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 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!

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Printed in Korea

How to use this manual

We want you to enjoy your vehicle to the fullest. 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, we urge you to read the DANGER, WARNING and CAUTION sections in the manual.

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

The table of contents provides the general organization of the manual. Use the index when looking for a specific area or subject; it has an alphabetical listing of all information in your manual.

You will find various safety precautions and operating procedures in the form of DANGER, WARNING, CAUTION, NOTE, TIP in this manual. These safety messages were prepared to enhance your personal safety. You should carefully read and follow ALL safety messages, procedures and recommendations provided in this manual.

DANGER

A DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

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.

NOTE

A NOTE indicates a hazardous situation which, if not avoided, could result in vehicle damage.

TIP

A TIP indicates a vehicle term or information display that requires additional explanation.

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A Abbreviation

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Introduction

Fuel requirements

Your new vehicle uses only unleaded fuel with 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, and 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 1 time. Otherwise the Check Engine light illuminates.

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.

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

Do not use gasohol containing more than 15% ethanol. Ethanol provides less energy than gasoline and attracts water. Thus, it is likely to reduce your vehicle's fuel efficiency and could lower your MPG results.

Do not use gasoline or gasohol containing any methanol. 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 any of the following:

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%.

TIP

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

NOTE

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), Methylcyclopentadienyl Manganese Tricarbonyl (MMT), Manganese (Mn), and other metallic additives may cause vehicle and engine damage or misfiring, poor acceleration, engine stalling, catalyst melting, clogging, abnormal corrosion, life cycle reduction, and so on. The Malfunction Indicator Lamp (MIL) may illuminate if you use fuel with the additives listed.

TIP

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 performance and damage components of the fuel system, engine control system, and emission control system.

Fuel Additives

Kia recommends that you use good quality gasolines treated with detergent additives, such as TOP TIER™ detergent gasoline, which help prevent deposit formation in the engine. These gasolines will help the engine run cleaner and enhance performance of the emission control system. For more information on TOP TIER™ detergent gasoline, please go to the website (http://www.toptiergas.com). For customers who do not use TOP TIER™ detergent gasoline regularly and have problems starting or running the engine smoothly, you can buy separative additives for the gasoline.

If TOP TIER™ detergent gasoline is not available, 1 bottle of additive should be added to the fuel tank every 8,000 miles (13,000 km) or every engine oil change. 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.

TIP

Damage or performance problems resulting from any modification may not be covered under the warranty.

NOTE

If you use an unauthorized electronic device, it may cause wire damage, battery discharge, fire, or abnormal vehicle operation. For your safety, do not use unauthorized electronic devices.

Breaking in your vehicle

Following these simple precautions for the first 600 miles (1,000 km) may increase the performance, economy, and lifespan of your vehicle:

- Do not race the engine.
- Avoid sudden acceleration.
- Do not maintain a single engine speed, either fast or slow, for long periods of time. Varying engine speeds is necessary 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.
- Depending on your break-in process, fuel economy and engine performance may vary and will stabilize after 4,000 miles (6,000 km). The engine may consume more oil during the break-in period.

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, such as higher ground clearance and track, give this vehicle a higher center of gravity than other types of vehicles. This vehicle is not designed for turning at the same speeds as conventional 2-wheel drive vehicles.

Avoid sharp turns and abrupt maneuvers. Failure to operate this vehicle correctly may result in loss of control, an accident, or vehicle rollover.

Be sure to read "Reducing the risk of a rollover" on page 394.

Vehicle data collection and Event Data Recorders (EDR)

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.

HEV powertrain

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

- Do not race the engine.
- Avoid hard stops, except in emergencies, to allow the brakes to seat properly.

Open source software notice

This vehicle contains software with open source licenses.
Open source software information including the source code, copyright notices and referred license terms may be obtained on the website https://worldwide.kia.com/en/opensource.
Kia Corporation will provide the open source code to you in storage medium such as CD-ROM for minimum charge covering the cost of performing source distribution upon email request to opensource@kia.com within a period of 3 years from the date of product purchase.

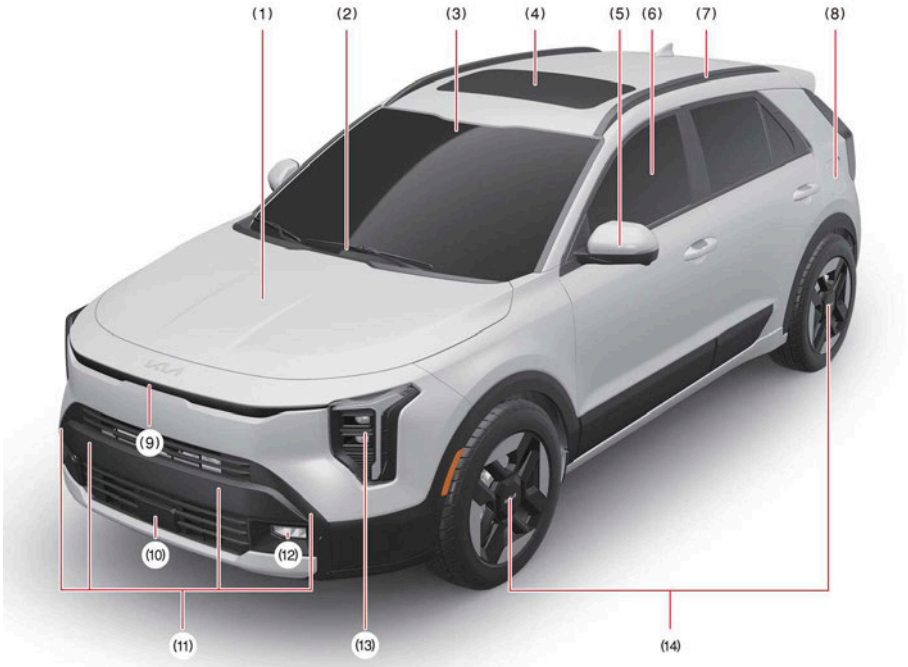
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Overview

Exterior overview

Front view



OSG2H026001N

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

(1) Hood - 101

(2) Front windshield wiper blades - 186, 687

(3) Front view camera - 418

(4) Sunroof - 104

(5) Outside rearview mirror - 132

(6) Windows - 96

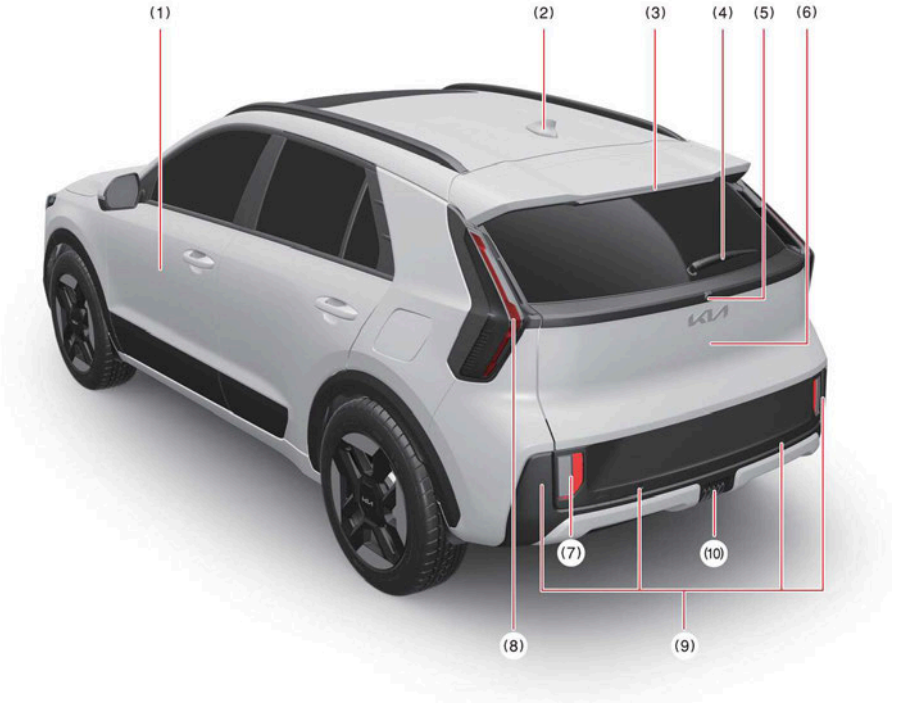
(7) Roof rack - 330

(8) Fuel filler door - 110

(9) Wide-front view camera - 492, 568

(10) Front radar - 418
(11) Front ultrasonic sensors - 418
(12) Front fog lamp - 733
(13) Headlamp - 175, 733
(14) Wheel and tire - 34

Rear view



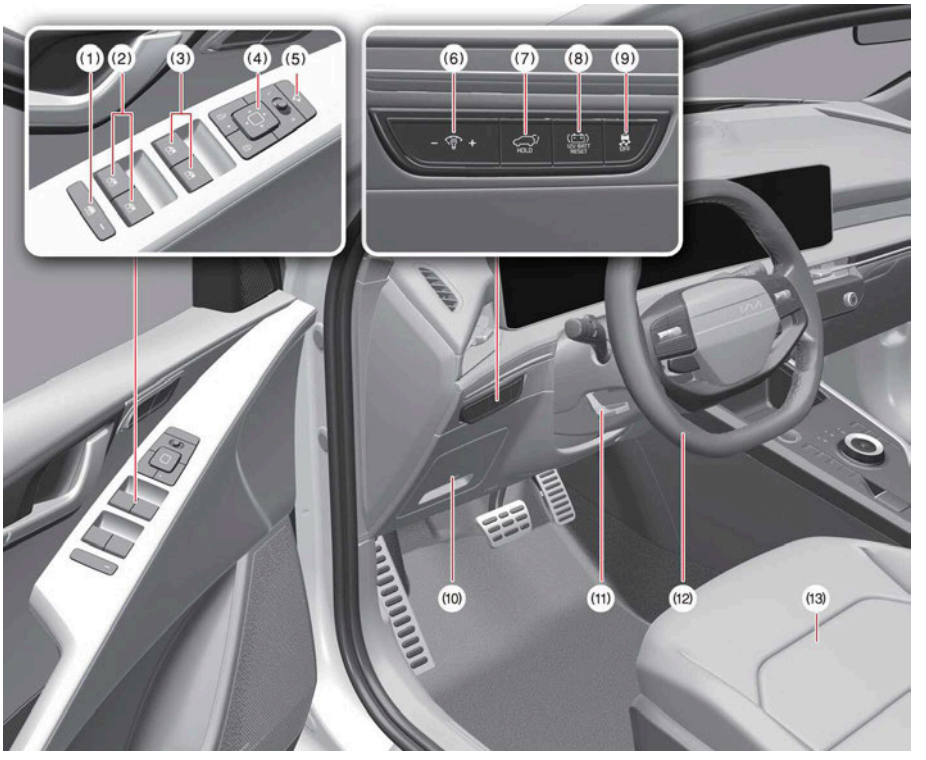
OSG2H025002L

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

(1) Doors - 58
(2) Antenna - 285
(3) High mounted stop lamp - 734
(4) Rear wiper - 190
(5) Wide-rear view camera - 562
(6) Liftgate - 82, 92
(7) Rear turn signal lamp - 734

(8) Stop lamp - 734
Tail lamp - 734
(9) Rear ultrasonic sensors - 588, 596
(10) Reversing lamp - 734

Interior overview



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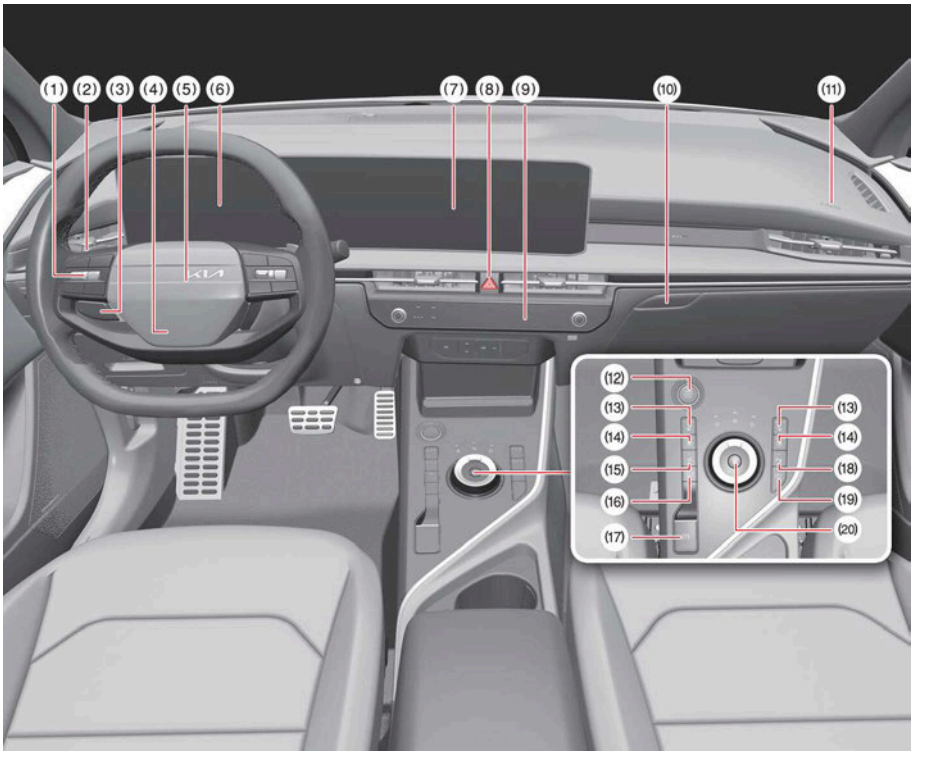
* The actual shape of your Kia may differ from the illustration.

(1) Power window lock button 99
Electronic power child safety lock button - 64
(2) Rear power window switches - 97
(3) Front power window switches - 97
(4) Outside rearview mirror control switch - 134
(5) Outside rearview mirror folding switch - 135
(6) Instrument panel illumination control switch - 147
(7) Power liftgate open/close button - 82, 88, 92
(8) **12V BATT RESET** button - 624
(9) ESC OFF button - 380
(10) Instrument panel fuse - 717
(11) Tilt and telescopic steering wheel lever - 117

(12) Steering wheel - 116

(13) Seat - 194

Instrument panel overview



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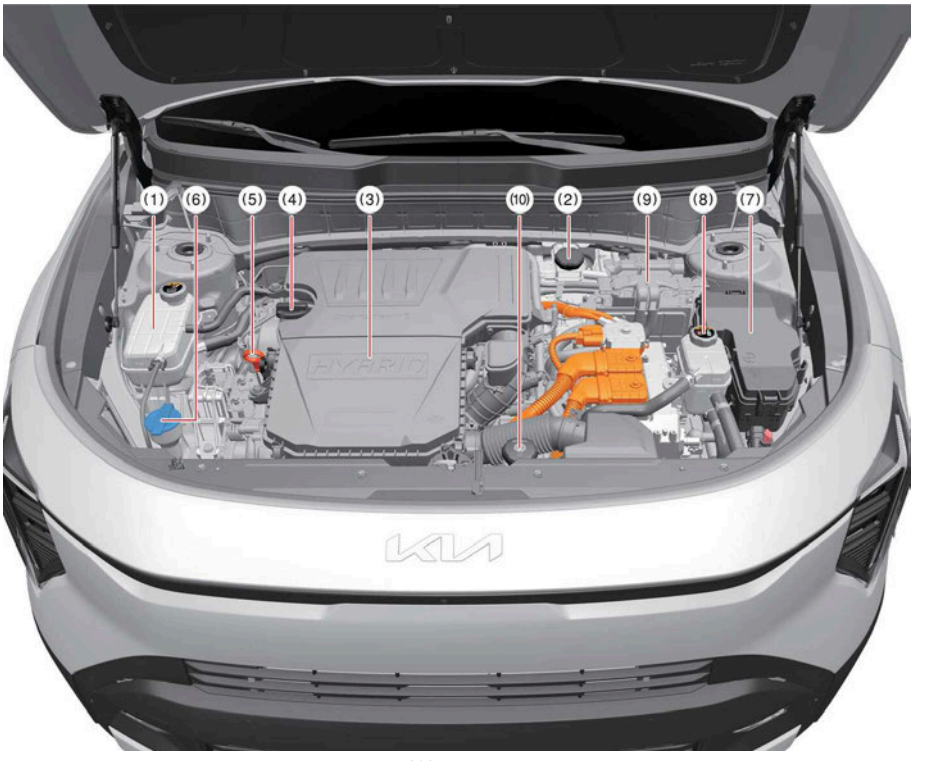
* The actual shape of your Kia may differ from the illustration.

(1) Driving Assist button - 451, 519
(2) Light control/turn signals lever - 175
(3) DRIVE MODE button - 387
(4) Driver's front air bag - 246
(5) Horn - 120
(6) Instrument cluster - 141
(7) Infotainment system - 285
(8) Hazard warning flasher switch - 622
(9) Infotainment/climate switchable controller - 300
(10) Glove box - 313
(11) Passenger's front air bag - 246
(12) ENGINE START/STOP button - 341

(13) Front seat warmer button - 315
(14) Front air ventilation seat button - 317
(15) Steering wheel heater button - 118
(16) AUTO HOLD button - 374
(17) EPB switch - 368
(18) Parking Safety button - 589
(19) Parking/View button - 564, 570
(20) Shifter dial - 346

Engine compartment overview

Smartstream G1.6 GDi HEV



OSG2H025005L

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

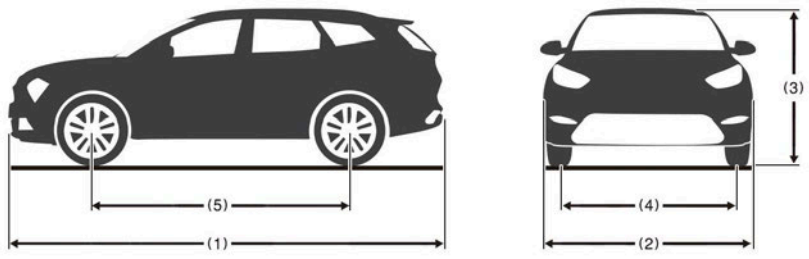
(1) Engine coolant reservoir - 676
(2) Brake fluid reservoir - 680
(3) Air cleaner - 684
(4) Engine oil filler cap - 673
(5) Engine oil dipstick - 673
(6) Windshield washer fluid reservoir - 683
(7) Fuse box - 721
(8) Inverter coolant reservoir - 676
(9) Electric Control Unit (ECU) - 659
(10) Engine clutch actuator reservoir - 682

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Specifications

Dimensions



KIAPB041_2

	Item			in (mm)
(1)	Overall length			174.4 (4,430)
(2)	Overall width			71.86 (1,825)
(3)	Overall height		Without roof rack	60.8 (1,545)
			With roof rack	61.0 (1,550)
			With antenna	61.4 (1,560)
(4)	Tread	Front	205/60 R16	62.4 (1,585)
			225/45 R18	61.9 (1,573)
		Rear	205/60 R16	62.8 (1,596)
			225/45 R18	62.4 (1,585)
(5)	Wheelbase			107.1 (2,720)

Engine

Item	Smartstream G1.6 GDi HEV
Displacement [cu in (cc)]	96.4 (1,580)
Bore x Stroke [in (mm)]	2.83 x 3.81 (72.0 x 97.0)
Firing order	1-3-4-2
No. of cylinders	4 (inline)

Gross vehicle weight

Item	Gross vehicle weight [lbs. (kg)]	
	16 inch wheel	18 inch wheel
Smartstream G1.6 GDi HEV	4,255 (1,930)	4,255 (1,930)

Luggage volume

- MIN: Behind the 3rd row.
- MAX: Behind the front seat to the roof.

Item		Volume
SAE [cu ft (L)]	MIN.	21.9 (619)
	MAX.	61.4 (1,740)

Air conditioning system

Contact an authorized Kia dealer for more details.

Item	Weight of volume (g)	Classification
Refrigerant	450±25	R-1234yf
Compressor lubricant	120±10	POE

Bulb wattage

*: if equipped

Light bulb			Bulb type	Wattage (Watt)
Front	Type A	High beam	LED	LED
		Low beam	LED	LED
		Position lamp	LED	LED
		Front turn signal lamp	PY28/8	28
	Type B	High beam	LED	LED
		Low beam	LED	LED
		Position lamp	LED	LED
		Daytime running light	LED	LED
		Front turn signal lamp	LED	LED
	Front side marker		LED	LED
	Front fog lamps *		LED	LED
Side	Side repeater lamp		LED	LED
Rear	Type A	Stop and tail lamps	LED	LED
		Rear turn signal lamps	PY21W	21
		Back up lamp	18W	18
	Type B	Stop and tail lamps	LED	LED
		Rear turn signal lamps	LED	LED
		Back up lamp	LED	LED
	Rear side marker		LED	LED
	High mounted brake lamps		LED	LED
	License plate lamps		LED	LED
Interior	Map lamps	Type A	WEDGE (W10W)	10
		Type B	LED	LED
	Room lamps	Type A	FESTOON	10
		Type B	LED	LED
	Vanity mirror lamps		FESTOON	5
	Glove box lamp		W5W	5
	Luggage lamp	Type A	FESTOON	10
		Type B	LED	LED
	Ambient light *		LED	LED

Tires and wheels

Item	Tyre size	Wheel size	Load capacity		Speed capacity		Inflation pressure [psi (bar, kPa)]		Wheel lug nut torque lbf·ft (kgf·m , N·m)
			LI [1]	kg	SS [2]	km/h	Front	Rear	
Full size tire	205/60 R16	6.5J X 16	92	630	H	210	36 (2.5, 250)	36 (2.5, 250)	79-94 (11-13, 107-127)
	225/45 R18	7.5J x18	95	690	V	240	36 (2.5, 250)	36 (2.5, 250)	
Compact size spare tire (steel wheel) [3]	T12 5/80 D16	4T x16	97	730	M	130	60 (4.2, 420)		

1. Load Index
2. Speed Symbol
3. if equipped

NOTE

- When you replace the tires, use the same kind of tires as those originally installed on your vehicle. Failure to do so affects driving performance.
- When you drive in high altitude grades, atmospheric pressure decreases. You should 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 promote engine efficiency, which improves fuel economy. Use the following lubricants and fluids in your vehicle:

Lubricant		Volume	Classification
Engine oil (drain and refill) [1] Recommends Kia TotalEnergies	Smart stream G1.6 GDi HEV	4 US qt. (3.8L)	Full synthetic SAE 0W-16, API SN PLUS/SP or ILSAC GF-6
Dual clutch transmission (DCT) fluid [2]		1.7-1.8 US qt. (1.6-1.7L)	Kia genuine DCTF 70W SYNTHETIC PLUS HK D DCTF TGO-10 PLUS (SK) SPIRAX S6 GHDE 70W DCTF PLUS (SHELL)
Coolant (Engine) [3]		7.1 US qt. (6.7L)	Kia Genuine Coolant An Phosphate based ethylene glycol based coolant
Coolant (Inverter) [3]	HEV	1.9 US qt. (1.8 L)	An Phosphate based ethylene glycol based coolant
Brake fluid		As required	SAE J1704 DOT-4 LV / FMVSS 116 DOT-4 / ISO4925 CLASS-6
Engine clutch actuator fluid		As required	SAE J1704 DOT-4 LV / FMVSS 116 DOT-4 / ISO4925 CLASS-6
Fuel	HEV	11.1 US gal (42 L)	Gasoline

1. Refer to "Recommended SAE viscosity (thickness) number" on page 36
2. Use only specified genuine dual clutch transmission fluid. The use of non-specified (even marked as compatible with genuine) could result in shift quality deterioration and vibrations, eventually, the transmission failure. (Refer to "Explanation of scheduled maintenance items" on page 671
3. Different type of coolant or water may damage the electrical component.

Recommended SAE viscosity (thickness) number

NOTE

Always clean the area around any filler plug, drain plug, or dipstick before you check or drain any lubricant (especially in dusty or sandy areas or if you drive on unpaved roads). Cleaning the plug and dipstick areas prevents dirt and grit from entering the engine or other mechanisms that could be damaged.

NOTE

Never add any additives to the engine oil. Engine oil additives can change the properties of engine oil and may cause serious engine failure.

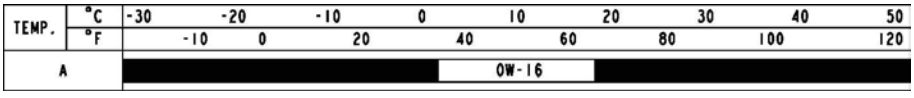
Engine oil viscosity (thickness) affects fuel economy and cold weather operation (including engine starting and engine oil flow ability). Lower viscosity engine oils can provide better fuel economy and cold weather performance. Higher viscosity engine oils are required for satisfactory lubrication in hot weather.

Using oils of any viscosity other than those recommended could result in engine damage.

When you choose an engine oil, consider the range of temperature you will operate your vehicle in before your next oil change. Select the recommended oil viscosity from the chart below.

Temperature Range for SAE Viscosity Numbers

A: Smartstream G1.6 GDi HEV

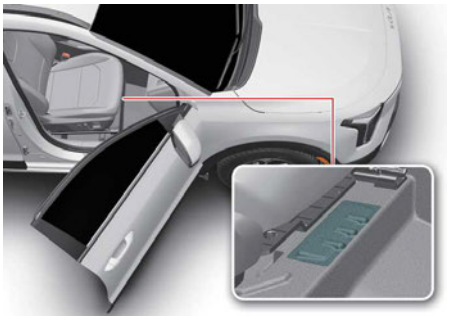


The American Petroleum Institute (API) Certification Mark denotes engine oils that conform to the International Lubricant Specification Advisory Committee (ILSAC). You should only use engine oils marked with the API Certification Mark.

Vehicle Identification Number (VIN)

Use your Vehicle Identification Number (VIN) to register your vehicle and in all legal matters pertaining to ownership.

VIN cover



OSG2H036001N

The VIN is punched into the floor underneath the passenger seat. To check the VIN, open the cover.

VIN label



OSG2H036002N

The VIN is also on a plate attached to the top of the instrument panel. You can see the VIN on the plate through the windshield from outside.

Vehicle certification label



OSG2H036003L

The vehicle certification label located on the center pillar on the driver side also states the VIN.

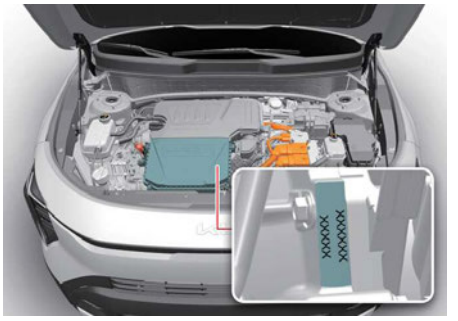
Tire specification and pressure label



OSG2H036004L

The tires equipped on your new vehicle are chosen to provide the best performance for normal driving. The tire label located on the center pillar on the driver side states the recommended tire pressures for your vehicle.

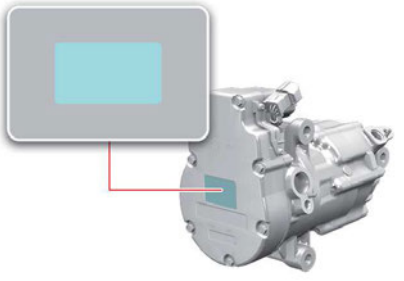
Engine number



OSG2H036005L

The engine number is stamped on the engine block as shown.

Air conditioner compressor label



KIAPB118

The air conditioner compressor label states which type of compressor your vehicle is equipped with, along with relevant information such as the model, supplier, part number, production number, refrigerant, and refrigerant oil.

Refrigerant label



OSG2H036007N

The refrigerant label is located underneath the hood, and states the following information:

- Type of refrigerant
- Amount of refrigerant

* For more information, refer to "Air conditioning (A/C) refrigerant label" on page 298.

Opening and closing

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Opening and closing

Keys

The smart key integrates the mechanical key and various remote functions.

WARNING

Smart key

Never leave the keys in your vehicle with unsupervised children. Leaving children unattended in a vehicle with a manual a smart key is dangerous.

Children imitate adults, and they could press the start button. The key would allow 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 allow 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, handy place outside the vehicle.

WARNING

Aftermarket keys

Use only Kia original parts for the key in your vehicle. If you use an aftermarket key, the ENGINE START/STOP button may not return to ON after START. The starter will continue to operate, causing excessive current in the wiring, which could result in a possible fire.

WARNING

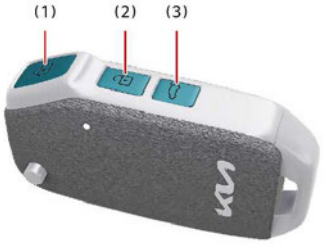
Never leave the keys in your vehicle

Leaving children unattended in a vehicle with the keys is dangerous, even if the vehicle is in ACC or ON. Unattended children could press the start button and may operate power windows or 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.

Remote key

With a remote key, you can lock or unlock the door and liftgate.

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



N_SP3i26_B04_038_IR

The remote key works when it is within approximately 10 m (33 feet) of the vehicle. Antenna within the vehicle sense when the remote key is within range.
Tinting the vehicle windows with film, especially metalized film, may interfere with the remote key's signal and reduce its operating range.

Lock (1)

All doors will lock if you press the lock button 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 you press the lock button 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 you press the lock button, the hazard warning lights will blink once.

Unlock (2)

All doors will unlock if you press the unlock button 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 relock automatically if you do not open any door within 30 seconds of pressing the unlock button.
The door will not lock or unlock with the remote key's lock/unlock button in the following situations:

- When the vehicle is in ACC or ON.
- When you try to lock a door when 1 or more doors are open.

NOTE

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

liftgate unlock (3) (if equipped)

If you press the button for longer than a second, the lock will be released.
Once the liftgate is opened and then closed, the liftgate will lock automatically.

Panic alarm (4)

The horn sounds and the hazard warning lights blink for about 30 seconds if you press the panic alarm button for more than 1 seconds. To stop the horn and lights, press any button on the smart key.

Start-up

You can start the vehicle without inserting the key.

For more information, refer to "Ignition switch" on page 338.

NOTE

To prevent damaging the remote key:

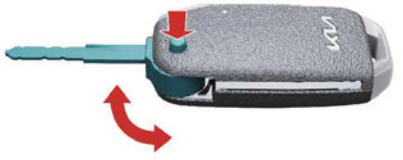
- Keep the remote key away from water or any liquid and fire. If the inside of the remote key gets damp (due to drinks or moisture), or is heated, internal circuit may malfunction, excluding the car from the warranty.
- Avoid dropping or throwing the remote key.
- Protect the remote key from extreme temperatures.

WARNING

Kia recommends to use parts for replacement from an authorized Kia dealer or service partner. If an aftermarket key is used, the ignition switch may not return to ON after START. If this happens, the starter will continue to operate causing damage to the starter motor and possible fire due to excessive current in the wiring.

Mechanical key

When the battery of the remote key is discharged, or the remote key does not operate normally, you can lock or unlock the door using the mechanical key.



N_SP3i26_B04_048_IR

- To unfold the key, press the release button then the key will unfold automatically.
- To fold the key, fold the key manually while pressing the release button.

CAUTION

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

Remote key precautions

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

- The ignition key is in ignition switch.
- You exceed the operating distance limit (about 10 m [30 feet]).
- The battery in the remote key is weak.
- Other vehicles or objects may be blocking the signal.
- The weather is extremely cold.
- The remote key is close to a radio transmitter such as a radio station or an airport which can interfere with normal operation of the transmitter.

When the remote key does not work correctly, try the spare, or open and close the door with the ignition key. When your remote key does not work correctly, contact a professional workshop. Kia recommends visiting an authorized Kia dealer or service partner.

If the remote key is near your cell phone or smartphone, the phone could be blocking the transmitter's signal. This is especially likely when the phone is active, such as when making or receiving calls, text messaging, and sending or receiving emails. Avoid placing the remote key and your cell phone or smartphone in the same pants or jacket pocket. Maintain adequate distance between the 2 devices.

If you do not move the remote key for some time, its detection function (if equipped) will pause. Lift the transmitter to reactivate the detection function.

NOTE

Losing the smart key

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

If you happen to lose both smart keys, you will not be able to start the vehicle. You should immediately contact an authorized Kia dealer or service partner for assistance. Tow the vehicle if necessary to protect it from potential theft.

NOTE

Remote key

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

CAUTION

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

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.

TIP

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

Smart key

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



N_CT25C001

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

Tinting the vehicle windows with film, especially metalized film, may interfere with the smart key's signal and reduce its operating range.

Lock (1)

All doors will lock if you press the lock button 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 you press the lock button again, 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 you press the lock button, the hazard warning lights will blink once.

Unlock (2)

The driver's door is unlocked if the unlock button is pressed once. The hazard warning lights will blink twice, and the chime will sound twice to indicate that the driver's door is unlocked..

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

Note that the doors will relock automatically if you do not open any door within 30 seconds of pressing the unlock button.

The door will not lock or unlock with the smart key's lock/unlock button in the following situations:

- When the vehicle is in ACC or ON.
- When you try to lock a door when 1 or more doors are open.

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

TIP

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

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

The liftgate unlock or power liftgate opens (if equipped) if you press the button for more than 1 second with a warning sound..

If you press the button while the power liftgate is opening or closing, the power liftgate will stop operating.

The liftgate unlock, power liftgate open/close button only operates when the smart key is within 40 in (1 m) of the liftgate.

If your vehicle is equipped with power liftgate then the liftgate will automatically open.

Panic alarm (4)

The horn sounds and the hazard warning lights blink for about 30 seconds if you press the panic alarm button for more than 1 seconds. To stop the horn and lights, press any button on the smart key.

Remote smart parking assist (RSPA) (5, 6) (if equipped)

You can start the vehicle without inserting the key.

* The Remote smart parking assist (RSPA) helps the drivers park their vehicle by using sensors to measure parking spaces and control the steering wheel, gear shift and vehicle speed to semi-automatically park the vehicle. With the smart key, the driver can move the vehicle forward or backward using the forward/ backward buttons (5, 6) on the smart key. For more information, refer to "Remote Smart Parking Assist (RSPA)" on page 604.

Remote start (7) (if equipped)

You can start the vehicle using the smart key's remote start button.

To start the vehicle remotely:

1. Lock the doors by pressing the door lock button (1) within 33 ft (10 m) of the vehicle.
2. Within 4 seconds after locking the doors, press and hold the remote start button for at least 2 seconds. The hazard lights will blink 3 times and the engine will start.

Press the remote start button (7) once to turn off the vehicle.

If you take no further action to operate the vehicle, it will turn off 10 minutes after you started it remotely.

While remote starting, the hazard warning lights blink 3 times. If you want to stop the vehicle, press the remote Start button (7) again.

NOTE

Operation status by the hazard warning light may not be applicable based on the regulation of your state.

TIP

- The vehicle must be in P (Park) for the remote start function to start.
- The engine turns off if you enter the vehicle without a registered smart key.
- If you enter the vehicle without the smart key while the car is starting remotely, **Carry your key to keep the ignition on** is displayed.
- The engine turns off if you do not get on the vehicle within 10 minutes after remotely starting the vehicle.
- The Remote Start button (7) may not operate if the smart key is not within 33 ft. (10 m).
- The vehicle will not remotely start if the engine hood or liftgate is opened.
- Do not idle the engine for a long period.
- Do not operate remote start in closed areas where there is no adequate ventilation for the engine exhaust.

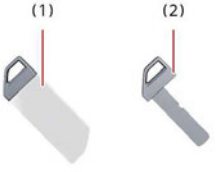
Start while inside the vehicle

You can start the vehicle when the smart key is carried with you or placed inside the vehicle
* For more information, refer to "Starting the engine" on page 344.

Mechanical key

When the battery of the smart key is discharged, or the smart key does not operate normally, you can lock or unlock the door using the mechanical key (2).

(1)Mechanical key protective cover
(2)Mechanical key



N_CT25C002

To remove the mechanical key, pull the mechanical key protective cover (1) off 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 that can interfere with its normal operation, such as a radio station or an airport.
- The smart key is near a mobile 2-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 or 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. When your smart key does not work correctly, contact an authorized Kia dealer.

If the smart key is near your cell phone or smartphone, the phone could be blocking the smart key's signal. This is especially likely when the phone is active, such as when making or receiving calls, text messaging, and sending or receiving emails. Avoid placing the smart key and your cell phone or smartphone in the same pants or jacket pocket. Maintain adequate distance between the 2 devices.

If you do not move the smart key for some time, its detection function (if equipped) will pause. Lift the smart key to reactivate the detection function.

NOTE

Losing the smart key

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

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

NOTE

Smart key

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

NOTE

- To prevent magnetic damage to the smart key, 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 or elsewhere, make sure that the buttons cannot be pressed accidentally. If you press a button, the key may emit radio waves that could interfere with aircraft operation.
- If the smart key is inoperative due to exposure to water or other 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.

TIP

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.

Battery replacement

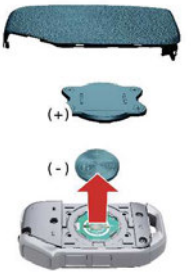
The smart key uses a 3V lithium battery, which normally lasts for several years.

Smart key



N_CT25C003

Remote key



N_SP3i26_B04_040_IR

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

1. Gently pry open the key battery cover using a thin tool.
2. Replace the old battery with a new battery (remote key: CR2032, smart key: CR2450). When replacing the battery, make sure to align the battery poles properly.
   If the battery is installed with incorrect polarity, it will discharge, rendering the key unusable.
3. Install the battery in the reverse order of removal.
   To replace your smart key, visit an authorized Kia dealer.
   The smart key can give you years of trouble-free use. However, it can malfunction if exposed to moisture or static electricity. If you are unsure how to 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 the battery can be harmful to the environment and human health.

Dispose of the battery according to your local laws or regulations.

WARNING

THIS PRODUCT CONTAINS A BUTTON 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.

NOTE

Smart key damage

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

Immobilizer system

Your vehicle may be equipped with an electronic engine immobilizer system to reduce the risk of unauthorized vehicle use.
Your immobilizer system is comprised of a small transponder in the ignition key and electronic devices inside the vehicle.

Vehicles without smart key system

With the immobilizer system, whenever you insert your ignition key into the ignition switch and turn it to ON, it checks and determines and verifies if the ignition key is valid or not.
If the key is valid, the engine will start.
If the key is invalid, the engine will not start.

To deactivate the immobilizer system:

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

To activate the immobilizer system:

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

Vehicles with smart key system

Whenever the ENGINE START/STOP buttons are changed to the ON position, the immobilizer system checks and verifies if the key is valid or not.
If the key is valid, the engine will start.
If the key is invalid, the engine will not start.

To deactivate the immobilizer system:

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

To activate the immobilizer system:

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

⚠ WARNING

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

NOTE

If you need additional keys or lose your keys, Kia recommends visiting an authorized Kia dealer or service partner.

⚠ CAUTION

- Do not put metal accessories near the ignition switch. Metal accessories may interrupt the transponder signal and may prevent the engine from being started.

- Do not change, alter or adjust the immobilizer system because it could cause the immobilizer system to malfunction. In this case, have the system serviced by a professional workshop. Kia recommends visiting an authorized Kia dealer or service partner.
- Malfunctions caused by improper alterations, adjustments or modifications to the immobilizer system are not covered by your vehicle manufacturer warranty.
- Do not attempt to alter this system or add other devices to it. Electrical problems could result that may make your vehicle inoperable.

TIP

- 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 to avoid a malfunction.
- If you need additional keys or lose your keys, contact an authorized Kia dealer.
- In order to prevent theft of your vehicle, do not leave spare keys anywhere in your vehicle. Your immobilizer password is a customer unique password should be kept confidential. Do not leave this number anywhere in your vehicle.

This device complies with Part 15 of the FCC rules.

Operation is subject to the following two conditions:

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

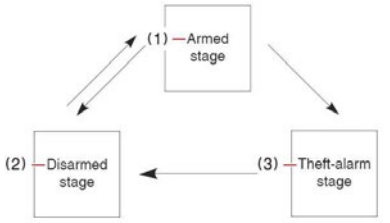
TIP

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

Theft-alarm system

The theft-alarm system provides protection from unauthorized entry into the vehicle.
This system is operated in 3 stages:

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



OMQ4A035459

If triggered, the system alarm sounds, and the hazard warning lights blink.

NOTE

- Do not change, alter or adjust the theft-alarm system because it could cause the theft-alarm system to malfunction. In this case, have the checked by an authorized Kia dealer.
- Malfunctions caused by improper alterations, adjustments or modifications to the theft-alarm system are not covered by your vehicle manufacturer warranty.
- Do not attempt to alter this system or add other devices to it. Electrical problems could result that may make your vehicle inoperable.

Armed stage

After you park the vehicle, follow these ol to arm the Theft-alarm system:

Using the smart key

1. Press the ENGINE START/STOP button in the OFF position.
2. Make sure that all the doors, the hood, and the liftgate are closed and latched.
3. To lock the doors, press the button on the front outside door handle with the smart key in your possession.

   After you complete these steps, the hazard warning lights blink once to indicate that the system is armed. If any door, the liftgate, or the hood remains open, the theft-alarm system will not arm, the hazard warning lights will not blink, and the chime will not sound. You can also arm the system by using the key to lock the doors; however, the hazard warning lights will not blink.
4. Press the smart key's lock button to lock the doors.

   After you complete these ol, the hazard warning lights blink once to indicate that the system is armed.

Using the remote key

1. Turn off the engine and remove the ignition key from the ignition switch.

2. Make sure that all doors (and liftgate), the engine hood are closed and latched.
3. Lock the doors by pressing the lock button on the remote key. After completion of the steps above, the hazard warning lights will blink once to indicate that the system is armed.
   If any door (and liftgate) or engine hood remains open, the hazard warning lights won't operate and theft-alarm will not arm. After this, if all doors (and liftgate) and engine hood are closed, the hazard warning lights blink once.

NOTE

- The theft-alarm system can be deactivated by a professional workshop. Kia recommends visiting an authorized Kia dealer or service partner.
- Do not arm the system until all passengers have left the vehicle. If the system is armed while passengers remain in the vehicle, the alarm may activate when the remaining passengers leave the vehicle. If you open any door, the liftgate, or the hood within 30 seconds after the system is armed, the system will be disarmed to prevent unnecessary alarm.

Theft-alarm stage

The alarm sounds and the hazard warning lights blink continuously for approximately 30 seconds if any of the following occur while the system is armed:

- You open a front or rear door without using the smart key.
- You open the liftgate without using the smart key.
- You open the hood.

Unless the system is disarmed, the horn sounds, the hazard warning lights blink continuously for approximately 27 seconds, and then the horn sounds 3 times. To turn the system OFF, unlock the doors with the mechanical key or smart key.

Disarmed stage

The system disarms when:

Using the remote key

- You press the door unlock button.
- The engine is started with the ignition switch.
- The ignition switch is in the “ON” position for 30 seconds or more.

Using the smart key

- You press the door unlock button.
- You press the button on the front outside door handle with the smart key in your possession.
- You start the engine (within 3 seconds).

After you press the unlock button, the hazard warning lights will blink, and the chime will sound twice (in the smart key) to indicate that the system is disarmed.
After you press the unlock button, if you do not open any door (or liftgate) within 30 seconds, the system will rearm.

NOTE

- 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, contact a professional workshop. Kia recommends visiting an authorized Kia dealer or service partner.
- Malfunctions caused by improper alterations, adjustments, or modifications to the theft-alarm system are not covered by your vehicle manufacturer warranty.

Adjusting alarm system

- Do not change, alter or adjust the immobilizer system because it could cause the immobilizer system to malfunction. In this case, have the system serviced by a professional workshop. Kia recommends visiting an authorized Kia dealer or service partner.
- Malfunctions caused by improper alterations, adjustments or modifications to the immobilizer system are not covered by your vehicle manufacturer warranty.
- Do not attempt to alter this system or add other devices to it. Electrical problems could result that may make your vehicle inoperable.

Door locks

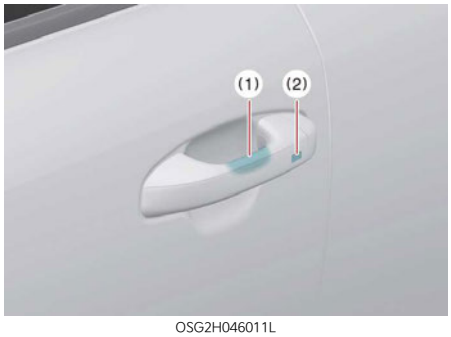
Know how to use the door lock so that you can lock or unlock the doors and liftgate.

With the smart key

With the smart key, you can lock and unlock the vehicle doors and liftgate. You can also start the engine. Refer to the following sections for more details.



OSG2H046010L



OSG2H046011L

Locking

With all doors closed and any door unlocked, press the button or touch the sensor (2) of the front outside door handles to lock all the doors. If all doors and the engine hood are closed, the hazard warning lights will blink once to indicate that all doors are locked.

Unlocking

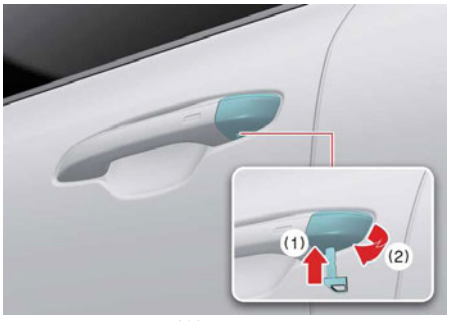
Press the button or touch the sensor (1) of the front outside door to unlock all the doors. The hazard warning lights blink twice to indicate that all doors are unlocked.

TIP

- The door handle button or sensor will only operate when the smart key is within 1 m (40 inches) of the outside door handle.
- If you try to lock the doors using the door handle button or sensor, the doors will not lock, and the chime will sound for 3 seconds under the following circumstances:
  - The smart key is inside the vehicle.
  - The vehicle is in the ACC or ON position.
  - Any door other than the liftgate is open.

  After you press the door lock/unlock button or sensor to unlock, the doors will lock automatically unless you open any door within 30 seconds.

With the mechanical key



OSG2H046012L



OSG2H046013L

Only the driver's door can be locked or unlocked using the manual key.
To operate door locks with the mechanical key:

1. Pull on the door handle.
2. Press the lever (1) located inside the bottom part of the cover (2) with a key or flat-head screwdriver.
3. Push out the cover while pressing the lever.
4. Turn the key toward the rear of the vehicle to unlock and toward the front of the vehicle to lock.
   - You can also lock and unlock doors with the smart key.
   - Once the doors are unlocked, you can open them by pulling the door handles.
   - When closing a door, push the door by hand. Make sure that all the doors are closed securely.

NOTE

- Be aware that the mechanical key can only lock/unlock the driver's door.
- 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 60 to lock the doors from inside the vehicle.

NOTE

- Be careful not to lose or scratch the key cover when removing it.
- If the key cover freezes and does not open, tap it lightly or indirectly warm it up, such as with the warmth of your hands.
- Do not apply excessive force to the door or door handle. This may cause damage.

NOTE

- 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.

CAUTION

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

WARNING

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

NOTE

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

NOTE

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 when the ENGINE START/STOP button is in the OFF position and close the door.
- If you lock the door with the central door lock button (1), all vehicle doors will lock automatically.

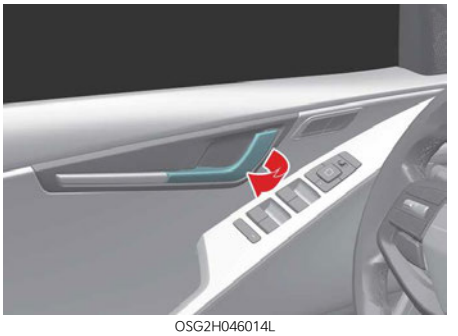
TIP

Always 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 from inside the vehicle with the door lock handle or central door lock switch.

With the door handle



OSG2H046014L

- Front door
  If you pull the inner door handle when the door is locked, the door will unlock and open.
- Rear door
  If you pull the inner door handle 1 time when the door is locked, the door will unlock.
  If you pull the inner door handle 1 more time, the door will open.

Door lock malfunction

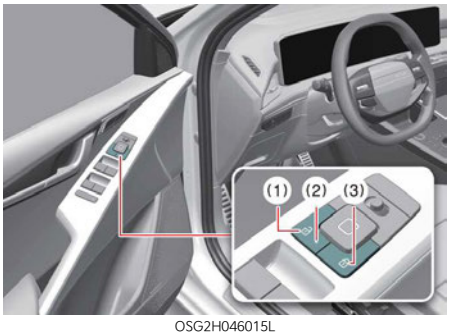
If a power door lock does not work while you are in the vehicle, try 1 or more of the following techniques to exit:

- 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 any door while the vehicle is moving.

With central door lock switch



OSG2H046015L

(1) Door unlock

(2) Doors indicator light
(3) Door lock

Press the central door lock button to operate the door locks.

- To lock all vehicle doors, press the central door lock button (3) on the driver and passenger side.
- To unlock all vehicle doors, press central door unlock button (1) on the driver and passenger side.

When all vehicle doors are locked, the indicator lights (2) on the front doors will turn off. If any door is unlocked, its indicator light will turn on.

If any door is open, the doors will not lock, even when the central door lock button is pressed.

WARNING

Doors

- The doors should always be fully closed and locked while the vehicle is in motion to prevent the doors from accidentally opening. 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 and cause vehicle damage or serious injury.

CAUTION

Unlocked vehicles

Leaving your vehicle unlocked can lead to someone hiding in it while you are gone. This could result in theft or possible harm to you or others. Always remove the key, engage the parking brake, close all windows, and lock all doors when you leave 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. When left or trapped in a hot vehicle, make sure to stay hydrated and avoid sun exposure through the vehicle's windshield. Furthermore, children might operate features of the vehicle that could injure them, or they could be harmed by someone entering 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 when 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 159.

Auto lock enable on shift

When this feature is displayed on the instrument cluster or infotainment system screen, all doors lock automatically when the vehicle is shifted out of P (Park) while running.

Auto unlock on shift to P

When this feature enabled on the infotainment system screen, all the doors unlock automatically when the vehicle is shifted back into P (Park) while it is ON.

Auto unlock vehicle off

When this feature is displayed on the instrument cluster or infotainment system screen, all doors unlock automatically when the vehicle is turned OFF.

Auto unlock vehicle off

When this feature is displayed on the instrument cluster or infotainment system screen, all doors unlock automatically when the vehicle is turned OFF.

Automatic door lock and unlock features

Your vehicle is equipped with features that will automatically lock or unlock your vehicle based on settings you select in the infotainment system screen.

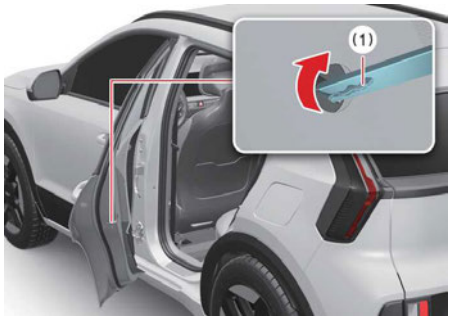
1. To activate Approach Unlock system, select **Setup > Vehicle > Door > Activate Approach Unlock** in the infotainment system.
2. Approach the outside door handle of the driver's side.

The outside door handle gets automatically unlocked and pops out. The hazard warning lights blink twice, and a warning alarm will ring twice.

If you don't touch the door lock sensor of the door handle within about 2 seconds after the handle pops out, all the doors will be locked again, and the outside door handle will retract.

Child-protector rear door lock (if equipped)

The child-protector rear door lock helps prevent children from accidentally opening the rear doors from inside the vehicle.



OSG2H046016L

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 you pull the inner door handle.
To activate the child safety lock, insert a small flat blade tool (like a screwdriver or similar) 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 still operates when the child safety lock is activated.

WARNING

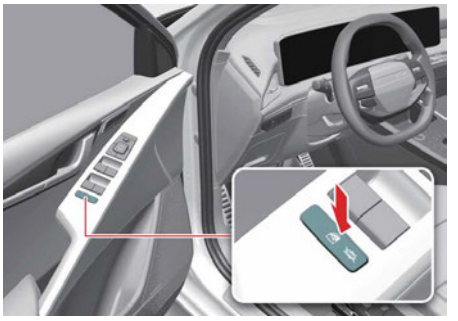
Rear door locks
If children accidentally open the rear doors while the vehicle is in motion, they could fall out and be severely injured or killed. To prevent children from opening the rear doors from the inside, use the rear door safety locks whenever children are in the vehicle.

WARNING

- The various driver safety systems do not detect every obstacle approaching the vehicle exit.
- The driver and passenger are responsible for any accident that occurs while exiting the vehicle. Always check your surroundings 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.



OSG2H046034L

To deactivate the electronic child safety lock, push the electronic child safety lock switch 1 more time, and then the indicator turns off.

Safe Exit Assist operates when the electronic child safety lock is activated and Safe Exit Assist is selected in the instrument 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 and for approximately 3 minutes after the engine is turned OFF.

If your vehicle is equipped with the electronic child safety lock, the manually operated child-protector rear door locks are not included.

The rear passenger cannot open or close the rear window while the electronic child safety lock is activated. For more details, refer to "Windows" on page 96.

WARNING

If the electronic child safety lock malfunctions, a message is displayed, and a chime sounds.



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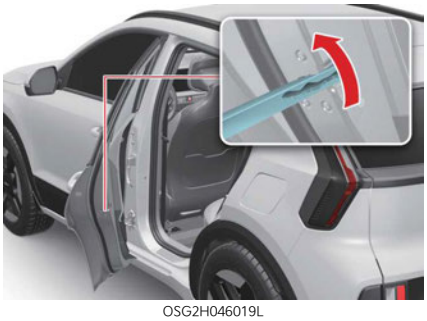
(1) **Child safety lock failure**

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

In case of an emergency

If the electrical power door lock switch is not operating (for example, if the car battery is dead), 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 a key or screwdriver into the emergency door lock hole and turn the key horizontally to lock position.



OSG2H046019L

3. Close the door securely.

TIP

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

Rear occupant alert (ROA) system

The Rear Occupant Alert (ROA) is provided to help prevent exiting the vehicle with a rear passenger left in the vehicle.

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



N_SP3i25_C00_001_IR

(1) **Do not leave children or pets alone.**

You can activate or deactivate the rear occupant alert by selecting **Setup > Vehicle > Convenience > Rear Occupant Alert** on the infotainment system.

WARNING

The ROA system does not actually detect objects or people in the rear seat. By using a rear door opened and closed history, the system informs the driver that there may be something in the rear seat.

CAUTION

The ROA system uses a rear door opened and closed history.
The history is reset after the driver turns off ignition normally, exits the vehicle and locks the door remotely using the remote keyless entry. So even if a rear door does not reopen, the ROA system alert can occur.
For example, after the ROA system alert occurs, if the driver does not lock the door, and drives again, the alert can occur.

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.

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 smartphone or card key, without a smart key.

Digital Key 2 (smartphone)

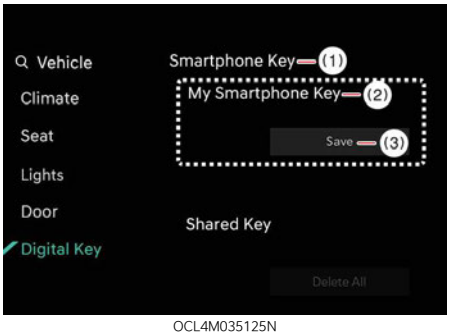
How to register Digital Key 2 (smartphone)

Kia Digital Key 2 can only be used on the smartphones that support this function, and the smartphone's Digital Key 2 function is provided by the smartphone manufacturer. Some smartphone functions may be incompatible with your vehicle.
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 oft he smart key.

Smartphone set-up

In order to use Digital Key 2 (Smartphone) function, install the Kia Access app or Kia App on your smartphone, 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.

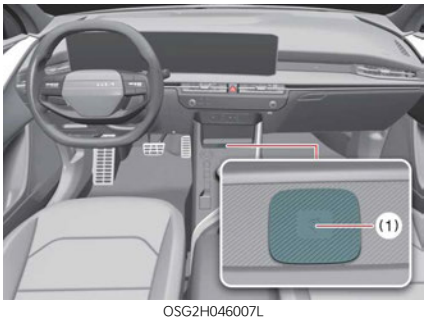
Smartphone Registration



OCL4M035125N

(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. Shift to P (Park), press **Digital Key Settings > Register** on the Kia Access app or Kia App on your smartphone, and register according to the messages on the app.
   - For smartphones without UWB support,place the NFC antenna of the smartphone on the center of the wireless charging pad (1).



OSG2H046007L

(1) charging pad

- As long as additional vehicle services support the device, you can register the digital key wirelessly.

3. Tap **Save** on the menu on the instrument cluster or on the infotainment system screen. The saving process will begin automatically.
4. When you save the digital key (smartphone), a message will appear on the instrument cluster or the infotainment system screen.
5. Remove the smartphone from the in-vehicle charging pad and complete the saving process by following the instructions on the smartphone screen.

TIP

- 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

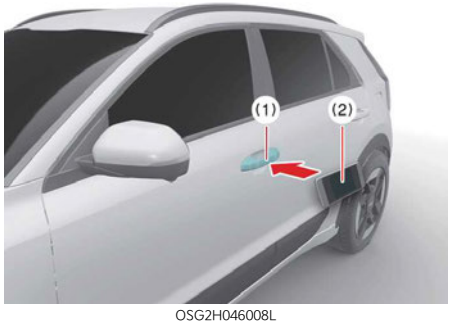
  When there is a digital key (smartphone) already saved in the vehicle, the Smartphone Key menu of the infotainment system will display Delete All and the My Smartphone Key screen will display Delete. If you want to save a digital key again, see "How to delete digital key (smartphone)" on page 73.
- Smartphone

  You cannot save the digital key again while the vehicle's digital key is saved in your smartphone. Save the digital key after deleting it from the Kia Access app or Kia App.
- The Digital Key 2 saving process will cancel when:
  - You remove the smartphone from the in-vehicle charging pad
  - You change the infotainment system or instrument cluster screen
  - You turn off the vehicle
  - You shift the gear
  - There is no smart key (saving process will not begin)
- The in-vehicle authentication pad (wireless charging pad) may not work smoothly depending on the internal structure of the smartphone, so 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 (smartphone)

Smartphone touch control

You can lock and unlock the door without activating the Kia Access app or Kia App by touching the smartphone to the door handle. You can start the vehicle by placing the smartphone on the charging pad. Make sure that the location of the smartphone's NFC antenna touches the door handle authentication pad.



OSG2H046008L

(1) Door handle authentication pad
(2) 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 place you tap 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 and unlocking the doors

- If the driver touches the smartphone antenna to the driver's or passenger's door handle authentication pad for more than 2 seconds, the door will lock or unlock.
- After you unlock the doors, they will automatically relock after 30 seconds unless you open a door.
- If the smartphone digital key does not operate, move the smartphone more than 4 inches (10 cm) from the door handle authentication pad and try it again.

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

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 to the lock/unlock sensor (curved area) on the outside door handle.
- If Approach Unlock is enabled, the doors automatically unlock when you approach the front door handle with your smartphone in your possession.

TIP

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

TIP

The door will not unlock and a beep will sound when you use the Digital Key 2 if any of the following occur:

- The smart key is in the vehicle.
- The vehicle is in the ACC or ON position.
- You attempt to lock the door while more than 1 door, the hood, or the liftgate is open.
- If you apply a tinting film containing metal substances to the digital key, it may not function properly.

Starting the vehicle

After placing your registered smartphone on the charging pad, engage the brake pedal and press the ENGINE START/STOP button.

Once you start the vehicle, you can remove the smartphone from the pad.

For more details, refer to "ENGINE START/STOP button" on page 341.

For smartphones without UWB support:

- To start the vehicle, place the smartphone's NFC antenna on the center of the charging pad, press the brake pedal, then press the ENGINE START/STOP button.
- Once you start 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.

For smartphones with UWB support:

- Carry the smartphone inside the vehicle, engage the brake pedal, and then press the ENGINE START/STOP 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 lights will flash.
- To turn the vehicle OFF, press the remote start button again.

WARNING

The vehicle can start when the registered smartphone is placed on the in-vehicle authentication pad (wireless charging pad). Do not leave children or people who are unaware of the system unsupervised, as this can result in serious injury or death. To prevent vehicle theft, always have the registered smartphone with you when you leave the vehicle.

TIP

The Digital Key 2 for a shared user may have an extended operation time the first time you use it.

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

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

Operating the liftgate

For smartphones with UWB support:

- When the vehicle is locked, to open the liftgate, press the liftgate open button, carrying a smartphone registered.
- When Smart liftgate is selected, the liftgate automatically opens when you approach the detecting area behind the liftgate for more than 3 seconds, carrying a smartphone with Digital Key 2 registered.

WARNING

- Always have the registered smartphone with you when you close the liftgate. The doors may not unlock if you close the liftgate when the doors are locked or if you close the liftgate using the liftgate button on the smartphone.
- The vehicle can be started when the registered smartphone 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. In addition, always keep the registered smartphone with you to prevent vehicle theft when leaving the vehicle.
- If a tinting film containing metal components is applied, it may cause poor Bluetooth connectivity.
- If the smartphone is in a back pocket or bag, the signal may be blocked, which could limit the Bluetooth connection and cause delays when locking/unlocking doors or starting the vehicle.

For smartphones with UWB support, Digital Key 2 is only available when the vehicle and the smartphone are connected through Bluetooth.

- The distance at which you can get a Bluetooth connection may vary depending on the surroundings.
- If a tinting film containing metal components is applied, it may cause poor Bluetooth connectivity.
- If the smartphone is in a back pocket or bag, the signal may be blocked,which could limit the Bluetooth connection and cause delays when locking/unlocking doors or starting the vehicle.

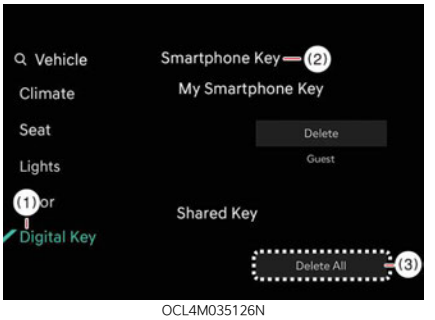
For smartphones with UWB support, Digital Key 2 is only available for a limited time to optimize the vehicle and smartphone batteries.

You can check the connection between the vehicle and smartphone in the smartphone's settings or in an app provided by the smartphone manufacturer.

How to delete digital key (smartphone)

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

1. To delete all digital key:

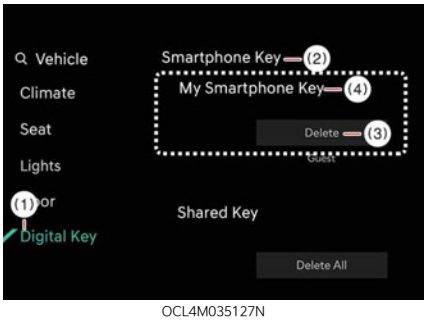


OCL4M035126N

(1) **Digital Key**
(2) **Smartphone key**
(3) **Delete all**

- With the vehicle on, tap **Setup** > **Digital key** > **Smartphone key** > **Delete all** on the infotainment system.
  - The owner's and shared user's keys will be deleted.
  - If there is no registered key, you cannot select the menu.

2. To delete MY Smartphone Key:



OCL4M035127N

(1) **Digital key**
(2) **Smartphone key**
(3) **Delete**
(4) **My Smartphone key**

If you change smartphones, you can only register the new smartphone after deleting the previous Digital Key 2 (smartphone).

TIP

- If you delete the digital key (smartphone) on the vehicle, the digital key saved in the smartphone is also deleted.
- If you delete the digital key (smartphone) on the smartphone, the digital key saved in the vehicle is also deleted.
- The infotainment system cannot delete a shared user's key.
- The digital key will not be deleted if you uninstall the Kia Access app or Kia App on your smartphone.

- You can activate or deactivate the digital key within the Kia Access app or Kia App provided by your smartphone manufacturer.

TIP

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.

3. To delete the shared keys

   Select **Setup > Vehicle > Digital Keys > Smartphone key > Shared Keys > [Group] > Delete** on the infotainment system.

   Those digital keys other than the **My Smartphone Key** (smartphone) are classified by **[Group]** and displayed as **Shared Key**.

   If the account logged in the smartphone is the same, it is displayed as the same **[Group]**.

   You can delete the **Shared Key** by the unit of **[Group]**.

Digital key 2 (card key)

How to register Digital Key 2 (card key)

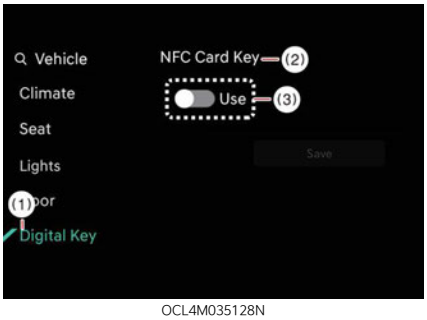
To use the card key as a Digital Key 2, register the card key in your vehicle system according to the following procedures:

1. Enter the vehicle with 2 smart keys.

   1) Wireless charging pad

2. Check if the **Use** menu is activated.

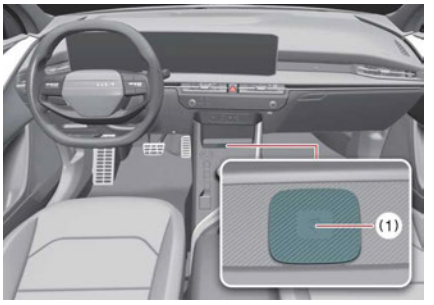
   With the vehicle on, tap **Setup > Vehicle > Digital keys > NFC card key > Use** on the infotainment system.



OCL4M035128N

(1) **Digital key**
(2) **NFC card key**
(3) **Use**

3. With the vehicle on, place the card key on the wireless charging pad (1), and tap **Save** on the infotainment system screen. The saving process will begin automatically.



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(1) Charging pad

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

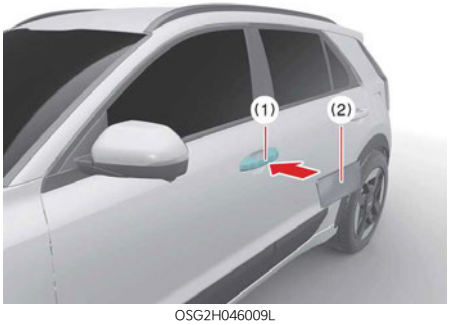
TIP

- 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 (smartphone)" on page 73 and follow the procedure for deleting an existing digital key first before saving a new digital key.
- To register the digital key (card key), the 2 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 to the door handle. The driver can start the vehicle by placing the card key on the charging pad.



OSG2H046009L

(1) **Door handle authentication pad**

(2) **Card key NFC antenna**

Locking and unlocking the doors

- If the driver touches the NFC antenna of the registered card key 2 to 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. Unlocked doors will automatically relock after 30 seconds unless you open a door.
- The lock works only if the center of the NFC card key touches the NFC authentication area of the vehicle door handle.

TIP

When you touch 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:

- The smart key is in the vehicle
- The vehicle is in the ACC or ON position
- 1 or more doors, the hood, or the liftgate are open

Starting the vehicle

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

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

For more details, refer to "ENGINE START/STOP button" on page 341.

WARNING

The vehicle can start when the registered card key is placed on the charging pad. Do not leave children or people who are unaware of the system unsupervised, as this can result in serious injury or death. In addition, to prevent vehicle theft, always have the registered card key with you when you leave the vehicle.

NOTE

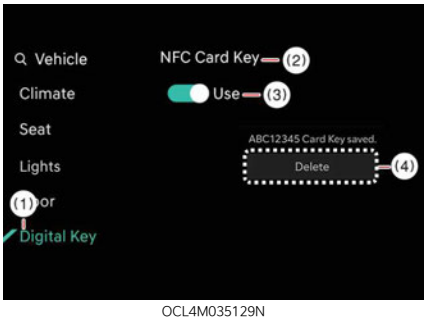
- The digital key (card key) may not work under the following conditions:
  - When the card key is not touching the center of the door handle authentication pad or the charging pad correctly.
  - If the card key overlaps NFC-enabled cards such as a credit card or smartphone.
  - If the card key does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

- The card key may malfunction if you place it between the charging pad and the smartphone while the smartphone is wirelessly charging (for example, if you charge 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. Make sure to keep the smart key inside the vehicle during the card key deletion process.
2. With the vehicle ON, place the card key on the in-vehicle authentication pad (wireless charging pad). With the vehicle ON, tap **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.



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(1) **Digital key**
(2) **NFC card key**
(3) **USE**
(4) **Delete**

When you delete the card key, a message will appear on the infotainment screen or instrument cluster.

> **TIP**
> The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system.

Personalized profile and vehicle settings

When you link the smartphone registered in the vehicle with a user profile, the vehicle will automatically operate (for example, the door will lock and unlock with the digital key) according to the linked user profile settings. User profile linking and personalization are available for a total of 2 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 and unlinking profile

How to link user profile

1. Tap **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 instructions.

3. If you tap **Link**, the registered phone number's digital key will link to the user profile. Tap **Link** according to the instructions on the infotainment system screen.
4. When the process is complete, the message **Digital Key Link Complete** will appear on the infotainment system screen.
5. Tap 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 on the infotainment system screen.

When the process is complete, the message **Digital Key Link Complete** appears on the infotainment system screen.

How to unlink user profile

1. Tap **Setup > User profile > Profile setting > Link digital key (smartphone)** on the infotainment system. Unlink the smartphone in the user profile settings. You can only unlink the smartphone when the user profile is linked.
2. When unlinking is complete, the message **Digital key is unlinked** will appear on the infotainment system screen.

TIP

- The user profile cannot be linked to multiple drivers (such as Driver 1 and Driver 2) that are connected to a single smartphone. Personalization will operate with the most recently linked user profile and automatically cancel the previously linked user profile.
- The user profile can be linked when the digital key is registered on the smartphone and the vehicle. The smartphone cannot be linked with another vehicle's digital key.
- The NFC card key cannot be linked with a personalized profile.
- If you remove the smartphone from the charging pad before the user profile finishes linking, the linking process will not be completed.
- Once the user profile linked to the digital key in the smartphone is deleted, reregister and personalize the digital key 2 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 to Digital Key 2 works under the following conditions:

- Touch the driver's door handle with the smartphone linked to your profile to lock or unlock the doors. (Personalization does not operate when you lock or unlock the front passenger door.)
- You can operate the personalization function using the digital key after you link 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, the personalization function does not work with the digital key.

TIP

The user profile operates according to the door lock/unlock system 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 personalization function in the vehicle is available as follows:

System	Personalization Item	
User Settings menu	Lamp	Blink number of 1-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 navigation system volume
		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.

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

TIP

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

Maintenance for a used vehicle

Purchasing a used vehicle

If any of the digital key devices (such as a smartphone key or card key, if equipped) are registered in the vehicle, the message **Digital key(s) active** will appear on the instrument cluster once when you turn on the vehicle after unlocking the 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. Notify an authorized Kia dealer when you purchase a used vehicle. Check if the digital key (card key) that came with the used vehicle operates properly. If it does not work properly, delete it and register the smartphone key. Then reregister the card key.

Digital Key 2 maintenance

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

Limitations of the system

- Digital Key 2 may not work if any of the following occurs:
  - The smartphone battery or vehicle battery is discharged.
  - You turn off the NFC or Bluetooth in the smartphone settings.
  - You use a metal or thick smartphone case, or a credit card overlaps the back of your smartphone.
  - You use the card key (if equipped) with other cards or in a wallet or card holder.
  - There is electronic interference by other vehicles or objects.
  - There may be a communication error with the Digital Key 2 NFC function if a metallic cover or communication device is attached to the smartphone. If there is a Digital Key 2 malfunction, remove the cover attached to the smartphone and try again.
- The smartphone may not control the vehicle if any of the following occurs:
  - Basic and necessary functions of the smartphone are operating (general call, urgent call, audio, or contactless payment).
  - You are using wireless earphones (general call, urgent call, or audio).
  - Digital Key 2 app function is limited due to the smartphone default settings or app launch priority policy per the manufacturer.
  - If you have a registered UWB-supported smartphone and stay within the vehicle's Bluetooth connection range for an extended period, low voltage battery drain may occur. If your smartphone or app supports the "Automatic Access" feature, please disable it before use.

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.

TIP

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. If the digital key2 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.

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 to or the death of the 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



OSG2H046029L

- If the liftgate is unlocked, you can open it by pressing the handle and pulling it up.
- The liftgate locks or unlocks when you lock or unlock all the doors with the smart key or the central door lock switch.
- If you press the liftgate unlock button on the smart key for approximately 1 second, only the liftgate unlocks.
- Once you open and close the liftgate, it locks automatically. All doors must be locked.

TIP

In cold and wet climates, the 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.

NOTE

Liftgate gas lifters
Make sure to close the liftgate before driving your vehicle. Possible damage to the liftgate gas lifters and attached hardware may occur if you do not close the liftgate prior to driving.

Closing the liftgate

To close the liftgate, lower and push the liftgate down 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.

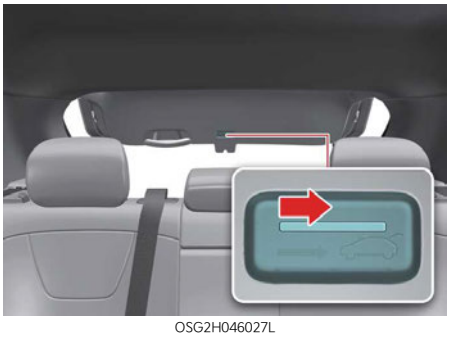
WARNING

Exhaust fumes
You should always keep the liftgate lid completely closed while the vehicle is in motion. If you leave the liftgate open or ajar, poisonous exhaust gases may enter the car and serious illness or death may result.

NOTE

To avoid damage to the liftgate's latch, make sure nothing is near the latch and striker while closing the liftgate.

Emergency liftgate safety release



OSG2H046027L

To unlock and open the liftgate manually from inside the luggage compartment, follow these steps:

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 it.

WARNING

- In case of emergency, be fully aware of:
  - the location of the emergency liftgate safety release latch in the vehicle
  - 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.

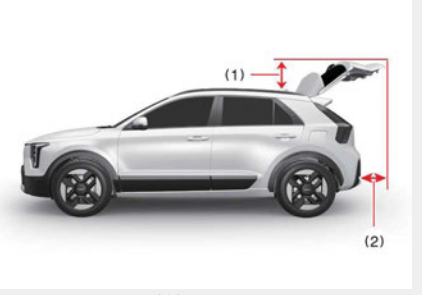
Power liftgate (if equipped)

Power liftgate operating conditions

The power liftgate operates when the gear is in P (Park) and the vehicle is running. However, the power liftgate will operate regardless of gear position when the vehicle is OFF. The liftgate can only be opened when vehicle speed is below 1.8 mph (3 km/h).
For safety purposes, make sure the gear is in P (Park) before attempting to open or close the liftgate.

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.



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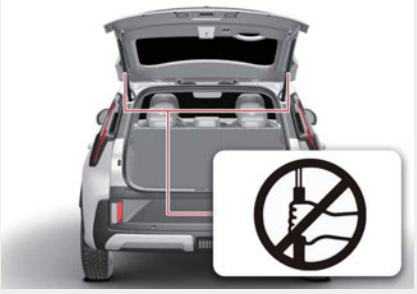
(1) Approximately 20 inches (50 cm)
(2) Approximately 6 inches (14 cm)

- Make sure that there are no people or objects in the path of the power liftgate or smart liftgate prior to use. Contact with the liftgate may result in serious injury, damage to the vehicle, or damage to surrounding objects (for example: walls, ceilings, vehicles, and so on).
- In the following situations, the liftgate may not open or may close unintentionally, injuring people:
  - There is accumulated snow on the liftgate.
  - There is a heavy object on the liftgate (such as a bicycle carrier, ladder, and so on).
- Do not open the liftgate before removing snow or heavy objects from the liftgate.

NOTE

- Do not close or open the liftgate manually. This may cause damage to the power liftgate. If you must close or open the liftgate manually when the battery is discharged or disconnected, do not apply excessive force.
- When the vehicle is not running, do not operate the power liftgate more than 10 times continuously. To prevent battery discharge, only use the power liftgate repeatedly while the vehicle is running.
- Do not leave the power liftgate open for a long period of time. This may drain the battery.
- Do not apply excessive force when operating the power liftgate. Doing so could damage the vehicle.

- Do not grab or hold on to the liftgate support struts at any time, as this could damage them. Deformation of the liftgate support struts may damage the vehicle and lead to personal injury.



OSG2H046028L

- 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, as the power liftgate may not operate properly:
  - When lifting 1 side of the vehicle to inspect it or change a tire.
  - When parking on an uneven road, such as a slope.
- Before using an automatic car wash, close the liftgate completely and lock all doors and the liftgate using the central door lock button.
- Do not spray high pressure water directly on the outside power liftgate open/close button. The liftgate may open unintentionally.

NOTE

- If the liftgate is not fully closed and the vehicle speed is at or above 1.8 mph (3 km/h), a warning will sound 10 times. Immediately park the vehicle in 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 ice from the outside power liftgate open/close button before using it, 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 you press any of the power liftgate buttons 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)



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OSG2H046022L

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 operating 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)



OSG2H046029L

When the liftgate is closed, press the power liftgate open/close button to open it.
If the vehicle is locked, press the power liftgate open/close button with the smart key in your possession.
If the liftgate is unlocked, it will open or close with a warning sound when you press the power liftgate open/close button without carrying the smart key.

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



OSG2H046030L

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 either stop or fully open. The automatic reverse feature may not operate properly, or it may operate unexpectedly under the following circumstances:

- The automatic reverse feature may not detect resistance if it is below a certain level, or if the liftgate is almost fully closed near the latched position.
- The automatic reverse feature may operate if you close the liftgate too strongly.

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. This may result in serious injury or damage to the vehicle.

TIP

The power liftgate may stop operating if the automatic reverse feature operates more than 2 times while you attempt 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.

NOTE

Liftgate gas lifters

Make sure to close the liftgate before driving your vehicle. Possible damage to the liftgate gas lifters and attached hardware may occur if you do not close the liftgate prior to driving.

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, tap **Setup > Vehicle > Door > Power liftgate opening speed > Normal/Fast** in the infotainment system. (The default setting is **Fast**.)

Power liftgate opening height

To adjust the power liftgate opening height, tap **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 the supplied infotainment manual.

User height setting

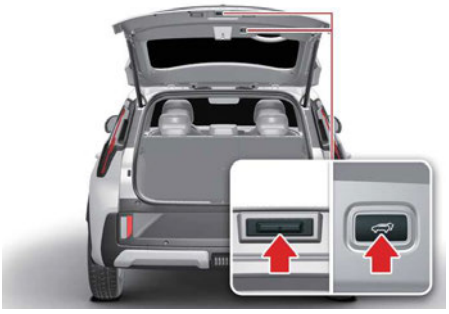
1. Position the liftgate manually to your preferred height.
2. Press the power liftgate open/close button located inside the liftgate for more than 3 seconds.

   If you select **User Height Setting** for the power liftgate opening height, the power liftgate will automatically open to the height you manually set.

> **TIP**
>
> - If you have not manually set the power liftgate opening height, the power liftgate will fully open when you select **User Height Setting** from the infotainment system.
> - If you select 1 of the height settings (**Full Open** / **Level 3** / **Level 2** / **Level 1**) from the settings menu in the infotainment system, then select **User Height Setting**, the liftgate will open to the height you manually set.
> - The power liftgate opening speed and opening height settings change according to the linked user profile. If you change the user profile, the power liftgate opening speed and opening height settings change accordingly.

Resetting the power liftgate

In some circumstances, you may need to reset the power liftgate operation, such as:
- When the 12V battery is recharged
- When the 12V battery is reinstalled after removal or replacement
- When the related fuse is reinstalled after removal or replacement



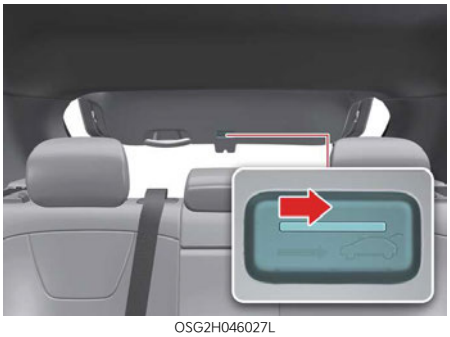
OSG2H046031L_2

To reset the power liftgate:

1. With the vehicle off or running, put the gear in P (Park).
2. Press the power liftgate open/close inner and outer buttons 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 the reset. If the liftgate stops before it is fully open, the reset cannot be completed.

> **TIP**
>
> If the power liftgate does not operate properly after you perform the preceding procedure, have the system inspected by an authorized Kia dealer.

Emergency liftgate safety release



OSG2H046027L

To unlock and open the liftgate manually from inside the luggage compartment, follow these steps:

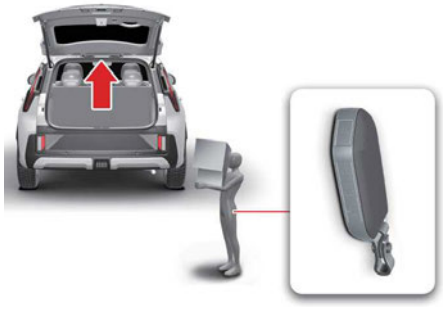
1. Insert a long, flat object (such as a key) into the opening at the bottom of the liftgate.
2. Slide the latch in the direction of the arrow to unlock the liftgate.
3. Push the liftgate to open it.

WARNING

- In case of emergency, be fully aware of:
  - the location of the emergency liftgate safety release latch in the vehicle
  - 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.

Smart liftgate with auto open (if equipped)

On a vehicle equipped with a smart key, you can open the liftgate using the Smart Liftgate with AUTO Open system.



OSG2H046023L

How to use the smart liftgate with auto open

You can open the liftgate with no-touch activation under the following circumstances:

- After 15 seconds, when all doors are closed and locked
- When you are positioned in the detecting area for more than 3 seconds

TIP

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 afterward.
- The smart key is detected within 15 seconds after the doors are closed and locked, and is 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 inside 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) while carrying a smart key, the hazard warning lights will blink and the chime will sound to alert you that the smart key has been detected. The liftgate will open.

   TIP

   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 lights and chime start to operate, leave the detecting area with the smart key in your possession. The liftgate will stay closed.

3. **Automatic opening**
   The hazard warning lights will blink and the chime will sound 6 times, and then the liftgate will open.

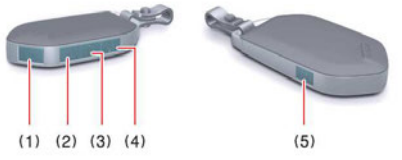
WARNING

- 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 it.
- Make sure objects in the rear cargo area do not come out when opening the liftgate on a slope. This may cause serious injury.
- Make sure to deactivate the smart liftgate with AUTO open when washing your vehicle. Otherwise, the liftgate may open accidentally.
- Keep the key out of reach of children. Children may accidentally open the smart liftgate with AUTO open while playing around the rear area of the vehicle.

NOTE

Liftgate gas lifters
Make sure to close the liftgate before driving your vehicle. Possible damage to the liftgate gas lifters and attached hardware may occur if you do not close the liftgate 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 alarm
(5) Remote start

OMQ4A035064

If you press any button on the smart key during the Detect and Alert stage, the smart liftgate with AUTO open function will deactivate.
Make sure you know how to deactivate the smart liftgate with AUTO open function for emergency situations.

TIP

- If you press the door unlock button (2), the smart liftgate with AUTO open function will deactivate temporarily. But if you do not open any door for 30 seconds, the smart liftgate with AUTO open function will activate again.

- If you press the liftgate open button (3) for more than 1 second, the liftgate will open.
- 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 deactivate.
- If you have deactivated the smart liftgate with AUTO open function by pressing the button on the smart key and opening a door, you can reactivate the Smart Liftgate with Auto Open function by closing and locking all doors.

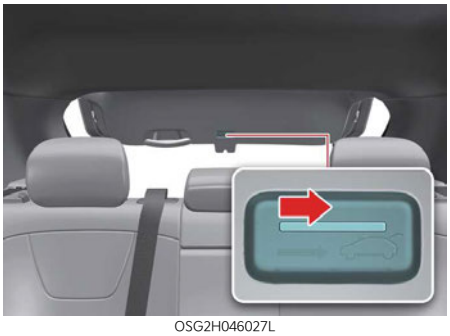
Detection area

- The smart liftgate with AUTO open function operates with a welcome alert if the smart key is detected within 20-40 in (50-100 cm) of the liftgate.
- The alert stops at once if the smart key is positioned outside the detecting area during the Detect and Alert stage.

TIP

- 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 car is raised to replace a tire or to inspect the vehicle.
  - The vehicle is parked on a slant, a slope, an unpaved road, and so on.

Emergency liftgate safety release



OSG2H046027L

To unlock and open the liftgate manually from inside the luggage compartment, follow these steps:

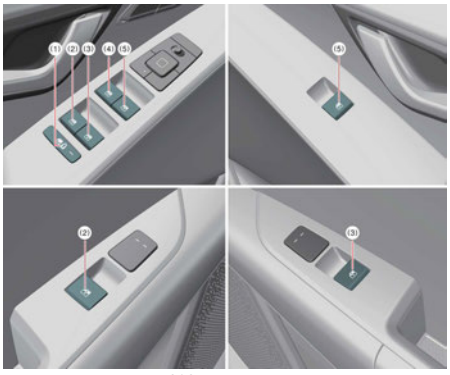
1. Insert a long, flat object (such as a key) into the opening at the bottom of the liftgate.
2. Slide the latch in the direction of the arrow to unlock the liftgate.
3. Push the liftgate to open it.

WARNING

- In case of emergency, be fully aware of:
  - the location of the emergency liftgate safety release latch in the vehicle
  - 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.

Windows

The doors of this vehicle are equipped with power windows that you can operate with a switch.



OSG2H046024L_4

(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) Power window lock switch

TIP

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

The ENGINE START/STOP button must be in the ON position for the power windows to operate. Each door has a power window switch that controls that door's window. The driver has a power window lock button, which can block the operation of rear passenger windows. You can operate the power windows for approximately 3 minutes after turning the ENGINE START/STOP button to the ACC position. If you open the front doors, you cannot operate the power windows, even within the 3-minute period.
If the window cannot close because objects are blocking it, remove the objects and close the window.

TIP

While driving with the rear windows down or with the sunroof (if equipped) in an open or partially open position, you may hear a wind buffeting (or pulsation) noise in your vehicle. This noise is normal and can be reduced or eliminated by taking the following actions:

- If the noise occurs with either one or both of the rear windows down, partially lower both front windows approximately 1 inch (2.5 cm).
- If the noise occurs with the sunroof open, slightly reduce the size of the sunroof opening.

TIP

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.

TIP

If you press the 1-touch window button to make a small adjustment, the glass will go down to a specific location for your convenience.

Window opening and closing

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

Auto up/down window



OLQ2A045032

To open or close a window, press down or pull up the front portion of the corresponding switch to the first detent position (1).

Momentarily pressing down or pulling up the power window switch to the second position (2) completely lowers or raises the window, even when you release the switch. To stop the window at the desired position while it is moving, pull up or press down and release the switch.

To reset the power windows

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

1. Move the 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



OSG2H046033L

If an object or part of the body blocks the upward movement of the window, the window will detect the resistance and stop moving up. The window will then move down approximately 11.8 inches (30 cm) to allow you to clear the object.
If the window detects resistance while you pull up the power window switch continuously, the window will stop moving up, then move down approximately 1 inch (2.5 cm).
If you pull up the power window switch continuously within 5 seconds after the automatic window reversal feature operates, the automatic window reversal feature will not operate again.

TIP

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

NOTE

To avoid injuries or vehicle damage, always check for obstructions before raising any window. 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

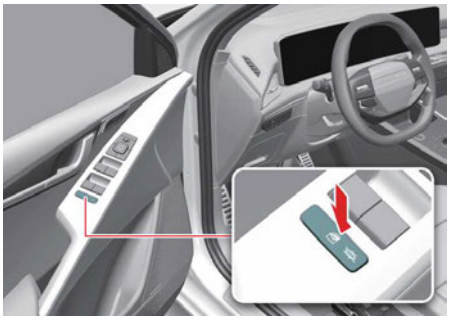
The automatic reverse feature doesn't activate while you reset the power window system. Make sure body parts or other objects are safely out of the way before closing the windows to avoid injuries.

NOTE

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).



OSG2H046034L

When the power window lock button is pressed:

- The power window lock switch can operate all passengers' power windows.
- The front passenger's control can operate their own power window.
- The rear passengers' controls cannot operate the rear passengers' power windows.

* If you operate the power window lock switch (indicator turns on), the 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" on page 64.

NOTE

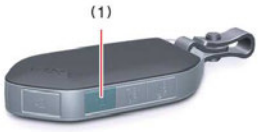
- To prevent possible damage to the power window system, do not open or close 2 or more windows at the same time. This will ensure the longevity of the fuse.
- Never try to operate the main switch on the driver's door and the individual door window switch in opposite directions at the same time. The 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 to play with the power windows. Keep the driver's door power window lock button in the LOCK position (pressed). SERIOUS INJURY can result from a child unintentionally operating a window.
- Do not extend your head or any limbs outside the window while the vehicle is in motion.

Remote window opening (if equipped)



OMQ4A035097

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 unlock, 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 features operate only on seats equipped with auto up and down safety windows.

NOTE

If you leave the vehicle unattended after operating the remote window opening function, theft may occur. In addition, please use caution, as there might be a malfunction due to the inflow of water while it rains.

NOTE

- 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 force. However, the other windows will keep operating. Make sure that all windows are opened.
- Be careful when using the remote window opening function, as the doors will be unlocked.

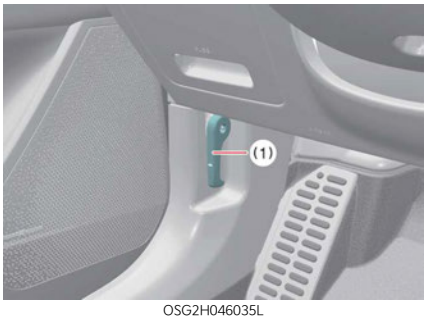
Hood

The hood is a cover for the engine compartment.

Open the hood if you need to look at the engine compartment or have maintenance work performed in the compartment.

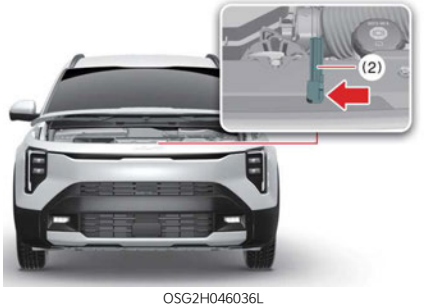
Opening the hood

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



OSG2H046035L

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



OSG2H046036L

3. Lift the unlocked hood upwards.



OSG2H046037L

Hood open warning

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



OSG2H006001L

The warning will chime when you drive the vehicle at or above 2 mph (3 km/h) with the hood open.

Closing the hood



OSG2H046038L

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 halfway and push down to securely lock in place.
3. Check that the hood has engaged properly.

   If the hood can be raised slightly, it is not properly engaged. Open it again and close it with a little more force.

WARNING

Hood obstruction

Before closing the hood, make sure 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

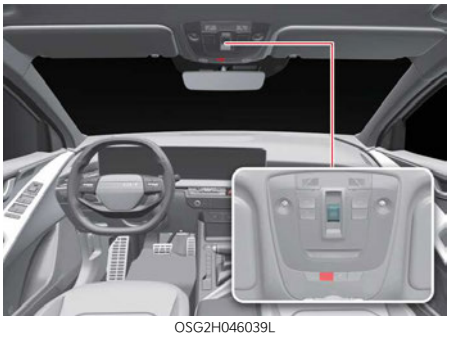
Do not leave gloves, rags, or any other combustible material in the motor compartment. Doing so may cause a heat-induced fire.

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 you drive the vehicle, causing a total loss of visibility, which may result in an accident.

Sunroof (if equipped)



OSG2H046039L

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 the ENGINE START/STOP button is in the ON position. The sunroof can be operated for approximately 3 minutes after the ENGINE START/STOP button is in the ACC or OFF position.

However, if the front door is open, the sunroof cannot be operated even within the 3 minutes 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 vehicle 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.

NOTE

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

Sunshade



OSG2H046040L

Use the sunshade to block direct sunlight coming through the sunroof glass.
Open or close the sunshade by hand.

NOTE

- The sunshade opens automatically when the sunroof glass is opened, but the sunshade does not close automatically when the sunroof glass is closed. Also, only the sunshade cannot be closed when the sunroof glass is opened.
- Do not pull the sunshade up or down, or apply excessive force as such action may damage the sunshade or cause it to malfunction.

Tilt open/close



OSG2H046041L



OSG2H046042L



OSG2H046043L

(1) Tilt open
(2) Tilt close

- Push the sunroof switch upward, the sunroof glass tilts open.
- Push the sunroof switch forward or pull the sunroof switch down when the sunroof glass is tilt opened, the sunroof glass closes.

The sunroof glass tilts open or closes while the switch is pushed.

NOTE

The sunroof glass cannot slide open and tilt open at the same time. You cannot tilt the sunroof glass open while the sunroof glass is slide open. Also, you cannot slide the sunroof glass open while the sunroof is tilt open. Slide open or tilt open the sunroof glass when the sunroof glass is completely closed.

Slide open/close



OSG2H046045L



OSG2H046044L

- Push the sunroof switch rearward, the sunshade and sunroof glass slide open.
  Push the sunroof switch forward, only the sunroof glass closes.
- Push the sunroof switch forward or rearward to the first detent position, the sunroof glass moves until the switch is released.
  To stop the sunroof movement at any point, push the sunroof switch in any direction.

- The sunroof glass stops halfway (first detent position) before it is fully opened. To fully open the sunroof glass, push the sunroof switch rearward once more. At this time, the sunroof glass opens only while the switch is pushed.

NOTE

To reduce wind noise while driving, we recommend that you drive at the recommended position (first detent position) before the maximum slide open position.

Automatic reversal



OSG2H046046L

If the 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 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 sunroof glass may reverse direction, but there is a risk of injury.

NOTE

- 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, including if the vehicle suddenly stops.

Resetting the sunroof



OSG2H046047L

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

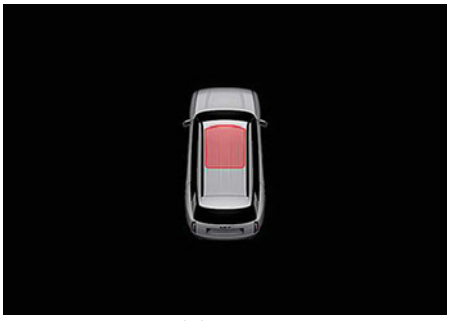
Sunroof resetting procedure:

1. It is recommended to perform the reset procedure with the vehicle engine running. Start the vehicle with the gear in P (Park).
2. Make sure the sunroof glass is in the fully closed position. If the sunroof glass is open, push the switch forward until the sunroof glass is fully closed.
3. Release the switch when the sunroof glass is fully closed.
4. Push the switch forward until the 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 close. Do not release the switch until the operation is completed. If you release the switch during operation, start the procedure again from step 2.

NOTE

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



OLQ2A005095

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 instrument cluster. Close the sunroof securely when leaving your vehicle.

NOTE

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.

Fuel filler door

You must open and close the vehicle's fuel filler door by hand from outside the vehicle.

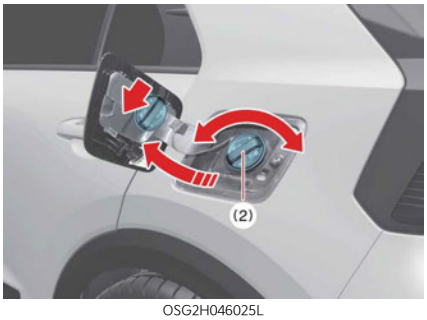
Opening the fuel filler door

1. Turn the engine OFF.
2. Make sure the driver's door is unlocked.
3. Press the rear center edge (1) of the fuel filler door.



OSG2H046026L

4. Pull the fuel filler door out to fully open it.
5. To remove the fuel tank cap (2), turn it counterclockwise. You may hear a hissing noise as the pressure inside the tank equalizes.



OSG2H046025L

6. Place the cap on the fuel filler door.

TIP

The fuel filler door will unlock when the driver's door is unlocked.

To unlock the fuel filler door, take one of the following actions:

- Press the unlock button on your smart key.
- Press the central door unlock button on the armrest trim of the driver's door.

- Pull the driver's inside door handle outward.

The fuel filler door will lock when all doors are locked.

To lock the fuel filler door:

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

All doors and the fuel filler door will automatically lock when vehicle speed exceeds 9.3 mph (15 km/h).

NOTE

Before refueling, be sure to check what type of fuel your vehicle uses.

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.

If the fuel filler door does not open under certain conditions, such as an electrical malfunction, contact an authorized Kia dealer.

TIP

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 deicer fluid (do not use radiator anti-freeze) or move the vehicle to a warm place and allow the ice to melt.

Closing and locking the fuel filler door

To lock the fuel filler door:

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

All doors and the fuel lid will automatically lock 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 its rear center edge.

NOTE

To lock the vehicle's fuel filler door, press the door to the LOCK position when it is completely closed.

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

WARNING

Refueling

Always remove the fuel cap carefully and slowly. If the cap is leaking 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.

NOTE

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

NOTE

Tighten the cap until it clicks 1 time. Otherwise, the engine warning indicator light will appear.

CAUTION

Keep the door in the LOCK position when washing the vehicle (for example: high pressure washer, automatic car washer, and so on.)

WARNING

Always tighten your fuel cap before you leave the fueling station. Failure to securely tighten 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 fueling station. 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, and so on) capable of producing static electricity. Static electricity discharge can ignite fuel vapors, resulting in rapid burning.

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 you have begun refueling, maintain contact with the vehicle 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 or electronic interference from mobile phones can potentially ignite fuel vapors, causing a fire.

⚠ WARNING

Refueling and vehicle fires
When refueling, always shut off the engine. 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 fueling station, especially during refueling. Automotive fuel is highly flammable and can start a fire when ignited.

Make sure to refuel your vehicle according to "Fuel requirements" on page 12.
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.

NOTE

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, take the following actions:

- Immediately rinse the 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.

NOTE

Damage caused by the wrong fuel

Fuel that does not conform to the vehicle requirements can lead to increased wear or damage to the engine and exhaust system. Only use the recommended fuel.

NOTE

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.

NOTE

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.

NOTE

- Do not use diesel to refuel vehicles with a gasoline engine.
- Do not turn the ignition ON if you accidentally refuel with the wrong fuel. Otherwise, the wrong 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.

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Driver adjustments

Steering wheel

The steering wheel of this vehicle has tilt and telescopic ability and a horn.

Motor Driven Power Steering (MDPS)

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, you may still steer the vehicle, but it will require increased steering effort.
The power steering unit, which senses the steering wheel torque and vehicle speed to command the motor, controls the MDPS.
For better control of the steering wheel, the steering effort becomes heavier as the vehicle's speed increases and lighter as the speed decreases.
Should you notice any change in the effort required to steer during normal vehicle operation, have the system inspected by an authorized Kia dealer.

TIP

The following may occur during normal vehicle operation:

- When the ENGINE START/STOP button is the ON position, the steering wheel enters normal operation mode after diagnosing the MDPS system (for about 3 seconds).
- You may hear a click noise from the MDPS relay after turning the ENGINE START/STOP button to the ON or OFF position.
- If you operate the steering wheel when the vehicle is not in motion or when driving at a low speed, you may hear some noise.
- If the MDPS system does not operate normally, the warning light appears or blinks on the instrument cluster. If the power assistance for steering fails, you will need to use more force to steer.
- Operating the steering wheel at lower temperatures may require more force and cause more accompanying noise. When the temperature increases, steering returns to normal.
- When the charging system warning light comes on due to the low voltage (when the alternator or battery does not operate normally or malfunctions), you may need to use more force to steer.
- When jump starting the vehicle after battery discharge, the steering wheel may not function properly. This 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 it is functioning properly before driving the vehicle.

TIP

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.

WARNING

If the EPS system does not work or an error occurs, the warning light on the instrument panel may turn 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. Then immediately pull your vehicle over to a safe place and have it inspected by an authorized Kia dealer.

Tilt and telescopic steering wheel

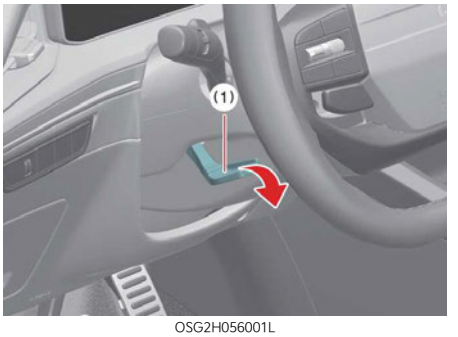
A tilt and telescopic steering wheel allows you to adjust the steering wheel before you drive. You can also raise the wheel to give your legs more room when you exit and enter the vehicle.
The steering wheel should be positioned so that it is comfortable for you to drive, while permitting you to see 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

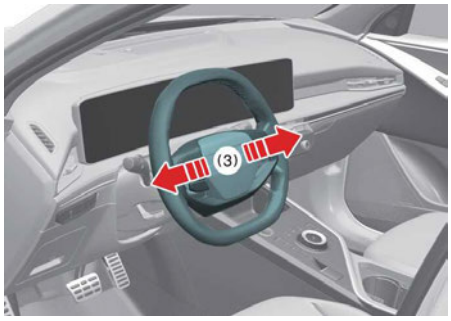
Manual type



OSG2H056001L



OSG2H056002L



OSG2H056003L

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 or back (3).
   Move the steering wheel so that 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. Push the steering wheel both up and down to make sure it is locked into position.
4. Adjust the steering wheel to the desired position before driving.

TIP

After adjustment, sometimes the lock-release lever may not lock the steering wheel. If this happens, adjust the steering wheel again to get it to lock. This is not a malfunction. It happens when 2 gears engage, and a small adjustment of either angle or height will correct the issue.

Steering wheel heater (if equipped)

When the ENGINE START/STOP button is in the ON position, pressing the heated steering wheel button warms the steering wheel. The indicator on the button will appear.



OSG2H056014L

- Press the steering wheel heater button. When you press the steering wheel heater button, the indicator lights up and the steering wheel will warm.

- To prevent low-temperature burns,the steering wheel temperature is automatically adjusted after the steering wheel heater is manually turned on.

Steering wheel heater level	Operating time
Off	-
2 (Strong)	30 minutes
1 (Weak)	Until restart

  - When using the steering wheel heater in the 2nd level (strong), it automatically lowers to the 1st level (weak) after about 30 minutes.
  - If the user does not manually operate the steering wheel heater, it is maintained at the 1st level (weak)until the vehicle is turned off.
- To turn off the steering wheel heater,press and hold the steering wheel heating button until the indicator light goes out.

NOTE

- 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.

Steering wheel grip sensor

While driving the vehicle with the Driver Assistance system on, it detects whether the driver is holding the steering wheel and displays the Hands-off warning when the driver is not holding the steering wheel.

For more details, refer to "Lane Keeping Assist (LKA)" on page 451, "Lane Following Assist (LFA)" on page 460, and "Highway Driving Assist (HDA)" on page 550.

NOTE

The steering wheel sensor may not work properly if the following precautions are not followed.

- Do not modify the steering wheel cover.
- Do not attach accessories on the rim of the steering wheel.
- Do not let the steering wheel come in contact with electronic devices (for example, laptops, tablets, etc.).
- Do not let the steering wheel come in contact with metallic or conductive objects (for example, tumblers, beverage cans, etc.).

- Avoid excessive contact with moisture (for example, wet tissues, spilled water, vapor from steam wash, etc.).

When the driver is wearing gloves or accessories such as a cover, steering wheel knobs, any other attachments are attached to the steering wheel, the sensor may fail to detect the driver's hands even when the driver is holding the steering wheel.

Horn

Press the area indicated by the horn symbol on your steering wheel to sound the horn (see illustration).



OSG2H056005L

The horn operates only when you press this area. Check the horn regularly to be sure it operates properly.

NOTE

Do not strike the horn with your fist. Do not press on the horn with a sharp or pointed object.

Mirrors

This vehicle is equipped with inside and outside rearview mirrors to provide views of objects behind the vehicle.

Inside rearview mirror

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

Do not place objects in the rear seat or cargo area that could interfere with your view out the rear window.

WARNING

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

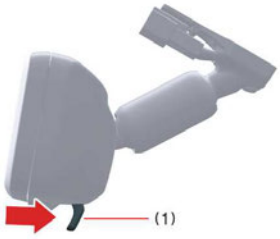
WARNING

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.

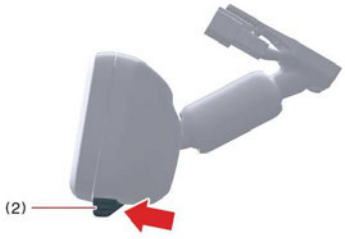
NOTE

Mirror cleaning
To clean 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 rearview mirror (if equipped)



OMQ4A035418



OMQ4A035419

(1) Day
(2) 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.

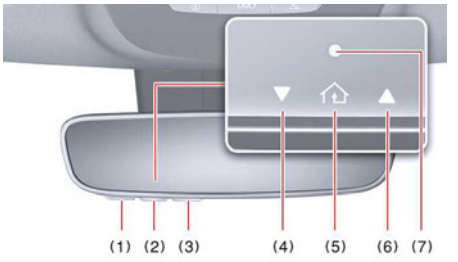
Remember that you lose some rearview clarity in the night position.

Electric Chromic Mirror (ECM) (if equipped)

The ECM automatically controls the glare from the headlights of vehicles behind you at night or in low-light driving conditions.

The sensor mounted on the rearview mirror detects the light level around the vehicle and automatically controls the headlamp glare from the vehicles behind you when the engine is running.

Electrochromic mirror (ECM) with HomeLink® system (if equipped)



OMQ4A035498

(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 rearview mirror glare. The HomeLink® Universal Transceiver allows you to activate your garage doors, electric gate, home lighting, and so on.

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 obstruct the light sensor will negatively affect 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 whenever you start the vehicle.

Integrated HomeLink® Wireless Control System

The HomeLink® Wireless Control System provides a convenient way to replace up to 3 hand-held radio-frequency (RF) transmitters that activate compatible devices such as gate operators,

garage door openers, entry door locks, security systems, and home lighting.

TIP

Due to the Home Security when the vehicle is parked outside the garage, the **HomeLink** will ONLY work the vehicle is in the ACC or ON position.

TIP

Before programming **HomeLink** to work with 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 you place a new battery into the hand-held transmitter of the device being trained to work with **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 before going back to the dealer who sold you the car.

Visit the HomeLink® website at: www.homelink.com. At the top of the page, choose your vehicle make. Then you can watch the YouTube video and access additional information on the website.

If you choose to access the website via your cell phone, scan the QR code:



ODL3A040519

Or call HomeLink® customer support at **1-800-355-3515**

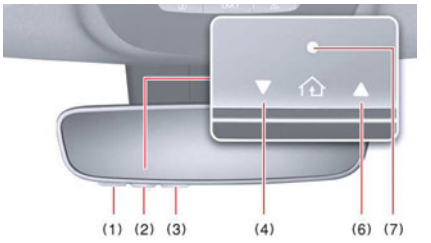
(Please have the vehicle make/model AND the opener device make/model readily available.)

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 you place a new battery into the hand-held transmitter of the device being programmed to HomeLink® for quicker training and accurate transmission of the radio-frequency signal.

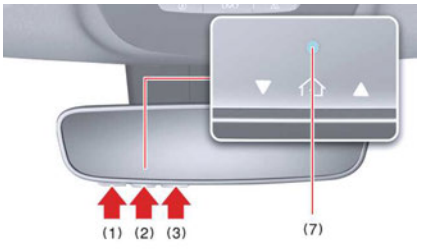
    3. Press the ENGINE START/STOP button in the ACC position to program HomeLink®.



OMQ4A035499

2. Programming a New HomeLink® Button

    1. Press and release the HomeLink® button you would like to program (1, 2, or 3). The HomeLink® indicator light (7) will slowly flash orange. If it does not, perform the steps in the "Erasing HomeLink® Buttons" section, and start over.



OMQ4A035500

    2. Position the garage door opener remote 1-3 inches (2-8 cm) away from the HomeLink® buttons.



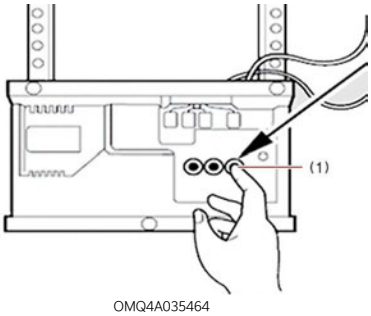
OMQ4A035447

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) changes from orange to green. You may now release the hand-held remote button.

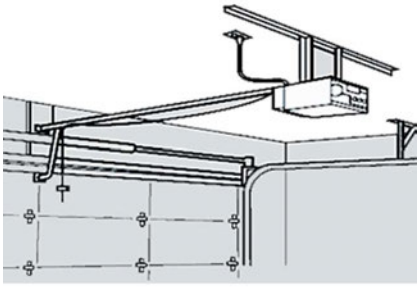
4. Wait until your garage door comes to a complete stop, regardless of position, before proceeding to the next steps.

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 you press the HomeLink® button. At this point, if your device operates, programming is complete.
   If the indicator light rapidly flashes green, firmly press the HomeLink® button, hold it for 2 seconds, and release it 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 the next step.

6. At the garage door opener motor, security gate motor, or other system motor, locate the "Learn," "Smart," "Set," or "Program" button. This can usually be found where the hanging antenna wire (1) 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.



OMQ4A035464



OMQ4A035465

* A ladder 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 to complete the next step.

8. Return to the vehicle and firmly press the HomeLink® button, hold it for 2 seconds, and release it up to 3 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 you press and release the HomeLink® button.

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/support. 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.

3. In your vehicle, press and hold the programmed HomeLink® button for 2 seconds, then release it. Confirm that the garage door is moving. AFTER it stops, you will have 1 minute to complete the following steps:

   * A ladder or second person may simplify the following steps.

   1. On the 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 you have difficulty locating this button, refer to the device's owner's manual.

   2. Press and release the "Learn" button.

   3. 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.

