

# FOREWORD

Dear Customer,

Thank you for selecting your new Kia vehicle.

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

If technical assistance is needed on your vehicle, authorized Kia dealerships can provide you with factory-trained technicians, recommended special tools, and genuine Kia replacement parts.

This Owner's Manual will acquaint you with the operation of features and equipment that are either standard or optional on this vehicle, along with the maintenance needs of this vehicle. Therefore, you may find some descriptions and illustrations not applicable to your vehicle. You are advised to read this publication carefully and follow the instructions and recommendations. Please always keep this manual in the vehicle for your, and any subsequent owner's, reference.

All information contained in this Owner's Manual was accurate at the time of publication. However, 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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## How to use this manual

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

We strongly recommend that you read the entire manual. In order to minimize the chance of death or injury, you must read the WARNING and CAUTION sections in the manual.

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

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

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

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

### **WARNING**

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

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### **CAUTION**

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

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### **NOTICE**

A NOTICE indicates interesting or helpful information is being provided.

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## Electric Vehicle Guide

### Overview of Electric Vehicle

An electric vehicle is driven using a battery and an electric motor. While general vehicles use an internal combustion engine and gasoline as fuel, electric vehicles use electrical energy that is charged inside the high voltage battery

As a result, electric vehicles are eco-friendly in that they do not require fuel and do not emit exhaust gases.

### Characteristics of Electric Vehicles

It is driven using the electrical energy that is charged inside the high voltage battery. This method prevents air pollution since fuel, like gasoline, is not required, negating the emission of exhaust gases.

A high performance electric motor is used in the vehicle as well. Compared to standard, internal combustion engine vehicles, engine noise and vibrations are much more minimal when driving.

When decelerating or driving downhill, regenerative braking is utilized to charge the high voltage battery. This minimizes energy loss and increases the distance to empty.

When the battery charge is not sufficient, AC charge, DC charge and trickle charge are available. (Refer to "Charge Types for Electric Vehicle" on page 1-13.)


#### \* NOTICE

What does regenerative braking do?

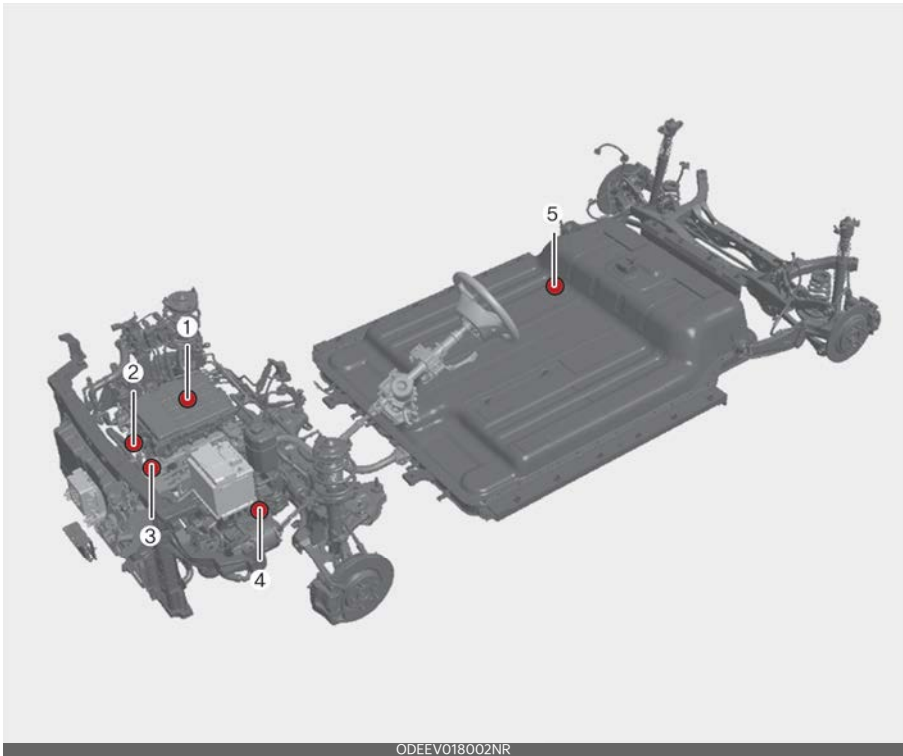
It uses an electric motor when decelerating and braking and recaptures & transforms kinetic to electrical energy in order to charge the high voltage battery.

### Battery Information

The vehicle is composed of a high voltage battery that drives the motor, air conditioner, and an auxiliary battery (12 V) that drives all other 12 V systems.

The auxiliary battery is automatically charged when the vehicle is in the ready () mode or the high voltage battery is being charged.

## Main Components of Electric Vehicle



- (1) **On-Board Charger (OBC)**: External device (low speed) to charge the high voltage battery.
  - (2) **Inverter**: Transforms direct current into alternating current to supply power to the motor, and transforms alternate current into direct current to charge the high voltage battery.
  - (2) **LDC**: Transforms power from the high voltage battery to low voltage (12 V) to supply power to the vehicle (DC-DC).
  - (2) **VCU**: Functions as a supervisory controller of electric vehicle
  - (3) **Traction Motor**: Drive vehicle converting electric energy of charged battery to mechanical energy (functions same as internal combustion engine)
  - (4) **Reduction gear**: Delivers rotational force of the motor to the tires at appropriate speeds and torque.
  - (5) **High voltage battery (lithium-ion polymer)**: Stores and supplies power necessary for the electric vehicle to operate (12 V auxiliary battery provides power to the vehicle features such as lights and wipers).
- \* OBC: On-Board Charger  
\* LDC: Low Voltage DC-DC Converter  
\* VCU: Vehicle Control Unit

**⚠ WARNING**

- Do not remove or disassemble high voltage components and high voltage battery connectors and/or wiring (Orange cabling). Also, be careful not to damage high voltage components and the high voltage battery. It may cause serious injury and significantly impact the performance and durability of the vehicle.
- When inspection and maintenance is required for high voltage components and the high voltage battery, have the vehicle inspected by an authorized Kia dealer.

**High Voltage (HV) Battery (lithium-ion polymer)**

The HV battery powers the vehicle and peripheral devices.



ODDEEV018003NR

The charge amount of the HV battery may gradually decrease when the vehicle is not driven or charged.

The battery capacity of the HV battery may decrease over time when the vehicle is stored in high temperatures and temporarily in low temperatures.

Distance to empty may vary depending on the driving conditions (cargo, rain, snow, wind, road surfaces), even if the charge amount is the same. The HV battery may expend more energy when driving a fast pace or uphill. These actions may reduce the distance to empty.

The high voltage battery is used when using the air conditioner / heater. This may reduce the distance to empty. Make sure to set moderate temperatures when using the air conditioner / heater and/or use the pre-conditioning prior to departures.

Natural degradation may occur with the high voltage battery depending on the number of years the vehicle was used and/or the number of charging cycles. This will reduce the distance to empty over time.

When the charge capacity and distance to empty keep falling, have your vehicle checked by an authorized Kia dealer.

If the vehicle will not be in use for an extended period of time, charge the high voltage battery once every three months to prevent it from discharging. Also, if the charge amount is not enough, immediately charge to full and store the vehicle.

AC charge is recommended to keep the high voltage battery in optimal condition.

If the HV battery is only charged to 80%, and you minimize the number of HV battery charging, you can keep the HV battery performance in optimal condition. (vs charging the HV battery to 100% an/or charging every drive cycle.)

**⚠ CAUTION**

- Make sure to use a designated charger when charging the HV battery. Using different types of chargers may have a serious impact on vehicle durability.
- Make sure that the HV battery charge gauge does not reach E (Empty). If the vehicle is kept at E (Empty) for a long period, it may damage the high voltage battery and the high voltage battery may have to be replaced depending on the level of degradation.
- If the vehicle is in a collision, contact an authorized Kia dealer to inspect whether the high voltage battery is still connected.

**\* NOTICE**

The high voltage battery warmer system operates when the charging connector is connected to the vehicle. However, the high voltage warmer system may not operate when battery temperature drops below -35 °C (-95 °F).

**EV Menu (if equipped)**

If you select the "EV" menu at the Infotainment system home screen or press the "EV" button on the left side of the air intake control button, you can enter EV menu.



\* The image of EV menu screen in this manual may differ from the actual screen depending on the vehicle specification and the version of the Infotainment system software. For more information, please refer to the "Car Infotainment System Quick Reference Guide".

The EV menu has a total of 5 menus including Available Range, Energy information, Charge management, ECO driving and EV settings.



### Available Range

Select 'EV → Map' on the screen.



The available range is marked in blue on the map.



### Energy Information

Select 'EV → Energy information' on the screen.



You can check information about battery and energy consumption

### Battery Information

You can check the reachable range, battery power remaining, and expected charging time for each charger type.



- The distance to empty is calculated based on the real-time fuel efficiency while driving. The distance may change if the driving pattern changes.
- The distance to empty may vary according to the change of the driving pattern even if the same target battery charge level is set.

### Power Consumption

Select 'EV → Energy information → Driving range, battery' on the screen.



You can check the current energy consumption for each system of the vehicle.



1. 'Driving' shows the total power and energy consumption of the driving motor's driving energy and regenerative energy.
2. 'Climate' shows the power and energy consumption which are used by the heater or air conditioner.
3. 'Electronics' shows the power and energy consumption which are used by the vehicle systems including the cluster, infotainment system (speaker and navigation), headlamp, vehicle control unit, etc.
4. 'Battery care' shows the momentary power and energy consumption which are used when:

Operate the winter mode to increase the battery temperature during winter to improve the driving performance.

Cool down the battery temperature during summer to prevent over temperature of the battery.

### Charge Management

Select 'EV → Charge Management' on the screen.



You can set the date and time of when to charge the battery, climate control temperature, location-based charging options and other various functions.

### Reserved Charging and Climate Control

You can choose the time and the day of week that you wish to charge the battery and operate reserved climate control to set the temperature of air conditioner / heater.

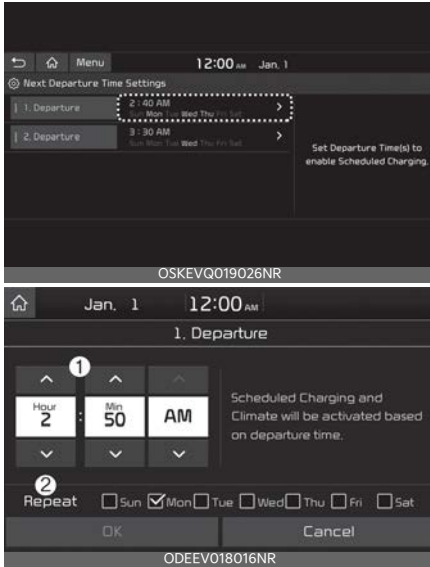


Also, you may select the time to start charging using the off-peak time setting.

\* The charger and the charging connector should be connected at the reserved charging time.

### Setting Departure Time

You can set the departure time by selecting 'EV → Charge management → Reserved charging and Climate control → Next departure time → ' on the screen.



1. Departure time: Set the time that you wish to start the vehicle after charging the battery.
2. Select the day: Set the day of the week to activate reserved charging and target temperature for departure time.

### Off-peak Time settings

Select 'EV → Charge management → Reserved charging and Climate Control → Reserved charging → ' on the screen.

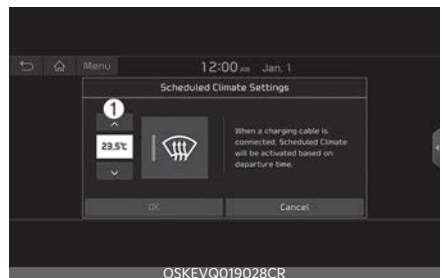


You can set off-peak time to charge the vehicle.

1. Charging begins at the beginning of the off-peak time
2. Charging stops at the end of the off-peak time
3. Charging mode
  - Off-peak tariffs prioritized: If selected, reserved charging performs by making the most of the off-peak time. If not sufficiently charged within the off-peak time, it may keep on charging even after the off-peak time
  - Off-peak tariffs only: If selected, charges only within off-peak time, therefore it may not charge up to the targeted charging amount.

### Climate Control Settings

Select 'EV → Charge management → Reserved charging and Climate Control → Reserved climate control → Scheduled Climate Settings' on the screen.



You can set the climate control temperature.

1. Setting the climate control temperature: set the temperature of heater / air conditioner.

### Setting Battery Charge Level

The target battery charge level can be selected when charged with AC charger or DC charger.



The charging level can be changed by 10%.

If the target battery charge level is lower than the high voltage battery charge level, the battery will not be charged.

### Charging Current

You can adjust the charging current for an AC charger. Select an appropriate charging current for the charger used.



If the charging process does not start or abruptly stops in the middle, re-select

another proper current and retry charging the vehicle.

Charging time varies depending on which charging current is selected.

The location-based charging feature allows you to dualize the charging current settings at specific locations.

### ECO Driving

Select 'EV → ECO Driving' on the screen.



You can check ECO level information and ECO driving history.

### Environment Contribution

Information on CO2 reduction compared to gasoline-fueled vehicles is displayed.



### Eco Driving History

You can check the driving date, driving distance, and the average energy consumption rating for the last 30 driving trips.





The date with the highest ECO is marked with a star-shaped icon.

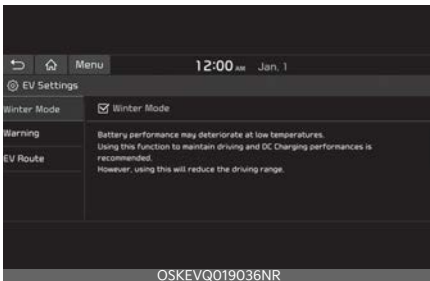
### EV Setting

Select 'EV → EV Setting' on the screen.



You can set Winter Mode, Warning and EV route functions.

### Winter Mode (if equipped)



The Winter mode is efficient during the winter time when the high voltage battery temperature is low.

This mode is recommended to improve driving and DC charging performances

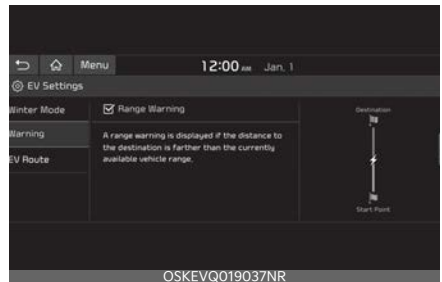
during winter by raising the battery temperature to an adequate level. However, this may reduce the distance to empty significantly as the high voltage battery consumes a lot more electricity.

Also, if the battery temperature is low during driving or when scheduled air conditioner / heater is activated, this mode is operated to improve driving performance.

However, when the battery level is low, the mode is not operated to ensure driving distance.

\* This mode is available for the vehicles equipped with the battery heater.

### Warning



Range Warning:

If the destination set in the navigation cannot be reached with the remaining battery, a warning message is displayed.

## EV Route



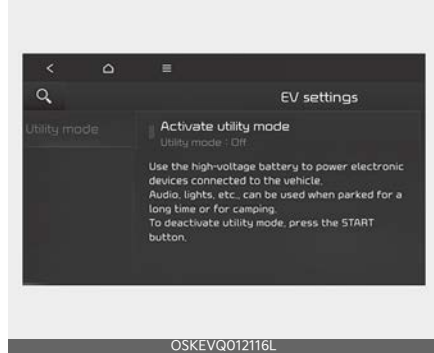
You can apply electric car-related functions for guiding the route. It allows you to check the distance that you can go with the current battery amount. Travelable and non-travelable sections on your way to the destination are displayed on the screen. The search station icon is also displayed so that you can find nearby stations immediately.

### Utility Mode

When driving is not necessary such as while camping or when stopping the vehicle for a long time, it is possible to use the electrical devices (audio, lights, etc.) for long hours.

The high voltage battery is used instead, to maintain the 12V auxiliary battery, for operating the convenient 12V features of the vehicle.

## System Setting and Activation



When the following conditions are satisfied, you can activate the Utility Mode function by selecting **EV Settings** → **Utility Mode** on the screen.

- The vehicle is in the (⚙️) mode.
- The gear is in P (Park).
- EPB (Electronic Parking Brake) is applied.
- **EV Settings** → **Utility Mode** is selected on the infotainment system screen.

### Utility mode Activation

- The (⚙️) indicator will turn off and the **UTIL** indicator will illuminate on the cluster and the EPB is applied.
- All vehicle electronics are usable but the vehicle cannot be driven.
- The EPB can be canceled by pressing the EPB switch.
- Gear cannot be shifted out of P (Park). If a shift attempt is made, **Shifting conditions not met** message will be displayed on the cluster.

### Utility mode Deactivation

The Utility Mode can be deactivated by pressing the START/STOP button to the OFF position.

## Charge Types for Electric Vehicle

The types of charging include AC charge, DC charge, and trickle charge.

### AC Charge

We recommend using AC charging for charging of the vehicle. You can use a AC charger at public charging stations but charge gun should always be checked for damage, prior to connecting to vehicle. Trickle charging cable (if equipped) in the cargo compartment of your car, can be used, but charge times will be long. (Refer to "Charging Electric Vehicle (AC Charge)" on page 1-20)

### DC Charge

You can DC charge at high speeds at public charging stations, but always confirm the charge gun is not damaged, prior to connecting to vehicle. Refer to the respective company's manual that is provided for each DC charger type.

Battery performance and durability can deteriorate if the DC charger is used constantly.

Use of DC charge should be minimized in order to help prolong high voltage battery life.

### Trickle Charge

When you cannot drive to a public charging station due to low battery, charge your car with ICCB (In Cable Control Box), a portable charging cable, which can be purchased as an option.










## Charging Time Information

The charging time depends on the charge type.

Charging Type		City-Type	Cruise-Type
AC charge		Takes about 6 hours and 10 minutes at room temperature. (Can be charged to 100%)	Takes about 9 hours and 35 minutes at room temperature. (Can be charged to 100%)
DC charge	100 kW-level charger	Takes about 47 minutes at room temperature to 80% of SOC. (Can be charged to 100%)	Takes about 47 minutes at room temperature to 80% of SOC. (Can be charged to 100%)
	50 kW-level charger	Takes about 48 minutes at room temperature to 80% of SOC. (Can be charged to 100%)	Takes about 64 minutes at room temperature to 80% of SOC. (Can be charged to 100%)
Trickle charge (120 V)		Takes about 36 hours at room temperature. (Can be charged to 100%)	Takes about 59 hours at room temperature. (Can be charged to 100%)

\* Depending on the condition and durability of high voltage battery, charger specifications, and ambient temperature, the time required for charging the high voltage battery may vary.

\* To know the estimated charging time, refer to the remaining charging time displayed on the instrument cluster or infotainment system screen.

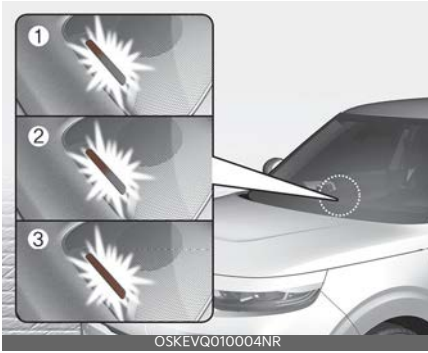
Category	Charging Inlet (Vehicle)	Charging Connector	Charging Outlet	How to Charge	Charging Time
AC Charge	 OSKEVQ011003N	 ODEEV018029NR	 ODEEV018030NR	Use the AC charger installed at home or public charging station	City-Type: Approx. 6 hours and 10 minutes Cruise-Type: Approx. 9 hours and 35 minutes * Can be charged to 100%
DC Charge	 OSKEVQ011002N	 ODEEV018105NR	 ODEEV018032NR	Use the DC charger at public charging station	City-Type: Approx. 47 minutes (100 kW) Approx. 48 minutes (50 kW) Cruise-Type: Approx. 47 minutes (100 kW) Approx. 64 minutes (50 kW) * To 80% of SOC, can be charged to 100%
Trickle charge (120 V)	 OSKEVQ011003N	 ODEEV018029NR	 ODEEV018033NR	Use household current	City-Type: Approx. 36 hours Cruise-Type: Approx. 59 hours * Can be charged to 100%

\* Actual charger image and charging method may vary in accordance with the charger manufacturer.

\* Depending on the condition and durability of the high voltage battery, charger specifications, and ambient temperature, the time required for charging the high voltage battery may vary.

## Charge Indicator Lamp for Electric Vehicle

When charging the high voltage battery, the charge level can be checked from outside the vehicle.



Operation of Charging Indicator Lamp			Details	
(1)	(2)	(3)		
○ (OFF)	○ (OFF)	○ (OFF)	Not Charged	
Blinking	○ (OFF)	○ (OFF)	Charging	
● (ON)	Blinking	○ (OFF)		0~33%
● (ON)	● (ON)	Blinking		34~66%
● (ON)	● (ON)	● (ON)	67~99%	
● (ON)	● (ON)	● (ON)	Charging complete (100%) (turns OFF in 5 seconds)	
Blinking	Blinking	Blinking	Error while charging	
○ (OFF)	○ (OFF)	Blinking	Charging 12 V auxiliary battery or reserved air conditioner is operating	
○ (OFF)	Blinking	○ (OFF)	Reserved charging is operating (turns OFF after 3 minutes) or interruptions that temporarily prevent charging (e.g., power failure)	

### AC Charging Connector Lock

This AC charging connector lock function prevents an outsider from removing the charging connector from the charging inlet.

Select the always mode or while charging mode at the User Setting Menu (cluster: convenience → charging connector locking mode)

\* The charging inlet is locked during DC Charge regardless of the locking mode. After charging is complete, the locked charging inlet is unlocked.

### While charging mode

The connector locks when charging starts. The connector unlocks when charging is complete.

### Do not lock

The locking device for charging inlet is kept unlocked regardless of charging status. The locking device is kept unlocked during charging and you can separate the connector by pressing the button of the charging connector. Please be careful about potential theft of the charging cable when selecting this mode.

### Connector Lock

	Always mode	While charging mode	Do not lock Mode
Before charging	○	X	X
While charging	○	○	X
After charging	○	X	X

### Always mode

The connector locks when the charging connector is plugged into the charging inlet. The connector is locked until all doors are unlocked by the driver. This mode can be used to prevent charging cable theft.

- If the charging connector is unlocked when all doors are unlocked, but the charging cable is not disconnected within 15 seconds, the connector will be automatically locked again.
- If the charging connector is unlocked when all doors are unlocked, but all doors are locked again, immediately, the connector will be automatically locked again.

## Reserved Charging

You can set-up charging schedule for your vehicle using the multimedia or the Kia Connect application on your smartphone.

Refer to the Infotainment system and the Kia Connect manual about reserved charging.

Reserved charging can only be done when using a AC charger or the Portable Charging Cable (ICCB: In-Cable Control Box).

When reserved charging is set and the AC charger or the Portable Charging Cable (ICCB: In-Cable Control Box) is connected for charging, the indicator lamp in the middle blinks (for 3 minutes) to indicate that reserved charging is set.



When reserved charging is set, charging is not initiated immediately when the AC charger or Portable Charging Cable (ICCB: In-Cable Control Box) is connected. When immediate charging is required, use the Infotainment system or the Kia Connect application on your smartphone to deactivate the scheduled charging.

If you need to completely deactivate the reserved charge setting, use the Infotainment system or the Kia Connect application on your smartphone.



When reserved charging is set and the normal charger or portable charging cable (ICCB: In Cable Control Box) is connected for charging, the indicator lamp turns on to show that reserved charging is set.

When reserved charging is set, charging does not start right after the normal charger or portable charging cable (ICCB: In Cable Control Box) is connected. If you need to charge the battery immediately, press the immediate charging button for more than 2 seconds or deactivate reserved charging by using the AVN or Kia Connect application on your smartphone.

\* Refer to "Charging Electric Vehicle (AC Charge)" on page 1-20, "Charging Electric Vehicle (Trickle Charge)" on page 1-30 for details about connecting the AC charger and the Portable Charging Cable (ICCB: In-Cable Control Box)

## Precautions for Charging Electric Vehicle

AC Charger



AC Charging Cable (if equipped)



DC Charger



\* Actual charger image and charging method may vary in accordance with the charger manufacturer.

### **⚠ WARNING**

- Electromagnetic waves that are generated from the charger can seriously impact medical electric devices such as an implantable cardiac pacemaker. When using electronic medical devices such as an implantable cardiac pacemaker, make sure to ask the medical team and manufacturer whether charging your electric vehicle will impact the operation of the medical electric devices such as an implantable cardiac pacemaker.
- Check to make sure there is no water or dust on the charging cable connector and plug before connecting to the charger and charging inlet. Connecting while there is water or dust on the charging cable connector and plug may cause a fire or electric shock.

### **⚠ WARNING**

- Be careful not to touch the charging connector, charging plug, and the charging inlet when connecting the charger connector cable to the charging outlet and the charging inlet on the vehicle.
- Comply with the following in order to prevent electrical shock when charging:
  - Use a waterproof charger.
  - Do not touch the charging connector and charging plug when your hand is wet. Do not stand in water or snow when connecting the charging cable.
  - Do not charge when there is lightning and/or potential for lightning.



- Do not charge when the charging connector and plug is wet.

### ⚠ WARNING

- Immediately stop charging when you discover abnormal symptoms (smell, smoke, etc.).
- Replace the charging cable if the cable coating is damaged to prevent electrical shock.
- When connecting or removing the charging cable, make sure to hold the charging connector handle.



- Only use the charging cable (if equipped) certified by Kia. If you use a separate extension cable such as a reel or use an uncertified cable, it may cause abnormalities of electrical outlets, leading to fire or explosion.
- If you pull the cable itself (without using the handle), the internal wires may be disconnected or get damaged. This may lead to electric shock or fire.

### ⚠ CAUTION

- Always keep the charging connector and charging plug in clean and dry condition. Be sure to keep the charging cable in a condition where there is no water or moisture.
- Make sure to use the designated charger for charging the electric vehicle. Using any other charger may cause failure.
- Before charging the battery, turn the vehicle [OFF].
- When the vehicle is switched [OFF] while charging, the cooling fan inside the motor compartment may automatically operate. Do not touch the cooling fan while charging.
- Be careful not to drop the charging connector. The charging connector can be damaged.

## Charging Electric Vehicle (AC Charge)

You can use an AC charger at public charging stations and the charging cable (if equipped) in the cargo compartment of your car.

AC Charger



\* Shape of charger and how to use the charger may be different for each manufacturer.

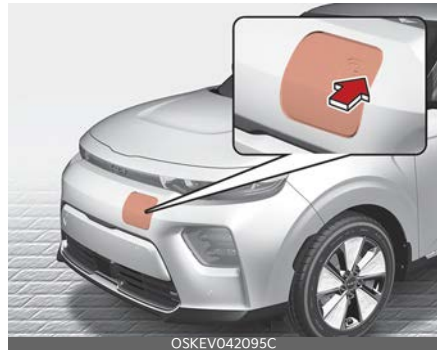
## Connecting AC charger

1. While the brake pedal is pressed, engage the parking brake.
2. Turn OFF all switches, place the shift gear in P (Park), and turn OFF the vehicle.

If you try to charge while the shift gear is not placed in P (Park), it will automatically move to P (Park).

However, charge the battery only when the shift gear is placed in P for safety reasons.

3. Press the arrow symbol [ ► ] on the charging door to open the charging door. The charging door opens only when the vehicle's doors are unlocked.



### **CAUTION**

If you cannot open the charging door due to freezing weather, tap lightly or remove any ice near the charging door. Do not try to forcibly open the charging door. The charging door may be broken if it is forcibly opened.

**\* NOTICE**

The charging door will unlock when Driver's door is unlocked.

To unlock charging door:

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

The charging door will lock when all doors are locked

To lock charging door:

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

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

4. Open the charging door and remove the AC charging inlet cover (1) to access the AC charging inlet port.

**⚠ CAUTION**

In order to connect the charging connector, release the door lock to unlatch the charging connector lock system.

If not, the charging connector and the vehicle's charging inlet may be damaged.

5. Check if there is any dust or foreign substances on the charging connector and charging inlet.
6. Hold the charging connector handle and connect it to the vehicle AC charging inlet.
7. Push the connector until you hear a "clicking" sound. If the charging connector and charging terminal are not connected properly, this may cause a fire.

\* For more information about how to charge and how to disconnect, please refer to the manual of each AC charger.

\* The shape of the charging connector may be different for each manufacturer.

\* Charging Connector Always / While charging / Do not lock Mode

When the charging connector and the charging inlet are connected, you can choose the mode at the USM. The charging connector will be locked at a different time depending on the selected mode.

- Always Mode: When the charging connector is properly connected, the charging connector will be automatically locked.
- While charging Mode: When the charging connector is properly connected and charging is initiated, the charging connector will be locked.

- Do not lock Mode: he locking device for charging inlet is kept unlocked regardless of charging status.

For more information, refer to the "AC Charging Connector Lock" on page 1-16.

8. Connect the charging plug to the electric outlet at a AC charging station to start charging.

AC Charger



9. Check if the charge indicator lamp of the high voltage battery in the instrument cluster is turned ON Green (OK) / Red (Error).



Charging does not occur when the charging indicator lamp is OFF.

When the charging connector and charging plug are not connected properly, reconnect the charging cable to charge.

**\* NOTICE**

- You can start charging when the START/STOP button is in the OFF position and the shift gear is in P (Park). After charging has started, you can use electrical components such as the radio by pressing the START/STOP button to the ACC or ON position.
- If you move the shift gear from P (Park) to R (Rear), N (Neutral), D (Drive), charging stops immediately. If you want to start charging again, place the shift gear to P (Park) and press the START/STOP button to the OFF position. Unplug and reconnect the charging cable to start charging again.
- During charging, you cannot move the shift gear from P (parking) to other positions.

10. After charging has started, the estimated charging time is displayed, as well as the charge level, on the instrument cluster for about 1 minute.



A: Remaining Time

\* The remaining charging time in the LCD image may differ from actual charging time.

If you open the driver seat door while charging, the estimated charging time is also displayed on the instrument cluster for about 1 minute.

When reserved charging is set, the estimated charging time is displayed as "--".

If air conditioning / remote air conditioning control is set, the estimated time to charge is displayed as "-".

#### **\* NOTICE**

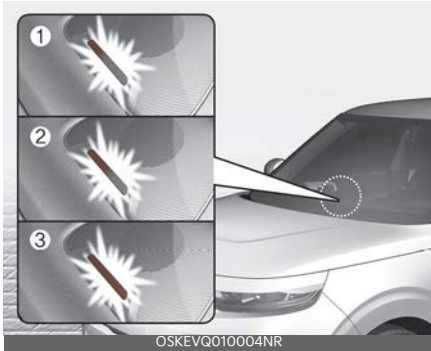
Depending on the condition and durability of the high voltage battery, charger specifications, and ambient temperature, the time required for charging the battery may vary.

#### **⚠ CAUTION**

In order to disconnect the charging connector, release the door lock to unlatch the charging connector lock, if the charge auto lock has not been activate. If not, the charging connector and the vehicle's charging inlet may be damaged.

### Charge Indicator Lamp for Electric Vehicle

When charging the high voltage battery, the charge level can be checked from outside the vehicle.



Operation of Charging Indicator Lamp			Details	
(1)	(2)	(3)		
○ (OFF)	○ (OFF)	○ (OFF)	Not Charged	
Blinking	○ (OFF)	○ (OFF)	Charging	
● (ON)	Blinking	○ (OFF)		0~33%
● (ON)	● (ON)	Blinking		34~66%
● (ON)	● (ON)	● (ON)	67~99%	
● (ON)	● (ON)	● (ON)	Charging complete (100%) (turns OFF in 5 seconds)	
Blinking	Blinking	Blinking	Error while charging	
○ (OFF)	○ (OFF)	Blinking	Charging 12 V auxiliary battery or reserved air conditioner is operating	
○ (OFF)	Blinking	○ (OFF)	Reserved charging in operation (turns OFF in 3 minutes) or temporary interruptions (e.g., power failure)	

## Disconnecting AC charger

1. When charging is complete, remove the charging plug from the electrical outlet.

AC Charger



2. Hold the charging connector handle and pull it while pressing the release button (1).



To prevent charging cable theft, the charging connector cannot be disconnected from the inlet when the vehicle's doors are locked. Unlock all doors to disconnect the charging connector from the inlet.

However, if the vehicle is in the charging connector While charging mode, the charging connector auto-

matically unlocks from the inlet when charging is completed.

For more details, refer to "AC Charging Connector Lock" on page 1-16.

### ⚠ CAUTION

In order to disconnect the charging connector, release the door lock to unlatch the charging connector lock system.

If not, the charging connector and the vehicle's charging inlet may be damaged.

### ⚠ CAUTION

Before disconnecting the charging connector, make sure the vehicle's doors are unlocked. When the doors are locked, the charging connector lock release button (1) will not work.

When disconnecting the charging connector, do not try to disconnect it by force while not pressing the release button. This may damage the charging connector and vehicle charging inlet.

If the charging connector lock does not unlatch even after the door lock doors have been unlocked, use the emergency release lever in the motor room and press the charging connector lock release button (1) to disconnect the charging connector. If this occurs, the charging connector lock function may have a problem so have your vehicle inspected by an authorized Kia dealer.

3. Make sure to completely close the AC charging inlet cover.



4. Make sure to completely close the charging door.
5. Close the protective covers of the charging connector and the charging plug to prevent foreign substances from entering the terminals.
6. Store the charging cable safely in the storage compartment

### How to Disconnect Charging Connector in Emergency



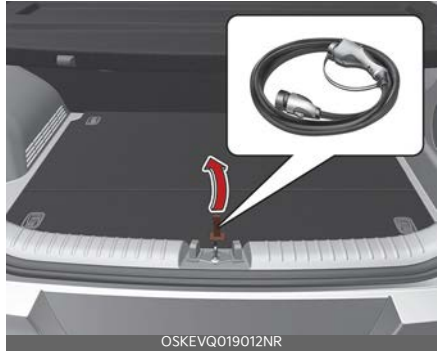
If the charging connector does not disconnect due to battery discharge and/or failure of the electric system, open the hood and slightly pull the emergency cable. The charging connector will then disconnect.

The charging cable lock may not work properly when foreign materials such as

dust enter the cable or the cable is encrusted with ice.

In that case, the charging cable may not be disconnected or locked, or the vehicle may not be charged. If this happens, open the hood and pull the emergency cable lightly 2 to 3 times and then try to disconnect the charging cable or start recharging.

### How to Store and Keep the AC Charging Cable (if equipped)



Store the charging cable safely in the storage compartment.

### ⚠ CAUTION

- Do not disassemble or modify the charging cable (ICCB: In-Cable Control Box). Such acts will void your warranty on the charger, & could result in fire, electric shock and injury.
- Always keep the charging connector and charging plug in clean and dry condition. Be sure to keep the charging cable in a condition where there is no water or moisture.
- If there is any foreign substance or dust inside the charging connector and charging plug, blow them off with the air, to prevent damage.



- When the charging connector or charging plug is damaged, corroded or rusted, or if it feels loose when the charging connector and charging plug are connected, do not charge the vehicle and contact an authorized Kia dealer.
- Please note the following when using the charging cable.
  - Do not pull the cable by excessive force.
  - Do not twist or bend it.
  - Do not drag it on the floor.
  - Do not place any object on the cable.
  - Do not place an object that can generate high temperatures near the charger.
  - Do not drop or subject it to shock or impact.
  - Do not store it with liquids.

For cleaning the charging cable, use only a soft cloth like gauze and lightly wipe the surface with water containing a 3% neutral detergent and remove the water with a clean cloth.

Dry it in a well-ventilated shade after wiping off the water. Be careful not to expose the charging connector and charging plug to water.

### **⚠ CAUTION**

When cleaning the charging cable, do not use an organic solvent such as paint thinner, benzene, alcohol and gasoline. Doing so may change the color and damage the charging cable.

When you use a general car cleaner to clean the charging cable, make sure that any organic solvent mentioned above is not included.

## Charging Electric Vehicle (DC Charge) (if equipped)

You can charge at high speeds at public charging stations. Use the charging cable installed with DC chargers.

DC Charger



- \* Actual charger image and charging method may vary in accordance with the charger manufacturer.
- \* If you use a DC charger when the vehicle is already fully charged, some DC chargers will send out an error message. When the vehicle is fully charged, do not charge the vehicle.

### **⚠ CAUTION**

If you cannot open the charging door due to freezing weather, try again after removing any ice near the charging door. If you open it by force, the charging door may be damaged.

### Connecting DC Charger

1. While the brake pedal is pressed, engage the parking brake.
2. Turn OFF all switches, place the shift gear in P (Park), and turn OFF the vehicle.

If you try to charge while the shift gear is not placed in P (Park), it will automatically move to P (Park).

However, charge the battery only when the shift gear is placed in P for safety reasons.

3. Press the charging door open symbol [▶] to open the charging door.



You cannot open the charging door when the vehicle's doors are locked.

### ⚠ CAUTION

If you cannot open the charging door due to freezing weather, tap lightly or remove any ice near the charging door. Do not try to forcibly open the charging door. The charging door may be broken if it is forcibly opened.

### \* NOTICE

The charging door will unlock when Driver's door is unlocked.

To unlock charging door:

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

The charging door will lock when all doors are locked

To lock charging door:

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

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

4. Open the charging door and then open the cover of the charging inlet.



5. Check whether there is dust or foreign substances inside the charging connector and charging inlet.

6. Hold the charging handle and connect it to the vehicle DC charging inlet. Push the connector until you hear a "clicking" sound. If the charging connector and charging terminal are not connected properly, this may cause a fire.
  - \* Refer to the manual for each type of DC charger for how to charge and remove the charger.
  - \* The shape of the charging connector may vary depending on the manufacturer.
7. Check if the charger indicator lamp of the high voltage battery in the instrument cluster is turned ON.



Charging doesn't start when the charging indicator lamp is OFF. When the charging connector is not connected properly, reconnect the charging cable to charge it again.

**CAUTION**

- Charge your car only when the shift gear is placed in P (Park) for safety.
- You can start charging when the START/STOP button is in the OFF position and the shift gear is in P (Park).

- After charging has started, you can use electrical components such as the radio by pressing the START/STOP button to ACC or ON position.
- You cannot move the shift gear other than P (Park) while charging

**CAUTION**

To control the temperature of the high voltage battery while charging, the air conditioner is used to cool down the battery which may generate noise from operation of the air conditioner compressor and cooling fan. Also, the air conditioner's performance may not be optimal during summer due to operation of the cooling system for the high voltage battery.

8. After charging has started, the estimated charging time is displayed on the instrument cluster for about 1 minute.



**A: Remaining Time**

\* The remaining charging time in the LCD image may differ from actual charging time.

**⚠ CAUTION**

Depending on the condition and durability of the high voltage battery, charger specifications, and ambient temperature, the time required for charging the battery may vary.

**Disconnecting DC Charger**

1. Remove the charging connector when DC charging is completed, or after you stop charging using the DC charger.

Refer to each respective fast charger manual for details about how to disconnect the charging connector.

**⚠ CAUTION**

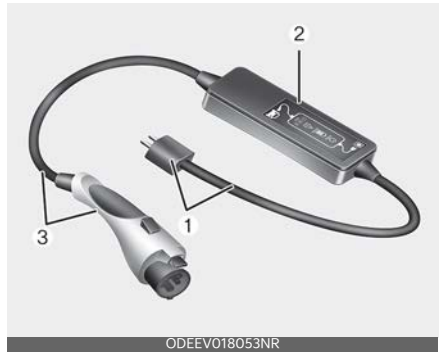
When disconnecting the charging connector, do not try to disconnect it by force while not pressing the release button. This may damage the charging connector and vehicle charging inlet.

2. Make sure to completely close the DC charging inlet cover.
3. Make sure to completely close the charging door.



**Charging Electric Vehicle (Trickle Charge)**

When you cannot drive to a public charging station due to low battery, you can charge the car by using the Portable Charging Cable (ICCB: In Cable Control Box) which you can buy as an option.



1. Code and Plug (Code set)
2. Control Box
3. Charging Cable and Charging Connector

This cable is designed to prevent problems caused by unexpected battery discharge and when you use general electric outlets, it may lead to excessive electricity charges as the electricity charges for electric vehicles will not be applied. So refrain from using it to fully charge your car.

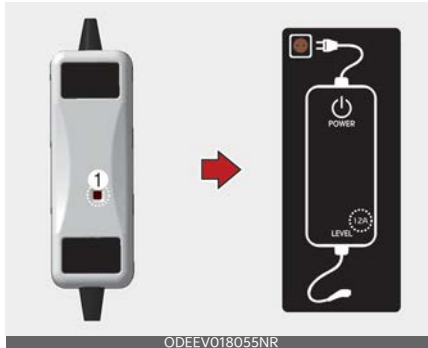
If this cable is connected to a household power source, it may exceed the capacity of the outlet (amperage), resulting in safety problems such as electrical shut-down and fire.

## Setting charging current of Portable Charging Cable

1. Check the outlet's current rating before connecting the plug to the outlet.
2. Connect the power plug to the household electrical outlet.



3. Check the status of the control box display
4. Adjust the charging current by pressing the button (1) on the back of the control box for more than 1 second. (Refer to the "Examples of ICCB Charging Current Setting" on page 1-32.)



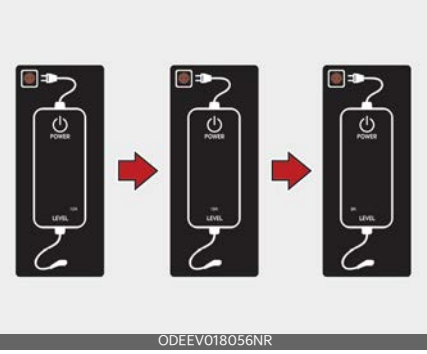
5. Each time the button (1) is pressed, the control box display is sequentially changed to 12 A, 10 A and 8 A.

Once the charging current setting is complete, start charging (refer to "Charging Electric Vehicle (Trickle Charge)" on page 1-30 for more information).

**\* NOTICE**

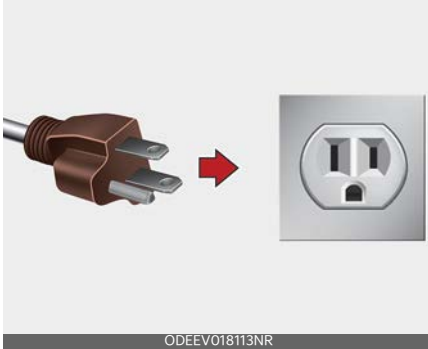
\* Examples of ICCB Charging Current Setting

(Examples are only for reference and situations may vary depending on the surrounding environment.)

Outlet current	ICCB charge level	Control box display
14~16 A	12 A	 <p style="text-align: center;">ODEEV018056NR</p>
13~12 A	10 A	
11~10 A	8 A	

## Trickle charging

1. Connect the plug to a household electric outlet.



### ⚠ CAUTION

If the outlet is aged, damaged or cracked, do not use it.

2. Check if the power lamp (green) on the control box turns ON.



3. While the brake pedal is pressed, engage the parking brake.
4. Turn OFF all switches, place the shift gear in P (Park). If you try to charge while the shift gear is not placed in P (Park), it will automatically move to P (Park).

However, charge the battery only when the shift gear is placed in P for safety reasons.

\* Make sure that the plug is not loosely put into the outlet. (If it is loose, it may generate heat.)

5. Press the arrow symbol [ ▶ ] on the charging door to open. You cannot open the charging door when the vehicle's doors are locked.



### ⚠ CAUTION

If you cannot open the charging door due to freezing weather, tap lightly or remove any ice near the charging door. Do not try to forcibly open the charging door. The charging door may be broken if it is forcibly opened.

### ⚠ CAUTION

In order to connect the charging connector, unlock the vehicle's doors to unlatch the charging connector lock system.

If not, the charging connector and the vehicle's charging inlet may be damaged.

**\* NOTICE**

The charging door will unlock when Driver's door is unlocked.

To unlock charging door:

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

The charging door will lock when all doors are locked

To lock charging door:

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

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

6. Open the charging door and then open the inlet cover (1).



7. Open the protective cover of the charging connector and check if there is dust on the charging connector and charging inlet.

8. Hold the charging connector handle and connect it to the vehicle AC charging inlet.
9. Push the connector until you hear a "clicking" sound.

Charging starts automatically and the charging indicator lamp starts to blink.



If the charging connector and charging terminal are not connected properly, this may cause a fire.

\* Charging Connector Always / While charging / Do not lock Mode

When the charging connector and the charging inlet are connected, you can choose the mode at the USM. The charging connector will be locked at a different time depending on the selected mode.

- Always Mode: When the charging connector is properly connected, the charging connector will be automatically locked.
- While charging Mode: When the charging connector is properly connected and charging is initiated, the charging connector will be locked, & will unlock when charging has completed.



- Do not lock Mode: he locking device for charging inlet is kept unlocked regardless of charging status.

For more information, refer to the "AC Charging Connector Lock" on page 1-16.

10. Check if the charge indicator lamp of the high voltage battery in the instrument cluster is turned ON.

Charging does not occur when the charging indicator lamp is OFF.



When the charging connector is not connected properly, reconnect the charging cable to charge it again.

**\* NOTICE**

- You can start charging when the START/STOP button is in the OFF position and the shift gear is in P (Park).  
After charging has started, you can use electrical components such as the radio by pressing the START/STOP button to ACC or ON position.
- If you move the shift gear from P (Park) to R (Reverse), N (Neutral), D (Drive), charging stops immediately. If you want to start charging again, place the shift gear to P (Park) and press the START/STOP button to the

OFF position. Unplug and reconnect the charging cable to start charging again.

- During charging, you cannot move the shift gear from P (parking) to other positions.

11. After charging has started, the estimated charging time is displayed on the instrument cluster for about 1 minute.



**A: Remaining Time**

\* The remaining charging time in the LCD image may differ from actual charging time.

If you open the driver door while charging, the estimated charging time is also displayed on the instrument cluster for about 1 minute.

When reserved charging is set, the estimated charging time is displayed as "--".

**\* NOTICE**










Depending on the condition and durability of the high voltage battery, charger specifications, and ambient temperature, the time required for charging the battery may vary.



 **CAUTION**






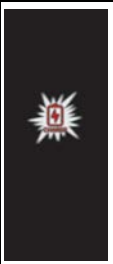
In order to disconnect the charging connector, release the door lock to unlatch the charging connector lock system. If not, the charging connector and the vehicle's charging inlet may be damaged.

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## Charging Status Indicator Lamp for Portable Charger

Control Box	Indicator		Details	
PLUG		(Green)	On: Power on Blink: Plug temperature sensor failure	
		(Red)	On: Plug high temperature protection Blink: Plug high temperature warning	
POWER			On: Power on	
CHARGE			Blink: Charging In power saving mode, only the CHARGE indicator appears.	
FAULT			Blink: Charging interrupted	
CHARGE LEVEL	12A	Charging current 12 A	The charging current changes (3 level) whenever the button (1) is pressed for 1 sec with the charger plugged into an electrical outlet but not the vehicle.	
	10A	Charging current 10 A		
	8A	Charging current 8 A		
VEHICLE		(Green)	Charging connector plugged	
		(Blue)	Charging	
		(Red)	Blink: Charging impossible	

NO	Control Box	Status/Diagnosis /Countermeasure	NO	Control Box	Status/Diagnosis /Countermeasure
1		<ul style="list-style-type: none"> <li>Connected to power plug (Green On)</li> <li>Plug temperature sensor failure (Green blink)</li> <li>Plug high temperature protection (Red blink)</li> <li>Plug high temperature warning (Red On)</li> </ul> (Contact an authorized Kia dealer.)	2		Charging connector plugged into the vehicle (Green On)

NO	Control Box	Status/Diagnosis /Countermeasure	NO	Control Box	Status/Diagnosis /Countermeasure
3		<p>While charging</p> <ul style="list-style-type: none"> <li>• Charge indicator (Green blink)</li> <li>• Vehicle indicator (Blue ON)</li> </ul>	4		<p>Before plugging charging connector into the vehicle (Red blink)</p> <ul style="list-style-type: none"> <li>• Abnormal internal temperature</li> <li>• Device failure</li> </ul> <p>(Contact an authorized Kia dealer.)</p>
5		<p>Plugged into the vehicle (Red blink)</p> <ul style="list-style-type: none"> <li>• Internal diagnostic device failure</li> <li>• Current leakage</li> <li>• Abnormal internal temperature</li> </ul> <p>(Contact an authorized Kia dealer.)</p>	6		<p>After plugging charging connector into vehicle (Red blink)</p> <ul style="list-style-type: none"> <li>• Communication failure</li> </ul> <p>(Contact an authorized Kia dealer.)</p>
7		<ul style="list-style-type: none"> <li>• Plug temperature sensor failure (Green blink)</li> <li>• Plug high temperature protection (Red blink)</li> <li>• Plug high temperature warning (Red On)</li> </ul> <p>(Contact an authorized Kia dealer.)</p>	8		<p>Power saving mode</p> <ul style="list-style-type: none"> <li>• 3 minutes after charging starts (Green blink)</li> </ul>

## Disconnecting the Portable Charging Cable (ICCB: In-Cable Control Box)

1. Hold the charging connector handle and pull it while pressing the release button (1).



Before disconnecting the charging connector, make sure the vehicle's doors are unlocked. When the doors are unlocked, the charging connector lock system will be triggered. And the charging connector will not be disconnected.

However, in While charging Mode, the lock is released automatically when charging is completed, and you can disconnect the charging connector.

For more information, refer to the "AC Charging Connector Lock" on page 1-16.

### **CAUTION**

In order to disconnect the charging connector, release the door lock unlatch the charging connector lock system.

If not, the charging connector and the vehicle's charging inlet may be damaged.

### **CAUTION**

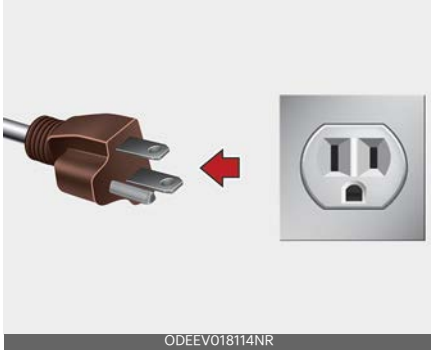
When disconnecting the charging connector, do not try to disconnect it by force while not pressing the release button. This may damage the charging connector and vehicle charging inlet.

- If the charging connector lock does not unlatch even after the vehicle's doors are unlocked, use the emergency release lever in the motor room and press the charging connector lock release button (1) to disconnect the charging connector. If such case occurs, the charging connector lock function may be defective so have your vehicle inspected by an authorized Kia dealer.

2. Make sure to completely close the AC charging inlet cover.



3. Make sure to completely close the charging door.
4. Disconnect the plug from the household electric outlet. Do not pull the cable when disconnecting the plug.



5. Close the protective cover for the charging connector so that foreign substances do not flow into the terminal.
6. Put the charging cable inside the cable compartment to protect it.

### Disconnecting Charging Connector in Emergency

If the charging connector is not disconnected due to battery discharge and failure of the electrical wires, open the hood and pull the emergency cable and then the charging inlet lock will be released.

The charging cable lock may not work properly when foreign materials such as dust enter the cable or the cable is encrusted with ice.

In that case, the charging cable may not be disconnected or locked, or the vehicle may not be charged. If this happens, open the hood and pull the emergency cable lightly 2 to 3 times and then try to disconnect the charging cable or start recharging.



### Precautions for the Portable Charging Cable (ICCB: In-Cable Control Box)

#### ⚠ WARNING

- Use a portable charging cable that is certified by Kia Motors.
- Do not try to repair, disassemble, or adjust the portable charging cable.
- Do not use an extension cord or adapter.
- Stop using immediately when failure occurs.
- Do not touch the plug and charging connector with wet hands.
- Do not touch the terminal part of the AC charging connector and the AC charging inlet on the vehicle.
- Do not connect the charging connector to voltage that does not comply with regulations.

#### ⚠ WARNING

- Do not use the portable charging cable if it is worn out, exposed, or there exists any type of damage on the portable charging cable.

- If the ICCB case and AC charging connector is damaged, cracked, or the wires are exposed in any way, do not use the portable charging cable.
- Do not let kids operate or touch the portable charging cable.
- Charging with a worn out or damaged household electric outlet can result in a risk of electric shock. If you are unsure about the condition of a household electric outlet have it checked by licensed electrician and charge again.
- Stop using the portable charging cable immediately if the household electric outlet or any components are overheating or you notice burning odors.

### CAUTION

- Keep the control box free of water.
- Keep the AC charging connector or plug terminal free of foreign substances.
- Do not step on the cable or cord.
- Do not pull the cable or cord and do not twist or bend it. Do not charge when there is lightning.
- Do not drop the control box or place a heavy object on the control box.
- Do not place an object that can generate high temperatures near the charger when charging.

### Actions to be taken for electric vehicle charging issues



When you cannot charge the high voltage battery after connecting the charger, check the following:

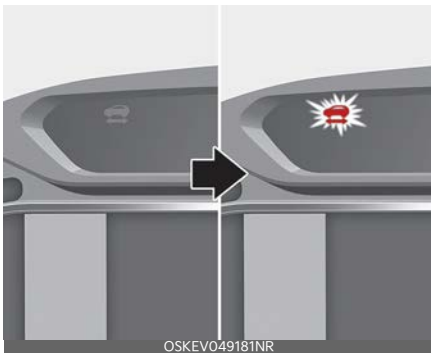
1. Check the charging settings for the vehicle. → 1-8  
(e.g., when scheduled charging is set, charging is not initiated immediately when the AC charger or portable charger is connected.)
2. Check the operation status of the AC charger, portable charger and DC charger.  
(Status of portable charger → 1-37)  
\* Actual method for indicating the charging status may vary in accordance with the charger manufacturer.
3. When the vehicle does not charge and a warning message appears on the instrument cluster, check the corresponding message. → 1-49 ~ 1-50
4. If the vehicle is properly charged when charged with another normally working charger, contact the charger manufacturer.
5. If the vehicle does not charge when charged with another normally working charger, we recommend that you contact an authorized Kia dealer for inspection.

### Driving Electric Vehicle

This section describes how to start and stop the vehicle, what is displayed on the various gauges and LCD displays, and so on.

#### Starting a vehicle



1. Holding the smart key, sit in the driver's seat.
2. Fasten the seat belt before starting the vehicle.
3. Make sure to engage the parking brake.
4. Check the position of the accelerator pedal and the brake pedal and the clearance with your right foot.
5. Make sure to depress and hold the brake pedal.
6. While depressing the brake pedal, shift to P (Park).
7. Depress and hold the brake pedal while pressing the START/STOP button.
8. When the  indicator is ON, you can drive the vehicle. When the  indicator is OFF, you cannot drive the vehicle. Start the vehicle again.

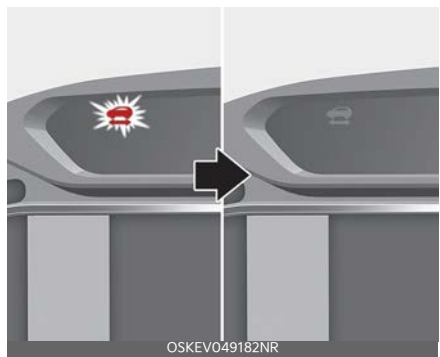


9. Depress and hold the brake pedal and shift to the desired position

10. Release the parking brake and slowly release the brake pedal. Check if the vehicle slowly moves forward, then depress the accelerator pedal.

#### Stopping the vehicle


1. Hold down the brake pedal while the vehicle is parked.
2. While depressing the brake pedal, shift to P (Park).
3. While depressing the brake pedal, engage the parking brake.
4. While depressing the brake pedal, press the START/STOP button and turn off the vehicle.
5. Check if the  indicator is turned OFF in the instrument cluster. When the  indicator is ON and the gear is in a position other than P (Park), the driver can accidentally depress the accelerator pedal, causing the vehicle to move unexpectedly.





## Virtual Engine Sound System

The Virtual Engine Sound System (V ESS) generates an engine sound for pedestrians to hear the vehicle because there is no sound while the Electric Vehicle (EV) is operating.

If the vehicle is in the ready  mode and the gear is not in P (Park), the V ESS will operate.

When the gear is shifted to R (Reverse), an additional warning sound will be heard.

### CAUTION

The vehicle does not generate an engine a sound. Be aware of your driving environment and drive safely

After you park the vehicle or while you are waiting at a traffic light, check whether there are children or obstacles around the vehicle.

### \* NOTICE

The sound system only plays a supplementary role. The system is not designed to and does not replace the care of drivers. Drivers should always pay attention to their surroundings while driving.

## Distance to Empty

You can check the distance the vehicle can be driven with the current battery amount.



### When destination is not set

Distance to empty may depend on many factors such as the charge amount of the high voltage battery, weather, temperature, durability of the battery, geographical features, and driving style.

When the outside temperature drops, such as in winter, the distance to empty may decrease due to battery performance degradation.

Natural degradation may occur with the high voltage battery depending on the number of years the vehicle is used. This may reduce the distance to empty.

On average, a vehicle can drive approximately 385 km or 239 miles. However, the distance to empty can be changed from 280~500 km (174~310 miles) depending on operation of the air conditioner/heater and other various vehicle conditions.

When using the heater during cold weather or driving at high speed, the high voltage battery consumes a lot more electricity. This may reduce the distance to empty significantly.

The vehicle can stop shortly after the "---" has been displayed. When it is displayed, drive to a safe place to stop the vehicle. (The available range varies depending on driving speed, heater / air conditioner, weather, driving style, and other factors.)

Distance to empty that is displayed on the instrument cluster after completing a recharge may vary significantly depending on previous operating patterns. When previous driving patterns include high speed driving, resulting in the high voltage battery using more electricity than usual, the estimated distance to empty is reduced. When the high voltage battery uses little electricity in ECO mode, the estimated distance to empty increases.

### When destination is set

When the destination is set, the distance to empty may change. The distance to empty is recalculated using the information of the destination.

However, the distance to empty may vary significantly based on traffic conditions, driving habits, and condition of the vehicle.

### Tips for Improving Distance to empty

- If you operate the air conditioner / heater too much, the driving battery uses too much electricity. This may reduce the distance to empty. Therefore, it is recommended that you set the cabin temperature to 22 °C (72 °F) AUTO. This setting will allow the vehicle to maintain optimal energy consumption rates while keeping the temperature fresh. Turn OFF the

heater and air conditioner if you do not need them.

- When the heater or air conditioning system is on the energy consumption is reduced if recirculation mode is selected instead of selecting the fresh mode. The fresh mode requires large amount of energy consumption as the outside air has to be re-heated or cooled.
- When using the heater or air conditioning system, use the DRIVER ONLY or scheduled air conditioner / heater function.
- Depress and hold the accelerator pedal to maintain speed and drive economically.
- Gradually depress and release the accelerator pedal when accelerating or decelerating.
- Always maintain specified tire pressures.
- Do not use unnecessary electrical components while driving.
- Do not load unnecessary items in the vehicle.
- Do not mount parts that may increase air resistance.

### Power/Charge Gauge

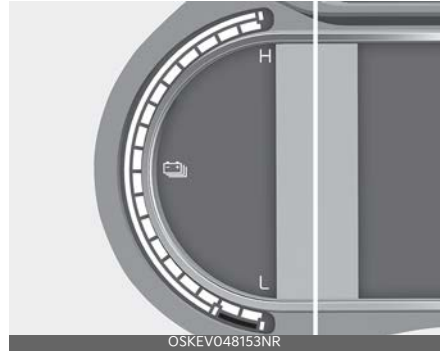
The Power/Charge gauge shows the energy consumption rate of the vehicle and the charge/discharge status of the regenerative brakes.



- **POWER:**  
It shows the energy consumption rate of the vehicle when driving uphill or accelerating. The more electric energy is used, the higher the gauge level.
- **CHARGE:**  
It shows the charging status of the battery when it is being charged by the regenerative brakes (decelerating or driving on a downhill road). The more electric energy is charged, the lower the gauge level.

### State of Charge (SOC) Gauge for High Voltage Battery

The SOC gauge shows the charging status of the high voltage battery.



"L (Low)" position on the indicator indicates that there is not enough energy in the high voltage battery.

"H (High)" position indicates that the driving battery is fully charged.

When driving on highways or motorways, make sure to check in advance if the driving battery is charged enough.

1. When there are 2 gauge bars (near the "L (Low)" area) on the SOC gauge, the warning lamp turns ON to alert you of the battery level.



2. When the warning lamp turns ON, the vehicle can drive an additional 20~30 km (12~18 miles) depending on the driving speed, heater / air conditioner, weather, driving style, and other factors. Charging is required.

**\* NOTICE**

When there are 1~2 gauge bars left for the high voltage battery, the vehicle speed is limited and then eventually the vehicle will turn OFF. Charge the vehicle immediately.

**Warning message on LCD display**

**Low EV battery**

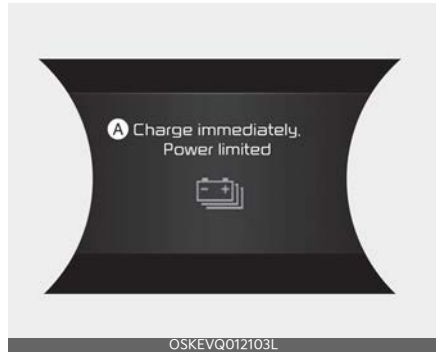


**A: Low EV battery**

When the high voltage battery level below 8% for Cruise type and below 12% for City type, this warning message is displayed.

The warning light on the instrument cluster (⚡) will turn on simultaneously. Charge the battery immediately.

**Charge immediately. Power limited**



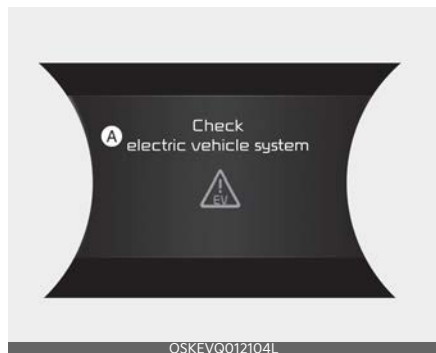
**A: Charge immediately. Power limited**

When the high voltage battery level reaches below 3% for Cruise type and below 5% for City type, this warning message is displayed.

The warning light on the instrument cluster (⚡) and the power down indicator light (🚗) will turn on simultaneously.

The vehicle's power will be reduced to minimize the energy consumption of the high voltage battery. Charge the battery immediately.

**Check electric vehicle system**



**A: Check electric vehicle system**

This warning message is displayed when there is a problem with the electric vehicle control system.

**\* NOTICE**

Refrain from driving when the warning message is displayed.

If this occurs, have your vehicle inspected by an authorized Kia dealer.

**Power limited****A: Power limited**

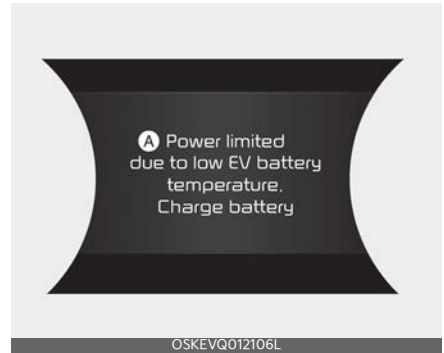
In the following cases, this warning message is displayed when the vehicle's power is limited for safety.

- When the high voltage battery is below a certain level, or voltage is decreasing.
- When the temperature of the motor or high voltage battery is too high or too low.
- When there is a problem with the cooling system or a failure that may interrupt normal driving.

**\* NOTICE**

When this warning message is displayed, do not accelerate or start the vehicle suddenly.

Charge the battery immediately when the high voltage battery level is not enough.

**Power limited due to low EV battery temperature. Charge battery****A: Power limited due to low EV battery temperature. Charge battery**

The warning message is displayed to protect the electric vehicle system when you turn off or turn on the vehicle while outside temperature is low. If the high voltage battery charging level is low and parked outside in low temperature for a long time, vehicle power could be limited. Charging the battery before driving, increases the battery temperature, and helps increase power.

**⚠ CAUTION**

If this warning message is still displayed even when the ambient temperature is sufficiently high, have the vehicle inspected by an authorized Kia dealer.

### EV Battery Overheated! Stop vehicle.



#### A: EV Battery Overheated! Stop vehicle

This warning message is displayed to protect battery and electric vehicle system when the high voltage battery temperature is too high.

Turn off the START/STOP button and stop the vehicle so that the battery temperature decreases.

#### \* NOTICE

If this warning is still displayed even after the START/STOP button has been turned off for sufficient time, refrain from driving and have the vehicle inspected by an authorized Kia dealer.

### Stop vehicle and check power supply



#### A: Stop vehicle and check power supply

This warning message is displayed when a failure occurs in the 12 V power supply system.

If this occurs, park the vehicle in a safe location and we recommend that you tow your vehicle to the nearest authorized Kia dealer and have the vehicle inspected.

### Unplug vehicle to start



#### A: Unplug vehicle to start

This message is displayed when you start the vehicle, without unplugging the charging cable, and will not shift out of

park. Unplug the charging cable, and then turn on the vehicle.

### Charging Door Open



#### A: Charging Door Open

This message is displayed when the vehicle is driven with the charging door opened. Close the charging door and then start driving.

### Remaining Time



#### A: Remaining Time

\* The remaining charging time in the LCD image may differ from actual charging time.

This message is displayed to notify the remaining time to charge the battery, to

the selected target battery charge level, and the charge voltage level.

### Charging Stopped. Check the AC/DC charger

AC Charger



#### A: Charging Stopped. Check the AC charger

Trickle Charger



#### A: Charging Stopped. Check the DC charger

This warning message is displayed when charging is stopped for the reasons below:

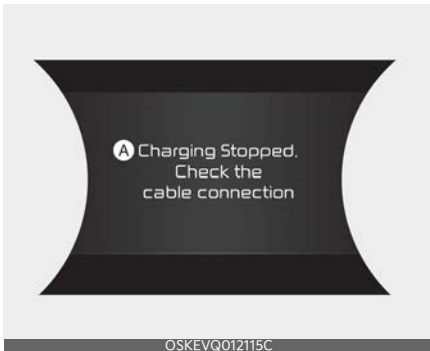
- There is a problem with the external AC charger or DC charger.

- The external AC charger stopped charging
- The charging cable is damaged.

If this occurs, check whether there is any problem with the external normal or DC charger and charging cable.

If the same problem occurs when charging the vehicle with a well-functioning AC charger or genuine Kia portable charger, have your vehicle inspected by an authorized Kia dealer.

### Charging Stopped. Check the Cable Connection



#### A: Charging Stopped. Check the Cable Connection

This warning message is displayed for the reasons below:

- The charging connector is not correctly connected to the charging inlet.
- The charging connector lock release button is pressed.

If this occurs, separate the charging connector and re-connect it.

Check whether there is any problem (external damage, foreign substances, etc.) with the charging connector and charging inlet.

If the same problem occurs when charging the vehicle with a replaced

charging cable or genuine Kia portable charger, we recommend that you have your vehicle inspected by an authorized Kia dealer.

### Check Active Air Flap system



#### A: Check Active Air Flap system

This warning message is displayed in the following situations:

- There is a malfunction with the actuator flap
- There is a malfunction with the actuator air flap controller
- The air flap does not open When all of the above conditions are fixed, the warning will disappear.

### 12 V Aux. Battery Saver+

The Aux. Battery Saver+ is a function that monitors the charging status of the 12 V auxiliary battery.

If the auxiliary battery level is low, the main high voltage battery charges the auxiliary battery.



## Mode

### Cycle Mode

When the START/STOP button is in the OFF position with all doors, hood and liftgate closed, the Aux. Battery Saver+ activates.

### Automatic Mode

When the START/STOP button is in the ON position with the charging connector plugged in, the function activates to prevent overdischarge of the auxiliary battery.

\* The Aux. Battery Saver+ activates maximum of 20 minutes. If the Aux. Battery Saver+ function activates more than 10 times consecutively when in the automatic mode, the function will stop activating, judging that there is a problem with the auxiliary battery. In this case, drive the vehicle for some period of time or if the auxiliary battery returns to normal, the function will start activating.

#### \* NOTICE

The Aux. Battery Saver+ function cannot prevent battery discharge if the auxiliary battery is damaged, worn out, used as a power supply or unauthorized electronic devices are used.

#### ⚠ WARNING

When the function is activated, the indicator lamp will appear and 360 V high voltage electricity will be flowing in the vehicle.

Do not touch, separate or disassemble all the electric and electronic components and devices including the high voltage electric wire, connector. This

may cause electric shock and lead to fatal injuries.

Also, do not modify your vehicle in any way. This may affect your vehicle performance and lead to an accident.

### Warning and Indicator Lights (related to electric vehicle)

The warning light and indicator light indicate the situation where the driver should be careful and whether the various functions are activated.

#### Ready Indicator

##### This indicator appears:

When the vehicle is ready to be driven.

- ON: Normal driving is possible.
- OFF: Normal driving is not possible, or a problem has occurred.
- Blinking: Emergency driving.

When the ready indicator goes OFF or blinks, there is a problem with the system. In this case, have your vehicle inspected by an authorized Kia dealer.

#### Service Warning Light

##### This warning light appears:

- When the START/STOP button is in the ON position.
  - It appears for approximately 3 seconds and then goes off.
- When there is a problem with related parts of the electric vehicle control system, such as sensors, etc.

When the warning light appears while driving, or does not go OFF after starting the vehicle, have your vehicle inspected by an authorized Kia dealer.

## Regenerative Brake Warning Light (red color) (yellow color)

### This warning light appears:

When the regenerative brake does not operate and the brake does not perform well. This causes the Brake Warning light (red) and Regenerative Brake Warning Light (yellow) to appear simultaneously. In this case, drive safely and have the vehicle inspected by an authorized Kia dealer.

The operation of the brake pedal may be more difficult than normal, and the braking distance can increase, as it may default to manual hydraulic mode.

## High Voltage Battery Low Level Warning Light

### This warning light appears:

When the high voltage battery level is low.

When the warning light turns ON, charge the battery immediately.

## Power Down Indicator

### This indicator light appears:

For safety when power is limited. The power is limited for the following reasons.

- The high voltage battery level is below a certain level or voltage is decreasing
- The temperature of the motor or high voltage battery is too high or too low
- There is a problem with the cooling system, or a failure that may interrupt normal driving

## \* NOTICE

Do not accelerate or start the vehicle suddenly when the power down indicator light is ON.

Charge the battery immediately when the high voltage battery level is not enough.

## Charging Cable Connection Indicator

This indicator appears in red when the charging cable is connected.

## Safety Precautions for Electric Vehicle

Be sure to read the information in this section to help you drive safely.

### If an Accident Occurs

#### WARNING

- When a vehicle accident occurs, move the vehicle to a safe place, turn OFF the vehicle and remove the auxiliary battery (12 V) terminal to prevent high voltage electricity from flowing.
- If electric wires are exposed from inside or outside the vehicle, do not touch the wires. Also, do not touch the high voltage electric wire (orange), connector, and all electric components and devices. This may cause electric shock and lead to injuries.

#### WARNING

When a vehicle accident occurs and the high voltage battery is damaged, harmful gas and electrolytes may leak. Be careful not to touch the leaked liquid.

When you suspect leakage of inflammable gas and other harmful gases, open the windows and evacuate to a safe place. If any leaked fluid comes in contact with your eyes or skin, immediately clean the affected area thoroughly with tap water or saline solution and seek medical attention as soon as possible.

#### WARNING

If a small scale fire occurs, use a fire extinguisher (ABC, BC) that is meant for electrical fires. If it is impossible to extinguish the fire in the early stage, maintain a safe distance away from the vehicle and immediately call your local fire emergency responders.

Also, advise them that an electric vehicle is involved.

If the fire spreads to the high voltage battery, large amount of water is needed to put out the fire. Using small amount of water or fire extinguishers not meant for electrical fires could cause serious injury or death from electrical shocks.

#### WARNING

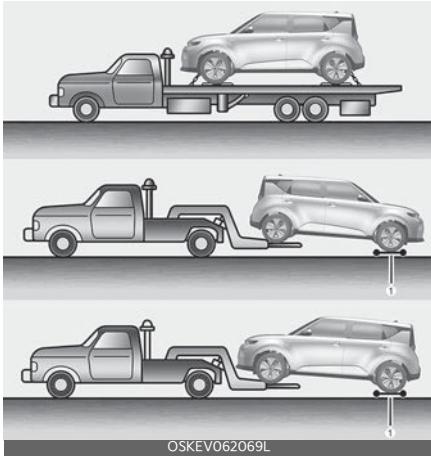
If you cannot put out the fire immediately, the high voltage battery may explode. Evacuate to a safe place and do not let other people approach the site.

Contact the fire department and notify them of an electric vehicle fire.

If the vehicle is flooded with water, immediately turn OFF the vehicle and evacuate to a safe place. Contact the fire department or an authorized Kia dealer.

If towing is required, lift all four wheels off the ground and tow the vehicle.

Flatbed Towing / Flatbed Towing / Tires Locked Towing



**WARNING**

- If you tow the vehicle while the front wheels are touching the ground, the vehicle motor may generate electricity and the motor components may be damaged or a fire may occur.



- When a vehicle fire occurs due to the battery, there is a risk of a second fire. Contact your local fire emergency responders when towing the vehicle.

1. Dolly

If you must tow the vehicle using only two wheels, lift the front wheels off the ground and tow the vehicle.

If necessary to roll the vehicle so that it can be rolled onto a flatbed tow truck perform the following:

- First, depress the brake pedal and release the parking brake.
- While depressing the brake pedal shift to the N (Neutral) position and press the START/STOP button to turn the vehicle off.
- Wait 3 minutes or more before opening the driver door and the vehicle will remain in ACC mode and in Neutral.
- If the driver door is opened within the 3 minute period, the vehicle will automatically shift to P (Park), the vehicle will turn OFF and the front wheels will be remained locked.

**Other Precautions for Electric Vehicle**

- When you paint, apply heat treatment to the vehicle and/or weld on the vehicle, the performance of the high voltage battery can be reduced. If heat treatment is required, have the vehicle serviced by an authorized Kia dealer and have the HV battery removed, prior to any repairs.

**WARNING**

When you clean the motor compartment, do not use high pressure water to wash. This may cause an electric shock due to a discharge in high voltage electricity, or damage the vehicle's electric system.

**⚠ CAUTION**

Use, remodel, or install only genuine parts or those of an equivalent standard. If not, this may damage the electric power system.

Kia Genuine Parts we guarantee for quality and performance.

**Service Interlock Connector**

In case of emergency, cut the service interlock connector cable to isolate the high voltage of the battery.



**Service Plug**

The service plug is under the rear seat. It is for professional service and maintenance.



**⚠ WARNING**

Never touch the service plug under the rear seat.

The service plug is attached to the high voltage battery system.

Touching the service plug will result in death or serious injury. Service personnel should follow procedures in service manual.

1



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## Introduction

### Vehicle data collection and Event Data Recorders

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

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

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

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

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

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



## Vehicle handling instructions

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

Specific design characteristics (higher ground clearance, track, etc.) give this vehicle a higher center of gravity than other types of vehicles. In other words they are not designed for cornering at the same speeds as conventional 2-wheel drive vehicles. Avoid sharp turns or abrupt maneuvers. Again, failure to operate this vehicle correctly may result in loss of control, an accident or vehicle rollover. Be sure to read the "Reducing the risk of a rollover" driving guidelines, in chapter 6 of this manual.

## Vehicle modifications

This vehicle should not be modified. Modification of your vehicle could affect its performance, safety or durability and may even violate governmental safety and emissions regulations.

### \* NOTICE

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

### ⚠ CAUTION

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



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Motor room compartment.....	3-8

# Your vehicle at a glance

## Exterior overview

Front view



OSKEV012001L

\* The actual shape may differ from the illustration.

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|--|------|
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* if equipped	

Rear view



OSKEV012002C

\* The actual shape may differ from the illustration.

- |                                  |            |
|----------------------------------|------------|
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- \* if equipped

## Interior overview



\* The actual shape may differ from the illustration.

- |   |      |
|---|------|
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| 14. Seat  | 4-5  |

## Instrument panel overview



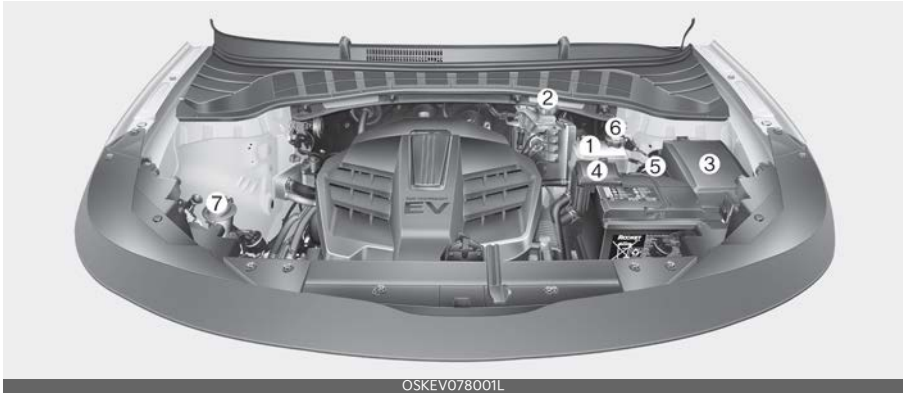
\* The actual shape may differ from the illustration.

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\* The actual motor room in the vehicle may differ from the illustration.

- |                                      |           |
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## Safety features of your vehicle

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

### Important safety precautions

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

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

### Always wear your seat belt

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

### Restrain all children

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

### Air bag hazards

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

### Driver distraction

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

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

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

## **Control your speed**

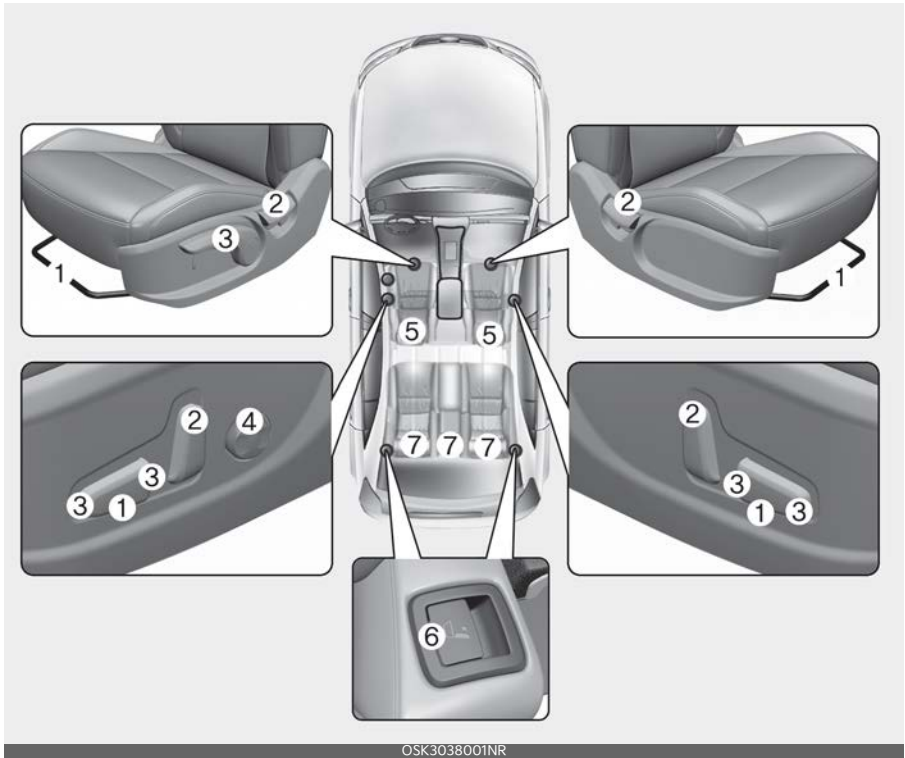
Excessive speed is a major factor in crash injuries and deaths. Generally, the higher the speed, the greater the risk, but serious injuries can also occur at lower speeds. Never drive faster than is safe for current conditions, regardless of the maximum speed posted.

## **Keep your vehicle in safe condition**

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

## Seat

The following explains name, feature and adjustment of each seat.



OSK3038001NR

### Front seat

- 1 Forward and backward
- 2 Seatback angle
- 3 Seat cushion height (Driver's seat)
- 4 Lumbar support (Driver's seat) (if equipped)
- 5 Head rest

### Rear seat

- 6 Seatback folding
- 7 Headrest

**⚠ WARNING**

**Loose objects**

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

**⚠ WARNING**

**Uprighting seat**

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

**⚠ WARNING**

**Driver responsibility for passengers**



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

**⚠ WARNING**

**Seat cushion**

Occupants should never sit on aftermarket seat cushions or sitting cushions. The passenger Occupant Detection System (ODS) may not operate properly, or passenger's hips may slide under the lap portion of the seat belt during an accident or a sudden stop.

**⚠ WARNING**

**Driver's seat**

- Never attempt to adjust the seat while the vehicle is moving. This could result in loss of control of your vehicle.
- Do not allow anything to interfere with the normal position of the seatback. Storing items against the seatback could result in serious or fatal injury in a sudden stop or collision.
- Sit as far back as possible from the steering wheel while still maintaining comfortable control of the your vehicle. A distance of at least 25 cm (10 in) from your chest to the steering wheel is recommended. Failure to do so can result in air bag inflation injuries to the driver.

