



## 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 Motors 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 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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## HYBRID SYSTEM OVERVIEW

### PHEV (plug-in electric vehicle) system

The Kia Plug-in Hybrid Electric Vehicle (PHEV) shares the characteristics of both a conventional hybrid electric vehicle and an all-electric vehicle.

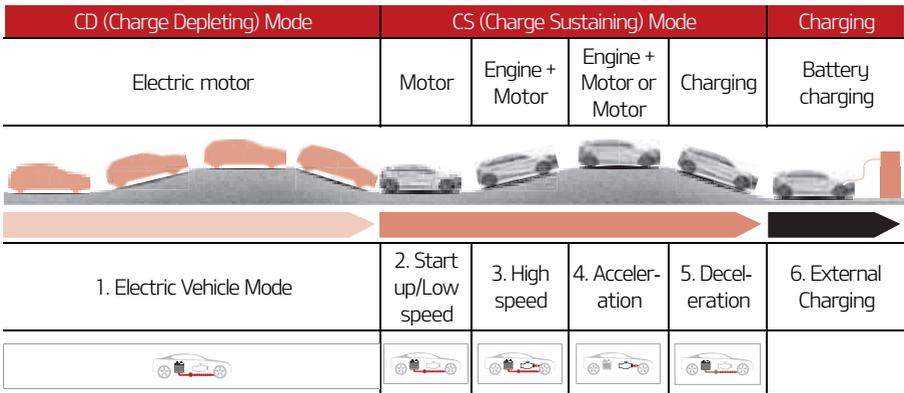
When used as a conventional hybrid electric vehicle, the HEV computer selectively operates between the engine and the electric motor or even both at the same time.

When it is operating in the electric vehicle mode, the vehicle is driven only using the electric motor over a certain distance until the hybrid

battery becomes low. The driving distance in EV mode depends on customer driving style and road conditions. Aggressive driving maneuvers may at times temporarily enable the engine to operate for maximum power.

The hybrid battery can be fully charged by connecting a plug to an external electric power source.

An engine can be turned on due to factors such as heater and a frequent operation of the accelerator pedal by a driver in CD mode.



## Charging the plug-in hybrid vehicle

trickle charge. Use only as a backup charger.

### Charging Information

- AC Charger: The plug-in hybrid vehicle is charged by plugging into a AC charger installed in your home or a public charging station. (For further details, refer to "AC Charger" on page 1-8.)
- Trickle Charger: The plug-in hybrid vehicle can be charged by using household electricity. The electrical outlet in your home must comply with regulations and can safely accommodate the Voltage / Current (Amps) / Power (Watts) ratings specified on the

### Charging Time

- AC Charger: Takes about 2 hours 15 minutes at room temperature (Can be charged to 100%). 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.
- Trickle Charger: For charging at home. Please note that the Trickle Charger is slower than the AC Charger.

### Charging Types

Category	Charging Inlet (Vehicle)	Charging Connector	Charging Outlet	Charging Method	Charging Time
AC Charger	 OCDPQ019006	 ODEPQ017019L	 OBDCPQ019003RE	AC charger installed in homes or public charging stations	Approximately 2 hours 15 minutes (to fully charge, 100%)
Trickle Charger	 OCDPQ019006	 ODEPQ017019L	 OAEE0016024	Household current	For charging at home. Please note that the Trickle Charger is slower than the AC Charger

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

### Charging Status



You can check the charging status at the outside of vehicle when charging or using (it is not driving status) the high-voltage battery.

It takes about 2.3 hours or more to complete charging.

Operation of charging indicator lamp			Details	
1	2	3		
Off	Off	Off	Not charged	
Off	Off	Blinking	Air conditioning (scheduled/remote)	
Off	Off	Blinking	Charging 12 V auxiliary battery or reserved air conditioner is operating	
Blinking	Off	Off	Charging	
On	Blinking	Off		0-35%
On	On	Blinking		36-65%
On	On	On	66-99%	
On	On	On	Charging completed (100%) (turns off in 5 seconds)	
Blinking	Blinking	Blinking	Error while charging	
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.

The driver can select the charge connector lock mode;

- From the User settings menu
  1. Press the MODE button (☰) several times on the steering wheel until 'User Settings' menu appears on the LCD.
  2. Select 'Convenience → Charging connector locking mode' with the MOVE switch (∧ / ∨) and the OK button on the steering wheel.
- From the infotainment menu (if equipped)
  1. Press SETUP button of the infotainment system
  2. On the infotainment display, select 'Vehicle → Eco vehicle → Charging connector locking mode'.

### Connector Lock

	Always lock	Lock while charging
Before charging	0	X
While charging	0	0
After charging	0	X

## Always lock

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.

## Lock while charging

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

## Scheduled Charging (if equipped)

- You can set reserved charging using the Infotainment System. Refer to the Infotainment System for detailed information about setting reserved charging.
- Scheduled charging can only be done when using a AC charger or the portable charging cable (ICCB; In-Cable Control Box).

- When scheduled charging is set and the AC charger or the portable charging cable (ICCB: In-Cable Control Box) is connected for charging, the indicator lamp blinks (for 3 minutes) to indicate that scheduled charging is set.



- When scheduled charging is set, charging is not initiated immediately when the AC charger or portable charging cable (ICCB: In-Cable Control Box) is connected.
- If charging is required immediately, turn off the scheduled charge using the Infotainment System and UVO application, or press the vehicle's scheduled charge release button .

- When the scheduled charge is set, the charge start time is calculated by itself. In some cases, charging may start immediately after connecting the charger.

- If you press the scheduled charging deactivation (  ) button to immediately charge the battery, charging must be initiated 3 minutes after the charging cable has been connected.



When you press the scheduled charging deactivation (  ) button for immediate charging, the scheduled charge setting is not completely deactivated. If you need to completely deactivate the scheduled charge setting, use the Infotainment System to finalize the deactivation. Refer to "AC Charger" on page 1-8 or "Trickle Charger (Portable Charging Cable)" on page 1-13 for details about connecting the AC charger and the portable charger (ICCB: In-Cable Control Box).

## Charging Precautions

### AC Charger



OBDCPQ019003RE

#### **⚠ WARNING**

#### **Fires caused by dust or water**

Do not connect the charging cable connector plug to the vehicle if there is water or dust on the charging inlet. Connecting while there is water or dust on the charging cable connector and plug may cause a fire or electric shock. There may be a risk of fire and injury when using old worn out public electrical outlets.

#### **⚠ WARNING**

#### **Interference with electronic medical devices**

When using medical electric 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 devices. In some instances,

electromagnetic waves that are generated from the charger can seriously impact medical electric devices such as an implantable cardiac pacemaker.

#### **⚠ WARNING**

#### **Touching the charging connector**

Do not touch the charging connector, charging plug, and the charging inlet when connecting the cable to the charger and the charging inlet on the vehicle. Doing so may result in electrocution.

- Comply with the following in order to prevent electrical shock when charging:
  - Use a waterproof charger
  - Make sure to not touch the charging connector and charging plug when your hand is wet
  - Do not charge when there is lightning
  - Do not charge when the charging connector and plug is wet

**⚠ WARNING**

**Charging cable**

- Immediately stop charging when you find abnormal symptoms (smell, smoke).
- 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 and charging plug.  
If you pull the cable itself (without using the handle), the internal wires may disconnect or get damaged. This may lead to electric shock or fire.

**⚠ WARNING**

**Cooling fan**

Do not touch the cooling fan while vehicle is charging. When the vehicle is switched OFF while charging, the cooling fan inside the motor compartment may automatically operate.

- 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 vehicle. Using any other charger may cause failure.
- Before charging the battery, turn the vehicle OFF.
- Be careful not to drop the charging connector. The charging connector can be damaged.

**AC Charger**

AC Charger



OBDCP0019003RE

AC charger cable



ODEP0017061L

You can charge your vehicle by plugging into a public charger at a charging station.

**How to Connect AC Charger**

OCDPQ019018

1. Depress the brake pedal and apply the parking brake.
2. Turn OFF all switches, move the shift lever to P (Park), and turn OFF the vehicle.
3. Open the charging door by pressing the circle mark (o) area on the right edge of the charging door. If the vehicle doors are locked, the charging door will not open.

**\* NOTICE**

The charging door does not open when the theft alarm system is armed.

4. Remove any dust on the charging connector and charging inlet.

5. Hold the charging connector handle.



OCDPQ019007

- Then, insert it into the charging inlet, until you hear a click sound. If it is not fully connected, a bad connection between the charging connector and the charging terminals may cause a fire.
6. Check if the charging cable connection indicator of the high voltage battery in the instrument cluster is turned ON.



Charging does not occur when the indicator is OFF. When the charging connector is not connected properly, reconnect the charging cable to charge.

## \* NOTICE

- The charging is in progress only with the shift lever is in P (Park). Charging the battery with the ENGINE START/STOP button in the ACC position is possible. However, it may discharge the 12-V battery. Thus, if possible, charge the battery with the ENGINE START/STOP button in the OFF position.
- Moving the shift lever from P (Park) to R (Reverse)/N (Neutral)/D (Drive) stops the charging process. To restart the charging process, move the shift lever to P (Park), press the ENGINE START/STOP button to the OFF position, and disconnect the charging cable. Then, connect the charging cable.

### \* Charging connector lock mode

When the charging connector is plugged into the charging inlet, the connector lock timing varies with the modes selected by the user settings menu or the infotainment (if equipped) menu.

- Always lock: The connector locks when the charging connector is plugged into the charging inlet.
- Lock while charging: The connector locks when charging starts. The connector unlocks when charging is completed.

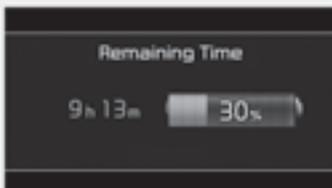
For more details, refer to "AC Charging Connector Lock" on page 1-5.

### \* Locking/unlocking the charging door

The charging door lock/unlock function works only when the following conditions are satisfied with the charging door closed. If the unlock function does not work, use the emergency charging door unlock method to unlock the charging door. (For more details, refer to the "Unlock charging door in emergency")

- Conditions for lock :
  - When locking doors from outside the vehicle with the charging door closed
  - When locking the driver's door using a spare key
  - When locking doors using a smart key
  - When pressing the door lock/unlock button on the front door outside handle while the smart key is detected and doors are unlocked
  - When locking all vehicle doors with the charging door closed. (When locking doors with functions such as spare key, smart key, door lock button on the outside door handle, central door lock switch, auto door lock.)
- Conditions for unlock :

- When unlocking doors from outside the vehicle with the charging door closed.
- When unlocking the driver's door using a spare key.
- When unlocking doors using a smart key
- When locking doors using a smart key
- When pressing the door lock/unlock button on the front door outside handle while the smart key is detected and doors are locked
- When unlocking all vehicle doors with the charging door closed. (When unlocking doors with functions such as spare key, smart key, door lock button on the outside door handle, central door lock switch, auto door lock.)
- After charging has started, the estimated charging time is displayed on the instrument cluster for about 1 minute.



OCDPQ019023

It is also displayed, when the driver's door is opened with charging in progress. When scheduled charging is set, the estimated charging time is displayed as "--".

### ***How to Disconnect Charging Connector in Emergency***



OCDPQ019019

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.

If the charging door is not opened immediately with the emergency cable in operation, press the charging door lightly and pull the emergency cable again.

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

In that case, the charging cable may not be disconnected from the car.

If this happens, open the hood and pull the emergency cable lightly 2 to 3 times before starting charging.

### Charging Status

#### Checking Charging Status



You can check the charging status at the outside of vehicle when charging or using (it is not driving status) the high-voltage battery.

It takes about 2.3 hours or more to complete charging.

For more information about charging status indicator, refer to "Charging Status" on page 1-4.

#### How to Disconnect AC Charger

1. The vehicle doors must be unlocked in order to be able to disconnect the charging connector. A lock system prevents charger cable disconnection when the vehicle's doors are locked.

### \* NOTICE

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

2. Hold the charging connector handle and pull it out.



### OCDPQ019008

To prevent charging cable theft, the charging connector cannot be disconnected from the inlet when the doors are locked.

However, if the vehicle is in the charging connector AUTO mode, the charging connector automatically unlocks from the inlet when charging is completed.

If the connector is not automatically unlocked after charging is completed in AUTO mode, the connector is unlocked when all of the doors are unlocked.

For more details, refer to "AC Charging Connector Lock" on page 1-5.

**\* NOTICE**

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.

3. Make sure to securely close the charging door.



OCDPQ019009

**\* NOTICE**

- Do not modify or disassemble the charging cable components. It may cause a fire or an electric shock with personal injury.
- Keep the charging connector and the charging plug clean and dry. The charging cable should be also kept dry.
- Use an air gun to blow any foreign substances from the charging connector and the charging plug.

**Trickle Charger (Portable Charging Cable)**

ODEPQ017063L

Trickle charger can be used if AC Charger is unavailable.

1. Plug and cable
2. Control box (ICCB)
3. Charging connector/cable

***How to Connect Portable Charging Cable (ICCB: In-Cable Control Box)***

1. Turn OFF all switches, move the shift lever to P (Park), and turn OFF the vehicle.
2. Connect the plug to a household electric outlet.



OCDPQ019045

3. Make sure that the power connection indicator (green) lights in the control box.



OCDPQ019051

- 4. Depress the brake pedal and apply the parking brake.
- 5. Open the charging door by pressing the circle mark (o) area on the right edge of the charging door. If the vehicle doors are locked, the charging door will not open.



OCDPQ019018

**\* NOTICE**

The charging door does not open when the theft alarm system is armed.

6. Remove any dust on the charging connector and charging inlet.

7. Hold the charging connector handle.



OCDPQ019007

Vehicle connection



OCDPQ019052

Then, insert it into the charging inlet, until you hear a click sound. If it is not fully connected, improper connection between the charging connector and the charging terminals are a potential fire hazard.

8. Charging starts automatically and the charging light blinks.



OCDPQ019053

9. Check if the charging cable connection indicator of the high voltage battery in the instrument cluster is turned ON.



Charging does not occur when the indicator is OFF. When the charging connector is not connected properly, reconnect the charging cable to charge.

### \* NOTICE

- The charging is in progress only with the shift lever is in P (Park). Charging the battery with the ENGINE START/STOP button in the ACC position is possible. However, it may discharge the 12-V battery. Thus, if possible, charge the battery with the ENGINE START/STOP button in the OFF position.
- Moving the shift lever from P (Park) to R (Reverse)/N (Neutral)/D (Drive) stops the charging process. To restart the charging process, move the shift lever to P (Park), press the ENGINE START/STOP button to the OFF position, and disconnect the charging cable. Then, connect the charging cable and restart the charging process.

10. After charging has started, the estimated charging time is displayed on the instrument cluster

for about 1 minute. It is also displayed, when the driver's door is opened with charging in progress. When scheduled charging is set, the estimated charging time is displayed as "--".



### *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.

If the charging door is not opened immediately with the emergency cable in operation, press the charging door lightly and pull the emergency cable again.

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

In that case, the charging cable may not be disconnected from the car.

If this happens, open the hood and pull the emergency cable lightly 2 to 3 times before starting charging.

### ***Charge cable storage***



We recommend that the trickle charger cable should be put in the storage box after use.

### ***Checking Charging Status***



You can check the charging status at the outside of vehicle when charging or using (it is not driving status) the high-voltage battery.

It takes about 2.3 hours or more to complete charging.

For more information about charging status indicator, refer to "Charging Status" on page 1-4.

### Charging Status Indicator Lamp for Portable Charging Cable

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 is illuminated.
	FAULT	 Blink : Charging interrupted
	CHARGE LEVEL	 Charging current 12A
		 Charging current 10A
		 Charging current 8A
	VEHICLE	 (Green) Charging connector plugged
		 (Blue) Charging
		 (Red) Blink : Charging impossible

1

NO	Control Box	Status / Diagnosis / Countermeasure	NO	Control Box	Status / Diagnosis / Countermeasure
1	                                     				

### ***How to Disconnect Portable Charging Cable (ICCB: In-Cable Control Box)***

1. Before disconnecting the charging connector, make sure the doors are unlocked. When the door is locked, the charging connector lock system will not allow disconnection. To prevent charging cable theft, the charging connector cannot be disconnected from the inlet when the doors are locked. However, if the vehicle is in the charging connector AUTO mode, the charging connector automatically unlocks from the inlet when charging is completed.

#### **\* NOTICE**

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

2. Hold the charging connector handle and pull it out.



OCDPQ019008

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



OCDPQ019046

5. Close the protective cover for the charging connector so that foreign material cannot get into the terminal.
6. Put the charging cable inside the cable compartment to protect it.

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

- Use the portable charging cable that is certified by Kia.
  - Do not try to repair, disassemble, or adjust the portable charging cable.
  - Do not use an extension cord or adapter.
  - Stop using immediately if failure warning light 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.
  - 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 children operate or touch the portable charging cable.
  - 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.
  - Charging with the worn out or damaged household electric outlet can result in a risk of electric shock. If you are in doubt to the household electric outlet condition, have it checked by a licensed electrician.
  - Stop using the portable charging cable immediately if the household electric outlet or any components is overheated or you notice burnt odors.

### ***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.  
(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.  
(Status of portable charger)  
\* 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.
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 the plug-in hybrid vehicle**

### **Changing plug-in hybrid mode**

#### ***EV/HEV button***



Whenever you press the [EV/HEV] button, Plug-in hybrid system drive mode will be changed in sequential as :

Automatic (AUTO) mode - Hybrid (CS) mode - Electric (CD) mode.

Each time the mode is changed a corresponding LED is displayed on the instrument cluster as follows.

**Automatic (AUTO) mode**

Type A



OCDP049499

Type B



OCDP049129

**Hybrid (CS) mode**

Type A



OCDP049500

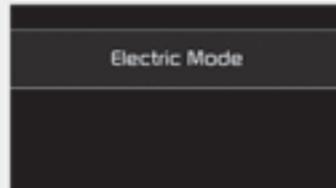
Type B



OCDP049130

**Plug-in hybrid mode message**

- CD (Charge Depleting, Electric) mode : The high-voltage (hybrid) battery is used to drive the vehicle.

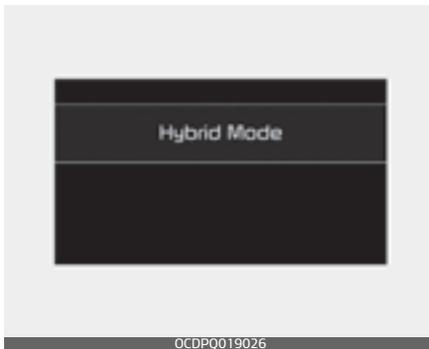


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- AUTO (Automatic) mode : The drive mode will be automatically selected from either Electric (CD) mode or Hybrid (CS) mode by the system according to the driving condition.



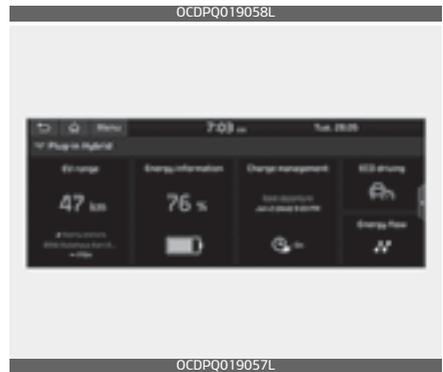
- CS (Charge Sustaining, Hybrid) mode : The high-voltage (hybrid) battery and gasoline engine is used to drive the vehicle.



A corresponding message is displayed to indicate the selected mode.

### 'Infotainment System' screen

Press [PHEV] on the [Home screen].



The Plug-in Hybrid menu consists of five sections: [EV range], [Energy information], [Charge management], [ECO driving], [Energy flow].



For more information, please refer to the infotainment manual that was separately supplied with your vehicle.

**Warning and indicator lights**

**Ready Indicator** 

**This indicator illuminates :**

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 the vehicle inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

**Hybrid system warning light** 

**This warning light illuminates:**

When there is a malfunction with the hybrid system.

When the warning light illuminate while driving, or does not go OFF after starting the vehicle, have the system inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

**EV Mode Indicator** 

This indicator illuminates when the vehicle is driven by the electric motor.

**Charging Cable Connection Indicator**



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

**Coasting guide (if equipped)**

A chime will sound and the coasting guide indicator will blink four times to inform the driver when to take the foot off from the accelerator by anticipating a decelerating event\* based on the analysis of driving routes and road conditions of the navigation. It encourages the driver to remove foot from the pedal and allow coasting down the road with EV motor only. This helps prevent unnecessary fuel consumption and increases fuel efficiency.

\* Example of a deceleration event is going down an extended hill, slowing down approaching a toll booth, and approaching reduced speed zones.

- User settings  
Press the ENGINE START/STOP button and put the shift lever in P(Park). In the User Settings Mode, select Driving Assist,

Coasting Guide, and then On to turn on the system. Cancel the selection of coasting guide to turn off the system. For the explanation of the system, press and hold the [OK] button.

- Operation conditions

To activate the system, take the following procedures. Enter your destination information on the navigation and select the driving route. Then, satisfy the following:

- The driving speed should be between 60 km/h (37 mph) and 160km/h (99 mph).

\* The operating speed may vary due to difference between instrument cluster and navigation effected by tire inflation level.

### \* NOTICE

Coasting guide is only a supplemental system to assist with fuel-efficient driving. Thus, the operating conditions may be different in accordance with traffic/road conditions (i.e. driving in a traffic jam, driving on a slope, driving on a curve). Thus, take the actual driving conditions into consideration, such as distances from the vehicles ahead/ behind, while referring to the coasting guide system as guidance.

### ***Check Hybrid system***

This message is displayed when there is a problem with the hybrid control system.

Refrain from driving when the warning message is displayed.

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

### ***Check Hybrid system. Turn off engine***

This message is displayed when there is a problem with the hybrid system. The "" indicator will blink and a warning chime will sound until the problem is solved.

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

### ***Check Hybrid system. Do not start engine.***

This message is displayed when the hybrid battery power (SOC) level is low. A warning chime will sound until the problem is solved.

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

***Stop vehicle and check power Supply***

This message is displayed when a failure occurs in the power supply-system.

In this case, 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.

***Refill inverter coolant***

This message is displayed when the inverter coolant is nearly empty.

You should refill the inverter coolant.

For volume and specification of the coolant, refer to "Recommended lubricants and capacities" on page 9-7.

***Stop vehicle and check brakes***

This message is displayed when a failure occurs in the brake system.

In this case, 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.

***Check brakes***

This message is displayed when the brake performance is low or the regenerative brake does not work properly due to a failure in the brake system.

In this case, it may take longer for the brake pedal to operate and the braking distance may become longer.

***Refuel to prevent Hybrid battery Damage***

This message is displayed when the fuel tank is nearly empty. You should refill the fuel tank to prevent hybrid battery damage.

***Check Virtual Engine Sound System***

This message is displayed when there is a problem with the Virtual Engine Sound System (VESS).

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

***Remaining charge time***

The message is displayed to notify the remaining time to fully charge the battery.

***Charging stopped. Check the AC charger***

This message is displayed when the charging failed by external charger error.

The purpose of this message is to let you know the error has occurred in the charger itself, not in the vehicle.

***Charging stopped. Check the cable connection***

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

***Low/High System Temp. Maintaining Hybrid mode***

This message is displayed when the temperature of the high-voltage (hybrid) battery is too low or too high.

This warning message is to protect the battery and the hybrid system.

***Low/High System Temp. Switching to Hybrid mode***

This message is displayed when the temperature of the high-voltage (hybrid) battery is too low or high.

This warning message is to protect the battery and the hybrid system.

***Switching to Hybrid mode to allow heating***

- When the coolant temperature is lower than  $-14\text{ }^{\circ}\text{C}$  ( $57\text{ }^{\circ}\text{F}$ ), and you turn the climate control On for heating, the above message will be displayed in the cluster. Then, the vehicle will automatically switch to HEV mode.
- When the coolant temperature is higher than  $-14\text{ }^{\circ}\text{C}$  ( $57\text{ }^{\circ}\text{F}$ ), or you turn the climate control Off, the vehicle will automatically return to EV mode.

***Wait until fuel door opens***

The message is displayed when you attempt to open the fuel filler door with the fuel tank pressurized. Wait until the fuel tank is depressurized.

**\* NOTICE**

- It may take up to 20 seconds to open fuel filler door.
- When the fuel filler door is frozen and does not open after 20 seconds at freezing temperature, slightly tap the fuel filler door and then attempt to open it.

***Fuel door open***

This message is displayed when the fuel filler door is opened.

Also means "Ready to refuel".

***Check fuel door***

This message is displayed when the fuel filler door is open or an abnormality has occurred.

***Charging Door Open***

This message indicates that the charging door is open while in driving ready state to encourage you to inspect and close the door.

(Driving with the charging door open may result in moisture inflow or damage. This message is used to prevent such occurrences.)

***Unplug vehicle to start***

The message is displayed when you start the engine without unplugging the charging cable. Unplug the charging cable, and then start the vehicle.

***Maintaining Hybrid mode to continue heating***

A message is displayed when heating is in operation and the HEV mode is maintained to meet the heating operating conditions when attempting to switch to EV mode by pressing the EV/HEV button.

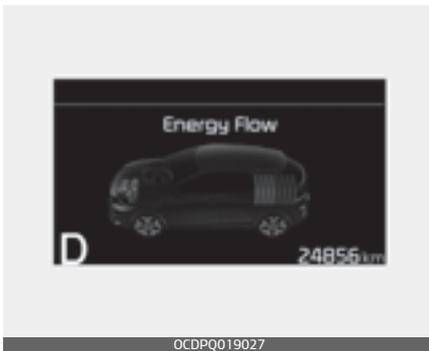
***EV/HEV modes***

A corresponding message is displayed when a mode is selected by pressing the EV/HEV button.

## Plug-in hybrid vehicle energy flow

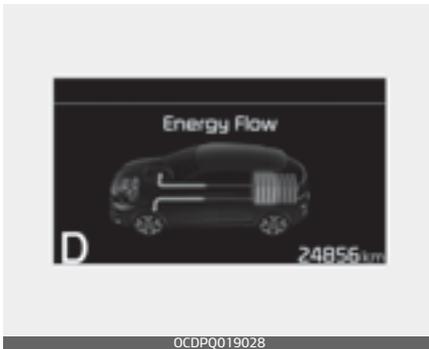
Kia hybrid system notifies the drivers of energy flow in various operating modes. Eleven modes show drivers the current operating condition.

### Vehicle Stop



The mode means the vehicle is stopped. (There is no energy flow.)

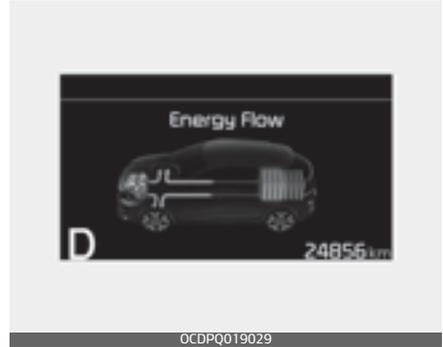
### EV Propulsion



Electric power is used to move the vehicle.

(Battery → Wheel)

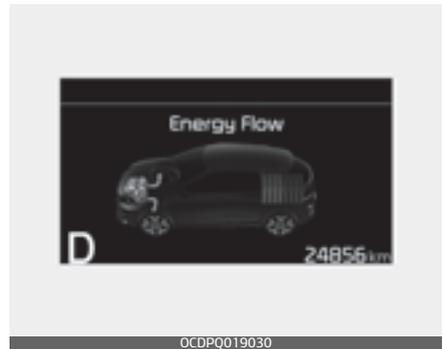
### Power Assist



Electric and Engine power are used to move the vehicle.

(Battery & Engine → Wheel)

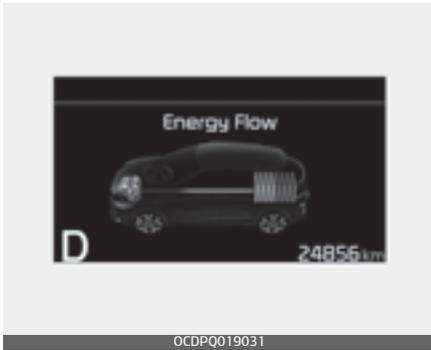
### Engine Only Propulsion



Engine power is used to move the vehicle.

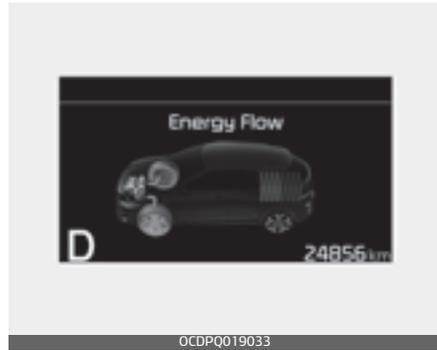
(Engine → Wheel)

### Engine Generation



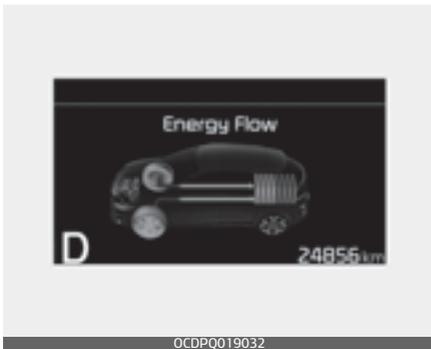
Vehicle is stopped with the Engine charging the hybrid battery.  
(Engine → Battery)

### Engine Brake



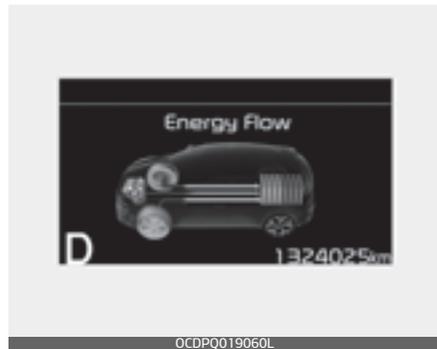
The vehicle is being slowed down by engine compression.  
(Wheel → Engine)

### Regeneration



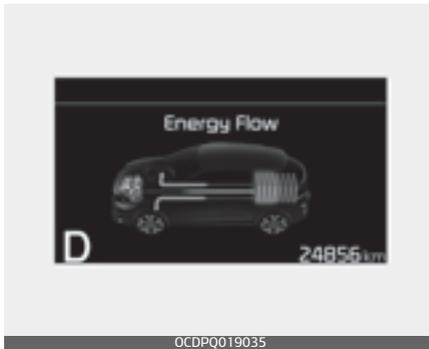
Hybrid battery is being charged by regenerative braking.  
(Wheel → Battery)

### Power Reserve



Engine is both driving the vehicle and charging the hybrid battery.  
(Engine → Wheel & Battery)

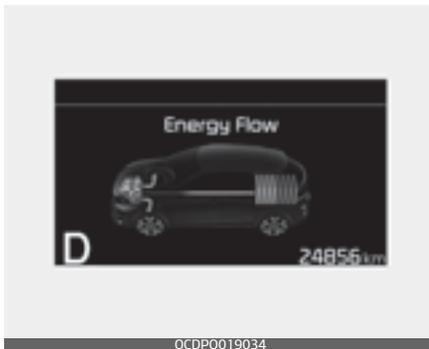
## Engine Generation/Motor Drive



The vehicle is being slowed down by engine compression and regenerative braking. The hybrid battery is being charged by regenerative braking.

(Engine → Battery → Wheel)

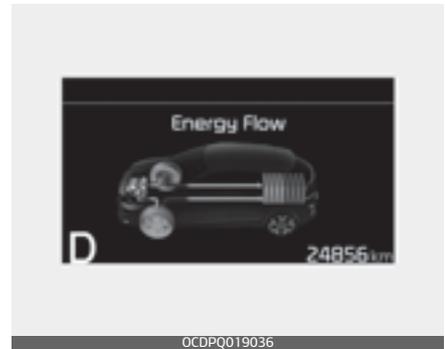
## Engine Generation/Regeneration



The engine and regenerative braking system charge the hybrid battery during deceleration.

(Engine & Wheel → Battery)

## Engine Brake/Regeneration



The engine compression can be used to slow the vehicle. The regenerative braking system can be used to charge the hybrid system.

(Wheel → Engine & Battery)

### AUX. BATTERY SAVER+ (if equipped)

The Aux. Battery Saver+ is a function that monitors the charging status of the 12V auxiliary battery. If the auxiliary battery level is low, the main high voltage battery charges the auxiliary battery.

#### \* NOTICE

The Aux. Battery Saver+ function will be ON when the vehicle is delivered. If the function is not needed, you may turn it off in the Users Settings mode on the LCD display. For more information, refer to the "System setting" on the following page.

### Mode

- Cycle Mode : When the vehicle is OFF with all doors, hood and tail-gate closed, the Aux. Battery Saver+ periodically activates according to the auxiliary battery status.
- Automatic Mode : When the ENGINE START/STOP button is in the ON position with the charging connector plugged in, the function activates according to the auxiliary battery status to prevent over-discharge of the auxiliary battery.

### ⚠ CAUTION

- The Aux. Battery Saver+ activates for a maximum of 20 minutes. If the Aux. Battery Saver+ function activates more than 10 times consecutively, 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. The function will start activating if the auxiliary battery returns to normal.
- 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.

### System setting

The driver can activate the Aux. Battery Saver+ function by placing the ENGINE START/STOP button to the ON position and by selecting: "User Settings → Other Features → Aux. Battery Saver+"

### ⚠ WARNING

When the function is activating the charging indicator lamp will quickly blink and high voltage electricity will be flowing in the vehicle. 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. Also, do not modify your vehicle in any way. This may affect your vehicle performance and lead to an accident.



## Starting the plug-in hybrid vehicle (Smart key)

### Starting the Hybrid System

1. Carry the smart key into the vehicle.
2. Make sure the parking brake is firmly applied.
3. Place the shift lever in the P(Park) position.  
In N (neutral) position, you can not start the vehicle.
4. Depress the brake pedal.
5. Press the ENGINE START/STOP button.
6. The engine should be started without pressing the accelerator. In extremely cold weather or after the vehicle has not been operated for several days, let the engine warm up without depressing the accelerator.
  - Even if the smart key is in the vehicle, if it is far away from you, the engine may not start.
  - When the ENGINE START/STOP button is in the ACC or ON position, if any door is open, the system checks for the smart key. If the smart key is not in the vehicle, the warning, "Key is not in vehicle" will come on, and if all doors are closed, the chime will also sound for about 5 seconds. The indicator will turn off while the vehicle is moving. Keep the smart key in the vehicle when using the ACC position or if the vehicle engine is on.

If the starting procedure is followed, the "" symbol on the instrument cluster will turn on. For more details, Please check "Starting the engine with smart key" on page 6-12.

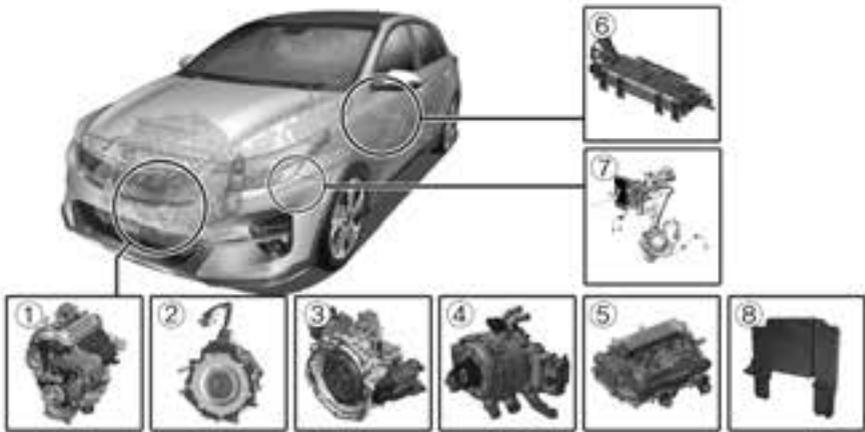
### ECONOMICAL and SAFE OPERATION of Hybrid system

- Drive smoothly. Accelerate at a moderate rate and maintain a steady cruising speed. Don't make "jack-rabbit" starts. Don't race between stoplights. Avoid heavy traffic whenever possible. Always maintain a safe distance from other vehicles so you can avoid unnecessary braking. This also reduces brake wear.
- The regenerative brake generates energy when the vehicle decelerates.
- When the hybrid battery power is low, the hybrid system automatically recharges the hybrid battery.
- When the engine runs in "N" position, the hybrid system cannot generate electricity. The hybrid battery cannot recharge in "N" position.

#### \* NOTICE

When the hybrid system is in READY mode, the engine will automatically start and stop as needed. The "" symbol will illuminate in the cluster when the system is operational.

### Components of the plug-in hybrid vehicle



OCDPQ019004

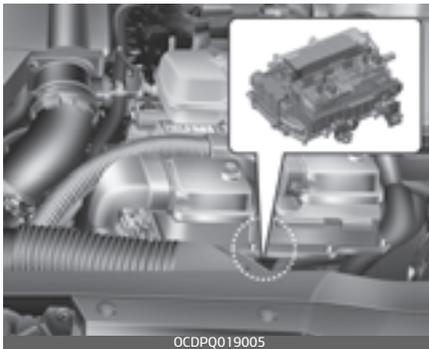
\* The actual shape may differ from the illustration.

- 1. Engine : 1.6L
- 2. Motor : 44.5kW
- 3. Transmission : 6DCT
- 4. Hybrid starter generator (HSG)
- 5. HPCU (Hybrid Power Control Unit)
- 6. High voltage battery system
- 7. Regenerative brake system
- 8. Virtual Engine Sound System (VESS)

The Hybrid battery uses high voltage to operate the electric motor and other components and other components. High voltage is dangerous if touched.

Your vehicle is equipped with orange colored insulation and covers over the high voltage components to protect people from electric shock. High voltage warning labels are attached to some system components as additional warnings. Have your vehicle serviced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

HPCU



HEV Battery



## ⚠ WARNING

Never touch orange or high voltage labeled components including wires, cables, and connections. If the insulators or covers are damaged or removed, severe injury or death from electrocution may occur.

## ⚠ WARNING

When replacing the fuses in the engine compartment, never touch the HPCU. The HPCU carries high voltage. Touching the HPCU could result in electrocution, serious injury, or death.

## ⚠ CAUTION

- Do not pile up any items in an area behind the high voltage battery. In a crash, the battery may become unstable, or its performance may degrade.
- Do not apply strong force nor pile up any items above the tailgate. Such an attempt may distort the high voltage battery case, causing a safety problem or degrading the performance.
- Be careful when loading inflammable liquid in tailgate. It could cause operational and safety degradation if the liquid leaks and flows into the high voltage battery.

Motor



**⚠ WARNING**

As with all batteries, avoid fluid contact with the hybrid battery. If the battery is damaged and if electrolyte comes in contact with your body, clothes or eyes, immediately flush with a large quantity of fresh water.

**⚠ WARNING**

Do not use an after-market battery charger to charge the hybrid battery. Doing so may result in death or serious injury.

**⚠ WARNING**

**High Waters**

- Avoid high waters as this may result in your vehicle becoming saturated with water and could compromise the high voltage components.

- Do not touch the any of the high voltage components within your vehicle if your vehicle has been submerged in water equal to half of the vehicle height. Touching high voltage components once submerged in water could result in severe burns or electric shock that could result in death or serious injury.

**⚠ WARNING**

**Carrying Liquids in tailgate**

Do not load large amounts of water in open containers into the vehicle. If the water spills onto the HEV battery, it may cause a short and damage the battery.

**⚠ CAUTION**

**Cleaning Engine**

When you clean the engine compartment, do not wash using water. Water may cause electric arcing to occur and damage electronic parts and components.

**⚠ WARNING**

**Exposure to High Voltage**

- High voltage in the hybrid battery system is very dangerous and can cause severe burns and electric shock. This may result in serious injury or death.

- For your safety, never touch, replace, dismantle or remove any portion of the hybrid battery system including components, cables and connectors.

### **⚠ WARNING**

#### **Use of Water or Liquids**

If water or liquids come into contact with the hybrid system components, and you are also in contact with the water, severe injury or death due to electrocution may occur.

### **⚠ WARNING**

#### **Hot Components**

When the hybrid battery system operates, the HEV battery system can be hot. Heat burns may result from touching even insulated components of the HEV system.

### **⚠ CAUTION**

#### **Prolonged parking**

Prolonged parking might cause battery discharge and operation failure due to natural discharge. Driving the vehicle approximately once every 2 months, more than 15 km is recommended. The battery will be charged automatically when driving the vehicle.

#### **Safety plug**



OCDPQ019022

### **⚠ DANGER**

Never touch the safety plug. The safety plug is attached to high voltage hybrid battery system. Touching the safety plug will result in death or serious injury. Service personnel should follow procedure in service manual.

#### **Some Special Features of the Hybrid Vehicle.**

Hybrid vehicles sound different than gasoline engine vehicles. When the hybrid system operates, you may hear a sound from the hybrid battery system behind the rear seat. If you apply the accelerator pedal rapidly, you may hear a sound. When you apply the brake pedal, you may hear a sound from the regenerative brake system. When the hybrid system is turned off or on, you may hear a sound in the engine compartment. If you depress the brake

pedal repeatedly when the hybrid system is turned on, you may hear a sound in the engine compartment. None of these sounds indicate a problem.

They are characteristics of hybrid vehicles.

When the hybrid system is turned on, the engine may run. This does not indicate a malfunction. If the  symbol is on, the hybrid system is operating. Even if the gasoline engine is off, you can operate the vehicle.

The HEV system may emit electromagnetic waves which can affect the performance of electronic devices appliances, such as laptop computers, which are not part of the vehicle design.

If you park the vehicle for a long time, the hybrid system will discharge. You need to drive the vehicle several times per month to maintain a charge.

When you start the hybrid system in the "P" transmission position, the  symbol is illuminated in the cluster. The driver can drive the vehicle even if the engine is stopped.

## WARNING

When you leave the vehicle, you should turn off the hybrid system. If you depress the accelerator pedal by mistake and the vehicle is not in the "P" position, the vehicle will accelerate. This may result in serious injury or death.

## Virtual Engine Sound System (VESS)

Virtual Engine Sound System generates engine sound for pedestrians to hear vehicle sound because there is limited sound while motor power is used.

Virtual Engine Sound System could be set in the audio or infotainment system.

- With the ENGINE START/STOP button in the ON position, if you change the shift lever from P (Parking) to any other position, the VESS will operate.
- When the gear is shifted to R (Reverse), an additional warning sound will be heard.

## High Voltage Battery Air Intake



The hybrid battery air intake is located on bottom and side of the rear seats. The air intake cools down the hybrid battery. When the hybrid battery air intake is blocked, the hybrid battery may be overheated. Do not obstruct the air intake with any other objects.

### **⚠ WARNING**

#### **Air Intake**

- Blocking the air intake behind the rear seats may damage the HEV battery.
- Do not allow any water into the air intake even when cleaning. If any water enters the air intake, the Hybrid battery may cause an electric shock which can cause serious injury or death due to electrocution.

#### **If An Accident Occurs**

- Avoid the engine compartment.
- Avoid any orange or high voltage wires, cables, or components.
- Assume that a high voltage component is exposed and move away from the vehicle as promptly as possible.
- Refer to "Towing" on page 7-24.

### **⚠ WARNING**

- After parking the vehicle, shift the transmission into "P" position. Turn off the hybrid system by pushing the ENGINE START/STOP button.
- 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 may occur causing injury or death.

- 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, remain a safe distance from the vehicle and immediately call your local fire emergency responders. Also, advise them that a hybrid 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.
- If you need towing, refer to "Towing" on page 7-24.

**⚠ WARNING**

If a vehicle accident occurs:

1. Stop the vehicle and shift the transmission into "P" position. And then depress the parking brake.
2. Turn off the Hybrid system by pushing the ENGINE START/STOP button.
3. Evacuate to the safety place.

4. Call emergency services for help and let them know the vehicle is a Hybrid vehicle.

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 may occur causing injury or death.

**⚠ WARNING**

If a submersion in water occurs: If your vehicle was flooded and has soaked carpeting or water on the flooring, you should not try to start the Hybrid system. Never touch the high voltage cables, connectors and package modules, because an electrical shock may occur causing injury or death. High voltage cables are orange in color.

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

## When the hybrid vehicle shuts off

When the high voltage battery or 12-volt battery discharges, or fuel tank is empty, the hybrid system may not operate.

If the Hybrid system stops operating while the vehicle is moving, reduce the vehicle speed. Pull your vehicle off the road in a safe area, and shift the transmission in to Park (P) position and;

1. Turn on the hazard warning flashers.
2. Set the ENGINE START/STOP button at OFF, and try to start the Hybrid system by applying the brake pedal and pushing the start button.
3. If the Hybrid system will not operate, refer to "Emergency starting" on page 7-6.

Before you try to jump start the vehicle, confirm the fuel level. If the fuel level is low add more fuel before attempting an emergency start.

### **⚠ WARNING**

#### **Accident Vehicle**

Never touch electric wires or cable. If exposed electric wires or cables are visible inside or outside of your vehicle, an electric shock may occur.

### **⚠ WARNING**

#### **Putting out fire**

Never use a small quantity of water to put out a fire in your vehicle. If a fire occurs, evacuate the car immediately and contact the fire department.

#### ***Service Interlock Connector***



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

### **⚠ CAUTION**

If you are not in an emergency situation, do not disconnect or cut the service interlock connector. It could cause the engine may not start or can cause serious damage.



<b>Fuel requirements .....</b>	<b>2-2</b>
<b>Vehicle modifications .....</b>	<b>2-4</b>
<b>Vehicle break-in process .....</b>	<b>2-5</b>
<b>Risk of burns when parking or stopping vehicle.....</b>	<b>2-5</b>
<b>HEV/PHEV POWERTRAIN.....</b>	<b>2-6</b>

## INTRODUCTION

### Fuel requirements

#### Gasoline engine

##### Unleaded

##### For Europe

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

You may use unleaded gasoline with an octane rating of RON 91-94 / AKI 87-90 but it may result in slight performance reduction of the vehicle. (Do not use methanol blended fuels.)

##### Except Europe

Your new Kia vehicle is designed to use only unleaded fuel having an Octane Rating of RON (Research Octane Number) 91 / AKI (Anti-Knock Index) 87 or higher. (Do not use methanol blended fuels.)