   4. 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 press any additional buttons until AFTER the garage door has come to a complete stop.
      Your Two-Way Communication programming is now complete.

      TIP

      If your garage door opener has Two-Way Communication functionality and the Two-Way Communication programming wasn't properly completed, HomeLink® may stop operating the garage door shortly after initial programming. This usually happens after the first 10 times you press a programmed HomeLink® button. If you experience this, completing the "Programming a New HomeLink® Button" and "Two-Way Communication programming" procedures 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.

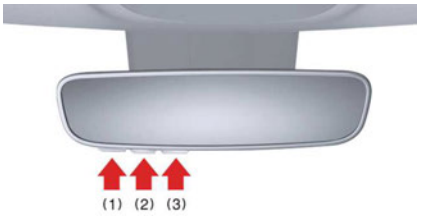
   If you live in Canada or you are having difficulties programming a gate operator or garage door opener by using the programming procedures, replace "Programming a New HomeLink® Button" step 3 with the following:

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 programmed HomeLink® button (1, 2, or 3).

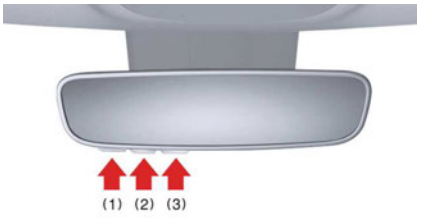


OMQ4A035449

> **TIP**
>
> 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.

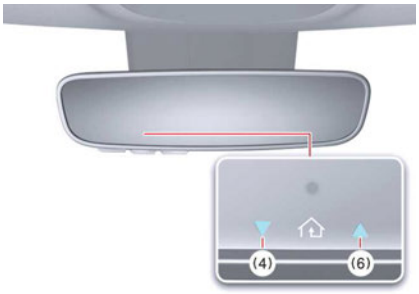
2. Two-Way Communication Display Behavior

   1. Press and release 1 of the programmed HomeLink® buttons (1, 2, or 3).



OMQ4A035449

   2. The indicator (4) and (6) operates as follows if your garage door opener has Two-Way Communication functionality:



OMQ4A035450

- If the indicator (4) flashes orange, the garage door is closing.
- The indicator (4) will turn solid green once the garage door has closed.
- If the indicator (6) flashes orange, the garage door is opening.
- The indicator (6) will turn solid green once the garage door has fully opened.
- If the indicator (4) or (6) does not turn green, the last status of the garage door was not received properly. The HomeLink® mirror will try to receive the last known status of the garage door for a few seconds.

3. Recalling Garage Door Status
   The HomeLink® mirror with Two-Way Communication provides a way to view the last stored message from the garage door opener. To recall the last known status of the last activated device, press the buttons "1 and 2" OR "2 and 3" simultaneously.
   - If indicator (4) appears solid green, the last activated device was closed properly.
   - If indicator (6) appears solid green, the last activated device was opened properly.

3. Erasing HomeLink® Buttons

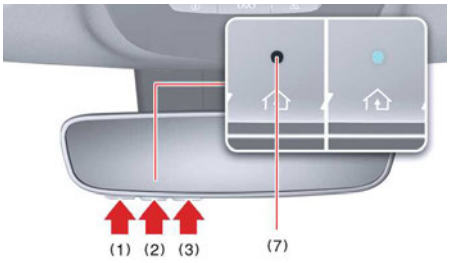
1) Erasing and reprogramming a single HomeLink® button:

1. Press and hold the HomeLink® button you want to reprogram. 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, which usually takes approximately 20 seconds.
3. Proceed with the steps in the "Programming a new HomeLink® button" section.

TIP

If you do not complete the reprogramming of a new device to the button, it will revert to the previously stored programming.

2) Erasing ALL HomeLink® programming from ALL buttons:



OMQ4A035501

1. Press and hold 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) rapidly flashes green.
4. Now all 3 HomeLink® buttons (1), (2), and (3) are cleared of any programming.

Information

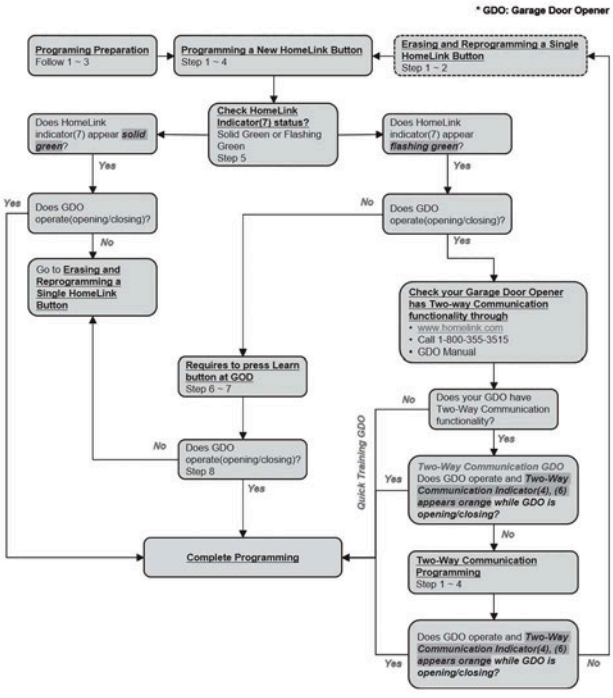
HomeLink® and the HomeLink® House logo are registered trademarks of Gentex Corporation. The myQ® logo is a registered trademark of The Chamberlain Group, Inc.

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 programming flow chart



OMQ4A035452

Outside rearview mirror

Your vehicle is equipped with both left and right outside rearview mirrors.

Be sure to adjust the mirror angle before driving.
You can adjust the mirrors remotely with the control levers or remote switch depending on the type of mirror control installed. You can fold the mirror heads back to prevent damage in an automatic car wash or when driving on a narrow street.

TIP

Rearview mirrors

- The outside rearview mirror is convex. Objects seen in the mirror are closer than they appear.
- Use your interior rearview mirror or direct observation to determine the actual distance of following vehicles when changing lanes.

NOTE

Do not scrape ice off of the mirror face, as scraping may damage the surface of the glass. If ice restricts the mirror's movement, do not force the mirror to adjust its position. To remove ice, use either a de-icer spray or warm water and a sponge or soft cloth.

NOTE

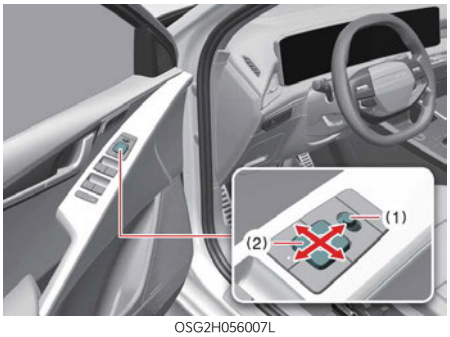
If the mirror is jammed with ice, do not adjust the mirror by force. Use an approved spray de-icer (not radiator antifreeze) to release the frozen mechanism, or move the vehicle to a warm place and allow the ice to melt.

WARNING

Do not adjust or fold the outside rearview mirrors while the vehicle is moving. This could result in a crash and serious injury or death.

Adjusting the outside rearview mirrors

The electric remote control mirror switch allows you to adjust the position of the left and right outside rearview mirrors.



OSG2H056007L

To adjust the outside rearview mirrors, follow these steps:

1. Move the R or L switch to select the right side mirror or the left side mirror.
2. Engage the corresponding point on the mirror adjustment control to position the selected mirror up, down, left, or right.

NOTE

- The mirrors will stop moving when they reach their maximum adjustment angles, but the motor will continue to operate while the switch is pressed. To avoid damage to the motor, do not press the switch longer than necessary.
- Do not adjust the outside rearview mirrors by hand. Doing so may damage their parts.

Folding the outside rearview mirror

Manual type (if equipped)

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



OSG2H056008L

Electric type (if equipped)

You can fold or unfold the outside rearview mirror by pressing the switch as shown in the following image:



OSG2H056009L

- To fold the outside rearview mirror,press the button.
- To unfold it, press the button again.

CAUTION

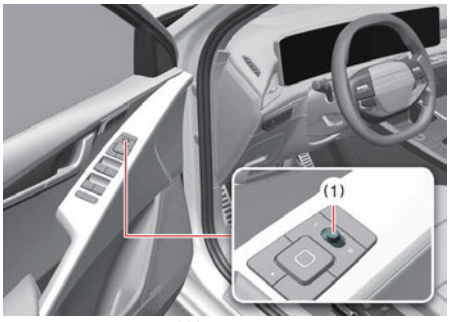
You can adjust the electric outside rearview mirrors even when the ENGINE START/ STOP button is in the ACC or OFF positions. To prevent unnecessary battery discharge, do not adjust the mirrors for longer than necessary while the engine is not running.

NOTE

Do not fold an electric outside rearview mirror by hand. This action can cause motor failure.

Reverse parking aid function (if equipped)

When you shift the gear to the R (Reverse) position, the outside rearview mirrors will rotate downward to aid in driving in reverse.



OSG2H056010L

The position of the outside rearview mirror switch (1) determines whether or not the mirrors will move.

Left or right: When you select either the L (Left) or R (Right) switch, the corresponding outside rearview mirror will move.

Neutral: When you do not select either switch, the outside rearview mirrors will not move.

The outside rearview mirrors will automatically revert to their original positions in the following cases:

- You set the ENGINE START/STOP button set to either OFF or ACC.
- You shift the gear to any position except R (Reverse).
- You do not select the remote control outside rearview mirror switch.

Auto reverse user settings

If you cannot secure enough visibility with the angles provided as factory default settings, you can readjust the angles of the outside rearview mirrors.

You can set the factory default angles of the right and left rearview mirrors differently to improve visibility:

1. Set the shift lever to P (Park). Make sure that the vehicle is stopped and the mirrors are not working.
2. Position the lever to L (left) or R (right) according to the mirror you want to adjust.
3. Engage the brake pedal and set the shift lever to R (Reverse).
4. When the rearview mirror finishes moving downward, adjust it by pressing the directional switches: ▼, ▲, ◄, ►.
5. To automatically save the adjusted angle, set the shift lever to a gear other than R (Reverse), change the rearview mirror selector lever to neutral, and wait for the mirror's automatic return.
6. Follow the same procedure to adjust the rearview mirror on the other side of the vehicle.

How to reset auto reverse user settings

To change the rearview mirror automatic control functions back to their factory default settings, follow these steps:

1. Set the shift lever to P (Park). Make sure that the vehicle is stopped and the mirror is not

working.

2. Position the lever to L (left) or R (right) according to the mirror you want to adjust.
3. Engage the brake pedal and set the shift lever to R (Reverse).
4. When the rearview mirror finishes moving downward, press the ▲ (up) switch to move the mirror's position higher (P, N, or D). Adjust the mirror higher than its driving mode position.
5. To initialize auto reverse user settings, shift the gear out of R (Reverse), or change the rearview mirror selector lever to its neutral position. The initialized position will be applied in the next operation.
6. Follow the same procedure to initialize settings for the rearview mirror on the other side of the vehicle.

TIP

Kia recommends following the above procedures in order when changing or initializing auto reverse user settings. If you move to the next step before completing the previous 1, the angle may not change or initialization may not work properly.

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.



OSG2H056012L

- Driver's seat position
- Outside rearview mirror
- Head-Up Display (HUD)

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.

NOTE

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

Storing memory positions

1. Shift to P (Park) while the ENGINE 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 positions.
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 ENGINE 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.
   "Driver 1 (or 2) settings applied" will appear on the infotainment screen.

Seat easy access

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

Exiting the vehicle

- The driver's seat will move as follows when the ENGINE 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 ENGINE 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 ENGINE START/STOP button in the OFF position.

- Driver seat: Moves back to its original position.

You can set the Seat Easy Access function from the Settings menu in the infotainment system screen.

- Driver seat: Select **Settings > Vehicle > Seats > Seat Easy Access > Dirver seat easy access** on the infotainment system.

Resetting the system

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

Resetting the integrated memory system

1. Stop the vehicle and open the driver's door with the ENGINE 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. Push the seatback angle forward switch and forward the driver's seat movement switch over 2 seconds simultaneously.

While resetting the 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).

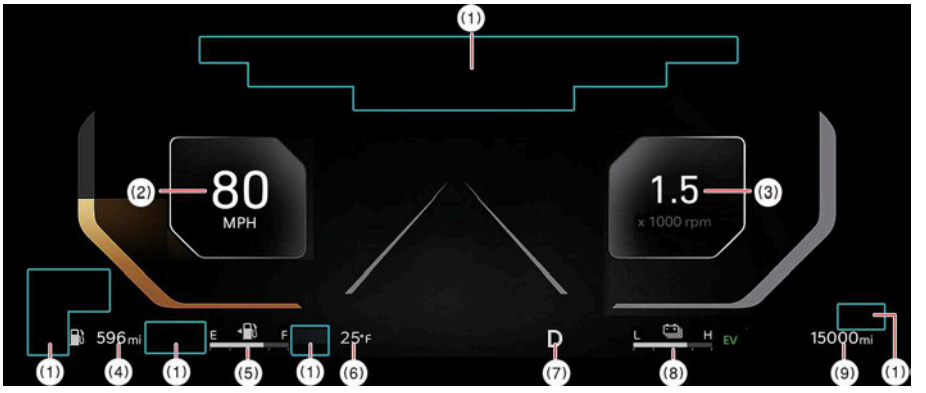
- The driver's door is closed.

TIP

- While integrated memory system is being reset, if the resetting and notification sound stops incompletely, restart the resetting procedure again.
- Make sure that there are 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.

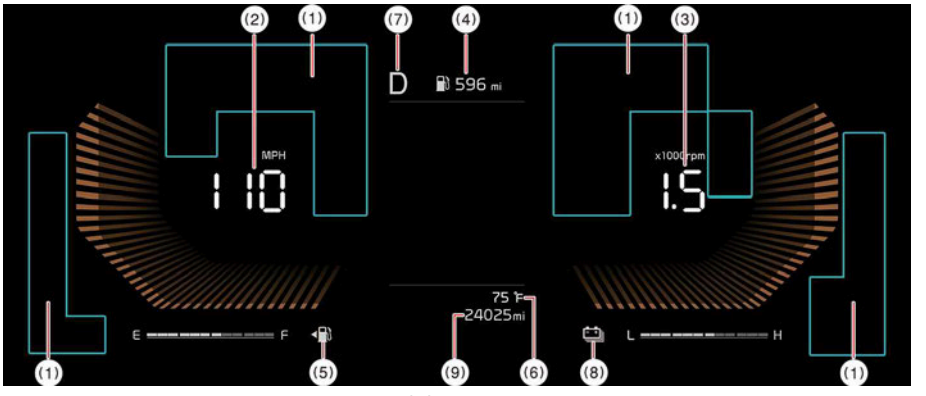
Instrument cluster

Type A



OLQ2AH005030

Type B



OLQ2AH005031

* The actual instrument cluster in the vehicle may differ from the illustrations.

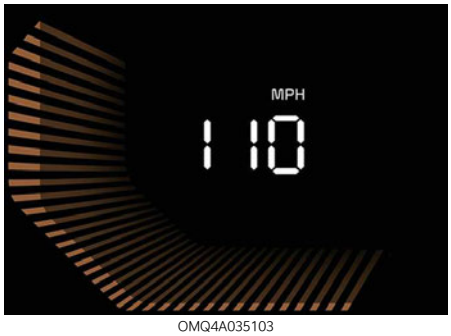
(1) Warning and indicator lights
(2) Speedometer
(3) Tachometer/Power gauge
(4) Distance to empty
(5) Fuel gauge
(6) Outside temperature gauge
(7) Transmission shift indicator
(8) Hybrid battery SOC gauge
(9) Odometer

Gauges

The gauges display various information, such as the speed of the vehicle and other metrics.

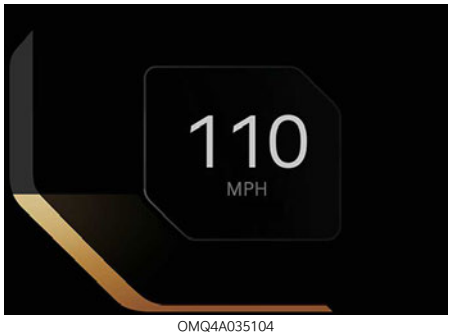
Speedometer

Type A



OMQ4A035103

Type B



OMQ4A035104

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

Tachometer/Power gauge

Type A



OLQ2AH005001

Type B



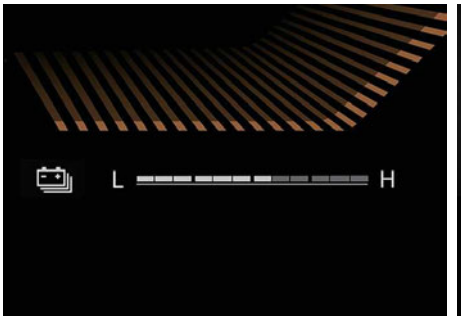
OLQ2AH005002

The hybrid system gauge indicates whether the current driving condition is fuel efficient or not.

- CHARGE:
  Shows that the energy made by the vehicle is converting to electrical energy (Regenerated energy).
- ECO:
  Shows that you are driving the vehicle in an eco-friendly manner.
- POWER:
  Shows that the vehicle is exceeding the eco-friendly range.

Hybrid battery SOC gauge

Type A



OLQ2AH005003

Type B



OLQ2AH005004

The hybrid battery State of Charge (SOC) gauge indicates the remaining level of hybrid battery power. If the gauge is near the Low (L) level, the vehicle automatically operates the engine to charge the battery.
If the Service Indicator ( ) and Malfunction Indicator Lamp (MIL) ( ) illuminate when the SOC gauge is near the Low (L) level, have your vehicle inspected by an authorized Kia dealer.

NOTE

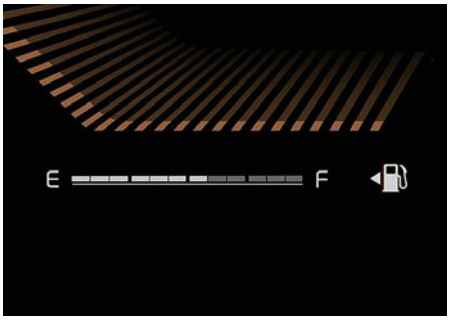
If the gauge pointer moves beyond the normal range area toward the "H" (Hot) position, it indicates overheating that may damage the engine.
Do not continue driving with an overheated engine. If your vehicle overheats, refer to "If the engine overheats" on page 628.

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.

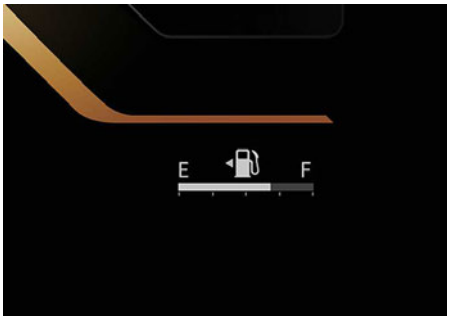
Fuel gauge

Type A



OMQ4A035109

Type B



OMQ4A035110

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

TIP

- More information about the fuel tank can be found in "Recommended lubricants and capacities" on page 35.
- The fuel gauge has a low fuel warning light that appears when the fuel tank is nearly empty.
- On inclines or curves, the fuel gauge pointer may fluctuate and 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 put the vehicle occupants in danger.

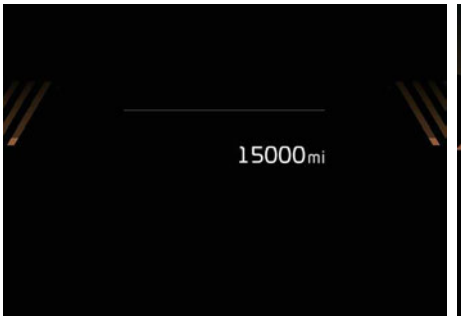
You must stop and obtain additional fuel as soon as possible if the warning light illuminates or when the gauge indicator comes close to the "E" (Empty) level.

NOTE

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

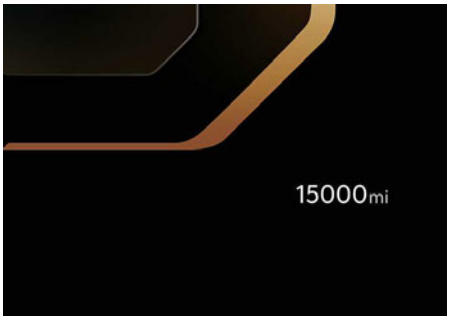
Odometer

Type A



OMQ4A035111

Type B



OMQ4A035112

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

- Odometer range: 0-999,999 mi or 0-1,599,999 km.

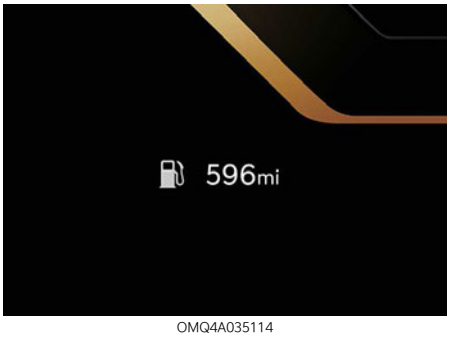
Distance to empty

Type A



OMQ4A035113

Type B



OMQ4A035114

- The distance to empty is the estimated distance you can drive the vehicle with the current amount of fuel.
  - Distance range: 1-9,999 mi or 1-9,999 km.
- If the estimated distance is below 1 mile (1.6 km), the trip computer will display "---" as the distance to empty.
- If the remaining fuel level is above 3/4, you must add more than 0.8 gallons (3 liters) of fuel for the fuel gauge to change. If the remaining fuel level is below 3/4, you must add more than 1.6 gallons (6 liters) of fuel for the fuel gauge to change.

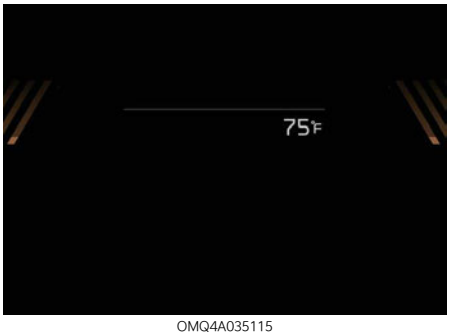
TIP

- 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 only an estimate.
- The trip computer may not register additional fuel if you add fewer than 1.6 gallons (6 liters) of fuel to the vehicle.
- The fuel economy and distance to empty may vary significantly based on driving conditions, driving habits, and the condition of the vehicle.

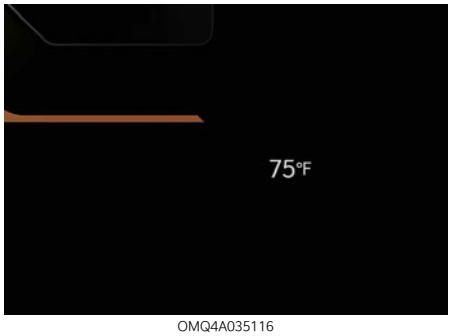
Outside temperature gauge

Type A



OMQ4A035115

Type B



OMQ4A035116

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

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

To prevent distracted driving, the outside temperature on the display may not change immediately as a regular thermometer would.

To change the temperature unit from Fahrenheit to Celsius or vice versa, use the LCD Display's "User Settings" mode.

* For more details, refer to "LCD display modes" on page 159.

Transmission shift indicator

The transmission shift indicator displays gear information depending on your vehicle's transmission type.

Dual clutch transmission shift indicator

Type A



N_SP3i25_C00_005_IR

Type B

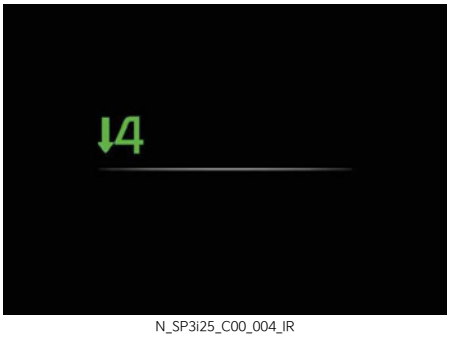


N_SP3i25_C00_086_IR

The transmission shift indicator displays which shift lever is currently selected.

- Park: P
- Reverse: R
- Neutral: N
- Drive: D1, D2, D3, D4, D5, D6

Dual clutch transmission shift indicator in manual shift mode (if equipped)



N_SP3i25_C00_004_IR

In the Manual shift mode, this indicator informs which gear is desired whilst driving to save fuel.

- Shifting up: ▲2, ▲3, ▲4, ▲5, ▲6
- Shifting down: ▼1, ▼2, ▼3, ▼4, ▼5

For example

- ▲3: Indicates that shifting up to the 3rd gear is desired (currently the shift lever is in the 2nd or 1st gear).
- ▼3: Indicates that shifting down to the 3rd gear is desired (currently the shift lever is in the 4th, 5th or 6th gear).When the system is not working properly, the indicator is not displayed.

Adjusting instrument cluster illumination

To change the brightness of the instrument panel illumination, press the illumination control but-

ton (“+” or “-”) when the ENGINE START/STOP button is ON or when the tail lights are turned ON.



OSG2H056019N

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.

Warning and indicator lights

The warning and indicator lights show whether various functions are activated and indicate situations in which the driver should be careful.

Warning lights

The warning lights indicate situations that require the driver to pay extra attention.

TIP

Warning lights

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

Service warning light

This warning light illuminates:

- When you press the ENGINE START/STOP button in the ON position, the service warning light illuminates for approximately 3 seconds, then turns off when all checks have been performed.
- When there is a problem with the hybrid vehicle control system or hardware

If the warning light illuminates while you are driving or does not turn off after you start the vehicle, have your vehicle inspected by an authorized Kia dealer.

Regenerative brake warning light

This warning light illuminates when regenerative braking does not operate or perform well. This issue causes the brake warning light (red) and regenerative brake warning light (yellow) to illuminate simultaneously.

If the regenerative brake warning light illuminates, drive safely and have your vehicle inspected

by an authorized Kia dealer. Operating the brake pedal might be more difficult than usual, and braking distance might increase.

Air bag warning light

This warning light appears:

- When you press the ENGINE START/STOP button in the ON position. The light illuminates for approximately 3-6 seconds and then disappears.
- When there is an SRS malfunction. If this happens, have your vehicle inspected by an authorized Kia dealer.

Seat belt warning light

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

* For more details, refer to "Seat belt warning" on page 211.

Parking brake and brake fluid warning light

This warning light appears:

- When you press the ENGINE START/STOP button in the ON position.
  - The light appears for approximately 3 seconds.
  - The light remains on if the parking brake is applied.
- When you apply the parking brake.
- When the brake fluid level in the reservoir is low.
  - If the warning light appears when you release the parking brake, the brake fluid level in the reservoir is low.

If the brake fluid level in the reservoir is low, follow these steps:

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 680). Then check all brake components for fluid leaks. Do not drive the vehicle if you find a leak in the brake system, the warning light remains on, or the brakes do not operate properly.

   Have your vehicle towed to and inspected by an authorized Kia dealer.

Dual-diagonal braking system

Your vehicle is equipped with dual-diagonal braking systems, which means you still have braking on 2 wheels even if one of the dual systems should fail.
With only 1 of the dual systems working, you need to press the pedal further and harder 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.

WARNING

Parking brake and brake fluid warning light

Driving the vehicle with a warning light ON is dangerous. If the Parking brake and brake fluid warning light appears while the parking brake is 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:

- For approximately 3 seconds when you press the ENGINE START/STOP button in the ON position.
- If the ABS malfunctions, the normal braking system will still be operational.
  Have your vehicle inspected by an authorized Kia dealer.

EBD system warning light

These 2 warning lights appear at the same time when both the ABS and regular brake system are not working. In this case, have your vehicle inspected by an authorized Kia dealer.

WARNING

EBD system warning light

When both the ABS and Parking brake and brake fluid warning lights are on, the brake system will not work normally, and sudden braking may cause a dangerous or unexpected situation.
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 warning light (if equipped)

This warning light appears:

- For approximately 3 seconds when you press the ENGINE START/STOP button in the ON position.
- When the EPB is malfunctioning. In this case, have your vehicle inspected by an authorized Kia dealer.

TIP

EPB warning light

The 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 an EPB malfunction.

Motor Driven Power Steering (MDPS) warning light

This warning light appears:

- For approximately 3 seconds when you press the ENGINE START/STOP button in the ON position.
- When the MDPS is malfunctioning. In this case, have your vehicle inspected by an authorized Kia dealer.

Charging system warning light

This warning light appears:

- When you press the ENGINE START/STOP button in the ON position.
- When either the alternator or electrical charging system is malfunctioning.

If either the alternator or electrical charging system is malfunctioning, follow these steps.

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 your vehicle inspected by an authorized Kia dealer.

Malfunction Indicator Lamp (MIL)

This warning light appears:

- For approximately 3 seconds when you press the ENGINE START/STOP button in the ON position.
- Whenever there is a malfunction with the emission control system, engine, or vehicle powertrain. Have your vehicle inspected by an authorized Kia dealer.

NOTE

MIL

- Driving with the MIL on may cause damage to the emission control systems, which could affect drivability and fuel economy.
- If the enhanced engine protection system is activated due to a lack of engine oil, the engine will have limited power. If this continues, the MIL will appear.

TIP

If the oil pressure lowers due to insufficient engine oil or another cause, the engine oil pressure warning light will turn on, and an enhanced engine protection system that limits the engine's power activates. The engine warning light will turn on if you continue driving.

NOTE

If the MIL appears, catalytic converter damage is possible, which could result in loss of engine power. In this case, have your vehicle inspected by an authorized Kia dealer.

Engine oil pressure warning light

This warning light appears:

- When you press the ENGINE START/STOP button in the ON position until the engine starts.
- When the engine oil 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 "Changing the engine oil and filter" on page 674). If the level is low, add oil as required.
- If the warning light remains on after you add oil, or if oil is not available, have your vehicle inspected by an authorized Kia dealer. Continuing to drive with the warning light on may cause engine failure.

TIP

- When engine oil pressure decreases due to insufficient engine oil or another cause, the engine oil pressure warning light will appear.
- The enhanced engine protection system, which limits engine power, will activate. If the engine oil pressure is restored, the Engine Oil Pressure warning light and the enhanced engine protection system will turn off.

NOTE

Engine overheating
Do not continue driving when the engine is overheated. Otherwise, the engine may be damaged.

NOTE

Engine damage
After the engine oil pressure warning light appears and stays on while the engine is running, serious engine damage may occur if you do not stop the engine immediately.

Exhaust system (GPF) warning light (Gasoline Engine)

This warning light appears:

- When there is a malfunction with the Gasoline Particulate Filter (GPF) system.
- When this warning light appears, it may turn off after you drive the vehicle.
  - Drive the vehicle for more than 30 minutes at a speed of 50 mph (80 km/h) or faster.
  - Ensure that 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 above procedure (at this time, the LCD warning message will display), have the GPF system inspected by an authorized Kia dealer

NOTE

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

NOTE

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 warning light appears 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:
- For approximately 3 seconds when you press the ENGINE START/STOP button in the ON position.
- When 1 or more of your tires are significantly underinflated. The LCD display shows the location of any underinflated tire.)

* For more details, refer to "Tire Pressure Monitoring System (TPMS)" on page 630.

This warning light remains on after blinking for approximately 60 seconds or repeats blinking on and off at intervals of approximately 3 seconds when the TPMS malfunctions. In this case, have your vehicle inspected by an authorized Kia dealer.

* For more details, refer to "Tire Pressure Monitoring System (TPMS)" on page 630.

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:
- For approximately 3 seconds when you press the ENGINE START/STOP button in the ON position.
- When there is a malfunction with the LED headlamp.

Have your vehicle inspected by an authorized Kia dealer.

This warning light blinks:
- When there is a malfunction with an LED headlamp related part.

Have your vehicle inspected by an authorized Kia dealer.

NOTE

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:

- For approximately 3 seconds when you press the ENGINE START/STOP button in the ON position.
- Yellow: When Forward Collision-Avoidance Assist Forward Safety is deselected or disabled, or when a malfunction is detected.

  If the yellow warning light remains on after the sensor has been uncovered or unblocked when you set Forward Safety, have your vehicle inspected by an authorized Kia dealer.

This warning light blinks red when the Forward Safety or Forward Cross-Traffic Safety function is operating.

* For more details, refer to "Forward Collision-avoidance Assist (FCA) (Sensor Fusion)" on page 418.

Emergency steering warning light (if equipped)

This warning light appears:

- For approximately 3 seconds when you press the ENGINE START/STOP button in the ON position.
- Yellow: When Forward Collision-Avoidance Assist Forward/Side Safety is deselected or disabled, or when a malfunction is detected.

  If the warning light remains on after the sensor has been uncovered or unblocked when Forward/Side Safety is on, have your vehicle inspected by an authorized Kia dealer.

This warning light blinks red when the Forward/Side Safety function is operating.

* For more details, refer to "Forward Collision-avoidance Assist (FCA) (Sensor Fusion)" on page 418.

Icy road warning light (if equipped)

This warning light appears when the temperature on the outside temperature gauge is below approximately 40°F (4°C) to warn the driver that the road may be icy. The outside temperature gauge blinks before the Icy Road Warning appears and the warning chime sounds once.

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.

Forward Attention Warning light (if equipped)

This warning light illuminates:

- For approximately 3 seconds when you press the ENGINE START/STOP button in the ON position.
- When Forward Attention Warning is disabled or a malfunction is detected. If the warning light remains on after the in-cabin camera has been uncovered or unblocked, have your vehicle inspected by an authorized Kia dealer.

This warning light blinks:

- Forward Attention Warning warns the driver to keep eyes on the road.

* For more details, refer to "Forward Collision-avoidance Assist (FCA) (Sensor Fusion)" on page 418.

Indicator lights

READY indicator READY

This indicator displays when the vehicle is ready to drive. When it does not display, normal driving is impossible or a problem has occurred. Blinking indicates emergency driving.

When the ready indicator does not display or blinks, there is a problem with the system. If this occurs, have your vehicle inspected by an authorized Kia dealer.

EV mode indicator EV

The EV mode indicator illuminates when the electric motor powers the vehicle.

When the EV indicator light does not illuminate, the gasoline engine powers the vehicle.

Electronic stability control (ESC) indicator light

This indicator light appears:

- For approximately 3 seconds when you turn the ENGINE START/STOP button to the ON position.
- When there is an ESC system malfunction. In this case, have your vehicle inspected by an authorized Kia dealer.

This indicator light blinks while the ESC is operating.

* For more details, refer to "Electronic Stability Control (ESC)" on page 380.

Electronic stability control (ESC) OFF indicator light

This indicator light appears:

- For approximately 3 seconds when you press the ENGINE START/STOP button in the ON position.
- When you deactivate the ESC system by pressing the ESC OFF button.

* For more details, refer to "Electronic Stability Control (ESC)" on page 380.

AUTO HOLD indicator light

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 engaging the brake pedal with the Auto Hold system activated.

- Yellow when there is a malfunction with the Auto Hold system. In this case, have your vehicle inspected by an authorized Kia dealer.

* For more details, refer to "AUTO HOLD" on page 374.

Immobilizer indicator light (without smart key)

- This indicator light appears when the vehicle properly detects your key's immobilizer while the vehicle is in ON position. The indicator light will disappear after you start the engine.
- This indicator light blinks when the immobilizer system is malfunctioning. In this case, have your vehicle checked by a professional workshop. Kia recommends that you visit an authorised Kia dealer/service partner.

This indicator light blinks:

- When the immobilizer system is malfunctioning.

  In this case, have the vehicle inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

Immobilizer indicator light (with smart key)

This indicator light appears for up to 30 seconds when the vehicle properly detects the smart key inside of the vehicle while the ENGINE START/STOP button is in the ACC or ON position. The indicator light will disappear after you start the engine.

This indicator light blinks for a few seconds when the smart key is not in the vehicle. You will not be able to start the engine.

This indicator light appears for 2 seconds then disappears when the vehicle cannot detect the smart key in the vehicle and the ENGINE START/STOP button is ON. In this case, have your vehicle inspected by an authorized Kia dealer.

This indicator light blinks:

- When the smart key battery is weak. You will not be able to start the engine unless you press the ENGINE START/STOP button with the smart key. (For more details, refer to "Immobilizer system" on page 53).
- When the immobilizer system is malfunctioning. In this case, have your vehicle inspected by an authorized Kia dealer.

Turn signal indicator light

This indicator light blinks when you engage the turn signal.

The turn signal system may be malfunctioning and should be inspected by an authorized Kia dealer if the indicator light does any of the following:

- The indicator light appears but does not blink.
- 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 high beam lights are ON.
- When the turn signal is set to Flash-to-Pass.

High Beam Assist indicator light

This indicator light appears:

- When the light switch is set to AUTO and the high beam lights are ON.
- If your vehicle detects oncoming vehicles or vehicles ahead, High Beam Assist will automatically switch the headlight from high beam to low beam.

* For more details, refer to "High Beam Assist (HBA)" on page 182.

Light ON indicator light

This indicator light appears when the taillight or headlight is 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:

- For approximately 3 seconds when you press the ENGINE START/STOP button in the ON position.
- 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 illuminated after the sensor has been uncovered or unblocked when Lane Safety is ON, have your vehicle 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 451.

Drive mode indicator light (ECO/SPORT) (if equipped)

This indicator light appears according to which drive mode you select.

For more details, refer to "Drive mode integrated control system" on page 387.

Intelligent Speed Limit Assist indicator light (if equipped)

This indicator light appears:

- For approximately 3 seconds when you press the ENGINE START/STOP button in the ON position.
- Yellow when Intelligent Speed Limit Assist is OFF, disabled, or malfunctioning.
- When the Intelligent Speed Limit Assist system is ON, the indicator displays the speed limit. When the vehicle is speeding, the speed limit displays red.

* For more details, refer to "Intelligent Speed Limit Assist (ISLA)" on page 499.

Highway Lane Change Assist indicator light (if equipped)

This indicator light appears:

- Green when Highway Lane Change Assist is ready to operate.
- Gray when Highway Lane Change Assist is on 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)" on page 550.

Lane Following Assist indicator light

This indicator light appears:

- When you press the Lane Following Assist button ON.
- Yellow when there is a problem with the Lane Following Assist function.

* For more details, refer to "Lane Following Assist (LFA)" on page 460.

LCD display

You can change the LCD display modes using the control buttons.

LCD display control



OSG2H056018L

Switch	Control	Action
Mode (1)	Short Press	Changing view modes
OK (2)	Short Press	Operating additional functions
	Long Press	Resetting menu information
Up/Down (3)	Short Roll	Searching utility information

LCD display modes

The LCD display has 3 modes. You can switch modes by pressing the Mode button.

View	Description
Driving Assist view	Displays information related to the Driver assistance system
Navigation view	Displays information related to the navigation system
Utility information view	Displays information related to driving, warnings, and so on

Driving assist view



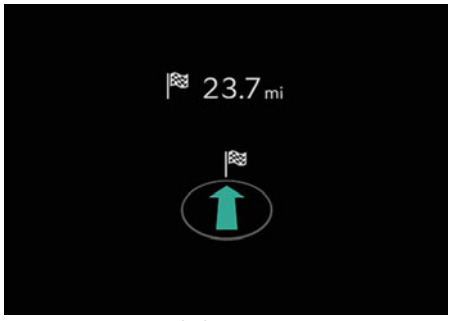
OSG2PH005119

This mode displays the state of:

- Lane Keeping Assist
- Smart Cruise Control
- Lane Following Assist

* For more details, refer to "Driver assistance guide" on page 411.

Navigation view



OMQ4A035120

This mode displays the navigation state.

Utility information view

Low pressure warning display



OSG2H006007L

(1) **Low tire pressure**

This warning message displays when the tire pressure is low and indicates which tire is low.
* For more details, refer to "Tire Pressure Monitoring System (TPMS)" on page 630.

Fuel economy

This information is always displayed at the bottom center of the Full LCD information cluster.



OMQ4A035146

(1) **Average fuel economy**

(2) **Instant fuel economy**

Average fuel economy

- Average fuel economy is calculated using the total driving distance and fuel consumption of the last trip.
  - Fuel economy range: 0-99.9 mpg or km/L, L/100 km

> **TIP**
>
> For more accurate calculation, the average fuel economy is not displayed if you do not drive the vehicle for more than 10 seconds or 0.03 miles (50 m) after you turn the ENGINE START/STOP button ON.

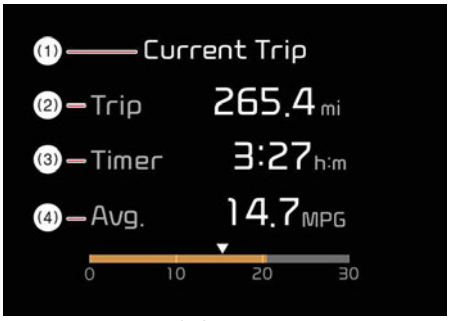
Instant fuel economy

- 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

> **NOTICE**
>
> Instant energy economy gauges may differ depending on the vehicle specifications.

Drive Info display

The Drive Info display shows the trip distance, average fuel efficiency, and total driving time once per ignition cycle.

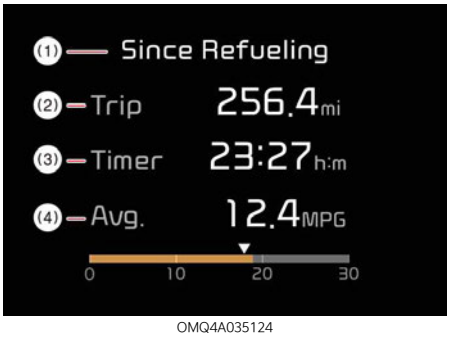


OMQ4A035121

(1) **Current Trip**
(2) **Trip**
(3) **Timer**
(4) **Avg.**

- After the vehicle runs for more than 0.19 miles (300 m), the Fuel efficiency is calculated.
- The information will automatically reset when the driver's door is opened after the ignition is turned off, or approximately 3 minutes after the ignition is turned off.
- If you press the "OK" button for more than approximately 1 second after the driving information is displayed, the information will be reset.
- Information is accumulated when the engine is running, even if the vehicle is not in motion.

Information since refueling



OMQ4A035124

(1) **Since Refueling**
(2) **Trip**
(3) **Timer**
(4) **Avg.**

This display shows the trip distance, the average fuel efficiency, and the instant fuel efficiency (or the total driving time) since refueling.

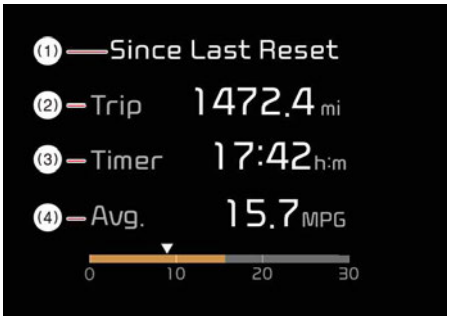
- After the vehicle runs for more than 0.19 miles (300 m), the information since refueling is calculated.
- If you press the "OK" button for more than 1 second after the information since refueling is displayed, the information is reset.
- When driving after refueling, the information is automatically reset.
- Information is accumulated when the engine is running, even if the vehicle is not in motion.

TIP

The vehicle must be driven for at least 0.19 miles (300 m) since the last ignition cycle before the average accumulated driving information is recalculated.

Accumulated driving information mode

This display shows the accumulated trip distance, the average fuel efficiency, and the total driving time.



OMQ4A035123

(1) **Since Last Reset**
(2) **Trip**
(3) **Timer**
(4) **Avg.**

- After the vehicle runs for more than 0.19 miles (300 m), the Accumulated information is calculated.
- If you press the "OK" button for more than 1 second after the Cumulative Information is displayed, the information will be reset.
- Information is accumulated when the engine is running, even if the vehicle is not in motion.

Other view modes

Master warning mode



N_CT25Z021

This mode informs you of the following situations:

- Driver assistance system malfunction, limitation, or a radar or camera interference (if equipped)
- LED headlamp malfunction
- Lamp malfunction
- TPMS (Tire Pressure Monitoring System) failure, low tire pressure, and so on.

The Master Warning icon (⚠) will appear. If the warning situation resolves, the master warning light will turn off and the Master Warning icon will disappear.

Service mode

This mode reminds you of scheduled maintenance information.



OCL4M035116N

(1) **Service in**

Service interval

The vehicle calculates and displays when you need a scheduled maintenance service (based on mileage or days).
If the remaining mileage or time reaches 900 miles (1,500 km) or 30 days, the "Service Interval" message displays for several seconds each time you turn the ENGINE START/STOP button to the ON position.

Service required

If you do not have your vehicle serviced according to the default service interval, the "Service required" message displays for several seconds each time you turn the ENGINE START/STOP button to the ON position.

TIP

Mileage and days may be incorrect in the following situations:
- The battery cable is disconnected.
- The battery is discharged.

LCD display messages

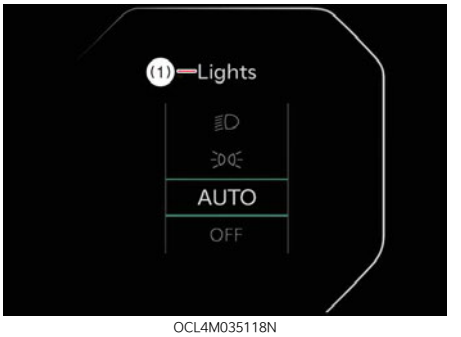
Door, hood, liftgate, or sunroof open



OSG2H006003L

This warning displays when a door, the hood, the liftgate, or the sunroof is open and indicates which is open.

Lights mode



OCL4M035118N

(1) **Lights**

This indicator displays which exterior light is selected using the lighting control.
You can activate or deactivate the Wiper/Lights Display function in the information cluster LCD display's User Settings mode.

Wiper mode

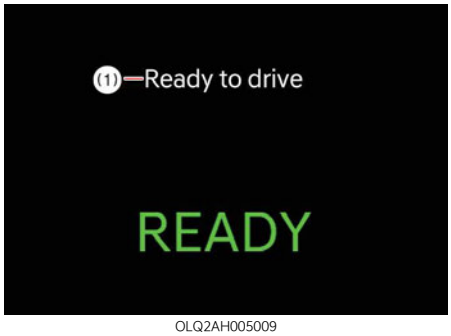


N_CT25_C00_170_A

(1) **Front Wiper**

This indicator displays which wiper speed is selected using the wiper control.
You can activate or deactivate the Wiper/Lights Display function in the information cluster LCD display's User Settings mode.

Ready to drive

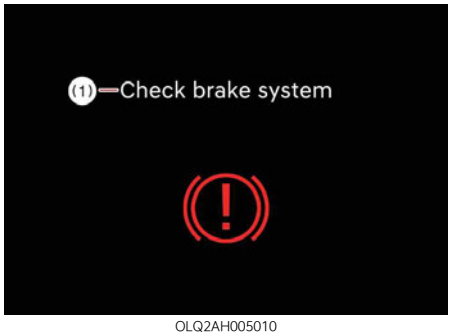


OLQ2AH005009

(1) **Ready to drive**

This message displays when the vehicle is ready to drive.

Check brake system

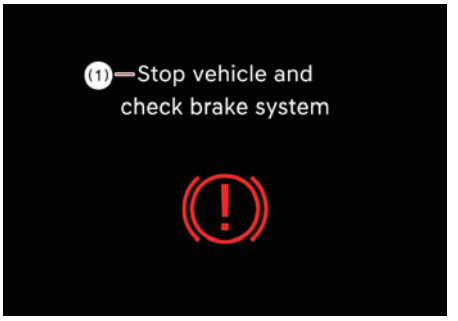


OLQ2AH005010

(1) **Check brake system**

This message displays when the brake performance is low or regenerative braking does not work properly due to a failure in the brake system. Operating the brake pedal might be slower than usual. The required braking distance might increase.

Stop vehicle and check brake system

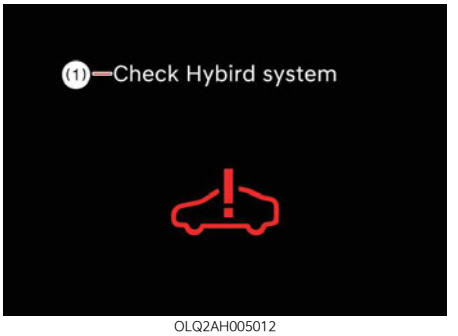


OLQ2AH005011

(1) **Stop vehicle and check brake system**

This message displays when the brake system has a failure. In this case, park the vehicle in a safe location and have it towed to the nearest authorized Kia dealer to be inspected.

Check Hybrid system

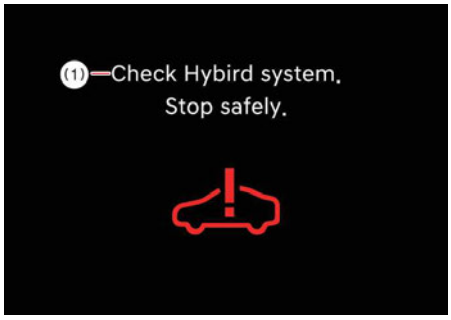


OLQ2AH005012

(1) **Check Hybrid system**

This message displays when the hybrid control system has a problem. When this warning message displays, refrain from driving the vehicle. Have your vehicle inspected by an authorized Kia dealer.

Check Hybrid system. Stop safely.



OLQ2AH005013

(1) **Check Hybrid system. Stop safely.**

This message displays when the hybrid control system has a problem. The READY indicator blinks and a warning chime sounds until the problem resolves. When this warning message displays, refrain from driving the vehicle. Have your vehicle inspected by an authorized Kia dealer.

Check Hybrid system. Do not start engine.



OLQ2AH005014

(1) **Check Hybrid system. Do not start engine.**

This message displays when the hybrid battery's charge level (SOC) is low. A warning chime sounds until the problem resolves. When this warning message displays, refrain from driving the vehicle. Have your vehicle inspected by an authorized Kia dealer.

Stop vehicle and check power supply

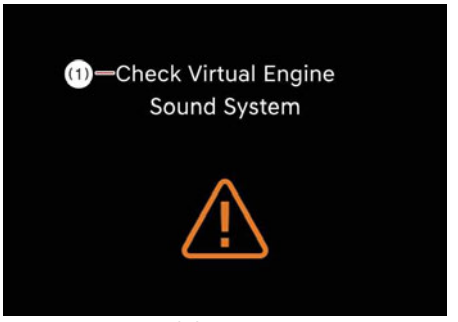


OLQ2AH005015

(1) **Stop vehicle and check power supply**

This message displays when the power supply system has a failure. In this case, park the vehicle in a safe location and have it towed to the nearest authorized Kia dealer to be inspected.

Check Virtual Engine Sound System



OLQ2AH005016

(1) **Check Virtual Engine Sound System**

This message displays when the Virtual Engine Sound System (VESS) has a problem. When this warning message displays, have your vehicle inspected by an authorized Kia dealer.

Refill coolant



OLQ2AH005017

(1) **Refill coolant**

This message displays when the inverter coolant is nearly empty. Refill the inverter coolant.

Park with engine On to charge battery



OLQ2AH005018

(1) **Park with engine On to charge battery**

This message displays when the hybrid battery's charge level (SOC) is low. Park the vehicle in a safe location and wait for the hybrid battery to charge before you resume driving.

Start engine to avoid battery discharge



OLQ2AH005019

(1) **Start engine to avoid battery discharge**

This message displays when the 12V battery might discharge if the ENGINE START/STOP button is in the ON position and the READY indicator does not display. To prevent the 12V battery from discharging, set the vehicle to the READY mode.

Low washer fluid

This warning message displays when the washer fluid level in the reservoir is nearly empty. Refill the washer fluid reservoir.

Engine overheated

This warning message displays 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 628.

Ice possible. Drive with care.

This warning appears when the road may be icy.

When the temperature on the outside temperature gauge is below approximately 40°F (4°C), the warning light and outside temperature gauge will blink 5 times, then remain lit. A warning chime will sound once.

WARNING

If the icy road warning appears while you are driving, you should drive even more attentively and cautiously. Refrain from speeding, rapid acceleration, sudden braking, sharp turning, and other potentially dangerous driving.

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 (Gasoline)" on page 673.

TIP

When the engine oil level warning light appears, ensure that you have followed the engine oil replacement maintenance schedule in the owner's manual before replenishing the oil. If you have not followed the schedule, you must replace the engine oil.

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.
Replace engine oil from an authorized Kia dealer. After that, select **Convenience > Oil Change Reminder** from the User Settings menu on the cluster or **Vehicle > Cluster > Oil Change Reminder** from Settings menu on the infotainment system screen to reset the remaining oil life.
For more details, refer to "Engine oil (Gasoline)" on page 673.

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. After that, select **Convenience > Oil Change Reminder** from the User Settings menu on the cluster or **Vehicle > Cluster > Oil Change Reminder** from Settings menu on the infotainment system screen to reset the remaining oil life.
For more details, refer to "Engine oil (Gasoline)" on page 673.

Low key battery (for smart key system)

This warning message appears if the smart key's battery is discharged when you turn the ENGINE START/STOP button 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 you press the ENGINE START/STOP button. To resolve the issue, 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 you turn the ENGINE START/STOP button 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 you turn the ENGINE START/STOP button 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 without the gear in P (Park) or N (Neutral).

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 when you press the button repeatedly without engaging the brake pedal. Engage 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 overcurrent generated by unauthorized electrical devices, such as a instrument panel camera.
If the warning continues after you disconnect external electrical devices, 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 due to a problem with the button system.
- You can start the engine by pressing the ENGINE START/STOP button once more.
- If the warning appears every time you press the ENGINE START/STOP button, have your vehicle inspected by an authorized Kia dealer.

Press START button with key (for smart key system)

- This warning message appears if you press the ENGINE START/STOP button while the warning message "Key not detected" is illuminated.
- The immobilizer indicator light will blink.

Headlights are Off

This warning message appears if the headlights are OFF when you are in dark surroundings.

Head-Up DIsplay (HUD) (if equipped)

The Head-Up Display is a transparent display that projects an image of certain information from the instrument cluster and navigation system onto the windshield glass.



OSG2H056015L

- The head up display image on the HUD screen may be hard to see when:
  - Sitting posture is improper.
  - Wearing polarized sunglasses.
  - There is an object on the cover of the head up display.
  - Driving on a wet road.
  - An inadequate lighting is turned on inside the vehicle.
  - Any light comes from the outside.
  - Wearing inappropriate eyeglasses.
- If the head up display image is hard to see, adjust the height, rotation or illumination of the head up display on the LCD display.
- If the head up display needs inspection or repair, visit an authorized Kia dealer.

⚠ WARNING

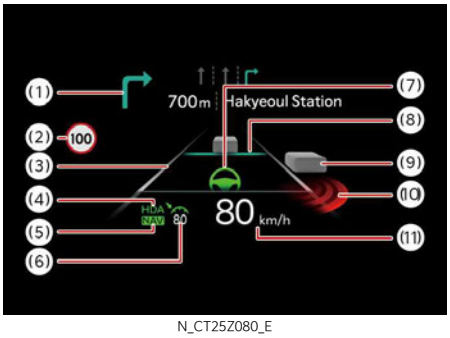
Head-Up Display

- Do not add tint or other coating to the windshield. The Head-up display image may be obscured.
- Do not place any accessories on the instrument panel or attach any objects on the windshield glass.
- Blind-Spot Collision-Avoidance Assist is a supplemental function to assist when changing lanes. It is not a substitute for the driver turning the head and looking directly to see that the adjacent lane is safe to enter. Do not rely only on the Blind-Spot Safety when changing lanes. Always pay attention to drive safely.

⚠ CAUTION

When replacing the front windshield glass of the vehicles equipped with the Head-Up Display, replace it with a windshield glass designed for the Head-Up Display operation. Otherwise, duplicate images may be displayed on the windshield glass.

Head Up Display Information



N_CT25Z080_E

(1) Turn By Turn (TBT) navigation information
(2) Traffic information
(3) Lane Safety information
(4) Highway Driving Assist information (if equipped)
(5) Highway Auto Speed Change information (if equipped)
(6) SCC set speed information (if equipped)
(7) Lane Following Assist information (if equipped)
(8) SCC vehicle distance information (if equipped)
(9) Surrounding vehicle information (if equipped)
(10) Blind-Spot Safety information
(11) Speedometer information

Head-Up Display Setting

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

1. Display height
2. Rotation
3. Brightness
4. Content selection

Lighting

This vehicle is equipped with a variety of lights to illuminate both the interior and exterior of the vehicle.

NOTE

To prevent the battery from discharging, do not leave the headlamps or interior lights on for a prolonged period of time while the vehicle is not running.

Battery saver function

The purpose of this feature is to prevent the battery from discharging if the lights are left on. The function automatically shuts off the position lamps once the engine is off and the driver's door is opened.

The position lamps, however, will stay on if you operate the light switch after turning the vehicle off, even when the driver's door is open.

To keep the lights on after turning off the vehicle, turn the position lamps off and on again using the headlamp switch on the steering column.

Headlight delay function

If you set the vehicle to OFF or to ACC position with the headlamps on, the headlamps and position lamps will remain on for approximately 5 minutes.

When the vehicle is off and the driver's door is opened and shut, the headlamps and position lamps will turn off after 15 seconds.

You can turn off the headlamps and position lamps by pressing the smart key's lock button twice or turning the light switch to the OFF or AUTO position. Keep in mind that the headlamps will not turn off if you turn the light switch to the AUTO position when it is dark outside.

You can activate or deactivate the headlight delay function in the **Settings** menu on the infotainment system screen. If your vehicle is equipped with additional navigation features, refer to the infotainment system manual supplied separately.

TIP

If the driver exits the vehicle through any door other than the driver's, the battery saver function will not operate, and the headlight delay function will not turn off automatically.

In this case, the 12V battery may discharge. To avoid 12V battery discharge, turn the headlamps off manually using the headlight switch before exiting the vehicle.

Daytime running light (DRL)

The DRL can make it easier for others to see the front of your vehicle during the day.

Daytime running lights (DRL) help other drivers see the front of your vehicle during the day, especially after dawn and before sunset.

Use the Daytime running lights (DRL) whenever you drive during daylight.

The system turns on the Daytime running lights (DRL) when the headlamp switch is in the OFF or

AUTO position (when daylight is detected) and the Electronic parking brake (EPB) is released.
The Daytime running lights (DRL) will turn its DRL lamp off when:

- The vehicle is in OFF position.
- When the parking brake is engaged while vehicle is in ON position.
- When the headlamps are on
  - The system automatically turns on the headlamps at night when the headlamp switch is in the AUTO position.
- When the front fog lamps are on (if equipped)

You can turn off the daytime running lights by engaging the brakes with the headlights on and turning off the headlights.

Lighting control

The light switch has a headlight and a position lamp setting.



OLQ2A055001

(1) Headlamps ON
(2) Position lamp and taillight
(3) AUTO
(4) OFF

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

Position Lamp & Taillight



OLQ2A055002

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)



OLQ2A055003

When the light switch is in the headlight position, headlight (low beam), taillight and license plate lamp will turn on.

TIP

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

Headlight (High Beam)



OLQ2A055005



OLQ2A055006

- To turn on the high beam headlights, push the lever away from you.
  When the high beam headlights are turned on, the lever will return to its original position, and the high beam indicator on the instrument cluster will illuminate.
- To flash the high beam headlamps, pull the lever toward you.
  The lever will return to the normal (low beam) setting when released. The headlight switch does not need to be on to flash the high beam headlights.

WARNING

High beams

Do not use the high beam headlight when there are other vehicles in front of or approaching your vehicle, as the light may obstruct the other driver's vision.

Auto light



OLQ2A055004

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.

Light switch settings

Setting	Result
Position lamp and taillight   OLQ2A055002	Front position lamp, taillights, and license plate lamp are on. **TIP** The vehicle must be in the ON position to turn on the headlights.
Headlight (low beam)   OLQ2A055003	Low beam headlight, taillight, and license plate lamp are on.

Setting	Result
AUTO light  OLQ2A055004	Taillights and headlights turn on or off automatically depending on the amount of ambient light.

NOTE

- The sensor (1) is located on the front windshield for optimal AUTO light setting performance.



OSG2H086012L

- Do not clean the sensor with a window cleaner, as it may leave a thin film that could interfere with sensor operation.
- If your vehicle has a window tint or other metallic coating on the front windshield, the AUTO light system may not work properly.

Turn and lane change signal operation



OLQ2A055007

The vehicle must be in the ON position for the turn signals to function.

- To engage the turn signal, move the lever up or down (1).
  The green arrow indicators on the instrument panel indicate which turn signal is operating.
  The turn signal will cancel itself after you complete a turn. 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 (2).
  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 need to be replaced.

One-touch lane change function

To use the one-touch lane change function, move the turn signal lever slightly, then release it. The lane change signals will blink 3, 5, or 7 times.

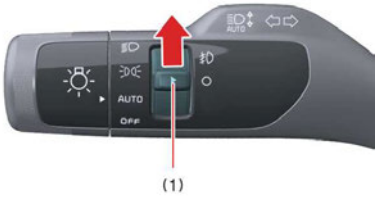
Select **Settings > Vehicle > Lights > One Touch Turn Signal** from the infotainment system to activate or deactivate the one-touch lane change function or choose the length of blinking (3, 5, or 7 times).

TIP

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

Front fog light operation (if equipped)

Front fog lights are designed to improve visibility in fog, rain, or snow.



OLQ2A055008

- To turn on the fog lights, turn the fog light switch (1) ON after turning the headlights on.
- To turn off the fog lights, turn the fog light switch (1) to the OFF position.

TIP

The fog lights consume large amounts of vehicle electrical power when in operation. Only use the fog lights when visibility is poor.

High Beam Assist (HBA) (if equipped)



OLQ2A105003

The HBA function automatically adjusts the headlight range (switches between high beam and low beam) depending on the brightness of detected vehicles and certain road conditions.

Detection sensor

Please refer to "Detecting sensor(s)" on page 415 for the applicable sensors and their locations.

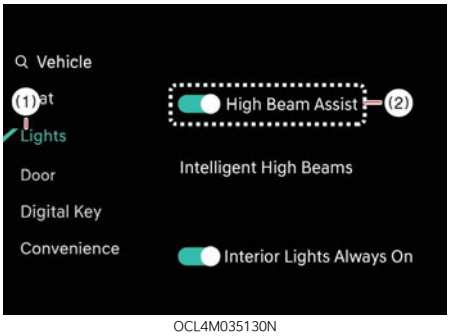
CAUTION

- When replacing, removing, or reinstalling the detection sensor, have your vehicle inspected by an authorized Kia dealer.
- If the detection sensor or its surrounding area is impacted, High Beam Assist may not operate properly even if a warning light or message does not appear on the instrument cluster. In this case, have your vehicle inspected by an authorized Kia dealer.

TIP

- Always keep the front view camera in good condition to maintain optimal performance of High Beam Assist.
- For more information about the front view camera, refer to "Forward Collision-avoidance Assist (FCA) (Sensor Fusion)" on page 418.

High Beam Assist setting



OCL4M035130N

(1) **Lights**

(2) **High Beam Assist**

With the vehicle ON, select **Setup > Vehicle > Lights > High Beam Assist** in the **Settings** menu to turn on the High Beam Assist function.

WARNING

For your safety, change the settings only after parking the vehicle at a safe location.

High Beam Assist operation

- After selecting **High Beam Assist** in the Settings menu, the function operates as follows:
  - To enable the function, set the headlight switch to AUTO and push the headlamp lever toward the instrument cluster. The HBA (AUTO) indicator light will appear on the instrument cluster.
  - When HBA is enabled, the high beam will turn on when the vehicle speed is above 20 mph (30 km/h). The high beam will not turn on when the vehicle speed is below 12 mph (20km/h).
  - The high beam ( ) indicator light will appear on the cluster when the high beam is on.
- If you use the headlight lever or switch when HBA is operating, the function operates as follows:
  - To turn the high beam on without canceling HBA, pull the headlight lever toward you when the high beam is off. When you let go of the headlight lever, it will move to the middle and the high beam will turn off.
  - To turn the high beam on and cancel HBA, push the light switch toward the instrument cluster.
  - If you change the headlight switch from AUTO to another setting, HBA will turn off and the corresponding lamp will turn on.

- When HBA is operating, the headlight switches from high to low beam in the following situations:
  - When an oncoming vehicle headlight is detected.
  - When the taillight of a vehicle in front is detected.
  - When the headlight or taillight of a motorcycle or bicycle is detected.
  - When the surrounding ambient light is bright enough that high beams are not required.
  - When streetlights or other lights are detected.

NOTICE

Depending on the instrument cluster specifications or theme, images or colors may be displayed differently.

High Beam Assist malfunction and limitations

High Beam Assist malfunction



OCL4M055096N

(1) **Check Driver Assistance system.**

When HBA is not working properly, the Master warning light (⚠) appears on the instrument cluster, along with a warning message that lasts for several seconds. Have your vehicle inspected by an authorized Kia dealer.

High Beam Assist limitations

HBA may not work properly in the following situations:

- Light from another vehicle is not detected for any reason.
- The headlights are dirty with dust, snow, or water.
- The headlight is off but the fog light is on.
- Your vehicle detects a lamp that is shaped like a vehicle headlight.
- The headlamps are damaged or incorrectly repaired.
- The headlamps are not aimed properly.
- You are driving on a narrow, curved, rough, or steep road.
- You are driving on a crossroad or curved road and a vehicle in front of you is partially visible.
- There is a traffic light, reflective or flashing sign, or mirror ahead.
- There is a temporary reflector or flash ahead from a construction area.
- Road conditions are wet, icy, snowy, or otherwise poor.
- A vehicle suddenly appears from around a curve.

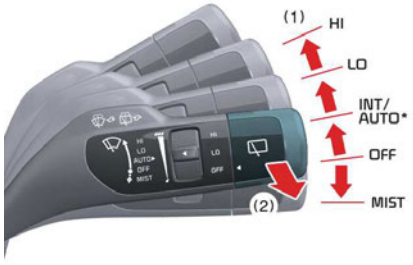
- A vehicle is tilted because of a flat tire or is being towed.
- Light from a vehicle is not detected because of exhaust fumes, smoke, fog, snow, or other obstructions.

TIP

- The HBA function is only for your convenience and may not work properly at times. It is the responsibility of the driver to maintain safe driving practices and always watch the road.
- HBA may not operate for 15 seconds after you start the vehicle or after you initialize or restart the front view camera.
- When HBA does not operate normally, manually switch the headlights between high and low beam.

Wipers and washers

The wipers and washers remove foreign substances from the windshield and rear window to help maintain visibility.



OLQ2A055010



OLQ2A055011



OLQ2A055012

(1) Wiper speed control
- MIST: Single wipe
- OFF: Off
- INT: Intermittent wipe
- AUTO*: Automatically controlled wipe
- LO: Low wiper speed
- HI: High wiper speed

(2) Wash with brief wipes (pull lever toward you)
(3) Intermittent control and AUTO control wipe time adjustment*
(4) Rear wiper/washer control
- HI: Continuous wipe
- LO: Intermittent wipe
- OFF: Off

(5) Rear wash with brief wipes (push lever away from you)

* : if equipped

Windshield wipers

When the vehicle is in ON position, operate the windshield wipers as follows:

- MIST: For a single wiping cycle, move the lever to this position and release it. If the lever is held in this position, wipers will operate continuously.
- OFF: Wiper is not in operation.
- INT: Wiper operates intermittently at the same wiping intervals. Use this mode in light rain or mist. To change the speed setting, turn the speed control knob.
- LO: Normal wiper speed
- HI: Fast wiper speed

WARNING

Do not use the washer in freezing temperatures before warming the windshield with the defroster, as the washer solution could freeze on the windshield and obscure your view, leading to an accident resulting in severe injury, death, or property damage.

NOTE

If there is a heavy accumulation of snow or ice on the windshield, do not drive until you defrost the windshield for about 10 minutes, or remove the snow and ice before using the windshield wipers to ensure proper operation. If you do not remove the snow and ice before using the wiper and washer, you may damage the wiper and washer system.

NOTE

- If a communication malfunction occurs in the wiper system and the wipers do not operate normally, set the wiper switch to the LO position. The wipers will operate at a constant LO speed. If this occurs, have your vehicle inspected by an authorized Kia dealer.
- When the wiper switch is in the HI position, the wiper speed may gradually decrease as rainfall lessens and friction increases. When rainfall increases again and friction decreases, the wiper speed will return to normal.

TIP

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.

TIP

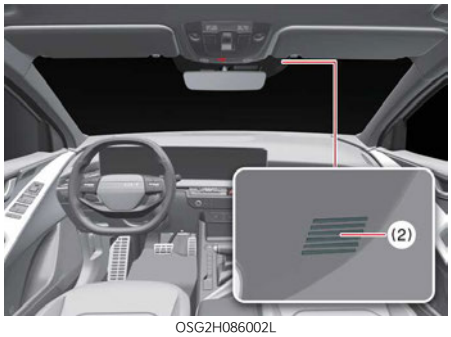
If you operate the wipers while driving on snowy roads, the wipers may stop due to snow buildup on your windshield. This is normal and not a failure, but a safety feature to prevent vehicular accidents and wiper damage from overloading the wiper motor. If the wipers stop, remove snow accumulated on the top or bottom of the windshield before using the wipers.

AUTO control (if equipped)

(1) Wiper speed control switch
(2) Rain sensor



OLQ2A055013



OSG2H086002L

The rain sensor, located on the upper end of the windshield, senses the amount of rainfall and controls the wiping cycle at the proper interval. The more it rains, the faster the wiper operates. When the rain stops, the wiper stops.

To change the speed setting, turn the speed control switch (1).

If you set the wiper switch to AUTO when the vehicle is in ON position, the wiper will operate once to check the system. Set the wiper to OFF when not in use.

WARNING

When the vehicle is in ON position and the windshield wiper switch is set to AUTO, follow these precautions to avoid any injury to your hands or other body parts:

- 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.

NOTE

- When washing the vehicle, set the wiper to OFF to stop automatic wiper operation. The wiper may operate and be damaged if you set it to AUTO while washing the vehicle.

- Do not remove the sensor cover located on the upper end of the passenger side windshield glass. This may cause damage to the system parts that may not be covered by your vehicle warranty.
- When starting the vehicle in winter, set the wiper to OFF. Otherwise, the wipers may operate, and ice may damage the windshield wiper blades. Always remove all snow and ice and defrost the windshield properly before operating the windshield wipers.
- If you tint the windshield, be careful not to let any fluid get into the sensor in the top center of the front windshield, as the fluid may damage related parts.

Windshield washer operation



OLQ2A055014

1. Turn the wiper speed control switch to OFF.
2. Gently pull the lever toward you to spray washer fluid on the windshield and run the wipers 1-3 cycles when the windshield is dirty. The spray and wiper operation will continue until you release the lever.

   If the windshield 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 fluid reservoir.

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

WARNING

Do not use the washer in freezing temperatures before warming the windshield with the defroster, as the washer solution could freeze on the windshield and obscure your view.

NOTE

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

NOTE

- 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 the wiper blades.
- To prevent damage to the wiper arms and other components, do not attempt to move the wipers manually.
- To prevent damage to the wipers and washer system, use washer fluid containing anti-freeze in the winter season or cold weather.

Rear windshield wiper and washer operation

The rear windshield wiper and washer switch is located at the end of the lever.

- To operate the rear wiper and washer, turn the switch to the desired position.



OLQ2A055015

  - 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.



OLQ2A055016

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Seating and safety restraints

Important safety precautions

You will find many safety precautions and recommendations throughout this section and 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 be properly restrained in a rear seat, not the front seat. Each infant and small child 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 (such as MP3 players, phones, navigation units, and so on) when your vehicle is parked or safely stopped.
- ONLY use your mobile device when allowed by law, 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 and your eyes and attention on the road.

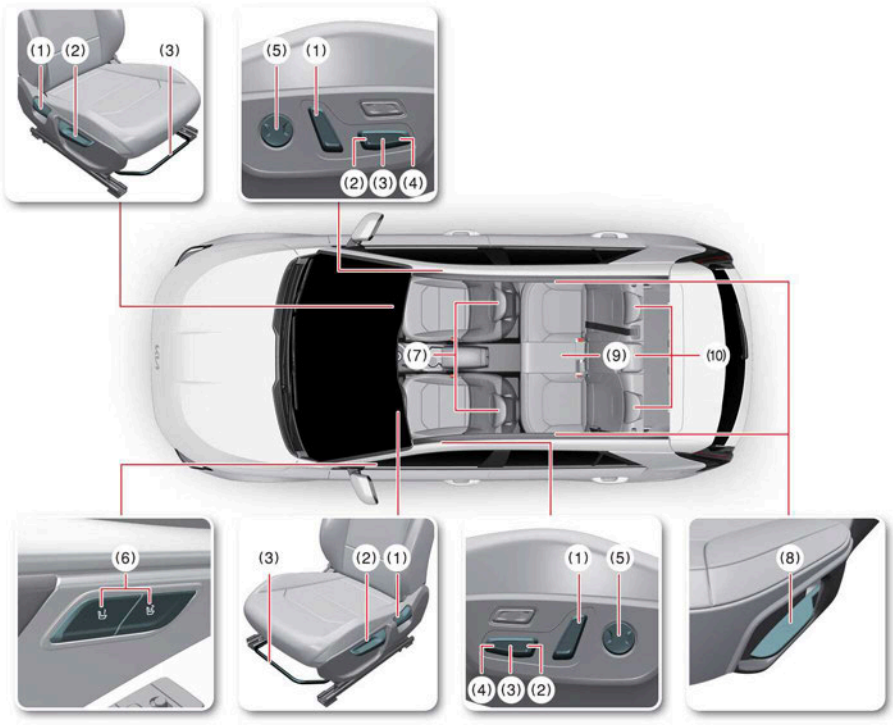
Control your speed

Excessive speed is a major factor in crash injuries and deaths. Generally, the higher the speed, the greater the risk. Serious injuries can also occur at lower speeds. Never drive faster than 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 pressure and condition frequently, and perform all regularly scheduled maintenance.

Seats



OSG2H066088N_6

* The actual features may differ from the illustration.

Front seat

(1) Seatback angle
(2) Seat cushion height
(3) Forward and backward
(4) Seat cushion tilt
(5) Lumbar support
(6) Integrated memory system
(7) Headrest

Rear seat

(8) Seatback angle/folding
(9) Armrest
(10) 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.

⚠ CAUTION

Raising a seat upright

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



OSG2H066047L

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 is greatly reduced.

⚠ WARNING

Seat cushion

Occupants should never sit on aftermarket seat 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 vehicle.
- Do not allow anything to interfere with the normal position of the seatback. For example, storing heavy 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 may put 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, secure them 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.

⚠ CAUTION

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.

NOTE

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. Short circuits and blocked vents can cause damage and could lead to fire.

Seat leather (if equipped)

- Your car seats are upholstered with artificial leather. 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 are high, which provides driving comfort and stability.

NOTE

- Belts with metallic accessories, zippers, and keys may damage the seat fabric.
- Make sure not to get the seat wet. It may damage the leather.
- Bleach on clothes may stain the leather.

TIP

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)

Use the control levers on the outside of the seat cushion to adjust the front seat.

Moving forward and backward

Adjust the seat before driving. 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.



OSG2H066001L_2

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



OSG2H066002L_2

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 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, reclining the seatback can greatly reduce the protections of the restraint system (seat belts and air bags).
>
> 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 you hips could slide under the lap belt or your neck will strike the shoulder belt.

Changing seat cushion height



OSG2H066003L_2

To change the height of the seat cushion:

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

Front seat adjustment for power seat (if equipped)

You can adjust the driver's seat by using the control switches located on the outside of the seat cushion. Before driving, adjust the seat to the proper position so you can easily control the steering wheel, pedals, and switches on the instrument panel.

⚠ WARNING

Unattended children

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

NOTE

Power seating adjustments

- The power seating controls function by motor. Repeated operation may cause damage to the electrical equipment.
- Do not operate 2 or more power seat control switches at the same time. This may cause damage to the power seat motor or electrical components.

Moving forward and backward



OSG2H066004L_2

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



OSG2H066005L_2

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.

⚠ WARNING

Reclining seatback

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

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 you hips could slide under the lap belt or your neck will strike the shoulder belt.

Changing seat cushion tilt and height



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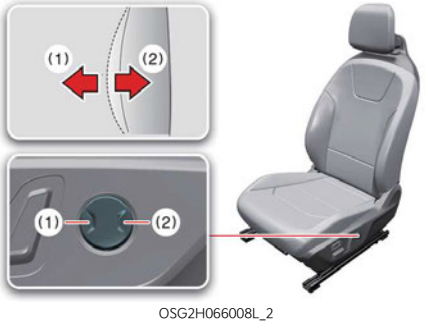


OSG2H066007L_2

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

Adjusting lumbar support (if equipped)



OSG2H066008L_2

Adjust the lumbar support by pressing the lumbar support switch on the side of the seat.

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

Rear seat adjustment

Seatback angle



OSG2H066089N

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.)

Folding the rear seat

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

WARNING

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.



OSG2H066089N

1. Set the front seatback to the upright position and, if necessary, slide the front seat forward.
2. Lower the rear headrests to the lowest position.
3. Pull on the seatback folding lever, then carefully lean back on the seat and adjust it to the desired position. When the adjustment is complete, release the lever.

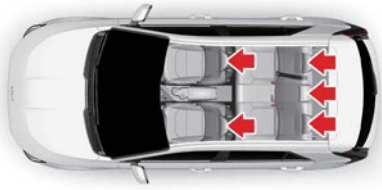
WARNING

Objects

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

Headrest

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



OSG2H066052L

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.
To maximize effectiveness in case of accidents, the headrest should be adjusted so the middle of the headrest is level with the center of gravity of an occupant's head. Generally, the center of gravity of most people's heads is at the same height as the top of their eyes.
Adjust the headrest as close to your head as possible. For this reason, we do not recommend using a cushion that holds your body away from the seatback.

WARNING

Headrest removal/adjustment

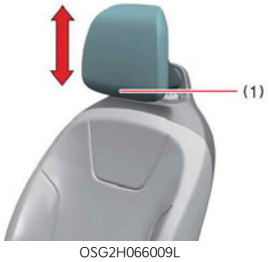
- Do not operate the vehicle with the headrests removed. Headrests can provide critical neck and head support in a crash.
- Do not adjust the headrest height while the vehicle is in motion. You may lose control of the vehicle.

NOTE

Excessive pulling or pushing may damage the headrest.

Adjusting the height up and down

Front



OSG2H066009L

Rear



OSG2H066014L

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

WARNING

To properly protect the occupants, make sure the headrest locks in position after adjusting it.

NOTE

If you angle the seatback forward with the headrest and seat cushion raised, the headrest may contact the sun visor or other parts of the vehicle.



OSG2H066038N

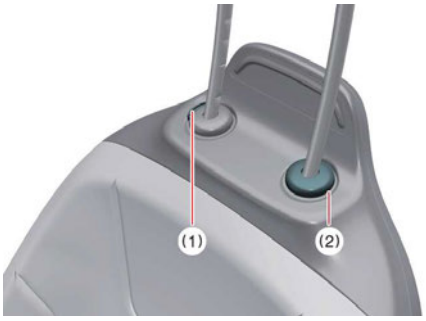
Forward and backward adjustment (for front seats)



OSG2H066010L

Adjust the headrest by pulling it forward to 1 of 3 different positions.
To adjust the headrest as far back as it will go, pull it all the way forward and release it.
Adjust the headrest so that it properly supports the head and neck.

Removing headrest (for front seats)



OSG2H066096N

1. Recline the seatback with the recline lever or switch.
2. Push and hold the release button (1). Raise headrest as far as it can go.
3. Insert a short, flat object (such as a small flat-head screwdriver) into the opening on the inside base of the left post (2) and pull the headrest upward.

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 (for front seats)



OSG2H066096N

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

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.

Removal and installation (for rear seat)



OSG2H066014L

1. Push and hold the release button (1) whilst pulling the headrest up.
2. Do it in reverse order to reinstall the headrest.

⚠ 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.

⚠ 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.

⚠ WARNING

To properly protect the occupants, make sure the headrest locks in position after adjusting it.

Do not operate the vehicle with the headrests removed. Headrests can provide critical neck and head support in a crash.

Armrest (if equipped)

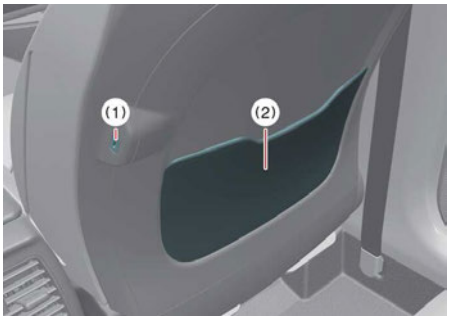


OSG2H066090N

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

Seatback pocket (if equipped)

There is a double pocket (2) in the front seatback for storing simple books or atlases, as well as a USB charger (1) for rear passengers.



OSG2H066054L

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.

Seat belts

Seat belts are designed to bear upon the skeletal structure of the body and should be worn with the lap belt part of the belt low and snug on the hips and the shoulder belt over the shoulder and across the chest.

Seat belt restraint system

For maximum protection from the seat belts, always wear them when the vehicle is moving:

- The proper position for the shoulder belt is midway over your shoulder and across your collarbone.
- Never allow children to ride in the front passenger seat. See "Child Restraint System (CRS)" on page 223 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 and cause serious injury.

WARNING

Shoulder belt

- Never wear the shoulder belt under your arm or behind your back. An improperly positioned shoulder belt cannot protect you 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, or even after it has been worn in an accident, even if damage to the webbing or assembly is not apparent.

Seat belts are designed to bear upon the skeletal structure of the body and should be worn with the lap belt part of the belt low and snug on the hips and the shoulder belt over the shoulder and across the chest. Avoid wearing the lap section of the belt across the abdominal area.

Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide maximum protection.

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

Take care to avoid contaminating the webbing with polishes, oils, and chemicals, particularly battery acid. Use mild soap and water to clean the belt. Replace the belt if the webbing becomes frayed, contaminated, or damaged:

- Do not make any modifications or additions that 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 it in the buckles of other seats. It is very dangerous and you may not be properly protected.
- Do not fasten and unfasten the seat belt while driving. This could cause loss of control and an accident resulting in death, serious injury, or property damage.
- When fastening the seat belt, make sure that the seat belt does not pass over objects other than clothing.

⚠ WARNING

Seat belt buckle

Do not allow foreign material (gum, crumbs, coins, liquids, and so on) to obstruct the seat belt buckle receptor. This may prevent the seat belt from fastening securely, and could result in serious injury or death in the event of a crash.

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 displays for approximately 6 seconds each time you turn the ENGINE START/STOP button ON, regardless of whether the belt is fastened. If you do not fasten the seat belt, the warning chime sounds for about 6 seconds.

If you start to drive between approximately 5 mph (9 km/h) and 12 mph (20 km/h) without the seat belt fastened, the corresponding warning light appears. The warning light turns off when the vehicle speed drops below approximately 5 mph (9 km/h).

If you drive at approximately 12 mph (20 km/h) or faster without the seat belt fastened, or unfasten it while driving at these speeds, the warning light blinks continuously and the warning chime sounds for about 100 seconds. If the seat belt is unfastened at speeds between 5 mph (9 km/h) and 12 mph (20 km/h), the warning light appears but does not blink or sound the chime until you exceed 12 mph (20 km/h).

Front passenger's seat belt warning

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

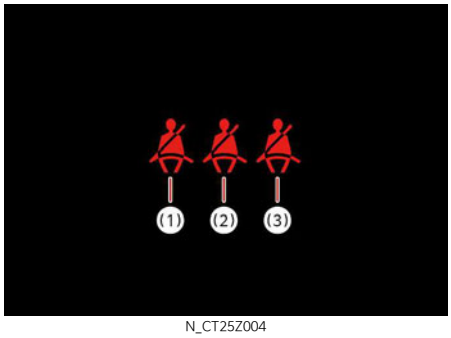
If you drive at approximately 12 mph (20 km/h) or faster without the seat belt fastened, or unfasten it while driving at these speeds, the warning light blinks continuously and the warning chime sounds for about 100 seconds. If the seat belt is unfastened at speeds between 5 mph (9 km/h) and 12 mph (20 km/h), the warning light appears but does not blink or sound the chime until you

exceed 12 mph (20 km/h).

TIP

- 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



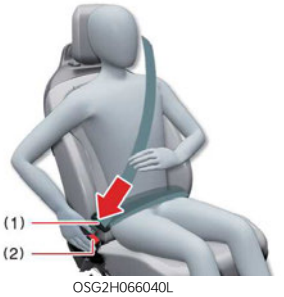
N_CT25Z004

(1) Rear seats left side
(2) Rear seats center side (if equipped)
(3) Rear seats right side

As a reminder to the rear passengers, the seat belt warning light illuminates for approximately 6 seconds each time you turn the ENGINE START/STOP button ON, regardless of whether the belt is fastened.
If you start to drive without the seat belt fastened, the seat belt warning light illuminates for approximately 70 seconds.
If you unfasten the seat belt when you drive under 12 mph (20 km/h), the seat belt warning light illuminates for approximately 70 seconds.
If you unfasten the seat belt when you drive over 12 mph (20 km/h), the seat belt warning chime sounds for approximately 35 seconds and the corresponding warning light blinks.
Unbuckling the seatbelt before the vehicle comes to a complete stop will cause an alarm to sound and the seatbelt reminder light to blink. This warning may continue for up to 35 seconds after you exit the vehicle. Always unbuckle your seatbelt only after the vehicle has come to a complete stop.
If the rear door is opened or closed while driving under 6 mph (10 km/h), the warning light and warning sound does not work, even if you speed up to over 12 mph (20 km/h).

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

Buckling your seat belt



OSG2H066040L

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 you manually adjust the lap belt portion 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

Place the lap belt portion as low as possible and snugly across your hips. If the lap belt is located over the abdomen, it may increase the chance of serious injury or death in the event of a collision. in the event of a collision.



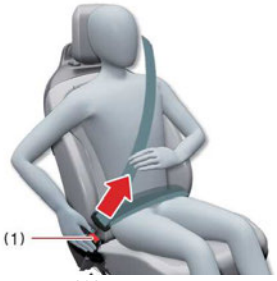
OMQ4A025111

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 shoulder belt portion of the seat belt under the arm closest to the door.

TIP

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



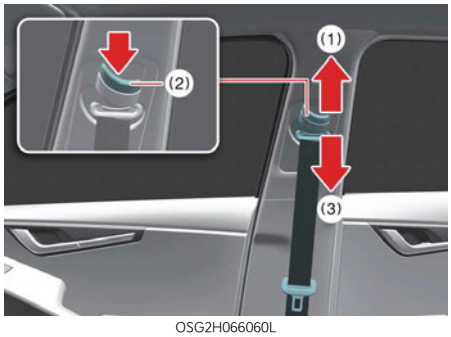
OSG2H066041L

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 1 of 4 positions for maximum comfort and safety.



OSG2H066060L

The height of the adjusted seat belt should not be too close to your neck, or you will not get 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, not your neck.

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

- To raise the height adjuster, pull it up.
- To lower it, push it down 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.

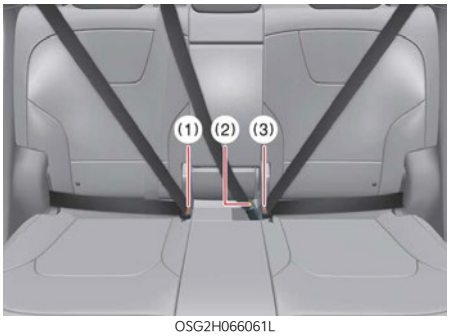
⚠ WARNING

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

⚠ WARNING

Seat belt replacement
After a collision, the entire seat belt assembly should be replaced, even if damage to the webbing or assembly is not apparent. Always replace any belts that are not functioning properly.

A properly buckled seat belt will be locked into the buckle on each seat cushion.



OSG2H066061L

(1) Rear right seat belt buckle
(2) Rear center seat belt buckle
(3) Rear left seat belt buckle

⚠ WARNING

Prior to buckling the rear seat belts, ensure that 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.



OSG2H066086N

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



OSG2H066085N

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

> **TIP**
>
> When pulling out the seat belt to wear it, slowly pull the tab out of the seat belt guide so that the guide does not come off the trim.

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

The following explains how to fasten the passenger's and rear seat belt.

Fastening the seat belt

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

- Pull it out of the retractor and insert the metal tab into the buckle. There will be an audible "click" when the tab locks into the buckle. When not securing a child restraint, the seat belt operates in the same way as the driver's seat belt (emergency locking retractor type).

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

When the seat belt is fully extended from the retractor to allow the installation of a child restraint system, the seat belt operation changes to allow the belt to retract, but not to extend (automatic locking retractor type). Refer to "Securing a CRS with a lap/shoulder belt" on page 229.

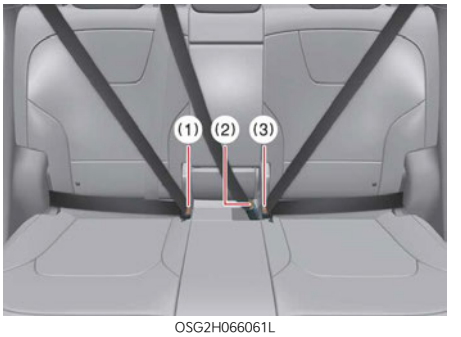
CAUTION

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

NOTE

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

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



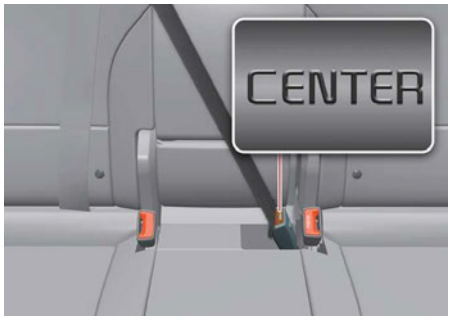
OSG2H066061L

(1) Rear right seat belt fastening buckle
(2) Rear center seat belt fastening buckle
(3) Rear left seat belt fastening buckle

WARNING

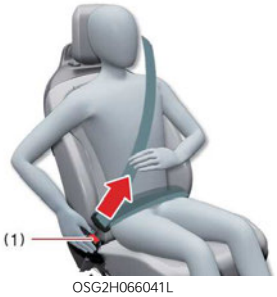
Prior to fastening the rear seat belts, ensure the latch matches the seat belt buckle. Forcefully fastening the left or right seat belt to the center buckle can result in an improper fastening scenario that will not protect you in an accident.

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



OSG2H066062L

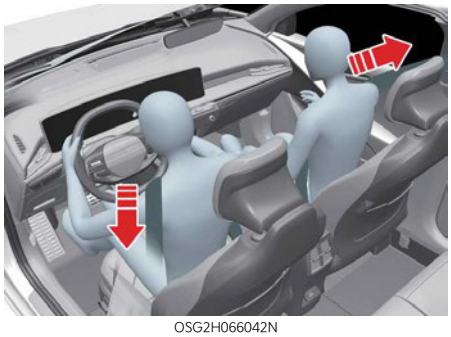
Releasing the seat belt



OSG2H066041L

The seat belt is released by pressing the release button (1) on the locking buckle.
When it is released, the belt should automatically draw back into the retractor.
If this does not happen, check the belt to make sure it is not twisted, then try again.

Pretensioner seat belt



OSG2H066042N

Your vehicle is equipped with pretensioner seat belts for the front driver and passenger and rear passengers.

The purpose of the pretensioner is to help to make sure that the seat belt fits tightly against the occupant's body in certain collisions.

The pretensioner seat belts may activate 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 pretensioner will activate and pull the seat belt into tighter contact against the occupant's body.

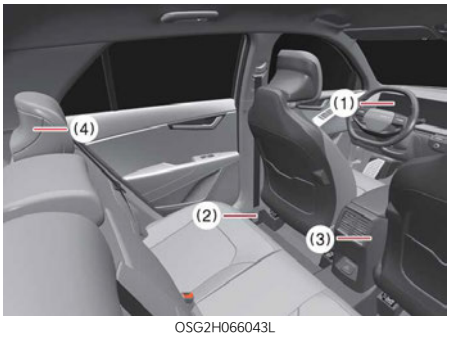
If the system senses excessive tension on the driver's or passenger's seat belt when the pretensioner system activates, the load limiter inside the retractor pretensioner will release some of the pressure on the affected seat belt.

WARNING

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

TIP

The pretensioner may activate in both a frontal or side collision if the vehicle is equipped with a side or curtain air bag.



OSG2H066043L

(1) SRS air bag warning light
(2) Front retractor pretensioner assembly
(3) SRS control module
(4) Rear retractor pretensioner assembly

CAUTION

Skin irritation

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

TIP

- Both the driver's and front passenger's seat belt pretensioner 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 pretensioner 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. Then it should turn off.
- If the pretensioner 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, remains illuminated for approximately 3-6 seconds, or appears while the vehicle is being driven, have the system inspected by an authorized Kia dealer.

WARNING

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

CAUTION

Hot pretensioner

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

Pretensioners are designed to operate only once. After activation, pretensioner seat belts 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 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 223.

TIP

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 223.

Larger children

Children who are too large for a Child Restraint System should always occupy the rear seat and use the available lap/shoulder belts. The lap belt portion as low as possible and snugly across your hip. Check periodically to ensure that the belt fits. A child's movement could move the belt out of position. Children are safest in the event of an accident when they are restrained by a proper restraint system in the rear seat. If a larger child (over age 12) must be seated in the front seat, the child should be securely restrained by the available lap/shoulder belt, and the seat should be placed in the rearmost position. Children under age 13 should be restrained securely in the rear seat. NEVER place a child under age 13 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 could 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 could result in serious injury or death of the fetus.

Injured person

A seat belt should be used when an injured person is being transported. When transporting an injured person 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. Two people using the same seat belt 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 maximize the 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. Take care to ensure 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. If the webbing or buckle are caught or pinched they may become damaged and could fail during a collision or sudden stop.

CAUTION

Metal components of seat belts can become hot in an enclosed vehicle in sunny weather. Please handle with care, as they could burn infants and children.

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 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 in the front passenger seat. A child riding in the front passenger seat can be forcefully struck by an inflating airbag and get seriously injured.

⚠ CAUTION

Hot Child Restraint System (CRS)
A CRS can become very hot if it is left in an enclosed 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 CRS must use the seat belts provided.
All 50 states have child restraint laws that require children to travel in approved child restraint devices. The laws governing the age or height and weight restrictions at which seat belts can be used instead of child restraints differs among states. You should be aware of the specific requirements in your state and the states 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 the 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 System (CRS) Installation

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

- Always follow the CRS manufacturer's instructions for installation and use.
- Always properly restrain your child in the CRS.
- If the vehicle head restraint prevents proper installation of a child seat (as described in the CRS manual), then readjust or entirely remove the head restraint from the seat.

- Do not use an infant carrier or a child safety seat that "hooks" over a seatback, as it may not provide adequate protection in an accident.
- A CRS in the center seating position may also contact or push up against the seat belt buckles, which can damage the buckles and make them unusable or unsafe. Always check that the CRS does not contact any of the seat belt buckles. Check the placement of the CRS regularly to make sure that it has not shifted and come into contact with any of the seat belt buckles.

WARNING

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

Selecting a child restraint system (CRS)

When selecting a CRS for your child, always:

- Make sure the CRS has a label certifying that it meets applicable Federal Motor Vehicle Safety Standards (FMVSS 213).
- Select a CRS based on your child's height and weight. The required label or the instructions for use typically provide this information.
- Select a CRS 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 https://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 could tear the child from your arms and throw them against the car's interior. Always use an appropriate CRS 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 1 seat belt for 2 occupants at the same time. This will eliminate any safety benefit provided by the seat belt to the occupants.

CRS types

There are 3 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



OSG2H066016L_2

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

They should be used in rear seating positions only.

All children under age 1 must always ride in a rear-facing infant CRS.

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 CRS 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 CRS'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 improves 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 across the abdomen or stomach. The shoulder belt should lie snugly across the shoulder and chest, not across the neck or face. Children under age 13 must always ride in the rear seats and be properly restrained to minimize the risk of injury.

Installing a child restraint system (CRS)

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

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

1. 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.

2. Make sure the child restraint is firmly secured.

   After installing a child restraint in the vehicle, push and pull the seat forward and from side-to-side to verify that it is securely attached to the seat. A CRS secured with a seat belt should be installed as firmly as possible. However, some side-to-side movement can be expected.

3. Secure the child in the CRS.

   Make sure the child is properly strapped in the CRS according to the manufacturer instructions.

Lower Anchors and Tether for Children (LATCH) system

The LATCH system holds a CRS in the vehicle. This system makes the CRS easier to install and reduces the possibility of improper installation. The LATCH system uses anchors in the vehicle and attachments on the CRS. The LATCH system eliminates the need to use seat belts to secure the CRS to the rear seats.

Lower anchors are metal bars built into the vehicle. There are 2 lower anchors for each LATCH seating position that will accommodate a CRS with lower anchor attachments.

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

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



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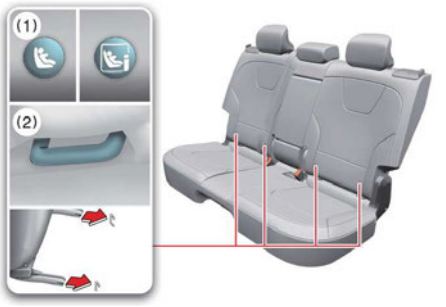
LATCH anchors have been provided in the left and right outboard rear seating positions. Their locations are shown in the illustration. There are no LATCH anchors provided for the center rear seating position.

WARNING

LATCH lower anchors

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



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(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.

Securing a child restraint system (CRS) with the LATCH anchors system

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

1. Move the seat belt buckle away from the lower anchors. Otherwise, the lower anchor can damage the webbing or buckle, which can make them unusable or unsafe.
2. Move away any objects that could prevent a secure connection between the child restraint and the lower anchors.
3. Place the CRS 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 CRS instructions for properly adjusting and tightening the lower anchor attachments on the CRS to the lower anchors.

⚠ WARNING

Take the following precautions when using the LATCH system:

- Read and follow all installation instructions provided with your CRS.
- To prevent the child from reaching and taking hold of the unused seat belts, buckle all unused rear seat belts before placing the child into the vehicle. Lock each unused seat belt following the instructions in the "automatic locking mode" subsection, and place the webbing behind the child seat or against an unused seatback. Children can be strangled if a shoulder belt wraps around their neck and the seat belt tightens.
- NEVER attach more than 1 CRS to a single lower 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 CRS.

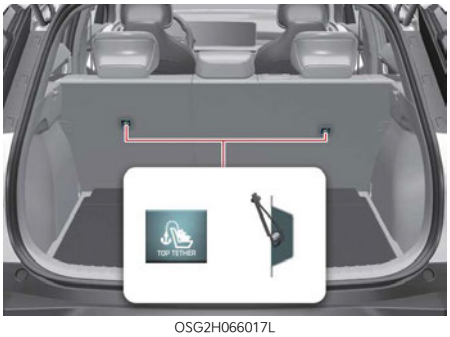
NOTE

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

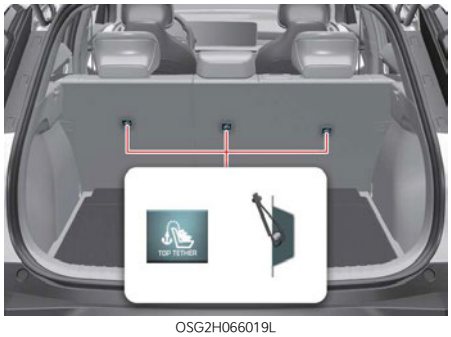
As a guide, use the following calculation to determine the maximum CRS weight:

CRS Weight = 65 - (child's total weight in lb)

Securing a child restraint seat with "Tether Anchor" system



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OSG2H066019L

First secure the CRS with the LATCH lower anchors or the seat belt. If the CRS manufacturer recommends that the tether be attached, attach and tighten the tether to the tether anchor. Tether anchors are located on the seat back.

WARNING

Take the following precautions when installing the tether:

- Read and follow all installation instructions provided with your CRS.
- NEVER attach more than 1 CRS to a single tether anchor. This could cause the anchor or attachment to come loose or break.
- Do not attach the tether 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 CRS 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:



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1. Route the tether over the seatback.
   For vehicles with adjustable headrests, route the tether under the headrest and between the headrest posts. Otherwise, route the tether over the top of the seatback.
2. Connect the tether to the tether anchor, then tighten the tether according to the instructions of your CRS's manufacturer to firmly attach the CRS to the seat.
3. Check that the CRS is securely attached to the seat by pushing and pulling the seat forward and from side-to-side.

Securing a CRS with a lap/shoulder belt

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

Automatic locking mode



OSW025039

All passenger seat belts move freely under normal conditions and only lock under sudden deceleration or emergency conditions (emergency locking mode). Therefore, to secure a CRS, 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 CRS, 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.



OSG2H066058L

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.



OSG2H066070L

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" on page 230 and "4" on page 230.



OSW025038

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" on page 230 through "6" on page 231.
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 228 for more information.

TIP

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 locking mode when installing any CRS. If the retractor is not in automatic locking mode, the CRS can move when your vehicle turns or stops suddenly, but below the emergency locking mode threshold. A child can be seriously injured or killed if the CRS is not properly anchored in the car.

To remove the CRS, 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

Precautions

WARNING

- To reduce the chance of serious or fatal injuries and receive the maximum safety benefit from your restraint system:
  - Never place a child in any child or booster seat in the front seat.
  - The infant or child could be severely injured or killed by an airbag deployment in case of an accident.
  - Children under age 13 must always be properly restrained in the rear seat. If a child 13 or over must be seated in the front seat, he or she must be properly belted and the seat should be moved as far back as possible.
  - When children are seated in the rear outboard seats, they must be seated in the proper child restraint system.
  - ABC—Always Buckle Children in the back seat. It is the safest place for children of any age to ride.
  - For maximum safety protection in all types of crashes, all occupants including the driver should always wear their seat belts whether or not an airbag is also provided at their seating position to minimize the risk of severe injury or death in the event of a crash. Do not sit or lean unnecessarily close to the airbag while the vehicle is in motion
  - The SRS airbag system must deploy very rapidly to provide protection in a crash. If an occupant is out of position because of not wearing a seat belt, the airbag may forcefully contact the occupant causing serious or fatal injuries.
  - Front and side airbags can injure occupants improperly positioned in the front seats.
  - Sitting improperly or out of position can result in serious or fatal injury in a crash. All occupants should sit upright with the seat back in an upright position, center on the seat cushion with their seat belt on, legs comfortably extended and their feet on the floor until the vehicle is parked.
  - To avoid severe personal injury or death caused by deploying airbags in a collision, the driver should sit as far back from the steering wheel airbag. The front passenger should always move their seat as far back as possible and sit back in their seat.
  - Do not allow the passengers to lean their heads or bodies onto doors, put their arms on the doors, stretch their arms out of the window, or place objects between the doors and passengers when they are seated on seats equipped with side and/or curtain airbags.
  - For best protection from the side airbag system and to avoid being injured by the deploying side airbag, both front seat occupants should sit in an upright position with the seat belt properly fastened.
  - No objects (such as instrument panel cover, cellular phone holder, cup holder, perfume or stickers) should be placed over or near the airbag modules on the steering wheel, instrument cluster, windshield glass, and the front passenger's panel above the glove box. Such objects could cause harm if the vehicle is in a crash severe enough to cause the airbags to deploy. Do not place any objects over the airbag or between the airbag and yourself.

  - Never place or insert any object into any small opening near side airbag labels attached to the vehicle seats. When the airbag deploys, the object may affect the deployment and result in unexpected accident or bodily harm.
  - When installing a container of liquid air freshener inside the vehicle, do not place it near the instrument cluster nor on the instrument panel surface. It may become dangerous projectiles and cause injury if the passenger's airbag deploys.
  - Do not place any objects over the airbag or between the airbag and yourself. Also, do not attach any objects around the area the airbag inflates such as the door, side door glass, front and rear pillar.
  - Do not hang heavy items on the coat hooks for safety reasons.
- If the SRS airbag warning light remains illuminated while the vehicle is being driven, have the system inspected by an authorized Kia dealer.
- Air bags can only be used once-have the system replaced by an authorized Kia dealer.
- Keep the SRS parts and wiring away from water or any liquid. If the SRS components are inoperative due to exposure to water or liquids, it may cause fire or severe injury.
- If your vehicle was flooded and has soaked carpeting or water on flooring, you shouldn't try to start the vehicle; In this situation, have your vehicle inspected by an authorized Kia dealer. For cleaning the airbag pad covers, use only a soft, dry cloth or one which has been moistened with plain water. Solvents or cleaners could adversely affect the airbag covers and proper deployment of the system.
- Airbag inflation may cause injuries including facial or bodily abrasions, injuries from broken glasses or burns.
- When the airbags deploy, the airbag related parts in the steering wheel and/or instrument cluster and/or in both sides of the roof rails above the front and rear doors are very hot. To prevent injury, do not touch the airbag storage areas internal components immediately after an airbag has inflated.
- Front and side airbags can injure occupants improperly positioned in the front seats.
- There may be a danger that the driver's and/or front passenger's and/or side and curtain airbag may fail to trigger or not trigger correctly during a collision.
- To prevent unexpected deployment of the side airbag that may result in personal injury, avoid impact to the side impact sensor when the vehicle is in ON position and within approximately 3 minutes after the vehicle is in OFF position.
- Do not hit or allow any objects to impact the locations where airbag or sensors are installed. This may cause unexpected airbag deployment, which could result in serious personal injury or death.
- If the installation location or angle of the sensors is altered in any way, the airbags may deploy when they should not or they may not deploy when they should, causing severe injury or death. Therefore, do not try to perform maintenance on or around the airbag sensors. Have the system serviced by an authorized Kia dealer.
- Do not tamper with or disconnect wiring or other components of the SRS system, including the addition of any kind of badges to the pad covers or modifications to the body structure. Doing so could adversely affect SRS performance and lead to possible injury. If necessary, have the system serviced by an authorized Kia dealer.
- If components of the airbag system must be discarded, or if the vehicle must be scrapped,certain safety precautions must be observed, such as removing SRS and pretensioners from a vehicle due to the risk of fire. Failure to follow these precautions and procedures could increase the risk of personal injury. An authorized Kia dealer knows these precautions and can give you the necessary information.

WARNING

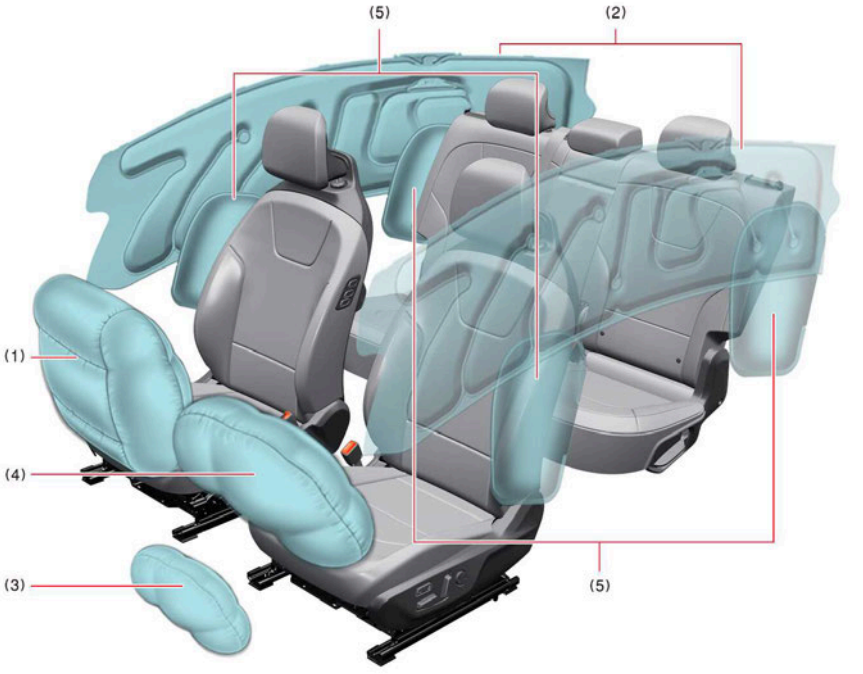
- SRS and pre-tensioners contain explosive chemicals. If you scrape a vehicle without removing the SRS and pre-tensioners, it may cause a fire. Before scraping a vehicle, contact an authorized Kia dealer
- The SRS functions only when the vehicle is in the ON position and remains functional for approximately 3 minutes after the vehicle is turned OFF. If the SRS airbag warning light does not appear or stays on for more than approximately 6 seconds when the vehicle is in the ON position, or if it turns on while driving after the vehicle is started, the SRS is malfunctioning. In this case, have the system inspected by an authorized Kia dealer.
- The SRS deploys the front air bags only when an impact is sufficiently severe. Additionally, the air bags deploy only once. Always wear seatbelts.
- Front air bags do not deploy in side-impact, rear-impact, or rollover crashes. In addition, front air bags do not deploy in frontal crashes below the deployment threshold.
- Never try to open or repair any components of the curtain airbag system. If necessary, have the system serviced by an authorized Kia dealer.
- Problems may arise if you change the sensor installation angles due to deformation of the front bumper, body, or B pillar where the side collision sensors are installed. In this case, have the system serviced by an authorized Kia dealer.
- Your vehicle absorbs impact and deploys the airbag(s) in certain collisions. Use only Kia Genuine Parts or those of an equivalent standard to install bumper guards or replace a bumper. If not, it may adversely affect your vehicle's collision and airbag deployment performance.
- Turn the vehicle to OFF position and wait for approximately 3 minutes when the vehicle is being towed. The side and curtain air bag may deploy within approximately 3 minutes if the vehicle is in the ON, or OFF position, and the rollover sensor detects a rollover situation.
- Deactivate the passenger's front air bag only when the vehicle is in the OFF position to prevent a malfunction in the SRS Control Module. There may be a risk that the driver's, front passenger's, and/or side and curtain airbags may fail to trigger or may not trigger correctly during a collision.
- Before you replace a fuse or disconnect a battery terminal, turn the vehicle to OFF position. Never remove or replace the air bag-related fuse(s) when the vehicle is in the ON position. If you fail to heed this warning, the SRS air bag warning light will appear.