**⚠ WARNING**

**Rear seatbacks**

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

**⚠ WARNING**

**Unexpected Seat Movement**

After adjusting a manual seat, always check that it is locked by shifting your weight to the front and back. Sudden or



unexpected movement of the driver's seat could cause you to lose control of the vehicle.

### **⚠ WARNING**

#### **Seat adjustment**

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

### **⚠ WARNING**

#### **Luggage and Cargo**

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

### **⚠ WARNING**

#### **Cargo Area**

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

### **⚠ WARNING**

#### **Small Objects**

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

## **Feature of Seat Leather**

- Our car seats are upholstered with a combination of artificial and genuine leather. The genuine leather is made from the outer skin of an animal, which goes through a special process to be available for use. Since it is a natural substance, each part differs in thickness or density. Also, wrinkles could appear depending on the temperature and humidity.
- The seat cover is made of stretchable material to improve comfort of passengers.
- The parts contacting the body are curved and the side supporting area is high which provides driving comfort and stability.

### **⚠ CAUTION**

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

### **\* NOTICE**

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

## **Front seat adjustment for manual seat**

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

### Moving forward and backward

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



To move the seat forward or backward:

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

### Reclining seatback



To recline the seatback:

1. Lean forward slightly and lift up the seatback recline lever.

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

### **⚠ WARNING**

#### Reclining seatback

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

Seat belts must be snug against your 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. Instead, it will be in front of you. During an accident, you could be thrown into the seat belt, causing neck or other injuries.

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

## Changing seat cushion height



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

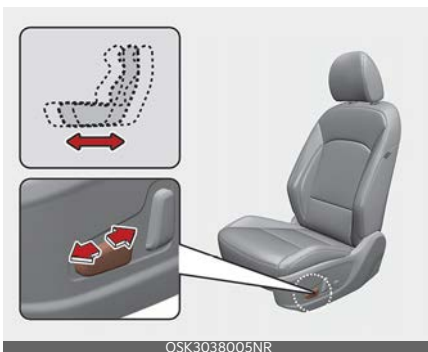
- To lower the seat cushion, push the lever down several times.
- To raise the seat cushion, pull the lever up several times.

## Front seat adjustment for power seat (if equipped)

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

Before driving, adjust the seat to the proper position so you can easily control the steering wheel, pedals and switches on the instrument panel.

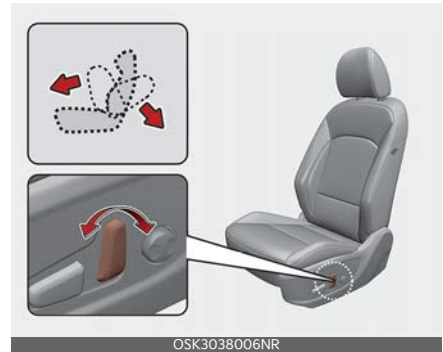
## Moving forward and backward



To move the seat forward or backward:

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

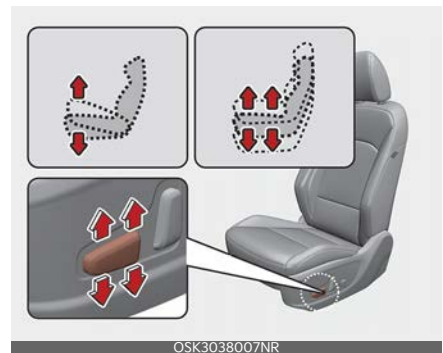
## Reclining seatback



To recline the seatback:

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

## Changing seat cushion tilt and height



To change the height of the seat:

1. Pull the front portion (1) of the control switch up to raise or press down to lower the front part of the seat cushion.
2. Pull the rear portion (2) of the control switch up to raise or press down to lower the seat cushion.
3. Release the switch once the seat reaches the desired position.

### Adjusting lumbar support for driver's seat (if equipped)



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

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

#### **⚠ WARNING**

Do not make seat adjustments while driving as this may cause you to lose control of the vehicle.

### Headrest for front seat

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



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

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

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

#### **⚠ WARNING**

#### Headrest removal/adjustment

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

**⚠ CAUTION**

Excessive pulling or pushing may damage the headrest.

**Adjusting the height up and down**



To raise the headrest:

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

**\* NOTICE**

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



**Removing headrest**

Type A



Type B



To remove the headrest:

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

**⚠ WARNING**

**Headrest Removal**

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

**Reinstalling headrest**

Type A



OSK3038013NR

Type B



OSK3038014NR

To reinstall the headrest:

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

**⚠ WARNING**

**Headrest Reinstallation**

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

**Seatback pocket**

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



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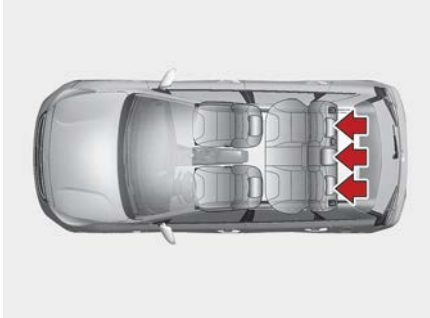
**⚠ WARNING**

**Seatback pockets**

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

## Headrest for rear seat

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



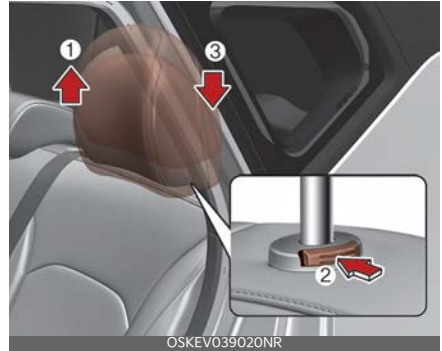
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The headrest not only provides comfort for passengers, but also helps protect the head and neck in the event of a collision.

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

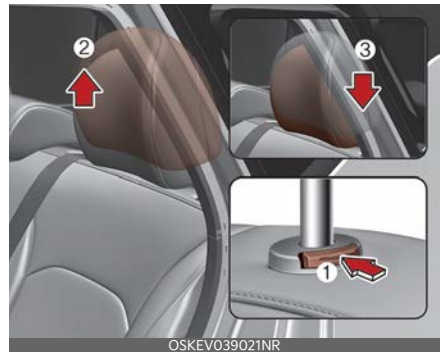
Also, adjust the headrest as close to your head as possible. For this reason, the use of a cushion that holds the body away from the seatback is not recommended.

## Adjusting the height up and down



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

## Removing/reinstalling headrest



- To remove the headrest, raise it as far as it can go then press the release button (1) while pulling the headrest upward (2).
- To reinstall the headrest, put the headrest poles (3) into the holes while pressing the release button (1).

- Then adjust it to the appropriate height and ensure that it locks in position.

### Armrest (if equipped)

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



### Folding the rear seat

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

#### **⚠ WARNING**

#### Folded Seatback

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 no seat belts are available for use.
- 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.

### Folding down the rear seatback

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 as above the picture.

#### **⚠ WARNING**

#### Objects

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

3. When folding the seatback, insert the rear seat belt buckle in the pocket between the rear seatback and cushion to make sure both seatbelts do not interfere with stowed luggage and cargo.





OSK3038016NR

Then, the seat belt webbing should be placed in the webbing guide to prevent the seat belt from being damaged by loaded cargo, etc. If the seat belt is loose, it may cause damage or noise. In that case, return the seatback to the upright position and put the webbing out from the guide to realign it.

4. Pull on the seatback folding lever, then fold the seat toward the front of the vehicle. When you return the seatback to its upright position, always be sure it has locked into position by pushing on the top of the seatback.



OSKEV039018NR

5. To use the rear seat, lift and pull the seatback backward by lifting up seatback. Pull the seatback firmly until it clicks into place. Make sure the seatback is locked in place.



OSKEV039050NR

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

**⚠ WARNING**

**Uprighting seat**

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

**⚠ WARNING**

**Rear seatback**

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

- Be careful not to damage the seat belt webbing or buckle.
- Do not allow the seat belt webbing or buckle to become pinched or caught in the rear seat.

- Ensure the seatback is completely locked into its upright position by pushing on the top of the seatback. Failure to adhere to any of these instructions could result in serious injury or death in the event of a crash.

**⚠ CAUTION****Damaging rear seat belt buckles**

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

**⚠ CAUTION****Rear seat belts**

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

**⚠ WARNING**

Until the driver's position is properly set according to the driver's physical figure, do not fold the rear seat. It may increase bodily injuries in a sudden stop or collision.

**⚠ CAUTION**

Be careful when loading cargo through the rear passenger seats to prevent damage to the vehicle interior.

**⚠ WARNING****Cargo**

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

**Cargo loading**

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

## Seat belts

Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis, chest and shoulders.

### Seat belt restraint system

For maximum restraint system protection, the seat belts must always be used whenever the vehicle is moving.

- A properly positioned shoulder belt should be positioned midway over your shoulder across your collarbone.
- Never allow children to ride in the front passenger seat. See "Child Restraint System (CRS)" on page 4-27 for further discussion.

#### WARNING

#### Twisted seat belt

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

#### WARNING

#### Shoulder Belt

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

#### WARNING

#### Damaged seat belt

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

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

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

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

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

- No modifications or additions should be made by the user which would either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.
- When you fasten the seat belt, be careful not to latch the seat belt in buckles of other seats. It is very dangerous and you may not be protected by the seat belt properly.

- Do not unfasten the seat belt and do not fasten and unfasten the seat belt repeatedly while driving. This could result in loss of control, and an accident causing death, serious injury, or property damage.
- When fastening the seat belt, make sure that the seat belt does not pass over objects that are hard or can break easily.

**⚠ WARNING**

**Seat belt buckle**

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

**Driver's seat belt warning**

As a reminder to the driver, the driver's seat belt warning light (1) will appear for approximately 6 seconds each time you place the START/STOP button is ON regardless of belt fastening.



If the seatbelt is not fastened, the warning chime will sound for about 6 seconds.

If you start to drive without the seat belt fastened or you unfasten the seat belt when you drive over 9 km/h (6 mph) and under 20 km/h (12 mph), the corresponding warning light will appear.

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

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

**Front passenger's seat belt warning**



As a reminder to the front passenger, the front passenger's seat belt warning lights will appear for approximately 6 seconds each time place the START/STOP button is ON regardless of belt fastening. If you start to drive without the passenger seat belt fastened or the passenger unfastens the seat belt when you drive under 20 km/h (12 mph) or stop, the corresponding warning light will appear.

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

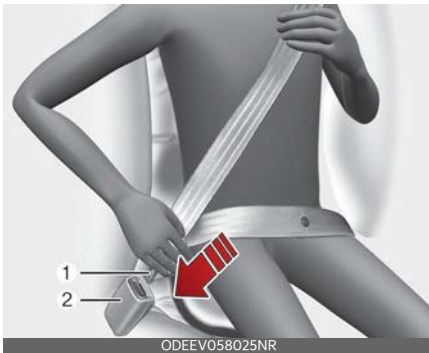
**\* NOTICE**

- Even if the front passenger seat is not occupied, the seat belt warning light will appear for 6 seconds.
- The front passenger's seat belt warning may operate when luggage is placed on the front passenger seat.

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

The following explains how to fasten and adjust the driver's seat belt.

**Fastening the 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.



**⚠ WARNING**

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

The arm closest to the seat belt buckle should be over the belt while the other arm should be under the belt as shown in the illustration. Never wear the seat belt under the arm closest to the door.

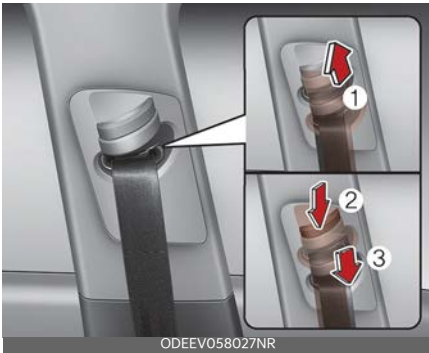
The seat belt automatically adjusts to the proper length only after the lap belt portion is adjusted manually so that it fits snugly around your hips. If you lean forward in a slow, easy motion, the belt will extend and let you move around. If there is a sudden stop or impact, however, the belt will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

**\* NOTICE**

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

**Adjusting the height of shoulder belt**

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



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

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

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

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

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

**⚠ WARNING****Shoulder belt positioning**

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

**⚠ WARNING****Seat belt replacement**

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

**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 System (CRS). 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 CRS, the seat belt operation changes to allow the belt to retract, but not to extend (automatic locking retractor type). Refer to "Securing a child restraint with a lap/shoulder belt" on page 4-32.

#### \* NOTICE

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

#### ⚠ CAUTION

Do NOT fold down the left portion of the rear 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.

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



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

#### ⚠ 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.



**Releasing the seat belt:**



- The seat belt is released by pressing the release button (1) on the locking buckle. When it is released, the belt should automatically draw back into the retractor. If this does not happen, check the belt to make sure it is not twisted, then try again.

**3-point rear center belt**

**⚠ WARNING**

**Rear center seat belt**

Do not separate mini tongue (1) and mini buckle (2) even if there is not an occupant.



If it is separated, It may hit the rear seat occupants in a collision or sudden stops.

- Pull the tongue plate and insert the tongue plate into the open end of the buckle until an audible "click" is heard, indication the latch is locked. Make sure the belt is not twisted.





**CAUTION**

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

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

**WARNING**

When using the rear seat center belt, you must lock all tongue plates and buckles. If any tongue plate or buckle is not locked, it will increase the chance of injury in the event of collision.

**Pre-tensioner seat belt**

Your vehicle is equipped with driver's and front passenger's pre-tensioner seat belts (retractor pre-tensioner and/or EFD (Emergency Fastening Device)).



The pre-tensioner seat belts may be activated, when a frontal collision is severe enough, together with the air bags.

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

## 1. Retractor pre-tensioner

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

## 2. EFD (Emergency Fastening Device, for driver seat)

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

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

**\* NOTICE**

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

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



\* The actual position of seat belt pre-tensioner system components may differ from the illustration.

1. Supplemental Restraint System (SRS) air bag warning light
2. Retractor pre-tensioner assembly
3. SRS Control Module (SRSCM)
4. Emergency Fastening Device (EFD)


**⚠ WARNING**

**Skin Irritation**

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

**\* NOTICE**

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

- Because the sensor that activates the SRS air bag is connected with the pre-tensioner seat belt, the SRS air bag warning light  on the instrument panel will appear for approximately 6 seconds after START/STOP button has been changed to ON position, and then it should turn off.
- If the pre-tensioner seat belt system is not working properly, this warning light will appear even if there is not a malfunction with the SRS air bag. If the SRS air bag warning light does not appear when START/STOP button has been changed to ON, or if it remains appeared after illuminating for approximately 6 seconds, or if it appears while the vehicle is being driven, have an authorized Kia dealer inspect the pre-tensioner seat belt and SRS air bag system as soon as possible.

**\* NOTICE**

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

**⚠ WARNING**

**Hot pre-tensioner**

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

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

### Seat belt precautions

Take the following precautions when using seat belts.

#### Infant or small child

Most countries have child restraint laws. You should be aware of the specific requirements in your country. Child and/or infant seats must be properly placed and installed in the rear seat. For more information about the use of these restraints, refer to "Child Restraint System (CRS)" on page 4-27.

#### \* NOTICE

Small children are best protected from injury in an accident when properly restrained in the rear seat by a child restraint system that meets the requirements of the Safety Standards of your country. Before buying any child restraint system, make sure that it has a label certifying that it meets Safety Standards of your country. 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 4-27.

#### Larger children

Children who are too large for child restraint system should always occupy the rear seat and use the available lap/shoulder belts. The lap portion should be fastened and snug on the hips as low as possible. Check periodically to insure

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

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

#### ⚠ WARNING

##### Small children

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

#### Restraint of pregnant women

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

**⚠ WARNING****Pregnant women**

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

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**Injured person**

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

**One person per belt**

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

**Do not lie down**

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

**Care of seat belts**

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

**⚠ WARNING****Pinched seat belt**

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

---

**⚠ WARNING**

Seatbelts can become hot in a vehicle that has been closed up in sunny weather. They could burn infants and children.

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**Periodic inspection**

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

**Keep belts clean and dry**

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

**When to replace seat belts**

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

## Child Restraint System (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.

### Children always in the rear

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

#### WARNING

#### Restraint Location

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

#### WARNING

#### Hot Child Restraint

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

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

Most countries have child restraint laws which require children to travel in approved child restraint devices. The laws governing the age or height/weight restrictions at which seat belts can be used instead of child restraints differs

among countries, so you should be aware of the specific requirements in your country, and where you are traveling.

The child restraint system must be properly placed and installed in the rear seat. You must use a commercially available child restraint system that meets the requirements of the Safety Standards of your country.

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

## Child Restraint System (CRS)

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

#### WARNING

#### Child Restraint Installation

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

- Always follow the child restraint system manufacturer's instructions for installation and use.
- Always properly restrain your child in the child restraint.
- If the vehicle head restraint prevents proper installation of a child seat (as described in the child restraint system manual), the head restraint of the respective seating position shall be readjusted or entirely removed.

- Do not use an infant carrier or a child safety seat that "hooks" over a seat-back as it may not provide adequate protection in an accident.

### **⚠ CAUTION**

- Be especially careful when installing a child restraint on the center seating position in the second row as it is narrower than the outboard positions. A wide child restraint installed on the center seat may cover the safety belt buckles for the other seating positions. Do not allow someone to ride in a seating position where the safety belt buckle is covered by a child restraint.
- A child restraint in the center seating position may also contact or push up against the safety belt buckles, which can damage the buckles and make them unusable or unsafe. Always check that the child restraint does not contact any of the safety belt buckles. Check the placement of the child restraint regularly to make sure that it has not shifted and come into contact with any of the safety belt buckles. Although properly installing the child restraint and regularly checking its placement will help to prevent damage to the safety belt buckles, installing a protective cover.

### **\* NOTICE**

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

## **Selecting a Child Restraint System (CRS)**

When selecting a CRS for your child, always:

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

### **⚠ WARNING**

#### **Holding Children**

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

### **⚠ WARNING**

#### **Unattended Children**

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

**⚠ WARNING****Seat Belt Use**

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

**Child Restraint System (CRS) types**

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

**Rear-facing child seats**

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

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

you to keep your child rear-facing for a longer period of time.

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

**Forward-facing child restraints**

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

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

**Booster seats**

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

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

### Installing a Child Restraint System (CRS)

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

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

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

### Lower Anchors and Tether for Children (LATCH) System

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

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

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

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



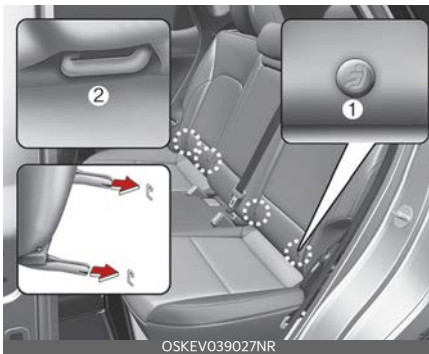
LATCH anchors have been provided in the left and right outboard rear seating positions. Their locations are shown in the illustration. There are no LATCH anchors provided for the center rear seating position.



**⚠ WARNING****LATCH Lower Anchors**

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

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



1. Lower Anchor position indicator
2. Lower Anchor

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

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

**Securing a child restraint with the LATCH anchors system**

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

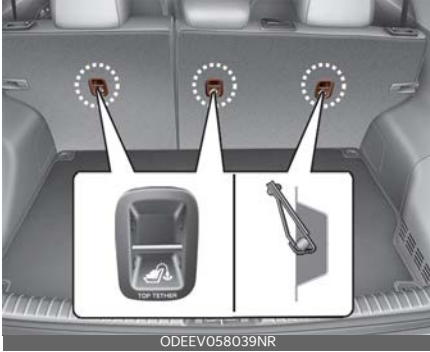
1. Move the seat belt buckle away from the lower anchors.
2. Move any other objects away from the anchors that could prevent a secure connection between the child restraint and the lower anchors.
3. Place the child restraint on the vehicle seat, then attach the seat to the lower anchors according to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

**⚠ WARNING**

Take the following precautions when using the LATCH system:

- Read and follow all installation instructions provided with your CRS.
- To prevent the child from reaching and taking hold of the unused seat belts, buckle all unused rear seat belts before the child is placed into the vehicle. Lock each unused seatbelt following the instructions in the "automatic locking mode" subsection, and place the webbing behind the child seat or against an unused seatback. Children can be strangled if a shoulder belt becomes wrapped around their neck and the seat belt tightens.
- NEVER attach more than one child restraint to a single anchor. This could cause the anchor or attachment to come loose or break.
- Always have the LATCH system inspected by your authorized Kia dealer after an accident. An accident can damage the LATCH system and may not properly secure the child restraint.

### Securing a child restraint seat with "Tether Anchor" system



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

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

#### **⚠ WARNING**

Take the following precautions when installing the tether strap:

- Read and follow all installation instructions provided with your child restraint system.
- NEVER attach more than one child restraint to a single tether anchor. This could cause the anchor or attachment to come loose or break.
- Do not attach the tether strap to anything other than the correct tether anchor. It may not work properly if attached to something else.
- Do not use the tether anchors for adult seat belts or harnesses, or for attaching other items or equipment to the vehicle.

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

To install the tether anchor:



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

### Securing a child restraint with a lap/shoulder belt

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

### Automatic locking mode



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

The "automatic locking" mode will help prevent the normal movement of the child in the vehicle from causing the seat belt to loosen and compromise the child restraint system.

To install a CRS on the rear seats, do the following:

1. Place the CRS on a rear seat and route the lap/shoulder belt around or through the child restraint, following the restraint manufacturer's instructions.  
Be sure the seat belt webbing is not twisted.
2. Fasten the lap/shoulder belt latch into the buckle. Listen for the distinct "click" sound.  
Position the release button so that it is easy to access in case of an emergency.



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



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



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

If your CRS manufacturer instructs or recommends you to use a tether anchor with the lap/shoulder belt, refer to "Securing a child restraint with the LATCH anchors system" on page 4-31 for more information.

**\* NOTICE**

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

**⚠ WARNING**

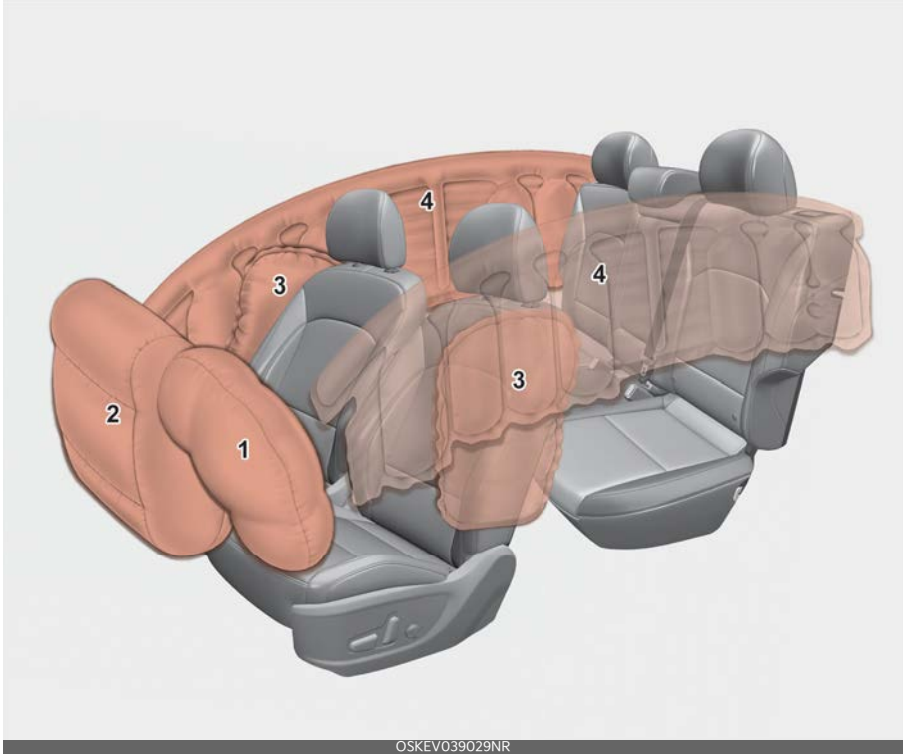
**Auto lock mode**

Set the retractor to Automatic Lock mode when installing any child restraint system. If the retractor is not in the automatic locking mode, the child restraint can move when your vehicle turns or stops suddenly. A child can be seriously injured or killed if the child restraint is not properly anchored in the car, including manually pulling the seat belt all the way out to shift the retractor to the "Auto Lock" mode.

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

## Air bag - advanced Supplemental Restraint System (SRS)

The appropriate air bags inflate instantly in the event of a serious frontal collision or side collision in order to help protect the occupants from serious physical injury.



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

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

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

## How does the air bag system operate?

- Air bags are activated (able to inflate if necessary) only when the START/STOP button has been changed to ON position or the vehicle is in the ready mode.
- The appropriate air bags inflate instantly in the event of a serious frontal collision or side collision in order to help protect the occupants from serious physical injury.
- Generally, air bags are designed to inflate based upon the severity of a collision and its direction. These two factors determine whether the sensors produce an electronic deployment / inflation signal.
- Air bags will inflate based upon the severity of a collision and its direction, etc. But Air bags will not inflate in every crash or collision situation.
- The front air bags will completely inflate and deflate in an instant. It is virtually impossible for you to see the air bags inflate during an accident. It is much more likely that you will simply see the deflated air bags hanging out of their storage compartments after the collision.
- In addition to inflating in serious side collisions, side and/or curtain air bags will inflate if the sensing system detects a rollover.
- When a rollover is detected, side and/or curtain air bags will remain inflated longer to help provide protection from ejection, especially when used in conjunction with the seat belts.
- In order to help provide protection, the air bags must inflate rapidly. The speed of the air bag inflation is a consequence of extremely short time in

which to inflate the air bag between the occupant and the vehicle structures before the occupant impacts those structures. This speed of inflation reduces the risk of serious or life-threatening injuries and is thus a necessary part of the air bag design.

However, air bag inflation can also cause injuries which can include facial abrasions, bruises and broken bones because the inflation speed also causes the air bags to expand with a great deal of force.

- **There are even circumstances under which contact with the steering wheel or passenger air bag can cause fatal injuries, especially if the occupant is positioned excessively close to the steering wheel or passenger air bag.**

### **WARNING**

#### **Airbag inflation**

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

#### **Noise and smoke**

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

### after impact in order to reduce discomfort and prevent prolonged exposure to the smoke and powder.

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

#### **⚠ WARNING**

### Hot components

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

#### **⚠ WARNING**

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

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

Never place a rear-facing child restraint in the front passenger's seat.



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If the air bag deploys, it would impact the rear-facing child restraint, causing serious or fatal injury.

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

#### **⚠ WARNING**

### Air bag deployment

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

### Air bag warning light

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



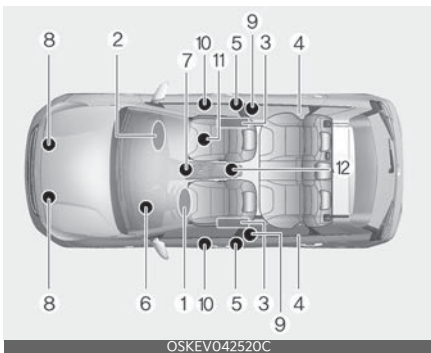
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If the air bag warning light appears for more than 6 seconds after START/STOP button has been changed to ON, or If it appears during vehicle operation, an SRS component may not be functioning properly and you should have your vehicle checked by an authorized Kia dealer. If any of the following conditions occur, this indicates a malfunction in the air bag system. Have an authorized Kia dealer inspect the air bag system as soon as possible.

- The light does not turn on briefly when you change START/STOP button to 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 START/STOP button is ON position.

**Supplemental Restraint System (SRS) components and functions**

The SRS consists of multiple elements and sensors.



OSKEV042520C

\* 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 air bag modules
- 4 Curtain air bag modules
- 5 Retractor pre-tensioner assemblies
- 6 Air bag warning light
- 7 SRS Control Module (SRSCM) / Roll-over sensor
- 8 Front impact sensors
- 9 Side impact sensors
- 10 Side pressure sensors

- 11 Occupant Detection System (ODS) (Front passenger's seat only)
- 12 Front passenger's seat belt buckle sensor

Driver's front air bag (1)



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

Driver's front air bag (2)



ODEEV058049NR

Upon deployment, tear seams molded directly into the pad covers will separate under pressure from the expansion of the air bags. Further opening of the cov-



ers then allows full inflation of the air bags.

Driver's front air bag (3)



ODEEV058050NR

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

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

Passenger's front air bag



ODEEV058051NR

## ⚠ WARNING

### Air bag obstructions

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

## ⚠ WARNING

### Flying objects

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

- If an air bag deploys, there may be a loud noise followed by a fine dust released in the vehicle. These conditions are normal and are not hazardous - the air bags are packed in this fine powder. The dust generated during air bag deployment may cause skin or eye irritation as well as aggravate asthma for some persons. Always wash all exposed skin areas thoroughly with cold water and a mild soap after an accident in which the air bags were deployed.
- The SRS can function only when START/STOP button is ON position. If the SRS air bag warning light does not appear, or continuously remains on after illuminating for about 6 seconds when START/STOP button is ON position, or after the vehicle is in the ready mode, comes on while driving, the SRS is not working properly. If this occurs, have your vehicle immediately inspected by an authorized Kia dealer.

**\* NOTICE**

Before you replace a fuse or disconnect a battery terminal, change START/STOP button to the OFF position. Never remove or replace the air bag related fuse(s) when START/STOP button is ON position. Failure to heed this warning will cause the SRS air bag warning light to appear.

**Occupant Detection System (ODS)**

Your vehicle is equipped with an Occupant Detection System (ODS) in the front passenger's seat.



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

Do not put anything in front of the passenger air bag **"OFF"** indicator.

**Main components of the ODS**

- An detection device located within the front passenger seat cushion.
- An electronic system (ACU) which determines whether the passenger air bag systems should be activated or deactivated.
- An indicator light located on the instrument panel which appears the words PASSENGER AIR BAG **"OFF"** indicates the front passenger air bag system is deactivated.
- The instrument panel air bag warning light is interconnected with the ACU and ODS.

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

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

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

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

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

## Condition and operation in the front passenger ODS

Condition detected by the occupant classification system	Indicator/Warning light		Devices
	"PASSENGER AIR BAG OFF" indicator light	SRS warning light	Front passenger air bag
1. Adult <sup>1</sup>	Off	Off	Activated
2. Child Restraint System (CRS) with child under 12 months old <sup>2</sup> <sup>3</sup> <sup>4</sup>	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 child restraint system) 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 alter or remodel the occupant detection system. This may damage the system and prevent its proper function in a collision.

**\* NOTICE**

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

**\* NOTICE**

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.

**\* NOTICE**

Do not modify or replace the front passenger seat. Don't place anything on or attach anything such as a blanket, front seat cover or after market seat heater to the front passenger seat. This can adversely affect the Occupant Detection System (ODS).

**⚠ WARNING****Occupant Detection System (ODS)**

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

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



- Do not place feet on the front passenger seatback.



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



- Never excessively recline the front passenger seatback.



- Never place feet on the dashboard.



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



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

- Do not sit on the passenger seat wearing heavily padded clothes such as ski wear and hip protector.

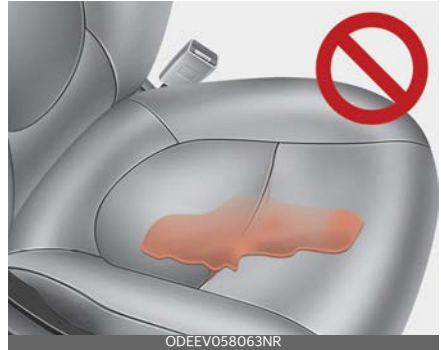


- Do not place electronic devices such as laptops, DVD player, or conductive materials such as water bottles on the passenger seat.
- Do not use electronic devices such as laptops and satellite radios which use inverter chargers.



- Wet Passenger Seat

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



Proper position



When an adult is seated in the front passenger seat, if the **PASSENGER AIR BAG "OFF"** indicator is on, change **START/STOP** button to the OFF position and ask the passenger to sit properly (sitting upright with the seatback in an upright position, centered on the seat cushion with their seat belt on, legs comfortably

extended and their feet on the floor). Restart the vehicle and have the person remain in that position. This will allow the system to detect the person and to enable the passenger air bag.

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

### **\* NOTICE**

The PASSENGER AIR BAG "OFF" indicator appears for about 4 seconds after START/STOP button is turned to the ON position after the vehicle is started. If the front passenger seat is occupied, the occupant detection sensor will then classify the front passenger after several more seconds.

- Even though your vehicle is equipped with the occupant detection system, never install a child restraint system in the front passenger's seat. A deploying air bag can forcefully strike a child resulting in serious injuries or death.

Any child age 13 and under should ride in the rear seat. Children too large for child restraints should use the available lap/shoulder belts. No matter what type of crash, children of all ages are safer when restrained in the rear seat.

If the Occupant Detection System (ODS) is not working properly, the SRS air bag warning light on the instrument panel will appear because the passenger's front air bag is connected with the ODS. If there is a malfunction of the ODS, the PASSENGER AIR BAG "OFF" indicator will not appear and the passenger's front air bag will inflate in frontal impact crashes even if there is no occupant in the front passenger's seat.

#### **Driver's and passenger's front air bag**

Your vehicle is equipped with an advanced Supplemental Restraint System (SRS) air bag and lap/shoulder belts at both the driver and passenger seating position.



Driver's front air bag



Passenger's front air bag



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

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

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

passenger's seat belt usage and impact severity.

The seat belt buckle sensor determines if the front passenger's seat belt is fastened.

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

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

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

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

Additionally, your vehicle 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 4-40.

**⚠ WARNING****Modification**

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

Manufacturers are required by government regulations to provide a contact point concerning modifications to the vehicle for persons with disabilities, which modifications may affect the vehicle's advanced air bag system. That contact is Kia's toll-free Customer Experience Department at 1-877-KIA-AUTO (1-877-542-2886). However, Kia does not endorse nor will it support any changes to any part or structure of the vehicle that could affect the advanced air bag system, including the occupant detection system.

**⚠ WARNING****Replacement/modifications**

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

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

**\* NOTICE**

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

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

**⚠ WARNING****SRS Wiring**

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

**⚠ WARNING****No attaching objects**

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

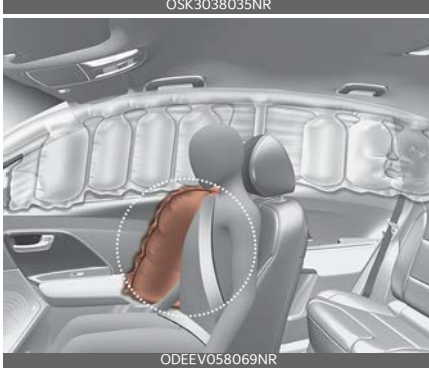
Do not place any objects over the air bag or between the air bag and yourself.

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

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

### Side air bag

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



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

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

- The side air bags are designed to deploy during certain side-impact collisions, depending on the crash severity of impact.

- The side air bags may deploy on the side of the impact or on both sides.
- The side and/or curtain air bags on both sides of the vehicle will deploy if a rollover or possible rollover is detected.
- The side air bags are not designed to deploy in all side impact or rollover situations.

### **⚠ WARNING**

#### Unexpected deployment

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

- The side air bag is supplemental to the driver's and the passenger's seat belt systems and is not a substitute for them. Therefore your seat belts must be worn at all times while the vehicle is in operation.
- For best protection from the side air bag system and to avoid being injured by the deploying side air bag, both front seat occupants should sit in an upright position with the seat belt properly fastened. The driver's hands should be placed on the steering wheel at the 9:00 and 3:00 positions. The passenger's arms and hands should be placed on their laps.

### **⚠ WARNING**

#### Deployment

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

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

**⚠ WARNING**

**Flying objects**

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

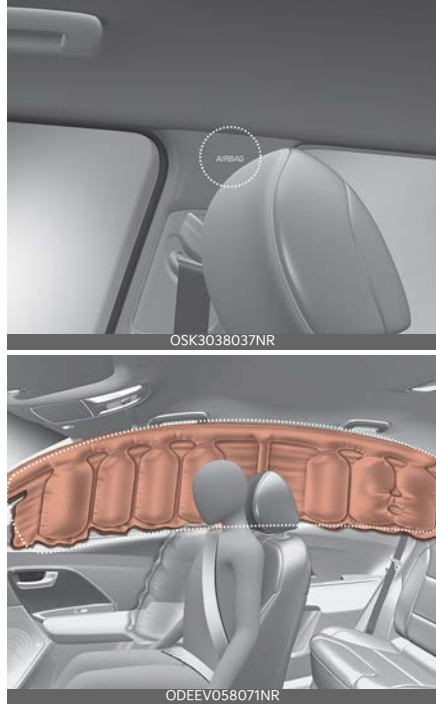
**⚠ WARNING**

**No attaching objects**

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

**Curtain air bag**

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



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

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

- The curtain air bags are designed to deploy during certain side impact collisions, depending on the severity of impact. However, when side deployment threshold is satisfied at front-impact, side air bags may deploy.

- The curtain air bags may deploy on the side of the impact or on both sides.
- Also, the curtain air bags on both sides of the vehicle will deploy in certain rollover situations.
- The curtain air bags are not designed to deploy in all side impact or rollover situations.

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

#### **\* NOTICE**

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

#### **⚠ WARNING**

##### **No attaching objects**

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

### Air bag collision sensors

The air bag collision sensors are located in the following positions



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

- 1 SRS Control Module (SRSCM) / Rollover sensor
- 2 Front impact sensor
- 3 Side impact sensor
- 4 Side pressure sensor

**⚠ WARNING****Air bag sensors**

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

This may cause unexpected air bag deployment, which could result in serious personal injury or death.

- If the installation location or angle of the sensors is altered in any way, the air bags may deploy when they should not or they may not deploy when they should.

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

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

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

Kia Genuine bumper guards/bumpers are parts we guarantee for quality and performance.

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

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

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

**Air bag inflation conditions****Front air bags**

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

**Side and/or curtain air bags**

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

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

Although the front air bags (driver's and front passenger's air bags) are primarily designed to inflate in frontal collisions, they may inflate in other types of collisions if the front impact sensors detect a sufficient frontal force in another type of impact.

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

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

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

### Air bag non-inflation conditions

- In certain low-speed collisions the air bags may not deploy. The air bags are designed not to deploy in such cases because they may not provide benefits beyond the protection of the seat belts in such collisions.
- Air bags are not designed to inflate in rear collisions, because occupants are moved backward by the force of the impact. In this case, inflated air bags would not be able to provide any additional benefit.
- Front air bags may not inflate in side impact collisions, because occupants move to the direction of the collision, and thus in side impacts, frontal air bag deployment would not provide additional occupant protection.
- In an angled collision, the force of impact may direct the occupants in a direction where the air bags would not be able to provide any additional benefit, and thus the sensors may not deploy any air bags.
- Just before impact, drivers often brake heavily. Such heavy braking lowers the front portion of the vehicle causing it to "ride" under a vehicle with a higher ground clearance. Air bags may not inflate in this "under-ride" situation because deceleration forces that are detected by sensors may be significantly reduced by such "under-ride" collisions.

- Front air bags may not inflate in all rollover accidents when the SRSCM indicates that the front air bag deployment would not provide additional occupant protection.
- Air bags may not inflate if the vehicle collides with objects such as utility poles or trees, where the point of impact is concentrated to one area and the full force of the impact is not delivered to the sensors.

### SRS Care

The SRS is virtually maintenance-free and so there are no parts you can safely service by yourself.

If the SRS air bag warning light does not appear, or continuously remains on, have your vehicle immediately inspected by an authorized Kia dealer.

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

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

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



**⚠ WARNING****Tampering with SRS**

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

**⚠ WARNING****Towing Vehicle**

Always have the ignition off when your vehicle is being towed. The side air bags may inflate if the vehicle is tilted such as when being towed because of the roll-over sensors in the vehicle.

**Adding equipment to or modifying your air bag-equipped vehicle**

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

**Air bag warning label**

Air bag warning labels, some required by the Canada Motor Vehicle Safety Standards (CMVSS), are attached to the sun visor to alert the driver and passengers of potential risks of the air bag system.





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## Features of your vehicle

### Keys

#### Record your key number



The key code number is stamped on the key code tag attached to the key set. Should

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

**⚠ WARNING**

#### Aftermarket keys

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

**⚠ WARNING**

#### Never leave the keys in your vehicle

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

### Smart key

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



#### Lock (1)

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

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

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



## Unlock (2)

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

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

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

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

Depending on the vehicle, the driver can turn off or set the 2-press unlock setting function.

### \* NOTICE

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

## Panic alarm (3)

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

## Mechanical key

If the smart key does not operate normally, you can lock or unlock the door by using the mechanical key.



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

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

### ⚠ WARNING

#### Smart key

Never leave the keys in your vehicle with unsupervised children. Leaving children unattended in a vehicle with a manual ignition key or a ENGINE START/STOP button is dangerous.

Children copy adults and they could place the key in the ignition switch or press the start button. The key would enable children to operate power windows or other controls, or even make the vehicle move, which could result in serious bodily injury or death.

## Smart key precautions

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

- The smart key is close to a radio transmitter such as a radio station or an airport which can interfere with normal operation of the smart key.
- The smart key is near a mobile two-way radio system or a cellular phone.
- Another vehicle's smart key is being operated close to your vehicle.

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

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

### \* NOTICE

#### Loss of the smart key

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

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

### ▲ CAUTION

#### Transmitter

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

### \* NOTICE

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

### \* NOTICE

To prevent the electronic key from becoming damaged by magnetic fields, do not leave it near the following electrical appliances:

- TVs
- Personal computers
- Cellular phones, cordless phones and battery chargers
- Table lamps
- Induction cookers

### \* NOTICE

If you have to leave the vehicle's key with a parking attendant, remove the mechanical key for your own use and provide the attendant with the electronic key only.

### \* NOTICE

When bringing a smart key onto an airplane, make sure you do not press any button on the key while inside the cabin. If you are carrying the key in your bag etc., make sure that the buttons cannot be pressed accidentally. If you press a button, the key may emit radio waves

that could interfere with the operation of the aircraft.

### Battery replacement

A smart key battery should last for several years, but if the smart key is not working properly, try replacing the battery with a new one.



OSP2N049054

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

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

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

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

To avoid damaging the smart key, don't drop it, get it wet, or expose it to heat or sunlight.



An inappropriately disposed battery can be harmful to the environment and human health. Dispose the battery according to your local law(s) or regulations.

#### **⚠ WARNING**

#### **THIS PRODUCT CONTAINS A BUT-TON BATTERY**

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

Keep batteries out of reach of children.

If you think batteries may have been swallowed or placed inside any part of the body, seek immediate medical attention.

#### **⚠ CAUTION**

#### **Smart Key Damage**

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

#### **⚠ WARNING**

#### **IC WARNING**

This device complies with Industry Canada licence-exempt RSS standard(s).

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.

## This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following 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.
3. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

### \* NOTICE

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

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## Immobilizer system

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

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

Place the EV button to the OFF position, then place the EV button to the ON position again.

In some circumstances, the vehicle may not recognize your smart key if another smart key device is nearby or a metal object such as a key chain is causing interference with the smart key.

If this occurs, your vehicle may not start. Remove any metal objects or additional keys near the smart key before attempting to start the vehicle again.

If the system repeatedly does not recognize the coding of the key, it is recommended that you contact your Kia dealer.

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

### \* NOTICE

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

---

## ⚠ WARNING

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

## This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions:

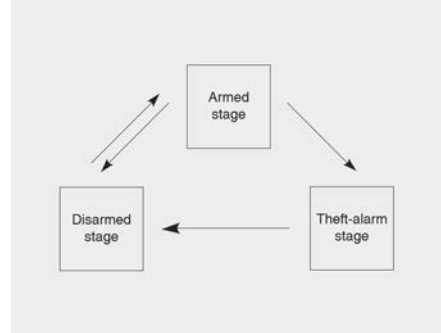
1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

## \* NOTICE

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

## Theft-alarm system

This system is designed to provide protection from unauthorized entry into the vehicle.



This system is operated in three stages: the first is the "Armed" stage, the second is the "Theft-alarm" stage, and the third is the "Disarmed" stage. If triggered, the system provides an audible alarm with blinking of the hazard warning lights.

### Armed stage

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

### Entering the armed stage using the smart key

1. Place the EV button in the OFF position.
2. Make sure that all doors, the hood and liftgate are closed and latched.
3. Lock the doors by pressing the button of the front outside door handle with the smart key in your possession.

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

If any door (or liftgate) or hood remains open, the hazard warning lights and the chime will not operate and the theft-alarm will not arm. If all

doors and liftgate and hood are closed after the lock button is pressed, the hazard warning lights blink once.

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

4. Lock the doors by pressing the lock button on the smart key.

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

#### \* NOTICE

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

### Theft-alarm stage

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

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

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

### Disarmed stage

The system will be disarmed when:

- The doors are unlocked with the smart key.

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

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

#### \* NOTICE

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

If the system is not disarmed with the smart key, open the doors by using the mechanical key and start the vehicle by directly pressing the EV button with the smart key.

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

#### ⚠ CAUTION

### Adjusting Alarm System

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

#### \* NOTICE

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

## 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.

### \* NOTICE

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

## Door locks

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

### Operating door locks from outside the vehicle

If using the mechanical key, turn the key toward the rear of the vehicle to lock (1) and toward the front of the vehicle to unlock (2).



1. To remove the cover:
  - 1) Pull out the door handle.
  - 2) Press the lever (1) located inside the bottom part of the cover with a key or flat-head screwdriver.
  - 3) Push out the cover (2) while pressing the lever.
2. Turn the key toward the rear of the vehicle to lock (A) and toward the front of the vehicle to unlock (B).
  - If you lock the driver's door with a key, only the driver's door will lock/unlock.
  - From the driver's door, turn the key toward the front of the vehicle once to unlock the driver's door and once more within 4 seconds to unlock all doors.

- Doors can also be locked and unlocked with the smart key.
- Once the doors are unlocked, they may be opened by pulling the door handle.
- When closing the door, push the door by hand. Make sure the doors are closed securely.

### \* NOTICE

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

### ⚠ WARNING

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

### ⚠ CAUTION

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

To lock a door without the key, push the inside door lock button (1) or central door lock switch (2) to the "Lock" position and close the door (3).



If you lock the door with the central door lock switch (2), all vehicle doors will lock automatically.

### \* NOTICE

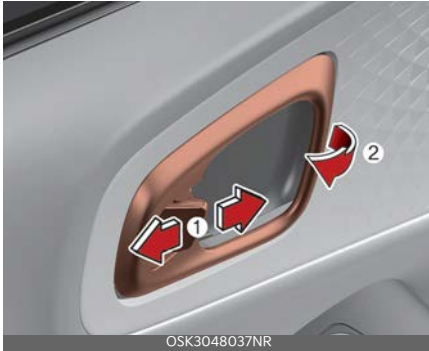
Always turn the START/STOP button to OFF position, engage the parking brake, close all windows, and lock all doors when leaving your vehicle unattended.

## Operating door locks from inside the vehicle

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



## With the door lock button



- To unlock a door, pull the door lock button (1) to the "Unlock" position. The red mark on the door lock button will be visible.
- To lock a door, push the door lock button (1) to the "Lock" position. If the door is locked properly, the red mark on the door lock button will not be visible.
- To open a door, pull the door handle (2) outward.
- If the inner door handle of the driver's (or front passenger's) door is pulled when the door lock button is in the lock position, the button will unlock and the door will open.
- Doors cannot be locked if the smart key is in the vehicle and a door is open.

## Door lock malfunction

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

- Operate the door unlock feature repeatedly (both electronic and manual) while simultaneously pulling on the door handle.

- Operate the other door locks and handles, front and rear.
- Lower a front window and use the key to unlock the door from outside.

## **⚠ WARNING**

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

## With central door lock/unlock switch

Driver side



Operate by pressing the central door lock/unlock switch.

- When pressing the right portion (1) for driver side or the upper portion (1) for passenger side of the switch, all vehicle doors will lock.
- When pressing the left portion (2) for driver side or the lower portion (2) for passenger side of the switch, all vehicle doors will unlock.
- If the smart key is in the vehicle and any door is opened, the doors will not lock even though the right portion (1) for driver side or upper portion (1) for passenger side of the central door lock switch is pressed.

**⚠ WARNING****Doors**

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

**⚠ WARNING****Unattended children, the elderly or pets**

An enclosed vehicle can become extremely hot, causing death or severe injury such as heatstroke to unattended children, the elderly or pets who cannot escape the vehicle. When left or trapped in a hot vehicle, make sure to stay hydrated and avoid sun exposure through the vehicle's windshield. Furthermore, children might operate features of the vehicle that could injure them, or they could encounter other harm, possibly from someone gaining entry to the vehicle. Never leave children or animals unattended in your vehicle.

**Door lock/unlock features**

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

**Impact sensing door unlock system**

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

**Speed sensing door lock system**

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

**\* NOTICE**

- You can activate or deactivate the Easy Access Function from Vehicle Settings from the infotainment system screen.
- 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.

**Child-protector rear door locks**

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

The child safety lock is located on the edge of each rear door. When the child safety lock is in the lock position (1), the rear door will not open if the inner door handle (2) is pulled.



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

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

**⚠ WARNING**

**Rear door locks**

Use the rear door safety locks whenever children are in the vehicle. If a child accidentally opens the rear doors while the vehicle is moving, he or she may fall out.

**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 vehicle, the "Check rear seats" warning message appears on the cluster.



**A: Check rear seats**

You can activate or deactivate the ROA from the infotainment system screen.

Select **Convenience** → **Rear Occupant Alert** on the Settings menu.

**⚠ WARNING**

The Rear Occupant Alert (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 Rear Occupant Alert (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.

**Liftgate**

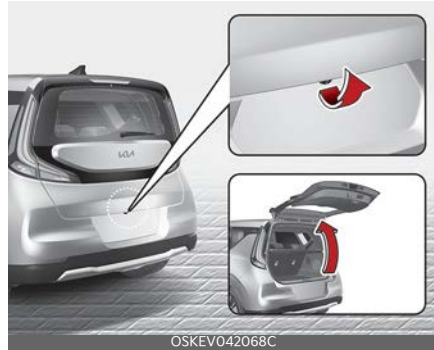
When you open the liftgate, you will see a space where you can load the cargo.

**Opening the liftgate**

The liftgate is locked or unlocked when all doors are locked or unlocked with the key, smart key or central door lock/unlock switch.

**⚠ CAUTION****Liftgate lift**

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



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

**\* NOTICE**

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

**⚠ WARNING**

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

**Closing the liftgate**

Lower and push down the liftgate firmly. Make sure that the liftgate is securely latched.



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

**⚠ WARNING****Rear cargo area**

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

**Opening the liftgate in emergency**

Your vehicle is equipped with the emergency liftgate safety release lever located on the bottom of the liftgate. When someone is inadvertently locked in the luggage compartment.



The liftgate can be opened by doing as follows:

1. Input the mechanical key into the hole.
2. Push the mechanical key to the right.
3. Push up the liftgate.

**⚠ WARNING**

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

**⚠ WARNING**

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

loading or unloading cargo from the vehicle.

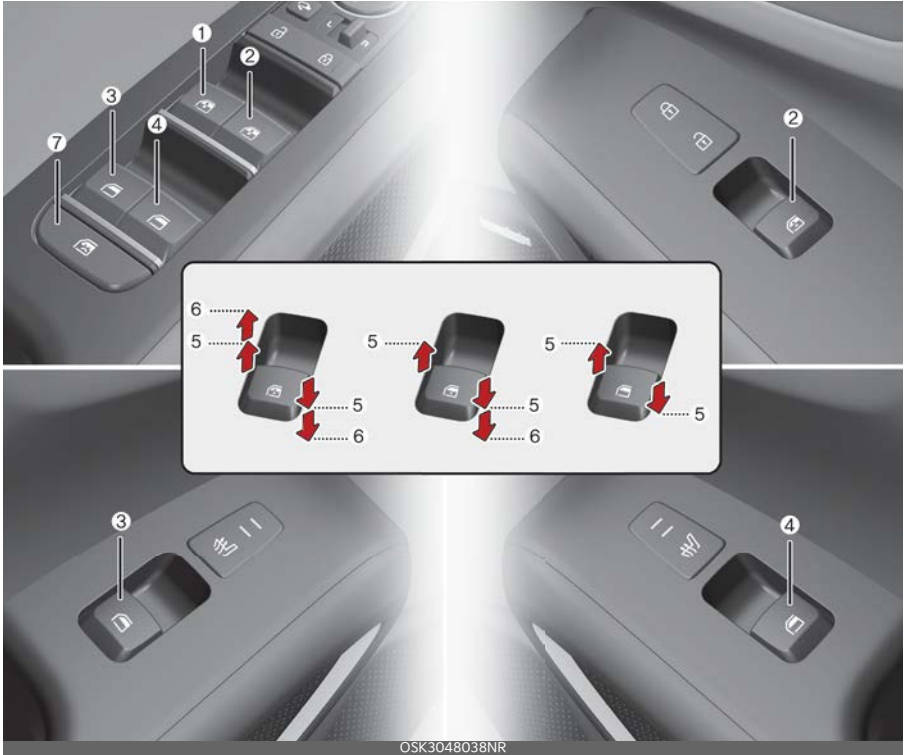
**⚠ WARNING**

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



## Windows

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



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

**\* NOTICE**

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

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

Each door has a power window switch that controls the door's window. The driver has a power window lock switch which can block the operation of rear passenger windows. The power windows can be operated for approximately 30 seconds after the START/STOP button is turned off. However, if the front doors are opened, the power windows cannot be operated even within the 30 seconds period.

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

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

**\* NOTICE**

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

**⚠ CAUTION**

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

**Window opening and closing**

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

**Type A**

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





### Type B - Auto down window (if equipped)



OSK3048091NR

Pressing the power window switch momentarily to the second detent position (6) completely lowers the window even when the switch is released. To stop the window at the desired position while the window is in operation, pull up the switch briefly to the opposite direction of the window movement.

### Type C - Auto up/down window (if equipped)



OSK3048090NR

Pressing or pulling up the power window switch momentarily to the second detent position (6) completely lowers or raises the window even when the switch is released. To stop the window at the

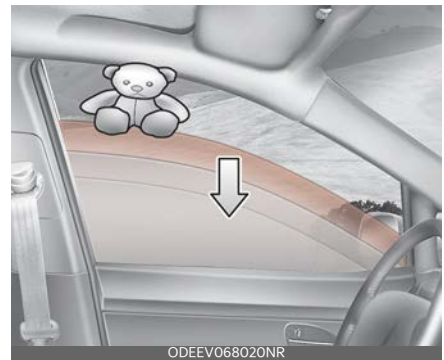
desired position while the window is in operation, pull up or press down and release the switch.

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

1. Turn the 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 (For Type C)

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



ODEEV068020NR

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

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

### \* NOTICE

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

### ⚠ WARNING

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

### ⚠ WARNING

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

### ⚠ WARNING

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

### Power window lock switch

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



When the power window lock switch is pressed:

- The driver's master control can operate the front passenger's power window and the rear passengers' power windows.
- The front passenger's control can operate the front passenger's power window.
- The rear passengers' control cannot operate the rear passengers' power window.

### ⚠ CAUTION

#### Opening/closing Window

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

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

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

## WARNING

### Power windows

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

## Hood

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

### Opening the hood

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



## \* NOTICE

Open the hood after turning off the START/STOP button on a flat surface, turn the shifter dial to the P (Park) position and setting the parking brake.

2. Go to the front of the vehicle, raise the hood slightly, push the secondary latch (1) up side and lift the hood (2).



OSKEV042041C

3. Raise the hood. It will completely rise by itself after it has been raised about halfway.



OSKEV072120C

### Hood open warning

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



OSKEV049148NR

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

### Closing the hood



OSKEV052440C

1. Before closing the hood, check the following:
  - All filler caps in the motor compartment must be correctly installed.
  - Gloves, rags or any other combustible material must be removed from the motor compartment.
2. Lower the hood until it is about 30cm (12 in.) above the closed position and let it drop. Make sure that it locks into place.
  - Then double check to be sure the hood is secure.
  - If the hood can be lifted with a slight force, open the hood again and close it more firmly.

### **⚠ CAUTION**

#### Hood obstruction

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

**⚠ WARNING****Fire risk**

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

**⚠ WARNING****Unsecured hood**

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

**Sunroof (if equipped)**

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



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

The sunroof can be operated for approximately 10 minutes after the ignition switch or START/STOP button is in the ACC or LOCK/OFF position.

However, if the front door is open, the sunroof cannot be operated even within the 10 minute period.

**⚠ WARNING**

- Adjust the sunroof or sunshade when your vehicle stops. This could result in loss of control and an accident that may cause injury, or property damage.
- Do not leave the vehicle running and the key in your vehicle with unsupervised children. Unattended children could operate the sunroof, which could result in serious injury.
- Do not sit on the top of the vehicle. It may cause injury or vehicle damage.

**\* NOTICE**

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

**Sunshade**



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

**\* INFORMATION**

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.

**\* NOTICE**

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**



1. Tilt open
  2. Tilt close
- Push the sunroof switch upward, the sunroof glass tilts open.
  - Push the sunroof switch forward when the sunroof glass is tilt opened, the sunroof glass closes.

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

**\* INFORMATION**

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 with the sunroof glass when the sunroof glass is completely closed.

## Slide open/close



- 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.
- Push the sunroof switch forward or rearward to the second detent position, the sunroof glass operates automatically (auto slide feature). 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.

### \* INFORMATION

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



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.

### \* NOTICE

- Do not continue to push the sunroof switch after the sunroof is fully opened, closed, or tilted. Damage to the sunroof motor could occur.
- Continuous operations such as slide open/close, tilt open/close, etc. may

cause the motor or sunroof system to malfunction.

- Regularly remove any accumulated dust on the sunroof rail.
- Dust accumulated between the sunroof and roof panel can make noise. Open the sunroof and remove dust regularly using a clean cloth.
- Do not try to open the sunroof when the temperature is below freezing or when the sunroof is covered with snow or ice. The sunroof may not work properly and may break if opened by force.
- Do not open or drive with the sunroof glass open immediately after rain or washing the vehicle. Water may wet the interior of the vehicle.
- Do not extend any luggage outside the sunroof while driving. Vehicle damage may occur if the vehicle suddenly stops.

**⚠ WARNING**

Do not extend your head, arms, body parts or objects outside the sunroof while driving. Injuries may occur if the vehicle suddenly stops.

**Resetting the sunroof**



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

- When the 12-volt battery is either disconnected or discharged
- When the sunroof fuse is replaced
- If the sunroof one-touch AUTO OPEN/CLOSE operation is not functioning properly

Sunroof resetting procedure:

1. It is recommended to perform the reset procedure with the vehicle in the ready mode. Start the vehicle 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.

**\* INFORMATION**

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



## Sunroof open warning



If the driver turns off the vehicle when the sunroof is not fully closed, the warning chime will sound for several seconds and the sunroof open warning will appear on the cluster LCD display. Close the sunroof securely when leaving your vehicle.

### **▲ CAUTION**

Make sure the sunroof is closed fully when leaving your vehicle.

If the sunroof is left open, rain or snow may wet the interior of the vehicle. Also, leaving the sunroof open when the vehicle is unattended may invite theft.

## Steering wheel

The steering wheel of this vehicle is equipped with Electric Power Steering (EPS).

### **Electric Power Steering (EPS)**

Power steering uses an electric motor to assist you in steering the vehicle.

If the vehicle is off or if the Electric Power Steering (EPS) becomes inoperative, the vehicle may still be steered, but it will require increased steering effort.

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

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

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

### **\* NOTICE**

The following symptoms may occur during normal vehicle operation:

- The EPS warning light does not appear.
- The steering gets heavy immediately after turning the START/STOP button is ON position. This happens as the system performs the EPS diagnostics. When the diagnostics are completed, the steering wheel will return to its normal condition.
- A click noise may be heard from the EPS relay after turning the START/STOP button is ON or OFF position.

- A motor noise may be heard when the vehicle is at a stop or at a low driving speed.
- If the EPS does not operate normally, the warning light will appear on the instrument cluster. The steering wheel may become difficult to control or operate abnormally. Take your vehicle to an authorized Kia dealer and have the vehicle checked as soon as possible.
- When the charging system warning light comes on due to the low voltage (when the alternator or battery does not operate normally or malfunctions), the steering wheel may require increased steering effort.

If the Electric Power Steering (EPS) does not operate normally, the warning light will appear on the instrument cluster. The steering wheel may become difficult to control or operate abnormally. In this case, have the system inspected by an authorized Kia dealer.

When you operate the steering wheel in low temperature, the steering effort may be high and abnormal noise could occur. If temperature rises, the noise will disappear. This is a normal condition.

When the vehicle is stationary, and the steering wheel is turned all the way to the left or right continuously, the steering wheel becomes harder to turn. The power assist is limited to protect the motor from overheating.

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

## Tilt & telescopic steering wheel

A tilt and telescopic steering wheel allows you to adjust the steering wheel before you drive.

You can also raise it to give your legs more room when you exit and enter the vehicle.

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

### **⚠ WARNING**

#### **Steering wheel adjustment**

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

## Adjusting steering wheel angle and height



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 height (3).
3. Pull up the lock-release lever to lock the steering wheel in place.
4. Be sure to adjust the steering wheel to the desired position before driving.

**\* NOTICE**

After adjustment, sometimes the lock-release lever may not lock the steering wheel.

It is not a malfunction. This occurs when two gears engage. In this case, adjust the steering wheel again and then lock the steering wheel.

**Heated steering wheel (if equipped)**

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



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

**\* NOTICE**

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

**⚠ CAUTION**

- Do not install any type of grip cover for the steering wheel, it may impair the function of the heated steering wheel system.

- When cleaning the heated steering wheel, do not use an organic solvent such as paint thinner, benzene, alcohol and gasoline. Doing so may damage the surface of the steering wheel.
- If the surface of the steering wheel is damaged 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 long periods of time.

**Horn**

To sound the horn, press the area indicated by the horn symbol on your steering wheel (see illustration).



The horn will operate only when this area is pressed. Check the horn regularly to be sure it operates properly.

## Mirrors

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

### Inside rearview mirror

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

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

#### **⚠ WARNING**

### Mirror adjustment

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

#### **⚠ WARNING**

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

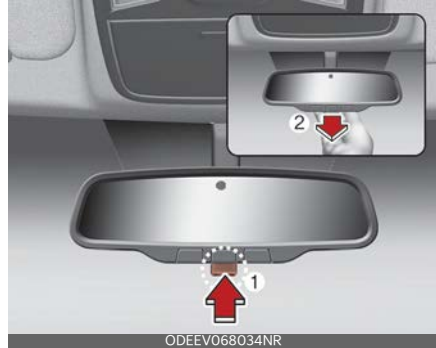
#### **⚠ CAUTION**

### Cleaning mirror

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

## Day/night rearview mirror with Telematics function (if equipped)

For day and night function:



\* (1): Day, (2): Night

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

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

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

**For Telematics button function:**



1. Roadside Assist button
2. Virtual Assist button
3. SOS button

Telematics buttons are also located on the mirror.

**Electric Chromic Mirror (ECM) with MTS service (if equipped)**

The electric rearview mirror automatically controls the glare from the headlights of the vehicles behind you in nighttime or low light driving conditions.



1. Roadside Assist button
2. Virtual Assist button
3. SOS button

The sensor (4) mounted in the mirror senses the light level around the vehicle,

and automatically controls the headlight glare from the vehicles behind you.

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

Telematics buttons are also located on the mirror.

**Outside rearview mirror**

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

Be sure to adjust the mirror angles before driving.

The mirrors can be adjusted remotely with the remote switch. The mirror heads can be folded back to prevent damage during an automatic car wash or when passing through a narrow street.

**⚠ CAUTION**

**Rearview mirrors**

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

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

**⚠ WARNING****Mirror adjustment**

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

**Adjusting the outside rearview mirrors**

Adjusting the rearview mirrors:

1. Move the L (Front left side) or R (Front right side) switch (1) to select the rearview mirror you would like to adjust.
2. Use the mirror adjustment control (2) to position the selected mirror up, down, left or right.

**⚠ CAUTION**

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

**Folding the outside rearview mirror**

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



## Charging door

To charge the vehicle, open the charging door.

### Opening the charging door



1. Be sure to turn off the power after switching off the various power switches and turning the shifter dial to parking (P).
2. Apply the parking brake on while the brake pedal is depressed.
3. Open the charging door by touching the (▶) of the charging door. The charging door will not open if the vehicle door is locked.

#### \* NOTICE

If you cannot open the charging door due to freezing weather, tap lightly or remove any ice near the charging door. Do not try to forcibly open the charging door. The charging door may be broken if it is forcibly opened.

#### \* NOTICE

The charging door will unlock when Driver's door is unlocked.

To unlock charging door:

- Press the unlock button on your smart key

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

The charging door will lock when all doors are locked

To lock charging door:

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

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

#### \* NOTICE

If the charging door does not open, proceed as follows.

- Check the auxiliary battery.
- If it does not open continuously, have your vehicle inspected by an authorized Kia dealer.

### Closing the charging door



1. Close the charging inlet cover securely.
2. Close the charging door securely.

## Instrument cluster

The instrument cluster displays various information about the vehicle's condition.



\* The actual cluster and contents of the LCD display in the vehicle may differ from the illustration.

- 1 Power/Charge gauge
- 2 Speedometer
- 3 Warning and indicator lights
- 4 LCD display (including Trip computer)
- 5 Battery SOC (State of Charge) gauge
- 6 Distance to empty



## Instrument cluster control



- If you hold the illumination control button ("+" or "-"), the brightness will be changed continuously.



- **A: Illumination**  
If the brightness reaches to the maximum or minimum level, an alarm will sound.

## Gauges

The gauges display various information such as the speed of the vehicle, the amount of charge of the battery, and so on.

## Speedometer



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

## Power/Charge gauge



The Power/Charge gauge shows the energy consumption rate of the vehicle and the charge/discharge status of the regenerative brakes.

- **POWER:** It shows the energy consumption rate of the vehicle when driving uphill or accelerating. The more electric energy is used, the higher the gauge level.

- CHARGE: It shows the charging status of the battery when it is being charged by the regenerative brakes (decelerating or driving on a downhill road). The more electric energy is charged, the lower the gauge level.

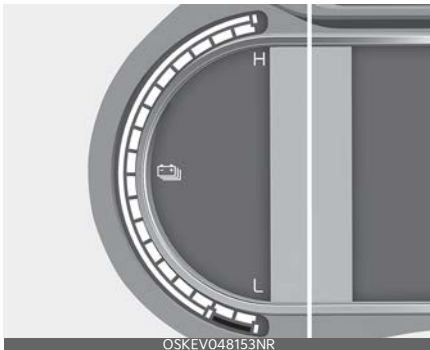
### Torque gauge



OSKEV049412NR

The torque gauge shows the real-time torque value while driving when SPORT mode is selected by pressing the DRIVE MODE button.

### State of Charge (SOC) gauge for high voltage battery



OSKEV048153NR

The SOC gauge shows the charging status of the high voltage battery. "L (Low)" position on the indicator indicates that

there is not enough energy in the high voltage battery. "H (High)" position indicates that the driving battery is fully charged. When driving on highways or motorways, make sure to check in advance if the driving battery is charged enough.

When there are 2 gauge bars (near the "L (Low)" area) on the SOC gauge, the warning lamp turns ON alert you of the battery level.



OSKEV049154NR

When the warning lamp turns ON the vehicle can drive an additional 20~30 km (12~18 miles) depending on the driving speed, heater/air conditioner, weather, driving style, an other factors. Charging is required.

### \* NOTICE

When there are 1-2 gauge bars left for the high voltage battery, the vehicle speed is limited and then eventually the vehicle will turn OFF. Charge the vehicle immediately.

### Distance to empty



- The distance to empty is the estimated distance the vehicle can be driven with the remaining level of the high voltage battery.
- The distance to empty is displayed differently according to the selected drive mode in the Drive Mode Integrated Control System.

\* For more details, refer to "Drive mode integrated control system" on page 6-40.

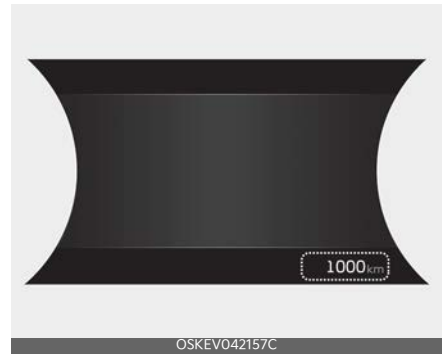
### Additional distance to empty from regenerative braking



The additional distance to empty which is converted from the energy regenerated by the regenerative braking is dis-

played if the ECO/ECO+ mode is selected by pressing the Drive Mode button. The display is initialized to 0 if the regenerative braking stops because of acceleration, etc.

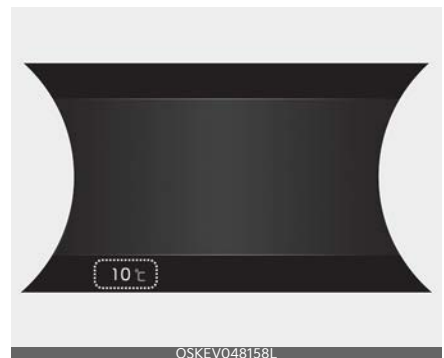
### Odometer



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

- Odometer range: 1,599,999 kilometers or 0-999,999 miles.

### Outside temperature gauge



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

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

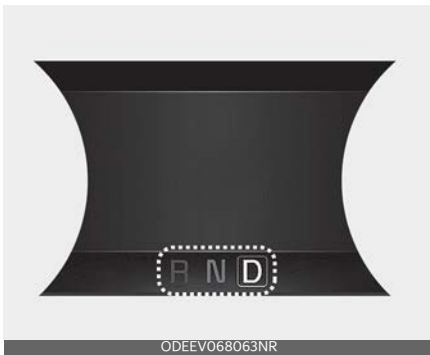
The outside temperature on the display may not change immediately like a general thermometer to prevent the driver from being distracted.

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

The temperature unit can be changed from the infotainment system screen.

### Reduction gear

This indicator displays which position is selected.

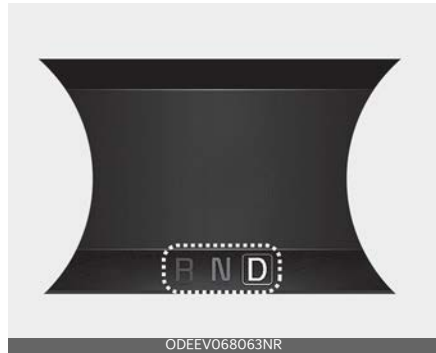


- Park: P
- Reverse: R
- Neutral: N
- Drive: D

### Shift indicator pop-up (if equipped)

The pop-up indicates the current gear position displayed in the cluster for about 2 seconds when shifting into other positions (P/R/N/D).

Type A



Type B



In R/N/D position, type A image is shown. In P position, type B image is shown.

### Regenerative braking level indicator

While using the regenerative brakes, you may select the regenerative braking level from 0 to 3 by pulling the paddle shifter.



\* For more details, refer to "Regenerative braking system" on page 6-16.

### Utility mode (if equipped)

The high voltage battery is used instead of the 12 V auxiliary battery for operating the electrical devices of the vehicle.



#### A: Utility Mode active

When driving is not necessary such as while camping or when stopping the vehicle for a long time, it is possible to use the electrical devices (audio, lights, etc.) for long hours.

The driver can activate the Utility Mode function when the following conditions are satisfied.

- The vehicle is in the ready (🚗) mode and the gear is shifted to P (Park).

- The Electronic Parking Brake (EPB) is applied.
- **EV Settings** → **Utility Mode** is selected on the infotainment system screen.

### Utility mode activation

When the system is activated:

- The indicator will turn off and the indicator will appear on the cluster.
- All electric devices are usable but the vehicle cannot be driven.
- The EPB can be cancelled by pressing the EBP switch.
- Gear cannot be shifted out of P (Park). If a shift attempt is made, a message "Shifting conditions not met" will be displayed on the cluster.

### Utility mode deactivation

The Utility Mode can be deactivated by pressing the START/STOP button to the OFF position. The function cannot be deactivated from the User Settings mode.




## LCD display

The LCD display shows trip computer and other information.

### LCD Display Control






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



- 1 : MODE button for changing modes
- 2 : MOVE switch for changing items
- 3 : OK: SELECT/RESET button for setting or resetting the selected item

## LCD Display Modes

The LCD display provides 4 modes. You can switch modes by pressing the Mode button.

		Mode			
		 Trip Computer	 Turn By Turn (TBT)	 Driving Assist	 Master warning
 Up/Down	Consumption Info	Route Guidance	Lane Keeping Assist	The Master Warning mode displays warning messages related to the vehicle when one or more systems is not operating normally.	
	Accumulated Info		Smart Cruise Control Lane Following Assist Highway Driving Assist		
	Drive Info		Driver Attention Warning		
	Driving Style		Tire Pressure		
	Energy Flow				

The information provided may differ depending on which functions are applicable to your vehicle.

### Trip computer mode



#### A: Consumption Info

The trip computer mode displays information related to vehicle driving parameters including drive info, driving style and energy flow.

\* For more details, refer to "Trip information (Trip computer)" on page 5-47.

### Turn By Turn (TBT) mode



This mode displays the state of the navigation.

### Driving Assist mode



This mode displays the state of:

- Lane Keeping Assist
- Smart Cruise Control
- Lane Following Assist
- Lane Following Assist
- Highway Driving Assist
- Tire Pressure

\* For more details, refer to each function information in "Driving your vehicle" on page 6-5.

### Tire pressure status

\* For more details, refer to "Tire Pressure Monitoring System (TPMS)" on page 7-6.

### Master warning mode



This warning light informs the driver the following situations.

- Driver assistance system malfunction, limitation or radar/camera blockage
- LED headlamp malfunction
- Lamp malfunction
- TPMS failure, low tire pressure, etc.

At this time, a Master Warning icon (⚠) will appear beside the Driving Assist icon (🚗), on the LCD display.

If the warning situation is resolved, the master warning light will be turned off and the Master Warning icon will disappear.



## LCD displays

LCD displays show the following information to drivers.

- Trip information
- LCD modes
- Warning messages

### Trip information (Trip computer)

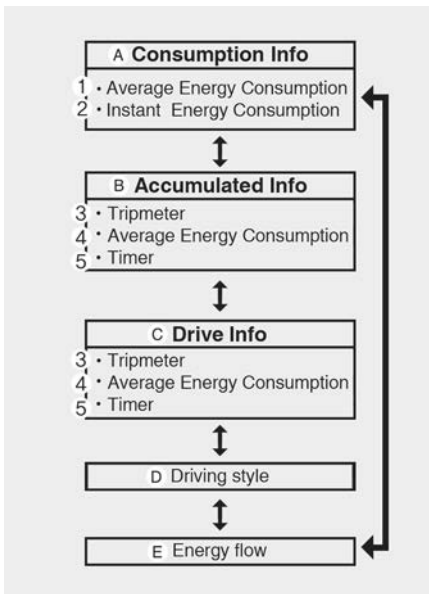
The trip computer is a microcomputer-controlled driver information system that displays information related to driving.

#### \* NOTICE

Some driving information stored in the trip computer resets if the battery is disconnected.

### Trip Modes

To change the trip mode, scroll the toggle the switch (∧ / ∨) on the steering wheel.



A: Consumption Info

B: Accumulated Info

C: Drive Info

D: Driving style

E: Energy flow

1: Average Energy Consumption

2: Instant Energy Consumption

3: Tripmeter

4: Average Energy Consumption

5: Timer

### Consumption info display



A: Consumption Info

### Average Energy Consumption (1)

The average energy consumption is calculated by the total driving distance and the high voltage battery consumption since the last average energy consumption reset.

### Resetting Average Energy Consumption

To automatically reset the average energy consumption select either menu from the infotainment system screen.

- At vehicle start: The average energy consumption will reset automatically whenever it has passed 4 hours after turning OFF the vehicle.

- After refueling: The average energy consumption will reset automatically when driving speed exceeds 1 km/h (1 mph), after recharging more than 10%.
- Manually: Average Energy Consumption will not be reset.

**\* NOTICE**

The vehicle must be driven for a minimum of 300 meters (0.19 miles) since the last ignition key cycle before the average energy consumption will be recalculated.

**Instant Energy Consumption (2)**

- The instantaneous energy consumption is displayed according to the bar graph in the LCD display while driving.

**Accumulated Info display**



**A: Accumulated Info**

This display shows the accumulated trip distance (1), the average energy consumption (2), and the total driving time (3).

The information is accumulated starting from the last reset.

To reset the details, press and hold the OK button when viewing the Accumu-

lated driving info. The trip distance, the average energy consumption, and total driving time will reset simultaneously.

The accumulated driving information will continue to be counted while the vehicle is in the ready (🚗) mode (for example, when the vehicle is in traffic or stopped at a stop light).

**\* NOTICE**

The vehicle must be driven for a minimum of 300 meters (0.19 miles) since the last ignition key cycle before the average accumulated driving information is recalculated.

**Drive Info display**



**A: Drive Info**

This display shows the trip distance (1), the average energy consumption (2), and the total driving time (3).

The information is combined for each ignition cycle. However, when the vehicle has been OFF for 4 hours or longer the Drive Info screen will reset.

The driving information will continue to be counted while the vehicle is in the ready (🚗) mode (for example, when

the vehicle is in traffic or stopped at a stop light).

**\* NOTICE**

The vehicle must be driven for a minimum of 300 meters (0.19 miles) since the last ignition key cycle before the driving information is recalculated.

**Energy flow**



**A: Energy flow**

The electric vehicle system informs the driver its energy flow in various operating modes. While driving, the current energy flow is specified in 3 modes.

**Driving style**



**A: Driving style**

This display shows whether the driver's driving style is Economical (1), Normal (2) or Aggressive (3).

- To reset the details, press and hold the OK button when viewing the Driving style.

**Driving info display**

At the end of each driving cycle, the Driving Info message is displayed.



**A: Driving info**

This display shows the trip distance (1), average energy consumption (2), driving time (3), charging time status (4) and climate time status (5).

This information is displayed for a few seconds when you turn off the vehicle, and then goes off automatically. The information is calculated for each time the vehicle is turned on.

### \* NOTICE

- If sunroof open warning is displayed in the cluster, the Driving Information message may not be displayed.
- To set the charging time and/or climate time, refer to a separately supplied car navigation system manual for detailed information.

## LCD display messages

### Press brake pedal to start vehicle

This warning message is displayed if the START/STOP button changes to the ACC position twice by pressing the button repeatedly without depressing the brake pedal.

You can start the vehicle by depressing the brake pedal.

### Key not in vehicle

The warning message will be displayed if the power of the vehicle is not OFF and the door is opened or closed without your smart key being inside the vehicle.

When attempting to start the vehicle, always have the smart key with you.

### Key not detected

This warning message is displayed if the smart key is not detected when you press the START/STOP button.

### Press START/STOP button again

This message is displayed if you were unable to start the vehicle when the START/STOP button was pressed.

If this occurs, attempt to start the vehicle by pressing the START/STOP button again.

If the warning message appears each time you press the START/STOP button, have your vehicle inspected by an authorized Kia dealer.

### Press START/STOP button with key

This warning message is displayed if you press the START/STOP button while the warning message "Key not detected" is displayed.

### Check BRAKE SWITCH fuse

This warning message is displayed if the brake switch fuse is disconnected.

You need to replace the fuse with a new one before starting the vehicle.

If that is not possible, you can start the vehicle by pressing the START/STOP button for 10 seconds in the ACC position.

### Shift to P to start vehicle

This warning message is displayed if you try to start the vehicle without shifting to the P (Park) position.

### Shift to P

This warning message is displayed if you try to turn off the vehicle with the gear in the N (Neutral) position.

At this time, the START/STOP button changes to the ACC position (If you press the START/STOP button once more, it will turn to the ON position).

### Low Key Battery

This warning message is displayed if the battery of the smart key is discharged while changing the START/STOP button to the OFF position.

### Battery discharging due to external electrical devices

This message is displayed if the battery voltage is weak due to any nonfactory electrical accessories (ex. dashboard camera). Be careful that the battery is not discharged.

If the warning message appears after removing the non-factory electrical accessories, have your vehicle inspected by an authorized Kia dealer.

### Door, Hood, Liftgate open warning display



This warning is displayed if any door or the hood or the liftgate is left open. The warning will indicate which door is open in the display.

### CAUTION

Before driving the vehicle, you should confirm that the door/hood/liftgate is fully closed. Also, check there is no door/hood/liftgate open warning light or message displayed on the instrument cluster.

### Sunroof open warning display (if equipped)



This warning is displayed if you turn off the vehicle when the sunroof is open. Close the sunroof securely before leaving your vehicle.

### Low Pressure warning display



**A: Low Tire Pressure**

This warning message is displayed if the tire pressure is low. The corresponding tire on the vehicle will appear.

\* For more details, refer to "Tire Pressure Monitoring System (TPMS)" on page 7-6.

### Wiper mode



**A: Front Wiper**

This indicator displays which wiper speed is selected using the wiper control.

You can activate or deactivate Wiper/Lights Display function from the User Settings mode in the cluster LCD display.