#### CAUTION

**NEVER USE LEADED FUEL.** The use of leaded fuel is detrimental to the catalytic converter and will damage the engine control system's oxygen sensor and affect emission control. (if equipped)

Never add any fuel system cleaning agents to the fuel tank other than what has been specified. (Kia recommends to consult an authorized Kia dealer/service partner for details.) (if equipped)

#### WARNING

- Do not "top off" after the nozzle automatically shuts off when refueling.
- Always check that the fuel cap is installed securely to prevent fuel spillage in the event of an accident.

#### **Gasoline containing alcohol and methanol**

Gasohol, a mixture of gasoline and ethanol (also known as grain alcohol), and gasoline or gasohol containing methanol (also known as wood alcohol) are being marketed along with or instead of leaded or unleaded gasoline.

Do not use gasohol containing more than 10% ethanol, and do not use gasoline or gasohol containing any methanol. Either of these fuels may

cause drivability problems and damage to the fuel system, engine control system and emission control system.

Discontinue using gasohol of any kind if drivability problems occur. Vehicle damage or drivability problems may not be covered by the manufacturer's warranty if they result from the use of:

1. Gasohol containing more than 10% ethanol.
2. Gasoline or gasohol containing methanol.
3. Leaded fuel or leaded gasohol.

### CAUTION

Never use gasohol which contains methanol. Discontinue use of any gasohol product which impairs drivability. (if equipped)

### Other fuel

Using fuels such as

- Silicone (Si) contained fuel,
- MMT (Manganese, Mn) contained fuel,
- Ferrocene (Fe) contained fuel, and
- Other metallic additives contained fuels,

may cause vehicle and engine damage or cause plugging, misfiring, poor acceleration, engine stalling, catalyst melting, abnormal corrosion, life cycle reduction, etc.

Also, the Malfunction Indicator Lamp (MIL) may illuminate.

### NOTICE

Damage to the fuel system or performance problem caused by the use of these fuels may not be covered by your New Vehicle Limited Warranty.

### Use of MTBE

Kia recommends avoiding fuels containing MTBE (Methyl Tertiary Butyl Ether) over 15.0% vol. (Oxygen Content 2.7% weight) in your vehicle. Fuel containing MTBE over 15.0% vol. (Oxygen Content 2.7% weight) may reduce vehicle performance and produce vapor lock or hard starting.

### CAUTION

Your New Vehicle Limited Warranty may not cover damage to the fuel system and any performance problems that are caused by the use of fuels containing methanol or fuels containing MTBE (Methyl Tertiary Butyl Ether) over 15.0% vol. (Oxygen Content 2.7% weight.) (if equipped)

### Do not use methanol

Fuels containing methanol (wood alcohol) should not be used in your vehicle. This type of fuel can reduce vehicle performance and damage components of the fuel system,

engine control system and emission control system.

### Fuel Additives

Kia recommends that you use unleaded gasoline which has an octane rating of RON (Research Octane Number) 95 / AKI (Anti Knock Index) 91 or higher (for Europe) or Octane Rating of RON (Research Octane Number) 91 / AKI (Anti-Knock Index) 87 or higher (except Europe).

For customers who do not use good quality gasolines including fuel additives regularly, and have problems starting or the engine does not run smoothly, one bottle of additives should be added to the fuel tank at every 15,000km (For Europe) / 10,000km (Except Europe). Additives are available from a professional workshop along with information on how to use them. Kia recommends to visit an authorized Kia dealer/service partner. Do not mix other additives.

### Operation in foreign countries

If you are going to drive your vehicle in another country, be sure to:

- Observe all regulations regarding registration and insurance.
- Determine that acceptable fuel is available.

### Vehicle modifications

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

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

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

## Vehicle break-in process

No special break-in period is needed. By following a few simple precautions for the first 1,000 km (600 miles) you may increase the performance, economy and life of your vehicle.

- Do not race the engine.
- While driving, keep your engine speed (rpm, or revolutions per minute) within 3,000 rpm.
- Do not maintain a single speed for long periods of time, either fast or slow. Varying engine speed is needed to properly break-in the engine.
- Avoid hard stops, except in emergencies, to allow the brakes to seat properly.
- Don't tow a trailer during the first 2,000 km (1,200 miles) of operation.

## Risk of burns when parking or stopping vehicle

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

## HEV/PHEV POWERTRAIN

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

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

# Your vehicle at a glance **3**

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## YOUR VEHICLE AT A GLANCE

### Exterior overview

Front view



OCDP019006

\* The actual shape may differ from the illustration.

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## Rear view

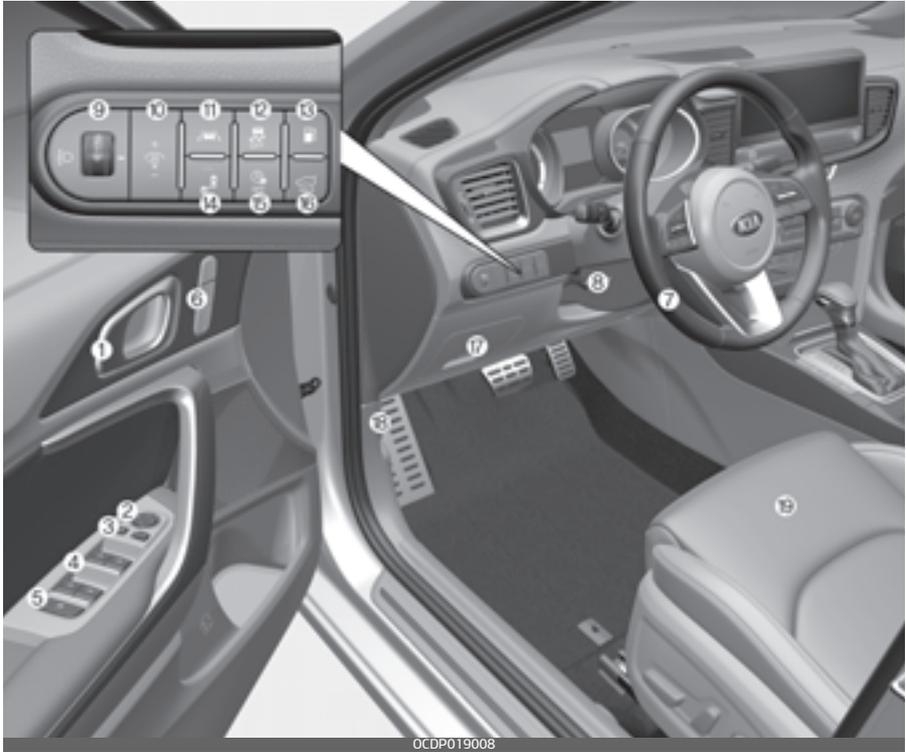


OCDP019007

\* The actual shape may differ from the illustration.

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OCDP019008

\* The actual shape may differ from the illustration.

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OCDP019005

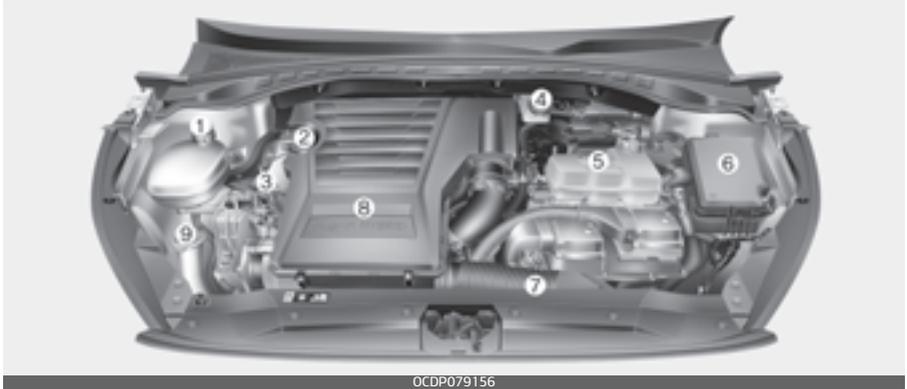
\* The actual shape may differ from the illustration.

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Kappa 1.6L GDI Engine



OCDP079156

\* The actual engine cover 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.

### Seats



OCDW039001

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

#### Driver's seat

1. Driver position memory system\*
2. Forward and backward
3. Seatback angle
4. Seat cushion height
5. Lumbar support\*
6. Headrest
8. Seatback angle
9. Seat cushion height\*
10. Lumbar support\*
11. Headrest

#### Front passenger's seat

7. Forward and backward
12. Armrest
13. Headrest

#### Rear seat

12. Armrest
  13. Headrest
- \* : if equipped

**⚠ WARNING****Loose objects**

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

**⚠ WARNING****Uprighting seat**

When you return the seatback to its upright position, hold the seatback and return it slowly and be sure there are no other occupants around the seat. If the seatback is returned without being held and controlled, the back of the seat could spring forward resulting in accidental injury to a person struck by the seatback.

**⚠ WARNING****Driver responsibility for passengers**

Riding in a vehicle with the seatback reclined could lead to serious or fatal injury in an accident. If a seat is reclined during an accident, the occupant's hips may slide under the lap portion of the seat belt, applying great force to the unprotected abdomen. Serious or fatal internal injuries could result. The driver must advise the passenger to keep the

seatback in an upright position whenever the vehicle is in motion.

**⚠ WARNING**

Do not use a sitting cushion that reduces friction between the seat and passenger. The passenger's hips may slide under the lap portion of the seat belt during an accident or a sudden stop. Serious or fatal internal injuries could result because the seat belt can't operate normally.

**⚠ WARNING****Driver's seat**

- Never attempt to adjust the seat while the vehicle is moving. This could result in loss of control, and an accident causing death, serious injury, or property damage.
- Do not allow anything to interfere with the normal position of the seatback. Storing items against a seatback or in any other way interfering with proper locking of a seatback could result in serious or fatal injury in a sudden stop or collision.
- Always drive and ride with your seatback upright and the lap portion of the seat belt snug and low across the hips. This is the best position to protect you in case of an accident.

- In order to avoid unnecessary and perhaps severe air bag injuries, always sit as far back as possible from the steering wheel while maintaining comfortable control of the vehicle. We recommend that your chest is at least 250 mm (10 inches) away from the steering wheel.

### WARNING

#### Rear seatbacks

- The rear seatback must be securely latched. If not, passengers and objects could be thrown forward resulting in serious injury or death in the event of a sudden stop or collision.
- Luggage and other cargo should be laid flat in the cargo area. If objects are large, heavy, or must be piled, they must be secured. Under no circumstances should cargo be piled higher than the seatbacks. Failure to follow these warnings could result in serious injury or death in the event of a sudden stop, collision or rollover.
- No passenger should ride in the cargo area or sit or lie on folded seatbacks while the vehicle is moving. All passengers must be properly seated in seats and restrained properly while riding.
- When resetting the seatback to the upright position, make sure it

is securely latched by pushing it forward and backwards.

- To avoid the possibility of burns, do not remove the carpet in the cargo area. Emission control devices beneath this floor generate high temperatures.

### WARNING

After adjusting the seat, always check that it is securely locked into place by attempting to move the seat forward or backward without using the lock release lever. Sudden or unexpected movement of the driver's seat could cause you to lose control of the vehicle resulting in an accident.

### WARNING

- Use extreme caution so that hands or other objects are not caught in the seat mechanisms while the seat is moving.
- Do not put a cigarette lighter on the floor or seat. When you operate the seat, gas may gush out of the lighter and cause fire.
- If there are occupants in the rear seats, be careful while adjusting the front seat position.
- Use extreme caution when picking small objects trapped under the seats or between the seat and the center console. Your hands

might be cut or injured by the sharp edges of the seat mechanism.

- Jeans or clothes which could bleach may contaminate the surface of the seat covering fabric.

### Feature of Seat Leather

- Leather is made from the outer skin of an animal, which goes through a special process to be available for use. Since it is a natural substance, each part differs in thickness or density. Wrinkles may appear as a natural result of stretching and shrinking depending on the temperature and humidity.
- The seat is made of stretchable fabric to improve comfort.
- The parts contacting the body are curved and the side supporting area is high which provides driving comfort and stability.
- Wrinkles may appear naturally from usage. It is not a fault of the product.

### **CAUTION**

- Wrinkles or abrasions which appear naturally from usage are not covered by warranty.
- Belts with metallic accessories, zippers or keys inside the back pocket may damage the seat fabric.
- Make sure not to wet the seat. It may change the nature of natural leather.

### Front seat adjustment – manual

#### *Forward and backward*



OCDW039002

To move the seat forward or backward:

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

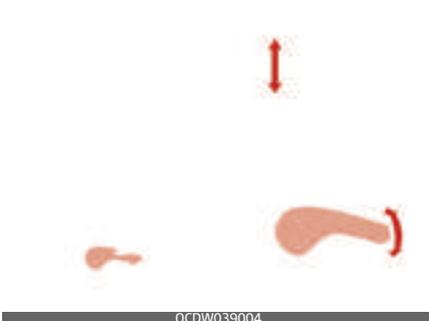
Adjust the seat before driving, and make sure the seat is locked securely by trying to move forward and rearward without using the lever. If the seat moves, it is not locked properly.

### Seatback angle



- Turn the control knob forward or rearward to move the seatback to the desired angle.

### Seat cushion height (if equipped)



To change the height of the seat cushion, push the lever that is located on the outside of the seat cushion 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 - power (if equipped)

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

#### ⚠ WARNING

The power seat is operable with the ignition OFF.

Therefore, children should never be left unattended in the vehicle.

#### ⚠ CAUTION

- The power seat is driven by an electric motor. Stop operating once the adjustment is completed. Excessive operation may damage the electrical equipment.
- When in operation, the power seat consumes a large amount of electrical power. To prevent unnecessary charging system drain, don't adjust the power seat longer than necessary while the engine is not running
- Do not operate two or more power seat control switches at the same time. Doing so may result in power seat motor or electrical component malfunction.

### ***Forward and backward***



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

### ***Seatback angle***



- Rotate the top of control switch forward or rearward to move the seatback to the desired angle.
- Release the switch once the seat reaches the desired position.

### ***Seat height***



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

### ***Lumbar support (if equipped)***



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

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

### **Driver position memory system (for power seat) (if equipped)**



OCDW039009

A driver position memory system is provided to store and recall the driver seat position with a simple button operation. By saving the desired position into the system memory, different drivers can reposition the driver seat based upon their driving preference. If the battery is disconnected, the position memory will be erased and the driving position should be restored in the system.

### **⚠ WARNING**

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

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

### ***Storing positions into memory using the buttons on the door***

#### ***Storing driver's seat positions***

1. Shift the shift lever into P or N while the ENGINE START/STOP button is ON.
2. Adjust the driver's seat comfortable for the driver.
3. Press SET button on the control panel. The system will beep once.
4. Press one of the memory buttons (1 or 2) within 4 seconds after pressing the SET button. The system will beep twice when memory has been successfully stored.

#### ***Recalling positions from memory***

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

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

### **⚠ WARNING**

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

### ***Initializing Driver position memory system***

Initialize Driver position memory system as follows if the system fails to function properly.

#### ***Initialization method***

1. Have the vehicle completely stopped, the ignition [ON], and the shift lever placed into P (Parking). Afterwards, open the door on driver's side.
2. Using the control switches for forward or backward and seatback angle, pull the seat forward to the fullest and the seatback upright forward to the fullest.
3. Press both [SET] button and the forward movement control switch at the same time for two seconds.

### ***Initialization process***

1. The alarm sounds and the initialization process starts.
2. The driver seat and its seatback automatically move backward. The alarm continues to sound during the movement.
3. The seat and seatback move to the center and the alarm sounds and the initialization is completed.

In the following cases, however, the initialization process and the alarming sound come to a stop.

- Driving position memory system button is pressed
- When the control switches for driver's seat are pressed
- When the shift lever was displaced from [P] to another position
- When vehicle is ran at the speed of 3km/h or faster
- When the door on the driver's side is closed

### **⚠ WARNING**

- Re-start initialization if the alarming sound or initialization stop while the initialization is in process.
- Make sure that nothing blocks the place near the driver seat before initializing Driver position memory system.
- Once initialization is completed, make sure to adjust the seat to

the driver's preferences and remember the driving position.

---

**Easy access function (if equipped)**

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

- It will move the driver's seat rearward when the ENGINE START/ STOP button is changed to the OFF position and front driver's door is opened.
- It will move the driver's seat forward when the ENGINE START/ STOP button is changed to the ACC or START position.

You can activate or deactivate this feature. Refer to "User settings mode (if equipped)" on page 5-70.

**\* NOTICE**

If there's not enough room between the driver seat and the rear seat or if the passenger is sitting right behind the driver seat, the driver seat can fail to move backward.

---

**Headrest - For front seat**



OCDW039065

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 to protect the head and neck in the event of a collision.

**⚠ WARNING**

- For maximum effectiveness in case of an accident, the headrest should be adjusted so the middle of the headrest is at the same height as the center of gravity of an occupant's head. Generally, the center of gravity of most people's head is similar with the height of the top of their eyes. Also, adjust the headrest as close to your head as possible. For this reason, the use of a cushion that holds the body away from

the seatback is not recommended.

- Do not operate the vehicle with the headrests removed or reversed as severe injury to the occupants may occur in the event of an accident. Headrests may provide protection against neck injuries when properly adjusted.
- Do not adjust the headrest position of the driver's seat while the vehicle is in motion.

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



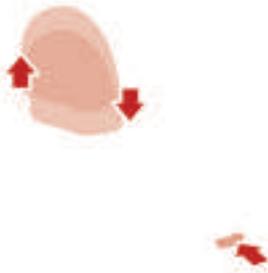
**⚠ CAUTION**

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

**⚠ CAUTION**

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.

***Adjusting the height up and down***



***Removal and installation***

Type A



OCDW039010

- To raise the headrest, pull it up to the desired position (1).

OCDW039012

Type B



OCDW039013

To remove the headrest:

1. Recline the seatback (2) with the recline dial 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**

A gap between the seat and the headrest release button may appear when seating on the seat or when you push or pull the seat. Be careful not to get your finger, etc. caught in the gap.

Type A



OCDW039015

Type B



OCDW039014

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 dial or switch (3).
3. Adjust the headrest to the appropriate height.

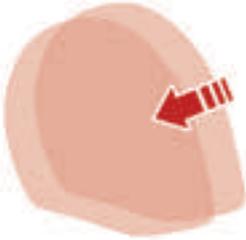
**⚠ WARNING**

A gap between the seat and the headrest release button may appear when seating on the seat or when you push or pull the seat. Be careful not to get your finger, etc. caught in the gap.

**⚠ WARNING**

A gap between the seat and the headrest release button may appear when seating on the seat or when you push or pull the seat. Be careful not to get your finger, etc. caught in the gap.

***Forward and backward adjustment (for front seat)***



OCDW039011

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

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

**Seatback pocket**



OCDW039016

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

**⚠ WARNING**

**Seatback pockets**

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

## Rear seat adjustment

### Headrest



OCDW039066

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

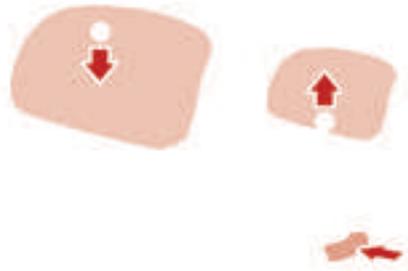
The headrest not only provides comfort for passengers, but also helps to protect the head and neck in the event of a collision.

### **⚠ WARNING**

- For maximum effectiveness in case of an accident, the headrest should be adjusted so the middle of the headrest is at the same height as the center of gravity of an occupant's head. Generally, the center of gravity of most people's head is similar with the height of the top of their eyes. Also adjust the headrest as close to your head as possible. For this reason, the use of a cushion that holds the body away from the seatback is not recommended.

- Do not operate the vehicle with the headrests removed or reversed. Severe injury to an occupant may occur in the event of an accident. Headrests may provide protection against severe neck injuries when properly adjusted.

### Adjusting the height up and down

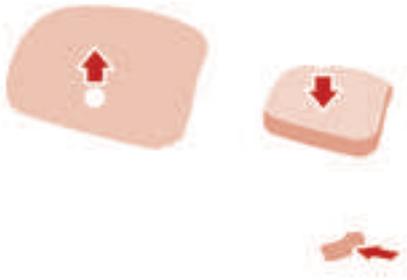


OCDW039017

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).

### Removal and installation



OCDW039018

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

#### **⚠ WARNING**

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

### Armrest (if equipped)



OCDW039019

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**

The purpose of the fold-down rear seatbacks is to allow you to carry longer objects than could not otherwise be accommodated.

Never allow passengers to sit on top of the folded down seatback while the car is moving as this is not a proper seating position and no seat belts are available for use. This could result in serious injury or death in case of an accident or sudden stop. Objects carried on the folded down seatback should not extend higher than the top of the front seats. This could allow cargo

to slide forward and cause injury or damage during sudden stops.

The rear seatbacks may be folded forward to provide additional cargo space and to provide access to the cargo area.

- To raise the seatback, lift and push it firmly until it clicks into place.
- When you return the seatback to its upright position, reposition the rear safety belts so that they can be used by rear seat passengers.

**⚠ WARNING**

Do not fold the rear seat, if the driver's position is not properly set according to the driver's physical figure after folding the rear seat. A sudden stop or collision may cause injury.

**⚠ CAUTION**

- When folding or unfolding the rear seat, make sure to move the front seat fully forward. If there are not enough space to fold the rear seat, never fold it by force. It will cause damage to the headrest or the related parts of the seat.
- Before using the seat belt, be sure to remove it from the holder. If you pull out the seat belt while it's in the holder, it may damage the seat belt or holder.

- Use the holder only when there is no passenger in the rear seat or when you need to fold the rear seat.

**⚠ CAUTION**

**Blocked Hybrid battery duct**



Do not put objects on the left side of rear seats. This could block the battery cooling duct causing battery degradation.

**To fold down the rear seatback (if equipped)**

1. Set the front seatback to the upright position and if necessary, slide the front seat forward.
2. Lower the rear headrests to the lowest position.
3. On rear outboard seatback: Pull the lock release lever (1) and fold the rear seatback forward and down firmly.

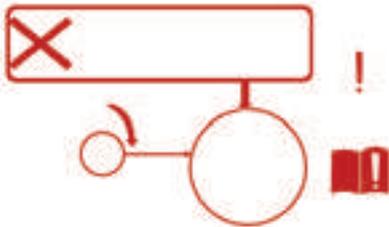
On rear outboard seatback



OCDW039021

**⚠ WARNING**

**2nd row right side seat folding**



OCDW039064

Be careful when you fold the 2nd row right side seat, if the center seat is folded. It may cause injury or damage to you.

**To unfold the rear seat**



OCDW039022

1. To use the rear seat, lift and pull the seatback backward. Pull the seatback firmly until it clicks into place. Make sure the seatback is locked in place. 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. If you can not see the red line at the bottom of folding lever, it means the seatback is locked completely.
2. Return the rear seat belt to the proper position.
3. When the seatback is completely installed, check the seatback folding lever again.

***To fold down the rear center seatback separately (if equipped)***



OCDW039057

Long objects can be stored by folding the rear center seatback, without having to fold all rear seats. See below steps for folding the rear center seatback.

1. Lower the rear center headrest to the lowest position.
2. Pull the armrest forward from the seatback.
3. Pull the lever (1) to unlock the center seatback.
4. After unlocking, pull forward the center seatback and fold it.

**⚠ 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**

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

**⚠ WARNING**

When you return the rear seatback to its upright position after being folded down:

Be careful not to damage the seat belt webbing or buckle. Do not allow the seat belt webbing or buckle to get caught or pinched in the rear seat. Ensure that the seatback is completely locked into its upright position by pushing on the top of the seatback. Otherwise, in an accident or sudden stop, the seat could fold down and allow cargo enter the passenger compartment, which could result in serious injury or death.

**⚠ 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****Cargo**

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

**⚠ WARNING****Cargo loading**

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

**Seat belts****Seat belt restraint system****⚠ WARNING**

- For maximum restraint system protection, the seat belts must always be used whenever the car is moving.
- Seat belts are most effective when seatbacks are in the upright position.
- Children age 13 and younger must always be properly restrained in the rear seat. Never allow children to ride in the front passenger seat. If a child over 13 must be seated in the front seat, he/she must be properly belted and the seat should be moved as far back as possible.
- Never wear the shoulder belt under your arm or behind your back. An improperly positioned shoulder belt can cause serious injuries in a crash. The shoulder belt should be positioned midway over your shoulder across your collarbone.
- Never wear a seat belt over fragile objects. If there is a sudden stop or impact, the seat belt can damage it.
- Avoid wearing twisted seat belts. A twisted belt can't do its job as well. In a collision, it could even cut

into you. Be sure the belt webbing is straight and not twisted.

- Be careful not to damage the belt webbing or hardware. If the belt webbing or hardware is damaged, replace it.

### **⚠ WARNING**

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

It is essential to replace the entire assembly after it has been worn in a severe impact even if damage to the assembly is not obvious. Belts should not be worn with straps twisted. Each belt assembly must

only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.

### **⚠ WARNING**

- No modifications or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.
- When you fasten the seat belt, be careful not to latch the seat belt in buckles of other seat. It's very dangerous and you may not be protected by the seat belt properly.
- Do not unfasten the seat belt and do not fasten and unfasten the seat belt repeatedly while driving. This could result in loss of control, and an accident causing death, serious injury, or property damage.
- When fastening the seat belt, make sure that the seat belt does not pass over objects that are hard or can break easily.
- Make sure there is nothing in the buckle. The seat belt may not be fastened securely.

***Driver seat belt warning***

As a reminder to the driver, the driver's seat belt warning lights will illuminate for approximately 6 seconds each time you turn the ENGINE START/STOP button 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 under 20 km/h or stop, the corresponding warning light will illuminate.

If you start to drive without the seat belt fastened or you unfasten the seat belt when you drive 20 km/h and faster, the warning light will blink and warning chime will sound for approximately 100 seconds.

When the seat belt is unfastened during driving, the warning light will illuminate when the speed is under 20 km/h.

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

***Front passenger seat belt warning***

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

If you start to drive without the seat belt fastened or you unfasten the seat belt when you drive under 20km/h or stop, the corresponding warning light will illuminate.

If you start to drive without the seat belt fastened or you unfasten the seat belt when you drive 20 km/h and faster, the warning light will blink and warning chime will sound for approximately 100 seconds.

When the seat belt is unfastened during driving, the warning light will illuminate when the speed is under 20 km/h. When the speed is 20 km/h and faster, the warning light will blink and warning chime will sound for approximately 100 seconds.

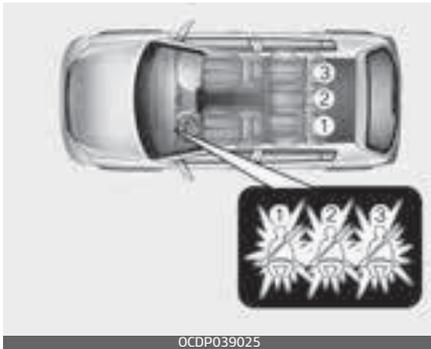
**⚠ WARNING**

Riding in an improper position adversely affects the front seat belt warning system. It is important for the driver to instruct the passenger to properly be seated as instructed in this manual.

**\* NOTICE**

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

***Rear passenger's seat belt warning***



- For rear left(1) and right(3) side seat

As a reminder to the rear passenger, the rear passenger's seat belt warning lights will illuminate for approximately 6 seconds each time you turn the ENGINE START/STOP button ON regardless of belt fastening.

If you start to drive without the seat belt fastened or you unfasten the seat belt when you drive under 20 km/h, the corresponding warning

light will continue to illuminate until you fasten the seat belt.

If you continue to drive without the seat belt fastened or you unfasten the seat belt when you drive 20 km/h and faster, the seat belt warning chime will sound for approximately 35 seconds and the corresponding warning light will blink.

When the seat belt is unfastened during driving, the warning lights will illuminate when the speed is under 20 km/h.

When the speed is 20 km/h and faster, the warning light will blink and warning chime will sound for approximately 35 seconds.

- For rear center (2) seat

As a reminder to the rear passenger, the rear passenger's seat belt warning lights will illuminate for approximately 6 seconds each time you turn the ENGINE START/STOP button ON regardless of belt fastening.

If the seat belt is not fastened when the ENGINE START/STOP button is turned ON, the seat belt warning light will illuminate for approximately 70 seconds.

If you start to drive without the seat belt fastened the corresponding warning light will continue to illuminate for approximately 70 seconds regardless of the speed.

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

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

If the rear door is opened while driving under 20 km/h, warning light and warning sound does not work even if driving over 20 km/h.

### ***Lap/Shoulder belt***

#### ***Height adjustment (front seat)***

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

Front seat



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

- To adjust the height of the seat belt anchor, lower or raise the height adjuster into an appropriate position.
- To raise the height adjuster, pull it up (1). To lower it, push it down (3) while pressing the height adjuster button (2).

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

#### **⚠ WARNING**

- 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.
- Failure to replace seat belts after an accident could leave you with damaged seat belts that will not provide protection in the event of another collision leading to personal injury or death. Replace your seat belts after being in an accident as soon as possible.

**To fasten your seat belt**



ODEEV058025NR

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

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

**\* NOTICE**

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



ODEEV058026NR

**⚠ WARNING**

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

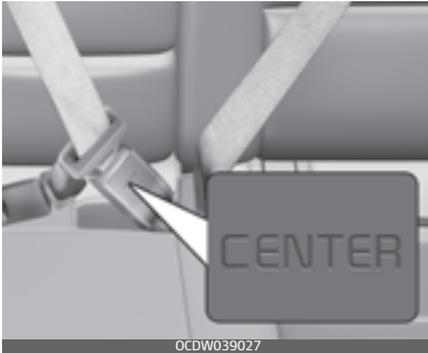
Never wear the seat belt under the arm nearest the door.



OCDW039026

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

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



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

**⚠ CAUTION**

Do not force to lock the left or right seat belt into the center seat belt buckle.

Make sure to lock the rear center seat belt into the center seat belt buckle.

If not, the improperly fastened seat belt will not be able to provide protection.

***Rear center seatbelt***



OCDW039067



OCDW039068

- Pull the metal tab (3) and insert it into the buckle (4). There will be an audible “click” when the tab locks into the buckle. Make sure the belt is not twisted. When using the rear center seat belt the buckle with the “CENTER” mark must be used.

***To release the seat belt***

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

***Stowing the rear seat belt***

OCDW039028

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

**Pre-tensioner seat belt**

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Your vehicle is equipped with pre-tensioner seatbelts at the front and rear outboard seating positions.

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

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

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

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

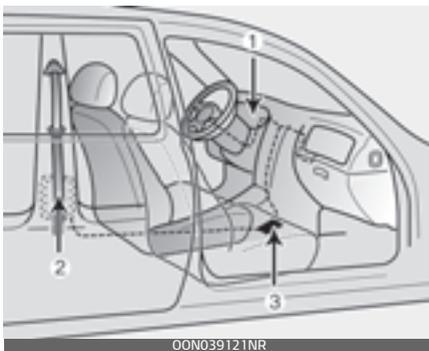
the pressure on the affected seat belt. (if equipped)

### ⚠ WARNING

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

### \* NOTICE

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



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

1. SRS air bag warning light
2. Retractor pre-tensioner assembly
3. SRS control module

### ⚠ WARNING

To obtain maximum benefit from a pre-tensioner seat belt:

1. The seat belt must be worn correctly and adjusted to the proper position. Please read and follow all of the important information and precautions about your vehicle's occupant safety features – including seat belts and air bags – that are provided in this manual.
2. Be sure you and your passengers always wear seat belts properly.

### \* NOTICE

- Pre-tensioners equipped at the front and rear outboard seating positions will be activated in certain collisions. The pre-tensioner seat belts can be activated, where the collision is severe enough, together with the air bags.
- 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.
- Although it is harmless, the fine dust may cause skin irritation and should not be breathed for prolonged periods. Wash all exposed skin areas thoroughly after an accident in which the pre-tensioner seat belts were activated.

- Because the sensor that activates the SRS air bag is connected with the pre-tensioner seat belt, the SRS air bag warning light  on the instrument panel will illuminate for approximately 6 seconds after the ENGINE START/STOP button has been turned to the ON position, and then it should turn off.

### CAUTION

If the pre-tensioner seat belt is not working properly, the SRS air bag warning light will illuminate even if there is no malfunction of the SRS air bag. If the SRS air bag warning light does not illuminate when the ENGINE START/STOP button is turned to ON, or if it remains illuminated after illuminating for approximately 6 seconds, or if it illuminates while the vehicle is being driven, have the system inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### WARNING

- Pre-tensioners are designed to operate only one time. After activation, pre-tensioner seat belts must be replaced. All seat belts, of any type, should always be replaced after they have been worn during a collision.
- The pre-tensioner seat belt assembly mechanisms become hot during activation. Do not touch the pre-tensioner seat belt assemblies for several minutes after they have been activated.
- Do not attempt to inspect or replace the pre-tensioner seat belts yourself. Have the system inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
- Do not strike the pre-tensioner seat belt assemblies.
- Do not attempt to service or repair the pre-tensioner seat belt system in any manner.
- Improper handling of the pre-tensioner seat belt assemblies, and failure to heed the warnings not to strike, modify, inspect, replace, service or repair the pre-tensioner seat belt assemblies may lead to improper operation or inadvertent activation and serious injury.
- Always wear the seat belts when driving or riding in a motor vehicle.
- If the vehicle or pre-tensioner seat belt must be discarded, contact a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

**⚠ CAUTION**

Body work on the front area of the vehicle may damage the pre-tensioner seat belt system. Therefore, have the system serviced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

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**Seat belt precautions****⚠ WARNING**

- All occupants of the vehicle must wear their seat belts at all times. Seat belts and child restraints reduce the risk of serious or fatal injuries for all occupants in the event of a collision or sudden stop. Without a seat belt, occupants could be shifted too close to a deploying air bag, strike the interior structure or be thrown from the vehicle. Properly worn seat belts greatly reduce these hazards.  
Always follow the precautions about seat belts, air bags and occupant safety contained in this manual.
  - Never wear a seat belt over fragile objects. If there is a sudden stop or impact, the seat belt can damage it.
- 

***Infant or small child***

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 4-32.

**⚠ WARNING**

Every person in your vehicle needs to be properly restrained at all times, including infants and 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 interior. Always use a child restraint appropriate for your child's height and weight.

---

**\* 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 4-32.

### ***Larger children***

Children who are too large for child restraint systems should always occupy the rear seat and use the available lap/shoulder belts. The lap portion should be fastened and snugged on the hips and as low as possible. Check if belt fits periodically. A child's squirming could put the belt out of position. Children are given the most safety in the event of an accident when they are restrained by a proper restraint system in the rear seat. If a larger child (over age 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**

#### **Shoulder belts on small children**

- Never allow a shoulder belt to be in contact with a child's neck or face while the vehicle is in motion.
- If seat belts are not properly worn and adjusted on children, there is a risk of death or serious injury.

### ***Pregnant women***

The use of a seat belt is recommended for pregnant women to lessen the chance of injury in an accident. When a seat belt is used, the lap belt portion should be placed as low and snugly as possible on the hips, not across the abdomen. For specific recommendations, consult a physician.

### **⚠ WARNING**

#### **Pregnant women**

Pregnant women must never place the lap portion of the safety belt over the area of the abdomen where the fetus is located or above the abdomen where the belt could crush the fetus during an impact.

### ***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.

### **⚠ WARNING**

Riding with a reclined seatback increases your chance of serious or fatal injuries in the event of a collision or sudden stop. The protection of your restraint system (seat belts

and air bags) is greatly reduced by reclining your seat. Seat belts must be snug against your hips and chest to work properly. The more the seatback is reclined, the greater the chance that an occupant's hips will slide under the lap belt causing serious internal injuries or the occupant's neck could strike the shoulder belt. Drivers and passengers should always sit well back in their seats, properly belted, and with the seatbacks upright.

### **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**

- When you return the rear seatback to its upright position after the rear seatback has been folded down, be careful not to damage the seat belt webbing or buckle. Be sure that the webbing or buckle does not get caught or pinched in the rear seat. A seat belt with damaged webbing or buckle could possibly fail during a collision or sudden stop, resulting in serious injury. If the webbing or

buckles are damaged, get them replaced immediately.

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

### ***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***

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. In this case, have the system replaced by a professional workshop. Kia recommends to consult an authorized Kia dealer/ service partner.

## **Child restraint system (CRS)**

### **Our recommendation: Children always in the rear**

#### **⚠ WARNING**

Always properly restrain children in the vehicle. Children of all ages are safer when riding in the rear seats. Never place a rearward-facing Child Restraint System on the front passenger seat, unless the air bag is deactivated.

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

According to accident statistics, children are safer when properly restrained in the rear seats than in the front seat. Children too large for a Child Restraint System must use the seat belts provided.

Most countries have regulations which require children to travel in approved Child Restraint Systems.

The laws governing the age or height/weight restrictions at which seat belts can be used instead of Child Restraint System differs among countries, so you should be aware of the specific requirements in your country, and where you are travelling.

Child Restraint Systems must be properly installed in the vehicle seat. Always use a commercially available Child Restraint System that meets the requirements of your country.

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

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

## **⚠ WARNING**

- Always follow the Child Restraint System manufacturer's instructions for installation and use.
- Always properly restrain your child in the Child Restraint System.
- Do not use an infant carrier or a child safety seat that "hooks" over a seatback, it may not provide adequate protection in an accident.
- After an accident, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

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

When selecting a Child Restraint System for your child, always:

- Make sure the Child Restraint System has a label certifying that it meets applicable Safety Standards of your country. A Child Restraint System may only be installed if it was approved in accordance with the requirements of ECE-R44 or ECE-R129.
- Select a Child Restraint System based on your child's height and weight. The required label or the instructions for use typically provide this information.

- Select a Child Restraint System that fits the vehicle seating position where it will be used. refer to "Suitability of each seating position for belted & ISOFIX Child Restraint Systems (CRS) according to UN regulations." on page 4-41.
- Read and comply with the warnings and instructions for installation and use provided with the Child Restraint System.

***Child Restraint System types***

There are three main types of Child Restraint Systems: rearward-facing, forward-facing and booster Child Restraint Systems.

They are classified according to the child's age, height and weight.

***Rearward-facing Child Restraint System***



A rearward-facing Child Restraint System 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 Child Restraint Systems and reduce the stress to the fragile neck and spinal cord.

All children under the age of one year must always ride in a rearward-facing Child Restraint System. There are different types of rearward-facing Child Restraint Systems: infant-only Child Restraint Systems can only be used rearward-facing. Convertible and 3-in-1 Child Restraint Systems typically have higher height and weight limits for the rearward-facing position, allowing you to keep your child rearward-facing for a longer period of time.

Keep using Child Restraint Systems in the rearward-facing position as long as children fit within the height and weight limits allowed by the Child Restraint System's manufacturer.

### ***Forward-facing Child Restraint System***



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

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

### ***Booster seats***

A booster seat is a Child Restraint System 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 stronger parts of your child's body. Keep your children in booster seats until they are big enough to fit in a seat belt properly.

For a seat belt to fit properly, the lap belt must lie comfortable across the upper thighs, not the stomach. The shoulder belt should lie comfortable across the shoulder and chest and not across the neck or face. Children under age 13 must always be properly restrained to minimize the risk of injury in an accident, sudden stop or sudden maneuver.

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

#### **⚠ WARNING**

Before installing your Child Restraint System always: Read and follow the instructions provided by the manufacturer of the Child Restraint System. Failure to follow all warnings and instructions could increase the risk of the SERIOUS INJURY or DEATH if an accident occurs.

#### **⚠ WARNING**

If the vehicle headrest prevents proper installation of a Child Restraint System, the headrest of the respective seating position shall be readjusted or entirely removed.

After selecting a proper Child Restraint System for your child and checking that the Child Restraint System fits properly on the seating position, there are three general steps for a proper installation:

- **Properly secure the Child Restraint System to the vehicle.** All Child Restraint Systems must be secured to the vehicle with the lap belt or lap part of a lap/shoulder belt or with the ISOFIX top-tether and/or ISOFIX anchorage and/or with the support leg.
- **Make sure the Child Restraint System is firmly secured.** After installing a Child Restraint System 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 System secured with a seat belt should be installed as firmly as possible. However, some side-to-side movement can be expected. When installing a Child Restraint System, adjust the vehicle seat and seatback (up and down, forward and rearward) so that your child fits in the Child Restraint System in a comfortable manner.
- **Secure the child in the Child Restraint System.** Make sure the child is properly strapped in the Child Restraint System according to the Child Restraint System manufacturer's instructions.

### CAUTION

A Child Restraint System in a closed vehicle can become very hot. To prevent burns, check the seating surface and buckles before placing your child in the Child Restraint System.

### **ISOFIX anchorage and top-tether anchorage (ISOFIX anchorage system) for children**

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

ISOFIX anchorages are metal bars built into the vehicle. There are two lower anchors for each ISOFIX seating position that will accommodate a Child Restraint System with lower attachments.

To use the ISOFIX system in your vehicle, you must have a Child Restraint System with ISOFIX attachments.

The Child Restraint System manufacturer will provide you with instructions on how to use the Child Restraint System with its attachments for the ISOFIX anchorages.



OCDW039056

ISOFIX anchorages have been provided in the left and right outboard rear seating positions. Their locations are shown in the illustration.

**⚠ WARNING**

Do not attempt to install a Child Restraint System using ISOFIX anchorages in the rear center seating position. There are no ISOFIX anchorages provided for this seat. Using the outboard seat anchorages, for the CRS installation on the rear center seating position, can damage the anchorages.

OCDW039029

1. \* ISOFIX(i-Size) Anchor Position-Indicator 
2. ISOFIX(i-Size) Anchor

ISOFIX(i-Size) anchorages are located between the seatback and the seat cushion of the rear seat left and right outboard seating positions, indicated by the symbols.

***Securing a Child Restraint System with the "ISOFIX(i-Size) Anchorage System"***

To install a ISOFIX(i-Size)-compatible Child Restraint System in either of the rear outboard seating positions:

1. Move the seat belt buckle away from the ISOFIX(i-Size) anchorages.
2. Move any other objects away from the anchorages that could prevent a secure connection between the Child Restraint System and the ISOFIX(i-Size) anchorages.

3. Place the Child Restraint System on the vehicle seat, then attach the seat to the ISOFIX(i-Size) anchorages according to the instructions provided by the Child Restraint System manufacturer.
4. Follow the instructions of the Child Restraint System's manufacturer for proper installation and connection of the ISOFIX(i-Size) attachments on the Child Restraint System to the ISOFIX(i-Size) anchorages.

damage the ISOFIX(i-Size) system and may not properly secure the Child Restraint System.

***Securing a Child Restraint System seat with “Top-tether Anchorage” system***



**⚠ WARNING**

Take the following precautions when using the ISOFIX(i-Size) system:

- Read and follow all installation instructions provided with your Child Restraint System.
- To prevent the child from reaching and taking hold of unretracted seat belts, buckle all unused rear seat belts and retract the seat belt webbing behind the child. 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 System to a single anchorage. This could cause the anchor or attachment to come loose or break.
- Always have the ISOFIX(i-Size) system inspected by your dealer after an accident. An accident can



Child restraint system top tether anchorages are located on the back of the rear seatbacks.



1. Route the Child Restraint System top-tether strap over the seat-back. Placing the top tether strap, please follow the instructions of the Child Restraint System manufacturer.

2. Connect the top-tether strap to the top-tether anchorage, then tighten the top-tether strap according to the instructions of your Child Restraint System's manufacturer to firmly attach the Child Restraint System to the seat.

### **⚠ WARNING**

Take the following precautions when installing the top-tether:

- Read and follow all installation instructions provided with your Child Restraint System.
- NEVER attach more than one Child Restraint System to a single ISOFIX top-tether anchorage. This could cause the anchorage or attachment to come loose or break.
- Do not attach the top-tether to anything other than the correct top-tether anchorage. It may not work properly if attached to something else.
- Child Restraint System anchorages are designed to withstand only those loads imposed by correctly fitted Child Restraint System. Under no circumstances are they to be used for adult seat belts or harnesses or for attaching other items or equipment to the vehicle.

### ***Securing a Child Restraint System with a lap/shoulder belt***

When not using the ISOFIX system, all Child Restraint Systems must be secured to a rear seat with the lap part of a lap/shoulder belt.

### ***Installing a Child Restraint System with a lap/shoulder belt***



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To install a Child Restraint System on the rear seats, do the following:

1. Place the Child Restraint System on a rear seat and route the lap/shoulder belt around or through the Child Restraint System, following the Child Restraint System manufacturer's instructions.

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. Make sure the seat belt webbing is not twisted.



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3. Remove as much slack from the belt as possible by pushing down on the Child Restraint System while feeding the shoulder belt back into the retractor.
4. Push and pull on the Child Restraint System to confirm that the seat belt is holding it firmly in place.

If your Child Restraint System manufacturer recommends the use of a top-tether with the lap/shoulder belt.

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

**Suitability of each seating position for belted & ISOFIX Child Restraint Systems (CRS) according to UN regulations.**

(Information for use by vehicle users and CRS manufacturers)

- Yes : Suitable for fitment of the designated category of CRS
- No : Not suitable for fitment of the designated category of CRS
- “-” : Not applicable
- The table is based on LHD vehicle. Except for the front passenger seat, the table is valid for RHD vehicle.

For RHD vehicle front passenger seat, please use information for the seating position number 3.

CRS categories		Seating positions							Remarks
		1	2	3		4	5	6	
				Airbag ON	Airbag OFF				
Universal belted CRS		-	-	No	Yes F, R	Yes F, R	Yes <sup>*1</sup> F, R	Yes F, R	F : Forward-facing R : Rearward-facing
i-size CRS		-	-	No	No	Yes F, R <sup>*2</sup>	No	Yes F, R <sup>*2</sup>	
Carry-cot (ISOFIX lateral facing CRS)	ISOFIX CRF : L1, L2	-	-	No	No	No	No	No	
ISOFIX infant CRS (i.e. CRS for a baby)	ISOFIX CRF : R1	-	-	No	No	Yes R	No	Yes R	
ISOFIX toddler CRS – small	ISOFIX CRF : F2, F2X, R2, R2X	-	-	No	No	Yes F, R <sup>*2</sup>	No	Yes F, R <sup>*2</sup>	
* ISOFIX toddler CRS – large (*: not booster seats)	ISOFIX CRF : F3, R3	-	-	No	No	Yes F, R <sup>*2</sup>	No	Yes F, R <sup>*2</sup>	
Booster Seat – reduced Width	ISO CRF : B2	-	-	No	No	Yes	No	Yes	
Booster Seat – full Width	ISO CRF : B3	-	-	No	No	No	No	No	

\*1. The seating position number 5 is not suitable for fitment of child restraint system with a support leg.  
 \*2. The seating position number 5 is not suitable for fitment of child restraint system with a support leg.  
 • Driver seat : You should move the driver seat to the mid position and adjust the height of seat to the highest position.  
 • Front passenger seat : You should move the passenger seat to the foremost position.