TIP

- The SRS deploys the front air bags only when an impact is sufficiently severe.
- Front air bags do not deploy in side-impact, rear-impact, or rollover crashes. In addition, front air bags do not deploy in frontal crashes below the deployment threshold.
- The side and curtain airbags deploy in certain side impact or rollover conditions severe enough to cause significant injury to the vehicle occupants.
- The air bags inflate instantly in the event of a rollover to help protect the occupants from serious physical injury.
- The side and curtain air bags inflates when a rollover sensor detects a rollover. The air bags may inflate in a rollover when the rollover sensor detects it.

- Although the front air bags (driver's and front passenger's air bags) inflate only in frontal collisions, they also may inflate in other types of collisions if the front impact sensors detect a sufficient impact. Side air bags (side and/or curtain air bags) inflate only in side impact collisions, but they may inflate in other collisions if the side impact sensors detect a sufficient impact. For instance, side air bags and curtain air bags may inflate if rollover sensors detect the possibility of a rollover (even if it does not occur) or in other situations, such as when the vehicle tilts while being towed. Even if side and/or curtain airbags 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 bumps or objects impact the vehicle chassis on unimproved roads or sidewalks, air bags may deploy. Drive carefully on unimproved roads or surfaces not designed for vehicle traffic to prevent unintended air bag deployment.

Overview



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

Even in vehicles with air bags, you and your passengers must always wear the provided safety belts to minimize the risk and severity of injury in the event of a collision or rollover. Airbags are supplemental restraint systems, designed to supplement the protection provided by seatbelts.

How does the air bag system operate?

- Air bags activate (and inflate if necessary) only when the ENGINE START/STOP Button is in the ON position, and they still activate for about 3 minutes after ignition off.
- The appropriate air bags inflate in the event of a serious frontal or side collision to help protect the occupants from serious physical injury.
- There is no single vehicle speed at which the air bags will inflate. Generally air bags inflate based on the severity of a collision, its direction, and so on. 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 mass and crush characteristics 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 quickly. You will find it virtually impossible 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.
- The curtain air bags will remain inflated longer. This helps provide protection from ejection,especially when used in conjunction with the seat belts.
- To 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 de sign. However, air bag inflation can also cause injuries, including facial abrasions, bruises, and broken bones, because the inflation speed also causes the air bags to expand with a great deal of force.
- **There are even circumstances under which contact with the steering wheel or passenger air bag can cause fatal injuries, especially if the occupant is positioned too close to the steering wheel or passenger air bag.**

Noise and smoke

When the air bags inflate, they 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 between your chest and both the seat belt and the air bag, as well as from breathing the smoke and powder.

Though smoke and powder are nontoxic, they may irritate the skin (eyes, nose, and throat, and so on). Wash and rinse with cold water immediately and consult a doc tor if the symptom persists.

Do not install a Child Restraint System (CRS) on the front passenger's seat



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Never place a rear-facing child restraint in the front passenger's seat.

If the air bag deploys, it will 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.

Air bag warning and indicator

Air bag warning light

The air bag warning light in your instrument panel alerts you to a potential problem with your air bag system, which may include the side and/or curtain air bags used for rollover protection.



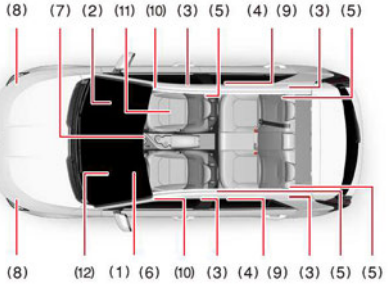
WKIA_027

If the air bag warning light appears for more than 6 seconds after you turn the ENGINE START/STOP button to the ON position, or if it appears during vehicle operation, an SRS component may not be functioning properly. Have your vehicle inspected by an authorized Kia dealer.

If any of the following conditions occur, this indicates a malfunction in the air bag system. Have your vehicle inspected by an authorized Kia dealer.

- The light does not turn on briefly when you turn the ENGINE START/STOP button to the ON position.
- The light stays on after it illuminates for approximately 3-6 seconds.
- The light comes on while the vehicle is in motion.
- The light blinks when you turn the ENGINE START/STOP button to the ON position.

Supplemental Restraint System (SRS) components and functions



OSG2H066095N

* 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) Side airbag module
(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) Driver's knee air bag module

The SRSCM monitors all elements while the ENGINE START/STOP Button is in the ON Position or for approximately 3 minutes after ignition off to determine whether a frontal, near-frontal, 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 turning the ENGINE START/STOP button 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)



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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.

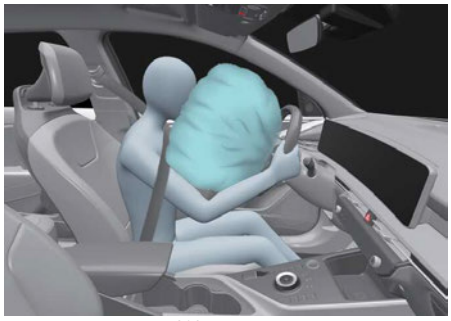
Driver's front air bag (2)



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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)



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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 contact with the steering wheel or instrument panel and distributing the force more evenly over the body. 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



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Occupant Detection System (ODS)

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



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The ODS detects the presence of a properly seated front passenger and determines if the passenger's front air bag should be activated (may inflate) or not. The ODS controls only the front passenger air bag.

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

Main components of the Occupant Detection System (ODS)

- A detection device is located within the front passenger seat cushion.
- An electronic system determines whether the passenger airbag system should activate or deactivate.
- The indicator light on the overhead console illuminates the words PASSENGER AIR BAG OFF ( ) to indicate the front passenger airbag system is deactivated.
- The overhead console indicator light connects 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 OFF ( ) 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 OFF ( ) 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 make sure that you and all vehicle occupants sit and restrain themselves properly (sitting upright with the seat in an upright position, centered on the seat cushion, with legs comfortably extended, feet on the floor, and wearing the safety belt correctly) for the most effective protection from the air bag and safety belt.

The ODS may not function properly if the passenger takes actions that defeat the detection system. These actions 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 instrument panel 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 Occupant Detection System (ODS)

Condition detected by the occupant detection system	Indicator/Warning light Devices		Devices
	PASSENGER AIR BAG OFF	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 OFF ( ) 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.

WARNING

- Do not use car seat cushions that cover up the surface of the seat and aftermarket manufactured passenger seat heaters.
- After cleaning the car interior using steam or detergent, dry the seat properly. Afterward, check that the PASSENGER AIR BAG OFF ( ) and air bag warning lights operate normally.
- Any service related to the passenger seat and the ODS must be done at an authorized Kia dealership.
- After you remove or install the passenger seat for repair purposes, check the normal operation of the PASSENGER AIR BAG OFF ( ) and air bag warning lights with a person seated or not seated in the passenger seat.
- When the PASSENGER AIR BAG OFF ( ) symbol appears, the passenger air bag system will not operate. The passenger air bag system will operate when necessary if the symbol does not appear.
- Do not modify or replace the front passenger seat. Do not place 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

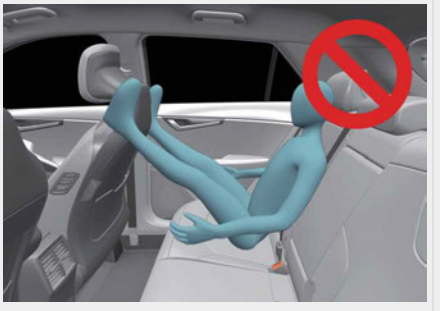
Occupant Detection System

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



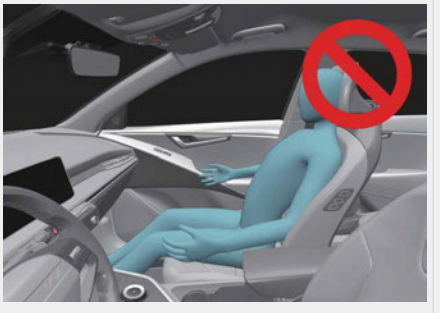
OSG2H066078N

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



OSG2H066081N

- Do not place feet on the front passenger seatback.



OSG2H066079N

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



OSG2H066047N

- Never excessively recline the front passenger seatback.



OSG2H066080N

- Never place feet on the instrument panel.



OSG2H066082N

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



OSG2H066083N

- 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, DVD players or heavy objects 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



OSG2H066084N

When an adult is seated in the front passenger seat, if the PASSENGER AIR BAG OFF ( ) 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 ex tended 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 OFF ( )indicator is still on, ask the passenger to move to the rear seat.

⚠ WARNING

PASSENGER AIR BAG OFF ( ) **light**

Do not allow an adult passenger to ride in the front seat when the PASSENGER AIR BAG OFF ( ) indicator is illuminated, because the air bag will not deploy in the event of a 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 OFF ( ) 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.

TIP

The PASSENGER AIR BAG OFF ( ) indicator does not illuminate if the front passenger seat is occupied. The occupant detection sensor will classify the front passenger after a few more seconds. Also, if you turn the ENGINE START/STOP button to the ON position after approximately 3 minutes have passed since the vehicle was in the OFF position, the system will activate.

- Even though your vehicle has 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 under age 13 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 generally speaking are safer when restrained in the rear seat.

If the ODS does not function 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 the ODS malfunctions, the PASSENGER AIR BAG OFF ( ) 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



OSG2H066023L



OSG2H066024L

Driver's knee air bag



OSG2H066064L

The indicators display the words AIR BAG on the airbag pad cover of the steering wheel, on the driver's side knee bolster cover below the steering wheel, and on the passenger's side front panel pad above the glove box.

The Supplemental Restraint System (SRS) includes airbags located under the pad covers in the center of the steering wheel, in the knee bolster below the steering wheel column, and in the passenger's side front panel above the glove box.

The SRS provides the vehicle's driver and/or front passenger with additional protection from the seat belt system alone in the event of a sufficiently severe frontal impact. impact of sufficient severity. The SRS uses sensors to gather information about the seat belt usage of the driver and front passenger, as well as the 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 controls air bag inflation with two levels. The first stage level activates for moderate impacts, while the second stage level activates for severe impacts.

The SRS Control Module (SRSCM) controls air bag inflation based on impact severity and seat belt usage. Failing to wear seat belts properly increases 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 240.

Government regulations require manufacturers to provide a contact point concerning modifications to the vehicle for persons with disabilities, as these 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.

Advanced air bags combine with pretensioner seat belts to help provide enhanced occupant protection in frontal crashes. Front air bags do not deploy in collisions where the seat belt provides sufficient protection.

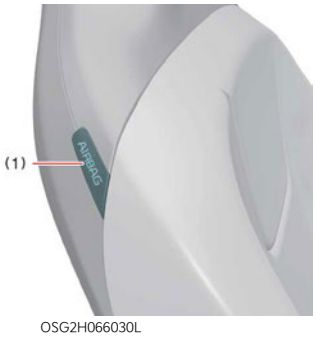
Front air bags do not deploy in side impacts, rear impacts or rollovers. When the frontal deployment threshold is satisfied in a side impact, the front air bags may deploy. Front air bags will not deploy in frontal impacts below the deployment threshold.

TIP

Refer to the WARNING, CAUTION and NOTE of "Precautions" on page 232

Side air bag

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



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OSG2H066065N

(1) Side air bag

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

Air bags are designed to provide the vehicle's driver, front passenger, and 2nd-row outboard passengers with additional protection compared to that offered by the seat belts alone.

- The side air bags deploy during certain side impact collisions, depending on the crash severity.
- The side air bags may deploy on the side of the impact or on both sides.
- The side curtain air bags on both sides deploy if a rollover or possible rollover occurs.
- The side air bags do not deploy in all side impact or rollover situations.
- The side air bag supplements the driver's and passenger's seat belt systems and does not replace them. Always wear your seat belts while the vehicle is in operation.
- To ensure the best protection from the side air bag system and to avoid injury from the deploying side air bag, both front seat occupants must sit upright with their seat belts properly fastened. The driver must place their hands on the steering wheel at the 9: 00 and 3: 00 positions. The passenger must place their arms and hands on their lap.
- If the seat or seat cover is damaged, have your vehicle inspected by an authorized Kia dealer.

TIP

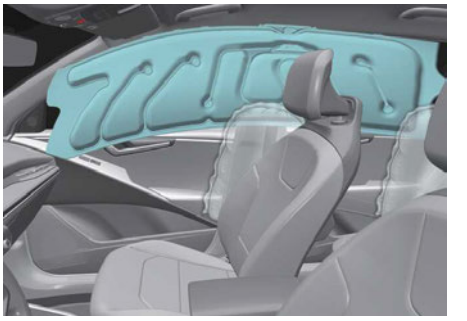
Refer to the WARNING, CAUTION and NOTE of "Precautions" on page 232

Curtain air bag

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



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

They help protect occupants in certain side impacts and reduce the risk of ejection during a rollover, especially when the seat belts are also used.

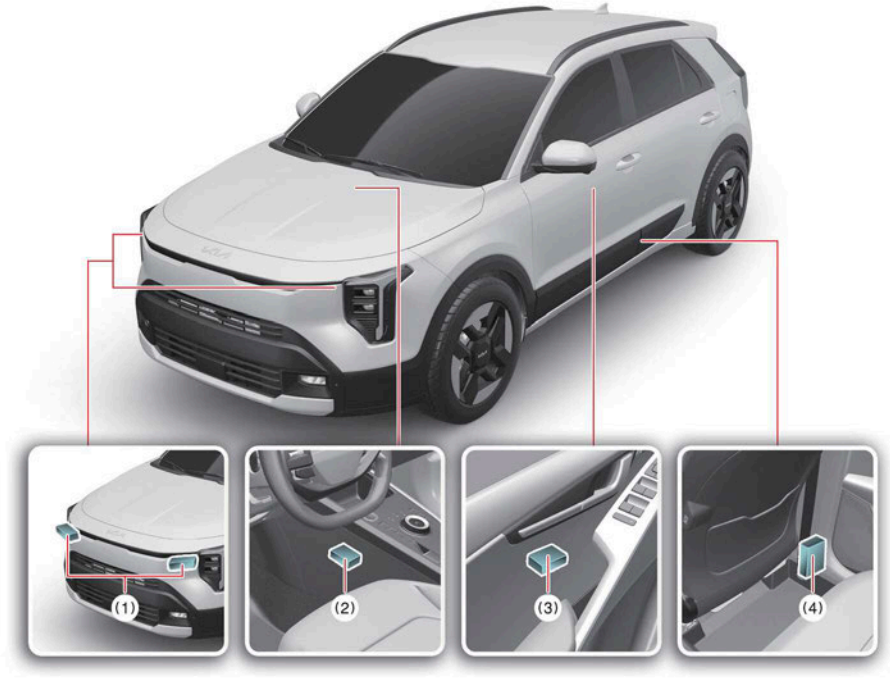
- The curtain air bags deploy during certain side impact collisions, depending on collision severity, angle, speed and point of impact.
- The curtain air bags may deploy on the side of the impact or on both sides.
- The curtain air bags on both sides deploy in certain rollover situations.
- The curtain air bags do not 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.

TIP

Refer to the WARNING, CAUTION and NOTE of "Precautions" on page 232

Air bag collision sensors



OSG2H066011L_4

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

(1) Front impact sensors
(2) Supplemental Restraint System (SRS) control module/rollover sensor
(3) Side pressure sensors (front door)
(4) Side impact sensors (B-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 perform maintenance on or around the air bag sensors. Have the system serviced by an authorized Kia dealer.
- Do not contact the front impact sensor. When the angle of the sensor is changed, the air bag system may malfunction.

Changing the sensor installation angles due to deformation of the front bumper, front end module, body, or front doors where side collision sensors are installed may cause problems. 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.

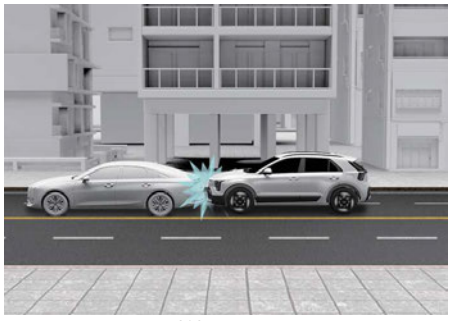
Kia Genuine bumper guards/bumpers are guaranteed for quality and performance.

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

Many types of accidents do not require the air bag 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

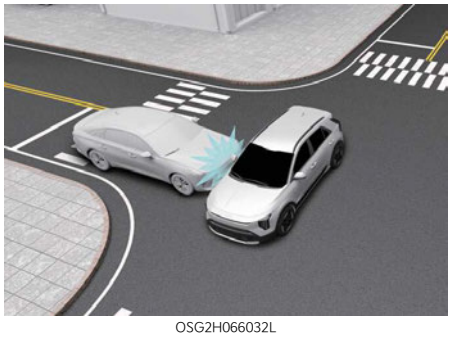
Front air bags



OSG2H066031L

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

Side and curtain air bags



OSG2H066032L

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

Side and/or curtain air bags inflate when side collision sensors detect an impact, depending on several factors, including the severity of the impact from a side collision.

The side and curtain air bags inflate when a rollover sensor detects a rollover (or possible rollover).

Although the front air bags (driver's and front passenger's air bags) primarily inflate in frontal collisions, they may inflate in other types of collisions if the front impact sensors detect sufficient frontal force in those impacts.

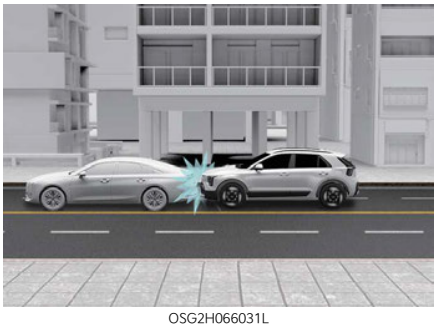
Similarly, although side and curtain air bags inflate in certain side impact collisions, they may also inflate in other types of collisions where sensors detect a side force. For instance, side and curtain air bags may inflate if rollover sensors detect the possibility of a rollover (even if none occurs) or in other situations, such as when the vehicle tilts while being towed.

Even if side and curtain air bags do not provide impact protection in a rollover, they will deploy to help prevent ejection of occupants, especially those who are restrained with seat belts.

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

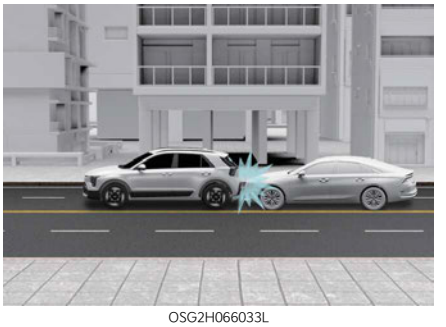
Air bag non-inflation conditions

- Air bags may not deploy in certain low-speed collisions where the air bag would not add any protection beyond what is already offered by the seat belts.



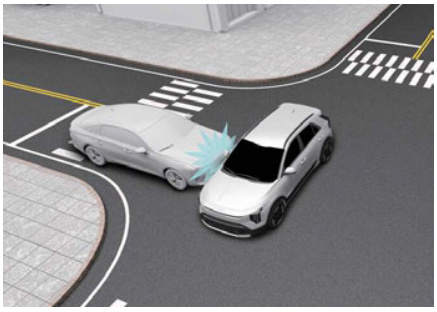
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- Front air bags are not designed to inflate in rear collisions, because occupants are moved backward by the force of the impact. In this case, inflated air bags would not be able to provide any additional benefit.



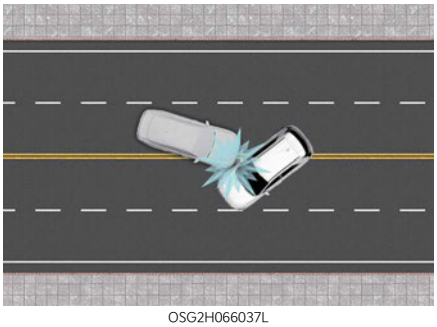
OSG2H066033L

- Front airbags may not inflate in side impact collisions because passengers move towards the point of impact. Therefore, in side impacts, frontal airbag deployment would not provide any additional protection.



OSG2H066032L

- In an angled collision, the force of impact may move the occupants in a direction where the air bags would not provide any additional protection; therefore, the sensors may not deploy any air bags.



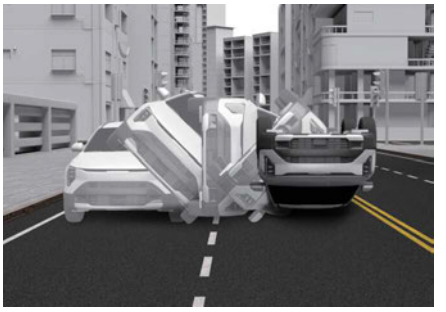
OSG2H066037L

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 situation because deceleration forces that are detected by sensors may be significantly reduced by such "under-ride" collisions.



OSG2H066034L

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



OSG2H066035L

- 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 a single area, and the full force of the impact is not delivered to the sensors.



OSG2H066036L

Supplemental Restraint System (SRS) care

The Supplemental Restraint System (SRS) is virtually maintenance-free, so there are no parts you can safely service by yourself.

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 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.

To clean the air bag pad covers, use only a soft, dry cloth or one moistened with plain water. Solvents or cleaners can adversely affect the air bag covers and prevent the proper deployment of the system.

If you must discard components of the air bag system or scrap the vehicle, you must observe certain safety precautions. 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.

Recap of important safety precautions

- **Never allow passengers to ride in the cargo area or on top of a folded-down back seat.** All occupants must sit upright, fully back in their seats with their seat belts on and 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 restrains only one occupant.** If multiple people use the same seat belt, they may suffer serious injury or death 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. You should properly restrain all infants and children 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 properly, 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

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



OSG2H066069N_2

Hybrid system overview

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Hybrid system overview

HEV (Hybrid Electric Vehicle) system

The Kia Hybrid Electric Vehicle (HEV) combines a gasoline engine and an electric motor for power. The electric motor uses a high voltage Hybrid Electric Vehicle (HEV) battery.

Depending on the driving conditions, the HEV computer selectively operates between the engine and the electric motor, or both at the same time.

Driving the vehicle with the electric motor (powered by the HEV battery) increases fuel efficiency.

The engine occasionally turns on (even when the vehicle is idling) to act as a generator to maintain the charge level of the HEV battery. The battery power also charges when you are slowing down or using regenerative braking.

Electric motor	Electric motor + Engine	Electric motor or Engine	Charging	Engine OFF



1. Startup/Low speed cruise	2. Acceleration	3. High speed cruise	4. Deceleration	5. Stop
				

Driving the hybrid vehicle

Starting the vehicle

Vehicles with smart key system

1. Carry the smart key or leave it inside the vehicle under your supervision
2. Make sure that the parking brake is firmly applied.
3. Shift the gear to P (Park). You cannot start the vehicle if the gear is in N (Neutral).
4. Engage the brake pedal.
5. Press the ENGINE START/STOP button. If the hybrid system starts, the READY indicator displays.
   The engine should start without engaging the accelerator whether the engine is cold or warm.

After you follow the starting procedure, the READY indicator displays on the instrument cluster. For more details, refer to "Indicator lights" on page 155.

Economical and safe operation of Hybrid system

- Drive smoothly. Accelerate at a moderate rate and maintain a steady cruising speed. Do not make jackrabbit starts. Do not race between stoplights.
- Avoid heavy traffic whenever possible. To avoid unnecessary braking and reduce brake wear, always maintain a safe following distance from other vehicles.
- Regenerative braking transforms kinetic energy when the vehicle slows down.
- The hybrid system automatically recharges the hybrid battery when the battery charge level is low.
- When the engine is running while the gear is in N (Neutral), the hybrid system cannot generate electricity or charge the hybrid battery.

NOTE

In the hybrid system, the engine automatically runs and stops. When the hybrid system operates, the READY indicator displays.

The engine might operate automatically in the following situations:

- The engine is ready to operate.
- The hybrid battery is charging.
- The hybrid battery is a certain temperature.

Special features

Hybrid vehicles sound different than gasoline engine vehicles. When the hybrid system operates, you might hear a sound from the hybrid battery system behind the rear seat. If you engage the accelerator pedal rapidly, you might hear an unconventional sound. When you engage the brake pedal, you might hear a sound from the regenerative braking system. When you turn the hybrid system off or on, you might hear a sound in the engine compartment. If you engage the brake pedal repeatedly when the hybrid system is on, you might hear a sound in the engine compartment. None of these sounds indicate a problem and are normal characteristics of hybrid vehicles.

Hearing a motor sound in the engine compartment is normal in any of the following situations:

- When you turn off the hybrid system and release the brake pedal

- When you turn off the hybrid system and engage the brake pedal
- When you open the driver side door

When you turn on the hybrid system, the gasoline engine might or might not run and you might feel a vibration. A vibration does not indicate a malfunction. When the READY indicator displays, the hybrid system is ready to begin driving. You can operate the vehicle as long as the READY indicator appears, even when the engine is off.

NOTE

The hybrid system contains many electronic components. High voltage components, such as cables and other parts, might emit electromagnetic waves. Even when the electromagnetic cover blocks electromagnetic emissions, electromagnetic waves might affect electronic devices. When you do not use your vehicle for a long period of time, the hybrid battery discharges. To prevent hybrid battery discharging, drive the vehicle several times a month for at least for 1 hour or 26 km/h (6 mph) at a time. When the hybrid battery discharges or jump starting the vehicle is impossible, visit an authorized Kia dealer.

WARNING

- When you start the hybrid system with the gear in P (Park), the READY indicator displays on the instrument cluster and you can drive the vehicle (even when the gasoline engine is off).
- When you park the vehicle, turn the hybrid system off. If you accidentally engage the accelerator pedal by mistake when the gear is not in P (Park), the vehicle moves abruptly, which might result in serious injury or death.

Virtual Engine Sound System (VESS)

The Virtual Engine Sound System (VESS) produces an engine sound so that pedestrians can hear the vehicle because there is a limited sound while the motor power is in use.

- The VESS operates when the vehicle moves at a low speed.

WARNING

The sound system only plays a supplementary role. It is not designed to replace the caution of the driver. Always pay attention to your surroundings while driving.

CAUTION

- After you park the vehicle or while you are waiting at a traffic light, check for children or obstacles around the vehicle.
- When driving in reverse, check to see if there is anything behind the vehicle. Pedestrians might not hear the sound of the vehicle.

Regenerative braking

Regenerative braking transforms kinetic energy to electrical energy using an electric motor. The electrical energy charges the high voltage battery when you slow down the vehicle or engage the brake pedal.

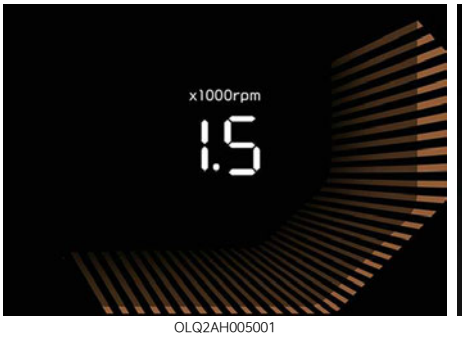
Battery

The vehicle has a high voltage battery and a 12V battery. The high voltage battery powers the motor and the air conditioning. The 12V battery contains powers lamps, wipers, and the audio system. The 12V battery automatically charges when the vehicle is in READY mode.

Hybrid system gauge

Power gauge

Type A



OLQ2AH005001

Type B



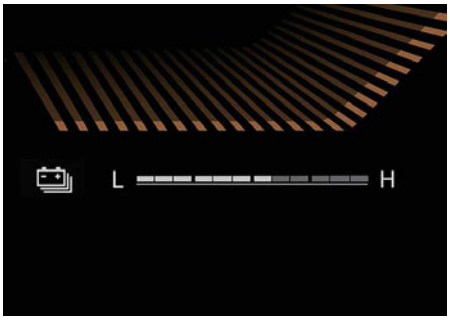
OLQ2AH005002

The hybrid system gauge indicates whether the current driving condition enhances fuel efficiency.

- CHARGE:
  Shows that the energy made by the vehicle is converting to electrical energy (Re-generative energy).
- ECO:
  Shows that you are driving the vehicle in an eco-friendly manner.
- POWER:
  Shows that the vehicle is exceeding the eco-friendly range.

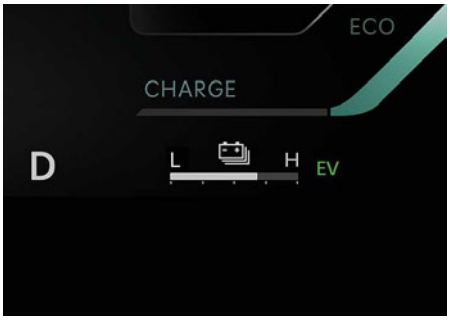
Hybrid battery State of Charge (SOC) gauge

Type A



OLQ2AH005003

Type B



OLQ2AH005004

The hybrid battery State of Charge (SOC) gauge indicates the remaining level of hy-brid battery power. If the gauge is near the Low (L) level, the vehicle automatically op-erates the engine to charge the hybrid battery.
If the Service Indicator ( ) and Malfunction Indicator Lamp (MIL) ( ) illuminate when the SOC gauge is near the Low (L) level, have your vehicle inspected by an authorized Kia dealer.

Warning and indicator lights

READY indicator READY

This indicator displays when the vehicle is ready to drive. When it does not display, normal driving is impossible or a problem has occurred. Blinking indicates emergency driving.
When the ready indicator does not display or blinks, there is a problem with the system. If this occurs, have your vehicle inspected by an authorized Kia dealer.

Service warning light

This warning light illuminates:

- When you press the ENGINE START/STOP button in the ON position, the service warning light illuminates for approximately 3 seconds, then turns off when all checks have been performed.
- When there is a problem with the hybrid vehicle control system or hardware

If the warning light illuminates while you are driving or does not turn off after you start the vehicle, have your vehicle inspected by an authorized Kia dealer.

EV mode indicator EV

The EV mode indicator illuminates when the electric motor powers the vehicle.
When the EV indicator light does not illuminate, the gasoline engine powers the vehicle.

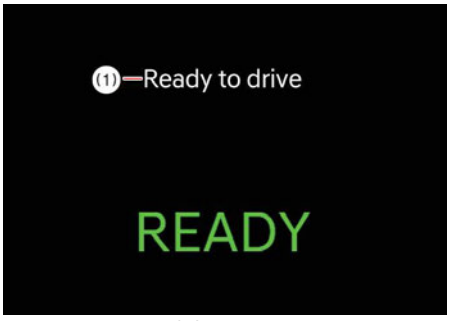
Regenerative brake warning light

This warning light illuminates when regenerative braking does not operate or perform well. This issue causes the brake warning light (red) and regenerative brake warning light (yellow) to illuminate simultaneously.
If the regenerative brake warning light illuminates, drive safely and have your vehicle inspected

by an authorized Kia dealer. Operating the brake pedal might be more difficult than usual, and braking distance might increase.

LCD display messages

Ready to drive

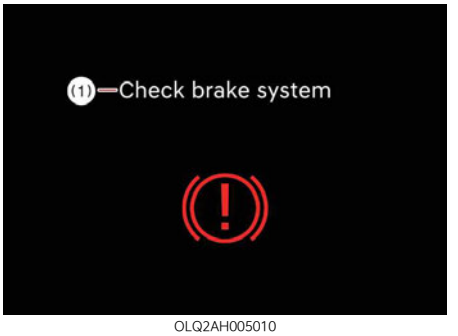


OLQ2AH005009

(1) **Ready to drive**

This message displays when the vehicle is ready to be driven.

Check brake system

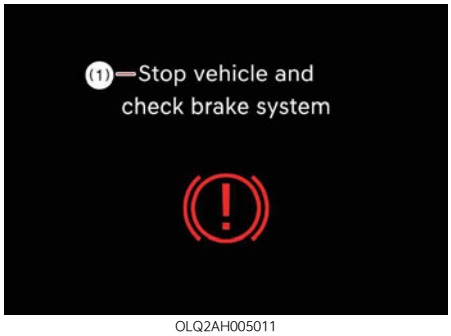


OLQ2AH005010

(1) **Check brake system**

This message displays when the brake performance is low or regenerative braking does not work properly due to a failure in the brake system. Operating the brake pedal might be slower than usual. The required braking distance might increase.

Stop vehicle and check brake system

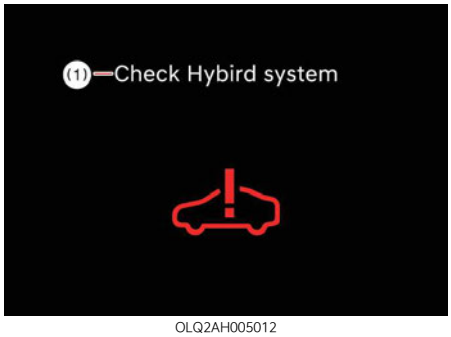


OLQ2AH005011

(1) **Stop vehicle and check brake system**

This message displays when the brake system has a failure. In this case, park the vehicle in a safe location and have it towed to the nearest authorized Kia dealer to be inspected.

Check Hybrid system

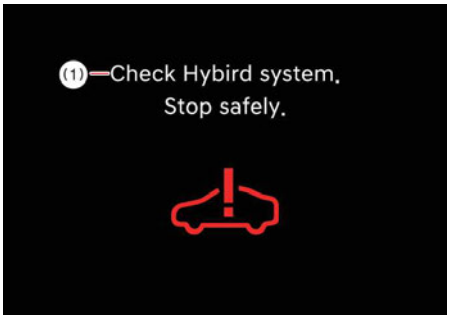


OLQ2AH005012

(1) **Check Hybrid system**

This message displays when the hybrid control system has a problem. When this warning message displays, refrain from driving the vehicle. Have your vehicle inspected by an authorized Kia dealer.

Check Hybrid system. Stop safely.



OLQ2AH005013

(1) **Check Hybrid system. Stop safely.**

This message displays when the hybrid control system has a problem. The READY indicator blinks and a warning chime sounds until the problem resolves. When this warning message displays, refrain from driving the vehicle. Have your vehicle inspected by an authorized Kia dealer.

Check Hybrid system. Do not start engine.

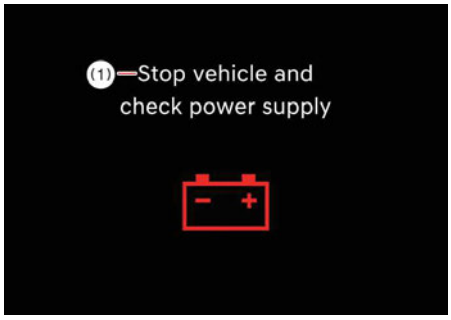


OLQ2AH005014

(1) **Check Hybrid system. Do not start engine.**

This message displays when the hybrid battery's charge level (SOC) is low. A warning chime sounds until the problem resolves. When this warning message displays, refrain from driving the vehicle. Have your vehicle inspected by an authorized Kia dealer.

Stop vehicle and check power supply



OLQ2AH005015

(1) **Stop vehicle and check power supply**

This message displays when the power supply system has a failure. In this case, park the vehicle in a safe location and have it towed to the nearest authorized Kia dealer to be inspected.

Check Virtual Engine Sound System



OLQ2AH005016

(1) **Check Virtual Engine Sound System**

This message displays when the Virtual Engine Sound System (VESS) has a problem. When this warning message displays, have your vehicle inspected by an authorized Kia dealer.

Refill coolant

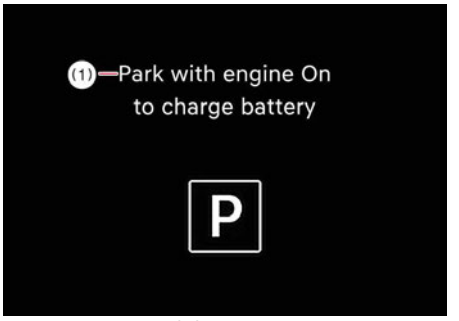


OLQ2AH005017

(1) **Refill coolant**

This message displays when the inverter coolant is nearly empty. Refill the inverter coolant.

Park with engine On to charge battery



OLQ2AH005018

(1) **Park with engine On to charge battery**

This message displays when the hybrid battery's charge level (SOC) is low. Park the vehicle in a safe location and wait for the hybrid battery to charge before you resume driving.

Start engine to avoid battery discharge



OLQ2AH005019

(1) **Start engine to avoid battery discharge**

This message displays when the 12V battery might discharge if the ENGINE START/STOP button is in the ON position and the READY indicator does not display. To prevent the 12V battery from discharging, set the vehicle to the READY mode.

Stay mode

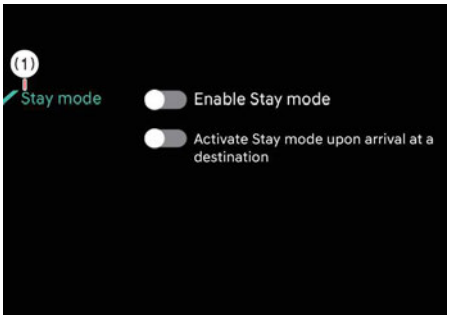
Stay mode allows users to use in-vehicle systems using the high-voltage battery instead of the 12 V battery.

System setting

Stay mode will operate under the following conditions:

- When the READY indicator light illuminates or the vehicle is in ON position.
- The gear is in P (Park).

System activation



OSG2H006103L

(1) **Hybrid**
(2) **Stay Mode**

To activate or deactivate stay mode, Select **Hybrid >** ⚙ **> Stay Mode** on the infotainment system screen

Activate Stay Mode: You can turn on the stay mode.

Use Mode on Destination Arrival: Shift the gear to P (Park) upon arrival at the destination, and a confirmation message pops up asking if you want to start stay mode. Press 'Yes' to turn on the mode.

System deactivation

Stay mode will stop under the following conditions:

- Vehicle is turned off
- When the coolant temperature is low.
- When the high voltage battery charge is low.
- When the fuel gauge is low.

NOTE

- The **Activate Stay Mode Upon Arrival at a Set Destination** feature is available when a destination is set on the navigation system.
- This feature pre-charges the battery before arriving at the destination to enable the use of stay mode, and may affect fuel economy and the battery's state-of-charge (SoC) level.
- When the stay mode is in use, the vehicle cannot be driven and cannot be shifted to positions other than P (Park).
- While in the stay mode, it is possible to use all in-vehicle electrical devices.
- How long this mode can be used may differ, depending on the outside temperature and the vehicle's power consumption (heating/cooling).

Energy flow

The hybrid system informs you about energy flow in various operating modes. While driving, the current energy flow is specified in 11 modes.
The hybrid system informs you of its energy flow in various operating modes. While driving, the current energy flow is specified in 11 modes.

Vehicle stop

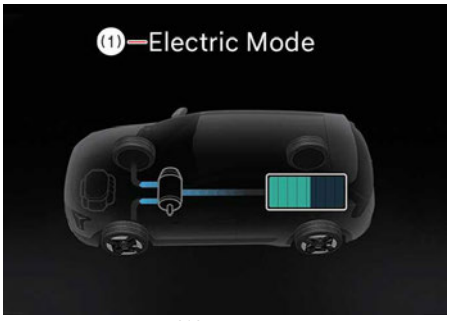


OSG2H006049L

(1) **Idle Mode**

The vehicle is stopped (no energy flow).

EV propulsion



OSG2H006048L

(1) **Electric Mode**

Only the motor is powering the vehicle (battery to wheel).

Power assist

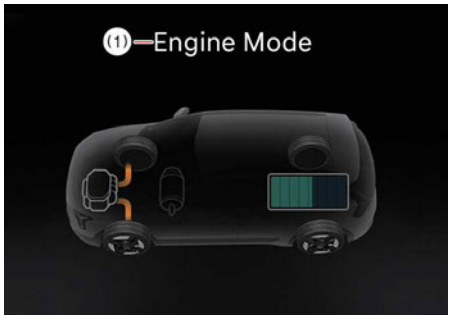


OSG2H006047L

(1) **Hybrid Mode**

Both the motor and the engine power are powering the vehicle (battery & engine to wheel).

Engine only propulsion



(1) **Engine Mode**

OSG2H006046L

Only the engine is powering the vehicle (engine to wheel).

Engine generation



(1) **Charging**

OSG2H006045L

When you stop the vehicle, the engine charges the high voltage battery (engine to battery).

Regeneration

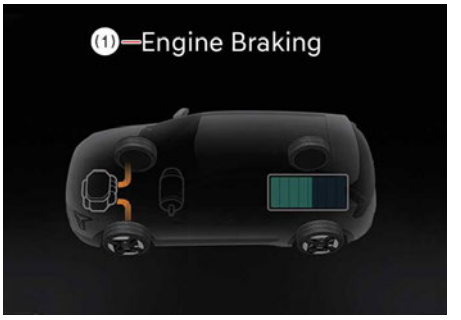


(1) **Charging**

OSG2H006042L

The regenerative braking system charges the high voltage battery (wheel to battery).

Engine brake

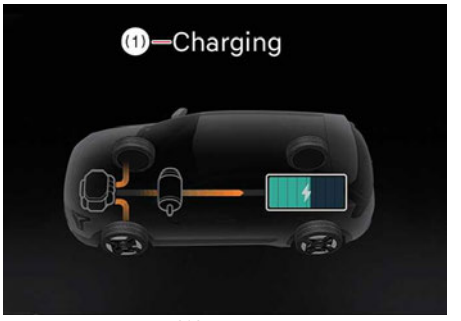


OSG2H006044L

(1) **Engine Braking**

Engine braking slows down the vehicle (wheel to engine).

Power reserve



OSG2H006042L

(1) **Charging**

The engine simultaneously powers the vehicle and charges the high voltage battery (engine to wheel & battery).

Engine generation/motor drive



OSG2H006040L

(1) **Charging**

The engine charges the high voltage battery. The motor powers the vehicle (engine to battery to

wheel).

Engine generation/regeneration



OSG2H006040L

(1) **Charging**

The engine and the regenerative braking system charge the high voltage battery (engine & wheel to battery).

Engine brake/regeneration



OSG2H006040L

(1) **Charging**

Engine braking simultaneously slows down the vehicle and charges the high voltage battery (wheel to engine & battery).

Hybrid Driving System

e-Handling/e-EHA (if equipped)

e-Handling controls the electric motor while turning to improve the handling performance, driving safety, convenience and ride comfort.

e-EHA connects FCA (Forward Collision Avoidance Assist) and the electric motor to assist with prompt collision avoidance when a FCA warning appears.

TIP

- e-Handling stands for Electrically Assisted Handling Performance.
- e-EHA means Electrically Evasive Handling Assist.

Operating condition(s)

- e-Handling is intended to work by identifying initiation conditions when the driver operates the steering wheel over a certain level when the vehicle speed is between 25 mph (40 km/h) and 74.5 mph (120 km/h).
- e-EHA operates if there is urgent steering wheel operation while FCA (Forward Collision Avoidance Assist) warning appears.

Non-operating condition(s)

- When ESC is functioning
- When ABS is functioning

CAUTION

The system does not operate under the following conditions:

- When the ESC operation stop light is on
- During a malfunction of an electronic device
- When the manual shift mode is set
- The selected gear is not D (Drive)

TIP

For more information, refer to "Paddle shifter" on page 356

e-Ride (if equipped)

e-Ride controls the vehicle's sensors and drive motor torque to help soften the impact when passing over obstacles such as speed bumps, and detects and adjusts the vehicle's movement to provide a more comfortable and stable driving performance.

e-Ride does not operate in the following circumstances.

- When your vehicle is in manual shift mode or SPORT mode
- When driving on steep slopes
- When ABS and ESC is activated

- When vehicle speed is 35 mph (55 km/h) or faster
- When your vehicle is driving off-road, making sharp turns, or shifting gears

Once these conditions are cleared, e-Ride will operate when driving over speed bumps.

TIP

e-Ride stands for Electrically-controlled Ride Comfort

Components of the hybrid vehicle

Hybrid vehicle components

High voltage battery system

⚠ WARNING

Never touch orange colored or high voltage labeled components, including wires, cables, and connections. When the insulators or covers are damaged or removed, severe injury or death from electrocution may occur.

⚠ WARNING

While replacing the fuses in the engine compartment, never touch the HPCU. The HPCU carries high voltage. Touching the HPCU may result in electrocution, serious injury, or death.

⚠ WARNING

In the hybrid system, the hybrid battery uses high voltage to operate the motor and other components. The high voltage hybrid battery system can be very dangerous.
Never touch the hybrid system. When you touch the hybrid battery system, serious injury or death may occur.

⚠ WARNING

- Do not place any items in the area behind the high voltage battery. In a crash, the battery may become unstable or its performance may degrade.
- Do not apply strong force to or place any items above the trunk. The high voltage battery case might distort, causing a safety problem or degrading the performance.
- Be careful when loading flammable liquid in the trunk. If the liquid leaks and flows in the high voltage battery, it could cause operational and safety degradation.

⚠ WARNING

- Do not disassemble the high voltage motor connector. The high voltage motor connector may contain residual high voltage. Coming in contact with high voltage may result in death or serious injury.
- Have the system inspected and repaired by an authorized Kia dealer.

⚠ WARNING

- Do not disassemble or assemble the high voltage battery system. Doing so may result in electric shock, causing death or serious injury.
- If you disassemble or assemble hybrid system components improperly, it may damage the performance and reliability of your vehicle.

- If electrolyte comes in contact with your body, clothes, or eyes, immediately flush with a large quantity of fresh tap water. Have your eyes examined by a doctor as soon as possible.

⚠ WARNING

Never assemble or disassemble the high voltage battery system.

- If you assemble or disassemble the high voltage battery system, the durability and performance of the vehicle may be damaged.
- When you want to check the high voltage battery system, have your vehicle inspected by an authorized Kia dealer.
- Do not touch the high voltage battery or the high voltage cable connected to the motor (orange color). Severe burns and electric shock may occur. For your safety, do not touch the cover of electronic components or the electronic cable. Do not remove the cover of electronic components or the electronic cable. In particular, never touch the high voltage battery system when the hybrid system is operating. This may result in death or serious injury.

⚠ WARNING

- Never use the package modules (high voltage battery, inverter, and converter) for any other purpose.
- Never locate the high voltage system near or in a fire.
- Never drill into or strike the package module. Otherwise, it may be damaged. An electric shock may occur, resulting in serious injury or death.

NOTE

- When the vehicle is paint baked, do not bake over 30 minutes at 158°F (70°C) or over 20 minutes at 176°F (80°C).
- Do not wash the engine compartment with water. Water may cause an electric shock and damage the electronic components.

⚠ WARNING

This hybrid vehicle uses the hybrid battery system inverter and converter to generate high voltage. High voltage in the hybrid battery system is very dangerous and may cause severe burns and electric shock. This may result in serious injury or death.

- For your safety, never touch, replace, disassemble, or remove the hybrid battery system (including components, cables, and connectors). Severe burns or electric shock may result in serious injury or death when you fail to follow this warning.
- The hybrid battery system can be hot when it operates. Always be careful to avoid burns or electric shock that might be caused by high voltage.
- Do not spill liquid on the HPCU, HSG, motor, or fuses. If the hybrid system components come in contact with liquid, this may result in electric shock.

Hybrid battery cooling duct (Hybrid vehicle)

Inlet duct



OSG2H076005L

The hybrid battery cooling duct is located under the rear seats. The cooling duct cools down the hybrid battery. When the hybrid battery cooling duct is blocked, the hybrid battery might overheat.
Clean the cooling duct for the hybrid battery with a dry cloth on a regular basis.

WARNING

- Never clean the cooling duct of the hybrid battery with a wet cloth. If any water enters the cooling duct of the hybrid battery, the hybrid battery might cause an electric shock, resulting in a serious damage, injury, or death.
- Lithium-ion composes the hybrid battery. The hybrid battery is dangerous to the environment if improperly handled. The hybrid battery might also cause electric shock and severe burns, resulting in serious injury or death.
- Do not spill liquid on the cooling duct of the hybrid battery. Doing so is very dangerous, and might cause electric shock or serious injury.
- Do not cover the cooling duct with objects.
- Do not put any objects into the cooling duct of the hybrid battery. Doing so might cause loss of the cooling duct volume. If any objects block the cooling duct, immediately contact a Kia dealer.
- Never place a container of liquid on or near the cooling duct. Spilled liquid might damage the hybrid battery.
- Before driving, secure all luggage in the liftgate. When a sharp or heavy load strikes with a strong impact or pierces the liftgate's interior wall, the hybrid battery system might be damaged, deteriorating its performance.
- Do not obstruct the cooling duct with any other objects.

Service interlock connector



OSG2H076002L

The service interlock connector, located within the engine compartment, is a safety device that disables the high voltage of the battery. It's for vehicle inspections at an authorized Kia dealer.

To access the service interlock connector , open the hood, and remove the motor compartment fuse panel near the fuse box.

WARNING

- Avoid contacting the service interlock connector to prevent severe injury or death from electric shock.
- If you need to inspect or maintain the service interlock connector, have your vehicle inspected by an authorized Kia dealer.
- Only disconnect or tamper with the service interlock connector in an emergency, as it may cause significant vehicle issues such as failure to start.

If an accident occurs

WARNING

- For your safety, do not touch the high voltage cables, connectors, or package modules. High voltage wiring and connectors are orange.
- Exposed cables or wires might be visible inside or outside of the vehicle. Never touch the wires or cables, as electric shock, injury, or death may occur.
- Any gas or electrolyte leakage from the vehicle is not only poisonous but flammable. If you see gas or electrolyte leakage, open the windows then keep a safe distance from the vehicle.

  Immediately contact emergency services or an authorized Kia dealer and advise them that a hybrid vehicle is involved.
- If the vehicle is severely damaged, maintain a safe distance of 50 feet (15 meters) or more between your vehicle and other vehicles or flammable objects.

⚠ WARNING

If a fire occurs:
- If a small scale fire occurs, use a fire extinguisher intended for electrical fires (ABC, BC).
- If extinguishing the fire in its early stage is impossible, keep a safe distance from the vehicle and immediately call your local fire department. Be sure to advise them that a hybrid vehicle is involved.
- If the fire spreads to the high voltage battery, a large amount of water will be needed to extinguish the fire.
- Using a small amount of water or a fire extinguisher not intended for electrical fires could cause serious injury or death from an electric shock.
- If you see any sparks, gases, flames, or fuel leakage coming from the vehicle, immediately contact emergency services or an authorized Kia dealer. Always advise them that a hybrid vehicle is involved.

⚠ WARNING

If your vehicle submerges in or floods with water, the high voltage battery might cause electric shock or fires. Turn the hybrid system OFF, take the key, and escape to a safe place. Never attempt to touch a flooded vehicle. Immediately contact an authorized Kia dealer and advise them that a hybrid vehicle is involved.

When the hybrid system shuts off

When the high voltage battery or 12V battery discharges, or the fuel tank is empty, the hybrid system might not operate while driving. When the hybrid system does not operate, perform the following steps:

1. Gradually reduce your speed and pull over in a safe location.
2. Shift the gear to P (Park).
3. Activate the hazard lights.
4. Turn OFF the vehicle. While engaging the brake pedal and pressing the ENGINE START/STOP button in the ON position, try to restart the hybrid system again.

Before you jump start the vehicle, check the fuel level and the jump starting procedure. When the fuel level is low, do not attempt to drive the vehicle exclusively with the battery power. If you do, the high voltage battery might discharge and the hybrid system turns off.

⚠ WARNING

Vehicular accident

Never touch the electric wires or cables. An electric shock might occur if exposed electric wires or cables are visible inside or outside of the vehicle.

⚠ WARNING

Extinguishing a fire

Never use a small amount of water to extinguish a vehicle fire. Using a small amount of water could cause serious injuries or death from an electric shock. In case of a fire, immediately evacuate the vehicle and contact your local fire department.

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Controls and features

Infotainment system

Audio system

NOTE

- If you install an aftermarket High Intensity Discharge (HID) headlight, your vehicle's audio and electronic devices may malfunction.
- When attaching metallic tinted paper to the glass, the communication function of the hi-pass system, radio reception function, connected car service, and automatic headlight turn-on function may not work normally. Also, be careful as the solution used in the construction of the tinted paper may permeate the inside of the vehicle, which may cause the electronic device to fail.

* If your vehicle is equipped with an infotainment system, refer to the separately supplied manual for detailed information.

Shark-fin antenna



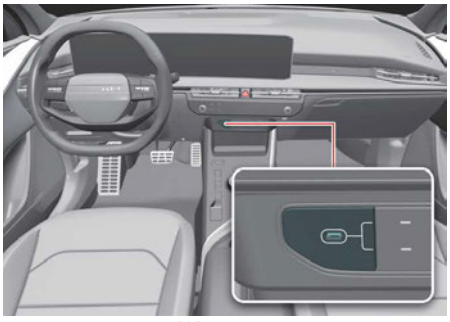
OSG2H086008L

Shark-fin antenna transmit and receive signals such as AM/FM and GPS. Additional signals are sent and received according to vehicle options.

- Be careful of antenna damage by checking the height of the vehicle before entering low-ceiling spaces such as automated parking lots or automated washing machines.
- Be careful not to contact the antenna when loading cargo on the roof rack. Antenna transmission/reception performance may be degraded.

USB port

Use the USB port to plug in a USB stick.



OSG2H086010L

- You can use a USB cable to connect audio devices to the vehicle's USB port.
- After connecting a media storage device such as an MP3 player or USB drive, you can play music through the vehicle speakers or the infotainment system.
- Small electronic devices can also be charged through the USB port.

NOTE

- Some devices may not charge when connected to the USB port.
- When using a portable audio device connected to the power outlet, noise may occur during playback. If this happens, disconnect the USB cable and use the portable audio device's own power source.

How vehicle radio works

Transmitter towers located around your city broadcast AM and FM radio signals. The radio antenna on your vehicle intercepts these signals. The radio processes these signals and sends them to your vehicle speakers.

In some cases, the signal coming to your vehicle may not be strong and clear.

This may be due to several factors, such as the distance from the radio station, the closeness of other strong radio stations, or the presence of buildings, bridges, or other large obstructions in the area.

FM reception

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. The obstructions can cause unpleasant listening conditions. This is not a problem with your radio.

AM reception

AM broadcasts are received at greater distances than FM broadcasts because AM radio waves are transmitted at low frequencies. These long distance, low frequency radio waves follow the curvature of the earth rather than traveling straight. In addition, they curve around obstructions

resulting in better signal coverage.

Radio station

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 the sound will begin to fade. When this occurs, select another station with a stronger signal.
- Flutter or static: Weak FM signals or large obstructions between the transmitter and your radio can disturb the signal, causing static or fluttering noises. 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 received from several directions can cause distortion or fluttering. This is caused by a direct and reflected signal from the same station, or by signals from 2 stations with close frequencies. Select another station until the condition has passed.

Using a mobile phone or 2-way radio

Using a mobile phone inside the vehicle may produce noise 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, you must affix a separate external antenna. When you use a mobile phone or radio set with only the internal antenna, it may interfere with the vehicle's electrical system and adversely affect the safe operation of the vehicle.

⚠ 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 should never be used while driving.

⚠ WARNING

Mobile phone use

Do not use a mobile phone while driving. Stop at a safe location to use a mobile phone.

AI Assistant (if equipped)



OLQ2A085066

AI Assistant can be operated using voice recognition.

Press the **AI Assistant** button or say "Hey, Kia."

Example (Vehicle control)

- "Turn on the air conditioner."
- "Turn off the air conditioner."

Example (Question)

- "Can you explain why the ocean is blue in a way that a 7-year-old can understand?"

> **TIP**
>
> **AI Assistant** may provide inaccurate answers. Please check important details separately.

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 1 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.

TIP

Any changes or modifications to this device that are not explicitly approved by the manufacturer could void your authority to operate this equipment.

Welcome system

The welcome system displays the surroundings or the interior when the driver approaches or exits the vehicle.

> **TIP**
>
> 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.

Door handle lamp

When all the doors and the liftgate are closed and locked, the door handle lamp will illuminate for about 15 seconds if you perform any of the following actions:

- You press the smart key's door unlock button.
- You press the button on the outside door handle.
- You approach the vehicle with the smart key in your possession.

Headlight escort function

The headlights and taillights remain on for approximately 5 minutes after you turn the vehicle to OFF or set the vehicle to ON position. If you open and close the driver's door, the headlights will turn off after 15 seconds.

You can turn the headlights off by pressing the lock button on the smart key twice, or by turning the light switch to OFF.

Interior light

When the **DOOR OFF** indicator light is off, and all doors and the liftgate are locked and closed, the interior light illuminates for 30 seconds if you perform any of the following actions with the smart key:

- You press the smart key's door unlock button.
- You touch the sensor on the outside door handle.

If you press the smart key's door lock button, the lamps will turn off immediately.

Interior lights

This vehicle is equipped with lights to illuminate its interior.

WARNING

Do not use the interior lights when driving in the dark. Accidents could happen because the interior lights may obscure your view, resulting in serious injury or death.

TIP

To avoid 12V battery discharge, do not use the interior lights for extended periods when the vehicle is not running.

Automatic turn off function

If the interior lights are on, they will automatically turn off approximately 20 minutes after you turn the vehicle off.

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

Interior lights always on

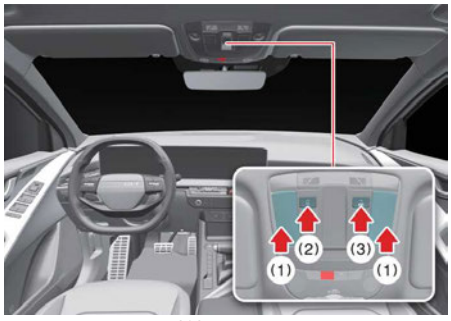
The Interior Lights Always On function turns on the interior button lights regardless of day or night.

Select **Setup > Vehicle Settings > Lights > Interior Lights Always On** from the infotainment system to activate Interior lights always on function.

After you enable the function, the interior button lights operate as follows:

- When all doors are closed and locked, if you unlock a door, the interior button lights illuminate for approximately 5 minutes.
- When you turn off the vehicle, the interior button lights illuminate for approximately 5 minutes.
- When the interior button lights are on, if you open and close a door or lock the doors, the interior button lights turn off immediately.

Map light



OSG2H086022L

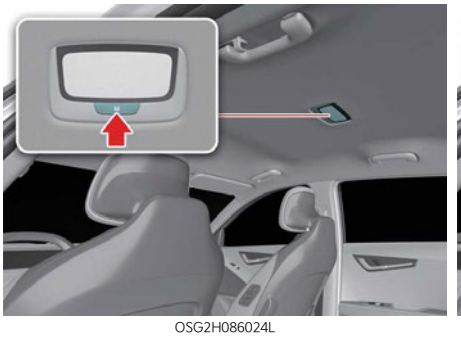
- To turn the map light ON, press the lens (1).
  To turn the map light OFF, press the lens (1) again.
- (2): DOOR mode
  - When you open a door, both the map light and interior light illuminate for approximately 30 seconds.
  - When you unlock the doors with a smart key, as long as you do not open the doors, the map light and interior light illuminate for approximately 30 seconds.
  - If you open a door when the ENGINE START/STOP button is set to ACC or OFF, the map and interior lights stay on for approximately 20 minutes.
  - If you open a door when the ENGINE START/STOP button is ON, the map and interior lights stay on continuously.
  - When the ENGINE START/STOP button is pressed ON or all doors are locked, the map and interior lights turn off immediately.
  - To turn DOOR mode OFF, press the DOOR button (2).
- (3): Press this switch to turn the front and rear interior lights ON and OFF.

TIP

You cannot select the DOOR and ROOM modes at the same time.

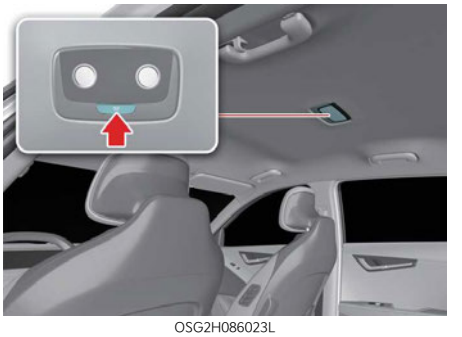
Interior light

Type A



OSG2H086024L

Type B



OSG2H086023L

Press the button to turn the cabin light on or off.

Luggage compartment light



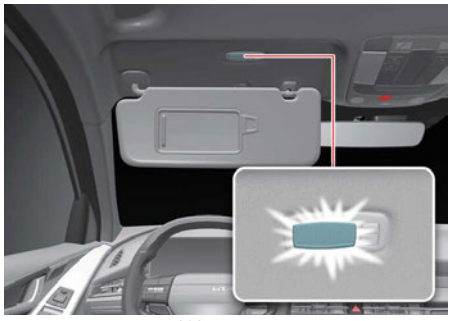
OSG2H086013L

The luggage compartment light illuminates when you open the liftgate.

NOTE

The luggage compartment light comes on as long as the liftgate is open. To prevent unnecessary charging system drain, close the liftgate securely after using the compartment.

Vanity mirror light



OSG2H086025L

Push the switch to turn the light ON or OFF.

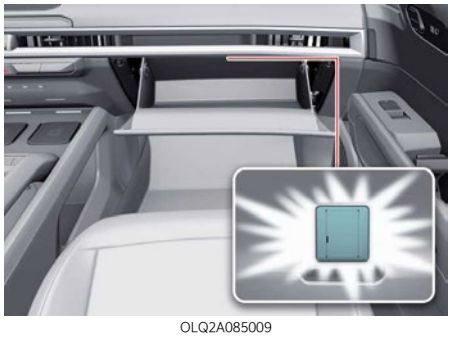
- : Press this button to turn the light ON.
- : Press this button to turn the light OFF.

NOTE

Vanity mirror lamp

Always close the vanity mirror and turn it off when not in use. If you close the sun visor with the vanity light on, this may damage the sun visor or cause the 12V battery to discharge.

Glove box light (if equipped)



OLQ2A085009

The glove box light will illuminates when you open the glove box.

NOTE

To prevent unnecessary charging system drain, close the glove box securely after opening it.

Ambient light (if equipped)

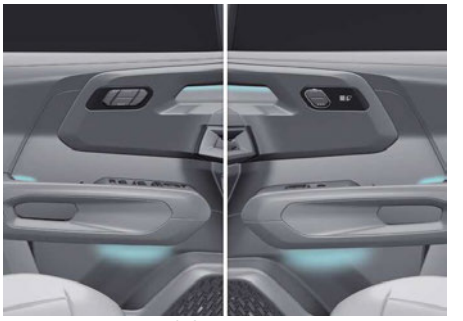
The ambient lights are applied to the front instrument panel, front/rear door and center console.

Instrument panel



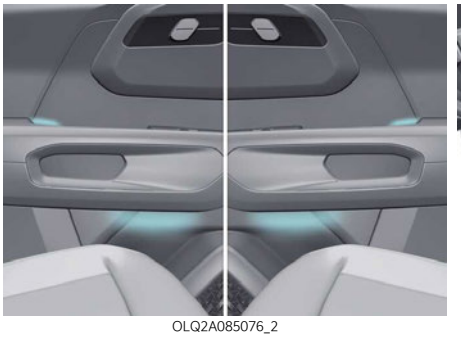
OLQ2A085068

Front door



OLQ2A085075_2

Rear door



OLQ2A085076_2

Center console



OLQ2A085087

When the vehicle is in ON position, select **Settings > Vehicle > Lights > Ambient Lighting** from the infotainment system.

TIP

The infotainment system may change after a software update. For more details, refer to the user's manual in the infotainment system or the quick reference guide.

Climate control system

The climate control system cools or heats the inside of the vehicle for the comfort of you and your passengers.

System operation

Ventilation

1. Set the air intake to .
2. Set the air intake control to external air.
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 .
2. Set the air intake control to external air.
3. Set the temperature control to the desired position.
4. Set the fan speed control to the desired speed.
5. For dehumidified heating, turn the air conditioning system ON.
   If the windshield fogs up, set the mode to or .

Heating system operation tips

- To keep dust or unpleasant fumes from entering the vehicle through the ventilation system, temporarily set the air intake control to recirculated air. Be sure to return the control to external air intake when the irritation has passed to keep fresh air in the vehicle.
- The climate control system draws air through the grille just at the base of the windshield. Ensure that the grille 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 external and the fan speed to the desired position.
  - Turn on the air conditioning system and adjust the temperature control to the 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 .
3. Set the air intake control to external or recirculated.
4. Adjust the fan speed control and temperature control as desired.

⚠ CAUTION

- The refrigerant system should only be serviced by trained and certified technicians to ensure 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 a cooling coil that was removed from a used or salvaged vehicle. Replacement Mobile Air Conditioning (MAC) evaporators should be certified (and labeled) as meeting SAE Standard J2842.

NOTE

Excessive air conditioning use

If you use the A/C system when outside temperatures are high, monitor the temperature gauge closely while driving up hills or in heavy traffic, as A/C system operation may cause the vehicle to overheat. If the temperature gauge indicates that the vehicle is overheating, you may continue to use the blower fan, but turn off the A/C system.

NOTE

To prevent condensation inside the vehicle that may damage electrical components, only use the A/C system with the windows and sunroof closed.

A/C 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 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 the vehicle speed as the A/C compressor runs. This is normal.
- Run the A/C system for a few minutes each month to ensure optimal system performance.
- When using the A/C system, you may notice clear water dripping or puddling on the ground under the passenger side of the vehicle. This is normal.
- Operating the A/C system with the air intake set to recirculated provides maximum cooling, but continued operation with recirculated air may cause the air inside the vehicle to become stale.
- When using the A/C system, you may occasionally notice a misty air flow because of rapid cooling of humid air intake. This is normal.

Climate control air filter

The climate control air filter removes dust and other pollutants that enter the vehicle from the outside. If dust or other pollutants accumulate in the filter over time, the airflow from the air vents may decrease. This leads to moisture accumulating on the inside of the windshield even when the fresh air intake mode is selected.

At this time, replace the climate control filter. If you find it challenging to do so yourself, have the climate control filter replaced by an authorized Kia dealer. For details on how to replace the climate control air filter, refer to "Climate control air filter" on page 685.

NOTE

Replace the climate control air filter according to the Maintenance Schedule. Failure to replace the climate control air filter on a regular basis can result in decreased airflow, diminished heating and cooling performance, and unpleasant odors.

TIP

If the airflow from the air vents suddenly decreases, have your vehicle inspected by an authorized Kia dealer.

Air conditioning (A/C) refrigerant label



KIAPB015

* 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) Caution
(2) Classification of refrigerant
(3) Classification of compressor lubricant
(4) Flammable refrigerant
(5) Requires a registered technician to service the A/C system
(6) Amount of refrigerant

The refrigerant label is located underneath the hood.

Refer to "Refrigerant label" on page 40 for more information on the location of the air conditioning refrigerant label.

Checking the amount of air conditioner (A/C) refrigerant and compressor lubricant

Low refrigerant reduces the A/C system performance. Overfilling the refrigerant also adversely impacts the A/C 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.

WARNING

Vehicles equipped with R-1234yf



Since the refrigerant is mildly flammable and operated at high pressure, the air conditioning system should only be serviced by trained and certified technicians. (Refer to the SAE J2845)
It is important that you use the correct type and amount of oil and refrigerant. Reclaim all refrigerants with the 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.

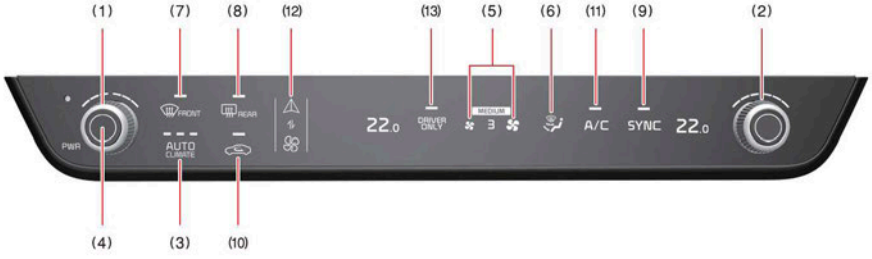
NOTE

It is important that you use the correct type and amount of oil and refrigerant. Otherwise, damage to the vehicle may occur. To prevent damage, the A/C system in your vehicle should only be serviced by trained and certified technicians.

Automatic climate control system

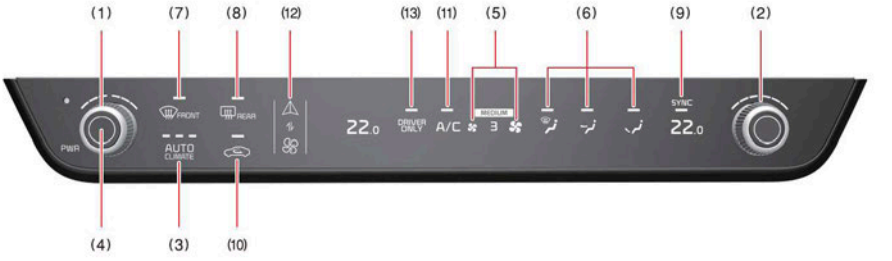
The automatic climate control system cools or heats the inside of the vehicle for the comfort of you and your passengers.

Type A



OSG2H086017L

Type B



OSG2H086021L

(1) Driver's temperature control knob
(2) Passenger's temperature control knob
(3) AUTO (automatic control) icon
(4) OFF icon
(5) Fan speed control icon
(6) Mode selection icon
(7) Front-windshield defroster icon
(8) Rear-window defroster icon
(9) SYNC icon
- Touch the SYNC icon to adjust the driver and passenger side temperature to the same value.

(10) Air intake control icon
(11) Air conditioning A/C icon
(12) Infotainment/climate control mode switching icon
(13) Driver's side only icon

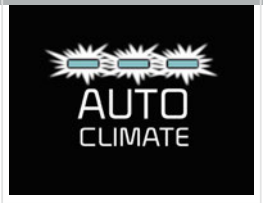
NOTE

Operating the blower when the ENGINE START/STOP button is ON could cause the battery to discharge. Operate the blower when the engine is running.

Automatic heating and air conditioning (A/C) operation



1. Press the AUTO icon.
   The modes, fan speeds, air intake and air-conditioning will be controlled automatically by setting the temperature.
   You can control the air flow in three stages by pushing the AUTO button during automatic operation.

Level	Indicator	LCD Display	Air flow
High			2-8
Medium			1-6
Low			1-4

2. Turn the temperature control knob AUTO CLIMATE to the desired temperature.

TIP

- To turn the automatic operation off, press any of the following buttons:
  - Mode selection button
  - Air conditioning button

- Front windshield defroster button

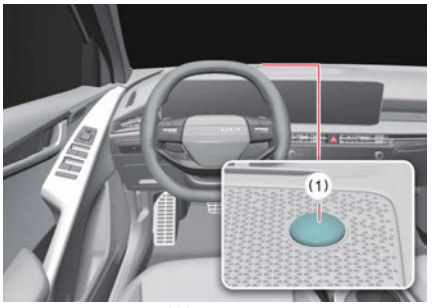
  Press the button again to deselect the front windshield defroster function. The AUTO sign will appear on the information display once again.
- Fan speed control knob

The selected function is controlled manually, while other functions operate automatically.

- To improve the effectiveness of the climate control, press the AUTO button and set the temperature to 22 °C (72 °F).

TIP

For better control of the heating and cooling system, never place anything over the sensor (1) located on the instrument panel.



OSG2H086012L

Manual heating and air conditioning (A/C) operation

The heating and cooling system can be controlled manually by pressing buttons other than the AUTO button.



OSG2H086014L

To manually operate the heating and A/C, follow these steps:

1. Start the vehicle.
2. Set the desired mode.
   - Heating:
   - Cooling:
3. Set the temperature control as desired.
4. Set the air intake control to external air.
5. Set the desired fan speed. Turn the A/C system on if desired.

Press the AUTO button to switch to the automatically controlled climate system.

Mode selection



The mode selection button controls the direction of airflow through the ventilation system.

Face-Level (2, 4, 6,)

Air flow is directed toward the upper body and face. You can control the direction of the airflow from each vent.

Bi-Level (2, 3, 4, 5, 6)

Air flow is directed toward the upper body and face and the floor.

Floor-Level (1, 3, 4, 5, 6)

Most of the airflow is directed to the floor, and a small amount is directed to the windshield, side window defrosters, and side air vents.

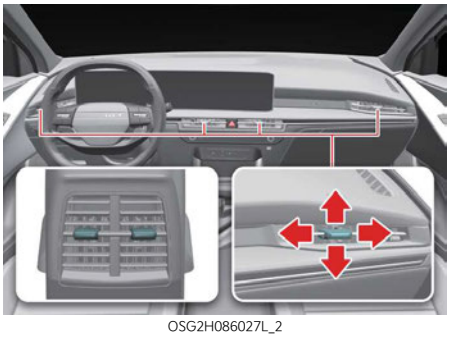
Floor/Defrost-Level (1, 3, 4, 5, 6)

Most of the airflow is directed to the floor and windshield, and a small amount is directed to the side window defrosters and side air vents.

Defrost-Level (1, 4)

Most of the air flow is directed to the windshield, and a small amount is directed to the side window defrosters and side air vents.

Instrument panel vents



OSG2H086027L_2

You can adjust the direction of a vent's airflow using the vent control lever as shown.

Temperature control

The temperature will increase to the maximum (HI) by turning the knob all the way to the right.
The temperature will decrease to the minimum (Lo) by turning the knob all the way to the left.
When turning the knob, the temperature will increase or decrease by 1 °F (0.5 °C in Celsius).
When set to the lowest temperature setting, the air conditioning will operate continuously.

TIP

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 during this time 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.

Syncing driver and passenger temperature

SYNC

1. Press the "SYNC" button to adjust the driver and passenger side temperature equally.
   The passenger side temperature will be set to the same temperature as the driver side temperature.
2. Turn the driver side temperature control knob. The driver and passenger side temperature will be adjusted equally.
3. If you rotate the passenger's temperature control knob, the SYNC button is turned off and the passenger side temperature can be operated individually.

Adjusting the driver and passenger side temperature individually

To adjust the driver and passenger side temperatures individually, press the SYNC icon again. The button indicator will turn off.

Changing temperature scale

To switch the temperature scale between Celsius and Fahrenheit, press the AUTO icon for at least 3 seconds while pressing the OFF knob.
The display will change from Fahrenheit to Celsius or vice versa. If the battery is discharged or disconnected, the temperature scale will reset to Celsius.

Controlling air intake



Select the external or recirculated airflow.
To change the air intake, press the desired control button.

Recirculated air intake

Air from the vehicle cabin is drawn through the heating system and cooled or heated accordingly.

External air intake

Air enters the vehicle from outside and is heated or cooled accordingly.

Controlling fan speed



- Use the fan speed control knob to set the desired fan speed.
- Turn the knob left or right to the desired temperature.
- To turn the fan speed control OFF, press the driver side temperature control knob.

Air conditioning (A/C)



- To turn the A/C system ON, press the A/C icon. The indicator light will illuminate.
- To turn the A/C system OFF, press the icon again.

Turning off the front air climate control



- To turn the climate control system OFF, press the driver side temperature control knob.
- You can operate the mode and air intake control buttons as long as the ENGINE START/STOP button is ON.

Clean air (if equipped)

The clean air function turns ON automatically when the ENGINE START/STOP button is ON.
The clean air function turns OFF automatically when the ENGINE START/STOP button is OFF.

Smart temperature comfort control system (for driver's seat)

When the engine is running and climate control is set to AUTO, the smart temperature comfort control system automatically controls the driver's seat warmer, air ventilated seat, and steering wheel heater according to the temperature both inside and outside the vehicle.
The steering wheel heater, seat warmer, and seat ventilation default to OFF whenever you restart the vehicle.

Charging door operation

On the infotainment system screen, tap **Settings > Vehicle > Seat > Heating/Ventilation > AUTO Controls**. Then, tap **Climate control > Settings > Steering wheel warmer > Seat warmer >**

ventilation.

TIP

For detailed information, refer to the Navigation Quick Reference Guide.

Scheduled ventilation control

Scheduled ventilation control expels hot air from the vehicle to lower the cabin temperature before you get into the vehicle.
Depending on the outside temperature, the blower fan will operate for 5 to 15 minutes while the vehicle is parked.

Turning scheduled ventilation control ON or OFF

To turn scheduled ventilation control ON or OFF, select **Setup > Vehicle Settings > Automatic Ventilation > Scheduled Ventilation** on the infotainment system screen. The starting time can be set up to 24 hours in advance. Scheduled ventilation control only operates after you set the feature.

Activate upon washer fluid use (if equipped)

To prevent the odor from entering into the vehicle, the ventilation system changes to Recirculated Air Mode for a whilst when the windscreen washer fluid sprayed.
The starting time can be set up to 24 hours in advance. Scheduled ventilation control only operates after you set the feature.

Windshield defrosting and defogging

Frost or moisture accumulated on the windshield can obscure visibility and should be removed.

WARNING

Windshield heating

Do not use the or setting when running the air conditioner (A/C) in extremely humid weather. The temperature differential between outside air and the windshield can fog up the windshield's outer surface and obscure visibility. Set the mode to and the fan speed control to its lowest speed.

- For maximum defrosting, set the temperature control to its highest heat and the fan speed control to its highest speed.
- Set the climate control mode to floor-defrost if you desire warm air in the footwell while defrosting or defogging.
- Before driving, clear all snow and ice from the windshield, rear window, sideview mirrors, and all side windows.
- To improve heater and defroster efficiency and reduce the likelihood of the inside of the windshield fogging up, clear all snow and ice from the hood and air inlet in the car's grille.

Defogging the inside of the windshield with the manual climate control system

To defog the inside of the windshield using the manual climate control system, follow these steps:

1. Select any fan speed other than 0.
2. Select the desired temperature.
3. Select the or mode.
4. External airflow and air conditioning (A/C) will be selected automatically.

If external airflow and A/C are not selected automatically, manually press the corresponding control buttons.

Defrosting the outside of the windshield with the manual climate control system

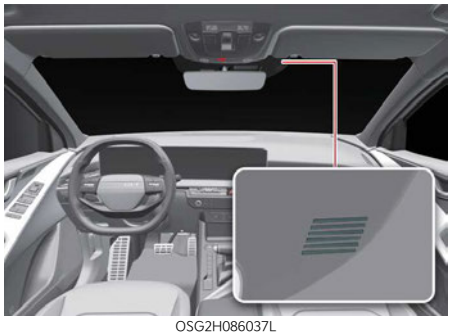
To defrost the outside of the windshield using the manual climate control system, follow these steps:

1. Set the fan to its highest speed.
2. Set the temperature to maximum heat.
3. Select the mode.
4. External airflow and air conditioning (A/C) are selected automatically.

AUTO defogging system

Automatic defogging senses moisture on the inside of the windshield to reduce the likelihood of the windshield fogging up.

Automatic defogging senses moisture on the inside of the windshield to reduce the likelihood of the windshield fogging up.



OSG2H086037L

The AUTO defogging system operates when the heating or air conditioning (A/C) is ON.
The AUTO defogging indicator will appear when the system is operating.
If high humidity is detected inside the vehicle, AUTO defogging will engage.
The following steps are performed automatically:

1. The A/C button will turn ON.
2. The air intake control changes to external airflow when the outside temperature is low.
3. The climate mode changes to defrost so that airflow is directed to the windshield.
4. The fan speed increases.

To cancel or reset the auto defogging system:
Press the front windshield defroster button for 3 seconds when the ENGINE START/STOP button is ON.
When AUTO defogging cancels, the defrost button indicator blinks 3 times.
When the AUTO defogging system resets, the defrost button indicator blinks 6 times without a signal.

TIP

- If you try to turn the A/C OFF when AUTO defogging is ON, the indicator blinks 3 times and the A/C will not turn OFF.
- To maintain the AUTO defogging system's effectiveness and efficiency, do not select re-circulated air intake while the system is operating.
- When AUTO defogging is operating, the fan speed adjustment knob, temperature adjustment knob, and air intake control button are all disabled.

NOTE

Do not remove the sensor cover located at the top of the driver's 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.

NOTE

Conductors
To prevent damage to the conductors bonded to the inside surface of the rear window, never clean the window using sharp instruments or window cleaners containing abrasives.

To defrost or defog the front windshield, refer to "Windshield defrosting and defogging" on page 309.

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 a heavy accumulation of snow on the rear window, brush it off before operating the rear defroster.
To turn the rear window defroster ON:
- 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 pressed OFF.

To turn off the defroster:
- Press the rear window defroster button again.

Outside mirror defroster

If your vehicle is equipped with outside mirror defrosters, they will operate when you turn on the rear window defroster.

Defogging logic (if equipped)

To reduce the likelihood of fogging up the inside of the windshield, air intake and A/C are automatically controlled according to certain conditions and reflected in modes such as or .

Canceling or restoring automatic defogging logic for automatic climate control system

Select **Settings > Vehicle > Climate > Auto Defog** from the infotainment system screen.
The defog logic status will reset if the 12V battery has been discharged or disconnected.

TIP

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.

Canceling or restoring automatic defogging logic on the manual climate control system

1. Press the ENGINE START/STOP button ON.
2. Select the mode.
3. Within 10 seconds of setting DEFOG mode, press the intake button for at least 5 seconds and for at least 3 seconds while pressing the A/C button.

   The air intake control button indicator light will blink 3 times to indicate that the defogging logic has been canceled or restored to the programmed status.

   The defog logic status will reset if the battery has been discharged or disconnected.

Canceling or restoring automatic defogging logic on the automatic climate control system

1. Press the ENGINE START/STOP button ON.
2. Press the defroster button .
3. While pressing the A/C button, press the air intake control button at least 5 times within 3 seconds.

   The recirculation indicator will blink 3 times in half-second intervals to indicate the defogging logic has been canceled or restored to the programmed status.

   The defog logic status will reset if the battery has been discharged or disconnected.

Storage compartments

You can use the compartments to store small items belonging to the driver or passengers:

- To avoid possible theft, do not leave valuables in the storage compartments.
- Always keep the storage compartment covers closed while driving. Do not attempt to place so many items in a storage compartment that it cannot close securely.

WARNING

Flammable materials

Do not store propane cylinders or other flammable or explosive materials in the vehicle. These items may catch fire or explode if the vehicle is exposed to hot temperatures for extended periods of time.

Center console storage



OSG2H086039L

To open the center console storage, pull up the lever.

Glove box



OSG2H086040L

To open the glove box, pull the handle and the glove box will automatically open.
Close the glove box after use.

WARNING

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

CAUTION

Do not keep food in the glove box for an extended period of time.

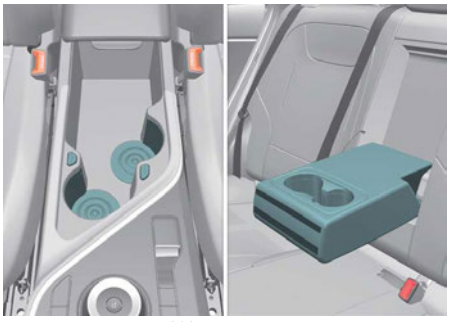
TIP

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 features inside the vehicle for the convenience of the occupants.

Cup holder



OSG2H086016L_2

You may place cups or small beverage cans in the cup holders.

⚠ WARNING

Hot Liquids

Do not place uncovered cups with hot liquid in the cup holders while the vehicle is in motion. If the hot liquid spills, you could be burned. A driver who is burned could lose control of the vehicle.

⚠ WARNING

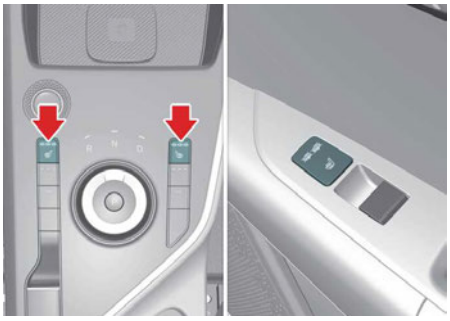
Keep cans or bottles out of direct sunlight, and do not put them in a hot vehicle. They could explode.

NOTE

- To prevent spillage, keep your drinks sealed while driving. If liquid spills, it may get into the vehicle's electrical or electronic system and damage parts.
- When cleaning spilled liquids, do not use heat to dry the cup holders. This may damage the cup holders.

Seat warmer (if equipped)

The seat warmer keeps the seats warm in cold weather.



OSG2H086018L_2

With ENGINE START/STOP button in the ON position:

• Push either of the controls 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 controls off.

The seat warmer defaults off whenever the ENGINE START/STOP button is turned on.

Temperature control (manual)

• Each time you press the controls, the temperature setting of the seat will change as follows:
  ◦ Front seat:
  OFF > High > Medium > Low > OFF
  ◦ Rear seat:
  OFF > High > Low > OFF

Temperature control (automatic)

The seat warmer automatically controls the seat temperature to prevent low-temperature burns after being manually turned ON.

Temperature	Duration
OFF	-
High	30 minutes
Medium	60 minutes
Low	-

Press the button to increase the seat temperature. It will revert to the automatic mode again after a short period of time.

Turn off the seat warmer by pressing the controls for more than 1.5 seconds.

TIP

When the seat warmer controls are on, 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.

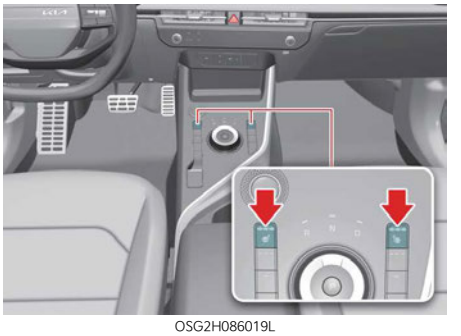
WARNING

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, and so on).

Air ventilation seat (if equipped)



OSG2H086019L

The temperature setting of the seat changes according to the levers position levers' positions.
To ventilate your seat cushion, push the levers.
Each time you push the levers, the airflow changes as follows:

OFF > High > Medium > Low > OFF

The seat warmer (with air ventilation) defaults to OFF whenever the ENGINE START/STOP button is turned ON.

TIP

This function automatically changes the temperature setting of the seat (**High** > **Low**) to maintain maximum comfort inside in case the Idle Stop and Go (ISG) system (if equipped) stops the engine.

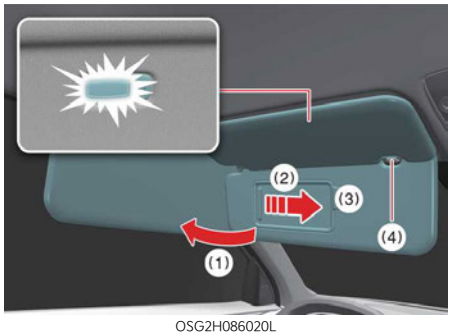
NOTE

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.



OSG2H086020L

To use the sun visor:

- 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 (4), and swing it to the side (1).
- To use the vanity mirror, pull down the visor and slide the mirror cover (2).
  Press the ON button to turn on the lamp inside the sun visor when using the mirror. Before returning the sun visor to its original position, be sure to press the OFF button to turn it off.
  The ticket holder (3) can hold a tollgate ticket.

WARNING

Do not block your view when using the sun visor.

NOTE

Do not put several tickets in the ticket holder at the same time. This could damage the ticket holder.

USB charger

The USB charger recharges the batteries of small electronic devices using a USB cable.

Instrument Panel



OSG2PH085034_4

You can recharge the electronic devices when the ENGINE START/STOP button is in the ON or START position.

You can monitor the battery charging state on the electronic device.

Disconnect the USB cable from the USB port after use.

Rated output:

- A smartphone or a tablet PC may get warmer during the recharging process. This does not indicate any malfunction with the charging system.
- A smartphone or a tablet PC that has a different recharging method may not properly recharge. In this case, use an exclusive charger for your device.
- The charging terminal is only for recharging a device. Do not use the charging terminal either to turn ON an audio or to play media in the infotainment system.

TIP

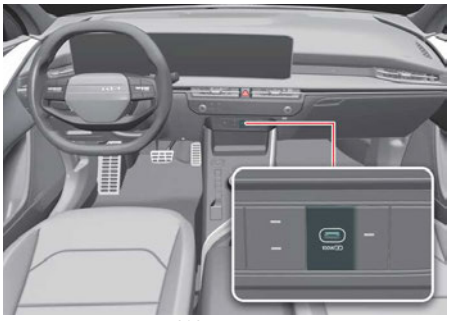
Charging may not be possible when using a USB Type-C to USB Type-A converter.

NOTE

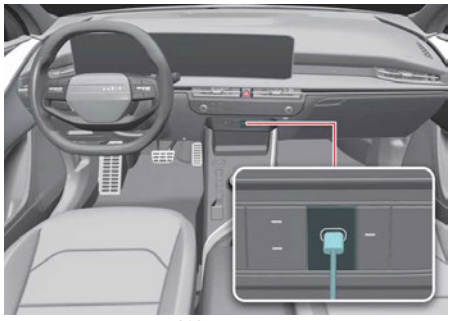
- Use the USB charger when the engine is running. Using the USB charger for prolonged periods of time with the engine OFF could cause the battery to discharge.
- To prevent damage to the USB charger:
  - Do not insert foreign objects or spill liquid into the outlet. This may damage the USB charging terminal

◦ Do not use devices with a working current exceeding 3,000 mA (3.0 A).

100W USB charging port (if equipped)



OSG2H086041L



OSG2H086042L

When the vehicle is in ON position, you can charge various devices such as smartphones and tablets by connecting them to the USB charging port.
Depending on the connected device's request or the specification of the charging cable, the USB charger can support up to 100W of total output.

• When using one port in the center console: up to 100W supported

CAUTION

- To prevent the vehicle's 12V battery from discharging, use the charging function only when the vehicle is on.
- Ensure that no foreign substances, beverages, or moisture enter the USB charging port, as it may cause damage.
- If a failure of the USB port or infotainment system occurs due to the use of low-quality or non-certified components, warranty repair will not be provided even within the warranty period. Use only Kia Genuine Parts or those of an equivalent standard with proven quality and performance.

NOTE

- The 100W USB charging port is indicated by the symbols (100W or 100W).
- The 100W USB charging port supports full 100W charging only when using genuine Kia cables or USB-IF certified cables. When using non-standard cables, the charging power may be limited to 60W or 27W. Use only Kia Genuine Parts or those of an equivalent standard with proven quality and performance.
- The 100W USB charging port indicates its operating status through indicator light for user convenience. If an issue persists, have your vehicle inspected by a professional workshop. Kia recommends visiting an authorized Kia dealer or service partner.

100W USB charging port status

Color	USB charging port state	Measure
White	Normal	-

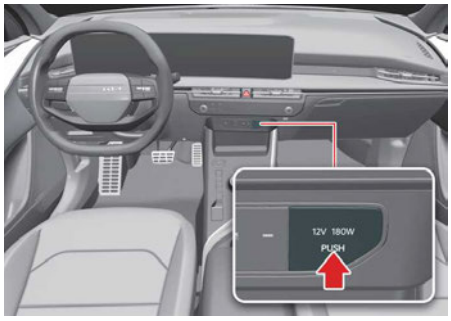
Color	USB charging port state	Measure
(Default)		
Yellow	Charging has stopped because the USB charging port is operating normally, but the connected device or cable is not.	• Check whether there is a problem with the connected device or cable, and then reconnect it. • If the same problem occurs repeatedly, replace it with another compatible cable or check whether the connected device is functioning properly.
Red	Turns on when a malfunction is detected in the charging device.	Stop charging immediately. Have your vehicle checked by a professional workshop. Kia recommends that you visit an authorized Kia dealer/service partner.

NOTE

- Check the charging status through the display on the connected device.
- When connecting to the data port using a C to A type USB adapter, use a genuine adapter compatible with the vehicle. Using products that lack built-in overcurrent protection or stabilization features, or those that do not meet the required specifications, may damage the vehicle's USB charging port or the connected device.
- The USB charging port provides charging functionality only and does not support media connection or playback.
- Always keep the USB port clean and free of dust or foreign substances. Using the port in a contaminated state may cause fire, damage, or other hazardous situations.

Power outlet

The power outlet provides power for mobile telephones or other devices designed to operate with the vehicle electrical system, or for other devices that are compatible with the power outlet and vehicle electrical system.



OSG2H086043L

The devices should draw less than 15A with the vehicle ON.

NOTE

- 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 12V electric accessories that are less than 15A 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 the plug does not make good contact, it 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 system and cause system malfunction.

WARNING

Electric shock

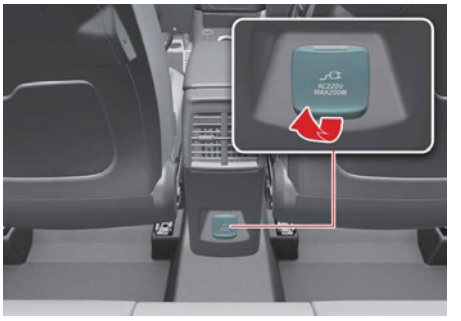
Do not put a finger or a foreign object (such as a pen) into a power outlet, and do not touch it with a wet hand. You may get an electric shock.

NOTE

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 both the vehicle and the TMK.

A/C inverter

The A/C inverter supplies 115V/150W electric power to operate electric accessories or equipment.



OSG2H086045L

- Rated Voltage: AC 220V or 115V
- Maximum electric power: /200W or 150W
- To avoid an electrical system failure, electric shock, and so on, be sure to read the vehicle's owner manual before use.
- Be sure to close the cover when not in use.

CAUTION

To reduce the risk of serious or fatal injuries:

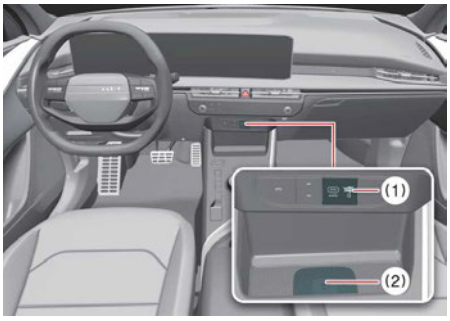
- Do not use a heated electric device such as a coffee pot, toaster, heater, iron, and so on.
- To avoid a shock, do not touch or insert foreign objects into the outlet.

NOTE

- 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 the battery to discharge.
- Do not use an electric accessory or equipment that has a power consumption greater than 200W (220V) or 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 vehicle's inverter and electrical systems.
- Do not use 2 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, the 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 smartphone charging system

A wireless smartphone charging system is located in front of the center console.



OSG2H086044L

(1) Indicator
(2) Charging pad

Firmly close all doors, and press the ENGINE START/STOP button. To start wireless charging, place the smartphone equipped with wireless charging function on the wireless charging pad. For best wireless charging results, place the smartphone on the center of the charging pad. The wireless charging system is designed for only 1 smartphone equipped with Qi ®. Please refer to the smartphone accessory cover or the smartphone manufacturer's website to check whether your smartphone supports the Qi ® charging.

⚠ WARNING

Distracted driving

Driving while distracted can result in a loss of vehicle control that may lead to an accident, severe bodily injury, or death. The driver's primary responsibility is the safe and legal operation of 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 while operating the vehicle.

⚠ CAUTION

Liquid in wireless charging system

To prevent damage, be sure not to spill liquid over the wireless smartphone charging system.

ⓘ NOTE

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 smartphone and the charging pad, immediately remove the smartphone. Remove the metallic object after it has cooled.

ⓘ NOTE

- 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 smartphone.
- To prevent radio wave disruption, wireless charging will stop when you use the wireless smart key search function.
- Wireless charging will stop when you move the smart key out of the vehicle with the engine ON.
- Wireless charging will stop when you open any of the doors (if equipped with smart keys).
- Wireless charging will stop when you turn the vehicle OFF.
- Wireless charging will stop when the smartphone is not in complete contact with the wireless charging pad.
- Items equipped with magnetic components, such as a credit card or transportation ticket, and so on may be damaged during wireless charging.
- For best results, place the smartphone on the center of the charging pad. The smartphone may not charge when placed near the rim of the charging pad. When the smartphone is charging, it may heat up excessively.
- For smartphones without a built-in wireless charging system, you must use an appropriate accessory.
- Certain smartphones may display messages on weak current. This is due to the characteristics of that smartphone and is not a wireless charging system malfunction.
- The indicator light of some manufacturers' smartphones may still be orange after the smartphone is fully charged. This is due to the characteristics of the smartphone and not is a wireless charging system malfunction.
- When you place any smartphone without a wireless charging function or a metallic object on the charging pad, you may hear a noise. This small noise comes from the vehicle discerning the compatibility of the object placed on the charging pad. It does not affect your vehicle or the smartphone 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 smartphone on the charging pad, position the phone in the middle of the pad for maximum efficiency.

  If your smartphone is off to the side, the charging speed may slow down, and your smartphone may heat up.
- When charging some smartphones with a self-protection feature, the wireless charging may decrease in speed or stop.
- You can only wirelessly charge a smartphone that supports wireless charging.
- The wireless charging pad has an internal cooling system, which can create noise, to keep your phone cool while it charges.
- It's normal for your phone to warm up while charging, but using apps like Android Auto or Apple CarPlay can cause it to heat up faster, potentially delaying or stopping the charging process due to overheating. This is not an issue with the wireless charging system, so please remove the smartphone from the charging pad to help it cool down.
- During wireless charging, an internal fan operates to prevent overheating. Fan noise may sound.

TIP

The wireless charging speed for certain smartphones with built-in protection may decrease or stop, depending on the wireless charging policy and product specifications set by each manufacturer, so you can check your smartphone's maximum wireless charging speed in the manufacturer's wireless charging manual.

NOTE

If any metallic object, such as a coin, is located between the wireless charging system and the smartphone, it may disrupt charging. The metallic object may heat up.

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.

TIP

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

Coat hook

There is a coat hook next to the rear grab handle.



OSG2H086046L

* The actual feature may differ from the illustration.

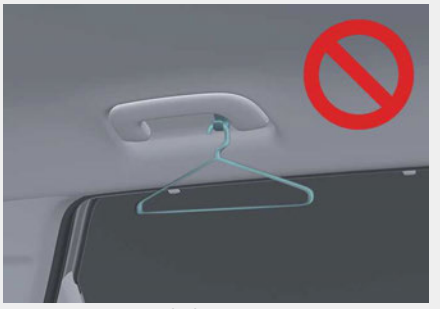
NOTE

Hanging clothing

Do not hang heavy clothes, as they may damage the hook.

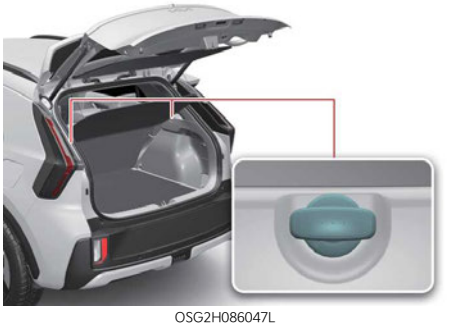
WARNING

Do not hang objects aside from clothes, such as hangers or hard objects. Do not put heavy, sharp, or breakable objects in the clothing's pockets. In an accident or when the curtain air bag inflates, it may cause vehicle damage or bodily injury.



OMQ4A035049

Shopping bag holder



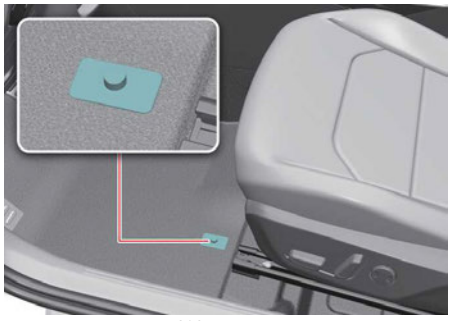
OSG2H086047L

To use the holder, push the bottom of the shopping bag holder.

CAUTION

- Do not hang a bag weighing more than 3 kg (7 lbs.). It may cause damage to the shopping bag holder.
- Do not hang the frail objects when you drive rough road, the objects may be damaged.

Floor mat anchors



OSG2H086051L

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

Aftermarket floor mat

- Do not install aftermarket floor mats that cannot be securely attached to the vehicle's floor mat anchors.

  Unsecured floor mats can interfere with pedal operation.
- To avoid interference with the pedals, use floor mats that can be properly secured on the floor and are not too thick. Make sure that you remove the plastic film on the carpets when installing the floor mats, as this may damage or break the floor mat fixed rings and result in the mats being unsecured.

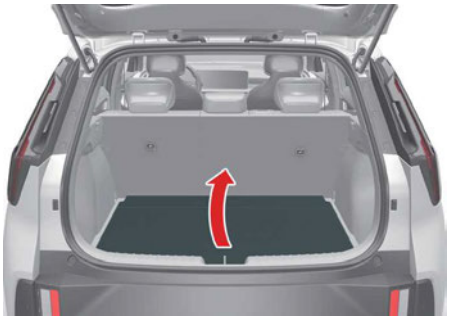
  The driver's seat floor mats should especially be checked, as unsecured mats may cause unintended acceleration or braking. Be sure to remove all the plastic film on the carpets before installing the mats.

Observe the following guidelines when installing ANY floor mat in the vehicle:

- Ensure that the floor mats are securely attached to the vehicle's floor mat anchors 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 (for example, an all-weather rubber mat on top of a carpeted floor mat). Only a single floor mat should be installed in each position.

Luggage tray (if equipped)

Use the cargo security screen to hide items stored in the cargo area.



OSG2H086048L

Grasp the handle on the top of the cover and lift the cover.

Exterior features

Roof rack (if equipped)

If your vehicle has a roof rack, you can load cargo and accessories (for example, a cargo carrier or roof tent) on top of your vehicle.



OSG2H086049L

* The actual shape might differ from the illustration.

You can attach cargo and accessories directly to the roof rack or to Kia crossbars (available from an authorized Kia dealer).

TIP

- Place the crossbars (if equipped) in the proper load carrying positions before placing items onto the roof rack.
- When you are not using the roof rack to carry cargo, you may need to reposition the crossbars if you detect wind noise.

NOTE

- 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.
- If the vehicle is equipped with a sunroof, ensure that cargo loaded onto the roof rack does not interfere with sunroof operation.
- When carrying cargo on the roof rack, do not operate the sunroof. (if equipped)
- Never place a 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.

Load limits

The Kia roof rack can support up to 400 kg (880 lb.) evenly distributed (side to side and front to back), but only when the vehicle is parked.

Never drive the vehicle with more than 100 kg (220 lb.) 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 the combined weight of occupants and cargo exceeds GVWR. That can cause loss of control and an accident.
- Loads on the roof rack raise your vehicle's center of gravity and may change the way that 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 from passing vehicles or weather can put 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. Updrafts could cause the items to fall off the roof rack and damage your vehicle or others around you.
- Failure to heed these warnings may lead to serious injury and death.

NOTE

- Overloading the roof racks may damage them.
- Overloading the vehicle may damage it.

Securing items to the roof rack

Plan carefully before attempting to put cargo and accessories on the roof racks. Be sure that you have the equipment to secure the items. Get help from those close to you whenever appropriate.

Be sure that the cargo and accessories will not extend too far forward, backward, 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 weather 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

Make sure an accessory is compatible with your vehicle's roof racks before installing it.

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 when installing an accessory.

Follow the accessory manufacturer's instructions, warnings, and cautions in addition to those above.

Roof tents

When using a roof tent:

- Be sure that the weight of the occupants does not exceed the load capacity of the roof racks.
- Confirm that 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 devices 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.

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Driving your vehicle

Before driving

Before you get into your vehicle, examine the vehicle and its surroundings. After you get into your vehicle, check a number of things before driving, as described in this section.

Be sure the exhaust system does not leak

- Check the exhaust system whenever the vehicle is raised for changing the oil or any other purpose.
- If you hear a change in the sound of the exhaust, or if you drive over something that strikes the underbody of the vehicle, have your vehicle inspected by an authorized Kia dealer.

WARNING

Do not inhale exhaust fumes or leave your engine running in an enclosed area for a prolonged period of time. Exhaust fumes contain carbon monoxide, a colorless and odorless gas that can cause unconsciousness and death by asphyxiation.

WARNING

Do not drive with the liftgate open. Poisonous exhaust fumes can enter the passenger compartment. If you must drive with the liftgate open, proceed as follows:

1. Close all windows.
2. Open the side vents.
3. Set the air intake control to external air intake, the mode selection to  or  , and the fan speed to the highest setting.

Before entering the vehicle

- Ensure that all windows, outside mirrors, 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 recommended interval depending on the fluid. Further details are provided in "Maintenance" on page 659.

WARNING

Distracted driving

Focus on the road while driving. Your primary responsibility is in the safe and legal operation of the vehicle. Do not use any handheld devices, other equipment, or vehicle systems that could distract you while driving.

Before starting

- Close and lock all doors.
- Position the seat so that you can easily reach all controls.
- Buckle your seat belt and make sure any and all passengers do the same.
- Adjust the inside and outside rearview mirrors.
- Be sure that all lights work.
- Check all gauges.
- Check the operation of warning lights when the vehicle is in 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

Check surroundings
Always check the surrounding areas near your vehicle for people, especially children, or other obstacles, before shifting to D (Drive) or R (Reverse).

WARNING

Driving under the influence
Do not drive while under the influence of alcohol, drugs, or any other impairing substance. Drinking and driving is dangerous. Even a small amount of alcohol will affect your reflexes, perceptions, and judgment. Drug-impaired driving is as dangerous as drunk driving.

WARNING

Proper footwear
Always wear appropriate shoes when operating your vehicle. Unsuitable shoes (such as high heels, ski boots, sandals, and so on) may interfere with your ability to engage 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.

WARNING

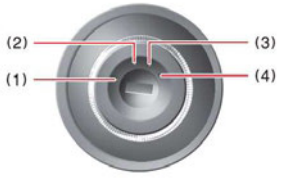
Loose objects

Securely store items in your vehicle. When you make a sudden stop or turn, loose objects may fall on the floorboard, interfere with the operation of the brake and accelerator pedals, and cause an accident.

NOTE

When you intend to park or stop the vehicle in ON position, be careful not to engage the accelerator pedal for a extended period of time. It may overheat the engine or exhaust system and cause a fire.

Ignition switch (if equipped)



OSG2H096001L

(1) LOCK
(2) ACC
(3) ON
(4) START

LOCK

In this position, the steering wheel locks to prevent theft and the ignition key can be removed.

ACC (Accessory)

In this position, the steering wheel is unlocked and electrical accessories are available.

> **TIP**
>
> If you have difficulty turning the ignition switch to ACC position, turn the steering wheel left and right while turning the key to release the tension.

ON

- Check the warning lights before starting the engine.
- This is the normal position after the engine is started.

> **NOTE**
>
> To prevent 12V battery discharge, do not leave the ignition switch in ON position when the engine is not running.

START

- Turn the ignition switch to the START position to start the engine.
- The engine will crank while the ignition key is held in this position and will return to ON position when released.
- The brake warning light can be checked in this position.

> **WARNING**
>
> - Never turn the ignition switch to LOCK or ACC while the vehicle is in motion. This would result in loss of directional control and braking function, which could cause an accident.

- Before leaving the driver's seat, always make sure the vehicle is in P (Park), set the parking brake fully and turn the vehicle off. Unexpected and sudden vehicle movement may occur if these precautions are not taken.
- Never reach for the ignition switch or any other controls through the steering wheel while the vehicle is in motion. The presence of your hand or arm in 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.

Anti-theft steering column lock (if equipped)

- The steering wheel locks in the LOCK position to help prevent theft.
- The steering wheel locks when the driver’s door is opened.
- If the steering wheel does not lock properly when the driver’s door is opened, a warning chime will sound. Attempt to lock the steering wheel again.
- If the issue persists, have your vehicle checked by an authorized Kia dealer.
- If the vehicle is in the LOCK position and the driver’s door is already open, the steering wheel will not lock and a warning chime will sound. In this case, close the door to lock the steering wheel and stop the chime.

Starting the engine

Starting the gasoline engine

1. Make sure the parking brake is applied.
2. Shift to P (Park).

   Depress the brake pedal fully. You may start the engine when the gear is in N (Neutral).
3. Turn the ignition switch to START position and hold it until the engine starts (maximum 10 seconds).

   Do not depress the accelerator pedal while starting.
4. Do not warm up the engine while the vehicle is stationary.

   Start driving at moderate engine speeds. Avoid sudden acceleration or deceleration.

⚠ WARNING

- Always wear appropriate shoes when operating your vehicle. Unsuitable shoes (high heels, ski boots, etc.) may interfere with your ability to use the pedals.
- Do not start the vehicle with the accelerator pedal depressed. 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.

⚠ CAUTION

- If the engine stalls while you are in motion, do not attempt to shift to P (Park). If traffic and road conditions permit, you may shift to N (Neutral) while the vehicle is still moving and turn the ignition switch to START position in an attempt to restart the engine.

- Do not operate the starter for more than 10 seconds. If the engine stalls or fails to start, wait approximately 5-10 seconds before trying again. Repeated or improper use of the starter may cause damage.
- Do not turn the ignition switch to START position while the engine is running. It may damage the starter.

ENGINE START/STOP button (if equipped)

The ENGINE START/STOP button illuminates when the front door is opened for your convenience. The light turns off approximately 30 seconds after the door is closed. It also turns off immediately when the theft-alarm system is armed.

Type A



OSG2H096024L

Type B



OSG2H096002L

Your vehicle is equipped with 4 different ignition positions.

OFF

- To turn off the engine, press the ENGINE START/STOP button and set it from the START/RUN position to the OFF position while the vehicle is in P (Park).
- To turn off the vehicle power, press the ENGINE START/STOP button and set it from the ON position to the OFF position while the vehicle is in P (Park).
- If you press the ENGINE START/STOP button without the vehicle in P (Park), its position will not change to OFF rather than ACC.

Anti-theft steering column lock (if equipped)

- To protect you from theft, the steering wheel locks when the ENGINE START/STOP button is in the OFF position.
- The steering wheel also locks when you open the door.
- If the steering wheel does not lock properly when you open the driver side door, the warning chime sounds. Try locking the steering wheel again. If that does not solve the problem, have your vehicle checked by an authorized Kia dealer.
- Additionally, the steering wheel does not lock and the warning chime sounds if you press the ENGINE START/STOP button in the OFF position after opening the driver side door. In this situation, close the door so that the steering wheel locks and the warning chime stops.

NOTE

If the steering wheel does not unlock properly, the ENGINE START/STOP button does not work. Press the ENGINE START/STOP button while turning the steering wheel right and left to release the tension.

TIP

- You can only turn the vehicle on or off by pressing the ENGINE START/STOP button in the START/RUN position when your vehicle is not in motion.
- If your vehicle is in motion during an emergency, you can turn the vehicle off by pressing the ENGINE START/STOP button in the ACC position for more than 2 seconds, or 3 times repeatedly within 3 seconds.

  If your vehicle is still moving, you can restart it by pressing the ENGINE START/STOP button when the vehicle speed is 3 mph (5 km/h) or above.