### Lights mode



**A: Lights**

This indicator displays which exterior light is selected using the lighting control.

You can activate or deactivate Wiper/Lights Display function from the infotainment system screen.

### Low washer fluid

This warning message is displayed if the washer fluid level in the reservoir is nearly empty.

Have the washer fluid reservoir refilled.

### Check headlight

This warning message is displayed if the headlights are not operating properly. A headlight bulb may need to be replaced.

Make sure to replace the burned out bulb with a new one of the same wattage rating.

### Check turn signal

This warning message is displayed if the turn signal lamps are not operating properly. A lamp may need to be replaced.

Make sure to replace the burned out bulb with a new one of the same wattage rating.

### **Check brake light**

This warning message is displayed if the stop lamps are not operating properly. A lamp may need to be replaced.

Make sure to replace the burned out bulb with a new one of the same wattage rating.

### **Check headlight LED**

This warning message is displayed if there is a problem with the LED headlight. Have your vehicle inspected by an authorized Kia dealer.

### **Check Forward Collision-Avoidance Assist (FCA)**

This warning message is displayed if there is a problem with Forward Collision-Avoidance Assist. Have your vehicle inspected by an authorized Kia dealer.

\* For more details, refer to "Forward Collision-Avoidance Assist (FCA) (Sensor Fusion) (if equipped)" on page 6-54.

### **Check Smart Cruise Control (SCC)**

This warning message is displayed if there is a problem with Smart Cruise Control. Have your vehicle inspected by an authorized Kia dealer.

\* For more details, refer to "Smart Cruise Control (SCC)" on page 6-102.

### **Check Lane Keeping Assist (LKA)**

This warning message is displayed if there is a problem with Lane Keeping Assist. Have your vehicle inspected by an authorized Kia dealer.

\* For more details, refer to "Lane Keeping Assist (LKA) (if equipped)" on page 6-68.

### **Check Driver Attention Warning (DAW)**

This warning message is displayed if there is a problem with Driver Attention Warning. Have your vehicle inspected by an authorized Kia dealer.

\* For more details, refer to "Driver Attention Warning (DAW)" on page 6-97.

### **Shift to P to charge**

This message is displayed if you connect the charging cable without the gear in the P (Park) position.

Shift to P (Park) before connecting the charging cable.

### **Remaining Time**

This message is displayed to notify the remaining time to charge the battery to the selected target battery charge level.

### **Unplug vehicle to start**

This message is displayed when you start the vehicle without unplugging the charging cable. Unplug the charging cable, and then turn on the vehicle.

### **Charging Door Open**

This message is displayed when the vehicle is driven with the charging door opened. Close the charging door and then start driving.

## Charging Stopped. Check the cable connection


This warning message is displayed when charging is stopped because the charging connector is not correctly connected to the charging inlet.

If this occurs, separate the charging connector and re-connect it and check whether there is any problem (external damage, foreign substances, etc.) with the charging connector and charging inlet.

If the same problem occurs when charging the vehicle with a replaced charging cable or genuine Kia portable charger, we recommend that you have your vehicle inspected by an authorized Kia dealer.

## Low Battery



When the high voltage battery level reaches below 8% for Cruise type and below 12% for City type, this warning message is displayed.

The warning light on the instrument cluster () will turn ON simultaneously.

Charge the high voltage battery immediately.

## Charge immediately. Power limited

When the high voltage battery level reaches below 3% for Cruise type and below 5% for City type, this warning message is displayed.

The warning light on the instrument cluster () and the power down indicator light () will turn on simultaneously.

The vehicle's power will be reduced to minimize the energy consumption of the high voltage battery. Charge the battery immediately.

## Low outside temperature may limit power output. Charge EV battery / Low EV battery temperature. Power limited

Both warning messages are displayed to protect electric vehicle system when outside temperature is low. If the high voltage battery charging level is low and parked outside in low temperature for a long time, vehicle power could be limited.

Charging the battery before driving helps increase power.

### \* NOTICE

If this warning message is still displayed even after the ambient temperature has increased, have your vehicle inspected by an authorized Kia dealer.

## EV Battery Overheated! Stop vehicle

This warning message is displayed to protect battery and electric vehicle system when the high voltage battery temperature is too high.

Turn off the START/STOP button and stop the vehicle so that the battery temperature decreases.



## Power limited

This warning message is displayed when the vehicle's power is limited due to any of the following reasons:

- When the high voltage battery is below a certain level, or voltage is decreasing.
- When the temperature of the motor or high voltage battery is too high or too low.
- When there is a problem with the cooling system or a failure that may interrupt normal driving.

### \* NOTICE

When this warning message is displayed, do not accelerate or start the vehicle suddenly.

Charge the battery immediately when the high voltage battery level is not enough.

---

## Stop vehicle and check power supply

This warning message is displayed when a failure occurs in the power supply system.

If this occurs, park the vehicle in a safe location and tow your vehicle to the nearest authorized Kia dealer and have your vehicle inspected by an authorized Kia dealer.

## Check Virtual Engine Sound System

This message is displayed when there is a problem with the Virtual Engine Sound System (VESS).

If this occurs, have your vehicle inspected by an authorized Kia dealer.

## Check electric vehicle system

This warning message is displayed when there is a problem with the electric vehicle control system.

Refrain from driving when the warning message is displayed.

If this occurs, have your vehicle inspected by an authorized Kia dealer.

## Warning and indicator lights

The warning light and indicator light indicate a situation where the driver should be careful and whether the various functions are activated.

### Warning lights

The warning light indicates situations that require the driver to pay attention.

#### \* NOTICE

### Warning lights

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

### Service Warning Light

#### This warning light appears:

- When the START/STOP button is in the ON position.
  - It appears for approximately 3 seconds and then goes off.
- When there is a problem with related parts of the electric vehicle control system, such as sensors, etc.

When the warning light appears while driving, or does not go OFF after starting the vehicle, have your vehicle inspected by an authorized Kia dealer.

### Air bag Warning Light

#### This warning light appears:

- Once you set the START/STOP button to the ON position.
  - It appears for approximately 6 seconds and then goes off.

- When there is a malfunction with the SRS.

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

### Seat Belt Warning Light

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

\* For more details, refer to "Seat belts" on page 4-17.

### Parking Brake & Brake Fluid Warning Light

#### This warning light appears:

- Once you set the START/STOP button to the ON position.
  - It appears for approximately 3 seconds
  - It remains on if the parking brake is applied.
- When the parking brake is applied.
- When the brake fluid level in the reservoir is low.
  - If the warning light appears with the parking brake released, it indicates the brake fluid level in reservoir is low.

#### If the brake fluid level in the reservoir is low:

1. Drive carefully to the nearest safe location and stop your vehicle.
2. With the vehicle stopped, check the brake fluid level immediately and add fluid as required (For more details, refer to "Brake fluid" on page 8-11). Then check all brake components for fluid leaks. If any leak on the brake system is still found, the warning light

remains on, or the brakes do not operate properly, do not drive the vehicle.

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

### Dual-diagonal braking system

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

With only one of the dual systems working, greater pedal pressure will be required to stop the vehicle.

Also, the vehicle will require increased stopping distance with only a portion of the brake system working.

### WARNING

#### Parking Brake & Brake Fluid Warning Light

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

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

### Anti-lock Brake System (ABS)

#### Warning Light

This warning light appears:

- When the START/STOP button is in the ON position.
  - It appears for approximately 3 seconds and then goes off.
- When there is a malfunction with the ABS (The normal braking system will

still be operational without the assistance of the ABS).

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

### Electronic Brake force Distribution (EBD) Warning Light BRAKE

**These two warning lights appear at the same time while driving:**

- When the ABS and regular brake system may not work normally.
  - In this case, have your vehicle inspected by an authorized Kia dealer.

### WARNING

#### Electronic Brake force Distribution (EBD) Warning Light

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

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

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

### Regenerative Brake Warning

#### Light (red color) (yellow color)

This warning light appears:

When the regenerative brake does not operate and the brake does not perform well. This causes the Brake Warning light (red) and Regenerative Brake Warning Light (yellow) to appear simultaneously.

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

The operation of the brake pedal may be more difficult than normal and the braking distance can increase.

### Electric Power Steering (EPS) Warning Light

#### This warning light appears:

- When the START/STOP button is in the ON position.
  - It remains on until the vehicle is started.
  - When there is a malfunction with the EPS.
- When there is a malfunction with the EPS.

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

### Charging System Warning Light



#### This warning light appears:

- When the 12-volt battery level is low or a failure occurs on the charging system such as LDC.
- If the warning light turns on while driving, move the vehicle to a safe location, turn off and turn on the vehicle again, and check if the warning light turns off. If the warning light remains on, have your vehicle inspected by an authorized Kia dealer.
- Even if the warning light turns off, have the vehicle inspected by an authorized Kia dealer.

If you drive the vehicle while the warning light is on, vehicle speed may be limited and the 12-volt battery may be discharged.

\* LDC: Low voltage DC-DC Converter.

### High Voltage Battery Low Level Warning Light

#### This warning light appears:

- When the high voltage battery level is low. When the warning light turns ON, charge the battery immediately.

### Power Down Indicator

#### This indicator light appears:

When the power is limited for the safety of the electric vehicle.

Power can be limited for the following reasons.

- The high voltage battery level is below a certain level or voltage is decreasing.
- The temperature of the motor or high voltage battery is too high or too low.
- There is a problem with the cooling system, or a failure that may interrupt normal driving.

#### **\* NOTICE**

Do not accelerate or start the vehicle suddenly when the power down indicator light is ON.

Charge the battery immediately when the high voltage battery level is not enough.

**⚠ CAUTION**

When the remaining battery power is low, the power down indicator light turns on and the output is limited. In that case, charge the battery immediately otherwise it could be difficult to climb hills or the vehicle may move backward.

**Low Tire Pressure Warning Light****This warning light appears:**

- When the START/STOP button is in the ON position.
    - It appears for approximately 3 seconds and then goes off.
  - When one or more of your tires are significantly under inflated.
- \* For more details, refer to "Tire Pressure Monitoring System (TPMS)" on page 7-6.

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

- When there is a malfunction with the TPMS.
 

In this case, have your vehicle inspected by an authorized Kia dealer.
- \* For more details, refer to "Tire Pressure Monitoring System (TPMS)" on page 7-6.

**⚠ WARNING****Low tire pressure**

- Significantly low tire pressure makes the vehicle unstable and can contrib-

ute to loss of vehicle 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 to severe and sudden tire damage caused by external factors.
- If you notice any vehicle instability, immediately take your foot off the accelerator pedal, apply the brakes gradually with light force, and slowly move to a safe position off the road.

**Master Warning Light** **This warning light informs the driver the following situations**

- Forward Collision-Avoidance Assist malfunction (if equipped)
- Forward Collision-Avoidance Assist radar blocked (if equipped)
- Blind-Spot Collision Warning malfunction (if equipped)
- Blind-Spot Collision Warning radar blocked (if equipped)
- LED headlamp malfunction (if equipped)
- Lamp malfunction
- High Beam Assist malfunction (if equipped)
- Smart Cruise Control malfunction (if equipped)
- Smart Cruise Control radar blocked (if equipped)

To identify the details of the warning, look at the LCD display.

### Electronic Parking Brake (EPB) Warning Light

#### This warning light appears:

- When the START/STOP button is in the ON position.
  - It appears for approximately 3 seconds and then goes off.
- When there is a malfunction with the EPB.
 

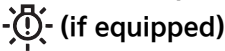
In this case, have your vehicle inspected by an authorized Kia dealer.

#### \* NOTICE

### Electronic Parking Brake (EPB) Warning Light

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

### LED Headlamp Warning Light



#### This warning light appears:

- When the START/STOP button is in the ON position.
  - It appears for approximately 3 seconds and then goes off.
- When there is a malfunction with the LED headlamp.

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

#### This warning light blinks:

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

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

#### CAUTION

### LED Headlamp Warning Light

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

### Forward Safety Warning Light



#### This indicator light appears:

- When the START/STOP button is in the ON position.
  - It appears for approximately 3 seconds and then goes off.
- When the Forward Collision-Avoidance Assist is turned off.
- When the radar sensor or cover is blocked with dirt or snow. Check the sensor and cover and clean them by using a soft cloth.
- When there is a malfunction with Forward Collision-Avoidance Assist. If this occurs, have your vehicle inspected by an authorized Kia dealer.

\* For more details, refer to "Forward Collision-Avoidance Assist (FCA) (Sensor Fusion) (if equipped)" on page 6-54.

### 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.

### Indicator lights

The indicator light indicates whether the various functions are activated.

## Electronic Stability Control (ESC)

### Indicator Light

### This indicator light appears:

- When the START/STOP button is in the ON position.
  - It appears for approximately 3 seconds and then goes off.
- When there is a malfunction with the ESC.
 

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 6-34.

## Electronic Stability Control (ESC)

### OFF Indicator Light

### This indicator light appears:

- When the START/STOP button is in the ON position.

- It appears for approximately 3 seconds and then goes off.

- When you deactivate the ESC by pressing the ESC OFF button.



\* For more details, refer to "Electronic Stability Control (ESC)" on page 6-34.

## Charging Cable Connection Indicator

This indicator appears in red when the charging cable is connected.

## Immobilizer Indicator Light (With Smart Key)

### This indicator light appears for up to 30 seconds:

- When the vehicle detects the smart key in the vehicle with the START/STOP button in the ACC or ON position.
  - Once the smart key is detected, you can start the vehicle ( indicator ON).
  - The indicator light goes off after starting the vehicle ( indicator ON).

### This indicator light blinks for a few seconds:

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

### This indicator light appears for 2 seconds and goes off:

- If the smart key is in the vehicle and the START/STOP button is ON, but

the vehicle cannot detect the smart key.

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

**This indicator light blinks:**

- When the battery of the smart key is weak.
- When there is a malfunction with the immobilizer system.

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

**Turn Signal Indicator Light** 

**This indicator light blinks:**

- When you turn the turn signal light on.
- If any of the following occurs, there may be a malfunction with the turn signal system.

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

- The indicator light does not blink but appears.
- The indicator light blinks more rapidly.
- The indicator light does not appear at all.

**High Beam Indicator Light** 

**This indicator light appears:**

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

**Light ON Indicator Light** 

**This indicator light appears:**

- When the tail lights or headlights are on.

**Front Fog Indicator Light** 

**This indicator light appears:**

- When the front fog lights are on.

**Ready Indicator** 

**This indicator appears:**

When the vehicle is ready to be driven.

- ON: Normal driving is possible.
- OFF: Normal driving is not possible, or a problem has occurred.
- Blinking: Emergency driving.

When the ready indicator goes OFF or blinks, there is a problem with the system. In this case, have your vehicle inspected by an authorized Kia dealer.

**Lane Safety Indicator** 

The Lane Safety indicator will appear when you turn the Lane Keeping Assist on by pressing the Lane Safety button.

If there is a problem with the function, the yellow Lane Safety indicator will appear.

\* For more details, refer to "Lane Keeping Assist (LKA) (if equipped)" on page 6-68.



## Cruise Indicator Light CRUISE (if equipped)

This indicator light appears:

- When Smart Cruise Control is enabled.
- \* For more details, refer to "Smart Cruise Control (SCC)" on page 6-102.

## SPORT Mode Indicator Light

 (if equipped)

This indicator light appears:

- When you select "SPORT" mode as drive mode.
- \* For more details, refer to "Drive mode integrated control system" on page 6-40.

## ECO Mode Indicator Light



This indicator light appears:

- When you select "ECO" mode as drive mode.
- \* For more details, refer to "Drive mode integrated control system" on page 6-40.

## ECO+ Mode Indicator

This indicator light appears:

- When you select "ECO+" mode as drive mode.
- \* For more details, refer to "Drive mode integrated control system" on page 6-40.

## Vehicle settings (infotainment system)



1. Press the **SETUP** button on the head unit of the infotainment system.
2. Select **Vehicle** and change the setting of the features.

Vehicle Settings in the infotainment system provides user options for a variety of settings including door lock/unlock features, convenience features, driver assistance settings, etc.

- **Vehicle settings**
  - Driver assistance
  - Head-up display
  - Cluster
  - Climate
  - Seat
  - Lights
  - Door
  - Convenience

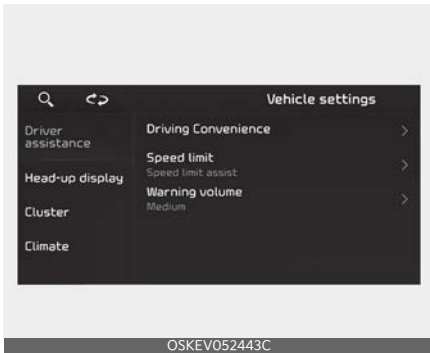
### **WARNING**

Do not operate the **Vehicle settings** while driving. This may cause distraction resulting in an accident.

**\* NOTICE**

- The information provided may differ depending on which features are applicable to your vehicle.
- 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.

**Driver assistance settings (infotainment system)**



Select **Settings** → **Vehicle** → **Driver assistance** on the infotainment system screen to set the Driver Assistance function.

- **Driver assistance**
  - **Driving convenience**
  - **Speed limit**
  - **Warning volume**
  - **DAW (Driver Attention Warning)**
  - **Driving safety**
  - **Parking safety**

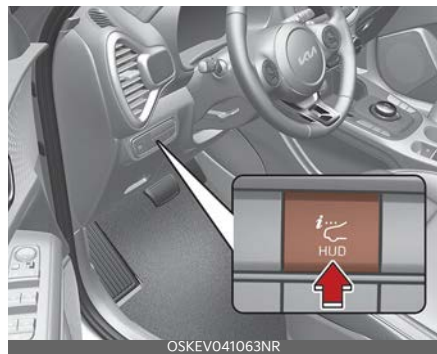
**Head-Up Display (HUD) (if equipped)**

The Head-Up Display (HUD) is a transparent display which projects a shadow of some information of the instrument cluster and navigation on the HUD screen.



**HUD screen operation**

The hidden screen will go up when you press the screen operation switch on the left side of the lower part of crash pad and if you press the switch again, the screen will return to its original hidden position.



- The Head-Up Display closes automatically when the door is locked with the smart key in the vehicle OFF state.

- For smart key vehicles, the lock/unlock button on the outside handle of the front door automatically closes the Head-Up Display when the door is locked.
- If you do not lock the door in the vehicle OFF state, the Head-Up Display closes automatically after about 5 minutes.
- The head-Up Display image on the HUD screen may not be visible when:
  - Sitting posture is bad.
  - Wearing a polarized sunglasses.
  - There is an object on the cover of the HUD.
  - Driving on a wet road.
  - Lighting is turned on inside the vehicle.
  - Any light comes from the outside.
  - Wearing inadequate glasses for your eyesight.
- If the HUD image is not shown well, adjust the height, rotation or illumination of the HUD in the cluster.
- When the HUD needs inspection or repair, have your vehicle inspected or repaired by an authorized Kia dealer.
- Do not manually adjust the shutter and combiner. The images may not be visible due to fingerprints. Excessive external force during operation may cause damage.
- Do not place any objects near the Head-Up Display. Interference with the object during operation may damage it.
- Do not place any objects around the Head-Up Display. It might enter the narrow gap of the cover and affects operation.
- Do not place any liquids around the Head-Up Display. Water or other liquids can break when it flows into the Head-Up Display.
- Do not expose the combiner to strong light. The combiner may be deformed.
- Do not use organic solvents, detergents or abrasive cloths to clean the Head-Up Display. Wipe it off with a soft cloth. Do not strongly wipe Head-Up Display shutter. it might be damage
- For safety, be sure to adjust the settings when vehicle stopped.
- When opening, closing and height adjusting the Head-Up Display, noise may be generated by the motor and gear

### WARNING

#### Head-Up Display

For safety, be sure to adjust the settings when vehicle stopped.

### CAUTION

- Do not place any accessories on the Head-Up Display shutter. It might fall into Head-Up Display and can damage to Head-Up Display.
- Do not attach stickers or accessories to the Head-Up Display and the crash pad.

## HUD Information



- 1 Turn By Turn navigation information
- 2 Road signs
- 3 Speedometer
- 4 SCC setting speed
- 5 SCC Vehicle Distance information
- 6 Lane Safety information
- 7 Blind-Spot Safety information
- 8 Warning lights (Low fuel)
- 9 AV mode information

\* Road Signs and Turn By Turn navigation information are available depending on the region.

## HUD setting

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

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

\* For more details, refer to "Head-Up Display (HUD) (if equipped)" on page 5-64

## **WARNING**

The Head-Up Display is a supplemental feature. Do not solely rely on this feature. Always pay attention to road and traffic conditions.

## Lighting

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

### Battery saver function

The purpose of this feature is to prevent the battery from being discharged if the lights are left in the ON position. The system automatically shuts off the parking lights after the vehicle is off and the driver's door is opened.

However, the position lamps stay ON even when the driver-side door is opened if the light switch is operated after the vehicle is turned off.

If necessary, to keep the lamps on turn the position lamps OFF and ON again using the headlamp switch on the steering column after the vehicle is turned off.

### Headlight escort function

If you turn the START/STOP button to the ACC or OFF position with the headlights ON, the headlights remain on for about 5 minutes.

However, if the driver's door is opened and closed, the headlights are turned off after 15 seconds.

The headlights can be turned off by pressing the lock button on the smart key one more or turning the light switch to the OFF position.

### Daytime Running Light (DRL)

The Daytime Running Light (DRL) can make it easier for others to see the front of your vehicle during the day.

DRL can be helpful in many different driving conditions, and it is especially helpful after dawn and before sunset.

The DRL will turn the dedicated lamp OFF when:

- The headlamps are on.
- The tail lamp is in the ON position.
- The vehicle is off.
- The front fog lamps are on.
- The parking brake is engaged.

### Off position



The parking lamp and headlamp will be turned ON or OFF automatically depending on the amount of daylight as measured by the ambient light sensor on the center dash when the parking brake is not engaged and shift gear is not in P (Park). The parking lamp and headlamp will be turned OFF when the vehicle speed is less than 5 km/h and parking brake is engaged or shift gear is in P (Park).

### Lighting control

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



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

1. OFF position / DRL off position.
2. Auto light position
3. Position & Tail light
4. Headlight position

### Position & Tail lamp



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

### Headlight position



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

### \* NOTICE

The START/STOP button must be in the ON position to turn on the headlights.

### Auto light



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

**CAUTION**

- Never place anything over the sensor (1) located on the instrument panel as this will ensure better auto-light system control.
- Don't clean the sensor using a window cleaner, the cleaner may leave a light film which could interfere with sensor operation.
- If your vehicle has window tint or other types of metallic coating on the front windshield, the Auto light system may not work properly.

**Operating high beam**



To turn on the high beam headlamp:

- Push the lever away from you.  
The lever will return to its original position.  
The high beam indicator will light when the headlight high beams are switched on.  
To prevent the battery from being discharged, do not leave the lights on for a prolonged time while the vehicle is off.

To flash the high beams:

- Pull the lever towards you.

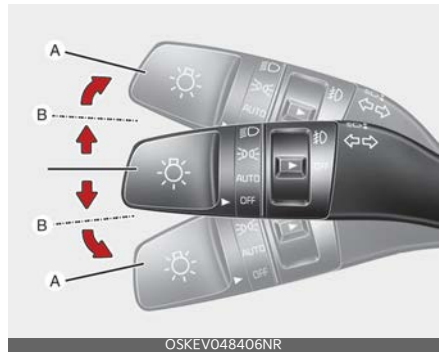


It will return to the normal (low beam) position when released. The headlight switch does not need to be on to use this flashing feature.

**WARNING**

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

**Operating turn signals and lane change signals**



The START/STOP button in the must be on for the turn signals to function.

To turn on the turn signals:

- Move the lever up or down (A).  
The green arrow indicators on the instrument panel indicate which turn signal is operating. They will self-cancel after a turn is completed. If the indicator continues to flash after a turn, manually return the lever to the OFF position.

To signal a lane change:

- Move the turn signal lever slightly and hold it in position (B).  
The lever will return to the OFF position when released.

If an indicator stays on and does not flash or if it flashes abnormally, one of the turn signal bulbs may be burned out and will require replacement.

**\* NOTICE**

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

**One-touch lane change function**

To activate an one-touch lane change function, move the turn signal lever slightly and then release it. The lane change signals will blink 3 times.

**Operating front fog light**

Fog lights are designed to provide improved visibility when visibility is poor due to fog, rain or snow, etc.



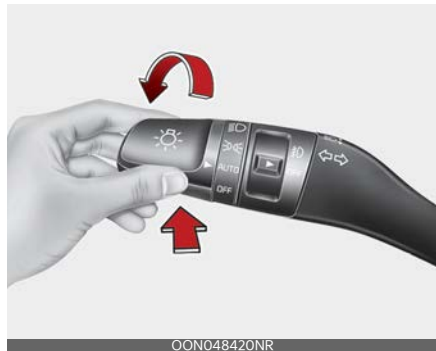
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The fog lights will turn on when the fog light switch (1) is turned to the on position after the headlight is turned on.

To turn off the fog lights:

- Turn the fog light switch (1) to the OFF position.

**High Beam Assist (HBA) (if equipped)**



OON048420NR

High Beam Assist is a function that automatically adjusts the headlamp range (switches between high beam and low beam) depending on the brightness of detected vehicles and certain road conditions.



## Detecting sensor

Front view camera



The front view camera is used as a detecting sensor to detect ambient light and brightness while driving. Refer to the picture above for the detailed location of the detecting sensor.

### **⚠ CAUTION**

Always keep the front view camera in good condition to maintain optimal performance of High Beam Assist.

For more details on the precautions of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA) (Sensor Fusion) (if equipped)" on page 6-54.

## High Beam Assist Setting



### A: Vehicle Settings

#### 1 Lights

#### 2 HBA (High Beam Assist)

With the vehicle in the ON position, select **Lights** → **HBA (High Beam Assist)** from the Settings menu to turn on High Beam Assist function.

### **\* NOTICE**

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.

### **⚠ WARNING**

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

## High Beam Assist operation

- After selecting **HBA (High Beam Assist)** in the Settings menu, High Beam Assist will operate by following the procedure below.
  - Place the headlamp switch in the AUTO position and push the headlamp lever towards the instrument cluster. The High Beam Assist (HBA) icon (HBA) will appear on the instrument cluster.

indicator light will appear on the cluster and the function will be enabled.

- When the function is enabled, high beam will turn on when vehicle speed is above 40 km/h (25 mph). When vehicle speed is below 25 km/h (15 mph), high beam will not turn on. The High Beam (H) indicator light will appear on the cluster when high beam is on.
- When High Beam Assist is operating, if the headlamp lever or switch is used, the function operates as follow:
  - If the headlamp lever is pulled towards you when the high beam is off, the high beam will turn on. When you let go of the headlamp lever, High Beam Assist will turn on again.
  - If the headlamp lever is pulled towards you when the high beam is on, the low beam will turn on and High Beam Assist will be canceled.
  - If you push the light switch towards the instrument cluster, high beam is turned on and High Beam Assist is released.
  - If the headlamp switch is placed from AUTO to another position (headlamp/position/off), High Beam Assist will turn off and the corresponding lamp will turn on.
- When High Beam Assist is operating, high beam switches to low beam if any of the following conditions occur:
  - When the headlamp of an oncoming vehicle is detected.
  - When the tail lamp of a vehicle in front is detected.
  - When the headlamp or tail lamp of a motorcycle or a bicycle is detected.

- When the surrounding ambient light is bright enough that high beams are not required.
- When streetlights or other lights are detected.

**\* 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**



**A: Check High Beam Assist system**

When High Beam Assist is not working properly, the warning message will appear and warning light (▲) will appear on the cluster. We recommend that you have your vehicle inspected by an authorized Kia dealer/service partner.

**Limitations of High Beam Assist**

- Light from a vehicle is not detected because of lamp damage, or because it is hidden from sight, etc.
- Headlamp of a vehicle is covered with dust, snow or water.
- A vehicle's headlamps are off but the fog lamps are on and etc.

- There is a lamp that has a similar shape as a vehicle's lamp.
- Headlamps have been damaged or not repaired properly.
- Headlamps are not aimed properly.
- Driving on a narrow curved road, rough road, uphill or downhill.
- Vehicle in front is partially visible on a crossroad or curved road.
- There is a traffic light, reflecting sign, flashing sign or mirror ahead.
- There is a temporary reflector or flash ahead (construction area).
- The road conditions are bad such as being wet, iced or covered with snow.
- A vehicle suddenly appears from a curve.
- The vehicle is tilted from a flat tire or is being towed.
- Light from a vehicle is not detected because of exhaust fume, smoke, fog, snow, etc.

**\* NOTICE**

For more details on the limitations of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA) (Sensor Fusion) (if equipped)" on page 6-54.

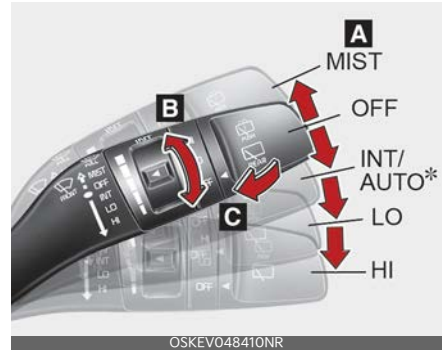
**▲ WARNING**

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

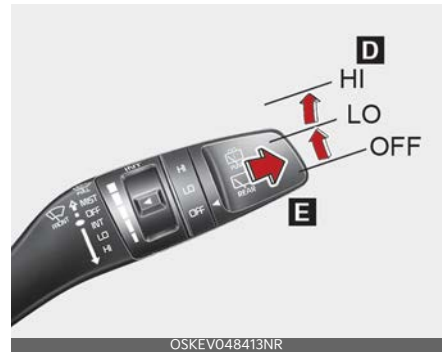
**Wipers and washers**

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

Front windshield wiper/washer



Rear windshield wiper/washer



**A: Wiper speed control (front)**

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

**B: Intermittent control wipe time adjustment**

**C: Wash with brief wipes (front)**

**D: Rear wiper/washer control**

- HI - Continuous wipe
- LO - Intermittent wipe
- OFF - Off

**E: Wash with brief wipes (rear)**

\*: if equipped

**Windshield washers**

Operates as follows when the START/STOP button is turned ON.

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

**OFF:** Wiper is not in operation

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

**LO:** Normal wiper speed

**HI:** Fast wiper speed

**\* NOTICE**

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

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

**Auto control (if equipped)**



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

To vary the speed setting, turn the speed control knob (1).

If the wiper switch is set in AUTO mode when the START/STOP button is ON position, the wiper will operate once to perform a self-check of the system. Set the wiper to OFF position when the wiper is not in use.

**⚠ WARNING**

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

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

- Do not put pressure on the windshield glass.

**⚠ CAUTION**

- When washing the vehicle, set the wiper switch in the OFF position to stop the auto wiper operation.  
The wiper may operate and be damaged if the switch is set in the AUTO mode while washing the vehicle.
- Do not remove the sensor cover located on the upper end of the passenger side windshield glass. Damage to system parts could occur and may not be covered by your vehicle warranty.
- When starting the vehicle in winter, set the wiper switch in the OFF position. Otherwise, wipers may operate and ice may damage the windshield wiper blades. Always remove all snow and ice and defrost the windshield properly prior to operating the windshield wipers.

**Operating windshield washer**

Use this function when the windshield is dirty.



1. Move the wiper speed control switch to the OFF position.

2. Pull the lever gently toward you to spray washer fluid on the windshield and to run the wipers 1-3 cycles.

The spray and wiper operation will continue until you release the lever.

If the washer does not work, check the washer fluid level. If the fluid level is not sufficient, you will need to add appropriate non-abrasive windshield washer fluid to the washer reservoir.

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

**⚠ CAUTION**

**Washer pump**

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

**⚠ CAUTION**

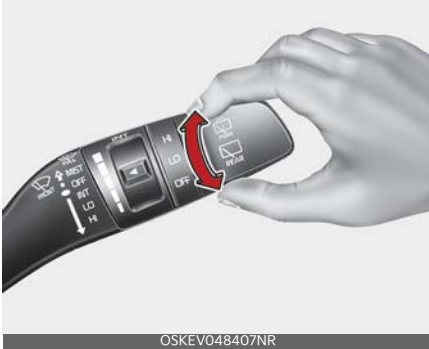
**Wipers & windshields**

- To prevent possible damage to the wipers or windshield, do not operate the wipers when the windshield is dry.
- To prevent damage to the wiper blades, do not use gasoline, kerosene, paint thinner, or other solvents on or near them.
- To prevent damage to the wiper arms and other components, do not attempt to move the wipers manually.

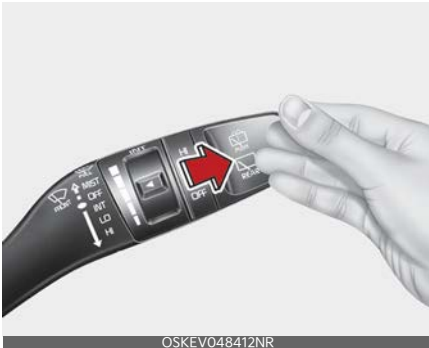
## Operating rear window wiper and washer switch

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

- Turn the switch to the desired position to operate the rear wiper and washer.



- HI: Continuous wipe
- LO: Intermittent wipe
- OFF: OFF
- Push the lever away from you to spray rear washer fluid and to run the rear wipers 1~3 cycles.



The spray and wiper operation will continue until you release the lever.

## Interior lights

This vehicle is equipped with lights throughout the vehicle to appear the interior.

Do not use the interior lights for extended periods when the vehicle is off. It may cause battery discharge.

### ⚠ WARNING

#### Interior Lights

Do not use the interior lights when driving in the dark. Accidents could happen because the view may be obscured by interior lights.

#### Automatic turn off function

The interior lights automatically turn off approximately 20 minutes after START/STOP button is turned off, if the lights are in the ON position.

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


#### Map lamp

Type A



Type B






- Press the lens (1) to turn ON the map lamp.  
To turn the map lamp OFF press the lens (1) again.
-  (2): DOOR mode
  - The map lamp and room lamp come on when a door is opened. The lamps go out after approximately 30 seconds.
  - The map lamp and room lamp come on for approximately 30 seconds when doors are unlocked with a smart key as long as the doors are not opened.
  - The map lamp and room lamp will stay on for approximately 20 minutes if a door is opened with the START/STOP button in the ACC or OFF position.
  - The map lamp and room lamp will stay on continuously if the door is opened with the START/STOP button in the ON position.

- The map lamp and room lamp will go out immediately if the START/STOP button is changed to the ON position or all doors are locked.
- To turn off the DOOR mode, press the DOOR button (2) once again (not pressed).

**\* NOTICE**

The DOOR mode and ROOM mode cannot be selected at the same time.

**Front Room Lamp:**

- Type A
  -  (3): Press this switch to turn the front and rear room lamps on.
  -  (4): Press this switch to turn the front and rear room lamps off.
- Type B
  -  (3): Press this switch to turn the front and rear room lamps on and off.

**Room lamp**

Type A



Type B



- : The light stays on at all times.

### Liftgate room lamp

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





### \* NOTICE

The liftgate lamp comes on as long as the liftgate lid is open. To prevent unnecessary charging system drain, close the liftgate lid securely after using the liftgate.

### Vanity mirror lamp (if equipped)



- Push the switch to turn the light on or off.
  - : The lamp will turn on if this button is pressed.
  - : The lamp will turn off if this button is pressed.

### ⚠ CAUTION

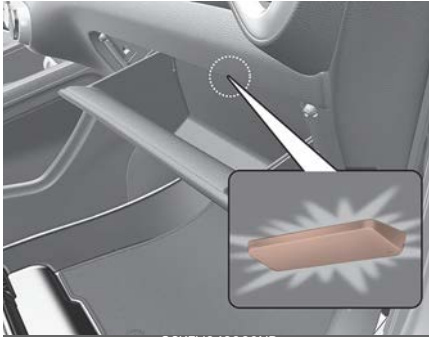
#### Vanity mirror lamp

Always have the switch in the off position when the vanity mirror lamp is not in use. If the sun visor is closed without the lamp off, it may discharge the battery or damage the sun visor.



## Glove box lamp

The glove box lamp comes on when the glove box is opened.



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### **CAUTION**

To prevent unnecessary charging system drain, close the glove box securely after using the glove box.

## Welcome system (if equipped)

The welcome system is a function that appears the surroundings or the interior when the driver approaches or exits the vehicle.

### Headlight (Headlamp) escort function

The headlights (and/or taillights) remain on for approximately 5 minutes after the vehicle is turned off. However, if the driver's door is opened and closed, the headlights are turned off after 15 seconds.

The headlights can be turned off by pressing the lock button on the smart key twice or turning off the light switch from the headlight or Auto light position.

### Interior light

When the interior light switch is in the DOOR position and all doors (and lift-gate) are locked and closed, the room lamp will come on for 30 seconds if any of the following occurs:

- With the smart key system
  - When the door unlock button is pressed on the smart key.
  - When the button of the outside door handle is pressed.

At this time, if you press the door lock button, the lamps will turn off immediately.

## Defroster

The vehicle is equipped with a defroster for removing frost or fog from the rear window.

### ⚠ CAUTION

#### Conductors

To prevent damage to the conductors bonded to the inside surface of the rear window, never use sharp instruments or window cleaners containing abrasives to clean the window.

If you want to defrost and defog the front windshield, refer to "Windshield defrosting and defogging" on page 5-95.

#### Operating rear window defroster

The defroster heats the window to remove frost, fog and thin ice from the rear window, while the vehicle is on.

If there is heavy accumulation of snow on the rear window, brush it off before operating the rear defroster.



OSKEV048306NR

To activate the rear window defroster:

- Press the rear window defroster button located in the center fascia switch 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 START/STOP button is turned off.

To turn off the defroster:

- Press the rear window defroster button again.

#### Operating outside mirror defroster


If your vehicle is equipped with the outside rearview mirror defrosters, they will operate at the same time you turn on the rear window defroster.

## Climate control system




The climate control system uses cooling and heating to help maintain a pleasant environment inside the vehicle.

### System operation

#### Ventilation

1. Set the mode to the  position.
2. Set the air intake control to the outside (fresh) air position.
3. Set the temperature control to the desired position.
4. Set the fan speed control to the desired speed.

#### Heating

1. Push the HEAT button to turn the heater on (indicator light will appear).
2. Set the mode to the  position.
3. Set the air intake control to the outside (fresh) air position.
4. Set the temperature control to the desired position.
5. Set the fan speed control to the desired speed.
6. If dehumidified heating is desired, turn the air conditioning system on.
  - If the windshield fogs up, set the mode to the  or  position.

#### Operation tips


- To keep dust or unpleasant fumes from entering the vehicle through the ventilation system, temporarily set the air intake control to the recirculated air position. Be sure to return the control to the fresh air position when the irritation has passed to keep fresh air

in the vehicle. This will help keep the driver alert and comfortable.

- Air for the heating/cooling system is drawn in through the grilles just ahead of the windshield. Care should be taken that these are not blocked by leaves, snow, ice or other obstructions.
- To prevent interior fog on the windshield, set the air intake control to the fresh air position and fan speed to the desired position, turn on the air conditioning system, and adjust the temperature control to desired temperature.

#### Air conditioning

All Kia Air Conditioning Systems are filled with R-1234yf refrigerant.

1. Start the vehicle. Press the air conditioning button.
2. Set the mode to the  position.
3. Set the air intake control to the outside-air or recirculated air position.
4. Adjust the fan speed control and temperature control to maintain maximum comfort.
  - When maximum cooling is desired, set the temperature control to the extreme left position, set the mode control to the MAX A/C position, then set the fan speed control to the highest speed.

#### CAUTION

##### Excessive A/C Use

When using the air conditioning system, monitor the temperature gauge closely while driving up hills or in heavy traffic when outside temperatures are high. Air conditioning system operation may cause vehicle overheating. Continue to

use the blower fan but turn the air conditioning system off if the temperature gauge indicates vehicle overheating.

### **⚠ CAUTION**

- The refrigerant system should only be serviced by trained and certified technicians to insure proper and safe operation.
- The refrigerant system should be serviced in a well-ventilated place.
- The air conditioning evaporator (cooling coil) shall never be repaired or replaced with one removed from a used or salvaged vehicle and new replacement MAC evaporators shall be certified (and labeled) as meeting SAE Standard J2842.

### **⚠ CAUTION**

When opening the windows in humid weather, air conditioning may create water droplets inside the vehicle. Since excessive water droplets may cause damage to electrical equipment, air conditioning should only be used with the windows closed.

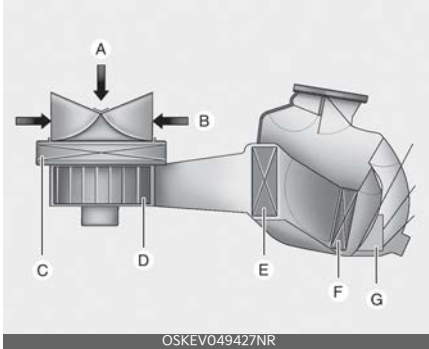
- During air conditioning system operation, you may occasionally notice a slight change in vehicle speed as the air conditioning compressor cycles. This is a normal system operation characteristic.
- Use the air conditioning system every month only for a few minutes to ensure maximum system performance.
- When using the air conditioning system, you may notice clear water dripping (or even puddling) on the ground under the passenger side of the vehicle. This is a normal system operation characteristic.
- Operating the air conditioning system in the recirculated air position provides maximum cooling; however, continual operation in this mode may cause the air inside the vehicle to become stale.
- During cooling operation, you may occasionally notice a misty air flow because of rapid cooling and humid air intake. This is a normal system operation characteristic.

### **Air conditioning system operation tips**

- If the vehicle has been parked in direct sunlight during hot weather, open the windows for a short time to let the hot air inside the vehicle escape.
- To help reduce moisture inside of the windows on rainy or humid days, decrease the humidity inside the vehicle by operating the air conditioning system.

## Climate control air filter

The climate control air filter installed behind the glove box filters the dust or other pollutants that come into the vehicle from the outside through the heating and air conditioning system.



- A: Outside air
- B: Recirculated air
- C: Climate control air filter
- D: Blower
- E: Evaporator core
- F: Inner condenser
- G: PTC heater

If dust or other pollutants accumulate in the filter over a period of time, the air flow from the air vents may decrease, resulting in moisture accumulation on the inside of the windshield even when the outside (fresh) air position is selected. If this happens, have the climate control air filter replaced by an authorized Kia dealer.

### \* NOTICE

- Replace the filter according to the Maintenance Schedule. If the vehicle is being driven in severe conditions such as dusty or rough roads, more frequent air conditioner filter inspections and changes are required.

- When the air flow rate suddenly decreases, the system should be checked at an authorized Kia dealer.

## Checking the amount of air conditioner refrigerant and compressor lubricant

When the amount of refrigerant is low, the performance of the air conditioning is reduced. Overfilling also has a negative impact on the air conditioning system.

Therefore, if abnormal operation is found, have the system inspected by an authorized Kia dealer.

### ⚠ WARNING

The oil and refrigerant in your vehicle's air conditioning system is under very high pressure. If proper service procedures are not followed an explosion may result. To reduce the risk of serious injury or death, the air conditioning system in your vehicle should only be serviced by trained and certified technicians.

### ⚠ CAUTION

It is important that the correct type and amount of oil and refrigerant is used, otherwise damage to the vehicle may occur. To prevent damage, the air conditioning system in your vehicle should only be serviced by trained and certified technicians.

**⚠ 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 the correct type and amount of oil and refrigerant are used.

All refrigerants should be reclaimed with proper equipment.

Venting refrigerants directly to the atmosphere is harmful to individuals and environment.

Failure to heed these warnings can lead to serious injuries.

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## Automatic climate control system



- 1 Temperature control knob
- 2 AUTO (automatic control) button
- 3 Driver only button
- 4 Air intake control button
- 5 Blower OFF button
- 6 EV button
- 7 HEAT button
- 8 Front windshield defroster button
- 9 Rear window defroster button
- 10 Fan speed control knob
- 11 Air conditioning button
- 12 Mode selection button
- 13 A/C display

### \* NOTICE

Operating the blower when the START/STOP button is in the ON position could cause the battery to discharge. Operate the blower when the vehicle is ON.

## Heating and air conditioning automatically

1. Press the AUTO button.

The modes, fan speeds, air intake and air-conditioning will be controlled automatically by setting the temperature.



2. Turn the temperature control switch to the desired temperature.



- To turn the automatic operation off, select any button or switch of the following:
  - Mode selection button
  - Air conditioning button
  - Front windshield defroster button (Press the button one more time to deselect the front windshield defroster function. The 'AUTO' sign

will appear on the information display once again.)

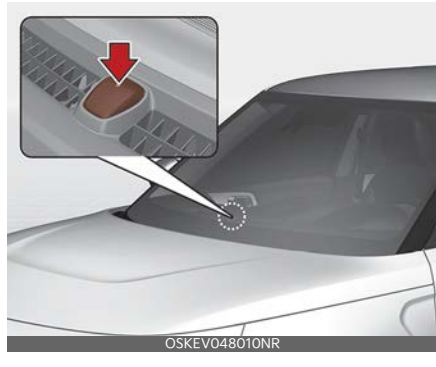
- Air intake control button
- Fan speed control knob

The selected function will be controlled manually while other functions operate automatically.

- For your convenience and to improve the effectiveness of the climate control, use the AUTO button and set the temperature to 22 °C (72 °F).

### \* NOTICE

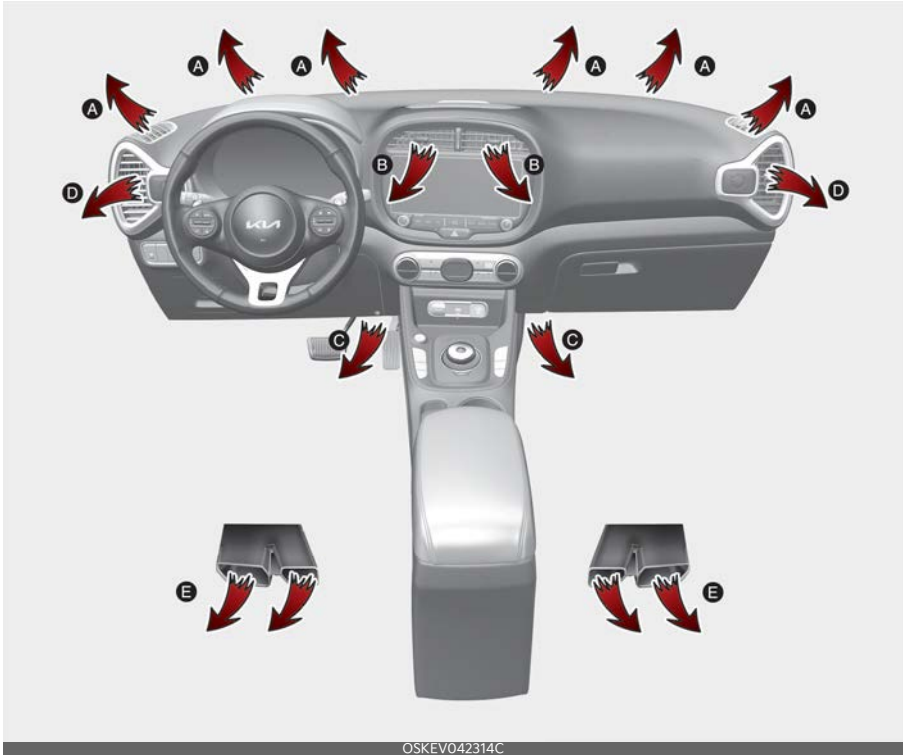
Do not place anything over the sensor located on the instrument panel to ensure better control of the heating and cooling system.





## Heating and air conditioning manually

The heating and cooling system can be controlled manually by pressing buttons or turning knob(s) other than the AUTO button.



5

In this case, the system works sequentially according to the order of buttons or knob(s) selected.

1. Start the vehicle.
2. Set the mode to the desired position.
  - For improving the effectiveness of heating and cooling;
    - Heating:
    - Cooling:
3. Set the temperature control to the desired position.
4. Set the air intake control to the outside (fresh) air position.
5. Set the fan speed control to the desired speed.

If air conditioning is desired, turn the air conditioning system on.

Press the AUTO button in order to convert to full automatic control of the system.

### Mode selection

The mode selection button controls the direction of the air flow through the ventilation system.



OSKEV048318NR

The air flow outlet port is converted as follows:



#### Face-Level (B, D)

Air flow is directed toward the upper body and face. Additionally, each outlet can be controlled to direct the air discharged from the outlet.

#### Bi-Level (B, C, D, E)

Air flow is directed towards the face and the floor.

#### Floor-Level (A, C, D, E)

Most of the air flow is directed to the floor, with a small amount of the air being directed to the windshield and side window defrosters.

#### Floor/Defrost-Level (A, C, D, E)

Most of the air flow is directed to the floor and the windshield with a small amount directed to the side window defrosters.

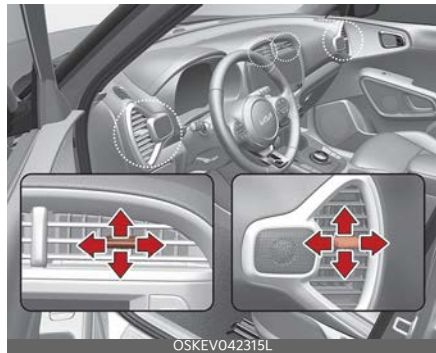
### Defrost-Level (A, D)



OSKEV048319NR

Most of the air flow is directed to the windshield with a small amount of air directed to the side window defrosters.

### Instrument panel vents



OSKEV042315L

The instrument panel vent air flow can be directed up/down or left/right using the vent adjustment lever.

The outlet vents can be opened or closed separately using the vent control lever. If you move the vent control lever to the left end, the outlet vents can be closed.

## Temperature control



The temperature will increase to the maximum (28 °C (82 °F)) by turning the knob to the extreme right.

The temperature will decrease to the minimum (17 °C (62 °F)) by turning the knob to the extreme left.

When turning the knob, the temperature will increase or decrease by 0.5 °C/1 °F. When set to the lowest temperature setting, the air conditioning will operate continuously.

### \* NOTICE

When starting the vehicle in cold weather using manual temperature control, operate the system in the following method to improve heating.

- Turn off or lower the blower, right after starting the vehicle.
- Allow the vehicle to warm up during this time since the air flow from the heater is still cold.
- After a few minutes of vehicle warm up, turn on or set the fan to a higher level and adjust the temperature setting to hot.

## Changing temperature scale

You can switch the temperature mode from Centigrade to Fahrenheit as follows:

- While pressing the OFF button, press the AUTO button for 3 seconds or more.

The display will change from Centigrade to Fahrenheit, or from Fahrenheit to Centigrade. If the battery has been discharged or disconnected, the temperature mode display will reset to Fahrenheit.

## Controlling air intake

This is used to select the outside (fresh) air position or recirculated air position.



To change the air intake control position:

- Push the control button.

### Outside (fresh) air position



With the outside (fresh) air position selected, air enters the vehicle from outside and is heated or cooled according to the function selected.

### Recirculated air position



With the recirculated air position selected, air from the passenger compartment will

be drawn through the heating system and heated or cooled according to the function selected.

Prolonged operation of the heater in the recirculated air position (without air conditioning selected) may cause fogging of the windshield and side windows and the air within the passenger compartment may become stale.

In addition, prolonged use of the air conditioning with the recirculated air position selected will result in excessively dry air in the passenger compartment.

### Controlling fan speed

The fan speed can be set to the desired speed by operating the fan speed control knob.

To change the fan speed:

- Turn it right for higher speed, or turn it left for lower speed.



- To turn the fan speed control off, press the front blower OFF button.

### Air conditioning



- Press the A/C button to turn the air conditioning system on (indicator light will appear).
- Press the button again to turn the air conditioning system off.

### **WARNING**

#### Reduced Visibility

Continued use of the climate control system in the recirculated air position may allow humidity to increase inside the vehicle which may fog the glass and obscure visibility.

### **WARNING**

#### Recirculated Air

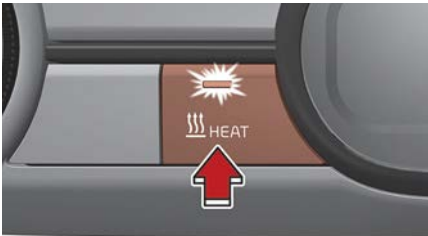
Continued use of the climate control system in the recirculated air position can cause drowsiness or sleepiness, and loss of vehicle control. Set the air intake control to the outside (fresh) air position as much as possible while driving.

**⚠ WARNING**

**Sleeping with A/C on**

Do not sleep in a vehicle with the air conditioning or heating on as this may cause serious harm or death due to a drop in the oxygen level and/or body temperature.

**Turning heating on or off**



OSKEV048332NR

- Push the HEAT button to turn the heater on (indicator light will appear).
- Push the button again to turn the heater off.

The air conditioner and heater uses energy from the battery. If you use the heater or air conditioner for too long, distance to empty can be reduced due to increased power consumption.

Turn off the heater or air conditioner if not necessary.

**Turning off the front air climate control**



OSKEV048323NR


- Press the front blower OFF button to turn off the front air climate control system.

However, you can still operate the mode and air intake buttons as long as the START/STOP button is in the ON position.

**Air conditioning for driver only**



OSKEV048331NR

- Press the DRIVER ONLY button  and the indicator light appears, cold air mostly blows in the direction of the driver's seat.


However, some of the cold air may come out of other seats' ducts to keep indoor air pleasant.

If you use the button with no passenger in the front passenger seat, energy consumption will be reduced.

### Automatic ventilation

The system automatically selects the outside (fresh) air position when the climate control system operates over a certain period of time (5 minutes) in low temperature with the recirculated air position selected.


### To cancel or reset the Automatic Ventilation

When the air conditioning system is on, select Face Level  mode and press the recirculated air position more than five times within 3 seconds while pressing A/C button.




When the automatic ventilation is canceled, the indicator blinks 3 times. When the automatic ventilation is activated, the indicator blinks 6 times.

### System operation

#### Ventilation

1. Set the mode to the  position.
2. Set the air intake control to the outside (fresh) air position.
3. Set the temperature control to the desired position.
4. Set the fan speed control to the desired speed.

### Heating


1. Set the mode to the  position.
2. Set the air intake control to the outside (fresh) air position.
3. Set the temperature control to the desired position.
4. Set the fan speed control to the desired speed.
5. If dehumidified heating is desired, turn the air conditioning system (if equipped) on.
  - If the windshield fogs up, set the mode to the  or  position.

### Operation Tips

- To keep dust or unpleasant fumes from entering the vehicle through the ventilation system, temporarily set the air intake control to the recirculated air position. Be sure to return the control to the fresh air position when the irritation has passed to keep fresh air in the vehicle. This will help keep the driver alert and comfortable.
- Air for the heating/cooling system is drawn in through the grilles just ahead of the windshield. Care should be taken that these are not blocked by leaves, snow, ice or other obstructions.
- To prevent interior fog on the windshield, set the air intake control to the fresh air position and fan speed to the desired position, turn on the air conditioning system, and adjust the temperature control to desired temperature.

## Air conditioning (if equipped)

All Kia Air Conditioning Systems are filled with R-1234yf refrigerant.

1. Start the vehicle. Press the air conditioning button.
2. Set the mode to the  position.
3. Set the air intake control to the outside-air or recirculated air position.
4. Adjust the fan speed control and temperature control to maintain maximum comfort.
  - When maximum cooling is desired, set the temperature control to the extreme left position, set the mode control to the MAX A/C position, then set the fan speed control to the highest speed.

### CAUTION

#### Excessive A/C Use

When using the air conditioning system, monitor the temperature gauge closely while driving up hills or in heavy traffic when outside temperatures are high. Air conditioning system operation may cause vehicle overheating. Continue to use the blower fan but turn the air conditioning system off if the temperature gauge indicates vehicle overheating.

### CAUTION

- The refrigerant system should only be serviced by trained and certified technicians to insure proper and safe operation.
- The refrigerant system should be serviced in a well-ventilated place.
- The air conditioning evaporator (cooling coil) shall never be repaired or replaced with one removed from a used or salvaged vehicle and new replacement MAC evaporators shall

be certified (and labeled) as meeting SAE Standard J2842.

### CAUTION

When opening the windows in humid weather, air conditioning may create water droplets inside the vehicle. Since excessive water droplets may cause damage to electrical equipment, air conditioning should only be used with the windows closed.

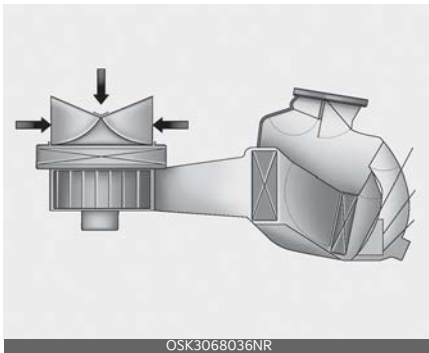
## Air conditioning system operation tips

- If the vehicle has been parked in direct sunlight during hot weather, open the windows for a short time to let the hot air inside the vehicle escape.
- To help reduce moisture inside of the windows on rainy or humid days, decrease the humidity inside the vehicle by operating the air conditioning system.
- During air conditioning system operation, you may occasionally notice a slight change in vehicle speed as the air conditioning compressor cycles. This is a normal system operation characteristic.
- Use the air conditioning system every month only for a few minutes to ensure maximum system performance.
- When using the air conditioning system, you may notice clear water dripping (or even puddling) on the ground under the passenger side of the vehicle. This is a normal system operation characteristic.

- Operating the air conditioning system in the recirculated air position provides maximum cooling; however, continual operation in this mode may cause the air inside the vehicle to become stale.
- During cooling operation, you may occasionally notice a misty air flow because of rapid cooling and humid air intake. This is a normal system operation characteristic.

### Climate control air filter (if equipped)

The climate control air filter installed behind the glove box filters the dust or other pollutants that come into the vehicle from the outside through the heating and air conditioning system.



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If dust or other pollutants accumulate in the filter over a period of time, the air flow from the air vents may decrease, resulting in moisture accumulation on the inside of the windshield even when the outside (fresh) air position is selected. If this happens, have the climate control air filter replaced by an authorized Kia dealer.

### \* NOTICE

- Replace the filter according to the Maintenance Schedule. If the vehicle is being driven in severe conditions such as dusty or rough roads, more frequent air conditioner filter inspections and changes are required.
- When the air flow rate suddenly decreases, the system should be checked at an authorized Kia dealer.

### Checking the amount of air conditioner refrigerant and compressor lubricant

When the amount of refrigerant is low, the performance of the air conditioning is reduced. Overfilling also has a negative impact on the air conditioning system.

Therefore, if abnormal operation is found, have the system inspected by an authorized Kia dealer.

### ⚠ WARNING

The oil and refrigerant in your vehicle's air conditioning system is under very high pressure. If proper service procedures are not followed an explosion may result. To reduce the risk of serious injury or death, the air conditioning system in your vehicle should only be serviced by trained and certified technicians.

### ⚠ CAUTION

It is important that the correct type and amount of oil and refrigerant is used, otherwise damage to the vehicle may occur. To prevent damage, the air conditioning system in your vehicle should



only be serviced by trained and certified technicians.

### WARNING

#### Vehicles equipped with R-1234yf\*



Since the refrigerant is mildly inflammable 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 the correct type and amount of oil and refrigerant are used.

All refrigerants should be reclaimed with proper equipment.

Venting refrigerants directly to the atmosphere is harmful to individuals and environment.




Failure to heed these warnings can lead to serious injuries.

## Windshield defrosting and defogging

When the windshield is covered with frost or moisture, the front view is blurred, you should remove the frost and moisture.

### WARNING


#### Windshield heating

Do not use the  or  position during cooling operation in extremely humid weather. The difference between the temperature of the outside air and the windshield could cause the outer surface of the windshield to fog up, causing loss of visibility. In this case, set the mode selection to the  position and fan speed control to the lower speed.


- For maximum defrosting, set the temperature control to the extreme right/hot position and the fan speed control to the highest speed.
- If warm air to the floor is desired while defrosting or defogging, set the mode to the floor-defrost position.
- Before driving, clear all snow and ice from the windshield, rear window, outside rear view mirrors, and all side windows.
- Clear all snow and ice from the hood and air inlet in the cowl grill to improve heater and defroster efficiency and to reduce the probability of fogging up the inside of the windshield.

### Defogging inside windshield with the automatic climate control




1. Set the fan speed to the desired position.
2. Select desired temperature.
3. Press the defroster button (  ).

The outside (fresh) air position will be selected automatically and the air conditioning will turn on according to the detected ambient temperature.

If the air conditioning and outside (fresh) air position are not selected automatically, adjust the corresponding button manually. If the  position is selected, lower fan speed is adjusted to a higher fan speed.



### Defrosting outside windshield with automatic climate control



1. Set the fan speed to the highest position.
2. Set the temperature to the extreme hot (HI) position.
3. Press the defroster button (  ).

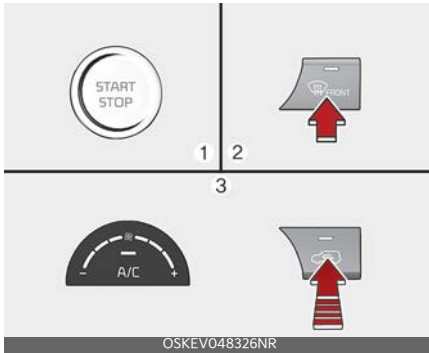
The outside (fresh) air position will be selected automatically and the air conditioning will turn on according to the detected ambient temperature.


### Defogging logic (if equipped)

To reduce the possibility of fogging up the inside of the windshield, the air intake or air conditioning is controlled automatically according to certain conditions such as  or  position.

To cancel automatic defogging logic or return to the automatic defogging logic, do the following.

## Turning the defogging logic on or off



1. Turn the START/STOP button to the ON position.
2. Press the defroster button (  ).
3. While pressing the air conditioning button (A/C), press the air intake control button at least 5 times within 3 seconds.

The recirculation indicator blinks 3 times in 0.5 second intervals. It indicates that the defogging logic is canceled or returned to the programmed status.

If the battery has been discharged or disconnected, it resets to the defog logic status.

## Auto Defogging System (ADS)

Auto Defogging System (ADS) reduces the probability of fogging up the inside of the windshield by automatically sensing the moisture of inside the windshield.



The Auto Defogging System (ADS) operates when the heater or air conditioning is on.

The indicator appears when the ADS senses the moisture on the inside of the windshield and operates.

The auto defogging system addresses excess moisture on the inside of the windshield in stages. For example if auto defogging does not defog inside the windshield at step 1, it tries to defog again at step 2.

1. Outside air position
2. Operating the air conditioning
3. Increasing air flow toward the windshield
4. Blowing air flow toward the windshield

## Turning the ADS on or off

- Press the front windshield defroster button for 3 seconds when the START/STOP button is in the ON position.

When the ADS system is canceled, the defroster button indicator will blink 3 times per 0.5 sec.

When the ADS system is reset, the defroster button indicator will blink 6 times per 0.25 sec.

### **CAUTION**

Do not remove the sensor cover located on the upper end of the passenger side windshield glass. Damage to the system parts could occur and may not be covered by your vehicle warranty.

## Storage compartment

These compartments can be used to store small items required by the driver or passengers.

- To avoid possible theft, do not leave valuables in the storage compartment.
- Always keep the storage compartment covers closed while driving. Do not attempt to place so many items in the storage compartment that the storage compartment cover cannot close securely.

### **WARNING**

#### Flammable materials

Do not store glasses, gas lighter, portable battery, canned beverage, spray can, propane cylinder, cosmetic tube or other flammable/explosive materials in the vehicle. These items may catch fire and/or explode if the vehicle is exposed to hot temperatures for extended periods.

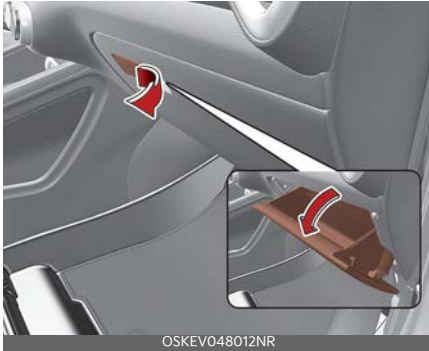
## Center console storage



To open the center console storage:

- Pull up the lever.

## Glove box



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.

### \* NOTICE

If the temperature control switch is in the warm or hot position, warm or hot air will flow into the glove box.

## Sunglass holder



To open the sunglasses holder:

- Press the cover and the holder will slowly open.

Place your sunglasses with the lenses facing out. To close the sunglasses holder push it up.

### ⚠ WARNING

#### Sunglass holder

- Do not keep objects except sunglasses inside the sunglasses holder. Such objects can be thrown from the holder in the event of a sudden stop or an accident, possibly injuring the passengers in the vehicle.
- Do not open the sunglasses holder while the vehicle is moving. The rear view mirror of the vehicle can be blocked by an opened sunglasses holder.

### Luggage net holder storage compartment luggage net holder



To keep items from shifting in the cargo area, you can use the 4 holders located in the cargo area to attach the luggage net (if equipped).

If necessary, Kia recommends contacting an authorized Kia dealer.

#### **CAUTION**

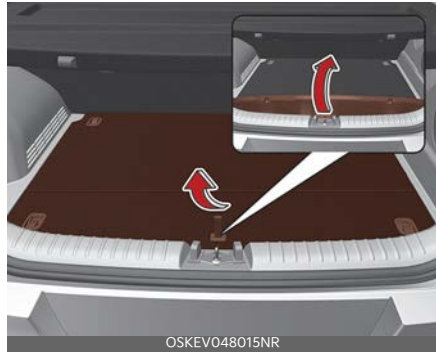
To prevent damage to the goods or the vehicle, be careful when carrying fragile or bulky objects in the luggage compartment.

#### **WARNING**

Avoid eye injury. DO NOT overstretch the luggage net, ALWAYS keep your face and body out of the luggage net's recoil path. DO NOT use when the strap has visible signs of wear or damage.

### Increase cargo space

- If you want to increase cargo space,
1. Grasp the handle on the top of the cover and lift it



2. Fold the rear part of the luggage board forward



3. Pull the luggage board hinge to the end of sliding slot and it will fall down lower to increase cargo space.



4. Slide it frontward (refer to the above pictures)

## Interior features

There are various features inside the vehicle for the convenience of the occupants.

### Cup holder

The front and rear seats of the vehicle have cup holders to accommodate cups.

#### **⚠ WARNING**

#### Hot liquids

Do not place uncovered cups with hot liquid in the cup holder while the vehicle is in motion. If the hot liquid spills, you may burn yourself. Such a burn to the driver could lead to loss of control of the vehicle.

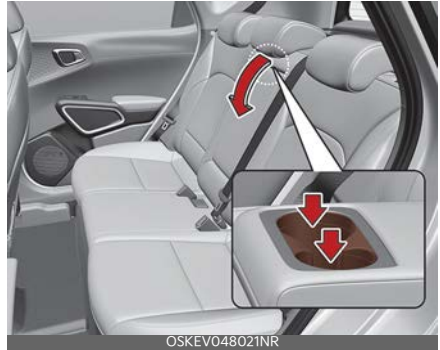
#### **⚠ CAUTION**

- Keep your drinks sealed while driving to prevent spilling your drink. If liquid spills, it may get into the vehicle's electrical/electronic system and damage electrical/electronic parts.
- When cleaning spilled liquids, do not use heat to dry the cup holders. This may damage the cup holder.

Front



Rear (if equipped)



Cups or small beverage cans may be placed in the cup holders.

### Seat warmer (if equipped)

The seat warmer is provided to warm the front seats during cold weather.

Front seat - A Type



Front seat - B Type



OSKEV04251TC

Rear seat



OSK3048025NR

With the START/STOP button in the ON position:

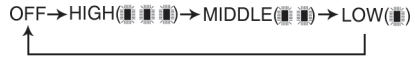
- Push either of the switches to warm the driver's seat or the front passenger's seat.

During mild weather or under conditions where the operation of the seat warmer is not needed, keep the switches in the "OFF" position.

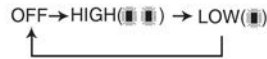
### Temperature control (Manual)

Each time you press the switch, the temperature setting of the seat will change as follows:

Front seat (B Type)



Front seat (A Type), Rear seat

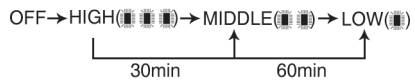


The seat warmer defaults to the OFF position whenever the START/STOP button is turned on.

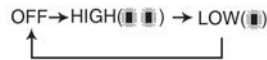
### Temperature control (Automatic) (if equipped)

The seat warmer starts to automatically control the seat temperature in order to prevent low-temperature burns after being manually turned ON.

Front seat (B Type)



Rear seat



You may manually press the button to increase the seat temperature. However, it soon returns to the automatic mode again. When pressing the switch for more than 1.5 seconds with the seat warmer operating, the seat warmer will turn OFF. The seat warmer defaults to



the OFF position whenever the START/STOP button is in the ON position.

**\* NOTICE**

With the seat warmer switch in the ON position, the heating system in the seat turns off or on automatically depending on the seat temperature.

**⚠ WARNING**

**Seat warmer burns**

The seat warmer may cause burns, even at low temperature, if used over a long period of time. Never allow passengers who may not be able to take care of themselves to be exposed to the risk of seat heater burns. These include:

1. Infants, children, elderly or disabled persons, or hospital outpatients
2. Persons with sensitive skin or those that burn easily
3. Fatigued individuals
4. Intoxicated individuals
5. Individuals taking medication that can cause drowsiness or sleepiness (sleeping pills, cold tablets, etc.)

**Air ventilation seat (if equipped)**

Front seat

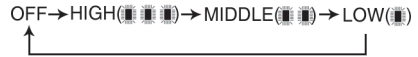


OSKEV042024C

The temperature setting of the seat changes according to the switch position.

- To ventilate your seat cushion, press the switch (blue color).

Each time you press the button, the airflow will change as follows:



The seat warmer (with air ventilation) defaults to the OFF position whenever the START/STOP button is turned on.

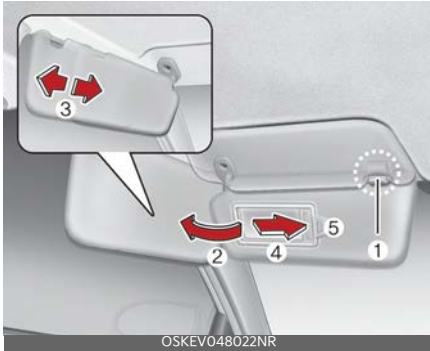
**⚠ CAUTION**

**Seat damage**

- When cleaning the seats, do not use an organic solvent such as paint thinner, benzene, alcohol and gasoline. Doing so may damage the air ventilation seat.
- Do not place heavy or sharp objects on the seat. Those things may damage the air ventilation seat.
- Be careful not to spill liquid such as water or beverages on the seat. If you spill some liquid, wipe the seat with a dry towel. Before using the air ventilation seat, dry the seat completely.

### Sun visor

Use the sun visor to shield direct light through the front or side windows.



\* The actual sun visor lamp in the vehicle may differ from the illustration.

- To use the sun visor, pull it downward.
- To use the sun visor for the side window, pull it downward, unsnap it from the bracket (1) and swing it to the side (2).
- Adjust the sun visor forward or backward (3) as needed.

To use the vanity mirror, pull down the visor and slide the mirror cover (4).

The ticket holder (5) is provided for holding a tollgate ticket.

**CAUTION**

#### Vanity mirror lamp

If you use the vanity mirror lamp, turn off the lamp before returning the sun visor to its original position, otherwise it could result in battery discharge and possible sun visor damage.

### Power outlet

The power outlet is designed to provide power for mobile telephones or other devices designed to operate with vehicle electrical systems.

Front



Rear (if equipped)



The devices should draw less than 10 amps with the vehicle on.

**WARNING**

- Use the power outlet only when the vehicle is on and remove the accessory plug after use. Using the accessory plug for prolonged periods of time with the vehicle off could cause the battery to discharge.

- Only use 12 V electric accessories which are less than 10 A in electric capacity.
- Adjust the air-conditioner or heater to the lowest operating level when using the power outlet.
- Close the cover when not in use.
- Some electronic devices can cause electronic interference when plugged into a vehicle's power outlet. These devices may cause excessive audio static and malfunctions in other electronic systems or devices used in your vehicle.
- Push the plug in as far as it will go. If good contact is not made, the plug may overheat and the fuse may open.
- Plug in battery equipped electronic devices with reverse current protection. The current from the battery may flow into the vehicle's electrical/electronic system and cause system malfunction.

### **WARNING**

#### **Electric shock**

Do not put a finger or a foreign object (pen, etc.) into a power outlet and do not touch with a wet hand. You may get an electric shock.

## **USB charger interior features**

### **USB charger**

The USB charger is designed to recharge batteries of small size electrical devices using a USB cable.

Front



Center (if equipped)



The electrical devices can be recharged when the START/STOP button is in ACC/ON/START position.

The battery charging state may be monitored on the electrical device.

Disconnect the USB cable from the USB port after use.

## \* NOTICE

- Some devices are not supported for fast charging but will be charged with normal speed.
- Use the USB charger when the vehicle is on to prevent battery discharge.
- Only devices that fit the USB port can be used.
- The USB charger can be used only for battery charging purposes.
- Battery chargers cannot be charged.

## Wireless smart phone charging system (if equipped)

A wireless smart phone charging system is located in front of the center console.



Firmly close all doors, and turn vehicle on. To start wireless charging, place the smart phone equipped with wireless charging function on the wireless charging pad.

For best wireless charging results, place the smart phone on the center of the charging pad.

The wireless charging system is designed for one smart phone equipped with Qi only. Please refer to the smart phone accessory cover or the smart phone manufacturer homepage to

check whether your smart phone supports Qi function.

## Charging smart phone wirelessly

1. Remove any object on the smart phone charging pad including the smart key. If there is any foreign object on the pad other than a smart phone, the wireless charging function may not operate properly.
2. Place the smart phone on the center of the wireless charging pad.

The indicator light will change to orange once the wireless charging begins. After the charging is complete, the orange light will change to green.

You can choose to turn the wireless charging function to either ON or OFF by selecting the USM on the instrument cluster. (Please refer to "Instrument cluster" on page 5-38 for details).

If the wireless charging does not work, gently move your smart phone around the pad until the charging indicator light turns orange.

Depending on the smart phone, the charging indicator light may not turn green even after the charging is complete.

If the wireless charging is not functioning properly, the orange light will blink and flash for ten seconds then turn off. In such cases, remove the smart phone from the pad and replace it on the pad again, or double check the charging status.

If you leave the smart phone on the charging pad when the vehicle is turned off, the vehicle will alert you through warning messages and sound (applicable for vehicles with voice guidance function) after the 'Good bye' function on the instrument cluster ends.

For some manufacturers' smart phones, the system may not warn you even though the smart phone is left on the wireless charging unit. This is due to the particular characteristic of the smart phone and not a malfunction of the wireless 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 in the safe and legal operation of a vehicle, and use of any handheld devices, other equipment, or vehicle systems which take the driver's eyes, attention and focus away from the safe operation of a vehicle or which are not permissible by law should never be used during operation of the vehicle.

### **⚠ CAUTION**

#### **Liquid in Wireless Smart Phone Charger**

To prevent liquid from damaging the wireless smart phone charging system in your vehicle, be sure not to spill liquid over the charging system when charging your phone.

### **⚠ CAUTION**


#### **Metal in Wireless Charging System**

If any metallic object such as a coin is located between the wireless charging system and the smart phone, the charging may be disrupted. Also, the metallic object may heat up and potentially damage the charging system. If there is any metallic object between the smart phone and the charging pad, immediately remove the smart phone.

Remove the metallic object after it has cooled down.

### **\* NOTICE**

- When the interior temperature of the wireless charging system rises above a set temperature, the wireless charging will cease to function. After the interior temperature drops below the threshold, the wireless charging function will resume.
- The wireless charging may not function properly when there is a heavy accessory cover on the smart phone.
- The wireless charging will stop when using the wireless smart key search function to prevent radio wave disruption.
- The wireless charging will stop when the smart key is moved out of the vehicle with the vehicle in ON.
- The wireless charging will stop when any of the doors are opened (applicable for vehicles equipped with smart keys).
- The wireless charging will stop when the vehicle is turned OFF.
- The wireless charging will stop when the smart phone is not in complete contact with the wireless charging pad.
- Items equipped with magnetic components such as credit card, telephone card, bankbook or any transportation ticket may become damaged during wireless charging.
- Place the smart phone on the center of the charge pad for best results. The smart phone may not charge when placed near the rim of the charging pad. When the smart phone does get charged, it may heat up excessively.

- For smart phones without built-in wireless charging system, an appropriate accessory has to be equipped in order to use the vehicle's wireless charging system.
- Smart phones of some manufacturers may display messages on weak current. This is due to the particular characteristic of the smart phone and does not imply a malfunction on wireless charging function.
- The indicator light of some manufacturers' smart phones may still be orange after the smart phone is fully charged. This is due to the particular characteristic of the smart phone and not a malfunction of the wireless charging.
- When any smart phone without a wireless charging function or a metallic object is placed on the charging pad, a small noise may sound. This small sound is due to the vehicle discerning compatibility of the object placed on the charging pad. It does not affect your vehicle or the smart phone in any way.
- The wireless cellular phone charging system may not support certain cellular phones, which are not verified for Qi specification .
- When placing your cellular phone on the charging mat, position the phone in the middle of the mat for optimal charging performance. If your cell phone is off to the side, the charging rate may be less and in some cases the cell phone may experience higher heat conduction.
- When charging some cellular phones with a self-protection feature, the wireless charging speed may

decrease and the wireless charging may stop.

**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.

**Coat hook**

A Coat hook is next to the rear grab handle.



\* This actual feature may differ from the illustration.

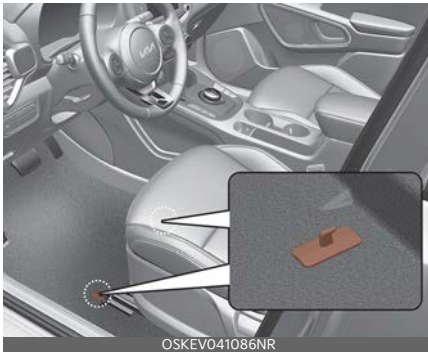
**⚠ CAUTION**

**Hanging clothing**

Do not hang heavy clothes, since they may damage the hook.

**⚠ WARNING**

Do not hang other objects such as hangers or hard objects except clothes. Also, do not put heavy, sharp or breakable objects in the clothing's pockets. In an accident or when the curtain air bag is inflated, it may cause vehicle damage or bodily injury.

**Floor mat anchor(s) (if equipped)**

When using a floor mat on the front floor carpet, make sure it attaches to the floor mat anchor(s) in your vehicle. This keeps the floor mat from sliding forward.

**⚠ WARNING****After market floor mat**

- Do not install after market floor mats that are not capable of being securely attached to the vehicle's floor mat anchors. Unsecured floor mats can interfere with pedal operation.
- Use floor mats not too thick and designed to be properly secured on the floor to avoid the interference with pedals. Make sure that installing the floor mats without removing plastic films on carpet may damage or break floor mat fix rings, resulting in the mats to be unsecured. Especially for a driver's seat, the unsecured mats may cause unintended acceleration/brake. Ensure to remove all the plastic films on the carpets before installing the mats.

The following must be observed when installing ANY floor mat to the vehicle.

- Ensure that the floor mats are securely attached to the vehicle's floor mat anchor(s) before driving the vehicle.
- Do not use ANY floor mat that cannot be firmly attached to the vehicle's floor mat anchors.
- Do not stack floor mats on top of one another (e.g., all-weather rubber mat on top of a carpeted floor mat). Only a single floor mat should be installed in each position.

### Cargo area cover (if equipped)



Use the cargo area cover to hide items stored in the cargo area.

### Removal and installation

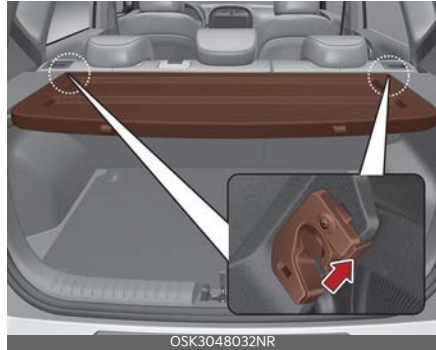


To remove the cargo area cover:

1. Fold the cargo area cover up in half.



2. Firmly hold the folded part of the cover and lift it up.



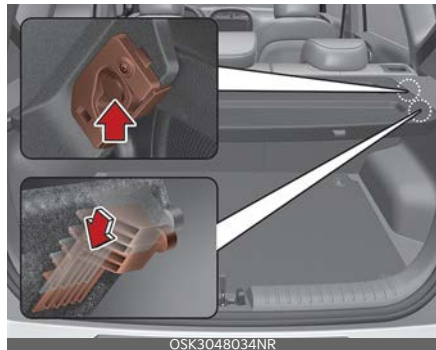
3. While lifting the cover up, hold the area near the front slots. Then, pull up the cover at approximately 45 ° angle.

**⚠ WARNING**

Folded cover may block the rear view. Put the folded cover in the appropriate position.

To install the cargo area cover:

1. To use the cargo area cover, insert the 4 edges into the slots.





**⚠ WARNING**

Do not place objects on the cargo area cover. Such objects may be thrown about inside the vehicle and possibly injure vehicle occupants during an accident or when braking.