Seat number	Position in the vehicle
1	Front left
2	Front center
3	Front right
4	2nd row left
5	2nd row center
6	2nd row right

**Recommended child restraint systems – For Europe**

Mass Group	Name	Manufacturer	Type of Fixation	ECE-R44 Approval No.
Group 0+	Cabriofix & Familyfix	Maxi Cosi	ISOFIX	E4 04443907
Group I	Duo Plus	Britax Römer	ISOFIX and top-tether	E1 04301133
Group II	KidFix II XP	Britax Römer	ISOFIX and vehicle Belt	E1 04301323
Group III	Junior III	Graco	vehicle Belt	E11 03.44.164 E11 03.44.165

CRS Manufacturer information

Maxi Cosi Cabriofix & Familyfix <http://www.maxi-cosi.com>

Britax Römer <http://www.britax.com>

Graco <http://www.gracobaby.com>

## Air bag – supplemental restraint system (if equipped)



4

OCDW039031



OCDW039063

1. Driver's front air bag
2. Passenger's front air bag
3. Side air bag
4. Curtain air bag
5. Front passenger's air bag ON/OFF switch

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

## **⚠ WARNING**

- Even in vehicles with air bags, you and your passengers must always wear the safety belts provided in order to minimize the risk and severity of injury in the event of a collision or rollover.
- SRS and pre-tensioners contain explosive chemicals. If scraping a vehicle without removing SRS and pre-tensioners from a vehicle, it may cause fire. Before scraping a vehicle, contact a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
- Keep the SRS parts and wirings away from water or any liquid. If the SRS components are inoperative due to exposure to water or liquids, it may cause fire or severe injury.

### **How does the air bag system operate**

- Air bags are activated (able to inflate if necessary) only when the ENGINE START/STOP button is turned to the ON position.
- 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.

- In normal conditions, the airbag is designed to deploy based on certain angle and intensity of the collision. These two factors are crucial elements for deciding whether to transmit airbag deployment signal or start the electrical operation or not.
- The airbag will deploy based on angle and intensity of the collision. It will not deploy in every crash or collision situations.
- 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 order to help provide protection in a severe collision, the air bags must inflate rapidly. The speed of the air bag inflation is a consequence of extremely short time in which a collision occurs and the need 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 in a severe collision 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 air bag can cause fatal injuries, especially if the occupant is positioned excessively close to the steering wheel.**

### WARNING

- To avoid severe personal injury or death caused by deploying air bags in a collision, the driver should sit as far back from the steering wheel air bag as possible (at least 250 mm (10 inches) away). The front passengers should always move their seats as far back as possible and sit back in their seat.
- Air bags inflate instantly in the event of a collision, and passengers may be injured by the air bag expansion force if they are not in a proper position.
- Air bag inflation may cause injuries including facial or bodily abrasions, injuries from broken glasses or burns.

### **Noise and smoke**

When the air bags inflate, they make a loud noise and they leave smoke and powder in the air inside of 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 the smoke and powder are non-toxic, they 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

When the air bags deploy, the air bag related parts in the steering wheel and/or instrument panel and/or in both sides of the roof rails above the front and rear doors are very hot. To prevent injury, do not touch the air bag storage area's internal components immediately after an air bag has inflated.

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

**Front passenger's air bag warning label for child restraint system**



Never place a rear-facing child restraint in the front passenger's seat. If the air bag deploys, it would impact the rear-facing child restraint, causing serious or fatal injury.

In addition, do not place a 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.

If your vehicle is equipped with the passenger's front air bag ON/OFF switch, you can activate or deactivate the front passenger's air bag when necessary.

**⚠ WARNING**

- Extreme Hazard! Do not use a rearward facing child restraint on a seat protected by an air bag in front of it!
- NEVER use a rearward facing child restraint on a seat protected by an ACTIVE AIRBAG in front of it, DEATH or SERIOUS INJURY to the CHILD can occur.
- Never put a child restraint in the front passenger's seat. If the front passenger air bag inflates, it can cause serious or fatal injuries.
- When children are seated in the rear outboard seats of a vehicle equipped with side and/or curtain air bags, be sure to install the child restraint system as far away from the door side as possible, and securely lock the child restraint system in position. Inflation of side and/or curtain air bags could cause serious injury or death to an infant or child.

**Air bag warning light**



The purpose of the air bag warning light in your instrument panel is to alert you of a potential problem with your air bag – Supplemental Restraint System (SRS).

When the ENGINE START/STOP button is turned ON, the warning light should illuminate for approximately 6 seconds, then goes off.

Have the system checked if:

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

***Passenger's front air bag ON indicator***



OCDP039032



The passenger's front air bag ON indicator illuminates for approximately 4 seconds after the ENGINE START/STOP button is turned to the ON position.

The passenger's front air bag ON indicator also comes on when the passenger's front air bag ON/OFF switch is set to the ON position and goes off after approximately 60 seconds.

***Passenger's front air bag OFF indicator***



OCDP039033



The passenger's front air bag OFF indicator illuminates for about 4 seconds after the ENGINE START/STOP button is turned to the ON position.

The passenger's front air bag OFF indicator also comes on when the passenger's front air bag ON/OFF switch is set to the OFF position and goes off when the passenger's front air bag ON/OFF switch is set to the ON position.

**CAUTION**

If the passenger's front air bag ON/OFF switch malfunctions, the passenger's front air bag OFF indicator will not illuminate (The passenger's front air bag ON indicator comes on and goes off after approximately 60 seconds) and the passenger's front air bag will inflate in a frontal impact even if the passenger's front air bag ON/OFF switch is set to the OFF position.

In this case, have the passenger's front air bag ON/OFF switch and the SRS air bag system inspected by a professional workshop.

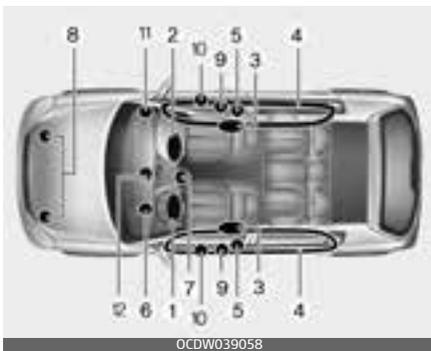
Kia recommends to visit an authorized Kia dealer/service partner.

4. Curtain air bag modules\*
5. Retractor pre-tensioner assemblies
6. Air bag warning light
7. SRS control module (SRSCM)
8. Front impact sensors
9. Side impact sensors
10. Side pressure sensors
11. Passenger's front air bag ON/OFF switch
12. Passenger's front air bag ON/OFF indicator

\* : if equipped

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

**SRS components and functions**



The SRS consists of the following components:

1. Driver's front air bag module
2. Passenger's front air bag module
3. Side air bag modules\*

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

**WARNING**

If any of the following conditions occurs, this indicates a malfunction of the SRS. In this case, have the system inspected by a professional workshop. Kia recommends to visit

an authorized Kia dealer/service partner.

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

Driver's front air bag (1)



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

Driver's front air bag (2)



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 covers then allows full inflation of the air bags.

4

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



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**⚠ WARNING**

- Do not install or place any accessories (drink holder, sticker, etc.) on the front passenger's panel above the glove box in a vehicle with a passenger's air bag. Such objects may become dangerous projectiles and cause injury if the passenger's air bag inflates.
- When installing a container of liquid air freshener inside the vehicle, do not place it near the instrument cluster nor on the instrument panel surface. It may become a dangerous projectile and cause injury if the passenger's air bag inflates.

**⚠ WARNING**

- If an air bag deploys, there may be a loud noise followed by a fine dust released in the vehicle. These conditions are normal and are not hazardous – the air bags are packed in this fine powder. The dust generated during air bag deployment may cause skin or eye irritation as well as aggravate asthma for some persons. Always wash all exposed skin areas thoroughly with cold water and a mild soap after an accident in which the air bags were deployed.
- The SRS can function only when the ENGINE START/STOP button is in the ON position. If the SRS "⚠" warning light does not illuminate, or continuously remains on after illuminating for about 6 seconds when the ENGINE START/STOP button is turned to the ON position, or after the engine is started, comes on while driving, the SRS is not working properly. In this case, have the system inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
- Before you replace a fuse or disconnect a battery terminal, change the ENGINE START/STOP button to the OFF position. Never remove or replace the air bag related fuse(s) when the ENGINE

START/STOP button is in the ON position. Failure to heed this warning will cause the SRS “” warning light to illuminate.

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

Driver's front air bag



Passenger's front air bag



Your vehicle is equipped with a Supplemental Restraint (Air Bag) System and lap/shoulder belts at both the driver and passenger seating positions.

The indications of the system's presence are the letters "AIRBAG" engraved on the air bag pad cover in 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.

#### **WARNING**

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**

Always use seat belts and child restraints – every trip, every time, everyone! Air bags inflate with considerable force and in the blink of an eye. Seat belts help keep occupants in proper position to obtain maximum benefit from the air bag. Even with air bags, improperly belted and unbelted occupants can be severely

injured when the air bag inflates. Always follow the precautions about seat belts, air bags and occupant safety contained in this manual. To reduce the chance of serious or fatal injuries and receive the maximum safety benefit from your restraint system:

- Never place a child in any child or booster seat in the front seat.
- ABC – Always Buckle Children in the back seat. It is the safest place for children of any age to ride.
- Front and side air bags can injure occupants improperly positioned in the front seats.
- Move your seat as far back as practical from the front air bags, while still maintaining control of the vehicle.
- You and your passengers should never sit or lean unnecessarily close to the air bags. Improperly positioned drivers and passengers can be severely injured by inflating air bags.
- Never lean against the door or center console – always sit in an upright position.
- Do not allow a passenger to ride in the front seat when the passenger's front air bag OFF indicator is illuminated, because the air bag will not deploy in the event of a moderate or severe frontal crash.
- No objects should be placed over or near the air bag modules on the steering wheel, instrument panel and the front passenger's panel above the glove box, because any such object could cause harm if the vehicle is in a crash severe enough to cause the air bags to deploy.
- 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.
- If the SRS air bag warning light remains illuminated while the vehicle is being driven, have the system inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
- Air bags can only be used once – have the system replaced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
- The SRS is designed to deploy the front air bags only when an impact is sufficiently severe and when the impact angle is less than 30° from the forward longitudinal axis of the vehicle. Additionally, the air bags will only deploy once. Seat belts must be worn at all times.
- Front air bags are not intended to deploy in side-impact, rear-

impact or rollover crashes. In addition, front air bags will not deploy in frontal crashes below the deployment threshold.

- A child restraint system must never be placed in the front seat. The infant or child could be severely injured or killed by an air bag deployment in case of an accident.
- Children age 13 and under must always be properly restrained in the rear seat. Never allow children to ride in the front passenger seat. If a child over 13 must be seated in the front seat, he or she must be properly belted and the seat should be moved as far back as possible.
- For maximum safety protection in all types of crashes, all occupants including the driver should always wear their seat belts whether or not an air bag is also provided at their seating position to minimize the risk of severe injury or death in the event of a crash. Do not sit or lean unnecessarily close to the air bag while the vehicle is in motion.
- Sitting improperly or out of position can result in serious or fatal injury in a crash. All occupants should sit upright with the seat back in an upright position, centered on the seat cushion with their seat belt on, legs comfortably extended and their feet on

the floor until the vehicle is parked and the vehicle is turned off.

- The SRS air bag system must deploy very rapidly to provide protection in a crash. If an occupant is out of position because of not wearing a seat belt, the air bag may forcefully contact the occupant causing serious or fatal injuries.

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#### ***Passenger's front air bag ON/OFF switch***



OCDW039070

The passenger's front air bag can be deactivated by the passenger's front air bag ON/OFF switch if a child restraint is installed on the front passenger's seat or if the front passenger's seat is unoccupied by a person.

To ensure the safety of your child, the passenger's front air bag must be deactivated when it should be necessary to install a rearward fac-

ing child seat on the front passenger seat in exceptional circumstances.

***To deactivate or reactivate the passenger's front air bag***



OCDP039036

- To deactivate the passenger's front air bag, insert the master key into the passenger's front air bag ON/OFF switch and turn it to the OFF position. The passenger's front air bag OFF indicator (⊗) will illuminate and stay on until the passenger's front air bag is reactivated.
- To reactivate the passenger's front air bag, insert the master key into the passenger's front air bag ON/OFF switch and turn it to the ON position.

The passenger's front air bag OFF indicator will go out and the passenger's front air bag ON indicator (⊗) will illuminate for approximately 60 seconds.

**⚠ WARNING**

The front air bag ON/OFF switch could turn by using a similar small rigid device. Always check the status of the front air bag ON/OFF switch and passenger's front air bag ON/OFF indicator.

**\* NOTICE**

- When the passenger's front air bag ON/OFF switch is set to the ON position, the passenger's front air bag is activated and child or infant seat should not be installed on the front passenger seat.
- When the passenger's front air bag ON/OFF switch is set to the OFF position, the passenger's front air bag is deactivated.

**⚠ CAUTION**

- If the passenger's front air bag ON/OFF switch is not working properly, the air bag warning light (⚠) on the instrument panel will illuminate. And, the passenger's front air bag OFF indicator (⊗) will not illuminate (The passenger's front air bag ON indicator comes on and goes off after approximately 60 seconds), the SRS Control Module reactivate the passenger's front air bag and the passenger's front air bag will

inflate in frontal impact crashes even if the passenger's front air bag ON/OFF switch is set to the OFF position.

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

- If the SRS air bag warning light blinks or does not illuminate when the ENGINE START/STOP button is turned to the ON position, or if it illuminates while the vehicle is being driven, have the system inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### **WARNING**

- The driver is responsible for the proper position of the passenger's front air bag ON/OFF switch.
- Deactivate the passenger's front air bag only when the ENGINE START/STOP button is switched off, or the malfunction may occur in the SRS Control Module. And there may be a danger that the driver's and/or front passenger's and/or side and curtain air bag may fail to trigger, or not trigger correctly during a collision.
- Never install a rearward facing child seat on the front passenger's seat unless the passenger's

front air bag has been deactivated. The infant or child could be severely injured or killed by an air bag deployment in case of an accident.

- Even though your vehicle is equipped with the passenger's front air bag ON/OFF switch, do not install a child restraint system in the front passenger's seat. A child restraint system must never be placed in the front seat. Children who are too large for child restraint systems should always occupy the rear seat and use the available lap/shoulder belts. Children are afforded the most safety in the event of an accident when they are restrained by a proper restraint system in the rear seat.
- As soon as the child seat is no longer needed on the front passenger's seat, reactivate the front passenger's air bag.
- 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.

**⚠ 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.

**Side air bag**

Front



OCDW039038

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

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

The side air bags are designed to deploy only during certain side-impact collisions, depending on the crash severity, angle, speed and point of impact. The side air bags are not designed to deploy in all side impact or rollover situations.

OCDW039037

**⚠ WARNING**

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

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**⚠ WARNING**

- The side air bag is supplemental to the 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 motion. The air bags deploy only in certain side impact severe enough to cause significant injury to the vehicle occupants.
- For best protection from the side air bag system and to avoid being injured by the deploying side air bag, both front and all rear (if equipped) seat occupants should sit in an upright position with the seat belt properly fastened.
- Do not use any accessory seat covers.
- Use of seat covers could reduce or prevent the effectiveness of the system.
- To prevent unexpected deployment of the side air bag that may result in personal injury, avoid impact to the side impact sensor

when the ENGINE START/STOP button is on.

- If the seat or seat cover is damaged, have the system serviced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
- 

**⚠ 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 place any objects between the door and the seat. They may become dangerous projectiles if the side air bag inflates.
  - Do not install any accessories on the side or near the side air bags.
  - Do not hang heavy items on the coat hooks for safety reasons.
-

### Curtain air bag



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

Curtain air bags are located along both sides of the roof rails above the center pillar.

They are designed to help protect the heads of the front seat occupants and the rear outboard seat occupants in certain side impact collisions.

The curtain air bags are designed to deploy only during certain side impact collisions, depending on the crash severity, angle, speed and

impact. The curtain air bags are not designed to deploy in all side impact situations, collisions from the front or rear of the vehicle or in most roll-over situations.

### **⚠ WARNING**

- In order for side and curtain air bags to provide their best protection, front seat occupants and outboard rear occupants should sit in an upright position with the seat belts properly fastened. Importantly, children should sit in a proper child restraint system in the rear seat.
- When children are seated in the rear outboard seats, they must be seated in the proper child restraint system. Make sure to position the child restraint system as far away from the door side as possible, and secure the child restraint system in a locked position.
- Do not allow the passengers to lean their heads or bodies onto doors, put their arms on the doors, stretch their arms out of the window, or place objects between the doors and passengers when they are seated on seats equipped with side and/or curtain air bags.

- Never try to open or repair any components of the side curtain air bag system. If necessary, have the system serviced by a professional workshop. Kia recommends to visit an authorized Kia dealer/ service partner.

Failure to follow the above instructions can result in injury or death to the vehicle occupants in an accident.

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 **WARNING**

**No attaching objects**

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

***Air bag collision sensors***



OCDP039085



OCDP039042

OCDW039083

OCDW039044

OCDW039045

\* The actual air bag collision sensors in the vehicle may differ from the illustration.

- 1. SRS control module (if equipped)
- 2. Front impact sensor
- 3. Side pressure sensors
- 4. Side impact sensor

**⚠ WARNING**

- 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, causing severe injury or death. Therefore, do not try to perform maintenance on or around the air bag sensors. Have the system serviced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
- Problems may arise if the sensor installation angles are changed due to the deformation of the front bumper, body or B pillars where side collision sensors are installed. In this case, have the system serviced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
- Your vehicle has been designed to absorb impact and deploy the air bag(s) in certain collisions. Installing bumper guards or replacing a bumper with non-genuine parts

may adversely affect your vehicle's collision and air bag deployment performance.

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

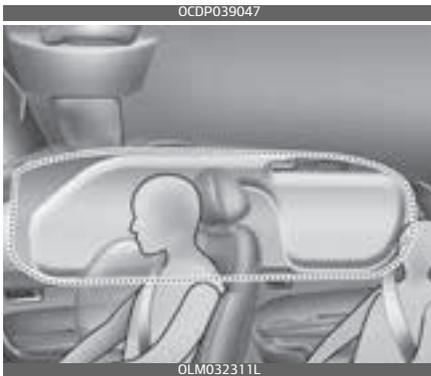
There are many types of accidents in which the air bag would not be expected to provide additional protection.

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**

OCDP039046

Front air bags are designed to inflate in a frontal collision depending on the intensity, speed or angles of impact of the front collision.



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

### Side and curtain air bags

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

Although the front air bags (driver's and front passenger's air bags) are designed to inflate only in frontal collisions, they also may inflate in other types of collisions if the front impact sensors detect a sufficient impact. Side and curtain air bags are designed to inflate only in side

impact collisions, but they may inflate in other collisions if the side impact sensors detect a sufficient impact.

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.



OCDP039048

- Frontal 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.



OCDP039049

- 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.

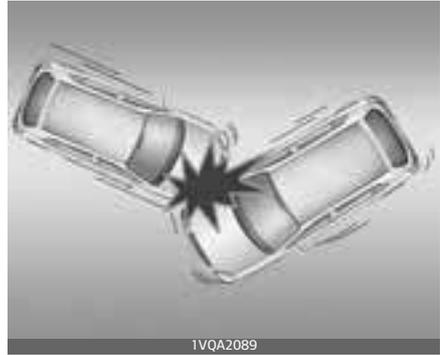


OCDP039047

However, side and curtain air bags may inflate depending on the intensity, vehicle speed and angles of impact.

- 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.



1VQA2089

- 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.



OCDP039051

- Air bags do not inflate in most rollover accidents, even though

the vehicle is equipped with side air bags and curtain air bags.



OCDP039053

OCDP039052

**\* NOTICE**

However, side and/or curtain air bags may inflate when the vehicle is rolled over by a side impact collision, if the vehicle is equipped with side air bags and curtain air bags.

**\* NOTICE**

**Without rollover sensor**

However, side and/or curtain air bags may inflate when the vehicle is rolled over by a side impact collision, if the vehicle is equipped with side air bags and curtain air bags.

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

**SRS Care**

The SRS is virtually maintenance-free and so there are no parts you can safely service by yourself. If the SRS air bag warning light does not illuminate, or continuously remains on, have the system inspected by a professional workshop.

Kia recommends to visit an authorized Kia dealer/service partner.

**⚠ WARNING**

- Modification to SRS components or wiring, including the addition of any kind of badges to the pad covers or modifications to the body structure, can adversely affect SRS performance and lead to possible 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.

- No objects should be placed over or near the air bag modules on the steering wheel, instrument panel, and the front passenger's panel above the glove box, because any such object could cause harm if the vehicle is in a crash severe enough to cause the air bags to inflate.
- If the air bags inflate, have the system replaced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
- Do not tamper with or disconnect SRS wiring, or other components of the SRS system. Doing so could result in injury, due to accidental inflation of the air bags or by rendering the SRS inoperative.
- 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.
- If your car was flooded and has soaked carpeting or water on flooring, you shouldn't try to start the engine; in this case, have your vehicle inspected by a profes-

sional workshop. Kia recommends to contact an authorized Kia dealer/service partner.

---

### Additional safety precautions

- **Never let passengers ride in the cargo area or on top of a folded-down back seat.** All occupants should sit upright, fully back in their seats with their seat belts on and their feet on the floor.
- **Passengers should not move out of or change seats while the vehicle is moving.** A passenger who is not wearing a seat belt during a crash or emergency stop can be thrown against the inside of the vehicle, against other occupants, or out of the vehicle.
- **Each seat belt is designed to restrain one occupant.** If more than one person uses the same seat belt, they could be seriously injured or killed in a collision.
- **Do not use any accessories on seat belts.** Devices claiming to improve occupant comfort or reposition the seat belt can reduce the protection provided by the seat belt and increase the chance of serious injury in a crash.
- **Passengers should not place hard or sharp objects between themselves and the air bags.** Carrying hard or sharp objects on your lap or in your mouth can result in injuries if an air bag inflates.

- **Keep occupants away from the air bag covers.** All occupants should sit upright, fully back in their seats with their seat belts on and their feet on the floor. If occupants are too close to the air bag covers, they could be injured if the air bags inflate.
- **Do not attach or place objects on or near the air bag covers.** Any object attached to or placed on the front or side air bag covers could interfere with the proper operation of the air bags.
- **Do not modify the front seats.** Modification of the front seats could interfere with the operation of the supplemental restraint system sensing components or side air bags.
- **Do not place items under the front seats.** Placing items under the front seats could interfere with the operation of the supplemental restraint system sensing components and wiring harnesses.

- **Never hold an infant or child on your lap.** The infant or child could be seriously injured or killed in the event of a crash. All infants and children should be properly restrained in appropriate child safety seats or seat belts in the rear seat.

### **WARNING**

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

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

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

### **Air bag warning label**



Air bag warning labels are attached to alert the driver and passengers of potential risk of air bag system.

Note that these government warnings focus on the risk of children. We also want you to be aware of the risks which adults are exposed to. Those have been described in previous pages.



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## FEATURES OF YOUR VEHICLE

### Keys

#### Record your key number

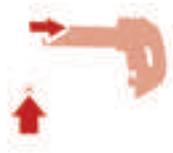


The key code number is stamped on the key code tag attached to the key set. Should you lose your keys, Kia recommends to contact an authorized Kia dealer/service partner. Remove the key code tag and store it in a safe place. Also, record the key code number and keep it in a safe and handy place, but not in the vehicle.

#### Key operations

##### *Smart key*

Smart key



OBDC049029RE

- 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**

Leaving children unattended in a vehicle with the smart key is dangerous even if the key is not in the ENGINE START/STOP button is ACC or ON position.

Children copy adults and they could press the ENGINE START/STOP button. The ignition key (smart 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 even death. Never leave the keys in your vehicle with unsupervised children, when the engine is running.

##### **Immobilizer system**

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

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

### ***Vehicles with smart key system***

Whenever the ENGINE START/STOP button is changed to the ON position, the immobilizer system checks and verifies if the key is valid or not.

If the key is valid, the engine will start.

If the key is invalid, the engine will not start.

### ***To deactivate the immobilizer system***

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

### ***To activate the immobilizer system***

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

## **⚠ WARNING**

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

## **\* NOTICE**

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

## **⚠ CAUTION**

Do not put metal accessories near the ENGINE START/STOP button. Metal accessories may interrupt the transponder signal and may prevent the engine from being started.

## **\* NOTICE**

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

## **⚠ CAUTION**

The transponder in your ignition key is an important part of the immobilizer system. It is designed to give years of trouble-free service, however you should avoid exposure to moisture, static electricity and rough handling. Immobilizer system malfunction could occur.

**⚠ CAUTION**

Do not change, alter or adjust the immobilizer system because it could cause the immobilizer system to malfunction. In this case, have the system serviced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

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

**Remote keyless entry (if equipped)****Remote keyless entry system operations**

Smart Key



OBDC049031RE

5

**Lock (1)**

All doors (and tailgate) are locked if the lock button is pressed while all doors are closed.

The hazard warning lights will blink once to indicate that all doors are locked.

However, if any door, engine hood or tailgate remains open, the hazard warning lights will not operate. If all doors, engine hood and tailgate are closed after the lock button is pressed, the hazard warning lights will blink once.

**Unlock (2)**

All doors (and tailgate) are unlocked if the unlock button is pressed.

The hazard warning lights will blink twice to indicate that all doors are unlocked.

After pressing this button, the doors will lock automatically unless you open any door within 30 seconds.

**Tailgate unlock (3)**

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

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

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

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

With the tailgate locked and the smart key in your possession, press the tailgate open switch. Then, the tailgate will be opened.

\* The word "HOLD" is written on the button to inform you that you must press and hold the button for 1 second.

**Transmitter precautions****\* NOTICE**

The transmitter will not work if any of the following occurs:

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

When the transmitter does not work correctly, open and close the door with the ignition key. If you have a problem with the transmitter Kia recommends to contact an authorized Kia dealer/service partner.

- If the transmitter is in close proximity to your cell phone or smart phone, the signal from the transmitter could be blocked by normal operation of your cell phone or smart phone. This is especially important when the phone is active such as making call, receiving calls, text messaging, and/or sending/receiving emails. Avoid placing the transmitter and your cell phone or smart phone in the same pants or jacket pocket

and maintain adequate distance between the two devices.

### ⚠ CAUTION

- Keep the transmitter away from water or any liquid. If the keyless entry system is inoperative due to exposure to water or liquids, it will not be covered by your manufacturer vehicle warranty.
- Keep the transmitter away from electromagnetic materials that blocks electromagnetic waves to the key surface.

### ⚠ CAUTION

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

## Battery replacement



OBDC049032RE

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

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

For transmitter replacement, Kia recommends to visit an authorized Kia dealer/service partner.

**⚠ CAUTION**

- The keyless entry system transmitter is designed to give you years of trouble-free use, however it can malfunction if exposed to moisture or static electricity. If you are unsure how to use or replace the battery, Kia recommends to contact an authorized Kia dealer/service partner.
- Using the wrong battery can cause the transmitter or smart key to malfunction. Be sure to use the correct battery.
- To avoid damaging the transmitter or smart key, don't drop it, get it wet, or expose it to heat or sunlight.

**⚠ CAUTION**

An inappropriately disposed battery can be harmful to the environment and human health. Dispose the battery according to your local law(s) or regulation.

**Smart key**



OBDC049031RE

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

**Smart key functions**



OCDW049001

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

### ***Locking (1)***

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

The button will only operate when the smart key is within 0.7 ~ 1 m (28 ~ 40 in.) from the outside door handle. If you want to make sure that a door has locked or not, you should check the door lock button inside the vehicle or pull the outside door handle.

Even though you press the outside door handle buttons, the doors will not lock and the chime will sound for 3 seconds if any of following occur:

- The smart key is in the vehicle.
- The ENGINE START/STOP button is in the ACC or ON position.
- Any door except the tailgate is open.

### ***Unlocking (2)***

Pressing the button of the front outside door handles with all doors (and tailgate) closed and locked, unlocks all the doors (and tailgate). The hazard warning lights blink twice to indicate that all doors (and tailgate) are unlocked.

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

When the smart key is recognized in the area of 0.7 ~ 1 m (28 ~ 40 in.) from the front outside door handle, other people can also open the door without possession of the smart key.

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

### ***Tailgate unlocking (3)***

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

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

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

### ***Start-up***

You can start the engine without inserting the key. For detailed information refer to "Starting the engine with smart key" on page 6-12.

## Smart key precautions

### \* NOTICE

- If, for some reason, you happen to lose your smart key, you will not be able to start the engine. Tow the vehicle, if necessary, contact a professional workshop. Kia recommends to contact an authorized Kia dealer/service partner.
- A maximum of 2 smart keys can be registered to a single vehicle. If you lose a smart key, Kia recommends to contact an authorized Kia dealer/service partner.
- The smart key will not work if any of the following occurs:
  - The smart key is close to a radio transmitter such as a radio station or an airport which can interfere with normal operation of the 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 properly, open and close the door with the mechanical key. If you have a problem with the smart key, Kia recommends to contact an authorized Kia dealer/service partner.

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

### ⚠ CAUTION

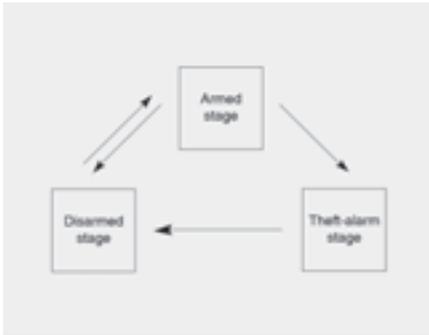
Keep the smart key away from water or any liquid. If the keyless entry system is inoperative due to exposure to water or liquids, it will not be covered by your manufacturer's vehicle warranty.

## Theft-alarm system



Vehicles equipped with a theft alarm system will have a label attached to the vehicle with the following words:

1. WARNING
2. SECURITY SYSTEM



This system is designed to provide protection from unauthorized entry into the car. 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

### *Using the smart key*

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

1. Turn off the engine.
2. Make sure that all doors (and tailgate) and the engine hood are closed and latched.

- 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 operate once to indicate that the system is armed.

If any door remains open, the doors won't lock and the chime will sound for 3 seconds. Close the door and try again to lock the doors.

If tailgate or engine hood remains open, the hazard warning lights won't operate and theft-alarm will not arm. After this, if the tailgate and engine hood are closed, the hazard warning lights will blink once.

- 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.

If any door (and tailgate) or engine hood remains open, the hazard warning lights won't operate and theft-alarm will not arm. After this, if all doors (and tailgate) and engine hood are closed, the hazard warning lights blink once.

### ***Using the transmitter***

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

1. Turn off the engine.
2. Make sure that all doors (and tailgate), the engine hood are closed and latched.
3. Lock the doors by pressing the lock button on the transmitter. After completion of the steps above, the hazard warning lights will blink once to indicate that the system is armed.

If any door (and tailgate) or engine hood remains open, the hazard warning lights won't operate and theft-alarm will not arm. After this, if all doors (and tailgate) and engine hood are closed, the hazard warning lights blink once.

### **⚠ CAUTION**

Do not arm the system until all passengers have left the vehicle. If the system is armed while a passenger(s) remains in the vehicle, the alarm may be activated when the

remaining passenger(s) leave the vehicle. If any door, tailgate or engine hood is opened within 30 seconds after entering the armed stage, the system is 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 door is opened without using the transmitter (or smart key).
- The tailgate is opened without using the transmitter (or smart key).
- The engine hood is opened.

The horn will sound and the hazard warning lights will blink continuously for approximately 30 seconds. To turn off the system, unlock the doors with the transmitter (or smart key).

### **Disarmed stage**

The system will be disarmed when:

#### ***Smart key***

- The door unlock button is pressed.
- The button of the front outside door is pressed while carrying the smart key.
- The engine is started.

After the doors are unlocked, the hazard warning lights will blink twice to indicate that the system is disarmed.

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

### \* NOTICE

#### Immobilizer system

- If the system is not disarmed with the transmitter, start the engine. Then the system will be disarmed.
- If you lose your keys, Kia recommends to visit an authorized Kia dealer/service partner.

### ▲ CAUTION

Do not change, alter or adjust the theft-alarm system because it could cause the theft-alarm system to malfunction. Have the system serviced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

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

## Door locks

### Operating door locks from outside the vehicle

#### *Mechanical key*



OCDW049002

To remove the cover:

1. Pull out the door handle.
  2. Push the hook (1) located inside the bottom part of the cover with a key or flat-head screwdriver.
  3. Remove the cover (2) while pushing the hook (1).
- Turn the key toward the front of the vehicle to lock and toward the rear of the vehicle to unlock.
  - If you lock/unlock the driver's door with a key, the driver's door will lock/unlock automatically.
  - 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 that doors are closed securely.

**Transmitter/Smart key**

- Doors can be locked and unlocked with the transmitter (or smart key). (if equipped)
- Doors can be locked and unlocked pressing the button of the outside door handle with the smart key in your possession.
- 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 that doors are closed securely.

**\* NOTICE**

- In cold and wet climates, door locks 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**

- If you don't close the door securely, the door may open again.
- Be careful that someone's body and hands are not trapped when closing the door.

**⚠ WARNING**

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

**⚠ CAUTION**

Do not frequently repeat opening and closing of doors, or apply excessive force to a door while the door closer is operating.

***In case of an emergency***



OCDP049003

If the power door lock switch does not operate electrically, the only way to lock the door(s) is with the mechanical key from the outside key hole.

Doors without the outside key hole, you can lock the door as follows:

1. Open the door.

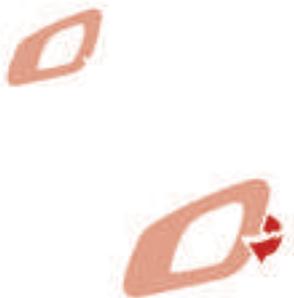
2. Insert the key into the emergency door lock hole and turn the key toward the outer of the vehicle to lock (1).
3. Close the door securely.

### \* NOTICE

Once the tailgate is closed when the power door lock switch does not operate electrically, you will not be able to open the tailgate.

## Operating door locks from inside the vehicle

### *With the door handle*



OCDW049004

### *Front door*

If the inner door handle is pulled when the door is locked, the door will unlock and open.

### *Rear door*

If the inner door handle is pulled once when the door is locked, the door will unlock.

If the inner door handle is pulled once more, the door will open.

### ⚠ WARNING

#### Door lock malfunction

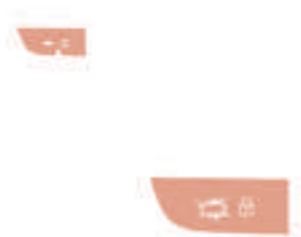
If a power door lock ever fails to function while you are in the vehicle, try one or more of the following techniques to exit:

- 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.
- Move to the cargo area and open the tailgate.

### ⚠ 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***



OCDP049426

It is operated by pressing the door lock/unlock switch.

- When you press the central door lock switch while any door is unlocked, all vehicle doors will lock and the indicator light on the switch will illuminate.
- If any front door is opened when the switch is pressed, all doors will not lock.
- If any door is unlocked, the indicator of the central door lock switch will blink.
- When you press the central door lock switch, all doors are locked.
- If any door is unlocked while all doors are locked, the indicator will blink.

### **\* NOTICE**

Once the doors are locked with the transmitter or smart key, the doors cannot be unlocked with the central door lock/unlock switch.

### **⚠ WARNING**

#### **Doors**

- The doors should always be fully closed and locked while the vehicle is in motion to prevent accidental opening of the door. Locked doors will also discourage potential intruders when the vehicle stops or slows down.
- Be careful when opening doors and watch 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**

#### **Unlocked vehicles**

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

### **⚠ WARNING**

#### **Unattended children**

An enclosed vehicle can become extremely hot, causing death or severe injury to unattended children or animals who cannot escape

the vehicle. 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.

### Impact sensing door unlock system

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

### Speed sensing door lock system

All doors will be automatically locked after the vehicle speed exceeds 15 km/h. And all doors will be automatically unlocked when you turn the engine off and when you remove the ignition key. (if equipped)

### Child-protector rear door lock



OCDP049427

The child safety lock is provided to help prevent children from accidentally opening the rear doors from

inside the vehicle. The rear door safety locks should be used whenever children are in the vehicle.

1. Open the rear door.
2. Insert a key (or screwdriver) into the hole and turn it to the lock  position (1). When the child safety lock is in the lock position, the rear door will not open even though the inner door handle (2) is pulled.
3. Close the rear door.  
To open the rear door, pull the outside door handle.  
Even though the doors may be unlocked, the rear door will not open by pulling the inner door handle until the rear door child safety lock is unlocked.

### WARNING

#### Rear door locks

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

## Tailgate

### Non-power tailgate

#### *Opening the tailgate*



OCDP049419

- The tailgate is locked or unlocked when all doors are locked or unlocked with the transmitter (or smart key) or central door lock switch.
- If unlocked, the tailgate can be opened by pressing the handle and pulling it up.
- When all doors are locked if the tailgate unlock button on the smart key is pressed for more than 1 second, the tailgate is unlocked. Once the tailgate is opened and then closed, the tailgate is locked automatically.

\* The tailgate has no keyhole.

#### \* NOTICE

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

#### ⚠ WARNING

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

#### ⚠ CAUTION

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

#### Closing the tailgate



OCDP049420

- To close the tailgate, lower and push down the tailgate firmly.

Make sure that the tailgate is securely latched.

### **⚠ WARNING**

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

### **⚠ CAUTION**

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

### **⚠ WARNING**

#### **Exhaust fumes**

If you drive with the tailgate open, you will draw dangerous exhaust fumes into your vehicle which can cause serious injury or death to vehicle occupants.

If you must drive with the tailgate open, keep the air vents and all windows open so that additional outside air comes into the vehicle.

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

### **⚠ WARNING**

#### **Rear cargo area**

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

### **⚠ WARNING**

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

#### **Emergency tailgate safety release**

Your vehicle is equipped with the emergency tailgate safety release lever located on the bottom of the tailgate. When someone is inadvertently locked in the luggage compartment.

2. Power tailgate handle switch



OCDP049421

The tailgate can be opened by doing as follows:

1. Input the mechanical key into the hole.
2. Push the mechanical key to the right (1).
3. Push up the tailgate.

**Power tailgate (if equipped)**

1. Power tailgate open/close button



OCDP049402



OCDP049451

3. Power tailgate close button



OCDP049410

4. Power tailgate open/close button



OCDW049412

**\* NOTICE**

If the ENGINE START/STOP button is ON position, the power tailgate can operate when the dual clutch transmission is in P (park) position..

**\* NOTICE**

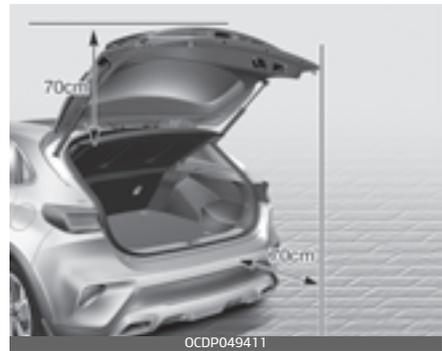
Do not put heavy stuffs on the power tailgate when you operate the power tailgate. Additional weight on tailgate could cause damages to the system.

**⚠ WARNING**

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

**⚠ WARNING**

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

**⚠ CAUTION**

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

**Opening the tailgate**

The power tailgate will open automatically by doing one of the following and the buzzer will sound twice at the beginning of open.

- Press the power tailgate open button (1) for approximately one second.



OCDW049412

**Closing the tailgate**

The power tailgate will close automatically by doing one of the following:

- To close power tailgate completely when tailgate is opened, you must press the close button(1) until it is closed. During the closing operation buzzer sounds continuously. If you release the close button(1) while closing, the tailgate will stop closing and the buzzer will sound approximately for 5 seconds.



OCDP049402

- Press the tailgate handle switch (2) carrying the smart key with you.



OCDP049451

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

- Press the tailgate open/close button (4) on the smart key for approximately one second.



OCDP049402

- Press the power tailgate close button (3) when the tailgate is opened. The tailgate will close and lock automatically. At the beginning of the closure, the buzzer will sound twice.



OCDP049410

- Press the tailgate open/close button (4) on the key and hold until the tailgate is fully closed.



OCDW049412

- Releasing the tailgate open/close button (4) on the key stops tailgate movement with the buzzer sound approximately for 5 seconds.

**\* NOTICE**

If you exceed the operating distance limit (about 10m) during closing by pressing the tailgate button on the key and holding, it will stop tailgate movement with the buzzer sound for 5 seconds.

***Power tailgate non-opening conditions***

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

**⚠ WARNING**

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

**⚠ CAUTION**

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

## \* NOTICE

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

### ***Automatic reversal***

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

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

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

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

**⚠ WARNING**

- Never intentionally place any object or part of your body in the path of the power tailgate to make sure the automatic reversal operates.
- Never operate power tailgate attached with any heavy objects (ex. bicycles). It could damage the power tailgate.

***How to reset the power tailgate***

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

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

If the power tailgate does not work properly after the above procedure, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

**\* NOTICE**

If the power tailgate does not operate normally, check again if the gear shift lever is in the correct position.

***Power tailgate opening height user setting (if equipped)***

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



OCDP049410

1. Position the tailgate manually to the height you prefer.
2. Press the tailgate close button (3) for more than 3 seconds.
3. Close the tailgate using the button (3) after hearing the buzzer sound.

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

## Smart tailgate (if equipped)



On the vehicle equipped with a smart key, the tailgate can be opened with no-touch activation using the Smart tailgate system.

### ***How to use the Smart Tailgate***

The tailgate can be opened with notouch activation satisfying all the conditions below.

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

### \* NOTICE

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

### 1. Setting

To activate the Smart Tailgate, go to User Settings Mode and select Smart Tailgate on the LCD display.

\* For more details, refer to "LCD windows (if equipped)" on page 5-64.

## 2. Detect and Alert



OCDP049414

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

### \* NOTICE

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

## 3. Automatic opening



OCDP049415

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

### ⚠ WARNING

- Make certain that you close the tailgate before driving your vehicle.
- Make sure there are no people or objects around the tailgate before opening or closing the tailgate.
- Make sure objects in the rear cargo area do not come out when opening the tailgate on the slope way. It may cause serious injury.
- Make sure to deactivate the Smart tailgate function when washing your vehicle. Otherwise, the tailgate may open inadvertently.
- The key should be kept out of reach of children. Children may inadvertently open the Smart Tailgate while playing around the rear area of the vehicle.

### ***How to deactivate the Smart Tailgate function using the smart key***

Smart key



OBD049031RE

1. Door lock
2. Door unlock
3. Tailgate open

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

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

### **\* NOTICE**

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

***Detecting area***

OCDP049416

- The Smart Tailgate operates with a welcome alert if the smart key is detected within 50~100 cm from the tailgate.
  - The alert stops at once if the smart key is positioned outside the detecting area during the Detect and Alert stage.
- \* NOTICE**
- The Smart Tailgate function will not work if any of the following occurs:
    - The smart key is close to a radio transmitter such as a radio station or an airport which can interfere with normal operation of the transmitter.
    - The smart key is near a mobile two way radio system or a cellular phone.
    - Another vehicle's smart key is being operated close to your vehicle.
  - The detecting range may decrease or increase when :
    - One side of the tire is raised to replace a tire or to inspect the vehicle.
    - The vehicle is slantingly parked on a slope or unpaved road, etc.

## Windows



OCDW049045

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.

## Power windows

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

Each door has a power window switch that controls the door's window. The driver has a power window lock switch which can block the operation of the rear passengers windows. The power windows can be operated for approximately 10 minutes after the ENGINE START/STOP button has been placed from ON or ACC to OFF position. However, if the front doors open, the power windows cannot be operated within the 10 minutes period. (if equipped)

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

### \* NOTICE

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

open, slightly reduce the size of the sunroof opening.

### ⚠ WARNING

Do not install any accessories in the area of windows. It may impact jam protection.

### *Window opening and closing*

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



OBDC049084RE

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

**Auto up/down window (if equipped)**



OBDC049092RE

- Pressing or pulling up the power window switch momentarily to the second detent position (6) completely lowers or lifts 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 and release the switch to the opposite direction of the movement.

If the power window is not operated correctly, the automatic power window system must be reset as follows:

- Turn the ENGINE START/STOP button to the ON position.
- Close the window and continue pulling up on the driver’s power window switch for at least 1 second after the window is completely closed.

**Automatic reversal**



ODEEV068020NR

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.

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

### \* NOTICE

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

### ⚠ 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 is not active while resetting power window system.

Make sure body parts or other objects are safely out of the way before closing the windows to avoid injuries or vehicle damage.

### *Power window lock button (if equipped)*



OCDW049046

- The driver can disable the power window switches on the rear passenger doors by pressing the power window lock button located on the driver's door to the LOCK position (pressed).
- The driver's master control can operate all passenger's power windows with window lock button pressed.
- The front passenger's control can operate the front passenger's power window.
- The rear passengers' control cannot operate the rear passenger's power window.

**⚠ CAUTION**

- To prevent possible damage to the power window system, do not open or close two windows or more at the same time. This will also ensure the longevity of the fuse.
- Never try to operate the main switch on the driver's door and the individual door window switch in opposite directions at the same time. If this is done, the window will stop and cannot be opened or closed.

- Do not allow children to play with the power windows. Keep the driver's door power window lock button in the LOCK position (pressed). Serious injury can result from unintentional window operation by the child.
- Do not extend a face or arms outside through the window opening while driving.

**Remote window closing (if equipped)**

Smart Key



**⚠ WARNING**

**Windows**

- Never leave children unattended in the vehicle when the engine is running.
- NEVER leave any child unattended in the vehicle. Even very young children may inadvertently cause the vehicle to move, entangle themselves in the windows, or otherwise injure themselves or others.
- Always double check to make sure all arms, hands, head and other obstructions are safely out of the way before closing a window.

OBDC049446RE

When the vehicle is off, if the door lock button (1) is pressed for 3 seconds or more, the door will be locked and the window will start to move up.

The window will go up as much as the lock button (1) pressed and stops when the button is released.