ACC (Accessory)

When your vehicle is in the ACC position, the steering wheel unlocks, and the electrical accessories are operational. Using electrical systems with the vehicle off will drain the battery.

To put your vehicle in ACC mode, press the ENGINE START/STOP button in the OFF position without engaging the brake pedal.

If the ENGINE START/STOP button is in the ACC position for more than 1 hour, your vehicle turns off automatically to prevent battery discharge.

ON

When your vehicle is on, the engine is running. To turn your vehicle on in ACC mode, press the ENGINE START/STOP button without engaging the brake pedal.

Warning lights appear before the engine starts so you can check them. Do not leave the ENGINE START/STOP button on for a long period of time before starting the engine, as this may discharge the 12V battery.

START/RUN

To start the vehicle, engage the brake pedal, and press the ENGINE START/STOP button with the vehicle in either P (Park) or N (Neutral). However, for your safety, always start the vehicle in P (Park).

TIP

If you press the ENGINE START/STOP button without engaging the brake pedal, the engine will not start and the ENGINE START/STOP button changes as follows:

- From **OFF** > **ACC**
- From **ON** > **OFF** or ACC

WARNING

- Never press the ENGINE START/STOP button while your vehicle is in motion. This results in the loss of directional control and braking function, which could cause an accident.
- Before you leave the driver's seat, always make sure to shift to P (Park), fully apply the parking brake, press the ENGINE START/STOP button in OFF position, and take the smart key with you. The vehicle may move suddenly and unexpectedly if you do not take these precautions.
- 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 result in loss of control of the vehicle, an accident, and serious bodily injury or death.
- Do not place any movable objects around the driver's seat. These objects may move while driving, interfere with your driving, and cause an accident.

Starting the engine

Starting the gasoline engine

1. Carry the smart key or leave it inside the vehicle.
2. Firmly apply the parking brake.
3. Shift to P (Park).
   Engage the brake pedal fully. You may start the engine when the gear is in N (Neutral).
4. Press the ENGINE START/STOP button without engaging the accelerator pedal.
5. Do not wait for the engine to warm up while your vehicle remains stationary. Start driving at moderate engine speeds. (Avoid rapid acceleration and deceleration.)

WARNING

- Always wear appropriate shoes when operating your vehicle. Unsuitable shoes (high heels, ski boots, etc.) may interfere with your ability to use the pedals.
- Do not start the vehicle with the accelerator pedal depressed. 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

The vehicle will start by pressing the ENGINE START/STOP button, only when the smart key is in the vehicle.
Even if the smart key is in the vehicle and when the smart key is far away from the driver, the vehicle may not start.
When the vehicle is in the ACC or ON position, if any door is open, the system will check for the smart key.
When the smart key is not in the vehicle, the ( ) indicator will blink and **Key not in vehicle** warning message will appear on the cluster. When all doors are closed, the chime will also sound for a few seconds. Keep the smart key in the vehicle.

WARNING

The vehicle only starts when the smart key is in your vehicle. Never allow a child or any person who is unfamiliar with your vehicle to touch the ENGINE START/STOP button or related parts. Pressing the ENGINE START/STOP button while the smart key is in your vehicle may result in unintended engine operation or vehicle movement.

CAUTION

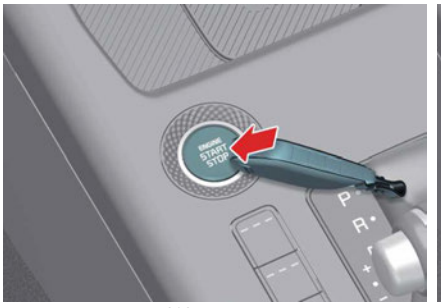
If the engine stalls while your vehicle is in motion, do not attempt to shift to P (Park). If traffic and road conditions permit, you may shift to N (Neutral) while your vehicle is still moving, and press the ENGINE START/STOP button to attempt to restart the engine.

NOTE

To prevent damage to the vehicle
Do not press the ENGINE START/STOP button for more than 10 seconds except when the stop lamp fuse is blown.

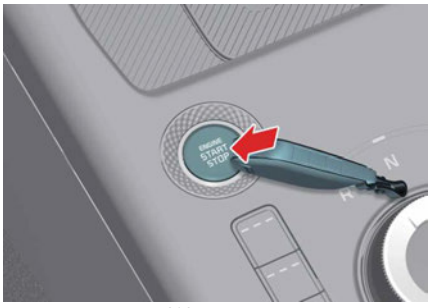
TIP

Type A



OSG2H096025L

Type B



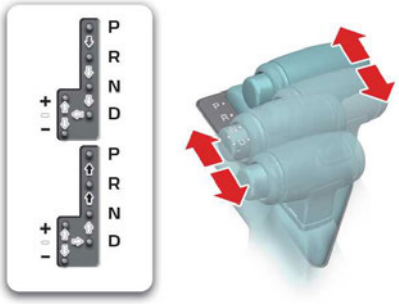
OSG2H096003L

- If the smart key battery is weak or the smart key does not work correctly, you can start the vehicle by pressing the ENGINE START/STOP button directly 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 lamp fuse is blown, you cannot start the engine normally.
  Replace the fuse with a new one. If this is not possible, start the vehicle by pressing the ENGINE START/STOP button in the ACC position for 10 seconds. The vehicle can start without the brake pedal engaged, but for your safety, always engage the brake pedal before starting the vehicle.

Dual clutch transmission (DCT)

The dual clutch transmission is an automatically shifting manual transmission. It delivers the driving feel of a manual transmission while providing the convenience of a fully automatic transmission.

Type A



OSG2H096004L

- Engage the brake pedal and the lock release button when you shift the gear.
- Press the unlock button when you shift the gear.
- You can shift the gear shift lever freely.

Type B



OSG2H096005L

- Select the gear position by turning the shift dial.
  For your safety, always engage the brake pedal while shifting to another gear.
- Press P button to shift to P (Park).

Dual clutch transmission operation

For smooth operation, engage the brake pedal when shifting from N (Neutral) to D (Drive) or R (Reverse).

WARNING

- Always check the surrounding areas near your vehicle for people, especially children, before shifting the gear to D (Drive) or R (Reverse).
- Before you leave the driver's seat, always make sure to shift to P (Park), fully apply the parking brake, and start the vehicle from the LOCK or OFF position. The vehicle may move suddenly and unexpectedly if you do not take these precautions.
- In 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, which may result in an accident.

NOTE

- To avoid damaging your transmission, do not accelerate while in R (Reverse) or in any forward gear position with the brakes engaged.
- Do not shift from N (Neutral) or P (Park) to D (Drive) or R (Reverse) when the engine is above idle speed.
- When stopped on an incline, do not use engine power to keep your vehicle stationary. Use the service brake or the parking brake.
- Do not rely on the transmission to keep your vehicle parked on an incline. Use the parking brake.

TIP

If there is a transmission failure, the gear position indicator on the instrument cluster blinks, and your vehicle may not move. If this happens, have your vehicle checked by an authorized Kia dealer.

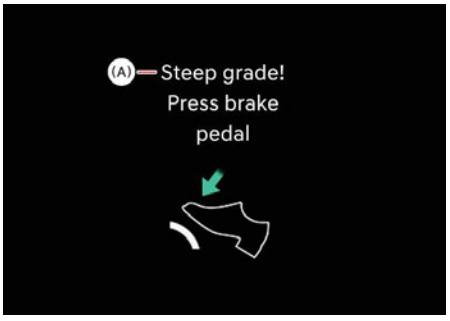
Characteristics of DCT

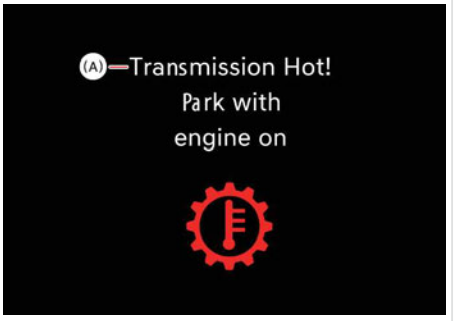
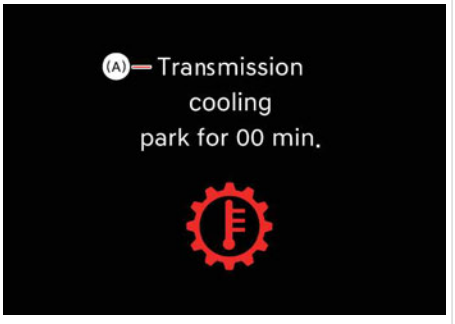
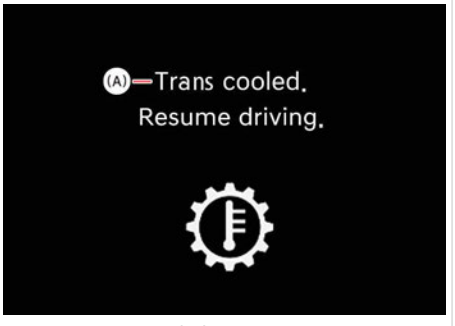
The DCT feels like driving with a manual transmission with the ease of a fully automatic transmission. Unlike a traditional automatic transmission, you can feel and hear the gear shifting with a dual clutch transmission.

- Shift to D (Drive) for fully automatic gear shifting, similar to a conventional automatic transmission.
- Dual clutch transmission uses dry type dual clutch, which is different from the torque converter of automatic transmissions and has better acceleration performance when you drive. However, the initial launch may be a bit slower than an automatic transmission.
- When you rapidly accelerate from a low speed, the engine could rev to a high rpm depending on the driving conditions.
- For a smooth climb uphill, engage the accelerator pedal smoothly.
- If you release the accelerator pedal while driving at a low speed, you may feel a strong engine brake, which is similar to a manual transmission.
- When driving downhill, use SPORT mode to shift down to a lower gear to control your speed without engaging 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 DCT.
- Always come to a complete stop before shifting to D (Drive) or R (Reverse).
- Do not put the shift lever in N (Neutral) while driving.

Instrument cluster display for warning message

The instrument cluster displays each of the following warning messages when applicable:

Message	Description
 OMQ4A045051	(1) **Steep grade! Press brake pedal** When driving up hills or on steep grades: • Engage the brake pedal or apply the parking brake to hold your vehicle on an incline. • When driving in stop-and-go traffic on an incline, keep some distance ahead before moving your vehicle forward. Then hold your vehicle on the incline by engaging the brake pedal. • If you hold your vehicle on an incline by engaging the accelerator pedal or by creeping uphill with brake pedal disengaged, the clutch and transmission may overheat, which can result in damage. If this happens, the instrument cluster displays a warning message. • If the warning message appears on the instrument cluster, you must engage the brake pedal. • Ignoring the warnings can result in damage to the transmission.
 OMQ4A045052	(1) **Transmission temp. is high! Stop safely.** • Under certain conditions (such as repeated stop-and-go climbing on steep grades, sudden acceleration, or other harsh driving conditions), the transmission clutch temperatures increase quickly. This may cause the transmission clutch to overheat. • When the clutch is overheated, the vehicle engages safe protection mode, and the gear shift position indicator on the instrument cluster blinks and sounds a chime. **Transmission temp. is high! Stop safely.** warning message appears on the instrument cluster. Driving may not be smooth. • Pull over to a safe location, stop the vehicle with the engine running, engage the brake pedal so that you can shift to P (Park), and allow the transmission to cool. • If you ignore this warning, driving conditions may worsen. You may experience abrupt or frequent shifts or jerks. To return to normal driving conditions, stop your vehicle and engage the brake pedal or shift to P (Park). Allow the transmission to cool for a few minutes with the vehicle on before driving away.

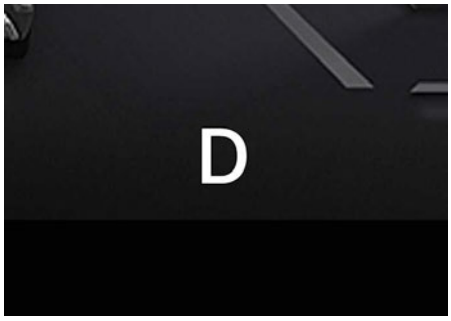
Message	Description
	• Drive your vehicle smoothly when possible.
 OMQ4A035133	(1) **Transmission Hot! Park with engine on** (2) **Transmission cooling. Park for 00 min.** (3) **Trans cooled. Resume driving.** • If you continue to drive your vehicle and the clutch reaches the maximum temperature limit,**Transmission Hot! Park with engine on** warning message appears on the instrument cluster. When this occurs, the clutch is disabled until it cools to normal temperatures. • The warning message displays a time to wait for the transmission to cool. • Pull over to a safe location, stop your vehicle with the engine running, engage the brake pedal, shift to P (Park), and allow the transmission to cool. • You can continue to drive your vehicle when **Trans cooled. Resume driving.** warning message appears on the instrument cluster. • Drive your vehicle smoothly when possible.
 OMQ4A045053	
 OMQ4A035135	

⚠ CAUTION

If any warning message on the instrument cluster continues to blink, have your vehicle checked by an authorized Kia dealer.

Transmission ranges

The indicator on the instrument cluster displays the gear position when the vehicle is in ON position.



OOV035110

P (Park)

Always come to a complete stop before shifting to P (Park). This position locks the transmission and prevents the driven wheels from rotating.

NOTE

- Shifting to P (Park) while your vehicle is in motion causes the drive wheels to lock. This can damage the transmission and cause you to lose control of your vehicle.
- Do not shift to P (Park) instead of applying the parking brake. Always make sure the vehicle is in P (Park) and fully apply the parking brake.
- Never leave a child unattended in your vehicle.
- Shifting the gear to P (Park) while the vehicle is in motion may damage the transmission.

R (Reverse)

Shift to R (Reverse) to drive your vehicle backward.

NOTE

Always come to a complete stop before shifting to or from R (Reverse). Shifting to R (Reverse) while your vehicle is moving forward may damage the transmission, except as explained in "Special driving conditions" on page 394.

N (Neutral)

In N (Neutral), the wheels and transmission are not engaged. Your vehicle can roll freely, even on the slightest incline, unless you apply the parking brake or service brake.

WARNING

- Always park the vehicle in P (Park) and apply the parking brake for safety. If you leave the gear in N (Neutral), the vehicle may move and cause serious damage and injury.

- After you turn the vehicle to the OFF position, you cannot release the Electronic Parking Brake (EPB).
- When you use the AUTO HOLD function while driving a vehicle equipped with EPB, if you turn the vehicle to the OFF position, the EPB is applied automatically. Turn the AUTO HOLD function off before you turn the vehicle to the OFF position.

CAUTION

Do not drive or park with the vehicle in N (Neutral). The engine brake does not work in N (Neutral), which may lead to an accident.

D (Drive)

D (Drive) is the normal forward driving gear shift position. The transmission automatically shifts through an 6 gear sequence to provide the best fuel economy and power.

For extra power when passing another vehicle or climbing uphill, engage the accelerator fully. The transmission automatically shifts down to the next lowest gear.

NOTE

Always come to a complete stop before shifting to D (Drive).

Manual mode (if equipped)

In manual mode, moving the shift lever forward or backward allows quick gear changes. Unlike manual transmission, gearshifts can be made even while the accelerator pedal is depressed.



OSG2H096006L

Select manual mode by pushing the gear shift lever from D (Drive) into the manual gate. To return to D (Drive) range operation, push the gear shift lever back into the main gate.

In manual mode, moving the shift lever back and forth allows you to shift gears rapidly. Unlike a manual transmission, manual mode allows you to shift gears while engaging the accelerator pedal.

- Up (+): Push the lever forward once to shift up 1 gear.
- Down (-): Pull the lever backward once to shift down 1 gear.

TIP

- Shift the gear upward according to the driving conditions, taking care to keep the engine speed (rpm) appropriately.
- You can only select the 6 forward gears. To reverse or park your vehicle, move the gear shift lever to R (Reverse) or P (Park) as required.
- The gear shifts down automatically when you slow down your vehicle. When you stop your vehicle, the 1st gear is selected automatically.
- When the engine speed (rpm) is too high, the gear shift points are varied to shift up automatically.
- To maintain the required levels of vehicle performance and safety, the system may not execute certain shifts between gears when you operate the gear shift lever.
- When driving on a slippery road, push the gear shift lever forward into the Up (+) position so that the transmission shifts up 1 gear, which helps with smooth driving on slippery roads. To shift back, push the gear shift lever into Down (-) position.

To stay in N (Neutral) when vehicle is OFF (if equipped)

If you want to stay in N (Neutral) after the engine is off (in ACC position), do the following:



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OSG2H096008L

1. Deactivate AUTO HOLD and release the parking brake when the vehicle is in ON position.
2. Depress the brake pedal.
3. Shift to N (Neutral).
4. Take your foot off the brake pedal, and the warning message will appear on the instrument cluster.
5. Press and hold the OK button on the steering wheel for more than 1 second.

   If the EPB is applied, release the Electronic Parking Brake (EPB) manually while depressing the brake pedal.

   If equipped with Electronic Parking Brake, it is not released automatically when you shift to N (Neutral).
6. Press the ENGINE START/STOP button after the message appears on the instrument cluster. The vehicle stays in N (Neutral) after turning off the vehicle.

TIP

However, if you open the driver's door within 30 minutes in ACC position, the vehicle will automatically shift to P (Park) and the vehicle will change to OFF position.

CAUTION

Do not open the driver's door when going through an automatic car wash tunnel machine. Failure to follow this instruction can damage your vehicle or the car wash machine.

If the driver's door is opened within 30 minutes after shifting to N (Neutral), your vehicle will automatically shift to P (Park).

For vehicles equipped with EPB, the parking brake is automatically applied.

NOTE

With the vehicle in N (Neutral), the vehicle will be in the ACC position. Note that the doors cannot be locked in ACC position or the 12V battery may discharge if left in the ACC position for a long period.

Shift lock system

For your safety, the transmission has a shift lock system that prevents you from shifting the transmission from P (Park) to R (Reverse) unless the brake pedal is engaged.

To shift from P (Park) to R (Reverse):

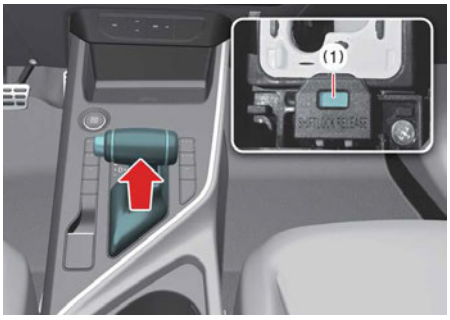
1. Engage and hold the brake pedal.
2. Start the vehicle to ON position.
3. Shift the vehicle.

   If you repeatedly engage and release the brake pedal with the vehicle in P (Park), you may hear a chattering noise and vibration. This is normal.

WARNING

Always engage the brake pedal fully before and while moving the vehicle from P (Park) into another position to avoid inadvertent vehicle motion, which could injure people in or around the vehicle.

Shift lock override (if equipped)



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If you cannot move the shift lever from P (Park) to R (Reverse) with the brake pedal engaged, continue to engage the brake, then perform the following actions:

1. Start the vehicle from the LOCK or OFF position.
2. Apply the parking brake.
3. Carefully remove the knob boots covering the shift-lock release access hole (1).
4. Insert a tool (such as a 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 release access hole and reinstall the knob boots.

If the shift lever does not move even after you perform this procedure, have your vehicle checked by an authorized Kia dealer.

Good driving practices

- Never shift from P (Park) or N (Neutral) to any other position with the accelerator pedal engaged.
- Never shift into P (Park) while the vehicle is in motion.
- Be sure you have completely stopped the vehicle before you attempt to shift to R (Reverse) or D (Drive).
- Never shift the vehicle out of gear and coast down a hill. This may be extremely hazardous. Always leave the vehicle in gear while 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 down the vehicle.
- Slow down before shifting to a lower gear. Otherwise, the lower gear may not be engaged.
- Reduce speed when driving in crosswinds to maintain better vehicle control.
- 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 the vehicle's speed can cause the drive wheels to lose traction, resulting in a loss of control over the vehicle.
- Smoothly engage and release the accelerator pedal for optimal vehicle performance and fuel economy.
- Always apply the parking brake. Do not depend on shifting to P (Park) to keep the vehicle from moving.

⚠ WARNING

- When driving uphill or downhill, always shift to D (Drive) for driving forward or R (Reverse) for driving backward. Check the gear position displayed on the instrument cluster before driving. Driving in the opposite direction of the selected gear can put you in danger by turning 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 turning.
- Do not make quick steering wheel movements (such as sharp lane changes or fast, sharp turns).
- Losing control of your vehicle at high speeds greatly increases the risk of a rollover.
- Loss of control often occurs if two or more wheels drop off the road and you oversteer to reenter the road.
- If your vehicle leaves the road, do not steer sharply. Instead, slow down before gradually reentering the travel lanes. Abruptly steering to reenter the road risks loss of control of the vehicle, serious injury, and death.
- Never exceed posted speed limits.
- If your vehicle becomes stuck in snow, mud, sand, and so on, then you may attempt to rock it free by moving it forward and backward. Do not attempt this procedure if people or objects are anywhere near the vehicle. 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, engage the brake pedal and perform the following actions:

- Select the appropriate gear depending on load weight and steepness of the grade and release the parking brake. Engage the accelerator gradually after releasing the service brakes.

Paddle shifter (if equipped)

The paddle shift function is available when the vehicle is in D (Drive) or manual mode.



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With the gear in D (Drive)

The paddle shift function operates when your speed is above 6 mph (10 km/h).
Pull the (+) or (-) paddle shifter once to shift up or down 1 gear. The system changes from automatic mode to manual mode.
To change from manual shift mode back to automatic shift mode, perform one of the following actions:

- Pull the (+) paddle shifter for more than 1 second.
- Shift from D (Drive) to manual mode, and then return to D (Drive).

Manual shift mode also changes back to automatic shift mode in any of following situations:

- You gently engage the accelerator pedal for more than 6 seconds while driving (Not available in manual mode)
- You stop the vehicle.

> **TIP**
>
> If you pull both paddle shifters at the same time, you cannot shift the gear.

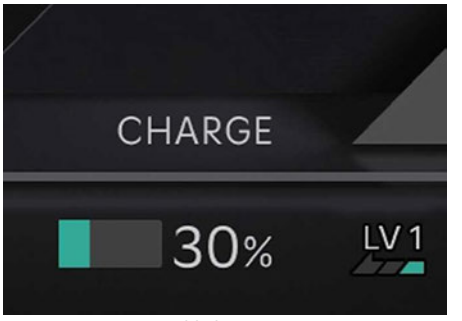
With the shift lever in manual mode (if equipped)

Pull the (+) or (-) paddle shifter once to shift up or down 1 gear.

Regenerative braking mode



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- Pull the left side ( ) of the paddle shifter to increase regenerative braking and deceleration.
- Pull the right side ( ) of the paddle shifter to decrease regenerative braking and deceleration.
- The selected regenerative braking level will be displayed on the instrument cluster.

CAUTION

- The initial setting will be set to 0 when the vehicle is in D (Drive) and in ECO mode.
- If the vehicle changes to P (Park), R (Reverse), N (Neutral) or vehicle is in SPORT mode, the vehicle's regenerative braking mode control will not be operated. Resetting the vehicle in D (Drive) will set the regenerative braking mode settings to the previously set steps.
- ABS and ESC will deactivate the regenerative braking mode.
- The regenerative braking mode can be controlled:
  - When the vehicle is nearly stopped in D (Drive).
  - When you are not engaging brake pedal while the vehicle is in D (Drive).

NOTE

Regenerative braking mode uses motor's power to conserve energy to the high voltage battery when braking to gain more fuel economy and higher efficiency.

TIP

The initial setting of the regenerative braking level differs according to the selected DRIVE MODE.

For more information, refer to "Drive mode integrated control system" on page 387.

DRIVE MODE	Paddle shifter operation	Paddle shifter function
ECO	+ (Up)	Regenerative braking level increases
	- (Down)	Regenerative braking level decreases
SPORT	+ (Up)	Manual shift (+)

DRIVE MODE	Paddle shifter operation	Paddle shifter function
	- (Down)	Manual shift (-)

Limitations of regenerative braking system

Regenerative braking intensity cannot be adjusted using the paddle shifters in the following situations:

- When both the left side ( ) and right side ( ) of paddle shifters are pulled at the same time.
- When the vehicle is decelerating with the brake pedal enegaged.
- When Smart Cruise Control (SCC) is activated.

Instrument cluster display for warning message

The instrument cluster displays each of the following warning messages when applicable:

Message	Description
Recuperative braking not available. Battery fully charged.	The message will appear when the high voltage battery amount is charged enough.
Recuperation shift paddle conditions not met.	The message will appear when: • When the high voltage battery is in high or low temperature • When the high voltage battery or transmission is not functioning properly • Regenerative braking mode is activated • Regenerative braking mode is activated while ABS/Cruise Control (CC)/Smart Cruise Control (SCC) is operating

NOTE

Drive normally and use the regenerative braking mode again to dismiss the warning message.

Smart regeneration system

The smart regeneration system controls regenerative braking automatically according to the gradient of the road and the driving condition of the vehicle ahead. The system minimizes unnecessary operation of the brake and accelerator pedals, improving the vehicle's electrical efficiency and assisting you while driving.

Detecting sensor

Front radar



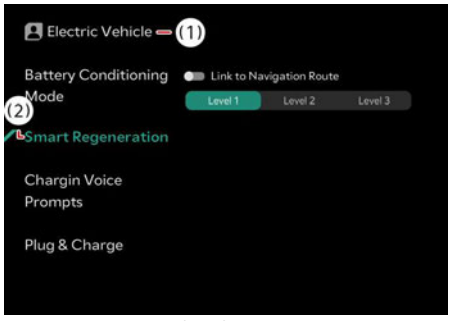
OSG2H096010L

Always make sure the radar sensor cover is clean and free of dirt, snow, or debris.
Dirt, snow, or debris on the lens might adversely affect the sensor's performance. In this case, the system might stop operating or not operate normally.

⚠ CAUTION

- Do not apply a license plate frame or foreign objects such as a bumper sticker or a bumper guard near the radar sensor. Doing so may adversely affect the sensing performance of the radar.
- Always keep the radar sensor and lens cover clean and free of dirt and debris.
- Use only a soft cloth to wash the vehicle. Do not spray pressurized water directly on the sensor or sensor cover.
- Be careful not to apply unnecessary force on the radar sensor or sensor cover. If the sensor is forcibly moved out of proper alignment, the smart regeneration system may not operate correctly. A warning message may not be displayed. Have your vehicle checked by an authorized Kia dealer.
- If the front bumper becomes damaged in the area around the radar sensor, the smart regeneration system may not operate properly. Have your vehicle checked by an authorized Kia dealer.
- The genuine Kia front radar sensor covers are parts with quality and performance ensured. If arbitrarily applying paint on or changing the cover, smart regeneration system 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.

Smart regeneration system settings



N_CT25_C00_222_A

(1) **Electric Vehicle**
(2) **Smart Regeneration**

- Tap **Electric Vehicle** > ⚙ > **Smart Regeneration** > **Link to Navigation Route** from the infotainment system.
- Smart Regenerative Braking Distance level allows you to adjust the distance to the vehicle ahead according to the driver's distance level (**Level 1**/**Level 2**/**Level 3**).

Navigation-based speed control

- In the (**AUTO**) stage, the speed is automatically adjusted using navigation information.
- Navigation-based speed control provides more accurate information when a destination is set. If a destination is not set, some functions may not work.
- The automatic deceleration function operates in the following situations:
  - When turning left/right at an intersection, it decelerates to an appropriate speed.
  - It decelerates to an appropriate speed on sharp curves.
  - When the speed limit on a road is lowered (56-30 mph (90-50 km/h), etc.), it decelerates to the speed limit once.
  - It automatically decelerates to an appropriate speed just before entering a roundabout.

Smart regeneration system operation



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N_CT25_C00_223_A

- Pull and hold the right side ( ) of the paddle shifter for approximately more than 1 second to activate smart regeneration system. (AUTO) indicator will appear on the instrument cluster.
- Pull and hold the right side ( ) of the paddle shifter again for approximately more than 1 second to deactivate smart regeneration system. (AUTO) indicator will disappear on the instrument cluster.

TIP

Smart regeneration system will automatically deactivate when:
- You shift to P (Park), R (Reverse), or N (Neutral).
- Cruise Control (CC) or Smart Cruise Control (SCC) is operating.
- Electronic Stability Control (ESC) or the Anti-lock Brake System (ABS) is operating.
- DRIVE MODE is in SNOW mode.

Operating conditions

- The vehicle speed is above approximately 6 mph (10 km/h)
- The road gradient changes
- The distance from the vehicle ahead increases or decreases
- The speed of the vehicle ahead increases or decreases
- Taking a left or right turn in the crossroads
- Approaching a roundabout

Non-operating conditions

- When the vehicle speed is under approximately 10 km/h (6 mph).
- You shift to P (Park), R (Reverse), or N (Neutral).
- Cruise Control (CC) or Smart Cruise Control (SCC) is operating.
- Electronic Stability Control (ESC) or the Anti-lock Brake System (ABS) is operating.

WARNING

- Smart regeneration system, which automatically controls regenerative braking during coasting, is a supplemental system for driver convenience.
- Do not rely solely on this system to stop the vehicle. The system cannot fully stop the vehicle in all situations or prevent all collisions.
- Braking may be insufficient if a vehicle ahead stops suddenly, cuts in unexpectedly, or when driving on steep slopes.
- Always remain alert and observe road conditions to prevent unexpected situations.
- When the smart regeneration system automatically cancels, adjust your speed by using the accelerator or brake pedal according to road conditions.

NOTE

- If the front radar does not detect a vehicle ahead, the (AUTO) indicator appears in white.
- If a vehicle ahead is detected, the (AUTO) indicator appears in blue. In this case, the vehicle decelerates automatically based on the distance and speed of the vehicle ahead, and the regenerative braking level is displayed with an arrow symbol.

- If the brake pedal is pressed while the system is active, the current regenerative braking level is maintained. If the accelerator pedal is pressed, the system is temporarily deactivated.
- The infotainment system may change after a software update. For more details, refer to the user's manual in the infotainment system or the quick reference guide.

Smart regeneration system malfunction and limitations

Smart regeneration system malfunction



N_CT25_C00_238_A

(1) **Check smart recuperation system**

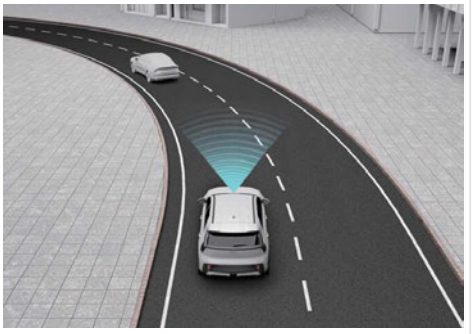
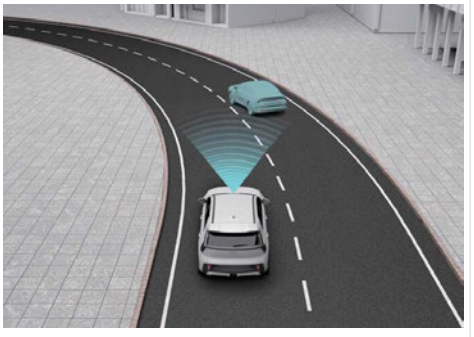
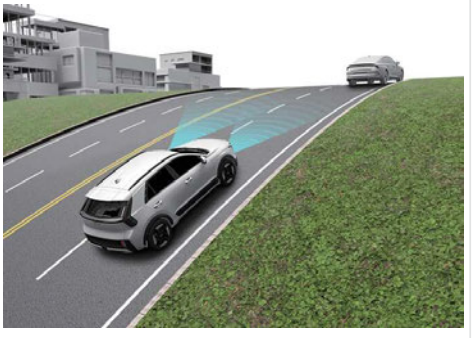
The following message will appear when the smart regeneration system is not functioning normally.

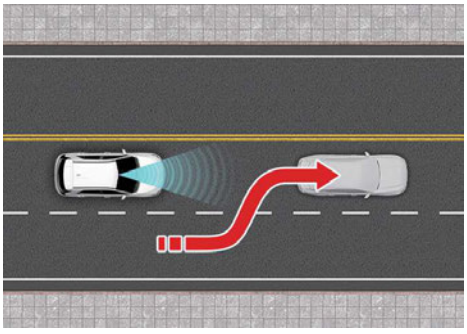
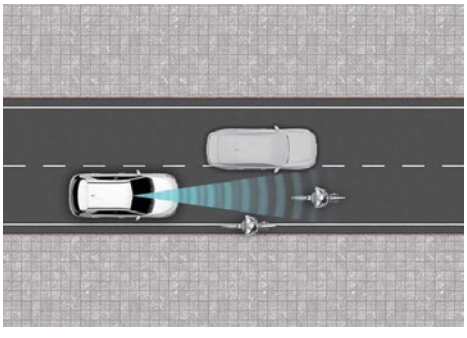
The system will be canceled and (**AUTO**) on the instrument cluster will disappear and instead display regenerative braking level.

Check for foreign substances on the front radar. Remove any dirt, snow, or debris that could interfere with the radar sensors.

If the system still does not operate normally, have your vehicle checked by an authorized Kia dealer.

Limitations of smart regeneration system

Limitations of smart regeneration system	
Driving on a curved road  OSG2H106055L  OSG2H106056L	When driving on the curve, the system may not detect the vehicle in your lane and the regenerative braking level will reduce automatically, making you feel that the vehicle is accelerating. Also, if the system suddenly recognizes the vehicle in front, the regenerative braking level will increase automatically, making you feel that the vehicle is decelerating. The driver must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance. The smart regeneration system may recognize a vehicle in an adjacent lane when driving on a curved road. In this case, the system increases the braking level and slow the vehicle. Always pay attention to road and driving conditions while driving. If necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance. Also, when necessary, you may depress the accelerator pedal to prevent the system from unnecessarily decelerating your vehicle. Always check the traffic conditions around the vehicle.
Driving on a sloped road  OSG2H106057L	When driving on an uphill or downhill, the system may not detect the vehicle in your lane and the regenerative braking level will reduce automatically, making you feel that the vehicle is accelerating. Also, if the system suddenly recognizes the vehicle in front, the regenerative braking level will increase automatically, making you feel that the vehicle is decelerating. The driver must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

Limitations of smart regeneration system	
Changing lanes  OSG2H096022L	When a vehicle changes lanes in front of you, the smart regeneration system may not immediately detect the vehicle, especially if the vehicle changes lanes abruptly. In this case, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.
Recognizing the vehicle  OSG2H106058L	Some vehicles in your lane cannot be recognized by the sensor: • Narrow vehicles such as motorcycles or bicycles • Vehicles offset to one side • Slow-moving vehicles or sudden-decelerating vehicles • Stopped vehicles (When the vehicle ahead drives away, the system may not detect a stopped vehicle.) • Vehicles with small rear profile such as trailers with no loads A vehicle ahead cannot be recognized correctly by the sensor if any of following occurs: • When the vehicle is pointing upwards due to overloading in the luggage compartment • While the steering wheel is operating • When driving to one side of the lane • When driving on narrow lanes or on curves Apply the brake or accelerator pedal if necessary.

WARNING

When using smart regeneration system, take the following precautions:

- In an emergency, always apply the brakes to stop the vehicle.
- Maintain a safe distance from the vehicle ahead, considering road conditions and vehicle speed. A short following distance at high speed may lead to a serious collision.
- Always keep sufficient braking distance and decelerate by applying the brake pedal when necessary.

- Smart regeneration system uses radar signals to detect and monitor vehicles ahead. It is not designed to detect oncoming vehicles, pedestrians, bicycles, motorcycles, or small wheeled objects such as luggage bags, shopping carts, or strollers.
- The system may experience delays in response to vehicles that change lanes frequently or may respond to vehicles in adjacent lanes. Always drive attentively and be prepared for unexpected situations.
- Smart regeneration system may not recognize complex driving scenarios. Continuously monitor road conditions and adjust your vehicle's speed as needed.

NOTE

Smart regeneration system may not operate temporarily due to:
- Electrical interference
- Modification of the suspension
- Differences in tire wear or pressure
- Installation of different type of tires

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.

TIP

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

Brake system

Your vehicle has power-assisted brakes, a parking brake, and various braking systems for safe driving.

Power-assisted brakes

- If the power-assisted brakes lose power because of a stalled engine or some other reason, you can still stop your vehicle by engaging the brake pedal with greater force than you normally would. However, the required stopping distance will be greater.
- Only engage the brake pedal when necessary to maintain steering control on slippery surfaces.
- Wet brakes may impair your vehicle's ability to slow down safely; your vehicle may drift to one side when you engage the brake pedal. Lightly engaging the brake pedal indicates whether the brakes have been affected in this way. Always test your brakes in this fashion after driving through deep water. To dry the brakes, engage them lightly while maintaining a safe forward speed until brake performance returns to normal.

WARNING

Steep hill braking

To avoid continuous engagement of the brake pedal when descending a long or steep hill, shift the vehicle to a lower gear or use the regenerative braking system. Continuous engagement of the brakes can cause them to overheat and could result in a temporary loss of braking performance.

NOTE

Brake pedal

Do not drive with your foot resting on the brake pedal. This creates abnormally high brake temperatures, which can cause excessive wear to the brake lining and pad.

TIP

- When you engage the brake pedal under certain driving or weather conditions, you may hear noise. This is not a brake malfunction.
- When driving on a road where de-icing chemicals have been applied, you may hear noises from the brake or abnormal abrasion of tires. Engage the brake pedal under safe traffic conditions to remove the de-icing chemicals from the brake disk and pad.

In the event of brake failure

If the service brakes fail to operate while your vehicle is in motion, you can make an emergency stop by applying the parking brake. However, the required stopping distance will be much greater than normal. However, Kia brake systems are designed with redundancy so that brake failure should never happen absent some extraordinary circumstance.

NOTE

Parking brake

Avoid applying the parking brake to stop your vehicle while it is moving except in an emergency. Applying the parking brake while your vehicle is moving at normal speeds can cause a sudden loss of control of your vehicle. If you must use the parking brake to stop your vehicle, use great caution.

Brake over accelerator

If the accelerator pedal is stuck or entrapped, engage the brake pedal with steady and firm pressure to slow down your vehicle and reduce engine power. These systems are designed to provide priority to the brake pedal over the accelerator pedal.

If this happens, follow these steps:

1. Engage the brake pedal and bring your vehicle to a safe stop.
2. Shift to P (Park), turn off the vehicle, and apply the parking brake.
3. Inspect the accelerator pedal for any interference.

If you do not find any interference and the accelerator pedal is still stuck, have your vehicle checked by an authorized Kia dealer.

Disc brake 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 engage the brake pedal.

Please remember that some driving conditions or climates may cause a brake squeal when you first apply (or lightly apply) the brakes. This is normal and does not indicate a problem with your brakes.

Always replace the front or rear brake pads as pairs.

WARNING

Brake wear

Do not ignore high pitched sounds from your brakes indicating brake wear. If you ignore this sound, you will eventually lose braking performance, which could lead to a serious accident.

NOTE

Replace brake pads

Do not continue to drive your vehicle with worn brake pads. Driving with worn brake pads can damage the braking system and result in costly brake repairs.

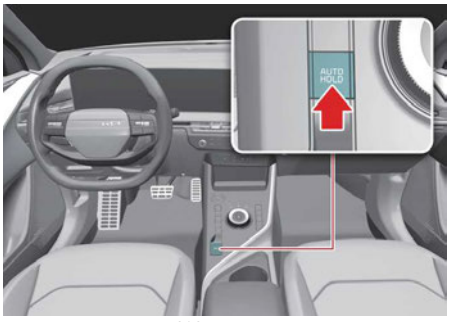
TIP

Brake dust may accumulate on the wheels, even under normal driving conditions. Some dust is inevitable as the brakes wear, which contributes to noise from the brakes.

Brake Disc Cleaning (BDC)

If surface rust forms on the brake discs or a squealing noise is heard, use the Brake Disc Cleaning

function to remove rust and reduce noise.



OSG2H096018L

- Press and hold the AUTO HOLD button for more than 3 seconds. The system starts when a warning message appears on the instrument cluster.
- The regenerative braking system is limited temporarily. The system applies the brakes approximately 10 times while driving to remove rust and eliminate squeal from the brake discs.
- BDC turns off automatically after the operation is complete. You can also cancel it manually by pressing and holding the AUTO HOLD button for more than 3 seconds.

NOTE

While BDC is active, the regenerative braking system is limited, which may reduce electric energy efficiency.

Brake Disc Wiping (BDW) (if equipped)

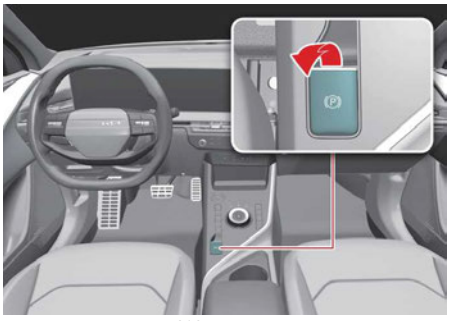
In rainy conditions, light braking may be briefly applied to remove moisture from the brake disc surface and maintain braking performance.

Electronic Parking Brake (EPB)

After parking your vehicle, apply the EPB to prevent any external force from moving your vehicle.

Applying the parking brake

Applying the parking brake with EPB switch



OSG2H096020L

1. Depress the brake pedal.
2. Pull up the EPB switch.
3. Make sure the brake warning light illuminates.

If AUTO HOLD button is on when you turn off your vehicle, the EPB is applied automatically. If you pull up the EPB switch after you turn off your vehicle, the EPB is applied.

WARNING

Never leave children or animals unattended in your vehicle. They may be able to set your vehicle in motion by:

- Releasing the parking brake.
- Shifting out of P (Park).
- Starting the vehicle.
- Operating vehicle equipment.

TIP

- If your vehicle does not remain at a standstill when you are on a steep incline or pulling a trailer, perform the following actions:
  1. Apply the EPB.
  2. Pull up the EPB switch for more than 3 seconds.
- Do not apply the EPB while your vehicle is moving except in an emergency.
- You may hear a click or electric brake motor whine sound while applying or releasing the EPB. This is normal and indicates that the EPB is functioning properly.

Automatic application of EPB

The EPB is applied automatically under the following conditions:

- You shift to P (Park) while on a slope.
- You turn the vehicle off while AUTO HOLD is enabled.
- Your vehicle moves a bit while the vehicle is in P (Park).
- While AUTO HOLD is activated:

- You open the driver side door.
- You open the hood.
- You open the liftgate.
- You stop the vehicle for more than approximately 10 minutes while on a steep slope.

• Other systems request application of the EPB.

TIP

For EPB-equipped vehicles using the AUTO HOLD function while driving, the EPB is engaged automatically if the vehicle is in OFF position. Turn off the AUTO HOLD function before pressing the vehicle is in OFF position.

Emergency braking with the EPB switch

If there is a problem with the brake pedal while driving, pull up and hold the EPB switch for emergency braking.
Emergency braking is possible only while you are holding the EPB switch.

WARNING

Do not apply the EPB while your vehicle is moving except in an emergency. Applying the EPB while your vehicle is moving at normal speeds can cause a sudden loss of control of your vehicle, resulting in an accident causing serious injury or death. If you must use the EPB to stop your vehicle, use great caution in applying the brake.

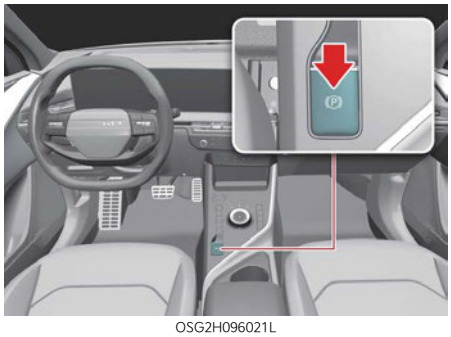
TIP

During emergency braking by the EPB, the brake warning light indicates that the system is operating.

If EPB is used for emergency braking, have your vehicle inspected by an authorized Kia dealer.

Releasing the parking brake

Releasing the parking brake with EPB switch



OSG2H096021L

1. Turn on the vehicle.

2. Engage the brake pedal.
3. Press the EPB switch.
4. Make sure the brake warning light is off.

Automatic release of EPB (if Shift by Wire (SBW) not equipped)

The EPB is released automatically under following conditions:

- **The vehicle is in P (Park)**

  With the vehicle running, engage the brake pedal and shift from P (Park) to R (Reverse) or D (Drive).

- **The vehicle is in N (Neutral)**

  With the vehicle running, engage the brake pedal and shift from N (Neutral) to R (Reverse) or D (Drive).

For Dual Clutch Transmission

1. Start the vehicle.
2. Fasten the driver's side seatbelt.
3. Close the driver side door, the hood, and the liftgate.
4. Engage the accelerator pedal while the vehicle is in R (Reverse), or D (Drive).

Make sure the brake warning light is off.

NOTE

Do not drive your vehicle with the EPB applied. Doing so may cause excessive brake pad and brake rotor wear.

WARNING

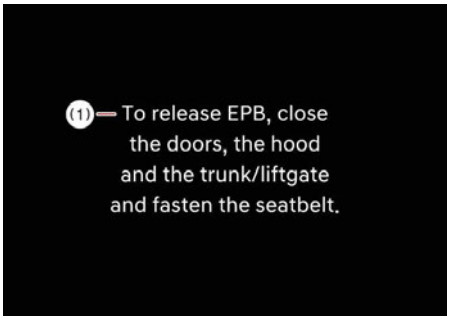
- Do not follow the procedure below when driving on flat, level ground. Your vehicle may suddenly move forward.
  - You can engage the EPB even though the vehicle is in OFF position, but you cannot release the EPB.
  - Engage the brake pedal and release the parking brake manually with the EPB switch when driving downhill or backing up your vehicle.
- If the brake warning light remains illuminated after you release the EPB, have your vehicle inspected by an authorized Kia dealer.

Instrument cluster display for warning message

The instrument cluster displays each of the following warning messages when applicable:

An EPB warning appears and an audible warning sounds in the following conditions:

- You try to drive by engaging the accelerator pedal with the EPB applied, but the EPB doesn't release automatically.
- When you try to drive with the EPB on, but it doesn't release automatically, a warning will sound and a message will appear.



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(1) **To release EPB, close the doors, the hood and the trunk/liftgate and fasten the seatbelt.**

Engage the brake pedal and release the EPB using the EPB switch.

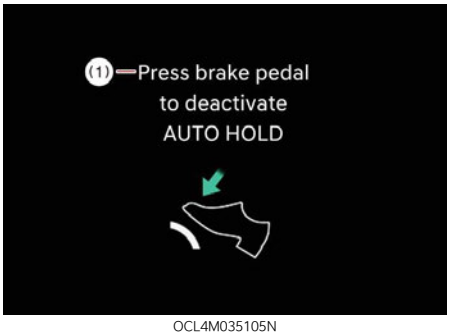
WARNING

Parking brake use

- Never allow a passenger or anyone who is unfamiliar with your vehicle to touch the EPB switch. If the parking brake is released unintentionally, serious injury or death may occur.
- Always fully engage the parking brake when parked to avoid inadvertent movement of your vehicle, which can injure occupants or pedestrians.

- You may hear a click or electric brake motor whine sound while engaging 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, inform them how to apply the EPB.
- The EPB may malfunction if you drive with it applied.
- When you automatically release the EPB by engaging the accelerator pedal, engage it slowly.

When the conversion from AUTO HOLD to EPB is not working properly, the system displays the following warning message with sound:



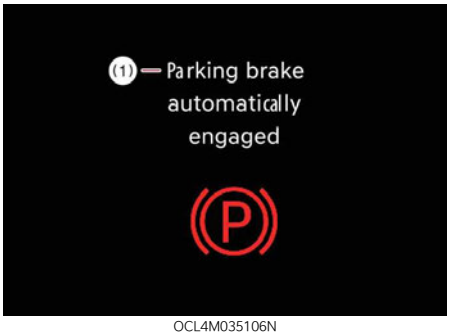
OCL4M035105N

(1) **Press brake pedal to deactivate AUTO HOLD**

TIP

When this warning message appears, engage the brake pedal to deactivate AUTO HOLD.

If you apply the EPB while AUTO HOLD is activated because of an Electronic Stability Control (ESC) signal, the system displays the following warning message with sound:



OCL4M035106N

(1) **Parking brake automatically engaged**

EPB malfunction indicator

If the vehicle is in ON position, and the vehicle turns off after approximately 3 seconds while the system is operating normally, the following warning light appears.



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If the EPB malfunction indicator appears while you are driving, or does not appear when the vehicle is in ON position, this indicates that the EPB may have malfunctioned. Have your vehicle inspected by an authorized Kia dealer.
When the ESC indicator appears because the ESC is not working properly, the EPB malfunction indicator may also appear. This does not indicate a malfunction of the EPB.

NOTE

The EPB warning light may appear if the EPB switch operates abnormally. Turn the engine off, then turn it back on after a few minutes. The warning light disappears, and the EPB switch operates normally. If the EPB warning light remains on, have your vehicle inspected by an authorized Kia dealer.
If the EPB warning light blinks or does not appear, even when you pull up the EPB switch, this indicates that the EPB has not been applied.

If the EPB warning light blinks, press and then pull up the EPB switch. Press it back into its original position and pull it back up. If the EPB warning light does not turn off, have your vehicle inspected by an authorized Kia dealer.

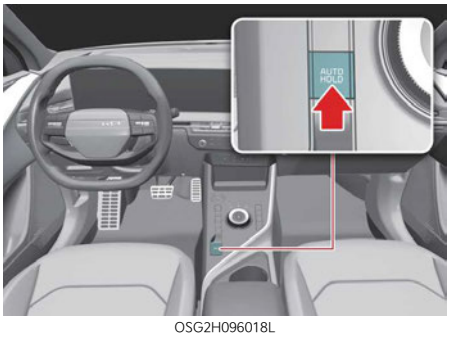
When the EPB is not released

If the EPB does not release normally, load your vehicle onto a flatbed tow truck and have your vehicle inspected by an authorized Kia dealer.

AUTO HOLD

The AUTO HOLD function keeps your vehicle still, even if you do not continue to hold your foot on the brake pedal after you have engaged it, to bring your vehicle to a complete stop.

Applying AUTO HOLD function



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OSG2H096019L_2

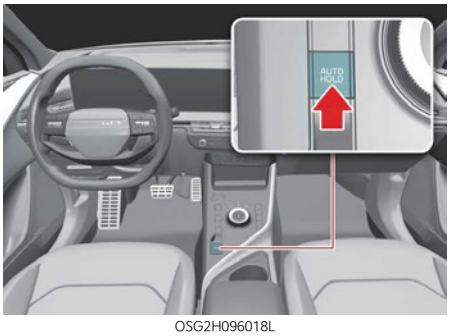
1. Engage the brake pedal and start your vehicle.
2. Press the AUTO HOLD button. The white AUTO HOLD indicator light appears, indicating that the system is in standby.

   Before the AUTO HOLD function engages, you must close the driver's side door and the hood.

TIP

- When you come to a complete stop by engaging the brake pedal, the AUTO HOLD indicator light changes from white to green, indicating that AUTO HOLD is engaged. Your vehicle remains at a standstill even if you release the brake pedal.
- If the EPB is applied, AUTO HOLD will be released.
- If you engage the accelerator pedal with the vehicle in D (Drive), the AUTO HOLD function is released automatically, and your vehicle starts to move. The AUTO HOLD indicator light changes from green to white, indicating that the AUTO HOLD function is in standby and the EPB is released.
- When driving after releasing AUTO HOLD by engaging the accelerator pedal, always check your surroundings.
- Engage the accelerator pedal slowly for a smooth forward motion.

Canceling AUTO HOLD function



OSG2H096018L

1. To cancel AUTO HOLD function, press the AUTO HOLD button. The AUTO HOLD indicator turns OFF.
2. To cancel AUTO HOLD function when your vehicle is at a standstill, press the AUTO HOLD while engaging the brake pedal.

WARNING

To reduce the risk of an accident, do not activate AUTO HOLD while driving downhill, backing up, or parking your vehicle.

NOTE

- If the AUTO HOLD indicator light turns yellow, the AUTO HOLD function is not working properly. Have your vehicle inspected by an authorized Kia dealer.
- If there is a malfunction with the driver side door or hood open detection system, the AUTO HOLD function may not work properly. Have your vehicle inspected by an authorized Kia dealer.
- You may hear a click or electric brake motor whine sound while engaging or releasing the EPB. This is normal and indicates that the EPB is functioning properly.

TIP

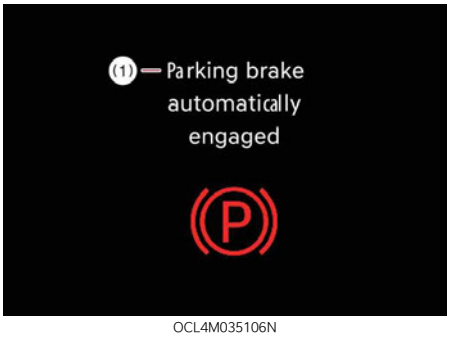
- AUTO HOLD does not engage under the following are conditions (the AUTO HOLD indicator light does not turn green, and the AUTO HOLD function remains in standby):
  - You open the driver side door.
  - You open the hood.
  - You shift to P (Park).
  - You apply the EPB.
- AUTO HOLD automatically switches to EPB under any of the following conditions (the AUTO HOLD indicator light remains white and the EPB applies automatically):
  - You open the driver side door.
  - You open the hood.
  - Your vehicle is at a standstill for more than 10 minutes.
  - Your vehicle is at a standstill on a steep slope.

◦ You moved your vehicle for a few seconds.
In these cases, the brake warning light appears, the AUTO HOLD indicator light changes from green to white, a warning sounds, and a message appears to inform you that the EPB has been applied automatically. Before driving again, engage the brake pedal, check your surroundings, and use the EPB switch to manually release the parking brake.

Instrument cluster display for warning message

The instrument cluster displays each of the following warning messages when applicable:

When you apply the EPB from AUTO HOLD:



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(1) **Parking brake automatically engaged**

When the conversion from AUTO HOLD to the EPB does not work properly:



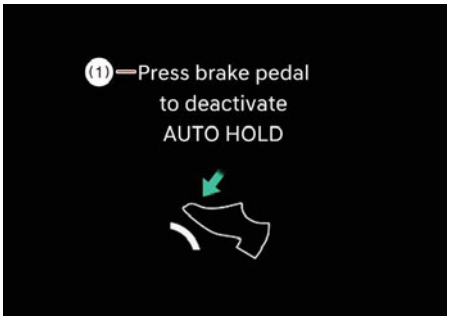
OCL4M035107N

(1) **AUTO HOLD turning Off! Press brake pedal**

WARNING

When this message appears, the AUTO HOLD function and the EPB may not operate. For your safety, engage the brake pedal.

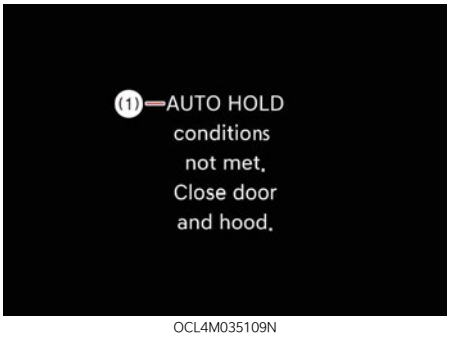
If you do not engage the brake pedal when you release the AUTO HOLD function by pressing the AUTO HOLD button, a warning sounds and a message appears:



OCL4M035105N

(1) **Press brake pedal to deactivate AUTO HOLD**

When you press the AUTO HOLD button while the driver side door and hood are open, a warning sounds and a message appears:



OCL4M035109N

(1) **AUTO HOLD conditions not met. Close door and hood.**

Press the AUTO HOLD button after closing the driver side door and hood.

Good braking practices

Good braking practices help keep occupants safe and extend the life of your brakes.

- Check to be sure that the parking brake is not applied and the parking brake indicator light is OFF before driving.
- Driving through water may wet the brakes. The brakes can also get wet when you wash your vehicle. Wet brakes can be dangerous! Your vehicle does not stop as quickly when the brakes are wet. Wet brakes also may cause your vehicle to drift to one side.

  To dry the brakes, lightly engage the brake pedal until the braking action returns to normal, taking care to always keep your vehicle 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 vehicle out of gear. This can be extremely hazardous. Always keep your vehicle in gear, use the brakes to slow down, and then shift to a lower gear so that vehicle braking action helps you maintain a safe speed.
- Don't continuously or constantly apply (i.e. "ride") the brake pedal. Resting your foot on the brake pedal while driving is dangerous because it can cause the brakes to overheat and lose their effectiveness. It also increases wear on the brake components.

- If a tire goes flat while you are driving, gently engage the brake pedal and keep your vehicle pointed straight ahead while you slow down. Pull off the road and stop in a safe place once you are moving slowly enough to do so.
- Be cautious when parking on a hill. Firmly apply the parking brake shift the gear to P (Park). If your vehicle is facing downhill, turn the front wheels toward the curb to help keep your vehicle from rolling.

  If your vehicle is facing uphill, turn the front wheels away from the curb to help keep your vehicle from rolling. If there is no curb and other conditions require you to keep your vehicle from rolling, block the wheels.
- Under some conditions, your parking brake can freeze while applied. This is most likely to occur when the brakes are wet, or when there is an accumulation of snow or ice near the rear brakes. If there is a risk that the parking brake may freeze, only apply it temporarily while you shift the gear to P (Park). Block the rear wheels so your vehicle cannot roll. Then release the parking brake.
- Do not use the accelerator pedal to hold your vehicle on an incline. This can cause the transmission to overheat. Always use the brake pedal or parking brake.

Vehicle safety system

Anti-lock Brake System (ABS)

The ABS is designed to help prevents the wheels from locking so that your vehicle remains stable and you can still steer it.

The ABS (or ESC) does not prevent accidents due to improper or dangerous driving maneuvers, or due to other than normal environmental conditions. Even though emergency braking improves vehicle control, always maintain a safe distance between your vehicle and objects ahead. Always reduce the vehicle speed during challenging or unusual road conditions under circumstances, including but not limited to:

- When driving on rough, gravel, or snow-covered roads
- When driving with tire chains installed
- When driving on roads where the surface is irregular, such as different surfaces, is pitted, or has different surface heights.

Driving in these conditions increases the required stopping distance for your vehicle.

The ABS continuously senses the speed of the wheels. If any wheel is about to lock, the ABS repeatedly modulates the hydraulic brake pressure to the affected wheels.

When you engage the brake pedal under conditions that may ordinarily 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 means your ABS is active.

To obtain the maximum benefit from your ABS in an emergency, do not try to modulate your brake pressure or pump your brakes. Engage your brake pedal as hard as possible to allow the ABS to control the force being delivered to the brakes.

> **TIP**
>
> You may hear a click sound when your vehicle begins to move after you start it. This is normal and indicates that the ABS is functioning properly.

Even with the ABS, your vehicle still requires sufficient stopping distance. Always maintain a safe distance from vehicles ahead.

Always slow down when turning. 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 is required for vehicles equipped with a conventional brake system.

The ABS warning light ( ) stays on for approximately 3 seconds after the vehicle is in ON position.

The ABS goes through self-diagnosis, and the ABS warning light turns off if everything is normal. If the light stays on, there may be a problem with the ABS. Have your vehicle inspected by an authorized Kia dealer.

When you drive on a road with poor traction (such as an icy road), and you have engaged the brake pedal continuously, the ABS will be continuously active, and the ABS warning light may appear. Pull over to a safe place and stop your vehicle.

Restart your vehicle. If the ABS warning light turns off, then your ABS is normal. If it remains on, you may have a problem with the ABS. Have your vehicle inspected by an authorized Kia dealer.

TIP

When you jump start your vehicle because of a drained 12V battery, your vehicle may not run as smoothly, and the ABS warning light may appear at the same time. This happens because of low 12V battery voltage and does not indicate an ABS malfunction.

- Do not pump your brakes.
- Recharge the 12V battery before driving your vehicle.

Electronic Stability Control (ESC)

The ESC is designed to stabilizes your vehicle when turning to mitigate against loss of control that could lead to an accident.



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ESC engages the brakes on individual wheels and intervenes with your vehicle management system to stabilize your vehicle.
ESC does 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 could cause the vehicle to lose traction. Even with ESC installed, always follow all the normal precautions for driving, including driving at safe speeds for the road conditions.

WARNING

For maximum protection, always wear your seat belt. No system, no matter how advanced, can compensate for all driver errors or driving conditions. Always drive responsibly.

The ESC is an electronic system that helps you maintain control of your vehicle under adverse conditions. It is not a substitute for safe driving practices. Factors such as speed, road conditions, and driver steering input can all affect whether ESC is effective in preventing a loss of control. It is still your responsibility to drive and turn at reasonable speeds and to leave a sufficient margin of safety.
When you engage the brake pedal under conditions that may ordinarily 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 means your ESC is active.

TIP

You may hear a click sound in your compartment when your vehicle begins to move after you start it. This is normal and indicates that the vehicle is functioning properly.

ESC operation

The ESC operates under the following conditions:

- When the vehicle is in ON position, ESC and ESC OFF indicator lights appear for approximately 3 seconds, and then the ESC system turns on.
- After you turn your vehicle on, press the ESC OFF button for at least half a second to turn the ESC OFF (the ESC OFF indicator appears). To turn the ESC on, press the ESC OFF button again (the ESC OFF indicator light disappears).
- When starting your vehicle, 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 operating, the ESC indicator light blinks.
When the ESC is operating properly, you can feel a slight pulsation in your vehicle. This is normal.
When moving out of mud or driving on a slippery road, engaging the accelerator pedal may not increase your vehicle's engine speed (rpm).

ESC operation OFF

Your vehicle has two OFF states for the ESC. If you stop your vehicle when ESC is OFF, ESC remains off. When you restart your vehicle, ESC automatically turns on.



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(1) **Traction Control disabled**

ESC OFF state 1

To turn off the traction control function and only operate the ESC's brake control function, press the ESC OFF button (ESC OFF) for less than 3 seconds. The ESC OFF indicator light (ESC OFF) appears.



OCL4M035111N

(1) **Traction and Stability Control disabled**

ESC OFF state 2

To turn the ESC's traction control and brake control functions off, press the ESC OFF button (ESC OFF) for more than 3 seconds. The ESC OFF indicator light (ESC OFF) appears and the ESC OFF warning chime sounds. ESC does not operate.

Indicator light

ESC indicator light



WKIA_041

ESC OFF indicator light



WKIA_042

When the vehicle is in ON position, the ESC OFF indicator light appears and then disappears if the ESC is operating normally.

The ESC indicator light blinks when ESC is operating, or appears when ESC fails to operate.

The ESC OFF indicator light appears when you use the button to turn the ESC system off.

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

- Keep the ESC system turned on whenever possible.
- To turn the ESC system off, press the ESC OFF button while driving on a flat road surface.

WARNING

Operating ESC

Never press the ESC OFF button while the ESC system is active (the ESC indicator light blinks).

If you turn the ESC system off while it is active, your vehicle may lose control.

NOTE

- When operating the vehicle on a dynamometer, ensure that the ESC system is turned off (the ESC OFF indicator light appears). If the ESC system is left on, it may prevent the vehicle speed from increasing, resulting in a false diagnosis.
- Turning the ESC system off does not affect ABS or brake system operation.

Vehicle Stability Management (VSM)

The VSM can further enhance the vehicle stability and steering responses under the following conditions:

- When driving on a slippery road.
- When the vehicle detects a change in the coefficient of friction between the left and right wheels.

WARNING

Tire and wheel size

When replacing tires and wheels, make sure they are the same size as the original tires and wheels. Driving with varying tire or wheel sizes may diminish any supplemental safety benefits of the VSM.

VSM operation

When the VSM is operating properly, you may feel a slight pulsation in your vehicle or unusual steering responses (MDPS). This is normal.

The VSM does not operate under the following conditions:

- You are driving on a banked road, such as a gradient or incline.
- You are driving in R (Reverse).
- The ESC OFF indicator light remains on the instrument cluster.
- The MDPS indicator light remains on the instrument cluster.

VSM operation OFF

If you press the ESC OFF button to turn the ESC system off, the VSM system also cancels, and the ESC OFF indicator light (OFF) appears.

To turn the VSM system on, press the ESC OFF 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 with maintaining control of your vehicle under certain circumstances. It is always your responsibility to drive safely.

Malfunction indicator

The VSM may deactivate even if you do not press the ESC OFF button to cancel VSM operation. This indicates that a malfunction has been detected somewhere in the MDPS system or VSM. If the ESC indicator light or MDPS warning light remains on, have your vehicle inspected by an authorized Kia dealer.

The VSM is only a supplementary function, not a substitute for safe driving practices. It is your responsibility to always check the speed and distance from a vehicle ahead. Always hold the steering wheel firmly while driving.

Your vehicle is designed to handle in response to driver inputs, even with VSM installed. Always follow all the normal precautions for driving at safe speeds for the conditions, including driving in inclement weather and/or on irregular or slippery road.

WARNING

For maximum protection, always wear your seat belt. No system, no matter how advanced, can compensate for all driver errors or driving conditions. Always drive responsibly.

Hill-start Assist Control (HAC)

A vehicle has the tendency to roll backward when it starts moving after you have stopped it on a steep hill. The HAC system prevents your vehicle from rolling backward by engaging the brakes automatically for about 2 seconds.

The HAC system releases the brakes after about 2 seconds, or when you engage the accelerator pedal.

The HAC system activates for about 2 seconds, so when you start your vehicle, always engage the accelerator pedal.

WARNING

Maintaining brake pressure on an incline
HAC does not replace the need to engage the brake pedal when you are stopped on an incline. While stopped, make sure you maintain sufficient brake pressure to prevent your vehicle from rolling backward and causing an accident. Do not release the brake pedal until you are ready to accelerate.

Brake Assistant System (BAS)

The BAS may provide additional pressure when you momentarily and strongly engage the brake pedal in situations where sudden braking is required.

The BAS can reduce the time required for the ABS control to activate, and consequently reduces

the braking distance, by providing additional pressure to the brakes up to the point of ABS intervention.

BAS operation

The BAS operates under the following circumstances:

- Your vehicle speed is above 6 mph (10 km/h) and the ABS control is not activated.
- You have fully engaged the brake pedal over a certain level.
- The friction of the road surface is above a certain level.

BAS operation OFF

The BAS does not operate under the following circumstances:

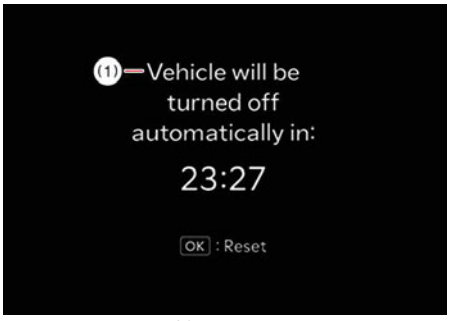
- Your speed is below 3 mph (5 km/h).
- You engage the brake pedal in certain road conditions where the system does not function well.
- The friction of the road surface is below a certain level.

TIP

The system operates depending on your driving habits, the vehicle speed, the degree to which you engage the brake pedal, and the conditions of the road surface.

Vehicle Auto Shut-off system (if equipped)

The Vehicle Auto Shut-off system automatically turns your vehicle off after a certain amount of time (set by you) to reduce fuel and energy consumption and prevent carbon monoxide poisoning.



OCL4M035112N

(1) **Vehicle will be turned off automatically in:**

When approximately 10 minutes remain on the Auto-Shut Off timer, a warning message appears on the instrument cluster. The remaining time is shown on the display. Press the OK button on the steering wheel to reset the Auto-Shut Off timer.

Activation requirements

The Vehicle Auto Shut-off system can be activated when all of the following requirements are satisfied:

- The vehicle is in the ON position.
- Your vehicle is stopped and the vehicle is in P (Park).
- The driver's seat belt is unfastened.
- The driver door is opened.
- The passenger seat is unoccupied.

TIP

- The default setting is 60 minutes.

Resetting the time

You can initialize and restart the Vehicle Auto Shut-Off system in the following conditions:

- You engage and release the brake pedal.
- You engage the accelerator pedal.
- You manually reset the timer.
- You press the OK button on the steering wheel.

Canceling the system

The Vehicle Auto Shut-off system automatically cancels in the following conditions:

- You are driving at a speed above 2 mph (3 km/h).
- You shift to D (Drive), R (Reverse), or N (Neutral).
- You fasten your seat belt.

Drive mode integrated control system

The drive mode integrated control system allows the driver to select the drive mode appropriate for the surrounding environment.

DRIVE MODE

You may select the drive mode according to preference or road condition.



OSG2H096016L

- Press the DRIVE MODE button. The drive mode changes whenever you press the button.
- The vehicle switches to ECO mode when the vehicle is restarted.

DRIVE MODE	Characteristics
ECO	Helps improve efficiency for eco-friendly driving.
SPORT	Provides sporty riding.

ECO mode

ECO mode manages the engine and transmission control logic to maximize fuel efficiency.
- When ECO mode is activated, the ECO indicator appears on the instrument cluster.
- When you restart the vehicle, the drive mode remains in ECO mode.

> **TIP**
>
> Fuel efficiency depends on your driving habits and the road conditions.

When ECO mode is activated:

- The accelerator pedal is only moderately engaged and the acceleration response may be slightly reduced.
- Air conditioning performance may be limited.
- The transmission's shift pattern may change.
- The engine noise may get louder.

All of the above conditions are normal when ECO mode is activated.

Limitations of ECO mode operation

If the following conditions occur while ECO mode is operating, the system operation is limited, even though there is no change in the ECO indicator:

- When the coolant temperature is low:
  System performance is temporarily limited until the engine reaches normal operating temperature.
- When driving uphill:
  System power may be reduced on inclines due to restricted engine torque.
- When the accelerator pedal is fully pressed for several seconds:
  System operation is limited when it detects that the driver intends rapid acceleration.

SPORT mode

SPORT mode manages driving dynamics to enhance driver performance by automatically adjusting the steering effort, engine, and transmission control logic.

- When SPORT mode is activated, the indicator appears on the instrument cluster.
- The drive mode defaults to ECO when you restart the engine. If you want to use SPORT mode, press the DRIVE MODE button to select SPORT mode.
- When SPORT mode is activated:
  - Engine speed (rpm) tends to remain raised over a certain amount of time, even after releasing the accelerator pedal.
  - Upshifts are delayed when you accelerate.

TIP

Fuel efficiency may decrease when you drive in SPORT mode.

Green Zone Drive Mode (if equipped)

To protect the atmospheric environment in urban areas, EV mode automatically expands when the vehicle enters a road inside the Green Zone based on navigation information, and also when departing from home based on the driving history.

Green Zone Drive Mode settings

When the vehicle is in ON position, tap **Settings > Vehicle > ECO Vehicle > Green Zone EV Drive** from the infotainment system screen.

Green Zone Drive Mode display



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Green Zone Drive Mode is enabled when the vehicle enters the green zone based on the navigation information in ECO mode.

Green Zone registration point

Green Zone registration points are determined based on navigation information and driving history, and may include:

1. Schools
2. Large hospitals
3. Registered favorites (Home/Office)

CAUTION

Even in the Green Zone, EV mode driving may be limited or the engine may start in the following situations:

- When the high voltage battery charge is low.
- When engine power is required (such as during acceleration, climbing, heating, or cooling) or when engine operation is necessary for the driving system.
- When the Green Zone cannot be recognized due to navigation problems.

TIP

- The available Green Zone may change through regular navigation updates.

- 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.

Active Air Flap (AAF) (if equipped)

Active Air Flap (AAF) controls the air flap below the front bumper to cool vehicle parts and improve fuel economy.



OSG2H096015L

Active Air Flap malfunction



N_CT25_C00_154_A

(1) **Check Active Air Flap system**

The active air flap system may not operate normally if the air flap is temporarily opened due to foreign factors or if the controller is contaminated by snow or rain, etc.

When the message appears on the display, stop the vehicle in a safe place and check the status of the air flap. Clear any foreign material as necessary.

Start the vehicle after addressing any issue and waiting 10 minutes. If the message remains up, have your vehicle inspected by an authorized Kia dealer.

NOTE

- Even if the warning message is not displayed, if the air flaps are visually asymmetrical (vehicles with exposed flap applied), turn off the vehicle and restart after about 10 minutes to inspect the air flap.
- The active air flap system is actuated by motors. Do not disturb actuation or apply force excessively. It may cause failure.

NOTE

Active air flap system could activated regardless of the vehicle condition.(Parking, driving, charging, etc.)

Economical operation

Your vehicle's fuel economy mainly depends on how, where, and when you drive.
Each of these factors affect your kilometers per liter (miles per gallon) of fuel. To operate your vehicle as economically as possible and save money on both fuel and repairs, follow these driving suggestions:

- Drive smoothly and accelerate at a moderate rate. Do not make "jackrabbit" starts or full-throttle shifts. Maintain a steady cruising speed. Do not race between stoplights. Follow the speed of traffic so you do not have to change speeds unnecessarily. Avoid heavy traffic whenever possible. Always maintain a safe braking and following distance from the vehicle ahead (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 results in unnecessary tire wear. Check tire pressure at least once a month.
- Be sure the wheels are correctly aligned. Hitting curbs or driving too fast over irregular surfaces can result in improper alignment. Poor alignment causes faster tire wear, and may result in other problems and 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 667. If you drive your vehicle in severe conditions, more frequent maintenance is required. For more information, refer to "Scheduled maintenance service" on page 667.
- 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 of a gear, which results in the engine bucking. If this happens, shift to a lower gear. Over-revving is racing the engine beyond its safe limit. Avoid over-revving by shifting the gear at the recommended speeds.
- Open windows at high speeds can reduce fuel economy.
- Fuel economy lessens in crosswinds and headwinds. To offset the decreased fuel economy, slow down when driving in these conditions.

Keeping a vehicle in good operating condition is important to both fuel economy and safety. Therefore, have the drive modes inspected by an authorized Kia dealer.

⚠ WARNING

Turning the vehicle off when in motion

Never turn the vehicle off to coast down hills, or any time your vehicle is in motion. The power steering and power brakes will not function properly if the vehicle is not running. In addition, turning the vehicle off while driving could engage the steering wheel lock and result in loss of steering. Keep the vehicle on and downshift to an appropriate gear for engine braking.

Special driving conditions

In poor weather or road conditions, you should drive even more carefully than usual.

Hazardous driving conditions

When you encounter water, snow, ice, mud, sand, or similar hazards on the road, 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 you are stalled in snow, mud, or sand, shift to 2nd gear and accelerate slowly to avoid spinning the drive wheels.
- Use sand, rock salt, or another nonslip material under the drive wheels to provide traction when you are 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 generally have higher ground clearance and sometimes a narrower track width to make them capable of performing in a wide variety of offroad applications.

Specific design characteristics can give SUVs a higher center of gravity than conventional passenger vehicles. An advantage of the higher ground clearance is a better view of the road, which allows you to anticipate problems.

SUVs are not designed for cornering at the same speeds as conventional passenger vehicles, any more than low-slung sports vehicles can perform satisfactorily in off-road conditions. Due to this risk, you and your passengers are strongly recommended to buckle your seat belts.

In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. To reduce the risk of a rollover while you are driving:

- If possible, avoid sharp turns or abrupt maneuvers.
- Do not load your roof rack with heavy cargo.
- Never modify your vehicle in any way.

⚠ WARNING

Rollover

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

- Utility vehicles have a significantly higher rollover rate than other types of vehicles.
- Specific design characteristics (such a higher ground clearance, narrower track, and so on) give this vehicle a higher center of gravity than ordinary vehicles.
- An SUV is not designed for turning at the same speeds as conventional vehicles.
- Avoid sharp turns or abrupt maneuvers.
- In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. Make sure everyone in your vehicle is properly buckled up.

WARNING

Your vehicle is equipped with tires that make handling and riding in your vehicle safer. Do not use tires or wheels that are different in size and type from the original ones. This can affect the safety and performance of your vehicle, which could lead to steering failure or a rollover and result in serious injury. When replacing the tires, be sure that all 4 tires and wheels are the same size, type, tread, and brand and have the same load-carrying capacity.

Rocking your vehicle

If it is necessary to rock your vehicle 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. Then shift the gear back and forth between R (Reverse) and any forward gear.
Do not rev the engine or spin the wheels. If you are still stuck after a few tries, have your vehicle towed out to avoid overheating the engine and causing possible damage to the transmission.

WARNING

Sudden vehicle movement
Do not attempt to rock your vehicle if people or objects are nearby. Your vehicle may suddenly move forward or backward as it becomes unstuck.

CAUTION

Vehicle rocking
Prolonged rocking may cause overheating of the vehicle, transmission damage or failure, and tire damage.

WARNING

Spinning tires
Do not spin the wheels, especially at speeds above 35 mph (56 km/h). Spinning the wheels at high speeds when your vehicle is stationary could overheat and damage the tires. The rotating wheels may detach and injure bystanders.

TIP

Turn the Electronic Stability Control (ESC) function off before rocking your vehicle.

Smooth turning

Avoid braking or shifting gears while turning, especially when roads are wet. Ideally, you should always turn with gentle acceleration. Following these suggestions minimizes wear on your tires.

Driving at night

Because night driving is more hazardous 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 without any street lights.
- Adjust your mirrors to reduce the glare from other drivers' headlights.

- Keep your headlamps clean and properly aimed at vehicles that are not equipped with the automatic headlight 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 are unprepared for the slick pavement.

When driving in rain, consider the following:

- A heavy rainfall makes it harder to see and increases the required stopping distance for 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 miss areas of the windshield.
- If your tires are not in good condition, stopping quickly on wet pavement can cause you to skid and possibly lead to an accident. Be sure your tires are in good shape.
- Turn on your headlights to make it easier for others to see you.
- Driving too fast through large puddles can affect your brakes. If you must drive through puddles, try to drive through them slowly.
- If you believe your brakes are wet, lightly engage the brake pedal while driving until braking operation returns to normal.

Hydroplaning

If the road is wet enough and you are driving fast enough, your vehicle may have little or no contact with the road surface and ride on the water. The best advice is to 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 697.

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 after driving through water because it may affect brake performance.

After driving through water, dry the brakes by gently applying them several times while your vehicle is moving slowly.

Highway driving

Tires

Adjust the tire inflation pressures according to the specification. Low tire inflation pressures result in overheating and possible failure of the tires.

Avoid driving with 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

Underinflated or overinflated tires

Always check the tires for proper inflation before driving. Underinflated or overinflated tires can cause poor handling, loss of vehicle control, and sudden tire failure, leading to accidents, injuries, and death. For proper tire pressures, refer to "Tires and wheels" on page 34.

WARNING

Tire tread

Always check the tire tread before driving your vehicle. Worn out tires can result in loss of control of the vehicle. Replace worn out tires as soon as possible. For further information and tread limits, refer to "Tires and wheels" on page 697.

Fuel, engine coolant, and engine oil

High speed travel consumes more fuel than driving in urban areas. Do not forget to check both the engine coolant and engine oil.

Drive belt

A loose or damaged drive belt may cause the engine to overheat.

Winter driving

Severe winter weather can lead to increased tire wear and additional issues. To minimize issues related to winter driving, you should follow the suggestions in these sections:

Snowy or icy conditions

To drive your vehicle in deep snow, you may need to use snow tires or to install tire chains on your tires.
If you need snow tires, select tires of the same size and type as the original ones. Failure to do so may adversely affect the safety and handling of your vehicle.
Speeding, rapid acceleration, sudden brake engagement, and sharp turns are potentially very hazardous practices in snowy or icy conditions.
When you decelerate, use engine braking fully. Sudden brake engagement on snowy or icy roads may cause skidding. Keep a sufficient distance between your vehicle and the vehicle ahead. Engage the brake pedal gently.
Installing tire chains on the tires allows you to drive with greater force, but does not prevent side skids.

NOTE

Tire chains are not legal in all states. Check state laws before using tire chains.

Snow tires

If you install snow tires on your vehicle, make sure they are radial tires of the same size and load bearing range as the original ones. Install snow tires on all 4 wheels to balance your vehicle's handling in all weather conditions. Keep in mind that snow tires may provide lower traction than your original tires on dry roads. 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 state, local, and municipal regulations for possible restrictions against their use.

WARNING

Snow tire size
Snow tires should be the same size and type as your original ones. Otherwise, your vehicle's safety and handling may be adversely affected.

Tire chains

Wire type



OSG2H096013L

Fabric type



OSG2H096014L

Because radial tires have thinner sidewalls, they can be damaged if you install certain types of tire chains on them. Therefore, snow tires are recommended instead of tire chains. Do not mount tire chains on vehicles equipped with aluminum wheels, as they may damage the wheels. If you must use tire chains, use:

- Fabric-type chains for 16 and 18 inch tires.
- Wire-type chains less than 0.47 inches (12 mm) thick for 16 inch tires.

Your warranty does not cover damage to your vehicle caused by improper tire chain use.

When using tire chains, attach them to the drive wheels as follows:

FWD: Front Wheel Drive

- FWD vehicles use the front wheels for power, so tire chains must be installed on the front tires.
- Drive slowly after installing tire chains. If you hear noise caused by the chains making contact with your vehicle, slow down until the noise stops. To prevent damage, remove the chains as soon as you begin driving on cleared roads.
- Wrong sized or improperly installed tire chains can damage your vehicle's brake lines, suspension, body, and wheels. When installing tire chains, follow the manufacturer's instructions and install them as tightly as possible. Drive slowly (below 20 mph (30 km/h)) with tire chains installed.

NOTE

- Make sure the tire chains are the correct size and type for your tires. Incorrect tire chains can cause damage to your vehicle's body and suspension, which may not be covered by your vehicle manufacturer warranty. The tire chain connecting hooks may be damaged from contacting vehicle components, causing the chains to come loose from the tires.
- Always check the tire chains for proper installation after driving approximately 0.3-0.6 miles (0.5-1 km). Retighten or reinstall the tire chains if they are loose.

Use high quality ethylene glycol coolant

Your vehicle is equipped with high quality ethylene glycol coolant. This 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

schedule in the Maintenance section.
Before winter, have your coolant tested to ensure that its freezing point is sufficient for the anticipated temperatures.

Check 12V battery and cables

Winter puts additional burdens on the 12V battery system. Visually inspect the 12V battery and cables as described in the Maintenance section. Have your battery inspected by an authorized Kia dealer to verify the charge level.

Change to “winter weight” oil if necessary

In some climates, it is recommended that you use a lower viscosity “winter weight” oil during cold weather. See "Recommended lubricants and capacities" on page 35. If you aren’t sure what oil weight 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 667, and replace them if necessary. Check all ignition wiring and components to make 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 glycerin into the key opening. If a lock is covered with ice, squirt an approved de-icing fluid onto the ice to remove it. If the lock is frozen internally, you may be able to thaw it out 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 according to the instructions on the container. Window washer anti-freeze is available from authorized Kia dealers and most auto parts stores. 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 while it is applied. 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 vehicle in P (Park). Block the rear wheels in advance so that your vehicle will not roll. Then release the parking brake.

Don’t let ice and snow accumulate under your vehicle

Under some conditions, ice and snow can build up under the fenders and interfere with steering. When driving in severe winter conditions where this may happen, periodically check under your vehicle to make sure that ice and snow do not obstruct the movement of the drive wheels and steering components.

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, a flashlight, emergency flares, sand, a shovel, jumper cables, a window scraper, gloves, a ground cloth, coveralls, a blanket, and so on.

Do not place objects or materials in the engine compartment

Putting objects or materials in the engine compartment may prevent the engine from cooling and cause engine failure or combustion. Your warranty does not cover such damage.

Drive your vehicle when water vapor condenses and accumulates inside the exhaust pipes

When your vehicle is stopped for a long time with the engine running during the winter, water vapor may condense and accumulate inside the exhaust pipes.

Water in the exhaust pipes may cause noise, but drains when you drive at medium or high speeds.

Trailer towing precautions

This vehicle does not support a trailer package.

We do not recommend installing any equipments including a towing hitch or a hitch-mounted carrier for trailer towing or for transporting wheelchairs, scooters, bicycles, etc.

If the trailer function is used arbitrarily, Kia will not be responsible for any issues related to the vehicle's warranty or performance that result from improper use or unauthorized installation.

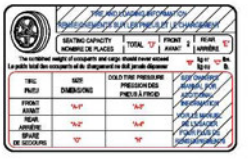
Vehicle load limit

The tire and loading information label on the driver side door displays your vehicle's load limit.

Tire and loading information label

The label located on the driver side door sill lists the original tire size, the cold tire pressures recommended for your vehicle, the number of people that can be in your vehicle, and the vehicle capacity weight.

Example for label



KIAPB045

Vehicle capacity weight:

• 5 seats: 860 lbs. (390 kg)

Vehicle capacity weight is the maximum combined weight of occupants and cargo. If your vehicle is equipped with a trailer, the combined weight includes the tongue load.

Seating capacity total: 5 persons (Front seat: 2 persons, Rear seat: 3 persons)

Seating capacity is the maximum number of occupants, including the driver, that your vehicle may carry.

The seating capacity may be reduced based on the weight of all the occupants and the weight of the cargo you are carrying or towing.

Do not overload your vehicle, as it has a load limit (or limit to the total weight, including occupants and cargo, that your vehicle can carry).

Towing capacity:

We do not recommend using this vehicle for trailer towing.

Cargo capacity:

The cargo capacity of your vehicle will increase or decrease depending on the weight and the number of occupants.

Steps For Determining Correct Load Limit—

1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on your vehicle's placard.
2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
3. Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.
4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the "XXX" amount equals 1400 lbs. and there will be five 150 lb passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400-750 (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. 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 (such as suitcases or unsecured child seats). These items may strike an occupant during a sudden stop or crash.

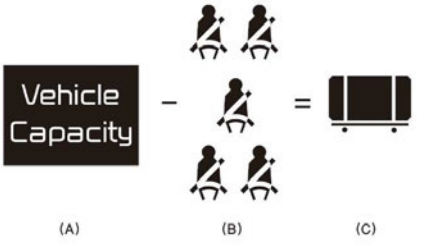
Example 1



KIAPB046

Item	Description	Total
(A)	Vehicle Capacity Weight	849 lb (385 kg)
(B)	Subtract Occupant Weight 150 lb (68 kg)×2	300 lb (136 kg)
(C)	Available Cargo and Luggage Weight	549 lb (249 kg)

Example 2

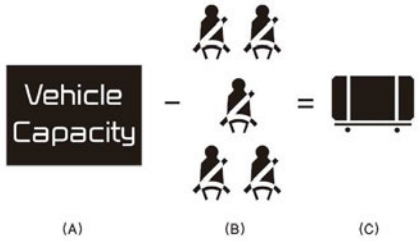


KIAPB047

Item	Description	Total
(A)	Vehicle Capacity Weight	849 lb (385 kg)
(B)	Subtract Occupant Weight	750 lb

Item	Description	Total
	150 lb (68 kg)×5	(340 kg)
(C)	Available Cargo and Luggage Weight	99 lb (45 kg)

Example 3



KIAPB047

Item	Description	Total
(A)	Vehicle Capacity Weight	849 lb (385 kg)
(B)	Subtract Occupant Weight 161 lb (73 kg)×5	805 lb (365 kg)
(C)	Available Cargo and Luggage Weight	44 lb (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 side door sill at the center pillar.



OLQ2A095034

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 vehicle, all occupants, and all cargo.
This label also tells you the maximum weight that can be supported by the front and rear axles. This is called the Gross Axle Weight Rating (GAWR).
To calculate the actual loads on your front and rear axles, go to a weigh station and weigh your vehicle. Your authorized Kia dealer can help you with this. Be sure to spread out your load equally on both sides of the center line.

⚠ WARNING

Overloading
Never exceed the GVWR for your vehicle, the GAWR for either the front or rear axle, or the vehicle capacity weight. Exceeding these ratings can affect your vehicle's handling and braking performance.

The certification label helps you decide how much cargo and installed equipment your vehicle can carry.
If you carry items inside your vehicle (such as suitcases, tools, or packages), they are moving as fast as your vehicle. If you must stop or turn quickly, or if there is a crash, the items will keep moving and can cause an injury if they strike you or a passenger.

WARNING

Overloading

Do not overload your vehicle. Overloading your vehicle can cause heat buildup in the tires (and possible tire failure), increased stopping distances, and poor vehicle handling, all of which may result in a crash.

NOTE

Do not overload your vehicle. Overloading your vehicle may cause damage. Repairs to damage caused by overloading your vehicle are not covered by your warranty.

Vehicle weight

This section offers guidance for properly loading your vehicle to keep your loaded vehicle weight within its design rating capability. Properly loading your vehicle maximizes your vehicle's design performance. Before loading your vehicle, familiarize yourself with the following terms for determining your vehicle's weight ratings, from your vehicle's specifications, and from the certification label:

Base curb weight

This is the weight of your vehicle, including a full tank of fuel and all standard equipment. It does not include passengers, cargo, or optional equipment.

Vehicle curb weight

This is the weight of your new vehicle when you picked it up from your dealer, plus any aftermarket equipment.

Cargo weight

This 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 the vehicle curb weight, cargo, and occupants.

GAWR (Gross axle weight rating)

This is the maximum allowable weight that a single axle (front or rear) can carry. 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 the actual Cargo weight plus the weight of all 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

certification label located on the driver side (or front passenger side) door sill shows the GVWR.

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 side (or front passenger side) door. Exceeding these ratings can cause an accident or damage to your vehicle. You can calculate the weight of your load by weighing the items (and people) before putting them in your vehicle. Be careful not to overload your vehicle.

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Driver assistance guide

WARNING

As the driver, do not rely on the Driver Assistance Systems. These systems do not replace the need for paying attention and driving safely. These systems operate under the assumption that the driver will maintain control of the vehicle, and are designed to help reduce the impact to the occupants in a collision and assist the driver under normal driving conditions. There are limits to the degree of recognition accuracy and control performance that these systems can provide, as more fully explained in this manual. The driver is solely responsible for paying attention to the vehicle's surroundings and driving safely. Complete attention is always required while driving, and you should be ready to take action and apply brakes and/or steer the vehicle to avoid crashes. This is NOT an autonomous (self-driving) vehicle. Failure to use proper care when driving may result in death, injury or vehicle damage.

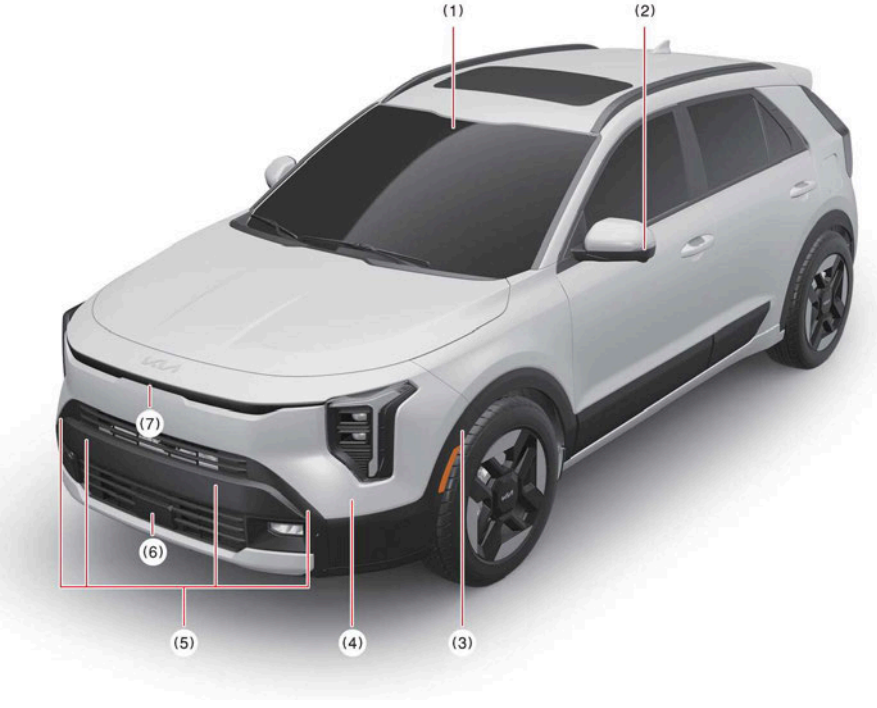
TIP

Due to software updates of the infotainment system, the descriptions of each driver assistance feature may differ from those in the owner's manual. In this case, please scan the QR code in the quick guide of the infotainment system to access the web manual and check the updated information.

Overview

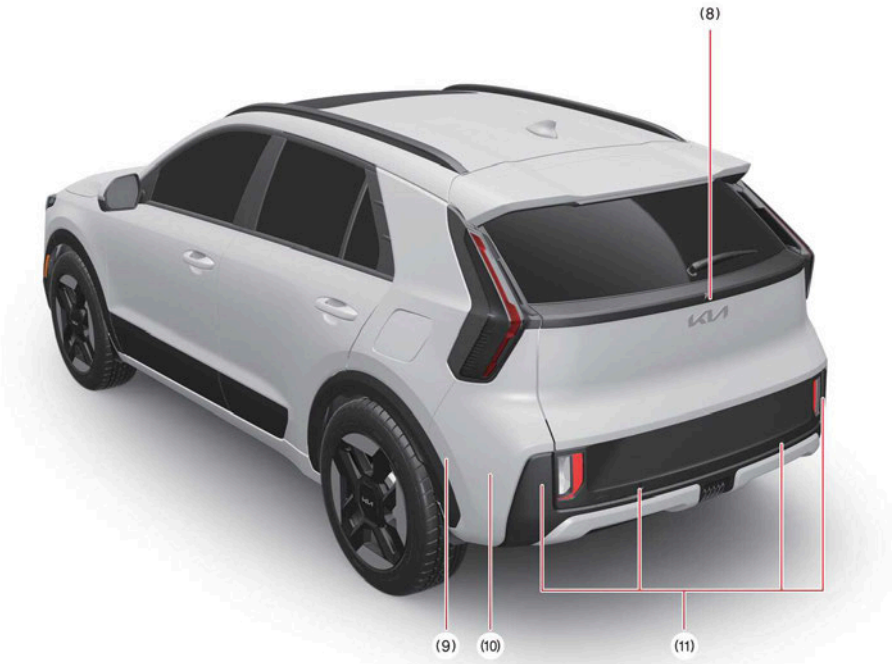
Detecting sensor(s)

Front view



OSG2H106001N

Rear view



OSG2H106002N

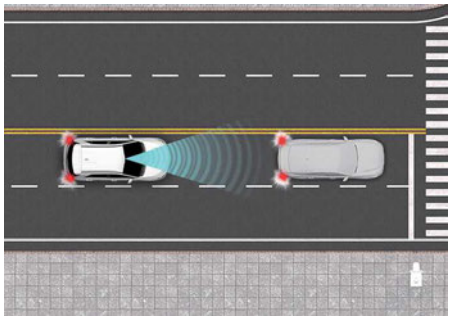
Refer to the picture above for the detailed location of the detecting sensors.
* : if equipped

No	Sensor	Function
(1)	Front view camera	• High Beam Assist (HBA) • Forward Collision-Avoidance Assist (FCA) (Sensor Fusion) • Lane Keeping Assist (LKA) • Intelligent Speed Limit Assist (ISLA)* • Driver Attention Warning (DAW) • Smart Cruise Control (SCC) • Lane Following Assist (LFA) • Highway Driving Assist (HDA)* • Emergency Stop (ES)
(2)	Wide-side view camera*	• Blind-Spot View Monitor (BVM)* • Surround View Monitor (SVM)*
(3)	Wide-front view camera*	• Surround View Monitor (SVM)*

No	Sensor	Function
(4)	Front radar	• Forward Collision-Avoidance Assist (FCA) (Sensor Fusion) • Smart Cruise Control (SCC) • Highway Driving Assist (HDA)* • Emergency Stop (ES)
(5)	Front ultrasonic sensors	• Parking Distance Warning (PDW) • Remote Smart Parking Assist (RSPA)*
(6)	Front corner radar*	• Forward Collision-Avoidance Assist (FCA) (Sensor Fusion)* • Smart Cruise Control (SCC)* • Highway Driving Assist (HDA)*
(7)	Front side ultrasonic sensors*	• Parking Distance Warning (PDW) • Remote Smart Parking Assist (RSPA)*
(8)	Wide-rear view camera	• Rear View Monitor (RVM)* • Surround View Monitor (SVM)* • Reverse Parking Collision-Avoidance Assist (PCA)*
(9)	Rear side ultrasonic sensors*	• Parking Distance Warning (PDW) • Remote Smart Parking Assist (RSPA)*
(10)	Rear corner radar	• Forward Collision-Avoidance Assist (FCA) (Sensor Fusion) • Blind-Spot Collision-Avoidance Assist (BCA) • Safe Exit Assist (SEA) • Highway Driving Assist (HDA)* • Rear Cross-Traffic Collision-Avoidance Assist (RCCA)
(11)	Rear ultrasonic sensors	• Parking Distance Warning (PDW) • Reverse Parking Collision-Avoidance Assist (PCA)* • Remote Smart Parking Assist (RSPA)*

Forward Collision-avoidance Assist (FCA) (Sensor Fusion)

Basic function

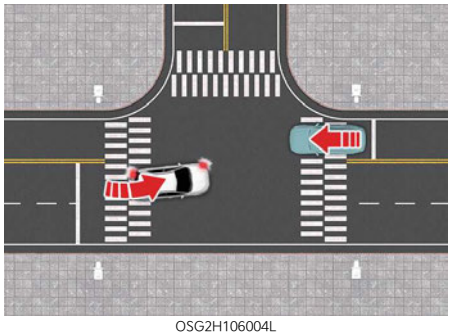


OSG2H106003L

Forward Collision-avoidance Assist can detect a vehicle, a motorcyclist, pedestrian, or 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 of you and in adjacent lanes even at high speeds. If the driver makes a lane change at those speeds, your vehicle may apply emergency braking to mitigate or avoid a collision. (if equipped)

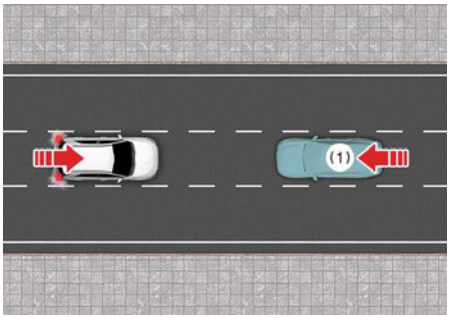
Junction Turning function



OSG2H106004L

When you turn left at a crossroad with the turn signal ON, Junction Turning can apply emergency braking to help you avoid a collision with a vehicle, motorcyclist, or cyclist in an oncoming lane.

Direct Oncoming function

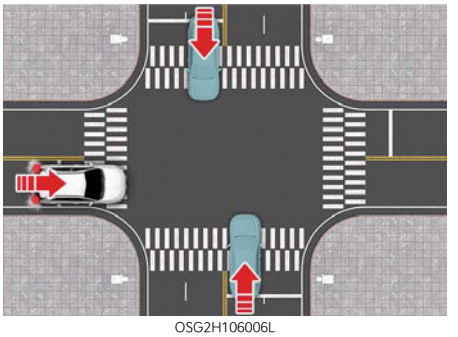


(1) Oncoming vehicle

OSG2H106005L

Direct Oncoming function can help reduce the speed of a collision when it detects a vehicle or motorcyclist approaching from the opposite direction.

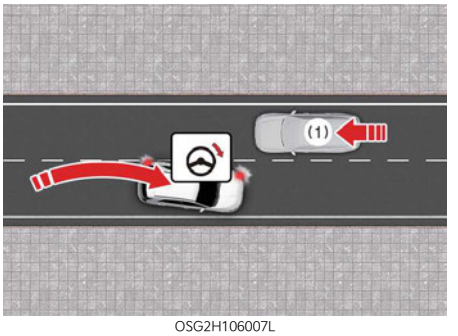
Junction Crossing function (if equipped)



OSG2H106006L

Junction Crossing function can apply emergency braking to help mitigate or avoid a collision with oncoming vehicles on your left or right side when you cross an intersection.

Lane-Change Oncoming function (if equipped)

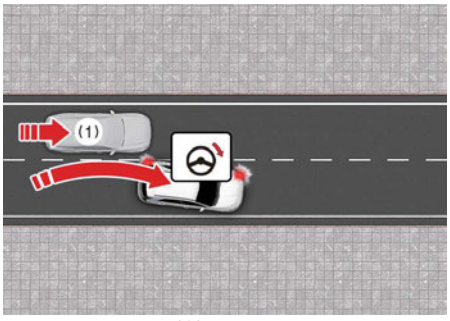


(1) Oncoming vehicle

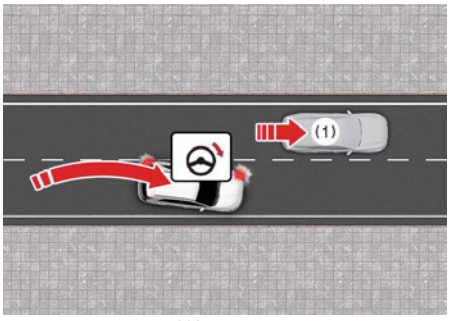
OSG2H106007L

When changing lanes, Lane-Change Oncoming can assist with your steering to help mitigate or avoid a collision with an oncoming vehicle or motorcyclist.

Lane-Change Side function (if equipped)



OSG2H106008L

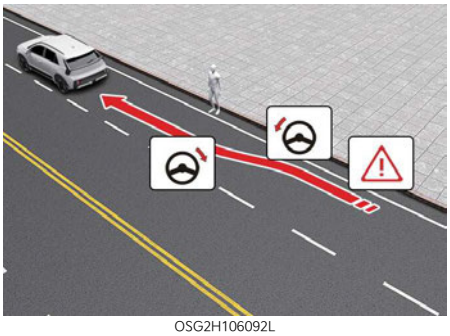


OSG2H106009L

(1) Approaching car from side

When changing lanes, Lane-Change Side can assist with your steering to help mitigate or avoid a collision with vehicles or motorcyclists in the next lane.

Evasive Steering Assist function (if equipped)



OSG2H106092L

- Driver Steering Assist

  If your vehicle detects a possible collision with a vehicle, pedestrian, or cyclist ahead, Evasive Steering Assist can assist you in steering to avoid the collision.
- Evasive Steering Assist

  Evasive Steering Assist can help mitigate or avoid a collision with a pedestrian or cyclist in the same lane ahead of you. If your vehicle detects a risk of collision, Evasive Steering Assist can warn you and assist your steering if you move the steering wheel.

Detection sensor

Please refer to "Detecting sensor(s)" on page 415 for the applicable sensors and their locations.

WARNING

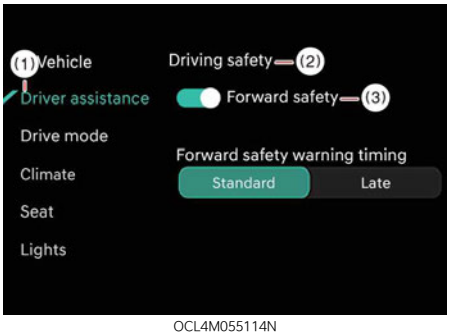
- Never damage or disassemble the detection sensor or sensor assembly.
- If the detection sensors have been replaced or repaired, have your vehicle inspected by an authorized Kia dealer.
- If the vehicle experiences an impact to or around the radar, Forward Collision-avoidance Assist may not operate properly, even if the instrument cluster does not display a warning message. Have your vehicle inspected by an authorized Kia dealer.
- Never tint or install any accessories or stickers on the windshield.
- Be extremely careful to keep the front view camera dry.
- Never place any reflective objects (for example, white paper or a mirror) over the instrument cluster.
- Do not place any objects near or install any accessories on the windshield. This can affect the performance of the climate control system's defogging and defrosting function, which may prevent the Driver Assistance systems from operating.
- Do not apply a 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 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.
- If you apply paint on or change the front, front corner and/or rear corner radar sensor 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.
- The function may not work properly if the bumper was replaced, or the areas of the front corner radar or rear corner radar were damaged or paint was applied.
- If you install a trailer or carrier, this may adversely affect the performance of Forward Collision-avoidance Assist and prevent it from operating properly.

Forward Collision-avoidance Assist settings

Forward Safety



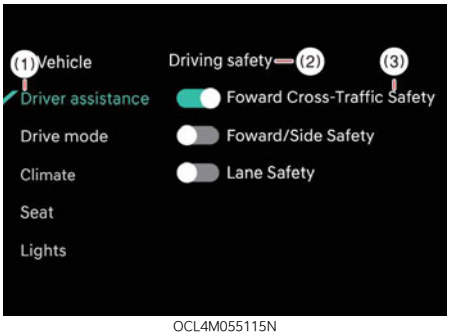
OCL4M055114N

(1) **Driver Assistance**
(2) **Driving Safety**
(3) **Forward Safety**

While the vehicle is ON, tap **Setup** > **Vehicle** > **Driver Assistance** > **Driving Safety** on the infotainment system screen to change the Forward Collision-Avoidance Assist settings.

Forward Safety: Collision warning or emergency braking may 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)

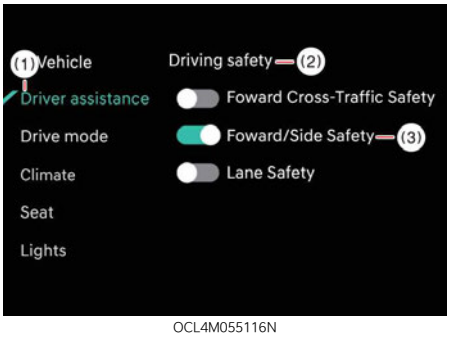


OCL4M055115N

(1) **Driver Assistance**
(2) **Driving Safety**
(3) **Forward Cross-Traffic Safety**

While the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Driving Safety > Forward Cross-Traffic Safety** on the infotainment system screen to change the Junction Crossing function settings.

Forward/Side Safety (if equipped)



OCL4M055116N

(1) **Driver Assistance**
(2) **Driving Safety**
(3) **Forward/Side Safety**

While the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Driving Safety > Forward/Side Safety** on the infotainment system screen to change the Forward/Side Safety settings.

Forward/Side Safety: Collision warning or emergency steering may 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.

You can monitor Forward Collision-Avoidance Assist setting status on the Settings menu of the infotainment system screen. If the Forward Safety warning light ( ) or Emergency steering warning light ( ) remains ON when Forward safety or Forward/Side safety is selected, have your vehicle inspected by an authorized Kia dealer.

TIP

Even when Forward safety is turned ON, it is the driver's responsibility to remain alert and in control of the vehicle. However, if **Forward safety** is turned OFF, the system will be unable to provide assistance.

Automatic Activation

Forward Collision-Avoidance Assist (FCA) is automatically activated under the following driving convenience conditions:

- When both Lane Following Assist (LFA) and Smart Cruise Control (SCC) are turned on
- When Highway Driving Assist (HDA) is turned on (if equipped)

When Forward Collision-Avoidance Assist (FCA) is automatically activated under the above conditions and you attempt to turn it off, a warning message will appear and the system will not be deactivated.

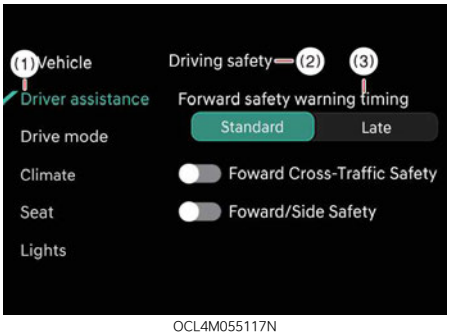
WARNING

- When a trailer or carrier is connected, set the Carrier menu. When the menu is set, the front/side functions will not operate. Always drive with caution.
- the front/side functions may not operate properly when a trailer, carrier, or other equipment is installed, or when towing another vehicle. Do not use these functions in such conditions.
- Towing a trailer or installing a carrier may reduce control stability. If necessary, disable the function and always drive with caution.
- Do not use the system when towing another vehicle or when other equipment that affects sensor operation or vehicle balance is installed, as it may not operate properly.

CAUTION

- If you turn the engine off and on, Forward Collision-Avoidance Assist will automatically be activated. You can turn each function off in the settings menu while the vehicle is stopped. But, if you do so, you will not be able to receive assistance from the deactivated Forward Collision-Avoidance Assist feature. Always drive with caution.
- Steering wheel vibration can be turned ON or OFF.
- Forward Safety settings include the "Basic," "Junction Turning," and "Direct Oncoming" functions. Forward Cross-Traffic Safety includes the "Junction Crossing" function. Forward/Side Safety includes the "Lane Change Oncoming", "Lane Change Side", and "Evasive Steering Assist" functions. (if equipped)
- If Forward Safety is set to OFF, even if Forward Cross-Traffic Safety and Forward/Side Safety are selected, "Junction Crossing" function will not operate. (if equipped)
- Forward Cross-Traffic Safety and Forward/Side Safety functions (if equipped) may not operate properly when a trailer, carrier, or other equipment is installed, or when towing another vehicle. Do not use these functions in such conditions.
- When Forward Collision-Avoidance Assist is automatically activated, it will remain on even if driving convenience features are turned off. To turn off Forward Collision-Avoidance Assist, stop the vehicle, turn off the driving convenience features, and then attempt to deactivate it.

Forward Safety Warning Timing



OCL4M055117N

(1) **Driver Assistance**
(2) **Driving Safety**
(3) **Forward Safety Warning Timing**

While the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Driving Safety > Forward Safety Warning Timing** on the infotainment system screen to change the Forward Collision-Avoidance Assist Warning Timing settings.

- Use **Standard** in normal driving conditions. If the Warning Timing seems sensitive, change it to **Late**.
- If you select **Late**, Forward Collision-Avoidance Assist warns you more slowly.

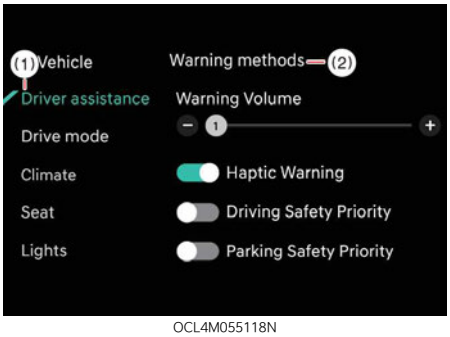
TIP

- Even if you select **Standard** Warning Timing, the warning may seem too slow if the vehicle ahead stops suddenly.
- Select **Late** Warning Timing when driving at low speeds in light traffic.