**⚠ CAUTION**

Since the cargo area cover may be damaged or malformed, do not put luggage on it when it is used.

**Exterior features**

If the vehicle has a roof rack, you can load cargo on top of your vehicle.

**Roof rack (if equipped)**

Crossbars and fixing components needed to install the roof rack on your vehicle may be obtained from an authorized Kia dealer.

**\* NOTICE**

- The crossbars (if equipped) should be placed in the proper load carrying positions prior to placing items onto the roof rack.
- If the vehicle is equipped with a sunroof, be sure not to position cargo onto the roof rack in such a way that it could interfere with sunroof operation.
- When the roof rack is not being used to carry cargo, the crossbars may need to be repositioned if wind noise is detected.

**⚠ CAUTION**

**Loading Roof Rack**

- When carrying cargo on the roof rack, take the necessary precautions to make sure the cargo does not damage the roof of the vehicle.
- When carrying large objects on the roof rack, make sure they do not exceed the overall roof length or width.
- When you are carrying cargo on the roof rack, do not operate the sunroof (if equipped). This can damage the sunroof.

The following specification is the maximum weight that can be loaded onto the roof rack. Distribute the load as evenly as possible across the crossbars (if equipped) and roof rack and secure the load firmly.

ROOF LOAD	100 kg (220 lbs.) EVENLY DISTRIBUTED
-----------	---

Loading cargo or luggage in excess of the specified weight limit on the roof rack may damage your vehicle.

**⚠ WARNING**

- The vehicle center of gravity will be higher when items are loaded onto the roof rack. Avoid sudden starts, braking, sharp turns, abrupt maneuvers or high speeds that may result in loss of vehicle control or rollover resulting in an accident.
- Always drive slowly and turn corners carefully when carrying items on the roof rack. Severe wind updrafts, caused by passing vehicles or natural causes, can cause sudden upward pressure on items loaded on the roof rack. This is especially true when car-

rying large, flat items such as wood panels or mattresses. This could cause the items to fall off the roof rack and cause damage to your vehicle or others around you.

---

To prevent damage or loss of cargo while driving, check frequently before or while driving to make sure the items on the roof rack are securely fastened.

## Infotainment System

### \* NOTICE

If you install an after market HID head lamp, your vehicle's audio and electronic device may malfunction.

\* If your vehicle is equipped with Infotainment system, refer to a separately supplied manual for detailed information.

## Shark-fin Antenna



The roof antenna will receive the transmit data.

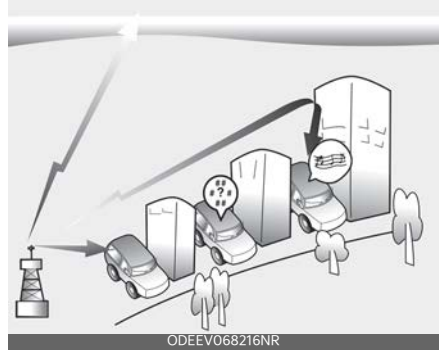
## USB port

You can use an USB port to plug in an USB.



## How vehicle radio works

### FM reception

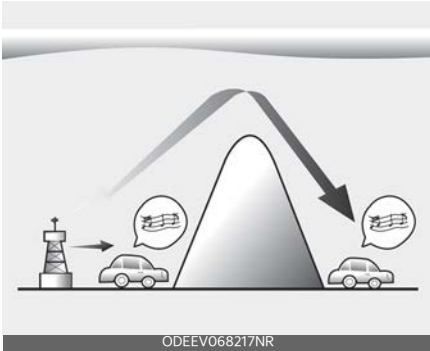


AM and FM radio signals are broadcast from transmitter towers located around your city. They are intercepted by the radio antenna on your vehicle. This signal is then processed by the radio and sent to your vehicle speakers.

However, in some cases the signal coming to your vehicle may not be strong and clear.

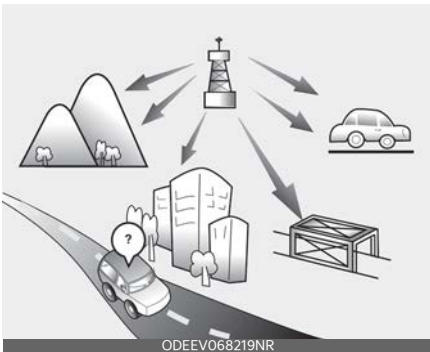
This can be due to factors, such as the distance from the radio station, closeness of other strong radio stations or the presence of buildings, bridges or other large obstructions in the area.

## AM reception



AM broadcasts can be received at greater distances than FM broadcasts. This is because AM radio waves are transmitted at low frequencies. These long distance, low frequency radio waves can follow the curvature of the earth rather than traveling straight. In addition, they curve around obstructions resulting in better signal coverage.

## FM radio station

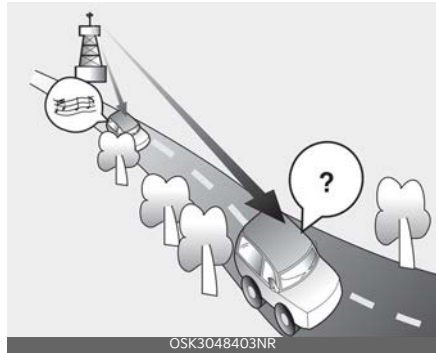


FM broadcasts are transmitted at high frequencies and do not bend to follow the earth's surface. Because of this, FM broadcasts generally begin to fade within short distances from the station. Also, FM signals are easily affected by buildings, mountains, and obstructions.

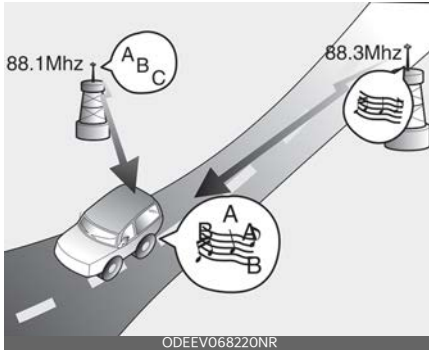
This can lead to undesirable or unpleasant listening conditions which might lead you to believe a problem exists with your radio.

The following conditions are normal and do not indicate radio trouble:

- **Fading** - As your vehicle moves away from the radio station, the signal will weaken and sound will begin to fade. When this occurs, we suggest that you select another station with a stronger signal.



- **Flutter/Static** - Weak FM signals or large obstructions between the transmitter and your radio can disturb the signal causing static or fluttering noises to occur. Reducing the treble level may lessen this effect until the disturbance clears.
- **Station Swapping** - As an FM signal weakens, another more powerful signal near the same frequency may begin to play. This is because your radio is designed to lock onto the clearest signal. If this occurs, select another station with a stronger signal.



- Multi-Path Cancellation - Radio signals being received from several directions can cause distortion or fluttering. This can be caused by a direct and reflected signal from the same station, or by signals from two stations with close frequencies. If this occurs, select another station until the condition has passed.

### Using a cellular phone or a two-way radio

When a cellular phone is used inside the vehicle, noise may be produced from the Infotainment system. This does not mean that something is wrong with the audio equipment. In such a case, try to operate mobile devices as far from the audio equipment as possible.

When using a communication system such as a cellular phone or a radio set inside the vehicle, a separate external antenna must be fitted. When a cellular phone or a radio set is used with an internal antenna alone, it may interfere with the vehicle's electrical system and adversely affect safe operation of the vehicle.

### **⚠ WARNING**

#### **Cell phone use**

Do not use a cellular phone while driving. Stop at a safe location to use a cellular phone.

### **⚠ WARNING**

#### **Distracted driving**

Driving while distracted can result in a loss of vehicle control that may lead to an accident, severe bodily injury, or death. The driver's primary responsibility is the safe and legal operation of the vehicle, and the use of any handheld devices, other equipment, or vehicle systems which take the driver's eyes, attention, and focus away from the safe operation of the vehicle, or which are not permissible by law, should never be used during the operation of the vehicle.

## Declaration of Conformity

### IC

This device complies with Industry Canada's licence-exempt RSSs.

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.

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## Driving your vehicle

### Before driving

Before getting into the vehicle, you should examine the car and its surroundings. After getting into the vehicle, you should check a number of things before driving.

### Before entering the vehicle

- Be sure that all windows, outside mirror(s), and outside lights are clean.
- Check the condition of the tires.
- Check under the vehicle for any sign of leaks.
- Be sure there are no obstacles behind you if you intend to back up.

### Before starting the vehicle

- Close and lock all doors.
- Position the seat so that all controls are easily reached.
- Buckle your seat belt.
- Adjust the inside and outside rearview mirrors.
- Be sure that all lights work.
- Check all gauges.
- Check the operation of warning lights when the START/STOP button is turned to the ON position.
- Release the parking brake and make sure the brake warning light goes out.

For safe operation, be sure you are familiar with your vehicle and its equipment.

### WARNING

#### Check surroundings

Always check the surrounding areas near your vehicle for people, especially children, before putting a vehicle into D (Drive) or R (Reverse).

### WARNING

#### Loose objects

Securely store items in your vehicle. When you make a sudden stop or turn the steering wheel rapidly, loose objects may drop on the floor and it could interfere with the operation of the foot pedals, possibly causing an accident.

### WARNING

#### Proper footwear

Always wear appropriate shoes when operating your vehicle. Unsuitable shoes (high heels, ski boots, sandals, etc.) may interfere with your ability to use the brake and accelerator pedals.

### WARNING

#### Driving while intoxicated

Do not drive while intoxicated. Drinking and driving is dangerous. Even a small amount of alcohol will affect your reflexes, perceptions and judgment. Driving while under the influence of drugs is as dangerous as or more dangerous than driving drunk.

**⚠ WARNING****Distracted driving**

Focus on the road while driving. The driver's primary responsibility is in the safe and legal operation of the vehicle. Use of any handheld devices, other equipment or vehicle systems that distract the driver should not be used during vehicle operation.

---

**START/STOP button**

Whenever the front door is opened, the START/STOP button will appear for your convenience.



The light will go off after about 30 seconds when the door is closed.

When all doors are closed, if you lock the vehicle by using the smart key, the light will go off immediately.

**START/STOP button position**

The START/STOP button has the following four positions.

- OFF
- ACC (Accessory)
- ON
- START/RUN

**OFF**

To turn off the vehicle power (ON position), press the START/STOP button with the shifter dial in the P (Park) position. When you press the START/STOP button without the shifter dial in the P (Park) position, the START/STOP button will not change to the OFF position but to the ACC position.

## ACC (Accessory)

Press the START/STOP button while it is in the OFF position without depressing the brake pedal.

If the START/STOP button is in the ACC position for more than 1 hour, the button is turned off automatically to prevent battery discharge.

## ON

Press the START/STOP button while it is in the ACC position without depressing the brake pedal.

The warning lights can be checked before the vehicle is started. Do not leave the START/STOP button in the ON position for a long time. The battery may discharge, because the vehicle is not ON.

## START/RUN

To start the vehicle, depress the brake pedal and press the START/STOP button with the shifter dial in the P (Park) position. For your safety, start the vehicle with the shifter dial in the P (Park) position.

If you press the START/STOP button without depressing the brake pedal, the vehicle will not start and the START/STOP button changes as follow:

Go to OFF → ACC → ON → OFF or ACC

## \* NOTICE

If you leave the START/STOP button in the ACC or ON position for a long time, the battery will discharge.

## ⚠ WARNING

### Starting vehicle

Never press the START/STOP button while the vehicle is in motion except in an emergency. This would result in loss of directional control and braking function, which could cause an accident.

## ⚠ WARNING

### Leaving the Vehicle

To avoid unexpected or sudden vehicle movement, never leave your vehicle if the reduction gear is not locked in the P (Park) position and the parking brake is fully engaged. Before leaving the driver's seat, always make sure the reduction gear is engaged in P (Park), set the parking brake fully and shut the vehicle off.

## Starting the vehicle

## ⚠ WARNING

Do not start the vehicle with the accelerator pedal depressed. The vehicle can move and lead to an accident.

- The vehicle will start by pressing the START/STOP button, only when the smart key is in the vehicle.
- Even when the smart key is in the vehicle, if it is far away from the driver, the vehicle may not start.
- When the START/STOP button is in the ACC or ON position, and any door is open, the system checks for the smart key. When the smart key is not in the vehicle, the "🔑" indicator will blink and the warning "Key not in vehicle" will come on. When all doors are closed, the chime will also sound for about 5 seconds. Keep the smart

key in the vehicle when in the ACC position or if the vehicle is ON.

1. Always carry the smart key with you.
2. Make sure the parking brake is applied.
3. Make sure the shifter dial is in P (Park).
4. Depress the brake pedal.
5. Press the START/STOP button. If the vehicle starts, the "↔" indicator will come on.

**\* NOTICE**

- Always start the vehicle with your foot on the brake pedal.
- If ambient temperature is low, the "↔" indicator may remain appear longer than the normal amount of time.

**\* NOTICE**

To prevent damage to the vehicle:

- If the "↔" indicator turns off while you are in motion, do not attempt to move the shifter dial to the P (Park) position.  
If traffic and road conditions permit, you may put the shifter dial in the N (Neutral) position while the vehicle is still moving and press the START/STOP button in an attempt to restart the vehicle.
- Do not push or tow your vehicle to start the vehicle.

**⚠ WARNING**

**Unintended vehicle movement**

Never leave the smart key in the vehicle with children or vehicle occupants who are unfamiliar with the vehicle operation. Pushing the START/STOP button while the smart key is in the vehicle may result in unintended vehicle activation and/or unintended vehicle movement.

If the battery is weak or the smart key does not work correctly, you can start the vehicle by pressing the START/STOP button with the smart key.



The side with the lock button should contact the START/STOP button directly. When you press the START/STOP button directly with the smart key, the smart key should contact the button at a right angle.

When the stop lamp fuse is blown, you can't start the vehicle normally. Replace the fuse with a new one. If it is not possible, you can start the vehicle by pressing the START/STOP button for 10 seconds while it is in the ACC position. The vehicle can start without depressing the brake pedal. But for your safety always depress the brake pedal before starting the vehicle.

Do not press the START/STOP button for more than 10 seconds except when the stop lamp fuse is blown.

### Turning Off the Vehicle

1. Depress the brake pedal fully.
2. Shift to P (Park).
3. Apply the parking brake.
4. Press the START/STOP button to turn the vehicle off.
5. Make sure the "🚗" indicator light on the instrument cluster is turned off.

#### ⚠ CAUTION

If the "🚗" indicator light on the instrument cluster is still on, the vehicle is not turned off and can move when the gear is in any position except P (Park).

## Reduction gear

Electric cars transmit the rotation of the motor to the wheel through the reducer.

### Reduction Gear Operation

Select gear positions by turning the shifter dial.



#### ⚠ WARNING

To reduce the risk of serious injury or death:

- ALWAYS check the surrounding areas near your vehicle for people, especially children, before shifting a vehicle into D (Drive) or R (Reverse).
- Before leaving the driver's seat, always make sure the gear is in the P (Park) position, then set the parking brake, and place the START/STOP button in the OFF position. Unexpected and sudden vehicle movement can occur if these precautions are not followed.

For your safety, always depress the brake pedal while shifting to another gear.

## Gear position



The indicator in the instrument cluster displays the gear position when the START/STOP button is in the ON position.

### P (Park)

Always come to a complete stop before shifting into P (Park).

To shift the gear from R (Reverse), N (Neutral) or D (Drive) to P (Park), press the [P] button.

If you turn off the vehicle in D (Drive) or R (Reverse), the gear automatically shifts to P (Park).

With the vehicle on, the gear automatically shifts to P (Park) if you open the driver's door when the gear is in N (Neutral), R (Reverse) or D (Drive). However, the reduction gear will be shifted to P (Park) once when the following conditions are met.

- The brake/accelerator pedal is not depressed.
- The seat belt is unfastened.
- The vehicle speed is below 2 km/h (1 mph).

When the vehicle is over a certain speed, the gear does not shift to P (Park) when the P button is pressed.

### ⚠ WARNING

- Shifting into P (Park) while the vehicle is in motion may cause you to lose control of the vehicle.
- After the vehicle has stopped, always make sure the gear is in P (Park), apply the parking brake, and turn the vehicle off.
- Do not use the P (Park) position in place of the parking brake.

### R (Reverse)

Use this position to drive the vehicle backward.

To shift to R (Reverse), turn the shift dial to R (Reverse) while depressing the brake pedal.

### ⚠ CAUTION

#### Shifting

Always come to a complete stop before shifting into or out of R (Reverse); you may damage the reduction gear if you shift into R (Reverse) while the vehicle is in motion, except on "Rocking the vehicle" ("Rocking the vehicle" on page 6-157).

### N (Neutral)

When in Neutral, wheels and gear are not engaged.

To shift to N (Neutral), turn the shift dial to [N] position when the car is 'START/RUN', or press the [P RELEASE] button when the car is 'ON'.



Always depress the brake pedal when you are shifting from N (Neutral) to another gear.

In N (Neutral), if the driver attempts to turn off the vehicle, the gear remains in N (Neutral) and the START/STOP button will be in the ACC position.

To turn off the vehicle from the ACC position, press the [P] button within 3 minutes. The vehicle will shift to P (Park) and turn off.

When the driver's door is opened within 3 minutes with the START/STOP button in the ACC position and the gear in N (Neutral), the vehicle is automatically turned OFF and shifted to the P (Park) position.

## D (Drive)

This is the normal driving position.

To shift to D (Drive), turn the shift dial to D (Drive) while depressing the brake pedal.

## Shift-lock system

For your safety, your vehicle has a shift-lock system which prevents shifting the gear from P (Park) or N (Neutral) into R (Reverse) or D (Drive) unless the brake pedal is depressed.

To shift from P (Park) or N (Neutral) into R (Reverse) or D (Drive), from R (Reverse) into D (Drive) or from D (Drive) into R (Reverse):

1. Depress and hold the brake pedal.
2. Start the vehicle or place the START/STOP button in the ON position.
3. Shift to the R (Reverse) or D (Drive).

## \* NOTICE

For your safety, you cannot shift the gear while the charging cable is connected.

## Ignition key interlock system

The START/STOP button will not change to the OFF position unless the shifter dial is in the P (Park) position.

## When the battery (12 V) is discharged

You cannot shift the gear when the battery is discharged.

Jump start your vehicle (refer to "Jump starting" on page 7-4) or contact an authorized Kia dealer.

## Parking

1. Always come to a complete stop and continue to depress the brake pedal.
2. Shift to the P (Park) position.
3. Apply the parking brake.
4. Place the START/STOP button in the OFF position.
5. Take the Key with you when exiting the vehicle.

### LCD Display Messages

If a message appears on the LCD display, refer to the next section for the appropriate steps to take.

#### Shifting conditions not met

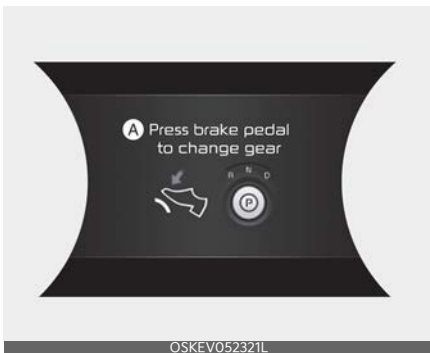


**A: Shifting conditions not met**

The message appears on the LCD display in the following conditions:

1. When driving speed is too fast to shift the gear. Decrease the vehicle speed or slow down before shifting the gear.
2. When the gear is shifted while the vehicle is in Utility mode.

#### Press brake pedal to change gear



**A: Press brake pedal to change gear**

The message appears on the LCD display, when the brake pedal is not depressed while shifting the gear.

Depress the brake pedal and then shift the gear.

#### Shift to P after stopping



**A: Shift to P after stopping**

The message appears on the LCD display when the gear is shifted to P (Park) while the vehicle is moving.

Stop the vehicle before shifting to P (Park).

#### Gear already selected



**A: Gear already selected**

The message appears on the LCD display when the selected gear button is pressed again.

**PARK malfunction. Engage parking brake when parking vehicle**



**A: PARK malfunction. Engage parking brake when parking vehicle**

The message is displayed when there is a problem with function engaging P (Park) position.

Immediately have the vehicle inspected by an authorized Kia dealer.

**Check P button**



**A: Check P button**

The message appears on the LCD display when there is problem with the P button.

Immediately have the vehicle inspected by an authorized Kia dealer.

**Check shifter dial**



**A: Check shifter dial**

The message appears on the LCD display when there is problem with the shift buttons.

Immediately have the vehicle inspected by an authorized Kia dealer

**Rotary shifter stuck**



**A: Rotary shifter stuck**

The message appears on the LCD display when the shifter dial is continuously stuck or there is problem with the shifter dial.

Make sure that there is no object over the shifter dial. If the problem persists, immediately have the vehicle inspected by an authorized Kia dealer.

### Shift button held down



#### A: Shift button held down

The message appears on the LCD display when the shifter button is continuously pressed or there is problem with the button.

Make sure that there is no object over the shifter button. If the problem persists, immediately have the system checked by an authorized Kia dealer.

### Rotary shifter turned while pressing P



#### A: Rotary shifter turned while pressing P

The message appears on the LCD display when the shifter dial is turned while pressing P button.

Make sure that shifter dial is not turned while pressing P button.

### Good Driving Practices

Good driving habits reduce the risk of accidents and help maintain vehicle performance.

- Never shift from P (Park) or N (Neutral) to any other position with the accelerator pedal depressed.
- Never shift from P (Park) when the vehicle is in motion.
  - Be sure the vehicle is completely stopped before you attempt to shift into R (Reverse) or D (Drive).
- Do not shift to N (Neutral) when driving. Doing so may result in an accident.
- Do not drive with your foot resting on the brake pedal. Even light, but consistent pedal pressure can result in the brakes overheating, brake wear and possibly even brake failure.

- Always apply the parking brake when leaving the vehicle. Do not depend on placing the gear in P (Park) to keep the vehicle from moving.
- Exercise extreme caution when driving on a slippery surface. Be especially careful when braking, accelerating or shifting gears. On a slippery surface, an abrupt change in vehicle speed can cause the drive wheels to lose traction and may cause loss of vehicle control resulting in an accident.
- Optimum vehicle performance and economy is obtained by smoothly depressing and releasing the accelerator.
- The risk of rollover is greatly increased if you lose control of your vehicle at highway speeds.
- Loss of control often occurs if two or more wheels drop off the roadway and the driver over steers to reenter the roadway.
- In the event your vehicle leaves the roadway, do not steer sharply. Instead, slow down before pulling back into the travel lanes.
- Follow all posted speed limits.

### **WARNING**

To reduce the risk of **SERIOUS INJURY** or **DEATH**:

- When driving uphill or downhill, always shift to D (Drive) for driving forward or shift to R (Reverse) for driving backwards, and check the gear position indicated on the cluster before driving. Driving in the opposite direction of the selected gear can lead to a dangerous situation by shutting off the vehicle and affecting the braking performance.
- **ALWAYS** wear your seat belt. In a collision, an unbelted occupant is significantly more likely to be seriously injured or killed than a properly belted occupant.
- Avoid high speeds when cornering or turning.
- Do not make quick steering wheel movements, such as sharp lane changes or fast, sharp turns.

## Regenerative braking system

The regenerative braking system allows you to charge the battery when you use the brakes to stop the vehicle.

### Regenerative braking adjustment with paddle shifter

The paddle shifter is used to adjust the regenerative braking level from 0 to 3 during decelerating or braking.



- Left side (⏪): Increases regenerative braking and deceleration.
- Right side (⏩): Decreases regenerative braking and deceleration.

Pull and hold the left side paddle shifter for more than 0.5 seconds and One Pedal Driving function is operated, increasing the regenerative braking. In this case, stopping the vehicle is possible by pulling the paddle shifter.

\* Refer to "One pedal driving" on page 6-17.

With the Smart Regeneration System activated, pull and hold the right side paddle shifter for over 1 second to turn on and off the automatic change of the regenerative braking. However, nothing will happen if the Smart Regeneration System is not activated from the User Settings mode. To activate or deactivate the function go to 'User settings → Convenience → Smart Regeneration' on the LCD.

\* Refer to "Smart regeneration system" on page 6-18.

### \* NOTICE

The paddle shifter does not operate when:

- The [⏪] and [⏩] paddle shifters are pulled at the same time.
- The vehicle is decelerating by depressing the brake pedal.
- The Cruise Control or Smart Cruise Control (SCC) is activated.

The selected regenerative braking level is displayed on the instrument cluster.



Initial setting of the regenerative braking level and adjustable range vary according to the selected Drive mode.

Drive mode	Initial setting
ECO+	2
ECO	2
NORMAL	1
SPORT	1

\* For more details, refer to "Drive mode integrated control system" on page 6-40.

## One pedal driving

The driver can stop the vehicle by pulling and holding the left side paddle shifter.

## Operating Conditions

The system enters the operating condition when the conditions below are met:

- The driver's door is closed.
- The driver's seat belt is fastened.

## Operation of one pedal driving

- Pull and hold the left side paddle shifter while coasting.
- When the vehicle speed is above 3 km/h (2 mph), release the paddle shifter to return to the previously set level.
- When the vehicle speed is below 3 km/h (2 mph), the function maintains control to stop the vehicle even though the paddle shifter is released.
- While the One pedal driving is in activation, the driver can control the vehicle stopping position using the accelerator pedal.

## Automatic engagement of EPB

After the vehicle is stopped by the One Pedal Driving function, EPB is automatically engaged when any of these conditions occur:

- The driver's door is open.
- The driver's seatbelt is unfastened.
- The hood is open.
- The liftgate is open.
- 5 minutes have passed after the vehicle has stopped.
- The system operation is limited due to other reasons.




## WARNING

- Do not solely rely on one pedal driving to stop the vehicle. Stopping the vehicle may not be possible depending on vehicle and road conditions. Pay attention to the road condition ahead and apply the brake if necessary.
- Avoid increasing the regenerative braking level suddenly on slippery roads (like snow or icy conditions) because it may lead to slipping of the tires and skidding of the vehicle. It can be dangerous due to the loss of the vehicle's steering force.

## Smart regeneration system

The Smart Regeneration System controls the regenerative braking automatically according to the road gradient and driving condition of the vehicle in front. The system minimizes the unnecessary operation of the brake and acceleration pedal, improving the electric efficiency and assisting the driver.

### Setting Smart Regeneration System

1. Place the gear in the P (Park) position.
2. Press the MODE button (  ) several times on the steering wheel until 'User Settings' menu appears on the LCD.
3. Select 'Convenience → Smart Regeneration' with the MOVE switch (  /  ) and the OK button on the steering wheel.

The setting is maintained when the vehicle is restarted.

Pull and hold the right side paddle shifter for over 1 second to turn on and off the automatic change of the regenerative braking.

### Smart Regeneration System Activation

With 'AUTO' for the regenerative braking level displayed on the cluster, the regenerative braking level is controlled automatically when vehicle speed is above 10 km/h (6 mph) and one of the condition below is met.

- The road gradient changes
- Distance from the vehicle ahead reduces or increases
- Speed of the vehicle ahead reduces or increases

### WARNING

When vehicle speed is under 10 km/h (6 mph), the Smart Regeneration System is cancelled. The driver must adjust the vehicle speed by depressing the accelerator or brake pedal according to the road and driving condition ahead.

When the system is turned on from the User Settings mode, but the front radar doesn't recognize the vehicle in front, 'AUTO' is displayed in white.



If the front radar recognizes the vehicle in front, 'AUTO' is displayed in blue. The regenerative braking level is automatically controlled depending on the driving condition of the vehicle in front and the level is indicated with arrows.





However, current regenerative braking level is maintained if the driver depresses the brake pedal while the system is in activation. Also, the system is cancelled temporarily if the accelerator pedal is depressed.

### **⚠ WARNING**

The Smart Regeneration System which automatically controls the regenerative braking level when coasting is only a supplemental system for the driver's convenience. Do not solely rely on this system to stop the vehicle. The system cannot completely stop the vehicle in all situations nor avoid all collisions. The brake control may be insufficient depending on the speed of the vehicle in front and when the vehicle in front suddenly stops, a vehicle cuts in suddenly or there is a steep slope. Always look ahead cautiously to prevent unexpected and sudden situations from occurring.

### **Smart Regeneration System Will Be Temporarily Cancelled When:**

- Cancelled manually  
Pulling and holding the right side paddle shifter for more than 1 second.  
The Smart Regeneration System turns off temporarily and AUTO for the regenerative braking level disappears from the cluster.
- Cancelled automatically
  - The vehicle is shifted to N (Neutral), R (Reverse) or P (Park).
  - The Cruise Control System (including the SCC) is in activation.
  - The Electronic Stability Control (ESC) or Anti-lock Brake System (ABS) is operating.

### **⚠ WARNING**

When the Smart Regeneration System is cancelled automatically, adjust the vehicle speed directly by depressing the accelerator or brake pedal according to the road and driving conditions ahead.



### **Resuming Smart Regeneration System**

To re-activate the Smart Regeneration System while driving:

- Pull and hold the right side paddle shifter for more than 1 second again. Then, AUTO for the regenerative braking level will appear on the cluster.

### **Turning Smart Regeneration system off**

To turn off the system:

1. Place the gear in the P (Park) position.
2. Press the MODE button () several times on the steering wheel until 'User Settings' menu appears on the LCD.
3. Deselect 'Convenience → Smart Regeneration' with the MOVE switch () and the OK button on the steering wheel.

### **Vehicle-to-Vehicle Distance Recognition Sensor (Front Radar)**

In order for the Smart Regeneration System to operate properly, always make sure the radar sensor cover is clean and free of dirt, snow, and debris.

Dirt, snow, or foreign substances on the lens may adversely affect the sensing performance of the sensor. In this case, the system operation may stop temporarily and not operate normally.



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**CAUTION**

- Do not apply license plate frame or foreign objects such as a bumper sticker or a bumper guard near the radar sensor. Doing so may adversely affect the sensing performance of the radar.
- Always keep the radar sensor and lens cover clean and free of dirt and debris.
- Use only a soft cloth to wash the vehicle. Do not spray pressurized water directly on the sensor or sensor cover.
- Be careful not to apply unnecessary force on the radar sensor or sensor cover. If the sensor is forcibly moved out of proper alignment, the Smart Regeneration System may not operate correctly. In this case, a warning message may not be displayed. Have the vehicle inspected 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 the vehicle inspected by an authorized Kia dealer.
- Use only genuine Kia parts to repair or replace a damaged sensor or sensor

cover. Do not apply paint to the sensor cover.

**System Malfunction**

"Check Smart Regeneration System" message will appear when the Smart Regeneration System is not functioning normally.



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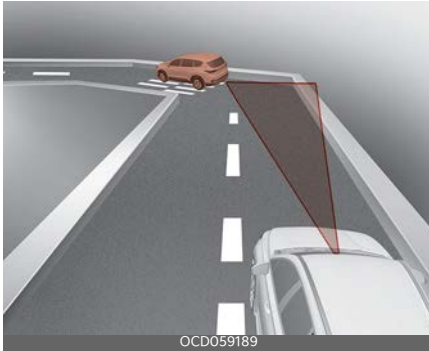
**A: Check Smart Regeneration System**

The system will be cancelled and the word 'AUTO' on the cluster will disappear and instead display regenerative braking level. Check for foreign substances on the front radar. Remove any dirt, snow, or foreign material that could interfere with the radar sensors. If the system still does not operate normally, take your vehicle to an authorized Kia dealer and have the system checked.

**Limitations of the System**

The Smart Regeneration System may not operate properly in certain situations when the driving condition is beyond the performance of the front radar sensor. Driver's attention is required in such cases when the system does not react properly or operate unintentionally.

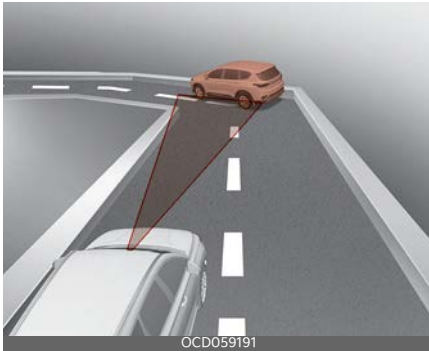
## Driving on a curve



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.



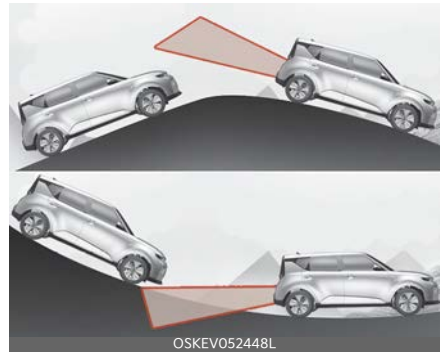
The smart regeneration system may recognize a vehicle in an adjacent lane when driving on a curved road. In this

case, the system increase 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 slope

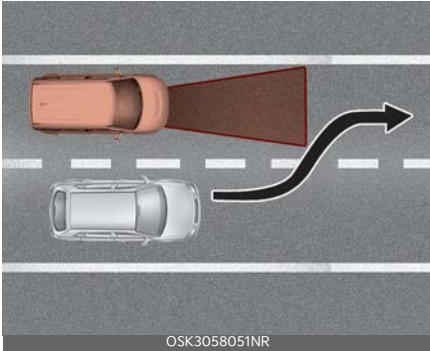


When driving uphill or downhill, the system may not detect the vehicle in your lane and the regenerative braking level will reduce automatically, making you feel that the vehicle is accelerating.

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.

## Changing lanes



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



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
- When driving closely towards one side of the lane
- When driving on narrow lanes or on curves

Apply the brake or accelerator pedal if necessary.

### \* NOTICE

When using the Smart Regeneration System take the following precautions:

- If an emergency stop is necessary, you must apply the brakes.
- Keep a safe distance according to road conditions and vehicle speed. If the vehicle to vehicle distance is too close during a high-speed driving, a serious collision may result.
- Always maintain sufficient braking distance and decelerate your vehicle by applying the brakes if necessary.
- The Smart Regeneration System is designed to detect and monitor the vehicle ahead in the roadway through radar signals. It is not designed to detect oncoming vehicles, pedestrians, bicycles, motorcycles, or smaller wheeled objects such as luggage bags, shopping carts, or strollers.

- Vehicles moving in front of you with a frequent lane change may cause a delay in the system's reaction or may cause the system to react to a vehicle actually in an adjacent lane. Always drive cautiously to prevent unexpected and sudden situations from occurring.
- The Smart Regeneration System may not recognize complex driving situations so always pay attention to driving conditions and control your vehicle speed.

### \* NOTICE

The Smart Regeneration System may not operate temporarily due to any of the following:

- Electrical interference
- A modified suspension
- Differences of tire abrasion or tire pressure
- Installation of different type of tires

### This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following 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.
3. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

## Brake system

This vehicle is equipped with various brakes and functions to stop the vehicle or keep it stationary.

### Power brakes

Your vehicle has power-assisted brakes that adjust automatically through normal usage.

If power is not supplied to your vehicle such as when the battery is discharged or the vehicle is turned off while driving, the power assist for the brakes will not work. You can still stop your vehicle by applying greater force to the brake pedal than typical. The stopping distance, however, will be longer than with power brakes.

Do not pump the brake pedal when the power assist has been interrupted.

Pump the brake pedal only when necessary to maintain steering control on slippery surfaces.

### \* NOTICE

- When stepping on the brake pedal under a certain driving or weather condition, you may witness your car make a sound of squealing or some other noises. This is not a brake malfunction but a normal phenomenon.
- When driving on the road to which deicing chemicals are applied, the vehicle may witness noises from the brake or abnormal abrasion of tires because of such deicing chemicals. You should operate brake additionally so that you would be able to remove the deicing chemicals on the brake disk and pad under a safe traffic condition.

**⚠ CAUTION****Brake Pedal**


Do not drive with your foot resting on the brake pedal. This will create abnormally high brake temperatures which can cause excessive brake lining and pad wear.

**⚠ WARNING****Steep hill braking**

Avoid continuous application of the brakes when descending a long or steep hill by shifting to a lower gear. Continuous brake application will cause the brakes to overheat and could result in a temporary loss of braking performance.

Wet brakes may impair the vehicle's ability to safely slow down; the vehicle may also pull to one side when the brakes are applied. Wet brake may cause squeal or groan noise, however, it does not affect to the brake performance. Applying the brakes lightly will indicate whether they have been affected in this way. Always test your brakes in this fashion after driving through deep water. To dry the brakes, apply them lightly while maintaining a safe forward speed until brake performance returns to normal.

**⚠ CAUTION**

Do not depress the brake pedal continuously without the  indicator ON. The battery may be discharged.

**In the event of brake failure**

If service brakes fail to operate while the vehicle is in motion, you can make an emergency stop with the parking brake. The stopping distance, however, will be much greater than normal.

**⚠ WARNING****Parking brake**

Avoid applying the parking brake to stop the vehicle while it is moving except in an emergency situation. Applying the parking brake while the vehicle is moving at normal speeds can cause a sudden loss of control of the vehicle. If you must use the parking brake to stop the vehicle, use great caution in applying the brake.

**Disc brakes wear indicator**

When your brake pads are worn and new pads are required, you will hear a high-pitched warning sound from your front brakes or rear brakes. You may hear this sound come and go or it may occur whenever you depress the brake pedal.

Always replace the front or rear brake pads as pairs.

**⚠ CAUTION****Replace brake pads**

Do not continue to drive with worn brake pads. Continuing to drive with worn brake pads can damage the braking system and result in costly brake repairs.

**⚠ WARNING****Brake wear**

Do not ignore high pitched wear sounds from your brakes. If you ignore this audible warning, you will eventually lose braking performance, which could lead to a serious accident.

**Electronic Parking Brake (EPB)**

After parking the vehicle, apply the Electronic Parking Brake (EPB) to prevent the vehicle from being moved by any external forces.

The EPB switch is located on the lower left side of the shifter dial.

**Applying the Electronic Parking Brake (EPB)**

1. Depress the brake pedal.
2. Pull up the EPB switch.
3. Make sure the warning light comes on.

Also, the EPB is applied automatically if the Auto Hold button is on when the vehicle is turned off. However, if you pull up the EPB switch after the vehicle is turned off, the EPB will not be applied.

**\* NOTICE**

On a steep incline, if the vehicle does not remain at a standstill, do as follows:

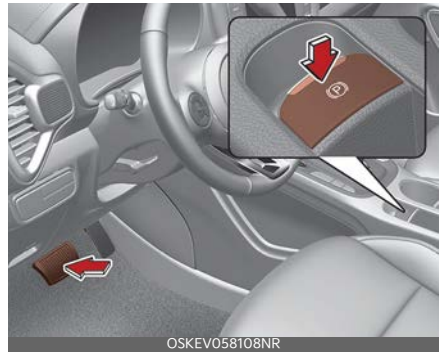
1. Apply the EPB.
2. Pull up the EPB switch for more than 3 seconds.

Do not operate the parking brake / EPB while the vehicle is moving except in an emergency situation.

**\* NOTICE**

A click or electric brake motor whine sound may be heard while operating or releasing the EPB.

These conditions are normal and indicate that the EPB is functioning properly.

**Releasing the Electronic Parking Brake (EPB) with EPB switch**

Releasing the EPB with EPB switch,

1. Have the START/STOP button in the ON position.
2. Depress the brake pedal.  
The shifter dial must be in P (Park).
3. Make sure the brake warning light goes off.

## Automatic release of EPB

The EPB is released automatically in the following situations.

- Shifter dial in P (Park)
 

With the vehicle running depress the brake pedal and shift out of P (Park) to R (Reverse) or D (Drive).
- Shifter dial in N (Neutral)
 

With the vehicle running depress the brake pedal and shift out of N (Neutral) to R (Reverse) or D (Drive).
- Reduction gear
  1. Start the vehicle.
  2. Fasten the driver's seat belt.
  3. Close the driver's door, hood and liftgate.
  4. Depress the accelerator pedal while the shifter dial is in R (Rear), D (Drive).

Make sure the brake warning light goes off.

### \* NOTICE

- For your safety, you can engage the EPB even though the START/STOP button is in the OFF position, but you cannot release it.
- For your safety, depress the brake pedal and release the parking brake manually with the EPB switch when you drive downhill or when backing up the vehicle.

Do not follow the above procedure when driving on a flat level ground. The vehicle may suddenly move forward.

### \* NOTICE

If the parking brake warning light is still on even though the EPB has been released, have the system checked by an authorized Kia dealer.

### ⚠ CAUTION

Do not drive your vehicle with the EPB applied. It may cause excessive brake pad and brake rotor wear.

### EPB may be automatically applied when:

The EPB is applied automatically under following conditions.

- The EPB is overheated
- Requested by other systems

### \* NOTICE

For Electronic Parking Brake (EPB) equipped vehicles with AUTO HOLD function used while driving, if the START/STOP button has been turned OFF, the EPB will be engaged automatically. Therefore,

AUTO HOLD function should be turned off before the START/STOP button is turned off.

### System warning

The EPB will display a warning message with sound under certain conditions.

- If you try to drive off depressing the accelerator pedal with the EPB applied, but the EPB doesn't release automatically, a warning will sound and a message will appear.
- If the driver's seat belt is not fastened and the vehicle hood, driver's door or liftgate is opened, a warning will sound and a message will appear.





**A: To release EPB, fasten seatbelt and close door, hood, and liftgate**

- If there is a problem with the vehicle, a warning may sound and a message may appear.

If the above situation occurs, depress the brake pedal and release EPB by pressing the EPB switch.

**⚠ WARNING**

**Parking Brake Use**

- Never allow a passenger to touch the parking brake. If the parking brake is released unintentionally, serious injury may occur.
  - All vehicles should always have the parking brake fully engaged when parked to avoid inadvertent movement of the vehicles which can injure occupants or pedestrians.
- 
- A click or electric brake motor whine sound may be heard while operating or releasing the EPB. These conditions are normal and indicate that the EPB is functioning properly.
  - When leaving your keys with a parking lot attendant or valet, make sure to inform him/her how to operate the EPB.

- The EPB may malfunction if you drive with the EPB applied.
- When you automatically release EPB by depressing the accelerator pedal, depress it slowly.

When the conversion from Auto Hold to EPB is not working properly a warning will sound and a message will appear.



**A: AUTO HOLD turning Off! Press brake pedal**

**\* NOTICE**

Depress the brake pedal when the above message appears for the Auto Hold and EPB may not activate.

If the EPB is applied while Auto Hold is activated because of an Electronic Stability Control (ESC) signal, a warning will sound and a message will appear.



### A: Parking brake automatically engaged

#### EPB malfunction indicator

This warning light appears if the START/STOP button is changed to the ON position and goes off in approximately 3 seconds if the system is operating normally.



If the EPB malfunction indicator remains on, comes on while driving, or does not come on when the START/STOP button is changed to the ON position, this indicates that the EPB may have malfunctioned.

If this occurs, have your vehicle checked by an authorized Kia dealer as soon as possible.

The EPB warning light may appear if the EPB switch operates abnormally. Shut the vehicle off and turn it on again after a few minutes. The warning light will go off and the EPB switch will operate normally. However, if the EPB warning light is still on, have the system checked by an authorized Kia dealer.

If the parking brake warning light does not appear or blinks even though the EPB switch was pulled up, the EPB is not applied.

If the parking brake warning light blinks when the EPB warning light is on, press the EPB switch, then pull it up. Once more press it back to its original position and pull it back up. If the EPB warning does not go off, have the system checked by an authorized Kia dealer.

#### Emergency braking

If there is a problem with the brake pedal while driving, emergency braking is possible by pulling up and holding the EPB switch.

Braking is possible only while you are holding the EPB switch.

#### **WARNING**

Do not operate the Electronic Parking Brake (EPB) while the vehicle is moving except in an emergency situation. Applying the EPB while the vehicle is moving at normal speeds can cause a sudden loss of control of the vehicle. If you must use the EPB to stop the vehicle, use great caution in applying the brake.

### \* NOTICE

During emergency braking by the EPB, the parking brake warning light will appear to indicate that the system is operating.

If you notice a continuous noise or burning smell when the EPB is used for emergency braking, have your vehicle checked by an authorized Kia dealer.

### When the EPB is not released

If the EPB does not release normally, take your vehicle to an authorized Kia dealer by loading the vehicle on a flat-bed tow truck and have the system checked.

### AUTO HOLD

The Auto Hold is designed to maintain the vehicle in a standstill even though the brake pedal is not depressed after the driver brings the vehicle to a complete stop by depressing the brake pedal.

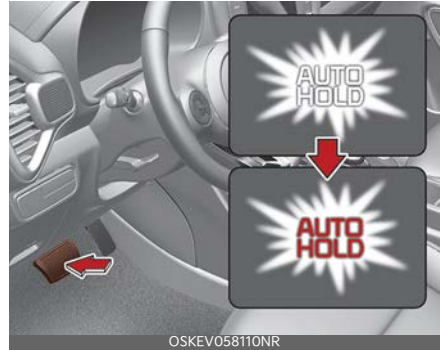
### Applying AUTO HOLD function

1. Depress the brake pedal and start the vehicle.
2. Press the Auto Hold button. The white AUTO HOLD indicator will come on indicating the system is in standby.



Before the Auto Hold will engage, the driver's door and vehicle hood must be closed and the liftgate must be closed.

When coming to a complete stop by depressing the brake pedal, the AUTO HOLD indicator changes from white to green indicating the AUTO HOLD is engaged. The vehicle will remain at a standstill even if you release the brake pedal.



If EPB is applied, Auto Hold will be released.

If you press the accelerator pedal with the shifter dial in D (Drive) or manual mode or R (Reverse), the Auto Hold will be released automatically and the vehicle will start to move. The indicator changes from green to white indicating the Auto Hold is in standby and the EPB is released.

When driving off from Auto Hold by depressing the accelerator pedal, always check the surrounding area near your vehicle.

Slowly depress the accelerator pedal for a smooth launch.

## Canceling AUTO HOLD function



- To cancel the Auto Hold operation, press the Auto Hold switch. The AUTO HOLD indicator will go out.
- To cancel the Auto Hold operation when the vehicle is at a standstill, press the Auto Hold switch while depressing the brake pedal.

### \* NOTICE

- The following are conditions when the Auto Hold will not engage (Auto Hold light will not turn green and the Auto Hold system remains in stand by):
  - The driver's door is opened
  - The vehicle hood or liftgate is opened
  - The shifter dial is in P (Park)
  - The EPB is applied
- For your safety, the Auto Hold automatically switches to EPB under any of the following conditions (Auto Hold light remains white and the EPB automatically applies):
  - The driver's door is opened
  - The vehicle hood or liftgate is opened
  - The vehicle is in a standstill for more than 10 minutes

- The vehicle is standing on a steep slope
- The vehicle moved for a few seconds

In these cases, the brake warning light comes on, the AUTO HOLD indicator changes from green to white, and a warning sounds and a message will appear to inform you that EPB has been automatically engaged. Before driving off again, press foot brake pedal, check the surrounding area near your vehicle and release parking brake manually with the EPB switch.

- If the AUTO HOLD indicator lights up yellow, the Auto Hold is not working properly. Take your vehicle to an authorized Kia dealer and have the system checked.

### ⚠ WARNING

To reduce the risk of an accident, do not activate Auto Hold while driving downhill, backing up or parking your vehicle. Do not solely rely on Auto Hold to control the brakes on your vehicle. Always be ready to apply the brakes according to the road and traffic conditions.

If there is a malfunction with the driver's door or vehicle hood or liftgate open detection system, the Auto Hold may not work properly.

Take your vehicle to an authorized Kia dealer and have the system checked.

**\* NOTICE**

A click or electric brake motor whine sound may be heard while operating or releasing the EPB, but these conditions are normal and indicate that the EPB is functioning properly.

**Warning messages**

The Auto Hold function will display a warning message with sound under certain conditions.

When the EPB is applied from Auto Hold, a warning will sound and a message will appear.



**A: Parking brake automatically engaged**

When the conversion from Auto Hold to EPB is not working properly a warning will sound and a message will appear.



**A: AUTO HOLD turning Off! Press brake pedal**

**\* NOTICE**

When this message is displayed, the Auto Hold and EPB may not operate. For your safety, depress the brake pedal.

If you do not apply the brake pedal when you release the Auto Hold by pressing the [AUTO HOLD] switch, a warning will sound and a message will appear.



**A: Press brake pedal to deactivate AUTO HOLD**

When you press the [AUTO HOLD] switch, if the driver's door and vehicle hood are not closed or the liftgate is not closed, a warning will sound and a message will appear on the LCD display.



**A: AUTO HOLD conditions not met. Close door, hood, and liftgate**

At this moment, press the [AUTO HOLD] button after closing the driver's door, vehicle hood and liftgate.

**⚠ WARNING**

**Parking brake use**

- Never allow a passenger to touch the parking brake. If the parking brake is released unintentionally, serious injury may occur.
- All vehicles should always have the parking brake fully engaged when parked to avoid inadvertent movement of the vehicles which can injure occupants or pedestrians.

Check the brake warning light by pressing START/STOP button ON (do not start the vehicle). This light will appear when the parking brake is applied with the START/STOP button in the START or ON position.



Before driving, be sure the parking brake is fully released and the brake warning light is off.

If the brake warning light remains on after the parking brake is released while the vehicle is running, there may be a malfunction in the brake system. Immediate attention is necessary.

If at all possible, cease driving the vehicle immediately. If that is not possible, use extreme caution while operating the vehicle and only continue to drive the vehicle until you can reach a safe location or repair shop.

**Anti-lock Brake System (ABS)**

The Anti-lock Brake System (ABS) prevents the wheels from locking. So the vehicle remains stable and can still be steered.

**⚠ WARNING**

ABS (or Electronic Stability Control (ESC)) will not prevent accidents due to improper or dangerous driving maneuvers. Even though vehicle control is improved during emergency braking, always maintain a safe distance between you and objects ahead.

Vehicle speeds should always be reduced during extreme road conditions. The vehicle should be driven at reduced speeds in the following circumstances:

- When driving on rough, gravel or snow-covered roads
- When driving on roads where the road surface is pitted or has different surface heights.

Driving in these conditions increases the stopping distance for your vehicle.

The ABS continuously senses the speed of the wheels. If the wheels are going to lock, the ABS repeatedly modulates the hydraulic brake pressure to the wheels.

When you apply your brakes under conditions which may lock the wheels, you may hear a "tik-tik" sound from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your ABS is active.

In order to obtain the maximum benefit from your ABS in an emergency situation, do not attempt to modulate your brake pressure and do not try to pump your brakes. Press your brake pedal as hard as possible to allow the ABS to control the force being delivered to the brakes.

#### \* NOTICE

A click sound may be heard in the vehicle compartment when the vehicle begins to move after the vehicle is started. These conditions are normal and indicate that the Anti-lock Brake System (ABS) is functioning properly.

Even with the ABS, your vehicle still requires sufficient stopping distance. Always maintain a safe distance from the vehicle in front of you.

Always slow down when cornering. The ABS cannot prevent accidents resulting from excessive speeds.

On loose or uneven road surfaces, operation of the ABS may result in a longer stopping distance than for vehicles equipped with a conventional brake system.

The ABS warning light will stay on for approximately 3 seconds after the START/STOP button is ON.



During that time, the ABS will go through self-diagnosis and the light will go off if everything is normal. If the light stays on, you may have a problem with your ABS. Contact an authorized Kia dealer as soon as possible.

When you drive on a road having poor traction, such as an icy road, and have operated your brakes continuously, the ABS will be active continuously and the ABS warning light may appear. Pull your vehicle over to a safe place and stop the vehicle.

Restart the vehicle. If the ABS warning light goes off, then your ABS system is normal. Otherwise, you may have a problem with the ABS. Contact an authorized Kia dealer as soon as possible.

### \* NOTICE

When you jump start your vehicle because of a drained battery, the vehicle may not run as smoothly and the ABS warning light may turn on at the same time. This happens because of low battery voltage. It does not mean your ABS has malfunctioned.

- Do not pump your brakes!
- Have the battery recharged before driving the vehicle.

### Electronic Stability Control (ESC)

The Electronic Stability Control (ESC) is designed to stabilize the vehicle during cornering maneuvers.



ESC checks where you are steering and where the vehicle is actually going. ESC applies the brakes on individual wheels and intervenes with the vehicle management system to stabilize the vehicle.

ESC will not prevent accidents. Excessive speed in turns, abrupt maneuvers and hydroplaning on wet surfaces can still result in serious accidents.

Only a safe and attentive driver can prevent accidents by avoiding maneuvers that cause the vehicle to lose traction. Even with ESC installed, always follow all the normal precautions for driving -

including driving at safe speeds for the conditions.

### ⚠ WARNING

For maximum protection, always wear your seat belt. No system, no matter how advanced, can compensate for all driver error and/or driving conditions. Always drive responsibly.

The ESC system is an electronic system designed to help the driver maintain vehicle control under adverse conditions. It is not a substitute for safe driving practices. Factors including speed, road conditions and driver steering input can all affect whether ESC will be effective in preventing a loss of control. It is still your responsibility to drive and corner at reasonable speeds and to leave a sufficient margin of safety.

When you apply your brakes under conditions which may lock the wheels, you may hear a "tik-tik" sound from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your ESC is active.

### \* NOTICE

A click sound may be heard in the vehicle compartment when the vehicle begins to move after the vehicle is started. These conditions are normal and indicate that the Electronic Stability Control (ESC) is functioning properly.



## ESC operation

### ESC ON condition

- When the START/STOP button is turned ON, ESC and ESC OFF indicator lights appear for approximately 3 seconds, then ESC is turned on.
- Press the ESC OFF button for at least half a second after turning the vehicle ON to turn ESC off. (ESC OFF indicator will appear). To turn the ESC on, press the ESC OFF button (ESC OFF indicator light will go off).
- When starting the 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 in operation, the ESC indicator light blinks.

When the Electronic Stability Control is operating properly, you can feel a slight pulsation in the vehicle. This is only the effect of brake control and indicates nothing unusual.

When moving out of the mud or driving on a slippery road, pressing the accelerator pedal may not cause the vehicle rpm (revolutions per minute) to increase.



### ESC operation off





This car has 2 kinds of ESC off states.

If the vehicle stops when ESC is off, ESC remains off. Upon restarting the vehicle, the ESC will automatically turn on again.

### ESC off state 1 - Traction control disabled

To turn off the traction control function and only operate the brake control function of the ESC, press the ESC OFF button (ESC OFF ) for less than 3 seconds and the ESC OFF indicator light (ESC OFF ) will appear.

### ESC off state 2 - Traction & stability control disabled

To turn off the traction control function and the brake control function of the ESC, press the ESC OFF button (ESC OFF ) for more than 3 seconds. ESC OFF indicator light (ESC OFF ) will appear and ESC OFF warning chime will sound. At this state, the car stability control function does not operate any more.

### Indicator light

ESC indicator light



ESC OFF indicator light



When START/STOP button is turned to ON, the indicator light appears, then goes off if the ESC system is operating normally.

The ESC indicator light blinks whenever ESC is operating or appears when ESC fails to operate.

The ESC OFF indicator light comes on when the ESC is turned off with the button.

**⚠ WARNING****Electronic Stability Control (ESC)**

Drive carefully even though your vehicle has ESC. It can only assist you in maintaining control under certain circumstances.

**ESC OFF usage****When driving**

- ESC should be turned on for daily driving whenever possible.
- To turn ESC off while driving, press the ESC OFF button while driving on a flat road surface.

**⚠ WARNING****Operating ESC**

Never press the ESC OFF button while ESC is operating (ESC indicator light blinks).

If ESC is turned off while ESC is operating, the vehicle may slip out of control.

**\* NOTICE**

- When operating the vehicle on a dynamometer, ensure that the ESC is turned off (ESC OFF light appears). If the ESC is left on, it may prevent the vehicle speed from increasing, and result in false diagnosis.
- Turning the ESC off does not affect Anti-lock Brake System (ABS) or brake system operation.


**Vehicle Stability Management (VSM)**

The Vehicle Stability Management (VSM) system provides further enhancements to vehicle stability and steering responses when a vehicle is driving on a slippery road or a vehicle detects changes in coefficient of friction between right wheels and left wheels when braking.

**⚠ WARNING****Tire/Wheel size**


When replacing tires and wheels, make sure they are the same type, size, brand, construction and tread pattern as the original tires and wheels installed. Driving with varying tire or wheel sizes may diminish any supplemental safety benefits of the VSM system.

**VSM operation**


When the VSM is in operation, ESC indicator light () blinks.

When the VSM is operating properly, you can feel a slight pulsation in the vehicle and/or abnormal steering responses (Electric Power Steering (EPS)). This is only the effect of brake and EPS control and indicates nothing unusual.

**The VSM does not operate when:**

- Driving on a sloping road such as a gradient or incline
- Driving in reverse
- ESC OFF indicator light () remains on the instrument cluster
- EPS indicator light remains on the instrument cluster

## VSM operation off

If you press the ESC OFF button to turn off the ESC, the VSM will also cancel and the ESC OFF indicator light () appears.


To turn on the VSM, press the button again. The ESC OFF indicator light goes out.

### WARNING

#### Vehicle Stability Management (VSM)

Drive carefully even though your vehicle has VSM. It can only assist you in maintaining control of the vehicle under certain circumstances.

## Malfunction indicator

The VSM can be deactivated even if you don't cancel the VSM operation by pressing the ESC OFF button. It indicates that a malfunction has been detected somewhere in the Electric Power Steering system or VSM system. If the ESC indicator light () or EPS warning light remains on, take your vehicle to an authorized Kia dealer and have the system checked.

### WARNING

The VSM is not a substitute for safe driving practices but a supplementary function only. It is the responsibility of the driver to always check the speed and the distance to the vehicle ahead. Always hold the steering wheel firmly while driving.

Your vehicle is designed to activate according to the driver's intention, even with installed VSM. Always follow all the normal precautions for driving at safe speeds for the conditions - including driving in clement weather and on a slippery road.

### WARNING

For maximum protection, always wear your seat belt. No system, no matter how advanced, can compensate for all driver error and/or driving conditions. Always drive responsibly.

## Hill-start Assist Control (HAC)

A vehicle has the tendency to roll back on a steep hill when it starts to go after stopping. The Hill-start Assist Control (HAC) prevents the vehicle from rolling back by applying the brakes automatically for about 5 seconds.

The brakes are released when the accelerator pedal is depressed or after about 5 seconds.

The HAC is activated only for about 5 seconds, so when the vehicle is starting off always depress the accelerator pedal.

### WARNING

#### Maintaining Brake Pressure on Incline

HAC does not replace the need to apply brakes while stopped on an incline. While stopped, make sure you maintain brake pressure sufficient to prevent your vehicle from rolling backward and causing an accident. Don't release the brake pedal until you are ready to accelerate forward.

## Brake Assistant System(BAS)

The Brake Assistant System provides additional pressure when the brake pedal is momentarily and strongly depressed in a situation sudden braking is required while driving.

The Brake Assistant System reduces the time for ABS(Anti-Lock Brake System) control to enter and consequently reduces the braking distance, by providing additional pressure up to the point of ABS intervention.

### BAS operation

- When the vehicle speed is more than 30 km/h and the ABS control is not entered.
- When the brake pedal is depressed strongly over a certain level.
- When the friction of the road surface is above a certain level.

### BAS operation off

- The vehicle speed is below 10 km/h.
- The brake pedal is depressed over a certain conditions.
- The friction of the road surface is below a certain level.

### WARNING

The system may not operate depending on driver's driving habit, the degree to which the brake pedal is depressed and the road surface condition.

## Good braking practices

Good braking practices help keep occupants safe and extend brake life.

- Check to be sure the parking brake is not engaged and the parking brake indicator light is out before driving away.
- Driving through water may get the brakes wet. They can also get wet when the vehicle is washed. Wet brakes can be dangerous! Your vehicle will not stop as quickly if the brakes are wet. Wet brakes may cause the vehicle to pull to one side. To dry the brakes, apply the brakes lightly until the braking action returns to normal, taking care to keep the vehicle under control at all times. If the braking action does not return to normal, stop as soon as it is safe to do so and call an authorized Kia dealer for assistance.
- Don't coast down hills with the vehicle out of gear. This is extremely hazardous. Keep the vehicle in gear at all times, use the brakes to slow down, then shift to a lower gear so that vehicle braking will help you maintain a safe speed.
- Don't "ride" the brake pedal. Resting your foot on the brake pedal while driving can be dangerous because the brakes might overheat and lose their effectiveness. It also increases the wear of the brake components.
- If a tire goes flat while you are driving, apply the brakes gently and keep the vehicle pointed straight ahead while you slow down. When you are moving slowly enough for it to be safe to do so, pull off the road and stop in a safe place.

- Be cautious when parking on a hill. Firmly engage the parking brake and place the shifter dial in P. If your vehicle is facing downhill, turn the front wheels into the curb to help keep the vehicle from rolling.  
If your vehicle is facing uphill, turn the front wheels away from the curb to help keep the vehicle from rolling. If there is no curb or if it is required by other conditions to keep the vehicle from rolling, block the wheels.
- Under some conditions your parking brake can freeze in the engaged position. This is most likely to happen when there is an accumulation of snow or ice around or near the rear brakes or if the brakes are wet. If there is a risk that the parking brake may freeze, apply it only temporarily while you put the shifter dial in P and block the rear wheels so the vehicle cannot roll. Then release the parking brake.
- Do not hold the vehicle on an incline with the accelerator pedal. This can cause the reduction gear to overheat. Always use the brake pedal or parking brake.
- Do not pump the brake pedal as the vehicle is equipped with ABS.
- The vehicle is equipped with electronic hydraulic brake. Due to malfunction or power instability, the brake booster may not operate normally and cause the brake pedal to feel stiff, resulting in longer braking distances. In this case, stop the vehicle by depressing the brake pedal stronger than usual. Have the system inspected by a professional workshop. Have the vehicle inspected by an authorized Kia dealer.
- The sound of electronic hydraulic brake operating or its motor may be heard temporarily when: Do not hold the vehicle on an incline with the accelerator pedal. This can cause the reduction gear to overheat. Always use the brake pedal or parking brake.
  - Repeatedly depressing the brake pedal
  - Opening driver's door

### \* NOTICE

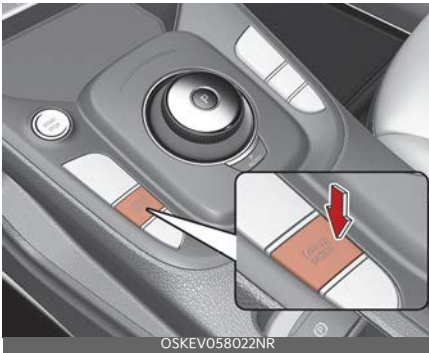
- When stepping on the brake pedal under a certain driving or weather condition, you may witness your car make a sound of squealing or some other noises. This is not a brake malfunction but a normal phenomenon.
- When driving on the road to which deicing chemicals are applied, the vehicle may witness noises from the brake or abnormal abrasion of tires because of such deicing chemicals. You should operate brake additionally so that you would be able to remove the deicing chemicals on the brake disk and pad under a safe traffic condition.

## Drive mode integrated control system

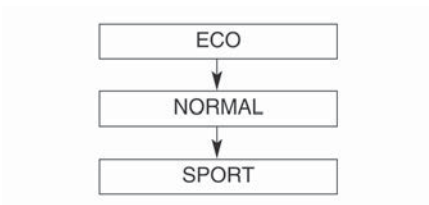
The drive mode integrated control system allows the driver to select the drive mode most appropriate to the surrounding environment.

### Drive Mode

The drive mode may be selected according to the driver's preference or road condition.






- The mode changes, as below, whenever the DRIVE MODE button is pressed.



- Press and hold the DRIVE MODE button to select ECO+ mode.

## Initial Setting for Each Drive Mode

Drive mode	NORMAL	SPORT	ECO	ECO+ <sup>*1</sup>
Feature	Normal driving mode	Sporty driving mode	Optimal for eco-driving	Ultra power saving driving mode
Button activation	Press	Press	Press	Press and hold
Indicator on the cluster	-			
Air conditioner / heater system control	NORMAL (ECO/NORMAL) <sup>*2</sup>	NORMAL (ECO/NORMAL) <sup>*2</sup>	ECO	Off
Speed limit	-	-	88~120 km/h (55~75 mph) <sup>*2</sup>	Below 90 km/h (56 mph)
Regenerative braking level	1 (1~3) <sup>*2</sup>	1 (1~3) <sup>*2</sup>	2 (1~3) <sup>*2</sup>	2

### \*1. Change to ECO+ mode

Distance to empty may not change when the air conditioner / heater system is off. However, actual distance may be extended.

Air conditioner / heater system turns off (except the defroster) but you may turn it on if necessary.

When the drive mode is switched from the ECO+ mode to a different mode, it is changed to air conditioner / heater operation status of the ECO mode.

The speed limit is automatically deactivated when the Smart Cruise Control (SCC) is in activation or the accelerator pedal is depressed to the end. If speed limit function is deactivated by depressing the accelerator pedal, the speed limit function will reactivate when vehicle speed is lower than the set speed limit. Also, the speed is changed to the speed set at ECO mode when the drive mode switches from the ECO+ mode to ECO mode.

\*2. It is possible to set the driving condition for each drive mode (except the ECO+ mode) at the drive mode setting in the Infotainment system. For more information, refer to the separately supplied manual.

## Active air flap



Active air flap system controls the air flap below the front bumper to cool the vehicle parts and improve energy efficiency.

## Active air flap malfunction



### A: 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 is popped up on the display, stop the vehicle in a safe place and check the status of the air flap.

Start the vehicle after performing the necessary work like foreign matter

removal and waiting 10 minutes. If the pop-up remains up, have the vehicle inspected by a professional workshop. Visit an authorized Kia dealer.

### ⚠ CAUTION

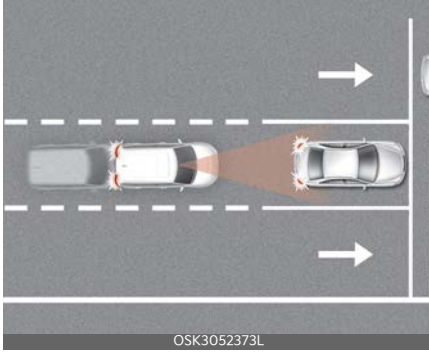
- Regardless of the pop-up, if the air flaps aren't in the same position, stop the vehicle and wait for 10 minutes and start the vehicle and inspect the air flap.
- The active air flap system is actuated by motors. Do not disturb actuation or apply force excessively. It may cause failure.

### \* NOTICE

Active air flap system could be activate regardless of the vehicle condition.( Parking, driving, charging, etc.)



## Forward Collision-Avoidance Assist (FCA) (Front Camera Only) (if equipped)



OSK3052373L

Forward Collision-Avoidance Assist is designed to help detect and monitor the vehicle ahead or help detect pedestrian or cyclist in the roadway and warn the driver that a collision is imminent with a warning message and an audible warning, apply emergency braking.

### Detecting sensor

Front view camera



OSKEV052444L

Refer to the picture above for the detailed location of the detecting sensors.

### ⚠ CAUTION

- Never disassemble the detecting sensor or sensor assembly, or cause any damage to it.
- If the detecting sensors have been replaced or repaired, have the vehicle inspected by an authorized Kia dealer.
- Never install any accessories or stickers on the front windshield, or tint the front windshield.
- Pay extreme caution to keep the front view camera dry.
- Never place any reflective objects (for example, white paper, mirror) over the dashboard.
- Do not place any objects near the front windshield or install any accessories on the front windshield. It can affect the performance of the defogging and defrosting function of the climate control system, which may prevent the Driver Assistance systems from operating.

6

## Forward Collision-Avoidance Assist settings

### Forward safety



OSK3052297N

### A: Driver Assistance

## 1 Driving Safety

### 2 Forward Safety

With the vehicle on, select **Settings** → **Vehicle** → **Driver Assistance** → **Driving Safety** on the infotainment system. The initial warning activation timing of Forward Collision-Avoidance Assist can be changed.

- **Forward Safety:** Depending on the collision risk levels, an audible warning will sound, and the braking will be assisted. If the following menu is deactivated, Forward Collision-Avoidance Assist will turn off and the warning light (🚨) will appear on the cluster.

The driver can monitor Forward Collision-Avoidance Assist On/Off status from the Settings menu. If the warning light (🚨) remains ON when Forward Collision-Avoidance Assist is on, have the vehicle inspected by an authorized Kia dealer.

#### ⚠️ WARNING

When the vehicle is restarted, Forward Collision-Avoidance Assist will always turn on. However, if **Forward Safety** is deselected, the driver should always be aware of the surroundings and drive safely.

#### ⚠️ CAUTION

When the trailer is connected, Forward Collision-Avoidance Assist automatically turns off (if equipped). In this case, you cannot get help from Forward Collision-Avoidance Assist. Always drive with care.

## Forward Safety Warning Timing



A: **Driving Safety**

### 1 Forward Safety Warning Timing

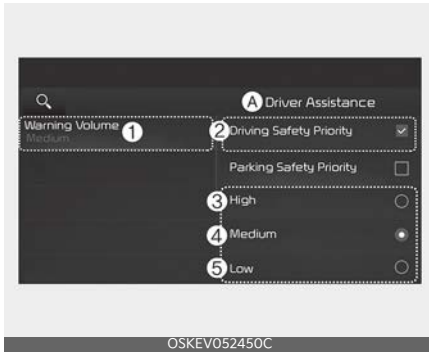
#### 2 Standard

#### 3 Late

With the vehicle on, **Settings** → **Vehicle** → **Driver Assistance** → **Driving Safety** → **Forward Safety Warning Timing** on the infotainment system to change the initial warning activation timing of Forward Collision-Avoidance Assist.

- Use **Standard** in normal driving conditions. If the Warning Timing seems sensitive, change it to **Late**.
- If **Late** is selected, Forward Collision-Avoidance Assist, warns the driver more slowly.

## Warning volume



A: **Driver Assistance**

1 **Warning Volume**

2 **Driving Safety Priority**

3 **High**

4 **Medium**

5 **Low**

With the vehicle on, **Settings** → **Vehicle** → **Driver Assistance** → **Warning Volume** on the infotainment system to change the Warning volume to adjust the Warning volume levels; **High**, **Medium** or **Low**.

If **Driving Safety Priority** is selected, the audio volume will temporarily decrease to warn the driver with the audible warning for safe driving.

### ⚠ CAUTION

- The setting of the Warning Timing and Warning Volume applies to all functions of Forward Collision-Avoidance Assist.
- Even though **Standard** is selected for Warning Timing, if the front vehicle suddenly stops, the warning may seem late.

- Select **Late** for Warning Timing when traffic is light and when driving speed is slow.

### \* NOTICE

- If the vehicle is restarted, Warning timing and Warning volume will maintain the last setting.
- If you change the Warning volume, the Warning volume of other Driver Assistance systems may change.

## Forward Collision-Avoidance Assist operation

### Basic function

The basic function for Forward Collision-Avoidance Assist is warned and controlled by the following level.

- Collision warning
- Emergency braking
- Stopping vehicle and ending brake control

### Collision warning



A: **Collision warning**

Collision warning will be activated depending on the detected object and your vehicle driving speed.

Collision Warning will be activated in the following conditions.

- Vehicle: approximately 10~180 km/h (6~112 mph)
- Pedestrian or cyclist: approximately 10~80 km/h (6~50 mph)

### Emergency braking



#### A: Emergency braking

The warning message, and an audible warning will warn the driver that emergency braking will be assisted. The brake assist will be activated and it helps avoiding collision of a vehicle, pedestrian and cyclist.

Emergency braking will be activated depending on the detected object and your vehicle driving speed.

- Vehicle: approximately 10~60 km/h (6~37 mph)
- Pedestrian or cyclist: approximately 10~60 km/h (6~37 mph)

### **CAUTION**

The function operation range may decrease due to the front traffic condition or the surroundings of the vehicle.

### Stopping vehicle and ending brake control



#### A: Drive carefully

When the vehicle is stopped due to emergency braking, the warning message will appear on the cluster.

For your safety, the driver should depress the brake pedal immediately and check the surroundings.

- Brake control will end after the vehicle is stopped by emergency braking for approximately 2 seconds.

### **WARNING**

- For your safety, change the Settings after parking the vehicle at a safe location.
- The driver should hold the responsibility to control the vehicle. Do not solely depend on Forward Collision-Avoidance Assist. Rather, maintain a safe braking distance, and if necessary, depress the brake pedal to reduce driving speed or to stop the vehicle.
- Never deliberately operate Forward Collision-Avoidance Assist on people, objects, etc. It may cause serious injury or death.

- Forward Collision-Avoidance Assist may not operate if the driver depresses the brake pedal to avoid collision.
- Depending on the road and driving conditions, Forward Collision-Avoidance Assist may warn the driver late or may not warn the driver.
- During Forward Collision-Avoidance Assist operation, the vehicle may stop suddenly injuring passengers and shifting loose objects. Always have the seat belt on and keep loose objects secured.
- If any other system's warning message is displayed or audible warning is generated, Forward Collision-Avoidance Assist warning message may not be displayed and audible warning may not be generated.
- You may not hear the warning sound of Forward Collision-Avoidance Assist if the surrounding is noisy.
- Forward Collision-Avoidance Assist may turn off or may not operate properly or may operate unnecessarily depending on the road conditions and the surroundings.
- Even if there is a problem with Forward Collision-Avoidance Assist, the vehicle's basic braking performance will operate properly.
- During emergency braking, braking control by Forward Collision-Avoidance Assist will automatically cancel when the driver excessively depresses the accelerator pedal or sharply steers the vehicle.

### ⚠ CAUTION

Depending on the condition of the vehicle, pedestrian and cyclist in front and the surroundings, the speed range to operate Forward Collision-Avoidance Assist may reduce. Forward Collision-Avoidance Assist may only warn the driver, or it may not operate.

### \* NOTICE

- In a situation where collision is imminent, braking may be assisted by Forward Collision-Avoidance Assist when braking is insufficient by the driver.
- The images and colors in the instrument cluster may differ depending on the cluster type or theme selected from the settings menu.

## Forward Collision-Avoidance Assist malfunction and limitations

### Forward Collision-Avoidance Assist malfunction



#### A: Check Forward Safety system

When Forward Collision-Avoidance Assist is not working properly, the warning message will appear, and the (⚠) and (⚠) warning lights will appear on

the cluster. Have the vehicle inspected by an authorized Kia dealer.

## Forward Collision-Avoidance Assist disabled



### A: Forward Safety systems disabled. Radar blocked

When the front windshield where the front view camera is located, front radar cover or sensor is covered with foreign material, such as snow or rain, it can reduce the detecting performance and temporarily limit or disable Forward Collision-Avoidance Assist.

If this occurs the warning message, and the (⚠️) and (⚠️) warning lights will appear on the cluster.

Forward Collision-Avoidance Assist will operate properly when snow, rain or foreign material is removed.

If Forward Collision-Avoidance Assist does not operate properly after obstruction (snow, rain, or foreign material) is removed, have the vehicle inspected by an authorized Kia dealer.

### ⚠️ WARNING

- Even though the warning message or warning light does not appear on the cluster, Forward Collision-Avoidance Assist may not properly operate.
- Forward Collision-Avoidance Assist may not properly operate in an area (for example, open terrain), where any objects are not detected after turning ON the vehicle.

## Limitations of Forward Collision-Avoidance Assist

Forward Collision-Avoidance Assist may not operate properly, or it may operate unexpectedly under the following circumstances:

- The detecting sensor or the surroundings are contaminated or damaged
- The temperature around the front view camera is high or low due to surrounding environment
- The camera lens is contaminated due to tinted, filmed or coated windshield, damaged glass, or sticky foreign material (sticker, bug, etc.) on the glass
- Moisture is not removed or frozen on the windshield
- Washer fluid is continuously sprayed, or the wiper is on
- Driving in heavy rain or snow, or thick fog
- The field of view of the front view camera is obstructed by sun glare
- Street light or light from an oncoming traffic is reflected on the wet road surface, such as a puddle on the road
- An object is placed on the dashboard
- Your vehicle is being towed
- The surrounding is very bright or the surrounding is very dark, such as in a tunnel, etc.
- The brightness changes suddenly, for example when entering or exiting a tunnel

- The brightness outside is low, and the headlamps are not on or are not bright
- Only part of the vehicle, pedestrian or cyclist is detected
- The vehicle or motorcycle in front is a bus, heavy truck, truck with an unusually shaped cargo, trailer, etc.
- The vehicle in front has no tail lights, tail lights are located unusually, etc.
- The brightness outside is low, and the tail lamps are not on or are not bright
- The rear of the front vehicle is small or the vehicle does not look normal, such as when the vehicle is tilted, overturned, or the side of the vehicle is visible, etc.
- The front vehicle's ground clearance is low or high
- A vehicle, pedestrian or cyclist suddenly cuts in front
- The vehicle in front is detected late
- The vehicle in front is suddenly blocked by an obstacle
- The vehicle in front suddenly changes lane or suddenly reduces speed
- The vehicle in front is bent out of shape
- The front vehicle speed is fast or slow
- The vehicle in front steers in the opposite direction of your vehicle to avoid a collision
- With a vehicle in front, your vehicle changes lane at low speed
- The vehicle in front is covered with snow
- You are departing or returning to the lane
- Unstable driving
- You are on a roundabout and the vehicle or motorcycle in front is not detected
- You are continuously driving in a circle
- The vehicle in front has an unusual shape
- The vehicle in front is driving uphill or downhill
- The pedestrian or cyclist is not fully detected, for example, if the pedestrian is leaning over or is not fully walking upright
- The pedestrian or cyclist is wearing clothing or equipment that makes it difficult to detect



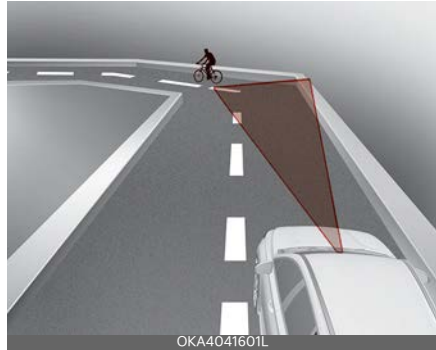
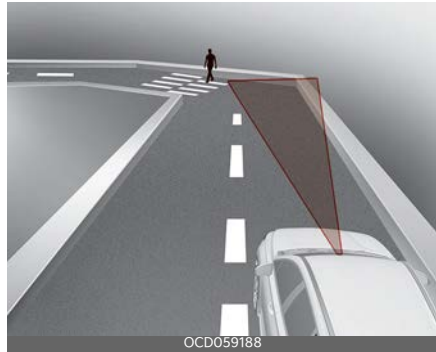
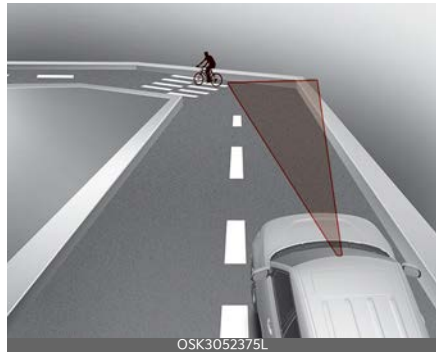
The illustration above shows the image the front view camera and front radar are capable of detecting as a vehicle, pedestrian and cyclist.

- The pedestrian or cyclist in front is moving very quickly
- The pedestrian or cyclist in front is short or is posing a low posture
- The pedestrian or cyclist in front has impaired mobility or moving intersected with the driving direction
- There is a group of pedestrians, cyclists or a large crowd in front

- The pedestrian or cyclist is wearing clothing that easily blends into the background, making it difficult to detect
- The pedestrian or cyclist is difficult to distinguish from the similarly shaped structure in the surroundings
- You are driving by a pedestrian, cyclist, traffic signs, structures, etc., near the intersection
- When driving in the following places
  - Driving through steam, smoke or shadow
  - Driving through a tunnel or iron bridge
  - Driving in large areas where there are few vehicles or structures (i.e. desert, meadow, suburb, etc.)
  - Driving in a parking lot
  - Driving through toll gate, construction areas, partially paved roads, bumpy roads, speed bumps, etc.
  - Driving near areas containing metal substances, such as a construction zone, railroad, etc.
  - Driving on an incline road, curved road, etc.
  - Driving through a roadside with trees or streetlights
  - Driving through a narrow road where trees or grass are overgrown
  - There is interference by electromagnetic waves, such as driving in an area with strong radio waves or electrical noise
- The adverse road conditions cause excessive vehicle vibrations while driving
- Your vehicle height is low or high due to heavy loads, abnormal tire pressure, etc.