**⚠ CAUTION**

- If a car window is rolled up with the remote window close but the distance between the remote control and vehicle is changed, the window can stop rolling up. Make sure to operate this function in the vicinity close enough to a vehicle in sight.
- If a window is stuck by certain forces while rolling up, it stops working, but the other three windows will continue to roll up. Make sure that the emergency warning light blinks three times and the rest of windows are completely shut.

**Hood****Opening the hood**

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



OCDP049047

**⚠ WARNING**

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

2. Go to the front of the vehicle, raise the hood slightly, push the secondary latch (1) inside of the hood center and lift the hood (2).



OCDP049048

3. Pull the support rod from the hood.



OCDW049049

4. Hold the hood open with the support rod.

## **⚠ WARNING**

### **Hot parts**

Grasp the support rod in the area wrapped in rubber. The rubber will help prevent you from being burned by hot metal when the engine is hot.

### **Hood open warning (if equipped)**

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



OCDP059400

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

### **Closing the hood**

1. Before closing the hood, check the following:
  - All filler caps in engine compartment must be correctly installed.
  - Gloves, rags or any other combustible material must be removed from the engine compartment.
2. Return the support rod to its clip to prevent it from rattling.
3. Lower the hood until it is about 30 cm above the closed position and let it drop. Make sure that it locks into place.
4. Check that the hood has engaged properly. If the hood can be raised

slightly, it is not properly engaged.

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

### **⚠ WARNING**

- Before closing the hood, ensure that all obstructions are removed from the hood opening. Closing the hood with an obstruction present in the hood opening may result in property damage or severe personal injury.
- Do not leave gloves, rags or any other combustible material in the engine compartment. Doing so may cause a heatinduced fire.

### **⚠ WARNING**

- 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.
- The support rod must be inserted completely into the hole provided in the hood whenever you inspect the engine compartment. This will prevent the hood from falling and possibly injuring you.
- Do not move the vehicle with the hood raised. The view will be blocked and the hood could fall or be damaged.

## **fuel filler door**

### **Opening the fuel filler door**



OCDP049050

The fuel filler door must be opened from inside the vehicle by pushing the fuel filler door button.

### **\* NOTICE**

If the fuel filler door does not open because ice has formed around it, tap lightly or push on the door to break the ice and release the door. Do not pry on the door. If necessary, spray around the door with an approved de-icer fluid (do not use radiator anti-freeze) or move the vehicle to a warm place and allow the ice to melt.



Wait until the fuel tank is depressurized. The message is displayed when the fuel filler door opens after the fuel tank is depressurized.

**\* NOTICE**

- It may take up to 20 seconds to open fuel filler door.
- When the fuel filler door is frozen and does not open after 20 seconds at freezing temperature, slightly tap the fuel filler door and then attempt to open it.



1. Stop the engine.
2. To open the fuel filler door, push the fuel filler door opener button.
3. Pull open the fuel filler door (1).
4. To remove the cap, turn the fuel filler cap (2) counterclockwise.
5. Refuel as needed.

**⚠ WARNING**

- Add fuel into the fuel tank within 20 minutes after opening the fuel filler door. After 20 minutes, the fuel tank may shut off, causing fuel to overflow. In this case, repress the fuel filler door opening button.
- Do not leave the fuel filler door opened for an extended period of time. It may discharge the battery.
- Close the fuel filler door after fueling the vehicle. If you start the vehicle with the fuel filler door opened, the message, "Check fuel door", illuminates on the LCD display.

- Avoid refueling the vehicle while charging the (high-voltage) hybrid battery. It may cause a fire or an explosion due to static electricity.

### Closing the fuel filler door

1. To install the cap, turn it clockwise until it "clicks". This indicates that the cap is securely tightened.
2. Close the fuel filler door and push it lightly and make sure that it is securely closed.

Always check that the fuel cap is installed securely to prevent fuel spillage in the event of an accident.

### \* NOTICE

Tighten the cap until it clicks once.

### ⚠ WARNING

#### Refueling

- If pressurized fuel sprays out, it can cover your clothes or skin and subject you to the risk of fire and burns. Always remove the fuel cap carefully and slowly. If the cap is venting fuel or if you hear a hissing sound, wait until the condition stops before completely removing the cap.
- Do not "top off" after the nozzle automatically shuts off when refueling.
- Always check that the fuel cap is installed securely to prevent fuel

spillage in the event of an accident.

### ⚠ WARNING

#### Refueling dangers

Automotive fuels are flammable materials. When refueling, please note the following guidelines carefully. Failure to follow these guidelines may result in severe personal injury, severe burns or death by fire or explosion.

- Read and follow all warning posted at the gas station facility.
- Before refueling note the location of the Emergency Gasoline Shut-Off, if available, at the gas station facility.
- Before touching the fuel nozzle, you should eliminate potentially dangerous static electricity discharge by touching another metal part of the vehicle, a safe distance away from the fuel filler neck, nozzle, or other gas source.
- Do not get back into a vehicle once you have begun refueling since you can generate static electricity by touching, rubbing or sliding against any item or fabric (polyester, satin, nylon, etc.) capable of producing static electricity. Static electricity discharge can ignite fuel vapors resulting in rapid burning. If you must reenter the vehicle, you should once again

eliminate potentially dangerous static electricity discharge by touching a metal part of the vehicle, away from the fuel filler neck, nozzle or other gasoline source.

- When using an approved portable fuel container, be sure to place the container on the ground prior to refueling. Static electricity discharge from the container can ignite fuel vapors causing a fire. Once refueling has begun, contact with the vehicle should be maintained until the filling is complete. Use only approved portable plastic fuel containers designed to carry and store gasoline.
- Do not use cellular phones while refueling. Electric current and/or electronic interference from cellular phones can potentially ignite fuel vapors causing a fire.
- When refueling, always shut the engine off. Sparks produced by electrical components related to the engine can ignite fuel vapors causing a fire. Once refueling is complete, check to make sure the filler cap and filler door are securely closed, before starting the engine.
- DO NOT use matches or a lighter and DO NOT SMOKE or leave a lit cigarette in your vehicle while at a gas station especially during refueling. Automotive fuel is highly flammable and can, when ignited, result in fire.

- If a fire breaks out during refueling, leave the vicinity of the vehicle, and immediately contact the manager of the gas station and then contact the local fire department. Follow any safety instructions they provide.

---

### CAUTION

- Make sure to refuel your vehicle according to the "Fuel requirements" on page 2-2.
  - If the fuel filler cap requires replacement, please make sure that you use parts designed for replacement in your vehicle. An incorrect fuel filler cap can result in a serious malfunction of the fuel system or emission control system. For more detailed information, Kia recommends to contact an authorized Kia dealer/service partner.
  - Do not spill fuel on the exterior surfaces of the vehicle. Any type of fuel spilled on painted surfaces may damage the paint.
  - After refueling, make sure the fuel cap is installed securely to prevent fuel spillage in the event of an accident.
-

**⚠ WARNING**

In case of using EV drive mode for a certain time without running engine, EMM(Engine Maintenance Mode) will automatically activate by the system to protect the fuel system and the engine.

Therefore, even though if it is possible to use EV drive mode with enough battery power, the engine may run by the system to protect fuel system and the engine.

If you leave the fuel without refueling or using for over 6 months, the remained fuel in the fuel system may be deteriorated. From this, corrosion or blocking problem may occur.

It is recommended using minimum 40% of remained fuel at least every 6 months by selecting Hybrid (CS) mode and refuel the vehicle with new fuel.

**Panorama sunroof (if equipped)**

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

The ENGINE START/STOP button must be in the On position before you can open or close the sunroof.

The sunroof can be operated for approximately 10 minutes after the ENGINE START/STOP button has been placed from ON or ACC to OFF position.

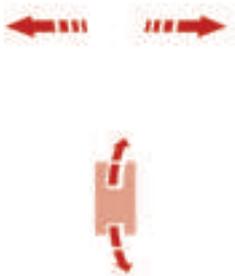
However, if the front door is opened, the sunroof cannot be operated even within the 10 minutes period.

**⚠ WARNING**

- Make sure heads, other body parts or objects are out of the way before using the sunroof.
- Do not leave the engine running and the key in your vehicle with unsupervised children. Unattended children could operate the sunroof, which could result in serious injury.

**Sunshade**

*To open the sunshade*



OCDW049054

- Push the sunroof control lever backward to the first detent position. To stop the sliding at any point, press the sunshade control lever momentarily.

*To close the sunshade when the sunroof glass is closed*

- Push the sunroof control lever forward to the first detent position. To stop the sliding at any point, press the sunshade control lever momentarily.

**\* NOTICE**

Wrinkles formed on the sunshade as material characteristic are normal.

**Sliding the sunroof**

*When the sunshade is closed*



OCDW049083

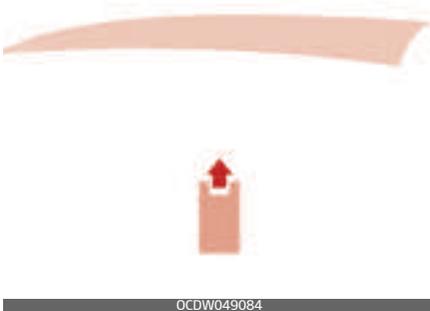
- Push the sunroof control lever backward to the second detent position, both the sunshade and sunroof glass will slide all the way open. To stop the sunroof movement at any point, push the sunroof control lever momentarily.

***When the sunshade is opened***

- Push the sunshade control lever backward to the first or second detent position, the sunroof glass will be opened.  
To stop the sunroof movement at any point, push the sunroof control lever momentarily.

**\* NOTICE**

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

**Tilting the sunroof*****When the sunshade is closed***

- Push the sunroof control lever upward, the sunshade will slide open then the sunroof glass will tilt.  
To stop the sunroof movement at any point, push the sunroof control lever momentarily.

***When the sunshade is opened***

- Push the sunroof control lever upward, the sunroof glass will tilt.  
To stop the sunroof movement at any point, push the sunroof control lever momentarily.

**Closing the sunroof*****To close the sunroof glass only***

OCDW049085

- Push the sunroof control lever forward to the first detent position, the sunroof glass will close automatically.  
To stop the sunroof movement at any point, push the sunroof control lever momentarily.

### ***To close the sunroof glass with the sunshade***

- Push the sunroof control lever forward to the second detent position. The sunroof glass and sunshade will close automatically. To stop the sunroof movement at any point, push the sunroof control lever momentarily.

### **Automatic reverse**



OCDW049449

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

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

### **⚠ CAUTION**

- Do not continue to press the sunroof control lever after the sunroof is fully opened, closed or tilted. Damage to the motor or system components could occur.
- To prevent damage to the sunroof, periodically remove any dirt that may accumulate on the guide rail.
- If you try to open the sunroof when the temperature is below freezing or when the sunroof is covered with snow or ice, the glass or the motor could be damaged.
- Make sure the sunroof is fully closed when leaving your vehicle. If the sunroof is opened, rain or snow may leak through the sunroof and wet the interior as well as cause theft.
- Do not extend any luggage outside the sunroof while driving.
- After washing the vehicle or after a rain, be sure to wipe off the water on the sunroof before operating the sunroof.
- Do not pull or push the sunshade by hand as such action may damage the sunshade or cause it to malfunction.
- Close the sunroof when driving in dusty environments. Dust may cause a malfunction of the vehicle system.

**⚠ WARNING**

- In order to prevent accidental operation of the sunroof, especially by a child, do not let a child operate the sunroof.
- Do not extend the face, neck, arms or body outside the sunroof while driving.
- To avoid serious injury or death, do not extend your head, arms or body outside the sunroof while driving.
- When closing the sunroof, make sure there are no body parts in the movement range of the sliding roof. Parts of the body could become trapped or crushed.
- A panorama sunroof is made of glass, therefore it may break in an accident. If you do not have your seat belt on, you may stick out of the broken glass and get injured or killed. For all passengers safety, have an appropriate protection on (ex. seat belt, CRS, etc.)
- Never adjust the sunroof or sunshade while driving. This could result in loss of control and an accident that may cause death, serious injury or property damage.
- Do not operate the sunroof while using the roof rack to transport cargo. This may cause the cargo to come loose and distract the driver.

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

**Resetting the sunroof**

OCDW049086

The sunroof may need to be reset if the following conditions occur :

- The battery is discharged or disconnected or the sunroof fuse has been replaced or disconnected.
  - The sunroof control lever is not operating correctly.
1. Start the engine.
  2. Close the sunshade and sunroof completely if opened.
  3. Release the sunroof control lever.
  4. Push the sunroof control lever forward in the direction of close (about 10 seconds) until the sunshade slightly moves. Then, release the lever.

5. Push the sunroof control lever forward in the direction of close, until the sunroof operates as follows again:  
 Sunshade Open → Glass Tilt Open → Glass Slide Open → Glass Slide Close → Sunshade Close

Then, release the lever.

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

**\* NOTICE**

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

**Sunroof open warning (if equipped)**



If the driver turns off the ENGINE START/STOP button when the sunroof is not fully closed, the warning chime will sound for a few seconds and a warning image will appear in the LCD window. Close the sunroof securely when leaving your vehicle.

**Steering wheel**

**Electric Power Steering (EPS)**

Power steering uses an electric motor to assist you in steering the vehicle. If the engine is off or if the power steering system becomes inoperative, the vehicle may still be steered, but it will require increased steering effort.

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

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

Should you notice any change in the effort required to steer during normal vehicle operation, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

**\* NOTICE**

The following symptoms may occur during normal vehicle operation:

- The EPS warning light does not illuminate.
- The steering effort is high immediately after turning the ENGINE

START/STOP button on. This happens as the system performs the EPS system diagnostics. When the diagnostics is completed, the steering wheel will return to its normal condition.

- A click noise may be heard from the EPS relay after the ENGINE START/STOP button is turned to the ON or OFF position.
- Motor noise may be heard when the vehicle is at a stop or at a low driving speed.
- If the Electric Power Steering System does not operate normally, the warning light will illuminate on the instrument cluster. The steering wheel may become difficult to control or operate abnormally. In this case, have the system inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
- The steering effort increases if the steering wheel is rotated continuously when the vehicle is not in motion. However, after a few minutes, it will return to its normal conditions.
- When you operate the steering wheel in low temperature, abnormal noise could occur. If temperature rises, the noise will disappear. This is a normal condition.

- When the charging system warning light comes on or the voltage is low (When the alternator (or battery) does not operate normally or it malfunctions), the steering wheel may get heavy and become difficult to control operate abnormally.

### Tilt & telescopic steering

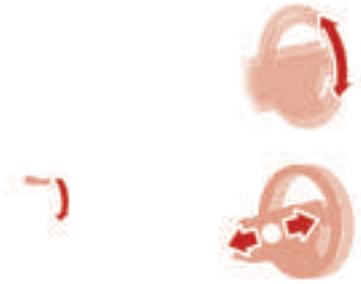
A tilt and telescopic steering wheel allows you to adjust the steering wheel before you drive.

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

- Never adjust the angle of the steering wheel while driving. You may lose steering control and cause severe personal injury, death or accidents.
- After adjusting, push the steering wheel both up and down to be certain it is locked in position.

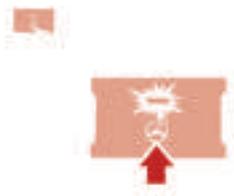


OCDP049056

To change the steering wheel angle:

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

**Heated steering wheel (if equipped)**



OCDW049429

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

- To turn the steering wheel off, press the button once again. The indicator on the button will turn off.  
It will turn off automatically approximately 30 minutes after the heated steering wheel is turned on.  
If you turn off the ignition within 30 minutes after pressing the steering wheel heater button, from next ignition ON, the heater will be off.

**CAUTION**

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

## Horn



OCDW049435

To sound the horn:

- Press the horn symbols on your steering wheel.  
Check the horn regularly to be sure it operates properly.

### \* NOTICE

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

### ⚠ CAUTION

Do not strike the horn severely to operate it, or hit it with your fist. Do not press on the horn with a sharp-pointed object.

## Mirrors

### Inside rear view mirror

Adjust the rear view mirror to center on the view through the rear window. Make this adjustment before you start driving.

### ⚠ WARNING

#### Rear visibility

Do not place objects in the rear seat or cargo area which would interfere with your vision through the rear window.

### ⚠ WARNING

Do not adjust the rear view mirror while the vehicle is moving. This could result in loss of control, and an accident which could cause death, serious injury or property damage.

### ⚠ WARNING

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

### ***Electrochromic mirror (ECM)***



OQL045059

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

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

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

### **⚠ CAUTION**

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.

### ***To operate the electric rear view mirror***

The mirror defaults to the ON position whenever the ENGINE START/STOP button is turned on.

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

### **Outside rear view mirror**

Be sure to adjust mirror angles before driving.

Your vehicle is equipped with both left-hand and right-hand outside rear view mirrors. 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 in a narrow street.

**⚠ WARNING****Rear view mirrors**

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

**⚠ CAUTION**

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

**⚠ CAUTION**

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

**⚠ WARNING**

Do not adjust or fold the outside rear view mirrors while the vehicle is moving. This could result in loss of control, and an accident which could cause death, serious injury or property damage.

***Remote control***

OCDW049058

The electric remote control mirror switch allows you to adjust the position of the left and right outside rear view mirrors. To adjust the position of either mirror, the ENGINE START/STOP button should be in the ACC position.

To adjust the position of either mirror,

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

**⚠ 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 rear view mirror by hand. Doing so may damage the parts.

***Folding the outside rear view mirror***



OCDW049060

- To fold the outside rear view mirror depress the button.
- To unfold it, depress the button again.
- With smart key system
  - The mirror will fold or unfold when the door is locked or unlocked by the smart key.
  - The mirror will fold or unfold when the door is locked or unlocked by the button on the outside door handle.

- The mirror will unfold when you approach the vehicle (all doors closed and locked) with a smart key in possession.

**⚠ CAUTION**

The electric type outside rear view mirror operates even though the ENGINE START/STOP button is in the OFF position. However, to prevent unnecessary battery discharge, do not adjust the mirrors longer than necessary while the engine is not running.

**⚠ CAUTION**

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

## Instrument cluster

Type A



OCDP049503

Type B



OCDP049487

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

1. Hybrid system gauge
2. Fuel gauge
3. Speedometer
4. Warning and indicator lights
5. LCD display
6. Battery SOC (State of Charge) gauge

For more details, refer to the "Gauges" on page 5-58 and "Warning and indicator lights" on page 5-83.

## Instrument cluster control

### *Adjusting Instrument Cluster Illumination*



OCDP049064

#### **⚠ WARNING**

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

The brightness of the instrument panel illumination is changed by pressing the illumination control button (“+” or “-”) when the ENGINE START/STOP button is ON, or the tail lights are turned on.



OCDP059404

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

## Gauges

### *Speedometer*

Type A



OCDW049066

Type B



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

**Hybrid System Gauge**

Type A



Type B



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

- CHARGE : Shows that the energy made by the vehicle is being converted to electrical energy. (Regenerated energy)
- ECO : Shows that the vehicle is being driven in an Ecofriendly manner.
- POWER : Shows that the vehicle is exceeding the Ecofriendly range.

**\* NOTICE**

Accordance to the hybrid system gauge area the "EV" indicator comes on or off.

- "EV" indicator ON : Vehicle is driven using the electric motor or the gasoline engine is stopped except for an engine can remain idle for automatic heating and air conditioning operation in winter.
- "EV" indicator OFF : Vehicle is driven using the gasoline engine.

### Hybrid Battery SOC (State of Charge) Gauge

Type A



OCDP049071

Type B



OCDP049132

This gauge indicates the remaining hybrid battery power. If the SOC is near the “L (Low) or 0” level, the vehicle automatically operates the engine to charge the battery. However, if the Service Indicator (⚠️) and Malfunction Indicator Lamp (MIL) (X) turn on when the SOC gauge is near the “L (Low) or 0” level, have the vehicle checked by a professional workshop. Kia recom-

mends to visit an authorized Kia dealer/service partner.

### \* NOTICE

Never try to start the vehicle if the fuel tank is empty. In this condition, the engine cannot charge the high voltage battery of the hybrid system. If you try to start the vehicle when the fuel is empty, the high voltage battery will become discharged and be damaged.

### Plug-in hybrid mode indicator

- CD (Charge Depleting, Electric) mode: The high-voltage (hybrid) battery is used to drive the vehicle.



OCDP049502

- AUTO mode: The AUTO mode will be automatically selected from either from Electric (CD) mode or Hybrid (CS) mode by the system according to the driving condition.



OCDP049499

- CS (Charge Sustaining, Hybrid) mode: The high-voltage (hybrid) battery and gasoline engine is used to drive the vehicle.



OCDP049500



A corresponding message is displayed to indicate the selected mode.

### Fuel Gauge

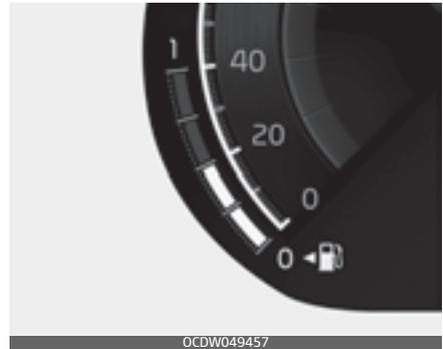
This gauge indicates the approximate amount of fuel remaining in the fuel tank.

Type A



OCDP049071

Type B



OCDW049457

5

### \* NOTICE

- The fuel tank capacity is given in "Recommended lubricants and capacities" on page 9-7.
- The fuel gauge is supplemented by a low fuel warning light, which will illuminate when the fuel tank is nearly empty.

- On inclines or curves, the fuel gauge pointer may fluctuate or the low fuel warning light may come on earlier than usual due to the movement of fuel in the tank.

**⚠ WARNING**

**Fuel Gauge**

Running out of fuel can expose vehicle occupants to danger.

You must stop and obtain additional fuel as soon as possible after the warning light comes on or when the gauge indicator comes close to the "0" level.

**⚠ CAUTION**

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

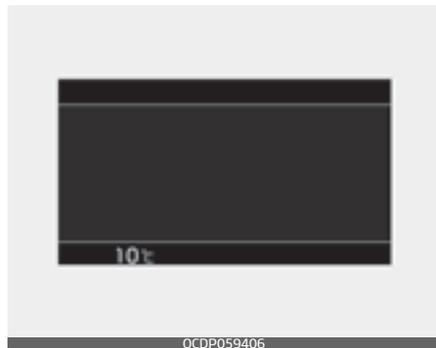
***Odometer***



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 : 0 ~ 1,599,999 km or 999,999 miles.

***Outside Temperature Gauge***



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

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

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

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

The temperature unit can be changed by using the "User Settings" mode of the LCD Windows.

\* For more details, refer to "LCD windows (if equipped)" on page 5-64.

## Transmission shift indicator

### *Dual clutch transmission shift indicator*



This indicator displays which shift lever is selected.

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

### *Dual clutch transmission shift indicator in Manual shift mode*



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

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

For example

- ▲3: Indicates that shifting up to the 3rd gear is desired (currently the shift lever is in the 2nd or 1st gear).
- ▼3: Indicates that shifting down to the 3rd gear is desired (currently the shift lever is in the 4th, 5th, or 6th gear).

When the system is not working properly, the indicator is not displayed.

## LCD windows (if equipped)

### LCD window control

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



OCDW049436

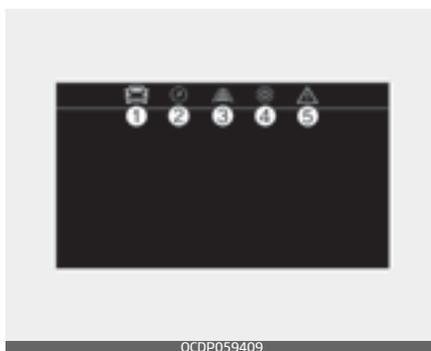


OCDMH049452

1. : MODE button for change the LCD MODES
2. : MOVE scroll switch for select the items
3. OK: SET/RESET button for set the items or reset the items

\* For the LCD modes, refer to "LCD windows (if equipped)" on page 5-64.

### LCD mode



OCDP059409

1. Trip Computer mode  
This mode displays driving information like the tripmeter, fuel economy, and so on.  
\* For more details, refer to "Trip information (Trip computer)" on page 5-65.
2. Turn By Turn mode (if equipped)  
This mode displays the state of the navigation.
3. Driving Assist mode
  - : This mode displays the state of the below systems.
    - Smart Cruise Control system,
    - Intelligent Speed Limit Warning system,
    - Lane Keeping Assist system
    - Driver Attention Warning system
    - Tire Pressure
  - : This mode displays the state of tire pressure.

4. User settings mode (if equipped)  
On this mode, you can change settings of the doors, lamps and so on. The information provided may differ depending on which functions are applicable to your vehicle. If an infotainment system is equipped, the user settings menus and items may differ. Refer to the infotainment system manual.

5. Master warning mode

This mode informs of warning message related to below functions.

- Forward Collision-Avoidance Assist system malfunction (if equipped)
- Forward Collision-Avoidance Assist system radar blind (if equipped)
- Blind-Spot Collision Warning system malfunction (if equipped)
- Blind-Spot Collision Warning system radar blind (if equipped)
- High Beam Assist system malfunction (if equipped)
- Lamp malfunction
- LED head lamp malfunction (if equipped)
- Smart Cruise Control system malfunction (if equipped)
- Smart Cruise Control system radar blind (if equipped)
- Engine oil

\* For controlling the LCD modes, refer to "LCD window control" on page 5-64.

### ***Trip information (Trip computer)***

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

#### **\* NOTICE**

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

### ***Distance to empty***



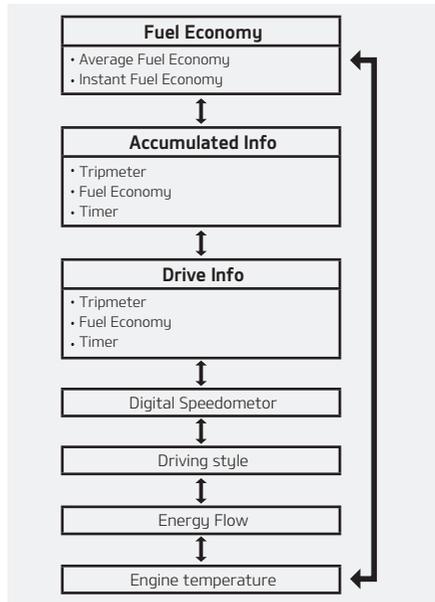
- The distance to empty is the estimated distance the vehicle can be driven with the remaining fuel.
  - Distance range: 1 ~ 9,999 km or 1 ~ 9,999 mi.

- If the estimated distance is below 1 km (1 mi.), the trip computer will display "---" as distance to empty.
- If the level of the remaining fuel is more than three-quarters, more than 3 liters of fuel must be refilled for the fuel gauge to change. In other cases, more than 6 liters of fuel must be refilled for the vehicle to change the fuel gauge.

**\* NOTICE**

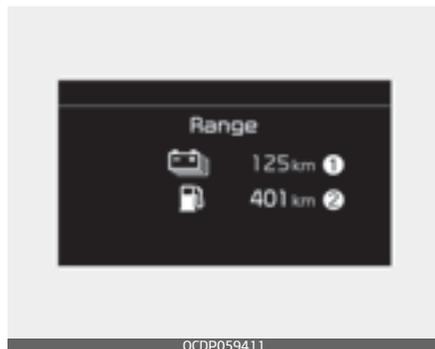
- If the vehicle is not on level ground or the battery power has been interrupted, the distance to empty function may not operate correctly.
- The distance to empty may differ from the actual driving distance as it is an estimate of the available driving distance.
- The trip computer may not register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

**Trip Modes**



To change the trip mode, scroll the MOVE scroll switch (∧ / ∨) in the trip computer mode.

**Range**



- The range is the estimated distance the vehicle can be driven with the remaining high-voltage

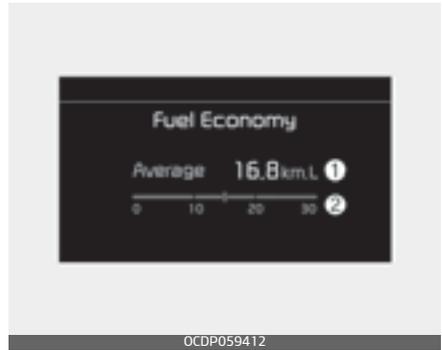
(hybrid) battery (1, Electric) and fuel in the fuel tank (2, Gasoline).

- If the estimated distance is below 1 km (1 mi.), the trip computer will display “---” as distance to empty.
  - Distance range: 1 ~ 510 km or 1 ~ 510 mi.

### \* NOTICE

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

### Fuel Economy



### Average Fuel Economy (1)

- The average fuel economy is calculated by the total driving distance and fuel consumption since the last average fuel economy reset.
  - Fuel economy range: 0 ~ 99.9km/L, L/100 km or MPG
- The average fuel economy can be reset both manually and automatically.

### Manual reset

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

### **Automatic reset**

To make the average fuel economy be reset automatically whenever refueling, select the "Fuel economy auto reset" mode in User Setting menu of the LCD Windows (Refer to "LCD windows (if equipped)" on page 5-64).

- OFF - You may set to default manually by using the trip switch reset button.
- After ignition - The vehicle will automatically set to default once 4 hours pass after the Ignition is in OFF.
- After refueling - After refueling more than 6 liters and driving over 1km/h, the vehicle will reset to default automatically.

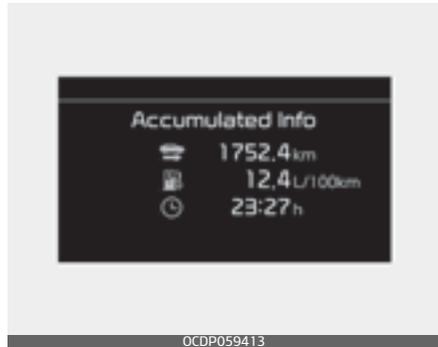
### **\* NOTICE**

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

### **Instant Fuel Economy (2)**

- This mode displays the instant fuel economy during the last few seconds when the vehicle speed is more than 10 km/h (6.2 MPH).
  - Fuel economy range: 0.0 ~ 30km/L, L/100km or 0.0 ~ 50.0 MPG

### **Accumulated driving information mode**



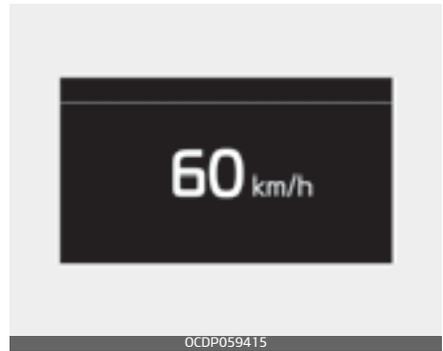
Displays accumulated information starting from mileage/fuel efficiency/ time default point.

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

**One time driving information mode**

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

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

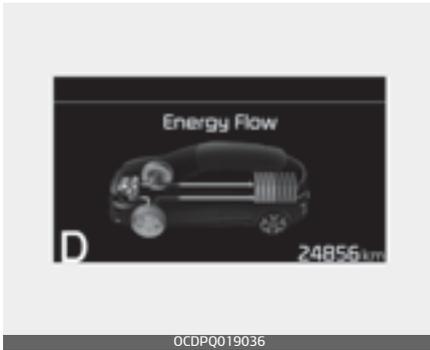
**Digital speedometer**

This mode displays the current speed of the vehicle.

**Transmission temperature gauge (For dual clutch transmission)**

This mode displays the transmission temperature.

## Energy flow



The hybrid system informs the driver about its energy flow in various operating modes. While driving, the current energy flow is specified in 11 modes.

\* For more details, refer to "Plug-in hybrid vehicle energy flow" on page 1-29.

## Service mode

### Service in

It calculates and displays when you need a scheduled maintenance service (mileage or days).

If the remaining mileage or time reaches 1,500 km (900 mi.) or 30 days, "Service in" message is displayed for several seconds each time you set the ENGINE START/STOP button to the ON position.

## Service required

If you do not have your vehicle serviced according to the already inputted service interval, "Service required" message is displayed for several seconds each time you set the ENGINE START/STOP button to the ON position.

To reset the service interval to the mileage and days you inputted before:

- Press the OK button (Reset) for more than 1 second.

## \* NOTICE

If any of the following conditions occurs, the mileage and days may be incorrect.

- The battery cable is disconnected.
- The fuse switch is turned off.
- The battery is discharged.

## User settings mode (if equipped)

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

The information provided may differ depending on which functions are applicable to your vehicle. If an infotainment system is equipped, the user settings menus and items may differ. Refer to the infotainment system manual.

**⚠ WARNING**

Do not adjust the User Setting while driving. You may lose your steering control and cause severe personal injury or accidents.

***Shift to P to edit settings/Engage parking brake to edit settings***

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

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

***Quick Menu (if equipped)***

In this mode, you can change the settings of the SCC Responsiveness, Driving Assist, Driver Attention Warning, etc.

- SCC Responsiveness
- Driving Assist
- Driver Attention Warning
- Warning Timing
- Forward Safety
- Lane Safety
- Blind-Spot Safety

The information provided may differ depending on which functions are applicable to your vehicle.

***Driver Assistance (if equipped)***

- Smart Cruise Control Responsiveness (if equipped)
  - Choose the sensitivity (fast, normal, slow) of Smart Cruise Control.
- \* For more details, refer to "Smart Cruise Control (SCC) (if equipped)" on page 6–104.
- Driving Assist (if equipped)
  - Choose the functions. (Leading Vehicle Departure Alert, Lane Following Assist, Speed Limit Warning)
- Warning Timing (if equipped)
  - Choose the warning time (Normal/Later)
- Driver Attention Warning (if equipped)
  - To adjust the sensitivity of the Driver Attention Warning.
  - High Sensitivity/Normal Sensitivity/Off
  - \* For more information, refer to the "Driver Attention Warning (DAW) (if equipped)" on page 6–97.
- Warning Volume
  - To adjust the warning volume of the driver assistance system.
  - High / Medium / Low
- Forward Safety (if equipped)
  - Choose the functions. (Active Assist/Warning Only/Off)

- Lane Safety (if equipped)
  - Choose the functions. (Lane Keeping Assist/Lane Departure Warning/Off)
- Blind-Spot Safety (if equipped)
  - Choose the functions. (Warning Only/Off)
- Parking Safety (if equipped)
  - Choose the functions. (Rear Cross-Traffic Safety On/Off)

### **Door**

- Auto Lock
  - Enable on Speed: All doors will be automatically locked when the vehicle speed exceeds 15 km/h (9.3 mph).
  - Enable on Shift: All doors will be automatically locked when the vehicle is shifted out of P (Park) while the engine is running.
  - Off: The auto door lock operation will be deactivated.
- Auto Unlock
  - Vehicle Off (if equipped): All doors will be automatically unlocked when the ENGINE START/STOP button is set to the OFF position.
  - On Shift to P: All doors will be automatically unlocked when the vehicle is shifted back into P (Park).
  - Off: The auto door unlock operation will be canceled.

- Power Tailgate (For Wagon and CUV) (if equipped)
  - If this item is checked, the power tailgate function will be activated.
- \* For more details, refer to "Power tailgate (if equipped)" on page 5-24.
- Smart Tailgate (For wagon and CUV) (if equipped)
  - If this item is checked, the smart tailgate function will be activated. If the power tailgate function is not activated, you cannot activate this function.

For more details, refer to "Smart tailgate (if equipped)" on page 5-30.

### **Lights**

- One Touch Turn Signal
  - Off: The one touch turn signal function will be deactivated.
  - 3, 5, 7 Flashes: The lane change signals will blink 3, 5, or 7 times when the turn signal lever is moved slightly.
- \* For more details, refer to "Lighting" on page 5-122.
- Ambient light (if equipped)
  - If this item is checked, ambient light function will be activated.
- Head Lamp Delay
  - If this item is checked, the head lamp delay function will be activated.

**Sound**

- Volume for PDW (Parking Distance Warning)
  - Adjust the PDW volume. (Level 1 ~ 3)
- Welcome Sound (if equipped)
  - If this item is checked, the welcome sound function will be activated.

**Convenience**

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

For more details, refer to "Driver position memory system (for power seat) (if equipped)" on page 4-8.

- Welcome Mirror/Light (if equipped)
  - On door unlock: The outside rearview mirrors are unfolded and the welcome light turns on automatically
  - On driver approach: The outside rearview mirrors are unfolded

and the welcome light turns on automatically

- Wireless Charging System (if equipped)
  - If this item is checked, the wireless charging system function will be activated.
- Wiper/Light Display (if equipped)
  - If this item is checked, the Wiper/Light Display will be activated.
- Auto rear wiper (reverse) (if equipped)
  - If this item is checked, auto rear wiper function will be activated.
- Gear Position Pop-up (if equipped)
  - If this item is checked, the gear position pop-up display will be activated.
- Coasting Guide (if equipped)
  - Enable Coasting Guide : To activate or deactivate the Coasting guide.
  - Sound : To activate or deactivate the Coasting guide sound.
- Start coasting (if equipped)
  - Choose the initial guiding time for Coasting guide. (Early/Normal/Late).
- Icy road warning (if equipped)
  - If this item is checked, the Icy road warning display will be activated.

**Service interval**

- Enable service interval  
To activate or deactivate the service interval function.
- Adjust Interval  
To adjust the interval by mileage and period.
- Reset  
To reset the service interval function.

**Other Features**

- Aux. Battery Saver+
  - If this item is checked, the aux. Battery Saver+ function will be activated.
- Fuel Economy Auto Reset
  - Off: The average fuel economy will not reset.
  - After ignition / After refueling: The average fuel economy will reset automatically after refueling.
- Fuel Economy Unit
  - Choose the fuel economy unit. (Km/L, L/100Km)
- Temperature Unit
  - Choose the temperature unit. (°C, °F)
- Tire Pressure Unit (if equipped)
  - Choose the tire pressure unit. (psi, kPa, bar)

**Language**

Choose the language

**Reset**

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

**Warning messages**

Warning messages appear on the LCD to warn the driver. It is located in the center of the instrument cluster.

The warning message may appear differently depending on the type of instrument cluster and some may not show the warning message at all. The warning message is shown in either symbol, symbol and text, or text type only.

**Door, hood, tailgate open**

- This warning is displayed indicating which door, or the hood, or the tailgate is open.

***Sunroof open (if equipped)***

OCDP059403

- This warning is displayed if you turn off the engine when the sunroof is open.

***Engine has overheated***

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

\* If your vehicle is overheated, refer to "If the engine overheats" on page 7-8.

***Low Key Battery (for smart key system)***

- This warning message illuminates if the battery of the smart key is discharged when the ENGINE START/STOP button changes to the OFF position.

***Press START button while turning wheel (for smart key system)***

- This warning message illuminates if the steering wheel does not unlock normally when the ENGINE START/STOP button is pressed.
- It means that you should press the ENGINE START/STOP button while turning the steering wheel right and left.

***Steering wheel unlocked (for smart key system)***

- This warning message illuminates if the steering wheel does not lock when the ENGINE START/STOP button changes to the OFF position.

***Check Steering Wheel Lock System (for smart key system)***

- This warning message illuminates if the steering wheel does not lock normally when the ENGINE START/STOP button changes to the OFF position.

***Key not in vehicle (for smart key system)***

- This warning message illuminates if the smart key is not in the vehicle when you press the ENGINE START/STOP button.
- It means that you should always have the smart key with you.

***Key not detected (for smart key system)***

- This warning message illuminates if the smart key is not detected when you press the ENGINE START/STOP button.

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

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

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

- This warning message illuminates if the ENGINE START/STOP button changes to the ACC position twice by pressing the button repeatedly without depressing the brake pedal.
- It means that you should depress the brake pedal to start the engine.

***Battery discharging due to external electrical devices (if equipped)***

The vehicle can detect self-discharge of the battery due to over-current that is generated by unauthorized electrical devices such as black box mounting during parking.

Please note that functions such as ISG are limited and battery discharge problems may occur.

If the warning continues even after external electrical devices are removed, have your vehicle inspected by a professional workshop. Kia recommends to contact an authorized Kia dealer/service partner.

***Press START button again (for smart key system)***

- This warning message illuminates if you can not operate the ENGINE START/STOP button when there is a problem with the ENGINE START/STOP button system.
- It means that you could start the engine by pressing the ENGINE START/STOP button once more.
- If the warning illuminates each time you press the ENGINE START/STOP button, have the vehicle inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

***Press START button with key (for smart key system)***

- This warning message illuminates if you press the ENGINE START/STOP button while the warning message "Key not detected" is illuminating.
- At this time, the immobilizer indicator light blinks.

**Check DAW system (if equipped)**

- This warning message is displayed if there is a problem with Driver Attention Warning system. In this case, have the vehicle inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
- \* For more information, refer to "Driver Attention Warning (DAW) (if equipped)" on page 6-97.

**Check BCW system (if equipped)**

- This warning message is displayed if there is a problem with Blind-Spot Collision Warning system. In this case, have the vehicle inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
- \* For more information, refer to "Blind-Spot Collision Warning (BCW) (if equipped)" on page 6-81.

**Icy Road Warning**

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

When the following conditions occur, the warning light (including Outside Temperature Gauge) blinks 5 times and then illuminates, and also warning chime sounds once.

- The temperature on the Outside Temperature Gauge is below approximately 4°C (40°F).

**\* NOTICE**

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

**Low engine oil**

This warning message is displayed when the engine oil level should be checked.

If the warning message is displayed, check the engine oil level as soon as possible and add engine oil as required.

Slowly pour the recommended oil little by little into a funnel. (Oil refill capacity: Approximately 0.6 l ~ 1.0 l)

Use only the specified engine oil. (refer to "Recommended lubricants and capacities" on page 9-7.)

Do not overfill the engine oil to ensure the oil level is not above F mark on the dipstick.

**\* NOTICE**

- If you travel approximately 50 km after adding the engine oil, the warning message will go off.
- Cycle the ignition from OFF to ON 3 times within 10 seconds, the warning message will go off immediately.

**⚠ CAUTION**

If the warning message is displayed continuously after adding the engine oil and traveling approximately 50 km, have the vehicle inspected by a professional workshop as soon as possible. Kia recommends to visit an authorized Kia dealer/service partner. Even if this warning message does not display after the engine has started, the engine oil should be checked and supplied periodically.

***Device in wireless charger (if equipped)***

If a smart phone is still left on the wireless charging pad unattended, even when the ENGINE START/STOP button is turned to the ACC or OFF position. And the instrument panel's one time driving information mode has finished, a warning message will light up on the instrument panel.

\* For more details, refer to "Wireless smart phone charging system (if equipped)" on page 5-166.

### ***Check Hybrid system***

This warning message illuminates when there is a problem with the hybrid control system.

Refrain from driving when the warning message is displayed.

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

### ***Check Hybrid system. Turn engine Off***

This warning message illuminates when there is a problem with the hybrid system. The "" indicator will blink and a warning chime will sound until the problem is solved.

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

### ***Check Hybrid system. Do not start engine***

This warning message illuminates when the hybrid battery power (SOC) level is low. A warning chime will sound until the problem is solved.

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

### ***Stop vehicle and check power supply***

This warning message illuminates when a failure occurs in the power supply system.

In this case, park the vehicle in a safe location and tow your vehicle to the nearest professional workshop and have the vehicle inspected. Kia recommends to visit an authorized Kia dealer/service partner.

### ***Park with engine On to charge battery***

This warning message illuminates when the hybrid battery power (SOC) level is low.

In this case, park the vehicle in a safe location and wait until the hybrid battery is charged.

### ***Refuel to prevent Hybrid battery damage***

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

You should refill the fuel tank to prevent hybrid battery damage.

### ***Refill inverter coolant***

This warning message illuminates when the inverter coolant is nearly empty.

You should refill the inverter coolant.

For volume and specification of the coolant, refer to "Recommended lubricants and capacities" on page 9-7.

### ***Check brake system***

This warning message illuminates when the brake performance is low or the regenerative brake does not work properly due to a failure in the brake system.

In this case, it may take longer for the brake pedal to operate and the braking distance may become longer.

### ***Stop vehicle and check brake system***

This warning message is displayed when a failure occurs in the brake system.

In this case, park the vehicle in a safe location and tow your vehicle to the nearest professional workshop and have the vehicle inspected. Kia recommends to visit an authorized Kia dealer/service partner.

### ***Coasting guide (if equipped)***



A chime will sound and the coasting guide indicator will blink four times to inform the driver when to take the foot off the accelerator by anticipating a decelerating event\* based on the analysis of driving routes and road conditions stored in the navigation system. It encourages the driver to remove the foot from the pedal and allow coasting down the road with EV motor only. This helps preventing unnecessary fuel consumption and increases fuel efficiency.

\* Example of a deceleration event is going down an extended hill, slowing down approaching a toll booth,

and approaching reduced speed zones.

- User settings  
Press the ENGINE START/STOP button and put the shift lever in P(Park). In the User Settings Mode, select Driver assistance, Coasting Guide, and then On to turn on the system. Cancel the selection of coasting guide to turn off the system. For the explanation of the system, press and hold the [OK] button.
  - Operation conditions  
To activate the system, take the following procedures. Enter your destination information on the navigation and select the driving route. Select the ECO mode in the Integrated Driving Control System. Then, satisfy the following:
    - The driving speed should be between 60 km/h(37 mph) and 160 km/h(99 mph).
- \* The operating speed may vary due to difference between instrument cluster and navigation effected by tire inflation level.

### ***Unplug vehicle to start***

The message is displayed when you start the engine without unplugging the charging cable. Unplug the charging cable, and then start the vehicle.

### ***Remaining Time***

The message is displayed to notify the remaining time to fully charge the battery.

### ***Shift to P to charge***

The message is displayed when the charging connector is plugged with the shift lever in R (Reverse), N (Neutral) or D (Drive). Move the shift lever to P (Park) and re-start the charging process.

### ***Electric mode/Automatic mode/Hybrid mode***

A corresponding message is displayed when a mode is selected by pressing the HEV button.

### ***Low battery. Maintaining Hybrid mode***

This message is displayed when unable to convert to EV mode even when pressing the HEV button during HEV mode driving due to insufficient high-voltage (hybrid) battery level.

### ***Low system temperature. Switching to Hybrid mode/ High system temperature. Switching to Hybrid mode***

This message is displayed when the temperature of the high-voltage (hybrid) battery is too low or high.

This warning message is to protect the battery and the hybrid system.

***Low system temperature. Maintaining Hybrid mode/ High system temperature. Maintaining Hybrid mode***

This message is displayed when the temperature of the high-voltage (hybrid) battery is too low or too high. This warning message is to protect the battery and the hybrid system.