TIP

The warning timing will not reset, even when restarting the vehicle.

Warning Methods



OCL4M055118N

(1) **Driver Assistance**
(2) **Warning Methods**

To change the Warning Methods settings while the vehicle is ON, tap **Setup > Vehicle > Driver**

Assistance > Warning Methods on the infotainment system screen. You can change the following settings:

- **Warning Volume**: Adjusts the volume of the warning sound.
- **Haptic Warning**: Turns ON the steering wheel vibration warning.
- **Driving Safety Priority**: Lowers all other audio volumes when the Driving Safety system sounds a warning.

TIP

- Your **Warning Methods** settings may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** maintain their last settings when you turn OFF and restart the vehicle.
- The **Warning Methods** setting menu may not be available on all vehicles.

Forward Collision-avoidance Assist operation

Basic function

Basic functions for Forward Collision-Avoidance Assist are:

- Collision Warning
- Emergency Braking
- Stopping vehicle and ending brake control

Collision Warning



OSG2H006009L

(1) **Collision Warning**

Collision Warning can alert you with Forward Safety warning light blinking ( ), a warning message, an audible warning, and steering wheel vibration.

Collision Warning operates when the vehicle ahead moves within the following speed ranges:

- The vehicle or motorcyclist speed is approximately 6-124 mph (10-200 km/h).
- The pedestrian or cyclist speed is approximately 6-53 mph (10-85 km/h).

Emergency Braking



OSG2H006010L

(1) **Emergency Braking**

Emergency Braking can alert you with Forward Safety warning light blinking ( ), a warning message, an audible warning, and steering wheel vibration.
Emergency Braking can be activated according to oncoming objects and danger levels under the following conditions:

- Vehicle or motorcyclist *:

-	Driving target	Stopped target
Weak braking power	6-124 mph (10-200 km/h)	
Strong braking power	6-80 mph (10-130 km/h)	6-53 mph (10-85 km/h)

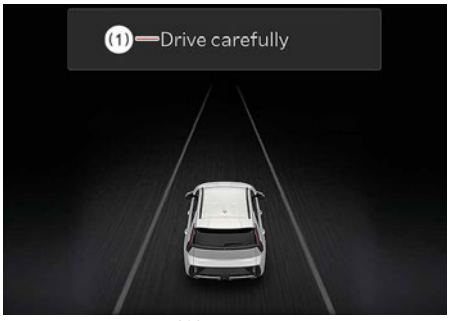
*: If Forward Collision- Avoidance Assist determines that a collision cannot be avoided even by changing lanes due to the surrounding conditions of the vehicle, braking assistance is provided earlier. When the target object is stationary, Forward Collision- Avoidance Assist may operate at speeds between about 6-62 mph (10-100 km/h) (if equipped).

- Pedestrian or cyclist: 6-50 mph (10-80 km/h)
- The target enters the operating area of the function.

WARNING

- The function's operational range may decrease due to the traffic ahead of or the surroundings of the vehicle.
- When driving at night, the ability to detect motorcycles is decreased. Thus, the Forward Collision- Avoidance Assist system may temporarily be limited or not work.

Stopping vehicle and ending brake control



OSG2H006011L

(1) **Drive carefully**

If Emergency Braking stops your vehicle, a warning message appears on the instrument cluster.
For safety purposes, you should immediately engage the brake pedal and check the vehicle's surroundings.
Brake control ends approximately 2 seconds after Emergency Braking stops your vehicle.

> **TIP**
>
> Press the hazard lights button to turn OFF the warning sound during collision warning and emergency braking.

Junction Turning function

Junction Turning functions for Forward Collision-Avoidance Assist are:

- Collision Warning
- Emergency Braking
- Stopping vehicle and ending brake control

Collision Warning



OSG2H006012L

(1) **Collision Warning**

Collision Warning can alert you with Forward Safety warning light blinking ( ), a warning message, an audible warning, and steering wheel vibration.
Collision Warning may be activated under the following conditions:

- Your driving speed is approximately 6-19 mph (10-30 km/h).
- The oncoming vehicle speed is approximately 19-44 mph (30-70 km/h).
- The motorcyclist or cyclist speed is approximately 9-44 mph (15-70 km/h).
- The target enters the operating area of the function.

Emergency Braking



OSG2H006013L

(1) **Emergency Braking**

Emergency Braking can alert you with the Forward Safety warning light blinking (), a warning message, an audible warning, and steering wheel vibration. Emergency Braking may activate to help avoid a collision with an oncoming vehicle.

Emergency Braking may be activated in the following conditions:

- Your driving speed is approximately 6-19 mph (10-30 km/h).
- The oncoming vehicle speed is approximately 19-44 mph (30-70 km/h).
- The motorcyclist or cyclist speed is approximately 9-44 mph (15-70 km/h).
- The target enters the operating area of the function.

Stopping vehicle and ending brake control



OSG2H006011L

(1) **Drive carefully**

When Emergency Braking stops your vehicle, a warning message appears on the instrument cluster.

For safety purposes, you should immediately engage the brake pedal and check the vehicle's surroundings.

Brake control ends approximately 2 seconds after Emergency Braking stops your vehicle.

TIP

Press the hazard lights button to turn OFF the warning sound during collision warning and emergency braking.

TIP

When turning right at an intersection, braking assistance may activate if there is a collision risk with a cyclist approaching at a speed of 9-12 mph (15-20 km/h) from the opposite side.

Direct Oncoming function

Direct Oncoming functions for Forward Collision-Avoidance Assist are:

- Collision Warning
- Emergency Braking
- Stopping vehicle and ending brake control

Collision Warning



OSG2H006009L

(1) **Collision Warning**

Collision Warning can alert you with Forward Safety warning light blinking ( ), a warning message, an audible warning, and steering wheel vibration.

Collision Warning may be activated under the following conditions:

- Your speed is approximately 6-80mph (10-130 km/h).
- The oncoming vehicle speed is above approximately 6 mph (10 km/h).
- The target enters the operating area of the function.

Emergency Braking



OSG2H006010L

(1) **Emergency Braking**

Emergency Braking can alert you with Forward Safety warning light blinking ( ), a warning message, an audible warning, and steering wheel vibration.
Emergency Braking may be activated in the following conditions:

- Your driving speed is approximately 19-80 mph (30-130 km/h).
- The oncoming vehicle speed is above approximately 6 mph (10 km/h).
- The target enters the operating area of the function.

Stopping vehicle and ending brake control



OSG2H006011L

(1) **Drive carefully**

When Emergency Braking stops your vehicle, a warning message appears on the instrument cluster.
For safety purposes, you should immediately engage the brake pedal and check the vehicle's surroundings.
Brake control ends approximately 2 seconds after Emergency Braking stops your vehicle.

WARNING

- If your vehicle or the oncoming vehicle is not driving straight, the Front Oncoming function warning and control may be late or may not operate.
- When driving at night, the ability to detect motorcycles is decreased. Thus, the Forward Collision- Avoidance Assist system may temporarily be limited or not work.

TIP

Press the hazard lights button to turn OFF the warning sound during collision warning and emergency braking.

Junction Crossing function (if equipped)

Junction turning functions for Forward Collision-Avoidance Assist are:
- Collision Warning
- Emergency Braking
- Stopping vehicle and ending brake control

Collision Warning



OSG2H006014L

(1) **Collision Warning**

Collision Warning can alert you with Forward Safety warning light blinking ( ), a warning message, an audible warning, and steering wheel vibration.
Collision Warning may activate under the following conditions:
- Your speed is approximately 6-34 mph (10-55km/h).
- The crossing vehicle speed is approximately 6-37 mph (10-60km/h).
- The target enters the operating area of the function.
- When the target is approaching at a speed slower than the vehicle's speed.

Emergency Braking



OSG2H006015L

(1) **Emergency Braking**

Emergency Braking can alert you with Forward Safety warning light blinking (), a warning message, an audible warning, and steering wheel vibration. Brake assist may activate to help avoid a collision with a vehicle.
Emergency Braking may activate in the following conditions:
- Your driving speed is approximately 6-34 mph (10-55km/h).
- The crossing vehicle speed is approximately 6-25 mph (10-40km/h).
- When the object approaches at a speed slower than the vehicle's own speed.
- The target enters the operating area of the function.

Stopping vehicle and ending brake control



OSG2H006011L

(1) **Drive carefully**

If Emergency Braking stops your vehicle, a warning message appears on the instrument cluster.
For safety purposes, you should immediately engage the brake pedal and check the vehicle's surroundings.
Brake control ends approximately 2 seconds after Emergency Braking stops your vehicle.

WARNING

If the angle of possible collision with the crossing vehicle is beyond a certain range, Junction Crossing warning and control may be late or may not operate.

NOTE

You can press the hazard warning lights during a collision warning or emergency braking to mute the warning sound.

Lane-Change Oncoming function (if equipped)

Lane-Change Oncoming functions for Forward Collision-Avoidance Assist are:
- Collision Warning
- Emergency Steering

Collision Warning



OSG2H006012L

(1) **Collision Warning**

Collision Warning can alert you with Emergency steering warning light blinking ( ), a warning message, an audible warning, and steering wheel vibration.

Collision Warning may activate under the following conditions:

- Your speed is approximately 25-90 mph (40-145 km/h).
- The oncoming vehicle or motorcyclist speed is above approximately 6 mph (10 km/h).
- The relative speed is below approximately 124 mph (200 km/h).
- When the directions of travel of your vehicle and an oncoming vehicle or motorcycle are opposite.
- When it is within a certain period of time after the system determines that the vehicle has departed from the lane.
- When the target enters the operating range of Lane-Change Oncoming function.
- When driving on a straight road.

Emergency Steering



OSG2H006018L

1. **Emergency Steering**

Emergency Steering can alert you with Emergency Steering warning light blinking ( ), a warning message, an audible warning, and steering wheel vibration. The Steering assist activates to help mitigate or avoid a collision with an oncoming vehicle or motorcyclist.

Emergency Steering may activate under the following conditions:

- Your driving speed is approximately 25-90 mph (40-145 km/h).
- The oncoming vehicle or motorcyclist speed is above approximately 6 mph (10 km/h).

- The relative speed is below approximately 124 mph (200 km/h).
- The directions of travel of your vehicle and an oncoming vehicle or motorcycle are opposite.
- It is within a certain period of time after the system determines that the vehicle has departed from the lane.
- The target enters the operating range of the Oncoming Vehicle Response function during overtaking.
- Driving on a straight road.
- Both lane markings are detected.
- There is no risk of a secondary collision.

Lane-Change Side function (if equipped)

Lane-Change Side functions for Forward Collision-Avoidance Assist are:
- Collision Warning
- Emergency Steering

Collision Warning



OSG2H006012L


OSG2H006016L

(1) **Collision Warning**

Collision Warning can alert you with the emergency steering warning light blinking (),a warning message, an audible warning, and steering wheel vibration. The warning light appears on the outside rearview mirror when a vehicle is detected in the right or left lane from the rear.

Collision Warning may activate under the following conditions:
- Your driving speed is approximately 25-90 mph (40-145 km/h).
- It is within a certain period of time after the system determines that the vehicle has departed from the lane.
- The target enters the operating range of the Lane-Change Side function.
- Driving on a straight road.

Emergency Steering



OSG2H006018L

(1) **Emergency Steering**

Emergency Steering can alert you with Emergency Steering warning light blinking ( ), a warning message, an audible warning, and steering wheel vibration.
The warning light on the outside rearview mirror appears when a vehicle is detected in the right or left lane from the rear. Emergency Steering may activate to avoid a collision.
Emergency Steering may activate under the following conditions:

- Your speed is approximately 25-90 mph (40-145 km/h).
- Speed of the side vehicle or motorcycle: While driving
- It is within a certain period of time after the system determines that the vehicle has departed from the lane.
- The target enters the operating range of the Lane-Change Side function.
- Driving on a straight road
- Both lane markings are detected.
- There is no risk of a secondary collision.

⚠ WARNING

- Lane-Change Side function does not operate if the oncoming vehicle is stopped.
- These functions do not work when a car or motorcyclist in the next lane is stationary.
- The front-side and rear-side radar detection range is based on the width of standard roads. On narrow roads, warnings may be triggered by a vehicle or motorcyclist driving in the next lane. Conversely, on wide roads, radars may fail to recognize a vehicle or motorcyclist driving in the next lane.
- The Lane-Change Side function deactivates in the following situations:
  - You drive more than a certain distance into the next lane.
  - You move away from the direction where there is a risk of collision.
  - You turn the steering wheel rapidly.
  - You engage the brake pedal.
  - Forward Collision-Avoidance Assist activates.
- After the Lane-Change Side function is triggered or after you change lanes, be sure to move into the center of the lane. If you continue to drive along the edge of the lane, the Lane-Change Side function may deactivate.

WARNING

If an additional accident risk is detected due to Emergency Steering, only a Collision Warning may be issued to notify you of the danger.

Evasive Steering Assist function (if equipped)

The Evasive Steering Assist function for Forward Collision-Avoidance Assist is Emergency Steering.

Emergency Steering (Driver steering assist)



OSG2H006018L

(1) **Emergency Steering**

Emergency Steering can alert you with Emergency steering warning light blinking ( ), a warning message, an audible warning, and steering wheel vibration.
If there is a risk of a collision with another vehicle or a pedestrian, cyclist, or motorcyclist ahead of your vehicle, Emergency Steering can assist you in steering to help prevent a collision.
Emergency steering will be activated in following conditions.
Your driving speed: Approximately 25-53 mph (40-85 km/h)

Emergency Steering (Evasive steering assist)



OSG2H006018L

(1) **Emergency Steering**

Emergency Steering can alert you with Emergency steering warning light blinking ( ), a warning message, an audible warning, and steering wheel vibration.
If there is a risk of a collision with a pedestrian, cyclist, or motorcyclist ahead of your vehicle and you have already exceeded the Emergency Braking speed limit, Emergency Steering can activate

to help you avoid a collision.
Emergency Steering may activate under the following conditions:
- Your driving speed is approximately 40-47 mph (65-75 km/h).
- The pedestrian, bicyclist, or motorcycle is moving in the same or opposite direction as your vehicle.
- Both lane markings are detected.
- Driving on a straight road.
- There is no risk of a secondary collision.

WARNING
- When Emergency Steering is operating, the steering wheel may turn automatically.
- Emergency Steering automatically ends when risk factors disappear. Adjust the steering wheel as needed.
- Emergency Steering may deactivate during operation if the steering wheel is held tightly or steered in the opposite direction.
- When steering is assisted to avoid a collision with another vehicle, a pedestrian, or a cyclist, Evasive steering assist will deactivate if potential collisions are detected with other vehicles, motorcyclist, pedestrians, or cyclists.
- Evasive steering assist may not operate if there is insufficient space to avoid a collision.
- 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.

TIP

For more information about warning messages, refer to "Collision Warning" on page 425.

WARNING
- For your safety, change the settings only after parking the vehicle at a safe location.
- Forward Collision-Avoidance Assist does not operate in all situations and cannot avoid all collisions.
- You are responsible for controlling the vehicle. Do not depend on Forward Collision-Avoidance Assist. Maintain a safe braking distance and manually engage the brake pedal to reduce driving speed or stop the vehicle.
- Never deliberately drive toward people or objects to test Forward Collision-Avoidance Assist. It may cause serious injury or death.
- Forward Collision-Avoidance Assist may not operate if you manually brake to avoid collision.
- Depending on the road and driving conditions, Forward Collision-Avoidance Assist may warn you late or not at all.
- During Forward Collision-Avoidance Assist operation, the vehicle may stop suddenly, which can cause loose objects to shift and possibly injure passengers. Always fasten seat belts and secure loose objects.
- Forward Collision-Avoidance Assist may not display a warning message or generate an audible warning if any other function's warning message is displayed or any other function's audible warning is generated at the same time.

- You may not hear the warning sound of Forward Collision-Avoidance Assist if you are in noisy surroundings.
- Depending on road conditions and surroundings, Forward Collision-Avoidance Assist may turn OFF or operate improperly or unnecessarily.
- Emergency Braking activated by Forward Collision-Avoidance Assist may end automatically if you brake hard or turn the steering wheel sharply.

WARNING

- Your surroundings may affect the speed or detection range of Forward Collision-Avoidance Assist, and result in the function being temporarily limited or disabled.
- Forward Collision-Avoidance Assist takes into account the oncoming vehicle's direction, speed, and surroundings to judge risk.
- Forward Collision-Avoidance Assist may not activate when driving at a high speed or when there is a significant difference in speed between your vehicle and oncoming vehicles.
- If the system determines that a collision with surrounding vehicles is likely, the Lane Change Oncoming, Lane Change Side, and Evasive Steering Assist functions will provide warnings only and not steering control.

TIP

- When a collision is imminent, Forward Collision-Avoidance Assist may activate brake assist if you do not brake enough to avoid the collision.
- The images or colors may display differently depending on the specifications of the instrument cluster or theme.
- If the interior camera detects an abnormal driver condition, the Forward Collision-Avoidance Assist may activate earlier than usual. (if equipped)

Forward Collision-avoidance Assist malfunction and limitations

Forward Collision-Avoidance Assist malfunction



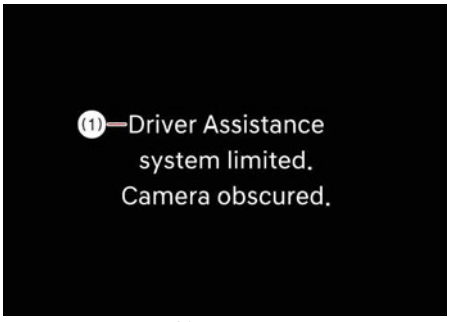
OCL4M055096N

(1) **Check Driver Assistance system**

When Forward Collision-Avoidance Assist is not working properly, the Master warning light (⚠), the Forward Safety warning light (🚗), and the Emergency Steering warning light (🚗) appear on

the instrument cluster, along with a warning message that lasts for several seconds. Have your vehicle inspected by an authorized Kia dealer.

Forward Collision-Avoidance Assist disabled



OCL4M055097N

(1) **Driver Assistance system limited. Camera obscured.**



OCL4M055098N

(1) **Driver Assistance system limited. Radar blocked.**

When foreign material (such as snow or rain) covers the windshield where the front view camera is located, the front radar cover, the bumper, or the sensor, it can reduce the detecting performance and temporarily limit or disable Forward Collision-Avoidance Assist.
If this occurs, a warning message, the Forward Safety warning light (), the Emergency Steering warning light (), and the Master warning light () display on the instrument cluster.
Forward Collision-Avoidance Assist should operate properly when you remove foreign material (such as snow or rain) from the sensor.
If Forward Collision-Avoidance Assist still does not operate properly after you remove foreign material (such as snow or rain) from the sensor or obstructions (such as a trailer or carrier) from the rear bumper, have your vehicle inspected by an authorized Kia dealer.

⚠ WARNING

- Even when the warning message or warning light does not appear on the instrument cluster, Forward Collision-Avoidance Assist may not operate properly.
- Forward Collision-avoidance Assist may not operate properly in an area (such as, open terrain) where any objects are not detected right after you turn ON the vehicle, or when the detection sensor is blocked with foreign material right after you turn ON the vehicle.

- If the system is in a blocked or malfunctioning state, turning the engine off and on may not resolve the issue, and Forward Collision-Avoidance Assist may still not operate properly.

TIP

You can check the Forward Collision-Avoidance Assist status in the service message of the utility information view of the instrument cluster display window.

Limitations of Forward Collision-Avoidance Assist

The function's operational range may decrease due to the traffic ahead of or the surroundings of the vehicle.

When driving at night, the ability to detect vehicles, motorcyclists, pedestrians, and cyclists is decreased. Thus, the Forward Collision- Avoidance Assist system may temporarily be limited or not work.

If your vehicle or the oncoming vehicle is not driving straight, the Front Oncoming function warning and control may be late or may not operate.

If the angle of possible collision with the crossing vehicle is beyond a certain range, Junction Crossing warning and control may be late or may not operate.

Emergency Steering automatically ends when risk factors disappear.

Emergency Steering may deactivate during operation if the steering wheel is held tightly or steered in the opposite direction.

When steering is assisted to avoid a collision with another vehicle, a pedestrian, or a cyclist, Evasive steering assist will deactivate if collisions are expected with other vehicles, motorcyclists, pedestrians, or cyclists.

Evasive steering assist may not operate if there is insufficient space to avoid a collision.

Forward Collision-Avoidance Assist does not activate for carts, bicycles, or other objects pushed or pulled by pedestrians or cyclists.

Forward Collision-Avoidance Assist may not operate normally if there is strong electromagnetic interference.

Forward Collision-Avoidance Assist may not activate for 15 seconds after you start the vehicle or initialize the front view camera.

Forward Collision-Avoidance Assist may operate abnormally or unexpectedly in certain circumstances, including the following:

- The surface of the windshield is dirty or has damage such as scratches.
- A windshield whose quality and performance have not been verified is used.
- The forward camera's field of view is reduced due to window tint film.
- Washer fluid is sprayed continuously or the windshield wipers are operating.
- It is dark and the tail lamps of the vehicle or motorcycle ahead are off or dim.
- The rear of the vehicle ahead is small or not clearly visible (e.g., when the vehicle ahead is driving at an angle, only the side of the vehicle is visible, or the vehicle is overturned).
- The detected object enters the front blind spot area of a cab-over type vehicle.
- Reflections or shapes projected by moisture or reflective objects on the road are recognized as objects.
- Driving near tunnels or railway bridges.
- The detected object is made of a material that does not reflect well to the front radar.
- There is a low-height or small obstacle ahead.

- A sensor is obscured or damaged.
- The temperature around the front-view camera is extremely high or low.
- The camera lens is obscured by a windshield tint, film, or coating, damaged glass, or objects on the glass such as a sticker or insect.
- There is moisture or ice on the windshield.
- Heavy rain, snow, or fog obscures the camera's view.
- Glare from the sun obstructs the front view camera's field of view.
- Light reflects off of a wet road surface, such as a puddle.
- There is an object on the instrument panel.
- Your vehicle's surroundings are excessively bright or dark.
- The light changes suddenly, such as when you enter or exit a tunnel.
- You are in dark conditions and your vehicle's headlights are not on or are obscured.
- Another vehicle or a motorcyclist, pedestrian, or cyclist is only partially visible.
- The vehicle ahead is a bus, heavy truck, or vehicle with bulky cargo or a trailer.
- The vehicle or motorcyclist ahead does not have tail lights or has an unusual tail light configuration.
- If the ground clearance of the vehicle in front is low or high
- A vehicle, motorcyclist, pedestrian, or cyclist suddenly crosses ahead of your vehicle.
- The vehicle is being towed by another vehicle.
- There is a significant change in brightness, such as when entering or exiting a tunnel.
- Small particles of a different color from the road surface, such as sand, contaminate the road.
- The recognized object type differs from the actual object.
- The front radar sensor is damaged or out of position.
- The temperature near the front radar is high or low.
- You are driving in areas where there are few vehicles or structures, such as a desert or meadow.
- You are driving near areas with a lot of metal, such as a construction zone, railroad, or road with metal plates.
- Passing near a tunnel or steel bridge.
- Objects that strongly reflect radar signals, such as guardrails or nearby vehicles, are present around the vehicle.
- The detected target is made of a material that does not reflect radar signals well.
- There is an obstacle of low height or small size ahead.
- The shadow is on the lane marking by a median strip, trees, guardrail, noise barriers, etc.
- Your view of the vehicle or motorcyclist ahead is suddenly obscured.
- The vehicle or motorcycle ahead is detected late.
- The vehicle or motorcycle ahead suddenly becomes obscured by an obstacle and cannot be detected.
- The vehicle or motorcycle ahead is at a significantly angled orientation.
- The vehicle or motorcycle ahead has an unusual shape.
- The vehicle or motorcyclist ahead suddenly changes lanes or reduces speed.
- The vehicle ahead is covered in snow.
- You are departing or returning to the lane.
- If your driving is unstable.
- You are driving in a traffic circle and the curvature of the road prevents detection of the vehicle or motorcyclist ahead.

- You are driving on a steep hill, which puts the vehicle or motorcyclist ahead out of range of your vehicle's camera or radar.
- The vehicle ahead continues to turn.

The system may not detect a pedestrian or cyclist ahead that is:

- Leaning over or not walking fully upright.
- Wearing clothing or equipment that makes them difficult to detect.
- Moving very quickly ahead of your vehicle.
- Short or crouching.
- Moving opposite of the flow of traffic or having impaired mobility.
- Part of a large crowd ahead of your vehicle.
- Difficult to distinguish from their surroundings.
- Passing pedestrians, cyclists, traffic signs, or structures near an intersection.

The system may not detect a pedestrian, motorcyclist or cyclist ahead when you are driving:

- Through steam, smoke, or shadow.
- Driving through a tunnel or steel bridge
- In large areas where there are few vehicles or structures, such as a desert, field, or suburban area.
- In a parking lot.
- Through a tollgate, construction area, or rough or bumpy terrain, speed hump.
- There are railroad tracks or other metallic objects on the road.
- Near areas with a lot of metal, like a construction zone or railroad.
- On a steep or curving road.
- The vehicle moves unstably or shakes severely.
- The vehicle height changes significantly due to abnormal tire pressure, excessive cargo loading, etc..
- Through a roadside with trees or street lights.
- Along a narrow road with dense trees or overgrowth.
- Through electromagnetic waves, such an area with strong radio waves or electrical noise.
- A snow chain, spare tire, or wheel of a different size is installed

The following illustration shows the kinds of images of a vehicle, motorcyclist, pedestrian, or cyclist that the front view camera and front radar can detect:

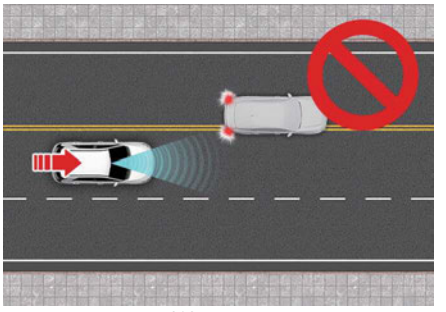


OMQ4A055001

Limitations of Basic function, Junction Turning function, and Direct Oncoming function

The Forward Collision-Avoidance Assist may operate abnormally in the following situations:

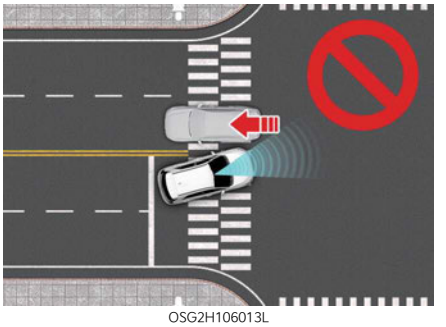
- When vehicles ahead, bicyclists, or pedestrians are outside the operating range.



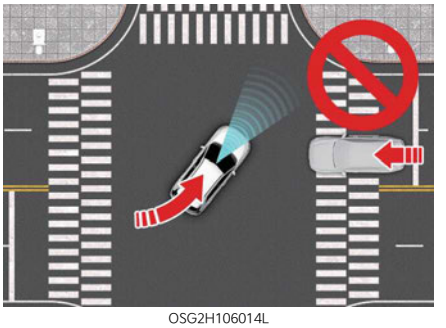
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The Junction Turning function may not operate normally in the following situations:

- When oncoming vehicles, motorcycles, or bicyclists are outside the operating range or only partially detected.



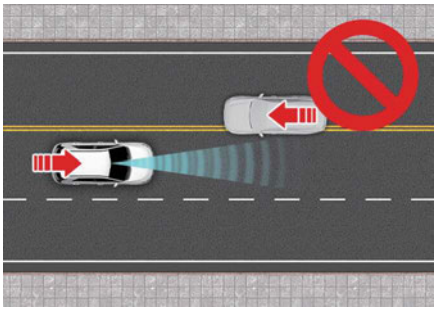
OSG2H106013L



OSG2H106014L

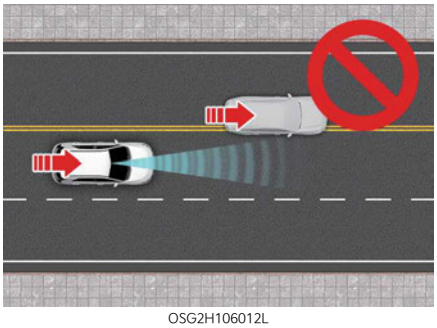
The Direct Oncoming function may not operate normally in the following situations:

- When oncoming vehicles or motorcycles are outside the operating range.



OSG2H106011L

- When traveling in the same direction.



OSG2H106012L

Junction Crossing, Lane-Change Oncoming, Lane-Change Side, Evasive Steering Assist function (if equipped)

The Junction Crossing, Lane-Change Oncoming, Lane-Change Side, and Evasive Steering Assist functions may operate abnormally or unexpectedly in certain circumstances, including the following:

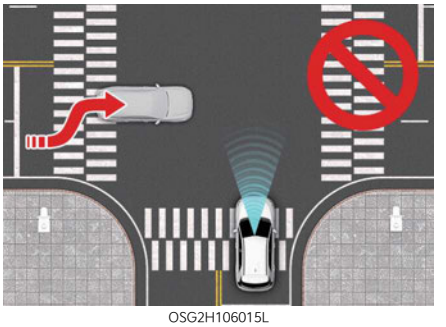
- The temperature around the front or rear side radar is too high or too low.
- You have installed a trailer or carrier near the rear corner radar.
- The front or rear corner radar is covered with snow, rain, dirt, and so on.
- The bumper around front corner or rear corner radar is covered with objects, such as a bumper sticker, bumper guard, bike rack, etc.
- The bumper near the front or rear corner radar is damaged, or the radar is out of position.
- The front or rear corner radar is blocked by other vehicles, walls, or pillars.
- You are driving on a highway ramp.
- Driving on a road where guardrails or walls are installed in multiple layers (double structures).
- Another vehicle or motorcyclist drives very close behind or passes close by your vehicle.
- Another vehicle or motorcyclist passes you at a very high speed.
- Your vehicle passes another vehicle or motorcyclist.
- You are accelerating at the same rate as a vehicle or motorcycle in the next lane.
- A vehicle or motorcycle moves into or out of the lane next to you, or you move into the lane next to another vehicle.

- The function detects a motorcycle or bicycle.
- Flat-bed type vehicles, such as trailers without cargo.
- The function detects a large vehicle, such as a bus or truck.
- The function detects a small moving obstacle, such as a pedestrian, animal, shopping cart, or stroller.
- The function detects a shorter vehicle, such as a sports car.
- The lane is difficult to see due to foreign material, such as rain, snow, dust, sand, oil and water puddles.
- Lane markings are obscured or not distinct from the road.
- Adjacent lanes end or lane markings merge together.
- There are more than 2 lane markings on the road.
- Lane markings are complicated or otherwise affected by roadwork.
- There are road markings, such as zigzag lanes, crosswalk markings and road signs.
- The lane suddenly disappears, such as at an intersection.
- The lane is very wide or narrow.
- The vehicle ahead is obscuring the lane markings.
- You are driving very close to the vehicle ahead.
- On wet road surfaces or when there is insufficient contrast between the lane and the road surface.
- When the lane is covered by shadows cast by roadside objects such as median barriers, guardrails, sound barriers, or nearby vegetation.
- There are only curbs and no lane markings.
- Driving in a bus-only lane or in the lane to the left or right of a bus-only lane.

Limitations of Junction Crossing function (if equipped)

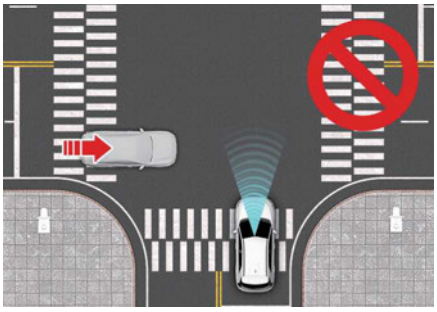
The Junction Crossing function may not operate normally in the following situations:

- When the oncoming vehicle or motorcycle is outside the operating range.



OSG2H106015L

- When the target vehicle is moving faster than your vehicle.

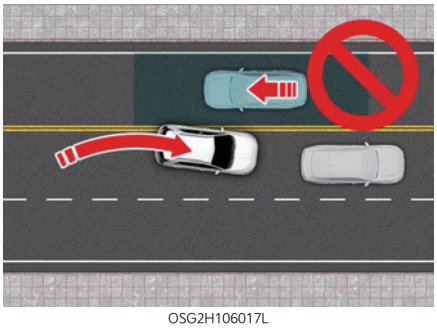


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Limitations of Lane-Change Oncoming, Lane-Change Side function (if equipped)

The Lane-Change Oncoming function and Lane-Change Side function may not operate normally in the following situations:

- When using these functions may create a risk of a secondary collision.

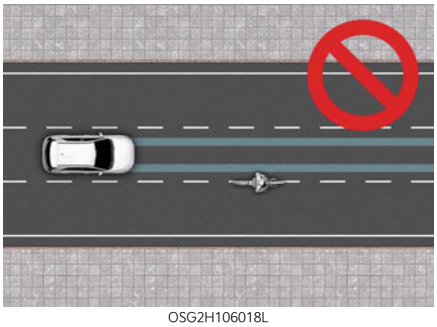


OSG2H106017L

Limitations of Evasive Steering Assist function (if equipped)

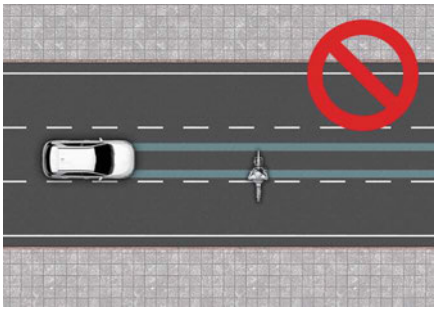
The Evasive Steering Assist function may not operate normally in the following situations:

- When a stationary vehicle, pedestrian, cyclist, or motorcyclist is located outside the operating range.



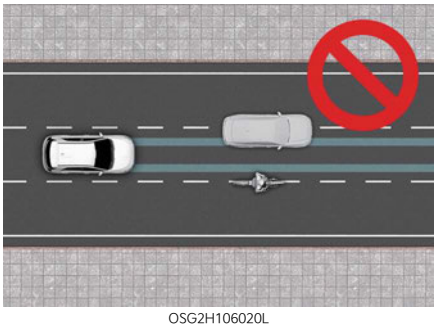
OSG2H106018L

- When pedestrians or bicyclists, motorcyclists are moving laterally.



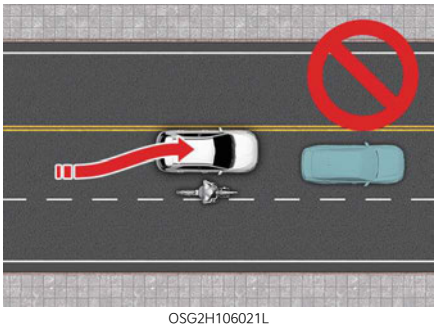
OSG2H106019L

- When a stationary vehicle, pedestrian, cyclist, or motorcyclist is within the operating range, but there is insufficient space for evasive steering.



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- When using Evasive Steering Assist may create a risk of a secondary collision.



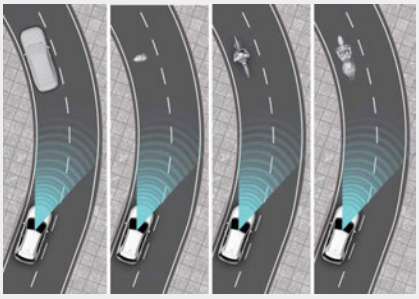
OSG2H106021L

TIP

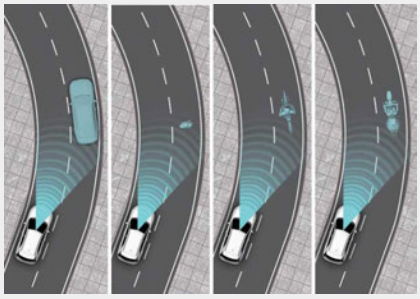
For more information about the limitations of detecting rear corner vehicles and cautions regarding the rear corner sensor, refer to "Blind-spot Collision-avoidance Assist (BCA)" on page 466.

WARNING

- Driving on a curved road



OSG2H106022L_4



OSG2H106023L_4

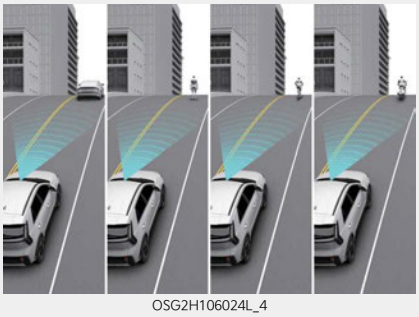
Forward Collision-Avoidance Assist may not detect other vehicles, motorcyclists, pedestrians, or cyclists ahead of you when you drive on curved roads. This may result in no warning, braking assist, or steering assist (if equipped) when needed.

When driving on a curve, you must maintain a safe braking distance and, if necessary, steer the vehicle and engage the brake pedal to reduce your speed.

Forward Collision-Avoidance Assist may detect a vehicle, motorcyclist, pedestrian, or cyclist in the adjacent lane or outside of the lane when you drive on a curved road.

If this occurs, Forward Collision-Avoidance Assist may unnecessarily warn you and control the braking or steering (if equipped). Always monitor traffic conditions.

- Driving on an incline



OSG2H106024L_4

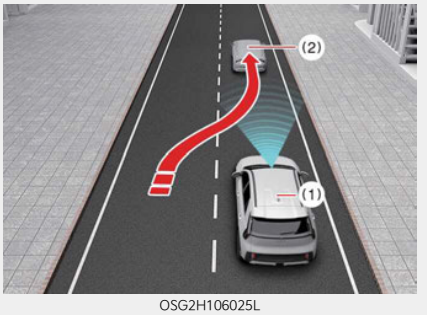
Forward Collision-Avoidance Assist may not detect other vehicles, motorcyclists, pedestrians, or cyclists ahead of you when you drive uphill or downhill, and adversely affect sensor performance.

The function may not help with warning, braking, or steering (if equipped) when necessary.

Also, Emergency Braking may activate if the function suddenly detects a vehicle, motorcyclist, pedestrian, or cyclist ahead.

Always keep your eyes on the road and steer your vehicle and engage the brake pedal to reduce your driving speed and maintain safe following and braking distances.

- Changing lanes

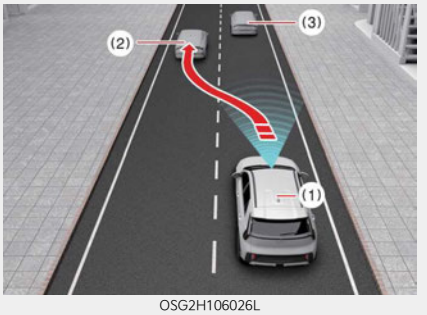


OSG2H106025L

(1) Your vehicle
(2) Lane changing vehicle or motorcyclist

When a vehicle or motorcyclist (2) moves into your lane from an adjacent lane, it will not be detected until it is within the sensor's range.

Forward Collision-Avoidance Assist may not immediately detect a vehicle or motorcyclist when it changes lanes abruptly. In this case, you must maintain a safe braking distance and, if necessary, steer your vehicle and engage the brake pedal to reduce your speed.



OSG2H106026L

(1) Your vehicle
(2) Lane changing vehicle or motorcyclist
(3) Same lane vehicle

When a vehicle (2) ahead of you moves into another lane, Forward Collision-Avoidance Assist may not immediately detect a vehicle or motorcyclist (3) that is now ahead of you. In this case, you must maintain a safe braking distance and, if necessary, steer your vehicle and engage the brake pedal to reduce your speed.

- Detecting a vehicle



OSG2H106027L_2

If the vehicle ahead of yours has cargo extending backward from the cab or high ground clearance, pay special attention. Forward Collision-Avoidance Assist may not be able to detect the cargo extending from the vehicle. In this case, you must maintain a safe braking distance from the rearmost object and, if necessary, steer your vehicle and engage the brake pedal to reduce your speed.

TIP

- The Forward/Side Safety (if equipped) may not operate normally when a trailer, carrier, or other equipment is installed, or when towing another vehicle. Do not use them.
- When you are towing a trailer or another vehicle, turn OFF Forward Collision-Avoidance Assist for safety reasons.
- Forward Collision-Avoidance Assist may activate if it detects objects similar to vehicles, motorcyclists, pedestrians, or cyclists.
- Forward Collision-Avoidance Assist does not activate for carts, bicycles, or other objects pushed or pulled by pedestrians or cyclists.
- Forward Collision-Avoidance Assist may not operate normally if there is strong electromagnetic interference.
- Forward Collision-Avoidance Assist may not activate for 15 seconds after you start the vehicle or initialize the front view camera.

TIP

For more information about the limitations of detecting rear corner vehicles and cautions regarding the rear corner sensor, refer to "Blind-spot Collision-avoidance Assist (BCA)" on page 466.

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.

TIP

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

Lane Keeping Assist (LKA) (if equipped)

When you drive over a certain speed, Lane Keeping Assist can detect lane markings or road edges. Lane Keeping Assist may assist with steering to prevent the vehicle from leaving its lane, and may warn you if your vehicle leaves the lane without you using the turn signal.

Detection sensor

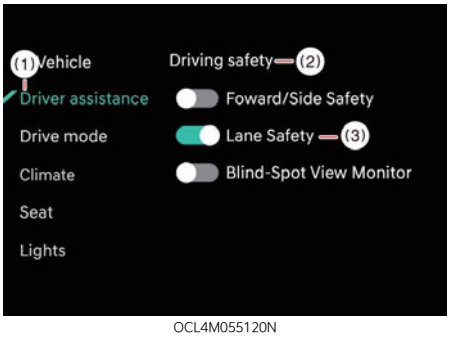
Please refer to "Detecting sensor(s)" on page 415 for the applicable sensors and their locations. The front view camera can detect lane markings or road edges.

TIP

For more information about the front view camera, refer to "Forward Collision-avoidance Assist (FCA) (Sensor Fusion)" on page 418.

Lane Keeping Assist settings

Lane Safety



OCL4M055120N

(1) **Driver Assistance**
(2) **Driving Safety**
(3) **Lane Safety**

While the vehicle is ON, tap **Setup** > **Vehicle** > **Driver Assistance** > **Driving Safety** on the infotainment system screen to change the Lane Safety settings.

Lane Safety: When a potential lane departure is detected, the system assists with steering to prevent you from leaving the lane. If you leave the lane, the system alerts you with an audible sound and steering wheel vibration. If you deselect Lane Safety, the indicator light ( ) turns OFF.

WARNING

You should always be aware of the surroundings and steer the vehicle if Lane Safety is deselected.

NOTE

- If you press and hold the Lane Driving Assist button ( ) for more than 2 seconds to turn off Lane Keeping Assist, the Lane Safety setting will also be turned off.

- Even if you turn the engine off and on, the Lane Keeping Assist setting will remain the same as it was before the engine was turned off.

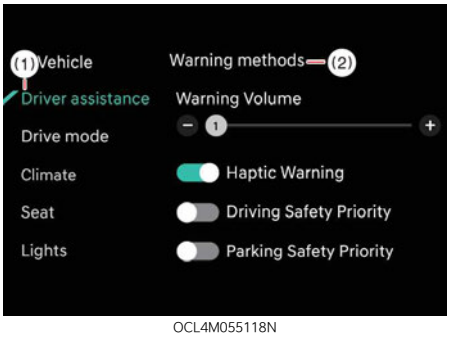
CAUTION

- Towing a trailer or mounting a carrier may reduce control stability. If necessary, disable the function and always drive with caution.
- Do not use the system when towing another vehicle or when other equipment that affects sensor operation or vehicle balance is installed, as it may not operate properly.
- When connecting a trailer or carrier, set the carrier menu. Setting the carrier menu will deactivate Lane Keeping Assist. Always drive with caution.

TIP

Pressing the Lane Driving Assist button ( ) turns OFF Lane Keeping Assist and deactivates Lane Safety.

Warning Methods



OCL4M055118N

(1) **Driver Assistance**
(2) **Warning Methods**

To change the Warning Methods settings while the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Warning Methods** on the infotainment system screen. You can change the following settings:

- **Warning Volume**: Adjusts the volume of the warning sound.
- **Haptic Warning**: Turns ON the steering wheel vibration warning.
- **Lane Safety Warning Sound**: Turns OFF the Lane Safety Warning Sound, when Haptic Warning is ON.
- **Driving Safety Priority**: Lowers all other audio volumes when the Driving Safety system sounds a warning.

TIP

- Your **Warning Methods** settings may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** maintain their last settings when you turn OFF and restart the vehicle.

- The **Warning Methods** setting menu may not be available on all vehicles.
- The Lane Safety Warning Sound can be set when both the Warning Volume and the Haptic Warning are on.

Lane Keeping Assist operation

Turning Lane Keeping Assist ON and OFF



OSG2H106028L

To turn Lane Keeping Assist ON or OFF, press and hold for more than 2 seconds the Lane Driving Assist ( ) button on the steering wheel while the vehicle is ON.
The gray or green indicator ( ) appears on the instrument cluster if you turn ON Lane Keeping Assist.

TIP

- If the operating conditions of Lane Keeping Assist are not met, the gray indicator ( ) appears on the instrument cluster.
- If the operating conditions of Lane Keeping Assist are met, the green indicator ( ) appears on the instrument cluster.

Automatic Activation

Lane Keeping Assist automatically turns on in the following situations:
- When both Lane Following Assist (LFA) and Smart Cruise Control (SCC) are activated.
- When Highway Driving Assist (HDA) is activated. (if equipped)

If Lane Keeping Assist is automatically turned on under these conditions, attempting to turn off Lane Keeping Assist will display a warning, and Lane Keeping Assist will not turn off.
To turn off Lane Keeping Assist, temporarily deactivate Smart Cruise Control or turn off the driving assistance functions by pressing the Lane Keeping Assist or Driving Assist button, then try again.

WARNING

Lane Keeping Assist will return to the previously set state when the driving assistance functions are turned off.

Warning and control

The Lane Keeping Assist function has the following warnings and controls:
- Lane Departure Warning
- Lane Keeping Assist

Lane Departure Warning (left)



OSG2H006019L

Lane Departure Warning (right)



OSG2H006020L

Lane Departure Warning

The Lane Departure Warning is issued through a green indicator ( ) light on the instrument cluster, a blinking indicator in the direction you departed from, an audible warning sound, and steering wheel vibration.

Lane Departure Warning can activate in the following conditions.
- Your driving speed: Approximately 40-120 mph (60-200 km/h)
- When road conditions are suitable for operation (lane width, curvature, etc.)

Lane Keeping Assist

The green indicator ( ) light blinks on the instrument cluster, and the steering wheel makes adjustments to keep the vehicle inside the lane.

Lane Keeping Assist can activate in the following conditions.
- Your driving speed: Approximately 40-120 mph (60-200 km/h)
- When road conditions are suitable for operation (lane width, curvature, etc.)

WARNING

Lane Keeping Assist will not operate when the vehicle speed is below 35 mph (55 km/h) or exceeds 130 mph (210 km/h).

Hands-off warning



OCL4M055099N

(1) **Keep hands on steering wheel**

If you take your hands off the steering wheel for several seconds, a warning message appears on the instrument cluster, and an audible warning sounds in stages.
The Hands-off warning will stop when the driver grips the steering wheel.

WARNING

- Steering assistance may not activate if you hold the steering wheel very tight or steer over a certain degree.
- Lane Keeping Assist does not operate at all times. It is your responsibility to safely steer the vehicle and maintain the vehicle in its lane.
- The hands-off warning message may appear late, depending on road conditions. Always keep your hands on the steering wheel while driving.
- If you wear gloves or hold the steering wheel very lightly, the hands-off warning message may appear because Lane Keeping Assist may not recognize that you have your hands on the steering wheel.
- If you attach objects to the steering wheel, the hands-off warning may not work properly.

TIP

- Even when the steering is assisted by Lane Keeping Assist, you may still control the steering wheel.
- The steering wheel may feel heavier or lighter than usual when the steering wheel is being assisted by Lane Keeping Assist.
- If the interior camera detects an abnormal driver condition, Lane Keeping Assist may activate earlier than usual. (if equipped)
- In the following situations, the steering wheel may feel heavier for safety:
  - When the driver is inattentive, such as not looking at the road ahead or in the direction of lane departure, or when a Hands-Off warning is triggered.
  - When a vehicle is approaching in the same direction in the lane toward which departure is occurring.
  - When a vehicle is approaching from the opposite direction in the lane toward which departure is occurring (across the center line).
- When the lane is recognized, the lane color in the cluster changes from gray to white.

Lane undetected



OSG2H006021L

Lane detected



OSG2H006022L

- The lanes displayed in the cluster may differ from the actual lanes.
- For more details on cluster settings, refer to "LCD display" on page 158.
- If you select Highway Lane Change Assist, the green lane appears on the instrument cluster (if equipped).
- The images or colors may display differently depending on the specifications of the instrument cluster or theme.

Lane Keeping Assist malfunction and limitations

Lane Keeping Assist malfunction

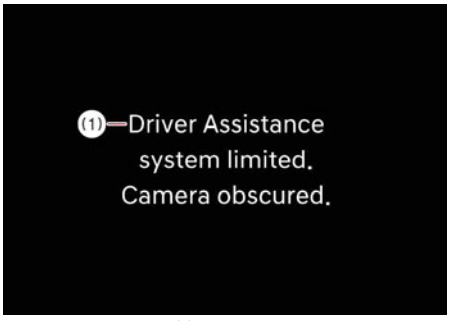


OCL4M055096N

(1) **Check Driver Assistance system**

When Lane Keeping Assist is not working properly, the Master warning light ( ), and the yellow indicator ( ) light appear on the instrument cluster, along with a warning message.
If a warning message appears, have your vehicle inspected by an authorized Kia dealer.

Lane Keeping Assist disabled



OCL4M055097N

(1) **Driver Assistance system limited. Camera obscured.**

If foreign material (such as snow or rain) obscure the sensors or the windshield where the front view camera is located, it may affect detection and render Lane Keeping Assist temporarily limited or disabled.
In this case, a warning message displays with the Master warning light (⚠) and the Lane safety warning lights (🚗) on the instrument cluster. This is normal operation.
Lane Keeping Assist should operate properly after cleaning snow, rain or foreign materials. Always keep it clean.
If Lane Keeping Assist still does not operate properly after you clean foreign materials (such as snow or rain) from the sensor or remove obstructions (such as a trailer or carrier) from the rear bumper, have your vehicle inspected by an authorized Kia dealer.

⚠ WARNING

- Even when a warning message or warning light does not appear on the instrument cluster, Lane Keeping Assist may not operate properly.
- Even after you start the vehicle again, Lane Keeping Assist may not function properly if the obstruction or malfunction persists.

ⓘ TIP

The warning information can be found in the service messages of the utility information view on the cluster display.

Limitations of Lane Keeping Assist

Lane Keeping Assist may not operate properly or may operate unexpectedly in certain circumstances, including the following

- The lane is contaminated or difficult to detect because:
  - The lane markings (or road edges) are covered with rain, snow, dirt, oil, and so on.
  - When the road surface is wet or the lane and road colors are not sufficiently distinguishable.
  - There are markings (or road edges) near the lane, or the markings (or road edges) look similar to lane markings.
  - The lane marking (or road edge) is indistinct or damaged.

  - When the shadow of objects around the road (median conditions, crash barriers, noise barriers, surrounding bushes, etc.) or the shadow of a vehicle covers the lane.
  - When a long object is lying on the road.
  - When there are longitudinal cracks on the road.
- The lane number increases or decreases, or the lane markings (or road edges) cross.
- There are more than two lane markings (or road edges).
- 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 crosswalk markings or road signs.
- The lane suddenly disappears, such as at an intersection.
- The lane or road 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, and so on.
- You are driving extremely close to the vehicle ahead, or it is covering the lane marking (or road edge).
- When driving a sharp curved road
- When driving in a bus-only lane or in the lane immediately to the left or right of a bus-only lane

TIP

For more information about the limitations of the front view camera, refer to "Forward Collision-avoidance Assist (FCA) (Sensor Fusion)" on page 418.

WARNING

- You are responsible for driving safely and controlling the vehicle. Do not rely on Lane Keeping Assist and drive dangerously.
- Lane Keeping Assist may stop operating or may not work properly depending on road conditions and surroundings. Always be cautious while driving.
- Refer to "Lane Keeping Assist malfunction and limitations" on page 456 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.
- Lane Keeping Assist may not display a warning message or generate an audible warning if any other function's warning message is displayed or audible warning is generated.
- You may not hear the warning sound of Lane Keeping Assist if the surroundings are noisy. Adjust the vehicle volume appropriately and always pay attention to the surroundings.
- 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:
  - When the turn signal is turned on or within a certain period of time after it is turned off
  - 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 turns quickly on a curved road.
  - The vehicle changes lanes suddenly.
  - The vehicle brakes suddenly.
- Loading freight exceeding the maximum load or placing freight unevenly may impede safe driving. This may also prevent Lane Keeping Assist from operating properly.

Lane Following Assist (LFA) (if equipped)

Lane Following Assist can detect lane markings or a vehicle ahead on the road and center your vehicle in the lane.

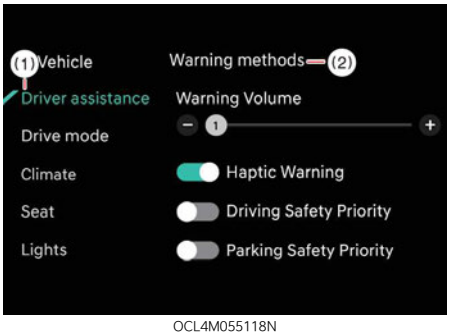
Detection sensor

Please refer to "Detecting sensor(s)" on page 415 for the applicable sensors and their locations. The front view camera detects lane markings and vehicles ahead.

> **TIP**
>
> For more information about the front view camera, refer to "Forward Collision-avoidance Assist (FCA) (Sensor Fusion)" on page 418.

Lane Following Assist settings

Warning Methods



OCL4M055118N

(1) **Driver Assistance**
(2) **Warning Methods**

To change the Warning Methods settings while the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Warning Methods** on the infotainment system screen. You can change the following settings:

- **Warning Volume**: Adjusts the volume of the warning sound.
- **Driving Safety Priority**: Lowers all other audio volumes when the Driving Safety system sounds a warning.

> **CAUTION**
>
> - Towing a trailer or mounting a carrier may reduce control stability. If necessary, disable the function and always drive with caution.
> - Do not use the system when towing another vehicle or when other equipment that affects sensor operation or vehicle balance is installed, as it may not operate properly.
> - When connecting a trailer or carrier, set the carrier menu. Setting the carrier menu will deactivate Lane Following Assist. Always drive with caution.

TIP

- Your **Warning Methods** settings may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** maintain their last settings when you turn OFF and restart the vehicle.
- The **Warning Methods** setting menu may not be available on all vehicles.

Lane Following Assist operation

Turning Lane Following Assist ON or OFF



OSG2H106028L

To turn Lane Following Assist ON, briefly press the **Lane Following Assist** button on the steering wheel while the vehicle is ON. The gray or green ( ) indicator light appears on the instrument cluster.

To turn Lane Following Assist OFF, press the **Lane Following Assist** button again.

Warning and control

TIP

The following warning messages appear on the instrument cluster:

- **Keep hands on steering wheel**
- **Lane Following Assist Canceled**

For more details, refer to the warning and control section of the function.

Lane Following Assist



OSG2H006023L

When both lanes or the preceding vehicle within the lane detected (if a lane is not detected during control based on both lanes) are recognized and the vehicle speed is below the operating speed, the system assists steering to keep the vehicle centered in the lane. An indicator ( ) will light up green on the instrument cluster.

- When both lanes are recognized: 0-95 mph (0-150 km/h)
- When a preceding vehicle is recognized: 0-45 mph (0-75 km/h)

TIP

When the steering wheel is not being assisted, the white indicator light ( ) blinks and changes to gray.

Hands-off warning



OCL4M055099N

(1) **Keep hands on steering wheel**

When you take your hands off the steering wheel for a few seconds, a warning message appears and an audible warning sounds in stages.

- First stage: Warning message
- Second stage: Warning message (red steering wheel) and audible warning



OCL4M055100N

(1) **Lane Following Assist deactivated**

If the driver continues not to hold the steering wheel, a Lane Following Assist deactivation warning will be displayed along with an audible alert, and Lane Following Assist will automatically turn off.

If Smart Cruise Control is active and the driver does not respond to the Hands-Off second stage warning message, the Emergency Stop function will be activated. For more details, refer to "Emergency Stop (ES)" on page 539.

The Hands-Off warning will stop when the driver grips the steering wheel.

WARNING

- Lane Following Assist may not assist with steering if you hold the steering wheel very tight or steer it over a certain degree.
- Lane Following Assist does not operate at all times. It is your responsibility to safely steer the vehicle and stay in your lane.
- The hands-off warning message may appear late depending on road conditions. Always keep 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 you wear gloves or hold the steering wheel lightly, Lane Following Assist may not detect your hands on the steering wheel and may display the hands-off warning.
- When Lane Following Assist reaches the system limit, the indicator will blink white and an audible warning will sound.
  - System limit: When the driver releases the steering wheel or the vehicle departs from the lane while Lane Following Assist is active.
- Lane Following Assist may not operate or may operate abnormally when navigating sharp curved roads.

TIP

- When both lane markings are detected, the lane lines on the instrument cluster change from gray to white.

Lane undetected



OSG2H006024L

Lane detected



OSG2H006023L

- The images or colors may display differently depending on the specifications of the instrument cluster or theme.
- If lane markings are not detected, steering wheel assistance by Lane Following Assist may be limited depending on whether a vehicle is ahead or on the driving conditions of the vehicle.
- You can control the steering wheel even when Lane Following Assist assists with steering.
- The steering wheel may feel heavier or lighter than usual when Lane Following Assist assists with steering.
- For more details on instrument cluster settings, refer to "Instrument cluster" on page 141.
- The lanes displayed in the cluster may differ from the actual lanes.

Lane Following Assist malfunction and limitations

Lane Following Assist malfunction



OCL4M055096N

(1) **Check Driver Assistance system**

When Lane Following Assist is not working properly, the Master warning light (⚠) appears on the instrument cluster, along with a warning message that lasts for several seconds.
If the warning message and Master warning light appear on the instrument cluster, have your vehicle inspected by an authorized Kia dealer.

TIP

You can check the Lane Following Assist warning message in the utility information view of the instrument cluster display window.

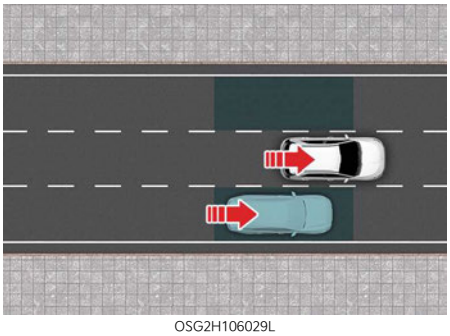
Limitations of Lane Following Assist

WARNING

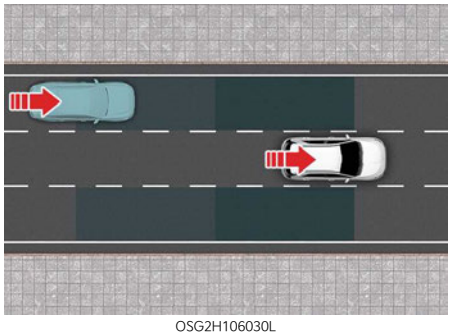
- For more information about Lane Following Assist warnings, refer to "Lane Keeping Assist (LKA)" on page 451.
- Loading freight exceeding the maximum load or placing freight unevenly may undermine driving safety. This may also prevent Lane Following Assist from operating properly.

Blind-spot Collision-avoidance Assist (BCA) (if equipped)

When driving above a certain speed, if a vehicle is detected in the rear-side warning area and a collision risk is assessed, the system alerts the driver with a warning light and sound. Additionally, if the risk of collision increases when moving forward, the system assists with braking to help avoid a collision.
The system also detects vehicles in the blind spot and provides a warning.

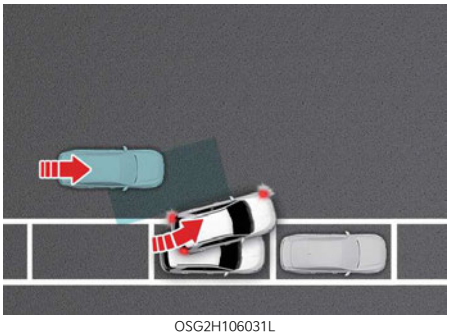


OSG2H106029L



OSG2H106030L

Blind-Spot Collision-avoidance Assist can help detect and inform you of a vehicle that is in your blind spot or approaching at a high speed from your blind spot area.



OSG2H106031L

When you are pulling out of a parking space, if Blind-Spot Collision-avoidance Assist determines that there is a collision risk with an approaching vehicle in your blind spot, it can help you avoid a collision by applying the brakes.

WARNING

- 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 other vehicles by at high speeds.
- The timing of the warning may vary if a vehicle is approaching at a high speed.

Detection sensor

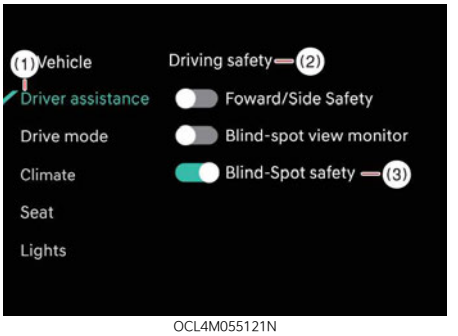
Please refer to "Detecting sensor(s)" on page 415 for the applicable sensors and their locations.

WARNING

- Never disassemble or damage the detection sensor assembly.
- If the detection sensor or the area near the sensor has been damaged or impacted in any way, Blind-Spot Collision-avoidance Assist may not operate properly, even if a warning message does not appear on the instrument cluster. Have your vehicle inspected by an authorized Kia dealer.
- If the detection sensors have been replaced or repaired, have your vehicle inspected by an authorized Kia dealer.
- If you paint or change the bumper where the rear corner radar sensors are mounted, 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 a license plate frame, or objects such as a bumper sticker, film, or bumper guard, near the rear corner radar.
- Blind-Spot Collision-avoidance Assist may not work properly if the bumper is replaced, the surroundings of the rear corner radar are damaged, or paint is applied.
- If you install a trailer, carrier, and so on, 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



OCL4M055121N

(1) **Driver Assistance**
(2) **Driving Safety**
(3) **Blind-Spot Safety**

While the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Driving Safety > Blind-Spot Safety** on the infotainment system screen.

Blind-Spot Safety: Blind-Spot Collision-Avoidance Assist warns you and assists with braking depending on the collision risk levels.



OCL4M055101N

(1) **Blind-Spot Safety System is Off**

When you activate Blind-Spot Collision-Avoidance Assist or restart the vehicle with this function activated, the warning light on the outside rearview mirror appears for approximately 3 seconds. When you restart the vehicle without Blind-Spot Collision-Avoidance Assist activated, a warning message appears on the instrument cluster.

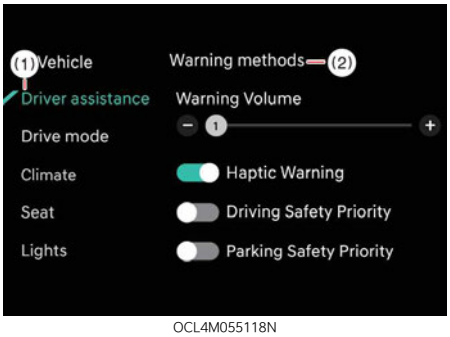
TIP

If you turn OFF Blind-Spot Safety, always be aware of your surroundings and drive safely.

CAUTION

- Do not use the system when towing a trailer or another vehicle, or when a carrier or other equipment that may affect sensor performance or vehicle balance is installed. The system may not operate properly.
- When connecting a trailer or carrier, set the carrier menu. Setting the carrier menu will deactivate Blind-Spot Collision-Avoidance Assist. Always drive with caution.

Warning Methods



OCL4M055118N

(1) **Driver Assistance**

(2) **Warning Methods**

To change the Warning Methods settings while the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Warning Methods** on the infotainment system screen. You can change the following settings:

- **Warning Volume**: Adjusts the volume of the warning sound.

- **Haptic Warning**: Turns ON the steering wheel vibration warning.
- **Blind-Spot Safety Warning Sound**: Blind-Spot Safety Warning Sound can be turned off separately.
- **Driving Safety Priority**: Lowers all other audio volumes when the Driving Safety system sounds a warning.

TIP

- Your **Warning Methods** settings may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** maintain their last settings when you turn OFF and restart the vehicle.
- The setting menu may not be available for your vehicle depending on your vehicle features and specifications.

Blind-Spot Collision-avoidance Assist operation

Blind-Spot Collision-avoidance Assist operates as follows:
- Collision Warning (while driving)
- Collision-avoidance Assist (while departing)

Collision Warning (while driving)



OSG2H106032L

The warning light on the instrument cluster, outside rearview mirror, and head-up display (if equipped) appear when a vehicle in either of the surrounding lanes is detected from the rear.
A vehicle is detected in the following conditions:
- Your speed is above 12 mph (20 km/h).
- The speed of the vehicle in your blind spot is above 7 mph (10 km/h).
- When the target enters the operating area of the function.

With vehicle detection in use, Collision Warning will alert you when you activate the turn signal to make a lane change while there is a car in your blind spot.
- Collision warning will alert you with the warning lights on the instrument cluster, outside rearview mirror, and heads-up display (if equipped), an audible warning, and steering wheel vibration.
- When you turn OFF the turn signal or move away from the lane, the collision warning cancels, and the function returns to vehicle detection state.

Collision Warning operates under the following conditions:
- Your speed is above 25 mph (40 km/h).
- The speed of the vehicle in your blind spot is above 7 mph (10 km/h).
- When a target enters the warning area and the turn signal is activated in the same direction.

WARNING
- The detecting range of the front 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 2 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 next to the turn signal will not operate.

TIP
- 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.
- The images or colors may display differently depending on the specifications of the instrument cluster or theme.

Collision-avoidance Assist (while departing)



OSG2H006050L

(1) **Emergency Braking**

The warning light on the outside rearview mirror, head-up display (if equipped), an audible warning, and steering wheel vibration warn you of a collision. This function assists in braking control to prevent a collision with a vehicle approaching from your blind spot.

Collision-avoidance Assist activates in the following conditions:
- Your speed is below 2 mph (3 km/h).
- The speed of the vehicle in your blind spot is above 3 mph (5 km/h).
- Gear position: Any gear other than R (Reverse) or P (Park)
- When a collision with the detected object is expected



OSG2H006090L

(1) **Drive carefully**

When the vehicle is stopped due to Emergency Braking, a warning message appears on the instrument cluster. For your safety, engage the brake pedal immediately and check the surroundings.
Brake control ends approximately 2 seconds after Emergency Braking stops your vehicle.

⚠ WARNING

- The Collision-Avoidance Assist is deactivated in the following situations:
  - When the vehicle moves a certain distance into the adjacent lane
  - When the vehicle moves out of the direction of collision risk
  - When the steering wheel is turned sharply
  - When the brake pedal is pressed
  - When Forward Collision-Avoidance Assist is activated.
- After the Blind-Spot Collision-Avoidance Assist operates or after changing lanes, make sure to return to the center of the lane. If you continue driving close to the lane line without moving back to the center, Blind-Spot Collision-Avoidance Assist will not operate.
- Always set the Blind-spot Collision-avoidance Assist after stopping in a safe location.
- Blind-Spot Collision avoidance may not display a warning message or generate an audible warning if any other function's warning message is displayed or audible warning is generated at the same time.
- You may not hear the warning sound of Blind-Spot Collision-avoidance Assist if your surroundings are noisy. Always pay attention and keep volume within the vehicle at a moderate level.
- Blind-Spot Collision-avoidance Assist may not operate if you engage the brake pedal to avoid a collision.
- When Blind-Spot Collision-avoidance Assist is operating, the function's braking control cancels automatically when you excessively engage the accelerator pedal or sharply steer the vehicle.
- During Blind-Spot Collision-avoidance Assist operation, the vehicle may stop suddenly, injuring passengers and shifting loose objects. Always fasten the seat belts and keep loose objects secured.
- 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, may not be able to avoid collisions.

- Blind-Spot Collision-avoidance Assist may warn you late or not at all, depending on the road and driving conditions.
- You are responsible for safe operation of the vehicle. Do not rely solely on Blind-Spot Collision-avoidance Assist for driving. Always check your surroundings and drive safely.
- Never rely solely on Blind-Spot Collision-avoidance to avoid a collision with people, animals, or objects. It may cause serious injury or death.

⚠ WARNING

If the Electronic Stability Control (ESC) system is in any of the following conditions, braking control may not operate even if a warning message is displayed on the cluster.

- The ESC warning light is illuminated.
- ESC is engaged in a different function.

Blind-Spot Collision-avoidance Assist malfunction and limitations

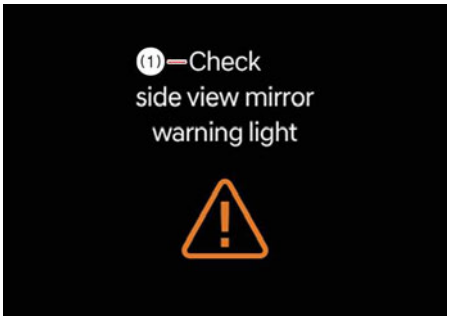
Blind-Spot Collision-Avoidance Assist malfunction



OCL4M055096N

(1) **Check Driver Assistance system.**

When Blind-Spot Collision-Avoidance Assist is not working properly, the Master warning light (⚠) appears on the instrument cluster, along with a warning message, which lasts for several seconds. You can check the warning-related functions in the Service Messages of the Utility Information View on the cluster display. If this occurs, have your vehicle inspected by an authorized Kia dealer.



OCL4M055102N

(1) **Check side view mirror warning light**

When the outside rearview mirror warning light is not working properly, the Master warning light (⚠) appears on the instrument cluster, along with a warning message, which lasts for several seconds. If this occurs, have your vehicle inspected by an authorized Kia dealer.

Blind-Spot Collision-Avoidance Assist disabled



OCL4M055098N

(1) **Driver Assistance system limited. Radar blocked.**

When foreign material (such as snow or rain) covers the rear bumper near the rear corner radar or sensor, or when you install a trailer or carrier, it can reduce the detection performance and temporarily limit or disable Blind-Spot Collision-Avoidance Assist.

A warning message and the Master warning light (⚠) display on the instrument cluster. This does not indicate a Blind-Spot Collision-Avoidance Assist malfunction.

Blind-Spot Collision-Avoidance Assist should operate properly after you remove foreign material (such as snow or rain) from the sensor or obstructions (such as a trailer or carrier) from the rear bumper then restart the vehicle. Always keep it clean.

If Blind-Spot Collision-Avoidance Assist still does not operate properly after you remove foreign material (such as snow or rain) from the sensor or obstructions (such as a trailer or carrier) from the rear bumper, have your vehicle inspected by an authorized Kia dealer.

⚠ WARNING

- Even when a warning message does not appear on the instrument cluster temporarily, Blind-Spot Collision-Avoidance Assist may not operate properly.

- Blind-Spot Collision-Avoidance Assist may not operate properly in an area (such as, open terrain) where any objects are not detected right after you turn ON the vehicle, or when the detection sensor is blocked with foreign material right after you turn ON the vehicle.

WARNING

Turn OFF Blind-Spot Collision-Avoidance Assist to install or remove a trailer, carrier, or other attachment. Turn ON Blind-Spot Collision-Avoidance Assist when you are finished.

TIP

You can check the Blind-Spot Collision-Avoidance Assist status in the service message of the utility information view of the instrument cluster display window.

Limitations of Blind-Spot Collision-Avoidance Assist

Blind-Spot Collision-Avoidance Assist may operate abnormally or unexpectedly under the following circumstances:

- There is inclement weather, such as heavy snow or rain.
- The detection sensor is covered with snow, rain, dirt, and so on.
- The ambient temperature around the detection sensor is very high or low.
- The detection sensor is blocked while you drive near a vehicle, pillar, or wall.
- You are driving on a highway ramp or through a tollgate.
- The pavement contains abnormally metallic components (such as debris left from subway construction).
- There are fixed objects near the vehicle, such as sound barriers, guardrails, central dividers, entry barriers, street lights, signs, tunnels, walls, and so on.
- You are driving on a narrow road with overgrown foliage.
- When driving in areas with few surrounding vehicles or structures (e.g., desert, plains, suburbs).
- You are driving on a wet road surface.
- Other vehicles are moving very close behind you or passing you.
- Other vehicles are moving very fast when passing you.
- You pass another vehicle.
- You change lanes.
- You and a vehicle next to you accelerate simultaneously.
- A vehicle in the next lane moves 2 lanes away from you, or the vehicle 2 lanes away moves to the lane next to you.
- You have installed a trailer or carrier near the rear corner radar.
- You cover the bumper near the rear corner radar with objects such as a bumper sticker, bike rack, and so on.
- The bumper near the front or rear corner radar is damaged, or the radar is out of position.
- When snow chains or wheels of a different specification are installed.
- Your vehicle height is low or high due to heavy loads, abnormal tire pressure, and so on.
- The following objects are detected:
  - A motorcycle or bicycle.
  - A vehicle towing a flat-bed trailer.

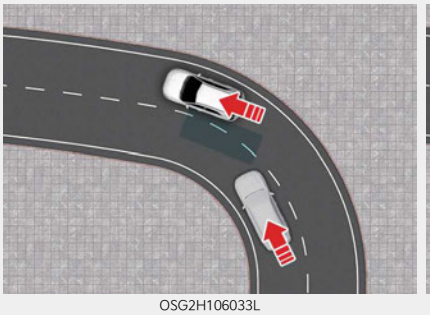
- A large vehicle, such as a bus or truck.
- A moving obstacle, such as a pedestrian, animal, shopping cart, or stroller.
- A shorter vehicle such as a sports car.

Pay extra attention. Braking control may not operate under the following conditions:

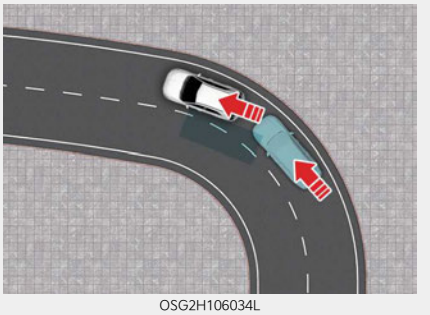
- The vehicle vibrates intensely while you drive over a bumpy road or pothole.
- You drive on a slippery surface such as snow, water, ice, and so on.
- Tire pressure is low or tires are damaged.
- The braking system has been modified.
- You steer abruptly.

WARNING

- Driving on a curved road



OSG2H106033L



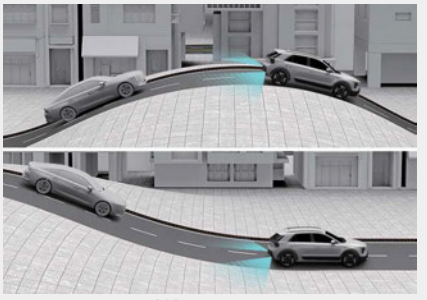
OSG2H106034L

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. On curved roads, check the road conditions and traffic in surrounding lanes directly.

On curved roads, the system may incorrectly operate by detecting vehicles in the same lane. Always pay attention to road and driving conditions while driving.

- Driving on an inclined road

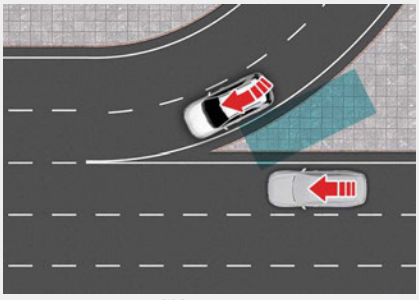


OSG2H106035L_2

Blind-Spot Collision-Avoidance Assist may not operate properly when you drive on a slope. The function may not detect the vehicle in the next lane, or may incorrectly detect the ground or a structure. Always pay attention to road and driving conditions.

The setting menu may not be available for your vehicle depending on your vehicle features and specifications.

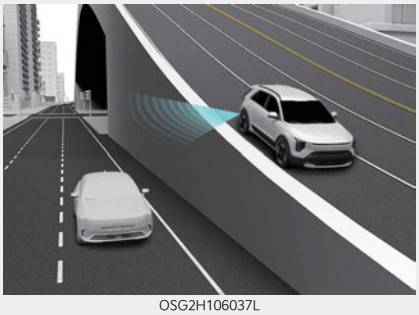
- Driving where the road is merging or dividing



OSG2H106036L

Blind-Spot Collision-Avoidance Assist may not operate properly when you drive 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.

- Driving where the heights of the lanes are different



OSG2H106037L

Blind-Spot Collision-Avoidance Assist may not operate properly when you drive where the heights of the lanes are different. The function may not detect the vehicle on a road with different lane heights (such as an underpass joining section, grade separated intersection, and so on). Always pay attention to the road and driving conditions.

⚠ 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 in areas with strong electromagnetic interference.
- Blind-Spot Collision-Avoidance Assist may not activate for approximately 3 seconds after you start the vehicle or initialize the front view camera or rear corner radars.

This device complies with Part 15 of the FCC rules.

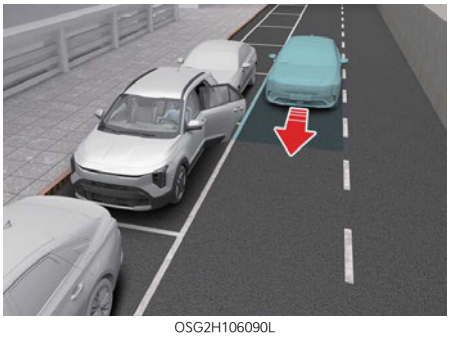
Operation is subject to the following two conditions:

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

TIP

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

Safe Exit Warning (SEW)



OSG2H106090L

While your vehicle is stopped, Safe Exit Warning may help you avoid a collision using a warning message and warning sound if it detects a vehicle approaching the rear corner of your vehicle in the warning zone and a passenger opens a door.

TIP

The timing of the warning may vary, depending on the speed of the approaching vehicle.

Detecting sensor

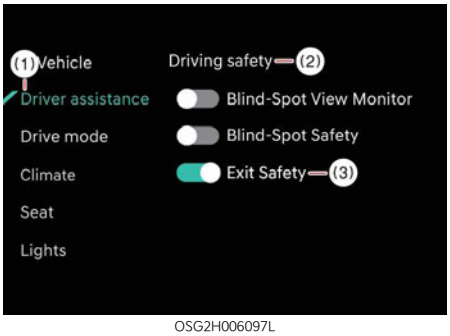
Please refer to "Detecting sensor(s)" on page 415 for the applicable sensors and their locations.

TIP

For more information about the rear corner radars, refer to "Blind-spot Collision-avoidance Assist (BCA)" on page 466.

Safe Exit Warning settings

Safe Exit



OSG2H006097L

(1) **Driver Assistance**
(2) **Driving Safety**
(3) **Exit Safety**

While the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Driving Safety > Exit Safety** on the infotainment system screen.

WARNING

If you deselect **Exit Safety**, Safe Exit Warning cannot warn you. You should always be aware of your surroundings.

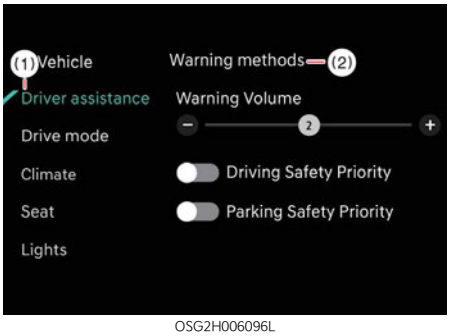
CAUTION

When using a Kia genuine Trailer Kit and the 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 while the function is inactive. (A Kia genuine Trailer Kit can determine whether a trailer is connected.)

TIP

If you restart the vehicle, Safe Exit Warning maintains its last setting.

Warning Methods



OSG2H006096L

(1) **Driver Assistance**
(2) **Warning Methods**

To change the Warning Methods settings while the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Warning Methods** on the infotainment system screen. You can change the following settings:

- **Warning Volume**: Adjusts the volume of the warning sound.
- **Driving Safety Priority**: Lowers all other audio volumes when the Driving Safety system sounds a warning.

TIP

- Your **Warning Methods** settings may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** maintain their last settings when you turn OFF and restart the vehicle.
- The **Warning Methods** setting menu may not be available on all vehicles.

Safe Exit Warning operation

Warning and control

Safe Exit Warning operates as follows:
- Vehicle detection
- Collision warning (when exiting the vehicle)

Vehicle Detection

Operates under the following conditions, and the warning indicator illuminates on the outside rearview mirror and the Head-Up Display (if equipped).
- Vehicle speed: 3 km/h (2 mph) or below.
- Minimum speed of the approaching vehicle in the blind spot: 6 km/h (4 mph) or above.
- When a detected object enters the warning zone.

Collision warning (when exiting the vehicle)



OSG2H106032L



OSG2H006053L

(1) **Collision Warning**

The warning indicator on the outside rearview mirror flashes, and a collision warning is provided through a warning message and an audible warning.
When the door is opened to exit the vehicle while in the Vehicle Detection state, the Collision Warning When Exiting is activated.

WARNING

- For your safety, change the settings only after parking the vehicle at a safe location.
- Safe Exit Warning may not display a warning message or generate an audible warning if any other function's warning message is displayed or audible warning is generated at the same time.
- You may not hear the warning sound of Safe Exit Warning if your surroundings are noisy.
- Safe Exit Warning does not operate in all situations and cannot prevent all collisions.
- Safe Exit Warning may warn you late or may not warn you depending on the vehicle and driving conditions. Always check the vehicle's surroundings.
- You and your passengers are responsible for accidents that occur while exiting the vehicle. Always check your surroundings before you exit the vehicle.

TIP

- After you turn OFF the vehicle, Safe Exit Warning operates for approximately 3 minutes, but turns OFF immediately if you lock the doors.
- The images or colors may display differently depending on the specifications of the instrument cluster or theme.

Safe Exit Warning malfunction and limitations

Safe Exit Warning malfunction



OCL4M055096N

(1) **Check Driver Assistance system.**

When Safe Exit Warning is not working properly, the Master warning light (⚠) appears on the instrument cluster, along with a warning message that lasts for several seconds. If the function does not work properly, have your vehicle inspected by an authorized Kia dealer.



OCL4M055102N

(1) **Check side view mirror warning light**

When the outside rearview mirror warning light is not working properly, the Master warning light (⚠) appears on the instrument cluster, along with a warning message that lasts for several seconds.
Have your vehicle inspected by an authorized Kia dealer.

Safe Exit Warning disabled

When foreign material (such as snow or rain) covers the rear bumper near the rear corner radar or sensor, or when you install a trailer or carrier, it can reduce the detection performance and temporarily limit or disable Safe Exit Warning.



OCL4M055098N

(1) **Driver Assistance system limited. Radar blocked.**

A warning message and the Master warning light (⚠) display on the instrument cluster. This does not indicate a malfunction of Safe Exit Warning.
Safe Exit Warning operates properly when you remove foreign material (such as snow or rain) from the sensor or obstructions (such as a trailer or carrier) from the rear bumper, then restart the vehicle.
If Safe Exit Warning still does not operate properly after you remove foreign material (such as snow or rain) from the sensor or obstructions (such as a trailer or carrier) from the rear bumper, have your vehicle inspected by an authorized Kia dealer.

⚠ WARNING

- Even when a warning message does not appear on the instrument cluster, Safe Exit Warning may not operate properly.
- Safe Exit Warning may not operate properly in open terrain where no objects are detected, or when the detection sensor is obscured by foreign material immediately after you turn ON the vehicle.

TIP

You can check the Safe Exit Warning status in the service message of the utility information view of the instrument cluster display window.

TIP

Turn OFF Safe Exit Warning to install or remove a trailer, carrier, or other attachment. Turn ON Safe Exit Warning when you are finished.

Limitations of Safe Exit Warning

Safe Exit Warning may operate abnormally or unexpectedly under the following circumstances:
- The rear corner radar area is blocked by a vehicle, pillar, wall, or similar object.
- You exit the vehicle where there is overgrown foliage.
- You exit the vehicle where the road is wet.
- An approaching vehicle is moving very fast or very slow.

TIP

For more information about the rear corner radars, refer to "Blind-spot Collision-avoidance Assist (BCA)" on page 466.

WARNING

- Safe Exit Warning may not operate properly in areas with strong electromagnetic interference.
- Safe Exit Warning may not activate for approximately 3 seconds after you restart the vehicle or initialize the rear corner radars.
- Even after you restart the vehicle, Safe Exit Warning may not function properly if an obstruction or malfunction persists.

This device complies with Part 15 of the FCC rules.

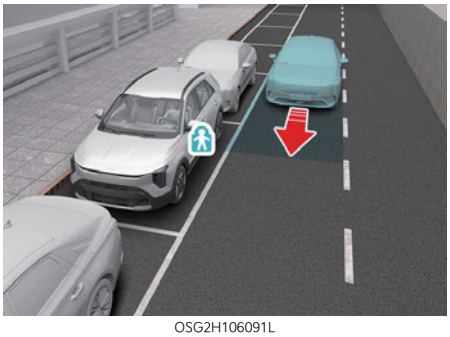
Operation is subject to the following two conditions:

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

TIP

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

Safe Exit Assist (SEA) (if equipped)



OSG2H106091L

While your vehicle is stopped, Safe Exit Assist may help you avoid a collision using a warning message and warning sound if it detects a vehicle approaching the rear corner of your vehicle in the warning zone and a passenger opens a door.

When the electronic child safety lock ( ) button is in the LOCK position and Safe Exit Assist detects a vehicle approaching from the rear in the warning zone, the electronic child safety lock ( ) button will not unlock, even if you press the button to unlock the rear doors.

TIP

The timing of the warning may vary depending on the speed of approaching vehicle.

Detecting sensor

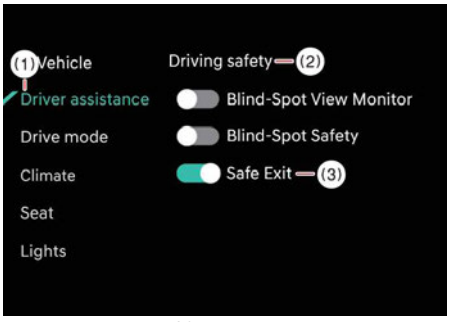
Please refer to "Detecting sensor(s)" on page 415 for the applicable sensors and their locations.

TIP

For more information about the rear corner radars, refer to "Blind-spot Collision-avoidance Assist (BCA)" on page 466.

Safe Exit Assist settings

Safe Exit



OCL4M055122N

(1) **Driver Assistance**
(2) **Driving safety**
(3) **Safe Exit**

While the vehicle is ON, tap **Setup** > **Vehicle** > **Driver Assistance** > **Driving Safety** > **Safe Exit** on the infotainment system screen.

WARNING

Always be aware of your surroundings. If you deselect **Safe Exit**, Safe Exit Assist cannot assist you.

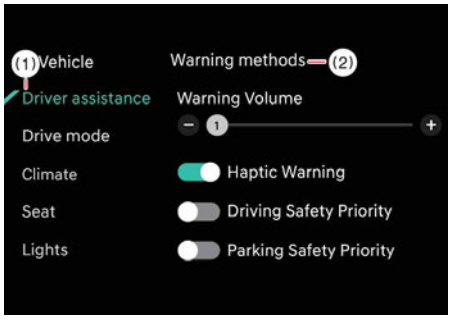
CAUTION

- Do not use the system when towing a trailer or another vehicle, or when a carrier or other equipment that affects sensor operation or vehicle balance is installed, as it may not operate properly.
- When connecting a trailer or carrier, set the carrier menu. Setting the carrier menu will deactivate Safe Exit Assist. Always drive with caution.

NOTE

When you restart the vehicle, Safe Exit Assist maintains its last setting.

Warning Methods



OCL4M055118N

(1) **Driver Assistance**
(2) **Warning Methods**

To change the Warning Methods settings while the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Warning Methods** on the infotainment system screen. You can change the following settings:

- **Warning Volume**: Adjusts the volume of the warning sound.
- **Driving Safety Priority**: Lowers all other audio volumes when the Driving Safety system sounds a warning.

TIP

- Your **Warning Methods** settings may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** maintain their last settings when you turn OFF and restart the vehicle.
- The **Warning Methods** setting menu may not be available on all vehicles.

Safe Exit Assist operation

Warning and control

Safe Exit Assist performs the following actions:
- Vehicle Detection
- Collision Warning (when exiting the vehicle)
- Safe Exit Assist linked to Electronic child safety lock

Vehicle Detection

Operates under the following conditions, and the warning indicator illuminates on the outside rearview mirror and the Head-Up Display (if equipped).
- Vehicle speed: 3 km/h (2 mph) or below.
- Minimum speed of the approaching vehicle in the blind spot: 6 km/h (4 mph) or above.
- When a detected object enters the warning zone.

Collision Warning (when exiting the vehicle)



OSG2H106032L



OSG2H006053L

(1) **Collision Warning**

The warning light on the outside rearview mirror blinks, a warning message appears on the instrument cluster, and an audible warning sounds.
- Collision Warning alerts you when exiting the vehicle under the following circumstances:
  - Your speed: below 3 km/h (2 mph)
  - The speed of a vehicle approaching from the rear: above 6 km/h (4 mph)

Safe Exit Assist linked to Electronic child safety lock



OLQ2A005110

(1) **Check traffic in the blind spot, then try again**

The warning light on the outside rearview mirror blinks and a warning message appears on the instrument cluster.

- The Safe Exit Assist linked to Electronic child safety lock blocks the release of the child safety lock even if the electronic child safety lock ( ) button is pressed when a vehicle is detected under the following conditions:
  - Your speed is below 3 km/h (2 mph)
  - The speed of a vehicle approaching from the rear: above 6 km/h (4 mph)
  - A detected object enters the warning zone.

TIP

For more information about the Electronic child safety lock button, refer to "Electronic child safety lock system" on page 64.

TIP

If you press the Electronic child safety lock button within 10 seconds after a warning message appears, Safe Exit Assist determines that you have unlocked the doors while acknowledging the rear status. The Electronic child safety lock turns OFF (as shown on the button indicator) and the rear doors unlock. Always check your surroundings before pressing the Electronic child safety lock button.

TIP

If you attempt to open a rear door from the outside, it opens regardless of Safe Exit Assist operation.

TIP

- For your safety, change the settings only after parking the vehicle at a safe location.
- Safe Exit Assist may not display a warning message or generate an audible warning if any other function's warning message is displayed or audible warning is generated at the same time.
- You may not hear the warning sound if your surroundings are noisy.

- Safe Exit Assist does not operate in all situations and cannot prevent all collisions.
- Safe Exit Assist may warn you late or may not warn you depending on the road and driving conditions. Always check the vehicle's surroundings.
- You and your passengers are responsible for accidents that occur while exiting the vehicle. Always check your surroundings before you exit the vehicle.
- Do not intentionally test the Safe Exit Assist, as it may result in serious injury or death.

TIP

- After you turn the vehicle OFF, Safe Exit Assist operates approximately for 3 minutes, but turns OFF immediately if you lock the doors.
- The images or colors may display differently depending on the specifications of the instrument cluster or theme.

Safe Exit Assist malfunction and limitations

Safe Exit Assist malfunction



OCL4M055096N

(1) **Check Driver Assistance system**

When Safe Exit Assist is not working properly, the Master warning light ( ) appears on the instrument cluster, along with a warning message that lasts for several seconds. If it does not work properly, have your vehicle inspected by an authorized Kia dealer.



OCL4M055102N

(1) **Check side view mirror warning light**

When the outside rearview mirror warning light is not working properly, the Master warning light

(⚠) appears on the instrument cluster, along with a warning message that lasts for several seconds.
Have your vehicle inspected by an authorized Kia dealer.

Safe Exit Assist disabled

When foreign material (such as snow or rain) covers the rear bumper near the rear corner radar or sensor, or when you install a trailer or carrier, it can reduce the detection performance and temporarily limit or disable Safe Exit Assist.



OCL4M055098N

(1) **Driver Assistance system limited. Radar blocked.**

A warning message and the Master warning light (⚠) display on the instrument cluster. This does not indicate a malfunction of Safe Exit Assist.
Safe Exit Assist operates properly when you remove foreign material (such as snow or rain) from the sensor and restart the vehicle. Always keep it clean.
If Safe Exit Assist still does not operate properly after you remove foreign material (such as snow or rain) from the sensor, have your vehicle inspected by an authorized Kia dealer.

⚠ WARNING

- Even if a detection sensor warning message is not displayed or the warning light does not turn on temporarily, Safe Exit Assist may not operate properly.
- Safe Exit Assist may not operate properly in open terrain where no objects are detected, or when the detection sensor is blocked with foreign material immediately after you turn the vehicle ON.

TIP

You can check the Safe Exit Assist status in the service message of the utility information view of the instrument cluster display window.

TIP

Turn Safe Exit Assist OFF to install or remove a trailer, carrier, or other attachment. Turn Safe Exit Assist back ON when you are finished.

Limitations of Safe Exit Assist

Safe Exit Assist may operate abnormally or unexpectedly under the following circumstances:

- You exit the vehicle where there is overgrown foliage.
- You exit the vehicle where the road is wet.
- An approaching vehicle is moving very fast or very slow
- The area around the rear-side radar is blocked by a vehicle, pillar, wall, or other objects.

TIP

For more information about the rear corner radar, refer to "Blind-spot Collision-avoidance Assist (BCA)" on page 466.

WARNING

- Safe Exit Assist may not operate properly if there is strong electromagnetic interference.
- Safe Exit Assist may not activate for approximately 3 seconds after you restart the vehicle or initialize the rear corner radars.
- Even after you restart the vehicle, Safe Exit Assist may not function properly if the obstruction or malfunction persists.

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.

TIP

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

Blind-spot View Monitor (BVM) (if equipped)

Left



OSG2H106038L

Right



OSG2H106039L

To help you safely change lanes, Blind-spot View Monitor displays rear blind spots in the instrument cluster when you use the turn signal.

Detection sensor

Please refer to "Detecting sensor(s)" on page 415 for the applicable sensors and their locations.

Blind-Spot View Monitor settings

Wide Rear View camera



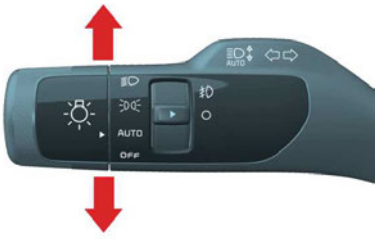
OCL4M055123N

(1) **Driver Assistance**
(2) **Driving Safety**
(3) **Blind-Spot view Monitor**

While the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Driving Safety > Blind-Spot View Monitor** on the infotainment system screen to change Blind-Spot View Monitor settings.

Blind-Spot View Monitor operation

Turn signal lever



OLQ2A105031

Blind-Spot View Monitor turns ON and OFF when you turn the turn signal ON and OFF.

Blind-Spot View Monitor

Operating conditions

- When you turn the left or right turn signal ON, the image appears on the instrument cluster.

Non-operating conditions

Blind-Spot View Monitor turns OFF under one of the following conditions:

- When you turn the turn signal OFF.
- When the hazard light is ON.
- When the instrument cluster displays another important warning.

Blind-Spot View Monitor malfunction

When Blind-Spot View Monitor does not work properly, the instrument cluster display flickers, or the camera image does not display normally, have your vehicle inspected by an authorized Kia dealer.

TIP

- Blind-Spot View Monitor may display objects at a different distance from what is shown on the infotainment system screen due to the correction of the Wide Side View camera images. Make sure to visually check the surroundings for safety.
- Always keep the camera lens clean to maintain optimal camera performance and Blind-Spot View Monitor operation. Do not clean the camera lens with chemical solvents that may damage it, including strong detergents that contain high alkaline or volatile organic solvents such as gasoline, acetone, and so on.

Manual Speed Limit Assist (MSLA)



OMQ4A055088

(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 (the set speed limit blinks and the chime sounds) until you return the vehicle speed within the speed limit.

Manual Speed Limit Assist operation

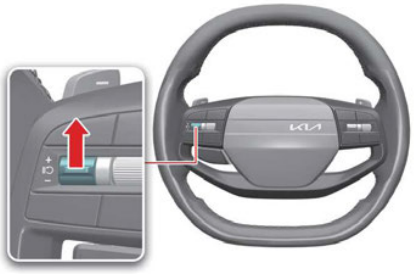
Setting the speed limit

1. Press and hold the Driving Assist ( ) button while driving at the desired speed. The Speed Limit (LIMIT) indicator appears on the instrument cluster.



OSG2H106040L

2. Push the (+) switch up or (—) switch down and release it while driving at the desired speed.
   Push the (+) switch up or (—) switch down and hold it. The speed increases or decreases to the nearest multiple of 5 mph (10 km/h) at first, then increases or decreases by 5 mph (10 km/h).



OSG2H106041L



OSG2H106042L

3. The instrument cluster displays the set speed limit (1).
   The set speed limit blinks and the chime sounds until you return the vehicle speed to the limit you set.



OMQ4A055089

TIP

- When the accelerator pedal is not engaged beyond the pressure point, the vehicle maintains 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 for your vehicle.

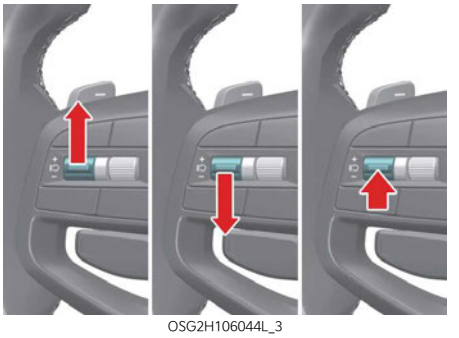
Temporarily pausing Manual Speed Limit Assist



OSG2H106043L

Press the (‖↻) switch to temporarily pause the set speed limit. The set speed limit turns OFF, but the Speed Limit (LIMIT) indicator stays ON.

Resuming Manual Speed Limit Assist



OSG2H106044L_3

To resume Manual Speed Limit Assist after pausing the function, push the (+), (—), and (‖↻) switches as follows:

- If you push the (+) switch up or (—) switch down, the vehicle speed sets to the current speed on the instrument cluster.
- If you push the (‖↻) switch, the vehicle speed resumes the preset speed.

Turning OFF Manual Speed Limit Assist



OSG2H106040L

Press the Driving Assist ( ) button to turn Manual Speed Limit Assist OFF. The Speed Limit (LIMIT) indicator disappears.

WARNING

Take the following precautions when using Manual Speed Limit Assist:

- Always set the vehicle speed below the posted speed limit.
- To avoid inadvertently setting a speed, keep Manual Speed Limit Assist OFF when not in use. Check that the Speed Limit (LIMIT) indicator is OFF.
- Manual Speed Limit Assist is not a substitute for proper and safe driving. It is your responsibility to always drive safely and 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 detected road signs and navigation system data to inform you of the posted speed limit or additional sign and help you maintain it. However, when navigation is not available, the system operates based on information recognized from road signs.

TIP

- Intelligent Speed Limit Assist may not operate properly if you use it in other countries.
- If your vehicle has a navigation system, the system needs regular updates for Intelligent Speed Limit Assist to operate properly.

Detection sensor

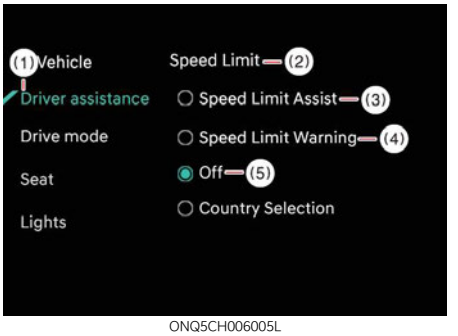
Please refer to "Detecting sensor(s)" on page 415 for the applicable sensors and their locations.

TIP

For more information about the front view camera, refer to "Forward Collision-avoidance Assist (FCA) (Sensor Fusion)" on page 418.

Intelligent Speed Limit Assist settings

Speed Limit



ONQ5CH006005L

(1) **Driver Assistance**
(2) **Speed limit**
(3) **Country selection**
(4) **Speed limit assist**
(5) **Speed limit warning**
(6) **Off**

While the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Speed Limit** on the infotainment system screen.

- **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 Offset Setting**: Sets the speed offset. The system issues an overspeed warning and adjusts the set speed based on the road's speed limit plus the selected offset value.
- **Speed Limit Assist**: Intelligent Speed Limit Assist informs you of the posted speed limit and additional road signs, and warns you when you drive the vehicle faster than the speed limit. Intelligent Speed Limit Assist also recommends changing the set speed of the Manual Speed Limit Assist or Smart Cruise Control functions to help you stay within the posted speed limit.

- **Speed Limit Warning**: Intelligent Speed Limit Assist informs you of the posted speed limit and additional road signs. Intelligent Speed Limit Assist also warns you when you drive the vehicle faster than the posted speed limit.
- **Off**: Intelligent Speed Limit Assist turns OFF.

TIP

Be sure to park in a safe place before setting Intelligent Speed Limit Assist.

TIP

- The Speed Limit and Speed Limit Warning functions operate based on an offset value added to the speed limit. Set the offset value to "0" to change or warn you of the speed according to the posted speed limit.
- Navigation-based Smart Cruise Control does not reflect the setting of the Speed Limit Offset function.

Intelligent Speed Limit Assist operation

Warning and control

Intelligent Speed Limit Assist has the following warnings and controls:

- Displaying the speed limit
- Speeding warning
- Changing the set speed
- Auto set speed change

TIP

Intelligent Speed Limit Assist warnings and controls operate based on adjusting the Offset to "0". For more information about adjusting the Offset setting, refer to "Intelligent Speed Limit Assist (ISLA)" on page 499.

Displaying the speed limit



OSG2H006025L

The instrument cluster displays the speed limit information.

TIP

- If Intelligent Speed Limit Assist cannot recognize speed limit information from the road, the instrument cluster displays the '---' sign. Please refer to "Intelligent Speed Limit Assist malfunction and limitations" on page 503 if the road signs are difficult for the function to recognize.
- Intelligent Speed Limit Assist provides other road sign information in addition to the posted speed limit. The additional road sign information provided may vary according to your region.
- The images or colors may display differently depending on the specifications of the instrument cluster or theme.

Speeding warning



OSG2H006026L

When you drive at a speed higher than the displayed speed limit, the red speed limit indicator appears.

Changing the set speed



OSG2H006027L



OSG2H006028L

If the posted speed limit on the road changes while you are operating Manual Speed Limit Assist or Smart Cruise Control, the instrument cluster displays an up or down arrow to inform you to change the set speed. You can change the set speed according to the speed limit by using the (+) or (—) switch on the steering wheel.
The set speed adjustment operates under the following condition:

• On roads with a speed limit of 20 mph (30 km/h) or higher.

Auto set speed change (if equipped with navigation)



OSG2PH005088

When you operate Manual Speed Limit Assist or Smart Cruise Control, if the speed you set is the same as the posted speed limit, the set speed automatically adjusts according to the speed limit afterward. The auto set speed change function operates on roads with a speed limit of above 45 mph (70 km/h). When you activate the function, the set speed displays in green on the instrument cluster.

TIP

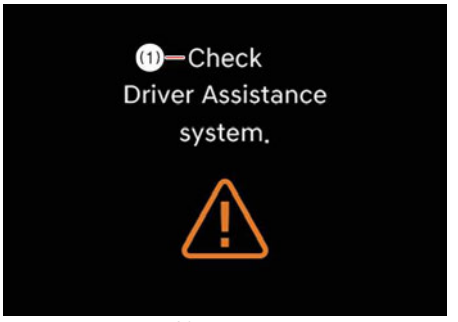
- When you drive at a speed lower than the speed limit, set the offset below "0", or push the (—) switch to decrease your set speed.
- Even after you change the set speed according to the posted speed limit, you can still drive the vehicle over the speed limit. Always check the traffic conditions and decelerate manually when necessary.
- Intelligent Speed Limit Assist operates using the speed unit you set in the instrument cluster. If you set the speed unit to a different unit than the one used in your country, Intelligent Speed Limit Assist may not operate properly.

TIP

- For more information about Manual Speed Limit Assist operation, refer to "Manual Speed Limit Assist (MSLA)" on page 495.
- For more information about Smart Cruise Control operation, refer to "Smart Cruise Control (SCC)" on page 519.

Intelligent Speed Limit Assist malfunction and limitations

Intelligent Speed Limit Assist malfunction



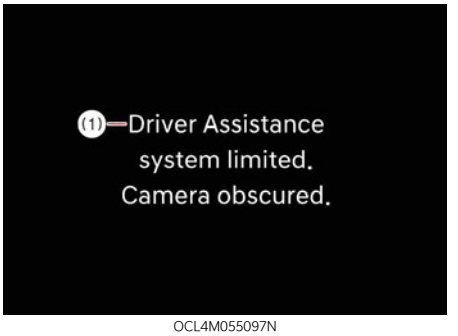
OCL4M055096N

(1) **Check Driver Assistance system.**

When Intelligent Speed Limit Assist is not working properly, the Master warning light ( ) and the Intelligent Speed Limit Assist indicator light ( ) appear on the instrument cluster, along with a warning message that lasts for several seconds.

If this occurs, have your vehicle inspected by an authorized Kia dealer.

Intelligent Speed Limit Assist disabled



OCL4M055097N

(1) **Driver Assistance system limited. Camera obscured.**

When foreign material (such as snow or rain) covers the windshield where the front view camera is located, it can reduce the detection performance and temporarily limit or disable Intelligent Speed Limit Assist.

If this occurs, a warning message and the Intelligent Speed Limit Assist indicator light ( ) display on the instrument cluster.

Intelligent Speed Limit Assist should operate properly when you remove foreign material (such as snow or rain) from the sensor. Always keep it clean.

If Intelligent Speed Limit Assist still does not operate properly after you remove foreign material (such as snow or rain) from the sensor, have your vehicle inspected by an authorized Kia dealer.

WARNING

- Even though a warning message or light does not appear on the cluster, Intelligent Speed Limit Assist may not operate properly.
- If you restart the vehicle with the sensors blocked or malfunctioning, Intelligent Speed Limit Assist may not operate properly until you fix the broken or covered state.

TIP

You can check the warning message in the service message of the utility information view of the instrument cluster.

Limitations of Intelligent Speed Limit Assist

Intelligent Speed Limit Assist may operate abnormally or unexpectedly under the following circumstances:

- The road sign is dirty or difficult to read.
  - The road sign is difficult to see due to inclement weather, such as rain, snow, or fog.
  - The road sign is partially obscured by surrounding objects or shadows.
  - The road sign is bent or installed at an angle.
- The road signs do not conform to the standard expected by Intelligent Speed Limit Assist.
  - The text or picture on the road sign is different from the standard expected by Intelligent Speed Limit Assist.
  - The road sign is installed between the main road 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
- When traffic signs are installed high above the road
- When the vehicle speed is high and there is insufficient time to recognize the traffic sign
- When frequently using turn signals in lanes adjacent to an exit
- When driving closely behind a preceding vehicle
- When supplementary signs or advertisements are installed near the traffic sign
- When communication with the map server is unstable
- When the navigation system reboots while driving
- When there is a change of country
  - When the vehicle crosses a national border
  - When the country setting is changed via the country selection menu
- The road signs are illuminated.
- Intelligent Speed Limit Assist incorrectly recognizes numbers or pictures in the street signs or other signs as the speed limit
- Intelligent Speed Limit Assist detects a sign on a nearby road.
- Multiple signs are installed close together
- A minimum speed limit sign is mistakenly recognized as a maximum speed limit sign.
- The brightness changes suddenly (for example, when you enter or exit a tunnel).
- You are not using the headlights, or the brightness of the headlights is weak at night or in a tunnel.
- Glare from the sun obstructs the front view camera's field of view.

- Road signs are difficult to recognize due to the reflection of sunlight, street lights, or oncoming vehicles
- The navigation or GPS information contains errors.
- You do not follow the guidance of the navigation.
- You are driving on a sharply or continuously curved road.
- You are driving over speed bumps, or driving up and down or left to right on steep inclines.
- The vehicle is shaking heavily.
- You are driving on a new road.
- You are driving on a road under construction.
- The navigation software updates while you are driving.

WARNING

- Intelligent Speed Limit Assist is a supplemental function that can help you comply with the posted speed limit. This function may not display the correct speed limit or control the driving speed properly.
- It is your responsibility to follow the speed limit.
- Intelligent Speed Limit Assist may not operate for 15 seconds after you start the vehicle or initialize or restart the front view camera.

TIP

For more information about the limitations of the front view camera, refer to "Forward Collision-avoidance Assist (FCA) (Sensor Fusion)" on page 418.

Driver Attention Warning (DAW) (if equipped)

Driver Attention Warning function

Driver Attention Warning monitors your driving pattern. When your attention appears to be below a certain level, Driver Attention Warning recommends a break to help with safe driving.

Leading Vehicle Departure Alert function

Leading Vehicle Departure Alert informs you when a detected vehicle ahead departs from a stop.

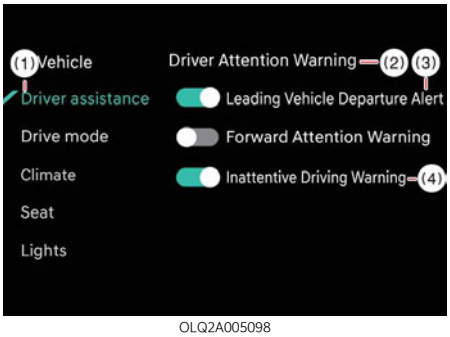
Detection sensor

During driving, the front camera is used as a detection sensor to recognize driving patterns and the departure of vehicles ahead. Please refer to "Detecting sensor(s)" on page 415 for the applicable sensors and their locations.

TIP

- Always keep the front view camera in good condition to maintain optimal performance of Driver Attention Warning.
- For more information about the front view camera, refer to "Forward Collision-avoidance Assist (FCA) (Sensor Fusion)" on page 418.