**WARNING**

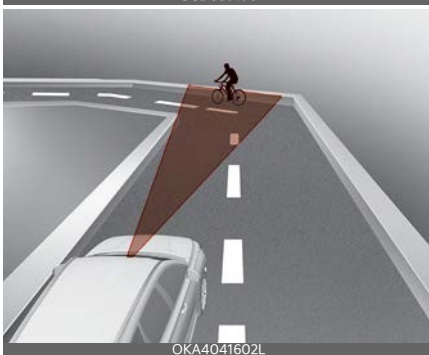
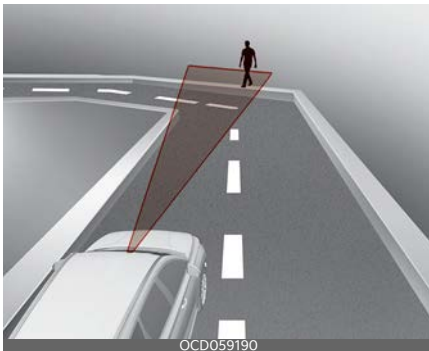
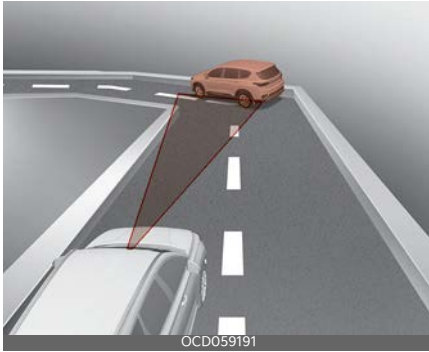
- Driving on a curved road



Forward Collision-Avoidance Assist may not detect other vehicles, pedestrians or cyclists in front of you when driving on curved roads adversely affecting the performance of the sen-



sors. This may result in no warning, braking assist when necessary. When driving on a curve, you must maintain a safe braking distance, and if necessary, steer the vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance.



Forward Collision-Avoidance Assist may detect a vehicle, pedestrian or cyclist in the next lane or outside the lane when driving on a curved road. If this occurs, Forward Collision-Avoidance Assist may unnecessarily warn the driver and control the brake. Always check the traffic conditions around the vehicle.

- Driving on an inclined road





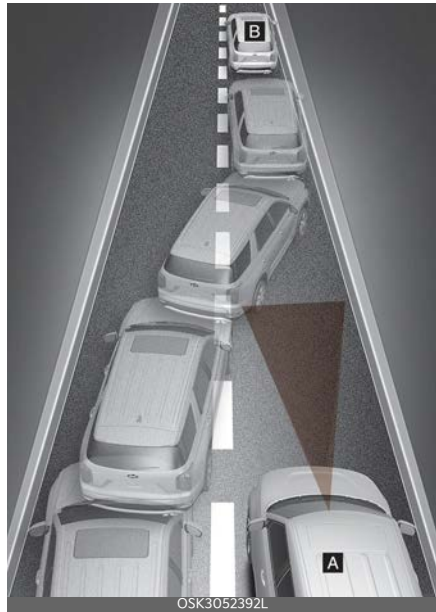
Forward Collision-Avoidance Assist may not detect other vehicles, pedestrians or cyclists in front of you while driving uphill or downhill, adversely affecting the performance of the sensors.

This may result in unnecessary warning, braking assist or no warning, braking assist when necessary.

Also, vehicle speed may rapidly decrease when a vehicle, pedestrian or cyclist ahead is suddenly detected.

Always have your eyes on the road while driving uphill or downhill and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

- Changing lanes

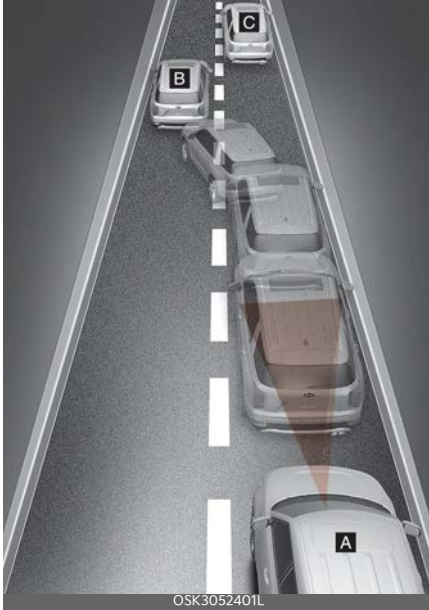


[A]: Your vehicle,

[B]: Lane changing vehicle

When a vehicle (B) moves into your lane from an adjacent lane, it cannot be detected by the sensor until it is in the sensor's detection range.

Forward Collision-Avoidance Assist may not immediately detect the vehicle when the vehicle changes lanes abruptly. In this case, you must maintain a safe braking distance, and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance.



- [A]: Your vehicle,
- [B]: Lane changing vehicle,
- [C]: Same lane vehicle

When a vehicle (B) in front of you merges out of the lane, Forward Collision-Avoidance Assist may not immediately detect the vehicle (C) that is now in front of you. In this case, you must maintain a safe braking distance, and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

- Detecting vehicle



If the vehicle in front of you has cargo that extends rearward from the cab, or when the vehicle in front of you has higher ground clearance, additional special attention is required. Forward Collision-Avoidance Assist may not be able to detect the cargo extending from the vehicle. In these instances, you must maintain a safe braking distance from the rearmost object, and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain distance.

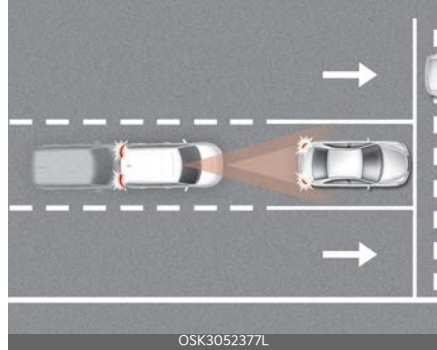
### **⚠ WARNING**

- When you are towing a trailer or another vehicle, turn off Forward Collision-Avoidance Assist for safety reasons. If you tow a European spec trailer, the function may be limited.
- Forward Collision-Avoidance Assist may operate if objects that are similar in shape or characteristics to vehicles, motorcycles, pedestrians and cyclists are detected.

- Forward Collision-Avoidance Assist does not operate on bicycles, or smaller wheeled objects, such as luggage bags, shopping carts, or strollers.
  - Forward Collision-Avoidance Assist may not operate properly if interfered by strong electromagnetic waves.
  - Forward Collision-Avoidance Assist may not operate for 15 seconds after the vehicle is started, or the front view camera is initialized.
- 

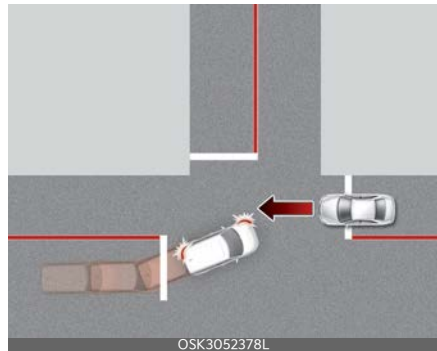
## Forward Collision-Avoidance Assist (FCA) (Sensor Fusion) (if equipped)

### Basic function



Forward Collision-Avoidance Assist is designed to help detect and monitor the vehicle ahead or help detect a powered two-wheeler, pedestrian or cyclist in the roadway and warn the driver that a collision is imminent with a warning message and warning and apply emergency braking.

### Junction Turning function



Junction Turning function can help avoid a collision with an oncoming vehicle in an adjacent lane when turning left at a

crossroad with the turn signal on by applying emergency braking.

## Detecting sensor

Front view camera



OSKEV052444L

Front radar



OSKEV052014C

Refer to the picture above for the detailed location of the detecting sensors.

### **CAUTION**

Take the following precautions to maintain optimal performance of the detecting sensor:

- Never disassemble the detecting sensor or sensor assembly, or cause any damage to it.

- If the detecting sensors have been replaced or repaired, have the vehicle inspected by an authorized Kia dealer.
- Never install any accessories or stickers on the front windshield, or tint the front windshield.
- Pay extreme caution to keep the front view camera dry.
- Never place any reflective objects (for example, white paper, mirror) over the dashboard.
- Do not place any objects near the front windshield or install any accessories on the front windshield. It can affect the performance of the defogging and defrosting function of the climate control system, which may prevent the Driver Assistance systems from operating.
- Do not apply license plate frame or objects, such as a bumper sticker, film or a bumper guard, near the front radar cover.
- Always keep the front radar and cover clean and free of dirt and debris. Use only a soft cloth to wash the vehicle. Do not spray pressurized water directly on the sensor or sensor cover.
- If the radar or around the radar has been damaged or impacted in any way, Forward Collision-Avoidance Assist may not properly operate even though a warning message does not appear on the cluster. Have the vehicle inspected 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, 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.

## Forward Collision-Avoidance Assist settings

### Forward safety



OSK305297N

#### A: Driver Assistance

##### 1 Driving Safety

##### 2 Forward Safety

With the vehicle on, **Settings** → **Vehicle** → **Driver Assistance** → **Driving Safety** on the infotainment system. The initial warning activation timing of Forward Collision-Avoidance Assist can be changed.

- **Forward Safety:** Depending on the collision risk levels, an audible warning will sound and the braking will be assisted. If the following menu is deactivated, Forward Collision-Avoidance Assist will turn off and the warning light (🚗) will appear on the cluster.

The driver can monitor Forward Collision-Avoidance Assist On/Off status from the Settings menu. If the warning light (🚗) remains ON when Forward Collision-Avoidance Assist is on, have the vehicle inspected by an authorized Kia dealer.

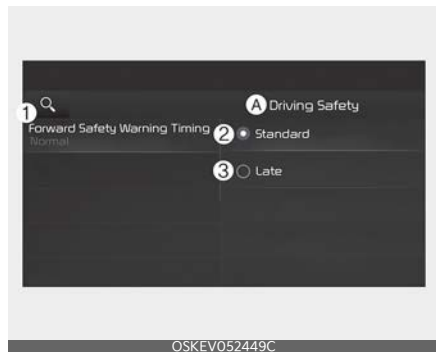
### ⚠ WARNING

When the vehicle is restarted, Forward Collision-Avoidance Assist will always turn on. However, if **Forward Safety** is deselected, the driver should always be aware of the surroundings and drive safely.

### ⚠ CAUTION

When the trailer is connected, Forward Collision-Avoidance Assist automatically turns off (if equipped). In this case, you cannot get help from Forward Collision-Avoidance Assist. Always drive with care.

### Forward Safety Warning Timing



OSKEV052449C

#### A: Driving safety

##### 1 Forward Safety Warning Timing

##### 2 Standard

##### 3 Late

With the vehicle on, touch **Settings** → **Vehicle** → **Driver assistance** → **Driving safety** → **Forward Safety Warning Timing** on the infotainment system to change the initial warning activation timing of Forward Collision-Avoidance Assist.

- Use **Standard** in normal driving conditions. If the Warning Timing seems sensitive, change it to **Late**.
- If **Late** is selected, Forward Collision-Avoidance Assist, warns the driver more slowly.

## Warning volume



A: **Driver Assistance**

- 1 **Warning Volume**
- 2 **Driving Safety Priority**
- 3 **High**
- 4 **Medium**
- 5 **Low**

With the vehicle on, select **Settings** → **Vehicle** → **Driver Assistance** → **Warning Volume** on the infotainment system to change the Warning volume to adjust the Warning volume levels; **High**, **Medium** or **Low**.

If **Driving Safety Priority** is selected, the audio volume will temporarily decrease to warn the driver with the audible warning for safe driving.

### ⚠ CAUTION

- The setting of the Warning Timing and Warning Volume applies to all functions of Forward Collision-Avoidance Assist.
- Even though **Standard** is selected for Warning Timing, if the front vehicle suddenly stops, the warning may seem late.
- Select **Late** for Warning Timing when traffic is light and when driving speed is slow.

### \* NOTICE

- If the vehicle is restarted, Warning timing and Warning volume will maintain the last setting.
- If you change the Warning volume, the Warning volume of other Driver Assistance systems may change.

## Forward Collision-Avoidance Assist operation

### Basic function

The basic function for Forward Collision-Avoidance Assist is warned and controlled by the following level.

- Collision warning
- Emergency braking
- Stopping vehicle and ending brake control

## Collision warning



### A: Collision warning

Collision warning will alert the driver with a warning message, and an audible warning.

Collision warning will be activated depending on the detected object and your vehicle driving speed.

- Vehicle: approximately 10~200 km/h (6~124 mph)
- Pedestrian or cyclist: approximately 10~85 km/h (6~53 mph)

## Emergency braking



### A: Emergency braking

The warning message, and an audible warning will warn the driver that emergency braking will be assisted. The brake assist will be activated and it helps

avoiding collision of a vehicle, pedestrian and cyclist.

Emergency braking will be activated depending on the detected object and your vehicle driving speed.

- Vehicle :

	Driving target	Stopped target
Weak braking power	approximately 10~200 km/h (6~124 mph)	
Strong braking power	approximately 10~130 km/h (6~80 mph)	approximately 10~75 km/h (6~47 mph)

- Pedestrian or cyclist: approximately 10~65 km/h (6~ 40 mph)

## ⚠ CAUTION

The function operation range may decrease due to the front traffic condition or the surroundings of the vehicle.

## Stopping vehicle and ending brake control



### A: Drive carefully

When the vehicle is stopped due to emergency braking, the warning message will appear on the cluster.

For your safety, the driver should depress the brake pedal immediately and check the surroundings.



- Brake control will end after the vehicle is stopped by emergency braking for approximately 2 seconds.

### Junction Turning function

The basic function for Junction turning function is warned and controlled by the following level.

- Collision warning
- Emergency braking
- Stopping vehicle and ending brake control

### Collision warning



#### A: Collision warning!

Collision warning will alert the driver with a warning message and an audible warning.

Collision warning will be activated depending on your vehicle driving speed and oncoming vehicle speed.

- Your driving speed: approximately 10~30 km/h (6~19 mph)
- Oncoming vehicle speed: 30~70 km/h (19~44 mph)

### Emergency braking



#### A: Emergency braking

The warning message and an audible warning will warn the driver that emergency braking will be assisted. The brake assist will be activated and it helps avoiding collision of a vehicle.

Emergency braking will be activated depending on your vehicle driving speed and oncoming vehicle speed.

- Your driving speed: approximately 10~30 km/h (6~19 mph)
- Oncoming vehicle speed: approximately 30~70 km/h (19~44 mph)

### Stopping vehicle and ending brake control



#### A: Drive carefully

When the vehicle is stopped due to emergency braking, the warning message will appear on the cluster. For your safety, the driver should depress the brake pedal immediately and check the surroundings.

- Brake control will end after the vehicle is stopped by emergency braking for approximately 2 seconds.

### \* NOTICE

For more details on warning messages, refer to "Collision warning" on page 6-58.

### ⚠ WARNING

- For your safety, change the Settings after parking the vehicle at a safe location.
- Forward Collision-Avoidance Assist does not operate in all situations or cannot avoid all collisions.
- The driver should hold the responsibility to control the vehicle. Do not solely depend on Forward Collision-Avoidance Assist. Rather, maintain a safe braking distance, and if necessary, depress the brake pedal to reduce driving speed or to stop the vehicle.
- Never deliberately operate Forward Collision-Avoidance Assist on people, objects, etc. It may cause serious injury or death.
- Forward Collision-Avoidance Assist may not operate if the driver depresses the brake pedal to avoid collision.
- Depending on the road and driving conditions, Forward Collision-Avoidance Assist may warn the driver late or may not warn the driver.

- During Forward Collision-Avoidance Assist operation, the vehicle may stop suddenly injuring passengers and shifting loose objects. Always have the seat belt on and keep loose objects secured.
- If any other system's warning message is displayed or audible warning is generated, Forward Collision-Avoidance Assist warning message may not be displayed and audible warning may not be generated.
- You may not hear the warning sound of Forward Collision-Avoidance Assist if the surrounding is noisy.
- Forward Collision-Avoidance Assist may turn off or may not operate properly or may operate unnecessarily depending on the road conditions and the surroundings.
- Even if there is a problem with Forward Collision-Avoidance Assist, the vehicle's basic braking performance will operate properly.
- During emergency braking, braking control by Forward Collision-Avoidance Assist will automatically cancel when the driver excessively depresses the accelerator pedal or sharply steers the vehicle.

### ⚠ CAUTION

- Depending on the condition of the vehicle, motorcycle, pedestrian and cyclist in front and the surroundings, the speed range to operate Forward Collision-Avoidance Assist may reduce. Forward Collision-Avoidance Assist may only warn the driver, or it may not operate.

- Forward Collision-Avoidance Assist will operate under certain conditions by judging the risk level based on the condition of the oncoming vehicle, driving direction, speed and surroundings.

**\* NOTICE**

- In a situation where collision is imminent, braking may be assisted by Forward Collision-Avoidance Assist when braking is insufficient by the driver.
- The images and colors in the instrument cluster may differ depending on the cluster type or theme selected from the settings menu.

**Forward Collision-Avoidance Assist malfunction and limitations**

**Forward Collision-Avoidance Assist malfunction**



**A: Check Forward Safety system**

When Forward Collision-Avoidance Assist is not working properly, the warning message will appear, and the (⚠️) and (⚠️) warning lights will appear on the cluster. Have the vehicle inspected by an authorized Kia dealer.

**Forward Collision-Avoidance Assist disabled**



**A: Forward Safety system disabled. Radar blocked**

When the front windshield where the front view camera is located, front radar cover or sensor is covered with foreign material, such as snow or rain, it can reduce the detecting performance and temporarily limit or disable Forward Collision-Avoidance Assist.

If this occurs the warning message, and the (⚠️) and (⚠️) warning lights will appear on the cluster.

Forward Collision-Avoidance Assist will operate properly when snow, rain or foreign material is removed.

If Forward Collision-Avoidance Assist does not operate properly after obstruction (snow, rain, or foreign material) is removed, have the vehicle inspected by an authorized Kia dealer.

**⚠️ WARNING**

- Even though the warning message or warning light does not appear on the cluster, Forward Collision-Avoidance Assist may not properly operate.

- Forward Collision-Avoidance Assist may not properly operate in an area (for example, open terrain), where any objects are not detected after turning ON the vehicle.

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### Limitations of Forward Collision-Avoidance Assist

Forward Collision-Avoidance Assist may not operate properly, or it may operate unexpectedly under the following circumstances:

- The detecting sensor or the surroundings are contaminated or damaged
- The temperature around the front view camera is high or low due to surrounding environment
- The camera lens is contaminated due to tinted, filmed or coated windshield, damaged glass, or sticky foreign material (sticker, bug, etc.) on the glass
- Moisture is not removed or frozen on the windshield
- Washer fluid is continuously sprayed, or the wiper is on
- Driving in heavy rain or snow, or thick fog
- The field of view of the front view camera is obstructed by sun glare
- Street light or light from an oncoming traffic is reflected on the wet road surface, such as a puddle on the road
- An object is placed on the dashboard
- Your vehicle is being towed
- The surrounding is very bright or the surrounding is very dark, such as in a tunnel, etc.
- The brightness changes suddenly, for example when entering or exiting a tunnel
- The brightness outside is low, and the headlamps are not on or are not bright
- Only part of the vehicle, powered two-wheeler, pedestrian or cyclist is detected
- The vehicle or powered two-wheeler in front is a bus, heavy truck, truck with an unusually shaped cargo, trailer, etc.
- The vehicle or powered two-wheeler in front has no tail lights, tail lights are located unusually, etc.
- The brightness outside is low, and the tail lamps are not on or are not bright
- The rear of the front vehicle is small or the vehicle does not look normal, such as when the vehicle is tilted, overturned, or the side of the vehicle is visible, etc.
- The front vehicle's ground clearance is low or high
- A vehicle, powered two-wheeler, pedestrian or cyclist suddenly cuts in front
- The bumper around the front radar is impacted, damaged or the front radar is out of position
- The temperature around the front radar is high or low
- Driving through a tunnel or iron bridge
- Driving in vast areas where there are few vehicles or structures (for example, desert, meadow, suburb, etc.)
- Driving near areas containing metal substances, such as a construction zone, railroad, etc.
- A material is near that reflects very well on the front radar, such as a guardrail, nearby vehicle, etc.

- The cyclist in front is on a bicycle made of material that does not reflect on the front radar
- The vehicle or powered two-wheeler in front is detected late
- The vehicle or powered two-wheeler in front is suddenly blocked by an obstacle
- The vehicle or powered two-wheeler in front suddenly changes lane or suddenly reduces speed
- The vehicle or powered two-wheeler in front is bent out of shape
- The front vehicle or powered two-wheeler or motorcycle speed is fast or slow
- The vehicle or powered two-wheeler in front steers in the opposite direction of your vehicle to avoid a collision
- With a vehicle or powered two-wheeler in front, your vehicle changes lane at low speed
- The vehicle in front is covered with snow
- You are departing or returning to the lane
- Unstable driving
- You are on a roundabout and the vehicle or powered two-wheeler in front is not detected
- You are continuously driving in a circle
- The vehicle in front has an unusual shape
- The vehicle in front is driving uphill or downhill
- The pedestrian or cyclist is not fully detected, for example, if the pedestrian is leaning over or is not fully walking upright

- The pedestrian or cyclist is wearing clothing or equipment that makes it difficult to detect



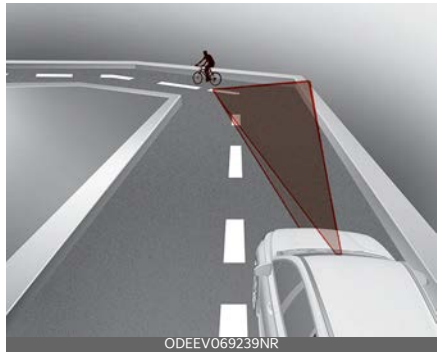
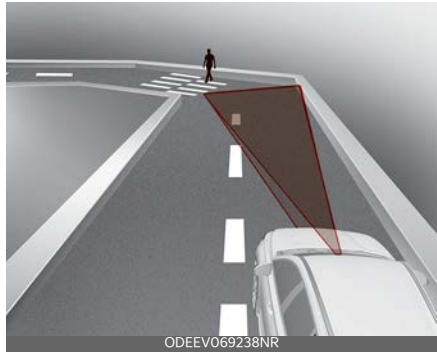
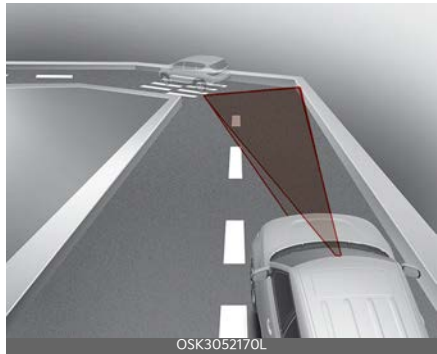
The illustration above shows the image the front view camera and front radar are capable of detecting as a vehicle, powered two-wheeler, pedestrian and cyclist.

- The pedestrian or cyclist in front is moving very quickly
- The pedestrian or cyclist in front is short or is posing a low posture
- The pedestrian or cyclist in front has impaired mobility or moving intersected with the driving direction
- There is a group of pedestrians, cyclists or a large crowd in front
- The pedestrian or cyclist is wearing clothing that easily blends into the background, making it difficult to detect
- The pedestrian or cyclist is difficult to distinguish from the similarly shaped structure in the surroundings
- You are driving by a pedestrian, cyclist, traffic signs, structures, etc., near the intersection

- When driving in the following places
  - Driving through steam, smoke or shadow
  - Driving through a tunnel or iron bridge
  - Driving in large areas where there are few vehicles or structures (i.e. desert, meadow, suburb, etc.)
  - Driving in a parking lot
  - Driving through toll gate, construction areas, partially paved roads, bumpy roads, speed bumps, etc.
  - Driving near areas containing metal substances, such as a construction zone, railroad, etc.
  - Driving on an incline road, curved road, etc.
  - Driving through a roadside with trees or streetlights
  - Driving through a narrow road where trees or grass are overgrown
  - There is interference by electromagnetic waves, such as driving in an area with strong radio waves or electrical noise
- The adverse road conditions cause excessive vehicle vibrations while driving
- Your vehicle height is low or high due to heavy loads, abnormal tire pressure, etc.

**WARNING**

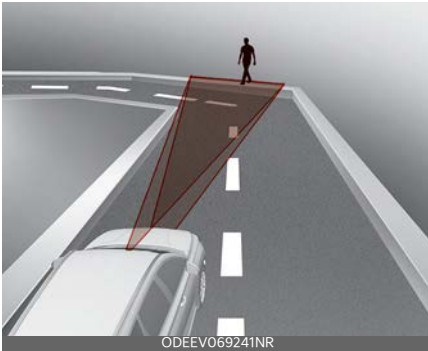
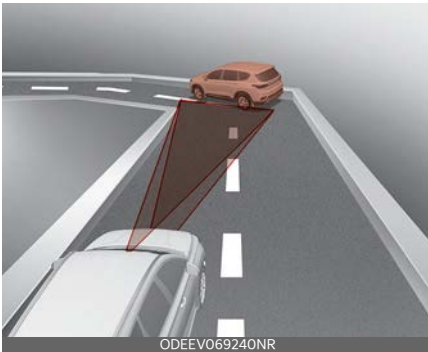
- Driving on a curved road



Forward Collision-Avoidance Assist may not detect other vehicles, powered two-wheelers, pedestrians or cyclists in front of you when driving on curved roads adversely affecting

the performance of the sensors. This may result in no warning, braking assist when necessary.

When driving on a curve, you must maintain a safe braking distance, and if necessary, steer the vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance.



Forward Collision-Avoidance Assist may detect a vehicle, powered two-wheeler, pedestrian or cyclist in the next lane or outside the lane when driving on a curved road.

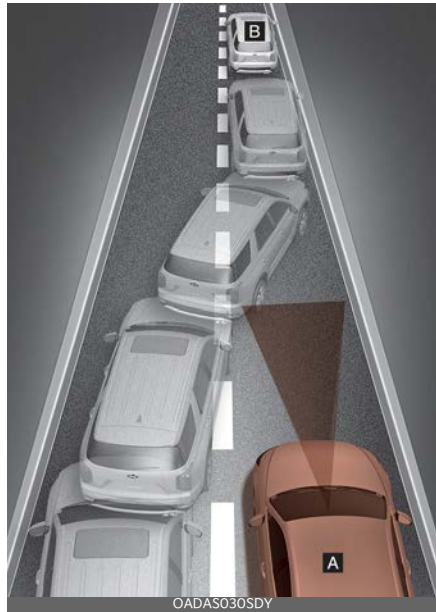
If this occurs, Forward Collision-Avoidance Assist may unnecessarily warn the driver and control the brake. Always check the traffic conditions around the vehicle.

- Driving on an inclined road





- Changing lanes



[A]: Your vehicle,

[B]: Lane changing vehicle

When a vehicle (B) moves into your lane from an adjacent lane, it cannot be detected by the sensor until it is in the sensor's detection range.

Forward Collision-Avoidance Assist may not immediately detect the vehicle when the vehicle changes lanes abruptly. In this case, you must maintain a safe braking distance, and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

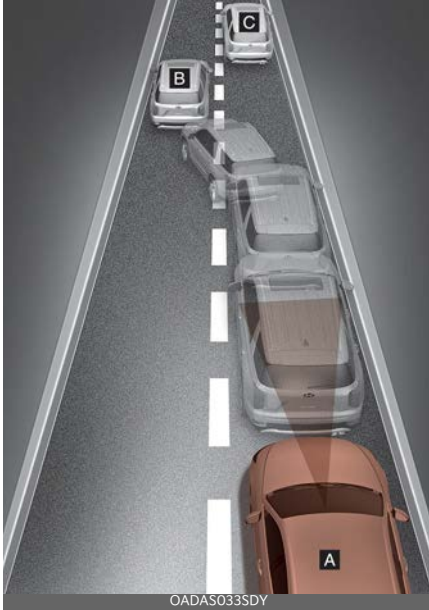
Forward Collision-Avoidance Assist may not detect other vehicles, powered two-wheelers, pedestrians or cyclists in front of you while driving uphill or downhill, adversely affecting the performance of the sensors.

This may result in unnecessary warning, braking assist or no warning, braking assist when necessary.

Also, vehicle speed may rapidly decrease when a vehicle, powered two-wheeler, pedestrian or cyclist ahead is suddenly detected.

Always have your eyes on the road while driving uphill or downhill and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

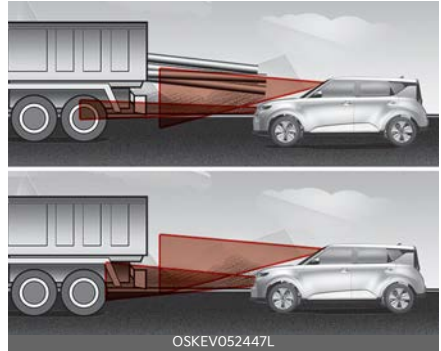




[A]: Your vehicle,  
 [B]: Lane changing vehicle,  
 [C]: Same lane vehicle

When a vehicle (B) in front of you merges out of the lane, Forward Collision-Avoidance Assist may not immediately detect the vehicle (C) that is now in front of you. In this case, you must maintain a safe braking distance, and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

- Detecting vehicle



If the vehicle in front of you has cargo that extends rearward from the cab, or when the vehicle in front of you has higher ground clearance, additional special attention is required. Forward Collision-Avoidance Assist may not be able to detect the cargo extending from the vehicle. In these instances, you must maintain a safe braking distance from the rearmost object, and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain distance.

### **⚠ WARNING**

- When you are towing a trailer or another vehicle, turn off Forward Collision-Avoidance Assist for safety reasons. If you tow a European spec trailer, the function may be limited.
- Forward Collision-Avoidance Assist may operate if objects that are similar in shape or characteristics to vehicles, motorcycles, pedestrians and cyclists are detected.

- Forward Collision-Avoidance Assist does not operate on bicycles, or smaller wheeled objects, such as luggage bags, shopping carts, or strollers.
- Forward Collision-Avoidance Assist may not operate properly if interfered by strong electromagnetic waves.
- Forward Collision-Avoidance Assist may not operate for 15 seconds after the vehicle is started, or the front view camera is initialized.

### This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following 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.
3. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

## Lane Keeping Assist (LKA) (if equipped)

Lane Keeping Assist is designed to help detect lane markings (or road edges) while driving over a certain speed. Lane Keeping Assist will warn the driver if the vehicle leaves the lane without using the turn signal, or will automatically assist the driver's steering to help prevent the vehicle from departing the lane.

### Detecting sensor

Front view camera



The front view camera is used as a detecting sensor to detect lane markings (or road edges).

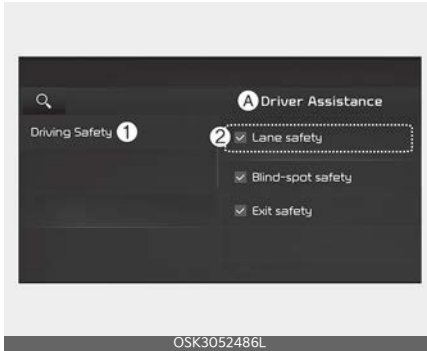
Refer to the picture above for the detailed location of the detecting sensor.

### **CAUTION**

For more details on the precautions of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA) (Front Camera Only) (if equipped)" on page 6-43.

## Lane Keeping Assist settings

### Lane safety



#### A: Driver Assistance

##### 1 Driving Safety

##### 2 Lane Safety

With the vehicle on, select **Settings** → **Vehicle** → **Driver Assistance** → **Driving Safety** on the infotainment system.

- **Lane Safety:** If Lane safety is selected, Lane Keeping Assist will automatically assist the driver's steering when lane departure is detected to help prevent the vehicle from moving out of its lane. If Lane safety is off, the yellow indicator light (🚗) will appear on the cluster.

### ⚠️ WARNING

- Lane Keeping Assist does not control the steering wheel when the vehicle is driven in the middle of the lane.
- The driver should always be aware of the surroundings and steer the vehicle if **Lane Safety** is deselected.

### \* NOTICE

When the trailer is connected, Lane Keeping Assist automatically turns off (if equipped). In this case, you cannot get help from Forward Collision-Avoidance Assist. Always drive with care.

### Warning volume



#### A: Driver Assistance

##### 1 Warning Volume

##### 2 Driving Safety Priority

##### 3 High

##### 4 Medium

##### 5 Low

With the vehicle on, touch **Settings** → **Vehicle** → **Driver Assistance** → **Warning Volume** on the infotainment system to change the Warning volume to adjust the Warning volume levels; **High**, **Medium** or **Low**.

If **Driving Safety Priority** is selected, the audio volume will temporarily decrease to warn the driver with the audible warning for safe driving.

**\* NOTICE**

If you change the Warning volume, the Warning volume of other Driver Assistance systems may change.

**Lane Keeping Assist operation**

**Turning Lane Keeping Assist On/Off**



- With the vehicle on, press and hold the Lane Driving Assist button located on the steering wheel to turn on Lane Keeping Assist. The gray or green (🚗) indicator light will appear on the cluster. Press and hold the Lane Driving Assist button again to turn off Lane Keeping Assist.

**\* NOTICE**

When the Lane Driving Assist button is pressed shortly, Lane Following Assist will turn on and off.

**Warning and control**

Left



Right



Lane Keeping Assist will warn and help control the vehicle with Lane Departure Warning and Lane Keeping Assist.

**Lane Departure Warning**


The green (🚗) indicator light and the lane line depending on which direction the vehicle is veering will blink on the cluster.

An audible warning will warn the driver that the vehicle is departing from the projected lane in front.

Lane departure warning will be activated in the following conditions.

- Your driving speed: Approximately 60~160 km/h (40~100 mph)

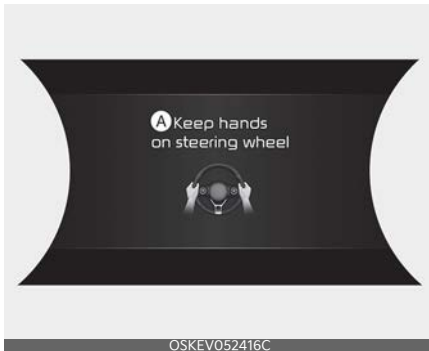
### Lane Keeping Assist

The green () indicator light will blink on the cluster, and the steering wheel will make adjustments to warn the driver that the vehicle is departing from the projected lane in front.

Lane Keeping Assist will be activated in the following conditions.

- Your driving speed: Approximately 60~200 km/h (40~120 mph)

### Hands-off warning




#### A: **Keep hands on steering wheel**

If the driver takes their hands off the steering wheel for several seconds, the warning message will appear on the cluster, and an audible warning will sound in stages.

### **WARNING**

- The steering wheel may not be assisted if the steering wheel is held very tight or the steering wheel is steered over a certain degree.
- Lane Keeping Assist does not operate at all times. It is the responsibility of the driver to safely steer the vehicle and to maintain the vehicle in its lane.
- The hands-off warning message may appear late depending on road conditions. Always have your hands on the steering wheel while driving.
- If the steering wheel is held very lightly, the hands-off warning message may appear because Lane Keeping Assist may not recognize that the driver has their hands on the steering wheel.
- If you attach objects to the steering wheel, the hands-off warning may not work properly.

### **NOTICE**

- For more details on setting the functions in the infotainment system Vehicle Settings, refer to "Vehicle settings (infotainment system)" on page 5-63.
- When lane markings (or road edges) are detected, the lane lines on the cluster will change from grey to white and the green () indicator light will appear.
- When lane markings (or road edges) are detected, the green lane lines on the cluster may appear.

Lane undetected



Lane detected



- The images and colors in the instrument cluster may differ depending on the cluster type or theme selected from the settings menu.
- Even though the steering is assisted by Lane Keeping Assist, the driver may control the steering wheel.
- The steering wheel may feel heavier or lighter when the steering wheel is assisted by Lane Keeping Assist than when it is not.

## Lane Keeping Assist malfunction and limitations

### Lane Keeping Assist malfunction



#### A: Check Lane Safety system

When Lane Keeping Assist is not working properly, the warning message will appear and the yellow (🚗) indicator light will appear on the cluster. If this occurs, have the function inspected by an authorized Kia dealer.

#### Limitations of Lane Keeping Assist

Lane Keeping Assist may not operate properly or may operate unexpectedly under the following circumstances:

- The lane is contaminated or difficult to detect because:
  - The lane markings (or road edge) are covered with rain, snow, dirt, oil, etc.
  - The color of the lane marking (or road edge) is not distinguishable from the road
  - There are markings (or road edges) on the road near the lane or the markings (or road edges) on the road look similar to the lane markings (or road edge)

- The lane marking (or road edge) is indistinct or damaged
- The shadow is on the lane marking (or road edge) by a median strip, trees, guardrail, noise barriers, etc.
- The lane number increases or decreases, or the lane markings (or road edges) are crossing
- There are more than two lane markings (or road edges) on the road
- The lane markings (or road edges) are complicated or a structure substitutes for the lines, such as a construction area
- There are road markings, such as zig-zag lanes, crosswalk markings and road signs
- The lane suddenly disappears, such as at the intersection
- The lane (or road width) is very wide or narrow
- There is a road edge without a lane
- There is a boundary structure in the roadway, such as a tollgate, sidewalk, curb, etc.
- The distance to the front vehicle is extremely short or the vehicle in front is covering the lane marking (or road edge)
- The operation of Lane Keeping Assist can be canceled or not work properly depending on road conditions and surroundings. Always be cautious while driving.
- Refer to "Limitations of Lane Keeping Assist" 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 you tow a European spec trailer, the function may be limited.
- If the vehicle is driven at high speed, the steering wheel will not be controlled. The driver must always follow the speed limit when using Lane Keeping Assist.
- If any other system's warning message is displayed or audible warning is generated, Lane Keeping Assist warning message may not be displayed and audible warning may not be generated.
- You may not hear the warning sound of Lane Keeping Assist if the surrounding is noisy. Adjust the vehicle volume moderately and always pay attention to the surrounding.
- If you attach objects to the steering wheel, steering may not be assisted properly.
- Lane Keeping Assist may not operate for 15 seconds after the vehicle is started, or the front view camera is initialized.
- Lane Keeping Assist will not operate when:
  - The turn signal or hazard warning flasher is turned on.
  - The vehicle is not driven in the center of the lane when Lane Keeping

### \* NOTICE

For more details on the limitations of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA) (Front Camera Only) (if equipped)" on page 6-43.

### ▲ WARNING

- The driver should hold the responsibility to safely drive and control the vehicle. Do not solely rely on Lane Keeping Assist and drive dangerously.

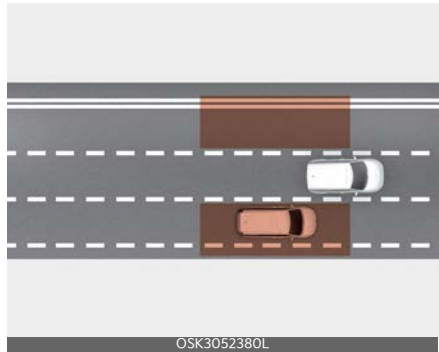
Assist is turned on or right after changing a lane.

- ESC (Electronic Stability Control) or VSM (Vehicle Stability Management) is activated.
  - The vehicle is driven on a sharp curve.
  - Vehicle speed is below 55 km/h (35 mph) or above 210 km/h (130 mph).
  - The vehicle makes sharp lane changes.
  - The vehicle brakes suddenly.
- 

### Blind-Spot Collision-Avoidance Assist (BCA) (if equipped)

Blind-Spot Collision-Avoidance Assist is designed to help detect and monitor approaching vehicles in the driver's blind spot area and warn the driver of a possible collision with a warning message and audible warning.

In addition, if there is a risk of collision when driving forward out of a parking space, Blind-Spot Collision-Avoidance Assist can help avoid a collision assisting with applying the brake.



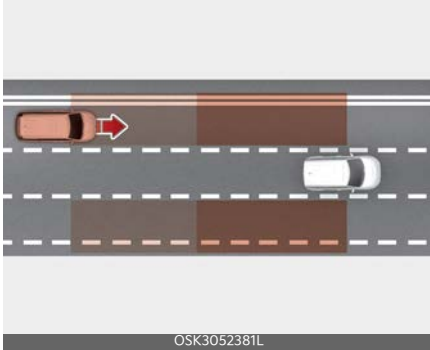
Blind-Spot Collision-Avoidance Assist helps detect and informs the driver that a vehicle is in the blind spot.

#### **⚠ CAUTION**

The detecting range may vary depending on the speed of your vehicle. Even if there is a vehicle in the blind spot area, Blind-Spot Collision-Avoidance Assist may not warn you when you pass by at high speeds.

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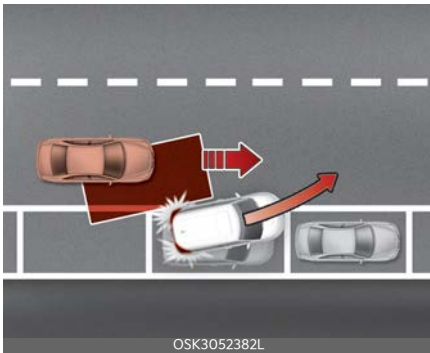




Blind-Spot Collision-Avoidance Assist helps detect and informs the driver that a vehicle is approaching at high speed from the blind spot area.

**⚠ CAUTION**

Warning timing may vary depending on the speed of the vehicle approaching at high speed.



When you are driving forward out of a parking space, if Blind-Spot Collision-Avoidance Assist judges that there is a collision risk with an approaching vehicle in the blind spot, it can help avoid collision by applying the brake.

**Detecting sensor**

Rear corner radar



Refer to the picture above for the detailed location of the detecting sensors.

**⚠ CAUTION**

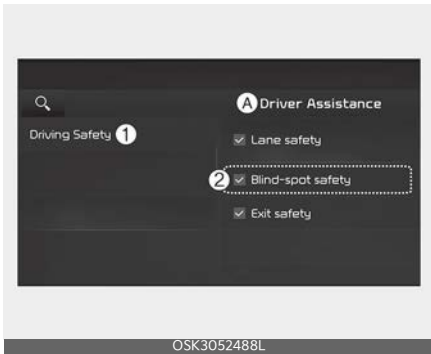
- Never disassemble the detecting sensor assembly, or cause any damage to it.
- If the detecting sensor or near the sensor has been damaged or impacted in any way, even though the warning message does not appear on the cluster, Blind-Spot Collision-Avoidance Assist may not operate properly. Have the function be inspected by an authorized Kia dealer.
- If the detecting sensors have been replaced or repaired, have the vehicle inspected by an authorized Kia dealer.
- The genuine Kia rear bumpers which the Rear corner radar sensors are mounted are parts with quality and performance ensured. If arbitrarily applying paint on or changing the bumper, the Blind-Spot Collision-Avoidance Assist may not function properly. Use only Kia Genuine Parts or those of an equivalent standard

with proven quality and performance to repair or replace the bumper.

- Do not apply license plate frame or objects, such as a bumper sticker, film or a bumper guard near the rear corner radar.
- Blind-Spot Collision-Avoidance Assist may not work properly if the bumper have been replaced, or the surroundings of the rear corner radar has been damaged or paint has been applied.
- If a trailer, carrier, etc., is installed, it may adversely affect the performance of the rear corner radar or Blind-Spot Collision-Avoidance Assist may not operate.

## Blind-Spot Collision-Avoidance Assist settings

### Blind-spot safety



#### A: Driver Assistance

##### 1 Driving Safety

##### 2 Blind-Spot Safety

With the vehicle on, **Settings** → **Vehicle** → **Driver Assistance** → **Driving Safety** on the infotainment system.

- **Blind-Spot Safety:** Blind-Spot Collision-Avoidance Assist will warn you with a warning message and an audi-

ble warning depending on the collision risk level while driving, and will provide emergency braking depending on the collision risk level for parallel parking exit.



#### A: Blind-Spot Safety System is Off

When activating Blind-Spot Collision-Avoidance Assist or restarting the vehicle with this function activated, the warning light on the side mirrors will appear for approximately 3 seconds.

When the vehicle is restarted with Blind-Spot Collision-Avoidance Assist inactivated, the warning message will appear on the cluster.

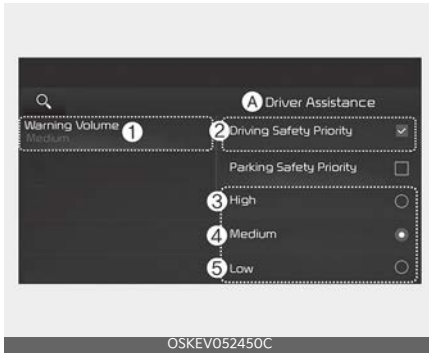
### WARNING

If **Blind-Spot Safety** is deselected, the driver should always be aware of the surroundings and drive safely.

### NOTICE

If the vehicle is restarted, Blind-Spot Collision-Avoidance Assist will maintain the last setting.

## Warning volume



### A: Driver Assistance

- 1 Warning Volume
- 2 Driving Safety Priority
- 3 High
- 4 Medium
- 5 Low

With the vehicle on, touch **Settings** → **Vehicle** → **Driver Assistance** → **Warning Volume** on the infotainment system to change the Warning volume to adjust the Warning volume levels; **High**, **Medium** or **Low**.

If **Driving Safety Priority** is selected, the audio volume will temporarily decrease to warn the driver with the audible warning for safe driving.

### \* NOTICE

If you change the Warning volume, the Warning volume of other Driver Assistance systems may change.

### ▲ CAUTION

The setting of the Warning volume applies to all functions of Blind-Spot Collision-Avoidance Assist.

## Blind-Spot Collision-Avoidance Assist operation

Blind-Spot Collision-Avoidance Assist will warn and control as following operation.

- Vehicle detection
- Collision warning
- Collision-avoidance assist (while departing)

## Vehicle detection

Left/Right



The warning light on the outside rear view mirror (side view mirror) will appear when the vehicle on both lanes is detected from the rear.

A vehicle is detected in the following conditions.

- Your driving speed: Above 20 km/h (12 mph)
- The speed of the vehicle in your blind spot area: Above 10 km/h (7 mph)

### Collision warning

With the vehicle detection state, Collision warning will alert the driver when the turn signal is activated to make a lane change with an adjacent car in the blind spot area.

- Collision warning will alert the driver with the warning light on the outside rear view mirrors (side view mirrors) and an audible warning.
- When the turn signal is turned off or you move away from the lane, the collision warning will be canceled and the function will return to Vehicle detection state.

### **WARNING**

- The detecting range of the front corner radar or rear corner radar is determined by a standard road width, therefore, on a narrow road, Blind-Spot Collision-Avoidance Assist may detect other vehicles two lanes over and warn you. In contrast, on a wide road, Blind-Spot Collision-Avoidance Assist may not be able to detect a vehicle driving in the next lane and may not warn you.
- When the hazard warning flasher is on, the collision warning by the turn signal will not operate.

### **\* NOTICE**

- If the driver's seat is on the left side, the collision warning may occur when you turn left.  
Maintain a proper distance with the vehicles in the lane.
- Images or colors may be displayed differently depends on the instrument cluster specifications or theme.

### Collision-avoidance assist (while departing)



#### A: Emergency Braking

The warning light on the outside rear view mirror (side view mirror) and an audible warning will warn the driver of a collision. It assists in braking control to prevent a collision with a vehicle approaching from the blind spot area. Collision-Avoidance Assist will be activated in the following conditions.

- Your driving speed: Below 3 km/h (2 mph)
- Speed of the vehicle in your blind spot area: Above 5 km/h (3 mph)



### A: Drive carefully

When the vehicle is stopped due to emergency braking, the warning message will appear on the cluster. For your safety, the driver should depress the brake pedal immediately and check the surroundings.

- Brake control will end after the vehicle is stopped by emergency braking for approximately 2 seconds.

### **⚠ WARNING**

- For your safety, change the Settings after parking the vehicle at a safe location.
- If any other system's warning message is displayed or audible warning is generated, Blind-Spot Collision-Avoidance Assist's warning message may not be displayed and audible warning may not be generated.
- You may not hear the warning sound of Blind-Spot Collision-Avoidance Assist if the surrounding is noisy.
- Blind-Spot Collision-Avoidance Assist may not operate if the driver applies the brake pedal to avoid collision.

- When Blind-Spot Collision-Avoidance Assist is operating, braking control by the function will automatically cancel when the driver excessively depresses the accelerator pedal or sharply steers the vehicle.
- During Blind-Spot Collision-Avoidance Assist operation, the vehicle may stop suddenly injuring passengers and shifting loose objects. Always have the seat belt on and keep loose objects secured.
- Even if there is a problem with Blind-Spot Collision-Avoidance Assist, the vehicle's basic braking performance will operate properly.
- Blind-Spot Collision-Avoidance Assist does not operate in all situations or cannot avoid all collisions.
- Blind-Spot Collision-Avoidance Assist may warn the driver late or may not warn the driver depending on the road and driving conditions.
- Driver should maintain control of the vehicle at all times. Do not depend on Blind-Spot Collision-Avoidance Assist. Maintain a safe braking distance, and if necessary, depress the brake pedal to reduce driving speed or to stop the vehicle.
- Never operate Blind-Spot Collision-Avoidance Assist on people, animal, objects, etc. It may cause serious injury or death.

**⚠ WARNING**

The brake control may not operate properly depending on the status of ESC (Electronic Stability Control).

There will only be a warning when:

- The ESC (Electronic Stability Control) warning light is on
- ESC (Electronic Stability Control) is engaged in a different function

**Blind-Spot Collision-Avoidance Assist malfunction and limitations**

**Blind-Spot Collision-Avoidance Assist malfunction**



**A: Check Blind-Spot Safety system**

When Blind-Spot Collision-Avoidance Assist is not working properly, the warning message will appear on the cluster for several seconds, and the master (⚠) warning light will appear on the cluster. If this occurs, have Blind-Spot Collision-Avoidance Assist be inspected by an authorized Kia dealer.



**A: Check side view mirror warning light**

When the outside rearview mirror warning light is not working properly, the warning message will appear on the cluster for several seconds, and the master (⚠) warning light will appear on the cluster. If this occurs, have Blind-Spot Collision-Avoidance Assist be inspected by an authorized Kia dealer.

**Blind-Spot Collision-Avoidance Assist disabled**



**A: Blind-Spot Safety System disabled. Radar blocked**

When the rear bumper around the rear corner radar or sensor is covered with foreign material, such as snow or rain, or installing a trailer or carrier, it can reduce

the detecting performance and temporarily limit or disable Blind-Spot Collision-Avoidance Assist.

If this occurs, the warning message will appear on the cluster.

Blind-Spot Collision-Avoidance Assist will operate properly when such foreign material or trailer, etc., is removed, and then the vehicle is restarted.

If Blind-Spot Collision-Avoidance Assist does not operate properly after it is removed, have Blind-Spot Collision-Avoidance Assist be inspected by an authorized Kia dealer.

### **WARNING**

- Even though the warning message does not appear on the cluster, Blind-Spot Collision-Avoidance Assist may not properly operate.
- Blind-Spot Collision-Avoidance Assist may not properly operate in an area (for example, open terrain) where any objects are not detected right after the vehicle is turned on, or when the detecting sensor is blocked with foreign material right after the vehicle is turned on.

### **CAUTION**

Turn off Blind-Spot Collision-Avoidance Assist to install or remove a trailer, carrier, or another attachment. Turn on Blind-Spot Collision-Avoidance Assist when finished.

## Limitations of Blind-Spot Collision-Avoidance Assist

Blind-Spot Collision-Avoidance Assist may not operate properly, or it may operate unexpectedly under the following circumstances:

- There is inclement weather, such as heavy snow, heavy rain, etc.
- The detecting sensor is covered with snow, rain, dirt, etc.
- The temperature around the detecting sensor is high or low due to surrounding environment.
- The detecting sensor is blocked while driving near a vehicle, pillar, or wall.
- Driving on a highway (or motorway) ramp or driving through a tollgate.
- The road pavement (or the peripheral ground) abnormally contains metallic components (for example, possibly due to subway construction).
- There is a fixed object near the vehicle, such as sound barriers, guardrails, central dividers, entry barriers, street lamps, signs, tunnels, walls, etc. (including double structures)
- Driving through a narrow road where trees or grass are overgrown
- Driving in vast areas where there are few vehicles or structures (for example, desert, meadow, suburb, etc.)
- Driving on a wet road surface, such as a puddle on the road
- The other vehicle drives very close behind your vehicle, or the other vehicle passes by your vehicle in close proximity
- The speed of the other vehicle is very fast that it passes by your vehicle in a short time
- Your vehicle passes by the other vehicle

- Your vehicle changes lane
- Your vehicle has started at the same time as the vehicle next to you and has accelerated
- The vehicle in the next lane moves two lanes away from you, or when the vehicle two lanes away moves to the next lane from you
- A trailer or carrier is installed around the rear corner radar
- The bumper around the rear corner radar is covered with objects, such as a bumper sticker, bike rack, etc.
- The bumper around the rear corner radar is impacted, damaged or the radar is out of position
- Your vehicle height is low or high due to heavy loads, abnormal tire pressure, etc.
- When the following objects are detected:
  - A motorcycle or bicycle is detected
  - A vehicle such as a flat trailer is detected
  - A big vehicle such as a bus or truck is detected
  - A moving obstacle such as a pedestrian, animal, shopping cart or a baby stroller is detected
  - A vehicle with low height such as a sports car is detected

Braking control may not work, driver's attention is required in the following circumstances:

- The vehicle severely vibrates while driving over a bumpy road, uneven road or concrete patch
- Driving on a slippery surface due to snow, water puddle, ice, etc.
- The tire pressure is low or a tire is damaged

- The braking system has been modified
- The vehicle makes abrupt lane changes

**\* NOTICE**

For more details on the limitations of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA) (Front Camera Only) (if equipped)" on page 6-43.

**⚠ WARNING**

- Driving on a curved road



Blind-Spot Collision-Avoidance Assist may not operate properly when driving 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 while driving.

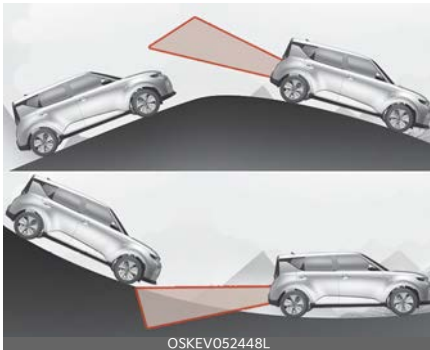




Blind-Spot Collision-Avoidance Assist may not operate properly when driving on a curved road. Blind-Spot Collision-Avoidance Assist may detect a vehicle in the same lane.

Always pay attention to road and driving conditions while driving.

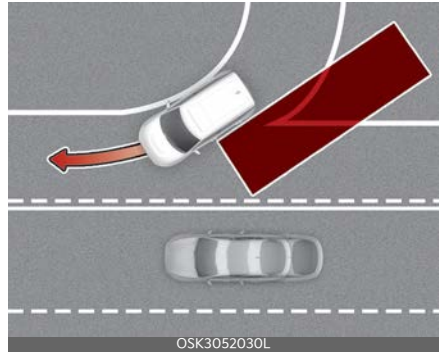
- Driving on a sloped road



Blind-Spot Collision-Avoidance Assist may not operate properly when driving on a slope. The function may not detect the vehicle in the next lane or may incorrectly detect the ground or structure.

Always pay attention to road and driving conditions while driving.

- Driving where the road is merging/dividing



Blind-Spot Collision-Avoidance Assist may not operate properly when driving where the road merges or divides. The function may not detect the vehicle in the next lane.

Always pay attention to road and driving conditions while driving.

- Driving where the heights of the lanes are different



Blind-Spot Collision-Avoidance Assist may not operate properly when driving where the heights of the lanes are different. The function may not detect the vehicle on a road with different lane heights (underpass joining section, grade separated intersections, etc.).

Always pay attention to road and driving conditions while driving.

**⚠ WARNING**

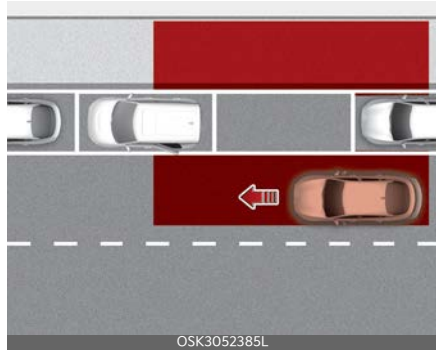
- When you are towing a trailer or another vehicle, make sure that you turn off Blind-Spot Collision-Avoidance Assist. If you tow a European spec trailer, the function may be limited.
- Blind-Spot Collision-Avoidance Assist may not operate properly if interfered by strong electromagnetic waves.
- Blind-Spot Collision-Avoidance Assist may not operate for 3 seconds after the vehicle is started, or the front view camera or rear corner radars are initialized.

**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.

**Safe Exit Warning (SEW) (if equipped)**



After the vehicle stops, when an approaching vehicle from the rear area is detected as soon as a passenger opens a door, Safe Exit Warning will warn the driver with a warning message and an audible warning to help prevent a collision.

**⚠ CAUTION**

Warning timing may vary depending on the speed of the approaching vehicle.

**Detecting sensor**

Rear corner radar



Refer to the picture above for the detailed location of the detecting sensors.

**⚠ CAUTION**

For more details on the precautions of the rear corner radars, refer to "Blind-Spot Collision-Avoidance Assist (BCA) (if equipped)" on page 6-74.

**Safe Exit Warning settings**  
**Setting features**

**Exit Safety**



**A: Driver Assistance**

**1 Driving Safety**

**2 Exit Safety**

With the vehicle on, select **Settings** → **Vehicle** → **Driver Assistance** → **Driving Safety** → **Exit Safety** on the infotainment system.

**⚠ WARNING**

If **Exit Safety** is deselected, Safe Exit Warning cannot warn you. The driver should always be aware of unexpected and sudden situations from occurring.

**\* NOTICE**

If the vehicle is restarted, Safe Exit Warning will maintain the last setting.

**Safe Exit Warning operation**

Safe Exit Warning warns the following actions.

- Collision warning when exiting vehicle

**Collision warning when exiting vehicle**



**A: Watch for traffic**

The warning light on the side view mirror will blink and the warning message will appear on the cluster, and an audible warning will sound.

- Safe Exit Warning will warn under the following circumstances:
  - Your driving speed: below 3 km/h (2 mph)
  - The speed of the approaching vehicle from the rear: above 6 km/h (4 mph)

**⚠ WARNING**

- For your safety, change the Settings after parking the vehicle at a safe location.
- If any other function's warning message is displayed or audible warning is generated, Safe Exit Warning warning message may not be displayed and audible warning may not be generated.
- You may not hear the warning sound of Safe Exit Warning if the surrounding is noisy.
- Safe Exit Warning does not operate in all situations or cannot prevent all collisions.
- Safe Exit Warning may warn the driver late or may not warn the driver depending and driving conditions. Always check vehicle surroundings.
- The driver and passengers are responsible for accidents that occurs while exiting the vehicle. Always check the surroundings before you exit the vehicle.

**\* NOTICE**

- After the vehicle is turned off, Safe Exit Warning operates for approximately 3 minutes, but turns off immediately if the doors are locked.
- Images or colors may be displayed differently depends on the instrument cluster specifications or theme.

**Safe Exit Warning malfunction and limitations**

**Safe Exit Warning malfunction**



**A: Check Blind-Spot Safety system**

When Safe Exit Warning is not working properly, the warning message will appear on the cluster, and the master warning light (⚠) will appear on the cluster. Have Safe Exit Warning be inspected by an authorized Kia dealer.



**A: Check side view mirror warning light**

When the outside rear view mirror warning light is not working properly, the warning message will appear on the cluster for several seconds, and the master warning light (⚠) will appear on

the cluster. Have Safe Exit Warning be inspected by an authorized Kia dealer.

## Safe Exit Warning disabled



### A: **Blind-Spot Safety system disabled. Radar blocked**

When the rear bumper around the rear corner radar or sensor is covered with foreign material, such as snow or rain, or installing a trailer or carrier, it can reduce the detecting performance and temporarily limit or disable Safe Exit Warning. If this occurs, the **Blind-Spot Safety systems disabled. Radar blocked** warning message will appear on the cluster.

Safe Exit Warning will operate normally when such foreign material or trailer, etc. is removed, and then the vehicle is restarted.

If Safe Exit Warning does not operate normally after it is removed, Have Safe Exit Warning be inspected by an authorized Kia dealer.

### **⚠ WARNING**

- Even though the warning message does not appear on the cluster, Safe Exit Warning may not properly operate.

- Safe Exit Warning may not properly operate in an area (e.g., open terrain), where any substance are not detected right after the vehicle is turned on, or when the detecting sensor is blocked with foreign material right after the vehicle is turned on.

### **⚠ CAUTION**

Turn off Safe Exit Warning to install a trailer, carrier, etc., or remove the trailer, carrier, etc. to use Safe Exit Warning.

## Limitations of Safe Exit Warning

Safe Exit Warning may not operate normally, or Safe Exit Warning may operate unexpectedly under the following warning.

- Getting out of the vehicle where trees or grass are overgrown
- Getting out of the vehicle where the road is wet
- The approaching vehicle is very fast or very slow

### **\* NOTICE**

For more details on the precautions of the rear corner radars, refer to "Blind-Spot Collision-Avoidance Assist (BCA) (if equipped)" on page 6-74.

### **⚠ WARNING**

- Safe Exit Warning may not operate normally if interfered by strong electromagnetic waves.
- Safe Exit Warning may not operate for approximately 3 seconds after the vehicle is restarted, or the rear corner radars are initialized.

## Manual Speed Limit Assist (MSLA) (if equipped)



- 1 Speed Limit indicator
- 2 Set speed

You can set the speed limit when you do not want to drive over a specific speed. If you drive over the preset speed limit, Manual Speed Limit Assist operates (set speed limit will blink and chime will sound) until the vehicle speed returns within the speed limit.

### Manual Speed Limit Assist operation

#### Setting speed limit

1. Press and hold Driving Assist (🚗) button at the desired speed. The Speed Limit (LIMIT) indicator will appear on the cluster.



2. Push the (+) switch up or (-) switch down, and release it at the desired speed.

Push the (+) switch up or (-) switch down and hold it. The speed will increase or decrease to the nearest multiple of 10 (multiple of 5 in mph) at first, and then increase or decrease by 10 km/h (5 mph).





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3. The set speed limit will be displayed on the cluster.

If you would like to drive over the pre-set speed limit, depress the accelerator pedal beyond the pressure point to activate the kickdown mechanism. The set speed limit will blink and chime will sound until you return the vehicle speed within the speed limit.



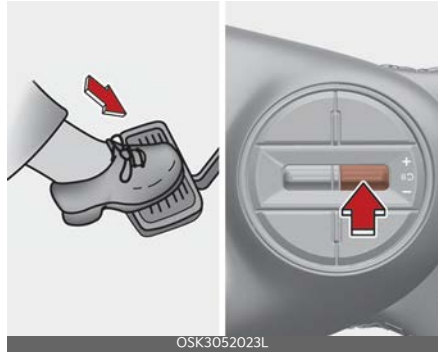
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**\* NOTICE**

- When the accelerator pedal is not depressed beyond the pressure point, vehicle speed will maintain within the speed limit.

- A clicking sound may be heard from the kickdown mechanism when the accelerator pedal is depressed beyond the pressure point.

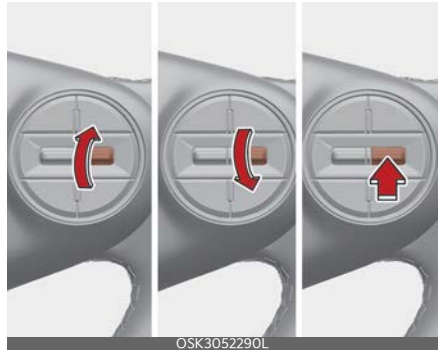
**Temporarily pausing Manual Speed Limit Assist**



OSK3052023L

Press the (⏏) switch to temporarily pause the set speed limit. The set speed limit will turn off but the Speed Limit (LIMIT) indicator will stay on.

**Resuming Manual Speed Limit Assist**



OSK3052290L

To resume Manual Speed Limit Assist after the function was paused, operate the (+), (-), (⏏) switch.

If you push the (+) switch up or (-) switch down, vehicle speed will be set to the current speed on the cluster.

If you press the (||) switch, vehicle speed will resume to the preset speed.

### Turning off Manual Speed Limit Assist



Press the Driving Assist (🚗) button to turn Manual Speed Limit Assist off. The Speed Limit (🚗LIMIT) indicator will go off.

### ⚠️ WARNING

Take the following precautions when using Manual Speed Limit Assist:

- Always set the vehicle speed under the speed limit in your country.
- Keep Manual Speed Limit Assist off when the function is not in use, to avoid inadvertently setting a speed. Check that the Speed Limit (🚗LIMIT) indicator is off.
- Manual Speed Limit Assist does not substitute for proper and safe driving. It is the responsibility of the driver to always drive safely and should always be aware of unexpected and sudden situations from occurring. Pay attention to the road conditions at all times.

### Intelligent Speed Limit Assist (ISLA) (if equipped)

Intelligent Speed Limit Assist uses information from the detected road sign and navigation system to inform the driver of the speed limit and additional information of the current road. Also, Intelligent Speed Limit Assist helps the driver to maintain within the speed limit of the road.

### ⚠️ CAUTION

- Intelligent Speed Limit Assist may not operate properly if the function is used in other countries.
- If a navigation is applied to your vehicle, the navigation needs to be regularly updated for Intelligent Speed Limit Assist to operate properly.

### Detecting sensor

Front view camera



Refer to the picture above for the detailed location of the detecting sensor.

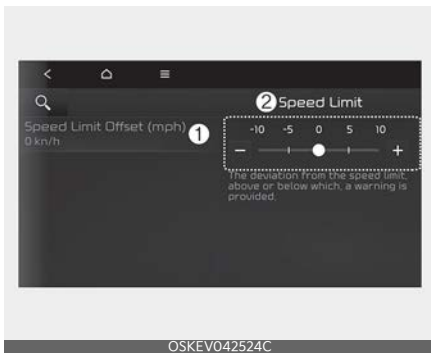


**CAUTION**

For more details on the precautions of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA) (Front Camera Only) (if equipped)" on page 6-43.

**Intelligent Speed Limit Assist settings**

**Speed limit offset**



A: **Driver Assistance**

1 **Speed Limit**

2 **Speed Limit Offset**

With the vehicle on, select **Settings** → **Vehicle** → **Driver Assistance** → **Speed Limit** on the infotainment system.

**Speed Limit Warning** and **Speed Limit Assist** warns the driver when driving speed exceeds the speed at which the set **Speed Limit Offset** is added to the speed limit, or applies the Speed limit offset setting to the detected speed limit.

**WARNING**

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

**NOTICE**

- Speed limit and Speed warning function operates based on an offset value added with the speed limit. Set the offset value to '0' to change or warn the speed according to the recognized speed limit.
- The setting of Speed limit offset is not reflected in Navigation-based Smart Cruise Control.

With the vehicle on, select **Settings** → **Driver Assistance** → **Speed Limit** on the instrument cluster or **Settings** → **Vehicle** → **Driver Assistance** → **Speed Limit** on the infotainment system.



A: **Driver Assistance**

1 **Speed limit**

2 **Country Selection**

3 **Speed limit tolerance**


4 **Speed limit assist**

5 **Speed Limit Warning/SLW (Speed Limit Warning)**

6 **Off**

- **Country Selection:** If the vehicle is not equipped with navigation system, a settings menu will be provided to select the country manually. For Intelligent Speed Limit Assist to operate

properly, select the country where the vehicle is currently being driven.

- **Speed limit tolerance:** The tolerance for Speed limit can be adjusted. The vehicle will warn the speed limit or adjust the driving speed when the current driving speed is higher than the recognized speed limit added with set tolerance value. (Except Europe)
- **Speed Limit Assist:** Intelligent Speed Limit Assist will inform the driver of speed limit and additional road signs. In addition, Intelligent Speed Limit Assist will inform the driver to change set speed of Manual Speed Limit Assist or Smart Cruise Control (If equipped) to help the driver stay within the speed limit.
- **Speed Limit Warning:** Intelligent Speed Limit Assist will inform the driver of speed limit and additional road signs. In addition, Intelligent Speed Limit Assist will warn the driver when the vehicle is driven faster than the speed limit. Manual Speed Limit Assist or Smart Cruise Control (If equipped) set speed will not be automatically adjusted. The driver should adjust the speed manually.
- **Off:** Intelligent Speed Limit Assist will turn off. Speed limit warning light (  ) will appear.

**⚠ WARNING**

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

**\* NOTICE**

- The Speed limit assist and Speed limit warning functions operate based on the added value of the speed limit tolerance. Set the offset value to '0' to change the speed to match the perceived speed limit or to warn you.
- The speed limit tolerance will not be reflected in Navigation-based Smart Cruise Control.

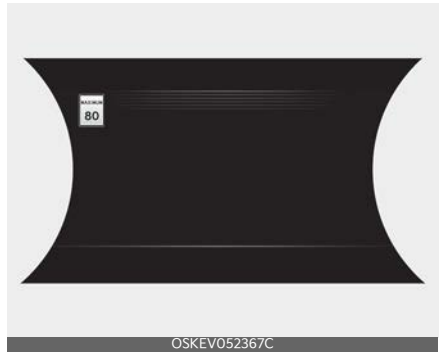
**Intelligent Speed Limit Assist operation**

**Warning and control**

Intelligent Speed Limit Assist is warned and controlled by the following level.

- Displaying speed limit
- Warning overspeed
- Changing set speed

**Displaying speed limit**

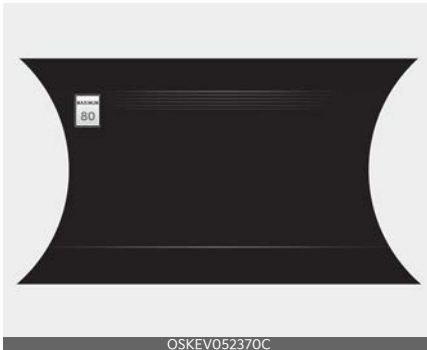


Speed limit information is displayed on the instrument cluster.

## \* NOTICE

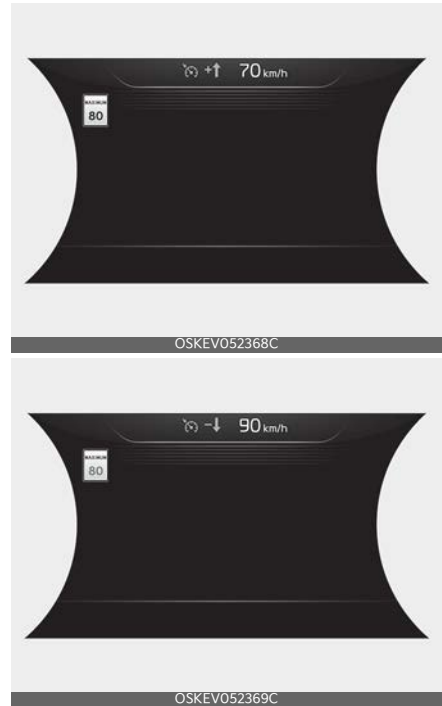
- If speed limit information of the road cannot be recognized, '---' sign will be displayed. Please refer to if the road signs are difficult to recognize.
- Intelligent Speed Limit Assist provides additional road sign information in addition to speed limit. The additional road sign information provided may vary according to your country.
- The images and colors in the instrument cluster may differ depending on the cluster type or theme selected from the settings menu.

## Warning overspeed



If the vehicle exceeds the speed limit, the function will alert the driver with the audible warning and the blinking indicator light.

## Changing set speed



If the speed limit of the road changes during the operation of Manual Speed Limit Assist or Smart Cruise Control, an arrow in the direction of up or down is displayed to inform the driver that the set speed needs to be changed. At this time, the driver can change the set speed according to the speed limit by using the (+) or (-) switch on the steering wheel.

## Auto control of the set speed (if equipped)



With Manual Speed Limit Assist or Smart Cruise Control activated, if the speed you have set matches the speed limit, the function automatically adjusts the set speed even at the new speed limit. The function is active on roads with more than 70 km/h (40 mph) speed limit. When active, the set speed on the cluster turns green.

### **⚠ WARNING**

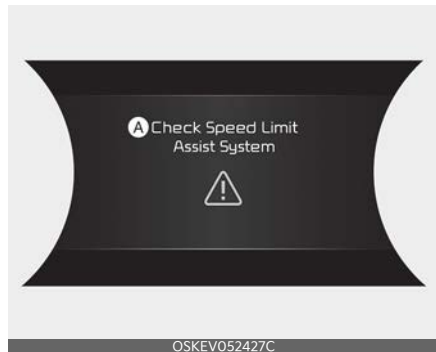
- Even after changing the set speed according to the speed limit of the road, the vehicle can still be driven over the speed limit. If necessary, depress the brake pedal to reduce your driving speed.
- If the speed limit of the road is under 30 km/h (20 mph), the set speed change function will not work.
- Intelligent Speed Limit Assist operates using the speed unit in the instrument cluster set by the driver. If the speed unit is set to a unit other than the speed unit used in your country, Intelligent Speed Limit Assist may not operate properly.

### **\* NOTICE**

- For more details on Manual Speed Limit Assist operation, refer to "Manual Speed Limit Assist (MSLA) (if equipped)" on page 6-88.
- For more details on Smart Cruise Control operation, refer to "Smart Cruise Control (SCC)" on page 6-102.

## Intelligent Speed Limit Assist malfunction and limitations

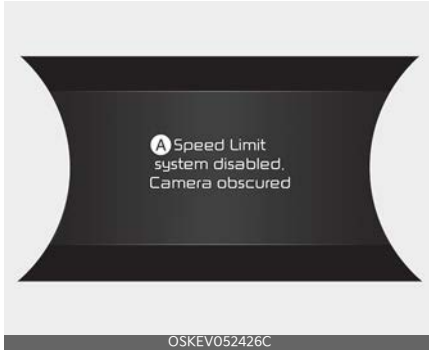
### Intelligent Speed Limit Assist malfunction




#### **A: Check Speed Limit Assist System**

When Intelligent Speed Limit Assist is not working properly, the warning message will appear on the cluster for several seconds, and the master (⚠) warning light and speed limit (---) warning light will appear on the cluster. If this occurs, we recommend the function checked by an authorized Kia dealer/service partner.

## Intelligent Speed Limit Assist disabled



### A: Speed Limit system disabled. Camera obscured

When the front windshield where the front view camera is located is covered with foreign material, such as snow or rain, it can reduce the detecting performance and temporarily limit or disable Intelligent Speed Limit Assist. If this occurs, the warning message and the speed limit (  ) warning light will appear on the cluster.

Intelligent Speed Limit Assist will operate properly when snow, rain or foreign material is removed. Always keep it clean.

If Intelligent Speed Limit Assist does not operate properly after it is removed, we recommend the function checked by an authorized Kia dealer/service partner.

### WARNING

Even though the warning message or warning light does not appear on the cluster, Intelligent Speed Limit Assist may not operate properly.

## Limitations of Intelligent Speed Limit Assist

Intelligent Speed Limit Assist may not operate properly, or it may operate unexpectedly under the following circumstances:

- The road sign is contaminated or indistinguishable
  - The road sign is difficult to see due to bad weather, such as rain, snow, fog, etc.
  - The road sign is partially obscured by surrounding objects or shadow
- The road signs do not conform to the standard
  - The text or picture on the road sign is different from the standard
  - The road sign is installed between the main line and the exit road or between diverging roads
  - A sign is attached to another vehicle
- The distance between the vehicle and the road signs is far
- The vehicle encounters appearing road signs
- Intelligent Speed Limit Assist incorrectly recognizes numbers or pictures in the street signs or other signs as the speed limit
- A road sign near the road you are driving is detected
- Multiple signs are installed close together
- Other Auxiliary signs or commercial signs are placed around the speed limit signs
- The minimum speed limit sign is mis-recognized
- The minimum speed limit sign is on the road

- The brightness changes suddenly, for example when entering or exiting a tunnel or passing under a bridge
- Headlamps are not used or the brightness of the headlamps are weak at night or in the tunnel
- The field of view of the front view camera is obstructed by sun glare
- Road signs are difficult to recognize due to the reflection of sunlight, street lights, or oncoming vehicles
- The navigation information or GPS information contain errors.
- The driver does not follow the guide of the navigation.
- Driving on a road that is sharply curved or continuously curved
- Driving through speed bumps, or driving up and down or left to right on steep inclines
- The vehicle is shaking heavily
- Driving on a newly opened road
- The navigation is updated while driving
- The navigation is restarted while driving

**⚠ WARNING**

- Intelligent Speed Limit Assist is a supplemental function that helps the driver to comply with the speed limit on the road, and may not display the correct speed limit or control the driving speed properly.
- It is the responsibility of the driver to keep the speed limit.
- When initializing (rebooting) the camera or restarting the vehicle, the function may not operate for approximately 15 seconds.

**\* NOTICE**

For more details on the limitations of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA) (Front Camera Only) (if equipped)" on page 6-43.

---

## Driver Attention Warning (DAW)

### Basic function

Driver Attention Warning can help determine the driver's attention level by analyzing driving pattern and driving time while the vehicle is driven. Driver Attention Warning will recommend a break when the driver's attention level falls below a certain level.

### Leading vehicle departure alert function

Leading Vehicle Departure Alert function will inform the driver when a detected vehicle in front departs from a stop.

### Detecting sensor

Front view camera



The front view camera is used as a detecting sensor to help detect driving patterns and front vehicle departure while vehicle is being driven.

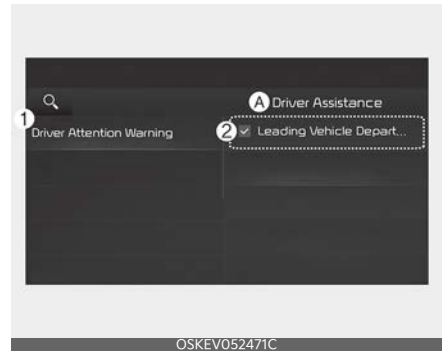
Refer to the picture above for the detailed location of the detecting sensor.

### CAUTION

- Always keep the front view camera in good condition to maintain optimal performance of Driver Attention Warning.
- For more details on the precautions of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA) (Front Camera Only) (if equipped)" on page 6-43.

## Driver Attention Warning settings

### Leading Vehicle Departure Alert



#### A: Driver Assistance

- 1 Driver Attention Warning
- 2 Leading Vehicle Departure Alert

- If **Leading Vehicle Departure Alert** is selected, the function will inform the driver when a detected vehicle in front departs from a stop.

## Driver Attention Warning operation

### Basic function

The basic function of Driver Attention Warning is to warn the driver 'Consider taking a break'.

### Taking a break



#### A: Consider taking a break

Warning message will appear on the cluster and an audible warning will sound to suggest that the driver take a break, when the driver's attention level is below a certain level.

- Driver Attention Warning will not suggest a break when the total driving time is shorter than 5 minutes or 10 minutes has not passed after the last break was suggested.

Driver Attention Warning (DAW) operates under the following conditions:

- Your driving speed: Approximately 0~200 km/h (0~120 mph).

### **⚠ WARNING**

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

### **⚠ CAUTION**

- Driver Attention Warning may suggest a break depending on the driver's driving pattern or habits, even if the driver doesn't feel fatigue.
- Driver Attention Warning is a supplemental function and may not be able to determine whether the driver is inattentive.
- The driver who feels fatigued should take a break at a safe location, even though there is no break suggestion by Driver Attention Warning.

### **\* NOTICE**

For more details on vehicle settings, refer to "Vehicle settings (infotainment system)" on page 5-63.

## Leading vehicle departure alert function



#### A: Leading vehicle is driving away

When a detected vehicle in front departs from a stop, Leading Vehicle Departure Alert will inform the driver by displaying the warning message on the cluster and an audible warning will sound.



**⚠ WARNING**

- If any other system's warning message is displayed or audible warning is generated, Leading Vehicle Departure Alert's warning message may not be displayed and audible warning may not be generated.
- The driver should hold the responsibility to safely drive and control the vehicle.

**⚠ CAUTION**

- Leading Vehicle Departure Alert is a supplemental function and may not alert the driver whenever the front vehicle departs from a stop.
- Always check the front of the vehicle and road conditions before departure.

**\* NOTICE**

The images and colors in the instrument cluster may differ depending on the cluster type or theme selected from the settings menu.

**Driver Attention Warning malfunction and limitations**

**Driver Attention Warning malfunction**



**A: Check Driver Attention Warning system**

When Driver Attention Warning is not working properly, the warning message will appear on the cluster for several seconds, and the master (⚠) warning light will appear on the cluster. If this occurs, have Driver Attention Warning inspected by an authorized Kia dealer.

**Driver Attention Warning disabled**



**A: Inattentive Driving Warning disabled. Camera obscured**

When the front view camera is located is covered with foreign material, such as snow or rain, it can reduce the detecting performance and temporarily limit or disable Driver Attention Warning.

If this occurs the warning message, and the (⚠️) warning light will appear on the cluster. Driver Attention Warning will operate normally when snow, rain or foreign material is removed. Always keep it clean.

If Driver Attention Warning does not operate normally after obstruction (snow, rain, or foreign material) is removed, have Driver Attention Warning inspected by an authorized Kia dealer.

**⚠️ WARNING**

Driver Attention Warning may not work properly in areas where substances are not detected after turning ON the vehicle (e.g. in open terrain) or if the recognition sensor is contaminated.