***Wait until fuel door opens***

This message is displayed when you attempt to open the fuel filler door with the fuel tank pressurized. Wait until the fuel tank is depressurized.

***Fuel door open***

This message is displayed when the fuel filler door opens after the fuel tank is depressurized. If this message is displayed, you can refuel the fuel tank.

***Charging stopped. Check the AC charger***

This messages is displayed when the charging failed by external charger error.

The purpose of this message is to let you know the error has occurred

in the charger itself, not in the vehicle.

***Charging stopped. Check the cable connection***

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

***Charging Door Open***

This message indicates that the charging door is open while in driving- ready state to encourage you to inspect and close the door.(Driving with the charging door open may result in moisture inflow or damage. This message is used to prevent such occurrences.)

### ***Switching to Hybrid mode to allow heating or air conditioning***

- When the coolant temperature is lower than  $-14^{\circ}\text{C}$  ( $57^{\circ}\text{F}$ ), and you turn the climate control On for heating, the above message will be displayed in the cluster. Then, the vehicle will automatically switch to HEV mode.
- When the coolant temperature is higher than  $-14^{\circ}\text{C}$  ( $57^{\circ}\text{F}$ ), or you turn the climate control Off, the vehicle will automatically return to EV mode.

### ***Switching to Hybrid mode for self-diagnosis***

- This message is displayed for selfdiagnosis of the hybrid mode system.

## **Warning and indicator lights**

### **Warning lights**

#### **\* NOTICE**

#### **Warning lights**

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

#### **Hybrid System Warning Light**

#### **This warning light illuminates:**

When there is a malfunction with the hybrid system.

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

#### **Air bag Warning Light**

#### **This warning light illuminates:**

- Once you set the ENGINE START/STOP button to the ON position.
  - It illuminates for approximately 6 seconds and then goes off.
- When there is a malfunction with the SRS.

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

### **Seat Belt Warning Light**

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

\* For more details, refer to the "Seat belts" on page 4-19.

### **Parking Brake & Brake Fluid Warning Light**

**This warning light illuminates:**

- Once you set the ENGINE START/STOP button to the ON position.
  - It illuminates for approximately 3 seconds
  - It remains on if the parking brake is applied.
- When the parking brake is applied.
- When the brake fluid level in the reservoir is low.
  - If the warning light illuminates with the parking brake released, it indicates the brake fluid level in reservoir is low.

**If the brake fluid level in the reservoir is low:**

1. Drive carefully to the nearest safe location and stop your vehicle.
2. With the engine stopped, check the brake fluid level immediately and add fluid as required (For more details, refer to "Brake fluid" on page 8-23). 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 the vehicle towed to a professional workshop and inspected. Kia recommends to visit an authorized Kia dealer/service partner.

### **Dual-diagonal braking system**

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

With only one of the dual systems working, more than normal pedal travel and greater pedal pressure are required to stop the vehicle. Also, the vehicle will not stop in as short a distance with only a portion of the brake system working. If the brakes fail while you are driving, shift to a lower gear for additional engine braking and stop the vehicle as soon as it is safe to do so.

### **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 illuminates with the parking brake released, it indicates that the brake fluid level is low.

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

### **Regenerative Brake Warning Light**

 (red color)  (yellow color)

#### **This warning light illuminates:**

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 illuminate simultaneously.

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

The operation of the brake pedal may be more difficult than normal and the braking distance can increase.

### **Anti-lock Brake System (ABS)**

**Warning Light** 

#### **This warning light illuminates:**

- Once you set the ENGINE START/STOP button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the ABS (The normal braking system will still be operational with-

out the assistance of the anti-lock brake system).

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

### **Electronic Brake force Distribution (EBD) System Warning Light**

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

- When the ABS and regular brake system may not work normally. In this case, have the vehicle inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### **⚠ WARNING**

### **Electronic Brake force Distribution (EBD) System Warning Light**

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

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

Have the vehicle inspected by a professional workshop as soon as possible. Kia recommends to visit an

authorized Kia dealer/service partner.

**\* NOTICE**

**Electronic Brake force Distribution (EBD) System Warning Light**

When the ABS Warning Light is on or both ABS and Parking Brake & Brake Fluid Warning Lights are on, the speedometer, odometer, or tripmeter may not work. Also, the EPS Warning Light may illuminate and the steering effort may increase or decrease.

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

**Electronic Power Steering (EPS) Warning Light **

**This warning light illuminates:**

- Once you set the ENGINE START/STOP button to the ON position.
  - This indicator light comes on after the ENGINE START/STOP button is turned to the ON position and then goes out after approximately 3 seconds.
- When there is a malfunction with the EPS.
 

In this case, have the vehicle inspected by a professional work-

shop. Kia recommends to visit an authorized Kia dealer/service partner.

**Malfunction Indicator Lamp (MIL)**



**This warning light illuminates:**

- Once you set the ENGINE START/STOP button to the ON position.
  - It remains on until the engine is started.
- When there is a malfunction with the emission control system. In this case, have the vehicle inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

**⚠ CAUTION**

**Malfunction Indicator Lamp (MIL)**

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

**⚠ CAUTION**

**Gasoline Engine**

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

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

### ***Charging System Warning Light***



#### **This warning light illuminates:**

- Once you set the ENGINE START/STOP button to the ON position.
  - It remains on until the engine is started.
- When there is a malfunction with either the alternator or electrical charging system.

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

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

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

### ***Engine Oil Pressure Warning Light***



#### **This warning light illuminates:**

- Once you set the ENGINE START/STOP button to the ON position.
  - It remains on until the engine is started.
- When the engine oil pressure is low.

#### **If the engine oil pressure is low:**

1. Drive carefully to the nearest safe location and stop your vehicle.
2. Turn the engine off and check the engine oil level (For more details, refer to "Engine oil (Gasoline)" on page 8-24. If the level is low, add oil as required.

If the warning light remains on after adding oil or if oil is not available, have the vehicle inspected by a professional workshop as soon as possible. Kia recommends to visit an authorized Kia dealer/service partner.

#### **⚠ CAUTION**

#### **Engine Oil Pressure Warning Light**

- If the engine does not stop immediately after the Engine Oil Pressure Warning Light is illuminated, severe damage could result.
- If the warning light stays on while the engine is running, it indicates that there may be serious engine

damage or malfunction. In this case,

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

**Low Fuel Level Warning Light** 

**This warning light illuminates:**

When the fuel tank is nearly empty.

**If the fuel tank is nearly empty:**

Add fuel as soon as possible.

**CAUTION** 

**Low Fuel Level**

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

**Washer Fluid Warning Light** 

**This warning light illuminates:**

- When the washer fluid level in the reservoir is nearly empty. If washer fluid warning light illuminates, refill the washer fluid reservoir in the engine room when possible.

**Low Tire Pressure Warning Light**



**This warning light illuminates:**

- Once you set the ENGINE START/STOP button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When one or more of your tires are significantly underinflated (The location of the underinflated tires are displayed on the LCD display).

\* For more details, refer to "Tire Pressure Monitoring System (TPMS)" on page 7-10.

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

- When there is a malfunction with the TPMS. In this case, have the vehicle inspected by a professional workshop as soon as possible. Kia recommends to visit an

authorized Kia dealer/service partner.

\* For more details, refer to "Tire Pressure Monitoring System (TPMS)" on page 7-10".

## 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.

### **Forward Collision-Avoidance Assist Warning light** (if equipped)

#### This indicator light illuminates:

- When there is a malfunction with Forward Collision-Avoidance Assist system.

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

### **Master Warning Light**

#### This indicator light illuminates:

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

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

**Exhaust system (GPF) warning light (Gasoline Engine)** 

**This warning light illuminates:**

- When there is a malfunction with Gasoline Particulate Filter (GPF) system.
- When this warning light illuminates, it may turn off after driving the vehicle:
  - The vehicle should be driven for more than 30 minutes at a speed of 80 km/h (50 mph) and faster.
  - Ensure the following conditions are all met: safe road conditions, transmission 3rd gear or above, and engine speed of 1,500 – 4,000 rpm.

If this warning light blinks in spite of the procedure (at this time the LCD warning message will be displayed), have the GPF system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/ service partner.

**⚠ CAUTION**

**Gasoline Engine with GPF (if equipped)**

If you continue to drive with the GPF warning light blinking for a long time, the GPF system can be damaged and fuel consumption can worsen.

**LED Headlamp Warning Light**  (if equipped)

**This warning light illuminates:**

- Once you set the ENGINE START/ STOP button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the LED headlamp.

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

**This warning light blinks:**

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

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

**Electronic Parking Brake (EPB) Warning Light** 

**This warning light illuminates:**

- Once you set the ENGINE START/ STOP button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
  - When there is a malfunction with the EPB.

In this case, have the vehicle inspected by a professional

workshop. Kia recommends to visit an authorised Kia dealer/ service partner.

## \* NOTICE

### Electronic Parking Brake (EPB) Warning Light

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

## Indicator lights

### Charging Cable Connection Indicator



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

### Electronic Stability Control (ESC) Indicator Light

#### This indicator light illuminates:

- Once you set the ENGINE START/ STOP button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the ESC system.  
In this case, have the vehicle inspected by a professional work-

shop. Kia recommends to visit an authorized Kia dealer/service partner.

#### This indicator light blinks:

While the ESC is operating.

- \* For more details, refer to "Electronic Stability Control (ESC)" on page 6-37.

### Electronic Stability Control (ESC)

#### OFF Indicator Light

#### This indicator light illuminates:

- Once you set the ENGINE START/ STOP button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When you deactivate the ESC system by pressing the ESC OFF button.  
\* For more details, refer to "Electronic Stability Control (ESC)" on page 6-37.

### AUTO HOLD Indicator Light (AUTO HOLD) (if equipped)

#### This indicator light illuminates:

- **White** When you activate the auto hold system by pressing the AUTO HOLD button.
- **Green** When you stop the vehicle completely by depressing the brake pedal with the auto hold system activated.

- **Yellow** When there is a malfunction with the auto hold system. In this case, have the vehicle inspected by a professional workshop. Kia recommends to visit an authorised Kia dealer/service partner.

\* For more details, refer to "AUTO HOLD (if equipped)" on page 6–33.

### **Immobilizer Indicator Light (Without Smart Key)**

#### **This indicator light illuminates:**

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

#### **This indicator light blinks:**

- When there is a malfunction with the immobilizer system. In this case, have the vehicle inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### **Immobilizer Indicator Light (With Smart Key)**

#### **This indicator light illuminates for up to 30 seconds:**

- When the vehicle detects the smart key in the vehicle properly while the ENGINE START/STOP button is ACC or ON.
  - At this time, you can start the engine.
  - The indicator light goes off after starting the engine.

#### **This indicator light blinks for a few seconds:**

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

#### **This indicator light illuminates for 2 seconds and goes off:**

- When the vehicle can not detect the smart key which is in the vehicle while the ENGINE START/STOP button is ON. In this case, have the vehicle inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

#### **This indicator light blinks:**

- When the battery of the smart key is weak.
  - At this time, you can not start the engine. However, you can

start the engine if you press the ENGINE START/STOP button with the smart key. (For more details, refer to "Starting the engine" on page 6-11).

- When there is a malfunction with the immobilizer system. In this case, have the vehicle inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### **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 the vehicle inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
  - The indicator light does not blink but illuminates.
  - The indicator light blinks more rapidly.
  - The indicator light does not illuminate at all.

### **Low Beam Indicator Light** (if equipped)

#### **This indicator light illuminates**

- When the headlights are on.

### **High Beam Indicator Light**

#### **This indicator light illuminates:**

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

### **High Beam Assist indicator** (if equipped)

#### **This warning light illuminates :**

- When the high beam is on with the light switch in the AUTO light position.
  - If your vehicle detects oncoming or preceding vehicles, High Beam Assist system will switch the high beam to low beam automatically.
- \* For more details, refer to "High Beam Assist (HBA) (if equipped)" on page 5-125.

### **EV Mode Indicator**

#### **This indicator light illuminates:**

This indicator illuminates when the vehicle is driven by the electric motor.

**Ready Indicator** 

**This indicator light illuminates:**

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 the vehicle inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

**Light ON Indicator Light** 

**This indicator light illuminates:**

- When the tail lights or headlights are on.

**Front Fog Indicator Light** 

**This indicator light illuminates:**

- When the front fog lights are on.

**Rear Fog Indicator Light** 

**This indicator light illuminates:**

- When the rear fog lights are on.

**Lane Keeping Assist indicator**   
(if equipped)

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

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

\* For more details, refer to "Lane Keeping Assist (LKA) (if equipped)" on page 6-73.

**Cruise indicator light**  CRUISE (if equipped)

**This indicator light illuminates:**

- When the cruise control system is enabled.

\* For more details, refer to "Smart Cruise Control (SCC) (if equipped)" on page 6-104.

**SPORT mode indicator light**

This indicator light illuminates:

- When you select "SPORT" mode as drive mode.

\* For more details, refer to "Sport system (if equipped)" on page 6-137.

## Rear View Monitor (RVM)



Rear View Monitor system is a supplemental system that shows the area behind the vehicle on the infotainment system screen to assist you when parking or driving.

- Rear View Monitor with parking guidance will activate when the engine is running and the shift into R (Reverse) position.
- To assist in parking, the rear view is shown (the parking guide line disappears) on the screen when the shift button is shifted from R (Reverse) to D (Drive) with vehicle speed below 10 km/h (6 mph).

### ⚠ CAUTION

- Rear View Monitor is not a safety device. It only serves to assist the driver in identifying objects directly behind the middle of the vehicle. The camera does not cover the complete area behind the vehicle.
- Never rely solely on the rear view monitor. As there are blind spots that do not appear on the camera while backing up and parking, You must always use methods of viewing the area behind you including looking over both shoulders as well as continuously checking all three rear view mirrors.
- Always look around your vehicle to make sure there are no objects or obstacles before moving the vehicle in any direction to prevent a collision.
- Always pay close attention when the vehicle is driven close to objects, particularly pedestrians, and especially children.
- Always keep the camera lens clean. If lens is covered with foreign matter, the camera may not operate normally.
- When stopping for a long time in winter or parking in an indoor parking lot, the image may temporarily be blurry due to the exhaust gas.

## Reverse Parking Distance Warning (PDW) (if equipped)



Reverse Parking Distance Warning system assists the driver during reverse movement of the vehicle by chiming if any object is sensed within the distance of 120 cm (48 in.) behind the vehicle.

This system is a supplemental system that senses objects within the range and location of the sensors, it cannot detect objects in other areas where sensors are not installed.

### **⚠ WARNING**

- Always look around your vehicle to make sure there are not any objects or obstacles before moving the vehicle in any direction to prevent a collision.
- Always pay close attention when the vehicle is driven close to objects, particularly pedestrians, and especially children.
- Be aware that some objects may not be visible on the screen or be

detected by the sensors, due to the objects distance, size or material, all of which can limit the effectiveness of the sensor.

### Operation of Reverse Parking Distance Warning

- This system will activate when backing up with the ignition switch in the ON position. However, if vehicle speed exceeds 5 km/h (3 mph), the system may not detect objects.
- If vehicle speed exceeds 10 km/h (6 mph), the system will not warn you even though objects are detected.
- When more than two objects are sensed at the same time, the closest one will be recognized first.

Types of warning sound	Indicator*
When an object is 60 cm to 120 cm (24 in. to 48 in.) from the rear bumper: Buzzer beeps intermittently.	
When an object is 30 cm to 60 cm (12 in. to 24 in.) from the rear bumper: Buzzer beeps more frequently.	
When an object is within 30 cm (12 in.) of the rear bumper: Buzzer sounds continuously.	

\* if equipped

## \* NOTICE

- The indicator may differ from the illustration depending on objects or sensors status. If the indicator blinks, we recommend that you have your vehicle checked by an authorized KIA dealer.
- If the audible warning does not sound or if the buzzer sounds intermittently when the gear is R (Reverse) position, this may indicate a malfunction with Reverse Parking Distance Warning system. If this occurs, we recommend that you have your vehicle checked by an authorized KIA dealer as soon as possible.

### Non-operational conditions of Reverse Parking Distance Warning

#### ***Reverse Parking Distance Warning system may not operate normally when:***

- Moisture is frozen to the sensor.
- Sensor is covered with foreign matter, such as snow or water, or the sensor cover is blocked.

#### ***There is a possibility of Reverse Parking Distance Warning system malfunction when:***

- Driving on uneven road surfaces such as unpaved roads, gravel, bumps, or gradient.

- Objects generating excessive noise such as vehicle horns, loud motorcycle engines, or truck air brakes can interfere with the sensor.
- Heavy rain or water spray is present.
- Wireless transmitters or mobile phones are present near the sensor.
- The sensor is covered with snow.
- Any non-factory equipment or accessories have been installed, or if the vehicle bumper height or sensor installation has been modified.

#### ***Detecting range may decrease when:***

- Outside air temperature is extremely hot or cold.

#### ***The following objects may not be recognized by the sensor:***

- Sharp or slim objects such as ropes, chains or small poles.
- Undetectable objects smaller than 100 cm (40 in) and narrower than 14 cm (6 in) in diameter.
- Objects, which tend to absorb sensor frequency such as clothes, spongy material or snow.

## Reverse Parking Distance Warning system precautions

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

### \* NOTICE

- This system can only sense objects within the range and location of the sensors; It cannot detect objects in other areas where sensors are not installed. Also, small or slim objects, such as poles or objects located between sensors may not be detected by the sensors. Always visually check behind the vehicle when backing up.
  - Be sure to inform any drivers of the vehicle that may be unfamiliar with the system regarding the systems capabilities and limitations.
-

### Self-Diagnosis

When the gear is R (Reverse) position and if one or more of the below occurs you may have a malfunction in the Parking Distance Warning system.

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

If this occurs, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### WARNING

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

### Forward/Reverse Parking Distance Warning (PDW) (if equipped)

Front



Rear



Forward/Reverse Parking Distance Warning system assists the driver during movement of the vehicle by chiming if any object is sensed within the distance of 100 cm (40 in) in front and 120 cm (48 in) behind the vehicle.

This system is a supplemental system that senses objects within the range and location of the sensors, it

cannot detect objects in other areas where sensors are not installed.

**⚠ WARNING**

- Always look around your vehicle to make sure there are no objects or obstacles before moving the vehicle in any direction to prevent a collision.
- Always pay close attention when the vehicle is driven close to objects, particularly pedestrians, and especially children.
- Be aware that some objects may not be visible on the screen or be detected by the sensors, due to the objects distance, size or material, all of which can limit the effectiveness of the sensor.

**Operation of Forward/Reverse Parking Distance Warning**

*Operating condition*

- This system will activate when Forward/Reverse Parking Distance Warning system button is pressed with the engine running.
- Forward/Reverse Parking Distance Warning system button turns on automatically and activates Forward/Reverse Parking Distance Warning system when the gear is R (Reverse) position. However, if vehicle speed exceeds 10 km/h (6 mph), the system will not warn you even though objects are detected, and if vehicle speed exceeds 20 km/h (12 mph), the system will turn off automatically. To turn on the system, press Forward/Reverse Parking Distance Warning system button.
- When more than two objects are sensed at the same time, the closest one will be recognized first.



OCDP049007

**Type of warning indicator and sound**

Distance from object cm(in)		Warning indicator		Warning sound
		When driving forward	When driving rearward	
60 ~ 100 (24 ~ 40)	Front		-	Buzzer beeps intermittently
	Rear	-		Buzzer beeps intermittently
30 ~ 60 (12 ~ 24)	Front			Buzzer beeps frequently
	Rear	-		Buzzer beeps frequently
30 (12)	Front			Buzzer sounds continuously
	Rear	-		Buzzer sounds continuously

**\* NOTICE**

- The indicator may differ from the illustration depending on objects or sensors status. If the indicator blinks, we recommend that the system be checked by an authorized Kia dealer.
- If the audible warning does not sound or if the buzzer sounds intermittently when shifting into R (Reverse) position, this may indicate a malfunction with the Parking Distance Warning (Reverse/Forward) system. If this occurs, we recommend that you have your vehicle checked by an authorized Kia dealer as soon as possible.

**Forward/Reverse Parking Distance Warning may not operate normally when:**

- Moisture is frozen to the sensor. (It will operate normally when the ice melts.)
- Sensor is covered with foreign matter, such as snow or water, or the sensor cover is blocked. (It will operate normally when the material is removed or the sensor is no longer blocked.)
- Forward/Reverse Parking Distance Warning button is off.

***There is a possibility of Forward/Reverse Parking Distance Warning malfunction when:***

- Driving on uneven road surfaces such as unpaved roads, gravel, bumps, or gradient.
- Objects generating excessive noise such as vehicle horns, loud motorcycle engines, or truck air brakes can interfere with the sensor.
- Heavy rain or water spray is present.
- Wireless transmitters or mobile phones present near the sensor.
- The sensor is covered with snow.
- Any non-factory equipment or accessories have been installed, or if the vehicle bumper height or sensor installation has been modified.

***Detecting range may decrease when:***

- Outside air temperature is extremely hot or cold.

***The following objects may not be recognized by the sensor:***

- 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.
- Undetectable objects smaller than 100 cm (40 in) and narrower than 14 cm (5.5 in) in diameter.

***Forward/Reverse Parking Distance Warning system precautions***

- Forward/Reverse Parking Distance Warning system may not sound consistently depending on the speed and shapes of the objects detected.
- Forward/Reverse Parking Distance Warning system may malfunction if the vehicle bumper height or sensor installation has been modified. Any non-factory installed equipment or accessories may also interfere with the sensor performance.
- Sensor may not recognize objects less than 30 cm (12 in) from the sensor, or it may sense an incorrect distance. Use with caution.
- When the sensor is frozen or stained with snow, dirt, or water, the sensor may be inoperative until the stains are removed using a soft cloth.
- Do not push, scratch or strike the sensor. Sensor damage could occur.
- Do not spray the 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.

### \* NOTICE

- This system can only sense objects within the range and location of the sensors; It cannot detect objects in other areas where sensors are not installed. Also, small or slim objects, such as poles or objects located between sensors may not be detected by the sensors. Always visually check behind the vehicle when backing up.
- Be sure to inform any drivers of the vehicle that may be unfamiliar with the system regarding the systems capabilities and limitations.

### ⚠ WARNING

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

### Self-Diagnosis

When the gear is R (Reverse) position and if one or more of the below occurs you may have a malfunction in the Parking Distance Warning system.

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

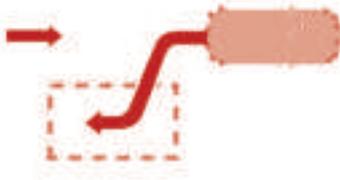
If this occurs, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### ⚠ WARNING

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

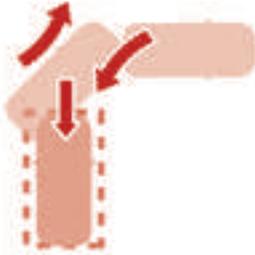
## Parking Assist (PA) (if equipped)

Parallel parking



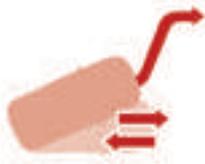
OCDW059149

Reverse parking



OCDW059145

Parallel exit



OCDW059146

Parking Assist helps drivers park their vehicle by using sensors to measure parking spaces, control the steering wheel to semi-automatically park the vehicle and provide instruction on the LCD display to help through parking.

Additionally, the system provides assistance when leaving (parallel exit) a parking space.

\* The volume for Parking Assist can be adjusted. Refer to "User settings mode (if equipped)" on page 5-70.

### \* NOTICE

- The vehicle will not stop for pedestrians or objects that may be in its path, so the driver must monitor the maneuver.
- Use the system only in parking lots and places used for parking.
- The system does not work if there is no car parked in front of the parking space you are planning to park or if it is a diagonal parking space.
- After parking your vehicle using the system, the vehicle may not be parked at the exact spot you have wished. For example, the space between your vehicle and wall may not be the distance you have desired.
- Deactivate the system and park your vehicle manually, when the

situation requires parking manually.

- Parking Assist system's front and rear warning sound activates when Parking Assist is activated.
- After searching for a parking space is completed, Parking Assist will be canceled if Parking Assist system is canceled by pressing the button to the OFF position.

mended by an authorized Kia dealer/service partner, the system may not work properly. Always use the same size tire and wheel.

**⚠ WARNING**

- Parking Assist should only be considered as a supplementary function. The driver must check the front and rear view for objects. The operational function of Parking Assist can be affected by many factors and conditions of the surroundings, so the responsibility rests always with the driver.
- The system may not operate normally if the vehicle needs wheel alignment adjustment. In this case, have the vehicle checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/ service partner.
- Kia recommends to always use the same size tire and wheel recommended by an authorized Kia dealer/ service partner. If you use a different tire or wheel size the system may not work properly. If you use a different tire or wheel size rather than the size recom-

**Operating condition**

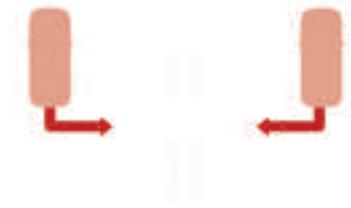
Right side - Parallel parking / Left side - Parallel parking



5

OCDW059142

Right side - Reverse parking / Left side - Reverse parking



OCDW059147

Left side - Parallel exit / Right side - Parallel exit



OCDW059148

The system will help park the vehicle in the middle or back of a parked vehicle. Use the system when all the below conditions are met.

- When the parking space is a straight line.
- When parallel parking or reverse (perpendicular) parking is required.
- When there is a parked vehicle.
- When there is enough space to move the vehicle.

**Non-operating condition**

Never use Parking Assist in the limitation of the system.

- Curved parking space
- Inclined roads
- A vehicle loaded with longer or wider cargo compared to the vehicle
- Diagonal parking space
- Heavy snow or rain or wind

- Near a circular pillar or narrow pillar, or a pillar surrounded by objects such as fire extinguisher, etc.
- The sensor is positioned incorrectly by an impact to the bumper
- Bumpy roads
- A vehicle equipped with a snow chain or spare tire
- Tire pressure lower or higher than the standard tire pressure
- A trailer connected to the vehicle
- Slippery or uneven road
- Big vehicles such as buses or trucks parked
- EPS (Electronic Power Steering) indicator light remains on the instrument cluster
- Front or rear distance sensors are malfunction or not working properly. (Refer to "Parking Assist (PA) (if equipped)" on page 5-104.)
- A motorcycle or bicycle parked
- An obstacle such as a trash can, bicycle, shopping cart, etc. is near
- Wheel changed to an unauthorized size
- A problem with the wheel alignment
- Vehicle leaned severely to one side

**⚠ WARNING**

Do not use Parking Assist in the following conditions for unexpected results may occur and cause a serious accident.

1. Parking on inclines



OCDP049009

The driver must apply the accelerator and brake pedal when parking on inclines. If the driver is unfamiliar with applying the accelerator and brake pedal, a vehicle accident may occur.

2. Parking in snow



OCDP049010

Snow may interfere with sensor operation or the system may cancel if the road is slippery while parking. Also, if the driver is unfamiliar with applying the accelerator and brake pedal, a car accident may occur.

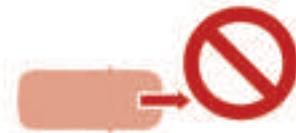
3. Parking in narrow space



OCDP049011

The system may not search for parking spaces if the space is too narrow. Even if the system is operating, always be careful.

4. Parking diagonal



OCDW059150

The system is a supplemental for parallel parking or perpendicular parking. Diagonal line parking is

not available. Even if the vehicle is able to enter the space, do not operate Parking Assist. The system will attempt parallel parking or reverse (perpendicular) parking.

5. Parking in uneven road



OCDP049012

Parking in uneven roads, the driver needs to properly apply the pedal (clutch, accelerator or brake). If not, the system may cancel when the vehicle slips or an accident may occur.

6. Parking behind a truck



OCDP049013

An accident may occur when parking behind a vehicle higher

than yours. For example, bus, truck, etc. Do not solely rely on Parking Assist.

7. Obstacle in parking space



OCDP049014

Obstacle such as a pillar may interfere with the system when looking for a parking space. Even though, a parking space is available the system may not detect a parking space.

8. Leaving a parking space near a wall



OCDP049011

When leaving a parking space that is narrow and near a wall, the system may not work properly.

When leaving a parking space similar to the above picture, the driver must watch out for obstacles while leaving.

### How the system works (Parking mode)

1. Activate Parking Assist  
The shift lever should be placed in D (Drive).
2. Select parking mode
  - If the parking mode is selected with the shift lever in N (Neutral) after starting the engine, the exit mode will be selected automatically and after driving, the parking mode will be selected.
3. (Optional) Search for parking space (slowly move forward.)
4. (Optional) Search complete (automatic search by sensor.)
5. Steering wheel control
  - 1) Shift according to the instruction on the LCD display.
  - 2) Drive slowly with the brake pedal applied.
6. Parking complete
7. If necessary, manually adjust position of vehicle.

If the system already recognized parking space before activating Parking Assist, you can proceed from 4th stage (Search complete)

### \* NOTICE

- Before activating the system check if the conditions are possible to use the system.
- For your safety, always apply the brake pedal except for when driving.

### 1. Activate Parking Assist



OCDP049015

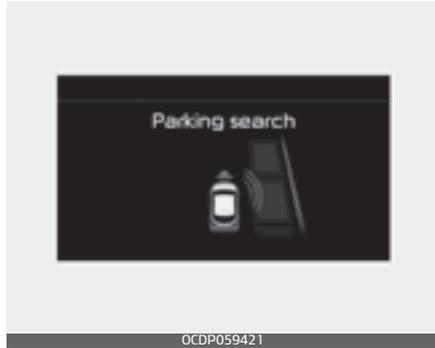
- Press the Parking Assist button (the button indicator will illuminate).
- Parking Assist system will be activated (the button indicator will illuminate).  
A warning sound will be heard if an obstacle is detected.
- Press the Parking Assist button  again for more than 1.5 seconds to turn off the system.
- Parking Assist defaults to the OFF position whenever the ENGINE START/STOP button is turned on.

### 2. Select Parking Mode

- Select parallel mode or reverse mode by pressing the Parking Assist button with the shift lever in D (Drive).
- If the system already recognized parking space before activating Parking Assist, you can see “Parking search” or “Space found”.
- The right side parallel mode is selected automatically when Parking Assist is activated.
- The mode changes from parallel mode (right → left) to reverse mode (right → left) whenever the Parking Assist button is pressed. (for LHD)
- The mode changes from parallel mode (left → right) to reverse mode (left → right) whenever the Parking Assist button is pressed. (for RHD)
- If the button is pressed again, the system will turn off.

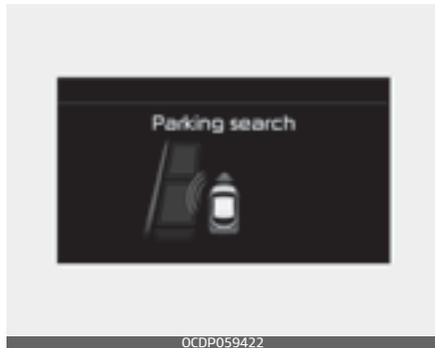
### 3. Search for parking space (optional)

Right side - Parallel parking



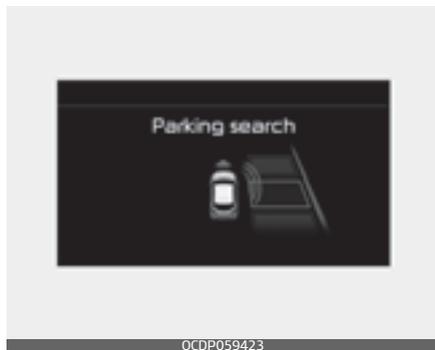
OCDP059421

Left side - Parallel parking



OCDP059422

Right side - Reverse parking



OCDP059423

Left side - Reverse parking



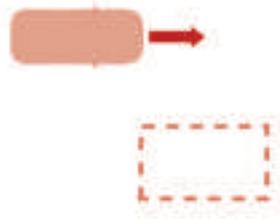
- Slowly drive forward maintaining the distance of approximately 50 ~ 150 cm (19.6 ~ 59.0 in.) with the parked vehicles. The side sensors will search for a parking space.
- If the vehicle speed is over 20 km/h (12 mph), a message will appear to notify you to reduce speed.
- If vehicle speed is over 30 km/h (18 mph), the system will be canceled.

**\* NOTICE**

- Turn on the hazard warning flasher if it is crowded with other vehicles.
- If the parking lot is small, slowly drive more nearer to the parking space.
- The search for a parking space will be completed only when there is enough space for the vehicle to move to park.

**\* NOTICE**

- When searching for a parking space, the system may not be able to find a parking space if there is no vehicle parked, a parking space is available after driving by or a parking space is available before driving by.
- The system may not operate normally in the following conditions:
  1. When the sensors are frozen
  2. When the sensors are dirty
  3. When it snows or rains heavily
  4. When a pillar or object is near



OCDW059151

**\* NOTICE**

Slowly drive forward maintaining the distance of approximately 50 ~ 150 cm (19.6 ~ 59.0 in.) with the parked vehicles. If it is not within the distance, the system may not be able to search for a parking space.

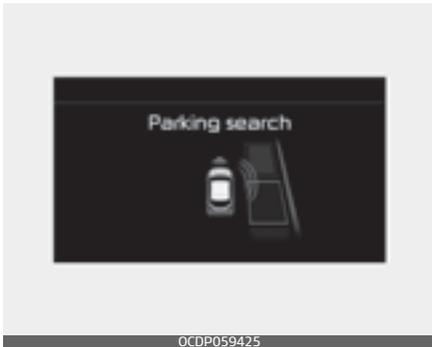
**⚠ CAUTION**

After searching for a parking space is completed, continue using the system after checking the surrounding area.

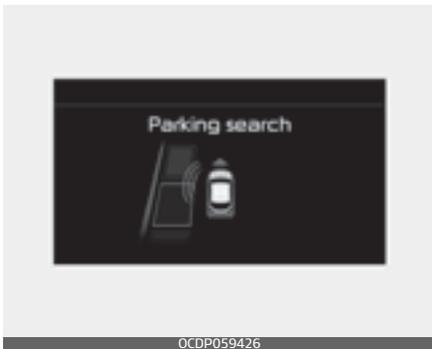
Especially, check the distance of the outside rear view mirror and objects while using the system to prevent careless accidents.

**4. Recognizing parking space (optional)**

Right side - Parallel parking



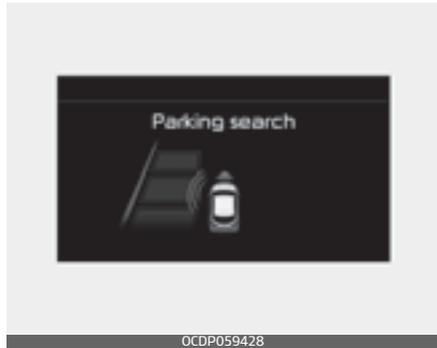
Left side - Parallel parking



Right side - Reverse parking



Left side - Reverse parking



When a parking space is found, a blank box will appear like the above picture. Drive forward slowly, then the "Shift to R" message will appear.

### 5. Search complete

Right side - Parallel parking



OCDP059429

Left side - Parallel parking



OCDP059430

Right side - Reverse parking



OCDP059431

Left side - Reverse parking



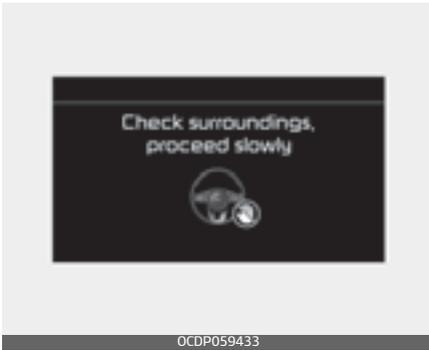
OCDP059432

While driving forward to search for a parking space, the above message will appear with a beep sound if the search is complete. Stop the vehicle and shift to the R (Reverse) position.

#### ⚠ CAUTION

- Always drive slowly with the brake pedal applied.
- If the parking space is too small the system may be canceled at the Steering wheel control stage. Do not park your vehicle if the space is too small.

## 6. Steering wheel control



- The above message will appear if the shift lever is in R (Reverse). The steering wheel will be controlled automatically.
- The system will be canceled if you firmly hold the steering wheel while it is controlled automatically.
- The system will be canceled if vehicle speed is over 7 km/h (4.3 mph).

### **⚠ WARNING**

Do not put your hands between the steering wheel while it is being automatically controlled.

### **⚠ CAUTION**

- Always drive slowly with the brake pedal applied.
- Always check for objects around your vehicle before driving.
- If the vehicle does not move even though the brake pedal is not

depressed, check the surrounding before depressing the accelerator pedal. Be sure not to speed over 7 km/h (4.3 mph).

- Do not install any cover on the steering wheel. This may cause the system to cancel.

### **\* NOTICE**

- If you do not follow the instructions provided, you may fail to park your vehicle. However, if Parking Assist system warning sound (distance from object is within 30 cm: continuous beep) occurs, slowly drive the vehicle to the reverse direction of the detected object after checking the surrounding.
- Always check the surrounding before driving your vehicle if Parking Assist system warning sound (distance from object is within 30 cm: continuous beep) is heard for the object is close to your vehicle. If the vehicle gets too close to the object, the warning will not sound.
- Be cautious not to accelerate too fast to avoid any crash with other vehicles around.

**To cancel the system while parking**

- Press the Parking Assist button and hold until the system is canceled.
- Press the Parking Assist button again for more than 1.5 seconds to turn off the system.
- Press the Parking Assist button while the steering wheel is controlled by the system.

**Gear shift while steering wheel control**

When the above message appears with a beep sound, shift the gear and drive the vehicle with the brake pedal depressed.

**⚠ CAUTION**

Always check the surrounding before releasing the brake pedal.

**⚠ WARNING**

Always be careful while parking for other vehicles or pedestrians.

**7. Parking Assist completed**



Complete parking your vehicle according to the instructions on the LCD display. If required, manually control the steering wheel and complete parking your vehicle.

**\* NOTICE**

The brake pedal must be depressed by the driver while parking your vehicle.

**Additional instructions (Messages)**





When Parking Assist is operating, a message may appear regardless of the parking order.

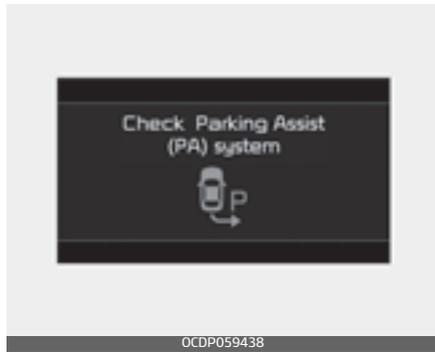
The messages will appear according to the circumstances. Follow the instructions provided while parking your vehicle with Parking Assist.

**\* NOTICE**

- In the below conditions the system will be canceled. Park your vehicle manually.
  - When the ABS is activated.
  - When the TCS/ESC is turned off.

- When vehicle speed is above 20km/h while searching for a parking space a message "Reduce speed" will appear
- In the below condition the system will not activate.
  - When the TCS/ESC is turned off.

**System malfunction**



- If there is a problem with the system, when the system is turned on, the above message will appear. Also, the indicator on the button will not light up and a beep sound will be heard.
  - If there is a problem with only Parking Assist, Parking Assist system will operate.
- If you notice any problem, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

## How the system works (Exit mode)

The Exit Mode operates in the below condition:

1. Activate Parking Assist  
The shift lever should be placed in P (Park).
2. Select Exit Mode
  - If the parking mode is selected with the shift lever in N (Neutral) after starting the engine, the exit mode will be selected automatically and after driving, the parking mode will be selected.
3. Check surroundings
4. Steering wheel control
  1. Shift according to the instruction on the LCD display.
  2. Drive slowly with the brake pedal applied.
5. Exiting complete  
If necessary, manually adjust position of vehicle.

### \* NOTICE

- Before activating the system check if the conditions are possible to use the system.
- For your safety, always apply the brake pedal except for when driving.

## 1. Activate Parking Assist



OCDP049015

- Press the Parking Assist button (the button indicator will illuminate).
- Parking Assist system will be activated (the button indicator will illuminate).  
A warning sound will be heard if an obstacle is detected.
- Press the Parking Assist button again for more than 1.5 seconds to turn off the system.
- Parking Assist defaults to the OFF position whenever the ENGINE START/STOP button is turned on.

## 2. Select Exit Mode

Left side - Parallel exit



Right side - Parallel exit

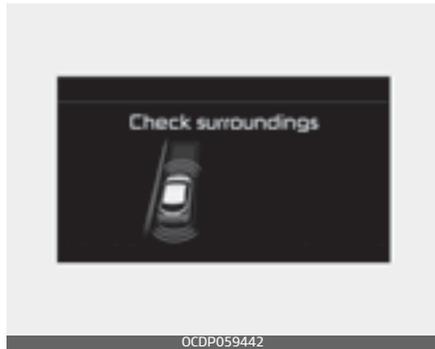


## 3. Check surroundings

Left side - Parallel exit



Right side - Parallel exit



- Select the mode by pressing Parking Assist button with the shift lever in P (Park) and the brake pedal depressed.
- The left side parallel mode is selected automatically when Parking Assist is activated.
- To select the right side parallel mode press the Parking Assist button once more.
- If the button is pressed again, the system will turn off.

Parking Assist checks the front and rear space to exit the vehicle from the parking space.

### \* NOTICE

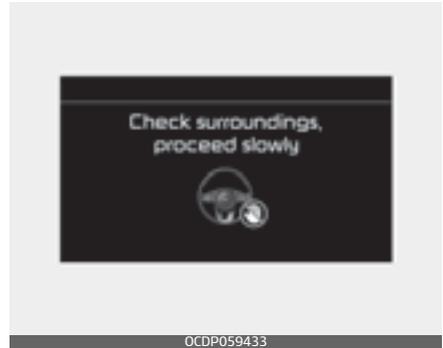
- When checking surroundings, if the front or rear vehicle (or object) is too near, the system may not work properly.
- The system may not operate normally in the following conditions:
  1. When the sensors are frozen.
  2. When the sensors are dirty.

- 3. When it snows or rains heavily.
- 4. When a pillar or object is near.
- When exiting the parking space if an obstacle is detected that may cause an accident, the system may cancel.
- If the space is too small to exit the system may cancel.

### ⚠ CAUTION

- If searching surroundings is completed, continue using the system after checking the surrounding area.
- The Exit mode may be activated unintentionally, when the shift lever is in P (Park) or N (Neutral) if the Parking Assist button is pressed.

#### 4. Steering wheel control



- The above message will appear if the shift lever is in D (Drive) or R (Reverse) according to the distance of the front and rear object from the sensor.  
The steering wheel will be controlled automatically.
- The system will be canceled if you firmly hold the steering wheel while it is controlled automatically.
- The system will be canceled if vehicle speed is over 7 km/h (4.3 mph).

### ⚠ WARNING

Do not put your hands between the steering wheel while it is being automatically controlled.

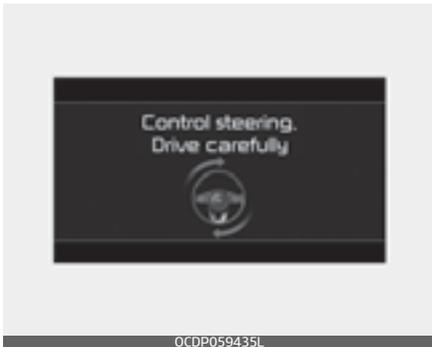
**To cancel the system while exiting**

- Press the Parking Assist system button.
- Press the Parking Assist button while the steering wheel is controlled by the system.

**CAUTION**

Always drive slowly with the brake pedal applied.

**5. Exiting Complete**



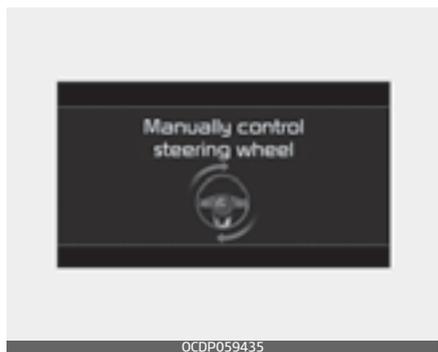
When assisting the driver exit the parking space is completed the above message will appear.

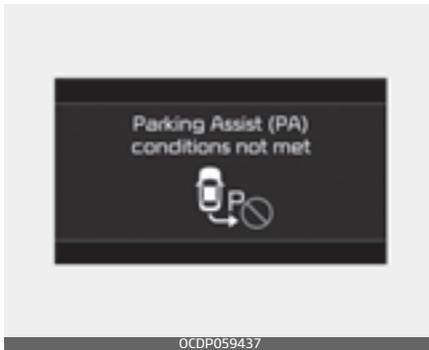
Turn the steering wheel to the direction you are leaving and manually control the steering wheel while leaving the parking space.

**CAUTION**

- When leaving the parking space turn the steering wheel as much as you can to the direction you are leaving, and then drive the vehicle slowly by depressing the accelerator pedal.
- Always check the surrounding before driving your vehicle if the Parking Assist system warning sound (distance from object is within 30 cm: continuous beep) is heard for the object is close to your vehicle.  
If the vehicle gets too close to the object, the warning will not sound.
- The system will be canceled for safety reasons if the vehicle is parked at a small space near a wall.

**Additional instructions (Messages)**





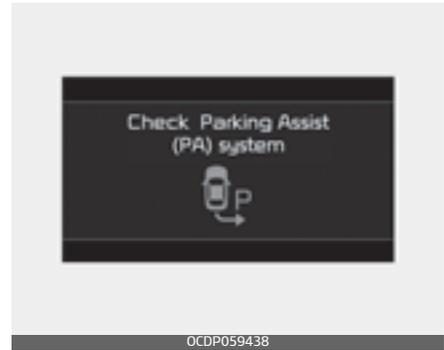
When Parking Assist is operating, a message may appear regardless of the exiting order.

The messages will appear according to the circumstances. Follow the instructions provided while parking your vehicle with Parking Assist.

### \* NOTICE

- In the below conditions the system will be canceled. Park your vehicle manually.
  - When the ABS is activated.
  - When the TCS/ESC is turned off.
- In the below condition the system will not activate
  - When the TCS/ESC is turned off.

## System malfunction



- If there is a problem with the system, when the system is turned on, the above message will appear. Also, the indicator on the button will not light up and a beep sound will be heard.
- If there is a problem with only Parking Assist, Parking Assist system will operate.