Driver Attention Warning settings



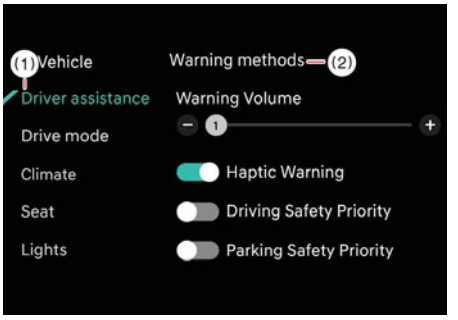
OLQ2A005098

(1) **Driver Assistance**
(2) **Driver Attention Warning**
(3) **Leading Vehicle Departure Alert**
(4) **Inattentive Driving Warning**

While the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Driver Attention Warning** on the infotainment system screen.

- **Leading Vehicle Departure Alert**: Driver Attention Warning will inform the driver when a detected vehicle in front departs from a stop.
- **Inattentive Driving Warning**: Inattentive Driving Warning of DAW can be turned on or off.

Warning Methods



OCL4M055118N

(1) **Driver Assistance**
(2) **Warning Methods**

To change the Warning Methods settings while the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Warning Methods** on the infotainment system screen. You can change the following settings:

- **Warning Volume**: Adjusts the volume of the warning sound.
- **Driving Safety Priority**: Lowers all other audio volumes when the Driving Safety system sounds a warning.

TIP

- Your **Warning Methods** settings may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** maintain their last settings when you turn OFF and restart the vehicle.
- The **Warning Methods** setting menu may not be available on all vehicles.

Driver Attention Warning operation

Inattentive Driving Warning function

The basic function of Driver Attention Warning is to advise the driver to take a break.

Taking a break



OCL4M055104N

(1) **Consider taking a break**

The Inattentive Driving Warning light ( ) blinks, a warning message appears on the instrument cluster, and an audible warning sounds to suggest that you take a break when your 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 before 4 minutes have passed since the function last suggested a break.

The driver's attention level is assessed based on the following criteria:

- The driver's individual driving patterns, such as steering and acceleration/deceleration
- Driving conditions, such as driving duration

The driver's attention level is reset under the following conditions:

- When the driver's seat belt is unfastened and the door is opened and closed while stopped
- When stopped for more than 10 minutes
- Upon restarting the vehicle

The rest recommendation operates under the following condition:

- Vehicle speed: 40 mph (60 km/h) or above

WARNING

For your safety, change the settings only after parking the vehicle at a safe location.

CAUTION

- Driver Attention Warning may suggest a break depending on your driving pattern or habits, even if you do not feel fatigued.
- Driver Attention Warning is a supplemental function and may not be able to determine whether you are being inattentive.
- If you feel fatigued, you should take a break at a safe location, even if Driver Attention Warning does not suggest a break.

Leading Vehicle Departure Alert function



OSG2H006030L

(1) **Leading vehicle is driving away**

When a detected vehicle ahead departs from a stop, Leading Vehicle Departure Alert will inform you by displaying a warning message on the instrument cluster and generating an audible warning sound.

WARNING

- Leading Vehicle Departure Alert may not display a warning message or generate an audible warning if any other function's warning message is displayed or an audible warning is generated at the same time.
- You are responsible for driving safely and controlling the vehicle.

TIP

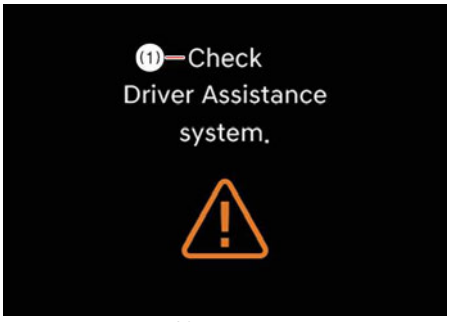
- Leading Vehicle Departure Alert is a supplemental function and may not alert you whenever the vehicle ahead departs from a stop.
- Always check the front of the vehicle and road conditions before departure.

TIP

The images or colors may display differently depending on the specifications of the instrument cluster or theme.

Driver Attention Warning malfunction and limitations

Driver Attention Warning malfunction



OCL4M055096N

(1) **Check Driver Assistance system.**

When Driver Attention Warning is not working properly,the Master warning light (⚠) appears on the instrument cluster, along with a warning message that lasts for several seconds.
If this occurs, have your vehicle inspected by an authorized Kia dealer.

Driver Attention Warning disabled



OCL4M055097N

(1) **Driver Assistance system limited. Camera obscured.**

When foreign material (such as snow or rain) covers the windshield where the front view camera is located, the front radar cover, the bumper, or the sensor, it can reduce the detecting performance and temporarily limit or disable Driver Attention Warning.
If this occurs, a warning message and the Master warning light (⚠) display on the instrument cluster. This does not indicate a malfunction of Driver Attention Warning.
Driver Attention Warning should operate properly when you remove foreign material (such as snow or rain) from the sensor.
If Driver Attention Warning still does not operate properly after you remove foreign material (such as snow or rain) from the sensor or obstructions (such as a trailer or carrier) from the rear bumper, have your vehicle inspected by an authorized Kia dealer.

WARNING

- If the camera is obstructed or malfunctioning, the obstructed or faulty state will remain even after restarting, and the driver attention warning may not operate properly.
- Driver Attention Warning may not operate properly in an open area where there is nothing to detect, or when the detection sensor is covered with foreign material after you turn the vehicle ON.

TIP

You can check the Driver Attention Warning message in the utility information view of the instrument cluster.

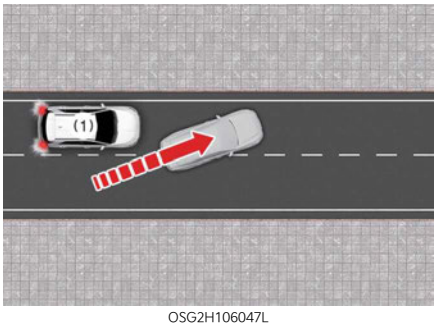
Limitations of Driver Attention Warning

Driver Attention Warning may operate abnormally or unexpectedly under the following circumstances:

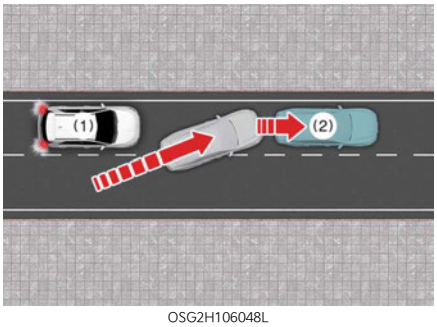
- Driving aggressively, such as during rapid acceleration or high-speed cornering.
- You frequently change lanes.
- Other functions of the Driver Assistance system, such as Lane Keeping Assist, are controlling the vehicle.
- Lane recognition is difficult, such as when lines are faint or worn out.

Leading vehicle departure alert function

- When a vehicle cuts in



OSG2H106047L

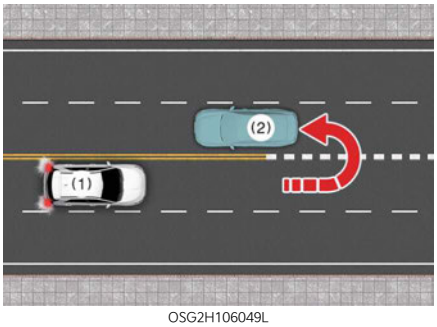


OSG2H106048L

(1) Your vehicle
(2) Vehicle ahead

If a vehicle cuts in ahead of you, Leading Vehicle Departure Alert may not operate properly.

- When the vehicle ahead sharply steers

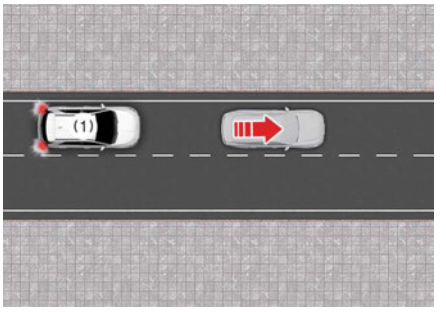


OSG2H106049L

(1) Your vehicle
(2) Vehicle ahead

If a vehicle ahead makes a sharp turn (to the left or right or a U-turn), Leading Vehicle Departure Alert may not operate properly.

- When the vehicle ahead abruptly departs

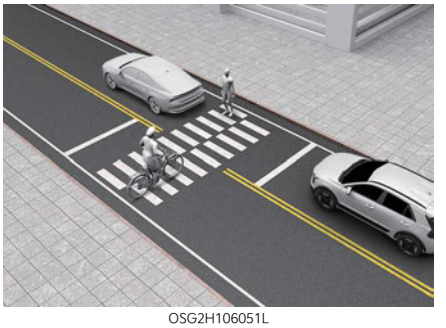


(1) Your vehicle

OSG2H106050L

If the vehicle ahead abruptly departs, Leading Vehicle Departure Alert may not operate properly.

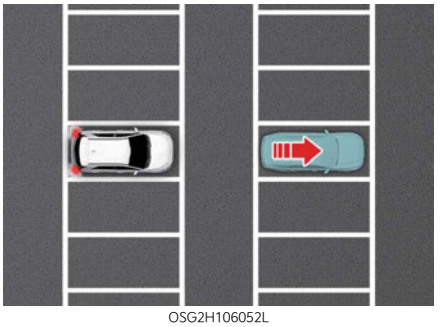
- When a pedestrian or cyclist is between you and the vehicle ahead



OSG2H106051L

If there is a pedestrian or cyclist between you and the vehicle ahead, Leading Vehicle Departure Alert may not operate properly.

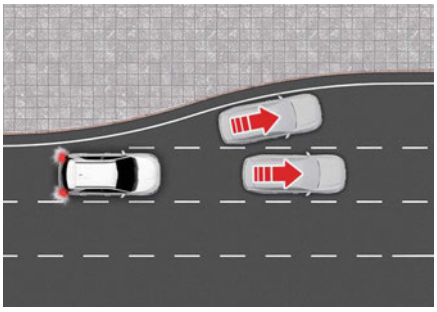
- When in a parking lot



OSG2H106052L

If a vehicle parked ahead 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



OSG2H106053L

If the vehicle is stopped and it is difficult to identify the vehicle ahead due to a lane split or merge in the front lane, Leading Vehicle Departure Alert may not operate properly.

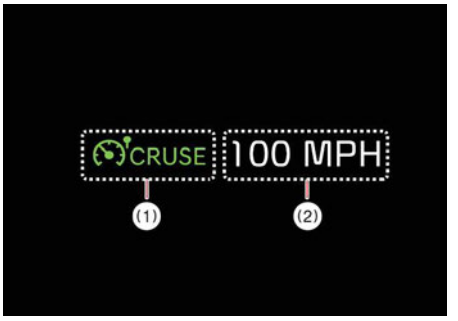
TIP

Driver Attention Warning may not activate until 15 seconds after you restart the vehicle or initialize the front view camera.

TIP

For more information about the front view camera, refer to "Forward Collision-avoidance Assist (FCA) (Sensor Fusion)" on page 418.

Cruise Control (CC)



OSG2H006120N

(1) Cruise indicator
(2) Set speed

Cruise Control will allow you to drive at speeds above 30 km/h (20 mph) without depressing the accelerator pedal.

Cruise Control operation

Setting speed



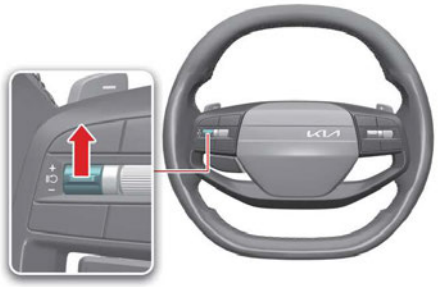
OSG2H106040L

1. Accelerate to the desired speed, which must be more than 30 km/h (20 mph).
2. Press the Driving Assist button at the desired speed. The set speed and Cruise indicator (CRUISE) will appear on the cluster.
3. Release the accelerator pedal.
   Vehicle speed will maintain the set speed even when the accelerator pedal is not depressed.

NOTE

- The vehicle may slightly slow down or speed up while driving uphill or downhill.
- The Driving Assist button symbol may vary depending on your vehicle option.

Increasing set speed



OSG2H106041L

- Push the + switch up and release it immediately. The set speed will increase by 1 km/h (1 mph) increments.
- To increase the set speed quickly, push and hold the (+) switch. The set speed will increase in increments of 10. If the cluster speed unit is mph, it will increase in multiples of 5.

  You can set a maximum speed of 160 km/h (100 mph).

Decreasing set speed



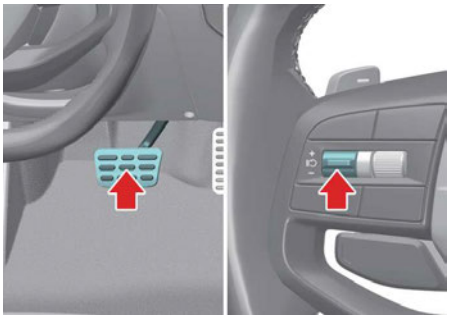
OSG2H106042L

- Push the — switch down and release it immediately. The set speed will decrease by 1 km/h increments.To decrease the set speed quickly, push and hold the — switch. The set speed will decrease in increments of 10.If the cluster speed unit is mph, it will decrease in multiples of 5.
- You can set a minimum speed of 30 km/h (20 mph).

Accelerating temporarily

If you want to speed up temporarily when Cruise Control is on, depress the accelerator pedal. To return to the set speed, take your foot off the accelerator pedal.
If you push the + switch up or — switch down at increased speed, the set speed will be set to the current incressased speed.

Temporarily pausing Cruise Control



OSG2H106046L_2

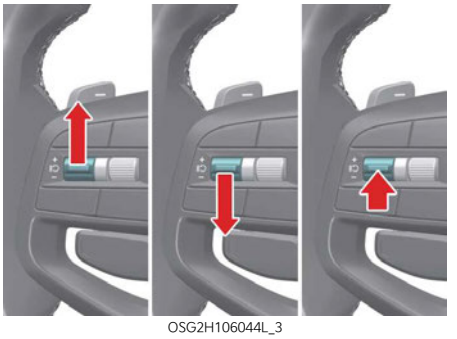
Cruise Control will be paused when:
- Depress the brake pedal.
- Press the switch.
- Shifting the gear to N (Neutral).
- Decreasing vehicle speed to less than approximately 30 km/h (20 mph).
- ESC (Electronic Stability Control) is operating.

The set speed will turn off but the Cruise indicator (CRUISE) will stay on.

NOTE

If Cruise Control pauses during a situation that is not mentioned, have your vehicle inspected by an authorized Kia dealer.

Resuming Cruise Control



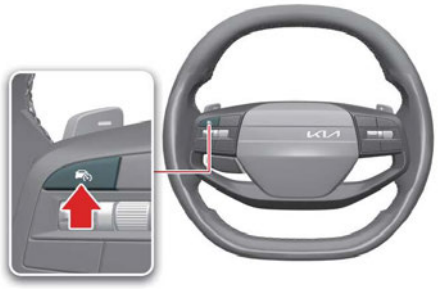
OSG2H106044L_3

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.
The vehicle speed must be above 30 km/h (20 mph) for Cruise Control to resume.

WARNING

Check the driving condition before using the switch. Driving speed may sharply increase or decrease when you press the switch.

Turning off Cruise Control



OSG2H106040L

Press the Driving Assist button to turn Cruise Control off. The Cruise (CRUISE) indicator will go off. Always press the Driving Assist button to turn Cruise Control off when not in use.

NOTE

If your vehicle is equipped with Manual Speed Limit Assist, press and hold the Driving Assist button to turn off Cruise Control. However, Manual Speed Limit Assist will turn on.

WARNING

Take the following precautions when using Cruise Control:

- Always set the vehicle speed under the speed limit in your country.
- Keep Cruise Control off when the function is not in use, to avoid inadvertently setting a speed. Check that the Cruise indicator (CRUISE) is off.
- Cruise Control does not substitute for proper and safe driving. It is the responsibility of the driver to always drive safely and should always be aware of unexpected and sudden situations from occurring.
- Always drive cautiously to prevent unexpected and sudden situations from occurring. Pay attention to the road conditions at all times.
- Do not use Cruise Control when it may be unsafe to keep the vehicle at a constant speed:
  - When driving in heavy traffic, or when traffic conditions make it difficult to drive at a constant speed
  - When driving on rainy, icy, or snow-covered roads
  - When driving on hilly or windy roads
  - When driving in windy areas
  - When driving with limited view (possibly due to bad weather, such as fog, snow, rain and sandstorm)
- Do not use Cruise Control when towing a trailer.

Smart Cruise Control (SCC) (if equipped)

Basic function

Smart Cruise Control can detect a vehicle ahead and help you maintain the appropriate following distance from it at the set speed.

Overtake Acceleration Assist function

When Smart Cruise Control determines that you are attempting to overtake a vehicle ahead, the function helps with accelerating.

Based On Driving Style function (if equipped)

Smart Cruise Control operates based on how you drive, taking into account distance between vehicles, acceleration, and reaction speed.

Detection sensors

The front camera and front radar are used as detection sensors to recognize vehicles ahead. Please refer to "Detecting sensor(s)" on page 415 for the applicable sensors and their locations.

CAUTION

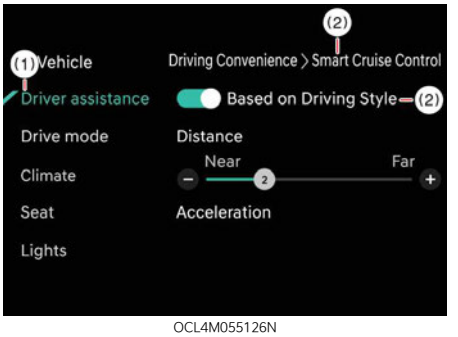
- Always keep the front view camera and front radar in good condition to maintain optimal performance of Smart Cruise Control.
- For more information about the front view camera and front radar, refer to "Forward Collision-avoidance Assist (FCA) (Sensor Fusion)" on page 418.

Smart Cruise Control settings

Smart Cruise Control

While the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Driving Convenience > Smart Cruise Control** on the infotainment system screen to set the distance, acceleration, and reaction speed.

Based on driving style



OCL4M055126N

(1) **Driver Assistance**
(2) **Smart Cruise Control**
(3) **Based on Driving Style**

While the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Driving Convenience > Smart Cruise Control > Based on Driving Style**. If **Based on Driving Style** is selected on the infotainment system screen, Smart Cruise Control operates based how you drive, taking into account distance between vehicles, acceleration, and reaction speed.
You can adjust the driving style manually.

TIP

- If your vehicle is equipped with **Based on Driving Style**, you can select Based on driving mode and Based on driving style by tapping **Setup > Vehicle > Driver Assistance > Driving Convenience > Smart Cruise Control** on the infotainment system screen.
- 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 is 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 style only when you drive the vehicle.
- When Based On Driving Style is disabled, your driving style (distance between vehicles, acceleration, and response speed) remains at the same level as the Based On Driving Style function.
- Whether Based On Driving Style is enabled or disabled, the displayed driving style (including distance between vehicles, acceleration, and response speed) may vary between different driving styles.

WARNING

- Towing a trailer or installing a carrier may reduce control stability. If necessary, disable the function and always drive with caution.
- Do not use the system when towing another vehicle or when other equipment that affects sensor operation or vehicle balance is installed, as it may not operate properly.

Warning Methods



OCL4M055118N

(1) **Driver Assistance**
(2) **Warning Methods**

To change the Warning Methods settings while the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Warning Methods** on the infotainment system screen. You can change the following settings:

- **Warning Volume**: Adjusts the volume of the warning sound.
- **Haptic Warning**: Turns ON the steering wheel vibration warning.
- **Driving Safety Priority**: Lowers all other audio volumes when the Driving Safety system sounds a warning.

TIP

- Your **Warning Methods** settings may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** maintain their last settings when you turn OFF and restart the vehicle.
- The **Warning Methods** setting menu may not be available on all vehicles.

Smart Cruise Control operation

Operating conditions

Basic function

Smart Cruise Control operates under the following conditions:
- The gear is in D (Drive).
- Your speed is within the operating range:
  - When there is no vehicle ahead: 5-95 mph (10-150 km/h)
  - When there is a vehicle ahead: 0-95 mph (0-150 km/h)
- Electronic Stability Control (ESC) or Anti-lock Braking System (ABS) is ON.

Smart Cruise Control does not operate in the following conditions.
- The driver's door is open.
- Engine RPM is high.
- Electronic Parking Brake (EPB) is engaged.
- ESC or ABS is controlling the vehicle.
- Forward Collision-Avoidance Assist brake control is operating.
- Remote Smart Parking Assist brake control is operating (if equipped).
- The vehicle is stopped or traveling below 5 mph (10 km/h) with no vehicle ahead
- The brake pedal is pressed while driving (excluding when stopped)

TIP

When you are stopped behind another vehicle, you can turn on Smart Cruise Control while the brake pedal is engaged.

Overtaking Acceleration Assist function

Overtaking Acceleration Assist operates when you turn the turn signal indicator ON to the left while Smart Cruise Control is operating under the following conditions:
- Your speed is above 40 mph (60 km/h).
- A vehicle is detected ahead of you.

Overtaking Acceleration Assist does not operate under the following conditions:
- The hazard lights are ON.

- You have reduced your speed to maintain following distance from a vehicle ahead.

WARNING

- When you turn the turn signal indicator ON to the left while there is a vehicle ahead, your vehicle may accelerate temporarily. Always pay attention to the road conditions.
- Regardless of your country's driving direction, Overtaking Acceleration Assist operates when the conditions are satisfied. When using the function in countries with a different driving direction, always check the road conditions.

Turning on Smart Cruise Control



OSG2H106040L

Press the Driving Assist button to turn Smart Cruise Control ON. The speed is set to the current speed on the instrument cluster.

- If there is no vehicle ahead of you, the function maintains the set speed.
- If there is a vehicle ahead of you, the function may adjust the speed to maintain the distance from that vehicle. If the vehicle ahead accelerates, your vehicle will travel at a steady cruising speed after accelerating to the set speed.

TIP

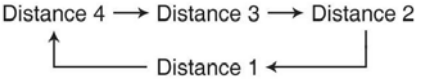
- If your vehicle speed is between 0-20 mph (0-30 km/h) when you press the Driving Assist button, the Smart Cruise Control speed will be set to 20 mph (30 km/h).
- Pressing and holding the Driving Assist button activates the Manual Speed Limit Assist (MSLA).
- For more details on Manual Speed Limit Assist (MSLA), refer to "Manual Speed Limit Assist (MSLA)" on page 495.

Setting vehicle distance



OSG2H106045L

To adjust the distance to the vehicle ahead, press the button. The distance will change as follows:
- The closest vehicle distance is 1.



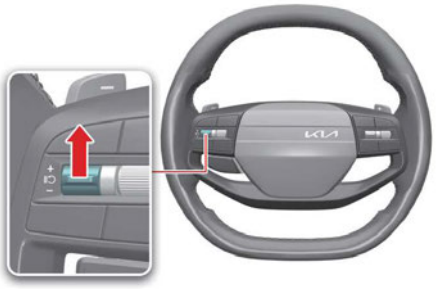
ODEEV078136NR

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)

TIP

The distance is set to the last distance you set before you restarted the vehicle or temporarily canceled Smart Cruise Control.

Increasing set speed



OSG2H106041L

- Push the (+) switch up and release it immediately. The set speed increases by 1 mph (1 km/h) each time you operate the switch in this manner.
- Push the (+) switch up and hold it. The set speed increases by 5 mph (10 km/h) each time you operate the switch in this manner.

  You can increase the set speed to 95 mph (150 km/h).

TIP

Check the driving conditions before using the (+) switch. Speed may sharply increase when you push up and hold the (+) switch.

Decreasing set speed

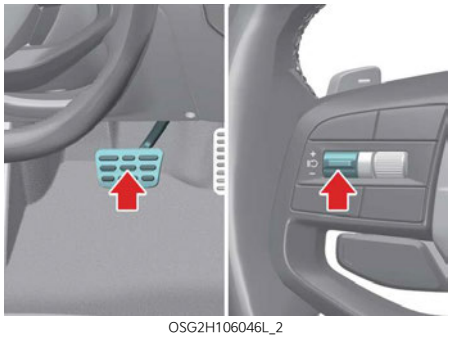


OSG2H106042L

- Push the (—) switch down and release it immediately. The set speed decreases by 1 mph (1 km/h) each time you operate the switch in this manner.
- Push the (—) switch down and hold it. The set speed decreases by 5 mph (10 km/h) each time you operate the switch in this manner.

  You can decrease the set speed to 20 mph (30 km/h).

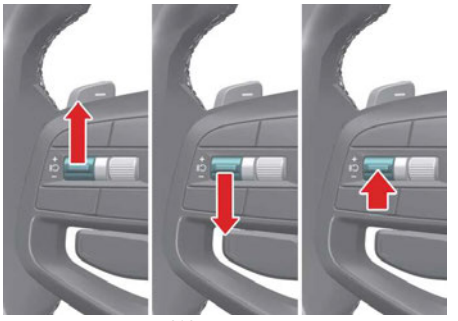
Temporarily canceling Smart Cruise Control



OSG2H106046L_2

Press the ( ) switch or engage the brake pedal to temporarily cancel Smart Cruise Control.

Resuming Smart Cruise Control



OSG2H106044L_3

To resume Smart Cruise Control after you cancel it, push the ( ), ( ), or ( ) switches as follows:

- If you push the ( ) switch up or ( ) switch down, the set speed is set to the current speed on the instrument cluster.
- If you press the ( ) switch, the vehicle resumes the preset speed.
- If the driver is pressing the accelerator and the current speed is below the set speed, pressing the ( ) or ( ) switch will immediately activate the function, and the set speed will be adjusted based on the current driving speed.

TIP

Check the driving conditions before you push the ( ) switch. Speed may sharply increase or decrease when you push the ( ) switch.

Turning OFF Smart Cruise Control



OSG2H106040L

Press the Driving Assist button to turn Smart Cruise Control OFF.

TIP

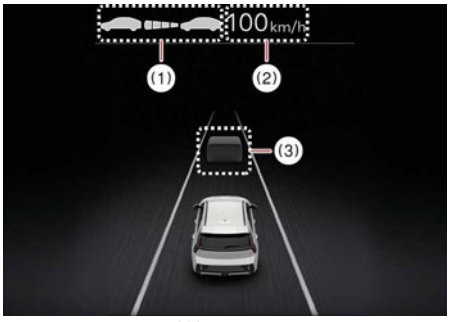
If your vehicle is equipped with Manual Speed Limit Assist, press and hold the Driving Assist button to turn OFF Smart Cruise Control. However, this action turns ON Manual Speed Limit Assist.

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 Smart Cruise Control operation in the Driving Assist view on the instrument cluster. Refer to "LCD display modes" on page 159.
Smart Cruise Control is displayed as shown in the following image (depending on the status of the function):



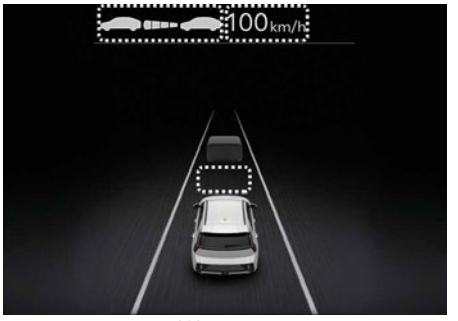
OSG2H006066L

- When operating:
  (1) Shows whether there is a vehicle ahead and displays the selected distance level
  (2) Displays the set speed
  (3) Shows whether there is a vehicle ahead and displays the target vehicle distance
- When temporarily canceled:
  (1) Shows your vehicle (gray)
  (2) Displays the previous set speed (gray)
  (3) Shows whether there is a vehicle ahead (gray) (if equipped)

TIP

- The instrument cluster displays the distance from the vehicle ahead according to the actual distance between that vehicle and yours.
- The target distance may vary according to the vehicle speed and the set distance level. If the 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 may display differently depending on the specifications of the instrument cluster or theme.

Accelerating temporarily



OSG2H006065L

If you want to speed up temporarily while operating Smart Cruise control without altering the set speed, engage the accelerator pedal. While the accelerator pedal is engaged, the set speed, distance level, and target distance blink on the instrument cluster.
However, if you do not engage the accelerator pedal sufficiently, the vehicle may decelerate.

⚠ WARNING

Be careful when accelerating temporarily, as Smart Cruise Control does not control the speed and distance automatically, even if there is a vehicle ahead of you.

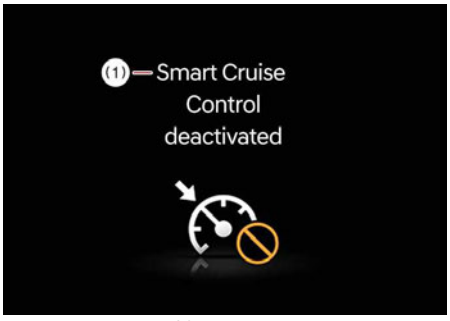
Based on Driving Style operating



OSG2PH005094

When Based on Driving Style is enabled, the instrument cluster displays the message “Based on Driving Style SCC” for 2 seconds, then displays the distance level and target distance based on your driving style.

Temporarily canceling Smart Cruise Control



OCL4M055105N

(1) **Smart Cruise Control deactivated**

If Smart Cruise Control is temporarily canceled automatically, a warning message appears on the instrument cluster, and an audible warning sounds.
Smart Cruise Control is temporarily canceled automatically when:

- Accelerating above 100 mph (160 km/h)
- Decelerating below 5 mph (10 km/h)
- The vehicle is stopped for a certain period of time
- You continuously engage the accelerator pedal for a certain period of time
- The Smart Cruise Control operating conditions are not satisfied
- The gear is in N (Neutral), R (Reverse), P (Park), or in a condition where shifting is not possible
- The Electronic Stability Control (ESC) or ABS is turned off
- The engine is operating at high RPM
- The electronic parking brake (EPB) is engaged
- If Smart Cruise Control is automatically temporarily deactivated, a warning message and alert sound will notify the driver of the automatic temporary deactivation.

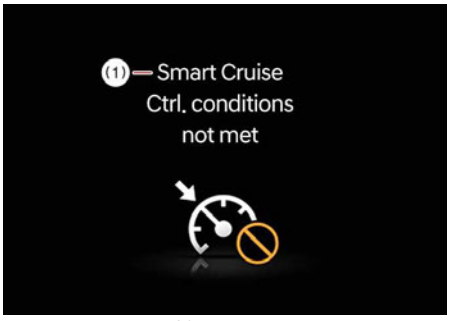
TIP

If Smart Cruise Control is temporarily canceled while the vehicle is at a standstill with the function activated, EPB (Electronic Parking Brake) may be applied.

WARNING

When Smart Cruise Control is temporarily canceled, the distance from the vehicle ahead will not be maintained. Always have your eyes on the road and, if necessary, engage the brake pedal to reduce your speed and maintain a safe distance.

Smart Cruise Control conditions not satisfied

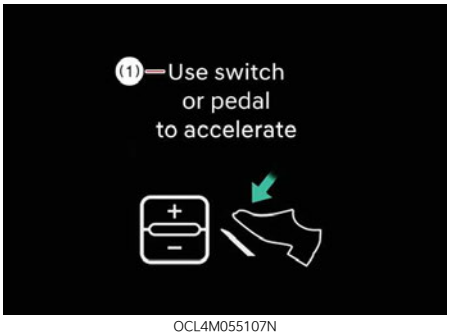


OCL4M055106N

(1) **Smart Cruise Ctrl. conditions not met**

If you operate the Driving Assist button, ( ) switch, ( ) switch, or ( ) switch when the Smart Cruise Control operating conditions are not satisfied, a warning message appears on the instrument cluster, and an audible warning sounds.

In traffic



OCL4M055107N

(1) **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 moving, as well.
After you have stopped your vehicle and a certain period of time has passed, a warning message appears on the instrument cluster. Engage the accelerator pedal or push the ( ) switch, ( ) switch, or ( ) switch to start driving.

NOTE

- When Highway Driving Assist (HDA) is active, the automatic departure time can be extended for a certain period.
- If an interior camera is equipped, the automatic departure time may be further extended depending on whether the driver is looking forward.
- Automatic departure may not occur if the driver is wearing sunglasses or if the driver's gaze cannot be detected.

Warning road conditions ahead



OSG2H006034L

(1) **Watch for surrounding vehicles**

When the function detects surrounding vehicles, a warning message appears on the instrument cluster, and an audible warning sounds to warn you about the road conditions ahead.

WARNING

- Always pay attention to vehicles or objects that may suddenly appear ahead of you and, if necessary, engage the brake pedal to reduce your speed and maintain a safe distance.
- Smart Cruise Control does not substitute for proper and safe driving. It is your responsibility to always check your speed and distance from a vehicle ahead.
- Smart Cruise Control may not recognize unexpected, sudden, or complex situations, so always pay attention to driving conditions and control the speed of your vehicle.
- Keep Smart Cruise Control OFF when you are not using it to avoid inadvertently setting a speed.
- Do not open any door or leave the vehicle while 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 the road conditions and vehicle speed. Driving at a high speed at too close a distance may result in a serious collision.
- When maintaining distance with a vehicle ahead, if that vehicle disappears from view, Smart Cruise Control may suddenly accelerate to the set speed. Always be aware of unexpected and sudden situations.
- The vehicle speed may decrease on an upward slope and increase on a downward slope.
- Always be aware of unexpected situations, such as when a vehicle cuts into your lane 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 in areas with strong electromagnetic interference.
- Smart Cruise Control may not detect an obstacle ahead, leading to a collision. Always look ahead to prevent unexpected and sudden situations from occurring.

- When the vehicle is heavily loaded or driving on a slope, control may be difficult depending on road conditions. Pay close attention and, if necessary, use the brake pedal to manually control the speed.
- Vehicles frequently changing lanes ahead of you may cause a delayed 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 your surroundings and drive safely, even when a warning message does not appear or an audible warning does not sound.
- Smart Cruise Control may not display a warning message or generate an audible warning if any other function's warning message is displayed or audible warning is generated at the same time.
- You may not hear the warning sound of Smart Cruise Control if your surroundings are noisy.
- The vehicle manufacturer is not responsible for any traffic violation or accident you cause.
- Always set the vehicle speed under the posted speed limit.
- If your driving style changes, the distance, acceleration, and reaction speed may change.

⚠ WARNING

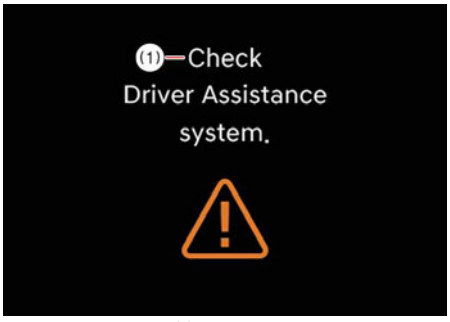
- You must drive your vehicle sufficiently for this system to analyze your actual driving style, including vehicle distance, acceleration, and reaction speed.
- Based on Driving Style may not reflect your driving style or the driving conditions, which could affect safe driving.
- If you are driving in inclement conditions, such as snow, rain, fog, or steep hills, Smart Cruise Control may not drive your vehicle according to your driving style.

TIP

- Smart Cruise Control may not operate for a few seconds after you restart the vehicle or initialize the front view camera or front radar.
- You may hear a sound when Smart Cruise Control engages the brake.
- Based on Driving Style may not reflect your driving style in unsafe ways, such as rapid acceleration.
- Based on Driving Style does not reflect any aspects of driving style besides vehicle distance, acceleration, and reaction speed.

Smart Cruise Control malfunction and limitations

Smart Cruise Control malfunction



OCL4M055096N

(1) **Check Driver Assistance system**

When Smart Cruise Control is not working properly, the Master warning light (⚠) appears on the instrument cluster, along with a warning message that lasts for several seconds. Have your vehicle inspected by an authorized Kia dealer.

Smart Cruise Control disabled



OCL4M055098N

(1) **Driver Assistance system limited. Radar blocked.**

When foreign material (such as snow or rain) covers the front radar cover or sensor, it can reduce the detection performance and temporarily limit or disable Smart Cruise Control.
A warning message and the Master warning light (⚠) display on the instrument cluster (and turn off after a certain period). This does not indicate a malfunction of Smart Cruise Control.
Smart Cruise Control should operate properly when you remove foreign materials (such as snow or rain) from the sensor. Always keep it clean.

TIP

- Even when a warning message does not appear on the instrument cluster temporarily, Smart Cruise Control may not operate properly.
- Smart Cruise Control may not operate properly in an open area where there is nothing to detect, or when foreign material covers the detection sensor after you turn your vehicle ON.

NOTE

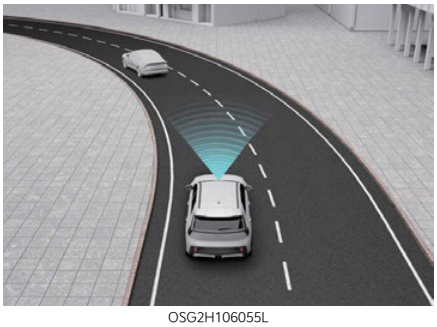
You can check the Smart Cruise Control status in the service message of the utility information view of the instrument cluster display window.

Limitations of Smart Cruise Control

Smart Cruise Control may operate abnormally or unexpectedly under the following circumstances:

- The detection sensor or its surrounding areas are contaminated or damaged.
- Washer fluid is continuously sprayed, or the wiper is ON.
- The camera lens is obscured by a windshield tint, film, or coating, damaged glass, or objects on the glass such as a sticker or insect.
- There is moisture or ice on the windshield.
- Glare from the sun obstructs the front view camera's field of view.
- Streetlights or light from an oncoming vehicle are reflected on a wet road.
- The temperature near the front view camera is very high or low.
- There is an object on the instrument panel.
- Your vehicle's surroundings are excessively bright or dark.
- The brightness changes suddenly (for example, when you enter or exit a tunnel).
- The brightness outside is low, and the headlights are not ON or are not bright.
- You are driving in heavy rain, snow, or thick fog.
- You are driving through steam, smoke, or shadows.
- Only part of a vehicle ahead is detected.
- A vehicle ahead has no tail lights or the tail lights are atypically located.
- The brightness outside is low, and the tail lights of a vehicle ahead are not on or are not bright.
- The glass surface is not clean or has scratches or other blemishes.
- Small particles, such as sand, with a different color than the lane surface contaminate the road.
- The type of detected object differs from the actual object.
- When objects that are easily detected by the front radar, such as guardrails or nearby vehicles, are present around the vehicle.
- There are low-height or small obstacles in front.
- The rear of a vehicle ahead is small or does not look normal (for example, tilted or overturned).
- A vehicle ahead has low or high ground clearance.
- A vehicle suddenly cuts in ahead of you.
- Your vehicle is being towed.
- Light from an object (such as a guardrail or nearby vehicle) reflects off the front radar.
- The bumper near the front radar is impacted or damaged, or the front radar is out of position.
- The temperature near the front radar is high or low.
- The vehicle ahead is made of material that does not reflect on the front radar.
- You are driving near a highway, interchange, or tollgate.
- You are driving on a slippery surface due to snow, rain, ice, and so on.
- You are driving on a curved road.
- A vehicle ahead is detected late.
- A vehicle ahead is suddenly blocked by an obstacle.

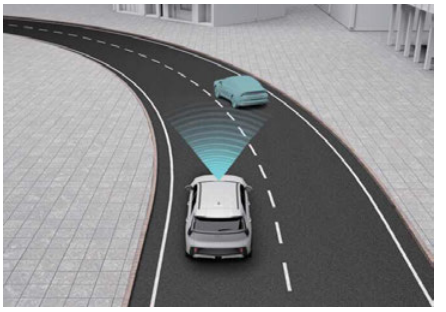
- A vehicle ahead suddenly changes lanes or reduces speed.
- A vehicle ahead is bent out of shape.
- A vehicle ahead is moving very fast or slow.
- You change lanes suddenly when there is a vehicle ahead.
- A vehicle ahead is covered with snow.
- Your driving is unstable.
- You are driving in a traffic circle and a vehicle ahead 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, and so on.
- You are driving:
  - In a parking lot.
  - Through a construction area, unpaved road, partially paved road, uneven road, speed bumps, and so on.
  - On a steep or curving road.
  - By a roadside with trees or streetlights.
  - On a narrow road with overgrown foliage.
  - Through electromagnetic waves, such as an area with strong radio waves or electrical noise.
- You are driving through a tunnel or covered bridge.
- You are driving near areas with a lot of metal, such as a construction zone, railroad, or road with metal plates.
- You are driving in wide open areas where there are few vehicles or structures.
- Driving on a curved road



OSG2H106055L

On curves, Smart Cruise Control may not detect a vehicle in the same lane, and may accelerate to the set speed. Your vehicle speed may rapidly decrease when a vehicle ahead is detected suddenly.

Select the appropriate set speed on curves, and engage the brake pedal or accelerator pedal according to the road and driving conditions ahead.

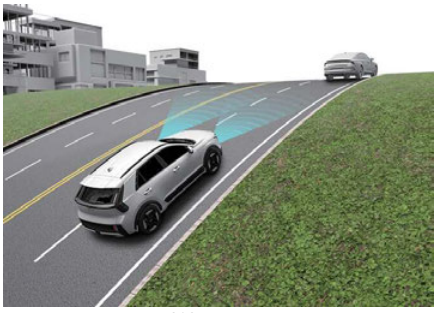


OSG2H106056L

Smart Cruise Control may reduce your vehicle speed due to the presence of a vehicle in an adjacent lane.

Check that the road conditions permit safe operation of Smart Cruise Control. If necessary, engage the brake pedal to reduce your speed and maintain a safe following distance.

- Driving on an inclined road

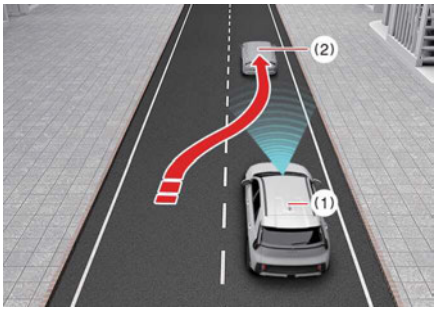


OSG2H106057L

When you drive uphill or downhill, Smart Cruise Control may not detect a moving vehicle in your lane, causing your vehicle to accelerate to the set speed. Your vehicle speed will rapidly decrease when a vehicle ahead is detected suddenly.

Select the appropriate set speed on inclines, and engage the brake pedal or accelerator pedal according to the road and driving conditions ahead.

- Changing lanes

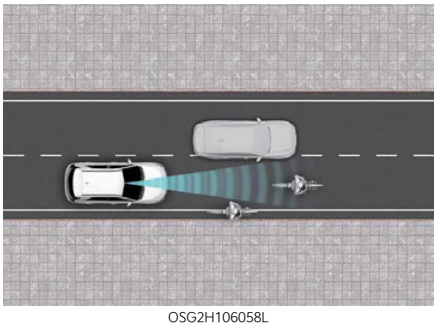


(1) Your vehicle
(2) Lane changing vehicle

OSG2H106025L

When a vehicle (2) moves into your lane from an adjacent lane, the sensor cannot detect it until it is in the detection range. Smart Cruise Control may not immediately detect the vehicle when it changes lanes abruptly. You must maintain a safe braking distance and, if necessary, engage the brake pedal to reduce your speed.

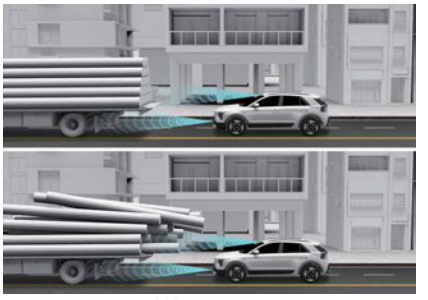
- Detecting a vehicle



OSG2H106058L

The sensor cannot detect the following types of vehicles or objects:

- Vehicles driving to one side.
- Slow-moving or suddenly-decelerating vehicles.
- Vehicles with higher ground clearance, or vehicles carrying loads that stick out of the back of the vehicle.
- Vehicles with the front lifted due to heavy loads.
- Vehicles within approximately 6 ft (2m) of your vehicle.
- Oncoming vehicles.
- Stopped vehicles.
- Vehicles with a small rear profile, such as trailers.
- Narrow vehicles, such as motorcycles or bicycles.
- Specialty vehicles.
- Animals and pedestrians.

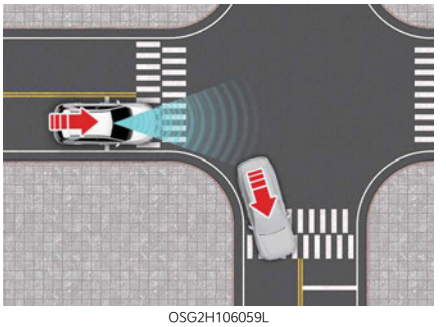


OSG2H106027L_2

Always pay attention to the road and driving conditions and drive safely. If necessary, adjust your vehicle speed. The sensor cannot detect the vehicle ahead in the following cases:

- You are steering your vehicle.
- You are driving on narrow or sharply curved roads.

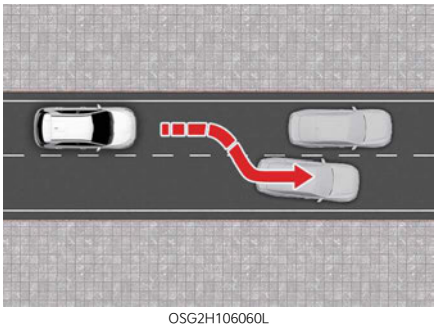
• When a vehicle ahead disappears from view at an intersection



OSG2H106059L

When a vehicle ahead disappears from view at an intersection, your vehicle may accelerate. Always pay attention to the road and driving conditions.

• When a vehicle ahead of you changes lanes

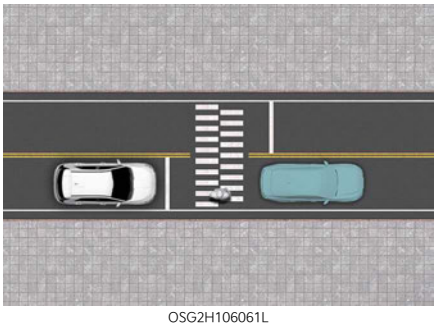


OSG2H106060L

When a vehicle ahead of you changes lanes, Smart Cruise Control may not immediately detect the new vehicle that is now ahead of you.

Always pay attention to the road and driving conditions.

- Always look out for pedestrians



OSG2H106061L

Always look out for pedestrians when your vehicle is maintaining a set distance from the vehicle ahead.

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.

TIP

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

Emergency Stop (ES) (if equipped)

Emergency Stop is a function designed to assist an unresponsive driver. If this system determines that the driver is unresponsive, the system can maintains the vehicle in the center of the road and assists in stopping through deceleration control.

Detecting sensor

The front camera and front radar are used as detection sensors to recognize vehicles ahead. Please refer to "Detecting sensor(s)" on page 415 for the applicable sensors and their locations.

NOTE

The front camera and front radar are used as detection sensors to recognize vehicles ahead. For more details on the precautions of the front view camera and front radar sensors, refer to "Overview" on page 415.

Emergency Stop operation

Operational Status

When Smart Cruise Control and Lane Following Assist are both active, Emergency Stop becomes operational.

WARNING

If the operation of Lane Keeping Assist is limited due to the Carrier menu setting, Emergency Stop may also be limited. Drive with caution.

NOTE

- If the driver unfastens the seat belt while driving at 20 km/h (13 mph) or above, Lane Keeping Assist turns off.
- Lane Following Assist cannot be activated if the driver is not wearing a seat belt.

Emergency Stop forewarning and Deceleration Control

If a Hands-Off warning continues, the system interprets this as driver unresponsiveness.
When driver unresponsiveness is detected, the system issues a forewarning through a warning message, warning sound, and steering wheel vibration.



(1) **Take control of the vehicle immediately.**

If the forewarning continues, steering control and deceleration control are activated to help bring the vehicle to a stop within the lane. The system indicates that Emergency Stop is in progress via a warning message, warning sound, and steering wheel vibration.



(1) **Take control of the vehicle immediately. Vehicle is stopping.**

Forewarning and Emergency Stop will be canceled in the following situations:
- The driver holds the steering wheel to operate the vehicle
- Smart Cruise Control is temporarily deactivated or turned off
- Lane Following Assist is turned off

NOTE

- During Emergency Stop operation, the Smart Cruise Control vehicle distance is set and displayed at level 4. Once Emergency Stop is canceled, it returns to the previously set value.
- This includes the operation of Navigation based Smart Cruise Control and Highway Driving Assist.
- For detailed information on Smart Cruise Control, Navigation-based Smart Cruise Control, Lane Following Assist, and Highway Driving Assist, refer to "Smart Cruise Control (SCC)" on page 519, "Navigation-based Smart Cruise Control (NSCC)" on page 543, "Lane Following Assist (LFA)" on page 460, "Highway Driving Assist (HDA)" on page 550.

Stop

If the vehicle stops by **Emergency Stop**, a warning message, warning sounds, and hazard warning flashers will alert if **Emergency Stop** is operated.
After that, the vehicle will automatically operate the following procedures:

- Door unlock
- SOS Call connect (if equipped)
- EPB applied
- Shift to the P (Park) position.

Release

Emergency Stop will release when the following conditions are satisfied.



OLQ2A005122

(1) **Drive carefully**

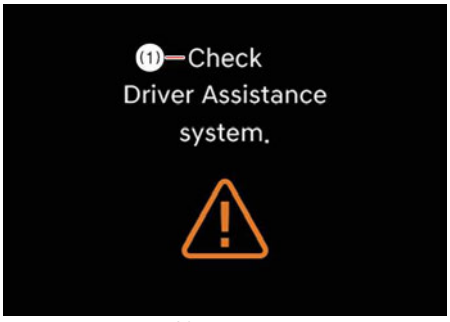
- The driver controls the steering wheel
- If the accelerator pedal is strongly engaged and maintained
- If the brake pedal is strongly engaged
- If the Lane Following Assist button ( ) is pressed
- If the Driver Assistance button is pressed
- Hazard warning flasher button is pressed after the vehicle stops.
- The front seat door (driver or front passenger) is opened.
- The driver cancels an SOS call (if the function is provided).
- Shifting from P (Park) to another gear.

WARNING

After the vehicle comes to a stop due to an **Emergency Stop**, to activate **Lane Following Assist** or **Highway Driving Assist**, the vehicle needs to be restarted.

Emergency Stop malfunction and limitation

Emergency Stop malfunction



OCL4M055096N

(1) **Check Driver Assistance system.**

When **Emergency Stop** is not working properly, the warning message and Master warning light (⚠) will appear on the cluster. If this occurs, have your vehicle inspected by an authorized Kia dealer.

> **TIP**
>
> You can check the malfunction in the service message of the utility information view of the cluster display window.

Limitations of Emergency Stop

For more details on the limitations of the **Emergency Stop**, refer to "Smart Cruise Control (SCC)" on page 519, "Lane Following Assist (LFA)" on page 460.

Navigation-based Smart Cruise Control (NSCC) (if equipped)

When driving on a highway with Smart Cruise Control operating, Navigation-based Smart Cruise Control (NSCC) uses navigation system information to help maintain a safe speed according to road conditions.

TIP

- Navigation-based Smart Cruise Control is available only on certain highways.
  * A controlled access road has 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 become available for Navigation-based Smart Cruise Control in future navigation updates.

TIP

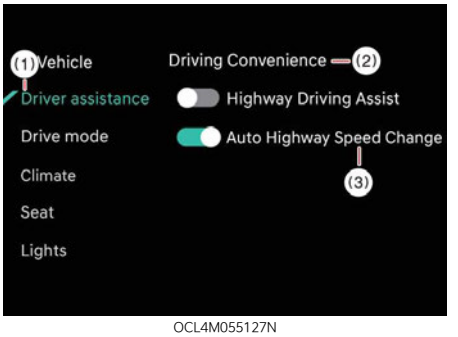
A dedicated road refers to a highway.

Highway Curve Zone Auto Speed Change

When driving at a high speed on a curve, Highway Curve Zone Auto Slowdown uses navigation system information to temporarily slow down or limit the acceleration of your vehicle to help you drive safely.

Navigation-based Smart Cruise Control settings

Auto Highway Speed Change



OCL4M055127N

(1) **Driver Assistance**
(2) **Driving Convenience**
(3) **Auto Highway Speed Change**

While the vehicle is ON, tap **Setup** > **Vehicle** > **Driver Assistance** > **Driving Convenience** > **Auto Highway Speed Change** on the infotainment system screen.

WARNING

- Towing a trailer or installing a carrier may reduce control stability. If necessary, disable the function and always drive with caution.
- Do not use the system when towing another vehicle or when other equipment that affects sensor operation or vehicle balance is installed, as it may not operate properly.

TIP

If there is a problem with Navigation-based Smart Cruise Control, you cannot turn the function ON in the settings menu.

Navigation-based Smart Cruise Control operation

Operating conditions

Navigation-based Smart Cruise Control works under the following conditions:

- You are operating Smart Cruise Control
- **Auto Highway Speed Change** setting in the cluster/infotainment system
- While driving on a dedicated road
- A controllable target (curved section) is detected ahead
- The Smart Cruise Control set speed is above the safe speed

TIP

For more information about operating Smart Cruise Control, refer to "Smart Cruise Control (SCC)" on page 519.

Navigation-based Smart Cruise Control display and control



OSG2H006122N

When Navigation-based Smart Cruise Control is operating, the instrument cluster displays the following indicators:

Navigation-based Smart Cruise Control standby

If all the operating conditions are satisfied, the green (NAV) indicator appears.

Navigation-based Smart Cruise Control operating

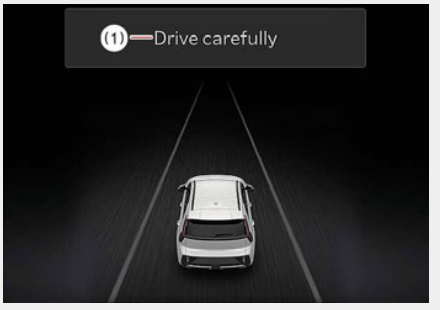
During speed control, the green (NAV) indicator blinks.

Navigation-based Smart Cruise Control pause/driver operation

If Smart Cruise Control cannot operate because Smart Cruise Control is temporarily deactivated or the route is recalculated, etc, the gray (NAV) indicator appears on the instrument cluster.
If you have engaged the accelerator pedal, the white (NAV) indicator blinks on the instrument cluster.

WARNING

A warning message appears when the Navigation-based Smart Cruise Control is not able to slow your vehicle to a safe speed.



(1) **Drive carefully**

OSG2H006011L

TIP

The images or colors may display differently depending on the specifications of the instrument cluster or theme.

Highway Curve Zone Auto Speed Change

The vehicle automatically decelerates based on the curvature of the road ahead on the highway to maintain a safe speed through the curve. After passing the curve, the vehicle accelerates to the set speed of Smart Cruise Control.

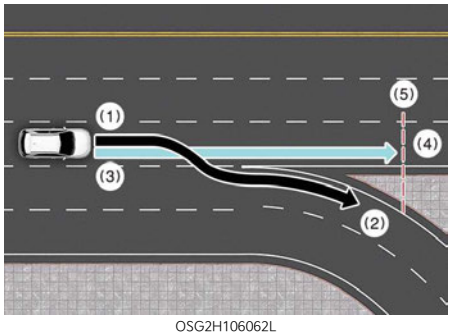
TIP

- The deceleration starting point depends on driving speed and road curvature. The higher the speed, the earlier the deceleration starting point.
- The system does not control the vehicle on roads with low curvature that are close to straight.
- If the road curvature is very high, the vehicle may decelerate sharply to adjust the driving speed to a safe level.

Navigation-based Smart Cruise Control limitations

Navigation-based Smart Cruise Control may operate abnormally or unexpectedly under the following circumstances:

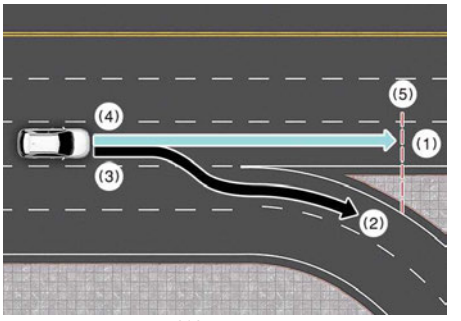
- The navigation system is not working properly.
- Map information is not transmitted due to abnormal operation of the infotainment system screen.
- Map information differs from the actual road because of real-time GPS data or map information errors.
- The navigation is searching for a route while you are driving.
- GPS signals are blocked, such as in a tunnel.
- Traveling to a country where operation is not supported.
- Android Auto™ or Apple CarPlay® is operating.
- The controllable target (curved section) is close to the vehicle
- The main lanes split into two or more and then merge
- Not driving along the navigation-guided route
- The destination is reset to recalculate the route (including real-time traffic-based recalculation) or the destination setting is canceled
- Driving on the entrances or exits of rest areas or drowsy driver rest areas on a dedicated road
- Short sections of splits or merges occur consecutively
- Lanes are added or removed in sections other than splits or merges
- Driving on roads without map information
- The performance of sensors detecting objects around the vehicle is at its limit
- Lane markings are unusual or of poor quality
- The navigation system cannot detect the vehicle's current position (for example, you are driving on elevated roads, including overpasses adjacent to general roads or nearby parallel roads).
- The navigation system updates while you are driving.
- The navigation system restarts while you are driving.
- The speed limit of some sections of the road changes.
- You are driving on a road under construction.
- You are driving on a controlled road.
- You are driving in bad weather, such as heavy rain or snow.
- You are driving on a sharply curved road.



OSG2H106062L

(1) Set route
(2) Branch line
(3) Driving route
(4) Main road
(5) Curved road section

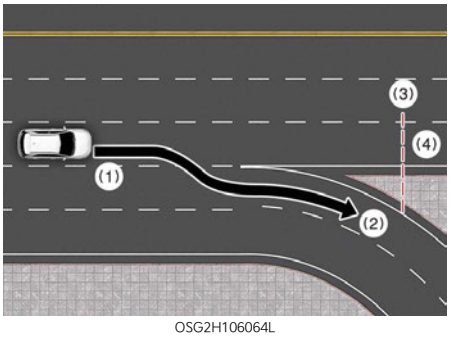
- When there is a difference between the navigation set route (branch line) and the driving route (main road), the Highway Curve Zone Auto Slowdown may not operate until the system recognizes the driving route as the main road.
- If the vehicle determines that the driving path is the main road of the dedicated roadway rather than the guided route, the Auto Highway Speed Change Adjustment function is activated. However, depending on the distance between the vehicle's current position and the curved section, as well as the vehicle's current speed, acceleration or deceleration may be insufficient or may occur abruptly.



OSG2H106063L

(1) Main road
(2) Branch line
(3) Driving route
(4) Set route
(5) Curved road section

- When the navigation route (main road) and driving route (branch line) differ, the Highway Curve Zone Auto Slowdown function temporarily operates based on the main road curve information.
- When the navigation system determines that you are driving off-route by entering the highway change or junction, Highway Curve Zone Auto Slowdown function does not operate.



OSG2H106064L

(1) Driving route
(2) Branch line
(3) Curved road section
(4) Main road

- If you do not set a navigation destination, Highway Curve Zone Auto Slowdown function operates 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 based on navigation information about the curved section of the highway.

⚠ WARNING

- Navigation-based Smart Cruise Control is a convenience function, not a substitute for safe driving practices. Always keep your eyes on the road. It is your responsibility to avoid violating traffic laws.
- Navigation-based Smart Cruise Control operates using road information provided by the navigation system. The navigation's speed limit information may differ from the actual speed limit. It is your responsibility to check the speed limit where you are driving.
- The Auto Highway Speed Change automatically turns off when the vehicle leaves the main lanes of a dedicated road and enters general roads classified as national roads or below, or enters facilities such as rest areas or entrances/exits (IC/JC) on the dedicated road. Always pay attention to the road and driving conditions.
- Navigation-based Smart Cruise Control may not operate due to the presence of vehicles ahead of yours and their driving conditions. Always pay attention to the road and driving conditions.
- When towing a trailer or something similar, your vehicle's deceleration may be insufficient. Always drive with caution.
- After you pass through a highway tollgate, Navigation-based Smart Cruise Control operates based on the first lane. If you enter another lane, Navigation-based Smart Cruise Control might not operate properly.
- Your vehicle accelerates if you engage the accelerator pedal while Navigation-based Smart Cruise Control is operating. The function does not decelerate your vehicle. If you engage the accelerator pedal too lightly, the vehicle may decelerate.
- If you engage and then release the accelerator pedal while Navigation-based Smart Cruise Control is operating, the vehicle may not decelerate sufficiently, or it may rapidly decelerate to a safe speed.
- If the curve is too large or too small, Navigation-based Smart Cruise Control may not operate.
- Towing a trailer or installing a carrier may reduce control stability. Disable the function if necessary and always drive with caution.
- Do not use the system when towing another vehicle or when other equipment that may affect sensor operation or vehicle balance is installed, as the system may not operate properly.

⚠ WARNING

- A time gap could occur between the navigation system's guidance and when Navigation-based Smart Cruise Control operation starts and ends.
- The speed information on the instrument cluster may differ from the navigation.
- Even if you are driving at a speed lower than the Smart Cruise Control set speed, acceleration may be limited by curved road sections ahead.
- If Navigation-based Smart Cruise Control is operating while you leave the main road to enter an interchange, junction, rest area, and so on, the function may operate for a certain period.
- Deceleration by Navigation-based Smart Cruise Control may feel insufficient due to road conditions such as uneven road surfaces and narrow lanes. If you feel the deceleration is insufficient, engage the brake pedal to slow the vehicle.

This device complies with Part 15 of the FCC rules.

Operation is subject to the following two conditions:

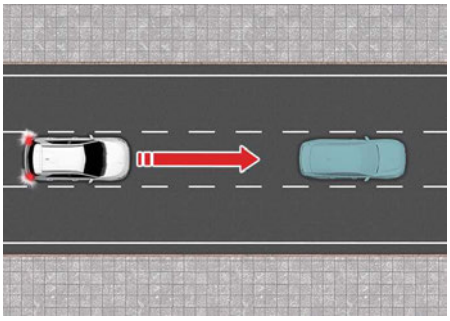
1. This device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

TIP

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

Highway Driving Assist (HDA) (if equipped)

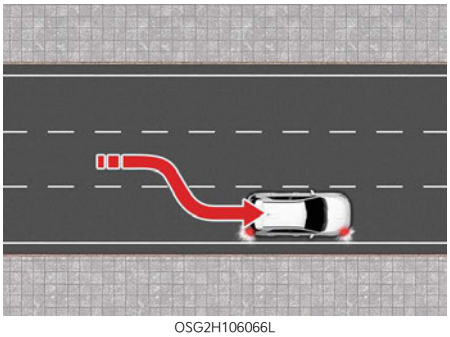
Highway Driving Assist



OSG2H106065L

Highway Driving Assist is designed to detect lane marking and vehicles ahead to help maintain your vehicle's following distance and set speed as well as center your vehicle in the lane while driving on a highway. It operates on the main lanes of highways, urban expressways, and motorways, and does not operate on branch roads (IC/JC).

Highway Lane Change Assist (if equipped)



OSG2H106066L

Highway Lane Change Assist can help you change lanes in the direction you operate the turn signal switch (if the function determines a lane change is possible).

TIP

- Highway Driving Assist is only available on controlled access roads on certain highways.
  * A controlled access road has 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.

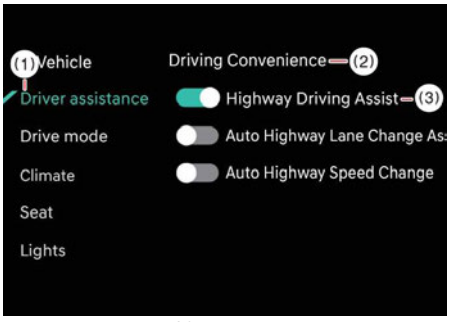
Highway Driving Assist operates on highway main roads, not interchanges or junctions.

Detection sensor

Please refer to "Detecting sensor(s)" on page 415 for the applicable sensors and their locations.

> **TIP**
>
> For detailed limitations of the front camera, front radar, front side radar, and rear side radar sensors, refer to "Forward Collision-avoidance Assist malfunction and limitations" on page 438, "Blind-Spot Collision-avoidance Assist malfunction and limitations" on page 472.

Highway Driving Assist settings



OCL4M055128N

(1) **Driver Assistance**
(2) **Driving Convenience**
(3) **Highway Driving Assist**

While the vehicle is ON, tap **Setup** > **Vehicle** > **Driver Assistance** > **Driving Convenience** on the infotainment system screen to set options for each function.

If you select Highway Driving Assist, the function can help you maintain a safe following distance and the set speed as well as center the vehicle in your lane.

Highway Lane Change Assist (if equipped)

If you select Highway Lane Change Assist, the function can help you change lanes safely.

WARNING

For your safety, change the settings only after parking the vehicle at a safe location.

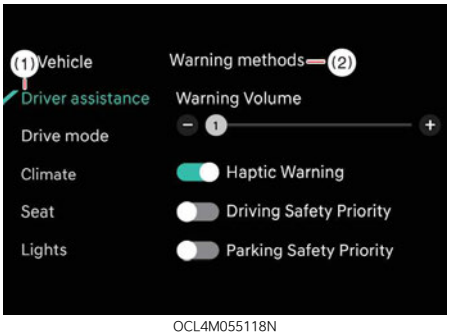
CAUTION

- Towing a trailer or installing a carrier may reduce control stability. If necessary, disable the function and always drive with caution.
- Do not use the system when towing another vehicle or when other equipment that affects sensor operation or vehicle balance is installed, as it may not operate properly.
- The Highway Lane Change Assist function (if equipped) may not operate properly when a trailer, carrier, or other equipment is installed, or when towing another vehicle. Do not use the function in these cases.
- When connecting a trailer or carrier, set the carrier menu. Setting the carrier menu will de-activate Highway Driving Assist. Always drive with caution.

TIP

- To use Highway Lane Change Assist, Highway Driving Assist must be active.
- If there is a problem with the Highway Lane Change Assist function, you cannot change the settings and should have your vehicle inspected by an authorized Kia dealer.
- The Highway Driving Assist and Highway Lane Change Assist functions maintain their last settings when you restart the vehicle.

Warning Methods



OCL4M055118N

(1) **Driver Assistance**
(2) **Warning Methods**

To change the Warning Methods settings while the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Warning Methods** on the infotainment system screen. You can change the following settings:

- **Warning Volume**: Adjusts the volume of the warning sound.

- **Driving Safety Priority**: Lowers all other audio volumes when the Driving Safety system sounds a warning.

TIP

- Your **Warning Methods** settings may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** maintain their last settings when you turn OFF and restart the vehicle.
- The **Warning Methods** setting menu may not be available on all vehicles.

Highway Driving Assist operation

Highway Driving Assist

Display and control

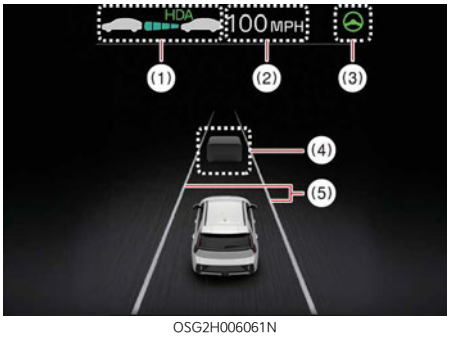
The Highway Driving Assist operation status is visible in the Driving Assist view on the instrument cluster. For more information, refer to "LCD display modes" on page 159.

Standby State



OSG2H006121N

Operating State



OSG2H006061N

The Highway Driving Assist status displays on the instrument cluster as follows:

(1) Highway Driving Assist indicator, whether there is a vehicle ahead and the selected distance level is displayed.
- Green: Operating
- Gray: Standby
- White blinking: Accelerator engaged
- Unlit: OFF

(2) Set speed
(3) Whether there is a vehicle ahead and the selected headway
(4) Whether the lane is detected or not
(5) Lane Following Assist indicator

TIP

- For more information about the display symbols and colors, refer to "Lane Following Assist (LFA)" on page 460 and "Smart Cruise Control (SCC)" on page 519.
- The images or colors may display differently depending on the specifications of the instrument cluster or theme.

Turning on Highway Driving Assist

Highway Driving Assist operates under the following conditions:

- Press the Drive Assist button to turn Highway Driving Assist ON while driving on controlled access roads.
- When entering a highway main road while Smart Cruise Control is operating, Highway Driving Assist will not turn ON if Lane Following Assist is turned OFF.

Hands-off warning



OCL4M055099N

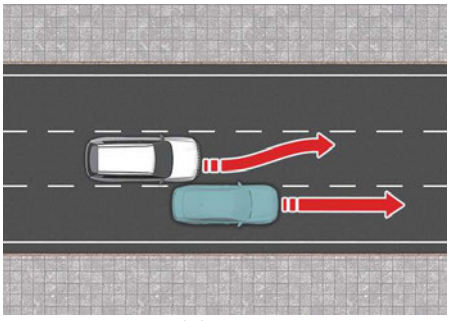
(1) **Keep hands on steering wheel**

If you remove your hands from the steering wheel for a few seconds, a warning message appears and an audible warning sounds in two stages:

- First stage: Warning message
- Second stage: Warning message (red steering wheel) and audible warning

If the steering wheel continues to be left unattended, the Emergency Stop (ES) function will activate. For detailed information, refer to "Emergency Stop (ES)" on page 539.

Driving to one side within lane (if equipped)



OLQ2A105055

If a vehicle near you is driving at a close distance when your vehicle speed is above 40 mph (60 km/h), your vehicle will control steering toward the opposite direction to assist with safe driving. If there are vehicles driving close to you on both sides of your lane, the function will not steer your vehicle to the opposite side of the lane.

Highway Driving Assist standby

If Smart Cruise Control is temporarily canceled while Highway Driving Assist is operating, Highway Driving Assist switches to standby, but Lane Following Assist continues to operate.

TIP

After a stop caused by Emergency Stop, if Emergency Stop is canceled, Highway Driving Assist must be restarted to operate again.

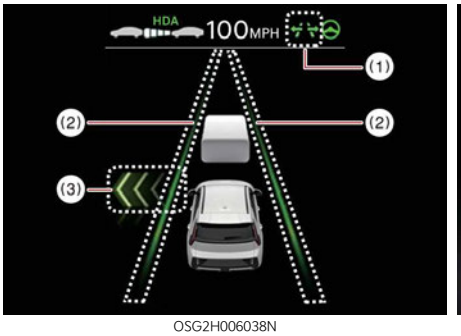
Highway Lane Change Assist (if equipped)

Display and control

The Highway Lane Change Assist status is visible on the instrument cluster. For more information, refer to "LCD display modes" on page 159.

The Highway Lane Change Assist status is displayed on the instrument cluster as follows:

Ready/Operating



OSG2H006038N

Standby/Canceled



OSG2H006091N

(1) Highway Lane Change Assist indicator
- Green (): Ready
- Green () blinking: Operating
- Gray (): Standby
- White () blinking: Canceled (displays for a short time after cancellation)

(2) Lane line

The lane line displays with the same color as the Highway Lane Change Assist indicator (1). However, the lane detection availability is shown on Standby.

(3) Green arrow and shade

The green arrow appears when a certain amount of time has passed after the function starts operating and until the lane change is completed.

(4) Message
- A message appears if Highway Lane Change Assist cannot operate when you use the turn signal lever.
- A message appears when Highway Lane Change Assist is canceled while operating.

To turn on Highway Lane Change Assist, use one of the following methods:
- Operate the switch or button to turn on Highway Driving Assist. Highway Lane Change Assist will also be turned on.

Highway Lane Change Assist is ready to operate when the function is ON and the following conditions are satisfied:
- Highway Driving Assist is operating.
- Lane Following Assist is operating.
- Your vehicle is ON and detects another vehicle behind more it than once.
- Your speed is above 20 mph (30 km/h).
- When driving 20-40 mph (30-60 km/h), your vehicle recognizes other vehicles in the left and right adjacent lanes, and there is no risk of collision when changing lanes.
- The instrument cluster does not display the hands-off warning.
- Hazard lights are OFF.

TIP

- While the Lane Change Assist function is ON, Lane Following Assist will not cancel, even if the turn signal indicator or hazard lights are operating.
- Lane Change Assist automatically turns OFF when you drive in the following conditions:
  - There is 1 driving lane.
  - Roads lack physical center separations structures, such as guardrails.
  - A pedestrian or cyclist is on the road ahead.
- If you drive below 15 mph (25 km/h) when Lane Change Assist is ready to operate, the function's status changes to standby.
- If you drive 20-40 mph (30-60 km/h) and your vehicle does not detect other vehicles in the right or left adjacent lanes, the Lane Change Assist status changes to standby.
- The Lane Change Assist status changes to standby if a risk of collision is detected.
- The images or colors may display differently depending on the specifications of the instrument cluster or theme.

WARNING

When Highway Lane Change Assist turns OFF, Steering Assist is temporarily canceled. Always be cautious when driving.

Highway Lane Change Assist operation



OSG2H106096L

Highway Lane Change Assist operates when the function's status is ready, you push the turn signal lever to the (1) or (2) position, and the following conditions are satisfied:

- Your hands are on the steering wheel.
- The lane change direction has no risk of collision.
- You are driving on a 2-lane road with broken lines of any color in the direction of the lane change.
- There are no Forward Collision-Avoidance Assist or Blind Spot Collision-Avoidance Assist warnings.
- You are driving in the center of the lane, not close to one side.
- The road you are on or where you are about to change lanes is a road that meets Highway Lane Change Assist's operation requirements.

TIP

- When you turn the turn signal lever to the (1) position, Highway Lane Change Assist operates. If you then turn the turn signal lever to neutral, Highway Lane Change Assist cancels before crossing the lane line.

  Highway Lane Change Assist does not cancel after you cross the lane line, but the function does cancel and the turn signal turns OFF when you complete your lane change.
- When you turn the turn signal lever to the (2) position for a certain amount of time, the green arrow appears. Highway Lane Change Assist will still operate if you release the turn signal lever back to its neutral position.
- While you are changing lanes, the turn signal indicator blinks even if you do not hold the turn signal lever. The turn signal indicator turns OFF when you complete your lane change.

Highway Lane Change Assist standby

Highway Lane Change Assist enters the standby state when 1 of its ready state conditions is not satisfied or when driving on the following types of roads:

- Main highway roads within a certain distance of a tollgate
- Dead ends without an interchange or junction
- Sharply curved roads
- Roads with narrow lanes

Canceling Highway Lane Change Assist

Highway Lane Change Assist is canceled when:

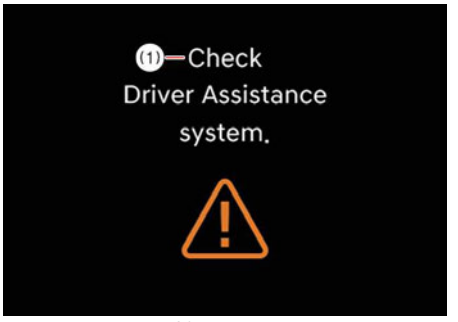
- You set the turn signal lever to the opposite direction of the lane change.
- You turn the steering wheel too sharply.
- You turn the turn signal lever to the (1) position while Lane Change Assist is operating, then return the turn signal lever to the neutral position before you change lanes.

⚠ WARNING

- Highway Lane Change Assist is canceled under any of the following circumstances:
  - You turn Highway Driving Assist OFF.
  - You turn OFF or temporarily cancel Lane Following Assist or Smart Cruise Control.
  - You turn the turn signal lever to the (1) position.
  - You turn the hazard lights ON.
  - The instrument cluster displays a Forward Collision-Avoidance Assist or Blind-Spot Collision-Avoidance Assist warning message.
  - Your vehicle detects a possible collision in an adjacent lane, even without Forward Collision-Avoidance Assist and Blind Spot Collision-Avoidance Assist warnings.
  - The target lane ends.
  - Your vehicle does not detect the target lane.
  - There is a problem with the turn signal lights.
  - The function is OFF because you turned it OFF in the settings menu, the road changes to a one-way, there is an intersection or crosswalk ahead, there is a pedestrian or cyclist in the driving lane, or you enter a road with no structure, such as a median strip or guardrail.
  - If you drive below 15 mph (25 km/h) while the Highway Lane Change Assist status is ready, the function status changes to standby.
  - If you drive 20-40 mph (30-60 km/h) and your vehicle does not detect other vehicles in the right or left adjacent lanes, the Lane Change Assist status changes to standby.
  - Your vehicle detects a risk of collision.
  - The lane in the direction of the lane change is not a single dashed lane.
- If you cancel Highway Lane Change Assist while it is operating, the vehicle may steer toward the center of the driving lane or steering assist may stop, depending on driving conditions. Always pay attention to the road and driving conditions.
- Highway Lane Change Assist may not operate normally on roads with pedestrians or cyclists, such as an intersection or crosswalk.

Highway Driving Assist malfunction and limitations

Highway Driving Assist malfunction



OCL4M055096N

(1) **Check Driver Assistance system**

When Highway Driving Assist is not working properly, the Master warning light ( ) appears on the instrument cluster, along with a warning message that lasts for several seconds. Have your vehicle inspected by an authorized Kia dealer.

WARNING

- You are responsible for driving safely and controlling the vehicle.
- Always keep 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 completely autonomous driving system. Always check road conditions and take the appropriate actions to drive safely.
- Always keep your eyes on the road. It is your responsibility to avoid violating traffic laws. Kia is not responsible for any traffic violations or accidents you cause.
- Highway Driving Assist may not recognize all traffic situations. Highway Driving Assist may not detect possible collisions due to the function's limitations. Always be aware of the function's limitations. The function may not detect obstacles (such as vehicles, motorcycles, bicycles, pedestrians, or unspecified objects) or structures (such as guardrails or tollgates) that may collide with your vehicle.
- Highway Driving Assist automatically turns OFF in the following situations:
  - When driving on roads where Highway Driving Assist is not operable, such as rest areas, intersections, junctions, and so on.
  - When the navigation system does not operate properly (for example, when it is updating or restarting).
- Highway Driving Assist may inadvertently operate or turn OFF depending on road conditions, navigation information, and surroundings.
- The Lane Following Assist function may be temporarily disabled when the front view camera cannot detect lane lines properly or when the hands-off warning appears.
- You may not hear the Highway Driving Assist warning sounds if your surroundings are noisy.
- If you drive your vehicle above a certain speed on a curve, your vehicle may veer to one side or depart from the driving lane.

- If you are towing a trailer or another vehicle, turn Highway Driving Assist OFF for safety reasons.
- The hands-off warning message may appear early or late depending on road conditions and how you steer. Always keep your hands on the steering wheel while driving.
- For your safety, please read the owner's manual before using Highway Driving Assist.
- Highway Driving Assist will not operate when you start the vehicle or initialize the detection sensors or navigation.

TIP

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 operate abnormally or unexpectedly under the following circumstances:

- The map information differs from the actual road because the navigation system is out of date.
- The map information differs from the actual road because of real-time GPS data or map information errors.
- The infotainment system is overloaded due to simultaneously performing functions such as route search, video playback, voice recognition, and so on.
- GPS signals are blocked when you drive in areas such as a tunnel.
- You veer off-course, reset the navigation route by changing the destination (including changing the route according to real-time traffic information), or cancel the route to the destination.
- The vehicle enters a service or rest area.
- Android Auto™ or Apple CarPlay® is operating.
- The navigation system cannot detect the vehicle's current position (for example, you are driving on elevated roads, including overpasses adjacent to general roads or nearby parallel roads).
- Your vehicle fails to recognize white single dash lane lines and road boundaries.
- Some lanes are temporarily restricted.
- The middle of the road does not have a physical separation structure, such as a center median.
- The lane you intend to change to is a bus lane or variable lane.
- You have a trailer, carrier, or other equipment attached to your vehicle.

NOTE

For more information on the front camera, front radar, front corner radar, and rear corner radar sensors, refer to "Forward Collision-avoidance Assist (FCA) (Sensor Fusion)" on page 418.

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.

TIP

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

Rear View Monitor (RVM) (if equipped)

The Rear View Monitor (RVM) displays the area behind your vehicle to help you park safely.

Detection sensor

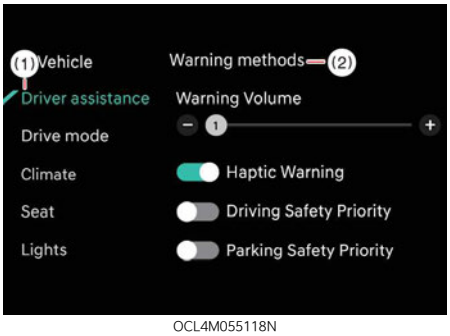
Please refer to "Detecting sensor(s)" on page 415 for the applicable sensors and their locations.

NOTE

Washer fluid can be sprayed onto the wide-angle rear camera lens to remove foreign substances, dust, and other contaminants.

Rear View Monitor settings

Warning Methods



OCL4M055118N

(1) **Driver Assistance**
(2) **Warning Methods**

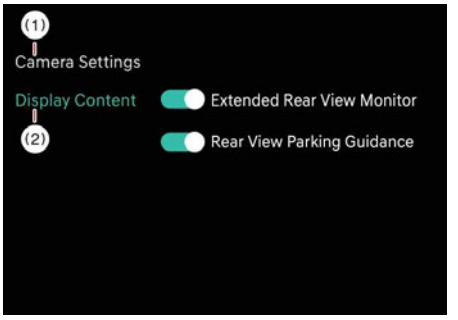
To change the Warning Methods settings while the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Warning Methods** on the infotainment system screen. You can change the following settings:

- **Parking Safety Priority**: Lowers all other audio volumes when Rear View Monitor is active.

TIP

- Your **Warning Methods** settings may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** maintain their last settings when you turn OFF and restart the vehicle.
- The **Warning Methods** setting menu may not be available on all vehicles.

Camera Settings



OLQ2AH005045

(1) **Camera Settings**
(2) **Display Content**

While the vehicle is ON, tap the setup icon (⚙) or tap **Setup > Vehicle > Driver Assistance > Parking Safety > Camera Settings** on the infotainment system screen to change the Rear View Monitor settings.

Extended Rear View Monitor

If you activate the Extended Rear View Monitor setting, the rear camera view continues to display when you shift from R (Reverse) to N (Neutral) or D (Drive).

Rear View Parking Guidance

If you activate the Rear View Parking Guidance setting, Rear View Parking Guidance and Top Rear View Parking Guidance display on the rear monitor.

Display settings

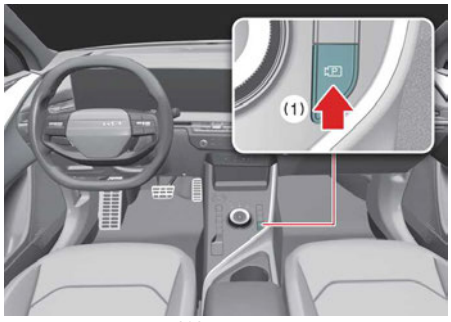
You can set the brightness (day/night) and contrast of the camera image in Display settings.

TIP

- Depending on your vehicle's specifications, the settings menu may not be available.
- Based on the unloaded vehicle condition, the horizontal lines displayed by Rear View Parking Guidance indicate distances from your vehicle of 20 in (0.5 m), 40 in (1 m), and 91 in (2.3 m).
- Based on the unloaded vehicle condition, the horizontal scale displayed by Top View Parking Guidance indicates liftgate opening distances and the 60 in (1.5 m) distance from your vehicle.

Rear View Monitor operation

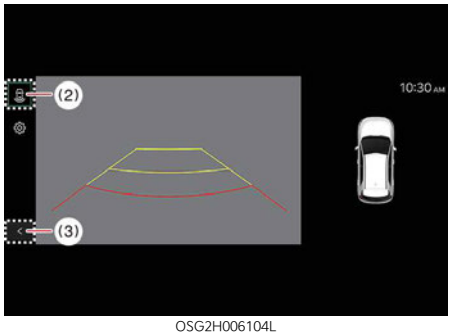
Parking/View button



OSG2H106067L

(1) Parking/View button
To turn Rear View Monitor ON, press the Parking/View button (1).
To turn Rear View Monitor OFF, press the Parking/View button (1) again.

Rear view



OSG2H006104L



OSG2H106068L

(2) View switching button
(3) back button
(4) infotainment system operation button

Operating conditions

Rear View turns ON under the following conditions:

- When you shift the gear to R (Reverse).
- When you press the Parking/View button (1) while the gear shift is in P (Park) or N (Neutral). If the gear is in N (Neutral), vehicle speed must be lower than 6 mph (10 km/h) to operate the Rear View function.

To select Rear Top View, Rear View, or Rear Wide View, press the View switching button (2) on the Rear Top View screen.

Non-operating conditions

Rear View turns OFF when you are parking under the following conditions:
- When you shift the gear to P (Park).
- When you press the Parking/View button (1).
- When you press the back button (3) on the Rear View Monitor screen.
- When you press the infotainment system operation button (4).
- The gear is in N (Neutral) or D (Drive) and the vehicle speed is above 6 mph (10 km/h).

TIP

When the gear is in R (Reverse), Rear View does not turn OFF.

Extended Rear View Monitor

To help you park safely, the Extended Rear View Monitor function maintains the Rear View display when you shift the gear from R (Reverse) into N (Neutral) or D (Drive).

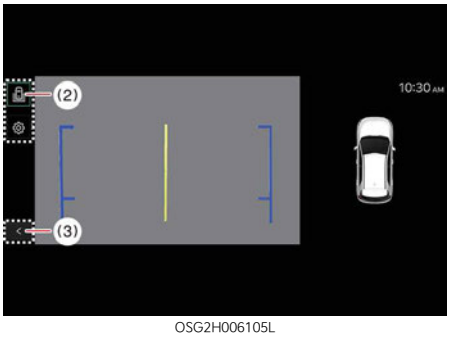
Operating conditions

Extended Rear View Monitor operates when you shift the gear from R (Reverse) into N (Neutral) or D (Drive) and your vehicle speed is below 6 mph (10 km/h).

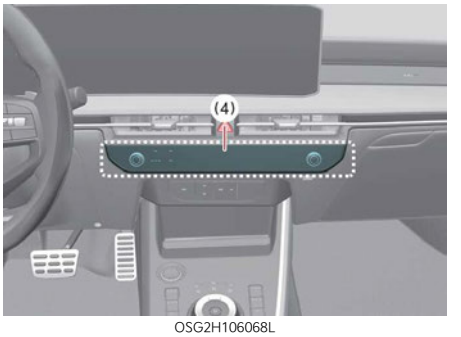
Non-operating conditions

Extended Rear View Monitor turns OFF under the following conditions:
- When you shift the gear to P (Park).
- When you press the Parking/View button (1).
- When you press the back button (3) on the Rear View Monitor screen.
- When you press the infotainment system operation button (4).
- Vehicle speed is above 6 mph (10 km/h).

Rear Top View



OSG2H006105L



OSG2H106068L

(2) View switching button
(3) back button
(4) infotainment system operation button
The Rear Top View displays an image of the vehicle from above to help you determine the space

between your vehicle and another vehicle or object when you are parking.
To turn the Rear Top View ON, press the Rear Top View button.

TIP

- Rear View video will not turn OFF when the gear is in Reverse (R), regardless of which view you select.
- The Rear View and Rear Top View can display Rear Parking Guidelines. To display Rear Parking Guidelines, tap **Setup > Vehicle > Driver Assistance > Parking Safety > Camera Settings > Display Information > Rear Parking Guidelines** on the infotainment system screen's settings menu. Note that Rear Parking Guidelines are not displayed on the Rear View while parking.

Rear View Monitor malfunction and limitations

Rear View Monitor malfunction

When Rear View Monitor malfunctions, the image on the screen may appear green, blue, or black.
If the Rear View Monitor does not work properly, the screen flickers, or the camera image does not display properly, have your vehicle inspected by an authorized Kia dealer.

Limitations of Rear View Monitor

When your vehicle is stopped for a long time in winter or your vehicle is parked in an indoor parking lot, the exhaust fumes may temporarily blur the image.
The screen may appear abnormally under the following circumstances:
- When the liftgate is open

WARNING
- The Wide Rear View camera does not encompass the complete area behind your vehicle. Always check the area behind your vehicle using the inside and outside rearview mirrors before parking or backing up your vehicle.
- Distance shown on the Rear View Monitor screen may differ from actual distance due to image calibration by the Wide Rear View camera. If your vehicle is tilted due to loaded cargo, Rear Parking Guidelines may be incorrect. When you are parking or driving, be sure to directly check your vehicle's surroundings for safety.
- Always keep the wide-rear view camera lens clean to maintain optimal camera performance and Rear View Monitor operation. Do not clean the camera lens with chemical solvents that may damage it, including strong detergents that contain high alkaline or volatile organic solvents such as gasoline, acetone, and so on.
- Driving with the liftgate open is abnormal. For your safety, be aware and drive safely.

Surround View Monitor (SVM) (if equipped)

Surround View Monitor (SVM) can assist you with parking by allowing you to see around the vehicle.

Detection sensor

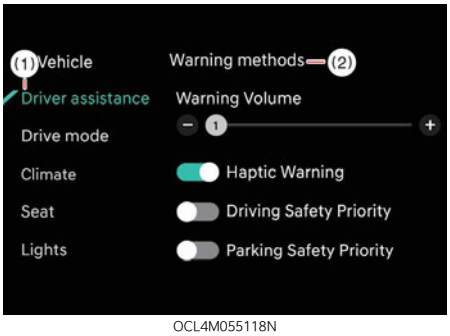
Please refer to "Detecting sensor(s)" on page 415 for the applicable sensors and their locations.

NOTE

Washer fluid can be sprayed onto the wide-angle rear camera lens to remove foreign substances, dust, and other contaminants.

Surround View Monitor settings

Warning Methods



OCL4M055118N

(1) **Driver Assistance**
(2) **Warning Methods**

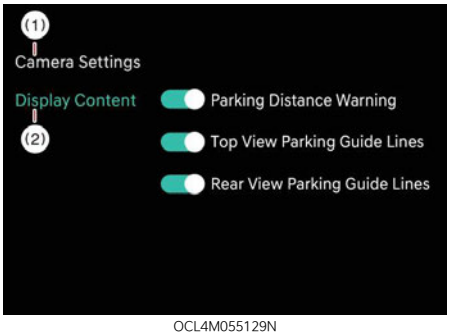
To change the Warning Methods settings while the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Warning Methods** on the infotainment system screen. You can change the following settings:

- **Parking Safety Priority**: Lowers all other audio volumes when Surround View Monitor is active.

TIP

- Your **Warning Methods** settings may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** maintain their last settings when you turn OFF and restart the vehicle.
- The **Warning Methods** setting menu may not be available on all vehicles.

Camera Settings



OCL4M055129N

(1) **Camera Settings**
(2) **Display Content**

While the vehicle is ON, tap the setup icon (⚙) or tap **Setup > Vehicle > Driver Assistance > Parking Safety > Camera Settings** on the infotainment system screen to change the Surround View Monitor settings.

Display Contents: Choose which information displays on the parking assistance screen.

Parking Distance Warning

If you select the Parking Distance Warning, the top-right corner of the Surround View Monitor screen displays the Parking Distance Warning when the warning is activated.

Rear View Parking Guidance

If you select **Rear View Parking Guidance**, the function displays in the Rear View.

Top View Parking Guidance

If you select **Top View Parking Guidance**, the function displays on the top right of the Surround View Monitor screen when Front or Rear Top View activates.

Display settings

You can set the brightness (day/night) and contrast of the camera image in Display settings.

TIP

- Depending on your vehicle's features and specifications, the settings menu may not be available.
- The horizontal Parking Guidance lines displayed on the Surround View Monitor indicate distances from your vehicle of 20 in (0.5 m), 40 in (1 m), and 91 in (2.3 m).
- The horizontal scale displayed by Top View Parking Lines indicates the liftgate opening distances and 79 in (2 m) from your vehicle.

Surround View Monitor Auto On

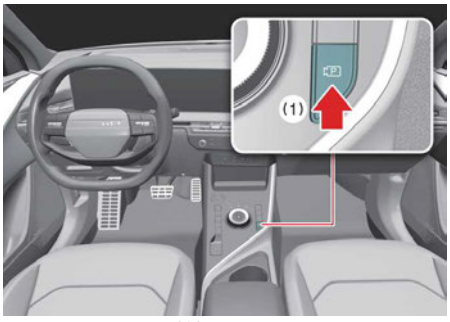
While the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Parking Safety > Surround View Monitor Auto On** on the infotainment system screen to use the function.

TIP

For more information about Surround View Monitor Auto On, refer to "Surround View Monitor Auto On" on page 569.

Surround View Monitor operation

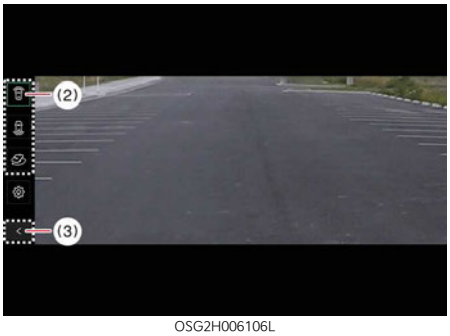
Parking/View button



OSG2H106067L

(1) Parking/View button
To turn Surround View Monitor ON, press the Parking/View button (1).
Press the button again to turn Surround View Monitor OFF.

Front-view



OSG2H006106L



OSG2H106068L

(2) View switching button
(3) back button
(4) infotainment system operation button
The front-view function assists with safe driving by displaying activity ahead of the vehicle on the navigation system, according to your selected settings.

Parking

The Surround View Monitor's Front-view function activates when you are parking under the fol-

lowing conditions:

- Your vehicle's gear is in P (Park), N (Neutral), or D (Drive) at a speed below 6 mph (10 km/h), and you press the Parking/View button (1).
- You shift the gear from R (Reverse) to N (Neutral) or D (Drive) at a speed below 6 mph (10 km/h).
- Forward Parking Distance Warning warns you while the gear is set to D (Drive).

  *(If you have selected **Setup > Vehicle > Driver Assistance > Parking Safety > Surround View Monitor Auto On** on the infotainment system screen).

Press the view switching button (2) on the Surround View Monitor to select Top View, Front View, Side View, or Wide View.

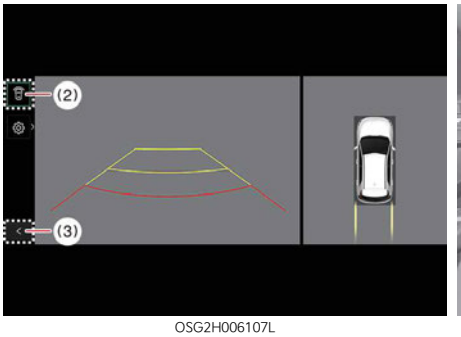
The Surround View Monitor's front-view function turns OFF when you are parking under the following conditions:

- You shift the gear to P (Park).
- You press the Parking/View button (1).
- You press the back button (3) on the Surround View Monitor screen.
- You press the infotainment system power button (4).
- You drive above 6 mph (10 km/h).

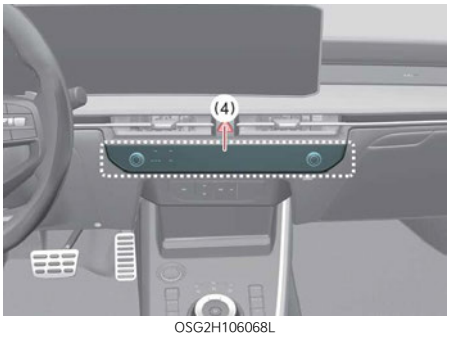
TIP

When the Surround View Monitor Front View activates, the last view you used displays.

Rear-view



OSG2H006107L



OSG2H106068L

(2) View switching button

(3) back button

(4) infotainment system operation button

The Surround View Monitor's Rear-view function assists you with safe parking by displaying activity behind the vehicle on the navigation system, according to your selected settings.

Parking

The Surround View Monitor's Rear-view function activates when you are parking under the following conditions:

- You press the Parking/View button (1), then select Rear View with the view switching button (2) while the gear is set to P (Park), N (Neutral), or D (Drive) with a speed below 6 mph (10 km/h).
- You shift the gear to R (Reverse).

Press the view switching button (2) on the Surround View Monitor to select Top View, Front View, Side View, or Wide View.

The Surround View Monitor's Rear-view function turns OFF when you are parking under the following conditions and the gear is set to P (Park), N (Neutral), or D (Drive):

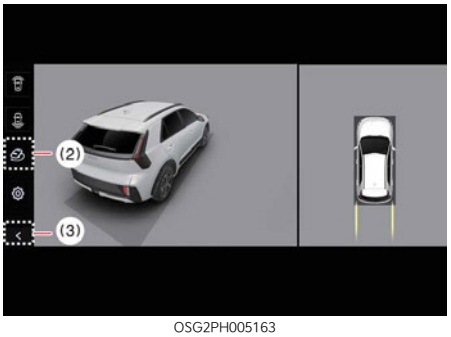
- You shift the gear from N (Neutral) or D (Drive) to P (Park).
- You press the Parking/View button (1).
- You press the back button (3) on the Surround View Monitor screen.
- You press the infotainment system power button (4).
- You drive above 6 mph (10 km/h).

The Surround View Monitor's Rear-view function turns OFF when you shift the gear from R (Reverse) to P (Park).

TIP

- The Rear View always displays when you shift the gear to R (Reverse).
- When you shift the gear to R (Reverse), the video does not turn OFF if you press the infotainment system power button (4).

3D View function



OSG2PH005163



OSG2H106068L

(2) View switching button

(3) back button

(4) infotainment system operation button

The Surround View Monitor's 3D View function displays the vehicle from various angles. To select the angle, press the 3D View icon on the Surround View Monitor. To reset the angle, press the 3D View icon again.

The Surround View Monitor's 3D View function activates under the following conditions:

- You shift the gear to P (Park), N (Neutral), or D (Drive) at speeds below 6 mph (10 km/h).
- You press the view switching button (2) to select 3D view while the gear is in R (Reverse) and Surround View Monitor is operating.

The Surround View Monitor's 3D View functions turns OFF when you are parking under the fol-

lowing conditions:
- You shift the gear from N (Neutral) or D (Drive) to P (Park).
- You press the Parking/View button (1).
- You press the back button (3) on the Surround View Monitor screen.
- You press the infotainment system power button (4).
- You drive above 6 mph (10 km/h).
- You shift the gear from R (Reverse) to P (Park).

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)

TIP
- The 3D View does not display parking guidelines.
- The Top View screen, which displays the Front View, Rear View, or 3D View, converts the original footage captured by your vehicle's 4 wide-view cameras to provide a 360-degree image of the vehicle from above.
- Top View does not display when you select Front or Rear Wide View.
- Pinch the Top View area to zoom in or out.

Surround View Monitor malfunction and limitations

Surround View Monitor malfunction

When Surround View Monitor malfunctions, the image on the screen may appear green, blue, or black.
If the Surround View Monitor does not work properly, the screen flickers, or the camera image does not display properly, have your vehicle inspected by an authorized Kia dealer.

Limitations of Surround View Monitor

When the vehicle is stopped for a long time in winter or when the vehicle is parked in an indoor parking lot, the exhaust fumes may temporarily blur the image.
- The screen may display abnormally and show an icon at the top left side under the following circumstances:
  - You open the liftgate.
  - You open the driver's door, or the front passenger opens their door.
  - You fold the outside rearview mirror.

WARNING
- Always look for objects or obstacles around your vehicle before moving. What you see on the screen may differ from the vehicle's actual location.
- Distance shown on the Surround View Monitor screen may differ from actual distance due to image calibration by the Wide Rear View camera. If your vehicle is tilted due to loaded cargo, Rear Parking Guidelines may be incorrect. When you are parking or driving, be sure to directly check your vehicle's surroundings for safety.

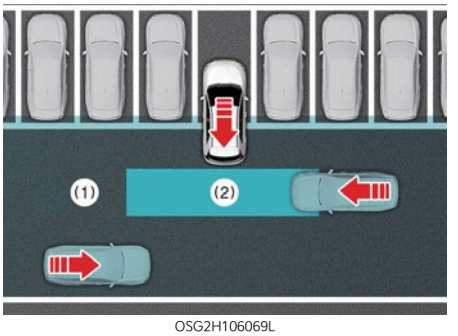
- The Surround View Monitor is designed to be used on a flat surface, and the image on the screen may not look correct when used on roads with varying heights, such as curbs and speed bumps.
- Always keep the camera lens clean to maintain optimal camera performance and Surround View Monitor operation. Do not clean the camera lens with chemical solvents that may damage it, including strong detergents that contain high alkaline or volatile organic solvents such as gasoline, acetone, and so on.
- Driving with the liftgate open is abnormal. For your safety, be aware and drive safely.

TIP

The Surround View Monitor displays images of your vehicle's surroundings using cameras mounted on the vehicle. The images shown on the screen may look unnatural depending on the vehicle and its surrounding conditions. Daily driving can calibrate and improve the Surround View Monitor's image.

Rear Cross-traffic Collision-avoidance Assist (RCCA) (if equipped)

Rear Cross-traffic Collision-avoidance Assist is designed to detect vehicles approaching the rear of your vehicle from the left or right while reversing and uses a warning message and sound to warn you of a possible collision. Rear Cross-traffic Collision-avoidance Assist may also assist with braking your vehicle to help you avoid a collision.



OSG2H106069L

(1) Rear Cross-Traffic Collision Warning operating range
(2) Rear Cross-Traffic Collision-avoidance Assist operating range

TIP

The warning time may vary depending on the speed of approaching vehicle.

Detection sensor

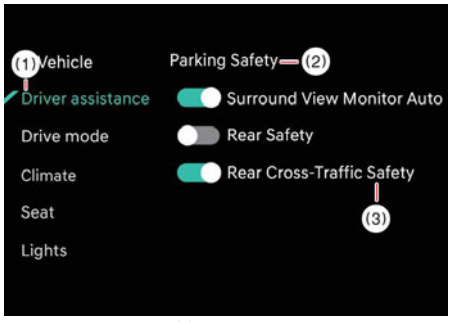
Please refer to "Detecting sensor(s)" on page 415 for the applicable sensors and their locations.

TIP

For more information about the rear corner radar, refer to "Blind-spot Collision-avoidance Assist (BCA)" on page 466.

Rear Cross-Traffic Collision-avoidance Assist settings

Rear Cross-Traffic Safety



OCL4M055135N

(1) **Driver Assistance**
(2) **Parking Safety**
(3) **Rear Cross-Traffic Safety**

While the vehicle is ON, tap **Setup** > **Vehicle** > **Driver Assistance** > **Parking Safety** > **Rear Cross-Traffic Safety** on the infotainment system screen to change Rear Cross-Traffic Collision-Avoidance Assist settings.

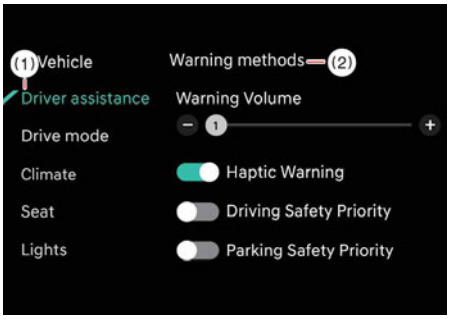
WARNING

When you restart the vehicle, Rear Cross-Traffic Collision-Avoidance Assist always turns ON. If you deselect **Rear Cross-Traffic Safety** after restarting the vehicle, you should always be aware of the surroundings and drive safely.

WARNING

- Do not use the system when towing a trailer or another vehicle, or when a carrier or other equipment that affects sensor operation or vehicle balance is installed, as it may not operate properly.
- When connecting a trailer or carrier, set the carrier menu. Setting the carrier menu will deactivate Rear Cross-traffic Collision-avoidance Assist. Always drive with caution.

Warning Methods



OCL4M055118N

(1) **Driver Assistance**
(2) **Warning Methods**

To change the Warning Methods settings while the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Warning Methods** on the infotainment system screen. You can change the following settings:

- **Warning Volume**: Adjusts the volume of the warning sound.
- **Haptic Warning**: Turns ON the steering wheel vibration warning.

TIP

- Your **Warning Methods** settings may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** maintain their last settings when you turn OFF and restart the vehicle.
- The **Warning Methods** setting menu may not be available on all vehicles.

Rear Cross-Traffic Collision-avoidance Assist operation

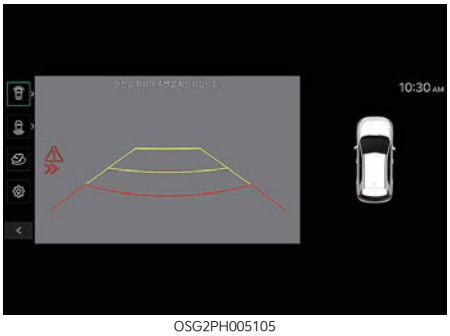
Rear Cross-Traffic Collision-avoidance Assist will warn you and control your vehicle in the following ways depending on the collision risk level:

- Collision Warning
- Emergency Braking
- Stopping vehicle and ending brake control

Collision Warning



OSG2H106032L



OSG2PH005105



OSG2H006055L

1. **Collision Warning**

Collision warning alerts you with a warning light on the outside rearview mirror, a warning message, an audible warning, and steering wheel vibration.
Collision warning also appears on the infotainment system screen.
Collision warning operates when all of the following conditions are satisfied:

- You shift the gear to R (Reverse) while your speed is below 5 mph (8 km/h).
- The approaching vehicle is approximately 82 ft (25 m) from the left or right side of your vehicle.
- The speed of the vehicle approaching from the left or right is above 3 mph (5 km/h).

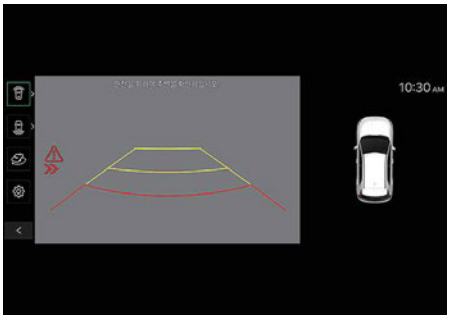
TIP

- If the operating conditions are satisfied, there will be a warning whenever a vehicle approaches from the left or right side even if your vehicle speed is 0 mph (0 km/h).
- The images or colors may display differently depending on the specifications of the instrument cluster or theme.

Emergency Braking



OSG2H106032L



OSG2PH005105



OSG2H006055L

(1) **Emergency Braking**

Collision Warning can alert you with a warning light on the outside rearview mirror, a warning message, an audible warning, and steering wheel vibration.
Collision Warning also appears on the infotainment system screen.
Emergency Braking assists you to help prevent a collision with an approaching vehicle from the left or right.
Emergency Braking operates when all of the following conditions are satisfied:

- You shift the gear to R (Reverse) while your speed is below 5 mph (8 km/h).
- The approaching vehicle is approximately 5 ft (1.5 m) from the left or right side of your vehicle.
- The speed of the vehicle approaching from the left or right is above 3 mph (5 km/h).

TIP

Brake control ends under the following conditions:

- 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 slows down.
- You engage the brake pedal with sufficient power.

Stopping the vehicle and ending brake control



OSG2H006090L

(1) **Drive carefully**

When Emergency Braking stops your vehicle, a warning message appears on the instrument cluster.

You should manually brake immediately and check your surroundings.

- Brake control ends approximately 2 seconds after emergency braking stops your vehicle.
- During emergency braking, Rear Cross-Traffic Collision-Avoidance Assist automatically cancels braking control if you excessively engage the brake pedal.

WARNING

- For your safety, change the settings only after parking the vehicle at a safe location.
- Rear Cross-Traffic Collision-Avoidance Assist may not display a warning message or generate an audible warning if any other function's warning message is displayed or audible warning is generated at the same time.
- You may not hear the warning sound of Rear Cross-Traffic Collision-Avoidance Assist in noisy surroundings. Adjust the interior vehicle volume appropriately and always stay attentive.
- Rear Cross-Traffic Collision-Avoidance Assist may not operate if you manually brake to avoid a 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.
- Your vehicle's basic braking performance operates properly even if there is a problem with Rear Cross-Traffic Collision-Avoidance Assist.

WARNING

- Rear Cross-Traffic Collision-Avoidance Assist automatically cancels braking control if you excessively engage 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, engage the brake pedal to reduce speed or stop your vehicle.
- Never rely on Rear Cross-Traffic Collision Avoidance to avoid a collision with people, animals, or objects. This may cause serious injury or death.

TIP

The brake control may not operate properly depending on the status of Electronic Stability Control (ESC).

There will only be a warning when:

- The ESC warning light is illuminated.
- ESC is engaged in a different function.

WARNING

- If Rear Cross-Traffic Collision-Avoidance Assist assists with braking, you must immediately engage the brake pedal and check your surroundings.
- After you shift the gear to R (Reverse), braking control operates once each for vehicles approaching from the left or right.

Rear Cross-Traffic Collision-avoidance Assist malfunction and limitations

Rear Cross-Traffic Collision-Avoidance Assist malfunction

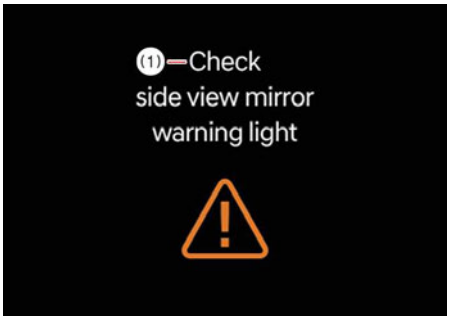


OCL4M055096N

(1) **Check Driver Assistance system**

If Rear Cross-Traffic Collision-Avoidance Assist is not working properly, the Master warning light (⚠) appears on the instrument cluster, along with a warning message that lasts for several seconds. You can check the warning-related functions in the Service Messages section of the Utility Information View on the cluster display.

Have your vehicle inspected by an authorized Kia dealer.



OCL4M055102N

(1) **Check side view mirror warning light**

When the outside sideview mirror warning light is not working properly, the Master warning light (⚠) appears on the instrument cluster, along with a warning message that lasts for several seconds.

Have your vehicle inspected by an authorized Kia dealer.

Rear Cross-Traffic Collision-Avoidance Assist disabled



OCL4M055098N

(1) **Driver Assistance system limited. Radar blocked.**

When foreign material (such as rain or snow) covers the rear bumper near the rear-side radar or sensor, or when you install a trailer or carrier, it can reduce the detection performance and temporarily limit or disable Rear Cross-Traffic Collision-Avoidance Assist.