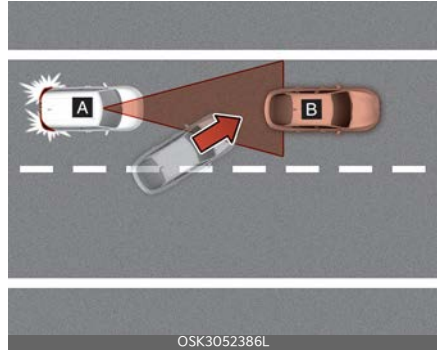
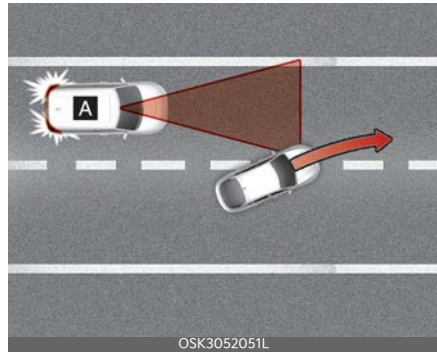
**Limitations of Driver Attention Warning**

Driver Attention Warning may not work properly in the following situations:

- The vehicle is driven violently
- The vehicle intentionally crosses over lanes frequently
- The vehicle is controlled by Driver Assistance system, such as Lane Keeping Assist

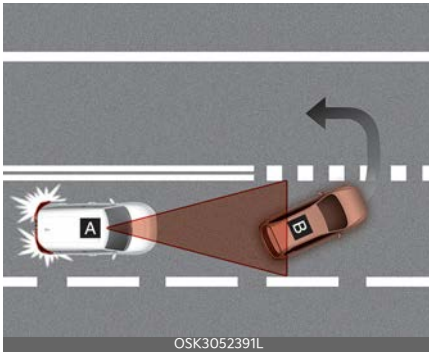
**Leading vehicle departure alert function**

- When the vehicle cuts in



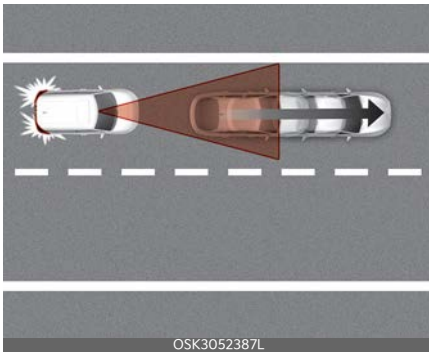
[A]: Your vehicle, [B]: Front vehicle  
If a vehicle cuts in front of your vehicle, Leading Departure Alert may not operate properly.

- When the vehicle ahead sharply steers



[A]: Your vehicle, [B]: Front vehicle  
If the vehicle in front makes a sharp turn, such as to turn left or right or make a U-turn, etc., Leading Vehicle Departure Alert may not operate properly.

- When the vehicle ahead abruptly departs



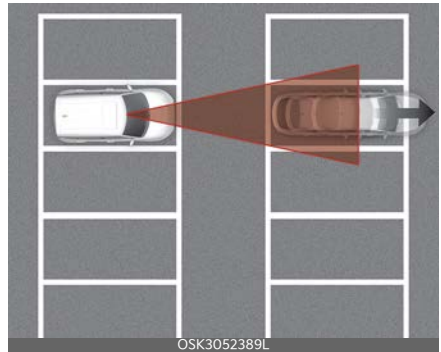
If the vehicle in front abruptly departs, Leading Vehicle Departure Alert may not operate properly.

- When a pedestrian or bicycle is between you and the vehicle ahead



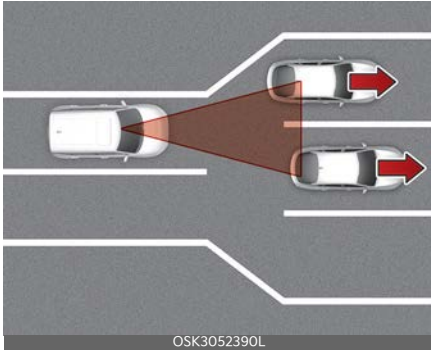
If there is a pedestrian(s) or bicycle(s) in between you and the vehicle in front, Leading Vehicle Departure Alert may not operate properly.

- When in a parking lot



If a vehicle parked in front drives away from you, Leading Vehicle Departure Alert may alert you that the parked vehicle is driving away.

- When driving at a tollgate or intersection, etc.



If you pass a tollgate or intersection with lots of vehicles or you drive where lanes are merged or divided frequently, Leading Vehicle Departure Alert may not operate properly.

**⚠ WARNING**

Driver Attention Warning may not operate for 15 seconds after the vehicle is started, or the front view camera is initialized.

**\* NOTICE**

For more details on the precautions of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA) (Front Camera Only) (if equipped)" on page 6-43.

## Smart Cruise Control (SCC)

Smart Cruise Control is designed to help detect the vehicle ahead and help maintain the desired speed and minimum distance between the vehicle ahead.

### Detecting sensor

Front view camera



Front radar



The front view camera and front radar are used as a detecting sensor to detect front vehicles.

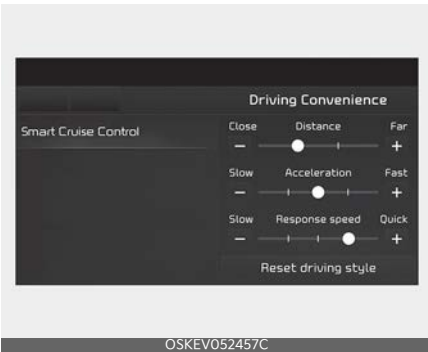
Refer to the picture above for the detailed location of the detecting sensor.

**CAUTION**

Always keep the front view camera and front radar in good condition to maintain optimal performance of Smart Cruise Control.

For more details on the precautions of the front view camera and front radar, refer to "Forward Collision-Avoidance Assist (FCA) (Front Camera Only) (if equipped)" on page 6-43.

**Smart Cruise Control settings**

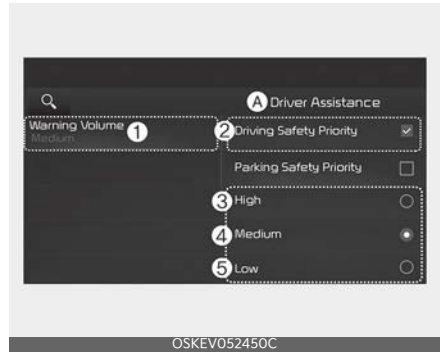


**A: Driving Convenience**

**1 Smart Cruise Control**

With the vehicle on, select **Settings** → **Vehicle** → **Driver Assistance** → **Driving Convenience** → **Smart Cruise Control** on the infotainment system to set the distance, acceleration and the reaction speed.

**Warning volume**



**A: Driver Assistance**

**1 Warning Volume**

**2 Driving Safety Priority**

**3 High**

**4 Medium**

**5 Low**

With the vehicle on, select **Settings** → **Vehicle** → **Driver Assistance** → **Warning Volume** on the infotainment system to change the Warning volume to adjust the Warning volume levels; **High**, **Medium** or **Low**.

If **Driving Safety Priority** is selected, the audio volume will temporarily decrease to warn the driver with the audible warning for safe driving.

**\* NOTICE**

- If the vehicle is restarted, Warning Volume will maintain the last setting.
- If you change the Warning Volume, the Warning Volume of other Driver Assistance systems may change.

## Smart Cruise Control operation

### Operating conditions for basic function

#### Basic function

Smart Cruise Control operates when the following conditions are satisfied.

- The gear is in D (Drive)
- Your vehicle speed is within the operating speed range
  - 10~160 km/h (5~100 mph) : when there is no vehicle in front
  - 0~160 km/h (0~100 mph): when there is a vehicle in front
- ESC (Electronic Stability Control) or ABS is on
- Smart Cruise Control does not operate in the following conditions.
  - The driver's door is opened
  - The vehicle is in power limited mode
  - EPB (Electronic Parking Brake) is applied
  - ESC (Electronic Stability Control) or ABS is controlling the vehicle
  - Forward Collision-Avoidance Assist brake control is operating

#### \* NOTICE

When stopped behind another vehicle, the driver can turn on Smart Cruise Control while the brake pedal is depressed.

### Operating conditions for Acceleration Assist

Overtaking Acceleration Assist will operate when the turn signal indicator is turned on to the left while Smart Cruise Control is operating, and the following conditions are satisfied:

- Your driving speed is above 60 km/h (40 mph)
- A vehicle is detected in front of your vehicle

Overtaking Acceleration Assist does not operate in the following conditions.

- The hazard warning flasher is on
- Vehicle speed is reduced to maintain distance with the vehicle in front

#### ⚠ WARNING

When the turn signal indicator is turned on to the left while there is a vehicle ahead, the vehicle may accelerate temporarily. Pay attention to the road conditions at all times.

Regardless of your country's driving direction, Overtaking Acceleration Assist will operate when the conditions are satisfied. When using the function in countries with different driving direction, always check the road conditions at all times.

## Turning on Smart Cruise Control



Press the Driving Assist button to turn on Smart Cruise Control. The speed will be set to the current speed on the cluster.

- If there is no vehicle in front of you, the set speed will be maintained.
- If there is a vehicle in front of you, the speed may be adjusted to maintain the distance to the vehicle ahead. If the vehicle ahead accelerates, your vehicle will travel at a steady cruising speed after accelerating to the set speed.

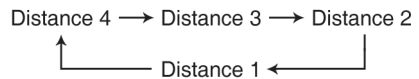
### \* NOTICE

- If your vehicle speed is between 0~30 km/h (0~20 mph) when you press the Driving Assist button, the Smart Cruise Control speed will be set to 30 km/h (20 mph).
- If the driver changes to the lower gear, the driving speed may not reach the set speed.

## Setting vehicle distance



Each time the button is pressed, the headway changes as follows:



### \* NOTICE

- If you drive at 90 km/h (56 mph), the distance is maintained as follows:  
 Distance 4 - approximately 52.5 m (172 ft.)  
 Distance 3 - approximately 40 m (130 ft.)  
 Distance 2 - approximately 32.5 m (106 ft.)  
 Distance 1 - approximately 25 m (82 ft.)
- The distance is set to the last set distance when the vehicle is restarted, or when Smart Cruise Control was temporarily canceled.

### Increasing set speed



- Push the (+) switch up and release it immediately. The set speed will increase by 1 km/h (1 mph) each time the switch is operated in this manner.
- Push the (+) switch up and hold it. The set speed will increase by 5 km/h (10 mph) each time the switch is operated in this manner.

You can increase the set speed to 160 km/h (100 mph).

#### **⚠ WARNING**

Check the driving condition before using the (+) switch. Driving speed may sharply increase when you push up and hold the (+) switch.

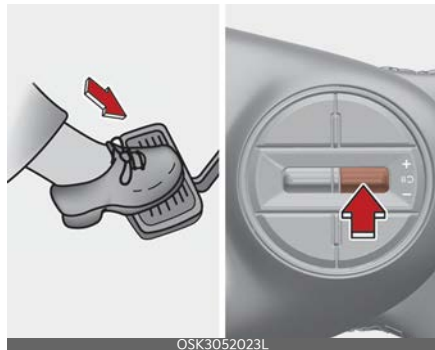
### Decreasing set speed



- Push the (-) switch down and release it immediately. The set speed will decrease by 1 km/h (1 mph) each time the switch is operated in this manner.
- Push the (-) switch down and hold it. The set speed will decrease by 10 km/h (5 mph) each time the switch is operated in this manner.

You can decrease the set speed to 30 km/h (20 mph).

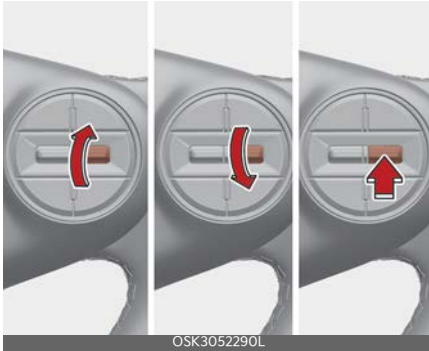
### Temporarily canceling Smart Cruise Control



Press the (||) switch or depress the brake pedal to temporarily cancel Smart Cruise Control.



## Resuming Smart Cruise Control



To resume Smart Cruise Control after the function was canceled, operate the (+), (-) or (||◁) switch.

If you push the (+) switch up or (-) switch down, the set speed will be set to the current speed on the cluster.

If you press the (||◁) switch, vehicle speed will resume to the preset speed.

### **▲ WARNING**

Check the driving condition before using the (||◁) switch. Driving speed may sharply increase or decrease when you press the (||◁) switch.

## Turning off Smart Cruise Control



Press the Driving Assist button to turn Smart Cruise Control off.

### **\* NOTICE**

If your vehicle is equipped with Manual Speed Limit Assist, press and hold the Driving Assist button to turn off Smart Cruise Control. However Manual Speed Limit Assist will turn on.

### **▲ CAUTION**

Do not use the switches and buttons at the same time. Smart Cruise Control may not operate properly.

## Displaying operating status

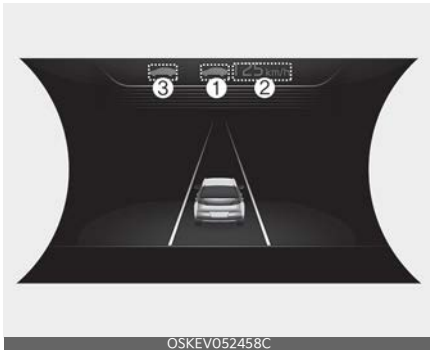
You can see the status of the Smart Cruise Control operation in the Driving Assist view on the cluster. Refer to "LCD display" on page 5-44.

Smart Cruise Control will be displayed as below depending on the status of the function.

### Operating



Temporarily canceled



Smart Cruise Control will be displayed as below depending on the status of the function.

- When operating
  1. Whether there is a vehicle ahead and the selected distance level
  2. Set speed
  3. Whether there is a vehicle ahead and the target vehicle distance
- When temporarily canceled
  1. Vehicle (shaded)
  2. Previous set speed (shaded)

**\* NOTICE**

- The distance of the front vehicle on the cluster is displayed according to the actual distance between your vehicle and the vehicle ahead.
- The target distance may vary according to your driving speed and the set distance level. If your driving speed is low, even though the vehicle distance have changed, the change of the target vehicle distance may be small.
- The images and colors in the instrument cluster may differ depending on the cluster type or theme selected from the settings menu.

Accelerating temporarily



If you want to speed up temporarily without altering the set speed while Smart Cruise Control is operating, depress the accelerator pedal. While the accelerator pedal is depressed, the set speed, distance level and target distance will blink on the cluster.

However, if the accelerator pedal is depressed insufficiently, the vehicle may decelerate.

**⚠ WARNING**

Be careful when accelerating temporarily, because the speed and distance is not controlled automatically even if there is a vehicle in front of you.

## Temporarily canceling Smart Cruise Control



### A: Smart Cruise Control deactivated

Smart Cruise Control will be temporarily canceled automatically when:

- The vehicle speed is above 170 km/h (110 mph)
- The vehicle is stopped for a certain period of time
- The accelerator pedal is continuously depressed for a certain period of time
- The conditions for the Smart Cruise Control to operate is not satisfied

If Smart Cruise Control is temporarily canceled automatically, the warning message will appear on the cluster, and an audible warning will sound to warn the driver.

### \* NOTICE

If Smart Cruise Control is temporarily canceled while the vehicle is at a standstill with the function activated, EPB (Electronic Parking Brake) maybe applied.

## ⚠ WARNING

When Smart Cruise Control is temporarily canceled, distance with the front vehicle will not be maintained. Always have your eyes on the road while driving, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

## Smart Cruise Control conditions not satisfied



### A: Smart Cruise Control conditions not met

If the Driving Assist button, (+) switch, (-) switch or (II) switch is operated when Smart Cruise Control operating conditions are not satisfied, the warning message will appear on the cluster, and an audible warning will sound.

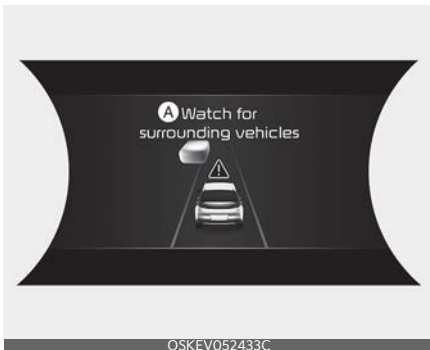
## In traffic situation



### A: Use switch or pedal to accelerate

In traffic, your vehicle will stop if the vehicle ahead of you stops. Also, if the vehicle ahead of you starts moving, your vehicle will start as well. In addition, after the vehicle has stopped and a certain time have passed, the warning message will appear on the cluster. Depress the accelerator pedal or operate the (+) switch, (-) switch or (||) switch to start driving.

## Warning road conditions ahead



### A: Watch for surrounding vehicles

In the following situation, the warning message will appear on the cluster, and an audible warning will sound to warn the driver of road conditions ahead.

## ⚠ WARNING

Always pay attention to vehicles or objects that may suddenly appear in front of you, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

## Collision warning



### A: Collision Warning

While Smart Cruise Control is operating, when the collision risk with the vehicle ahead is high, the warning message will appear on the cluster, and an audible warning will sound to warn the driver. Always have your eyes on the road while driving, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

## ⚠ WARNING

In the following situations, Smart Cruise Control may not warn the driver of a collision.

Always pay attention to road and driving conditions while driving.

- The distance from the front vehicle is near, or the vehicle speed of the front vehicle is faster or similar with your vehicle
- The speed of the front vehicle is very slow or is at a standstill
- The accelerator pedal is depressed right after Smart Cruise Control is turned on

### WARNING

- Smart Cruise Control does not substitute for proper and safe driving. It is the responsibility of the driver to always check the speed and distance to the vehicle ahead.
  - Smart Cruise Control may not recognize unexpected and sudden situations or complex driving situations, so always pay attention to driving conditions and control your vehicle speed.
  - Keep Smart Cruise Control off when the function is not in use to avoid inadvertently setting a speed.
  - Do not open the door or leave the vehicle when Smart Cruise Control is operating, even if the vehicle is stopped.
  - Always be aware of the selected speed and headway distance.
  - Keep a safe distance according to road conditions and vehicle speed. If the headway distance is too close during high-speed driving, a serious collision may result.
  - When maintaining distance with the vehicle ahead, if the front vehicle disappears, Smart Cruise Control may suddenly accelerate to the set speed.
- Always be aware of unexpected and sudden situations from occurring.
  - Vehicle speed may decrease on an upward slope and increase on a downward slope.
  - Always be aware of situations such as when a vehicle cuts in suddenly.
  - When you are towing a trailer or another vehicle, turn off Smart Cruise Control for safety reasons. If you tow a European spec trailer, the function may be limited.
  - Turn off Smart Cruise Control when your vehicle is being towed.
  - Smart Cruise Control may not operate properly if interfered by strong electromagnetic waves.
  - Smart Cruise Control may not detect an obstacle in front and lead to a collision. Always look ahead cautiously to prevent unexpected and sudden situations from occurring.
  - Vehicles moving in front of you with a frequent lane change may cause a delay in Smart Cruise Control reaction or may cause Smart Cruise Control to react to a vehicle actually in an adjacent lane. Always drive cautiously to prevent unexpected and sudden situations from occurring.
  - Always be aware of the surroundings and drive safely, even though a warning message does not appear or an audible warning does not sound.
  - If any other system's warning message is displayed or warning sound is generated, Smart Cruise Control warning message may not be displayed and warning sound may not be generated.
  - You may not hear the warning sound of Forward Collision-Avoidance Assist if the surrounding is noisy.

- The vehicle manufacturer is not responsible for any traffic violation or accidents caused by the driver.
- Always set the vehicle speed under the speed limit in your country.

**\* NOTICE**

- Smart Cruise Control may not operate for a few seconds after the vehicle is restarted or the front view camera or front radar is initialized.
- You may hear a sound when the brake is controlled by Smart Cruise Control.

**Smart Cruise Control malfunction and limitations**

**Smart Cruise Control malfunction**



**A: Check Smart Cruise Control System**

When Smart Cruise Control is not working properly, the warning message will appear, and the (A) warning light will appear on the cluster. Have Smart Cruise Control inspected by an authorized Kia dealer.

**Smart Cruise Control disabled**



**A: Smart Cruise Control disabled. Radar blocked**

When the front radar cover or sensor is covered with snow, rain, or foreign material, it can reduce the detecting performance and temporarily limit or disable Smart Cruise Control.

If this occurs the warning message will appear for a certain period of time on the cluster.

Smart Cruise Control will operate properly when snow, rain or foreign material is removed.

Always keep it clean.

**⚠ WARNING**

Even though the warning message does not appear on the cluster, Smart Cruise Control may not properly operate.

**⚠ CAUTION**

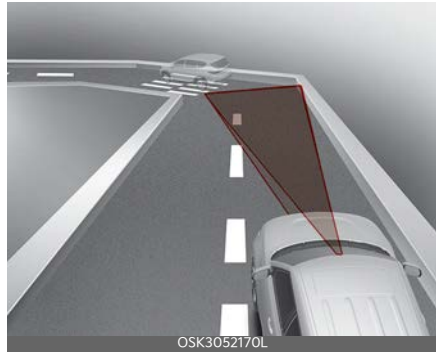
Smart Cruise Control may not properly operate in an area (e.g. open terrain), where there is nothing to detect, or detecting sensor is covered in foreign material after turning ON the vehicle.

## Limitations of Smart Cruise Control

Smart Cruise Control may not operate properly, or it may operate unexpectedly under the following circumstances:

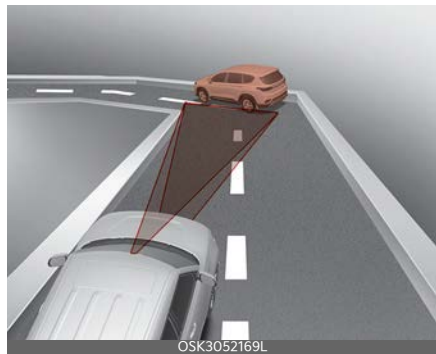
- The detecting sensor or the surroundings are contaminated or damaged
- Washer fluid is continuously sprayed, or the wiper is on
- The camera lens is contaminated due to tinted, filmed or coated windshield, damaged glass, or sticky foreign material (sticker, bug, etc.) on the glass
- Moisture is not removed or frozen on the windshield
- The field of view of the front view camera is obstructed by sun glare
- Street light or light from an oncoming vehicle is reflected on the wet road surface, such as a puddle on the road
- The temperature around the front view camera is high or low
- An object is placed on the dashboard
- The surrounding is very bright
- The surrounding is very dark, such as in a tunnel, etc.
- The brightness changes suddenly, for example when entering or exiting a tunnel
- The brightness outside is low, and the headlamps are not on or are not bright
- Driving in heavy rain or snow, or thick fog
- Driving through steam, smoke or shadow
- Only part of the vehicle is detected
- The vehicle in front has no tail lights, tail lights are located unusually, etc.
- The brightness outside is low, and the tail lamps are not on or are not bright
- The rear of the front vehicle is small or does not look normal (for example, tilted, overturned, etc.)
- The front vehicle's ground clearance is low or high
- A vehicle suddenly cuts in front
- Your vehicle is being towed
- An object reflecting off the front radar such as a guardrail, nearby vehicle, etc.
- The bumper around the front radar is impacted, damaged or the front radar is out of position
- The temperature around the front radar is high or low
- The vehicle in front is made of material that does not reflect on the front radar
- Driving near a highway (or motorway) interchange or tollgate
- Driving on a slippery surface due to snow, water puddle, ice, etc.
- Driving on a curved road
- The vehicle in front is detected late
- The vehicle in front is suddenly blocked by an obstacle
- The vehicle in front suddenly changes lane or suddenly reduces speed
- The vehicle in front is bent out of shape
- The front vehicle's speed is fast or slow
- With a vehicle in front, your vehicle changes lane suddenly at low speed
- The vehicle in front is covered with snow
- Unstable driving
- You are on a roundabout and the vehicle in front is not detected

- You are continuously driving in a circle
- The adverse road conditions cause excessive vehicle vibrations while driving
- Your vehicle height is low or high due to heavy loads, abnormal tire pressure, etc.
- Driving in following places
  - Driving in a parking lot
  - Driving through a construction area, unpaved road, partial paved road, uneven road, speed bumps, etc.
  - Driving on an incline road, curved road, etc.
  - Driving through a roadside with trees or streetlights
  - Driving through a narrow road where trees or grass are overgrown
  - There is interference by electromagnetic waves, such as driving in an area with strong radio waves or electrical noise
  - Driving on a curved road
- Driving through a tunnel or iron bridge
- Driving near areas containing metal substances, such as a construction zone, railroad, etc.
- Driving in vast areas where there are few vehicles or structures (for example, desert, meadow, suburb, etc.)
  - Driving through steam, smoke or shadow
  - Driving near a highway (or motorway) interchange or tollgate
  - Driving near areas containing metal substances, such as a construction zone, railroad, etc.



On curves, Smart Cruise Control may not detect a vehicle in the same lane, and may accelerate to the set speed. Also, vehicle speed may rapidly decrease when the vehicle ahead is detected suddenly.

Select the appropriate set speed on curves and apply the brake pedal or accelerator pedal according to the road and driving conditions ahead.



Your vehicle speed can be reduced due to a vehicle in the adjacent lane. Check to be sure that the road conditions permit safe operation of Smart Cruise Control and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance



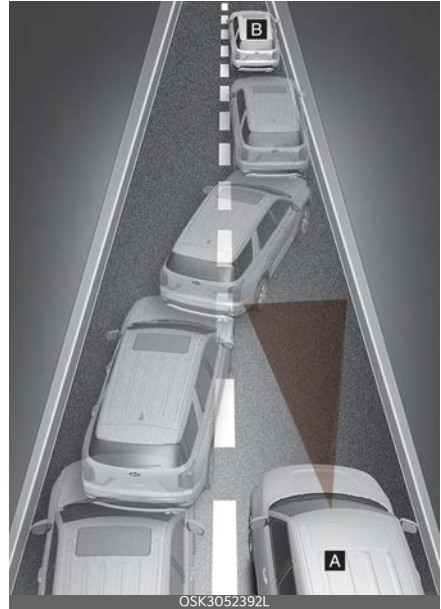
- Driving on an inclined road



During uphill or downhill driving, the Smart Cruise Control may not detect a moving vehicle in your lane, and cause your vehicle to accelerate to the set speed. Also, vehicle speed will rapidly decrease when the vehicle ahead is detected suddenly.

Select the appropriate set speed on inclines and apply the brake pedal or accelerator pedal according to the road and driving conditions ahead.

- Changing lanes



[A] : Your vehicle,

[B] : Lane changing vehicle

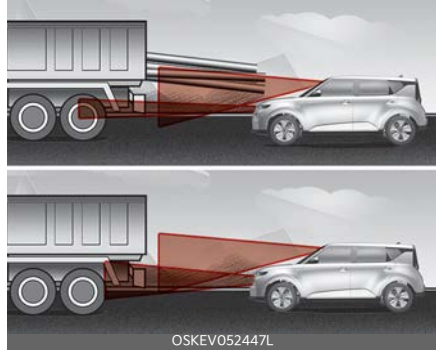
When a vehicle (B) moves into your lane from an adjacent lane, it cannot be detected by the sensor until it is in the sensor's detection range. Smart Cruise Control may not immediately detect the vehicle when the vehicle changes lanes abruptly. In this case, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

- Situations when detecting are limited



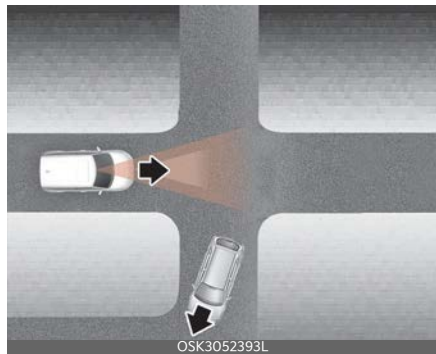
In the following cases, some vehicles in your lane cannot be detected by the sensor:

- Vehicles offset to one side
- Slow-moving vehicles or sudden-decelerating vehicles
- Vehicles with higher ground clearance or vehicles carrying loads that stick out of the back of the vehicle
- Vehicles that has the front lifted due to heavy loads
- Vehicles within approximately 2 m (6 ft.) from your vehicle
- Oncoming vehicles
- Stopped vehicles
- Vehicles with small rear profile, such as trailers
- Narrow vehicles, such as motorcycles, bicycles, or powered two-wheelers
- Special vehicles
- Animals and pedestrians



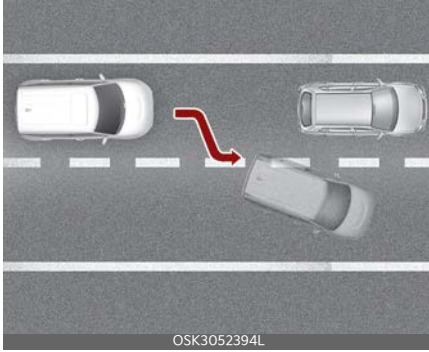
In the following cases, the vehicle in front cannot be detected by the sensor. Always pay attention to the road and driving conditions and drive safely. If necessary, adjust your vehicle speed.

- You are steering your vehicle
- Driving on narrow or sharply curved roads

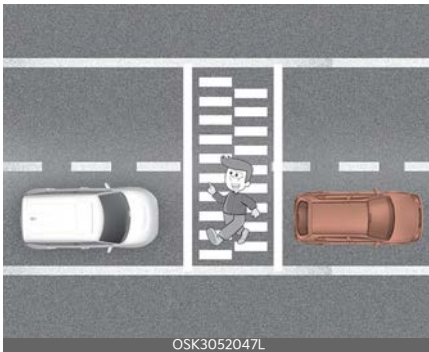


- When a vehicle ahead disappears at an intersection, your vehicle may accelerate.

Always pay attention to road and driving conditions while driving.



- When a vehicle in front of you merges out of the lane, Smart Cruise Control may not immediately detect the new vehicle that is now in front of you. Always pay attention to road and driving conditions while driving.



- Always look out for pedestrians when your vehicle is maintaining a distance with the vehicle ahead.

## Navigation-based Smart Cruise Control (NSCC) (if equipped)

Navigation-based Smart Cruise Control can help drive at a certain speed according to the road conditions when driving on highways (or motorways) by using road information from the navigation system while Smart Cruise Control is operating.

### \* NOTICE

- Navigation-based Smart Cruise Control is available only on controlled access road of certain highways.
  - \* Controlled access road indicates roads with limited entrances and exits that allow uninterrupted high speed traffic flow. Only passenger cars and motorcycles are allowed on controlled access roads.

Available highway (Controlled access road)	
USA	Select Interstate Highway and U.S.(Federal) and State Highways
Canada	Select Provincial and Territorial Highways

- Additional highways may be expanded by future navigation updates.

### \* NOTICE

Navigation-based Smart Cruise Control operates on main roads of highways (or motorways), and does not operate on interchanges or junctions.

**⚠ WARNING**

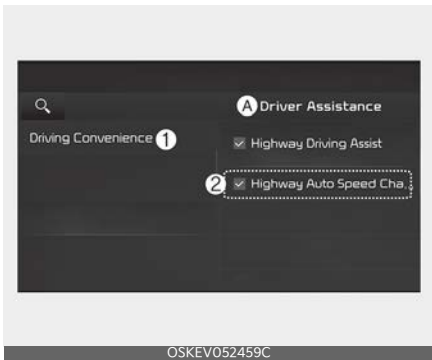
Navigation-based Smart Cruise Control (NSCC) is a supplemental function and is not a substitute for safe driving. It is the responsibility of the driver to always check the speed and distance to the vehicle ahead. Always drive safely and use caution.

**Highway Curve Zone Auto Slowdown**

If vehicle speed is high, Highway Curve Zone Auto Slowdown function will temporarily decelerate your vehicle or limit acceleration to help you drive safely on a curve based on the curve information from the navigation.

**Navigation-based Smart Cruise Control settings**

**Highway Auto Speed Change**



**A: Driver Assistance**

**1 Driving Convenience**

**2 Highway Auto Speed Change**

With the vehicle on, select **Settings** → **Vehicle** → **Driver Assistance** → **Highway Auto Speed Change** on the infotainment system.

**⚠ CAUTION**

When the trailer is connected, Lane Keeping Assist automatically turns off (if equipped). In this case, you cannot get help from Forward Collision-Avoidance Assist. Always drive with care.

**\* NOTICE**

When there is a problem with Navigation-based Smart Cruise Control, the function cannot be set from the Settings menu.

**Navigation-based Smart Cruise Control operation**

**Operating conditions**

Navigation-based Smart Cruise Control is ready to operate if all of the following conditions are satisfied:

- Smart Cruise Control is operating
- Driving on main roads of highways (or motorways)

**\* NOTICE**

For more details on how to operate Smart Cruise Control, refer to "Smart Cruise Control (SCC)" on page 6-102.

## Navigation-based Smart Cruise Control display and control

When Navigation-based Smart Cruise Control operates, it will be displayed on the cluster as follows:

## Navigation-based Smart Cruise Control standby



OSKEV052389L

If the operating conditions are satisfied, the white (NAV) symbol will appear.

## Navigation-based Smart Cruise Control operating



OSKEV052390L

If temporary deceleration is required in the standby state and Navigation-based Smart Cruise Control is operating, the green (NAV) symbol will appear on the cluster.

## ⚠ WARNING



### A: Drive carefully

The warning message will appear in the following circumstances:

- Navigation-based Smart Cruise Control is not able to slow down your vehicle to a safe speed

## \* NOTICE

The images and colors in the instrument cluster may differ depending on the cluster type or theme selected from the settings menu.

## Highway Curve Zone Auto Slow-down

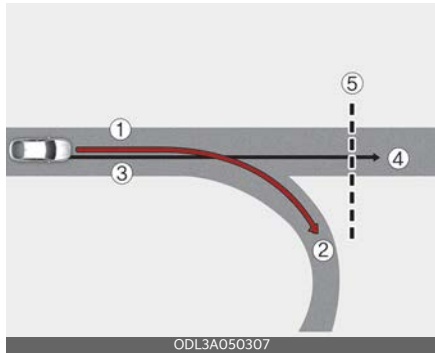
- Depending on the curve ahead on the highway (or motorway), the vehicle will decelerate, and after passing the curve, the vehicle will accelerate to Smart Cruise Control set speed.
- Vehicle deceleration time may differ depending on the vehicle speed and the degree of the curve on the road. The higher the driving speed, deceleration will start faster.

### Limitations of Navigation-based Smart Cruise Control

Navigation-based Smart Cruise Control may not operate properly under the following circumstances:

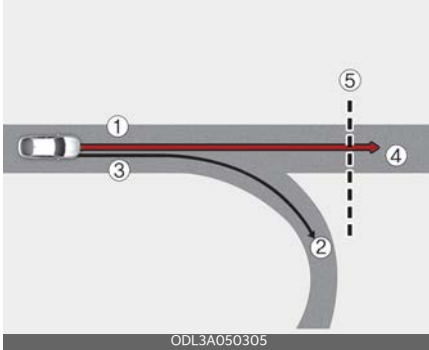
- The navigation is not working properly
- Speed limit and road information in the navigation is not updated
- Map information is not transmitted due to infotainment system's abnormal operation
- Speed limit and road information in the navigation is not updated
- The map information and the actual road is different because of real-time GPS data or map information error
- The navigation searches for a route while driving
- GPS signals are blocked in areas such as a tunnel
- A road that divides into two or more roads and joins again
- The driver goes off course the route set in the navigation
- The route to the destination is changed or canceled by resetting the navigation
- The vehicle enters a service station or rest area
- Android Auto or Car Play is operating
- The navigation cannot detect the current vehicle position (for example, elevated roads including overpass adjacent to general roads or nearby roads exist in a parallel way)
- The navigation is being updated while driving
- The navigation is being restarted while driving

- The speed limit of some sections changes according to the road situations
- Driving on a road under construction
- Driving on a road that is controlled
- There is bad weather, such as heavy rain, heavy snow, etc.
- Driving on a road that is sharply curved



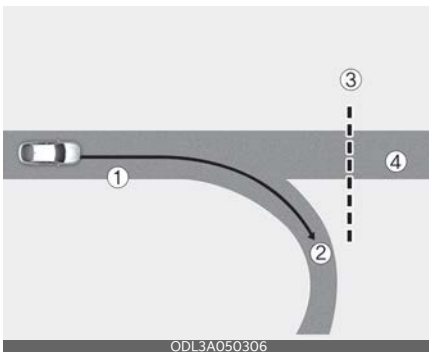
[1]: Set route, [2]: Branch line, [3]: Driving route, [4]: Main road, [5]: Curved road section

- When there is a difference between the navigation set route (branch line) and the driving route (main road), Highway Curve Zone Auto Slowdown function may not operate until the driving route is recognized as the main road.
- When the vehicle's driving route is recognized as the main road by maintaining the main road instead of the navigation set route, Highway Curve Zone Auto Slowdown function will operate. Depending on the distance to the curve and the current vehicle speed, vehicle deceleration may not be sufficient or may decelerate rapidly.



[1]: Main road, [2]: Branch line, [3]: Driving route, [4]: Set route, [5]: Curved road section

- When there is a difference between the navigation route (main road) and the driving route (branch line), Highway Curve Zone Auto Slowdown function will operate based on the curve information on the main road.
- When it is judged that you are driving out of the route by entering the highway interchange or junction, Highway Curve Zone Auto Slowdown function will not operate.



[1]: Driving route, [2]: Branch line, [3]: Curved road section, [4]: Main road

- If there is no destination set on the navigation, Highway Curve Zone Auto Slowdown function will operate based

on the curve information on the main road.

- Even if you depart from the main road, Highway Curve Zone Auto Slowdown function may temporarily operate due to navigation information of the highway curve section.

### **⚠ WARNING**

- Navigation-based Smart Cruise Control is not a substitute for safe driving practices, but a convenience function. Always have your eyes on the road, and it is the responsibility of the driver to avoid violating traffic laws.
- The navigation's speed limit information may differ from the actual speed limit information on the road. It is the driver's responsibility to check the speed limit on the actual driving road or lane.
- Navigation-based Smart Cruise Control will automatically be canceled when you leave the highway (or motorway) main road. Always pay attention to road and driving conditions while driving.
- Navigation-based Smart Cruise Control may not operate due to the existence of leading vehicles and the driving conditions of the vehicle. Always pay attention to road and driving conditions while driving.
- When you are towing a trailer or another vehicle, turn off Navigation-based Smart Cruise Control for safety reasons. If you tow a European spec trailer, the function may be limited.
- After you pass through a tollgate on a highway (or motorway), Navigation-based Smart Cruise Control will operate based on the first lane. If you enter one of the other lanes, Navigation-

based Smart Cruise Control might not operate properly.

- The vehicle will accelerate if the driver depresses the accelerator pedal while Navigation-based Smart Cruise Control is operating, and the function will not decelerate the vehicle. However, if the accelerator pedal is depressed insufficiently, the vehicle may decelerate.
- If the driver accelerates and releases the accelerator pedal while Navigation-based Smart Cruise Control is operating, the vehicle may not decelerate sufficiently or may rapidly decelerate to a safe speed.
- If the curve is too large or too small, Navigation-based Smart Cruise Control may not operate.

### **This device complies with Industry Canada licence-exempt RSS standard(s).**

Operation is subject to the following 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.
3. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

#### **\* NOTICE**

- A time gap could occur between the navigation's guidance and when Navigation-based Smart Cruise Control operation starts and ends.
- The speed information on the cluster and navigation may differ.
- Even if you are driving at a speed lower than Smart Cruise Control set speed, acceleration may be limited by the curve sections ahead.
- If Navigation-based Smart Cruise Control is operating while leaving the main road to enter an interchange, junction, rest area, etc., the function may operate for a certain period of time.
- Deceleration by Navigation-based Smart Cruise Control may feel it is not sufficient due to road conditions such as uneven road surfaces, narrow lanes, etc.



## Lane Following Assist (LFA) (if equipped)

Lane Following Assist is designed to help detect lane markings and/or vehicles on the road, and assists the driver's steering to help center the vehicle in the lane.

### Detecting sensor

Front view camera



The front view camera is used as a detecting sensor to detect lane markings and front vehicles.

Refer to the picture above for the detailed location of the detecting sensor.

#### **CAUTION**

For more details on the precautions of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA) (Front Camera Only) (if equipped)" on page 6-43.

## Lane Following Assist settings

### Warning volume



A: **Driver Assistance**

1 **Warning Volume**

2 **Driving Safety Priority**

3 **High**

4 **Medium**

5 **Low**

With the vehicle on, select **Settings** → **Vehicle** → **Driver Assistance** → **Warning Volume** on the infotainment system to change the Warning volume to adjust the Warning volume levels; **High**, **Medium** or **Low**.

If **Driving Safety Priority** is selected, the audio volume will temporarily decrease to warn the driver with the audible warning for safe driving.

#### **NOTICE**

When the trailer is connected, Lane Following Assist automatically turns off (if equipped). In this case, you cannot get help from Forward Collision-Avoidance Assist. Always drive with care.

**\* NOTICE**

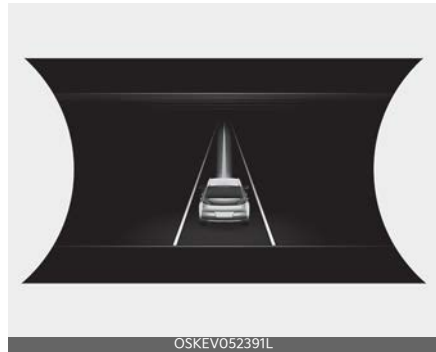
- When the vehicle is restarted, Lane Following Assist settings will retain its settings.
- If you change the Warning Volume, the Warning Volume of other Driver Assistance systems may change.

**Lane Following Assist operation**  
**Turning Lane Following Assist On/Off**



With the vehicle on, shortly press the Lane Driving Assist button located on the steering wheel to turn on Lane Following Assist. The grey or green (ⓐ) indicator light will appear on the cluster. Press the button again to turn off the function.

**Lane Following Assist**

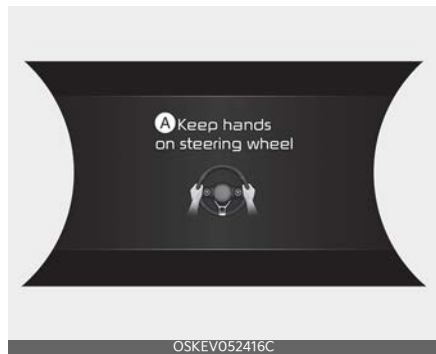


If the vehicle ahead and/or both lane markings are detected and The vehicle speed is below 160 km/h (100 mph), the green (ⓐ) indicator light appears on the cluster, and Lane Following Assist helps center the vehicle in the lane by assisting the steering wheel.

**⚠ CAUTION**

When the steering wheel is not assisted, the white (ⓐ) indicator light blinks and change to grey.

**Hands-off warning**



**A: Keep hands on steering wheel**

If the driver takes their hands off the steering wheel for several seconds, the

warning message will appear and an audible warning will sound in stages.

- First stage: Warning message
- Second stage: Warning message (red steering wheel) and audible warning



**A: LFA (Lane Following Assist) cancelled**

If the driver still does not have their hands on the steering wheel after the hands-off warning the warning message will appear and Lane Following Assist will be automatically canceled.

**WARNING**

- The steering wheel may not be assisted if the steering wheel is held very tight or the steering wheel is steered over a certain degree.
- Lane Following Assist does not operate at all times. It is the responsibility of the driver to safely steer the vehicle and to maintain the vehicle in its lane.
- The hands-off warning message may appear late depending on road conditions. Always have your hands on the steering wheel while driving.

- If the steering wheel is held very lightly the hands-off warning message may appear because Lane Following Assist may not recognize that the driver has their hands on the steering wheel.
- If you attach objects to the steering wheel, the hands-off warning may not work properly.

**\* NOTICE**

- When both lane markings are detected, the lane lines on the cluster will change from grey to white.

Lane undetected



Lane detected



- The images and colors in the instrument cluster may differ depending on

the cluster type or theme selected from the settings menu.

- If lane markings are not detected, steering wheel control by Lane Following Assist can be limited depending on whether a vehicle is in front or the driving conditions of the vehicle.
- Even though the steering is assisted by Lane Following Assist, the driver may control the steering wheel.
- The steering wheel may feel heavier or lighter when the steering wheel is assisted by Lane Following Assist than when it is not.

### Limitations of Lane Following Assist

For more details on Lane Following Assist limitations, refer to "Lane Keeping Assist (LKA) (if equipped)" on page 6-68.

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## Lane Following Assist malfunction and limitations

### Lane Following Assist malfunction

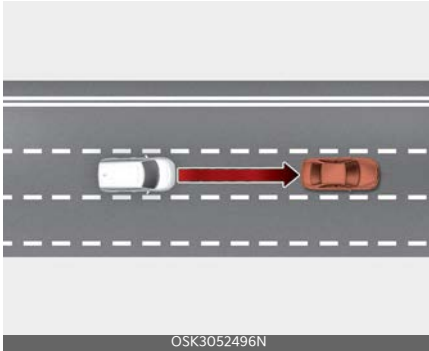


#### A: Check LFA (Lane Following Assist) system

When Lane Following Assist is not working properly, the warning message will appear and the master warning light (⚠) will appear on the cluster.

If this occurs, have Lane Following Assist inspected by an authorized Kia dealer.

## Highway Driving Assist (HDA) (if equipped)



Highway Driving Assist is designed to help detect vehicles and lanes ahead, and help maintain distance from the vehicle ahead, maintain the set speed, help center the vehicle in the lane while driving on the highway (or motorway).

### \* NOTICE

- Highway Driving Assist is available only on controlled access road of certain highways.
  - \* Controlled access road indicates roads with limited entrances and exits that allow uninterrupted high speed traffic flow. Only passenger cars and motorcycles are allowed on controlled access roads.

Available highway (Controlled access road)	
USA	Select Interstate Highway and U.S.(Federal) and State Highways
Canada	Select Provincial and Territorial Highways

- Additional highways may be expanded by future navigation updates.

- Highway Driving Assist operates on main roads of highways (or motorways), and does not operate on interchanges or junctions.

## Detecting sensor

Front view camera



Front radar



Refer to the picture above for the detailed location of the detecting sensors.

### ⚠ CAUTION

For more details on the precautions of the detecting sensors, refer to "Forward Collision-Avoidance Assist (FCA) (Sensor Fusion) (if equipped)" on page 6-54.

## Highway Driving Assist settings

### Highway Driving Assist



#### A: Driver Assistance

##### 1 Driving Convenience

##### 2 Highway Driving Assist

With the vehicle on, select **Settings** → **Driver Assistance** → **Driving Convenience** → **Highway Driving Assist** on the instrument cluster or **Settings** → **Vehicle** → **Driver Assistance** → **Driving Convenience** → **Highway Driving Assist** on the infotainment system.

If **Highway Driving Assist** is selected, it helps maintain distance from the vehicle ahead, maintain the set speed, and helps center the vehicle in the lane.

#### **⚠ WARNING**

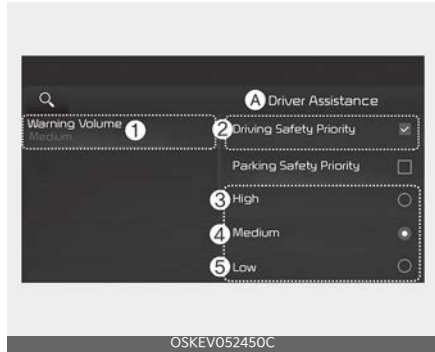
For your safety, change the Settings after parking the vehicle at a safe location.

#### **\* NOTICE**

- If there is a problem with the functions, the settings cannot be changed. Have the function be inspected by an authorized Kia dealer.

- If the vehicle is restarted, the functions will maintain the last setting.

### Warning volume



#### A: Driver Assistance

##### 1 Warning Volume

##### 2 Driving Safety Priority

##### 3 High

##### 4 Medium

##### 5 Low

With the vehicle on, select **Settings** → **Vehicle** → **Driver Assistance** → **Warning Volume** on the infotainment system to change the Warning volume to adjust the Warning volume levels; **High**, **Medium** or **Low**.

If **Driving Safety Priority** is selected, the audio volume will temporarily decrease to warn the driver with the audible warning for safe driving.

#### **\* NOTICE**

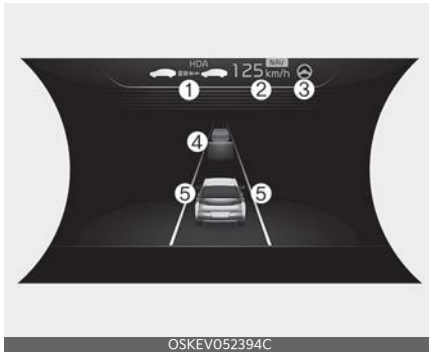
If you change the Warning volume, the Warning volume of other Driver Assistance systems may change.

## Highway Driving Assist operation

### Displaying operating status

You can see the status of the Highway Driving Assist operation in the Driving Assist view on the cluster. Refer to "LCD display" on page 5-44.

#### Operating State



#### Standby State



Highway Driving Assist will be displayed as below depending on the status of the function.

- 1 Highway Driving Assist indicator, whether there is a vehicle ahead and the selected distance level are displayed.
  - Highway Driving Assist indicator
    - Green (HDA): Operating state

- Grey (HDA): Standby state
- White (HDA) blink: Accelerator depressed state

- 2 Set speed
- 3 Lane Following Assist indicator
- 4 Whether there is a vehicle ahead and the selected headway
- 5 Whether the lane is detected or not

### \* NOTICE

- For more details on the display refer to "Smart Cruise Control (SCC)" on page 6-102.
- For more details on the display, refer to "Lane Following Assist (LFA) (if equipped)" on page 6-123.
- The images and colors in the instrument cluster may differ depending on the cluster type or theme selected from the settings menu.

## Highway Driving Assist operating


Highway Driving Assist operates when:

- When driving on available road, press Drive Assist button to turn on Highway Driving Assist.
- When entering the main roads of highways (or motorways) while Smart Cruise Control is operating, Driving Assist will not turn on if Lane Following Assist is turned off.

### Restarting after stopping



#### A: Use switch or pedal to accelerate

When Highway Driving Assist is operating, your vehicle will stop if the vehicle ahead of you stops. Also, if the vehicle ahead of you starts moving within 30 seconds after the stop, your vehicle will start as well. In addition, after the vehicle has stopped and 30 seconds have passed, the message will appear on the cluster. Depress the accelerator pedal or operate the + switch, - switch or  switch to start driving.

### Hands-off warning



#### A: Keep hands on steering wheel

If the driver takes their hands off the steering wheel for several seconds, the 'Keep hands on the steering wheel'

warning message will appear and an audible warning will sound in stages.

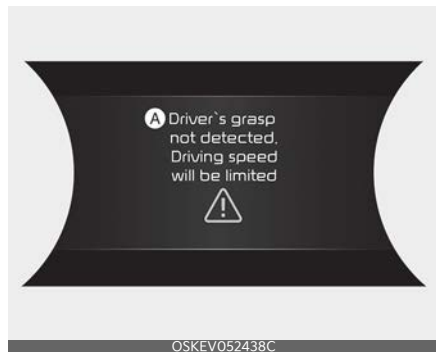
- First stage: Warning message
- Second stage: Warning message (red steering wheel) and audible warning



#### A: Highway Driving Assist deactivated

If the driver still does not have their hands on the steering wheel after the hands-off warning, warning message will appear and Highway Driving Assist will be automatically canceled.

### Driving speed limit



#### A: Driver's grasp not detected. Driving speed will be limited

When Highway Driving Assist is canceled by the hands-off warning, The driving speed will be limited.



While Driving Speed Limit function is operating, the warning message will appear on the cluster, and an audible warning will sound continuously.

### Highway Driving Assist standby

When the Smart Cruise Control is temporarily canceled while Highway Driving Assist is operating, Highway Driving Assist will be in the standby state. At this time, Lane Following Assist will operate properly.

#### \* NOTICE

- Driving Speed Limit helps you drive below 60 km/h (40 mph). At this time, the vehicle decelerates due to the vehicle ahead. After the vehicle has decelerated, it cannot automatically accelerate.
- Driving Speed Limit will cancel in the following circumstances:
  - When the driver grabs the steering wheel again
  - When the driver turns on Lane Following Assist by pressing the Lane Driving Assist button
  - When (+), (-), (||◻) switch or (🚗) button is operated, or the accelerator pedal or the brake pedal is depressed

### Highway Driving Assist malfunction and limitations

#### Highway Driving Assist malfunction



#### A: Check Highway Driving Assist system

When Highway Driving Assist is not working properly, the warning message will appear, and the (⚠️) warning light will appear on the cluster. Have Highway Driving Assist be inspected by an authorized Kia dealer.

#### ⚠️ WARNING

- The driver is responsible for controlling the vehicle for safe driving.
- Always have your hands on the steering wheel while driving.
- Highway Driving Assist is a supplemental function that assists the driver in driving the vehicle and is not a complete autonomous driving system. Always check road conditions, and if necessary, take appropriate actions to drive safely.

- Always have your eyes on the road, and it is the responsibility of the driver to avoid violating traffic laws. The vehicle manufacturer is not responsible for any traffic violation or accidents caused by the driver.
- Highway Driving Assist may not be able to recognize all traffic situations. Highway Driving Assist may not detect possible collisions due to limitations of the function. Always be aware of the limitations of the function. Obstacles such as vehicles, motorcycles, bicycles, pedestrians, or unspecified objects or structures such as guardrails, tollgate, etc., that may collide with the vehicle may not be detected.
- Highway Driving Assist will turn off automatically under the following situations:
  - Driving on roads that Highway Driving Assist does not operate, such as a rest area, intersection, junction, etc.
  - The navigation does not operate properly such as when the navigation is being updated or restarted
- Highway Driving Assist may inadvertently operate or turn off depending on road conditions (navigation information) and surroundings.
- Lane Following Assist function may be temporarily disabled when the front view camera cannot detect lanes properly or the hands-off warning is on.
- You may not hear the warning sound of Highway Driving Assist if the surrounding is noisy.
- If the vehicle is driven at high speed above a certain speed at a curve, your

vehicle may drive to one side or may depart from the driving lane.

- When you are towing a trailer or another vehicle, turn off Highway Driving Assist for safety reasons.
- The hands-off warning message may appear early or late depending on how the steering wheel is held or road conditions. Always have your hands on the steering wheel while driving.
- For your safety, please read the owner's manual before using the Highway Driving Assist.
- Highway Driving Assist will not operate when the vehicle is started, or when the detecting sensors or navigation is being initialized.

---

### Limitations of Highway Driving Assist

Highway Driving Assist may not operate properly, or it may not operate under the following circumstances:

- The map information and the actual road is different because the navigation is not updated
- The map information and the actual road is different because of real-time GPS data or map information error
- The infotainment system is overloaded by simultaneously performing functions such as route search, video playback, voice recognition, etc.
- GPS signals are blocked in areas such as a tunnel
- The driver goes off course, or resetting the navigation route by changing the destination (including route change according to real-time road traffic information), or canceling the route to the destination

- The vehicle enters a service station or rest area
- Android Auto or Car Play is operating
- The navigation cannot detect the current vehicle position (for example, elevated roads including overpass adjacent to general roads or nearby roads exist in a parallel way)

**\* NOTICE**

For more details on the limitations of the front view camera and front radar, refer to "Forward Collision-Avoidance Assist (FCA) (Sensor Fusion) (if equipped)" on page 6-54.

**This device complies with Industry Canada licence-exempt RSS standard(s).**

Operation is subject to the following 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.
3. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

**Rear View Monitor (RVM)**

Rear View Monitor shows the area behind the vehicle to assist you when parking or backing up.

**Detecting sensor**

Wide-rear view camera



Refer to the picture above for the detailed location of the detecting sensor.

**Rear View Monitor settings**

**Warning volume**



**A: Driver Assistance**

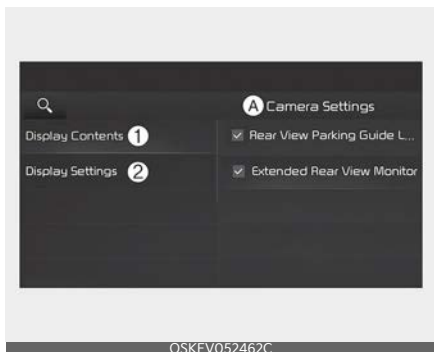
- 1 Warning Volume
- 2 Parking Safety Priority
- 3 High
- 4 Medium
- 5 Low

If **Parking Safety Priority** is selected, the audio volume will temporarily decrease while Rear View Monitor is operating for safe parking.

### \* NOTICE

If you change the Warning volume, the Warning volume of other Driver Assistance systems may change.

## Camera settings



OSKEV052462C

### A: Camera Settings

#### 1 Display Contents

#### 2 Display Settings (if equipped)

You can change Rear View Monitor 'Display Contents' by touching the setup icon (⚙️) on the screen while Rear View Monitor is operating, or selecting **Driver assistance** → **Parking safety** → **Camera settings** from the Settings menu while the vehicle is on.

- **Display Contents:** To change the settings of Extended Rear View Monitor and Rear View Parking Guide Lines.
- **Display Settings:** To change the screen's brightness and contrast.

### \* NOTICE

The settings menu may not be dependent on the specifications of the vehicle specifications.

## Rear View Parking Guide

### Rear View Parking Guide Lines



OSK3052368L

If **Rear View Parking Guide Lines** is selected, the rear view parking guide lines will be displayed at the left side of the infotainment system screen.

### \* NOTICE

The horizontal guideline shows the distance of 0.5 m (1.6 ft.), 1 m (3.3 ft.) and 2.3 m (7.6 ft.) from the vehicle.

### Top View Parking Guide Lines



OSK3052364L

If **Rear View Parking Guide Lines** is selected, the top view parking guide

lines will be displayed at the left side of the infotainment system screen.

### \* NOTICE

The horizontal scale of rear top view parking guide indicates the tailgate opening distance, 1.5 m from the vehicle.

## Extended Rear View Monitor

If Extended Rear View Monitor is selected, the Rear View keeps displaying when shifting from R to N/D.

## Rear View Monitor operation

### Parking/View button (if equipped)



Press the Parking/View button (1) to turn on Rear View Monitor.

Press the button again to turn off the function.

## Rear view function



## Operating conditions

Rear View Monitor will turn on when the following conditions are satisfied:

- Shifting the gear to R (Reverse).
- Pressing the Parking/View button (1) while P (Park) gear position is selected
- Pressing the View icon with the Rear top view on the screen

## Off conditions

Rear View Monitor will turn off when the following conditions are satisfied:

- Pressing the Parking/View button (1) again while P (Park) gear position is selected. with the rear view on the screen.
- Changing the gear from R (Reverse) to P (Park).

### \* NOTICE

Rear View Monitor will not turn off when the vehicle is in R (Reverse).

## Extended Rear View Monitor

Extended Rear View Monitor function maintains the rear view of the vehicle when shifting the gear from R (Reverse)

to N (Neutral) or D (Drive) to help you park safely.

### Operating conditions

Rear View Monitor will maintain when the following conditions are satisfied:

- Shifting the gear from R (Reverse) to N (Neutral) or D (Drive).
- The vehicle speed is below approximately 10 km/h (6 mph).

### Off conditions

Extended Rear View Monitor function will turn off when one the following conditions are satisfied:

- The vehicle speed is above approximately 10 km/h (6 mph).
- Pressing the Parking/View button (1).
- Shifting the gear to P (Park).

### Rear Top View



Rear Top View shows the rear top view of your vehicle when parking for you to check the distance between an object and behind the vehicle.

Rear Top View will turn on under the following conditions:

- The gear is shifted to R (Reverse) and the icon is selected among the view buttons.

- The Parking/View button is pressed, while the gear is in P (Park), N (Neutral) or D (Drive), and vehicle speed is 10 km/h (6 mph) or less.

### Rear View Monitor malfunction and limitations

#### Rear View Monitor malfunction

When Rear View Monitor is not working properly, or the screen flickers, or the camera image does not display properly, Visit an authorized Kia dealer.

#### Limitations of Rear View Monitor

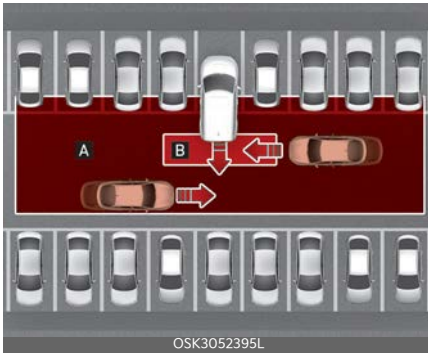
When the vehicle is stopped for a long time in winter or when the vehicle is parked in an indoor parking lot, the exhaust fumes may temporarily blur the image.

#### **⚠ WARNING**

- The Wide-rear view camera does not cover the complete area behind the vehicle. The driver should always check the rear area directly through the inside and outside rearview mirror before parking or backing up.
- The image shown on the screen may differ from the actual distance of the object. Make sure to directly check the vehicle's surroundings for safety.
- If the camera lens is covered with foreign material, the Rear View Monitor may not operate normally. Always keep the camera lens clean. However, do not use chemical solvents such as strong detergents containing high alkaline or volatile organic solvents (gasoline, acetone etc.). This may damage the camera lens.

## Rear Cross-Traffic Collision-Avoidance Assist (RCCA) (if equipped)

Rear Cross-Traffic Collision-Avoidance Assist is designed to help detect vehicles approaching from the left and right side while your vehicle is reversing, and warn the driver that a collision is imminent with a warning message and an audible warning. Also, braking is assisted to help prevent collision.



[A]: Rear Cross-Traffic Collision Warning operating range

[B]: Rear Cross-Traffic Collision-Avoidance Assist operating range

### **CAUTION**

Warning timing may vary depending on vehicle speed of the approaching vehicle.

## Detecting sensor

Rear corner radar



Refer to the picture above for the detailed location of the detecting sensors.

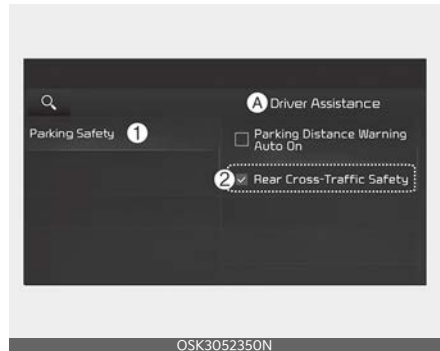
### **\* NOTICE**

For more details on the precautions of the rear corner radar, refer to "Blind-Spot Collision-Avoidance Assist (BCA) (if equipped)" on page 6-74.

6

## Rear Cross-Traffic Collision-Avoidance Assist settings

### Rear Cross-Traffic Safety



A: Driver Assistance

1 Parking Safety

## 2 Rear Cross-Traffic Safety

With the vehicle on, select **Settings** → **Vehicle** → **Driver Assistance** → **Parking Safety** → **Rear Cross-Traffic Safety** on the infotainment system screen to turn on Rear Cross-Traffic Collision-Avoidance Assist.

### ⚠ WARNING

When the vehicle is restarted, Rear Cross-Traffic Collision-Avoidance Assist will always turn on. However, if **Rear Cross-Traffic Safety** is deselected after the vehicle is restarted, the driver should always be aware of the surroundings and drive safely.

### \* NOTICE

Rear Cross Safety settings include 'Rear Cross-Traffic Collision-Warning' and 'Rear Cross-Traffic Collision-Avoidance Assist'.

### \* NOTICE

If the vehicle is restarted, Warning Volume will maintain the last setting.

## Warning volume



A: Driver Assistance

## 1 Warning Volume

### 2 High

### 3 Medium

### 4 Low

With the vehicle on, select **Settings** → **Vehicle** → **Warning Volume** on the infotainment system to change the Warning volume to adjust the Warning volume levels; **High**, **Medium** or **Low**.

### ⚠ CAUTION

The settings for Warning Volume applies to all the functions of Rear Cross-Traffic Collision-Avoidance Assist.

### \* NOTICE

- If the vehicle is restarted, Warning volume will maintain the last setting.
- If you change the Warning volume, the Warning volume of other Driver Assistance systems may change.

## Rear Cross-Traffic Collision-Avoidance Assist operation

Rear Cross-Traffic Collision-Avoidance Assist will warn and control the vehicle depending on collision risk level:

'Collision warning', 'Emergency braking' and 'Stopping vehicle and ending brake control'.



## Collision warning



A: Collision warning

- To warn the driver of an approaching vehicle from the rear left/right side of your vehicle, the warning light on the outside rearview mirror will blink and a warning will appear on the cluster. At the same time, an audible warning will sound. If the Rear View Monitor is operating, a warning will also appear on the infotainment system screen.
- Rear Cross-Traffic Collision-Avoidance Assist will operate when all the following conditions are satisfied:
  - The gear is shifted to R (Reverse)
  - Vehicle speed is below 8 km/h (5 mph)
  - The approaching vehicle is within approximately 25 m (82 ft.) from the left and right side of your vehicle
  - The speed of the vehicle approaching from the left and right is above 5 km/h (3 mph)

### \* NOTICE

- If the operating conditions are satisfied, there will be a warning whenever the vehicle approaches from the left or right side even though your vehicle speed is 0 km/h (0 km/h).
- The images and colors in the cluster may differ depending on the cluster type or theme selected from the cluster.

## Emergency braking



cluster. At the same time, an audible warning will sound. A warning will also appear on the infotainment system screen.

- Emergency braking will be assisted to help prevent collision with approaching vehicles from the left and right.
- Rear Cross-Traffic Collision-Avoidance Assist will operate when all the following conditions are satisfied:
  - The gear is shifted to R (Reverse)
  - Vehicle speed is below 8 km/h (5 mph)
  - The approaching vehicle is within approximately 1.5 m (5 ft.) from the left and right side of your vehicle
  - The speed of the vehicle approaching from the left and right is above 5 km/h (3 mph)

### **⚠ WARNING**

Brake control ends when the conditions of the approaching vehicle from the rear left or right side are as below:

- The approaching vehicle is out of the detecting range
- The approaching vehicle passes behind your vehicle
- The approaching vehicle does not drive toward your vehicle
- The approaching vehicle speed slows down
- The driver depresses the brake pedal with sufficient power

### A: Emergency Braking

- To warn the driver of an approaching vehicle from the rear left/right side of your vehicle, the warning light on the outside rearview mirror will blink and a warning message will appear on the

## Stopping vehicle and ending brake control



### A: Drive carefully

- When the vehicle is stopped due to emergency braking, the warning message will appear on the cluster.
- Brake control will end after the vehicle is stopped by emergency braking for approximately 2 seconds.
- During emergency braking, braking control by Rear Cross-Traffic Collision-Avoidance Assist will automatically cancel when the driver excessively depresses the brake pedal.

### ⚠ WARNING

- For your safety, change the Settings after parking the vehicle at a safe location.
- If any other system's warning message is displayed or audible warning is generated, Rear Cross-Traffic Collision-Avoidance Assist's warning message may not be displayed and audible warning may not be generated.
- You may not hear the warning sound of Rear Cross-Traffic Collision-Avoidance Assist if the surrounding is noisy.

- Rear Cross-Traffic Collision-Avoidance Assist may not operate if the driver applies the brake pedal to avoid collision.
- During Rear Cross-Traffic Collision-Avoidance Assist operation, the vehicle may stop suddenly injuring passengers and shifting loose objects. Always have the seat belt on and keep loose objects secured.
- Even if there is a problem with Rear Cross-Traffic Collision-Avoidance Assist, the vehicle's basic braking performance will operate properly.

### ⚠ WARNING

- When Rear Cross-Traffic Collision-Avoidance Assist is operating, braking control by function will automatically cancel when the driver excessively depresses the accelerator pedal.
- Rear Cross-Traffic Collision-Avoidance Assist does not operate in all situations or cannot avoid all collisions.
- Rear Cross-Traffic Collision-Avoidance Assist may warn the driver late or may not warn the driver depending on the road and driving conditions.
- The driver should hold the responsibility to control the vehicle. Do not solely depend on Rear Cross-Traffic Collision-Avoidance Assist. Rather, maintain a safe braking distance, and if necessary, depress the brake pedal to reduce driving speed or to stop the vehicle.
- Never deliberately operate Rear Cross-Traffic Collision-Avoidance Assist on people, animal, objects, etc. It may cause serious injury or death.

**⚠ WARNING**

The brake control may not operate properly depending on the status of ESC (Electronic Stability Control).

There will only be a warning when:

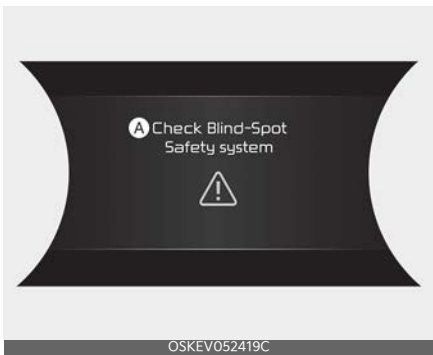
- The ESC (Electronic Stability Control) warning light is on
- ESC (Electronic Stability Control) is engaged in a different function

**\* NOTICE**

- If braking is assisted by Rear Cross-Traffic Collision-Avoidance Assist, the driver must immediately depress the brake pedal and check vehicle surroundings.
- After shifting the gear to R (Reverse), braking control will operate once for left and right vehicle approach.

**Rear Cross-Traffic Collision-Avoidance Assist malfunction and limitations**

**Rear Cross-Traffic Collision-Avoidance Assist malfunction**



**A: Check blind-spot safety systems**

When Rear Cross-Traffic Collision-Avoidance Assist is not working properly, the warning message will appear on the cluster for several seconds, and the master (⚠) warning light will appear on the cluster. If this occurs, have the function be inspected by an authorized Kia dealer.



**A: Check side view mirror warning light**

When the outside rearview mirror warning light is not working properly, the warning message will appear on the cluster for several seconds, and the master (⚠) warning light will appear on the cluster. If this occurs, have the function be inspected by an authorized Kia dealer.

## Rear Cross-Traffic Collision-Avoidance Assist disabled



### A: Rear Cross-Traffic Safety system disabled. Radar blocked

When the rear bumper around the rear-side radar or sensor is covered with foreign material, such as snow or rain, or installing a trailer or carrier, it can reduce the detecting performance and temporarily limit or disable Rear Cross-Traffic Collision-Avoidance Assist.

If this occurs, the warning message will appear on the cluster.

Rear Cross-Traffic Collision-Avoidance Assist will operate properly when such foreign material or trailer, etc., is removed.

If Rear Cross-Traffic Collision-Avoidance Assist does not operate properly after it is removed, have the function be inspected by an authorized Kia dealer.

### ⚠ WARNING

- Even though the warning message does not appear on the cluster, Rear Cross-Traffic Collision-Avoidance Assist may not operate properly.
- Rear Cross-Traffic Collision-Avoidance Assist may not operate properly in an area (for example, open terrain),

where any substance are not detected after turning ON the vehicle.

### ⚠ CAUTION

Turn off Rear Cross-Traffic Collision-Avoidance Assist to install or remove a trailer, carrier, or another attachment. Turn on Rear Cross-Traffic Collision-Avoidance Assist when finished.

## Limitations of Rear Cross-Traffic Collision-Avoidance Assist

Rear Cross-Traffic Collision-Avoidance Assist may not operate properly, or it may operate unexpectedly under the following circumstances:

- Departing from where trees or grass are overgrown
- Departing from where roads are wet
- Speed of the approaching vehicle is fast or slow

Braking control may not work, driver's attention is required in the following circumstances:

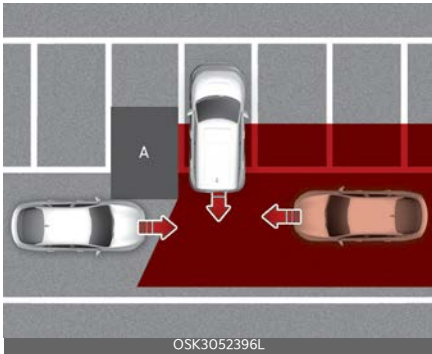
- The vehicle severely vibrates while driving over a bumpy road, uneven road or concrete patch
- Driving on a slippery surface due to snow, water puddle, ice, etc.
- The tire pressure is low or a tire is damaged
- The brake is tuned
- Remote Smart Parking Assist is operating (if equipped)

### \* NOTICE

For more details on the limitations of the rear corner radar, refer to "Blind-Spot Collision-Avoidance Assist (BCA) (if equipped)" on page 6-74.

**⚠ WARNING**

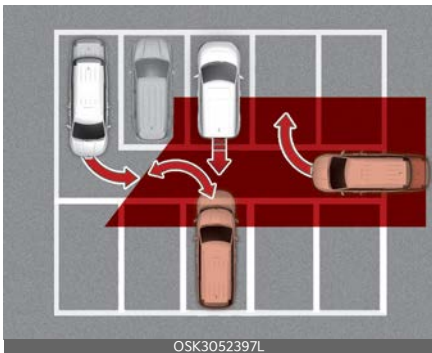
- Driving near a vehicle or structure



[A]: Structure

Rear Cross-Traffic Collision-Avoidance Assist may be limited when driving near a vehicle or structure, and may not detect the vehicle approaching from the left or right. If this occurs, the function may not warn the driver or control the brakes when necessary. Always check your surroundings while backing up.

- When the vehicle is in a complex parking environment



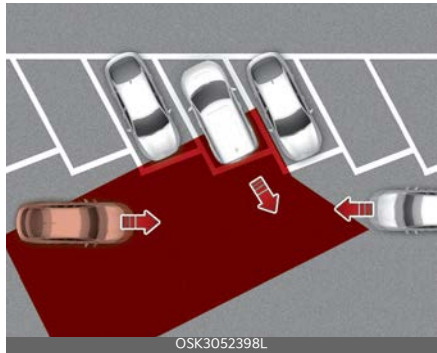
Rear Cross-Traffic Collision-Avoidance Assist may detect vehicles which are parking or pulling out near your vehicle (example, a vehicle leaving

beside your vehicle, a vehicle parking or pulling out in the rear area, a vehicle approaching your vehicle making a turn, etc.).

If this occurs, the function may unnecessarily warn the driver and control the brake.

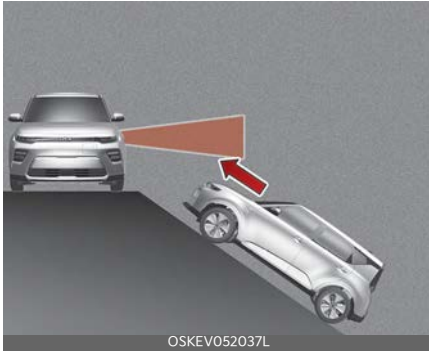
Always check your surroundings while backing up.

- When the vehicle is parked diagonally



Rear Cross-Traffic Collision-Avoidance Assist may be limited when backing up diagonally, and may not detect the vehicle approaching from the left or right. If this occurs, the function may not warn the driver or control the brakes when necessary. Always check your surroundings while backing up.

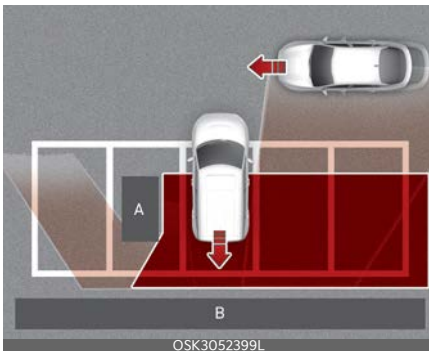
- When the vehicle is on or near a slope



Rear Cross-Traffic Collision-Avoidance Assist may be limited when the vehicle is on an uphill or downhill slope, or near it, and may not detect the vehicle approaching from the left or right. If this occurs, the function may not warn the driver or control the brakes when necessary.

Always check your surroundings while backing up.

- Pulling into the parking space where there is a structure



[A]: Structure,

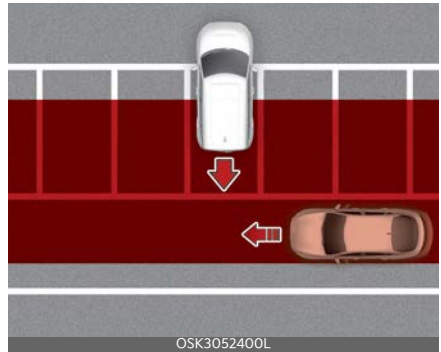
[B]: Wall

Rear Cross-Traffic Collision-Avoidance Assist may detect vehicles passing by in front of you when parking in reverse into a parking space with a

wall or structure in the rear or side area. If this occurs, the function may unnecessarily warn the driver and control the brake.

Always check your surroundings while backing up.

- When the vehicle is parked rearward



Rear Cross-Traffic Collision-Avoidance Assist may detect vehicles passing by behind you when parking in reverse into a parking space. If this occurs, the function may unnecessarily warn the driver and control the brake.

Always check your surroundings while backing up.

### ⚠ WARNING

- When you are towing a trailer or another vehicle, turn off Rear Cross-Traffic Collision-Avoidance Assist for safety reasons. If you tow a European spec trailer, the function may be limited.
- Rear Cross-Traffic Collision-Avoidance Assist may not operate properly if interfered by strong electromagnetic waves.

- Rear Cross-Traffic Collision-Avoidance Assist may not operate for 3 seconds after the vehicle is started, or the rear corner radars are initialized.

**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.

**Reverse Parking Distance Warning (PDW) (if equipped)**

Reverse Parking Distance Warning will help warn the driver if a person, an animal or an object is detected within a certain distance when the vehicle is moving in reverse.

**Detecting sensor**

Rear ultrasonic sensors



Refer to the picture above for the detailed location of the detecting sensors.

**Reverse Parking Distance Warning settings**

**Warning volume**





A: **Driver Assistance**

**1 Warning Volume**

**2 High**

**3 Medium**

**4 Low**

With the vehicle on, select **Settings** → **Vehicle** → **Warning Volume** on the infotainment system to change the Warning volume to adjust the Warning volume levels; **High, Medium** or **Low**.

**\* NOTICE**

- If the vehicle is restarted, Warning volume will maintain the last setting.
- If you change the Warning volume, the Warning volume of other Driver Assistance systems may change.

**Reverse Parking Distance Warning operation**

**Parking Safety button**



Press the Parking Safety (P+) button to turn on or off Reverse Parking Distance Warning.

- When Reverse Parking Distance Warning is off (button indicator light off), if you shift the gear to R (Reverse), Reverse Parking Distance Warning will automatically turn on.

- If you shift the gear to R (Reverse), Reverse Parking Distance Warning will not turn off even if you press the Parking Safety (P+) button for your safety.

**Reverse Parking Distance Warning**

Reverse Parking Distance Warning will operate under the following conditions.

- Shift the gear to R (Reverse).
- The vehicle's speed is below 10 km/h (6 mph).

**Warning indication and warning sound**

Distance from object	Warning indicator when driving backward	Warning sound
60~120 cm (24~48 in.)		Buzzer beeps intermittently
30~60 cm (12~24 in.)		Beeps more frequently
within 30 cm (12 in.)		Beeps continuously

- The corresponding indicator will appear on the cluster or infotainment system whenever each ultrasonic sensor detects a person, animal or object in its sensing range. Also an audible warning will sound.
- When more than two objects are detected at the same time, the closest one will be warned with an audible warning.
- Distance from object may be detected differently when obstacles are not located in front of the sensor.

- The shape of the indicator in the illustration may differ from the actual vehicle.

**Reverse Parking Distance Warning malfunction and precautions**

**Reverse Parking Distance Warning malfunction**

After starting the vehicle, a beep will sound once when the gear is shifted to R (Reverse) to indicate Reverse Parking Distance Warning is operating normally. However, if one or more of the following occurs, first check whether the ultrasonic sensor is damaged or blocked with foreign material. If it still does not work properly, have your vehicle inspected by an authorized Kia dealer.

- The audible warning does not sound.
- The buzzer sounds intermittently.
- The warning message appears on the cluster.



A: Ultrasonic sensor error or blockage

**Limitations of Reverse Parking Distance Warning**

- Reverse Parking Distance Warning may not operate normally when:
  - Moisture is frozen to the sensor (Reverse Parking Distance Warn-

ing will operate normally when it is melted.)

- Sensor is covered with foreign material, such as snow or water (Reverse Parking Distance Warning will operate normally when such foreign material are removed.)
- The weather is extremely hot or cold
- The sensor or sensor assembly is disassembled
- The surface of the sensor is pressed hard or an impact is applied with a hard object
- The surface of the sensor is scratched with a sharp object
- The sensors or its surrounding area is directly sprayed with high pressure washer
- Reverse Parking Distance Warning may malfunction when:
  - Heavy rain or water spray is present
  - Water flows on the surface of the sensor
  - Affected by another vehicle's sensors
  - The sensor is covered with snow
  - Driving on uneven road, gravel roads or bushes
  - Objects that generates ultrasonic waves are near the sensor
  - Installing the license plate differently from the original location
  - The vehicle bumper height or ultrasonic sensor installation has been modified
  - Attaching equipments or accessories around the ultrasonic sensors

- The following objects may not be detected:
  - Sharp or slim objects, such as ropes, chains or small poles.
  - Objects, which tend to absorb sensor frequency, such as clothes, spongy material or snow.
  - Objects smaller than 100 cm (40 inches) in length and narrower than 14 cm (6 inches) in diameter.
  - Pedestrians, animals or objects that are very close to the ultrasonic sensors

**⚠ WARNING**

- Reverse Parking Distance Warning is a supplemental function. The operation of Reverse Parking Distance Warning can be affected by several factors (including environmental conditions). It is the responsibility of the driver to always check the rear view before and while parking.
- Your vehicle warranty does not cover any accidents or damage to the vehicle due to the malfunction of Reverse Parking Distance Warning.
- Pay close attention when driving near objects, pedestrians, and especially children. Some objects may not be detected by the ultrasonic sensors, due to the objects distance, size or material, all of which can limit the effectiveness of the sensor.
- Parking Distance Warning indicator may not occur sequentially depending on vehicle speed or obstacle shape.
- If Reverse Parking Distance Warning needs repair, have your vehicle inspected by an authorized Kia dealer.