If you notice any problem, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### ⚠ CAUTION

The system may not work properly by providing incorrect messages when the sensors are interfered by other vehicle sensors and noise, or it is on a road that interferes with receiving signals.

## Lighting

### Battery saver function

- The purpose of this feature is to prevent the battery from being discharged. The system automatically turns off the parking lights after the vehicle is turned off and opens the driver-side door.
- With this feature, the parking lights will be turned off automatically if the driver parks on the side of road at night.

If necessary, to keep the lights on when the vehicle is turned off, perform the following:

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

### Headlight escort function (if equipped)

The headlights (and/or taillights) will remain on for approximately 5 minutes after the engine 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 transmitter (or smart key) twice or turning off the light switch from the headlight or Auto light position.

### CAUTION

If the driver gets out of the vehicle through other doors (except driver's door), the battery saver function does not operate and the headlight escort function does not turn off automatically. Therefore, It causes the battery to be discharged. In this case, make sure to turn off the lamp before getting out of the vehicle.

### Headlight welcome function (if equipped)

When the headlight switch is in the ON or AUTO position and all doors (and tailgate) are closed and locked, if you press the door unlock button on the transmitter (or smart key), the headlights will come on for about 15 seconds.

If the headlight switch is in the AUTO position, the function can only operate at night.

At this time, if you press the door unlock button again or door lock button on the transmitter (or smart key), the headlights will turn off immediately.

### *\* Traffic Change (For Europe)*

The low beam light distribution is asymmetric. If you go abroad to a country with opposite traffic direction, this asymmetric part will daz-

zle oncoming car driver. To prevent dazzle, ECE regulation demand several technical solutions (ex. automatic change system, adhesive sheet, down aiming). This headlamps are designed not to dazzle opposite drivers. So, you need not change your headlamps in a country with opposite traffic direction.

### Lighting control



OSP2049032L

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

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

1. Off position
2. Auto light position
3. Parking light position
4. Headlight position

### **Parking light position** (P)



OSP2049034L

When the light switch is in the parking light position (2nd position), the tail position, license and instrument panel lights will turn ON.

### **Headlight position** (H)



OSP2049035L

When the light switch is in the headlight position (3rd position), the head, tail, position, license and instrument panel lights are ON.

**\* NOTICE**

The ENGINE START/STOP button must be in the ON position to turn on the headlights.

**Auto light position**



OCDP049090

When the light switch is in the AUTO light position, the taillights (bulb type) and headlights will be turned ON or OFF automatically depending on the amount of light outside the vehicle.

However, LED type taillight is always on regardless of the amount of light outside the vehicle.

**⚠ CAUTION**

- Never place anything over sensor (1) located on the instrument panel, this will ensure better auto-light system control.
- Don't clean the sensor using a window cleaner, the cleanser may

leave a light film which could interfere with sensor operation.

- If your vehicle has window tint or other types of metallic coating on the front windshield, the Auto light system may not work properly.

**High beam operation**



OSP2049037L

To turn on the high beam headlights:

- Push the lever away from you. Pull it back for low beams.

The high beam indicator will light when the headlight high beams are switched on. To prevent the battery from being discharged, do not leave the lights on for a prolonged time while the engine is not running.

**⚠ WARNING**

Do not use high beam when there are other vehicles. Using high beam could obstruct the other driver's vision.

To flash the headlights:

- Pull the lever towards you. It will return to the normal (low beam) position when released.



OSP2049036L

The headlight switch does not need to be on to use this flashing feature.

### High Beam Assist (HBA) (if equipped)

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



OCDP049437

### Operating condition

1. Place the light switch in the AUTO position.
2. Turn on the high beam by pushing the lever away from you.

The High Beam Assist (HBA) indicator will illuminate.

3. High Beam Assist will turn on when vehicle speed is above 45 km/h (28 mph).
  - If the lever is pushed away when High Beam Assist is operating, High Beam Assist will turn off and the high beam will be on continuously. The High Beam Assist (HBA) indicator will turn off.
  - If the lever is pulled towards you when the high beam is on with operating High Beam Assist, High Beam Assist will turn off.

4. If the light switch is placed to the headlamp position, High Beam Assist will turn off and the low beam will be on continuously.

The high beam switches to low beam in the below conditions.

- When High Beam Assist is off.
- When the light switch is not in the AUTO position.
- When the headlamp is detected from the on-coming vehicle.
- When the tail lamp is detected from the front vehicle.

- When the surrounding is bright enough high beams are not needed.
- When streetlights or other lights are detected.
- When vehicle speed is below 35 km/h (22 mph).
- When headlamp / taillamp of bicycle/ motorcycle is detected.

### **⚠ CAUTION**

The system may not operate normally in the below conditions.

- When the light from the oncoming or front vehicle is not detected because of lamp damage, hidden from sight, etc.
- When the lamp of the on-coming or front vehicle is covered with dust, snow or water.
- When the light from the oncoming or front vehicle is not detected because of exhaust fume, smoke, fog, snow, etc.
- When the front window is covered with foreign matters such as ice, dust, fog, or is damaged.
- When there is a similar shape lamp with the front vehicle's lamps.
- When it is hard to see because of fog, heavy rain or snow.
- When the headlamp is not repaired or replaced at an authorized dealer.
- When headlamp aiming is not properly adjusted.
- When driving on a narrow curved road or rough road.
- When driving downhill or uphill.
- When only part of the vehicle in front is visible on a crossroad or curved road.
- When there is a traffic light, reflecting sign, flashing sign or mirror.
- When the road conditions are bad such as being wet or covered with snow.
- When the front vehicle's headlamps are off but the fog lamps on.
- When a vehicle suddenly appears from a curve.
- When the vehicle is tilted from a flat tire or being towed.
- When the Lane Keeping Assist system warning light illuminates.

### **⚠ WARNING**

- Do not place any accessories, stickers or tint the windshield.
- Have the windshield glass replaced from an authorized dealer.
- Do not remove or impact related parts of High Beam Assist system.
- Be careful that water doesn't get into High Beam Assist unit.
- Do not place objects on the dashboard that reflects light such as mirrors, white paper, etc. The

system may malfunction if sunlight is reflected.

- At times, High Beam Assist system may not work properly, always check the road conditions for your safety. When the system does not operate normally, manually change between the high beam and low beam.

## Turn signals and lane change signals



OSP2049078L

The ENGINE START/STOP button must be on for the turn signals to function. To turn on the turn signals, move the lever up or down (A).

The green arrow indicators on the instrument panel indicate which turn signal is operating. They will self cancel after a turn is completed.

If the indicator continues to flash after a turn, manually return the lever to the off position.

To signal a lane change, move the turn signal lever slightly and hold it

in position (B). The lever will return to the off position when released.

If an indicator stays on and does not flash or if it flashes abnormally, one of the turn signal bulbs may be burned out and will require replacement.

### *One-touch lane change function*

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

You can activate/deactivate the One Touch Turn Signal function or choose the number of blinks (3, 5, or 7) from the User Settings mode on the LCD WINDOWS. For more details, refer to "User settings mode (if equipped)" on page 5-70.

### **\* NOTICE**

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

## Front fog light



OSP2049079L

Fog lights are used to provide improved visibility when visibility is poor due to fog, rain or snow, etc. The fog lights will turn on when the fog light switch (1) is turned on after the parklight is turned on.

To turn off the fog lights:

- Turn the fog light switch (1) to the ON position.

### **⚠ CAUTION**

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

## Rear fog light



OSP2049432L

To turn the rear fog lights on, turn the rear fog light switch (1) to the on position when the headlight is turned on.

Also, the rear fog lights turn on when the rear fog light switch is turned on after the front fog light switch is turned on and the headlight switch is in the parklight position.

To turn the rear fog lights off:

- Turn the rear fog light switch to the on position again.

### Daytime running light

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

The DRL system turns OFF when:

1. The headlight switch is ON.
2. The engine is OFF.
3. The front fog light is on.
4. Engaging the parking brake.

### Headlight leveling device



OCDP049016

To adjust the headlight beam level according to the number of the passengers and loading weight in the luggage area, turn the beam leveling switch.

The higher the number of the switch position, the lower the headlight beam level. Always keep the headlight beam at the proper leveling position, or headlights may dazzle other road users.

Listed below are the examples of proper switch settings. For loading conditions other than those listed below, adjust the switch position so that the beam level may be the nearest as the condition obtained according to the list.

Loading condition	Switch position
Driver only	0
Driver + Front passenger	0
Full passengers (including driver)	1
Full passengers (including driver) + Maximum permissible loading	2
Driver + Maximum permissible loading	3

## Wipers and washers

Windshield wiper/washer



OCDP049019

Rear window wiper/washer



OCDP049018

### A: Wiper speed control (front)

-  - Single wipe
- 0 - Off
- AUTO\* - Auto control wipe
- 1 - Low wiper speed
- 2 - High wiper speed

### B: Intermittent control wipe time adjustment

### C: Wash with brief wipes (front)\*

### D: Rear wiper/washer control

- 2 - Continuous wipe
- 1 - Intermittent wipe
- 0 - Off

### E: Wash with brief wipes (rear)\*

\* if equipped

### Windshield wipers

Operates as follows when the ENGINE START/STOP button is turned ON.

: 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.

**0:** Wiper is not in operation

**AUTO :** The rain sensor located on the upper end of the windshield glass senses the amount of rainfall and controls the wiping cycle for the proper interval. The more it rains, the faster the wiper operates. When the rain stops, the wiper stops. To vary the speed setting, turn the speed control knob.

**1:** Normal wiper speed

**2:** Fast wiper speed

### \* NOTICE

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

### *Auto control (if equipped)*



OCDP049020

The rain sensor (1) 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 ENGINE START/STOP button is ON, the wiper will operate once to perform a self-check of the system. Set the wiper to OFF (O) position when the wiper is not in use.

### ⚠ CAUTION

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

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

### ⚠ CAUTION

- When washing the vehicle, set the wiper switch in the OFF (O) 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 (O) position. Otherwise, wipers may operate and ice may damage the windshield wiper blades. Always remove all snow and ice and defrost the windshield properly prior to operating the windshield wipers.
- When tinting the windshield, be careful of any fluid getting into the sensor located in the top center of the front windshield. It may damage the related parts.

### Windshield washers



OCDP049021

In the OFF (O) position, pull the lever gently toward you to spray washer fluid on the windshield and to run the wipers 1-3 cycles.

Use this function when the windshield is dirty.

The spray and wiper operation will continue until you release the lever.

If the washer does not work, check the washer fluid level. If the fluid level is not sufficient, you will need to add appropriate non-abrasive windshield washer fluid to the washer reservoir.

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

#### ⚠ CAUTION

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

#### ⚠ WARNING

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

#### ⚠ CAUTION

- To prevent possible damage to the wipers or windshield, do not operate the wipers when the windshield is dry.
- To prevent damage to the wiper blades, do not use gasoline, kero-

sene, paint thinner, or other solvents on or near them.

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

**Headlight washer (if equipped)**

If your vehicle is equipped with the headlight washer it will operate at the same time when you operate the windshield washer. However, if this function is operated once, the headlight washer will not operate within 15 minutes. It will operate when the headlight is ON and the ENGINE START/STOP button is in the ON position.

The washer fluid will be sprayed on to the headlights.

**\* NOTICE**

- Check the headlight washers periodically to confirm that the washer fluid is being sprayed properly onto the headlight lenses.
- The headlight washer can be operated 15 minutes after being operated last time.

**Rear window wiper and washer switch**



OCDP049022

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 / 2 - Normal wiper operation

LO / 1 - Intermittent wiper operation (if equipped)

OFF / 0 - Wiper is not in operation



OCDP049023

- 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.

### **Heated washer nozzle (if equipped)**

The heated washer nozzle function defreezes the washer nozzles in freezing weather.

The heated washer nozzle will turn on and off automatically when the ENGINE START/STOP button is in ON or when the engine is running in following conditions:

- Turns ON when the outside temperature is below 5°C, and OFF when it is over 10°C.
- The washer fluid defreezing speed may be slower when the ignition is in ON, than compared to when the engine is running.
- When the ignition is in ON, after 20 minutes of operation, the system will turn off automatically to prevent possible battery discharge.
- After the engine is running, the washer fluid will defrost after 5 to 10 minutes.
- If the engine has been started within the operating temperature, the heated nozzle remains ON even after 20 minutes.

### **\* NOTICE**

In below conditions, the heated washer nozzle may not function properly.

- The washer fluids in the washer reservoir is frozen.
  - Outside temperature sensor is malfunctioning.
-

## Interior light

### ⚠ CAUTION

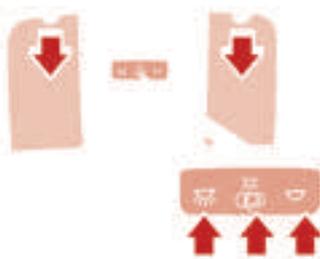
Do not use the interior lights for extended periods when engine is not running. It may cause battery discharge.

### ⚠ WARNING

Do not use the interior lights when driving in the dark. Accidents could happen because the view may be obscured by interior lights.

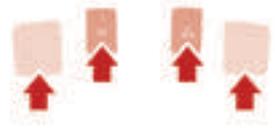
### Map lamp

Type A



OBDC049403RE

Type B



OBDC049058RE

- (1): Press the lamps to turn the front map lamps on and off.
-  (2):
  - The map lamp and room lamp comes on when a door is opened. The lamps go out after approximately 30 seconds.
  - The map lamp and room lamp comes on for approximately 30 seconds when doors are unlocked with a transmitter or smart key as long as the doors are not opened.
  - The map lamp and room lamp will stay on for approximately 20 minutes if a door is opened with the ENGINE 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 ENGINE START/STOP button in the ON position.

- The map lamp and room lamp will go out immediately if the ENGINE START/STOP button is changed to the ON position or all doors are locked.
- To turn off the DOOR mode, press the DOOR button (2) once again (not pressed).

**\* NOTICE**

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

**Front Map Lamp:**

 (3): Press this switch to turn the front map lamps on.

 (4): Press this switch to turn the front map lamps off.

**Room lamp**

Type A



ODEEV068148NR

Type B



OCDW049082

- : The light stays on at all times.

**Luggage room lamp**

Type A



OCDP049024

Type B



QCDCP049475

The luggage room lamp comes on when the tailgate is opened.

**CAUTION**

The luggage room lamp comes on as long as the tailgate opens. To prevent unnecessary charging system drain, close the tailgate securely after using the luggage room.

**Vanity mirror lamp (if equipped)**



OBDC049062RE

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**



OCDW049025

The glove box lamp comes on when the glove box is opened.

**CAUTION**

To prevent unnecessary charging system drain, close the glove box securely after using the glove box.

## Defroster

### ⚠ CAUTION

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.

### \* NOTICE

If you want to defrost and defog the front windshield, refer to "Windshield defrosting and defogging" on page 5-152.

### Rear window defroster

The defroster heats the window to remove frost, fog and thin ice from the rear window, while the engine is running.



OCDW049301

To activate the rear window defroster:

- Press the rear window defroster button.  
The indicator on the rear window defroster button illuminates when the defroster is ON.  
If there is heavy accumulation of snow on the rear window, brush it off before operating the rear defroster.  
The rear window defroster automatically turns off after approximately 20 minutes or when the ENGINE START/STOP button is turned off. To turn off the defroster, press the rear window defroster button again.

### *Outside rear view mirror defroster (if equipped)*

If your vehicle is equipped with the outside rear view mirror defrosters, they will rear viewoperate at the same time you turn on the rear window defroster.

### \* NOTICE

The rear window defroster may turn off in the below conditions.

- Engine temperature is less than 25°C and the vehicle speed is from 1 ~ 10 km/h with the gear position in "D" or "R". If the vehicle stops or the vehicle speed is over 10 km/h, the rear window defroster turns on again.

## Automatic climate control system

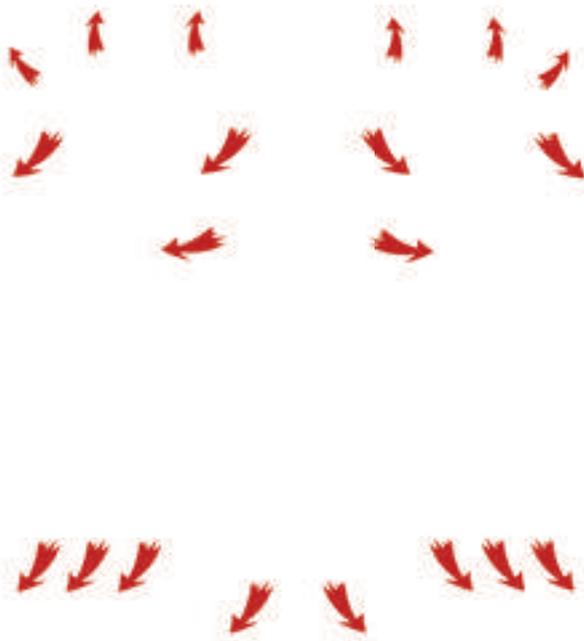


1. Driver's temperature control knob
2. AUTO (automatic control) button
3. Front windshield defroster button
4. Rear window defroster button
5. Air conditioning button
6. Air intake control button
7. Blower OFF button
8. Fan speed control button
9. Mode selection button
10. Passenger's temperature control knob
11. SYNC button
12. Driver only select button

### **CAUTION**

Operating the blower when the ENGINE START/STOP button is in the ON position could cause the battery to discharge. Operate the blower when the engine is running.

### Heating and air conditioning



OCDP049319

1. Start the engine.
2. Set the mode to the desired position.  
For improving the effectiveness of heating and cooling;
  - Heating: 
  - Cooling: 
3. Set the temperature control to the desired position.
4. Set the air intake control to the outside (fresh) air position.
5. Set the fan speed control to the desired speed.
6. If air conditioning is desired, turn the air conditioning system on.

## Automatic heating and air conditioning



OCDP049302

1. Press the AUTO button. The modes, fan speeds, air intake and air-conditioning will be controlled automatically according to the temperature setting.



OCDP049303

2. Turn the temperature control knob to set the desired temperature.

### \* NOTICE

- To turn the automatic operation off, select any button or switch of the following:
  - Mode selection button
  - Air conditioning button

- Front windshield defroster button (Press the button one more time to deselect the front windshield defroster function. The AUTO sign will illuminate on the information display once again.)
  - Air intake control button
  - Fan speed control 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).



OCDW049304

### \* NOTICE

Never place anything over the sensor located on the instrument panel to ensure better control of the heating and cooling system.

### Manual heating and air conditioning

The heating and cooling system can be controlled manually by pushing buttons other than the AUTO button. In this case, the system works sequentially according to the order of buttons selected.

When pressing any button (or turning any knob) except the AUTO button while using automatic operation, the functions not selected will be controlled automatically.

1. Start the engine.
2. Set the mode to the desired position.  
To improve the effectiveness of heating and cooling:
  - Heating: 
  - Cooling: 
3. Set the temperature control to the desired position.
4. Set the fan speed control to the desired speed.
5. 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.



OCDP049327

You can select various modes using the face, floor and/or defrost mode button. If you push the button once, the corresponding switch will turn on, and if you push the button again, the switch will turn off.

Also you may select 2~3 modes at the same time.

- face () + floor () mode
- face () + defrost () mode
- floor () + defrost () mode
- face () + floor () + defrost () mode

### Face-Level (B, D, F)

Air flow is directed toward the upper body and face. Additionally, each outlet can be controlled to direct the air discharged from the outlet.

 **Floor-Level (C, D, E, F)**

Most of the air flow is directed to the floor.

 **Defrost-Level (A, C, D, E, F)**

Most of the air flow is directed to the floor and the windshield with a small amount directed to the side window defrosters.

 **Max Defrost-Level (A, D)**

Most of the air flow is directed to the windshield.

**Defrost mode**



OCDP049306

When you select the defrost mode, the following system settings will be made automatically:

- The air conditioning system will be turned on.
- The fan speed will be set to the high speed.

To turn the defrost mode off, press the mode button or defrost button again or AUTO button.

**Instrument panel vents**



OCDP049307

The outlet port can be opened or closed separately using the horizontal thumb wheel. To close the vent, rotate it downward to the maximum position. To open the vent, rotate it upward to the desired position.

Also, you can adjust the direction of air delivered from these vents using the vent control lever as shown.

**Temperature control**



OCDP049303

The temperature will increase to the maximum (HI) by turning the knob to the right extremely.

The temperature will decrease to the minimum (Lo) by turning the knob to the left extremely.

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.

***Adjusting the driver and passenger side temperature equally***



OCDP049309

- Press the "SYNC" button to adjust the driver and passenger side temperature equally. The passenger side temperature will be set to the same temperature as the driver side temperature.
- Turn the driver side temperature control knob. The driver and passenger side temperature will be adjusted equally.

***Adjusting the driver and passenger side temperature individually***

- Press the "SYNC" button again to adjust the driver and passenger side temperature individually. The illumination of button turns off.
- Operate the driver side temperature control knob to adjust the driver side temperature.
- Operate the passenger side temperature control knob to adjust the passenger side temperature.

***Temperature conversion***

You can switch the temperature mode between Centigrade to Fahrenheit as follows:

While pressing the OFF button, press the AUTO button for 3 seconds or more.

The display will change from Centigrade to Fahrenheit, or from Fahrenheit to Centigrade.

If the battery has been discharged or disconnected, the temperature mode display will reset to Centigrade.

### ***Air intake control***

This is used to select recirculated air position.



OCDP049310

To change the air intake control position, press the control button.

### **Recirculated air position**



With the recirculated air position selected, air from the passenger compartment will be drawn through the heating system and heated or cooled according to the function selected.

### **Outside (fresh) air position**

— With the outside (fresh) air position selected, air enters the vehicle from outside and is heated or cooled according to the function selected.

### **\* NOTICE**

Prolonged operation of the heater in the recirculated air position (without air conditioning selected) may cause fogging of the windshield and side windows and the air within the passenger compartment may become stale.

In addition, prolonged use of the air conditioning with the recirculated air position selected will result in excessively dry air in the passenger compartment.

### **⚠ WARNING**

- Continued climate control system operation in the recirculated air position may allow humidity to increase inside the vehicle which may fog the glass and obscure visibility.
- Do not sleep in a vehicle with the air conditioning or heating system on. It may cause serious harm or death due to a drop in the oxygen level and/or body temperature.
- Continued climate control system operation in the recirculated air position can cause drowsiness or sleepiness, and loss of vehicle control.

### Fan speed control



OCDW049311

The fan speed can be set to the desired speed by pressing the fan speed control button.

The higher the fan speed is, the more air is delivered.

Pressing the OFF button turns off the fan.

### Air conditioning (A/C)



OCDP049312

- Press the A/C button to turn the air conditioning system on (indicator light will illuminate).
- Press the button again to turn the air conditioning system off.

### OFF mode



OCDP049313

- Press the OFF button to turn off the air climate control system. However, you can still operate the air intake buttons as long as the ENGINE START/STOP button is in the ON position.

### Driver Only



OCDP049505

If you press the DRIVER ONLY button and the indicator light illuminates, 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.

## System operation

### Ventilation

1. Set the mode to the  position.
2. Set the temperature control to the desired position.
3. Set the fan speed control to the desired speed.

### Heating

1. Set the mode to the  position.
2. Set the temperature control to the desired position.
3. Set the fan speed control to the desired speed.
4. If dehumidified heating is desired, turn the air conditioning system (if equipped) on.
  - If the windshield fogs up, set the mode to the  position.

### Operation Tips

- To keep dust or unpleasant fumes from entering the vehicle through the ventilation system, temporarily set the air intake control to the recirculated air position. Be sure to return the control to the fresh air position when the irritation has passed to keep fresh air in the vehicle. This will help keep the driver alert and comfortable.

- Air for the heating/cooling system is drawn in through the grilles just ahead of the windshield. Care should be taken that these are not blocked by leaves, snow, ice or other obstructions.
- To prevent interior fog on the windshield, set the air intake control to the fresh air position and fan speed to the desired position, turn on the air conditioning system, and adjust the temperature control to desired temperature.

### Air conditioning

Kia Air Conditioning Systems are filled with environmentally friendly refrigerant\*.

1. Start the engine. Push the air conditioning button.
2. Set the mode to the  position.
3. Set the air intake control to the outside air or recirculated air position.
4. Adjust the fan speed control and temperature control to maintain maximum comfort.

\* : Your vehicle is filled with R-134a or R-1234yf according to the regulation in your country at the time of producing. You can find out which air conditioning refrigerant is applied your vehicle at the label inside of engine room. Refer to "Refrigerant label (if equipped)" on page 9-12.

**⚠ 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.

**\* NOTICE**

- When using the air conditioning system, monitor the temperature gauge closely while driving up hills or in heavy traffic when outside temperatures are high. Air conditioning system operation may cause engine overheating. Continue to use the blower fan but turn the air conditioning system off if the temperature gauge indicates engine overheating.
- When opening the windows in humid weather air conditioning may create water droplets inside the vehicle. Since excessive water droplets may cause damage to electrical equipment, air condi-

tioning should only be used with the windows closed.

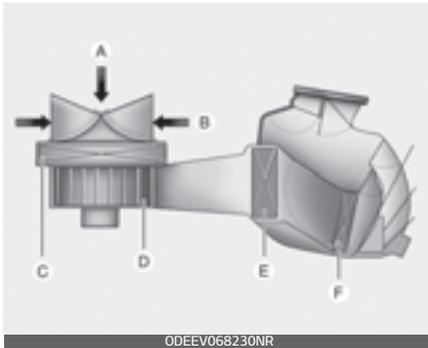
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**Air conditioning system operation tips**

- If the vehicle has been parked in direct sunlight during hot weather, open the windows for a short time to let the hot air inside the vehicle escape.
- To help reduce moisture inside of the windows on rainy or humid days, decrease the humidity inside the vehicle by operating the air conditioning system.
- During air conditioning system operation, you may occasionally notice a slight change in engine speed as the air conditioning compressor cycles. This is a normal system operation characteristic.
- Use the air conditioning system every month only for a few minutes to ensure maximum system performance.
- When using the air conditioning system, you may notice clear water dripping (or even puddling) on the ground under the passenger side of the vehicle. This is a normal system operation characteristic.

- Operating the air conditioning system in the recirculated air position provides maximum cooling, however, continual operation in this mode may cause the air inside the vehicle to become stale.
- During cooling operation, you may occasionally notice a misty air flow because of rapid cooling and humid air intake. This is a normal system operation characteristic.

### Climate control air filter



- A: Outside air
- B: Recirculated air
- C: Climate control air filter
- D: Blower
- E: Evaporator core
- F: Heater core

The climate control air filter installed behind the glove box filters the dust or other pollutants that come into the vehicle from the out-

side through the heating and air conditioning system.

If dust or other pollutants accumulate in the filter over a period of time, the air flow from the air vents may decrease, resulting in moisture accumulation on the inside of the windshield. If this happens, have the climate control air filter replaced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### \* NOTICE

- Replace the filter according to the Maintenance Schedule. If the vehicle is being driven in severe conditions such as dusty or rough roads, more frequent air conditioner filter inspections and changes are required.
- When the air flow rate suddenly decreases, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### Air Conditioning refrigerant label

Example Type A



OCDP069042

Example Type B



OCDP069043

\* The actual Air Conditioning refrigerant label in the vehicle may differ from the illustration.

Each symbols and specification on air conditioning refrigerant label means as below ;

- 1. Classification of refrigerant
- 2. Amount of refrigerant
- 3. Classification of Compressor lubricant
- 4. Caution
- 5. Flammable Refrigerant

- 6. Registered technician to service Air Conditioning system
- 7. Service manual

You can find out which air conditioning refrigerant is applied your vehicle at the label inside of the engine room.

\* Refer to "Refrigerant label (if equipped)" on page 9-12.

### 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 bad influence on the air conditioning system.

Therefore, if abnormal operation is found, have the system inspected by a professional workshop.

Kia recommends to visit an authorized Kia dealer/service partner.

**⚠ WARNING****Vehicles equipped with R-134a\***

Because the refrigerant is at very high pressure, the air conditioning system should only be serviced by trained and certified technicians. It is important that the correct type and amount of oil and refrigerant is used.

Otherwise, it may cause damage to the vehicle and personal injury.

**⚠ 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.

\* : Your vehicle is filled with R-134a or R-1234yf according to the regulation in your country at the time of producing. You can find out which air conditioning refrigerant is

applied your vehicle at the label inside of engine room. Refer to "Refrigerant label (if equipped)" on page 9-12.

**⚠ CAUTION****AC Repair**

It is important that the correct type and amount of oil and refrigerant is used, otherwise damage to the vehicle may occur. To prevent damage, the air conditioning system in your vehicle should only be serviced by trained and certified technicians.

## Windshield defrosting and defogging

### **⚠ WARNING**

#### Windshield heating

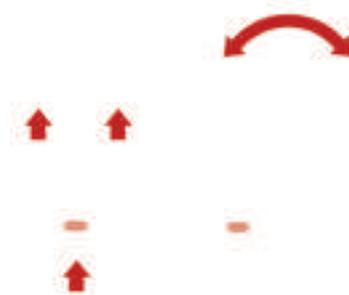
Do not use the  position during cooling operation in extremely humid weather. The difference between the temperature of the outside air and that of the windshield could cause the outer surface of the windshield to fog up, causing loss of visibility. In this case, set the mode selection knob or button to the  position and fan speed control knob or button 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 prob-

ability of fogging up the inside of the windshield.

#### Automatic climate control system

##### *To defog inside windshield*

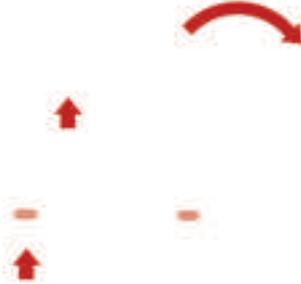


OCDP049314

1. Set the fan speed to the desired position.
2. Select desired temperature.
3. Press the defrost button (.
4. The air conditioning will be turned on according to the detected ambient temperature and outside (fresh) air position will be selected automatically.

If the air conditioning and outside (fresh) air position are not selected automatically, adjust the corresponding button manually. If the  position is selected, lower fan speed is adjusted to a higher fan speed.

**To defrost outside windshield**



OCDP049315

1. Set the fan speed to the highest (extreme right) position.
2. Set the temperature to the extreme hot (HI) position.
3. Press the defrost button (🚗).
4. The air conditioning will be turned on according to the detected ambient temperature and outside (fresh) air position will be selected automatically.

If the 🚗 position is selected, lower fan speed is adjusted to a higher fan speed.

**Defogging logic (if equipped)**

To reduce the possibility of fogging up the inside of the windshield, the air intake or air conditioning are controlled automatically according to certain conditions such as 🚗 position. To cancel or return to the defogging logic, do the following.

**Automatic climate control system (if equipped)**



OCDP049316

1. Turn the ENGINE START/STOP button to the ON position.
2. Select the defrost position pressing defrost button (🚗).
3. While holding the air conditioning button (A/C) pressed, press the air intake control button at least 5 times within 3 seconds.

The A/C display blinks 3 times. It indicates that the defogging logic is canceled or returned to the programmed status.

If the battery has been discharged or disconnected, it is reset to the defog logic status.

**Auto defogging system**



OCDW049026

Auto defogging reduces the possibility of fogging up the inside of the windshield by automatically sensing the moisture of inside the windshield and air flow toward the windshield can increase.

The auto defogging system operates when the AUTO mode is on.

**For Europe**

If your vehicle is equipped with the auto defogging system, it is automatically activated when the conditions are met.

When the auto fogging system senses moisture inside of the windshield, air flow towards the windshield can increase.

However, if you would like to deactivate the auto defogging system, keep the front defroster button pressed longer than 3 seconds.

The defroster button indicator will blink 3 times to inform you that the system is deactivated.

To re-activate the auto defogging system again, follow the procedure mentioned above and the defroster button indicator will blink 6 times.

If the battery has been disconnected or discharged, it resets to the auto defogging status.

**Except Europe**



This indicator illuminates when the auto defogging system senses the moisture of inside the windshield and operates.

If more moisture is in the vehicle, higher steps operate as follow.

- Step 1: Operating the air conditioning
- Step 2: Outside air position
- Step 3: Blowing air flow toward the windshield
- Step 4: Increasing air flow toward the windshield

If your vehicle is equipped with the auto defogging system, it is automatically activated when the conditions are met.

However, if you would like to deactivate the auto defogging system,

keep the front defroster button pressed longer than 3 seconds.

The defroster button indicator will blink 3 times to inform you that the system is deactivated.

To re-activate the auto defogging system again, follow the procedure mentioned above and the defroster button indicator will blink 6 times.

If the battery has been disconnected or discharged, it resets to the auto defogging status.

## Storage compartments

These compartments can be used to store small items required by the driver or passengers.

### CAUTION

- To avoid possible theft, do not leave valuables in the storage compartments.
- Always keep the storage compartment covers closed while driving. Do not attempt to place so many items in the storage compartment that the storage compartment cover cannot close securely.

### WARNING

#### Flammable materials

Do not store cigarette lighters, propane cylinders, or other flammable/explosive materials in the vehicle. These items may catch fire and/or explode if the vehicle is exposed to hot temperatures for extended periods.

### Center console storage

These compartments can be used to store small items required by the driver or front passenger.



OCDW049027

- To open the center console storage pull up the lever.

### Sliding armrest

#### *To move forward*



OCDW049471

- Grab the front portion of the armrest then press up the lever (1) and pull it forward.

#### *To move rearward*

- Push the armrest rearward with your palm.

### **⚠ WARNING**

Do not grab the front portion of the armrest (1) when moving the armrest rearward. It may pinch your fingers.

### Glove box



OCDW049028

To open the glove box:

- Pull the handle and the glove box will automatically open. Close the glove box after use.

### **⚠ WARNING**

To reduce the risk of injury in an accident or sudden stop, always keep the glove box door closed while driving.

**⚠ CAUTION**

Do not keep food in the glove box for a long time.

**Sunglas holder**

OBDC049018RE

To open the sunglass holder:

- Press the cover and the holder will slowly open.  
Place your sunglasses with the lenses facing out. To close the sunglass holder, push it up.

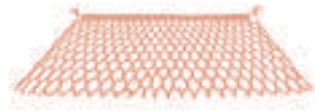
**⚠ WARNING**

- Do not keep objects except sunglasses inside the sunglass 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 sunglass holder while the vehicle is moving. The rear view mirror of the vehicle can be blocked by an opened sunglass holder.

- Do not put the glasses forcibly into a sunglass holder to prevent breakage or deformation of the glasses. It may cause personal injury if you try to open it forcibly when the glasses are jammed in the holder.

**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.



OCDP049097

If necessary, Kia recommends to contact an authorized Kia dealer/service partner.

**⚠ CAUTION**

To prevent damage to the goods or the vehicle, care should be taken when carrying fragile or bulky objects in the luggage compartment.

**⚠ WARNING**

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.

**Luggage board**

You can place a first aid kit, a reflector triangle, tools, etc. in the box for easy access.



OCDP049072

1. Grasp the handle on the top of the cover and lift it.
2. Fold the rear part of luggage board forward.
3. Lift up luggage board forward (Luggage board stand itself)

**Luggage tray**

You can place a first aid kit, a reflector triangle (front tray), tools, etc. in the box for easy access.

Type A



OCDP059218

Type B



OCDP059219

- Grasp the handle on the top of the cover and lift it.

## Interior features

### Ambient light (if equipped)

Ambient light is applied to the bottom front of the driver's seat.



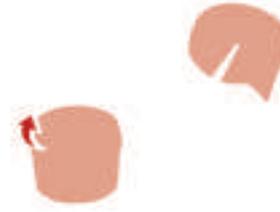
OCDP059252

When the headlamp light is on, ambient light is on at the same time. Ambient light could be set in the infotainment menu.

Refer to the separately supplied infotainment manual for detailed information.

### Ashtray (if equipped)

Use the ashtray by putting it into the cup holder right beside.



OCDP049031

- To use the ashtray, open the cover.
- To clean or empty the ashtray, pull it out.

### **⚠ WARNING**

#### Ashtray use

- Do not use the vehicle's ashtrays as waste receptacles.
- Putting lit cigarettes or matches in an ashtray with other combustible materials may cause a fire.

### **⚠ 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 burn yourself. Such a burn to the driver could lead to loss of control of the vehicle.

- To reduce the risk of personal injury in the event of sudden stop or collision, do not place uncovered or unsecured bottles, glasses, cans, etc., in the cup holder while the vehicle is in motion.

**⚠ WARNING**

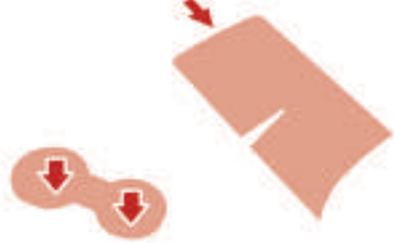
Keep cans or bottles out of direct sun light and do not put them in a vehicle that is heated up. It may explode.

**\* NOTICE**

- 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 dry the cup holder at high temperature. This may damage the cup holder.

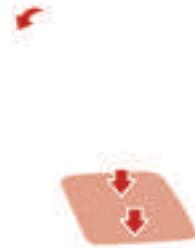
**Cup holder**

Front



OCDP049032

Rear



OCDW049033

Cups or small beverage cans may be placed in the cup holders.

### Sun visor

Use the Sun visor to shield direct light through the front or side windows.



OCDW049091

- 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).
- To use the vanity mirror, pull down the visor and slide the mirror cover (3).

The ticket holder (4) is provided for holding a tollgate ticket.

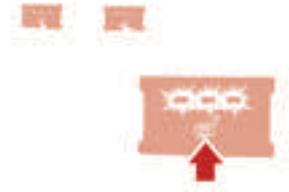
### **WARNING**

For your safety, do not obstruct your vision when using the Sun visor.

### Seat warmer (if equipped)

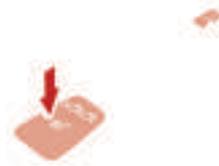
The seat warmer is provided to warm the front seats during cold weather.

Front seat



OCDW049430

Rear seat



OCDW049035

With the ENGINE 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



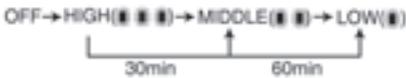
- Rear seat



- The seat warmer defaults to the OFF position whenever the ENGINE START/STOP button is turned on.

**Temperature control (Automatic)**

The seat warmer starts to automatically control the seat temperature in order to prevent low-temperature burns after being manually turned ON.



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 ENGINE START/STOP button is in the ON position.

**\* NOTICE**

With the seat warmer switch in the ON position, the heating system in the seat turns off or on automatically depending on the seat temperature.

**⚠ CAUTION**

- When cleaning the seats, do not use an organic solvent such as paint thinner, benzene, alcohol and gasoline. Doing so may damage the surface of the heater or seats.
- To prevent overheating the seat warmer, do not place anything on the seats that insulates against heat, such as blankets, cushions or seat covers while the seat warmer is in operation.
- Do not place heavy or sharp objects on seats equipped with seat warmers. Damage to the seat warming components could occur.
- Do not change the seat cover. It may damage the seat warmer or airventilation system.

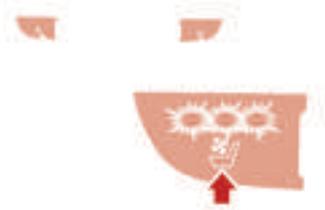
**⚠ WARNING****Seat warmer burns**

Passengers should use extreme caution when using seat warmers due to the possibility of excess heating or burns. The seat warmer may cause burns even at low temperatures, especially if used for long periods of time. In particular, the driver must exercise extreme care for the following types of passengers:

1. Infants, children, elderly or handicapped persons, or hospital out-patients
2. Persons with sensitive skin or those that burn easily
3. Fatigued individuals
4. Intoxicated individuals
5. Individuals taking medication that can cause drowsiness or sleepiness (sleeping pills, cold tablets, etc.)

**Seat cooler (Air ventilation seat) (if equipped)**

The temperature setting of the seat changes according to the switch position.



OCLDP049036

Each time you press the button, the airflow will change as follows:



- The air ventilation defaults to the OFF position whenever the ENGINE START/STOP button is turned on.

**⚠ CAUTION**

When cleaning the seats, do not use an organic solvent such as paint thinner, benzene, alcohol and gasoline. Doing so may damage the surface of the heater or seats.

### Power outlet

Front seat (if equipped)



Luggage compartment



The power outlet is designed to provide power for mobile telephones or other devices designed to operate with vehicle electrical systems. The devices should draw less than 10 amps with the engine running.

#### **CAUTION**

- Use the power outlet only when the engine is running and remove the accessory plug after use. Using the accessory plug for pro-

longed periods of time with the engine off could cause the battery to discharge.

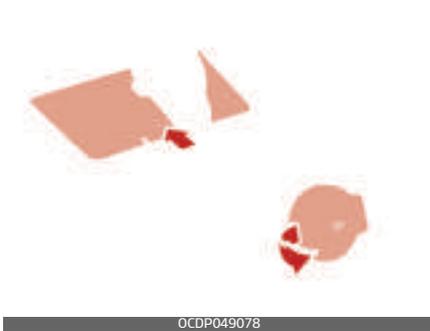
- Only use 12V electric accessories which are less than 10A in electric capacity.
- Adjust the air-conditioner or heater to the lowest operating level when using the power outlet.
- Close the cover when not in use.
- Some electronic devices can cause electronic interference when plugged into a vehicle's power outlet. These devices may cause excessive audio static and malfunctions in other electronic systems or devices used in your vehicle.
- Using electrical products which exceed the limited capacity might cause heating to the power outlet and wiring that could lead to an electrical breakdown.
- Always make sure the electrical part is firmly plugged into the power outlet. Incomplete plugging may cause electrical breakdown.
- Electrical products with a built-in battery might cause current flow, which could lead to malfunction of the electric/electronic device in your vehicle. Only use electrical products which include reverse current prevention.

**⚠ WARNING**

Do not put a finger or a foreign element (pin, etc.) into a power outlet and do not touch with a wet hand. You may get an electric shock.

**USB charger (if equipped)**

The USB car charger allows drivers to charge their digital devices like smartphone, and PC tablets.



OCDP049078

Connect the cable to the USB port, charging will begin.

The USB car charger is available with either the ACC state or the ignition on. But we recommend you to connect the USB port and digital devices with the engine starting. See the display screen of the device to check its charging process completion. Your smartphone or tablet PC could get heated up while charging.

This is no reason to worry, as it doesn't impact life or functions of the device. For the safety reason, charging can be stopped if the battery gets heated up to a certain point of temperature that the devices can be negatively affected. Charging some digital devices is not available or requires special dedicated adapters if their charging methods don't fit the way the USB car charger works.

Quick Charge 2.0 is available on the smartphone or the table PC quipped with fast charging capabilities. The applicable is as follows:

(<https://www.qualcomm.com/documents/quick-charge-device-list>)

The smartphone or PC tablet without fast charging is charged at a regular speed.

Rated output:

Digital devices with fast charging: - 9.0 V, 1.67 A

Digital devices with normal charging: - 5.0 V, 2.1 A

**⚠ CAUTION**

- Use the USB car charger with the ignition on. Otherwise, the vehicle battery can be discharged.
- Use the official USB cable of the manufacturer of the digital device to be charged.
- Make sure that any foreign object, drinks, and water do not come into contact with the USB car charger. Water or foreign object can damage the USB charger.
- Do not use the device those current consumption exceeds 2.1 A.
- Do not connect an electrical device that generates excessive electromagnetic noise to the USB car port. If you do so, noise can be caused or vehicle electronic devices can be interrupted while audio or AV is on.
- If the charger is connected incorrectly, it can cause serious damage on the devices. Please note that damages due to incorrect usage are not covered by warranty service.

**Wireless smart phone charging system (if equipped)**

A wireless smart phone charging system located in front of the center console.



OCDP049038

Firmly close all doors, and turn the ignition to ACC or IGN ON. To start wireless charging, place the smart phone equipped with wireless charging function on the wireless charging pad.

For best wireless charging results, place the smart phone on the center of the charging pad.

The wireless charging system is designed for one smart phone equipped with Qi per single usage only. Please refer to the smart phone accessory cover or the smart phone manufacturer homepage to check whether your smart phone supports Qi function.

**⚠ WARNING**

If any metallic object such as coins is located between the wireless charging system and the smart phone, the charging may be disrupted. Also, the metallic object may heat up.

***Wireless smart phone charging***

1. Remove any object on the smart phone charging pad including the smart key. If there is any foreign object on the pad other than a smart phone, the wireless charging function may not operate properly.
2. Place the smart phone on the center of the wireless charging pad.
3. The indicator light will change to orange once the wireless charging begins. After the charging is complete, the orange light will change to green.
4. You can choose to turn the wireless charging function to either ON or OFF by selecting the USM on the instrument cluster. (Please refer to "Instrument cluster" on page 5-57).

If the wireless charging does not work, gently move your smart phone around the pad until the charging indicator light turns yellow. Depending on the smart phone, the charging indicator light may not turn green even after the charging is complete.

If the wireless charging is not functioning properly, the orange light will blink and flash for ten seconds then turn off. In such cases, remove the smart phone from the pad and replace it on the pad again, or double check the charging status.

If you leave the smart phone on the charging pad when the vehicle ignition is in OFF, the vehicle will alert you through warning messages and sound (applicable for vehicles with voice guidance function) after the 'Good bye' function on the instrument cluster ends.

**⚠ CAUTION**

- When the interior temperature of the wireless charging system rises above a set temperature, the wireless charging will cease to function. After the interior temperature drops below the threshold, the wireless charging function will resume.

- If there is any metallic object between the smart phone and the wireless charging pad, immediately remove the smart phone. Remove the metallic object after it has completely cooled down.
  - 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 ignition in ON.
  - The wireless charging will stop when any of the doors is 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, any transportation ticket and such may become damaged during wireless charging.
  - Place the smart phone on the center of the charge pad for best results. The smart phone may not charge when placed near the rim of the charging pad. When the smart phone does get charged, it may heat up excessively.
  - For smart phones without builtin wireless charging system, an appropriate accessory has to be equipped.
  - 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 yellow after the smart phone is fully charged. This is due to the particular characteristic of the smart phone and not a malfunction of the wireless charging.
  - When any smart phone without a wireless charging function or a metallic object is placed on the charging pad, a small noise may sound. This small sound is due to the vehicle discerning compatibility of the object placed on the charging pad. It does not affect your vehicle or the smart phone in any way.
-

## Floor mat anchor(s) (if equipped)



OCDP049061

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.