If this occurs, a warning message appears on the instrument cluster.

Rear Cross-Traffic Collision-Avoidance Assist should operate properly when you remove foreign materials (such as snow or rain) from the sensor or obstructions (such as a trailer or carrier) from the rear bumper.

If Rear Cross-Traffic Collision-Avoidance Assist still does not operate properly after you remove foreign materials (such as snow or rain) from the sensor or obstructions (such as a trailer or carrier) from the rear bumper, have your vehicle inspected by an authorized Kia dealer.

⚠ WARNING

- Even though a warning message does not appear on the instrument cluster, Rear Cross-Traffic Collision-Avoidance Assist may not operate properly.

- Rear Cross-Traffic Collision-Avoidance Assist may not operate properly immediately after starting the vehicle if the detection sensors are contaminated or if there are no objects around the vehicle (e.g., in an open, unobstructed area).

⚠ WARNING

Turn OFF Rear Cross-Traffic Collision-Avoidance Assist to install or remove a trailer, carrier, or other attachment. Turn ON Rear Cross-Traffic Collision-Avoidance Assist when you are finished.

Limitations of Rear Cross-Traffic Collision-Avoidance Assist

Rear Cross-Traffic Collision-Avoidance Assist may operate abnormally or unexpectedly under the following circumstances:

- You are departing from areas with overgrown foliage.
- You are departing from areas where roads are wet.
- The speed of an approaching vehicle is fast or slow.
- The rear-side radar is obstructed by the vehicle itself, pillars, walls, or other objects.
- Exiting simultaneously with a neighboring vehicle, causing the rear-side radar to be obstructed.

Braking control may not work, and your attention is required in the following circumstances:

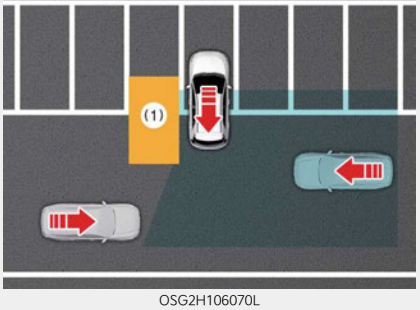
- The vehicle vibrates severely while you drive over a bumpy, uneven road or pothole.
- You drive on a slippery surface such as snow, rain, ice, and so on.
- The tire pressure is low or a tire is damaged.
- Remote Smart Parking Assist is operating (if equipped).
- The brakes are modified

TIP

For more information about the rear corner radar, refer to "Blind-spot Collision-avoidance Assist (BCA)" on page 466.

WARNING

- You are driving near a vehicle or structure



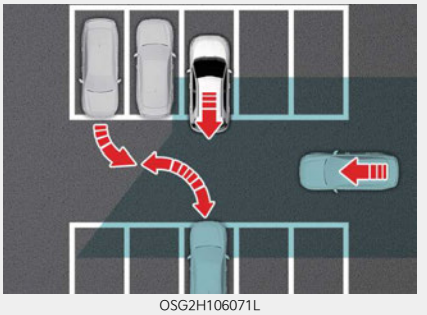
(1) Structure

OSG2H106070L

Rear Cross-Traffic Collision-Avoidance Assist may be limited when you drive near a vehicle or structure, and it 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.

- The vehicle is in a complex parking environment



OSG2H106071L

Rear Cross-Traffic Collision-Avoidance Assist may detect vehicles that are parking or pulling out near your vehicle (for example, a vehicle leaving from beside your vehicle, a vehicle parking or pulling out behind your vehicle, a vehicle that is approaching your vehicle making a turn, and so on).

The function may unnecessarily warn you and control the brake.

Always check your surroundings while backing up.

- The vehicle is parked diagonally

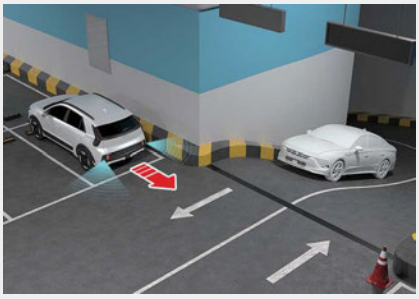


OSG2H106072L

Rear Cross-Traffic Collision-Avoidance Assist may be limited when you back up diagonally 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.

- The vehicle is on or near a slope

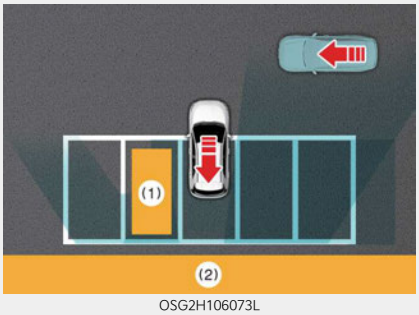


OSG2H106089L

Rear Cross-Traffic Collision-Avoidance Assist may be limited when your vehicle is on or near an uphill or downhill slope, and it 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.

- You are pulling into a parking space where there is a structure



(1) Structure

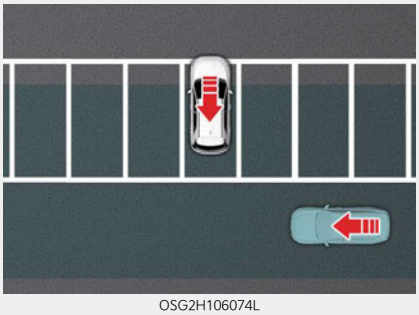
(2) Wall

OSG2H106073L

Rear Cross-Traffic Collision-Avoidance Assist may detect vehicles passing ahead of you when you park in reverse into a parking space with a wall or structure in the rear or side area. The function may unnecessarily warn you and control the brake.

Always check your surroundings while backing up.

- The vehicle is parked backward



OSG2H106074L

Rear Cross-Traffic Collision-Avoidance Assist may detect vehicles passing behind you when you park in a parking space in reverse. The function may unnecessarily warn you 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 there is strong electromagnetic interference.
- Rear Cross-Traffic Collision-Avoidance Assist may not activate for 3 seconds after you start your vehicle or initialize the rear corner radars.
- Even if you restart the vehicle with the sensors blocked or malfunctioning, Rear Cross-Traffic Collision-Avoidance Assist may not operate properly, as the function maintains its 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.

TIP

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

Parking Distance Warning (PDW) (if equipped)

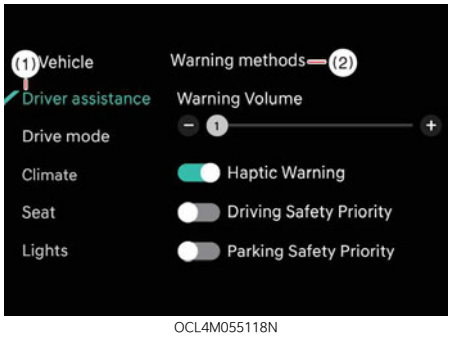
Forward/Side/Reverse Parking Distance Warning uses the front, side (if equipped), and rear ultrasonic sensors to detect and warn you if a person, animal, or object is within a certain distance when your vehicle is stopped or driving at low speed.

Detection sensor

Please refer to "Detecting sensor(s)" on page 415 for the applicable sensors and their locations.

Parking Distance Warning settings

Warning Methods



OCL4M055118N

(1) **Driver Assistance**
(2) **Warning Methods**

To change the Warning Methods settings while the vehicle is ON, tap **Setup** > **Vehicle** > **Driver Assistance** > **Warning Methods** on the infotainment system screen. You can change the following settings:

- **Warning Volume**: Adjusts the volume of the warning sound.

TIP

- Your **Warning Methods** settings may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** maintain their last settings when you turn OFF and restart the vehicle.
- The **Warning Methods** setting menu may not be available on all vehicles.

Parking Distance Warning Auto On

You can set the Parking Distance Warning to automatically turn ON when driving at low speeds. To use the Parking Distance Warning Auto On function, tap **Setup** > **Vehicle** > **Driver Assistance** > **Parking Safety** > **Parking Distance Warning Auto On** on the infotainment system screen.

WARNING

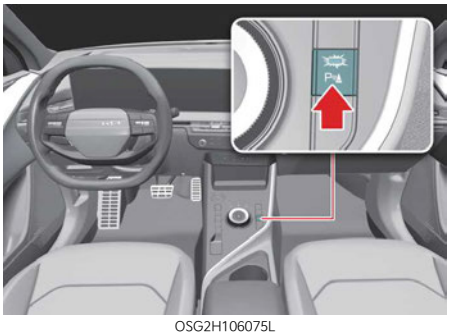
- Do not use the system when towing a trailer or another vehicle, or when a carrier or other equipment that affects sensor operation or vehicle balance is installed, as it may not function properly.
- When connecting a trailer or carrier, set the trailer or carrier menu (if equipped). If the driver manually sets the menu or the trailer or carrier connection is automatically recognized through genuine parts, the functions of the driver assistance system may be limited.

TIP

When **Parking Distance Warning Auto On** is selected, the Parking Safety button indicator (P) stays ON.

Parking Distance Warning operation

Parking Safety button



OSG2H106075L

Press the Parking Safety (P) button to turn ON Parking Distance Warning. Press the button again to turn OFF the function.
When you shift the gear to R (Reverse), Parking Distance Warning automatically turns ON (the Parking Safety button indicator is ON).

Forward Parking Distance Warning

Forward Parking Distance Warning operates when any of the following conditions is satisfied:

- When you shift the gear 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 illuminated.
- Forward Parking Distance Warning warns you when the vehicle is in D (Drive) (if you have selected **Setup > Vehicle > Driver Assistance > Parking Safety > Parking Distance Warning Auto On** on the infotainment system screen).

TIP

- Forward Parking Distance Warning operates when the vehicle's speed is below 6 mph (10 km/h).
- When in R (Reverse), Forward Parking Distance Warning does not issue any warning for objects inside the front of the vehicle. A warning sound will be activated when an object within 12 in (30 cm) of the front outer side of the vehicle is detected while turning.
- If you do not select Parking Distance Warning Auto On, the Forward Parking Distance Warning function (and its indicator light on the button) turns OFF when your speed is above 18 mph (30 km/h). Even if you drive below 6 mph (10 km/h) again, the function does not turn ON automatically.
- A warning sound will be activated when an object is detected within the vehicle's driving path.
- The warning sound may be deactivated when the vehicle is stationary.

Warning indicator and warning sound

Distance from object	Warning indicator		Warning sound
	Instrument cluster	Infotainment system screen	
24-48 in (60-120 cm)			Buzzer beeps intermittently
12-24 in (30-60 cm)			Buzzer beeps more frequently
within 12 in (30 cm)			Buzzer beeps continuously

- The corresponding indicator appears and an audible warning sounds whenever each ultrasonic sensor detects a person, animal, or object in its sensing range.
- When more than 2 objects are detected at the same time, the audible warning applies to the closest one.
- The shape of the indicator in the illustration may differ from the indicator displayed by your vehicle.

Side Parking Distance Warning (if equipped)

Side Parking Distance Warning operates when any of the following conditions is satisfied:

- When you shift the gear to R (Reverse).
- The gear is in D (Drive) and the Parking Safety (P) button indicator light is illuminated.
- Your speed is below 6 mph (10 km/h).

TIP

- Side Parking Distance Warning only works when your speed is below 6 mph (10 km/h).
- Side Parking Distance Warning only works when the Forward/Reverse Parking Distance Warning function is ON.

- A warning sound will be activated when an object is detected within the vehicle's driving path.
- The warning sound may be deactivated when the vehicle is stationary.

Warning indicator and warning sound

Distance from object	Warning indicator		Warning sound
	Instrument cluster	Infotainment system screen	
24-48 in (60-120 cm)			-
12-24 in (30-60 cm)			-
within 12 in (30 cm)			Buzzer beeps continuously

- When the side ultrasonic sensor detects a person or object, the instrument cluster or infotainment system screen displays indicator lights for each distance.
- A warning sounds when the sensor detects an object within 12 in (30 cm) of the side in the vehicle's exit path.
- If the sensor detects an object to the side outside the vehicle's exit path, it only displays the indicator light.
- In D (Drive), when the distance from the object is 12 in (30 cm) or more, the instrument cluster does not display the side-way warning.
- The shape of the indicator in the illustration may differ from the indicator displayed by your vehicle.

Reverse Parking Distance Warning

Reverse Parking Distance Warning operates when you shift the gear to R (Reverse).

TIP

- A warning sound will be activated when an object is detected within the vehicle's driving path.
- The warning sound may be deactivated when the vehicle is stationary.

Warning indicator and warning sound

Distance from object	Warning indicator		Warning sound
	Instrument cluster	Infotainment system screen	
24-48 in (60-120 cm)			Buzzer beeps intermittently

Distance from object	Warning indicator		Warning sound
	Instrument cluster	Infotainment system screen	
12-24 in (30-60 cm)			Buzzer beeps more frequently
within 12 in (30 cm)			Buzzer beeps continuously

- The corresponding indicator appears and an audible warning sounds whenever each ultrasonic sensor detects a person, animal, or object in its sensing range.
- When more than 2 objects are detected at the same time, the audible warning applies to the closest one.
- The shape of the indicator in the illustration may differ from the indicator displayed by your vehicle.

Parking Distance Warning malfunction and precautions

Parking Distance Warning malfunction

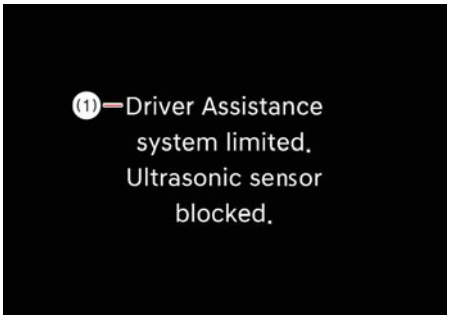


OCL4M055096N

(1) **Check Driver Assistance system**

If there is a problem with the Parking Distance Warning or related functions and parts, the instrument cluster displays a warning message.
You can check the contents of the warning in the service message of the utility information view of the instrument cluster. If the function still does not work properly, have your vehicle inspected by an authorized Kia dealer.

Parking Distance Warning disabled



OCL4M055111N

(1) **Driver Assistance system limited. Ultrasonic sensor blocked.**

The ultrasonic sensors detect objects around your vehicle. Parking Distance Warning may be temporarily limited or may not operate if snow, rain, foreign substances, and so on cover 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. Parking Distance Warning works normally if you remove the contamination from the recognition sensor. Always keep it clean. If the function still does not work properly even after you remove the contamination, have your vehicle inspected by an authorized Kia dealer.

TIP

The Master warning light (⚠) displays in the target direction if a malfunction or ultrasonic sensor is blocked while the Parking Distance Warning is operating. You can check the Forward/Side/Reverse Parking Distance status in the service message of the utility information view of the instrument cluster display window.



OSG2H006102L

Limitations of Parking Distance Warning

Parking Distance Warning may operate abnormally or unexpectedly under the following circumstances:

- Ice is on the sensor

  The sensor is covered with foreign material, such as snow, ice, or water. (Parking Distance Warning operates properly when you remove such substances.)

- The weather is extremely hot or cold.
- The sensor or sensor assembly is damaged.
- You press the surface of the sensor hard or hit it with a hard object.
- You scratch the surface of the sensor with a sharp object.
- You spray the sensors or their surrounding areas directly with a high pressure washer.
- Objects emitting ultrasonic waves (such as a vehicle's horn, motorcycle engine, or large vehicle air brakes) are nearby.
- A wireless device with a transmitting function is operating near the ultrasonic sensors
- During strong winds
- If sensor damage or misalignment occurs due to vehicle accidents, such as bumper damage

Parking Distance Warning may malfunction when:

- Heavy rain or water spray is present.
- Water flows across the surface of the sensor.
- Affected by another vehicle's sensors

  The sensor is covered with snow or ice.
- You are driving on an uneven road, gravel road, or road with dense overgrowth.
- Objects that generate ultrasonic waves are near the sensor.
- The license plate is installed in a different spot from the original location.
- A license plate that does not meet official specifications is installed
- The vehicle bumper height or ultrasonic sensor installation has been modified.
- You have attached equipment or accessories near the ultrasonic sensors.
- A cargo carrier (trailer or carrier) is installed at the rear of the vehicle
- The vehicle's ride height changes significantly due to abnormal tire pressure, overloading, etc.
- A trailer hitch is installed on the vehicle

The following objects may not be detected:

- Slim objects such as ropes, chains, or small poles.
- Narrow objects, such as the corners of a square column.
- Objects that tend to absorb ultrasonic waves, such as clothes, spongy material, or snow.
- Objects shorter 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 and rear side ultrasonic sensors, or approaching the side space.

⚠ WARNING

- Parking Distance Warning is a supplemental function. Several factors can affect the operation of Parking Distance Warning, including environmental conditions. It is your responsibility to always check your surroundings before and while parking.
- Your new vehicle warranty does not cover any accidents or damage to your vehicle due to any malfunction of Parking Distance Warning.
- Pay close attention when driving near objects, pedestrians, and especially children. The ultrasonic sensors may not detect some objects due to their distance, size, or material, all of which can limit the sensor's effectiveness.
- Parking Distance Warning does not warn you about objects in the order it detects them. The warning order varies depending on the speed of your vehicle or the shape of a person, animal, or object.

- If Parking Distance Warning does not operate properly, have your vehicle inspected by an authorized Kia dealer.
- Driving with the liftgate open is abnormal and may be unsafe. Exercise caution.
- Some objects may not be detected by the ultrasonic sensors due to their size, shape, material, or distance from the vehicle. This can limit sensor performance.
- Always keep the detection sensors clean.
- Clean the sensor surfaces with water. Do not use acidic or alkaline detergents.
- Do not spray high-pressure water directly onto the sensors or their surrounding areas. Impact from high-pressure water may cause sensor malfunction.
- Do not cover the sensors with external objects (stickers, bumper guards, etc.) or paint the bumper. This may degrade the performance of Parking Collision-Avoidance Assist.
- Do not disassemble or apply impact to the sensor components.
- Avoid impacts to the sensors. If a sensor is displaced by impact, Parking Collision-Avoidance Assist may not function properly. If a sensor is damaged due to impact, have your vehicle inspected by an authorized Kia dealer.
- If the bumper is damaged, replaced, or repaired, the Parking Distance Warning may not function properly.
- Strong electromagnetic waves may disable Parking Collision-Avoidance Assist.
- Excessive audio volume may prevent you from hearing warning sounds. Adjust the vehicle's interior volume appropriately and always pay attention.

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 you avoid a collision while your vehicle is reversing.

Detection sensor

Please refer to "Detecting sensor(s)" on page 415 for the applicable sensors and their locations.

Reverse Parking Collision-avoidance Assist settings

Parking Safety



OCL4M055136N

(1) **Driver Assistance**
(2) **Parking Safety**
(3) **Rear Safety**

While the vehicle is ON, tap **Setup** > **Vehicle** > **Driver Assistance** > **Parking Safety** on the infotainment system screen.

Backward Safety: This function warns you or assists you with braking when there is a high risk of collision with pedestrians or objects behind your vehicle.

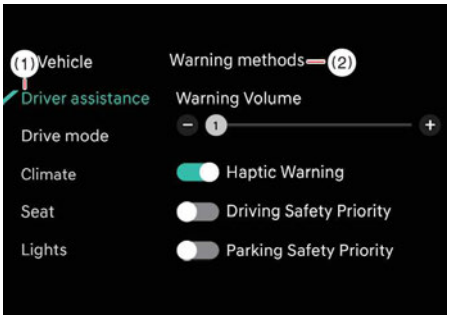
WARNING

- Do not use the system when towing a trailer, another vehicle, or when a carrier or other equipment that affects sensor operation or vehicle balance is installed. The system may not operate normally.
- When connecting a trailer or carrier, set the trailer or carrier menu (if equipped). If the driver manually sets the menu or the trailer or carrier connection is automatically recognized through genuine parts, the functions of the driver assistance system may be limited.

TIP

When you restart your vehicle, **Backward Safety** is selected and Parking Collision-Avoidance Assist settings are retained.

Warning Methods



OCL4M055118N

(1) **Driver Assistance**
(2) **Warning Methods**

To change the Warning Methods settings while the vehicle is ON, tap **Setup > Vehicle > Driver Assistance > Warning Methods** on the infotainment system screen. You can change the following settings:

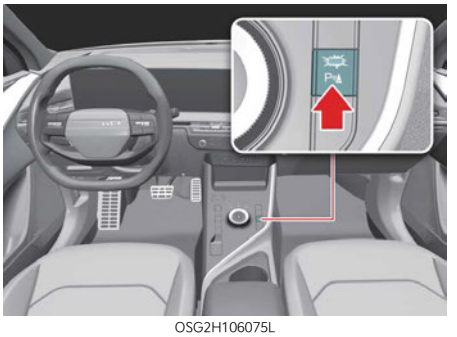
- **Warning Volume**: Adjusts the volume of the warning sound.
- **Haptic Warning**: Turns ON the steering wheel vibration warning.

TIP

- Your **Warning Methods** settings may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** maintain their last settings when you turn OFF and restart the vehicle.
- The **Warning Methods** setting menu may not be available on all vehicles.

Reverse Parking Collision-avoidance Assist operation

Turning ON or OFF



OSG2H106075L

Press and hold the Parking Safety button (P) for more than 2 seconds to turn the Parking Collision-Avoidance Assist ON or OFF.

Operating conditions

When Reverse Parking Collision-Avoidance Assist detects a risk of collision with pedestrians or objects behind the vehicle, an audible warning sounds, the steering wheel vibrates, and a warning message appears on the instrument cluster. If the Surround View Monitor is active, the infotainment system screen also displays a warning message.

If a collision risk is urgent, Reverse Parking Collision-Avoidance Assist controls the vehicle's braking.

Tap **Backward Safety** on the **Parking Safety** menu on the infotainment system screen. Parking Collision-Avoidance Assist is enabled under the following conditions:

- The liftgate and doors are closed.
- The Electronic Parking Brake (EPB) is released.
- The gear is shifted to R (Reverse).
- Your speed is below 6 mph (10 km/h) (detecting pedestrians).
- Your 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 condition.



OSG2H006058L

When Parking Collision-Avoidance Assist activates, a line appears at the bottom of the vehicle's image in the instrument cluster.

TIP

Parking Collision-Avoidance Assist operates only once after you shift the gear to R (Reverse). To reactivate Parking Collision-Avoidance Assist, shift from another gear to R (Reverse).

Non-operating conditions

If Parking Collision-Avoidance Assist detects the risk of a collision between your vehicle and a pedestrian or object, Parking Collision-Avoidance Assist warns you with an audible warning and warning message on the instrument cluster. If the infotainment system screen is ON, a warning appears on the screen.

If a collision is imminent, Parking Collision-Avoidance Assist can assist you with braking.

Braking assist releases after 5 minutes. Immediately engage the brake pedal and check your surroundings.

Braking assist also releases under the following conditions:

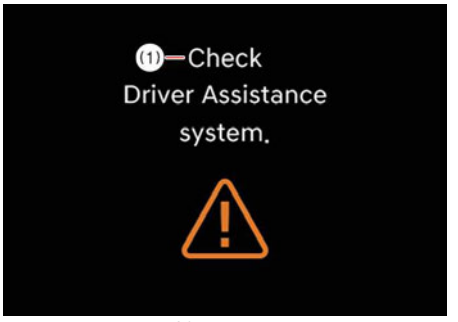
- You shift the gear to P (Park) or D (Drive).
- You manually brake with sufficient power.
- You release the warning by shifting to P (Park), N (Neutral), or D (Drive).

TIP

When Parking Collision-Avoidance Assist activates while you are reversing, braking control is released after 5 minutes, and the Electronic Parking Brake (EPB) is engaged.

Reverse Parking Collision-avoidance Assist malfunction and limitations

Reverse Parking Collision-Avoidance Assist malfunction

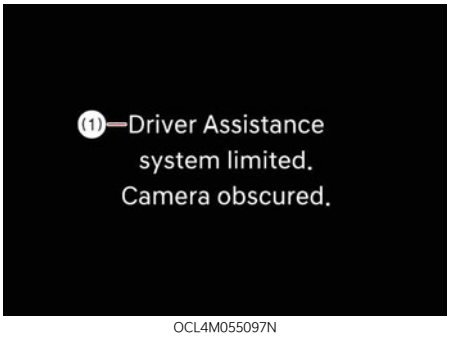


OCL4M055096N

(1) **Check Driver Assistance system**

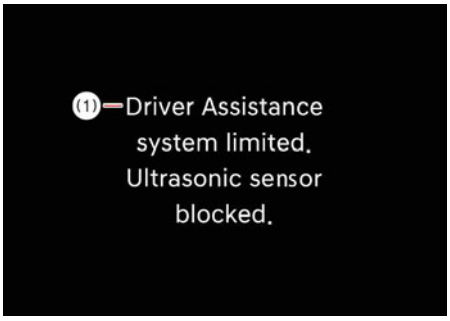
If there is a problem with Parking Collision-Avoidance Assist or related functions and parts, a warning message displays on the instrument cluster. If the function still does not work properly, have your vehicle inspected by an authorized Kia dealer.

Reverse Parking Collision-Avoidance Assist disabled



OCL4M055097N

(1) **Driver Assistance system limited. Camera obscured.**



OCL4M055111N

(1) **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, and so on obscure the sensor. You can check the detection sensor blind warning target (wide-rear view camera and rear ultrasonic sensor) in the service message of the utility information view in the instrument cluster. Parking Collision-Avoidance Assist works normally if you remove the contamination from the recognition sensor. Always keep it clean. If the function still does not work properly even after you remove the contamination, have your vehicle inspected by an authorized Kia dealer.

TIP

You can check the Reverse Parking Collision-Avoidance Assist status in the service message of the utility information view of the instrument cluster.

Limitations of Reverse Parking Collision-Avoidance Assist

Parking Collision-Avoidance Assist may not assist you with braking, even if there are pedestrians or objects behind the vehicle, under the following circumstances:

- There is a problem with the vehicle:
  - You install any non-factory equipment or accessory.
  - You modify the braking system components, such as brake discs and calipers.
  - The wheels are misaligned, or the suspension components are modified.
  - You have attached accessories to the steering wheel or modified the steering components.
  - Your vehicle is unstable due to an accident or other causes.
  - You have modified the bumper height or ultrasonic sensor installation.
  - The overall height of the vehicle is severely tilted due to abnormal tire pressure or excessive loading in the cargo area.
  - The wide view cameras or ultrasonic sensors are damaged.
  - The wide view cameras or ultrasonic sensors are covered with foreign material such as snow or dirt.
  - You have installed a snow chain, spare tire, or wheel of a different size.
  - A trailer hitch is installed on the vehicle
  - The license plate is mounted in a location other than the standard position
  - A non-standard license plate is installed
  - Decorations are attached around the ultrasonic sensors

  - The ultrasonic sensors or their surrounding parts are removed or tampered with
  - Excessive force is applied to the surface of the ultrasonic sensors or they are struck with a hard object
  - The surface of the ultrasonic sensors is scratched or damaged by a sharp object
- There is a problem with the surroundings:
  - There is a pattern on the road.
  - There is a shadow or reflected light on the ground
  - Pedestrians or objects are near the vehicle's path.
  - You are driving through a narrow track or a parking space.
  - You are driving on an uneven road such as an unpaved road, gravel road, speed bump, or inclined road.
  - You have installed a trailer or carrier near the rear corner radar.
  - Wide view cameras are obscured by a light source or by inclement weather, such as heavy rain, fog, snow, and so on.
  - The surroundings are extremely bright or dark.
  - Outside temperature is extremely high or low.
  - The wind is either strong (above 12 mph (20 km/h)) or blowing perpendicular to the rear bumper.
  - Objects that generate excessive noise (such as vehicle horns, loud motorcycles, or truck air brakes) are near your vehicle.
  - Objects that generate ultrasonic waves are near your vehicle.
  - A wireless device with a transmission function is operating near the rear ultrasonic sensor.
  - Your vehicle is affected by another vehicle's parking distance warning function.
  - The road is slippery or inclined.
  - High-pressure water is sprayed directly onto the surface of the ultrasonic sensors
- There is a situation with pedestrians or objects:
  - The pedestrian is difficult to detect.
  - There is ground height difference between your vehicle and the pedestrian.
  - The image of the 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 is wearing clothing that easily blends into the background, making them difficult to detect.
  - The pedestrian is wearing clothing that does not reflect ultrasonic waves.
  - The object's size, thickness, height, or shape does not reflect ultrasonic waves (for example, a pole, bush, curb, cart, the edge of a wall, and so on).
  - The pedestrian or 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 the pedestrian or the object.
  - The object is not located near the front or rear center of your vehicle.
  - The object is not parallel with the rear bumper.
  - The face of the object is not parallel with the rear bumper.
- There is a situation with the driving conditions:
  - You drive the vehicle immediately after shifting the gear to R (Reverse) or D (Drive).

- You accelerate or drive in a circle.
- 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 the vehicle's speed is above 2 mph (4 km/h), Parking Collision-Avoidance Assist will operate 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 from the vehicle, 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 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, the rear ultrasonic sensors, or their surrounding areas directly with a high pressure washer. This may cause the Wide Rear View camera or ultrasonic sensors to malfunction.
- Do not apply objects (such as a bumper sticker or 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 damage the Wide Rear View camera or the components of the ultrasonic sensor.
- Do not apply unnecessary force to the Wide Rear View camera or ultrasonic sensors. Parking Collision-Avoidance Assist may not operate properly if you forcibly move the Wide Rear View camera or ultrasonic sensors out of proper alignment. If Parking Collision-Avoidance Assist does not operate properly, have your vehicle inspected by an authorized Kia dealer.
- You may hear noise when braking suddenly to avoid a collision.
- If any other warning sound (such as the seatbelt warning chime) is already generated, the 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 in areas with strong electromagnetic interference.
- Playing the vehicle audio system at a 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 brake system.
  There will only be a warning when:
  - The brake system warning light is illuminated.

  - brake system is activated in a different function.
- Check your brake fluid and brake pad conditions regularly. The brake performance may decrease depending on the brakes' condition.
- Turn OFF Parking Collision-Avoidance Assist when towing a trailer. If you are towing and moving in reverse, Parking Collision-Avoidance Assist will detect the trailer and activate.
- Driving with the liftgate open is considered abnormal operation; exercise caution for safety.

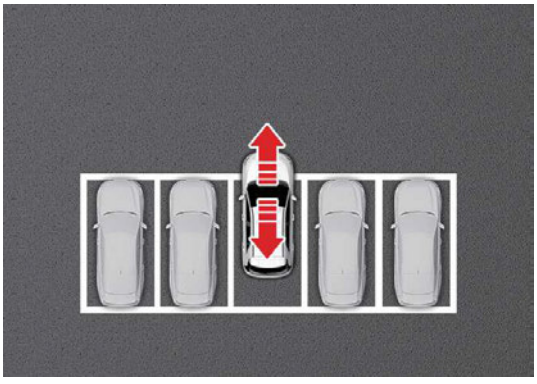
TIP

Parking Collision-Avoidance Assist can detect a pedestrian or an object when:

- A pedestrian is standing behind the vehicle.
- A large obstacle, such as another vehicle, is parked in the rear center of your vehicle.

Remote Smart Parking Assist (RSPA) (if equipped)

Remote Smart Parking Assist uses the front, front side, rear side, and rear ultrasonic sensors to detect parking spaces and control vehicle steering, speed, gear shifts, and help enter and exit parking spaces remotely from outside your vehicle.

Function	Description
Remote Operation	Remotely moving forward or backward  OSG2H106076L

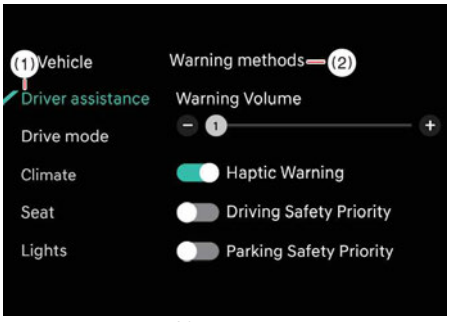
- Remote Smart Parking may be operated from outside the vehicle using the smart key.
- When Remote Smart Parking Assist operates, Parking Distance Warning and Surround View Monitor will also operate. For more details, refer to "Parking Distance Warning (PDW)" on page 588 and "Surround View Monitor (SVM)" on page 568.

WARNING

- Never disassemble or apply impact on the ultrasonic sensor or its surrounding.
- If foreign material (snow, rain or etc.) block the ultrasonic sensor, the detecting performance may not operate properly. Check the ultrasonic sensor, if the ultrasonic sensor is dirty, clean it with a soft cloth.
- Do not press the ultrasonic sensor too hard, shock it with a hard object or scratch it with a sharp object.
- Do not spray the ultrasonic sensors directly with a high pressure washer.
- Remote Smart Parking Assist may not operate properly when bumper height or ultrasonic sensor installation has been modified, if any accessories or stickers installed on the field of view of the ultrasonic sensor.

Remote Smart Parking Assist settings

Warning methods



OCL4M055118N

(1) **Driver Assistance**
(2) **Warning Methods**

The Warning Methods can be set with the vehicle on. Select **Settings > 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.

CAUTION

- Do not use the system if a trailer or another vehicle is being towed, or if a carrier or other equipment affecting sensor operation or vehicle stability is installed. The system may not operate properly.
- When connecting a trailer or carrier, set the trailer or carrier menu (if applicable). If the driver sets the menu manually, or if the trailer or carrier connection is automatically recognized via the manufacturer's dedicated parts, the functions of the driver assistance system may be limited.

TIP

- 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.

Remote Smart Parking Assist operation

Remote Smart Parking button

Parking/View button	Smart key	Digital key (if equipped)
		
OSG2H106077L	OSG2H106088L	OOV055277

Location	Name	Symbol	Description
Inside vehicle	Parking/View button		• Press and hold the Parking/View button to turn on Remote Smart Parking Assist. Also, Forward/Reverse Parking Distance warning will automatically turn on. (However, functions may differ depending on the situations. Refer to each function's description for more details in the following pages.) • Press and hold the Parking/View button while Smart Parking or Smart Exit function is on to operate the function.
Smart key	Remote Start button		• Press the Remote Start button after the door is locked with the vehicle off to start the vehicle remotely. • Press the Remote Start button while Remote Operation function is operating to end function operation.
	Forward button		• When using Remote Parking function, regardless of which direction button is pressed, reverse parking is supported while the button is pressed. • When using the Remote Operation function, the vehicle moves in the direction of the button while the button is pressed.
	Backward button		
Digital key (if equipped)	Remote Smart Parking button		• When using Remote Forward/Backward, swipe the vehicle icon to move the vehicle in the desired direction

Remote Operation

Operating order

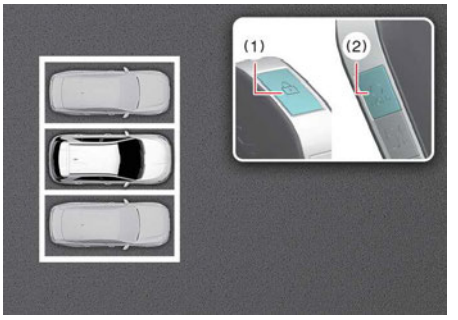
Remote Operation operates in the following order:

1. Getting ready to remotely move forward and backward
2. Remotely moving forward and backward

1. Getting ready to remotely move forward and backward

There are two ways to operate Remote Operation function.

Method (1): Using the function with vehicle off

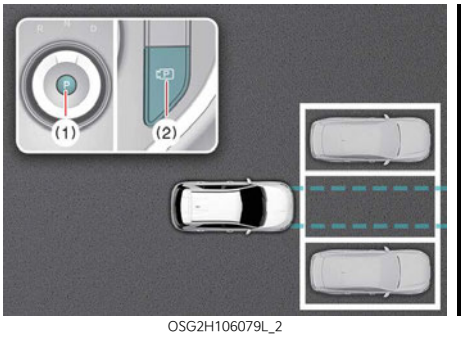


OSG2H106078L_2

(1) Within a certain range from the vehicle press the door lock ( ) button on the smart key or digital key and lock all doors.

(2) Press and hold the Remote Start button (HOLD) within 4 seconds until the vehicle starts.

Method (2): Using the function with vehicle on



OSG2H106079L_2



OSG2H006092L

(1) **1. Leave the vehicle (keep the key) and close the doors.**

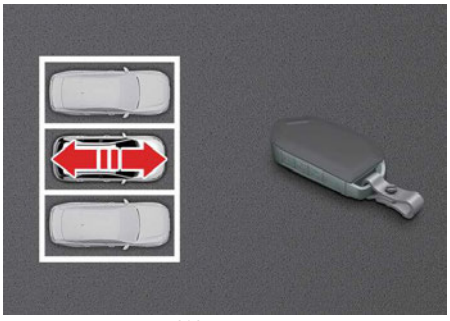
(2) **2. Press and hold the parking button on the Smart Key.**

1. Park the vehicle in front of the space where you want to use Remote Operation function, and shift the gear to P (Park).
2. Press and hold the Parking/View (P) button to turn on Smart Parking Assist. A message **Under REMOTE control** will appear on the infotainment system screen.
3. Get out of the vehicle with the smart key and close all doors.

NOTE

- **Agree** must be selected on the infotainment system screen and the infotainment system has to operate properly to use Remote Operation function.
- Before starting to move the vehicle using the Remote Forward/Reverse function from outside the vehicle, make sure that no Smart Key or Digital Key is left inside the vehicle. If a spare Smart Key or Digital Key remains inside the vehicle, the Remote Forward/Reverse function will not operate.

2. Remote Operation



OSG2H106097L

Method (1): Using the Smart key

1. Press and hold one of the Forward ( ) or Backward ( ) button on the smart key.
   - Remote Smart Parking Assist will automatically control the steering wheel, vehicle speed and gear shift. The vehicle will move in the direction of the button pressed.
   - While Remote Operation function is operating, if you release the button, the vehicle will stop and function control will pause. The function will start operating again when the button is pressed and held again.
2. Hold down the Forward ( ) or Backward ( ) button until the vehicle reaches the target location.
3. When Remote Operation is done, get in the vehicle with the smart key or press the Remote Start ( ) button on the smart key from outside the vehicle.
   - The message will appear on the infotainment system screen. The vehicle will automatically shift to P (Park) and engage the parking brake.
   - When the Remote Start ( ) button is pressed, the vehicle will turn off. If the driver is in the vehicle, the vehicle will retain ON position.

Method (2): Using the Digital key

1. Swipe the vehicle icon in the desired direction on the Remote Forward/Backward screen to operate the vehicle.
   - While the button is pressed, Remote Smart Parking Assist will automatically control the steering, gear shifting, and vehicle speed. The moving direction of the vehicle corresponds to the direction of the Forward or Backward button on the Digital Key.
   - If you release the button while controlling Remote Forward or Backward, the vehicle will stop and control will pause temporarily. Press the button again to resume operation.
2. Swipe the vehicle icon on the Digital Key and maintain the action until the vehicle reaches the desired position.

3. After Remote Forward or Backward is complete, either board the vehicle with the Digital Key or press the Exit button.
   - A Remote Forward/Backward complete message will be displayed on the infotainment system screen. Remote Smart Parking Assist will automatically shift to P (Park) and apply the Electronic Parking Brake (EPB).
   - If the Exit button is pressed, the vehicle will turn off. If you board the vehicle, the system will remain on.

NOTE

- Remote Operation can control the vehicle remotely using the smart key or digital key outside the vehicle.
- Check that all smart keys or digital key are outside the vehicle when using Remote Operation function.
- The detecting range of the smart key or digital key may vary depending on the surroundings that are affected by radio waves such as transmission tower, broadcast station, etc.
- When remotely moving forward using method (1), it is recognized as an exit situation, and the vehicle moves 4 m (13 ft.) to check for pedestrians, animals or objects around the vehicle. After confirmation, the steering wheel is controlled according to the condition ahead.
- When remotely moving forward using method (2), it is recognized as a parking situation, and will immediately control the steering wheel according to the condition ahead to assist with entering the parking space and aligning the vehicle. However, performance may reduce depending on the pedestrians, animals, shape of objects, location, etc. around the vehicle.
- For moving remotely backward, both method (1) and (2) aligns the steering wheel first, and then will only move the vehicle straight.

WARNING

- When using Remote Operation function, make sure that all passengers have gotten out of the vehicle.
- Before leaving the vehicle, close windows and sunroof, and make sure the vehicle is off before locking the doors.
- If the vehicle's battery is discharged or Remote Smart Parking Assist malfunctions when parked in a narrow parking space, Remote Operation function will not operate. Always park your vehicle in a space wide enough for you to get in or out of your vehicle.
- Please note that depending on the parking space, you may not be able to exit from the space you have entered by using Remote Operation function.
- After parking, the surrounding may change due to the movement of surrounding vehicles. If this occurs, Remote Operation function may not operate.

Remote Smart Parking Assist operation status

Operation Status	Smart key LED
Under control	Green LED Continuously blinks
Pause	Red LED Continuously blinks
Off	Red LED illuminates for 4 seconds and then turns off

Operation Status	Smart key LED
Complete	Green LED illuminates for 4 seconds and then turns off

NOTE

- Operation status by the hazard warning light may not be applicable based on the regulation of your country.
- If the smart key is not within the operating range from the vehicle (approximately 4 m (13 ft.)), the smart key LED will not appear or blink. Use the smart key within the operating range.

How to turn off Remote Operation function while operating

- Press the Parking/View (P) button or shift the gear except to P (Park) while the infotainment system screen guides the driver using method 2.
- Press the Parking Safety (P) button or select **Cancel** on the infotainment system screen.
- Press the Remote Start (HOLD) button on the smart key or digital Key end button (X) while the vehicle is being controlled by Remote Operation function. Remote Operation function will turn off. At this time, the vehicle will turn off.
- Get on the vehicle with the smart key. Remote Operation function will turn off. At this time, the vehicle will remain on.

The function will pause in the following conditions when:

When Remote Operation function is paused, the vehicle will stop. If the condition that made the function to pause disappears, the function may operate again.

- There is a pedestrian, animal or object in the direction the vehicle is moving
- The door or tailgate is open
- The Forward (P) or Backward (P) button is not continuously pressed
- Simultaneously pressing multiple buttons on a smart key
- If sliding the vehicle icon is not completed or touch operation does not function properly while using the digital key
- The smart key and digital key are not operated within 4 m (13 ft.) from the vehicle
- Button of another smart key is pressed in addition to the operating smart key (Excluding start button)
- When Parking Collision-Avoidance Assist, Blind-Spot Collision-Avoidance Assist or Rear Cross-Traffic Collision-Avoidance Assist operates

The function will cancel in the following conditions when:

When Remote Operation function is canceled, the vehicle will automatically stop, shift the gear to P (Park) and engage EPB (Electronic Parking Brake).

- The steering wheel is steered
- The gear is shifted while the vehicle is moving
- Operating EPB while the vehicle is moving
- The vehicle hood is open
- The brake pedal or accelerator pedal is depressed when all the doors are closed

- The smart key is outside the vehicle when the brake pedal is depressed while the driver's door is open
- Rapid acceleration occurs
- Vehicle skid occurs
- The wheel is stuck by an obstacle and cannot move
- Approximately 3 minutes and 50 seconds have past after Remote Operation function has started to operate
- The slope of the road exceeds the operational range
- The total travel distance of the vehicle has exceeded 20 m (66 ft.) after Remote Operation function operation
- The steering wheel, gearshift, braking, and drive controls are not working normally
- There is a problem with the smart key or the smart key battery is low
- ABS, TCS or ESC system operates due to slippery road conditions
- The alarm of the Theft Alarm System sounds
- The charging door opens

Remote Smart Parking Assist malfunction and limitations

Remote Smart Parking Assist malfunction

Remote Smart Parking Assist check



OSG2H006093L

(1) **Check Parking Assist**

(2) **Visit A Nearby Service Center.**

When Remote Smart Parking Assist is not working properly, the **Check Parking Assist** warning message will appear on the infotainment system screen. If the message appears, stop using the function, and have your vehicle inspected by an authorized Kia dealer.

Remote Smart Parking Assist canceled



OOV055172L

(1) **Parking Assist Canceled.**
(2) **Please Refer To Owner's Manual.**

When Remote Smart Parking Assist is operating, the function can be canceled, and the **Parking Assist Canceled.** warning message may appear regardless of the parking order. Other messages may appear depending on the situations. Follow the instructions provided on the infotainment system screen while parking your vehicle with Remote Smart Parking Assist. Always look around and pay attention when using the function.

Remote Smart Parking Assist standby



OOV055173L

(1) **Parking Assist Conditions Not Met**
(2) **Please Refer To Owner's Manual.**

When **Parking Assist Conditions Not Met** message appears, when Parking/View (P) button has been pressed and held, Remote Smart Parking Assist is in standby. After a while, press and hold the Parking/View (P) button again to see if the function works.
The message appears even when the smart key's battery is low. Check the smart key battery level.

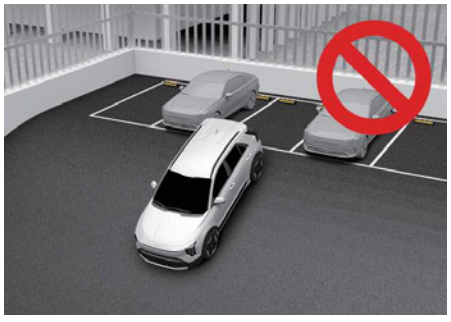
Limitations of Remote Smart Parking Assist

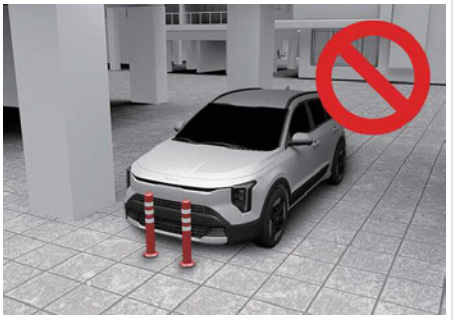
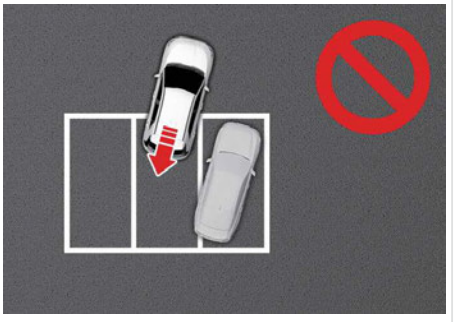
In the following circumstances, function performance to park or exit the vehicle may be limited, there may be a risk of collision, or Remote Smart Parking Assist may turn off. Park or exit the vehicle manually if necessary.

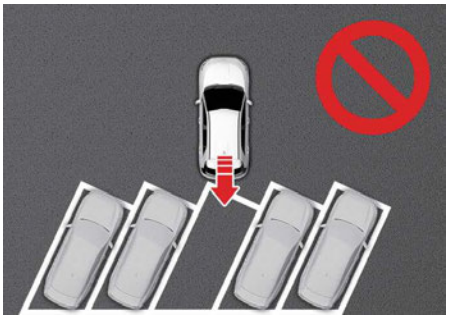
- Accessories are attached to the steering wheel or steering components are modified
- The vehicle is installed with a snow chain, spare tire or different size wheel
- Tire pressure is lower or higher than the standard tire pressure

- Your vehicle is loaded with cargo longer or wider than your vehicle or a trailer is connected to your vehicle
- Wheels are misaligned or suspension components are modified
- Your vehicle is leaning severely to one side
- Your vehicle is equipped with a trailer hitch
- The license plate is not installed in the original location
- There is a person, animal or object above or below the ultrasonic sensor when Remote Smart Parking Assist is activated
- The parking space is curved or diagonal
- There is an obstacle such as a person, animal or object (trash can, bicycle, motorcycle, shopping cart, narrow pillar etc.) near the parking space
- There is a circular pillar or narrow pillar, or a pillar surrounded by objects such as fire extinguisher, etc. near the parking space
- The road surface is bumpy (curbstone, speed bump, etc.)
- The road is slippery
- The parking space is near a large vehicle, or one with higher ground clearance, such as a truck, etc.
- The parking space is Inclined
- There is heavy wind
- Operating Remote Smart Parking Assist on uneven roads, gravel roads, bushes, etc.
- The performance of the ultrasonic sensor is affected by extremely hot or cold weather
- The ultrasonic sensor is covered with snow or water
- An object that generates ultrasonic waves is nearby
- A wireless device with a transmission function operates near the ultrasonic sensors
- Your vehicle is affected by another vehicle's Parking Distance Warning
- The sensor is mounted or positioned incorrectly due to an impact to the bumper
- When the ultrasonic sensor cannot detect the following objects: Sharp or slim objects, such as ropes, chains or small poles
- Objects smaller than 100 cm (40 inches) in length and narrower than 14 cm (6 inches) in diameter
- Objects which tend to absorb sensor frequency, such as clothes, spongy material or snow

Remote Smart Parking Assist may not operate normally under the following circumstances:

Limitations	Details
Parking on inclines  OSG2H106080L	Park manually when parking on inclines.
Parking on uneven road  OSG2H106081L	Remote Smart Parking Assist may cancel when the vehicle slips, or the vehicle cannot move due to road conditions such as pebbles or fragmented stones.
Parking around high-level obstacles such as truck cargo beds  OSG2H106082L	Using Remote Smart Parking Assist near obstacles or structures located at heights that sensors may have difficulty detecting, such as truck cargo beds, may result in a collision. Park or exit the vehicle manually instead of using Remote Smart Parking Assist.

Limitations	Details
Parking near a pillar  OSG2H106087L	Remote Smart Parking Assist performance may reduce or collision with an obstacle may occur when there is a narrow object, circular pillar, square pillar, or a pillar surrounded by objects such as a fire extinguisher, etc. near the parking space. The driver should park the vehicle manually.
Parking in a parking space with a vehicle on one side only  OSG2H106083L	If Remote Smart Parking Assist is used, when parking in a parking space with a vehicle only on one side, your vehicle may cross the parking line to avoid the parked vehicle.
Parking in snow  OSG2H106084L	Snow may interfere with sensor operation, or Remote Smart Parking Assist may cancel if the road is slippery while parking.

Limitations	Details
Parking diagonally  OSG2H106085L	Remote Smart Parking Assist does not provide diagonal parking. Even if your vehicle was able to enter the parking space, do not use the function because the function cannot operate normally.

WARNING

- It is the driver's responsibility to park and exit safely. Use Remote Smart Parking Assist while checking your surroundings at all times when parking and exiting. Under various environmental conditions, braking control may not operate because people, animals, other vehicles or objects around the vehicle may not be properly detected. If there is a risk of collision with a nearby obstacle, release the control button to stop the function.
- When using Remote Smart Parking Assist, stay out of the way in the direction the vehicle moves for your safety.
- Always check surroundings when using Remote Smart Parking Assist. You may collide with pedestrians, animals, or objects if they are near the sensor or are in the sensor's blind spot area.
- A collision may occur if a pedestrian, animal, or object suddenly appears while Remote Smart Parking Assist is operating.
- Do not use Remote Smart Parking Assist when under the influence of alcohol.
- Do not let children or other people use the smart key.
- If Remote Smart Parking Assist is used continuously for a long period, it may adversely affect Remote Smart Parking Assist performance.
- Remote Smart Parking Assist may not operate normally if the vehicle needs wheel alignment adjustment such as when the vehicle tilts to one side. Have your vehicle inspected by an authorized Kia dealer.
- Noise may be heard when braking occurs by Remote Smart Parking Assist or when the brake pedal is depressed by the driver.
- Remote Smart Parking Assist may suddenly apply the brake to avoid collision.
- Use Remote Smart Parking Assist only in a parking space that is large enough for the vehicle to move safely.
- Driving with the tailgate open is considered abnormal operation. Please exercise caution for your safety.
- Always keep the detection sensors clean.
- When cleaning the sensor surface, use only mild soap or a neutral detergent, and rinse thoroughly with water. Do not use acidic or alkaline cleaners.

- Do not spray high pressure water directly onto the detection sensors or their surrounding areas during car washing. Impact from high-pressure water may cause the sensors to malfunction.
- Do not cover the area around the detection sensors with external objects (such as stickers or bumper guards), and do not paint the bumper. The performance of the Remote Smart Parking Assist may be degraded.
- Do not disassemble or apply impact to the detection sensor components.
- Be careful not to subject the detection sensors to impact. If the sensors become misaligned due to impact, the Remote Smart Parking Assist may not operate properly. If a sensor is damaged by impact, have your vehicle inspected by an authorized Kia dealer.
- If the bumper is damaged, replaced, or repaired, the Parking Distance Warning may not function properly.
- The Remote Smart Parking Assist may turn off due to strong electromagnetic interference.
- Excessive sound from the audio system may prevent you from hearing the warning sound. Adjust the in-vehicle volume appropriately and always remain attentive.
- To prevent a collision, sudden braking and resulting brake noises may occur.

NOTE

- If the 3rd stage warning (continuous beep) of the Forward/Reverse Parking Distance Warning sounds while Remote Smart Parking Assist is operating, it means the obstacle detected is close to your vehicle. At this time, Remote Smart Parking Assist will temporarily stop operating. Make sure there are no pedestrians, animals, or objects around your vehicle.
- Depending on brake operation, the stop lights may come on while the vehicle is moving.
- If the vehicle is remotely started that has been parked in cold weather for a long time, the operation of Remote Parking function may be delayed or canceled depending on vehicle condition.

Declaration of conformity

The radio frequency components (Front Radar) comply:

For United States and United States territories



FCC ID
: 2A3OZ-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.

OMQ4A055138

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.

OMQ4A055139

The radio frequency components (Front Corner Radar/Rear Corner Radar) comply: (if equipped)

For United States and United States territories



N_CT25E046_E

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.

N_CT25E047_E

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.

OMQ4A055137

What to do in an emergency

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What to do in an emergency

Road warning

When an emergency situation occurs while you are driving or when you park by the edge of the road, turn the hazard lights on to alert approaching vehicles to be careful as they pass.

Hazard lights switch

The hazard lights warn other drivers to exercise extreme caution when approaching, overtaking, or passing your vehicle.



OSG2H116007L

Use the hazard lights when your vehicle is stopped near the edge of the road or undergoing emergency repairs.
Push the hazard lights switch when the vehicle is in any position. The hazard lights switch is located in the center front panel. All turn signal lights blink simultaneously.

- The hazard lights switch operates whether your vehicle is running or not.
- Turn signal lights do not work when hazard lights are on.
- Be careful using the hazard lights while the vehicle is being towed.

If the engine does not start

If the engine does not start, first check to see how much fuel there is and whether the 12V battery is discharged.

If the engine does not turn over or turns over slowly

1. Be sure the vehicle is in P (Park) and the emergency brake is applied.
2. Check the 12V battery connections to be sure they are clean and tight.
3. Turn the interior light on. 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.

NOTE

Do not push or pull the vehicle to start it. This could cause damage to your vehicle. Refer to "Jump starting" on page 625.

If the engine turns over normally but does not start

1. Check the fuel level and add fuel if necessary.
2. With the vehicle in 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.

If the hybrid vehicle shuts off

When the high-voltage battery or 12V battery is discharged, or when the fuel tank is empty, the hybrid system may not operate while driving.

1. Pull over your vehicle off the road in a safe area and shift to P (Park).
2. Turn on the hazard warning flashers.
3. Turn off the vehicle and try to start the hybrid system again, while depressing the brake and pressing the ENGINE START/STOP button.
4. If the engine still does not start, call an authorized Kia dealer or seek other qualified assistance.

   When the hybrid system still does not operate, refer to "Jump starting" on page 625.

NOTE

Before jump starting the vehicle, check the fuel level and the exact procedure to jump start. When the fuel level is low, do not attempt to drive the vehicle only with the high-voltage battery power. The high-voltage battery may be discharged, and the hybrid system may turn off.

Emergency starting

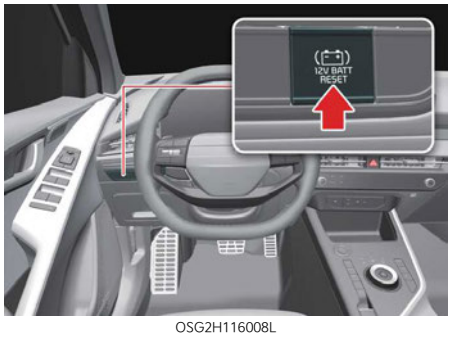
When the vehicle does not start because of low 12V battery power, you may need to jump start the vehicle.

Charging the battery

NOTE

- This vehicle is not equipped with a conventional 12V battery that requires regular replacement. Instead, it uses a lithium-ion battery integrated into the HEV high voltage battery system. A battery protection function is provided, which automatically disconnects the battery from vehicle power draw to prevent complete discharge.
- When the vehicle is started (READY indicator ON), the battery is charged regardless of whether the engine is running. Even if no engine sound is heard, it is not necessary to depress the accelerator pedal.
- The use of external power accessories may affect vehicle performance and functionality. In particular, the use of a dash camera may result in vehicle power being turned off before the dash camera completes its automatic shutdown.

12V battery reset button



OSG2H116008L

1. Open the driver's door using the emergency key.
   For more details, refer to "With the mechanical key" on page 59.
2. Press the **12V BATT RESET** button to reconnect the battery.
3. After pressing the **12V BATT RESET** button, start the vehicle within 15 seconds.
4. With the vehicle started (READY indicator ON), keep the vehicle stopped or drive for approximately 30 minutes to fully recharge the battery.

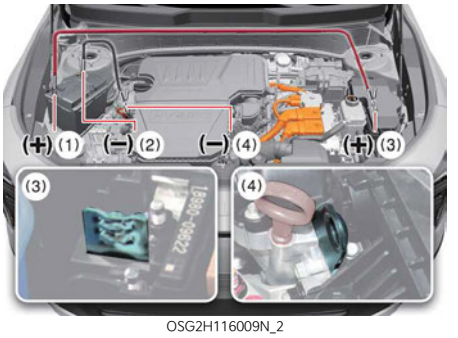
CAUTION

- If the vehicle is not started immediately after pressing the **12V BATT RESET** button, the battery power will be automatically disconnected after a few seconds to prevent further discharge. If the battery disconnects before starting the vehicle, press the button again and start the vehicle immediately.

- Repeated use of the **12V BATT RESET** button without keeping the vehicle in the READY state for at least 30 minutes may cause over-discharge of the battery, which could prevent the vehicle from starting.
  If the battery becomes too discharged for the reset function to operate, jump-start the vehicle. For more details, refer to "Jump starting" on page 625.

Jump starting

Connect the cables in the numerical order shown in the following image (and disconnect them in the reverse order):



OSG2H116009N_2

(1) (+) terminal of the booster battery
(2) (-) terminal of the booster battery
(3) Charging terminal inside the engine compartment fuse panel
(4) Latch

Jump starting can be dangerous if done incorrectly. To avoid harm to yourself or damage to your vehicle or battery, follow the jump starting procedures in this section. If in doubt, have a competent technician or towing service jump start your vehicle.

⚠ WARNING

- Do not attempt to jump start the vehicle if the discharged battery is frozen, as the battery may rupture or explode.
- 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 cause an explosion if it is exposed to flame or sparks.
  If you do not follow these instructions 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, which is poisonous and highly corrosive. When jump starting your vehicle, wear protective glasses and be careful not to get acid on yourself, your clothing, or the vehicle.
- Do not attempt to jump start the vehicle if the discharged battery is frozen or the electrolyte level is low. The battery may rupture or explode.
- Do not allow the (+) and (-) jumper cables to touch each other. This may cause sparks.
- 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. 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.

- Automobile batteries contain sulfuric acid. When jump starting your vehicle, be careful not to get sulfuric acid on yourself, your clothing, or the vehicle. This acid is poisonous and highly corrosive.

⚠ CAUTION

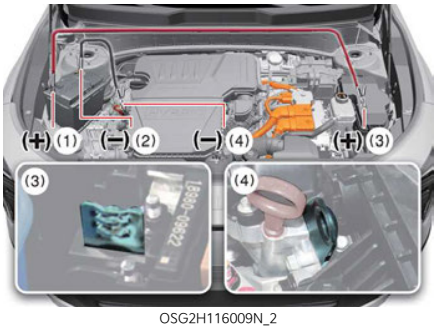
Do not jump start another vehicle with your hybrid vehicle. Jump starting another vehicle will damage the hybrid vehicle's 12 volt battery

NOTE

Use only a 12V jumper system. You can damage a 12V starting motor, ignition system, and other electrical parts beyond repair by using a 24V power supply (either two 12V batteries in a series or a 24V motor generator set).

Jump starting instructions

1. Make sure the booster battery is 12V and that its negative terminal is grounded.
   If the booster battery is in another vehicle, do not allow the vehicles to come into contact.
2. Turn off all unnecessary electrical loads.
3. Connect the jumper cables in the exact sequence shown in the following illustration:



OSG2H116009N_2

(1) (+) terminal of the booster battery
(2) (-) terminal of the booster battery
(3) Charging terminal inside the engine compartment fuse panel
(4) Latch

4. Connect one end of a jumper cable to the charging terminal inside the engine compartment fuse panel (3).
5. Connect the other end of that jumper cable to the positive terminal of the booster battery (1).
6. Proceed to connect one end of the other jumper cable to the negative terminal of the booster battery (2).
7. Connect the other end of that jumper cable to a ground: a solid, stationary, metallic latch (such as 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 connecting the jumper cables.
8. If you have connected the jumper cables with another vehicle, start the vehicle containing the booster battery first and let it run at 2,000 rpm for several minutes.
9. Press **12V BATT RESET** button.

10. If the vehicle containing the discharged battery starts, disconnect the end of the jumper cable from the negative terminal of the booster battery (2).
11. Then disconnect the other jumper cable from the charging terminal inside the engine compartment fuse panel (3) and the discharged battery.

NOTE

If it is not obvious why your battery was discharged, have your vehicle checked by an authorized Kia dealer.

Push starting

Vehicles equipped with Dual Clutch Transmission can only be jump started, not push started. Follow the instructions in this section for "Jump starting" on page 625.

WARNING

Tow starting the vehicle

Never tow your vehicle to start it. When the vehicle starts, your vehicle can suddenly surge forward and collide with the vehicle towing it.

If the engine overheats

If your temperature gauge indicates overheating, you experience a loss of power, or you hear a loud pinging or knocking sound, the engine is probably 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 to P (Park) and apply 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 disappeared.
5. If there is no visible engine coolant leak and no steam, leave the engine running and check to make sure the engine cooling fan is operating.

   If the fan is not operating, turn the engine off.
6. Check to see if the water pump drive belt is missing.
   - If the drive belt is not missing, check to make sure that it is tight.
   - If the drive belt seems satisfactory, check for coolant leaking from the radiator, hoses, or under the vehicle. (If you have been using the air conditioning, it is normal for cold water to drain from it when you stop).
7. If the water pump drive belt is broken, or if engine coolant is leaking, stop the engine immediately and call the nearest authorized Kia dealer for assistance.
8. If you cannot find the cause of the engine 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 up to the reservoir's halfway mark.
9. Proceed with caution, keeping alert for further signs of the engine overheating. If overheating recurs, call an authorized Kia dealer for assistance.

WARNING

Under the hood



While the engine is running, keep your hair, hands, and clothing away from moving parts (such as the fan and drive belts) to prevent injury.

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 causing serious burns.

NOTE

- Serious loss of coolant indicates that there is a leak in the cooling system. This should be checked as soon as possible. Have your vehicle inspected by an authorized Kia dealer.

- When the engine overheats due to low engine coolant, suddenly adding engine coolant may cause cracks in the engine. To prevent damage, add engine coolant slowly and in small quantities.

In case of an emergency while driving

In an emergency, stay calm and follow these steps:

If the vehicle stalls while driving

1. Reduce your speed gradually, staying in a straight line.
2. Move cautiously off the road to a safe place.
3. Turn your hazard lights on.
4. Try to restart your vehicle. If your vehicle does not restart, contact an authorized Kia dealer.

If the vehicle stalls at a crossroad or junction

1. Shift to N (Neutral).
2. Push the vehicle to a safe place if you can do so safely.

If you have a flat tire while driving

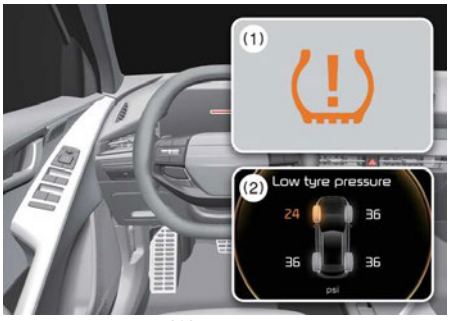
1. Remove your foot from the accelerator pedal and let the vehicle slow down while driving straight ahead.

   Do not engage 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 a safe speed, brake carefully and pull off the road.
3. Drive off the road as far as possible and park on firm, level ground.

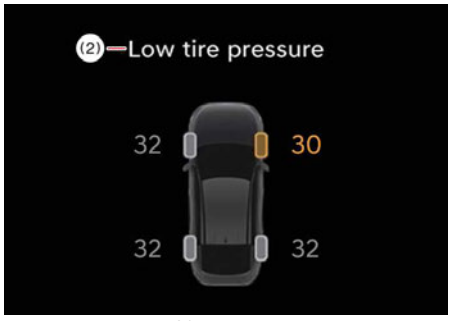
   If you are on a divided highway, do not park in the median area between the two traffic lanes unless absolutely necessary.
4. When the vehicle is stopped, turn your hazard lights ON, apply the parking brake, and shift the gear to P (Park).
5. Have all passengers exit the vehicle. Be sure they all exit on the side of the vehicle that is facing away from traffic.
6. When changing a flat tire, follow the instructions provided later in this section.

Tire Pressure Monitoring System (TPMS)

The Tire Pressure Monitoring System (TPMS) detects the pressure of the vehicle's tires and displays it on the instrument cluster.



OSG2H116010L_2



OCL4M065024N

(1) Low tire pressure or TPMS malfunction indicator light
(2) Low tire pressure position indicator light (shown on the instrument cluster)

Tire pressure indicator

- You can check the tire pressure in assist mode on the instrument cluster. For more information, refer to "LCD display modes" on page 159.
- The tire pressure indicator appears 1 - 2 minutes after you start driving.
- If the tire pressure does not display when you stop the vehicle, **Drive to display** warning message displays. After driving, check the tire pressure again.
- You can choose from the following tire pressure units in the user settings on the instrument cluster: psi, kPa, and bar (refer to "LCD display modes" on page 159).

TIP

- The tire pressure may change due to factors such as parking conditions, driving style, and altitude above sea level.
- The tire pressure shown on the instrument cluster may differ from the tire pressure measured by a tire pressure gauge.
- A low tire pressure warning may sound when a tire's pressure unit is equal to or lower than the nearby tires. This is normal operation due to the change in tire pressure along with the tire temperature.

Effective use of TPMS

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 sys-

tem (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.

WARNING

Overinflation or underinflation of tires can reduce tire life, adversely affect vehicle handling, and lead to sudden tire failure that may cause you to lose control of your vehicle, resulting in an accident.

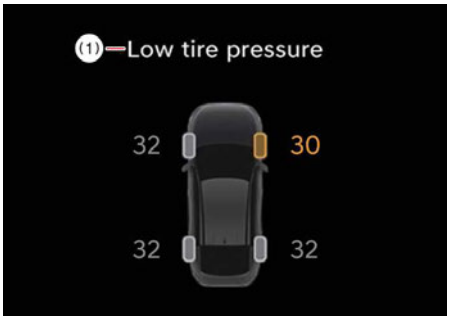
NOTE

Have your vehicle inspected by an authorized Kia dealer under any of the following circumstances:

- The low tire pressure or TPMS malfunction indicator light does not illuminate for 3 seconds when the vehicle is in ON position or the vehicle is running.
- The TPMS malfunction indicator light remains illuminated after blinking for approximately 1 minute.
- The low tire pressure position indicator light remains illuminated.

Low tire pressure indicator light

When the TPMS warning indicators are illuminated, one or more of your tires is significantly under-inflated.



OCL4M065025N

(1) **Low tire pressure**

If the indicator light illuminates, immediately reduce your speed, avoid hard turning, and anticipate increased stopping distances. Stop and check your tires as soon as possible.

Inflate the tires to the proper pressure indicated on the vehicle's placard or on the tire inflation pressure label (located on the driver 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 and low tire pressure indicator light may illuminate after you restart the vehicle. After that, you have about 20 minutes of continuous driving before you must have the low pressure tire repaired and replaced.

In winter or cold weather, the low tire pressure indicator light may illuminate if you adjusted the tires to the recommended inflation pressure in warm weather. This does not mean your TPMS is malfunctioning; the decreased temperature leads to a proportional lowering of tire pressure.

Check the tire inflation pressure and adjust the tires to the recommended pressure under the following conditions:

- You are driving from a warm area to a cold area.
- You are driving from a cold area to a warm area.
- The outside temperature is extremely high or low.

Filling tires with more air may not meet the conditions required to turn the low tire pressure indicator light off. This is because a tire inflator has a margin of error in performance. The low tire pressure indicator light turns 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 resulting in increased braking distances and a loss of control.

TPMS malfunction indicator

When there is a problem with the TPMS, the low tire pressure indicator light ( ) illuminates after blinking for approximately 1 minute.

If the system correctly detects an underinflation warning at the same time as a system failure, it will illuminate both the TPMS malfunction and low tire pressure position indicator lights. (For ex-

ample, if the front left sensor fails, the TPMS malfunction indicator appears. However, if the front right, rear left, or rear right tire is underinflated, the low tire pressure position indicator lights may appear together with the TPMS malfunction indicator light.)

Have the system inspected by an authorized Kia dealer as soon as possible to determine the cause of the problem:

- The TPMS malfunction indicator light may illuminate if you drive your vehicle near electric power supply cables or radio transmitters (for example, at police stations, government and public offices, broadcasting stations, military installations, airports, transmitting towers, and so on). This can interfere with normal TPMS operation.
- The TPMS malfunction indicator light may illuminate if the vehicle is equipped with tire chains, or if you use a personal electronic device (such as a laptop computer, mobile charger, remote starter, or navigation system) in the vehicle. This can interfere with normal TPMS operation.

Tire replacement with TPMS

If you have a flat tire, the low tire pressure indicator light appears. Have the flat tire repaired by an authorized Kia dealer as soon as possible, or replace the flat tire with the spare tire.

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 indicator light remains illuminated until you repair or replace the low pressure tire.

The TPMS malfunction indicator light may appear a few minutes after you replace the low pressure tire with the spare tire. This is because the TPMS sensor mounted on the spare wheel is not activated.

Once you inflate the low pressure tire to the recommended pressure and install it on the vehicle, or mount the TPMS sensor on the replaced spare wheel and have it activated by an authorized Kia dealer, the TPMS malfunction and low tire pressure indicator light turns OFF within a few minutes of driving.

If the indicator light does not turn OFF after a few minutes of driving, have your vehicle inspected by an authorized Kia dealer.

If you replace an original tire with the spare tire, the TPMS sensor on the replaced spare wheel should be activated, and the TPMS sensor on the original wheel should be deactivated. If the TPMS sensor on the original wheel located in the spare tire carrier is still active, the TPMS may not operate properly. Have the tire with the TPMS serviced or replaced by an authorized Kia dealer.

You may not be able to identify a low pressure tire simply by looking at it. Always use a good quality tire pressure gauge to measure the tire's inflation pressure. A tire that is hot (after being driven) will have a higher pressure measurement than a tire that is cold (after sitting stationary for at least 3 hours or being 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 it to the recommended pressure.

Never use tire sealant if your vehicle is equipped with a TPMS. A liquid sealant can damage the tire pressure sensors, causing the following issues:

- 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 pedal, engage the brakes lightly and gradually, and slowly move to a safe position off the road.

CAUTION

Repair Agents
Never use a puncture-repairing agent not approved by Kia to repair or inflate a low pressure tire. A sealant that is not approved by Kia may damage the tire pressure sensor.

NOTE

Protecting TPMS
Tampering with, modifying, or disabling the TPMS components may interfere with the system's ability to warn you of low tire pressure conditions or TPMS malfunctions. It may also void the warranty for that portion of the vehicle.

This device complies with Part 15 of the FCC rules.

Operation is subject to the following two conditions:

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

TIP

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

If you have a flat tire (with spare tire) (if equipped)

If you have a flat tire, you can use tools to replace it with a spare tire.

⚠ WARNING

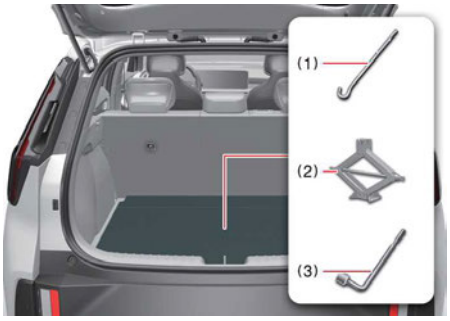
- Driving on a flat tire causes permanent damage to the tire. Reinflating a tire after you drive on it while the tire is severely underinflated or flat may cause a blowout and a serious crash. Never attempt to reinflate a tire that has been driven on while severely underinflated or flat. In this case, replace the flat tire as soon as possible.
- Changing a tire can be dangerous. To reduce the risk of serious injury or death, follow the instructions in this section when you change a tire.

⚠ CAUTION

When using the jack handle, be careful to stay clear of the flat end, as it has sharp edges that could cause cuts.

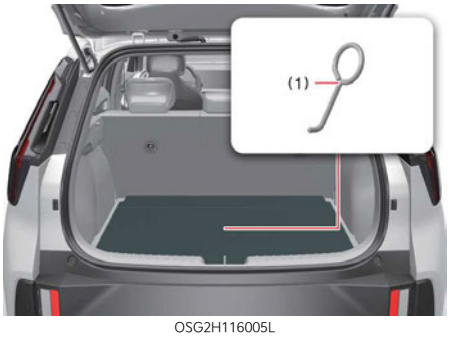
Jack and tools

Pull the luggage compartment up to reach this equipment:



OSG2H116004L

(1) Jack handle
(2) Jack
(3) Wheel lug nut wrench



OSG2H116005L

(1) Wheel cover remover tool

The equipments are stored in the luggage compartment.

Jacking instructions

The provided jack is only for emergency tire changes.

- Properly store the jack to keep it from rattling when your vehicle is in motion.
- To reduce the possibility of personal injury, follow the provided jacking instructions.

⚠ WARNING

Changing tires

- Never attempt vehicle repairs in the traffic lanes of a public road or highway.
- Always move the vehicle completely off of the road and onto the shoulder before you change a tire. Use the jack on firm, level ground. If you cannot find a firm, level place off of the road, call a towing services company for assistance.
- Be sure to use the correct front and rear jacking positions for your vehicle. Never use the bumpers or any other part of the vehicle for jacking support.
- Your vehicle can roll off of the jack and cause serious injury or death.
- Do not go underneath a vehicle 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 the vehicle.

WARNING

Tire jack

Never put any part of your body under a vehicle that is only supported by a jack, as the vehicle can easily roll off of 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 vehicle on jack

Do not start or run the vehicle while your vehicle is on the jack, as it may cause the vehicle to fall off of the jack.

Properly store the jack to keep it from rattling when your vehicle is in motion.

NOTE

- Take out the remover tool. Insert the tool to the hole and pull out the wheel cover.
- When removing the wheel cover, if you use any other tool except the tool provided, the wheel cover may be damaged.



OSG2H116006L

WARNING

Retreaded tires

Substantial design variations and the age of a retreaded tire's casing structure can limit service life and negatively impact driving safety.

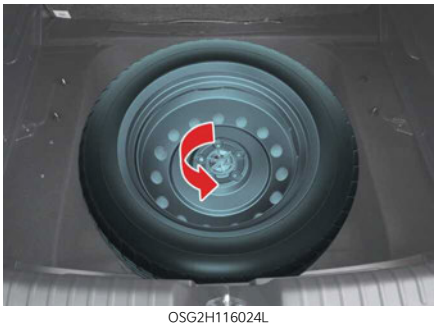
Removing and storing the spare tire

1. Open the liftgate and remove the luggage board cover (1).



OSG2H116011L

2. Turn the tire hold-down wing bolt counterclockwise to remove.



OSG2H116024L

3. Store the tire in the reverse order of removal.
4. To prevent the spare tire and toolsfrom "rattling" while the vehicle is in motion, store them properly.

If it is hard to loosen the tire hold down wing bolt by hand, you can loosen it easily using the jack handle.

1. Put the jack handle inside the tire hold-down wing bolt.
2. Turn the tire hold-down wing bolt counterclockwise with the jack handle.
   Use caution when utilizing the sharp jack handle.

WARNING

Touching surface of the luggage compartment floor

Do not touch the metal surface of the luggage compartment floor while the engine is running or hot, as this 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.

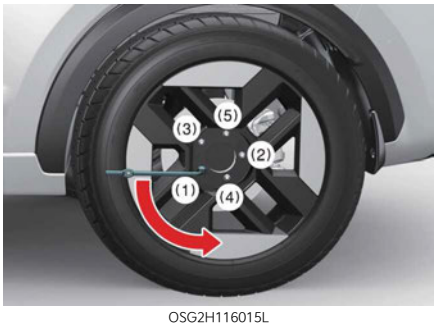
Changing tires

1. Park your vehicle on a level, firm surface, apply the parking brake, and turn the vehicle off.
2. Turn the hazard lights on.
3. Remove the wheel lug nut wrench, jack, jack handle, and spare tire from the vehicle.
4. Block both sides of the wheel diagonally opposite the jack position.



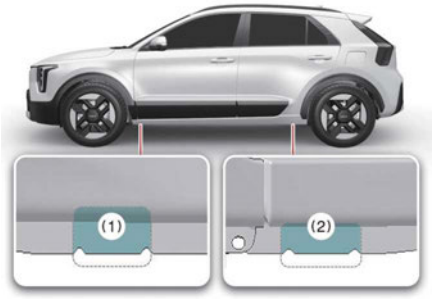
OSG2H116012L_2

5. Loosen the wheel lug nuts counterclockwise one turn each, but do not remove any of the nuts until the tire is raised above ground.



OSG2H116015L

6. 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.



OSG2H116013L_2



OSG2H116014L_2

7. Insert the jack handle into the jack and turn it clockwise, raising the vehicle until the tire just clears the ground (approximately 1.2 inches (30 mm)). Before removing the wheel lug nuts, make sure the vehicle is stable and there is no chance of movement or slipping.



OSG2H116016L

8. Loosen the wheel lug nuts and remove them with your hands. 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 the holes up with the studs, and slide the wheel into place.

   If this is difficult, tip the wheel slightly and line up the top hole in the wheel with the top stud. Jiggle the wheel back and forth until you can slide the wheel over the other studs.
9. To reinstall the wheel, hold it on the studs, place the wheel lug nuts on the studs, and tighten them by hand. Jiggle the tire to be sure it is completely seated, then tighten the nuts by hand as much as possible.
10. To lower the vehicle back to the ground, turn the wheel nut wrench clockwise.

    Position the wrench as shown in the illustration above and tighten the wheel nuts. Make sure the socket is seated completely over the nut. Do not stand on the wrench handle or use an extension pipe over the wrench handle. Go around the wheel, tightening every nut. Double check each nut to be sure it is tight on the wheel. After you change a wheel, have an authorized Kia dealer tighten the wheel nuts to their proper torque as soon as possible.



OSG2H116017L

⚠ WARNING

- To reduce the possibility of injury, only use the jack provided with your vehicle in the correct jack position. Never use any other part of the vehicle for jack support.
- To prevent vehicle movement while changing a tire, always fully apply the parking brake and block the wheel diagonally opposite the tire you are changing.
- You should block all of the wheels on the vehicle. No one should remain in the vehicle when you use the jack.
- When you install a wheel, be sure to 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. Secure any fasteners that attach the rotor to the hub so they do not interfere with the mounting surfaces on 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. This could result 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.
- Because a vehicle can slip or roll off a jack and cause serious injury or death to you or those nearby, you should take the following safety precautions:
  - Never put any part of your body under a vehicle that is only supported by a jack.
  - Never attempt to change a tire in a traffic lane. Always move the vehicle completely off of the road onto firm, level ground away from traffic before you try to change a tire. If you cannot find a firm, level place off of the road, call a towing services company for assistance.
  - Be sure to use the jack provided with your vehicle.
  - Be sure to use the correct front and rear jacking positions for your vehicle. Never use the bumpers or any other part of the vehicle for jacking support.
  - Do not start or run the vehicle 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 the vehicle.

Wheel nut tightening torque

Steel wheel and 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 air pressure is lower than recommended, drive slowly to the nearest service station and inflate your tires to the correct pressure. If the air pressure is higher than recommended, adjust the air pressure until it is correct. Always reinstall the valve cap after you check or adjust tire pressure. If the cap is not re-installed, air may leak from the tire. If you lose a valve cap, buy another and install it as soon as possible.

After you change a wheel, always secure the flat tire in its place and return the jack and tools to their proper storage locations.

Note that most lug nuts do not have metric threads. Be extremely careful and check the thread style before you install aftermarket lug nuts or wheels. If in doubt, consult an authorized Kia dealer.

WARNING

- If the studs are damaged, they may lose the ability to hold the wheels in place. This could lead to the loss of a wheel, and a collision resulting in serious injuries.
- Never use oil or grease on bolts or nuts because the nuts might come loose and the wheel could fall off, causing a crash.

NOTE

Reusing lug nuts

When you remove a wheel, make sure the same nuts that were removed are reinstalled. If you must replace a nut, make sure the replacement nut has metric threads and the same chamfer configuration as the original nut. If you install a nut without metric threads, it will not properly secure the wheel to the hub and will damage the stud (and you will have to replace the stud).

Important - use of compact spare tire

Your vehicle is equipped with a compact spare tire. This compact spare tire takes up less space than a regular size tire. This tire is smaller than a conventional tire and designed for temporary use only.

- Drive carefully when you use the compact spare tire. Replace it with a proper conventional tire and rim as soon as possible.
- Do not operate your vehicle 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 the 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).

NOTE

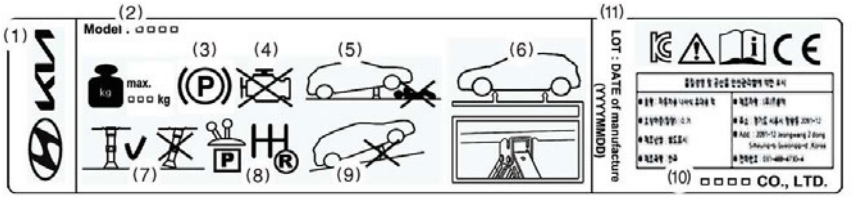
Check the inflation pressure after you install the spare tire and adjust it to the specified pressure if necessary.

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.
- Drive slowly enough to avoid all hazards (according to road conditions). Any road hazard, such as a pothole or debris, could seriously damage the compact spare tire.
- Continuous use could result in tire failure, loss of vehicle control, and personal injury.
- Do not exceed your 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 go through an automatic car wash while using the compact spare tire.
- Do not use the compact spare tire on any other vehicle. This tire has been designed specifically 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.
- Do not use the compact spare tire with any other wheels. Similarly, do not use standard tires, snow tires, wheel covers, or trim rings with the compact spare wheel. This may result in damage to these items or other vehicle components.
- Do not use more than one compact spare tire at a time.
- Do not tow a trailer while the compact spare tire is installed.

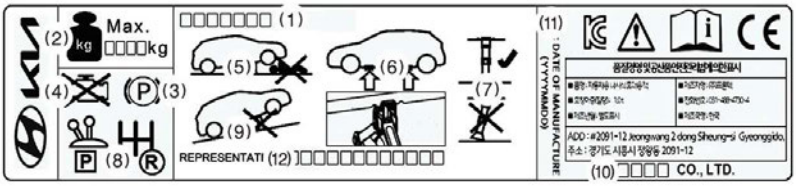
Jack label

Type A



OLQ2A115016

Type B



OLQ2A115017

Type C



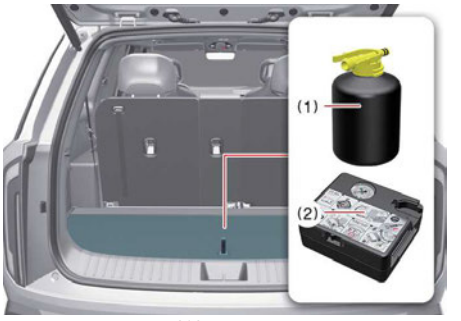
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* The actual jack label in your vehicle may differ from the illustration above. Refer to the jack label in your vehicle for these specifications:

(1) Model Name
(2) Maximum allowable load
(3) When using the jack, apply 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) Shift to P (Park)
(9) The jack should be used on firm, level ground
(10) Jack manufacturer
(11) Production date
(12) Representative company and address

If you have a flat tire (with Tire Mobility Kit) (if equipped)

The Tire Mobility Kit (TMK) is a temporary fix to the tire and the tire should be inspected by an authorized Kia dealer as soon as possible.



(1) Sealant bottle
(2) Compressor

OSG2H116018L

The TMK is located in the cargo area or in a dedicated bag in the luggage room.
For safe operation, carefully read and follow the instructions in this manual before use.

WARNING

- Do not use the TMK to repair large punctures or damage to the tire sidewalls. In these situations, the tire will not be fully sealed and air will leak from the tire. This can result in tire failure.
- Have your tire repaired as soon as possible. The tire may lose air pressure at any time after inflating with the TMK.
- Do not exceed a speed of 50 mph (80 km/h) when driving with a tire sealed with the TMK.
  While driving, if you experience any unusual vibration, ride disturbance, or noise, reduce your speed and drive with caution until you can safely pull off to the side of the road.

CAUTION

When two or more tires are flat, do not use the TMK because the supplied canister of sealant in the TMK is only enough sealant for one flat tire.

Introduction

With the TMK properly used, the vehicle can be operated even after experiencing a tire puncture.
The system of compressor and sealing compound effectively seals most punctures (from nails or similar objects) and reinflates the tire.
After you ensure that the tire is properly sealed, drive cautiously at a maximum speed of 50 mph (80 km/h) to reach a service station or tire dealer to replace the tires.
Air pressure loss may adversely affect tire performance.
For this reason, you should avoid abrupt steering or other driving maneuvers, especially if the vehicle is heavily loaded or a trailer is in use.
The TMK is not intended as a permanent tire repair method and is to be used for one tire only.
This instruction shows you step by step procedures to temporarily seal the puncture.

Read the section below.

Notes on the safe use of the Tire Mobility Kit

- Park your car on the side of the road so that you can use the TMK away from moving traffic.
- Be sure your vehicle cannot move. Even when on fairly level ground, always set the parking brake.
- Only use inflating TMK for sealing/inflating vehicle tires. Only punctured areas located within the tread region of the tire can be sealed using the TMK.
- Do not use on motorcycles, bicycles or any other type of tires.
- When the tire and wheel are damaged, do not use TMK for your safety.
- TMK may not be effective for tire damage larger than approximately 0.16 inches (4 mm).
  Please contact the nearest Kia dealership if the tire cannot be made roadworthy with the Tire Mobility Kit.
- Do not use the TMK if a tire is severely damaged by driving with flat tires or with insufficient air pressure.
- Do not remove any foreign objects such as nails or screws that have penetrated the tire.
- If the vehicle is outdoors, leave the vehicle on. Otherwise operating the compressor may eventually drain the 12V battery.
- Never leave the TMK unattended while it is being used.
- Do not leave the compressor running for more than 10 minutes at a time or it may overheat.
- Do not use the TMK if the ambient temperature is below -22 °F (-30 °C).

WARNING

- If sealant gets on your skin, wash it with a lot of water. If skin irritation continues, visit a doctor.
- If sealant gets in your eyes, lift up your eyelid and wash for at least 15 minutes. If eye irritation continues, visit a doctor.
- If sealant is swallowed, wash the mouth and drink a lot of water. However, do not give anything to an unconscious person and see a doctor immediately.
  Exposure to the sealant for a long time may cause damage to bodily tissues.

CAUTION

When done using a flat tire with the TMK, quickly remove the sealant from the tire pressure sensor and wheel. When installing the repaired tire and wheel, tighten the wheel nut to a torque value of 79-94 lbf·ft (11-13 kgf·m).

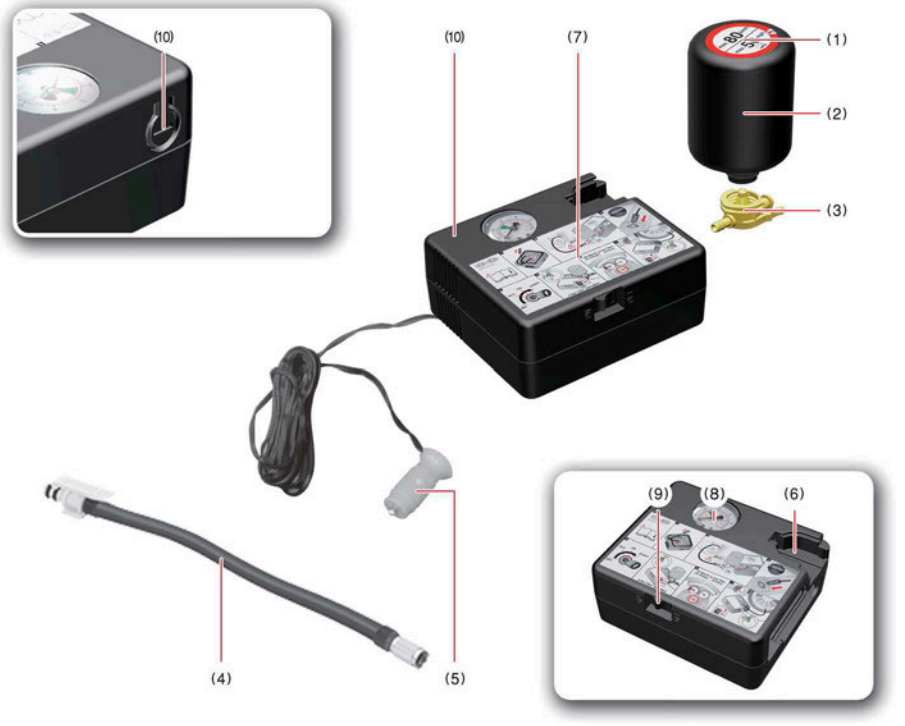
NOTE

- Take out the remover tool in the Tire Mobility Kit. Insert the tool to the hole and pull out the wheel cover.
- When removing the wheel cover, if you use any other tool except the tool provided, the wheel cover may be damaged.



OSG2H116006L

Components of the Tire Mobility Kit



OSG2H116019L_2

* Connectors, cable and compressor hose are stored in the compressor housing.
* Strictly follow the specified sequence, otherwise the sealant may escape under high pressure.

(1) Speed restriction label
(2) Sealant bottle

(3) Sealant bottle holder cap
(4) Sealant bottle filling hose
(5) Power outlet connector
(6) Holder for the sealant bottle
(7) Compressor
(8) Compressor ON/OFF switch
(9) Tire inflation pressure gauge
(10) Tire inflation pressure valve

WARNING

Expired sealant
Do not use the Tire sealant after the sealant has expired (i.e. past the expiration date on the sealant container). This can increase the risk of tire failure.

WARNING

Sealant
- Keep out of reach of children.
- Avoid contact with eyes.
- Do not swallow.

WARNING

- Before using the TMK, follow the instructions on the sealant bottle.
- Remove the label with the speed restriction from the sealant bottle and apply it to the steering wheel.
- Please note the expiration date on the sealant bottle.

CAUTION

Before using the TMK, carefully read the instructions attached on the sealant bottle. Detach the speed limit label on the sealant bottle and place it in a highly visible area in the vehicle, such as on the steering wheel, to remind you not to drive too fast.

NOTE

The sealant bottle and insert hose cannot be reused.

Using the Tire Mobility Kit

CAUTION

Detach the speed restriction label from the sealant bottle, and place it in a highly visible place inside the vehicle such as on the steering wheel to remind the driver not to drive too fast.

1. Shake the sealant bottle.



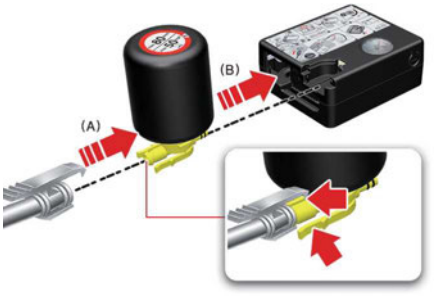
OSG2H116020L

2. Remove the sealant bottle cap and replace it with the sealant bottle holder cap.



OSG2H116021L

3. Connect the sealant bottle to the compressor and secure it.
4. Connect the filling hose onto the connector of the sealant bottle. (A)
   Remove the sealant bottle cap and sealant bottle holder cap and connect the bottle onto the sealant bottle holder. (B)



OSG2H116022L

5. Unscrew the valve cap from the valve of the defective tire and screw the filling hose of the sealant bottle onto the tire valve.



OSG2H116023L

6. Make sure the compressor is switched off.

> **NOTE**
>
> Make sure the tire inflation pressure adjustment valve is closed.

7. Connect between compressor and the vehicle power outlet using the cable and connectors.



OSG2H116025L

8. Start the vehicle.
9. Switch on the compressor and let it run for approximately 5-7 minutes to fill the sealant up to proper pressure. (refer to "Tires and wheels" on page 34). The inflation pressure of the tire after filling is unimportant and will be checked/corrected later.

   Be careful not to overinflate the tire and stay away from the tire when filling it. When the tire and wheel are damaged, do not use Tire Mobility Kit for your safety.
10. Switch off the compressor.
11. Detach the sealant filling hoses from the sealant bottle connector and from the tire valve. After using, leave the sealant bottle and the compressor attached together.
12. Return the TMK to its storage location in the vehicle.

> **WARNING**
>
> - If the tire pressure is below 200 kPa (29 psi), do not drive the vehicle. It may cause accident.

- Do not leave your vehicle running in a poorly ventilated area for extended periods of time. Carbon monoxide poisoning and suffocation can occur.

⚠ CAUTION

Securely install the sealant filling hose on the valve. If not, sealant may flow backward, possibly clogging the filling hose.

Distributing the sealant

After putting sealant in the tire, it is necessary to drive the vehicle so that the sealant becomes evenly distributed inside the tire.



OSG2H116026L_2

- Immediately drive approximately 4-6 miles (7-10 km or, about 10 minutes) to evenly distribute the sealant in the tire.

Do not exceed a speed of 50 mph (80 km/h). If possible, do not drop below 12 mph (20 km/h).

While driving, if you experience any unusual vibration, ride disturbance or noise, reduce your speed further and drive with caution until you can safely pull off of the side of the road.

⚠ CAUTION

When you use the TMK, the tire pressure sensors and wheel may be stained by sealant. Remove the tire pressure sensors and wheel stained by the sealant and have your vehicle checked by an authorized Kia dealer.

Checking the tire inflation pressure

After driving briefly so as to distribute the sealant in the tire, check the inflation pressure.

1. After driving approximately 4-6 miles (7-10 km or about 10 minutes), stop at a safe location.
2. Connect the compressor and the tire connection hose directly to the tire valve.



OSG2H116023L

3. Connect the power outlet connector.
4. To check the current tire pressure, temporarily turn off the compressor:
   - **To increase the inflation pressure**, switch on the compressor, position I. To check the current inflation pressure setting, briefly switch off the compressor.
   - **To reduce the inflation pressure**, press the valve on the compressor.

WARNING

Do not let the compressor run for more than 10 minutes. Otherwise, the device may overheat and be damaged.

CAUTION

Tire Pressure Sensor

When you use the TMK with a sealant that is not approved by Kia, the tire pressure sensors may be damaged by that sealant. Approved sealant on the tire pressure sensor and wheel should be removed when you replace the tire and the tire pressure sensors should be inspected at an authorized Kia dealer.

NOTE

The pressure gauge may show higher than actual reading when the compressor is running. To get an accurate tire reading, the compressor needs to be turned off.

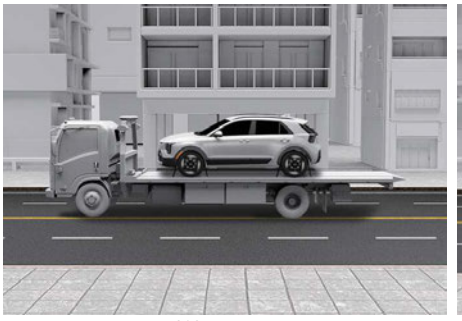
Technical data

- System voltage: DC 12 V
- Working voltage: DC 12 V
- Amperage rating: max. 10 A ± 1 A
- Suitable temperatures: -22 to 158 °F (-30 to 70 °C)
- Max. working pressure: 6 bar (87 psi)

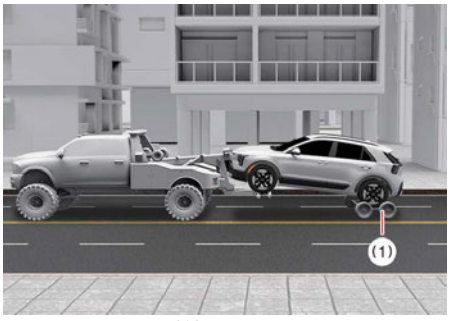
* Sealant and spare parts can be obtained and replaced at an authorized vehicle or tire dealer. Empty sealant bottles may be disposed of at home. Liquid residue from the sealant should be disposed of by your vehicle or tire dealer or in accordance with local waste disposal regulations.

Towing

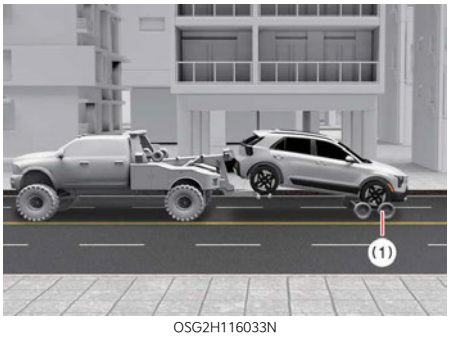
Towing service



OSG2H116031N



OSG2H116032N



OSG2H116033N

(1) Wheel dollies

If towing is necessary, have it done by 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.

WARNING

Side and curtain air bag

If your vehicle is equipped with side and curtain air bag, set the vehicle to ACC position when the vehicle is being towed. The side and curtain air bag may deploy when the vehicle is in ON position and the rollover sensor detects the situation as a rollover.

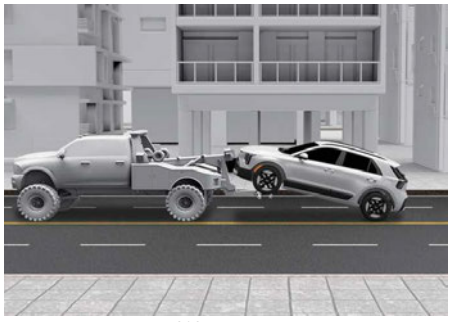
NOTE

The AWD vehicle should never be towed with the wheels on the ground. Always use wheel dollies or flatbed. If not, the transmission and the AWD system could be seriously damaged.

NOTE

- Shift to N (Neutral) to tow a vehicle with the tires on the ground. For more details, refer to "Dual clutch transmission (DCT)" on page 346.
- If the EPB does not release normally, load your vehicle onto a flatbed tow truck and have your vehicle inspected by an authorized Kia dealer.

When flatbed is unavailable



OSG2H116034N

2-wheel drive vehicle can be towed with the opposite tires on the ground (without dollies) and parking brake released before turning off the vehicle.
If you must tow the vehicle using only two wheels, lift the driven wheels off the ground and tow the vehicle.

NOTE

- 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 with sling-type equipment. Use wheel lift or flatbed equipment.



OSG2H116035N

- Do not tow the vehicle backwards with the driven wheels on the ground as this may cause damage to the vehicle.



OSG2H116036N

Precautions for using towing hooks for short-distance movement before towing the vehicle

When moving your vehicle for loading onto a towing truck or repositioning it for towing, drive at a speed of 3 mph (5 km/h) or less over a distance of 32 ft (10 m) or less.

In this situation, shift to N (Neutral) and disengage the parking brake. When the transmission or parking brake is not functioning, ensure that all wheels of your vehicle are elevated using a tow dolly or tire skates.

Removable towing hook (if equipped)

Front



OSG2H116028L

Rear

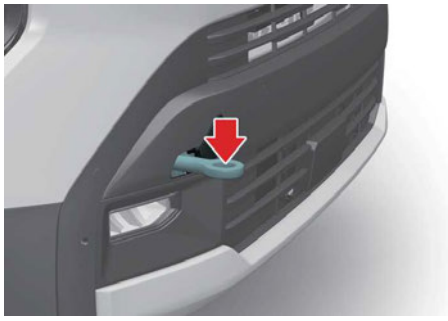


OSG2H116027L

1. Open the liftgate, and take out the towing hook from the tool case.
2. Remove the hole cover pressing the cover on the bumper.
3. Install the towing hook by turning it clockwise into the hole until it is fully secured.
4. Remove the towing hook and install the cover after use.

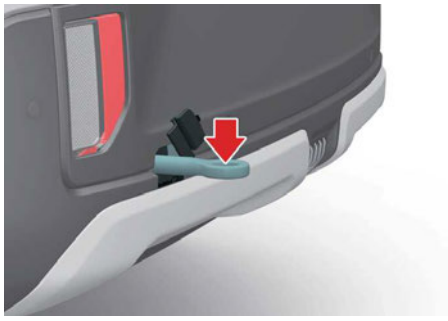
Emergency towing

Front



OSG2H116028L

Rear

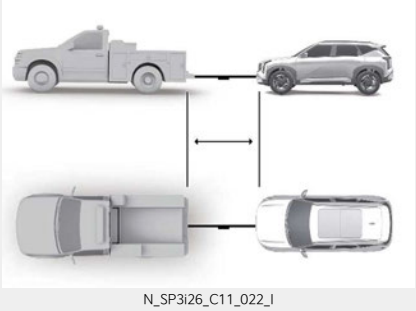


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WARNING

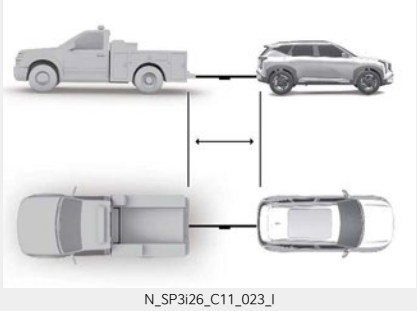
- Use extreme caution when towing the vehicle. A driver must be in the vehicle to steer it and operate the brakes.
- Avoid sudden starts or erratic driving maneuvers which would place excessive stress on the emergency towing hook and towing cable or chain. The hook and towing cable or chain may break and cause serious injury or damage.
- If the disabled vehicle is unable to be moved, do not forcibly continue the towing. Have your vehicle towed by an authorized Kia dealer or a commercial towing service.
- Tow the vehicle as straight ahead as possible.
- Keep away from the vehicle during towing.
- Use a towing strap less than 16 ft (5 m) long. Attach a white or red cloth (about 12 inches (30 cm) wide) in the middle of the strap for easy visibility.

Front



N_SP3i26_C11_022_I

Rear



N_SP3i26_C11_023_I

- Drive carefully so that the towing strap is not loosened during towing.
- The driver must be in the vehicle for steering and braking operations when the vehicle is towed and passengers other than the driver must not be allowed to be on board.

NOTE

- Attach a towing strap to the tow hook.
- Using a portion of the vehicle other than the tow hooks for towing may damage the body of your vehicle.
- Use only a cable or chain specifically intended for use in towing vehicles. Securely fasten the cable or chain to the towing hook provided.
- Accelerate or decelerate the vehicle in a slow and gradual manner while maintaining tension on the tow rope or chain to start or drive the vehicle, otherwise tow hooks and the vehicle may be damaged.

NOTE

- Towing in this manner may be done only on hard-surfaced roads for a short distance and at low speed. Also, the wheels, axles, power train, steering and brakes must all be in good condition.
- Do not use the tow hooks to pull a vehicle out of mud, sand or other conditions from which the vehicle cannot be driven out under its own power.
- Avoid towing a vehicle heavier than the vehicle doing the towing.
- The drivers of both vehicles should communicate with each other frequently.
- Before emergency towing, check if the hook is not broken or damaged.
- Fasten the towing cable or chain securely to the hook.
- Do not jerk the hook. Apply it steadily and with even force.
- To avoid damaging the hook, do not pull from the side or at a vertical angle. Always pull straight ahead.

Emergency towing precautions

- Start the vehicle to ON position so the steering wheel isn't locked.
- Shift to N (Neutral).
- Release the parking brake.
- Press the brake pedal with more force than normal since you will have reduced brake performance.
- More steering effort will be required because the power steering system will be disabled.
- If you are driving down a long hill, the brakes may overheat and brake performance will be reduced. Stop often and let the brakes cool off.
- The vehicle should be towed at a speed of 15 mph (25 km/h) or less within the distance of 12 miles (20 km).
- To avoid serious damage to the transmission, limit the vehicle speed to 10 mph (15 km/h) and drive less than 1 mph (1.5 km) when towing.

NOTE

Transmission

- If the vehicle is being towed with all four wheels on the ground, it can be towed only from the front. Be sure that the vehicle is in N (Neutral). Be sure the steering is unlocked by placing the vehicle in ACC position. A driver must be in the towed vehicle to operate the steering and brakes.

- Before towing, check the transmission for fluid leaks under your vehicle. If the transmission fluid is leaking, flatbed equipment or a towing dolly must be used.

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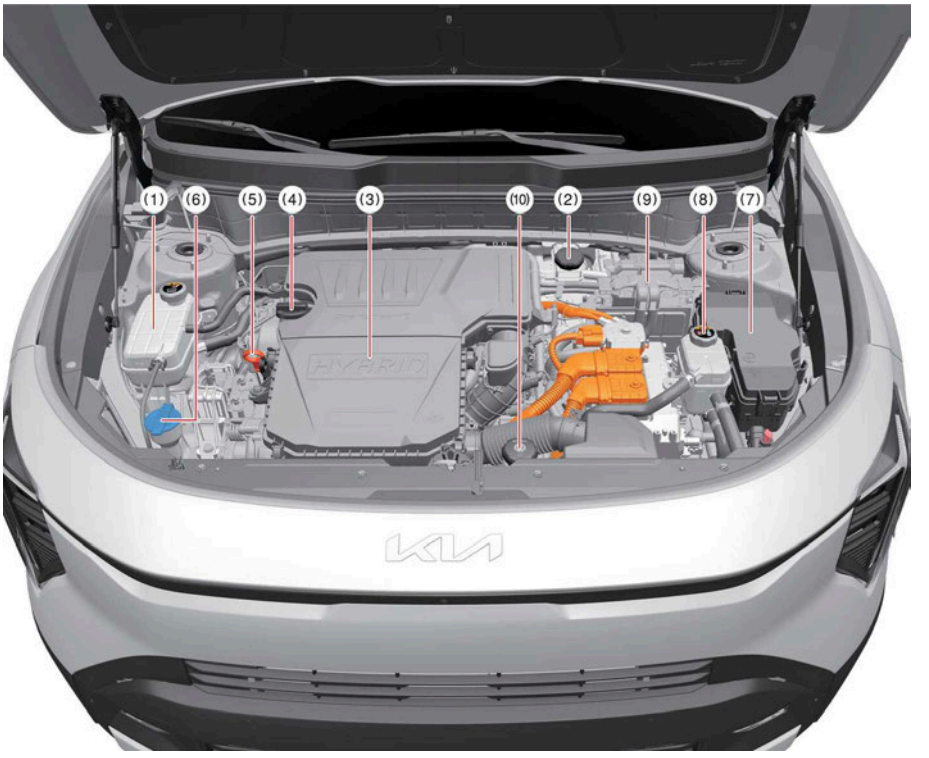
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Maintenance

Engine compartment

Smartstream G1.6 GDi HEV



OSG2H025005L

* 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 filler cap
(5) Engine oil dipstick
(6) Windshield washer fluid reservoir
(7) Fuse box
(8) Inverter coolant reservoir
(9) Electric Control Unit (ECU)

(10) Engine clutch actuator reservoir

Maintenance services

Take the utmost care to prevent damage to your vehicle and injury when performing any maintenance or inspection procedures.

If you have any doubts concerning the inspection or maintenance 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 service may result in operational problems with your vehicle that could lead to vehicle damage, an accident, personal injury or death.

Owner's responsibility

NOTE

Maintenance Service and Record Retention are your responsibility as the owner.

You should retain documents showing that proper maintenance has been performed on your vehicle according to 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.

Your Warranty and Consumer Information manual contains detailed warranty information. Repairs and adjustments 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 satisfaction.

Owner maintenance precautions

Improper or incomplete service may result in problems. This section provides instructions only for maintenance items that are easy to perform.

Several procedures can only be performed by an authorized Kia dealer with special tools.

WARNING

Maintenance work

Do not wear jewelry or loose clothing while working under the hood of your vehicle running. These items can become entangled in moving parts. If you must maintain the vehicle running while working under the hood, be sure to remove all jewelry (especially rings, bracelets, watches, and necklaces) and all neckties, scarves, and similar loose clothing before getting near the 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 before you perform maintenance work on the vehicle.

NOTE

Improper owner maintenance during the warranty period may affect warranty coverage. For details, read the separate Warranty and 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.

NOTE

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. After your initial purchase, take the following steps to prevent unsafe corrosion damage to your vehicle:

- Wash the underbody of your vehicle regularly during the winter and whenever your vehicle has been exposed to salts or chemicals.
- Wash the underbody thoroughly at the end of winter.
- Have your vehicle inspected for corrosion annually by a professional service technician or at a governmental inspection station.
- Have your vehicle inspected immediately if you see sighs 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 protect yourself from unsafe corrosion conditions.

Owner maintenance

The following lists are vehicle checks and inspections that should be performed by the owner or an authorized Kia dealer at the indicated frequencies to help ensure safe, dependable operation of your vehicle.

Bring any adverse conditions 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.
- Check for low tire pressure or underinflated tires.
- Check to make sure that the front of the radiator and condenser are clean and not blocked with leaves, dirt, insects, and so on. If any of these parts are extremely dirty, or if you are not sure of their condition, take your vehicle to an authorized Kia dealer.