**Forward/Reverse Parking Distance Warning (PDW) (if equipped)**

Forward/Reverse Parking Distance Warning will help warn the driver if an obstacle is detected within a certain distance when the vehicle is moving forward or in reverse at low speeds.

**Detecting sensor**

Front ultrasonic sensors



Rear ultrasonic sensors



Refer to the picture above for the detailed location of the detecting sensors.

## Forward/Reverse Parking Distance Warning settings

### Warning volume



A: Driver Assistance

1 Warning Volume

2 High

3 Medium

4 Low

With the vehicle on, select **Settings** → **Vehicle** → **Driver Assistance** → **Warning Volume** on the infotainment system to change the Warning volume to adjust the Warning volume levels; **High**, **Medium** or **Low**.

#### \* NOTICE

- If the vehicle is restarted, Warning volume will maintain the last setting.
- If you change the Warning volume, the Warning volume of other Driver Assistance systems may change.

## Parking Distance Warning Auto On

You can set the parking distance warning to be ON at low speeds. To use Parking Distance Warning Auto On function, select **Settings** → **Vehicle** → **Driver Assistance** → **Parking Safety** → **Parking Distance Warning Auto On** on the infotainment system.

#### \* NOTICE

When **Parking Distance Warning Auto On** is selected, the Parking Safety button (P<sub>A</sub>) stays on.

## Parking Distance Warning operation

### Control switch

### Parking Safety button (if equipped)



- Press the Parking Safety (P<sub>A</sub>) button to turn on Forward/Reverse Parking Distance Warning. Press the button again to turn off the function.
- When the gear is shift to R (Reverse), Parking Distance Warning will automatically turn on (Parking Safety button indicator on).

- When the gear is in R (Reverse), Parking Distance Warning does not turn off even if the Parking Safety button (3) is pressed.

### Forward Parking Distance Warning

Forward Parking Distance Warning will operate under the following conditions.




- The gear is shifted from R (Reverse) to D (Drive) with Reverse Parking Distance Warning on
- The gear is in D (Drive) and the Parking Safety (P) button indicator light is on
- Forward Parking Distance Warning warns the driver when the vehicle is in D (Drive)  
(If **Settings** → **Driver Assistance** → **Parking Safety** → **Parking Distance Warning Auto On** on the instrument cluster or **Settings** → **Vehicle** → **Driver Assistance** → **Parking Safety** → **Parking Distance Warning Auto On** on the infotainment system selected)
- Vehicle speed is below 10 km/h (6 mph).

#### \* NOTICE

- Forward Parking Distance Warning does not operate when the vehicle's forward speed is above 10 km/h (6 mph) even when the Parking Safety (P) button indicator is on. Forward Parking Distance Warning will operate again when the vehicle's forward speed decreases below 10 km/h (6 mph) while the Parking Safety (P) button indicator is on.

- When the vehicle's forward speed is above 30 km/h (18 mph), the Forward Parking Distance Warning will turn off (Parking Safety button indicator off). Although you drive below 10 km/h (6 mph) again, Forward Parking Distance Warning will not automatically turn on (If **Settings** → **Driver Assistance** → **Parking Safety** → **Parking Distance Warning Auto On** on the instrument cluster or **Settings** → **Vehicle** → **Driver Assistance** → **Parking Safety** → **Parking Distance Warning Auto On** on the infotainment system not selected).

### Warning indication and warning sound

Distance from object	Warning indicator when driving forward	Warning sound
(60~100cm) (24~40in.)		Buzzer beeps intermittently
30~60 cm (12~24 in.)		Beeps more frequently
within 30 cm (12 in.)		Beeps continuously

- The corresponding indicator will appear whenever each ultrasonic sensor detects a person, animal or object in its sensing range. Also an audible warning will sound.
- When more than two objects are detected at the same time, the closest one will be warned with an audible warning.

## Driving your vehicle

- The shape of the indicator in the illustration may differ from the actual vehicle.

### Reverse Parking Distance Warning




Reverse Parking Distance Warning will operate under the following conditions.

- The gear is shifted to R (Reverse).
- Vehicle speed is below 10 km/h (6 mph).

#### \* NOTICE

Parking Distance Warning detects and warns the driver of both rear and front corners, when the vehicle speed is below 10 km/h (6 mph).

### Warning indication and warning sound

Distance from object	Warning indicator when driving backward	Warning sound
60~120 cm (24~48 in.)		Buzzer beeps intermittently
30~60 cm (12~24 in.)		Beeps more frequently
within 30 cm (12 in.)		Beeps continuously

- The corresponding indicator will appear whenever each ultrasonic sensor detects a person, animal or object in its sensing range. Also an audible warning will sound.
- When more than two objects are detected at the same time, the closest one will be warned with an audible warning.

## Forward/Reverse Parking Distance Warning (PDW)

- The shape of the indicator in the illustration may differ from the actual vehicle.

### Parking Distance Warning malfunction and limitations

#### Parking Distance Warning malfunction

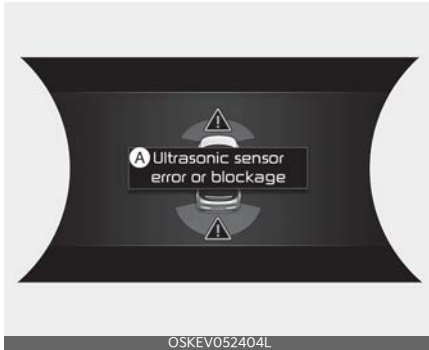
After starting the vehicle, a beep will sound when the gear is shifted to R (Reverse) to indicate Parking Distance Warning is operating properly.

However, if one or more of the following occurs, first check whether the ultrasonic sensor is damaged or blocked with foreign material. If it still does not work properly, have your vehicle inspected by an authorized Kia dealer.

- The direction of Parking Distance Warning sensor malfunction is shown on the instrument cluster.



#### A: Check Parking Distance Warning system



A: **Ultrasonic sensor error or blockage**  
**Parking Distance Warning disabled**



A: **Parking Distance Warning system limited. Ultrasonic sensor blocked**

If this occurs, the warning message appears on the cluster. Parking Distance Warning will operate properly when snow, rain or foreign material is removed. If Parking Distance Warning does not operate properly after obstruction (snow, rain, or foreign material) is removed (including trailer, carrier, etc., from the rear bumper), have your vehicle inspected by an authorized Kia dealer.

## Limitations of Parking Distance Warning

- Parking Distance Warning may not operate properly when:
  - Moisture is frozen to the sensor
  - Sensor is covered with foreign substance, such as snow or water (Parking Distance Warning will operate properly when such substance is removed.)
  - The weather is extremely hot or cold
  - The sensor or sensor assembly is disassembled
  - The surface of the sensor is pressed hard or hit with a hard object
  - The surface of the sensor is scratched with a sharp object
  - The sensors or its surrounding area is directly sprayed with high pressure washer
- Parking Distance Warning may malfunction when:
  - Heavy rain or water spray is present
  - Water flows on the surface of the sensor
  - Affected by another vehicle's sensors
  - The sensor is covered with snow or ice
  - Driving on uneven road, gravel roads or bushes
  - Objects that generates ultrasonic waves are near the sensor
  - License plate is installed in a different spot from the original location
  - The vehicle bumper height or ultrasonic sensor installation has been modified

- Attaching equipment or accessories next to the ultrasonic sensors
  - The following objects may not be detected:
    - Sharp or slim objects, such as ropes, chains or small poles.
    - Narrow objects, such as corners of a square column
    - Objects, which tend to absorb sensor frequency, such as clothes, spongy material or snow.
    - Objects smaller than 100 cm (40 inches) in length and narrower than 14 cm (6 inches) in diameter.
    - Pedestrians, animals or objects that are very close to the ultrasonic sensors
  - If the Parking Distance Warning does not operate properly, have your vehicle inspected by an authorized Kia dealer.
- 

 **WARNING**

- Parking Distance Warning is a supplemental function. The operation of Parking Distance Warning can be affected by several factors (including environmental conditions). It is the responsibility of the driver to always check the front and rear views before and while parking.
- Your new vehicle warranty does not cover any accidents or damage to the vehicle due to the malfunction of Parking Distance Warning.
- Pay close attention when driving near objects, pedestrians, and especially children. Some objects may not be detected by the ultrasonic sensors, due to the objects distance, size or material, all of which can limit the effectiveness of the sensor.
- Parking Distance Warning does not warn you in the order of detection. It varies depending on the speed of the vehicle or the shape of a person, animal, or object.



## Declaration of conformity (if equipped)

### The radio frequency components (Front radar) complies:

For United States and American territories, Micronesia, Dominican Republic, Honduras



OYB060040L

**FCC ID**

: 2ACDX-MRR-20

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.

OSP2061032L

For Canada

Model: MRR-20  
IC: 11988A-MRR20


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.

OSP2061034L

## The radio frequency components (Rear Corner Radar) complies :

For United States and American territories, Micronesia, Dominican Republic, Honduras



OYB060040L

FCC ID  
: 2A3OZ-SRR30SA

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.

OSK3052430N

For Canada

Model: SRR30SA  
IC: 27992-SRR30SA

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.

OSK3052431N

## Special driving conditions

If driving conditions deteriorate due to poor weather or road conditions, you should pay even more attention than usual to your driving.

### Hazardous driving conditions

When hazardous driving conditions are encountered such as water, snow, ice, mud, sand, or similar hazards, follow these suggestions:

- Drive cautiously and allow extra distance for braking.
- Avoid sudden braking or steering.
- When braking with non-ABS brakes pump the brake pedal with a light up-and-down motion until the vehicle is stopped.
- Do not pump the brake pedal on a vehicle equipped with ABS.
- If stalled in snow, mud, or sand, use the second gear. Accelerate slowly to avoid spinning the drive wheels.
- Use sand, rock salt, or other nonslip material under the drive wheels to provide traction when stalled in ice, snow, or mud.

### Reducing the risk of a rollover

This multi-purpose passenger vehicle is defined as a Sports Utility Vehicle (SUV). Utility vehicles have a significantly higher rollover rate than other types of vehicles. SUV's have higher ground clearance and a narrower track to make them capable of performing in a wide variety of offroad applications.

Specific design characteristics give them a higher center of gravity than ordinary vehicles. An advantage of the higher ground clearance is a better view of the

road, which allows you to anticipate problems.

They are not designed for cornering at the same speeds as conventional passenger vehicles, any more than low-slung sports vehicles are designed to perform satisfactorily in off-road conditions. Due to this risk, driver and passengers are strongly recommended to buckle their seat belts.

In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. There are steps that a driver can make to reduce the risk of a rollover.

If at all possible, avoid sharp turns or abrupt maneuvers, do not load your roof rack with heavy cargo, and never modify your vehicle in any way.

### WARNING

#### Rollover

As with other Sports Utility Vehicle (SUV), failure to operate this vehicle correctly may result in loss of control, an accident or vehicle rollover.

- Utility vehicles have a significantly higher rollover rate than other types of vehicles.
- Specific design characteristics (higher ground clearance, narrower track, etc.) give this vehicle a higher center of gravity than ordinary vehicles.
- A SUV is not designed for cornering at the same speeds as conventional vehicles.
- Avoid sharp turns or abrupt maneuvers.

- In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. Make sure everyone in the vehicle is properly buckled up.

### WARNING

Your vehicle is equipped with tires designed to provide safe ride and handling capability. Do not use a size and type of tire and wheel that is different from the one that is originally installed on your vehicle. It can affect the safety and performance of your vehicle, which could lead to steering failure or rollover and serious injury. When replacing the tires, be sure to equip all four tires with the tire and wheel of the same size, type, tread, brand and load-carrying capacity.

If you nevertheless decide to equip your vehicle with any tire/wheel combination not recommended by Kia for off road driving, you should not use these tires for highway driving.

#### Rocking the vehicle

If it is necessary to rock the vehicle to free it from snow, sand, or mud, first turn the steering wheel right and left to clear the area around your front wheels. Then, shift back and forth between R (Reverse) and any forward gear.

Do not race the vehicle, and spin the wheels as little as possible. If you are still stuck after a few tries, have the vehicle pulled out by a tow vehicle to avoid vehicle overheating and possible damage to the reduction gear.

**⚠ WARNING****Sudden Vehicle Movement**

Do not attempt to rock the vehicle if people or objects are nearby. The vehicle may suddenly move forward or backwards as it becomes unstuck.

**⚠ CAUTION****Vehicle rocking**

Prolonged rocking may cause vehicle overheating, reduction gear damage or failure, and tire damage.

**⚠ CAUTION****Spinning tires**

Do not spin the wheels, especially at speeds more than 56 km/h (35 mph). Spinning the wheels at high speeds when the vehicle is stationary could cause a tire to overheat which could result in tire damage that WARNING - Sudden may injure bystanders.

The ESC system should be turned OFF prior to rocking the vehicle.

**Smooth cornering**

Avoid braking or gear changing in corners, especially when roads are wet. Ideally, corners should always be taken under gentle acceleration. If you follow these suggestions, tire wear will be held to a minimum.

**Driving at night**

Because night driving presents more hazards than driving in the daylight, here are some important tips to remember:

- Slow down and keep more distance between you and other vehicles, as it may be more difficult to see at night, especially in areas where there may not be any street lights.
- Adjust your mirrors to reduce the glare from other driver's headlights.
- Keep your headlights clean and properly aimed. (On vehicles not equipped with the automatic headlight aiming feature.) Dirty or improperly aimed headlights will make it much more difficult to see at night.
- Avoid staring directly at the headlights of oncoming vehicles. You could be temporarily blinded, and it will take several seconds for your eyes to readjust to the darkness.

**Driving in the rain**

Rain and wet roads can make driving dangerous, especially if you're not prepared for the slick pavement.

Here are a few things to consider when driving in the rain:

- A heavy rainfall will make it harder to see and will increase the distance needed to stop your vehicle, so slow down.
- Keep your windshield wiping equipment in good shape. Replace your windshield wiper blades when they show signs of streaking or missing areas on the windshield.
- If your tires are not in good condition, making a quick stop on wet pavement can cause a skid and possibly lead to an accident. Be sure your tires are in good shape.
- Turn on your headlights to make it easier for others to see you.

- Driving too fast through large puddles can affect your brakes. If you must go through puddles, try to drive through them slowly.
- If you believe you may have gotten your brakes wet, apply them lightly while driving until normal braking operation returns.

## Driving in flooded areas

Avoid driving through flooded areas unless you are sure the water is no higher than the bottom of the wheel hub. Drive through any water slowly. Allow adequate stopping distance because brake performance may be affected.

After driving through water, dry the brakes by gently applying them several times while the vehicle is moving slowly.

## Driving on unpaved roads

Drive carefully if on unpaved roads because your vehicle may be damaged by rocks or roots of trees. Become familiar with the unpaved road conditions where you are going to drive before you begin driving.

## Highway driving

### Tires

Adjust the tire inflation pressures to specification. Low tire inflation pressures will result in overheating and possible failure of the tires.

Avoid using worn or damaged tires which may result in reduced traction or tire failure.

Never exceed the maximum tire inflation pressure shown on the tires.

### WARNING

#### Under/over inflated tires

Always check the tires for proper inflation before driving. Underinflated or overinflated tires can cause poor handling, loss of vehicle control, and sudden tire failure leading to accidents, injuries, and even death. For proper tire pressures, refer to "Tires and wheels" on page 9-4.

### WARNING

#### Tire tread

Always check the tire tread before driving your vehicle. Worn-out tires can result in loss of vehicle control. Worn-out tires should be replaced as soon as possible. For further information and tread limits, refer to "Tires and wheels" on page 8-19.

## Winter driving

Severe weather conditions in the winter result in greater wear and other problems.

To minimize the problems of winter driving, you should follow these suggestions:

### Snowy or icy conditions

To drive your vehicle in deep snow, it may be necessary to use snow tires on your tires.

If snow tires are needed, it is necessary to select tires equivalent in size and type of the original equipment tires. Failure to do so may adversely affect the safety and handling of your vehicle. Furthermore, speeding, rapid acceleration, sudden brake applications, and sharp turns are potentially very hazardous practices. During deceleration, use vehicle braking to the fullest extent. Sudden brake applications on snowy or icy roads may cause skids to occur. You need to keep sufficient distance between the vehicle in operation in front of your vehicle. Also, apply the brake gently.

### Snow tires

If you mount snow tires on your vehicle, make sure they are radial tires of the same size and load range as the original tires. Mount snow tires on all four wheels to balance your vehicle's handling in all weather conditions. Keep in mind that the traction provided by snow tires on dry roads may not be as high as your vehicle's original equipment tires. You should drive cautiously even when the roads are clear. Check with the tire dealer for maximum speed recommendations.

Do not install studded tires without first checking local, country and municipal regulations for possible restrictions against their use.

### **WARNING**

#### Snow tire size

Snow tires should be equivalent in size and type to the vehicle's standard tires. Otherwise, the safety and handling of your vehicle may be adversely affected.

#### Use high quality ethylene glycol coolant

Your vehicle is delivered with high quality ethylene glycol coolant in the cooling system. It is the only type of coolant that should be used because it helps prevent corrosion in the cooling system, lubricates the water pump and prevents freezing. Be sure to replace or replenish your coolant refer to "Normal maintenance schedule" on page 8-8. Before winter, have your coolant tested to assure that its freezing point is sufficient for the temperatures anticipated during the winter.

#### Check battery and cables

Winter puts additional burdens on the battery system. Visually inspect the battery and cables (refer to "For best battery service" on page 8-17). The level of charge in your battery can be checked by an authorized Kia dealer or a service station.

## **Change to "winter weight" oil if necessary**

In some climates it is recommended that a lower viscosity "winter weight" oil be used during cold weather. Refer to "Recommended lubricants and capacities" on page 9-5 for recommendations. If you aren't sure what weight oil you should use, consult an authorized Kia dealer.

## **To keep locks from freezing**

To keep the locks from freezing, squirt an approved de-icer fluid or glycerine into the key opening. If a lock is covered with ice, squirt it with an approved de-icing fluid to remove the ice. If the lock is frozen internally, you may be able to thaw it out by using a heated key. Handle the heated key with care to avoid injury.

## **Use approved window washer anti-freeze in system**

To keep the water in the window washer system from freezing, add an approved window washer anti-freeze solution in accordance with instructions on the container. Window washer anti-freeze is available from an authorized Kia dealer and most auto parts outlets. Do not use vehicle coolant or other types of anti-freeze as these may damage the paint finish.

## **Don't let your parking brake freeze**

Under some conditions your parking brake can freeze in the engaged position. This is most likely to happen when there is an accumulation of snow or ice around or near the rear brakes or if the brakes are wet. If there is a risk the parking brake may freeze, apply it only temporarily while you put the gear shift dial in P (Park) and block the rear wheels so the vehicle cannot roll. Then release the parking brake.

## **Don't let ice and snow accumulate underneath**

Under some conditions, snow and ice can build up under the fenders and interfere with the steering. When driving in severe winter conditions where this may happen, you should periodically check underneath the vehicle to be sure the movement of the front wheels and the steering components are not obstructed.

## **Carry emergency equipment**

Depending on the severity of the weather, you should carry appropriate emergency equipment. Some of the items you may want to carry include tow straps or chains, flashlight, emergency flares, sand, shovel, jumper cables, window scraper, gloves, ground cloth, coveralls, blanket, etc.

## Trailer towing

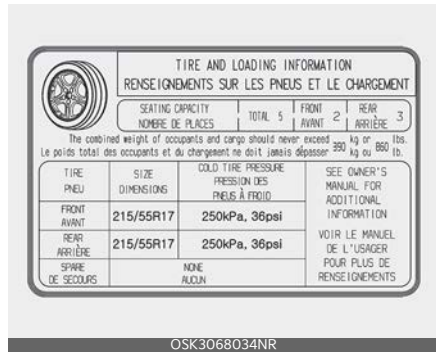
We do not recommend using this vehicle for trailer towing.

## Vehicle load limit

The vehicle load limit is displayed on the tire and loading information label on the driver's door.

## Tire and loading information label

The label located on the driver's door sill gives the original tire size, cold tire pressures recommended for your vehicle, the number of people that can be in your vehicle and vehicle capacity weight.



## Vehicle capacity weight:

390 kg (860 lbs.)

Vehicle capacity weight is the maximum combined weight of occupants and cargo. If your vehicle is equipped with a trailer, the combined weight includes the tongue load.

## Seating capacity:

Total: 5 persons (Front seat: 2 persons, Rear seat: 3 persons)

Seating capacity is the maximum number of occupants including a driver, your vehicle may carry.

However, the seating capacity may be reduced based upon the weight of all of



the occupants, and the weight of the cargo being carried or towed.

Do not overload the vehicle as there is a limit to the total weight, or load limit including occupants and cargo, the vehicle can carry.

**Towing capacity:**

**We do not recommend using this vehicle for trailer towing.**

**Cargo capacity:**

The cargo capacity of your vehicle will increase or decrease depending on the weight and the number of occupants.

**Steps For Determining Correct Load Limit -**

- (1) Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on your vehicle's placard.
- (2) Determine the combined weight of the driver and passengers that will be riding in your vehicle.
- (3) Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs..
- (4) The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the "XXX" amount equals 635 kg (1400 lbs.) and there will be five 68 kg (150 lbs.) passengers in your vehicle, the amount of available cargo and luggage load capacity is 295 kg (650 lbs.).  $(635 - 340 (5 \times 68)) = 295$  kg or  $1400 - 750 (5 \times 150) = 650$  lbs.)
- (5) Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.

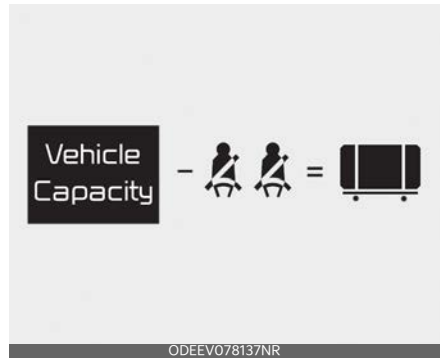
(6) If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

**⚠ WARNING**

**Loose cargo**

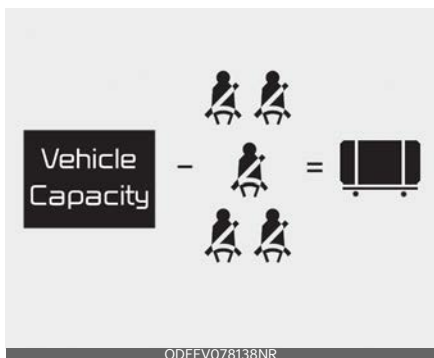
Do not travel with unsecured blunt objects in the passenger compartment of your vehicle (e.g., suit cases or unsecured child seats). These items may strike an occupant during a sudden stop or crash.

Example 1



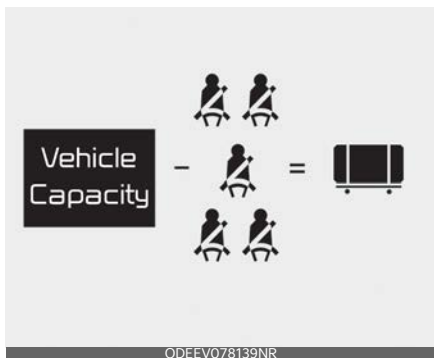
Item	Description	Total
A	Vehicle Capacity Weight	385 kg (849 lbs.)
B	Subtract Occupant Weight 68 kg (150 lbs.)x2	136 kg (300 lbs.)
C	Available Cargo and Luggage weight	249 kg (549 lbs.)

Example 2



Item	Description	Total
A	Vehicle Capacity Weight	385 kg (849 lbs.)
B	Subtract Occupant Weight 68 kg (150 lbs.)×5	340 kg (750 lbs.)
C	Available Cargo and Luggage weight	45 kg (99 lbs.)

Example 3



Item	Description	Total
A	Vehicle Capacity Weight	385 kg (849 lbs.)
B	Subtract Occupant Weight 73 kg (161 lbs.)×5	365 kg (805 lbs.)

Item	Description	Total
C	Available Cargo and Luggage weight	20 kg (44 lbs.)

Refer to your vehicle's tire and loading information label for specific information about your vehicle's capacity weight and seating positions. The combined weight of the driver, passengers and cargo should never exceed your vehicle's capacity weight.

### Certification label

The certification label is located on the driver's door sill at the center pillar.

This label shows the maximum allowable weight of the fully loaded vehicle. This is called the Gross Vehicle Weight Rating (GVWR). The GVWR includes the weight of the vehicle, all occupants and cargo.

This label also tells you the maximum weight that can be supported by the front and rear axles, called Gross Axle Weight Rating (GAWR).

To find out the actual loads on your front and rear axles, you need to go to a weigh station and weigh your vehicle. Your dealer can help you with this. Be sure to spread out your load equally on both sides of the centerline.

### **⚠ WARNING**

#### Over loading

Never exceed the GVWR for your vehicle, the GAWR for either the front or rear axle and vehicle capacity weight. Exceeding these ratings can affect your vehicle's handling and braking ability.

The label will help you decide how much cargo and installed equipment your vehicle can carry.

If you carry items inside your vehicle - like suitcases, tools, packages, or any-

thing else - they are moving as fast as the vehicle. If you have to stop or turn quickly, or if there is a crash, the items will keep going and can cause an injury if they strike the driver or a passenger.

### **WARNING**

#### **Over loading**

Do not overload your vehicle. Overloading your vehicle can cause heat buildup in your vehicle's tires and possible tire failure, increased stopping distances and poor vehicle handling--all of which may result in a crash.

### **NOTICE**

Overloading your vehicle may cause damage. Repairs would not be covered by your warranty. Do not overload your vehicle.

## **Vehicle weight**

This chapter will guide you in the proper loading of your vehicle and/or trailer, to keep your loaded vehicle weight within its design rating capability, with or without a trailer.

Properly loading your vehicle will provide maximum return of the vehicle design performance. Before loading your vehicle, familiarize yourself with the following terms for determining your vehicle's weight ratings, with or without a trailer, from the vehicle's specifications and the compliance label:

**Base curb weight** This is the weight of the vehicle including a full tank of fuel and all standard equipment. It does not include passengers, cargo, or optional equipment.

**Vehicle curb weight** This is the weight of your new vehicle when you picked it up from your dealer plus any aftermarket equipment.

**Cargo weight** This figure includes all weight added to the Base Curb Weight, including cargo and optional equipment.

**GAW (Gross Axle Weight)** This is the total weight placed on each axle (front and rear) - including vehicle curb weight and all payload.

**GAWR (Gross Axle Weight Rating)** This is the maximum allowable weight that can be carried by a single axle (front or rear). These numbers are shown on the compliance label. The total load on each axle must never exceed its GAWR.

**GVW (Gross Vehicle Weight)** This is the Base Curb Weight plus actual Cargo Weight plus passengers.

**GVWR (Gross Vehicle Weight Rating)** This is the maximum allowable weight of the fully loaded vehicle (including all options, equipment, passengers and

cargo). The GVWR is shown on the certification label located on the driver's door sill.

# What to do in an emergency

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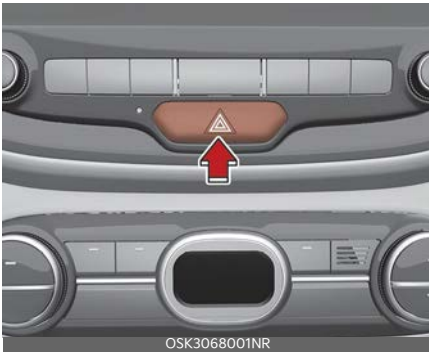
## What to do in an emergency

### Road warning

When an emergency situation occurs while driving or when you park by the edge of the roadway, you must alert approaching or passing vehicles to be careful as they pass. For this, you should use the hazard warning flasher.

### Hazard warning flasher

The hazard warning flasher serves as a warning to other drivers to exercise extreme caution when approaching, overtaking, or passing your vehicle.



It should be used whenever emergency repairs are being made or when the vehicle is stopped near the edge of a roadway.

Depress the flasher switch with the START/STOP button in any position. The flasher switch is located in the center fascia panel. All turn signal lights will flash simultaneously.

- The hazard warning flasher operates whether your vehicle is running or not.
- The turn signals do not work when the hazard flasher is on.
- Care must be taken when using the hazard warning flasher while the vehicle is being towed.

### In case of an emergency while driving

If an emergency situation occurs while driving, stay calm and take the following steps.

#### If the Vehicle Stalls While Driving

1. Reduce your speed gradually, keeping a straight line.
2. Move cautiously off the road to a safe place.
3. Turn on your hazard warning flasher.
4. Try to start the vehicle again. If your vehicle will not start, contact an authorized Kia dealer or seek other qualified assistance.

#### If the Vehicle Stalls at a crossroad or crossing

1. If safe to do so, shift to the N (Neutral) position.
2. Push the vehicle to a safe location.

#### If you have a flat tire while driving

1. Take your foot off the accelerator pedal and let the vehicle slow down while driving straight ahead.

### WARNING

Do not apply the brakes immediately to slow down the vehicle

2. Use the paddle shifter (left side lever) to increase regenerative braking control.

**⚠ WARNING**

Do not or attempt to pull off the road as this may cause loss of vehicle control resulting in an accident.

---

3. When the vehicle has slowed to such a speed that it is safe to do so, brake carefully and pull off the road.
4. Drive off the road as far as possible and park on firm, level ground.

**⚠ WARNING**

If you are on a divided highway, do not park in the median area between the two traffic lanes.

---

5. When the vehicle is stopped, press the hazard warning flasher button, shift to P (Park), apply the parking brake, and place the START/STOP button in the OFF position.
6. Have all passengers get out of the vehicle. Be sure they all get out on the side of the vehicle that is away from traffic.
7. Follow the instructions provided later in this chapter.

**If the vehicle will not start**

The vehicle may not start if the battery level is low.

Check the battery level by performing the following procedure.

1. Be sure the shifter dial is in P (Park). The vehicle starts only when the shifter dial is in P (Park).
2. Check the 12-volt battery connections to be sure they are clean and tight.
3. Turn on the interior light. If the light dims or goes out when you operate the starter, the battery is drained.

**⚠ WARNING**

Do not push or pull the vehicle to start it. This could cause damage to your vehicle.

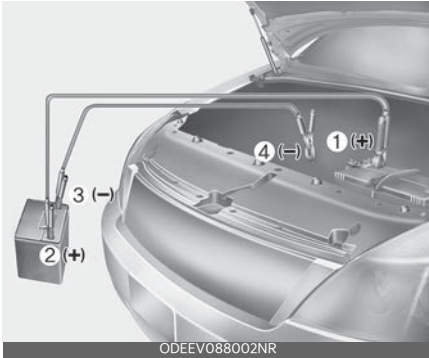
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## Emergency starting

When the vehicle will not start because of low battery power, you may need to jump start the vehicle.

### Jump starting

Connect cables in numerical order and disconnect in reverse order.



Jump starting can be dangerous if done incorrectly. Therefore, to avoid harm to yourself or damage to your vehicle or battery, follow these jump starting procedures. If in doubt, we strongly recommend that you have a competent technician or towing service jump start your vehicle.

#### **⚠ WARNING**

### Battery

Never attempt to check the electrolyte level of the battery as this may cause the battery to rupture or explode.

#### **⚠ WARNING**

### Frozen batteries

Do not attempt to jump start the vehicle if the discharged battery is frozen as the battery may rupture or explode.

#### **⚠ WARNING**

### Electrolyte

- Do not charge or discharge the battery arbitrarily. It may lead to fault, electric shock or burns.
- Do not damage the battery in such ways as drop, deform, impact, or strike with a sharp object. It may cause electrolyte leakage or fire.
- Breakdown of the battery may lead to electrolyte leakage or generate flammable gas. Contact an authorized Kia dealer immediately.
- If electrolyte leaks out, avoid contact with eyes, skin or clothes. In event of accident, flush with water and get medical help immediately.
- Do not place the battery near open flame or incinerate. It may lead to fire or explosion.
- Keep out of reach of children or animals.
- Keep the battery away from moisture of liquid. Do not touch or use if liquids have been spilled on.

#### **⚠ WARNING**

### Battery cables

Do not connect the jumper cable from the negative terminal of the booster battery to the negative terminal of the discharged battery, directly. This can cause the discharged battery to overheat and crack, degradation.

Connect the jumper cable from the negative terminal of the booster battery to the chassis ground in the motor room.



**⚠ WARNING****Sulfuric acid risk**

Automobile batteries contain sulfuric acid. When jump starting your vehicle, be careful not to get sulfuric acid on yourself, your clothing, or on the vehicle. This acid is poisonous and highly corrosive.

**⚠ WARNING****Battery**

Keep all flames or sparks away from the battery. The battery produces hydrogen gas which will explode if exposed to flame or sparks.

**Jump-starting**

1. Make sure the booster battery is 12-volt and that its negative terminal is grounded.  
If the booster battery is in another vehicle, do not allow the vehicles to come in contact.
2. Turn off all unnecessary electrical loads.
3. Connect the jumper cables in the exact sequence shown in the illustration.
  - 1) Connect on end of a jumper cable to the positive terminal of the discharged battery (1).
  - 2) Connect the other end to the positive terminal of the booster battery (2).

- 3) Proceed to connect one end of the other jumper cable to the negative terminal of the booster battery (3), then the other end to a solid, stationary, metallic point away from the battery (4).

Do not allow the jumper cables to contact anything except the correct battery terminals or the correct ground. Do not lean over the battery when making connections.

4. Start vehicle with the booster battery and let it run, then start the vehicle with the discharged battery.

If the cause of your battery discharging is not apparent, you should have your vehicle checked by an authorized Kia dealer.

**\* NOTICE**

Make sure to connect one end of the jumper cable to the negative terminal of the booster battery, and the other end to a metallic point, far away from the battery.

**Push-starting**

Your vehicle equipped with reduction gear should not be push-started.

**⚠ WARNING****Tow starting vehicle**

Never tow a vehicle to start it.

When the vehicle starts, the vehicle can suddenly surge forward and could cause a collision with the tow vehicle.

## Tire Pressure Monitoring System (TPMS)

The Tire Pressure Monitoring System (TPMS) detects the pressure of vehicle's tires and displays it on the LCD display.



- 1 Low tire pressure telltale / TPMS malfunction indicator
- 2 Low tire pressure position telltale (Shown on the LCD display)

## Tire Pressure Indicator

- You can check the tire pressure in the assist mode on the cluster.
  - Refer to "Vehicle settings (infotainment system)" on page 5-63.
- Tire pressure is displayed 1~2 minutes later after driving.
- If tire pressure is not displayed when the vehicle is stopped, "Drive to display" message displays. After driving, check the tire pressure.
- You can change the tire pressure unit in the user settings mode on the cluster.
  - kPa, psi (Refer to "LCD display" on page 5-44).

### \* NOTICE

- The tire pressure may change due to factors such as parking condition, driving style, and altitude above sea level.
- Low tire pressure warning may sound when a tire's pressure unit is equal or higher than nearby tires. This is a normal occurrence, which is due to the change in tire pressure along with tire temperature.
- The tire pressure shown on the dashboard may differ from the tire pressure measured by tire pressure gauge.

## Effective use of the 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 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 subse-

quent vehicle start-ups as long as the malfunction exists. When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended. TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly.

Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.

### \* NOTICE

If any of the below happens, have the system checked by an authorized Kia dealer.

1. The Low Tire Pressure TPMS Malfunction Indicator does not illuminate for 3 seconds when the START/STOP button is placed to the ON position or vehicle is ON ( indicator ON).
2. The TPMS Malfunction Indicator remains illuminated after blinking for approximately 1 minute.
3. The Low Tire Pressure LCD display remains illuminated.

### Low tire pressure telltale (!)

#### Low tire pressure position telltale

When the TPMS warning indicators are illuminated, one or more of your tires is significantly under-inflated.



#### A: Low tire pressure

If the telltale illuminates, immediately reduce your speed, avoid hard cornering and anticipate increased stopping distances. You should stop and check your tires as soon as possible.

Inflate the tires to the proper pressure as indicated on the vehicle's placard or tire inflation pressure label located on the driver's side center pillar outer panel. If you cannot reach a service station or if the tire cannot hold the newly added air, replace the low pressure tire with the spare tire.

Then the TPMS malfunction indicator and the Low Tire Pressure telltale may turn on and illuminate after restarting and about 20 minutes of continuous driving before you have the low pressure tire repaired and replaced on the vehicle.

In winter or cold weather, the low tire pressure telltale may be illuminated if the tire pressure was adjusted to the recommended tire inflation pressure in warm weather. It does not mean your TPMS is malfunctioning because the decreased temperature leads to a proportional lowering of tire pressure.

When you drive your vehicle from a warm area to a cold area or from a cold area to a warm area, or the outside temperature is greatly higher or lower, you should check the tire inflation pressure and adjust the tires to the recommended tire inflation pressure.

When filling tires with more air, conditions to turn off the low tire pressure telltale may not be met. This is because a tire inflator has a margin of error in performance. The low tire pressure telltale will be turned off if the tire pressure is above the recommended tire inflation pressure.

### ! WARNING

#### Low pressure damage

Do not drive on low pressure tires. Significantly low tire pressure can cause the tires to overheat and fail making the vehicle unstable resulting in increased braking distances and a loss of vehicle control.

### TPMS malfunction indicator (!)

The low tire pressure telltale will illuminate after it blinks for approximately one minute when there is a problem with the TPMS.

If the system is able to correctly detect an underinflation warning at the same time as system failure then it will illuminate both the TPMS malfunction and low tire pressure position telltales e.g., if

Front Left sensor fails, the TPMS malfunction indicator illuminates, but if the Front Right, Rear Left, or Rear Right tire is under-inflated, the low tire pressure position telltales may illuminate together with the TPMS malfunction indicator.

Have the system checked by an authorized Kia dealer as soon as possible to determine the cause of the problem.

- The TPMS malfunction indicator may be illuminated if the vehicle is moving around electric power supply cables or radios transmitters such as at police stations, government and public offices, broadcasting stations, military installations, airports, or transmitting towers, etc. This can interfere with normal operation of the TPMS.
- The TPMS malfunction indicator may be illuminated if snow chains are used or some separate electronic devices such as notebook computer, mobile charger, remote starter or navigation etc., are used in the vehicle. This can interfere with normal operation of the TPMS.

## Tire replacement with TPMS

If you have a flat tire, the Low Tire Pressure telltale will come on. Have the flat tire repaired by an authorized Kia dealer as soon as possible or replace the flat tire with the spare tire.

### CAUTION

#### Repair Agents

Never use a puncture-repairing agent not approved by Kia to repair and/or inflate a low pressure tire. The sealant not approved by Kia may damage the tire pressure sensor.

Each wheel is equipped with a tire pressure sensor mounted inside the tire behind the valve stem. You must use TPMS specific wheels. It is recommended that you always have your tires serviced by an authorized Kia dealer.

Even if you replace the low pressure tire with the spare tire, the Low Tire Pressure telltale will remain on until the low pressure tire is repaired and placed on the vehicle.

After you replace the low pressure tire with the spare tire, the TPMS malfunction indicator may illuminate after a few minutes because the TPMS sensor mounted on the spare wheel is not initiated.

Once the low pressure tire is inflated again to the recommended pressure and installed on the vehicle or the TPMS sensor mounted on the replaced spare wheel is initiated by an authorized Kia dealer, the TPMS malfunction indicator and the low tire pressure telltale will turn off within a few minutes of driving.

If the indicator has not disappeared after a few minutes of driving, please visit an authorized Kia dealer.

If an original mounted tire is replaced with the spare tire, the TPMS sensor on the replaced spare wheel should be initiated and the TPMS sensor on the original mounted wheel should be deactivated. If the TPMS sensor on the original mounted wheel located in the spare tire carrier still activates, the TPMS may not operate properly. Have the tire with TPMS serviced or replaced by an authorized Kia dealer.

You may not be able to identify a low tire by simply looking at it. Always use a good quality tire pressure gauge to measure the tire's inflation pressure. Please

note that a tire that is hot (from being driven) will have a higher pressure measurement than a tire that is cold (from sitting stationary for at least 3 hours and driven less than 1.6 km (1 mile) during that 3 hour period).

Allow the tire to cool before measuring the inflation pressure. Always be sure the tire is cold before inflating to the recommended pressure.

A cold tire means the vehicle has been sitting for 3 hours and driven for less than 1.6 km (1 mile) in that 3 hour period.

Never use tire sealant if your vehicle is equipped with a TPMS. The liquid sealant can damage the tire pressure sensors.

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

**\* NOTICE**

**Protecting TPMS**

Tampering with, modifying, or disabling the TPMS components may interfere with the system's ability to warn the driver of low tire pressure conditions and/or TPMS malfunctions. Tampering with, modifying, or disabling the TPMS components may void the warranty for that portion of the vehicle.

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**This device complies with Industry Canada licence-exempt RSS standard(s).**

Operation is subject to the following 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.
3. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

## If you have a flat tire (with Tire Mobility Kit)

The Tire Mobility Kit 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

For safe operation, carefully read and follow the instructions in this manual before use.

### CAUTION

When two or more tires are flat, do not use the tire mobility kit because the one supplied canister of sealant in the Tire Mobility Kit is to only enough sealant for one flat tire.

### WARNING

#### Tire wall

Do not use the Tire Mobility Kit to repair large punctures or damage to the tire sidewalls. In these situations, the tire cannot be sealed completely and air will leak from the tire. This can result in tire failure.

### WARNING

Have your tire repaired as soon as possible. The tire may loose air pressure at any time after inflating with the Tire Mobility Kit.

### WARNING

#### Speed with temporary fix

Do not exceed a speed of 80 km/h (50 mph) when driving with a tire sealed with the Tire Mobility Kit.

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.

## Introduction



With the Tire Mobility Kit you stay mobile even after experiencing a tire puncture.

The system of compressor and sealing compound effectively seals most punctures in a passenger car tire caused by nails or similar objects and reinflates the tire.

After you ensured that the tire is properly sealed you can drive cautiously on the tire at a max. speed of 80 km/h (50

mph) in order to reach a service station or tire dealer to have the tire replaced as soon as possible.

It is possible that some tires, especially with larger punctures or damage to the sidewall, cannot be sealed completely.

Air pressure loss in the tire 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 if a trailer is in use.

The Tire Mobility Kit is not designed or intended as a permanent tire repair method and is to be used for one tire only.

This instruction shows you step by step procedure to temporarily seal the puncture.


Read the section "Notes on the safe use of the Tire Mobility Kit".

### Notes on the safe use of the Tire Mobility Kit

- Park your car at the side of the road so that you can work with the Tire Mobility Kit away from moving traffic.
- Even when you're on fairly level ground, always set your parking brake.
- Only use the Tire Mobility Kit for sealing/inflation passenger car tires. Only punctured areas located within the tread region of the tire can be sealed using the Tire Mobility Kit.
- Do not use on motorcycles, bicycles or any other type of tires.
- When the tire and wheel are damaged, do not use Tire Mobility Kit for your safety.

- Use of the Tire Mobility Kit may not be effective for tire damage larger than approximately 4 mm (0.16 in).

Please contact the nearest Kia dealership if the tire cannot be made road-worthy with the Tire Mobility Kit.

- Do not use the Tire Mobility Kit if a tire is severely damaged or with insufficient air pressure.
- Do not remove any foreign objects such as nails or screws that have penetrated the tire.
- Provided the car is outdoors, leave the vehicle ON (  indicator ON). Otherwise operating the compressor may eventually drain the car battery.
- Never leave the Tire Mobility Kit unattended while it is being used.
- Do not leave the compressor running for more than 10 min. at a time or it may overheat.
- Do not use the Tire Mobility Kit if the ambient temperature is below -30 °C (-22 °F).

### CAUTION

When repairing a flat tire with the Tire Mobility Kit (TMK), quickly remove the sealant on the tire pressure sensor and wheel. When installing the repaired tire and wheel, tighten the wheel nut to a torque value of 11~13 kgf·m (79~94 lbf·ft).

### WARNING

#### Sealant

- Keep out of reach of children.
- Avoid contact with eyes.
- Do not swallow.



**⚠ WARNING**

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**

- If the sealant gets on your skin, wash it with a large amount of water. If skin irritation continues, visit a doctor for examination.
  - If the sealant gets into your eyes, raise your eyelid and wash for at least 15 minutes. If eye irritation continues, visit a doctor for examination.
  - If you swallowed the sealant, wash the mouth and drink a large amount of water. See the doctor immediately. Exposure to the sealant for a long time may cause damage to the bodily tissues.
-

## Components of the Tire Mobility Kit

Connectors, cable and connection hose are stored in the compressor housing.



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- 1 Speed restriction label
- 2 Sealant bottle and label with speed restriction
- 3 Filling hose from sealant bottle to wheel
- 4 Connectors and cable for the power outlet direct connection
- 5 Holder for the sealant bottle
- 6 Compressor
- 7 On/off switch
- 8 Pressure gauge for displaying the tire inflation pressure
- 9 Button for reducing tire inflation pressure
- 10 Hose to connect compressor and sealant bottle or compressor and wheel

**\* NOTICE**

The sealant container and insert hose (3) cannot be reused.

**⚠ CAUTION**

Before using the tire repair kit, please read carefully the instruction attached on the sealant bottle. Detach the speed limit label on the sealant case and put it on a highly visible place. Always drive within the speed limit. Be sure to check the expiration date on the sealant bottle.



**Using the Tire Mobility Kit**

Carefully follow below steps.

1. Shake the sealant bottle.



2. Screw connection hose (10) onto the connector of the sealant bottle.



3. Ensure that button (9) on the compressor is not pressed.
4. Unscrew the valve cap from the valve of the defective wheel and screw filling hose (3) of the sealant bottle onto the valve.



5. Insert the sealant bottle into the housing of the compressor (5) so that the bottle is upright.



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**\* NOTICE**

If a visible foreign object has punctured the tire, do not remove it before using Tire Mobility Kit.

**\* NOTICE**

If the sealant is injected when the tire air pressure injection valve and sealant injection hose are not fully interlocked, the sealant may overflow and clog the valve.



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6. Ensure that the compressor is switched off, position 0.



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- 7. Connect the compressor to the vehicle power outlet (4) using the cable and connectors.
- 8. With the START/STOP button ON, switch on the compressor and let it run for approximately 5~7 minutes to fill the sealant up to cold tire recommended pressure. (refer to "Tires and wheels" on page 9-4). Be careful not to overinflate the tire and stay away from the tire when filling it.

**⚠ WARNING**

**Tire pressure**

Do not attempt to drive your vehicle if the tire pressure is below 200 kPa (29 psi). This could result in an accident due to sudden tire failure.

- 9. Switch off the compressor.
- 10. Detach the hoses from the sealant bottle connector and from the tire valve.
- 11. Return the Tire Mobility Kit to its storage location in the vehicle.

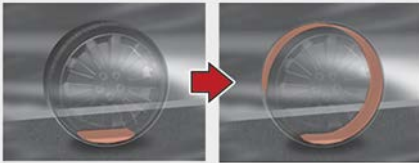
**⚠ WARNING**

**Carbon monoxide**

Carbon monoxide poisoning and suffocation is possible if the vehicle is left running in a poorly ventilated or unventilated location (such as inside a building).

**Distributing the sealant**

After putting sealant into the tire, it is necessary to drive the vehicle so that the sealant becomes evenly distributed inside the tire.



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- Immediately drive approximately 7~10 km (4~6 miles or about 10 min) to evenly distribute the sealant in the tire.

Do not exceed a speed of 80 km/h (50 mph).

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 of the side of the road.

**⚠ CAUTION**

When you use the Tire Mobility Kit, the tire pressure sensors and wheel may be stained by sealant. Therefore, remove the tire pressure sensors and wheel stained by sealant and have your vehicle inspected by an authorized Kia dealer.

**Checking the tire inflation pressure**

After driving briefly so as to distribute the sealant throughout the inside of the tire, you should check the tire inflation pressure.

1. After driving approximately 7~10 km (4~6 miles or about 10 min), stop at a safe location.
2. Connect connection hose (10) of the compressor directly to the tire valve.



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3. Connect between compressor and the vehicle power outlet using the cable and connectors.
4. Adjust the tire inflation pressure to the cold tire recommended pressure as indicated on the vehicle's placard or tire inflation pressure label located on the driver's side center pillar outer panel. (In this owner's manual, refer to "Tires and wheels" on page 9-4)

- **To increase the inflation pressure**, switch on the compressor, position I. To check the current inflation pressure setting, briefly switch off the compressor.

**\* NOTICE**

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.

**⚠ CAUTION**

Do not let the compressor run for more than 10 minutes; otherwise, the device may overheat and be damaged.

- **To reduce the inflation pressure**, press the button (9) on the compressor.

**⚠ CAUTION**

**Tire pressure sensor**

When you use the Tire Mobility Kit including sealant not approved by Kia, the tire pressure sensors may be damaged by sealant. The sealant on the tire pressure sensor and wheel should be removed when you replace the tire with a new one and inspect the tire pressure sensors at an authorized dealer.

**Technical data**

The specifications of the Tire Mobility Kit are as follows.

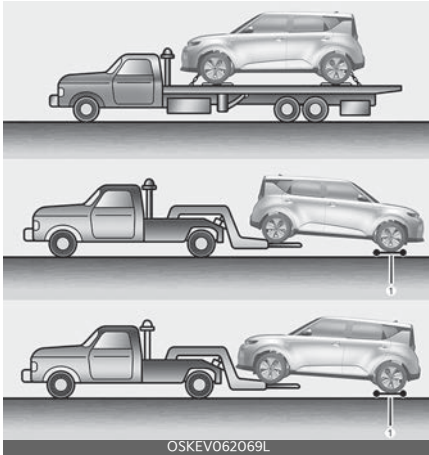
System Voltage	DC 12 V	
Working Voltage	DC 10~15 V	
Amperage rating	Max 15A	
Suitable for use at temperatures	-40~+70 °C (-40~+158 °F)	
Max. working pressure	620 kPa (90 psi)	
Size	Compressor	140 x 150 x 60 mm (5.5 x 5.9 x 2.4 in)
	Sealant bottle	85,5 x 104 mm (ø 3.4 x 4.1 in)
	Compressor weight	795 g (1.75 lbs.)
	Sealant volume	300 ml (18.3 cu in)

\* 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

If emergency towing is necessary, we recommend having it done by an authorized Kia dealer or a commercial tow-truck service.

## Towing service



Proper lifting and towing procedures are necessary to prevent damage to the vehicle. The use of wheel dollies (1) or flatbed is recommended.

On Front Wheel Drive (FWD) vehicles, it is acceptable to tow the vehicle with the rear wheel on the ground (without dollies) and the front wheels off the ground. If any of the loaded wheels or suspension components are damaged or the vehicle is being towed with the front wheels on the ground, use a towing dolly under the front wheels. When being towed by a commercial tow truck and wheel dollies are not used, the front of the vehicle should always be lifted, not the rear.

## ⚠ WARNING

### Side and curtain Air bag

If your vehicle is equipped with side and curtain air bag, place the START/STOP button in the OFF or ACC when the vehicle is being towed.

The side and curtain air bag may deploy when the START/STOP button is ON, and the rollover sensor detects the situation as a rollover.

## ⚠ CAUTION

### Towing



- Do not tow the vehicle backwards with the front wheels on the ground as this may cause damage to the vehicle.
- Do not tow with sling-type equipment. Use wheel lift or flatbed equipment.

## ⚠ WARNING

- If you tow the vehicle while the front wheels are touching the ground, the vehicle motor may generate electricity and the motor components may be damaged or a fire may occur.

- When a vehicle fire occurs due to the battery, there is a risk of a second fire. Contact the fire department when towing the vehicle.

### Dinghy towing



Your vehicle is not designed to be dinghy towed (with 4 wheels on the ground) behind a motor home. To avoid serious damage to your vehicle, do not tow your vehicle with four wheels on the ground.

### Towing without wheel dollies when using a towing service

When towing your vehicle in an emergency without wheel dollies:

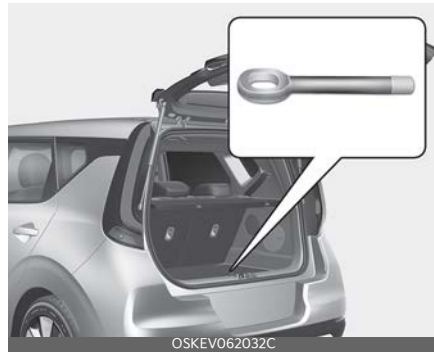
1. While depressing the brake pedal shift to the N (Neutral) position and turn the vehicle off. The START/STOP button will be in the ACC position.
2. Place the shifter dial in N (Neutral).
3. Release the parking brake.

**⚠ CAUTION**

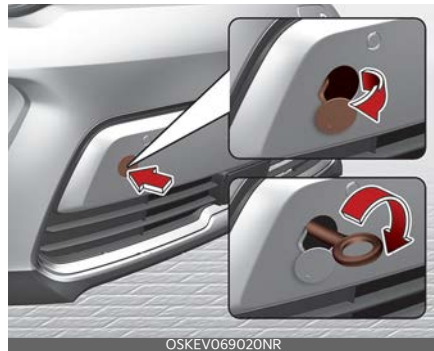
### Towing gear position

Failure to shift to N (Neutral) may cause internal damage to the vehicle.

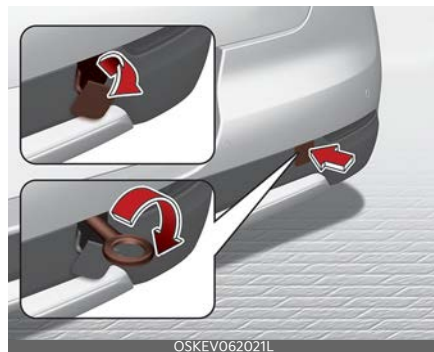
### Using removable towing hook



Front



Rear



1. Open the liftgate, and remove the towing hook from the tool case.



2. Remove the hole cover pressing the upper (front) / lower (rear) part of the cover on the bumper.
3. Install the towing hook by turning it clockwise into the hole until it is fully secured.
4. Remove the towing hook and install the cover after use.

### Emergency towing

If towing service is not available in an emergency, your vehicle may be temporarily towed using a cable or chain secured to the emergency towing hook under the front (or rear) of the vehicle.

Front



Rear



### If towing is necessary, have it done by an authorized Kia dealer or a commercial tow truck service.

Use extreme caution when towing the vehicle. A driver must be in the vehicle to steer it and operate the brakes.

Towing in this manner may be done only on hard-surfaced roads for a short distance and at low speed. Also, the wheels, axles, power train, steering and brakes must all be in good condition.

- Do not use the tow hooks to pull a vehicle out of mud, sand or other conditions from which the vehicle cannot be driven out under its own power.
- Avoid towing a vehicle heavier than the vehicle doing the towing.
- The drivers of both vehicles should communicate with each other frequently.

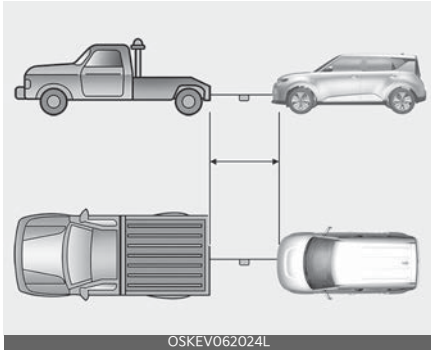
### ⚠ CAUTION

Using a portion of the vehicle other than the tow hooks for towing may damage the body of your vehicle.

- Attach a towing strap to the tow hook.
- Use only a cable or chain specifically intended for use in towing vehicles. Securely fasten the cable or chain to the towing hook provided.
- 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.
- 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.
- Use a towing strap less than 5 m (16 ft) long. Attach a white or red cloth (about 30 cm (12 in) wide) in the middle of the strap for easy visibility.

Front



- 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.

**⚠ WARNING**

**Emergency Towing Precautions**

Use extreme caution when towing the vehicle.

- Avoid sudden starts or erratic driving maneuvers which would place excessive stress on the emergency towing hook and towing cable or chain. The hook and towing cable or chain may break and cause serious injury or damage.

- If the disabled vehicle is unable to be moved, do not forcibly continue the towing. We recommend that you contact an authorized Kia dealer or a commercial tow truck service for assistance.
- Tow the vehicle as straight ahead as possible.
- Keep away from the vehicle during towing.

**Emergency towing precautions**

1. While depressing the brake pedal shift to the N (Neutral) position and turn the vehicle off. The START/STOP button will be in the ACC position.
2. Release the parking brake.
3. Press the brake pedal with more force than normal since you will have reduced brake performance.
4. More steering effort will be required because the power steering system will be disabled.
5. 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.
6. If the car is being towed with all four wheels on the ground, it can be towed only from the front. Be sure that the reduction gear is in neutral. Be sure the steering is unlocked by placing the START/STOP button in the ACC position. A driver must be in the towed vehicle to operate the steering and brakes.

**⚠ CAUTION**

To avoid damage to your vehicle and vehicle components when towing:

- Always pull straight ahead when using the towing hooks. Do not pull from the side or at a vertical angle.
- Do not use the towing hooks to pull a vehicle out of mud, sand or other conditions from which the vehicle cannot be driven out under its own power.
- Limit the vehicle speed to 15 km/h (10 mph) and drive less than 1.5 km (1 mile) when towing to avoid serious damage to the reduction gear.

**\* NOTICE**

Before towing, check the reduction gear for fluid leaks under your vehicle. If the reduction gear fluid is leaking, a flatbed equipment or towing dolly must be used.

**If an accident occurs**

If an accident occurs, stay calm and take the following precautions.

**⚠ WARNING****High voltage components**

- For your safety, do not touch high voltage cables, connectors and package modules. High voltage components are orange in color.
- Exposed cables or wires may be visible inside or outside of the vehicle. Never touch the wires or cables, because an electrical shock, an injury, or a death may occur.

**\* NOTICE**

Any gas or electrolyte leakage from your vehicle is not only poisonous but also flammable. Upon witnessing one of those, make sure your car is parked in a safe area away from any roads, open the windows, and maintain a safe distance away from the vehicle. Immediately contact an authorized Kia dealer and advise them that an electric vehicle is involved.

- If you need towing, refer to "Towing" on page 7-19.
- When the vehicle is severely damaged, remain a safe distance of 15 meter (50 feet) or more between your vehicle and other vehicles/flammbles.
- If a fire occurs, immediately call emergency services (911) and advise the emergency responders that an electric vehicle is involved.

 **WARNING**

**Submersion in water**

Do not touch your vehicle if it has been submerged in water. The high-voltage battery may cause shock or may catch fire. Immediately contact the authorities and advise them of the condition of your vehicle and that an electric vehicle is involved.

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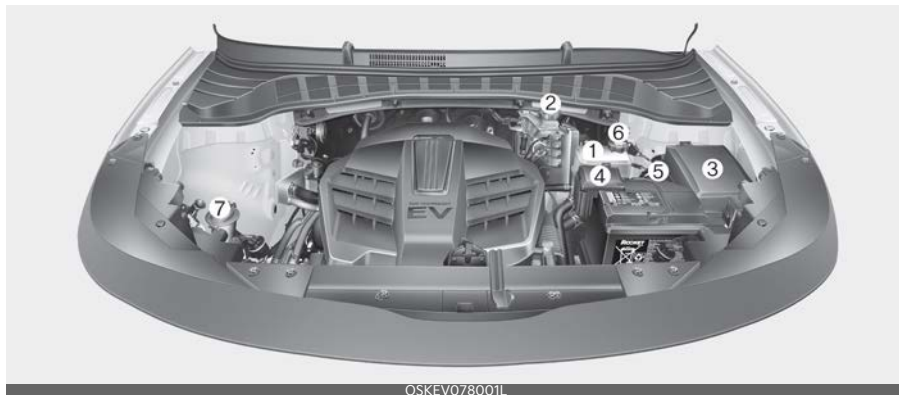
# 8 Maintenance

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## Maintenance

### Motor room compartment

Open the hood to see the motor room compartment.



\* The actual motor compartment in the vehicle may differ from the illustration.

- 1 Coolant reservoir
- 2 Brake fluid reservoir
- 3 Fuse box
- 4 Positive battery terminal
- 5 Negative battery terminal
- 6 Coolant reservoir cap
- 7 Windshield washer fluid reservoir

## Maintenance services

You should exercise the utmost care to prevent damage to your vehicle and injury to yourself whenever performing any maintenance or inspection procedures.

Should you have any doubts concerning the inspection or servicing of your vehicle, we strongly recommend that you have an authorized Kia dealer perform this work.

An authorized Kia dealer has factory-trained technicians and genuine Kia parts to service your vehicle properly. For expert advice and quality service, see an authorized Kia dealer.

Inadequate, incomplete or insufficient servicing may result in operational problems with your vehicle that could lead to vehicle damage, an accident, or personal injury.

## Owner's responsibility

### \* NOTICE

Maintenance Service and Record Retention are the owner's responsibility.

You should retain documents that show proper maintenance has been performed on your vehicle in accordance with the scheduled maintenance service charts shown on the following pages. You need this information to establish your compliance with the servicing and maintenance requirements of your vehicle warranties.

Detailed warranty information is provided in your Warranty & Consumer Information manual.

Repairs and adjustments required as a result of improper maintenance or a lack

of required maintenance are not covered.

We recommend you have your vehicle maintained and repaired by an authorized Kia dealer. An authorized Kia dealer meets Kia's high service quality standards and receives technical support from Kia in order to provide you with a high level of service satisfaction.

## Owner maintenance precautions

Improper or incomplete service may result in problems. This section gives instructions only for the maintenance items that are easy to perform.



As explained earlier in this section, several procedures can be done only by an authorized Kia dealer with special tools.

### \* NOTICE

Improper owner maintenance during the warranty period may affect warranty coverage. For details, read the separate Warranty & Consumer Information manual provided with the vehicle. If you're unsure about any servicing or maintenance procedure, have it done by an authorized Kia dealer.

### ⚠ WARNING

#### Maintenance work

Do not wear jewelry or loose clothing while working under the hood of your vehicle with ready () mode. These items can become entangled in moving parts, if you must run the vehicle in the ready () mode while working under the hood, make certain that you remove all jewelry (especially rings, bracelets, watches, and necklaces) and all neckties,



scarves, and similar loose clothing before getting near cooling fans.

### **⚠ WARNING**

#### **Touching metal parts**

Do not touch metal parts (including strut bars) while the vehicle is operating or hot. Doing so could result in serious bodily injury. Turn the vehicle off and wait until the metal parts cool down to perform maintenance work on the vehicle.

## **Owner maintenance**

The following lists are vehicle checks and inspections that should be performed by the owner or an authorized Kia dealer at the frequencies indicated to help ensure safe, dependable operation of your vehicle.

Any adverse conditions should be brought to the attention of your dealer as soon as possible.

These Owner Maintenance Checks are generally not covered by warranties and you may be charged for labor, parts and lubricants used.

### **When you stop for charge**

- Check the coolant level in coolant reservoir.

### **⚠ WARNING**

When the coolant level is low, have the reservoir filled by an authorized Kia dealer by using only designated coolant water for electric vehicles. Using other types of water or antifreeze can cause serious damage to the vehicle.

- Check the windshield washer fluid level.
- Look for low or under-inflated tires. Check if the front of the radiator and condenser are clean and not blocked with leaves, dirt or insects etc. If any of the above parts are extremely dirty or you are not sure of their condition, take your vehicle to an authorized Kia dealer.

**While operating your vehicle:**

- Check for vibrations in the steering wheel. Notice any increased steering effort or looseness in the steering wheel, or change in its straight-ahead position.
- Notice if your vehicle constantly turns slightly or "pulls" to one side when traveling on smooth, level road.
- When stopping, listen and check for unusual sounds, pulling to one side, increased brake pedal travel or "hard-to-push" brake pedal.
- If any slipping or changes in the operation of your reduction gear occurs, take your vehicle to an authorized Kia dealer.
- Check the reduction gear 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.

**⚠ WARNING**

When the coolant level is low, have the reservoir filled by an authorized Kia dealer by using only designated coolant water for electric vehicles. Using other types of water or antifreeze can cause serious damage to the vehicle.

- Check the operation of all exterior lights, including the stoplights, turn signals and hazard warning flashers.
- Check the inflation pressures of all tires including the spare for tires that

are worn, show uneven wear, or are damaged.

- Check for loose wheel lug nuts.

**At least twice a year (i.e., every Spring and Fall):**

- Check the radiator, heater and air conditioning hoses for leaks or damage.
- Check the windshield washer spray and wiper operation. Clean the wiper blades with clean cloth dampened with washer fluid.
- Check the headlight alignment.
- Check the lap/shoulder belts for wear and function.

**At least once a year:**

- Clean the body and door drain holes.
- Lubricate the door hinges and check the hood hinges.
- Lubricate the door and hood locks and latches.
- Lubricate the door rubber weatherstrips.
- Check the air conditioning system.
- Inspect and lubricate reduction gear linkage and controls.
- Clean the battery and terminals.
- Check the brake fluid level.

## Scheduled maintenance service

Follow the Normal Maintenance Schedule if the vehicle is usually operated where none of the following conditions apply.

If any of the following conditions apply, follow the Maintenance Under Severe Usage Conditions.

- Repeated driving short distance of less than 8 km (5 miles) in normal temperature or less than 16 km (10 miles) in freezing temperature.
- Extensive motor idling or low speed driving for long distances.
- Driving on rough, dusty, muddy, unpaved, graveled or salt-spread roads.
- Driving in areas using salt or other corrosive materials or in very cold weather.
- Driving in heavy dust condition.
- Driving in heavy traffic area.
- Driving on uphill, downhill, or mountain road repeatedly.
- Using for towing or camping and driving with loading on the roof.
- Driving as a patrol car, taxi, other commercial use of vehicle towing.
- Frequently driving under high speed or rapid acceleration/deceleration.
- Frequently driving in stop-and-go condition.

If your vehicle is operated in any of the prior listed conditions, you should inspect, replace or refill more frequently, using the severe usage maintenance schedule instead of the normal usage maintenance schedule.

### Normal maintenance schedule

The following maintenance services must be performed to ensure good emission control and performance. Keep receipts for all vehicle services to protect your warranty. Where both mileage and date are shown, the frequency of service is determined by whichever occurs first.

R: Replace

I: Inspect and if necessary, adjust, correct, clean or replace

Number of months or driving distance, whichever comes first															
Months	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180
Miles×1,000	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5
Km×1,000	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180
Rotate tires	Rotate every 12,000 km (7,500 miles)														
Climate control air filter	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I
Brake fluid	I	I	I	R	I	I	I	R	I	I	I	R	I	I	I
Coolant <sup>*1</sup>	Replace every 60,000 km (37,500 miles) or 36 months														
Brake pedal															
12V Battery condition															
Air conditioner refrigerant															
Brake lines, hoses and connections (including booster)															
Tire (pressure & tread wear)	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Disc brakes and pads															
Suspension ball joints															
Steering gear rack, linkage and boots															
Air conditioner compressor															
Drive shafts and boots															
Cooling system hoses and connections	Inspect every 12,000 km (7,500 miles) or 6 months														
Brake pedal free play	Inspect every 12,000 km (7,500 miles) or 6 months														
All latch, hinges and locks	Inspect every 24,000 km (15,000 miles) or 12 months														
Reduction gear oil	-	-	I	-	I	-	I	-	I	-	I	-	I	-	I
Cooling system	-	-	-	I	-	I	-	I	-	I	-	I	-	I	-

\*1. When the coolant level is low, have the reservoir filled by an authorized Kia dealer by using only designated coolant water for electric vehicles. Using other types of water or antifreeze can cause serious damage to the vehicle.

## Maintenance Under Severe Usage Conditions

The following items must be serviced more frequently on cars mainly used under severe driving conditions. Refer to the chart below for the appropriate maintenance intervals.

R: Replace

I: Inspect and if necessary, adjust, correct, clean or replace

Maintenance item	Maintenance operation	Maintenance intervals	Driving condition
Reduction gear oil	R	Every 120,000 km (75,000 miles)	A, C, F, G, I, K
Front suspension ball joints	R	Replace more frequently depending on the condition	C, E, G
Climate control air filter	I	Inspect more frequently depending on the condition	C, D, E, F, G
Disc brakes and pads	I	Inspect more frequently depending on the condition	C, D, E, G, H, I, K
Steering gear rack, linkage and boots	I	Inspect more frequently depending on the condition	C, D, E, F, G, H, I, K
Drive shaft and boots	I	Inspect more frequently depending on the condition	C, D, E, F, G, H, I, K

## Severe Driving Conditions

A: Repeatedly driving short distance of less than 8 km (5 miles) in normal temperature or less than 16 km (10 miles) in freezing temperature.

B: Extensive low speed driving for long distances.

C: Driving on rough, dusty, muddy, unpaved, graveled or salt-spread roads.

D: Driving in areas using salt or other corrosive materials or in very cold weather.

E: Driving in heavy dust condition.

F: Driving in heavy traffic area.

G: Driving on uphill, downhill, or mountain roads.

H: Using for towing or camping and driving with loading on the roof.

I: Driving for patrol car, taxi, commercial car or vehicle towing.

J: Driving in very cold weather.

K: Frequently driving under high speed or rapid acceleration/deceleration.

## Explanation of scheduled maintenance items

The following parts require scheduled maintenance.

### Cooling system

Check the cooling system components, such as the radiator, coolant reservoir, hoses and connections, coolant 3-way valve, chiller for leakage and damage. Replace any damaged parts.

### Coolant

The coolant should be changed at the intervals specified in 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 "MIN" and "MAX" marks on the side of the reservoir. Use only hydraulic brake fluid conforming to DOT 3 or DOT 4 specification.

### Brake discs, pads and calipers

Check the pads for excessive wear, discs for run out and wear, and calipers for fluid leakage.

### Suspension mounting bolts

Check the suspension connections for looseness or damage. Retighten to the specified torque.

### Steering gear box, linkage & boots/lower arm ball joint

With the vehicle stopped and off, check for excessive free-play in the steering wheel.

Check the linkage for bends or damage. Check the dust boots and ball joints for deterioration, cracks, or damage. Replace any damaged parts.

### Drive shafts and boots

Check the drive shafts, boots and clamps for cracks, deterioration, or damage. Replace any damaged parts and, if necessary, repack the grease.

### Air conditioning refrigerant

Check the air conditioning lines and connections for leakage and damage.

## Coolant

### ⚠ WARNING



The electric motor (cooling fan) is controlled by coolant temperature, refrigerant pressure and vehicle speed. It may sometimes

operate even when the vehicle is not operating. Use extreme caution when working near the blades of the cooling fan so that you are not injured by a rotating fan blades. As the coolant temperature decreases, the electric motor will automatically shut off. This is a normal condition.

Check the condition and connections of all cooling system hoses.



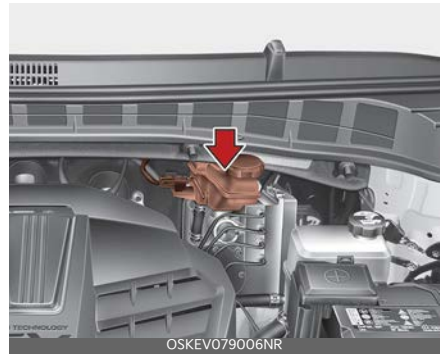
Replace any swollen or deteriorated hoses. The coolant level should be filled between F (MAX) and L (MIN) marks on the side of the coolant reservoir when motor compartment is cool. When the coolant level (in the reservoir) is low, have your vehicle inspected by an authorized Kia dealer. Use only designated coolant water for electric vehicles, adding other types of water or anti-freeze can damage the vehicle.

## Brake fluid

The brake fluid acts to transmit force to the brake when the driver depresses the brake pedal. Brake fluid must be maintained periodically to ensure that the brakes operate smoothly.

### Checking the brake fluid level

Check the fluid level in the reservoir periodically. The fluid level should be between MAX and MIN marks on the side of the reservoir.



1. Before removing the reservoir cap and adding brake fluid, clean the area around the reservoir cap thoroughly to prevent brake fluid contamination.

### ⚠ CAUTION

#### Proper fluid

Only use brake fluid in the brake system. Small amounts of improper fluids can cause damage to the brake system.

2. Periodically check that the fluid level in the brake fluid reservoir is between MIN and MAX. The level will fall with accumulated mileage. This is a normal condition associated with the wear of the brake linings. If the fluid level is excessively low, have the brake system checked by an authorized Kia dealer.

Use only the specified brake fluid. (Refer to "Recommended lubricants and capacities" on page 9-5.)

Never mix different types of fluid.

In the event the brake system requires frequent additions of fluid, the vehicle should be inspected by an authorized Kia dealer.

When changing and adding brake fluid, handle it carefully. Do not let it come in contact with your eyes. If brake fluid should come in contact with your eyes, immediately flush them with a large quantity of fresh tap water. Have your eyes examined by a doctor as soon as possible.

### **CAUTION**

#### **Brake fluid**

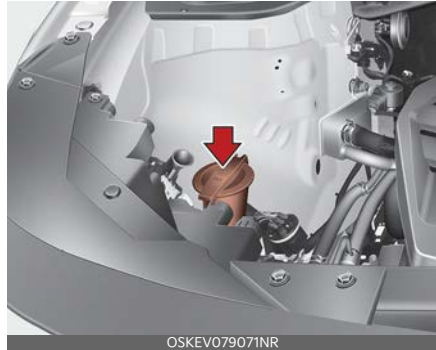
Do not allow brake fluid to contact the vehicle's body paint, as paint damage will result.

Brake fluid, which has been exposed to open air for an extended time should never be used as its quality cannot be guaranteed. It should be disposed of properly.

## **Washer fluid**

Washer fluid is used when wiping the windshield of the vehicle with a windshield wiper. You should check and refill washer fluid periodically to make sure that it doesn't run out.

### **Checking the washer fluid level**



The reservoir is translucent so that you can check the level with a quick visual inspection.

- Check the fluid level in the washer fluid reservoir and add fluid if necessary. Plain water may be used if washer fluid is not available. However, use washer solvent with antifreeze characteristics in cold climates to prevent freezing.

### **WARNING**

#### **Flammable Fluid**

Do not allow the washer fluid to come in contact with open flames or sparks. The windshield washer fluid reservoir is flammable under certain circumstances. This can result in a fire.



**⚠ WARNING****Coolant**

- Do not use radiator coolant or anti-freeze in the washer fluid reservoir.
- Radiator coolant can severely obscure visibility when sprayed on the windshield and may cause loss of vehicle control.

**⚠ WARNING****Windshield fluid**

Do not drink the windshield washer fluid. The windshield washer fluid is poisonous to humans and animals.

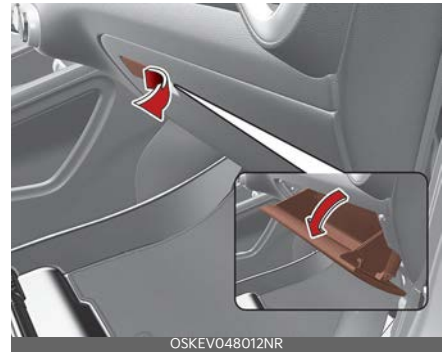
**Climate control air filter**

The climate control air filter should be replaced according to the maintenance schedule. If the vehicle is operated in severely air-polluted cities or on dusty rough roads for a long period, it should be inspected more frequently and replaced earlier.

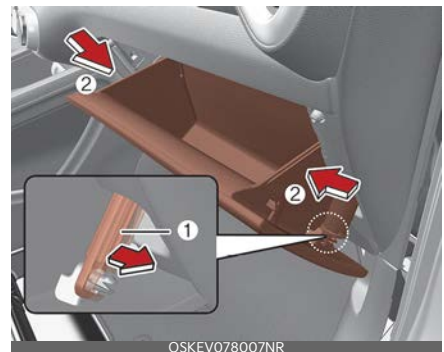
**Inspecting and replacing climate control air filter**

When you replace the climate control air filter, replace it performing the following procedure, and be careful to avoid damaging other components.

1. Open the glove box.



2. With the glove box open, pull the support strap (1).



- Remove the climate control air filter case by pulling out right side of the cover.



- Replace the climate control air filter.



- Reassemble in the reverse order of disassembly.

When replacing the climate control air filter install it properly. Otherwise, the system may produce noise and the effectiveness of the filter may be reduced.

## Wiper blades

When the wipers no longer clean adequately, the blades may be worn or cracked, and require replacement.

To prevent damage to the wiper arms or other components, do not attempt to move the wipers manually.

The use of a non-specified wiper blade could result in wiper malfunction and failure.

## Blade inspection



Commercial hot waxes applied by automatic vehicle washes have been known to make the windshield difficult to clean.

And it is the responsibility of customers to wash and manage the vehicle with adequate methods and materials.

Contamination of either the windshield or the wiper blades with foreign matter can reduce the effectiveness of the windshield wipers. Common sources of contamination are insects, tree sap, and hot wax treatments used by some commercial vehicle washes. If the blades are not wiping properly, clean both the window and the blades with a good cleaner or mild detergent, and rinse thoroughly with clean water.

## ⚠ CAUTION

### Wiper blades

To prevent damage to the wiper blades, do not use gasoline, kerosene, paint thinner, or other solvents on or near them.

## Replacing front windshield wiper blade

Type A

1. Raise the wiper arm and turn the wiper blade assembly to expose the plastic locking clip.



## ⚠ CAUTION

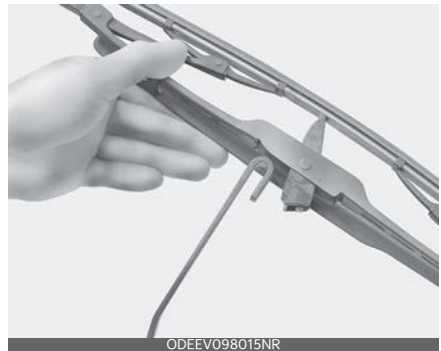
### Wiper arms

- Do not allow the wiper arm to fall against the windshield, since it may chip or crack the windshield.
- Do not pull wiper arm forward, since arm could chip hood paint.

2. Compress the clip and slide the blade assembly downward.



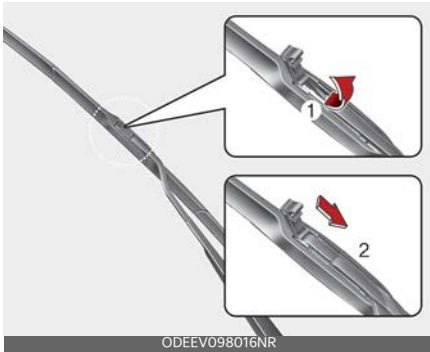
3. Lift it off the arm.



4. Install the blade assembly in the reverse order of removal.

Type B

1. Raise the wiper arm.
2. Lift up the wiper blade clip. Then pull down the blade assembly and remove it.



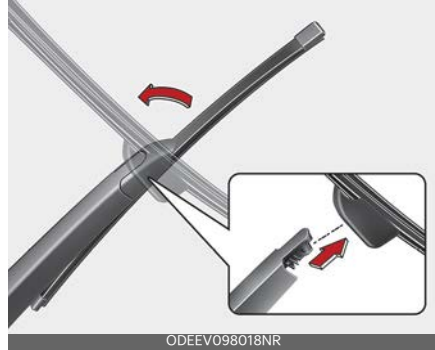
3. Install the new blade assembly.



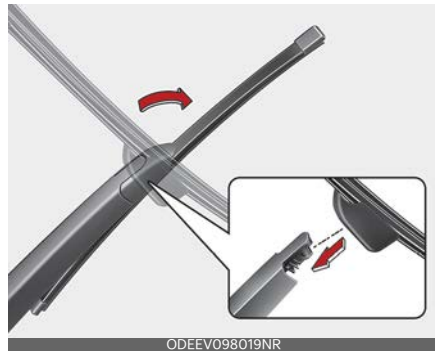
4. Return the wiper arm on the windshield.
5. Change START/STOP button to the ON position and wiper arms will return to the normal operating position.

Replacing rear window wiper blade

1. Raise the wiper arm and pull out the wiper blade assembly.



2. Install the new blade assembly by inserting the center part into the slot in the wiper arm until it clicks into place.



3. Make sure the blade assembly is installed firmly by trying to pull it slightly.

To prevent damage to the wiper arms or other components, have an authorized Kia dealer replace the wiper blade.

## Battery

The battery powers the motor in order to move the vehicle as well as supplying power to the various devices installed in the vehicle.

### For best battery service



- Keep the battery securely mounted.
- Keep the battery top clean and dry.
- Keep the terminals and connections clean, tight, and coated with petroleum jelly or terminal grease.
- Rinse any spilled electrolyte from the battery immediately with a solution of water and baking soda.
- If the vehicle is not going to be used for an extended time, disconnect the battery cables.

### **WARNING**

#### Risk of explosion



Keep lit cigarettes and all other flames or sparks away from the battery.



The battery contains hydrogen -- a highly combustible gas which will explode if it comes in contact with a flame or

spark.



Keep batteries out of the reach of children because batteries contain highly corrosive SULFURIC ACID and electrolytes.

Do not allow battery acid to contact your skin, eyes, clothing or paint finish.



Wear eye protection when charging or working near a battery. Always provide ventilation when working in an

enclosed space.



Always read the following instructions carefully when handling a battery.



If any electrolyte gets into your eyes, flush your eyes with clean water for at least 15 minutes and get immediate medi-

cal attention. If electrolyte gets on your skin, thoroughly wash the contacted area. If you feel pain or burning sensation, get medical attention immediately.