### *When installing floor mat*

1. Align fixing structure (hook) of floor carpet and hook ring of floor mat.
2. Insert the floor mat hook ring to the hook of floor carpet.
3. When inserting, first, push under part of the hook ring of floor mat matching with the hook of floor carpet, and push upper part of hook ring, so that hook ring can be properly inserted.

### *When uninstalling floor mat*

Grab the front part of the floor mat and pull the floor mat upward.

### **⚠ WARNING**

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.
- When uninstalling floor mat, be sure to uninstall it with designated direction described with arrow at the previous picture. If different direction of force is applied to the hook, the hook can be broken.

**IMPORTANT** – Your vehicle was manufactured with driver's side floor mat anchors that are designed to securely hold the floor mat in place. To avoid any interference with pedal operation, Kia recommends that only Kia floor mats that

were designed for use in your vehicle should be installed.



### Clothes hanger



OCDW049062

To use the hanger:

- Pull down the upper portion of hanger.

#### **CAUTION**

Do not hang heavy clothes, since those 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 clothe pockets. In an accident or when the curtain air bag is inflated, it may cause vehicle damage or personal injury.

ODEEV068209NR

### Cargo area cover (if equipped)

Use the cover to hide items stored in the cargo area.



OCDP049073

The cargo area cover will be lifted when the tailgate is opened.

- Disconnect the strap (1) from holder if you want to return the cover to original position. To remove the cargo area cover completely, lift the cover to a 40-degree angle and pull it out to the full (2).

For installation of the cover, reverse the removal procedure.

### \* NOTICE

- When you return the cargo area cover to its original position, hold the cover and lower it.
- Do not operate the vehicle with the cover removed. It may damage to the cover.
- The cargo area cover may be lifted when the tailgate is opened. Ensure that the luggage on the cover is moved to a safe place.
- Since the cargo area cover may be damaged or malformed, do not apply excessive force to the cover or do not put the heavy loads on it.

### ⚠ WARNING

- Do not place objects on the cargo area cover while driving. Such objects may move around inside the vehicle and possibly injure vehicle occupants during an accident or when braking.
- Never allow anyone to ride in the luggage compartment. It is designed for luggage only.
- Maintain the balance of the vehicle and locate the weight as far forward as possible.

## Shopping bag holder



OCDP049063

### ⚠ CAUTION

- Do not hang a bag weighing more than 3 kg (7 lbs.). It may cause damage to the shopping bag holder.
- Do not hang the frail objects when you drive rough road, the objects may be damaged.

## Cargo security screen



OCDP059214

Use the cargo security screen to hide items stored in the cargo area.

**\* NOTICE**

Since the cargo security screen may be damaged or malformed, do not put luggage on it when it is used.

**⚠ WARNING**

- Do not place objects on the cargo security screen. Such objects may move around inside the vehicle and possibly injure vehicle occupants during an accident or when braking.
- Never allow anyone to ride in the luggage compartment. It is designed for luggage only.
- Maintain the balance of the vehicle and locate the weight as forward as possible.

***To use the cargo security screen***

OCDP059215

1. Pull the cargo security screen towards the rear of the vehicle by the handle (1).
2. Insert the guide pin into the guide (2).

**\* NOTICE**

Pull out the cargo security screen using the handle in the center to prevent the guide pin from falling out of the guide.

When the cargo security screen is not in use:

1. Pull the cargo security screen backward and up to release it from the guides.
2. The cargo security screen will automatically slide back in.

**\* NOTICE**

The cargo security screen may not automatically slide back in if the cargo security screen is not fully pulled out. Fully pull it out and then let go.

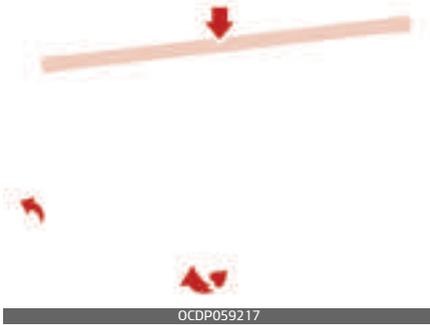
***To remove the cargo security screen***

1. Push the guide pin in the direction as shown in the picture below.



OCDP059216

2. While pushing the guide pin, pull out the cargo security screen.
3. Open the luggage tray and keep the cargo security screen in the tray.



***To remove the cargo security screen from the luggage tray***

1. Pull up the screen board.



2. Push the guide pin in the direction as shown in the picture below.



3. While pushing the guide pin, pull out the cargo security screen.



## Exterior features

### Roof rack

If the vehicle has a roof rack, you can load cargo on top of your vehicle.



OCDP049504

Crossbars and fixing components needed to install the roof rack on your vehicle may be obtained from an authorized Kia dealer/service partner or other qualified shop.

#### \* 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

- 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)

#### ⚠ WARNING

- 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 RACK	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.

- 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 carrying large, flat items such as wood panels or mattresses. This could cause the items to fall off the roof rack and cause damage to your vehicle or others around you.
- To prevent damage or loss of cargo while driving, check frequently before or while driving to make sure the items on the roof rack are securely fastened.

## Infotainment system

### Audio system

#### \* NOTICE

If you install an after market HID head lamp, your vehicle's audio and electronic device may malfunction.

- \* If your vehicle is equipped with AVN (Audio, Video and Navigation) system, refer to a separately supplied manual for detailed information.

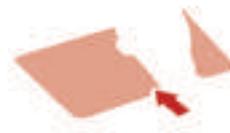
### Antenna

#### *Shark fin antenna*

The shark fin antenna will receive the transmit data.

#### *USB port (if equipped)*

You can use the USB port to plug in a USB device or iPod®.



OCDP049450

**\* NOTICE**

When using a portable audio device connected to the power outlet, noise may occur during playback. If this happens, use the power source of the portable audio device.

\* iPod® is a trademark of Apple Inc.

**How vehicle audio works**

**FM reception**



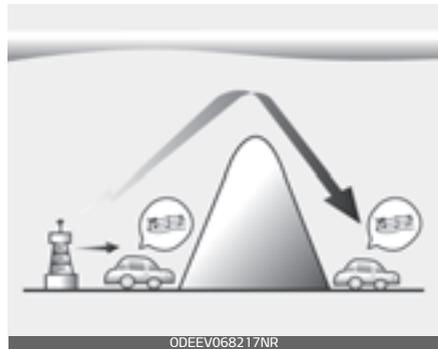
AM and FM radio signals are broadcast from transmitter towers located around your city. They are intercepted by the radio antenna on your vehicle. This signal is then received by the radio and sent to your vehicle speakers.

When a strong radio signal has reached your vehicle, the precise engineering of your audio system ensures the best possible quality reproduction. However, in some

cases the signal coming to your vehicle may not be strong and clear.

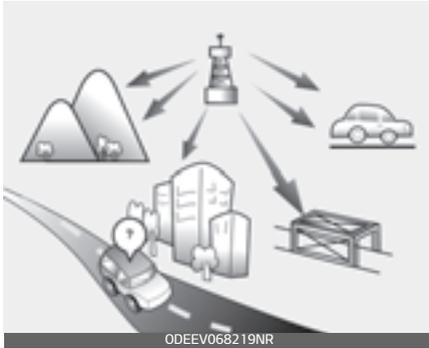
This can be due to factors, such as the distance from the radio station, closeness of other strong radio stations or the presence of buildings, bridges or other large obstructions in the area.

**AM reception**



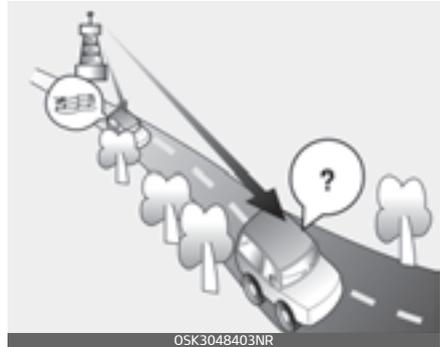
AM broadcasts can be received at greater distances than FM broadcasts. This is because AM radio waves are transmitted at low frequencies. These long, low frequency radio waves can follow the curvature of the earth rather than traveling straight out into the atmosphere. In addition, they curve around obstructions so that they can provide better signal coverage.

**FM radio station**

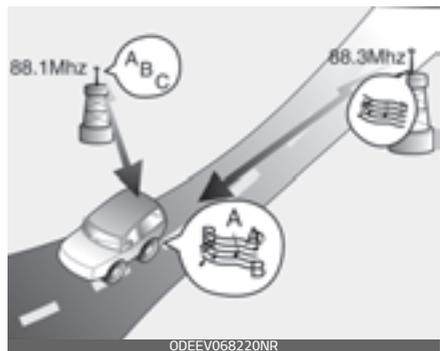


FM broadcasts are transmitted at high frequencies and do not bend to follow the earth's surface. Because of this, FM broadcasts generally begin to fade at short distances from the station. Also, FM signals are easily affected by buildings, mountains, or other obstructions. These can result in certain 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 stronger station.



- 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 a FM signal weakens, another more powerful signal near the same frequency may begin to play. This is because your radio is designed to lock onto the clearest signal. If this occurs, select another station with a stronger signal.
- Multi-Path Cancellation – Radio signals being received from several directions can cause distortion or fluttering. This can be caused by a direct and reflected signal from the same station, or by signals from two stations with close frequencies. If this occurs, select another station until the condition has passed.

### ***Using a cellular phone or a two-way radio***

When a cellular phone is used inside the vehicle, noise may be produced from the audio system. This does not mean that something is wrong with the audio equipment. In such a case, use the cellular phone at a place as far as possible from the audio equipment.

### **⚠ CAUTION**

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**

Do not use a cellular phone while driving. Stop at a safe location to use a cellular phone.

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• Before starting .....	6-7
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## DRIVING YOUR VEHICLE

### **WARNING**

#### **ENGINE EXHAUST CAN BE DANGEROUS!**

Engine exhaust fumes can be extremely dangerous. If, at any time, you smell exhaust fumes inside the vehicle, open the windows immediately.

- **Do not inhale exhaust fumes.**

Exhaust fumes contain carbon monoxide, a colorless, odorless gas that can cause unconsciousness and death by asphyxiation.

- **Be sure the exhaust system does not leak.**

The exhaust system should be checked whenever the vehicle is raised to change the oil or for any other purpose. If you hear a change in the sound of the exhaust or if you drive over something that strikes the underneath side of the vehicle, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

- **Do not run the engine in an enclosed area.**

Letting the engine idle in your garage, even with the garage door open, is a hazardous practice.

Never run the engine in your garage any longer than it takes to start the engine and back the car out.

- **Avoid idling the engine for prolonged periods with people inside the car.**

If it is necessary to idle the engine for a prolonged period with people inside the car, be sure to do so only in an open area with the air intake set at "Fresh" and fan operating at one of the higher speeds so fresh air is drawn into the interior.

If you must drive with the tailgate lid open because you are carrying objects that make this necessary:

1. Close all windows.
2. Open side vents.
3. Set the air intake control at "Fresh", the air flow control at "Floor" or "Face" and the fan at one of the higher speeds.

To assure proper operation of the ventilation system, be sure the ventilation air intakes located just in front of the windshield are kept clear of snow, ice, leaves or other obstructions.

---

## Before driving

### Before entering vehicle

- Be sure that all windows, outside mirror(s), and outside lights are clean.
- Check the condition of the tires.
- Check under the vehicle for any sign of leaks.
- Be sure there are no obstacles behind you if you intend to back up.

### Necessary inspections

Fluid levels, such as engine oil, engine coolant, brake fluid, and washer fluid should be checked on a regular basis, with the exact interval depending on the fluid. Refer to "Scheduled maintenance service" on page 8–10.

#### WARNING

Driving while distracted can result in a loss of vehicle control, that may lead to an accident, severe personal injury, and death. The driver's primary responsibility is in the safe and legal operation of a vehicle, and use of any hand-held 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.

---

### Before starting

- Close and lock all doors.
- Position the seat so that all controls are easily reached.
- Adjust the inside and outside rear view mirrors.
- Be sure that all lights work.
- Check all gauges.
- Check the operation of warning lights when the ENGINE START/STOP button is turned to the ON position.
- Release the parking brake and make sure the brake warning light goes out.

For safe operation, be sure you are familiar with your vehicle and its equipment.

#### WARNING

All passengers must be properly belted whenever the vehicle is moving. Refer to "Seat belts" on page 4–19 for more information on their proper use.

---

#### WARNING

Always check the surrounding areas near your vehicle for people, especially children, before putting a car into D (Drive) or R (Reverse).

---

**⚠ WARNING****Driving under the influence of alcohol or drugs**

Drinking and driving is dangerous. Drunk driving is the number one contributor to the highway death toll each year. Even a small amount of alcohol will affect your reflexes, perceptions and judgment. Driving while under the influence of drugs is as dangerous or more dangerous than driving drunk.

You are much more likely to have a serious accident if you drink or take drugs and drive.

If you are drinking or taking drugs, don't drive. Do not ride with a driver who has been drinking or taking drugs. Choose a designated driver or call a cab.

---

**⚠ WARNING**

- When you intend to park or stop the vehicle with the engine on, be careful not to depress the accelerator pedal for a long period of time. It may overheat the engine or exhaust system and cause fire.
  - 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. Keep all things in the vehicle safely stored.
  - If you do not focus on driving, it may cause an accident. Be careful when operating what may disturb driving such as audio or heater. It is the responsibility of the driver to always drive safely.
-

## ENGINE START/STOP button

### Illuminated ENGINE START/STOP button



Whenever the front door is opened, the ENGINE START/STOP button will illuminate for your convenience. The light will go off after about 30 seconds when the door is closed. It will also go off immediately when the theft-alarm system is armed.

### ENGINE START/STOP button position

#### **OFF**

To turn off the engine (START/RUN position) or vehicle power (ON position), press the ENGINE START/STOP button with the shift lever in the P (Park) position. When you press the ENGINE START/STOP button without the shift lever in the P (Park) position, the ENGINE START/STOP button will not change to the OFF position but to the ACC position.

### Vehicles equipped with anti-theft steering column lock

The steering wheel locks when the ENGINE START/STOP button is in the OFF position to protect you against theft. It locks when the door is opened.

If the steering wheel is not locked properly when you open the driver's door, the warning chime will sound. Try locking the steering wheel again. If the problem is not solved, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

In addition, if the ENGINE START/STOP button is in the OFF position after the driver's door is opened, the steering wheel will not lock and the warning chime will sound. In such a situation, close the door. Then the steering wheel will lock and the warning chime will stop.

#### \* NOTICE

If the steering wheel doesn't unlock properly, the ENGINE START/STOP button will not work. Press the ENGINE START/STOP button while turning the steering wheel right and left to release the tension.

**\* NOTICE**

You are able to turn off the engine (START/RUN) or vehicle power (ON), only when the vehicle is not in motion.

---

**⚠ CAUTION**

In an emergency situation while the vehicle is in motion, you are able to turn the engine off and to the ACC position by pressing the ENGINE START/STOP button for more than 2 seconds or 3 times successively within 3 seconds.

If the vehicle is still moving, to restart the vehicle:

- Press the ENGINE START/STOP button when vehicle speed is 5 km/h or over.
- 

***ACC (Accessory)***

Press the ENGINE START/STOP button while it is in the OFF position without depressing the brake pedal.

The steering wheel unlocks and electrical accessories are operational.

If the ENGINE START/STOP button is in the ACC position for more than 1 hour, the button is turned off automatically to prevent battery discharge.

***ON***

Press the ENGINE START/STOP button while it is in the ACC position without depressing the brake pedal.

The warning lights can be checked before the engine is started. Do not leave the ENGINE START/STOP button in the ON position for a long time. The battery may discharge, because the engine is not running.

***START/RUN***

To start the engine, depress the brake pedal and press the ENGINE START/STOP button with the shift lever in the P (Park) or the N (Neutral) position. For your safety, start the engine with the shift lever in the P (Park) position.

**\* NOTICE**

If you press the ENGINE START/STOP button without depressing the brake pedal, the engine will not start and the ENGINE START/STOP button changes as follow: OFF → ACC → ON → OFF or ACC

---

**\* NOTICE**

If you leave the ENGINE START/STOP button in the ACC or ON position for a long time, the battery will discharge.

---

**⚠ WARNING**

- Never press the ENGINE START/STOP button while the vehicle is in motion. This would result in loss of directional control and braking function, which could cause an accident.
- The anti-theft steering column lock is not a substitute for the parking brake. Before leaving the driver's seat, always make sure the shift lever is engaged in P (Park), set the parking brake fully and shut the engine off. Unexpected and sudden vehicle movement may occur if these precautions are not taken.
- Never reach for the engine start / stop button or any other controls through the steering wheel while the vehicle is in motion. The presence of your hand or arm in the area could cause loss of vehicle control, an accident and serious bodily injury or death.
- Do not place any movable objects around the driver's seat as they may move while driving, interfere with the driver and lead to an accident.

**Starting the engine****⚠ WARNING**

- Always wear appropriate shoes when operating your vehicle. Unsuitable shoes (high heels, ski boots, etc.) may interfere with your ability to use the brake, accelerator pedal.
- Do not start the vehicle with the accelerator pedal depressed. The vehicle can move and lead to an accident.
- Wait until the engine rpm is normal. The vehicle may suddenly move if the brake pedal is released when the rpm is high.

**\* NOTICE****Kick down mechanism**

Use the kick down mechanism for maximum acceleration. Depress the accelerator pedal beyond the pressure point.

***Starting the gasoline engine***

1. Carry the smart key or leave it inside the vehicle.
2. Make sure the parking brake is firmly applied.
3. Place the transmission shift lever in P (Park). Depress the brake pedal fully. You can also start the engine when the shift lever is in the N (Neutral) position.
4. Press the ENGINE START/STOP button.  
It should be started without depressing the accelerator pedal.
5. Do not wait for the engine to warm up while the vehicle remains stationary. Start driving at moderate engine speeds. (Steep accelerating and decelerating should be avoided.)

***Starting and stopping the engine for turbocharger intercooler***

1. Do not race or accelerate the engine immediately after starting. If the engine is cold, idle for several seconds before sufficient lubrication is ensured in the turbocharger unit.
2. After high speed or extended driving, requiring a heavy engine load, idle the engine about 1 minute before turning it off.  
This idle time will allow the turbocharger to cool prior to shutting the engine off.

**⚠ CAUTION**

Do not turn the engine off immediately after it has been subjected to a heavy load. Doing so may cause severe damage to the engine or turbocharger unit.

***Starting the engine with smart key***

- Even if the smart key is in the vehicle, if it is far away from you, the engine may not start.
- When the ENGINE START/STOP button is in the ACC position or above, if any door is opened, the system checks for the smart key. If the smart key is not in the vehicle, the “” indicator and a message “Key is not in the vehicle” will appear on the instrument cluster and LCD window. And if all doors are closed, the chime will sound for 5 seconds. The indicator or warning will turn off while the vehicle is moving. Always have the smart key with you.

**⚠ WARNING**

The engine will start, only when the smart key is in the vehicle. Never allow children or any person who is unfamiliar with the vehicle touch the ENGINE START/STOP button or related parts.

**⚠ CAUTION**

If the engine stalls while the vehicle is in motion, do not attempt to move the shift lever to the P (Park) position. If the traffic and road conditions permit, you may put the shift lever in the N (Neutral) position while the vehicle is still moving and press the ENGINE START/STOP button in an attempt to restart the engine.



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**\* NOTICE**

- If the battery is weak or the smart key does not work correctly, you can start the engine by pressing the ENGINE START/STOP button with the smart key. The side with the lock button should contact the ENGINE START/STOP button directly. When you press the ENGINE START/STOP button directly with the smart key, the smart key

should contact the button at a right angle.

- When the stop lamp fuse is blown, you cannot start the engine normally.

Replace the fuse with a new one. If it is not possible, you can start the engine by pressing the ENGINE START/STOP button for 10 seconds while it is in the ACC position. The engine can start without depressing the brake pedal. But for your safety always depress the brake pedal and clutch pedal (if equipped) before starting the engine.

**⚠ CAUTION**

- Do not press the ENGINE START/STOP button for more than 10 seconds except when the stop lamp fuse is blown.

## Dual Clutch Transmission (DCT)



OCDW059003

➡ Depress the brake pedal and the lock release button when shifting.

➡ Press the lock release button when shifting.

⇨ The shift lever can be shifted freely.

### Dual clutch transmission operation

The dual clutch transmission has six forward speeds and one reverse speed.

The individual speeds are selected automatically when the shift lever is in the D (Drive) position.

### ⚠ WARNING

To reduce the risk of serious injury or death:

- ALWAYS check the surrounding areas near your vehicle for people, especially children, before shifting a vehicle into D (Drive) or R (Reverse).
- Before leaving the driver's seat, always make sure the shift lever is in the P (Park) position, then set the parking brake fully and shut the engine off. Unexpected and sudden vehicle movement can occur if these precautions are not followed.
- Do not use engine braking (shifting from a high gear to lower gear) rapidly on slippery roads. The vehicle may slip causing an accident.

### ⚠ CAUTION

- To avoid damage to your transmission, do not try to accelerate with the shift lever in R (Reverse) or any forward gear position with the brake engaged.
- When stopped on a slope, do not hold the vehicle with accelerator pedal. Engage the service brake or the parking brake.

- The dual clutch transmission can be thought of as an automatically shifting manual transmission. It gives the driving feel of a manual transmission, yet provides the ease of a fully automatic transmission.
- When D (Drive) is selected, the transmission will automatically shift through the gears similar to a conventional automatic transmission. Unlike a traditional automatic transmission, the gear shifting can sometimes be felt and heard as the actuators engage the clutches and the gears are selected.
- The dual clutch transmission adopts a dry-type dual clutch, which is different from the torque converter of the automatic transmission. It shows better acceleration performance and increased fuel efficiency while driving but initial launch might be little bit slower than the automatic transmission. As a result, gear shifts are sometimes more noticeable than a conventional automatic transmission and a light vibration during launching can be felt as the transmission speed is matched with the engine speed. This is a normal condition of the dual clutch transmission.
- The dry-type clutch transfers torque more directly and provides a direct-drive feeling which may feel different from a conventional automatic transmission with a torque converter. This may be more noticeable when launching the vehicle from a stop or when traveling at low, stop-and-go vehicle speeds.
- When rapidly accelerating at a low vehicle speed, the engine rpm may increase highly depending on the vehicle's driving condition.
- For smooth launch uphill, press down the accelerator pedal smoothly depending on the current conditions.
- If you release your foot from the accelerator pedal at low vehicle speed, you may feel strong engine braking, which is similar to manual transmission.
- When driving downhill, you may use Sports Mode or press the paddle shifters (if equipped) to downshift to a lower gear in order to control your speed without using the brake pedal excessively.
- When you turn the engine on and off, you may hear clicking sounds as the system goes through a self test. This is a normal sound for the Dual Clutch Transmission.

- During the first 1,500 km (1,000 miles), you may feel that the vehicle may not be smooth when accelerating at low speed. During this break-in period, the shift quality and performance of your new vehicle is continuously optimized.

**\* NOTICE**

- Always come to a complete stop before shifting into D (Drive) or R (Reverse).
- Do not put the shift lever in N (Neutral) while driving.

**⚠ WARNING**

Due to transmission failure, the vehicle may not move and the position indicator (D, R) will blink on the cluster. In this case, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

**LCD display for transmission temperature and warning message**

***Transmission temperature Gauge***



- Select trip computer mode on the LCD display and move to the transmission temperature screen

to see the temperature of the dual clutch transmission.

- Try to drive so that the temperature gauge do not show high/overheat. When the transmission is overheated, the warning message will display on the LCD. Follow the displayed message.
- The transmission temperature is displayed in three colors (white, orange and red) as it increases.
- Orange temperature gauge is displayed right before the warning message appears on the LCD display. (if equipped)

### ⚠ CAUTION

- Increase (high temperature) of the transmission temperature gauge usually appears on an incline when the vehicle is stopped for a long time using accelerator pedal, without depressing the brake pedal.
- To maintain the optimal transmission performance, drive so that the white gauge is not exceeded. (if equipped)

### *DCT warning messages*



This warning message is displayed when vehicle is driven slowly on a grade and the vehicle detects that the brake pedal is not applied.

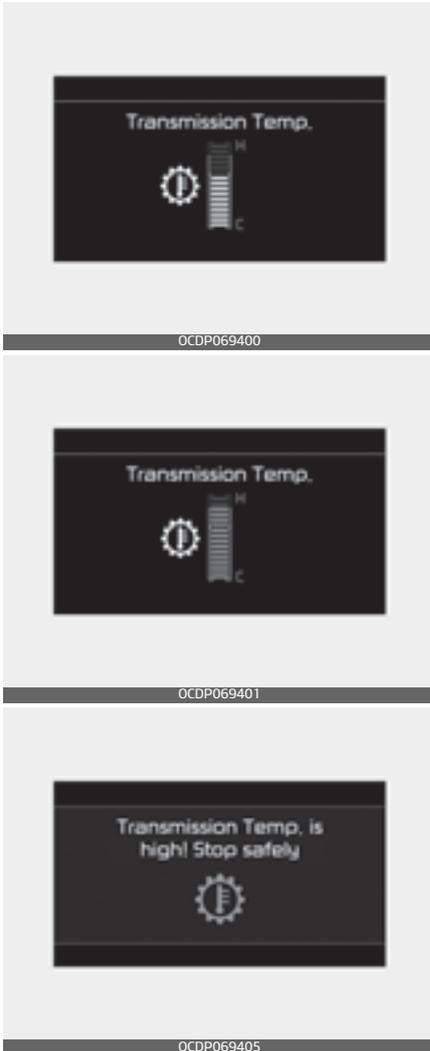
### *Steep grade*

Driving up hills or on steep grades:

- To hold the vehicle on an incline use the foot brake or the parking brake.
- When in stop-and-go traffic on an incline, keep some distance ahead before moving the vehicle forward. Then hold the vehicle on the incline with the foot brake.
- If the vehicle is held on a hill by applying the accelerator pedal or by creeping with brake pedal disengaged, the clutch and transmission may overheat which can result in damage. At this time, a warning message will appear on the LCD display.
- If the LCD warning is active, the foot brake must be applied.

- Ignoring the warnings can lead to damage to the transmission.

### Transmission high temperature



- Under certain conditions, such as repeated stop-and-go launches on steep grades, sudden take off or acceleration, or other harsh driving conditions, the transmission clutch temperatures will increase excessively. Finally the clutch in transmission could be overheated.
- When the clutch is overheated, the safe protection mode engages and the gear position indicator on the cluster blinks with a chime. At this time, "Transmission temp. is high! Stop safely" warning message will appear on the LCD display and driving may not be smooth.
- If this occurs, pull over to a safe location, stop the vehicle with the engine running, apply the brakes and shift the vehicle to P (Park), and allow the transmission to cool.
- If you ignore this warning, the driving condition may become worse. You may experience abrupt shifts, frequent shifts, or jerkiness. To return to the normal driving condition, stop the vehicle and apply the foot brake or shift into P (Park). Then allow the transmission to cool for a few minutes with engine on, before driving off.
- When possible, drive the vehicle smoothly.

### ***Transmission overheated***



- If the vehicle continues to be driven and the clutch temperatures reach the maximum temperature limit, the "Transmission Hot! Park with engine on" warning will be displayed. When this

occurs the clutch is disabled until the clutch cools to normal temperatures.

- The warning will display a time to wait for the transmission to cool.
- If this occurs, pull over to a safe location, stop the vehicle with the engine running, apply the brakes and shift the vehicle to P (Park), and allow the transmission to cool.
- When the message "Trans cooled. Resume driving." appears you can continue to drive your vehicle.
- When possible, drive the vehicle smoothly.

If any of the warning messages in the LCD display continue to blink, for your safety, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### ***Transmission ranges***

The indicator in the instrument cluster displays the shift lever position when the ENGINE START/STOP button is in the ON position.

### ***P (Park)***

Always come to a complete stop before shifting into P (Park).

To shift from P (Park), you must depress firmly on the brake pedal and make sure your foot is off the accelerator pedal.

**If you have done all of the above and still cannot shift the lever out of P (Park), see "Shift-lock override" on page 6-23.**

The shift lever must be in P (Park) before turning the engine off.

### **⚠ WARNING**

- Shifting into P (Park) while the vehicle is in motion may cause you to lose control of the vehicle.
- After the vehicle has stopped, always make sure the shift lever is in P (Park), apply the parking brake, and turn the engine off.
- When parking on an incline, block the wheels to prevent the vehicle from rolling down.
- For safety, always engage the parking brake with the shift lever in the P (Park) position except for the case of emergency parking.
- Do not use the P (Park) position in place of the parking brake.

### ***R (Reverse)***

Use this position to drive the vehicle backward.

### **⚠ CAUTION**

Always come to a complete stop before shifting into or out of R (Reverse); you may damage the transmission if you shift into R (Reverse) while the vehicle is in motion.

### ***N (Neutral)***

The wheels and transmission are not engaged.

Use N (Neutral) if you need to restart a stalled engine, or if it is necessary to stop with the engine ON. Shift into P (Park) if you need to leave your vehicle for any reason.

Always depress the brake pedal when you are shifting from N (Neutral) to another gear.

### **⚠ WARNING**

Do not shift into gear unless your foot is firmly on the brake pedal. Shifting into gear when the engine is running at high speed can cause the vehicle to move very rapidly. You may lose control of the vehicle and cause accidents.

**⚠ WARNING**

Do not drive with the shift lever in N (Neutral).

The engine brake will not work and lead to an accident.

**Parking in N (Neutral) gear**

Follow below steps when parking and you want the vehicle to move when pushed.

1. After parking your vehicle, step on the brake pedal and move the shift lever to [P] with the ignition button in [ON] or while the engine is running.
2. If the parking brake is applied unlock the parking brake.
  - For EPB (Electronic Parking Brake) equipped vehicles, push the brake pedal with the ignition button in [ON] or while the engine is running to disengage the parking brake. If [AUTO HOLD] function is used while driving (If [AUTO HOLD] indicator is on in the cluster), press [AUTO HOLD] switch and [AUTO HOLD] function should be turn off.

3. While pressing the brake pedal, turn the ENGINE START/STOP button [OFF].
  - For smart key equipped vehicles, the ENGINE START/STOP button can be moved to [OFF] only when the shift lever is in [P].
4. Change the gear shift lever to [N] (Neutral) while pressing the brake pedal and pushing [SHIFT LOCK RELEASE] button or inserting, pressing down a tool (e.g. flat-head screw-driver) into the [SHIFT LOCK RELEASE] access hole at the same time. Then, the vehicle will move when external force is applied.

**⚠ CAUTION**

- With the exception of parking in neutral gear, always park the vehicle in [P] (Park) for safety and engage the parking brake.
- Before parking in [N] (Neutral) gear, first make sure the parking ground is level and flat. Do not park in [N] gear on any slopes or gradients.  
If parked and left in [N], the vehicle may move and cause serious damage and injury.
- After the ENGINE START/STOP button has been turned off, the electronic parking brake cannot be disengaged.

- For EPB (Electronic Parking Brake) equipped vehicles with [AUTO HOLD] function used while driving, if the ignition button has been turned [OFF], the electronic parking brake will be engaged automatically. Therefore, [AUTO HOLD] function should be turned off before the ignition button is turned off.

not work and may lead to an accident.

### \* NOTICE

Always make sure the vehicle is stationary, at a complete stop, before selecting D (Drive).

### ***D (Drive)***

This is the normal driving position. The transmission will automatically shift through a seven-gear sequence, providing the best fuel economy and power.

For extra power when passing another vehicle or driving uphill depress the accelerator pedal further until you feel the transmission downshift to a lower gear.

### **⚠ WARNING**

- Do not shift into gear unless your foot is firmly on the brake pedal. Shifting into gear when the engine is running at high speed can cause the vehicle to move very rapidly. You may lose control of the vehicle and cause accidents.
- Do not drive with the shift lever in N (Neutral). The engine brake will

### **Manual mode**



OCDP059004

Whether the vehicle is stationary or in motion, manual mode is selected by pushing the shift lever from the D (Drive) position into the manual gate. To return to D (Drive) range operation, push the shift lever back into the main gate.

In manual mode, moving the shift lever backwards and forwards will allow you to select the desired range of gears for the current driving conditions.

- + (Up): Push the lever forward once to shift up one gear.
- - (Down): Pull the lever backwards once to shift down one gear.

## \* NOTICE

- Only the six forward gears can be selected. To reverse or park the vehicle, move the shift lever to the R (Reverse) or P (Park) position as required.
- Downshifts are made automatically when the vehicle slows down. When the vehicle stops, 1st gear is automatically selected.
- When the engine rpm approaches the red zone the transmission will upshift automatically.
- If the driver presses the lever to + (Up) or - (Down) position, the transmission may not make the requested gear change if the next gear is outside of the allowable engine rpm range. The driver must execute upshifts in accordance with road conditions, taking care to keep the engine rpms below the red zone.

### **Shift lock system**

For your safety, the Dual clutch transmission has a shift lock system which prevents shifting the transmission from P (Park) into R (Reverse) unless the brake pedal is depressed.

To shift the transmission from P (Park) into R (Reverse):

1. Depress and hold the brake pedal.

2. Start the engine or turn the ENGINE START/STOP button to the ON position.
3. Move the shift lever.

If the brake pedal is repeatedly depressed and released with the shift lever in the P (Park) position, a chattering noise & vibration near the shift lever may be heard. This is a normal condition.

## ⚠ WARNING

Always fully depress the brake pedal before and while shifting out of the P (Park) position into another position to avoid inadvertent motion of the vehicle which could injure persons in or around the car.

### **Shift-lock override**



OCDP059005

If the shift lever cannot be moved from the P (Park) position into R (Reverse) position with the brake pedal depressed, continue depressing the brake, then do the following:

1. Place the ENGINE START/STOP button in the OFF position.
2. Apply the parking brake.
3. Press down the shift lock release button.
4. Move the shift lever.
5. Have the system inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### Good driving practices

- Never move the shift lever from P (Park) or N (Neutral) to any other position with the accelerator pedal depressed.
- Never move the shift lever into P (Park) when the vehicle is in motion.
- Be sure the car is completely stopped before you attempt to shift into R (Reverse) or D (Drive).
- Never take the car out of gear and coast down a hill. This may be extremely hazardous. Always leave the car in gear when moving.
- Do not "ride" the brakes. This can cause them to overheat and malfunction. Instead, when you are driving down a long hill, slow down and shift to a lower gear. When you do this, engine braking will help slow the car.
- Slow down before shifting to a lower gear. Otherwise, the lower gear may not be engaged.
- Always use the parking brake. Do not depend on placing the transmission in P (Park) to keep the car from moving.
- Exercise extreme caution when driving on a slippery surface. Be especially careful when braking, accelerating or shifting gears. On a slippery surface, an abrupt change in vehicle speed can cause the drive wheels to lose traction and the vehicle to go out of control.
- Optimum vehicle performance and economy is obtained by smoothly depressing and releasing the accelerator pedal.

### WARNING

- Always buckle-up! In a collision, an unbelted occupant is significantly more likely to be seriously injured or killed than a properly belted occupant.
- Avoid high speeds when cornering or turning.
- Do not make quick steering wheel movements, such as sharp lane changes or fast, sharp turns.
- The risk of rollover is greatly increased if you lose control of your vehicle at highway speeds.
- Loss of control often occurs if two or more wheels drop off the roadway and the driver oversteers to 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.
- Never exceed posted speed limits.

### **⚠ WARNING**

If your vehicle becomes stuck in snow, mud, sand, etc., then you may attempt to rock the vehicle free by moving it forward and backward. Do not attempt this procedure if people or objects are anywhere near the vehicle. During the rocking operation the vehicle may suddenly move forward or backward as it becomes unstuck, causing injury or damage to nearby people or objects.

### ***Moving up a steep grade from a standing start***

To move up a steep grade from a standing start, depress the brake pedal:

- Shift the shift lever to D (Drive). Select the appropriate gear depending on load weight and steepness of the grade, and release the parking brake. Depress the accelerator gradually while releasing the brake pedal.

## **Regenerative braking system**

### **Regenerative Braking (Paddle Shifter)**



OCDW059129

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.

### **\* NOTICE**

- The control level will be started at 0 when the engine start. It will activate only in D (Drive) range.
- If you operate the shift lever (to P, R, N/Sport), Regen B mode will be canceled and if you return to D (Drive) range, the Regen B mode will be returned to 0 level.
- Regen B mode will be canceled when ABS, ESC operate.
- The speed decrement may different depends on the vehicle speed

even in the same Regen B level. (The speed decrement in each level is bigger in the city driving than that of highway driving.)

**\* NOTICE**

The vehicle does not completely stop by using paddle shifter lever. When the Regen B power reduced, the vehicle slowly moves about 10 km/h. In order to stop the vehicle, depress the brake pedal.

**\* 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 system or Smart Cruise Control system is activated.

**⚠ WARNING**

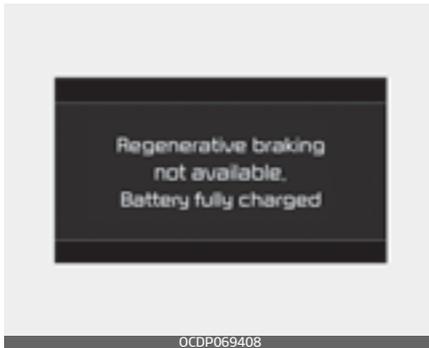
Usage of the function may be limited according to the battery and motor's condition. (over charge, high and low temperature) Check traffic and driving condition. If necessary, control the vehicle speed by yourself using brake pedal.

The selected regenerative braking level is displayed on the instrument cluster.

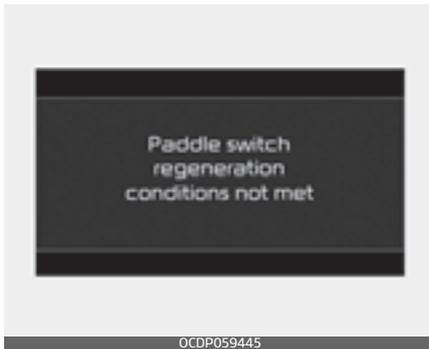


Drive mode	Paddle shifter lever operation	Paddle shift lever function
ECO	+	Reduction regenerative braking level
	-	Increase of regenerative braking level
SPORT	+	manual shift (+)
	-	manual shift (-)

\* The paddle shifter function changed by selection of Drive mode.

***Regeneration unavailable. Battery full***

If SOC (State of High voltage battery Charge) is high, it is not possible to enable Regen B mode. Use the function again after normal driving.

***Regeneration conditions not met***

- If the motor and battery is in high/low temperature status or if there is a malfunction on battery and transmission, the warning message will be displayed.

- If the vehicle entering the Regen B mode during the activation of ABS/Cruise Control/Smart Cruise Control, the warning message will be displayed.

Once the warning message is displayed, the usage of function will be temporarily limited. Use the function again after normal driving.

## Brake system

### Power brakes

Your vehicle has power-assisted brakes that adjust automatically through normal usage.

In the event that the power-assisted brakes lose power because of a stalled engine or some other reason, you can still stop your vehicle by applying greater force to the brake pedal than you normally would. The stopping distance, however, will be longer.

When the engine is not running, the reserve brake power is partially depleted each time the brake pedal is applied. Do not pump the brake pedal when the power assist has been interrupted.

Pump the brake pedal only when necessary to maintain steering control on slippery surfaces.

### WARNING

#### Brakes

- Do not drive with your foot resting on the brake pedal. This will create abnormal high brake temperatures, excessive brake lining and pad wear, and increased stopping distances.
- When descending a long or steep hill, shift to a lower gear and avoid continuous application of the

brakes. Continuous brake application will cause the brakes to overheat and could result in a temporary loss of braking performance.

- Wet brakes may impair the vehicle's ability to safely slow down; the vehicle may also pull to one side when the brakes are applied. Applying the brakes lightly will indicate whether they have been affected in this way. Always test your brakes in this fashion after driving through deep water. To dry the brakes, apply them lightly while maintaining a safe forward speed until brake performance returns to normal.
- Always, confirm the position of the brake and accelerator pedal before driving. If you don't check the position of the accelerator and brake pedal before driving, you may depress the accelerator instead of the brake pedal. It may cause a serious accident.

#### *In the event of brake failure*

If service brakes fail to operate while the vehicle is in motion, you can make an emergency stop with the parking brake. The stopping distance, however, will be much greater than normal.

**⚠ WARNING****Parking brake**

Applying the parking brake while the vehicle is moving at normal speeds can cause a sudden loss of control of the vehicle. If you must use the parking brake to stop the vehicle, use great caution in applying the brake.

***Disc brakes wear indicator***

Your vehicle has disc brakes.

When your brake pads are worn and new pads are required, you will hear a high-pitched warning sound from your front brakes or rear brakes. You may hear this sound come and go or it may occur whenever you depress the brake pedal.

Please remember that some driving conditions or climates may cause a brake squeal when you first apply (or lightly apply) the brakes. This is normal and does not indicate a problem with your brakes.

**⚠ CAUTION**

- To avoid costly brake repairs, do not continue to drive with worn brake pads.
- Always replace the front or rear brake pads as pairs.

**⚠ WARNING****Brake wear**

This brake wear warning sound means your vehicle needs service. If you ignore this audible warning, you will eventually lose braking performance, which could lead to a serious accident.

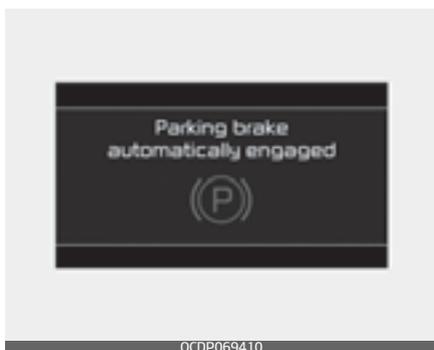
**Electronic parking brake (EPB)*****Applying the parking brake***

OCDW059031

***To apply the EPB (electronic parking brake) manually:***

1. Stop the vehicle.
2. Depress the brake pedal and pull up the EPB switch.
3. Make sure the warning light comes on.

***EPB may be automatically applied when:***



- Requested by other systems.
- If the driver applies the EPB while the engine is ON then turn the engine off, the EPB may be applied again automatically.

**\* NOTICE**

If the driver turns the engine off by mistake while Auto Hold (if equipped) is operating, EPB will be automatically applied. But if the driver turns the engine off and push the EPB switch in 1 second, the EPB does not apply.

***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. If you hand off the EPB switch, the braking force is lost. If you hold

the EPB switch and the vehicle stop, the EPB is applied.

- The braking distance may be longer than under normal braking conditions.

**\* NOTICE**

During emergency braking by the EPB, the parking brake warning light will illuminate and the warning sounds will occur to indicate that the system is operating.

**⚠ WARNING**

Do not operate the parking brake while the vehicle is moving except in an emergency situation. It could damage the vehicle system and endanger driving safety.

**⚠ CAUTION**

If you continuously notice a noise or burning smell when the EPB is used for emergency braking, have the system checked by a professional workshop. Kia recommends visiting an authorized Kia dealer/service partner.

## Releasing the parking brake

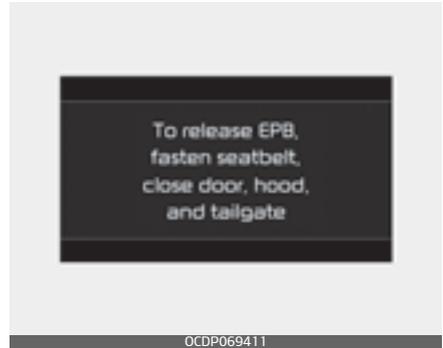
### To release the EPB manually:

Press the EPB switch in the following condition.

- Have the ENGINE START/STOP button in the ON position.
- Depress the brake pedal.
- Make sure the brake warning light goes off.

### To release EPB automatically

1. Close the driver's door, engine hood and tailgate.
2. Fasten the driver's seat belt.
3. Start the engine.
4. If the shift lever is in P (Park), depress the brake pedal and shift out of P (Park) to R (Rear) or D (Drive), the EPB is released automatically. Make sure the brake warning light goes off.
5. If the shift lever is in N (Neutral), depress the brake pedal and shift out of N (Neutral) to R (Rear) or D (Drive), the EPB is released automatically. Make sure the brake warning light goes off.
  - If you try to drive off depressing the accelerator pedal with the EPB applied, but doesn't release automatically, a warning will sound once and a message will appear.



- If the driver's seat belt is not fastened, driver's door is opened, the engine hood is opened in D or the tailgate is opened in R, a warning will sound once and a message will appear.
- If there is a problem with the vehicle, a warning may sound once and a message may appear. If the above situation occurs, depress the brake pedal and release EPB by pressing the EPB switch.

### **⚠ WARNING**

- Never allow anyone who is unfamiliar with the vehicle to touch the parking brake. If the parking brake is released unintentionally, serious injury may occur.
- Do not place any objects around the EPB switch. They could release the EPB switch.

**⚠ CAUTION**

- To prevent unintentional movement when stopped and leaving the vehicle, do not use the shift lever in place of the parking brake. Set the parking brake and make sure the shift lever is securely positioned in P (Park). Use wheel chokes if necessary.
- In winter or cold conditions, the EPB may freeze. Park the vehicle with the shift lever in P on the even and safe place without applying the EPB. And use wheel chokes.
- Do not drive your vehicle with the EPB applied. It may cause excessive wear of brake pad and brake rotor.
- A click sound may be heard while operating or releasing the EPB, but these conditions are normal and indicate that the EPB is functioning properly.
- When leaving your keys with a parking lot attendant or valet, make sure to inform him/her how to operate the EPB.
- When the battery is drained, the EPB does not apply or release. In this case, jump start your vehicle.

***Malfunction of EPB***

 The image shows a red rectangular icon with the letters "EPB" in white, representing the Electronic Parking Brake malfunction indicator light.

OCDW059033

If the EPB malfunction indicator remains on, it indicates that the EPB may have malfunctioned. If this occurs, have the system checked by a professional workshop. Kia recommends visiting an authorized Kia dealer/service partner.

The EPB malfunction indicator may illuminate when the ESC indicator comes on to indicate that the ESC is not working properly, but it does not indicate a malfunction of the EPB.

**⚠ CAUTION**

- The EPB warning light may illuminate if the EPB switch operates abnormally. Shut the engine off and turn it on again after a few minutes. The warning light will go off and the EPB switch will operate normally. However, if the EPB warning light is still on, have the system checked by a professional workshop. Kia recommends to

visit an authorized Kia dealer/service partner.