⚠ WARNING

Hot coolant



Be careful when checking your coolant level when the vehicle 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, looseness in the steering wheel, or change in its straight-ahead position.
- Notice whether your vehicle constantly turns slightly, or if it "pulls" or drifts to one side, when traveling on a smooth, level road.
- When stopping, listen for unusual sounds and check for drifting to one side, increased brake pedal travel, or difficulty engaging the brake pedal.
- If you notice any slipping or changes in the operation of your transmission, 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 brake lights, turn signal lights, and hazard lights.
- Check the inflation pressures of all tires, including the spare. Also check 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 a clean cloth dampened with washer fluid.
- Check the headlamp alignment.
- Check the muffler, exhaust pipes, shields, and clamps.
- Check the lap and shoulder bands of the seat belt 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 weather strips.
- Check the air conditioning system.
- Inspect and lubricate the transmission linkage and controls.
- Clean the 12V battery and terminals.
- Check the brake fluid level.
- Visually inspect the steering, suspension, and chassis components for damaged, loose, or missing parts or signs of wear.

Scheduled maintenance service

Scheduled maintenance service precautions

Follow the Normal Maintenance Schedule if the vehicle is not usually operated under any of the following conditions. Follow the Maintenance Under Severe Usage Conditions if any of the following conditions apply:

A: You repeatedly drive short distances of less than 5 miles (8 km) in normal temperatures, or less than 10 miles (16 km) in freezing temperatures.

B: You idle the engine extensively or drive at low speeds for long distances.

C: You drive on rough, dusty, muddy, unpaved, graveled, or salt-treated roads.

D: You drive in areas that use salt or other corrosive materials, or in very cold weather.

E: You drive in extremely dusty conditions.

F: You drive in areas with heavy traffic.

G: You frequently drive on uphill, downhill, or mountain roads.

H: You use your vehicle for towing or camping and drive with cargo loaded on the roof.

I: You drive your vehicle as a patrol car, taxi, or for other commercial purposes.

J: You frequently drive at high speeds or rapidly accelerate and decelerate.

K: You frequently drive in stop-and-go traffic.

If you operate your vehicle under these conditions, you should inspect your vehicle, replace parts, or refill fluids more frequently, or follow the Maintenance Under Severe Usage Conditions schedule. Follow the prescribed maintenance intervals for the periods of time or distances shown in the chart.

NOTE

Your vehicle may be equipped with an Oil Life Management System that predicts engine oil life based on your driving history and alerts you to change the engine oil.

- If engine oil deteriorates more quickly depending on the severity of your driving, the remaining oil life alert appears on the instrument cluster before the normal engine oil replacement interval. Have the engine oil and filter changed by an authorized Kia dealer.
- The Oil Life Management System works when you use the recommended engine oil. If you do not use the recommended engine oil, replace the oil according to the Maintenance Under Severe Usage Conditions schedule. Also, check your engine oil level regularly, as this system assumes that you are filling the engine oil normally.
- Always reset the remaining engine oil life whenever the engine oil is changed. Otherwise, the Oil Life Management System will not function correctly.
- If there is no alert until the maximum maintenance interval, have your vehicle inspected by an authorized Kia dealer.

TIP

After 10 years or 100,000 miles (150,000 km), we recommend using the Maintenance Under Severe Usage Conditions schedule.

Normal maintenance schedule

You must perform the following maintenance services to ensure good emission control and performance. Keep receipts for all vehicle services to protect your warranty. Where both the mileage and date are shown, the frequency of service you need is based on whichever occurs first.

I: Inspect and adjust, correct, clean, or replace if necessary.
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 x 1,000		**8**	**16**	**24**	**32**	**40**	**48**	**56**	**64**	**72**	**80**	**88**	**96**
Km x 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 G1.6 GDi HEV	R	R	R	R	R	R	R	R	R	R	R	R
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 G1.6 GDi HEV	Replace every 96,000 miles (156,000 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											
Coolant (Inverter)	HEV [4]	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													
Brake discs and pads													
Brake lines, hoses and connections													
Suspension ball joints													
Steering gear rack, linkage and boots													
Exhaust system													
Cooling system													
Engine clutch actuator hose and line													
Drive shaft and boots		-	I	-	I	-	I	-	I	-	I	-	I
Fuel tank and fuel cap													
Fuel tank air filter [5]													
Fuel lines, hoses and connections													
HSG (Hybrid Starter & Generator) belt [6]		Inspect every 8,000 miles (13,000 km) or 12 months Replace every 64,000 miles (104,000 km) or 48 months											
Dual clutch transmission (DCT) fluid*		No service required											
Engine clutch actuator fluid		Inspect every 8,000 miles (13,000 km) or 12 months											

Number of months or driving distance, whichever comes first												
Months	**12**	**24**	**36**	**48**	**60**	**72**	**84**	**96**	**108**	**120**	**132**	**144**
Miles x 1,000	**8**	**16**	**24**	**32**	**40**	**48**	**56**	**64**	**72**	**80**	**88**	**96**
Km x 1,000	**13**	**26**	**39**	**52**	**65**	**78**	**91**	**104**	**117**	**130**	**143**	**156**
	Replace every 24,000 miles (39,000 km) or 24 months											

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 the 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.
   For your convenience, it can be replaced prior to its interval when you are doing other maintenance tasks.
4. **Coolant (HEV Inverter)**
   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.
5. **Fuel tank air filter**
   Fuel tank air filter are considered to be maintenance free but periodic inspection is recommended for this maintenance schedule depends on fuel quality.
6. **HSG (Hybrid Starter & Generator) belt**
   Inspect HSG belt for evidence of cuts, cracks, excessive wear or oil saturation and replace if necessary.

* Transmission fluid

If your vehicle has been in a flooded area or submerged in water, change the fluids as a precaution.

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	R	Every 5,000 miles (8,000 km) or 6 months	D, H, I
HSG (Hybrid Starter & Generator) belt	R	Every 30,000 miles (48,000 km) or 24 months	B, C, D, E, I, K
	I	Every 5,000 miles (8,000 km) or 6 months	
Spark plugs	R	More frequently	A, B, F, G, H, I, K
Air cleaner filter	R	More frequently	C, E
Climate control air filter	R	More frequently	C, E, G
Dual clutch transmission (DCT) fluid	R	Every 72,000 miles (117,000 km)	C, D, F, 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

Severe driving conditions

A: You repeatedly drive short distances of less than 5 miles (8 km) in normal temperatures, or less than 10 miles (16 km) in freezing temperatures.
B: You idle the engine extensively or drive at low speeds for long distances.
C: You drive on rough, dusty, muddy, unpaved, graveled, or salt-treated roads.
D: You drive in areas that use salt or other corrosive materials, or in very cold weather.
E: You drive in extremely dusty conditions.
F: You drive in areas with heavy traffic.
G: You frequently drive on uphill, downhill, or mountain roads.
H: You use your vehicle for towing or camping and drive with cargo loaded on the roof.
I: You drive your vehicle as a patrol car, taxi, or for other commercial purposes.
J: You frequently drive at high speeds or rapidly accelerate and decelerate.
K: You frequently drive in stop-and-go traffic.

Explanation of scheduled maintenance items

Engine oil and filter

Change the engine oil and filter at the intervals specified in the maintenance schedule. If you drive your vehicle in severe conditions, more frequent oil and filter changes are required.

HSG (Hybrid Starter & Generator) belt

Inspect HSG belt for evidence of cuts, cracks, excessive wear or oil saturation and replace if necessary.

⚠ CAUTION

When you are inspecting the belt, place the ignition switch or ENGINE START/STOP button in the LOCK/OFF or ACC position

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

Inspect the fuel tank and fuel cap at the intervals specified in the maintenance schedule. Make sure to correctly replace a fuel tank or fuel cap with a new one.

Air cleaner filter

Have the Genuine Kia air cleaner filter replaced by an authorized Kia dealer.

Spark plugs (Gasoline engine)

Install new spark plugs for the correct heat range.
To prevent contamination of the spark plug insulator when assembling parts, use a soft cloth to wipe the inside and outside of the boot bottom of the ignition coil and the spark plug insulator.

⚠ CAUTION

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/inverter coolant

Change the coolant at the intervals specified in the maintenance schedule.

Dual clutch transmission (DCT) fluid

Inspect the dual clutch transmission fluid according to the maintenance schedule.

Brake hoses and lines

Visually check for proper installation, chafing, cracks, deterioration, and any leakage. Replace any deteriorated or damaged parts immediately.

Brake fluid

Check the brake fluid level in the brake fluid reservoir. The level should be between the MIN and MAX marks on the side of the reservoir. Use only hydraulic brake fluid conforming to DOT 4 specifications.

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, and lower arm ball joint

With the vehicle is stopped and is in OFF state, check for excessive free-play in the steering wheel.

Check the linkage for bends or damage. Check the dust boots and ball joints for deterioration, cracks, or damage. Replace any damaged parts.

Drive shafts and boots

Check the drive shafts, boots, and clamps for cracks, deterioration, or damage. Replace any damaged parts and, if necessary, repack the grease.

Air conditioning refrigerant

Check the air conditioning lines and connections for leakage and damage.

Checking fluid levels

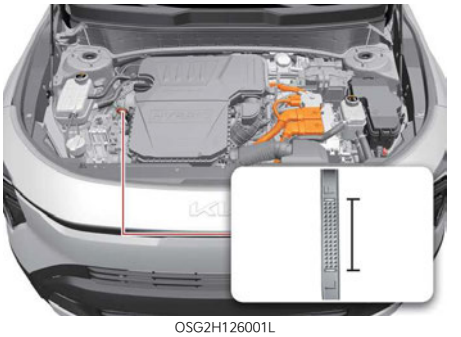
When you check the engine oil, coolant, brake fluid, and washer fluid, always be sure to clean the area around any filler plug, drain plug, or dipstick before checking or draining any lubricant or fluid. This is especially important in dusty or sandy areas, and when you use the vehicle on unpaved roads. Cleaning the plug and dipstick areas prevents dirt and grit from entering and damaging the vehicle and other mechanisms.

Engine oil (Gasoline)

Checking the engine oil level

Engine oil lubricates, cools, and operates various hydraulic components in the engine. Engine oil consumption while driving is normal, so it is necessary to check and refill the engine oil regularly. Check and refill the oil according to the recommended maintenance schedule to prevent deterioration of the oil performance.

Check the engine oil according to the following procedure:



OSG2H126001L

1. Be sure the vehicle is on level ground.
2. Start the engine and allow it to reach the normal operating temperature.
3. Turn off the engine, remove the oil filler cap, and pull out the dipstick. Wait for 15 minutes for the oil to return to the oil pan.
4. Wipe the dipstick clean and fully reinsert it.
5. Pull the dipstick out again and check to see whether the oil level is between the F and L line. If it is below the L line, add enough oil to bring it to the F line.

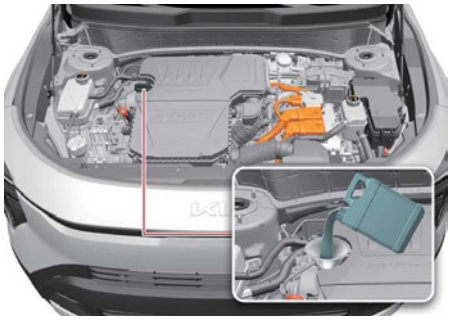
CAUTION

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.

NOTE

When you wipe the oil level gauge, use a clean cloth. An oil level gauge with debris can damage the engine.



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Use a funnel to help prevent you from spilling oil on the engine components.

Use only the specified engine oil. (Refer to "Recommended lubricants and capacities" on page 35.)

- Do not spill engine oil when adding or changing engine oil. Wipe off spilled oil immediately.
- Engine oil consumption may increase while you break in your new vehicle. It will stabilize after you drive 4,000 miles (6,000 km).
- Engine oil consumption can be affected by driving habits, climate conditions, traffic conditions, oil quality, and so on. Therefore, it is recommended that you inspect the engine oil level regularly and refill the oil, if necessary.

Changing the engine oil and filter

The lubrication, rust prevention, cooling, and cleaning effect of the engine oil gradually degrades 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 you exceed the maintenance schedule to replace the engine oil, the engine oil's performance may deteriorate, which may affect the engine's condition. 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 you do not use the recommended engine oil and filter, replace them according to the Maintenance Under Severe Usage Conditions schedule.
- 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 the engine oil regularly.

WARNING

Used engine oil

Used engine oil may cause skin irritation or cancer 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 engine oil. Keep used engine oil out of reach of children.

NOTE

- When the oil pressure is low due to insufficient engine oil, the engine oil pressure warning light ( ) appears.

  In addition, the enhanced engine protection system (which limits the engine's power) activates, and the malfunction indicator light ( ) appears when you drive the vehicle in this state continuously.
- When oil pressure is restored, the Engine Oil Pressure warning light will turn OFF and the engine power will no longer be limited.

CAUTION

The engine oil is very hot immediately after you drive the vehicle and can cause burns during replacement. Replace the engine oil after the engine oil has cooled down.

NOTE

Never use any additives in the engine oil. Additives can change the engine oil's properties and cause engine failure.

Engine coolant

The high-pressure cooling system has a reservoir filled with year-round antifreeze coolant. The reservoir is filled at the factory.

Check the antifreeze protection and coolant level at least once a year (at the beginning of the winter season), and before traveling to a colder climate.

NOTE

- 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 without engine coolant. This may cause water pump failure, engine seizure, and so on.

Checking the coolant level

WARNING

Removing the coolant reservoir cap



Never attempt to remove the coolant reservoir cap while the engine is operating or hot. Doing so might damage the cooling system and engine. Also, hot coolant or steam could cause serious personal injury.

Turn off the engine and wait until it cools down. Use extreme care when removing the coolant reservoir cap. Wrap a thick towel around it and turn it counterclockwise slowly to the first stop. Step back while the pressure is released from the cooling system.

When you are sure that all of the pressure has been released, press down on the cap using a thick towel, and continue turning it counterclockwise to remove it.

Even if the engine is not operating, do not remove the 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.

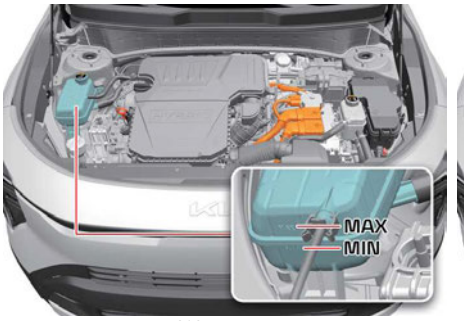
CAUTION



The electric motor (cooling fan) is controlled by the engine coolant temperature, refrigerant pressure, and vehicle speed. The fan sometimes operates even when the engine is not running. To avoid injury from rotating cooling fan blades, use extreme caution when working near the blades. As the engine coolant temperature decreases, the electric motor automatically shuts off. This is normal operation.

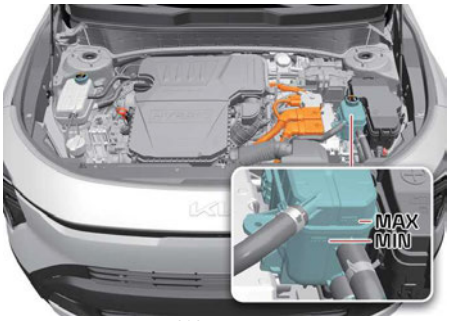
The electric motor (cooling fan) may operate until you disconnect the negative 12V battery cable.

Engine coolant reservoir



OSG2H126003L

Inverter coolant reservoir



OSG2H126004L

Check the conditions and connections of all cooling system hoses and heater hoses. Replace any swollen or deteriorated hoses.

The coolant level should be filled between the 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 to bring the level to MAX (F). Do not overfill.

If your vehicle requires frequent coolant refills, have the system inspected by an authorized Kia dealer.

NOTE

Make sure to properly close the coolant cap after refilling the coolant. Otherwise, the engine could overheat while you drive.

1. Make sure the coolant reservoir cap label is on straight.



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2. Make sure that the tiny protrusions inside the coolant cap are securely interlocked.

Recommended coolant

- When adding coolant, use only deionized water or soft water for your vehicle. Never mix hard water into 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

Coolant reservoir cap



Do not remove the coolant reservoir cap when the engine and radiator are hot. Scalding hot coolant and steam may blow out under pressure, causing serious injury.

NOTE

Adding other cooling substances or water might lead to cooling system degradation or even failure.

Changing the coolant

Have the coolant replaced by an authorized Kia dealer.

NOTE

To prevent the coolant from overflowing into engine parts (such as the alternator), place a thick cloth around the radiator cap before refilling the coolant.

NOTE

Coolant

- Do not use engine coolant or antifreeze in the washer fluid reservoir.
- Radiator coolant can severely obscure visibility when sprayed on the windshield. This may cause a loss of vehicle control or damage the paint and body trim.

Hybrid starter & generator (HSG) belt

Checking the Hybrid Starter & Generator (HSG) belt

We recommend that you have the Hybrid Starter & Generator (HSG) belt inspected or replaced according to the Maintenance Schedule in this chapter by an authorized Kia dealer.

NOTE

When the HSG belt is worn out or damaged, replace the belt. Otherwise, it may cause engine overheating or battery discharge.

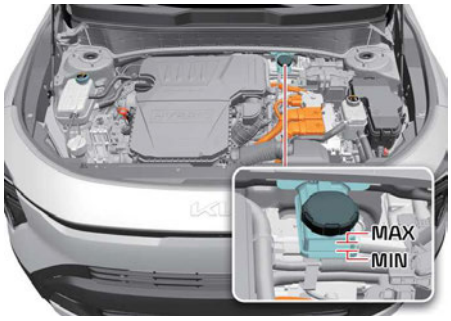
WARNING

- Turn the vehicle off while you inspect the engine or Hybrid Starter & Generator (HSG) belt. Otherwise it may result in serious injury.
- Keep hands, clothing etc. away from the Hybrid Starter & Generator (HSG) belt.

Brake fluid

Checking the brake fluid level

Check the brake fluid level in the reservoir periodically. The fluid level should be between the MAX and MIN marks on the side of the reservoir.



OSG2H126005L

1. To prevent brake fluid contamination, clean the area around the reservoir cap thoroughly before removing the cap and adding brake fluid.
2. Periodically check that the fluid level in the brake fluid reservoir is between MAX and MIN. The level falls as you accumulate mileage. This is a normal condition associated with wear on the brake linings.

   If the fluid level is excessively low, have the system inspected by an authorized Kia dealer.

Only use hydraulic brake fluid that conforms to DOT 4 specifications. (Refer to "Recommended lubricants and capacities" on page 35.)
Never mix different types of fluid.

WARNING

Brake fluid
When changing and adding brake fluid, handle it carefully. Do not let it come into contact with your eyes. If brake fluid comes into contact with your eyes, immediately flush them with a large quantity of fresh tap water. Have your eyes examined by a doctor as soon as possible.

NOTE

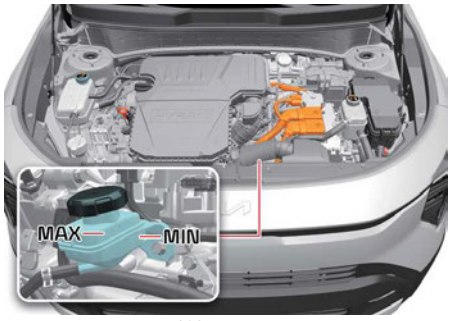
Do not allow brake fluid to come into contact with the vehicle's body paint, as it will damage the paint. Never use brake fluid that has been exposed to open air for an extended period of time, as its quality cannot be guaranteed. Properly dispose of it instead. Do not put the wrong kind of fluid into the brake fluid reservoir. A few drops of mineral-based oil (such as engine oil) in your brake system can damage the brake system parts.

WARNING

Loss of brake fluid
If the brake system requires you to add fluid frequently, have the system inspected by an authorized Kia dealer.

Engine clutch actuator fluid

Checking the engine clutch actuator fluid level



OSG2H126059L

In normal driving conditions, the actuator fluid level does not go down rapidly.
However, oil consumption rate may rise as vehicle mileage increases, and leakage in actuator related parts may result in increased consumption of the engine clutch actuator oil. Regularly check and make sure the engine clutch actuator oil fluid level is between MIN and MAX marks.
If the oil level is below MIN mark, have the vehicle checked by an authorized Kia dealer.
If the fluid level is excessively low, have the system checked by an authorized Kia dealer.
Use only the specified engine clutch actuator fluid. (Refer to "Recommended lubricants and capacities" on page 35.) Never mix different types of fluid.

- Check the fluid level in the engine clutch actuator fluid reservoir and add fluid if necessary.

The reservoir is translucent so that you can check the level with a quick visual inspection.

CAUTION

Do not allow the engine clutch actuator fluid to contact the vehicle's body paint, as paint damage will result. The engine clutch actuator 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 engine clutch system can damage engine clutch system parts.

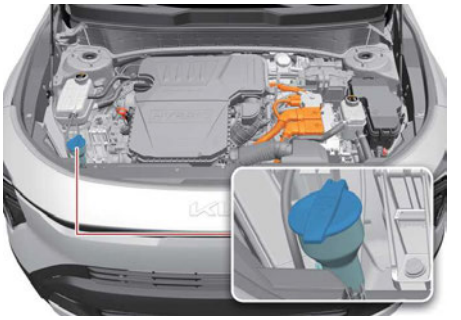
WARNING

- In the event the engine clutch system requires frequent additions of fluid, have the system inspected by an authorized Kia dealer.
- When changing and adding the engine clutch actuator fluid, handle it carefully. Do not let it come in contact with your eyes. If engine clutch actuator fluid should come in contact with your eyes, immediately flush them with a large quantity of fresh tap water. Have your eyes examined by a doctor as soon as possible.

Washer fluid

Checking the washer fluid level

The reservoir is translucent so that you can check the level with a quick visual inspection.



OSG2H126007L

Check the fluid level in the washer fluid reservoir and, if necessary, add fluid. You may use plain water if washer fluid is not available. However, you should use washer solvent with antifreeze characteristics in cold climates to prevent freezing.

⚠ WARNING

Washer fluid

- Do not use radiator coolant or antifreeze in the washer fluid reservoir.
- Coolant can severely obscure visibility when sprayed on the windshield. It may cause a loss of vehicle control or damage to the 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 come into contact with the washer fluid or the washer fluid reservoir. This could damage your vehicle or injure the occupants.
- Windshield washer fluid is poisonous to humans and animals. Do not drink and avoid coming into contact with windshield washer fluid. Serious injury or death could occur.

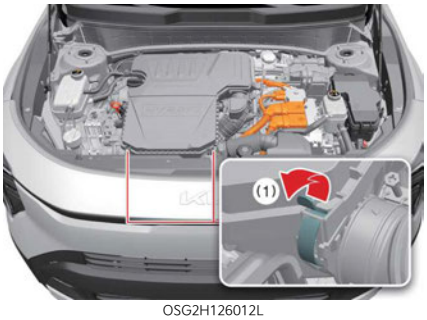
Air cleaner

Replacing the air cleaner filter

Replace the air cleaner filter when necessary, and do not wash it.

You can clean the filter when inspecting the air cleaner compartment. Use compressed air to clean the filter.

1. Remove the stopper (1) on the air cleaner cover and release the lock.



OSG2H126012L

2. Pull up the air cleaner cover and open it.



OSG2H126013L

3. Replace the air cleaner filter.
4. Reassemble the air cleaner filter parts and cover in the reverse order of disassembly.

Replace the filter according to the Maintenance Schedule.

If you drive your vehicle in extremely dusty or sandy areas, replace the filter more often than the usual recommended intervals. (Refer to "Maintenance under severe usage conditions" on page 670.)

NOTE

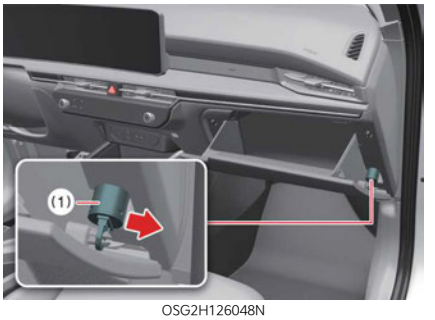
- Do not drive with the air cleaner filter removed. This results in excessive engine wear.
- When removing the air cleaner filter, make sure that dust or dirt does not enter the air intake, as this can cause damage.
- Use genuine replacement parts from an authorized Kia dealer.

Climate control air filter

Inspecting the climate control air filter

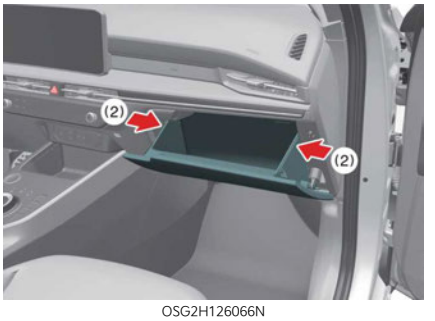
Replace the climate control air filter according to the maintenance schedule. If you drive your vehicle in severely air-polluted locations or on dusty rough roads for a long period of time, have the filter inspected more frequently and replaced earlier. Perform the following procedure to replace the climate control air filter, and be careful to avoid damaging other components.

1. Open the glove box and remove the stoppers (1) on both sides.



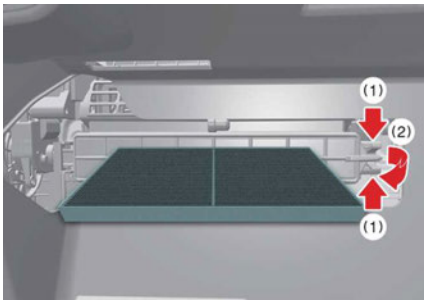
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2. With the glove box open, remove the glove box by pushing the both sides of it (2).



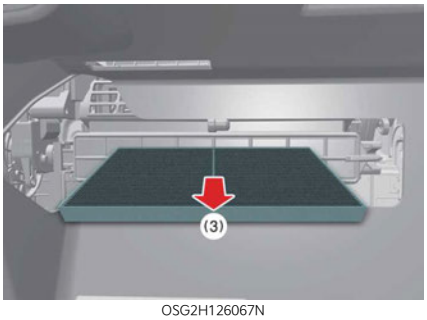
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3. Press the right side (1) of the air filter holder cover for the climate control system and pull the holder cover (2).



OSG2H126014N

4. Pull out the air filter (3), and then replace it with a new air filter.



OSG2H126067N

5. Reassemble the climate control air filter parts and cover in the reverse order of disassembly.

NOTE

When you replace the climate control air filter, be sure to install it properly. Otherwise, you may hear noise from the system and notice a reduction in the filter's effectiveness.



KIAPB031

Wiper blades

Blade inspection

Contamination of either the windshield or the wiper blades with foreign substances 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 windshield and the blades with a good cleaner or mild detergent, and rinse thoroughly with clean water.

NOTE

To prevent damage to the wiper blades, do not use gasoline, kerosene, paint thinner, or other solvents on or near them.

TIP

Commercial hot waxes applied by automatic car washes have been known to make the windshield difficult to clean.

Blade replacement

When the wipers no longer clean adequately, the blades may be worn or cracked, and require replacement.

WARNING

- To prevent damage to the wiper arms or other components, do not attempt to move the wipers manually.
- The use of a non-specified wiper blade could result in wiper malfunction and failure.

Front wiper blade replacement (Type A)

To replace the front wiper blade, follow these steps:

NOTE

Wiper arms

- Do not allow the wiper arm to fall against the windshield, as it may crack or chip the glass.
- Do not pull the wiper arm forward, as the arm could chip the hood paint.

1. For your convenience, and to prevent hood paint damage, move the windshield wiper blades to the service position.
2. Make sure the vehicle is in the OFF position and disconnect battery connector.
3. Move the wiper switch to the single wiping (MIST) position within 20 seconds.



OSG2H126049L

4. Hold the switch for more than 2 seconds until the wiper blades are pointing straight up.
5. Raise the wiper arm.
6. Position the wiper arm and the wiper blade so that they form a T shape.



OSG2H126016L

7. Compress the clip and slide the blade assembly downward.



OSG2H126017L

8. Install the new blade assembly.



OSG2H126018L

9. Return the wiper arms to the windshield.
10. Start the vehicle to the ON position.
11. Operate the wiper once in the MIST position to check that it operates properly.

Front wiper blade replacement (Type B)

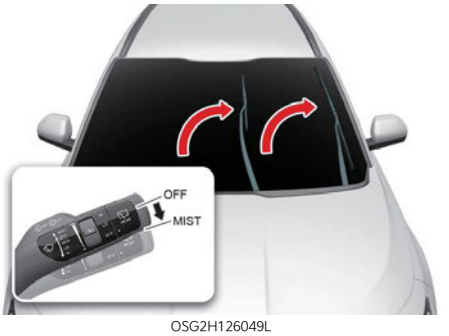
To replace the front wiper blade, follow these steps:

NOTE

Wiper arms

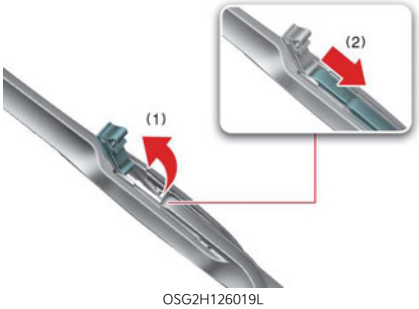
- Do not allow the wiper arm to fall against the windshield, as it may crack or chip the glass.
- Do not pull the wiper arm forward, as the arm could chip the hood paint.

1. For your convenience, and to prevent hood paint damage, move the windshield wiper blades to the service position.
2. Make sure the vehicle is in the OFF position and disconnect battery connector.
3. Move the wiper switch to the single wiping (MIST) position within 20 seconds.



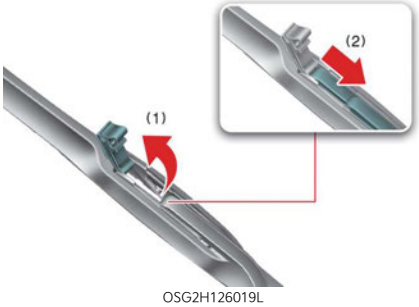
OSG2H126049L

4. Hold the switch for more than 2 seconds until the wiper blades are pointing straight up.
5. Raise the wiper arm.
6. Lift the wiper blade clip up (1).



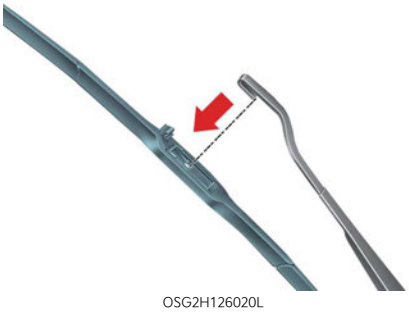
OSG2H126019L

7. Pull down the blade assembly and remove the clip (2).



OSG2H126019L

8. Install the new blade assembly.



OSG2H126020L

9. Return the wiper arms to the windshield.
10. Start the vehicle to the ON position.
11. Operate the wiper once in the MIST position to check that it operates properly.

Rear wiper blade replacement

To replace the rear wiper blde, follow these steps:

1. Make sure the vehicle is in the OFF position and disconnect battery connector.
2. Move the wiper switch to the single wiping (MIST) position within 20 seconds.

3. Hold the switch for more than 2 seconds until the wiper blades are pointing straight up.
4. Raise the wiper arm.



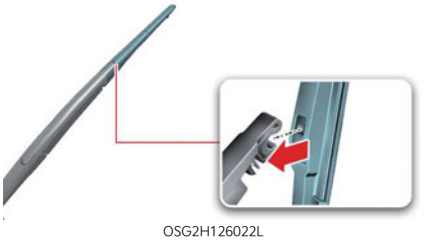
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5. Raise the wiper arm and pull out the wiper blade assembly.



OSG2H126021L

6. Lift up the wiper blade and pull it to remove it.



OSG2H126022L

7. Start the vehicle to the ON position.
8. Operate the wiper once in the MIST position to check that it operates properly.

NOTE

To prevent damage to the wiper arm or other components, have the wiper blade replaced by an authorized Kia dealer.

CAUTION

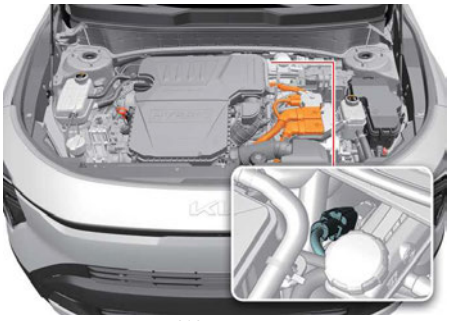
- The wiper may not operate for approximately 10 seconds if you try to operate it without washer fluid or if the blades are frozen. This is not a malfunction. It is a wiper protection system activated by the motor overload circuit within the wiper motor.
- With the wiper blades raised up, clean the front windshield with a hose and wipe it with a clean towel. Whenever grease or wax has been applied to the wiper blades, wipe them clean.

NOTE

If you apply too much force to the wiper arm while pulling the blade, you may damage the center part.

12V battery

For best battery service



OSG2H126023L

- Keep the 12V battery securely installed.
- Keep the top of the 12V battery clean and dry.
- Keep the terminals and connections clean, tight, and coated with petroleum jelly or terminal grease.
- Immediately rinse any spilled electrolyte from the 12V battery using a solution of water and baking soda.
- If you do not plan to use the vehicle for an extended period of time, disconnect the 12V battery cables.

NOTE

Your vehicle is equipped with a maintenance-free 12V battery. If your vehicle's 12V battery is marked with **LOWER** and **UPPER** on the side, you can check the electrolyte level. The electrolyte level should be between the **LOWER** and **UPPER** marks. If the electrolyte level is low, add distilled (demineralized) water. (Never add sulfuric acid or other electrolytes.) When refilling, be careful not to splash the 12V battery and adjacent components. Do not overfill the 12V battery cells, as this can cause corrosion on other parts. Make sure to tighten the cell caps. Contact an authorized Kia dealer.

WARNING

Risk of explosion

Keep lit cigarettes and all other flames or sparks away from the 12V battery.

The 12V battery contains hydrogen, a highly combustible gas that will explode if it comes into contact with a flame or spark.

Keep 12V batteries out of reach of children because 12V batteries contain highly corrosive sulfuric acid and electrolytes. Do not allow 12V battery acid to come into contact with your skin, eyes, clothing, or your vehicle's paint finish.



Wear eye protection when charging or working near a 12V battery. Always have proper ventilation when working in an enclosed space.



Always read instructions carefully when handling a 12V battery.



If electrolyte gets into your eyes, flush your eyes with clean water for at least 15 minutes and seek immediate medical attention. If electrolyte gets on your skin, thoroughly wash the affected area. If you feel pain or a burning sensation, seek immediate medical attention.



An inappropriately disposed 12V battery can be harmful to the environment and human health. Dispose of the 12V battery according to your local laws or regulations.



The 12V battery contains lead. Do not dispose of it after use. Please return the 12V battery to an authorized Kia dealer to be recycled.

Never attempt to recharge the 12V battery when the 12V battery cables are connected.

⚠ WARNING

Risk of electrocution

Never touch the electrical ignition system while the vehicle is running. This system works with high voltage, which can shock you.

⚠ WARNING

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.

⚠ CAUTION

12V battery lead compound

12V battery posts, terminals, and related accessories contain lead and lead compounds. Wash your hands after handling these parts.

TIP

If you connect unauthorized electronic devices to the 12V battery, the 12V battery may be discharged. Never use unauthorized devices.

12V battery recharging

If the 12V battery discharges, start the vehicle for at least 60 minutes, either driving or idling. Alternatively, you may connect a fully automatic regulated charger to the engine compartment front jumper posts or to the 12V battery.

When recharging the 12V battery, take the following precautions:

- Remove the 12V battery from the vehicle and place it in an area with good ventilation.
- Do not allow cigarettes, sparks, or flame near the 12V battery.
- Watch the 12V battery while it charges, and stop or reduce the charging rate in the following cases:
  1. The 12V battery cells begin boiling violently.
  2. The electrolyte temperature of any cell is above 120 °F (49 °C).
- Wear eye protection when you check the 12V battery while it is charging.
- Before performing maintenance or recharging the 12V battery, turn off all accessories and stop the vehicle.
- Disconnect the 12V battery charger in the following order:
  1. Turn off the 12V 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 12V battery is disconnected.

Reset items

Reset the following items after the 12V battery has been discharged or disconnected:

- Auto up and down window (Refer to "Window opening and closing" on page 97)
- Climate control system (Refer to "Automatic climate control system" on page 300)
- Sunroof (Refer to "Sunroof" on page 104)
- Radio presets
- Clock

12V parking lithium battery (if equipped)

Your vehicle uses an additional 12V parking lithium battery to secure stable operation power supply when you operate certain functions while parking, such as Over-The-Air (OTA) software update, air conditioning (A/C) automatic drying, and CCS.

If the 12V lithium auxiliary battery detects an abnormality (such as high temperature or over-charging), the instrument cluster displays a warning message, or the vehicle sends a malfunction alert text message to the registered mobile phone number.

NOTE

Only customers who subscribe to the Kia Connect service receive a malfunction alert text message.

TIP

If you receive a warning message on the instrument cluster or a malfunction alert text on your phone, have the system inspected by an authorized Kia dealer.

Tires and wheels

Tire care

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



OSG2H036004L

You can find all tire specifications (sizes and pressures) on the label attached to the vehicle's side center pillar.
Failure to maintain the specified tire pressure may result in excessive wear, poor handling, reduced fuel economy, deformation of tires or wheels, harsh riding conditions, possible additional damage from road hazards, or tire failure.

⚠ WARNING

Tire underinflation

Inflate your tires according to 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 take 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 resulting in serious injury or death. This risk is much higher on hot days and when driving at high speeds for long periods of time.

TIP

Check all tire pressures when the tires are cold (after the vehicle has been sitting for at least 3 hours, or you haven't driven it more than 1 mile (1.6 km) since you started it.)

Maintain the recommended tire pressures for the best ride, vehicle handling, and minimum tire wear.

For recommended tire pressures, refer to "Tires and wheels" on page 34.

Tire pressure

Always follow these recommendations:

- Check the tire pressure when the tires are cold (after the vehicle has been sitting for at least 3 hours, or you haven't driven it more than 1 mile (1.6 km) since you started it.)
- 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 the luggage rack (if equipped).
- 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 a loss of vehicle control and potential injury.

Tire terminology and definitions

Refer to the following list for detailed definitions of the terms 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 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 or 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 that 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 rating

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 the 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 lb (68 kg).

Occupant Distribution

Designated seating positions.

Outward Facing Sidewall

The side of an asymmetrical tire that faces outward when mounted on a vehicle. The outward facing sidewall bears white lettering or manufacturer, brand, or model name moldings that are higher or deeper than the same moldings on the inner facing sidewall.

Passenger (P-Metric) Tire

A tire used on passenger cars and some light duty trucks and multipurpose vehicles.

Ply

A layer of rubber-coated parallel cords.

Pneumatic tire

A mechanical device made of rubber, chemicals, fabric, and steel or other materials that, when mounted on an automotive wheel, provides the traction and contains the gas or fluid that sustains the load.

Production options weight

The combined weight of installed regular production options weighing over 5 lb (2.3 kg) more than the standard items that 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

The vehicle manufacturer's recommended tire inflation pressure, 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 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 the 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 1/16 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 tread wear. 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 the designated seating positions multiplied by 150 lb (68 kg) plus the rated cargo and luggage load.

Vehicle Maximum Load on the Tire

The load on an individual tire due to curb and accessory weight plus the maximum occupant and cargo weight.

Vehicle Normal Load on the Tire

The load on an individual tire, determined by distributing to each axle its share of the curb weight, accessory weight, and normal occupant weight and dividing by 2.

Vehicle Placard

A label permanently attached to a vehicle showing the original equipment tire size and recommended inflation pressure.

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.



KIAPB032

The TIN can be used to identify the tire in case of a recall.

1. Manufacturer or brand name

The sidewall shows the manufacturer or brand name.

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 example explains what the letters and numbers in the tire size designation mean.
(These numbers are provided as an example only; your tire size designation could vary depending on your vehicle.)
Example tire size designation:
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 example 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 following chart lists many of the different speed ratings that are currently used for passenger vehicle tires. The speed rating is part of the tire size designation marked 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)

Speed Rating Symbol	Maximum Speed
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 with new ones. You can find the manufacturing date on the tire sidewall (possibly on the inside of the wheel) displayed as part of the DOT code. The DOT code consists of a series of numbers and English letters on a tire. The manufacturing date is designated by the last 4 digits (characters) of the DOT code.

DOT: XXXX XXXX OOOO

The first part of the DOT code contains the plant code number, tire size, and tread pattern, and the last four numbers indicate week and year manufactured.

For example:

DOT XXXX XXXX 1626 means that the tire was produced in the 16th week of 2026.

⚠ 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 vehicle control and an accident, potentially leading to serious injury or death.

4. Tire ply composition and material

Tire ply means the number of layers (or plies) of rubber-coated fabric in the tire. Tire manufacturers must list the materials in the tire, which include steel, nylon, polyester, and others. The letter R means radial ply construction, the letter D means diagonal or bias ply construction, and the letter B means belted-bias ply construction.

5. Maximum Inflation Pressure

This number is the greatest amount of air pressure that should be put into the tire. Do not exceed the maximum inflation pressure. Refer to "Certification label" on page 406 for the recommended inflation pressure.

6. Maximum load rating

This number is the maximum load in kilograms and pounds that the tire can carry. 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 you are not using them. Regardless of the remaining tread, we recommend that you replace the tires after approximately 6 years of normal service. Heat from hot climates or frequent high loading conditions can accelerate the aging process.

Tread wear

The tread wear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear 1½ times as well on the government test course as a tire graded 100.
The relative performance of tires depends on 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.
Tread wear 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, and C

The traction grades from highest to lowest are AA, A, B, and C. These 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, turning, hydroplaning, or peak traction characteristics.

Temperature — A, B, and C

The temperature grades from highest to lowest are A, 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 the life of the tire, and excessive temperature can lead to sudden tire failure. Grade C corresponds to the performance level that 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.

Checking tire inflation pressure

Check your tires once a month or more.

Use a high-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 are underinflated.
Check the tire inflation pressure when the tires are cold (after the vehicle has been sitting for at least 3 hours, or you haven't driven it more than 1 mile (1.6 km) since you started it.)

1. Remove the valve cap from the tire valve stem.
2. Press the tire gauge firmly onto the valve to measure the pressure. 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 recommend-

ed pressure.
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, a loss of vehicle control, and sudden tire failure, leading to accidents, injuries, and even death. The recommended cold tire pressure for your vehicle can be found in this manual and on the tire label located on the vehicle's side center pillar.

Tire maintenance

In addition to proper inflation, correct wheel alignment helps to prevent wear on the tires.

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 a tire when it is removed from the wheel.

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 if your vehicle pulls or drifts in one direction or the other, you may need to have the alignment reset.
If you notice your vehicle vibrating when you drive on a smooth road, you may need to have your wheels rebalanced.

NOTE

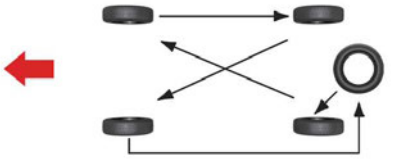
Wheel weight
Improper wheel weights can damage your vehicle's aluminum wheels. Use only approved wheel weights.

Tire rotation

To equalize tread wear, it is recommended that you rotate the tires every 8,000 miles (13,000 km) or sooner if irregular wear develops.

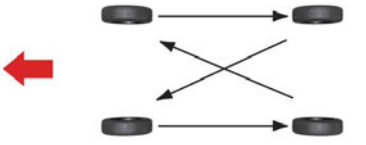
During rotation, check the tires for correct balance.
When rotating the tires, check for uneven wear and damage. Abnormal wear is usually caused by incorrect tire pressure, improper wheel alignment, out-of-balance wheels, severe braking, or severe turning. Look for bumps or bulges in the tread or on the side of the tire. Replace the tire if you find either of these conditions. Replace the tire if fabric or cord is visible. After rotating the tires, be sure to bring the front and rear tire pressures to specification and check the tightness of the lug nuts (proper torque is 11 - 13 kgf·m [79 - 94 lb-ft]).
Refer to "Tires and wheels" on page 34.
Inspect the disc brake pads for wear whenever you rotate the tires.

With a spare tire



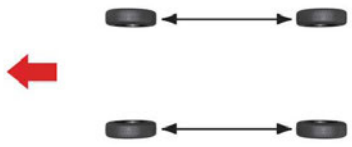
KIAPB033

Without a spare tire



KIAPB034

Directional tires (if equipped)



KIAPB035

Rotate radial tires with 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.

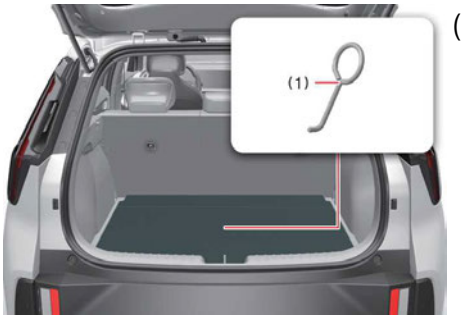
Tire traction

Driving on worn tires, improperly inflated tires, or slippery road surfaces may reduce the tire traction.

Replace the tires when the tread wear indicators appear. Slow down whenever there is rain, snow, or ice on the road to reduce the risk of losing control of the vehicle.

Wheel and tire installation

When removing and installing wheels and tires, use the tool for removing the wheel cover inside the tool case to remove the wheel cover. The remover tool insertion hole is located at the top or edge of the wheel cover.



OSG2H116005L

(1) Wheel cover remover tool

Removing the wheel cover using a dedicated removal tool



OSG2H116006N

1. Make sure to place the wheel cover into the designated position when replacing the wheel cover.

2. The designated position of the wheel cover depends on the shape of the wheel. It must be installed in the same position as before disassembly.
3. Be careful not to install in the wrong location or force it in, as this may damage the parts or cause the wheel cover to come off while driving.

Tire replacement

If the tire is worn evenly, a tread wear indicator appears as a solid band across the tread.



KIAPB036

(1) Tread wear indicator

This indicator shows that there is less than 1/16 inches (1.6 mm) of tread left on the tire. Replace the tire when this indicator appears.
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 the wheel speed. When replacing the tires, all four tires must be the same size as the original ones supplied with the vehicle. Using tires of a different size can prevent the ABS and ESC from working correctly.
It is best to replace all four tires at the same time. If that is not possible or necessary, replace the two front or two rear tires as a pair. Replacing just one tire can seriously affect your vehicle's handling.

WARNING

When you replace the tires, use the same type of tires as the ones originally supplied with the vehicle to avoid impacting the driving performance.

Compact spare tire replacement (if equipped)

A compact spare tire has a shorter tread life than a regular size tire. Replace it when you can see the tread wear indicator bars on the tire.

The replacement compact spare tire should be the same size and design tire as the one provided with your new vehicle and should be mounted on the same compact spare tire wheel.

The compact spare tire is not designed to be mounted on a regular size wheel, and the compact spare tire wheel is not designed for mounting a regular size tire.

Wheel replacement

When replacing the metal wheels for any reason, make sure the new wheels are equivalent to the original factory units in diameter, rim width, and offset.

A wheel of the incorrect size may adversely affect many things, including wheel and bearing life, braking and stopping abilities, handling characteristics, ground clearance, body-to-tire clearance, tire chain clearance, speedometer and odometer calibration, headlamp aim, and bumper height.

WARNING

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.

All season tires

Kia specifies all season tires on some models to provide good performance for use all year round, including for snowy and icy road conditions.

All season tires are identified by ALL SEASON 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 drive 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.

Install snow tires on all four wheels. Doing otherwise may result in poor handling.
Snow tires should carry 4 psi (28 kPa) more air pressure than the pressure recommended for standard tires on the tire label on the driver side center pillar, or up to the maximum pressure shown on the tire sidewall, whichever is less.
Do not drive at speeds above 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 lose traction and braking power. Change the tires on your vehicle to winter or all season tires of the same size as the standard tires on 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 and permanently damage the tires.

Tire chains

Tire chains, if necessary, should be installed on the front wheels.

Be sure to install the chains according to the manufacturer's instructions.
To minimize tire and chain wear, do not continue to use tire chains when you no longer need them.

- When driving on roads covered with snow or ice, drive at speeds below 20 mph (30 km/h).
- Use the SAE "S" class or wire chains.
- If you hear noise caused by the chains making contact with the body of the vehicle, retighten the chains to avoid contact with the body.
- To prevent damage to the body of the vehicle, retighten the chains after driving 0.3 - 0.6 miles (0.5 - 1 km).
- Do not use tire chains on vehicles equipped with aluminum wheels. In unavoidable circumstance, use a fabric type chain.
- Use wire chains below 0.47 inches (12 mm) to prevent damage to the chains' connection.

Radial-ply tires

Radial-ply tires provide improved tread life, road hazard resistance, and a smoother high-speed ride.

The radial-ply tires used on this vehicle are of belted construction and are selected to complement the vehicle's ride and handling characteristics. Radial-ply tires have the same load carrying capacity as bias-ply or bias belted tires of the same size, and they have 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 seriously deteriorate the vehicle's handling. Always use identical radial-ply tires 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 can only be repaired in the tread area because of sidewall flexing. Consult your tire dealer for radial-ply tire repairs.

Low aspect ratio tires (if equipped)

Low aspect ratio tires (tires whose aspect ratio is lower than 50) are provided for sporty looks.

Because low aspect ratio tires are optimized for handling and braking, it may be more uncomfortable to ride in vehicles equipped with them, and they make more noise than normal tires.

NOTE

Because the sidewall of a low aspect ratio tire is shorter than normal, the wheel and tire are more easily damaged. Follow these recommendations:

- When driving on a rough road or off-road, drive cautiously to avoid damaging the tires and wheels. After driving, inspect the tires and wheels.
- When passing over a pothole, speed bump, manhole, or curb stone, drive slowly to avoid damaging the tires and wheels.
- If the tire sustains impact, have the tire inspected by an authorized Kia dealer.
- To prevent damage to the tires, inspect their 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 it, have the tire checked or replaced because damage may cause air to leak from the tire.
- If you damage the tires by driving on a rough road, off-road, or over a pothole, manhole, or curb stone, they are not covered by your warranty.
- You can locate the tire information on the tire sidewall.

Fuses

* Left side: Normal
* Right side: Blown

Blade type



KIAPB037_2

Cartridge type



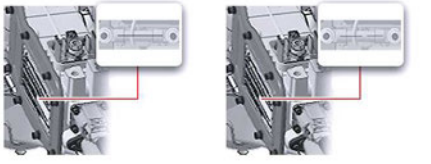
KIAPB038_2

Multi fuse



KIAPB039_4

High voltage fuse



KIAPB040_4

* The actual fuse/relay panel label may differ from equipped items.

Fuses protect a vehicle's electrical system from electrical overload damage.

Your vehicle has 2 (or 3) fuse panels: one in the driver side panel bolster, and the others 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 is blown, the element inside the fuse melts.

If the electrical system does not work, check the driver side fuse panel first.

If a replacement fuse blows, this indicates an electrical problem. Avoid using the respective system and immediately consult an authorized Kia dealer.

Your vehicle uses 3 kinds of fuses: blade type for lower amperage rating, cartridge type, and multi fuse for higher amperage ratings.

⚠ WARNING

Fuse replacement

- Never replace a fuse with a fuse of a different rating. A higher capacity fuse could cause damage and possibly fire.
- Never install wire or aluminum foil in place of a proper fuse, even as a temporary repair. Doing so may cause extensive wiring damage and possibly fire.
- Do not arbitrarily modify or add electric wiring to the vehicle.

⚠ 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 could cause a possible fire. If fuses, relays, and terminals fastened with bolts or nuts are blown, consult an authorized Kia dealer.

NOTE

- Never insert objects other than fuses or relays, such as a screwdriver or wiring, into fuse or relay terminals. Doing so may cause contact failure and system malfunction.
- The inner junction block can burn if you directly connect the wire on the rear combination lamp or replace its bulb with one over the regulated capacity to install a trailer.

NOTE

- Do not use a screwdriver or any other metal object to remove fuses. Doing so may cause a short circuit and damage the electrical system.
- When replacing a blown fuse or relay, make sure the new fuse or relay fits tightly in the clips. Failure to tightly install a fuse or relay may cause damage to the wiring and electrical systems.

NOTE

Electrical wiring repairs

All electrical repairs should be performed by authorized Kia dealerships using approved Kia parts. Using other wiring components, especially when retrofitting a multimedia or theft alarm system, phone, or radio may cause vehicle damage and increase the risk of a vehicle fire.

NOTE

Rewiring prohibited

Do not rewire your vehicle in any way. Doing so may affect the performance of several safety features in your vehicle. Rewiring your vehicle may also void your warranty, which makes you responsible for any subsequent vehicle damage.

TIP

- When you replace a fuse, make sure the vehicle and all other switches are in the OFF position, then remove the negative 12V battery terminal.
- The actual fuse or relay panel label may differ from equipped items.

Inner panel fuse replacement

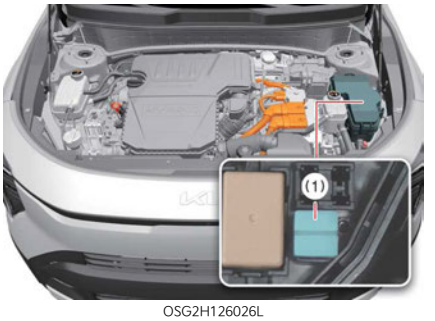
To replace a fuse in the inner panel, follow these steps:

1. Make sure the vehicle and all other switches are in the OFF position.
2. Remove the fuse panel cover.



OSG2H126025L

3. Pull the suspected fuse straight out using the removal tool (1) provided in the engine compartment's main fuse box.



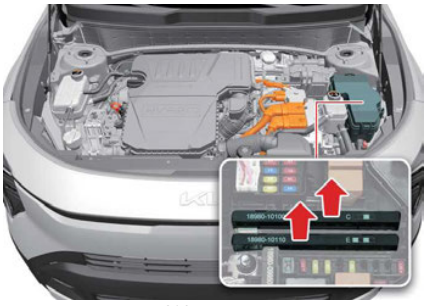
OSG2H126026L

4. Check if the fuse you removed is blown. If so, replace the fuse.
   Spare fuses are provided in the instrument panel fuse panel (or in the engine compartment fuse panel).
5. To replace the blown fuse, push in a new fuse of the same rating and make sure it fits tightly in the clips.
   If the new fuse does not fit tightly, consult an authorized Kia dealer.
   If you do not have a spare fuse, replace the blown fuse with one of the same rating from a circuit you may not need to operate the vehicle, such as the cigarette lighter fuse.
   If the vehicle's exterior and interior lamps do not work and their fuses are not blown, consult an authorized Kia dealer.

Engine compartment fuse replacement

To replace a fuse in the engine compartment fuse panel, follow these steps:

1. Make sure the vehicle and all other switches are in the OFF position.
2. Remove the fuse panel cover by pressing the tab and pulling the cover up.



OSG2H126027L

3. Pull the suspected fuse straight out using the fuse puller provided in the engine compartment fuse panel.



OSG2H126028L

4. Check if the fuse you removed is blown. If so, use the fuse puller again to replace the fuse.
5. To replace the blown fuse, push in a new fuse of the same rating and make sure it fits tightly in the clips. If the new fuse does not fit tightly, consult an authorized Kia dealer.

NOTE

After you check the engine compartment fuse panel, securely install the fuse panel cover (make sure you hear the audible click sound). If you do not securely install the fuse panel cover, electrical failures may occur due to contact with water.

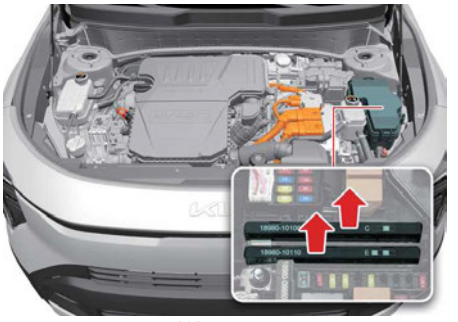
TIP

If the multi-fuse is blown, consult an authorized Kia dealer.

NOTE

The electronic system may not function correctly, even when the engine room and internal fuse box's individual fuses are not disconnected. In this case, the main fuse (BFT type), which is inside the positive 12V battery terminal cap, may be disconnected and causing the malfunction. Because the main fuse is designed more intricately than other parts, have it serviced by an authorized Kia dealer.

Main fuse (multi-fuse)



OSG2H126027L

If the main fuse (multi-fuse) is blown, follow these steps to remove it:

1. Make sure the vehicle is in the OFF position.
2. Disconnect the negative 12V battery cable.
3. Remove the nuts as shown.
4. Replace the fuse with a new one of the same rating.
5. Reinstall in the reverse order of removal.

NOTE

Visually inspect the 12V battery cap to make sure it is closed securely. If the 12V battery cap is not securely latched, influx of moisture into the electrical system may damage the system.

Fuse/relay panel description

Inside the fuse/relay panel covers, you can find the fuse/relay label describing the fuse/relay name and capacity.

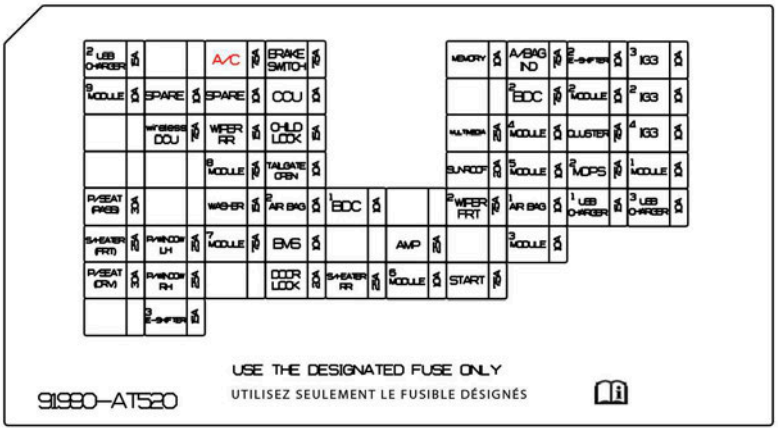
TIP

While the fuse panel descriptions in this manual are accurate at the time of printing, not all fuse panel descriptions may apply to your vehicle.

Driver side fuse panel



OSG2H126030L



OSG2H126073N

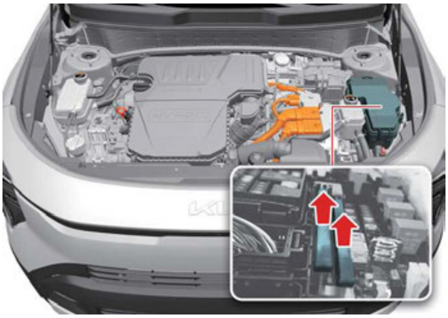
PDC

Fuse Name	Fuse Rating	Circuit Protected	FUSE NUMBER
USB CHA RER2	15A	USB_CHARGER_100W	FUSE01
RESERVE			FUSE02
A/C	7.5A	DATC (Dual Auto Temperature Control)	FUSE03
BRAKE SW	7.5A	BDC Brake Pedal Switch	FUSE04
MEMORY	10A	WPC (Wireless Power Charger) MOOD_LP_SAL MKBD (Multimedia Keyboard) USB JACK ETCS (Electronic Toll Collection System) HUD (Head Up Display) CLUSTER BLTN CAM UNIT(Built In Camera) DATC BDC (V_PAS_RPAS_POWER) Rear Corner Radar ADAS Parking ECU (Advanced Driver Assistance System Parking ECU)	FUSE05
A/BAG IND	7.5A	PAB IND (Passenger Airbag Indicator)	FUSE06
E-SHIFTER2	10A	VPC (Vehicle Platform Controller) SBW Lever (Shift By Wire Lever)	FUSE07
IG3 3	10A	HEV BMS VPC	FUSE08
MODULE9	10A	KEY INTER LOCK Hazard Switch Rain Sensor ICC UNIT AAF ACTR UPR VESS UNIT OBD (On Board Diagnostic) Blower motor Relay Coil AAF SNSR	FUSE09
SPARE	10A	SPARE	FUSE10
SPARE	10A	SPARE	FUSE11
CCU	10A	CCU (Communication Central Unit)	FUSE12
RESERVE			FUSE13
BDC2	7.5A	BDC (Body Domain Controller)	FUSE14
MODULE2	10A	CCU (Communication Central Unit) Stop Lamp Switch	FUSE15
IG3 2	10A		FUSE16
RESERVE			FUSE17
Wirel ess DCU	7.5A	DCU (Data Connectivity Unit)	FUSE18
WIPER REAR	15A	WIPER RR RLY PWR REAR WIPER MTR	FUSE19
CHILD LOCK	15A	Door Lock/Unlock Actuator RL/RR	FUSE20
MULTI MEDIA	25A	ccNC (connected car Navigation Cockpit)	FUSE21
MODULE4	10A	ccNC (connected car Navigation Cockpit) WPC (Wireless Power Charger) BLTN_CAM_UNIT DCU DATC (Dual Auto Temperature Control) C PAD SW ICC UNIT OHC LAMP ECM(Inside Mirror) Drv SEAT Power seat unit External Amplifier HEAD_LAMP LH/RH	FUSE22
CLUSTER	7.5A	CLUSTER HUD (Head Up Display)	FUSE23

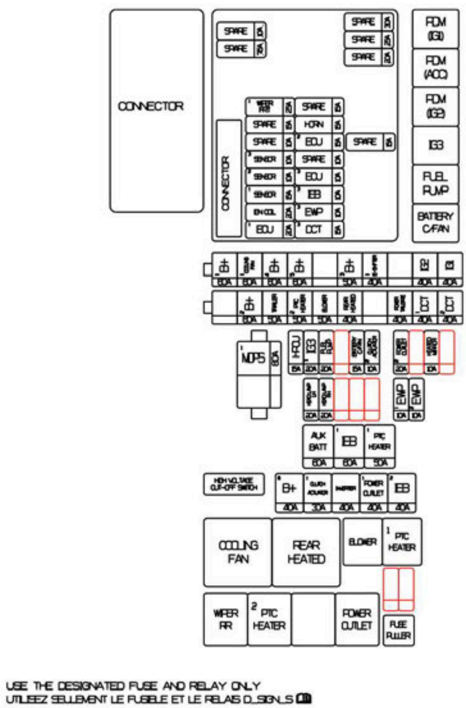
Fuse Name	Fuse Rating	Circuit Protected	FUSE NUMBER
IG3 4	10A	CCU (Central Communication Unit)	FUSE24
RESERVE			FUSE25
RESERVE			FUSE26
MODULE8	7.5A	WPC (Wireless Power Charger) AC OUTLET AC INVERTER P_LBM C_FAN_BLDC	FUSE27
TAILGATE OPEN	10A	Tailgate Latch Actuator	FUSE28
SUNROOF	20A	Sunroof motor	FUSE29
MODULE5	10A	Power window switch DRV USB CHAGER	FUSE30
MDPS2	7.5A	MDPS (Motor Driven Power Steering)	FUSE31
MODULE1	10A	BDC (Body Domain Controller) USB Charger BLTN CAM UNIT DCU (Data Connectivity Unit) ccNC (connected car Navigation Cockpit) MKBD (Multimedia Keyboard) CCU (Communication Central Unit) Power outlet Rly Coil External Amplifier HEV BMS (Hybrid Battery Management System) ADAS Parking ECU (Advanced Driver Assistance System Parking ECU)	FUSE32
P/SEAT PASS	30A	POWER SEAT PASS	FUSE33
RESERVE			FUSE34
WASHER	15A	Multifunction switch (Washer Motor)	FUSE35
AIR BAG2	10A	ISCM (Intergrated Safety Control Module)	FUSE36
BDC1	10A	BDC (Body Domain Controller) DRV/PASS NFC DRV/PASS HDL PIC UWB UNIT(Ultra-wideband) Sport mode sw(dct)	FUSE37
RESERVE			FUSE38
FRT WI PER 2	7.5A	FRT WIPER MTR	FUSE39
AIR BAG1	10A	ISCM (Intergrated Safety Control Module)	FUSE40
USB CHA RGER1	10A	USB CHARGER - SEAT DRV USB CHARGER - SEAT PASS ICU_USB CHARGER 3 (FUSE)	FUSE41
USB CHA RGER3	10A	ICU_USB CHARGER 3	FUSE42
S/HEA TER DRV	25A	SEAT HEATER DRV	FUSE43
P/WIN DOW LH	25A	Power Window Safety ECU DRV Power Window Motor RL	FUSE44
MODULE7	7.5A	BDC (Body Domain Controller)	FUSE45
BMS	10A	HEV BMS (Hybrid Battery Management System)	FUSE46
RESERVE			FUSE47
AMP	25A	External Amplifier	FUSE48
RESERVE	20A		FUSE49

Fuse Name	Fuse Rating	Circuit Protected	FUSE NUMBER
MODULE3	10A	Crash Pad Switch Front View Camera Console LWR Switch ADAS Parking ECU (Advanced Driver Assistance System Parking ECU) Rear & Front Corner Radar ADAS Driving ECU (Advanced Driver Assistance System Driving ECU) REAR CONER RADAR Front Radar	FUSE50
P/S EAT DRV	30A	Drv Power Seat	FUSE51
P/WIN DOW RH	25A	Power Window Safety ECU PASS Power Window Motor RR	FUSE52
RESERVE			FUSE53
DOOR LOCK	20A	Door Lock/Unlock Actuator	FUSE54
S/HEATER REAR	25A	SEAT HEATER REAR	FUSE55
MODULE6	10A	P_WDW_MAIN_SW OUT SIDE MIRROR MOTOR SEAT_EXTN_DRIV POWER TAIL GATE	FUSE56
START	7.5A	BDC (Body Domain Controller) VPC (Vehicle Platform Controller)	FUSE57
RESERVE			FUSE58
E-SHIFTER3	15A	VPC (Vehicle Platform Controller) SBW Lever (Shift By Wire Lever)	FUSE59

Engine compartment fuse panel



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OSG2H126074N

Engine Compartment Junction Block

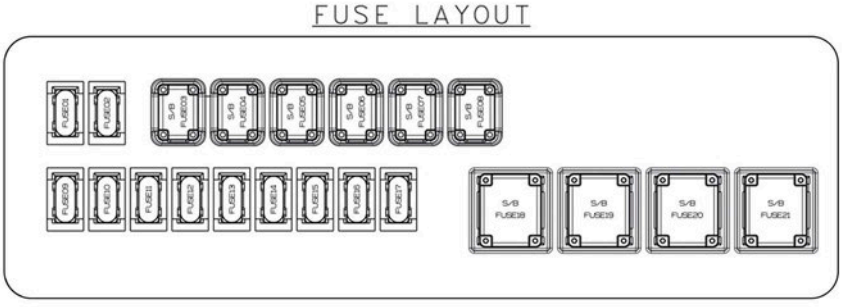
No	Fuse Name	Fuse Rating	Circuit Protected
G15_1_1	B+6	S/B M 40A	PDC B+6 : IPS(40A)

No	Fuse Name	Fuse Rating	Circuit Protected
G15_1_2	CLUTCH ACTUATOR1	S/B M 30A	Clutch Acturator 1
G15_1_3	INVERTER	S/B M 40A	AC INVERTER
G15_1_4	POWER OUTLET1	S/B M 40A	POWER OUTLET
G15_1_5	IEB2	S/B M 40A	IEB_UNIT B+ (Integrated Electric Booster)
G11_1_1	POWER OUTLET2	MICRO 20A	POWER OUTLET FRONT
G11_1_3	HEATED MIRROR	MICRO 10A	Out Side Heated Mirror DRV/PASS
G10_1_5	BATTERY C/FAN	MICRO 15A	BMS(Battery Management System) Cooling Fan (HEV)
G10_1_6	CLUTCH ACTUATOR2	MICRO 10A	Clutch Acturator 2
G14_1_1	AUX BATT	S/B ET 60A	PLBM_BATTERY (Parking Lithium Battery Module)
G14_1_2	IEB1	S/B LP 60A	IEB_UNIT B+ (Integrated Electric Booster)
G14_1_3	PTC HEATER1	S/B LP 50A	PTC1 (Positive Temperature Coefficient)
G12_1_1	HEAD LAMP LH	MICRO 20A	HEAD LAMP LH
G12_1_2	HEAD LAMP RH	MICRO 20A	HEAD LAMP RH
G12_1_3	RESERVE	MICRO 30A	
G12_1_4	RESERVE	MICRO 20A	
G12_1_5	RESERVE	MICRO 20A	
G9_1_1	MDPS1	MULTI 80A	MDPS (Motor Driven Power Steering)
G7_1_1	B+1	MULTI 60A	PDC B+1 : 60A
G7_1_2	COOL ING FAN1	MULTI 60A	Cooling Fan1
G7_1_3	B+4	MULTI 60A	PDC B+4 : IPS (60A)
G7_1_4	B+5	MULTI 60A	PDC B+5 : ER JB PCB Block
G7_1_5	RESERVE	MULTI 60A	
G7_1_6	B+3	MULTI 50A	PDC B+3 : 50A

No	Fuse Name	Fuse Rating	Circuit Protected
G7_1_7	E-SHIFTER1	MULTI 40A	VPC (Vehicle Platform Controller)
G7_1_8	RESERVE	MULTI 40A	
G7_1_9	IG2	MULTI 40A	IG2
G7_1_10	IG1	MULTI 40A	IG1
G8_1_1	RESERVE	MULTI 80A	
G8_1_2	B+2	MULTI 60A	PDC B+1 : 60A
G8_1_3	TRAILER	MULTI 50A	TRAILER
G8_1_4	PTC HEATER2	MULTI 50A	PTC2 (Positive Temperature Coefficient)
G8_1_5	BLOWER	MULTI 50A	Blower Motor
G8_1_6	REAR HEATED	MULTI 40A	REAR HEATED
G8_1_7	RESERVE	MULTI 40A	
G8_1_8	POWER TAILGATE	MULTI 40A	POWER TAILGATE
G8_1_9	DCT1	MULTI 40A	DCT1 (Dual Clutch Transmission)
G8_1_10	DCT2	MULTI 40A	DCT2 (Dual Clutch Transmission)
G10_1_1	HPCU	MICRO 15A	HPCU (Hybrid Power Control Unit)
G10_1_2	IG3 1	MICRO 20A	IG3 1
G10_1_3	FUEL PUMP	MICRO 20A	FUEL PUMP
G10_1_4	RESERVE	MICRO 20A	
G13_1_1	EWP1	MICRO 10A	EWP1 (Electric Water Pump)
G13_1_2	EWP2	MICRO 10A	EWP2 (Electric Water Pump)
G18_1_2	RESERVE	MICRO 10A	
G11_1_2	RESERVE	MICRO 10A	
G11_1_4	RESERVE	MICRO 10A	

No	Fuse Name	Fuse Rating	Circuit Protected
G18_1_1	RESERVE	MICRO 10A	
G4_5_1	IGN COIL	MICRO 20A	Ignition Coil
G4_6_1	ECU1	MICRO 20A	ECU1
G4_4_1	SENSOR1	MICRO 15A	O2_SNSR_UP_LIN_K_GDI O2_SNSR_DN_LIN_K_GDI
G4_3_1	SENSOR2	MICRO 10A	OCV_EX_K_GDI OCV_IN_K_GDI OLS V_OLD_PUMP PCSV_K_GDI ELCM
G4_2_1	SENSOR3	MICRO 10A	Cooling Fan BLDC Fuel Pump Rly Coil
G4_1_1	RESERVE	MICRO 10A	
G4_2_2	RESERVE	MICRO 10A	
G4_1_2	ECU2	MICRO 15A	ECU2
G3_1_2	RESERVE	MICRO 15A	
G3_1_1	WIPER FRT1	MICRO 25A	Wiper Front1
G3_2_1	RESERVE	MICRO 15A	
G3_2_2	HORN	MICRO 15A	Dual HORN HI / Dual HORN HI
G4_4_2	IEB3	MICRO 10A	IEB3 (Integrated Electric Booster)
G4_3_2	ECU3	MICRO 10A	ECU3
G4_6_2	DCT3	MICRO 15A	DCT3 (Dual Clutch Transmission)
G4_5_2	EWP3	MICRO 10A	EWP3 (Electric Water Pump)
G2_2_1	SPARE	MICRO 7.5A	
G2_1_1	SPARE	MICRO 10A	
G5_1_1	SPARE	MICRO 15A	
G1_3_1	SPARE	MICRO 20A	
G1_2_1	SPARE	MICRO 25A	
G1_1_1	SPARE	MICRO 30A	

Rear Relay



OLQ2AH125017

The following table shows the relay type:

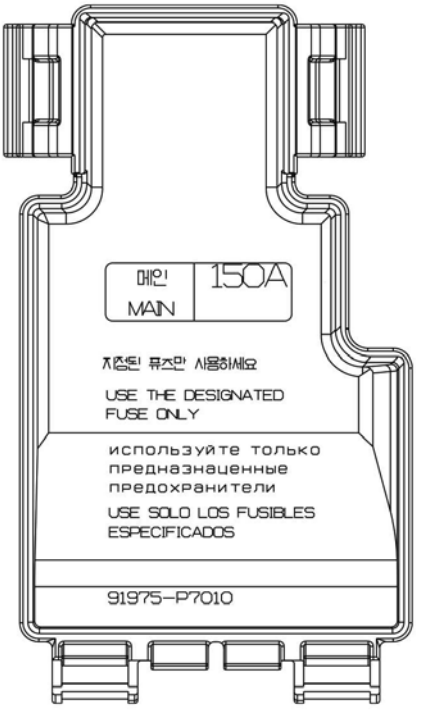
NO	Relay Name	TYPE	Load
66	G19_1_4	H/C MICRO 4P	POWER OUTLET
67	G6_6_1	H/C MICRO 4P	BATTERY C/FAN
68	G17_1_1	H/C MICRO 4P	BLOWER
69	G6_3_1	H/C MICRO 4P	PDM (IG2)
70	G6_2_1	H/C MICRO 4P	PDM (ACC)
71	G6_1_1	H/C MICRO 4P	PDM (IG1)
72	G16_1_1	3725 MINI 4P	COOLING FAN
73	G17_1_2	H/C MICRO 4P	PTC HEATER1
74	G19_1_2	H/C MICRO 4P	PTC HEATER2
75	G16_1_2	3725 MINI 4P	REAR HEATED
76	G6_4_1	H/C MICRO 4P	IG3
77	G6_5_1	H/C MICRO 4P	FUEL PUMP
78	G19_1_1	H/C MICRO 4P	WIPER RR

NO	Relay Name	TYPE	Load
79	G19_1_3	H/C MICRO 4P	RESERVE

Engine compartment fuse panel (12V battery terminal cover)



OSG2H126023L



OLQ2AH125025

Light bulbs

Your vehicle has various light bulbs installed to provide lighting both inside and outside of the vehicle, and to alert other vehicles.

Bulb replacement precautions

You should keep extra light bulbs with appropriate specifications handy in case of emergency. For more information, refer to "Bulb wattage" on page 33.
When you change a light bulb, make sure the vehicle is in the OFF position in a safe place, firmly apply the parking brake, and remove the negative 12V battery terminal.

CAUTION

Working on the lights
Before you work on the lights, make sure the vehicle is in the OFF position in a safe place, firmly apply the parking brake, and turn the lights off to avoid sudden vehicle movement, which could cause finger burns or electric shock.

NOTE

Light replacement
To prevent damage to the fuse or electric wiring system when you replace a light bulb, only use bulbs with the same wattage rating as the burned out bulb.
To prevent damage or fire, make sure light bulbs (and any parts used to secure them) you install are fully seated and locked. Failure to do so may result in heat damage, fire, or water entering the headlamp unit. Any of these results may damage the headlamps or cause condensation to build up on the lens.

NOTE

Headlamp lens
To prevent damage, do not clean the headlamp lens with chemical solvents or strong detergents.
To prevent damage to the headlamp lens, do not clean it with chemical solvents or strong detergents.

WARNING

After an accident or headlamp assembly reinstallation, have the headlamp aim adjusted by an authorized Kia dealer.

NOTE

- 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 due to a stabilization function of the vehicle's electronic control device. If the lamp lights up normally after blinking momentarily, 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. In this case, have your vehicle inspected by an authorized Kia dealer.

TIP

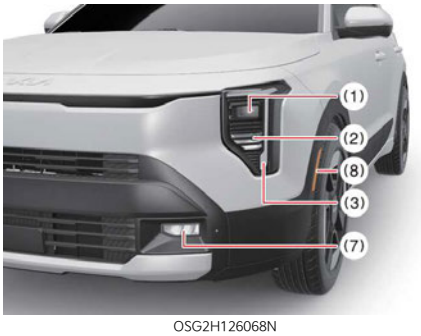
After you wash your vehicle or drive in the rain, you may find moisture inside the lamp lenses. This is normal condensation caused by the temperature difference between the inside and the outside of the lamp. It does not indicate a problem with the lamp's functions. The moisture inside the lamp disappears if you drive the vehicle with the headlamps on. However, the level at which moisture dissipates may differ depending on the size, location, and condition of the lamp. If the moisture remains inside the lamp, have your vehicle inspected by an authorized Kia dealer.

If you lack the necessary tools, correct light bulbs, or expertise to replace a light bulb, consult an authorized Kia dealer. In many cases, replacing vehicle light bulbs is difficult because you must remove other parts of the vehicle before you can access the bulb. This is especially true if you have to remove the headlamp assembly to access the bulb.
Removing or reinstalling the headlamp assembly can damage the vehicle. Using non-genuine parts or substandard bulbs may blow a fuse or cause other wiring damage.
Do not install extra lamps or LED lights on your vehicle. Installing additional lights may lead to lamp malfunctions, lamp flickering, or damage to the fuse box and other wiring.

Light bulb position (Front)

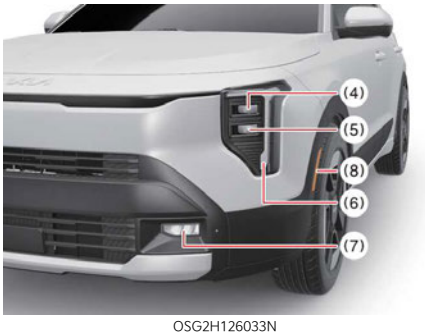
* : if equipped

Type A



OSG2H126068N

Type B

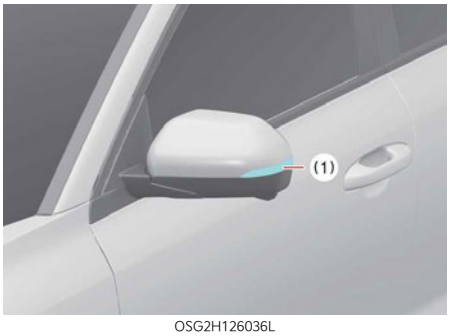


OSG2H126033N

(1) Headlamp (Low/High) (LED type)
(2) Front turn signal lamp (Bulb type)
(3) Day time running light/Position lamp (LED type)
(4) Headlamp (Low) (LED type)
(5) Headlamp (High) (LED type)

(6) Day time running light/Position lamp/Front turn signal lamp (LED type)
(7) Front fog lamp (LED type)*
(8) Front side marker (LED type)

Light bulb position (Side)

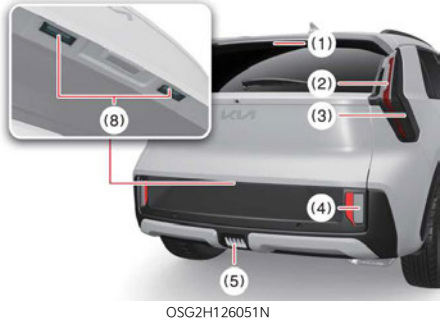


OSG2H126036L

(1) Side repeater lamp (LED type)

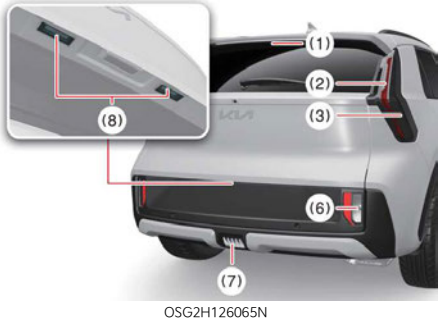
Light bulb position (Rear)

Type A



OSG2H126051N

Type B



OSG2H126065N

(1) High mounted stop lamp (LED type)
(2) Tail lamp/Stop lamp (LED type)
(3) Rear side marker (LED type)
(4) Rear turn signal lamp (Bulb type)
(5) Reversing lamp (Bulb type)
(6) Rear turn signal lamp (LED type)
(7) Reversing lamp (LED type)
(8) License plate lamp (LED type)

Replacing lights (LED type)

If the LED lamp is not functioning, have your vehicle inspected by an authorized Kia dealer. The LED lamp cannot be replaced as an individual component since it is an integrated unit. Instead,

the entire LED lamp unit must be replaced.
A skilled technician should check or repair the LED lamp, for it may damage related parts of the vehicle.

NOTE

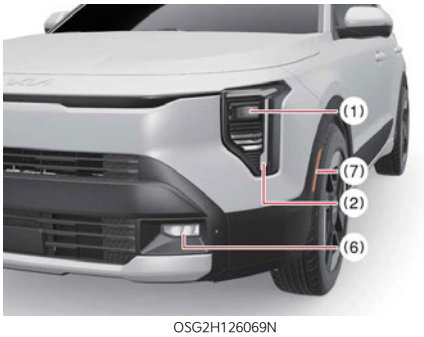
If the high-mounted stop lamp (LED) is not functioning, have your vehicle inspected by an authorized Kia dealer. The LED lamp cannot be replaced as a single unit because it is an integrated component. Instead, the entire LED lamp unit must be replaced. It's essential to have a skilled technician check or repair the high-mounted stop lamp (LED) to prevent any damage to related vehicle parts.

Replacing front lights (LED type)

If the front lights are not functioning, have your vehicle inspected by an authorized Kia dealer.

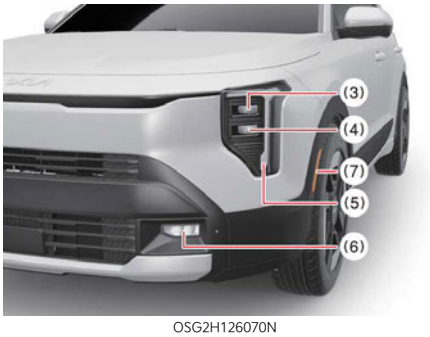
* : if equipped

Type A



OSG2H126069N

Type B

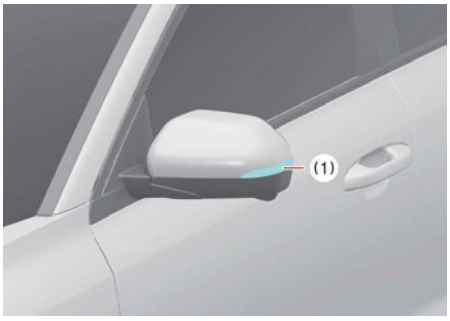


OSG2H126070N

(1) Headlamp (Low/High) (LED type)
(2) Day time running light/Position lamp (LED type)
(3) Headlamp (Low) (LED type)
(4) Headlamp (High) (LED type)
(5) Day time running light/Position lamp/Front turn signal lamp (LED type)
(6) Front fog lamp (LED type)*
(7) Front side marker (LED type)

Replacing side repeater lamp (LED type)

If the side repeater lamp is not functioning, please have your vehicle inspected by an authorized Kia dealer.



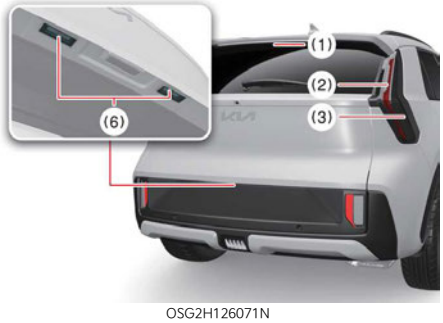
OSG2H126036L

(1) Side repeater lamp (LED type)

Replacing rear lights (LED type)

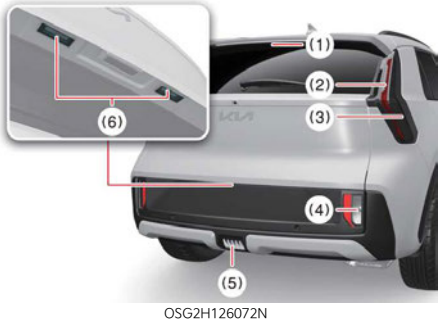
If the rear lights are not functioning, have your vehicle inspected by an authorized Kia dealer.

Type A



OSG2H126071N

Type B



OSG2H126072N

(1) High mounted stop lamp (LED type)
(2) Tail lamp/Stop lamp (LED type)
(3) Rear side marker (LED type)
(4) Rear turn signal lamp (LED type)
(5) Reversing lamp (LED type)
(6) License plate lamp (LED type)

Replacing interior lights (LED type)

If the interior lights are not functioning, have your vehicle inspected by an authorized Kia dealer.

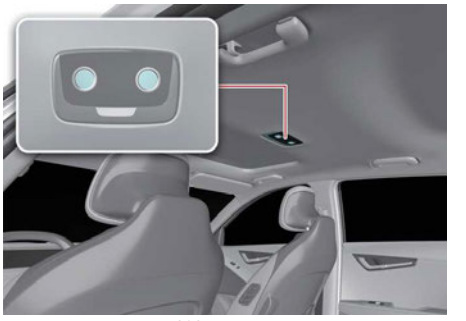
*: if equipped

Map lamp



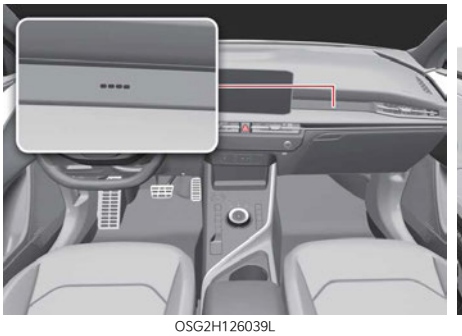
OSG2H126037L

Room lamp*



OSG2H126038L

Ambient light *



OSG2H126039L

Luggage compartment lamp

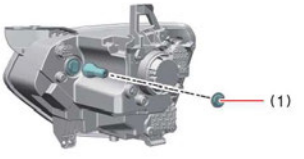


OSG2H126040L

Replacing lights (Bulb type)

Replacing front turn signal lamp

To replace the front turn signal lamp (Bulb type), follow these steps:



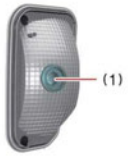
OSG2H126075N

1. Make sure the vehicle is in the OFF position and disconnect the negative 12V battery terminal.
2. Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
3. Remove the bulb from the socket (1) 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.
4. Insert a new bulb by inserting it into the socket and rotating it until it locks into place.
5. 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.
6. Connect the battery connector.

Replacing rear turn signal lamp

To replace the rear turn signal lamp (Bulb type), follow these steps:

1. Make sure the vehicle is in the OFF position and disconnect the negative 12V battery terminal.
2. Remove the bumper.
3. Disconnect the rear combination lamp connector.
4. To remove the socket from the assembly, turn the rear turn signal lamp socket (1) counterclockwise until the tabs on the socket align with the slots on the assembly.



OSG2H126043L

5. Press the bulb in to the socket and rotate it counterclockwise until the tabs on the bulb align with the socket. Then, remove the bulb from the socket.
6. Insert a new bulb into the socket and rotate it clockwise until it locks into place.
7. To install the socket back into the assembly, align the tabs on the socket with the slots in the assembly, push the socket into the assembly, and turn the socket clockwise.

Replacing the reversing lamp

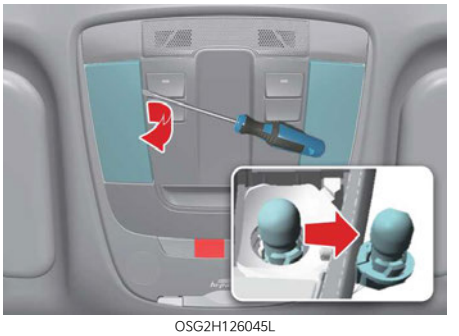
To replace the reversing lamp (Bulb type), follow these steps:

1. Make sure the vehicle is in the OFF position and disconnect the negative 12V battery terminal.
2. Remove the bumper.
3. Disconnect the reversing lamp connector.
4. To remove the socket from the assembly, turn the reversing lamp socket counterclockwise until the tabs on the socket align with the slots on the assembly.
5. Press the bulb in to the socket and rotate it counterclockwise until the tabs on the bulb align

with the socket. Then, remove the bulb from the socket.
6. Insert a new bulb into the socket and rotate it clockwise until it locks into place.
7. To install the socket back into the assembly, align the tabs on the socket with the slots in the assembly, push the socket into the assembly, and turn the socket clockwise.

Replacing the map lamp

To replace the map light (Bulb type), follow these steps:



OSG2H126045L

1. Make sure the vehicle is in the OFF position and disconnect the negative 12V battery terminal.
2. Use a slotted (flat-tip) screwdriver to gently pry the lens cover from the lamp housing.
3. Pull the bulb straight out of the socket to remove it.
4. Install a new bulb in the socket.
5. Align the tabs on the lens cover with the notches in the lamp housing, and lock the lens into the lamp housing.

CAUTION

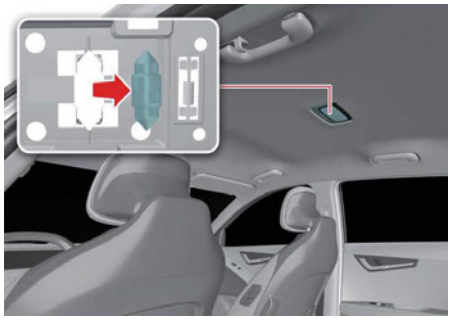
To avoid finger burns or electric shock, make sure the interior lights are off before you replace one.

NOTE

Be careful not to dirty or damage the lens, lens tab, and plastic housings.

Replacing the room lamp

To replace the room lamp (bulb type), follow these steps:



OSG2H126046L

1. Make sure the vehicle is in the OFF position and disconnect the negative 12V battery terminal.
2. Use a slotted (flat-tip) screwdriver to gently pry the lens cover from the lamp housing.
3. Pull the bulb straight out of the socket to remove it.
4. Install a new bulb in the socket.
5. Align the tabs on the lens cover with the notches in the lamp housing, and lock the lens into the lamp housing.

CAUTION

To avoid finger burns or electric shock, make sure the interior lights are off before you replace one.

NOTE

Be careful not to dirty or damage the lens, lens tab, and plastic housings.

Replacing the luggage lamp

To replace the luggage light (Bulb type), follow these steps:



OSG2H126056L

1. Make sure the vehicle is in the OFF position and disconnect the negative 12V battery terminal.
2. Use a slotted (flat-tip) screwdriver to gently pry the lamp assembly cover from the vehicle

interior.
3. Remove the cover from the light assembly.
4. Pull the bulb straight out of the socket to remove it.
5. Install a new bulb in the socket.
6. Replace the cover on the lamp assembly.
7. Replace the lamp assembly on the vehicle interior.

CAUTION

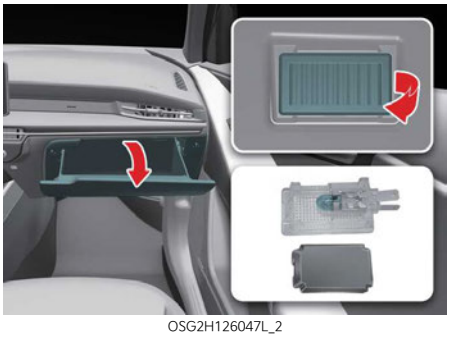
To avoid finger burns or electric shock, make sure the interior lights are off before you replace one.

NOTE

Be careful not to dirty or damage the lens, lens tab, and plastic housings.

Replacing the glove box lamp

To replace the glove box lamp (Bulb type), follow these steps:



OSG2H126047L_2

1. Make sure the vehicle is in the OFF position and disconnect the negative 12V battery terminal.
2. Use a slotted (flat-tip) screwdriver to gently pry the lamp assembly from the vehicle interior.
3. Remove the cover from the lamp assembly.
4. Pull the bulb straight out of the socket to remove it.
5. Install a new bulb in the socket.
6. Replace the cover on the lamp assembly.
7. Replace the lamp assembly on the vehicle interior.

CAUTION

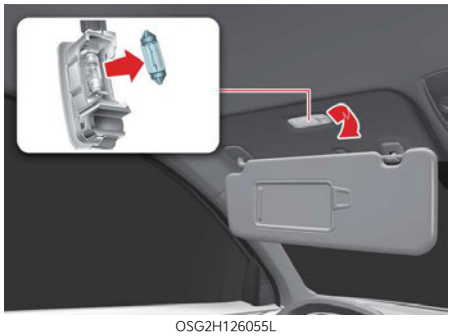
To avoid finger burns or electric shock, make sure the interior lights are off before you replace one.

NOTE

Be careful not to dirty or damage the lens, lens tab, and plastic housings.

Replacing the vanity mirror lamp

To replace thevanity mirror lamp (Bulb type), follow these steps:



OSG2H126055L

1. Make sure the vehicle is in the OFF position and disconnect the negative 12V battery terminal.
2. Use a slotted (flat-tip) screwdriver to gently pry the lamp assembly from the vehicle interior.
3. Remove the cover from the lamp assembly.
4. Pull the bulb straight out of the socket to remove it.
5. Install a new bulb in the socket.
6. Replace the cover on the lamp assembly.
7. Replace the lamp assembly on the vehicle interior.

CAUTION

To avoid finger burns or electric shock, make sure the interior lights are off before you replace one.

NOTE

Be careful not to dirty or damage the lens, lens tab, and plastic housings.

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 also helps to prolong the life of your vehicle.

Exterior general precautions

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.

NOTE

If you park your vehicle near a stainless signboard or reflective building, the plastic exterior trim (bumper, spoiler, trim, lights, outside mirror, and so on) may be damaged by reflected sunlight. To avoid damaging the plastic exterior trim, park the vehicle away from areas with reflected light or use a vehicle cover. (Depending on the vehicle, the type of exterior trim may differ.)

Finish maintenance

Washing

To help protect your vehicle's finish from rust and deterioration, wash it thoroughly with lukewarm or cold water at least once a month.
If you use your vehicle for off-road driving, wash it after each off-road trip. Take special care to remove any accumulated salt, dirt, mud, and other foreign materials. Be sure to keep the drain holes in the lower edges of the doors and rocker panels 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 of these deposits. Use a mild soap that is safe for painted surfaces.
After you wash the vehicle, rinse it thoroughly with lukewarm or cold water. Do not allow soap to dry on the finish.
After you wash the vehicle, test the brakes while driving slowly to see if they have been affected by water. If the braking performance is impaired, dry the brakes by engaging them lightly while maintaining a slow forward speed.

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.

NOTE

- 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.

High-pressure washing

When using high-pressure washers, be sure to maintain sufficient distance from the vehicle. Insufficient distance or excessive pressure can lead to component damage or water penetration. Do not spray the camera, sensors, or their surrounding areas directly with a high-pressure washer. Shock from high-pressure water may affect these devices' operation.

Do not bring the nozzle tip close to the vehicle's boots (rubber or plastic covers) or connectors, as contact from high-pressure water may damage them.

NOTE

Wetting engine compartment

- Washing the engine compartment with water, including high-pressure washing, may cause the electrical circuits located in the engine compartment to fail.
- Never allow water or other liquids to contact electronic components or air ducts, as this may damage them.
- After you wash the vehicle, brake carefully while paying attention to the traffic conditions until the braking function is fully restored.

Waxing

Wax the vehicle when water no longer beads on the paint.
Always wash and dry the vehicle before waxing it. Use a high quality liquid or paste wax and follow the manufacturer's instructions. Wax all metal trim to protect it and maintain its luster.

Removing oil, tar, and similar materials with a spot remover usually strips 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.

NOTE

Drying your vehicle

- Wiping dust or dirt off the body of the vehicle 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

Repair deep scratches or chips in the painted surface promptly. Exposed metal rusts quickly and may develop into a major repair expense.

NOTE

If your vehicle is damaged and requires any metal repair or replacement, be sure the body shop applies anti-corrosion materials to the parts that were 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 it to a high luster.

During winter weather or in coastal areas, cover the bright metal parts with a heavier coating of wax or preservative. If necessary, coat the parts with non-corrosive petroleum jelly or another protective compound.

Underbody maintenance

Road salt and other corrosive chemicals are used in cold weather areas to melt snow and prevent ice accumulation. If you do not regularly remove these chemicals from your vehicle, they will corrode 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 vehicle owners of all brands to take the following steps:

- Wash the underbody of your vehicle regularly during the winter and whenever your vehicle has been exposed to salts or chemicals.
- Thoroughly wash the underbody at the end of winter.
- Have your vehicle inspected for corrosion annually by a professional service technician or at a governmental inspection station.
- Have your vehicle inspected immediately if you see sighs 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 is cool.
- 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 to help prevent corrosion.
- Avoid washing the wheels with high-speed vehicle wash brushes.
- Do not use any alkaline or acid detergents. They may damage and corrode 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, Kia produces vehicles of the highest quality. However, this is only part of the job. Your assistance is required to achieve long-term corrosion resistance for your vehicle.

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, abrasions, or minor scrapes and dents that leave unprotected metal exposed to corrosion.

High-corrosion areas

If you live in an area where your vehicle is regularly exposed to corrosive materials, corrosion protection is particularly important. Some of the most common causes of accelerated corrosion are road salts, dust control chemicals, ocean air, and industrial pollution.

Moisture breeds corrosion

Corrosion is most likely to occur in moist conditions. High humidity accelerates corrosion, particularly when temperatures are just above freezing. The corrosive material stays in contact with the vehicle's surface because moisture 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 accelerate corrosion.

High temperatures can also accelerate corrosion of parts that are not well ventilated enough to disperse the moisture. For all of 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 underbody of the vehicle.

To help prevent corrosion

You can help prevent corrosion by following these guidelines:

Keep your vehicle clean

The best way to prevent corrosion is to keep your vehicle clean and free of corrosive materials. Attention to the underbody of the vehicle is particularly important.

If you live in a high-corrosion area where road salts are used, near the ocean, or in areas with industrial pollution, acid rain, and so on, you should take extra care to prevent corrosion. In winter, hose off the underbody of your vehicle at least once a month, and be sure to clean the underbody thoroughly when winter is over.

When cleaning the underbody of the vehicle, pay 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 the lower door panels, rocker panels, and frame components, be sure to keep the drain holes open so that moisture can escape instead of staying trapped inside where it can 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 enough to disperse moisture.

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 re-

duce the possibility of corrosion. If bare metal shows through, the attention of a qualified body and paint shop is recommended.
Bird droppings are highly corrosive and may damage painted surfaces in just a few hours. Always remove bird droppings as soon as possible.

Do not 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. Be particularly careful if you carry fertilizers, cleaning materials, or chemicals in the vehicle.
Only carry these materials in proper containers. Clean up any spills or leaks, then flush the carpeting with clean water and thoroughly dry it.

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 of the vehicle because they may cause damage or discoloration. If these chemicals 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).

NOTE

Electrical components
Never allow water or other liquids to contact electronic components inside the vehicle, as this may damage them.

NOTE

Leather
When cleaning leather products (such as the steering wheel or seat), use neutral detergents or solutions with low alcohol content. If you use high alcohol content solutions or acid or alkaline detergents, they may fade the color or strip the surface of the leather.

Taking care of leather seats

- Vacuum the seats periodically to remove dust and sand from them. This prevents abrasion or damage to the leather and maintains its quality.
- Wipe the leather seat cover often with a soft, dry cloth.
- Sufficient use of a leather protective may prevent abrasion of the cover and help maintain the color. Be sure to read the instructions and consult a specialist when using leather coating or protective agents.
- Light-colored leather (such as beige or cream) is more easily and visibly contaminated. Clean the seats frequently.
- Avoid wiping the leather seats with a wet cloth. It may cause the surface to crack.

Cleaning the leather seats

Remove all contaminants immediately. To remove different contaminants, refer to the following instructions:

- Cosmetic products (such as sunscreen or foundation): Apply cleaning cream on a cloth and wipe the contaminated area. Wipe off the cream with a wet cloth and remove the water with a dry cloth.
- Beverages (such as coffee or soda): Apply a small amount of neutral detergent and wipe until the contaminants do not smear.
- Oil or color transfer from blue jeans or clothes: Remove the oil or stain instantly with an absorbent 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. If they are heavily soiled with stains from beverages or other sources, use a suitable interior cleaner. To prevent damage to the seat covers, use a soft sponge or microfiber cloth to wipe them down to the seams with large wiping motions. Velcro closures on clothing or sharp objects may snag or scratch 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 the 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 the 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. The fire-resistant properties of fabric can be reduced if you do not properly maintain the material.

Interior wooden trim (if equipped)

Use a wooden furniture protector (for example, wax, coating compound) to clean the interior wooden trim. Sharp objects (for example, driver, knife), adhesive materials, tapes, or any strong impacts may damage the interior wooden trim.

⚠ CAUTION

- If the coating finish over the interior wooden trim is removed, moisture may damage or change wood traits.
- If the interior wooden trim is damaged, you may get a splinter from the wood surface. Have your vehicle inspected by an authorized Kia dealer.

Cleaning the lap/shoulder belt webbing

Clean the webbing of the lap and shoulder belt portions of the seat belt with any mild soap solution recommended for cleaning upholstery or carpet. Follow the instructions provided with the soap. Do not bleach or redye the webbing because this may weaken it.

Cleaning the lap and shoulder belt webbing

If the interior glass surfaces fog up or are covered with an oily, greasy, or waxy film, clean them with a glass cleaner. Follow the directions on the glass cleaner container.

NOTE

Rear window

Do not scrape or scratch the inside of the rear window. This may damage 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 and Consumer Information manual in your vehicle.

Your vehicle is equipped with an emission control system to meet all applicable emission regulations. There are 3 emission control systems:

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 according to 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 OFF the ESC system 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 prevents air pollution caused by the crankcase emitting blow-by gases. 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 prevents fuel vapors from escaping into the atmosphere. The ORVR system loads the vapors from the fuel tank into a canister while you refuel the vehicle at a gas station, preventing the escape of fuel vapors into the atmosphere.

Canister

The onboard canister absorbs and stores fuel vapors generated inside the fuel tank. 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 Engine Control Module (ECM) controls the PCSV. When the engine coolant temperature is low while you are idling, the PCSV closes so that evaporated fuel is not drawn into the engine. After the engine warms up while you drive, 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 that 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 modifications may not be covered under your warranty.
If you use unauthorized electronic devices, they may cause abnormal vehicle operation, 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 have the issue repaired immediately. If you suspect exhaust fumes are entering your vehicle, only drive it with all of the windows fully open. Have your vehicle inspected and repaired immediately by an authorized Kia dealer.

⚠ WARNING

Exhaust
Engine exhaust gases contain CO. Though colorless and odorless, CO is dangerous and could be lethal if inhaled. Follow the instructions in this section to avoid CO poisoning.

- Do not operate the engine in a confined or enclosed area (such as a garage) more than necessary to move your vehicle in or out of the area.
- When you stop your vehicle in an open area for more than a short period of 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 period of time with the engine running.
- If the engine stalls or fails to start, excessive attempts to restart it may damage 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, and so on. 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. Doing so may present a fire risk under certain conditions.

Your vehicle is equipped with a catalytic converter emission control device.
Take the following precautions:
- 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 speeds for extended periods of time (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.

Gasoline Particulate Filter (GPF) (if equipped)

The Gasoline Particulate Filter (GPF) is the system that removes the soot from the exhaust gas. Unlike a disposable air filter, the GPF system automatically burns (oxidizes) and removes the accumulated soot while driving.
However, repeated short-distance driving or long-distance driving at a low speed can stop the accumulated soot from automatically being removed by the GPF system. If the accumulated soot reaches a certain amount, the GPF warning light ( ) will appear. To re-operate the GPF system, 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 met: safe road conditions, 3rd gear or above, and engine speed of 1,500-4,000 rpm. Driving at 50 mph (80 km/h) or faster for recommended hours will get the GPF system back to work and stop the GPF warning light.

If the GPF warning light stays on or **Check exhaust system** message appears in spite of the procedure, visit an authorized Kia dealer. Constant driving with the GPF warning light on can damage the GPF system and undermine fuel economy.

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Consumer info

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).

Consumer Assistance (U.S. only)

Roadside Assistance is provided with all new current model year Kia vehicles from the date the vehicle is delivered to its first retail buyer or otherwise put into use (in-service date), whichever is earlier, for a period of 60 months or 60,000 miles, whichever is earlier, subject to the terms, conditions, and exclusions set forth in the Kia Warranty and Consumer Information Manual applicable to your vehicle's model year.

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 or service requests are excessive in frequency or type of occurrence.

Toll free consumer assistance

Toll free consumer assistance is available from 5:00 AM to 6:00 PM PST Monday through Friday. Call 1-800-333-4542 (U.S. only) to access toll free consumer assistance.
For more information regarding available assistance, refer to your Kia Warranty and Consumer Information Manual.

Emergency roadside assistance

Emergency roadside assistance is available 24 hours a day, 365 days a year and is accessible by calling 1-800-333-4542 (U.S. only) or pressing the RSA button (if enrolled in Kia Connect).
You must provide your Vehicle Identification Number (VIN) to verify coverage when you call. Find your VIN on the driver side of the instrument panel, the door jamb, your vehicle registration, or your 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 also have access to a network of over 10,000 locksmiths should you be locked out of your vehicle.
If mechanical difficulty renders your vehicle undrivable due to a warranty related concern, Kia's Roadside Assistance Representative will arrange to transport your vehicle to the nearest Kia dealer or an authorized Kia alternative service location. To receive this service, your vehicle must be accessible to the dispatched transport vehicle, as determined by its driver.

TIP

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 3-day maximum limit per incident. You must contact the Kia Roadside Assistance Center to obtain preauthorization 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, make sure it conforms to the regulations in that country. Even if you successfully register your vehicle in a foreign country, consider the possibility of having to deal with the following problems:

1. The specified fuel for your vehicle may be unavailable. Using other fuels 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. In addition to the specified fuel, you may also find that the parts, service techniques, and tools necessary to maintain and repair your vehicle may be unavailable because vehicles like yours may not be marketed in the new country of registration. Even if vehicles like yours are sold in a foreign country, mechanical specifications required by the government may vary enough from the country of purchase to cause additional problems.
3. There may not be an authorized Kia dealer local to where you plan to register your vehicle, which can cause trouble in obtaining services for any number of reasons.

Kia America, Inc. cannot assume any responsibility for problems caused by unsatisfactory service or lack of service outside of the United States.

Electrical Equipment (U.S. only)

The electrical system of your vehicle performs under all reasonably expected operating conditions.

Before installing any additional electrical equipment in your vehicle, consult an authorized Kia dealer to make sure you don't void your warranty.

Certain electrical equipment, or the way it is installed, may adversely affect vehicle operation (including systems such as engine control system, audio, and electrical charging) and potentially void all or part of your warranty.

Kia America, Inc. assumes no responsibility for any expense you may incur or any malfunction of your vehicle, its components, or its systems resulting 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

Improper installation of a mobile two-way radio system or installation of an excessively powerful mobile two-way radio system may adversely affect other electronic systems. To avoid damaging your vehicle, consult an authorized Kia dealer on 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 information under the headings "NOTICE," "CAUTION," and "WARNING."

If you have any questions regarding the operation of your vehicle, safety issues, or defects after reading this manual, please contact Kia's toll free Consumer Assistance hot line:

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: 1-888-275-9171); go to http://www.NHTSA.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.NHTSA.gov.

Online factory authorized manuals (U.S. only)

The following publications are available at www.KiaTechinfo.com:

Service manual

This manual covers maintenance and recommended procedures for repairing engine and chassis components. This manual is written for the journeyman mechanic, but is simple enough for most mechanically inclined owners to understand.

Electrical troubleshooting manual

This manual is a companion to the Service Manual and provides 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 of your vehicle.

Abbreviation

ABS
Anti-lock Brake System

ACC
Accessory

ACU
Airbag Control Unit

ALR
Automatic Locking Retractor

BAS
Brake Assistant System

BCA
Blind-Spot Collision-Avoidance Assist

BCW
Blind-Spot Collision Warning

BVM
Blind-Spot View Monitor

CC
Cruise Control

CD
Charge Depleting

CRS
Child Restraint System

CS
Charge Sustaining

CSC
Crosswind Stability Control

DAW
Driver Attention Warning

DBC
Downhill Brake Control

DCM
Digital Center Mirror

DCT
Dual Clutch Transmission

DPF
Diesel Particulate Filter

DRL
Daytime Running Light

DRVM
Driving Rear View Monitor

EBD
Electronic Brake force Distribution

ECM
Electronic Chromic Mirror

ELR
Emergency Locking Retractor

EPB
Electronic Parking Brake

ESC
Electronic Stability Control

ESS
Emergency Stop Signal

ETCS
Electronic Toll Collection System

FCA
Forward Collision-Avoidance Assist

HAC
Hill-start Assist Control

HBA
High Beam Assist

HDA
Highway Driving Assist

HID
High-Intensity Discharge

HMSL
High Mounted Stop Lamp

HUD
Head-Up Display

IC/JC
Interchange/Junction

ICCB

In-Cable Control Box

ISG

Idle Stop and Go

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

NFC

Near Field Communication

NSCC

Navigation-based Smart Cruise Control

ODS

Occupant Detection System

PCA-R

Reverse Parking Collision-Avoidance Assist

PCA-F/R

Forward/Reverse Parking Collision-Avoidance Assist

PCA-F/S/R

Forward/Side/Reverse Parking Collision-Avoidance Assist

PDW-R

Reverse Parking Distance Warning

PDW-F/R

Forward/Reverse Parking Distance Warning

PDW-F/S/R

Forward/Side/Reverse Parking Distance Warning

RCCA

Rear Cross-Traffic Collision-Avoidance Assist

RCCW

Rear Cross-Traffic Collision Warning

RSPA

Remote Smart Parking Assist

RVM

Rear View Monitor

SBW

Shift-by-wire

SCC

Smart Cruise Control

SCR

Selective Catalytic Reduction

SEA

Safe Exit Assist

SEW

Safe Exit Warning

SRS

Supplemental Restraint System

SRSCM

SRS Control Module

SVM

Surround View Monitor

TBT

Turn By Turn

TCI

Turbo Charger Intercooler

TCS

Traction Control System

TIN

Tire Identification Number

T-GDI

Turbocharger Gasoline Direct Injection

TMK

Tire Mobility Kit

TPMS

Tire Pressure Monitoring System

TSA

Trailer Stability Assist

UWB

Ultra Wide Band

VIN

Vehicle Identification Number

VESS

Virtual Engine Sound System

VOCs

Volatile Organic Compounds

VSM

Vehicle Stability Management

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