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

according to your local law(s) or regulation.



The battery contains lead. Do not dispose of it after use. Please return the battery to an authorized Kia dealer to be

recycled.

Never attempt to recharge the battery when the battery cables are connected.

### **WARNING**

#### Risk of electrocution

Never touch the electrical motor while the vehicle is running. This system works with high voltage which can "zap" you.

### \* NOTICE

If you connect unauthorized electronic devices to the battery, the battery may be discharged. Never use unauthorized devices.

### ⚠ WARNING

#### Recharging battery

Never attempt to recharge the battery when the battery cables are connected.

### ⚠ WARNING

#### Battery lead compound

Battery posts, terminals, and related accessories contain lead and lead compounds. Wash hands after handling.

## Battery recharging

Your vehicle has a maintenance-free, calcium-based battery

- If the battery becomes discharged in a short time (because, for example, the headlights or interior lights were left on while the vehicle was not in use), recharge it by slow charging (trickle) for 10 hours.
- If the battery gradually discharges because of high electric load while the vehicle is being used, recharge it at 20~30 A for two hours.

When recharging the battery, observe the following precautions:

- The battery must be removed from the vehicle and placed in an area with good ventilation.
- Do not allow cigarettes, sparks, or flame near the battery.
- Watch the battery during charging, and stop or reduce the charging rate if the battery cells begin gassing (boil-

ing) violently or if the temperature of the electrolyte of any cell exceeds 49 °C (120 °F).

- Wear eye protection when checking the battery during charging.
- Disconnect the battery charger in the following order.
  1. Turn off the battery charger main switch.
  2. Unhook the negative clamp from the negative battery terminal.
  3. Unhook the positive clamp from the positive battery terminal.
- Before performing maintenance or recharging the battery, turn off all accessories and stop the vehicle.
- The negative battery cable must be removed first and installed last when the battery is disconnected.

## Reset items

The following items should be reset after the battery has been discharged or the battery has been disconnected.

- Auto up/down window (Refer to "Window opening and closing/window opening and closing" on page 5-22)
- Trip computer (Refer to "Trip information (Trip computer)" on page 5-47)
- Climate control system (Refer to "Automatic climate control system" on page 5-85)

## Tires and wheels

For proper maintenance, safety, and maximum fuel economy, you must always maintain recommended tire inflation pressures and stay within the load limits and weight distribution recommended for your vehicle.

### Recommended cold tire inflation pressures

All tire pressures should be checked when the tires are cold. "Cold Tires" means the vehicle has not been driven for at least three hours or driven less than 1.6 km (1 mile).

Recommended pressures must be maintained for the best ride, vehicle handling, and minimum tire wear.

For recommended inflation pressure, refer to "Tires and wheels" on page 9-4. All specifications (sizes and pressures) can be found on a label attached to the driver's side center pillar.



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#### **⚠ WARNING**

#### **Tire underinflation**

Inflate your tires consistent with the instructions provided in this manual. Regularly check the tire inflation pressure, and correct it as needed: at least twice a month and before any long trips

on the road. If you fail to observe this precaution, you may be driving on underinflated tires, which may not only compromise your vehicle's driving stability, but also lead to tire damage and the risk of an accident. This risk is much higher on hot days and when driving for long periods at high speeds.

Failure to maintain specified pressure may result in excessive wear, poor handling, reduced fuel economy, deformation of tire and/or wheel, harsh ride conditions, possibility for additional damage from road hazards, or result in tire failure.

### Tire pressure

Always observe the following:

- Check tire pressure when the tires are cold. (After vehicle has been parked for at least three hours or hasn't been driven more than 1.6 km (1 mile) since startup.)
- Check the pressure of your spare tire each time you check the pressure of other tires.
- Never overload your vehicle. Be careful not to overload a vehicle luggage rack if your vehicle is equipped with one.
- Warm tires normally exceed recommended cold tire pressures by 28 to 41 kPa (4 to 6 psi). Do not release air from warm tires to adjust the pressure or the tires will be underinflated.

#### **⚠ WARNING**

#### **Tire Inflation**

Overinflation or underinflation can reduce tire life, adversely affect vehicle handling, and lead to sudden tire failure.

This could result in loss of vehicle control and potential injury.

### Checking tire inflation pressure

Check your tires once a month or more. Use a good quality gauge to check tire pressure. You cannot tell if your tires are properly inflated simply by looking at them. Radial tires may look properly inflated even when they're underinflated.

Check the tire's inflation pressure when the tires are cold. "Cold" means your vehicle has been sitting or at least three hours or driven no more than 1.6 km (1 mile).

1. Remove the valve cap from the tire valve stem.
2. Press the tire gauge firmly onto the valve to get a pressure measurement. If the cold tire inflation pressure matches the recommended pressure on the tire and loading information label, no further adjustment is necessary.
3. If the pressure is low, add air until you reach the recommended amount.
4. If you overfill the tire, release air by pushing on the metal stem in the center of the tire valve.
5. Recheck the tire pressure with the tire gauge.
6. Be sure to put the valve caps back on the valve stems. They help prevent leaks by keeping out dirt and moisture.

Inspect your tires frequently for proper inflation as well as wear and damage. Always use a tire pressure gauge.

Tires with too much or too little pressure wear unevenly causing poor handling, loss of vehicle control, and sudden tire

failure leading to accidents, injuries, and even death. The recommended cold tire pressure for your vehicle can be found in this manual and on the tire label located on the driver's side center pillar.

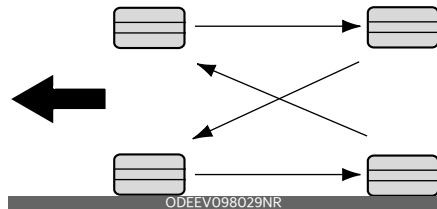
### Tire rotation

To equalize tread wear, it is recommended that the tires be rotated every 12,000 km (7,500 miles) or sooner if irregular wear develops.

During rotation, check the tires for correct balance.

When rotating tires, check for uneven wear and damage. Abnormal wear is usually caused by incorrect tire pressure, improper wheel alignment, out of balance wheels, severe braking or severe cornering. Look for bumps or bulges in the tread or side of tire. Replace the tire if you find either of these conditions. Replace the tire if fabric or cord is visible. After rotation, be sure to bring the front and rear tire pressures to specification and check lug nut tightness.

Refer to "Tires and wheels" on page 9-4. Disc brake pads should be inspected for wear whenever tires are rotated.



Rotate radial tires that have an asymmetric tread pattern only from front to rear and not from right to left.



**⚠ WARNING****Mixing tires**

Do not mix bias ply and radial ply tires under any circumstances. This may cause unusual handling characteristics.

**Wheel alignment and tire balance**

The wheels on your vehicle were aligned and balanced carefully at the factory to give you the longest tire life and best overall performance.

In most cases, you will not need to have your wheels aligned again. However, if you notice unusual tire wear or your vehicle pulling one way or the other, the alignment may need to be reset.

If you notice your vehicle vibrating when driving on a smooth road, your wheels may need to be rebalanced.

**⚠ CAUTION****Wheel weight**

Improper wheel weights can damage your vehicle's aluminum wheels. Use only approved wheel weights.

**Tire replacement**

If the tire is worn evenly, a tread wear indicator will appear as a solid band across the tread.



This shows there is less than 1.6 mm (1/16 in) of tread left on the tire. Replace the tire when this happens.

Do not wait for the band to appear across the entire tread before replacing the tire.

The Anti-lock Brake System (ABS) works by comparing the speed of the wheels. The tire size affects wheel speed. When replacing tires, all 4 tires must use the same size originally supplied with the vehicle. Using tires of a different size can cause the ABS and Electronic Stability Control (ESC) to work irregularly.

It is best to replace all four tires at the same time. If that is not possible, or necessary, then replace the two front or two rear tires as a pair. Replacing just one tire can seriously affect your vehicle's handling.

**\* NOTICE**

We recommend that when replacing tires, use the same originally supplied with the vehicles. If not, that affects driving performance.

**Wheel replacement**

When replacing the metal wheels for any reason, make sure the new wheels are equivalent to the original factory units in diameter, rim width and offset.

A wheel that is not the correct size may adversely affect wheel and bearing life, braking and stopping abilities, handling characteristics, ground clearance, body-to-tire clearance, snow chain clearance, speedometer and odometer calibration, headlight aim and bumper height.

## ⚠ CAUTION

### Wheels

Wheels that do not meet Kia specifications may fit poorly and result in damage to the vehicle or unusual handling and poor vehicle control.

### Tire traction

Tire traction can be reduced if you drive on worn tires, tires that are improperly inflated or on slippery road surfaces.

Tires should be replaced when tread wear indicators appear. Slow down whenever there is rain, snow or ice on the road to reduce the possibility of losing control of the vehicle.

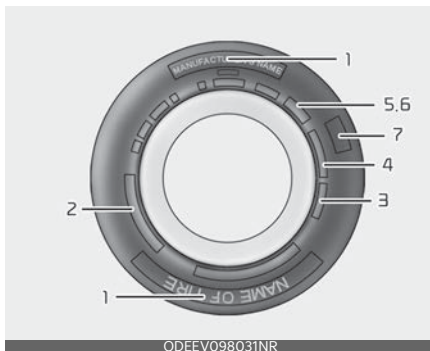
### Tire maintenance

In addition to proper inflation, correct wheel alignment helps to decrease tire wear.

If you find a tire is worn unevenly, have your dealer check the wheel alignment. When you have new tires installed, make sure they are balanced. This will increase vehicle ride comfort and tire life. Additionally, a tire should always be rebalanced if it is removed from the wheel.

### Tire sidewall labeling

This information identifies and describes the fundamental characteristics of the tire and also provides the Tire Identification Number (TIN) for safety standard certification.



The TIN can be used to identify the tire in case of a recall.

### 1. Manufacturer or brand name

Manufacturer or Brand name is shown.

### 2. Tire size designation

A tire's sidewall is marked with a tire size designation. You will need this information when selecting replacement tires for your vehicle. The following explains what the letters and numbers in the tire size designation mean.

Example tire size designation:

(These numbers are provided as an example only; your tire size designator could vary depending on your vehicle.)

#### **P235/65R17 108T**

- P: Applicable vehicle type (tires marked with the prefix "P" are intended for use on passenger vehicles or Light Trucks; however, not all tires have this marking).
- 235: Tire width in millimeters.
- 65: Aspect ratio. The tire's section height as a percentage of its width.
- R: Tire construction code (Radial).
- 17: Rim diameter in inches.

- 108: Load Index, a numerical code associated with the maximum load the tire can carry.
- T: Speed Rating Symbol. See the speed rating chart in this section for additional information.

### Wheel size designation

Wheels are also marked with important information that you need if you ever have to replace one. The following explains what the letters and numbers in the wheel size designation mean.

Example wheel size designation:

#### 7.0JX17

- 7.0: Rim width in inches.
- J: Rim contour designation.
- 17: Rim diameter in inches.

### Tire speed ratings

The chart below lists many of the different speed ratings currently being used for passenger vehicle tires. The speed rating is part of the tire size designation on the sidewall of the tire. This symbol corresponds to that tire's designed maximum safe operating speed.

Speed Rating Symbol	Maximum Speed
S	180 km/h (112 mph)
T	190 km/h (118 mph)
H	210 km/h (130 mph)
V	240 km/h (149 mph)
Z	Above 240 km/h (149 mph)

### 3. Checking tire life (TIN: Tire Identification Number)

Any tires that are over 6 years old, based on the manufacturing date, should be replaced by new ones. You can find the manufacturing date on the tire sidewall (possibly on the inside of the wheel), displaying the DOT Code. The DOT Code is a series of numbers on a tire consisting of numbers and English letters. The manufacturing date is designated by the last four digits (characters) of the DOT code.

#### DOT: XXXX XXXX OOOO

The front part of the DOT means a plant code number, tire size and tread pattern and the last four numbers indicate week and year manufactured.

For example:

DOT XXXX XXXX 1622 represents that the tire was produced in the 16th week of 2022.

#### WARNING

#### Tire age

Replace tires within the recommended time frame. Failure to replace tires as recommended can result in sudden tire failure, which could lead to a loss of control and an accident.

### 4. Tire ply composition and material

The number of layers or plies of rubber-coated fabric in the tire. Tire manufacturers also must indicate the materials in the tire, which include steel, nylon, polyester, and others. The letter "R" means radial ply construction; the letter "D" means diagonal or bias ply construction; and the letter "B" means belted-bias ply construction.

## 5. Maximum permissible inflation pressure

This number is the greatest amount of air pressure that should be put in the tire. Do not exceed the maximum permissible inflation pressure. Refer to the Tire and Loading Information label for recommended inflation pressure.

## 6. Maximum load rating

This number indicates the maximum load in kilograms and pounds that can be carried by the tire. When replacing the tires on the vehicle, always use a tire that has the same load rating as the factory installed tire.

## 7. Uniform Tire Quality Grading

Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width.

For example:

Treadwear 200

Traction AA

Temperature A

Tires degrade over time, even when they are not being used. Regardless of the remaining tread, we recommend that tires be replaced after approximately six (6) years of normal service. Heat caused by hot climate or frequent high loading conditions can accelerate the aging process.

### Tread wear

The tread wear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one-and-a-half times (1½) as well

on the government course as a tire graded 100.

The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

These grades are molded on the sidewalls of passenger vehicle tires. The tires available as standard or optional equipment on your vehicle may vary with respect to grade.

### Traction - AA, A, B & C

The traction grades, from highest to lowest, are AA, A, B and C. Those grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning, or peak traction characteristics.

### Temperature -A & B

The temperature grades are A (the highest), B representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. Grades B and A represent higher levels of performance on the laboratory test

wheel than the minimum required by law.

### Tire terminology and definitions

Refer to the following for detailed definitions of the terms that are found in the tire description.

**Air Pressure** The amount of air inside the tire pressing outward on the tire. Air pressure is expressed in pounds per square inch (psi) or kilopascal (kPa).

**Accessory Weight** This means the combined weight of optional accessories. Some examples of optional accessories are automatic transaxle, power seats, and air conditioning.

**Aspect Ratio** The relationship of a tire's height to its width.

**Belt** A rubber coated layer of cords that is located between the plies and the tread. Cords may be made from steel or other reinforcing materials.

**Bead** The tire bead contains steel wires wrapped by steel cords that hold the tire onto the rim.

**Bias Ply Tire** A pneumatic tire in which the plies are laid at alternate angles less than 90 degrees to the centerline of the tread.

**Cold Tire Pressure** The amount of air pressure in a tire, measured in pounds per square inch (psi) or kilopascal (kPa) before a tire has built up heat from driving.

**Curb Weight** This means the weight of a motor vehicle with standard and optional equipment including the maximum capacity of fuel, oil and coolant, but without passengers and cargo.

**DOT Markings** The DOT code includes the Tire Identification Number (TIN), an alphanumeric designator which can also

identify the tire manufacturer, production plant, brand and date of production.

**GVWR** Gross Vehicle Weight Rating

**GAWR FRT** Gross Axle Weight Rating for the Front Axle.

**GAWR RR** Gross Axle Weight Rating for the Rear axle.

**Intended Outboard Sidewall** The side of an asymmetrical tire that must always face outward when mounted on a vehicle.

**Kilopascal (kPa)** The metric unit for air pressure.

**Light Truck (LT) tire** A tire designated by its manufacturer as primarily intended for use on lightweight trucks or multipurpose passenger vehicles.

**Load ratings** The maximum load that a tire is rated to carry for a given inflation pressure.

**Load Index** An assigned number ranging from 1 to 279 that corresponds to the load carrying capacity of a tire.

**Maximum Inflation Pressure** The maximum air pressure to which a cold tire may be inflated. The maximum air pressure is molded onto the sidewall.

**Maximum Load Rating** The load rating for a tire at the maximum permissible inflation pressure for that tire.

**Maximum Loaded Vehicle Weight** The sum of curb weight; accessory weight; vehicle capacity weight; and production options weight.

**Normal Occupant Weight** The number of occupants a vehicle is designed to seat multiplied by 68 kg (150 pounds).

**Occupant Distribution** Designated seating positions.

**Outward Facing Sidewall** The side of an asymmetrical tire that has a particular side that faces outward when mounted

on a vehicle. The outward facing sidewall bears white lettering or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same moldings on the inner facing sidewall.

**Passenger (P-Metric) Tire** A tire used on passenger cars and some light duty trucks and multipurpose vehicles.

**Ply** A layer of rubber-coated parallel cords.

**Pneumatic tire** A mechanical device made of rubber, chemicals, fabric and steel or other materials, that, when mounted on an automotive wheel, provides the traction and contains the gas or fluid that sustains the load.

**Production options weight** The combined weight of installed regular production options weighing over 2.3 kg (5 lbs.) in excess of the standard items which they replace, not previously considered in curb weight or accessory weight, including heavy duty brakes, ride levelers, roof rack, heavy duty battery, and special trim.

### **Recommended Inflation Pressure**

Vehicle manufacturer's recommended tire inflation pressure and shown on the tire placard.

**Radial Ply Tire** A pneumatic tire in which the ply cords that extend to the beads are laid at 90 degrees to the centerline of the tread.

**Rim** A metal support for a tire and upon which the tire beads are seated.

**Sidewall** The portion of a tire between the tread and the bead.

**Speed Rating** An alphanumeric code assigned to a tire indicating the maximum speed at which a tire can operate.

**Traction** The friction between the tire and the road surface. The amount of grip provided.

**Tread** The portion of a tire that comes into contact with the road.

**Treadwear Indicators** Narrow bands, sometimes called "wear bars," that show across the tread of a tire when only 1.6 mm (2/32 inch) of tread remains.

**UTQGS** Uniform Tire Quality Grading Standards, a tire information system that provides consumers with ratings for a tire's traction, temperature and treadwear. Ratings are determined by tire manufacturers using government testing procedures. The ratings are molded into the sidewall of the tire.

**Vehicle Capacity Weight** The number of designated seating positions multiplied by 68 kg (150 lbs.) plus the rated cargo and luggage load.

### **Vehicle Maximum Load on the Tire**

Load on an individual tire due to curb and accessory weight plus maximum occupant and cargo weight.

**Vehicle Normal Load on the Tire** Load on an individual tire that is determined by distributing to each axle its share of the curb weight, accessory weight, and normal occupant weight and dividing by 2.

**Vehicle Placard** A label permanently attached to a vehicle showing the original equipment tire size and recommended inflation pressure.

### **All season tires**

Kia specifies all season tires on some models to provide good performance for use all year round, including snowy and icy road conditions.

All season tires are identified by ALL SEASON and/or M+S (Mud and Snow)

on the tire sidewall. Snow tires have better snow traction than all season tires and may be more appropriate in some areas.

### Summer tires

Kia specifies summer tires on some models to provide superior performance on dry roads.

Summer tire performance is substantially reduced in snow and ice. Summer tires do not have the tire traction rating M+S (Mud and Snow) on the tire sidewall. If you plan to operate your vehicle in snowy or icy conditions, Kia recommends the use of snow tires or all season tires on all four wheels.

### Snow tires

If you equip your vehicle with snow tires, they should be the same size and have the same load capacity as the original tires.

Snow tires should be installed on all four wheels; otherwise, poor handling may result.

Snow tires should carry 28 kPa (4 psi) more air pressure than the pressure recommended for the standard tires on the tire label on the driver's side of the center pillar, or up to the maximum pressure shown on the tire sidewall, whichever is less.

Do not drive faster than 120 km/h (75 mph) when your vehicle is equipped with snow tires.

### WARNING

Do not use summer tires at temperatures below 7 °C (45 °F) or when driving on snow or ice. At temperatures below 7 °C (45 °F), summer tires can lose elasticity, and therefore traction and braking power as well. Change the tires on your

vehicle to winter or all-weather tires of the same size as the standard tires of the vehicle. Both types of tires are identified by the M+S (Mud and Snow) marking. Using summer tires at very cold temperatures could cause cracks to form, thereby damaging the tires permanently.

### Radial-ply tires

Radial-ply tires provide improved tread life, road hazard resistance and smoother high speed ride.

The radial-ply tires used on this vehicle are of belted construction, and are selected to complement the ride and handling characteristics of your vehicle. Radial-ply tires have the same load carrying capacity, as bias-ply or bias belted tires of the same size, and use the same recommended inflation pressure.

Mixing of radial-ply tires with bias-ply or bias belted tires is not recommended. Any combinations of radial-ply and bias-ply or bias belted tires when used on the same vehicle will seriously deteriorate vehicle handling. The best rule to follow is: Identical radial-ply tires should always be used as a set of four.

Longer wearing tires can be more susceptible to irregular tread wear. It is very important to follow the tire rotation interval shown in this section to achieve the tread life potential of these tires. Cuts and punctures in radial-ply tires are repairable only in the tread area, because of sidewall flexing. Consult your tire dealer for radial-ply tire repairs.

## Low aspect ratio tire (if equipped)

Low aspect ratio tires, whose aspect ratio is lower than 50, are provided for sporty looks.

Because the low aspect ratio tires are optimized for handling and braking, it may be more uncomfortable to ride in and there is more noise compare with normal tires.

### CAUTION

Because the sidewall of the low aspect ratio tire is shorter than the normal, the wheel and tire of the low aspect ratio tire is easier to be damaged. So, follow the instructions below.

- When driving on a rough road or off road, drive cautiously because tires and wheels may be damaged. And after driving, inspect tires and wheels.
  - When passing over a pothole, speed bump, manhole, or curb stone, drive slowly so that the tires and wheels are not damaged.
  - If the tire is impacted, we recommend that you inspect the tire condition or contact an authorized Kia dealer.
  - To prevent damage to the tire, inspect the tire condition and pressure every 3,000 km (1,900 miles).
- 
- It is not easy to recognize the tire damage with your own eyes. But if there is the slightest hint of tire damage, even though you cannot see the tire damage with your own eyes, have the tire checked or replaced because the tire damage may cause air leakage from the tire.
  - If the tire is damaged by driving on a rough road, off road, pothole, man-

hole, or curb stone, it will not be covered by the warranty.

- You can find out the tire information on the tire sidewall.



## Fuses

A vehicle's electrical system is protected from electrical overload damage by fuses.

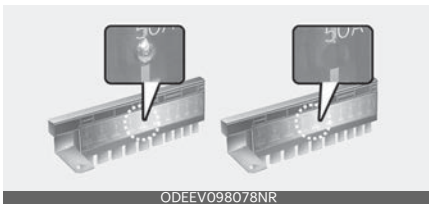
Blade type



Cartridge type



Multi fuse



BFT



\* Left side: Normal, Right side: Blown  
This vehicle has 2 (or 3) fuse panels, one located in the driver's side panel bolster, the other in the motor compartment near the battery.

If any of your vehicle's lights, accessories, or controls do not work, check the appropriate circuit fuse. If a fuse has blown, the element inside the fuse will melt.

If the electrical system does not work, first check the driver's side fuse panel. If the replacement fuse blows, this indicates an electrical problem. Avoid using the system involved and immediately consult an authorized Kia dealer.

Three kinds of fuses are used: blade type for lower amperage rating, cartridge type, and multi fuse for higher amperage ratings.

### **⚠ WARNING**

#### Fuse replacement

- Never replace a fuse with anything but another fuse of the same rating.
- A higher capacity fuse could cause damage and possibly a fire.
- Never install a wire or aluminum foil instead of the proper fuse - even as a temporary repair. It may cause extensive wiring damage and a possible fire.
- Do not arbitrarily modify or add-on electric wiring to the vehicle.

### **\* NOTICE**

- When replacing a fuse, change START/STOP button to the OFF position and turn off switches of all electrical devices then remove battery (-) terminal.
- The actual fuse/relay panel label may differ from equipped items.

**⚠ WARNING****Electrical Fire**

Always ensure replacements fuses and relays are securely fastened when installed. Failure to do so can result in a vehicle fire.

Do not remove fuses, relays and terminals fastened with bolts or nuts. The fuses, relays and terminals may be fastened incompletely, and it may cause a possible fire. If fuses, relays and terminals fastened with bolts or nuts are blown, we recommend that you consult with an authorized Kia dealer.

**⚠ CAUTION**

- When replacing a blown fuse or relay, make sure the new fuse or relay fits tightly into the clips. Failure to tightly install the fuse or relay may cause damage to the wiring and electric systems.

**⚠ CAUTION**

- Do not input any other objects except fuses or relays into fuse/relay terminals such as a screwdriver or wiring. It may cause contact failure and system malfunction.
- Do not plug in screwdrivers or after-market wiring into the terminal originally designed for fuse and relays only. The electrical system and wiring of the vehicle interior may be damaged or burned due to contact failure.
- If you directly connect the wire on the taillight or replace the bulb which is over the regulated capacity to install trailers etc., the inner junction block can get burned.

**⚠ WARNING****Electrical wiring repairs**

All electrical repairs should be performed by an authorized Kia dealerships using approved Kia parts. Using other wiring components, especially when retrofitting Infotainment or theft alarm system, car phone or radio may cause vehicle damage and increase the risk of a vehicle fire.

**\* NOTICE****Remodeling Prohibited**

Do not rewire your vehicle in any way as doing so may affect the performance of several safety features in your vehicle. Rewiring your vehicle may also void your warranty and cause you to be responsible for any subsequent vehicle damage which may result.

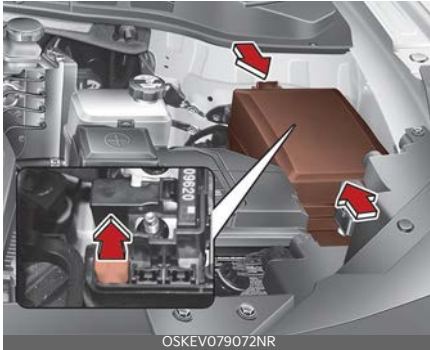
**Replacing inner panel fuse**

1. Turn the START/STOP button and all other switches off.
2. Open the fuse panel cover.



To identify the location of a specific fuse, please refer to the inside of the fuse panel cover and the description list in this section.

- Pull the suspected fuse straight out.  
Use the removal tool provided on the motor compartment fuse panel cover.



- Check the removed fuse; replace it if it is blown.  
Spare fuses are provided in the motor compartment fuse panel.
- Push in a new fuse of the same rating, and make sure it fits tightly in the clips.

If it fits loosely, consult an authorized Kia dealer.

If you do not have a spare, use a fuse of the same rating from a circuit you may not need for operating the vehicle, such as the power outlet fuse.

If the head lamp, turn signal lamp, stop signal lamp, fog lamp, DRL, tail lamp, HMSL do not work and the fuses are OK, check the fuse panel in the motor compartment. If a fuse is blown, it must be replaced.

#### \* NOTICE

If the headlamp, fog lamp, turn signal lamp, or tail lamp malfunction even without any problem to the lamps, have the vehicle checked by an authorized Kia dealer for assistance.

#### ⚠ CAUTION

##### Fuse Panel Covers

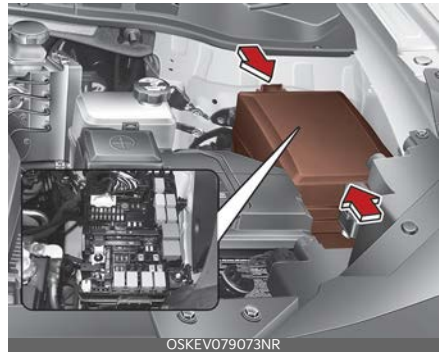
The contact points of the switches may wear out with excessive use. Please refrain from excessive use of the switches (except for long-term parking for over 1 month).

#### \* NOTICE

- If the vehicle is going to be unused for over 1 month, set all switches to OFF to prevent the batteries from draining.

### Replacing motor compartment fuse

- Turn the START/STOP button and all other switches off.
- Remove the fuse panel cover by pressing the tab and pulling the cover up.

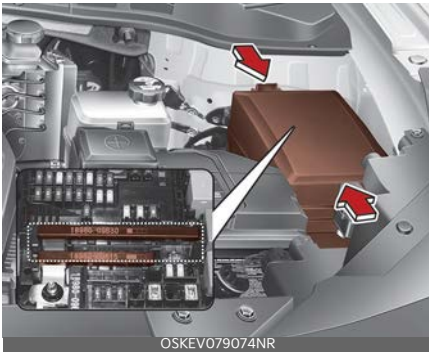


- Check the removed fuse; replace it if it is blown. To remove or insert the fuse, use the fuse puller in the motor compartment fuse panel.
- Push in a new fuse of the same rating, and make sure it fits tightly in the clips. If it fits loosely, consult an authorized Kia dealer.

## ⚠ CAUTION

Always securely install the fuse panel cover in the motor compartment to protect against electrical failure which may occur from water contact. Listen for the audible clicking sound to ensure fuse panel cover is securely fastened.

## Multi fuse



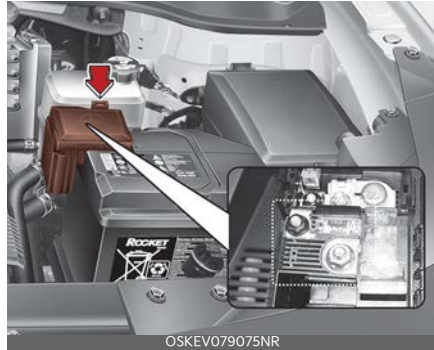
If the multi fuse is blown, it must be removed as follows:

1. Turn the ignition switch and all other switches off.
2. Disconnect the negative battery cable.
3. Remove the nuts shown in the picture above.
4. Replace the fuse with a new one of the same rating.
5. Reverse these steps to reinstall the multi fuse.

## \* NOTICE

Do not disassemble nor assemble the multi fuse when it is secured with nuts and bolts. Incorrect or partial assembly torque may cause a fire. Have the vehicle checked by an authorized Kia dealer

## Main fuse



If the multi fuse is blown, it must be removed as follows:

1. Turn the ignition switch and all other switches off.
2. Disconnect the negative battery cable.
3. Remove the nuts shown in the picture above.
4. Replace the fuse with a new one of the same rating.
5. Reverse these steps to reinstall the main fuse.

## \* NOTICE

Do not disassemble nor assemble the main fuse when it is secured with nuts and bolts. Incorrect or partial assembly torque may cause a fire. Have the vehicle checked by an authorized Kia dealer

## \* NOTICE

The electronic system may not function correctly even when the motor compartment and internal fuse box's individual fuses are not disconnected. In such case the cause of the problem may be disconnection of the main fuse (BFT type), which is located inside the positive battery terminal (+) cap.

Since the main fuse is designed more intricately than other parts, have the vehicle checked by an authorized Kia dealer.

---

### **Fuse/relay panel description**

Inside the fuse/relay panel covers, you can find the fuse/relay label describing fuse/relay name and capacity.

### Driver's side fuse panel



OSKEV071012L

### \* NOTICE

Not all fuse panel descriptions in this manual may be applicable to your vehicle. It is accurate at the time of printing. When you inspect the fuse panel in your vehicle, refer to the fuse panel label on the inside of the fuse cover. This diagram will provide you with the specific information for your vehicles.

SPARE	10A	4 MODULE	7.5A	MULTI MEDIA	15A	IG1	WASHER	15A	MDPS	7.5A	CLUSTER	7.5A	2 IBU	7.5A	1 AIR BAG	15A
1 MEMORY	10A	SPARE	15A	5 MODULE	10A	2 WIPER FRT	10A	25A	SPARE	10A	7 MODULE	7.5A	3 MODULE	7.5A	A/BAG IND	7.5A
1 MODULE	7.5A	2 MEMORY	10A	WIPER RR	15A	A/C	1 WIPER FRT	25A	SUNROOF	20A	START	7.5A	6 MODULE	7.5A	SPARE	10A
TAILGATE OPEN	10A	S/HEATER RR	20A	DOOR LOCK	20A	2 AIR BAG	10A	SPARE	25A	SPARE	20A	SPARE	15A	2 MODULE	10A	SPARE
P/WINDOW RH	25A	HEATED MIRROR	10A	1 IBU	15A											POWER OUTLET
P/WINDOW LH	25A	S/HEATER FRT	20A	BRAKE SWITCH	10A											
P/SEAT (DRV)	25A	AMP	25A	P/SEAT (PASS)	25A											

91990-J2020  
USE THE DESIGNATED FUSE ONLY

OSKEV079095NR

Refer to the following table for a description of the fuse.

Fuse Name	Fuse rating	Circuit Protected
POWER OUTLET	20 A	Front Power Outlet
MODULE2	10 A	E/R Junction Block (Power Outlet Relay), Audio, Rear USB Charger, Wireless Charger, Sound Mood Amplifier, Amplifier, Driver/Passenger Door Mood Range Amplifier, Power Outside Mirror Switch, A/V & Navigation Head Unit, IBU (Integrated Body Control Unit)

Fuse Name	Fuse rating	Circuit Protected
HEATED MIRROR	10 A	Driver/Passenger Power Outside Mirror, Air Conditioner Control Module
IG1	25 A	PCB Block (Fuse - IE2, IE3)
AIR BAG1	15 A	Occupant Detection Sensor, SRS (Supplemental Restraint System) Control Module
A/BAG IND	7.5 A	Instrument Cluster, Air Conditioner Control Module
IBU2	7.5 A	IBU (Integrated Body Control Unit)
CLUSTER	7.5 A	HUD, Instrument Cluster
MDPS *1	7.5 A	MDPS (Motor Driven Power Steering) Unit
MODULE3	7.5 A	Stop Amplifier Switch
MODULE4	7.5 A	Multifunction Camera, IBU (Integrated Body Control Unit), Forward Collision Avoidance Assist Unit, Crash Pad Switch, Blind-Spot Collision Warning Unit LH/RH, VESS (Virtual Engine Sound System) Unit (Speaker)
MODULE5	10 A	Front Air Ventilation Seat Control Module, Crash Pad Switch, A/V & Navigation Head Unit, Front Seat Warmer Control Module, Rear Seat Warmer Module, Audio, Electro Chromic Mirror
A/C	7.5 A	Air Conditioner Control Module,
WIPER FRT1	25 A	Front Wiper Motor, PCB Block (Front Wiper (Low) Relay)
WIPER RR	15 A	Rear Wiper Motor, ICM Relay Box (Rear Wiper Relay)
WASHER	15 A	Multifunction Switch
MODULE6	7.5 A	IBU (Integrated Body Control Unit)
MODULE7	7.5 A	Front/Rear Seat Warmer Control Module, Front Air Ventilation Seat Control Module, E/R Junction Block (W/S Heated Glass LH Relay)
E-SHIFTER	10 A	Driver Console Switch, Shift Select Switch (SBW)
WIPER FRT2	10 A	Front Wiper Motor, PCB Block (Front Wiper (Low) Relay), IBU (Integrated Body Control Unit)
START	7.5 A	IBU (Integrated Body Control Unit), EPCU
P/WINDOW LH	25 A	Power Window LH Relay, Driver Safety Power Window Module
P/WINDOW RH	25 A	Power Window RH Relay, Passenger Safety Power Window Module
TAILGATE OPEN	10 A	Tail Gate Open Relay
SUNROOF	20 A	Sunroof Motor
AMP	25 A	Amplifier
S/HEATER FRT	20 A	Front Seat Warmer Control Module, Front Air Ventilation Seat Control Module
P/SEAT (DRV)	25 A	Driver Seat Manual Switch
P/SEAT (PASS)	25 A	Passenger Seat Manual Switch
S/HEATER RR	20 A	Rear Seat Warmer Control Module
DOOR LOCK	20 A	Door Lock/Unlock Relay, ICM Relay Box (T/Turn Unlock Relay)
BRAKE SWITCH	10 A	Stop Amplifier Switch, IBU (Integrated Body Control Unit)
IBU1	15 A	IBU (Integrated Body Control Unit)
AIR BAG2	10 A	SRS (Supplemental Restraint System) Control Module
MODULE1	7.5 A	Hazard Switch, Active Air Flap Unit, Rain Sensor, Data Link Connector
MEMORY1	10 A	Instrument Cluster, HUD
MEMORY2	10 A	Air Conditioner Control Module
MULTI MEDIA	15 A	Audio, A/V & Navigation Head Unit

\*1: MDPS (Motor Driven Power Steering) is the same as EPS (Electric Power Steering).





	Fuse Name	Fuse rating	Circuit Protected
MUTL FUSE	LDC	150 A	Fuse: POWER OUTLET1, IEB1, IEB2, CHARGER1, Air Conditioner, EPCU
	MDPS *1	80 A	MDPS (Motor Driven Power Steering) Unit
	B+5	60 A	PCB Block (Main Relay, Fuse: BATTERY MANAGEMENT, HORN, EPCU1)
	B+2	60 A	ICU Junction Block (IPS (Instrument Panel Module) Control Module, IPS (Instrument Panel Module)(ICH))
	B+3	60 A	ICU Junction Block (IPS (Instrument Panel Module) Control Module)
	B+4	50 A	ICU Junction Block (Fuse: TAIL GATE OPEN, SUNROOF, Amplifier, P/WINDOW LH, P/WINDOW RH, S/HEATER FRT, P/SEAT (PASS), P/SEAT (DRV))
	COOLING FAN	60 A	Cooling Fan Relay
	REAR HEATED	40 A	Rear Heated Relay
	BLOWER	40 A	Blower Relay
	IG1	40 A	PDM (IG1) #2 Relay, PDM (ACC) #1 Relay
	IG2	40 A	PDM (IG2) #3 Relay
	IEB4	80 A	Integrated Mobis Electronic Brake Control Module (Motor)
	W/S HEATED GLASS LH	50 A	W/S Heated Glass LH Relay
	W/S HEATED GLASS RH	50 A	W/S Heated Glass RH Relay
FUSE	POWER OUTLET3	20 A	Front USB Charger
	POWER OUTLET2	20 A	Rear Power Outlet
	OBC	10 A	OBC (On-Board Charger)
	CHARGER2	10 A	Charger Lock Relay, Charger Unlock Relay
	IG3 5	20 A	IG3 2 Relay, IG3 1 Relay
	B+1	40 A	Long Term Load Latch Relay, ICU Junction Block (Fuse: DOOR LOCK, S/HEATER RR, BRAKE SWITCH, IBU (Integrated Body Control Unit)1, AIR BAG2, MODULE1)
	E-SHIFTER1	40 A	E-Shifter Relay, Fuse: E-SHIFTER2
	CHARGER1	10 A	Charge Door Module, CCM Unit
	A/C	15 A	Air Conditioner Control Module
	IEB1	40 A	Multipurpose Check Connector, Integrated Mobis Electronic Brake Control Module
	IEB2	40 A	Integrated Mobis Electronic Brake Control Module
	POWER OUTLET1	40 A	Power Outlet Relay
	E-SHIFTER2	10 A	SCU, Shift Select Switch (SBW)
	HORN	15 A	Horn Relay
	EPCU1	15 A	EPCU
	IG3 2	10 A	OBC (On-Board Charger), EPCU, Electronic Air Conditioner Compressor
	BATTERY MANAGEMENT	15 A	BMU
	ELECTRICAL WATER PUMP	15 A	Electronic Water Pump (BMS, ER)
	IG3 4	10 A	Charger Door Module, Active Air Flap Unit, ICU Junction Block (IPS (Instrument Panel Module) Control Module), Instrument Cluster, Charger LAmplifier, Audio,AV & Navigation Head Unit
	IG3 1	15 A	E/R Junction Block (IG3 2 Relay, IG3 1 Relay)
	IEB3	10 A	Multipurpose Check Connector, Data Link Connector, Integrated Mobis Electronic Brake Control Module
	E-SHIFTER3	10 A	SCU
	IG3 3	10 A	3Way Coolant Control Valve LH/RH, E/R Junction Block (Cooling Fan Relay, Blower Relay), Air Conditioner Control Module, CCM Unit, Air Conditioning PTC Heater
	IEB2	10 A	EPCU

\*1: MDPS (Motor Driven Power Steering) is the same as EPS (Electric Power Steering).

Refer to the following table for the relay type.

Relay Name	Type
Charger Unlock Relay	MICRO
Charger Lock Relay	MICRO
PDM (IG1) 2 Relay	MICRO
Power Outlet Relay	MICRO
IG3 1 Relay	MICRO
PDM (IG2) 3 Relay	MICRO
Rear Heated Relay	MICRO
PDM (ACC) 1 Relay	MICRO
Cooling Fan Relay	MINI
Blower Relay	MINI
E-Shifter Relay	MICRO
W/S Heated Glass LH Relay	MICRO
W/S Heated Glass RH Relay	MICRO
IG3 2 Relay	MICRO

### Battery terminal cover



### \* NOTICE

Not all fuse panel descriptions in this manual may be applicable to your vehicle. It is accurate at the time of printing. When you inspect the fuse panel in your vehicle, refer to the fuse panel label.



HYUNDAI KIA



use

>PP-TD20<

91971-F2100

AMS 10A

지정된 퓨즈만 사용하세요

USE THE DESIGNATED FUSE ONLY

используйте только предназначенные предохранители

USE SOLO LOS FUSIBLES ESPECIFICADOS

استخدم الفيوز ذو القياس المناسب

OSK3078015NR

## Light bulbs

Light bulbs are installed in various parts of the vehicle to provide lighting inside and outside the vehicle as well as to alert other vehicles.

### Bulb replacement precaution

Please keep extra bulbs on hand with appropriate wattage ratings in case of emergencies.

Refer to "Bulb wattage" on page 9-3.

When changing lamps, first turn off the vehicle at a safe place, firmly apply the parking brake and detach the battery's negative (-) terminal.

### **⚠ WARNING**

#### Working on the lights

Prior to working on the light, firmly apply the parking brake, ensure that the vehicle START/STOP button is in OFF position and turn off the lights to avoid sudden movement of the vehicle and burning your fingers or receiving an electric shock.

Use only bulbs of the specified wattage.

### **⚠ CAUTION**

#### Light replacement

Be sure to replace the burned-out bulb with one of the same wattage rating. Otherwise, it may cause damage to the fuse or electric wiring system.

### **⚠ CAUTION**

#### Headlamp Lens

To prevent damage, do not clean the headlamp lens with chemical solvents or strong detergents.

### **\* NOTICE**

- If the light bulb or lamp connector is removed while the lamp is still on, the fuse box's electronic system may log it as a malfunction. Therefore, a lamp malfunction incident may be recorded as a Diagnostic Trouble Code (DTC) in the fuse box.
- It is normal for an operating lamp to flicker momentarily. This is due to a stabilization function of the vehicle's electronic control device. If the lamp lights up normally after momentarily blinking, then it is functioning as normal. However, if the lamp continues to flicker several times or turns off completely, there may be an error in the vehicle's electronic control device. Please have the vehicle checked by an authorized Kia dealer immediately.

### **\* NOTICE**

We recommend that the headlight aiming be adjusted by an authorized Kia dealer after an accident or after the headlight assembly is reinstalled.

### **\* NOTICE**

You can find moisture inside the lens of lamps after a car wash or driving in the rain. It is a natural event caused by the temperature difference between the inside and the outside of the lamp and does not mean a problem with its functions. The moisture inside the lamp would disappear if you drive the vehicle with the headlamp turned on, however, the level at which the moisture is removed may differ depending on the size/location/condition of the lamp. If the moisture continues to stay inside the

lamp, have the vehicle checked by an authorized Kia dealer.

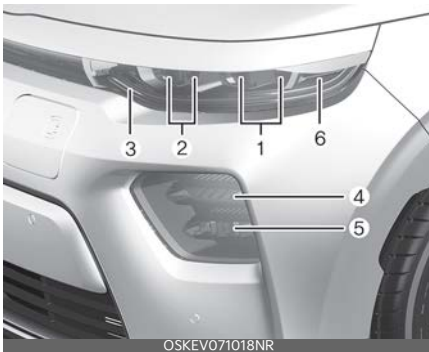
If you don't have the necessary tools, the correct bulbs and the expertise, consult an authorized Kia dealer. In many cases, it is difficult to replace vehicle light bulbs because other parts of the vehicle must be removed before you can get to the bulb. This is especially true if you have to remove the headlamp assembly to get to the bulb(s).

Removing/installing the headlamp assembly can result in damage to the vehicle. If non-genuine parts or substandard bulbs are used, it may lead to blowing a fuse or other wiring damages. Kia Genuine Parts we guarantee for quality and performance.

Do not install extra lamps or LEDs to the vehicle. If additional lights are installed, it may lead to lamp malfunctions and flickering. Additionally, the fuse box and other wiring may be damaged.

### Light bulb position (Front)

Head lamp

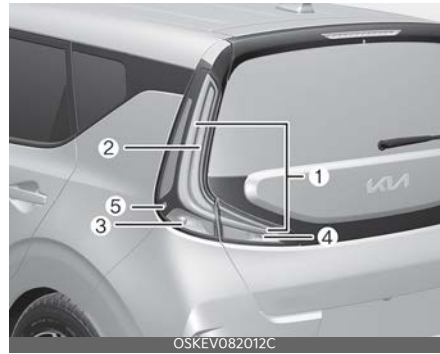


1. Headlamp (LED Type) (Low)
2. Headlamp (LED Type) (High/Sub low)

3. Position lamp/Daytime running lamp (LED Type)
4. Front turn signal lamp (LED Type)
5. Front fog lamp (LED Type)
6. Side marker (LED Type)

### Light bulb position (Rear)

Rear combination lamp



License plate lamp



High mounted stop lamp



1. Tail lamp (LED type)
2. Stop lamp (LED type)
3. Rear turn signal lamp (Bulb type)
4. Back-up lamp (Bulb type)
5. Side marker (LED Type)
6. License plate lamp (Bulb type)
7. High mounted stop lamp (LED type)

Light bulb position (Side)

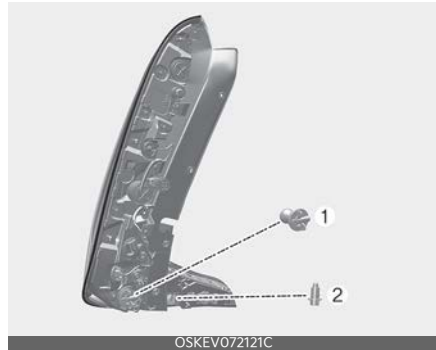


1. Side repeater lamp (LED type)

Replacing turn signal lamp



1. Open the liftgate.
2. Loosen the lamp assembly retaining screws with a screwdriver.
3. Remove the rear combination lamp assembly from the body of the vehicle.



4. Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
5. Remove the bulb from the socket by pressing it in and rotating it counterclockwise until the tabs on the bulb align with the slots in the socket.
6. Insert a new bulb by inserting it into the socket and rotating it until it locks into place.

7. Install the socket in the assembly by aligning the tabs on the socket with the slots in the assembly and turning the socket clockwise.
8. Reinstall the lamp assembly to the body of the vehicle.

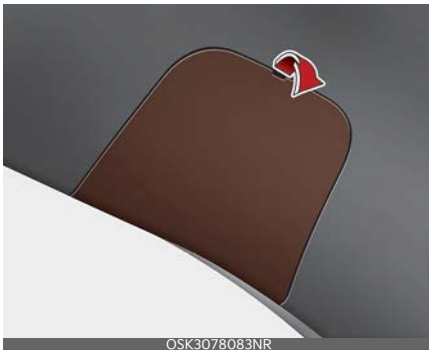
### Replacing lights (LED type)

If the LED lamp does not operate, have your vehicle checked by an authorized Kia dealer. The LED lamp cannot be replaced as a single component because it is an integrated unit. The LED lamp has to be replaced with the unit.

A skilled technician should check or repair the LED lamp, for it may damage related parts of the vehicle.

### Replacing back-up lamp bulb

1. Open the liftgate.
2. Remove the service cover assembly to the body of the vehicle.  
(Loosen the lamp assembly retaining screws and remove the lamp assembly from the body of the vehicle for back-up lamp)



3. Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.

### Back-up lamp



4. Remove the bulb from the socket by pressing it in and rotating it counterclockwise until the tabs on the bulb align with the slots in the socket. Pull the bulb out of the socket.
5. Insert a new bulb by inserting it into the socket and rotating it until it locks into place.
6. Install the socket in the assembly by aligning the tabs on the socket with the slots in the assembly. Push the socket into the assembly and turn the socket clockwise.
7. Install the service cover by putting it into the service hole.

## Replacing High Mounted Stop Lamp (HMSL) (LED type)

If the HMSL (LED) (8), does not operate, have the vehicle checked by an authorized Kia dealer.

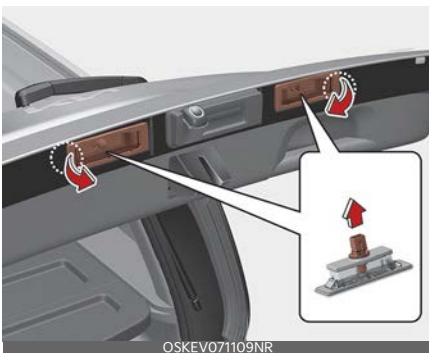


OSKEV072022C

The LED lamps cannot be replaced as a single component because it is an integrated unit. The LED lamps have to be replaced with the unit.

A skilled technician should check or repair the HMSL (LED), for it may damage related parts of the vehicle.

## Replacing license plate lamp (bulb type)



OSKEV071109NR

1. Remove the lamp assembly by using a flat-blade screwdriver.
2. Remove the socket from the assembly by turning the socket counterclock-

wise until the tabs on the socket align with the slots on the assembly.

3. Remove the bulb from bulb-socket by pulling it out.
4. Insert a new bulb by inserting it into the bulb-socket.
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. Install the lamp assembly to the body of the vehicle.

## Replacing map lamp (bulb type)



OSK3078084NR

1. Using a flat-blade screwdriver, gently pry the lens cover from lamp housing.
2. Remove the bulb by pulling it straight out.
3. Install a new bulb in the socket.
4. Align the lens cover tabs with the lamp housing notches and snap the lens into place.

### \* NOTICE

Be careful not to dirty or damage the lens, lens tab, and plastic housings. Allow the bulb to cool down before handling it.



### Replacing vanity mirror lamp (bulb type) (if equipped)



#### **⚠ WARNING**

#### **Interior lamps**

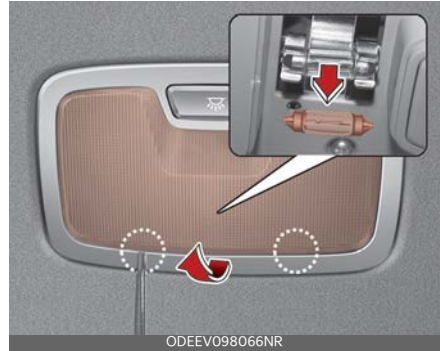
Prior to working on the Interior lamps, ensure that the "OFF" button is depressed to avoid burning your fingers or receiving an electric shock.

1. Using a flat-blade screwdriver, gently pry the lamp assembly from interior.
2. Remove the bulb by pulling it straight out.
3. Install a new bulb in the socket.
4. Install the lamp assembly to interior.

#### **\* NOTICE**

Be careful not to dirty or damage the lens, lens tab, and plastic housings.

### Replacing room lamp (bulb type)



#### **⚠ WARNING**

#### **Interior lamps**

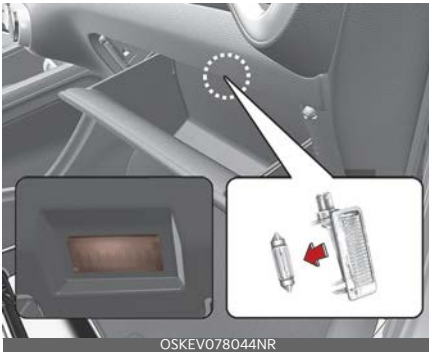
Prior to working on the Interior lamps, ensure that the "OFF" button is depressed to avoid burning your fingers or receiving an electric shock.

1. Using a flat-blade screwdriver, gently pry the lens cover from lamp housing.
2. Remove the bulb by pulling it straight out.
3. Install a new bulb in the socket.
4. Align the lens cover tabs with the lamp housing notches and snap the lens into place.

#### **\* NOTICE**

Be careful not to dirty or damage the ODE076049 lens, lens tab, and plastic housings.

## Replacing glove box lamp (if equipped)



1. Using a flat-blade screwdriver, gently pry the lamp assembly from interior.
2. Remove the bulb by pulling it straight out.
3. Install a new bulb in the socket.
4. Install the lamp assembly to interior.

### ⚠ CAUTION

Be careful not to dirty or damage the lens, lens tab, and plastic housings.

## Replacing liftgate room lamp (bulb type)



1. Using a flat-blade screwdriver, gently pry the lens cover from lamp housing.

2. Remove the bulb by pulling it straight out.
3. Install a new bulb in the socket.
4. Align the lens cover tabs with the lamp housing notches and snap the lens into place.

### \* NOTICE

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 it also helps to prolong the life of the vehicle.

#### \* NOTICE

If you park the vehicle around a stainless signboard or windshield building etc., the plastic exterior trim (bumper, spoiler, garnish, lamp, outside mirror etc.) may be damaged by reflected sunlight from the external structure. To avoid damaging the plastic exterior trim, park the vehicle away from the areas where the reflected light may occur or use a vehicle cover. (Depending on the vehicle, the type of exterior trim applied such as spoiler may differ.)

### Exterior general caution

It is very important to follow the label directions when using any chemical cleaner or polish. Read all warning and caution statements that appear on the label.

## Finish maintenance

### Washing

To help protect your vehicle's finish from rust and deterioration, wash it thoroughly and frequently at least once a month with lukewarm or cold water.

If you use your vehicle for off-road driving, you should wash it after each off-road trip. Pay special attention to the removal of any accumulation of salt, dirt, mud, and other foreign materials. Make sure the drain holes in the lower edges of the doors and rocker panels are kept clear and clean.

Insects, tar, tree sap, bird droppings, industrial pollution and similar deposits can damage your vehicle's finish if not removed immediately.

Even prompt washing with plain water may not completely remove all these deposits. A mild soap, safe for use on painted surfaces, may be used.

After washing, rinse the vehicle thoroughly with lukewarm or cold water. Do not allow soap to dry on the finish.

After washing the vehicle, test the brakes while driving slowly to see if they have been affected by water. If braking performance is impaired, dry the brakes by applying them lightly while maintaining a slow forward speed.

#### ▲ CAUTION

- Do not use strong soap, chemical detergents or hot water, and do not wash the vehicle in direct sunlight or when the body of the vehicle is warm.
- Be careful when washing the side windows of your vehicle, especially with high-pressure water. Water may leak through the windows and wet the interior.

- To prevent damage to the plastic parts and lamps, do not clean with chemical solvents or strong detergents.

### High-pressure washing

When using high-pressure washers, make sure to maintain sufficient distance from the vehicle.

Insufficient clearance or excessive pressure can lead to component damage or water penetration.

Do not spray the camera, sensors or its surrounding area directly with a high pressure washer. Shock applied from high pressure water may cause the device to not operate normally.

Do not bring the nozzle tip close to boots (rubber or plastic covers) or connectors as they may be damaged if they come into contact with high pressure water.

### ⚠ WARNING

After washing the vehicle, test the brakes while driving slowly to see if they have been affected by water. If braking performance is impaired, dry the brakes by applying them lightly while maintaining a slow forward speed.

### ⚠ CAUTION

#### Wetting motor room compartment



- Water washing in the motor room compartment including high pressure water washing may cause the failure of electrical circuits located in the motor room compartment.
- Never allow water or other liquids to come in contact with electrical/electronic components inside the vehicle as this may damage them.
- To prevent damage to the charging door, make sure to close and lock the vehicle doors when washing (high-pressure washing, automatic car washing, etc.) the vehicle.

### Waxing

Wax the vehicle when water will no longer bead on the paint.

Always wash and dry the vehicle before waxing. Use a good quality liquid or paste wax, and follow the manufacturer's instructions. Wax all metal trim to protect it and to maintain its luster.

Removing oil, tar, and similar materials with a spot remover will usually strip the wax from the finish. Be sure to re-wax

these areas even if the rest of the vehicle does not yet need waxing.

### **▲ CAUTION**

#### **Drying vehicle**

- Wiping dust or dirt off the body with a dry cloth will scratch the finish.
- Do not use steel wool, abrasive cleaners, acid detergents or strong detergents containing high alkaline or caustic agents on chrome-plated or anodized aluminum parts. This may result in damage to the protective coating and cause discoloration or paint deterioration.

#### **Finish damage repair**

Deep scratches or stone chips in the painted surface must be repaired promptly. Exposed metal will quickly rust and may develop into a major repair expense.

### **\* NOTICE**

If your vehicle is damaged and requires any metal repair or replacement, be sure the body shop applies anti-corrosion materials to the parts repaired or replaced.

#### **Bright-metal maintenance**

To remove road tar and insects, use a tar remover, not a scraper or other sharp object.

To protect the surfaces of bright metal parts from corrosion, apply a coating of wax or chrome preservative and rub to a high luster.

During winter weather or in coastal areas, cover the bright metal parts with a heavier coating of wax or preservative.

If necessary, coat the parts with non-corrosive petroleum jelly or other protective compound.

#### **Underbody maintenance**

Road salt and other corrosive chemicals are used in cold weather states to melt snow and prevent ice accumulation. If these chemicals are not regularly removed, they will corrode the vehicle underbody and over time damage fuel lines, the fuel tank retention system, the vehicle suspension, the exhaust system, and even the body frame.

- Wash the undercarriage of your vehicle regularly during the winter and whenever your vehicle has been exposed to such salts or chemicals.
- Do a thorough washing of the undercarriage at the end of the winter.
- Use professional service technicians or governmental inspection stations to annually inspect for corrosion.
- Immediately seek an inspection of your vehicle if you become visually aware of corrosion flaking or scaling or if you become aware of a change in vehicle performance, such as soft or spongy brakes, fluids leaking, impairment of directional control, suspension noises or rattling metal straps.

#### **Aluminum wheel maintenance**

The aluminum wheels are coated with a clear protective finish.

- Do not use any abrasive cleaner, polishing compound, solvent, or wire brushes on aluminum wheels. They may scratch or damage the finish.
- Clean the wheel when it has cooled.
- Use only a mild soap or neutral detergent, and rinse thoroughly with water.

Also, be sure to clean the wheels after driving on salted roads. This helps prevent corrosion.

- Avoid washing the wheels with high speed vehicle wash brushes.
- Do not use any alkaline or acid detergents. It may damage and corrode the aluminum wheels coated with a clear protective finish.

## Corrosion protection

### Protecting your vehicle from corrosion

By using the most advanced design and construction practices to combat corrosion, we produce vehicles of the highest quality. However, this is only part of the job. To achieve the long-term corrosion resistance your vehicle can deliver, the owner's cooperation and assistance is also required.

### Common causes of corrosion

The most common causes of corrosion on your vehicle are:

- Road salt, dirt and moisture that is allowed to accumulate underneath the vehicle.
- Removal of paint or protective coatings by stones, gravel, abrasion or minor scrapes and dents which leave unprotected metal exposed to corrosion.

### High-corrosion areas

If you live in an area where your vehicle is regularly exposed to corrosive materials, corrosion protection is particularly important. Some of the common causes of accelerated corrosion are road salts,

dust control chemicals, ocean air and industrial pollution.

### Moisture breeds corrosion

Moisture creates the conditions in which corrosion is most likely to occur. For example, corrosion is accelerated by high humidity, particularly when temperatures are just above freezing. In such conditions, the corrosive material is kept in contact with the vehicle's surface by moisture that evaporates slowly.

Mud is particularly corrosive because it dries slowly and holds moisture in contact with the vehicle. Although the mud appears to be dry, it can still retain the moisture and promote corrosion.

High temperatures can also accelerate corrosion of parts that are not properly ventilated so the moisture can be dispersed. For all these reasons, it is particularly important to keep your vehicle clean and free of mud or accumulations of other materials. This applies not only to the visible surfaces but particularly to the underside of the vehicle.

### To help prevent corrosion

You can help prevent corrosion from beginning by observing the following:

### Keep your vehicle clean

The best way to prevent corrosion is to keep your vehicle clean and free of corrosive materials. Attention to the underside of the vehicle is particularly important.

If you live in a high-corrosion area — where road salts are used, near the ocean, areas with industrial pollution, acid rain, etc.—, you should take extra care to prevent corrosion. In winter, hose off the underside of your vehicle at least

once a month and be sure to clean the underside thoroughly when winter is over.

When cleaning underneath the vehicle, give particular attention to the components under the fenders and other areas that are hidden from view. Do a thorough job; just dampening the accumulated mud rather than washing it away will accelerate corrosion rather than prevent it. Water under high pressure and steam are particularly effective in removing accumulated mud and corrosive materials.

When cleaning lower door panels, rocker panels and frame members, be sure that drain holes are kept open so that moisture can escape and not be trapped inside to accelerate corrosion.

### Keep your garage dry

Don't park your vehicle in a damp, poorly ventilated garage. This creates a favorable environment for corrosion. This is particularly true if you wash your vehicle in the garage or drive it into the garage when it is still wet or covered with snow, ice or mud. Even a heated garage can contribute to corrosion unless it is well ventilated so moisture is dispersed.

### Keep paint and trim in good condition

Scratches or chips in the finish should be covered with "touch-up" paint as soon as possible to reduce the possibility of corrosion. If bare metal is showing through, the attention of a qualified body and paint shop is recommended.

**Bird droppings:** Bird droppings are highly corrosive and may damage painted surfaces in just a few hours.

Always remove bird droppings as soon as possible.

### Don't neglect the interior

Moisture can collect under the floor mats and carpeting and cause corrosion. Check under the mats periodically to be sure the carpeting is dry. Use particular care if you carry fertilizers, cleaning materials or chemicals in the vehicle.

These should be carried only in proper containers and any spills or leaks should be cleaned up, flushed with clean water and thoroughly dried.

### Interior care

Use the information in the following sections to maintain the interior of your vehicle.

### Interior general precautions

Prevent chemicals such as perfume, cosmetic oil, sun cream, hand cleaner, and air freshener from contacting the interior parts because they may cause damage or discoloration. If they do contact the interior parts, wipe them off immediately. If necessary, use a mixture of warm water and mild non-detergent cleaner (test all cleaners on a concealed area before use). Use proper car cleaner to clean interior parts.

### CAUTION

#### Electrical components

Never allow water or other liquids to come in contact with electrical/electronic components inside the vehicle as this may damage them.

**⚠ CAUTION****Leather**

When cleaning leather products (steering wheel, seats etc.), use neutral detergents or low alcohol content solutions. If you use high alcohol content solutions or acid/alkaline detergents, the color of the leather may fade or the surface may get stripped off.

**Taking care of leather seats**

- Vacuum the seat periodically to remove dust and sand on the seat. It will prevent abrasion or damage of the leather and maintain its quality.
- Wipe the leather seat cover often with dry or soft cloth.
- Sufficient use of a leather protective may prevent abrasion of the cover and helps maintain the color. Be sure to read the instructions and consult a specialist when using leather coating or protective agents.
- Leather with bright colors (beige, cream beige) is easily contaminated and clear in appearance. Clean the seats frequently.
- Avoid wiping with wet cloth. It may cause the surface to crack.

**Cleaning the leather seats**

Remove all contaminations instantly. Refer to instructions below for removal of each contaminant.

- Cosmetic products (sunscreen, foundation, etc.)
  - Apply cleansing cream on a cloth and wipe the contaminated point. Wipe off the cream with a wet cloth and remove water with a dry cloth.

- Beverages (coffee, soft drink, etc.)
  - Apply a small amount of neutral detergent and wipe until contaminations do not smear.
- Oil
  - Remove oil instantly with absorbable cloth and wipe with stain remover for leather only.
- Chewing gum
  - Harden the gum with ice and remove gradually.

**Fabric seat cover (if equipped)**

Please clean the fabric seats regularly with a vacuum cleaner in consideration of fabric material characteristics. If they are heavily soiled with beverage stains, etc., use a suitable interior cleaner. To prevent damage to seat covers, wipe off the seat covers down to the seams with a large wiping motion and moderate pressure using a soft sponge or microfiber cloth.

Velcro closures on clothing or sharp objects may cause snagging or scratches on the surface of the seats. Make sure not to rub such objects against the surface.

**Cleaning the upholstery and interior trim****Car interior surfaces**

Remove dust and loose dirt from interior surfaces with a whisk broom or a vacuum cleaner. If necessary, clean interior surfaces with a mixture of warm water and mild non-detergent cleaner (test all cleaners on a concealed area before use).



## Fabric

Remove dust and loose dirt from fabric with a whisk broom or vacuum cleaner. Clean with a mild soap solution recommended for upholstery or carpets.

Remove fresh spots immediately with a fabric spot cleaner. If fresh spots do not receive immediate attention, the fabric can be stained and its color can be affected. Also, its fire-resistant properties can be reduced if the material is not properly maintained.

Using anything but recommended cleaners and procedures may affect the fabric's appearance and fire-resistant properties.

## Cleaning the lap/shoulder belt webbing

Clean the belt webbing with any mild soap solution recommended for cleaning upholstery or carpet. Follow the instructions provided with the soap. Do not bleach or re-dye the webbing because this may weaken it.

## Cleaning the interior window glass

If the interior glass surfaces of the vehicle become fogged (that is, covered with an oily, greasy or waxy film), they should be cleaned with a glass cleaner. Follow the directions on the glass cleaner container.

### CAUTION

#### Rear window

Do not scrape or scratch the inside of the rear window. This may result in damage of the rear window defroster grid.



# Specifications & Consumer information

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## Specifications & Consumer information

### Dimensions

Item	Size: mm (in)		
Overall length	4,195 (165.2)		
Overall width	1,800 (70.9)		
Overall height	1,605 (63.2)		
Tread	Front	215/55R17	1,565 (61.6)
	Rear	215/55R17	1,575 (62.0)
Wheelbase	2,600 (102.4)		

### Electric vehicle specifications

#### Cruise Type (64 kWh)

Motor		Battery (Lithium-Ion Polymer)			Charger (OBC)
Max. Output	Max. Torque	Capacity	Power Output	Voltage	Max. Output
150 kW	395 N·m	180 Ah	170 kW	356 V	7.2 kW

OBC: On-Board Battery Chargers

#### City Type (39.2 kWh)

Motor		Battery (Lithium-Ion Polymer)			Charger (OBC)
Max. Output	Max. Torque	Capacity	Power Output	Voltage	Max. Output
100 kW	395 N·m	120 Ah	113 kW	327 V	7.2 kW

### Volume and weight

Gross Vehicle Weight (GVW)	Luggage Volume (SAE)	
2,180 kg (4,806 lbs.)	Min. l (cu ft)	Max. l (cu ft)
	663 (23.4)	1,735 (61.3)

- Min: Back seat upright.
- Max: Back seat folded.

## Air conditioning system

	Items	Weight of Volume g (oz)	Classification
Refrigerant	Without heat pump	21.16±0.88 (600±25)	R-1234yf
	With heat pump	22.92±0.88 (650±25)	
Compressor lubricant		5.29±0.35 (150±10)	POE-1

Contact an authorized Kia dealer for more details.

## Bulb wattage

	Light Bulb	Bulb type	Wattage (W)
Front	Headlamp (Low/High)	LED	LED
	Position lamp / Daytime running lamp	LED	LED
	Front side marker	LED	LED
	Front turn signal lamps	LED	LED
	Front fog lamps	LED	LED
	Side repeater lamps (Outside Mirror)*	LED	LED
Rear	Rear stop lamps	LED	LED
	Rear tail lamps	LED	LED
	Rear side marker	LED	LED
	Rear turn signal lamps	1156NA	27
	Back-up lamps	W16W	16
	High Mounted Stop Lamps	LED	LED
	License plate lamps	W5W	5
Interior	Map lamps	W10W (LED*)	10 (LED*)
	Room lamps	FESTOON (LED*)	10 (LED*)
	Vanity mirror lamps*	FESTOON	5
	Luggage lamp	FESTOON	10 (W)

\* If equipped

## Tires and wheels

Item	Tire size	Wheel size	Load Capacity		Speed capacity		Inflation pressure [kPa (psi)]				Wheel lug nut torque kgf·m (lbf·ft, N·m)
			L <sup>1</sup>	kg	SS <sup>2</sup>	km/h	Normal load		Maximum load		
							Front	Rear	Front	Rear	
Full size tire	215/55 R17	7.0J X17	94	670	V	240	250 (36)	250 (36)	250 (36)	250 (36)	11~13 (79~94, 107~127)

\*1. Load Index

\*2. Speed Symbol

### **⚠ CAUTION**

When replacing tires, use the same size originally supplied with the vehicle.

Using tires of a different size can damage the related parts or make it work irregularly.

### **\* NOTICE**

- We recommend that when replacing tires, use the same originally supplied with the vehicles.

If not, that affects driving performance.

- When driving in high altitude grades, it is natural for the atmospheric pressure to decrease.

Therefore, please check the tire pressure and add more air when necessary.

Additionally required tire air pressure per km above sea level: 10.5 kPa/km

## Recommended lubricants and capacities

To help achieve proper vehicle performance and durability, use only lubricants of the proper quality.

These lubricants and fluids are recommended for use in your vehicle.

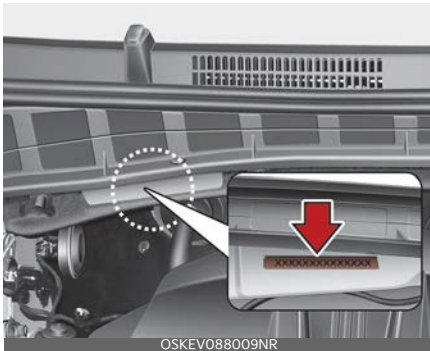
Lubricant		Volume [l (US qt.)]	Classification
Reduction gear fluid		Approx. 1.0~1.1 (1.1~1.2)	SAE 70W, API GL-4 HK SYN MTF 70W (SK), SPIRAX S6 GHME 70W MTF (H.K.SHELL), GS MTF HD 70W (GS CALTEX), Kia genuine MTF&DCTF 70W SYN-THETIC
Coolant	Cruise Type (64 kWh)	Without heat pump	Approx. 13.3~13.8 (12.6~14.6)
		With heat pump	Approx. 13.7~14.3 (14.5~15.1)
	City Type (39.2 kWh)	Without heat pump	Approx. 11.0~11.6 (11.6~12.3)
		With heat pump	Approx. 11.5~12.0 (12.2~12.7)
Designated coolant water for electric vehicles			
Brake fluid		As required	FMVSS116 DOT-3 or DOT-4

### Vehicle Identification Number (VIN)

The Vehicle Identification Number (VIN) is the number used in registering your vehicle and in all legal matters pertaining to its ownership, etc.

The number is punched on the motor compartment frame and back side of the motor.

Frame number



The VIN is also on a plate attached to the top of the dashboard. The number on the plate can easily be seen through the windshield from outside.

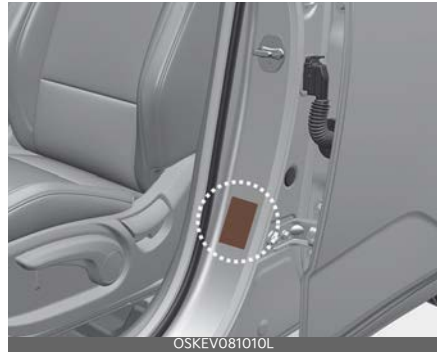
VIN label



### Vehicle certification label

The vehicle certification label attached on the driver's side center pillar gives the Vehicle Identification Number (VIN).

Type A



Type B





## Tire specification and pressure label

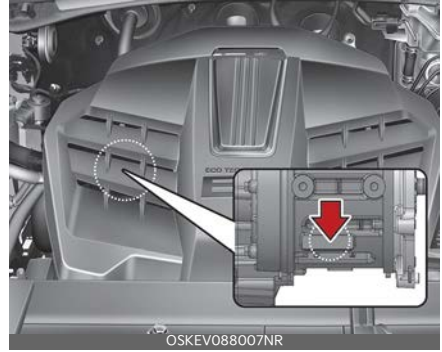
The tire label located on the driver's side center pillar gives the tire pressures recommended for your vehicle.



The tires supplied on your new vehicle are chosen to provide the best performance for normal driving.

## Motor number

The motor number is stamped on the motor block as shown in the drawing. The motor number can be seen from under the vehicle.



## REPORTING SAFETY DEFECTS

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform Transport Canada (TC) in addition to notifying **Kia Canada Inc.**

Mailing Address:

Transport Canada - ASFAD  
330 Sparks Street  
Ottawa, ON  
K1A 0N5

Telephone: 819-994-3328 (Ottawa-Gatineau area or internationally)

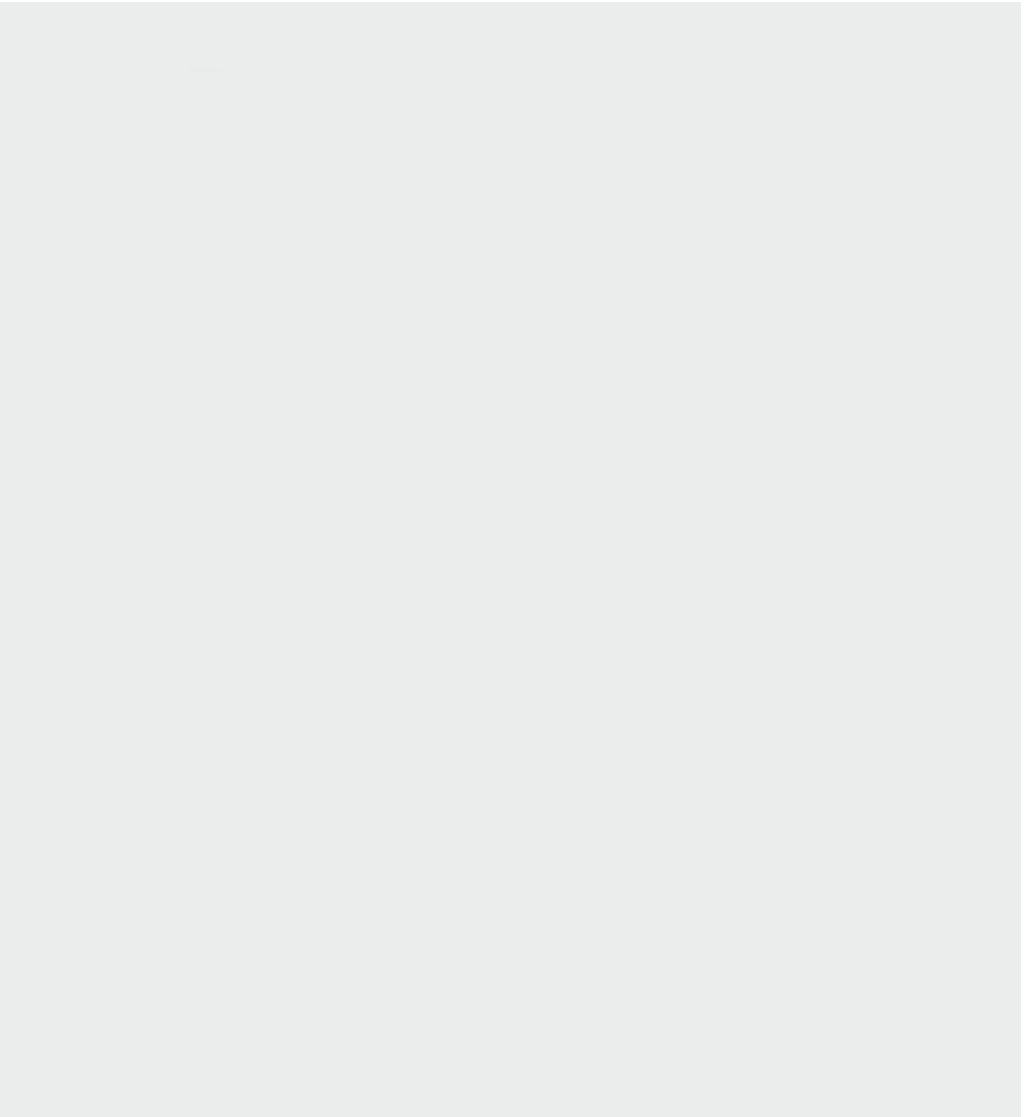
Toll free: 1-800-333-0510 (in Canada)

Online:

<http://www.tc.gc.ca/recalls>

If TC 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, TC cannot become involved in individual problems between you, your dealer, or **Kia Canada Inc.**

# Abbreviation **A**



## Abbreviation

### A/C

Air conditioning

### ABS

Anti-lock Brake System

### ADS

Auto Defogging System

### BCA

Blind-Spot Collision-Avoidance Assist

### BCW

Blind-Spot Collision Warning

### CMVSS

Canada Motor Vehicle Safety Standards

### CRS

Child Restraint System

### DAW

Driver Attention Warning

### DRL

Daytime Running Light

### EBD

Electronic Brake force Distribution

### ECM

Electric Chromic Mirror

### EDR

Event Data Recorder

### EPB

Electronic Parking Brake

### EPS

Electric Power Steering

### ESC

Electronic Stability Control

### FCA

Forward Collision-Avoidance Assist

### FWD

Front Wheel Drive

### GAW

Gross Axle Weight

### GAWR

Gross Axle Weight Rating

### GVW

Gross Vehicle Weight

### GVWR

Gross Vehicle Weight Rating

### HAC

Hill-start Assist Control

### HBA

High Beam Assist

### HUD

Head-Up Display

### LATCH

Lower Anchors and Tether for Children

### LDW

Lane Departure Warning

### LKA

Lane Keeping Assist

### ODS

Occupant Detection System

## Abbreviation

### **RCCA**

Rear Cross-Traffic Collision-Avoidance Assist

### **RCCW**

Rear Cross-Traffic Collision Warning

### **SCC**

Smart Cruise Control

### **SRS**

Supplemental Restraint System

### **SRSCM**

SRS Control Module

### **SUV**

Sports Utility Vehicle

### **TIN**

Tire Identification Number

### **TPMS**

Tire Pressure Monitoring System

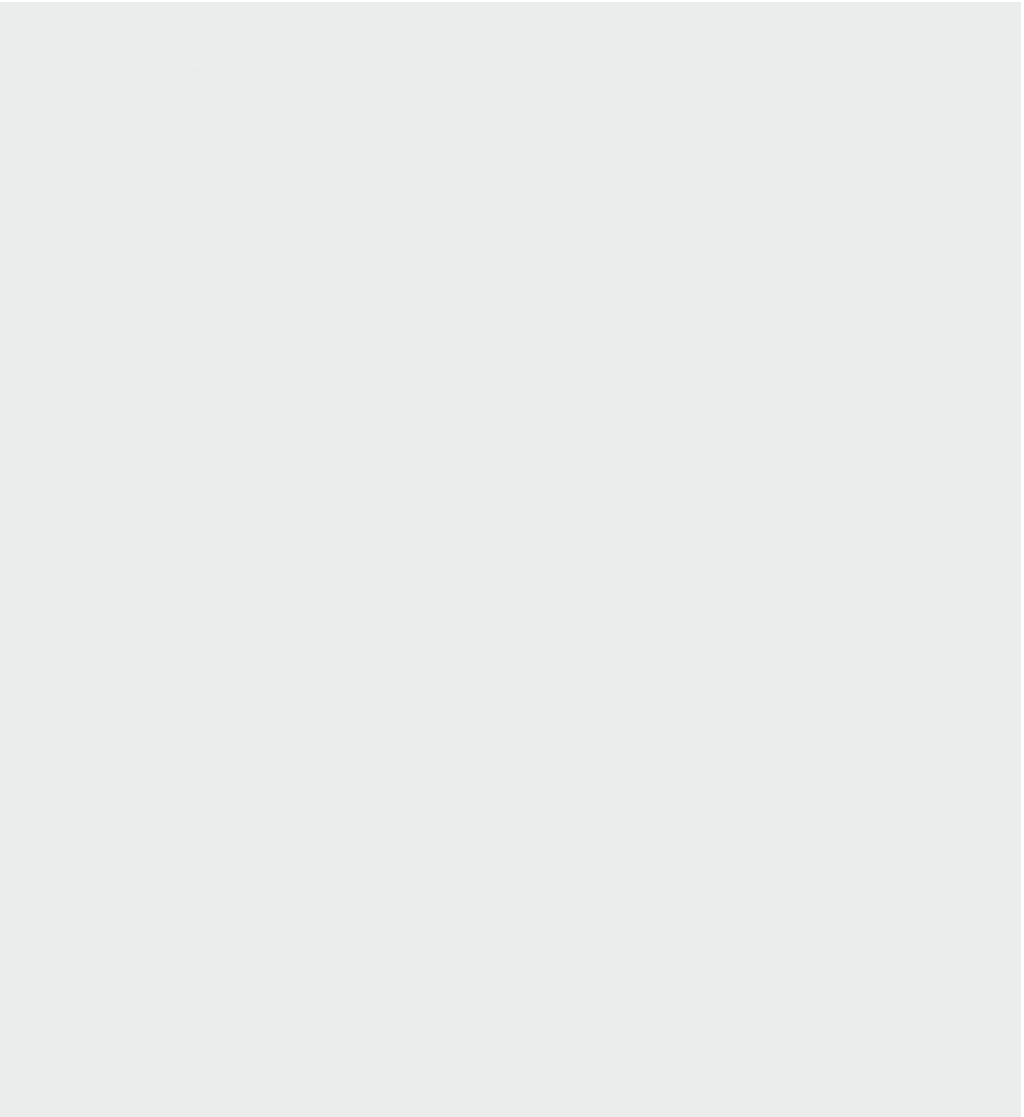
### **VIN**

Vehicle Identification Number

### **VSM**

Vehicle Stability Management





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