- If the parking brake warning light does not illuminate or blinks even though the EPB switch was pulled up, the EPB is not applied. If the parking brake warning light blinks when the EPB warning light is on, press the switch, then pull it up. Once more press it back to its original position and pull it back up. If the EPB warning does not go off, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/ service partner.

### AUTO HOLD (if equipped)

The Auto Hold maintains the vehicle in a standstill even though the brake pedal is not depressed after the driver brings the vehicle to a complete stop by depressing the brake pedal.

#### Set up



OCDW059034

1. With the driver's door and engine hood closed, fasten the driver's seat belt or depress the brake pedal and then press the Auto Hold button. The white AUTO HOLD indicator will come on and the system will be in the standby position.



OCDP059035

2. When you stop the vehicle completely by depressing the brake pedal, the AUTO HOLD indicator changes from white to green.
3. The vehicle will remain stationary even if you release the brake pedal.
4. If EPB is applied, Auto Hold will be released.

#### Leaving

If you press the accelerator pedal with the shift lever in, D (Drive), R (Reverse) or sports mode, the Auto Hold will be released automatically and the vehicle will start to move. The indicator changes from green to white.

**⚠ WARNING**

When driving off from Auto Hold by depressing the accelerator pedal, always check the surrounding area near your vehicle.

Slowly depress the accelerator pedal for a smooth launch.

***Cancel***

OCDW059034

- 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 Auto Hold does not operate when:
  - The driver's seat belt is unfastened and driver's door is opened.
  - The engine hood is opened.

- The shift lever is in P (Park) or R (Reverse).
- The EPB is applied.
- For your safety, the Auto Hold automatically switches to EPB in such cases:
  - The driver's door is opened.
  - The engine hood is opened.
  - The vehicle is in a standstill for more than 10 minutes.
  - The vehicle is standing on a steep slope.
  - The vehicle moved several times.

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. In this case, have your vehicle inspected by a professional workshop. Kia recommends to contact an authorized Kia dealer/service partner.
- While operating Auto Hold, you may hear mechanical noise. However, it is normal operation noise.

**⚠ WARNING**

- Press the accelerator pedal slowly when you start the vehicle.
- For your safety, cancel the Auto Hold when you drive downhill or back up the vehicle or park the vehicle.

**⚠ CAUTION**

If there is a malfunction with the driver's door or engine hood open detection system, the Auto Hold may not work properly.

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

**Anti-lock brake system (ABS)****⚠ WARNING**

ABS (or ESC) will not prevent accidents due to improper or dangerous driving maneuvers. Even though vehicle control is improved during emergency braking, always maintain a safe distance between you and objects ahead. Vehicle speeds should always be reduced during extreme road conditions.

The braking distance for cars equipped with an anti-lock braking system (or Electronic Stability Con-

trol system) may be longer than for those without it in the following road conditions.

During these conditions the vehicle should be driven at reduced speeds:

- Rough, gravel or snow-covered roads.
- With tire chains installed.
- On roads where the road surface is pitted or has different surface height.

The safety features of an ABS (or ESC) equipped vehicle should not be tested by high speed driving or cornering. This could endanger the safety of yourself or others.

The ABS continuously senses the speed of the wheels. If the wheels are going to lock, the ABS system repeatedly modulates the hydraulic brake pressure to the wheels.

When you apply your brakes under conditions which may lock the wheels, you may hear a "tik-tik" sound from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your ABS is active.

In order to obtain the maximum benefit from your ABS in an emergency situation, do not attempt to modulate your brake pressure and do not try to pump your brakes. Press your brake pedal as hard as possible or as hard as the situation

warrants and allow the ABS to control the force being delivered to the brakes.

### \* NOTICE

A click sound may be heard in the engine compartment when the vehicle begins to move after the engine is started. These conditions are normal and indicate that the anti-lock brake system is functioning properly.

- Even with the anti-lock brake system, your vehicle still requires sufficient stopping distance. Always maintain a safe distance from the vehicle in front of you.
- Always slow down when cornering. The anti-lock brake system cannot prevent accidents resulting from excessive speeds.
- On loose or uneven road surfaces, operation of the anti-lock brake system may result in a longer stopping distance than for vehicles equipped with a conventional brake system.

### ⚠ CAUTION

- If the ABS warning light is on and stays on, you may have a problem with the ABS. In this case, however, your regular brakes will work normally.



- The ABS warning light will stay on for approximately 3 seconds after the ENGINE 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. In this case, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/ service partner.

### ⚠ CAUTION

- When you drive on a road having poor traction, such as an icy road, and operate your brakes continuously, the ABS will be active continuously and the ABS warning light may illuminate. Pull your car over to a safe place and stop the engine.
- Restart the engine. If the ABS warning light is off, then your ABS system is normal. Otherwise, you may have a problem with the ABS. In this case, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### \* NOTICE

When you jump start your vehicle because of a drained battery, the engine may not run as smoothly and the ABS warning light may turn on at the same time. This happens because of the low battery voltage. It does not mean your ABS is malfunctioning.

- Do not pump your brakes!
- Have the battery recharged before driving the vehicle.

### Electronic Stability Control (ESC)

The Electronic Stability Control (ESC) system is designed to stabilize the vehicle during cornering maneuvers. ESC checks where you are steering and where the vehicle is actually going.



OCDP059007

ESC applies the brakes at individual wheels and intervenes in the engine management system to stabilize the vehicle.

### ⚠ WARNING

Never drive too fast for the road conditions or too quickly when cornering. Electronic stability Control (ESC) will not prevent accidents. Excessive speed in turns, abrupt maneuvers and hydroplaning on wet surfaces can still result in serious accidents. Only a safe and attentive driver can prevent accidents by avoiding maneuvers that cause the vehicle to lose traction. Even with ESC installed, always follow all the normal precautions for driving - including driving at safe speeds for the conditions.

The Electronic Stability Control (ESC) system is an electronic system designed to help the driver maintain vehicle control under adverse conditions. It is not a substitute for safe driving practices. Factors including speed, road conditions and driver steering input can all affect whether ESC will be effective in preventing a loss of control. It is still your responsibility to drive and corner at reasonable speeds and to leave a sufficient margin of safety.

When you apply your brakes under conditions which may lock the wheels, you may hear a "tik-tik" sound from the brakes, or feel a corresponding sensation in the

brake pedal. This is normal and it means your ESC is active.

**\* NOTICE**

A click sound may be heard in the engine compartment when the vehicle begins to move after the engine is started. These conditions are normal and indicate that the Electronic Stability Control System is functioning properly.

**ESC operation**

**ESC ON condition**

- When the ignition is turned ON, ESC and ESC OFF indicator lights illuminate for approximately 3 seconds, then ESC is turned on.
- Press the ESC OFF button after turning the ignition ON to turn ESC off. (ESC OFF indicator will illuminate). To turn the ESC on, press the ESC OFF button (ESC OFF indicator light will go off).
- When starting the engine, you may hear a slight ticking sound. This is the ESC performing an automatic system self-check and does not indicate a problem.

**When operating**

When the ESC is in operation, the ESC indicator light blinks.

 When the Electronic Stability Control is operating properly, you can feel a slight pulsation in the vehicle. This is only the effect of brake control and indicates nothing unusual.

When moving out of the mud or driving on a slippery road, the engine rpm (revolution per minute) may not be increased even if you press the accelerator pedal deeply. This is to maintain the stability and traction of the vehicle and does not indicate a problem.

**ESC OFF condition**

 To cancel ESC operation:



- State 1  
Press the ESC OFF button shortly (ESC OFF indicator light and message illuminates). At this state, the engine control function does not operate. In other words, the traction control function does not

operate but only the brake control function operates.



- State 2  
Press the ESC OFF button for more than 3 seconds. ESC OFF indicator light and message illuminates and ESC OFF warning chime will sound. At this state, the engine control function and brake control function does not operate. In other words, the vehicle stability control function does not operate any more.  
If the ENGINE START/STOP button is placed to the LOCK/OFF position when ESC is off, ESC remains off. Upon restarting the engine, the ESC will automatically turn on again.

**Indicator light**

ESC indicator light



ESC OFF indicator light



When the ENGINE START/STOP button is turned to ON, the indicator light illuminates, then goes off if the ESC system is operating normally.

The ESC indicator light blinks whenever ESC is operating or illuminates when ESC fails to operate.

ESC OFF indicator light comes on when the ESC is turned off with the button.

**CAUTION**

Driving with varying tire or wheel sizes may cause the ESC system to malfunction. When replacing tires, make sure they are the same size as your original tires.

**WARNING**

The Electronic Stability Control system is only a driving aid; use precautions for safe driving by slowing down on curved, snowy, or icy roads. Drive slowly and don't attempt to accelerate whenever the ESC indicator light is blinking, or when the road surface is slippery.

## 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.

Never press the ESC OFF button while ESC is operating (ESC indicator light blinks).

If ESC is turned off while ESC is operating, the vehicle may slip out of control.

### \* NOTICE

- When operating the vehicle on a dynamometer, ensure that the ESC is turned off (ESC OFF light illuminated).
- Turning the ESC off does not affect ABS or brake system operation.

### ⚠ WARNING

Never press the ESC OFF button while ESC is operating. If the ESC is turned off while ESC is operating, the vehicle may go out of control.

To turn ESC off while driving, press the ESC OFF button while driving on a flat road surface.

## Hill-start assist control (HAC)

Hill start Assist Control is a comfort function. The main intend is to prevent the vehicle from rolling backwards while driving off uphill on an inclined surface. HAC holds the braking pressure buildup by driver during stopping procedure for 2 seconds after releasing brake pedal.

During the pressure-hold period, the driver has enough time to press the accelerator pedal to drive off.

The braking pressure is reduced as soon as the system detects the driver's intention to drive off.

### ⚠ WARNING

The HAC is usually activated only for 2 seconds. The driver should be careful from the rolling backward causing the accident with behind objects or human, when the driver may feel the unintended rolling backward while driving off on hill due to insufficient brake hold pressure built-up by driver during stopping procedure.

## \* NOTICE

- The HAC does not operate when the transmission shift lever is in the P (Park) or N (Neutral) position.
- The HAC activates even though the ESC is off but it does not activate when the ESC has malfunctioned.

### Vehicle stability management (VSM)

This system provides further enhancements to vehicle stability and steering responses when a vehicle is driving on a slippery road or a vehicle detected changes in coefficient of friction between right wheels and left wheels when braking.

#### *VSM operation*

When the VSM is in operation, ESC indicator light () blinks.

When the vehicle stability management is operating properly, you can feel a slight pulsation in the vehicle. This is only the effect of brake control and indicates nothing unusual.

### The VSM does not operate when:

- Driving on bank road such as gradient or incline
- Driving rearward
- ESC OFF indicator light () remains on the instrument cluster
- EPS indicator light remains on the instrument cluster

#### *VSM operation off*

If you press the ESC OFF button to turn off the ESC, the VSM will also cancel and the ESC OFF indicator light () illuminates.

To turn on the VSM, press the button again. The ESC OFF indicator light goes out.

#### *Malfunction indicator*

The VSM can be deactivated even if you don't cancel the VSM operation by pressing the ESC OFF button. It indicates that a malfunction has been detected somewhere in the Electric Power Steering system or VSM system.

If the ESC indicator light () or EPS warning light remains on, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### \* NOTICE

- The VSM is designed to function above approximately 15 km/h (9 mph) on curves.
- The VSM is designed to function above approximately 30 km/h (18 mph) when a vehicle is braking on a split-mu road. The split-mu road is made of surfaces which have different friction forces.

### ⚠ WARNING

- The Vehicle Stability Management system is not a substitute for safe driving practices but a supplementary function only. It is the responsibility of the driver to always check the speed and the distance to the vehicle ahead. Always hold the steering wheel firmly while driving.
- Your vehicle is designed to activate according to the driver's intention, even with installed VSM. Always follow all the normal precautions for driving at safe speeds for the conditions – including driving inclement weather and on a slippery road.
- Driving with varying tire or wheel sizes may cause the VSM system to malfunction. When replacing tires, make sure they are the same size as your original tires.

### ESS: Emergency Stop Signal

The Emergency Stop Signal system alerts the driver behind by blinking the stop light when the vehicle suddenly stops or when the ABS activates in a stop. (The system activates when the vehicle speed is over 55km/h and the vehicle deceleration is over  $7\text{m/s}^2$  or the ABS activates when the vehicle emergency braking.)

When the vehicle speed is under 40 km/h and the ABS deactivates or the sudden stop situation is over, the stop light blinking will stop.

### ⚠ CAUTION

The Emergency Stop Signal system will not work if the hazard warning flasher is already on.

## Good braking practices

### WARNING

- Whenever leaving vehicle or parking, always set the parking brake as far as possible and fully engage the vehicle's transmission into the park position. Vehicles not fully engaged in park with the parking brake set are at risk for moving inadvertently and injuring yourself or others.
  - All vehicles should always have the parking brake fully engaged when parking to avoid inadvertent movement of the car which can injure occupants or pedestrians.
- 
- After parking the vehicle, check to be sure the parking brake is not engaged and that 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 car is washed. Wet brakes can be dangerous! Your car will not stop as quickly if the brakes are wet. Wet brakes may cause the car 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 car 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 have your vehicle inspected by a professional workshop. Kia recommends to call an authorized Kia dealer/service partner.
  - Don't coast down hills with the car out of gear. This is extremely hazardous. Keep the car in gear at all times, use the brakes to slow down, then shift to a lower gear so that engine braking will help you maintain a safe speed.
  - Don't "ride" the brake pedal. Resting your foot on the brake pedal while driving can be dangerous because it can result in the brakes overheating and losing 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 car pointed straight ahead while you slow down. When you are moving slowly enough for it to be safe to do so, pull off the road and stop in a safe place.
  - Be cautious when parking on a hill. Firmly engage the parking brake and place the shift lever in P (Park). If your car is facing downhill, turn the front wheels into the curb to help keep the car from rolling. If your car is facing uphill, turn the front wheels away from the curb to help keep the car from rolling. If there is no curb or if it is required by other conditions to

keep the car from rolling, block the wheels.

- Under some conditions your parking brake can freeze in the engaged position. This is most likely to happen when there is an accumulation of snow or ice around or near the rear brakes or if the brakes are wet. If there is a risk that the parking brake may freeze, apply it only temporarily while you put the shift lever in P (Park) and block the rear wheels so the car cannot roll. Then release the parking brake.
- Do not hold the vehicle on the upgrade with the accelerator pedal. This can cause the transmission to overheat. Always use the brake pedal or parking brake.

### Forward Collision-Avoidance Assist (FCA) (Front view camera only) (if equipped)

Forward Collision-Avoidance Assist system is designed to help detect and monitor the vehicle ahead or detect a pedestrian in the roadway through front view camera recognition to warn the driver that a collision is imminent, and if necessary, apply emergency braking.

#### **WARNING**

Take the following precautions when using Forward Collision-Avoidance Assist:

- This system is only a supplemental system and it is not intended to, nor does it replace the need for extreme care and attention of the driver. The sensing range and objects detectable by the sensors are limited. Pay attention to the road conditions at all times.
  - Drive at posted speed limits and accordance to road conditions.
  - Always drive cautiously to prevent unexpected and sudden situations from occurring. FCA may not always stop the vehicle completely and is only intended to help mitigate a collision that is imminent.
-

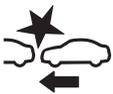
## System setting and activation

### System setting

The driver can activate FCA by placing the ENGINE START/STOP button to the ON position and by selecting at the LCD Display or infotainment system (if equipped):

"User Settings → Driver Assistance → Forward Safety"

- If you select "Active Assist", FCA system activates. FCA produces warning messages and warning alarms in accordance with the collision risk levels. Also, it controls the brakes in accordance with the collision risk levels.
- If you select "Warning Only", FCA system activates and produces only warning alarms in accordance with the collision risk levels. You should control the brake directly because FCA system do not control the brake.
- If you select "Off", FCA system deactivates.



The warning light illuminates on the LCD display, when you cancel FCA system. The driver can monitor FCA ON/OFF status on the LCD display. Also, the warning light illuminates when the ESC (Electronic Stability Control) is turned off. When the warning light remains ON with FCA activated, have the system checked

by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

The driver can select the initial warning activation time on the LCD display.

Go to the "User Settings → Driver Assistance → Warning Timing → Normal/Later".

The options for the initial Forward Collision Warning includes the following:

- Normal:  
When this condition is selected, the initial Forward Collision Warning is activated normally. This setting allows for a nominal amount of distance between the vehicle ahead before the initial warning occurs.
- Later:  
When this condition is selected, the initial Forward Collision Warning is activated later than normal. This setting reduces the amount of distance between the vehicle ahead before the initial warning occurs.  
Select 'Later' when traffic is light and when driving speed is slow. If the vehicle in front puts on a burst of speed, the driver can notice the warning alarm is early even though the later option is selected.

### ***Prerequisite for activation***

FCA gets ready to be activated, when the Active Assist or Warning Only under the Forward Safety is selected on the LCD display or infotainment system, and when the following prerequisites are satisfied.

- The ESC is activated.
- The driving speed is over 10 km/h (5 mph). FCA is only activated within a certain speed range.
- The system detects a vehicle or a pedestrian (if equipped) in front, which may collide with your vehicle. (However, FCA does not activate according to conditions in front and vehicle systems, but it notices only certain warnings.)
- FCA does not operate properly or it only produces a warning alarms in accordance with the driving or vehicle condition.
- If the warning only under the Forward Safety is selected, FCA produces only warning alarms in accordance with the collision risk levels. After finishing the booting of the front view camera (initial engine on, camera reset, etc), FCA system operates properly. It may take about 15 seconds.

### **⚠ WARNING**

- FCA automatically activates upon placing the ENGINE START/STOP button to the ON position. The driver can deactivate FCA by canceling the system setting on the LCD display.
- FCA automatically deactivates upon canceling the ESC. When the ESC is canceled, FCA cannot be activated on the LCD display. FCA warning light will illuminate, but it does not indicate a malfunction of the system.
- Set or cancel FCA with controlling switches on steering wheel after stopping the vehicle in the safe place for your safety.

### **FCA warning message and system control**

FCA produces warning messages and warning alarms in accordance with the collision risk levels such as abrupt stopping of the vehicle in front, insufficient braking distance, pedestrian detection. Also, it controls the brakes in accordance with the collision risk levels.

### ***Collision Warning (1st warning)***



OCDP069414

- The warning message appears on the LCD display with the warning alarms. Additionally, some vehicle system intervention occurs by the engine management system to help decelerate the vehicle.
- The vehicle may slow down slightly.
- It will operate if the vehicle speed is greater than 10 km/h and less than or equal to 180 km/h on a forward vehicle. (Depending on the condition of the vehicle ahead and the environment surrounding it, the possible maximum operating speed may be reduced.)
- For pedestrians the vehicle speed is greater than or equal to 10 km/h and less than 80 km/h. (Depending on the condition of pedestrians and the surrounding environment the possible maximum operating speed may be reduced.)

- If you select "Warning Only", FCA system activates and produces only warning alarms in accordance with the collision risk levels. You should control the brake directly because FCA system do not control the brake.

### ***Emergency braking (2nd warning)***



OCDP069415

- The warning message appears on the LCD display with the warning alarms. Additionally, some vehicle system intervention occurs by the engine management system to help decelerate the vehicle.
- The vehicle may slow down slightly.
- It will operate if the vehicle speed is greater than 10 km/h and less than or equal to 180 km/h on a forward vehicle. (Depending on the condition of the vehicle ahead and the environment surrounding it, the possible maximum operating speed may be reduced.)

- For pedestrians the vehicle speed is greater than or equal to 10 km/h and less than 80 km/h. (Depending on the condition of pedestrians and the surrounding environment the possible maximum operating speed may be reduced.)
  - If you select "Warning Only", FCA system activates and produces only warning alarms in accordance with the collision risk levels. You should control the brake directly because FCA system do not control the brake.

### Brake operation

- In an urgent situation, the braking system enters into the ready status for prompt reaction to assist the driver in depressing the brake pedal.
- FCA provides additional braking power for optimum braking performance, when the driver depresses the brake pedal.
- The braking control is automatically deactivated, when the driver sharply depresses the accelerator pedal, or when the driver abruptly operates the steering wheel.
- The braking control is automatically canceled, when risk factors disappear.

### ⚠ CAUTION

- The driver should always use extreme caution while operating the vehicle, whether or not there is a warning message or alarm from FCA system.
- If any other warning sound such as seat belt warning chime is already generated, Forward Collision-Avoidance Assist system warning may not sound.
- After the brake control is activated, the driver must immediately depress the brake pedal and check the surroundings. The brake activation by the system lasts for about 2 seconds.

### ⚠ WARNING

The braking control cannot completely stop the vehicle nor avoid all collisions. The driver should hold the responsibility to safely drive and control the vehicle.

### ⚠ WARNING

The FCA system logic operates within certain parameters, such as the distance from the vehicle, or a pedestrian ahead, the speed of the vehicle ahead, and the driver's vehicle speed. Certain conditions such as inclement weather and road conditions may affect the operation of FCA system.

Never deliberately drive dangerously to activate the system.

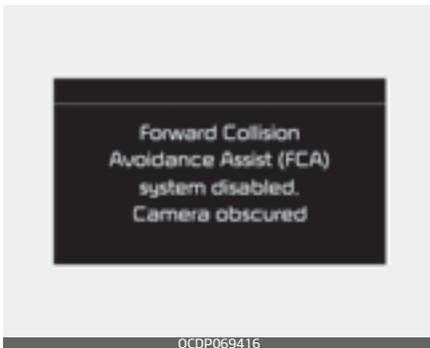
### FCA front view camera sensor

In order for FCA system to operate properly, always make sure the sensor is clean and free of dirt, snow, and debris.



Dirt, snow, or foreign substances on the lens may adversely affect the sensing performance of the sensor.

### Warning message and warning light



When the camera is blocked with dirt, snow, or debris, FCA operation

may temporarily stop. In this case, the warning message appears to warn the driver.

This is not a malfunction with FCA. To operate FCA again, remove the foreign substances.

FCA may not properly operate in an area (e.g. open terrain), where any substances are not detected after turning ON the engine. Also, even though a warning message does not appear on the LCD display, FCA may not properly operate. Also, even though a warning message does not appear on the LCD display, FCA may not properly operate.

### ⚠ WARNING

FCA system may not activate without any warning messages according to driving condition, traffic on the road, weather, road condition, etc.

### \* NOTICE

- Doing so may adversely affect the sensing performance of the sensor.
- Always keep the sensor clean and free of dirt and debris.
- Be careful not to apply unnecessary force on the sensor. If the sensor is forcibly moved out of proper alignment, FCA system may not operate correctly. In this

case, a warning message may not be displayed. In this case, have the vehicle inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

- Use only genuine parts to repair or replace a damaged.
- Do not tint the window or install stickers, accessories around the inside mirror where the camera is installed.
- Make sure the frontal camera installation point does not get wet.
- Do not impact or arbitrarily remove any camera components.
- Do not place reflective objects (white paper or mirror etc.) on the crash pad.

The system may activate unnecessarily due to reflect of the sunlight.

- Excessive audio volume may disturb the sound of the system warning alarm.
- For more cautions for the camera sensor, refer to "Lane Keeping Assist (LKA) (if equipped)" on page 6-73.

## System malfunction



- When FCA is not working properly, FCA warning light (🚗💥) will illuminate and the warning message will appear for a few seconds. After the message disappears, the master warning light (⚠️) will illuminate. In this case, have the vehicle inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
- FCA warning message may appear along with the illumination of the ESC warning light.

### ⚠️ WARNING

- FCA is only a supplemental system for the driver's convenience. The driver should hold the responsibility to control the vehicle operation. Do not solely depend on FCA system. Rather, maintain a safe braking distance, and, if necessary, depress the

brake pedal to lower the driving speed.

- In certain instances and under certain driving conditions, FCA system may activate unintentionally. Also, in certain instances the front camera recognition system may not detect the vehicle ahead. FCA system may not activate and the warning message will not be displayed.
- FCA may unnecessarily produce the warning message and the warning alarms. Also, due to the sensing limitation, FCA may not produce the warning message and the warning alarm at all.
- When there is a malfunction with FCA, the braking control does not operate upon detecting a collision risk even with other braking systems normally operating.
- FCA operates only for the vehicle in front, while driving forward. It does not operate for any animals or vehicles in the opposite direction.
- FCA does not recognize the vehicle, which horizontally drives across the crossroad, or the vehicle, which is parked in the horizontal direction.
- If the vehicle in front stops suddenly, you may have less control of the brake system. Therefore, always keep safe distance

between your vehicle and the vehicle in front of you.

- FCA system may activate during braking and the vehicle may stop suddenly. And the load in the vehicle may endanger passengers. Therefore, always be mindful of the load volume in the vehicle.
- FCA system may not activate if the driver applies the brake pedal to avoid risk of collision.
- FCA system does not operate when the vehicle is in reverse. In these cases, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce the driving speed in order to maintain a safe distance.
- The regular braking function will operate normally even if There is a problem with FCA brake control system or other functions. In this case, the braking control will not operate in the risk of a collision.
- FCA system may not activate according to driving condition, traffic on the road, weather, road condition, etc.
- FCA system may not activate to all types of vehicles.

## Limitation of the system

FCA is an assistant system for a driver in a certain risky driving condition and it does not take every responsibility for all risks from driving condition.

FCA monitors the driving situations through the camera sensor. Thus, for a situation out of the sensing range, FCA may not normally operate. The driver should pay great caution in the following situations. FCA operation may be limited.

### *Recognizing vehicles*

- The camera is contaminated with foreign substances.
  - It heavily rains or snows.
  - There is interruption by electric waves.
  - The vehicle in front has a narrow body. (i.e. motor cycle and bicycle)
  - The driver's view is unclear due to the backlight, the reflected light, or darkness.
  - The camera cannot contain the full image of the vehicle in front.
  - The vehicle in front is a special vehicle, such as a heavily-loaded truck or a trailer.
  - The outside brightness is greatly changed, such as entering/exiting the tunnel.
  - The vehicle driving is unstable.
  - The camera sensor recognition is limited.
- The driver's field of view is not well illuminated (either too dark or too much reflection or too much backlight that obscures the field of view)
  - The vehicle in front is driving erratically
  - The vehicle is driven near areas containing metal substances such as a construction zone, railroad, etc.
  - Backlight is reflected in the direction of the vehicle (including front light from the vehicle ahead)
  - Moisture on the windshield is not completely removed or frozen.
  - The weather is misty.
  - The vehicle in front does not turn ON the rear lights, does not have rear lights, has asymmetric rear lights, or has rear lights out of angle.
  - The vehicle is on unpaved or uneven rough surfaces, or roads with sudden gradient changes.
  - The vehicle is moving under ground level or inside a building.
  - If a sudden change in the sensor recognition takes place while passing through the speed bump,
  - When the vehicle is severely shaken,
  - When driving around circular intersection after the vehicle in front,
  - If the front of the camera lens is contaminated by front glass tinting, film, water repellent coating,

## Driving your vehicle

- damage on glass, foreign matter (sticker, insect, etc.)
- The camera or camera lens is damaged.
- If the headlights of the vehicle are not used at night or in the tunnel section, or the light is too weak.
- If street light or the light of the vehicle coming from the opposite is reflected or when sunlight is reflected by the water on the road surface.
- When the back light is projected in the direction of the vehicle's motion (including the headlights of vehicles)
- Road sign, shadow on the road, tunnel entrance, toll gate, partial pavement
- If the windshield has moisture on its surface or if windshield freezes,
- Driving in the fog.
- When objects are out of the sensing range of the camera.
- The pedestrian is not fully detected by the camera recognition system, for example, if the pedestrian is leaning over or is not fully walking upright.
- The pedestrian is moving very quickly or appears abruptly in the camera detection area.
- The pedestrian is wearing clothing that easily blends into the background, making it difficult to be detected by the camera.

## Forward Collision-Avoidance Assist (FCA) (Front view camera only)

- The outside lighting is too bright (e.g. when driving in bright sunlight or in sun glare) or too dark (e.g. when driving on a dark rural road at night).
- It is difficult to detect and distinguish the pedestrian from other objects in the surroundings, for example, when there is a group of pedestrians or a large crowd.
- There is an item similar to a person's body structure.
- The pedestrian is small.
- The pedestrian has impaired mobility.
- When the pedestrian suddenly interrupts in front of the vehicle.

## Driving on a curve



OCD059189



OCD059188

The performance of FCA system may be limited when driving on a curved road.

On curved roads, the other vehicle on the same lane is not recognized and FCA system's performance may be degraded. This may result in unnecessary alarm or braking or no alarm or braking when necessary. Also, in certain instances the front camera recognition system may not detect the vehicle traveling on a curved road.

In these cases, 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. FCA system may recognize a vehicle in the next lane when driving on a curved road.



OCD059191



OCD059190

In this case, the system may unnecessarily alarm the driver and apply the brake.

Always pay attention to road and driving conditions, while driving. If necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance. Also, when necessary depress the accelerator pedal to prevent the system from unnecessarily decelerating your vehicle.

Check to be sure that the road conditions permit safe operation of FCA.

## Driving on a slope



OCDP059193



OCD059192

The performance of FCA decreases while driving upward or downward on a slope, not recognizing the vehicle in front in the same lane. It may unnecessarily produce the warning message and the warning alarm, or it may not produce the warning message and the warning alarm at all.

When FCA suddenly recognizes the vehicle in front while passing over a slope, you may experience sharp deceleration.

Always keep your eyes forward while driving upward or downward on a slope, and, if necessary, depress the brake pedal to reduce

your driving speed in order to maintain distance.

## Changing lanes



OSP2059177

When a vehicle changes lanes in front of you, FCA system may not immediately detect the vehicle, especially if the vehicle changes lanes abruptly. In this case, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

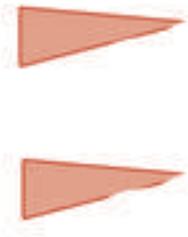


OSP2059016

When driving in stop-and-go traffic, and a stopped vehicle in front of you merges out of the lane, FCA system may not immediately detect the

new vehicle that is now in front of you. In this case, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

**Recognizing the vehicle**



OCDP059194

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. FCA system may not be able to detect the cargo extending from the vehicle. In these instances, you must maintain a safe braking distance from the rearmost object, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain distance.

**⚠ WARNING**

- Do not use Forward Collision-Avoidance Assist system when towing a vehicle. Application of FCA system while towing may

adversely affect the safety of your vehicle or the towing vehicle.

- Use extreme caution when the vehicle in front of you has cargo that extends rearward from the cab, or when the vehicle in front of you has higher ground clearance.
- Forward Collision-Avoidance Assist may operate when an object, which has similar shape or characteristic to a vehicle or pedestrian, is detected.
- FCA system is designed to detect and monitor the vehicle and pedestrian ahead in the roadway through camera recognition. It is not designed to detect bicycles, motorcycles, or smaller wheeled objects such as luggage bags, shopping carts, or strollers.
- Never try to test the operation of FCA system. Doing so may cause severe injury or death.
- If the front bumper, front glass or camera have been replaced or repaired, we recommend that you have your vehicle inspected by an authorized Kia dealer/service partner.

**\* NOTICE**

In some instances, FCA system may be canceled when subjected to electromagnetic interference.

### Lane-Change Oncoming function

Lane-Change Oncoming function detects the oncoming vehicle with a front view camera at the front windshield. And it assists the driver's steering to help avoiding the collision to oncoming vehicle and keeping the vehicle in the lanes, when the vehicle drives over the centerline.

- This function is only a supplemental system. So, it does not replace the need for extreme care and attention of the driver. The sensing range of oncoming vehicle is limited. Pay attention to the road conditions at all times.
- Always drive cautiously to prevent unexpected and sudden situations from occurring. The function does not steer the vehicle completely and is not a collision avoidance system.

### ***Warning message and function control***



OCDW059102

- After FCA is on, vehicle speed is over 60 km/h and if the vehicle crosses the centerline with an oncoming vehicle approaching, this warning message appears on the LCD display with audible warning.
- Additionally, steering assist is provided in order to return the car in between the lanes.

### **⚠ WARNING**

- The steering control can not completely avoid the collision to oncoming vehicle. Driver is responsible for being aware of surroundings and steering the vehicle in a safely manner.
- The function operates within certain conditions, such as the distance and speed from the oncoming vehicle, the driver's vehicle speed, etc. The function can be canceled or not work properly according to road condition and surroundings. Always be cautious when driving.
- Never drive deliberately and dangerously to activate the system.

## Forward Collision-Avoidance Assist (FCA) (Sensor fusion) (if equipped)

Forward Collision-Avoidance Assist system is designed to help detect and monitor the vehicle ahead or help detect a pedestrian or a cyclist in the roadway through radar signals and front view camera recognition to warn the driver that a collision is imminent, and if necessary, apply emergency braking.

### WARNING

Take the following precautions when using Forward Collision-Avoidance Assist system:

- This system is only a supplemental system and it is not intended to, nor does it replace the need for extreme care and attention of the driver. The sensing range and objects detectable by the sensors are limited. Pay attention to the road conditions at all times. Drive at posted speed limits and accordance to road conditions.
- NEVER drive too fast in accordance with the road conditions or while cornering.
- Always drive cautiously to prevent unexpected and sudden situations from occurring. FCA may not always stop the vehicle, pedestrian or cyclists completely and is

## Forward Collision-Avoidance Assist (FCA) (Sensor fusion)

only intended to help mitigate a collision that is imminent.

### System setting and activation

#### *System setting*

The driver can activate FCA by placing the ENGINE START/STOP button to the ON position and by selecting at the LCD Display or infotainment system (if equipped):

"User Settings → Driver Assistance → Forward Safety"

- If you select "Active Assist", FCA system activates. FCA produces warning messages and warning alarms in accordance with the collision risk levels. Also, it controls the brakes in accordance with the collision risk levels.
- If you select "Warning Only", FCA system activates and produces only warning alarms in accordance with the collision risk levels. You should control the brake directly because FCA system do not control the brake.
- If you select "Off", FCA system deactivates.



The warning light illuminates on the LCD display, when you cancel FCA system. The driver can monitor FCA ON/OFF status on the LCD display. Also, the warning light illuminates when the ESC (Electronic Stability

Control) is turned off. When the warning light remains ON with FCA activated, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

The driver can select the initial warning activation time on the LCD display.

Go to the "User Settings → Driver Assistance → Warning Timing → Normal/Later".

The options for the initial Forward Collision Warning includes the following:

- Normal:  
When this condition is selected, the initial Forward Collision Warning is activated normally. This setting allows for a nominal amount of distance between the vehicle ahead before the initial warning occurs.
- Later:  
When this condition is selected, the initial Forward Collision Warning is activated later than normal. This setting reduces the amount of distance between the vehicle ahead before the initial warning occurs.  
Select 'Later' when traffic is light and when driving speed is slow. If the vehicle in front puts on a burst of speed, the driver can notice the warning alarm is early

even though the later option is selected.

### ***Prerequisite for activation***

FCA gets ready to be activated, when the Active Assist or Warning Only under the Forward Safety is selected on the LCD display or infotainment system, and when the following prerequisites are satisfied.

- The ESC is activated.
- The driving speed is over 10 km/h (5 mph). (FCA is only activated within a certain speed range.)
- When recognizing the vehicle, pedestrian or cyclist in front. (FCA is only activated within a certain speed range.)
- FCA does not operate properly or it only produces a warning alarms in accordance with the driving or vehicle condition.
- If the warning only under the Forward Safety is selected, FCA produces only warning alarms in accordance with the collision risk levels. After finishing the booting of the front view camera, (initial engine on, camera reset, etc) FCA system operates properly. It may take about 15 sec.

**⚠ WARNING**

- FCA automatically activates upon placing the ENGINE START/STOP button to the ON position. The driver can deactivate FCA by canceling the system setting on the LCD display.
- FCA automatically deactivates upon canceling the ESC. When the ESC is canceled, FCA cannot be activated on the LCD display. FCA warning light will illuminate, but it does not indicate a malfunction of the system.
- Set or cancel FCA with controlling switches on steering wheel after stopping the vehicle in the safe place for your safety.

**FCA warning message and system control**

FCA produces warning messages and warning alarms in accordance with the collision risk levels of such as abrupt stopping of the vehicle in front, insufficient braking distance, pedestrian or cyclist (if equipped) detection. Also, it controls the brakes in accordance with the collision risk levels.

***Collision Warning (1st warning)***



OCDP069414

- The warning message appears on the LCD display with the warning alarms. Additionally, some vehicle system intervention occurs by the engine management system to help decelerate the vehicle.
- The vehicle may slow down slightly.
- It will operate if the vehicle speed is greater than 10 km/h (5 mph) and less than or equal to 180 km/h (110 mph) on a forward vehicle. (Depending on the condition of the vehicle ahead and the environment surrounding it, the possible maximum operating speed may be reduced.)
- For pedestrians and cyclists, the vehicle speed is greater than or equal to 10 km/h (5 mph) and less than 65 km/h (40 mph). (Depending on the condition of pedestrians and cyclists and the surrounding environment the

possible maximum operating speed may be reduced.)

- If you select "Warning Only", FCA system activates and produces only warning alarms in accordance with the collision risk levels. You should control the brake directly because FCA system do not control the brake.

### ***Emergency braking (2nd warning)***



- The warning message appears on the LCD display with the warning alarms.
- The brake control is maximized just before a collision, reducing impact when it strikes a forward vehicle.
- It will operate if the vehicle speed is greater than 10 km/h (5 mph) and less than or equal to 80 km/h (50 mph) on a forward vehicle. (Depending on the condition of the vehicle ahead and the environment surrounding it, the pos-

sible maximum operating speed may be reduced.)

- For pedestrians and cyclists, the vehicle speed is greater than or equal to 10 km/h (5 mph) and less than 65 km/h (40 mph). (Depending on the condition of pedestrians and cyclists and the surrounding environment the possible maximum operating speed may be reduced.)
- If you select "Warning Only", FCA system activates and produces only warning alarms in accordance with the collision risk levels. You should control the brake directly because FCA system do not control the brake.

### **Brake operation**

- In an urgent situation, the braking system enters into the ready status for prompt reaction to assist the driver in depressing the brake pedal.
- FCA provides additional braking power for optimum braking performance, when the driver depresses the brake pedal.
- The braking control is automatically deactivated, when the driver sharply depresses the accelerator pedal, or when the driver abruptly operates the steering wheel.

## Driving your vehicle

- The braking control is automatically canceled, when risk factors disappear.

### ⚠ CAUTION

- The driver should always use extreme caution while operating the vehicle, whether or not there is a warning message or alarm from FCA system.
- If any other warning sound such as seat belt warning chime is already generated, Forward Collision-Avoidance Assist system warning may not sound.
- After the brake control is activated, the driver must immediately depress the brake pedal and check the surroundings. The brake activation by the system lasts for about 2 seconds.

### ⚠ WARNING

The braking control cannot completely stop the vehicle nor avoid all collisions. The driver should hold the responsibility to safely drive and control the vehicle.

### ⚠ WARNING

The FCA system logic operates within certain parameters, such as the distance from the vehicle, pedestrian ahead, the speed of the vehicle ahead, and the driver's vehi-

## Forward Collision-Avoidance Assist (FCA) (Sensor fusion)

cle speed. Certain conditions such as inclement weather and road conditions may affect the operation of FCA system.

Never deliberately drive dangerously to activate the system.

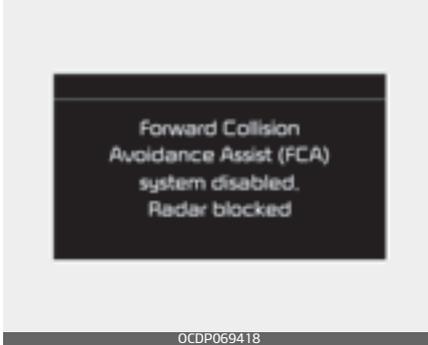
### Sensor to detect the distance from the vehicle in front (front view camera + front radar)



In order for FCA system to operate properly, always make sure the sensor cover or sensor is clean and free of dirt, snow, and debris.

Dirt, snow, or foreign substances on the lens may adversely affect the sensing performance of the sensor.

### **Warning message and warning light**



When the sensor cover is blocked with dirt, snow, or debris, FCA operation may temporarily stop. In this case, the warning message appears to warn the driver.

This is not a malfunction with FCA. To operate FCA again, remove the foreign substances.

FCA may not properly operate in an area (e.g. open terrain), where any substances are not detected after turning ON the engine.

### **⚠ WARNING**

FCA system may not activate without any warning messages according to driving condition, traffic on the road, weather, road condition, etc.

### **\* NOTICE**

- Do not install any accessories, such as license plate molding or sticker, on the sensor area. Nor arbitrarily replace the bumper. Those may adversely affect the sensing performance.
- Always keep the sensor/bumper area clean.
- Use only soft clothes to wash the vehicle. Also, do not spray highly-pressurized water on the sensor installed on the bumper.
- Be careful not to apply unnecessary force on the frontal sensor area. When the sensor moves out of the correct position due to external force, the system may not normally operate even without the warning light or message. In this case, have the vehicle inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
- Use only the genuine Kia sensor cover. Do not arbitrarily apply paint on the sensor cover.
- Do not tint the window or install stickers, accessories around the inside mirror where the camera is installed.
- Make sure the frontal camera installation point does not get wet.

## Driving your vehicle

- Do not impact or arbitrarily remove any front view camera/ front radar components.
- Do not place reflective objects (white paper or mirror etc.) on the crash pad.  
The system may activate unnecessarily due to reflect of the sunlight.
- Excessive audio volume may disturb the sound of the system warning alarm.
- For more cautions for the camera sensor, refer to "Lane Keeping Assist (LKA) (if equipped)" on page 6-73.

## System malfunction



- When FCA is not working properly, FCA warning light (🚗💥) will illuminate and the warning message will appear for a few seconds. After the message disappears, the master warning light (⚠️) will illuminate. In this case, have

## Forward Collision-Avoidance Assist (FCA) (Sensor fusion)

- the vehicle inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
- FCA warning message may appear along with the illumination of the ESC warning light.

### ⚠️ WARNING

- FCA is only a supplemental system for the driver's convenience. The driver should hold the responsibility to control the vehicle operation. Do not solely depend on FCA system. Rather, maintain a safe braking distance, and, if necessary, depress the brake pedal to lower the driving speed.
- In certain instances and under certain driving conditions, FCA system may activate unintentionally. This initial warning message appears on the LCD display with a warning chime. Also, in certain instances the front radar sensor or camera recognition system may not detect the vehicle, pedestrian or cyclist (if equipped) ahead. FCA system may not activate and the warning message will not be displayed.
- FCA may unnecessarily produce the warning message and the warning alarms. Also, due to the sensing limitation, FCA may not

produce the warning message and the warning alarm at all.

- When there is a malfunction with FCA, the braking control does not operate upon detecting a collision risk even with other braking systems normally operating.
- FCA operates only for the vehicles, pedestrians or cyclists in front, while driving forward. It does not operate for any animals or vehicles in the opposite direction.
- FCA does not recognize the vehicle, which horizontally drives across the crossroad, or the vehicle, which is parked in the horizontal direction.
- If the vehicle in front stops suddenly, you may have less control of the brake system. Therefore, always keep safe distance between your vehicle and the vehicle in front of you.
- FCA system may activate during braking and the vehicle may stop suddenly. And the load in the vehicle may endanger passengers. Therefore, always be mindful of the load volume in the vehicle.
- FCA system may not activate if the driver applies the brake pedal to avoid risk of collision.
- FCA system does not operate when the vehicle is in reverse. In these cases, you must maintain a safe braking distance, and if necessary, depress the brake pedal

to reduce the driving speed in order to maintain a safe distance.

- The regular braking function will operate normally even if there is a problem with FCA brake control system or other functions. In this case, the braking control will not operate in the risk of a collision.
  - FCA system may not activate according to driving condition, traffic on the road, weather, road condition, etc.
  - FCA system may not activate to all types of vehicles.
- 

### Limitation of the system

FCA is an assistant system for a driver in a certain risky driving condition and it does not take every responsibility for all risks from driving condition.

FCA monitors the driving situations through the radar and the camera sensor. Thus, for a situation out of the sensing range, FCA may not normally operate. The driver should pay great caution in the following situations. FCA operation may be limited.

### ***Recognizing vehicles***

The sensor may be limited when:

- The radar sensor or camera is blocked with a foreign object or debris.
- The camera lens is contaminated due to tinted, filmed or coated windshield, damaged glass, or stuck of foreign matter (sticker, bug, etc.) on the glass
  - Inclement weather such as heavy rain or snow obscures the field of view of the radar sensor or camera.
  - There is interference by electromagnetic waves.
- There is severe irregular reflection from the radar sensor.
- The camera/radar sensor recognition is limited.
- The vehicle in front is too small to be detected (for example a motorcycle etc.).
- The vehicle in front is an oversize vehicle or trailer that is too big to be detected by the camera recognition system (for example a tractor trailer, etc.)
- The camera's field of view is not well illuminated (either too dark or too much reflection or too much backlight that obscures the field of view)
- The vehicle in front does not have their rear lights or their rear lights does not turned ON or their rear lights are located unusually.
- The outside brightness changes suddenly, for example when entering or exiting a tunnel
- When light coming from a street light or an oncoming vehicle is reflected on a wet road surface such as a puddle in the road
  - The field of view in front is obstructed by sun glare.
- The windshield glass is fogged up; a clear view of the road is obstructed.
- The vehicle in front is driving erratically.
- The vehicle is on unpaved or uneven rough surfaces, or road with sudden gradient changes.
- The vehicle is driven near areas containing metal substances as a construction zone, railroad, etc.
- The vehicle drives inside a building, such as a basement parking lot.
- The camera does not recognize the entire vehicle in front.
- The camera is damaged.
- The brightness outside is too low such as when the headlamps are not on at night or the vehicle is going through a tunnel.
- The shadow is on the road by a median strip, trees, etc.
- The vehicle drives through a toll-gate.
- The windshield glass is fogged up; a clear view of the road is obstructed.

- The rear part of the vehicle in front is not normally visible. (the vehicle turns in other direction or the vehicle is overturned.)
- The adverse road conditions cause excessive vehicle vibrations while driving
- The sensor recognition changes suddenly when passing over a speed bump.
- The vehicle in front is moving vertically to the driving direction.
- The vehicle in front is stopped vertically.
- The vehicle in front is driving towards your vehicle or reversing.
- You are on a roundabout and the vehicle in front circles.



ODEEV069238NR



ODEEV069239NR

## Driving on a curve



ODEEV069237NR

The performance of FCA system may be limited when driving on a curved road.

On curved roads, the other vehicle on the same lane is not recognized and FCA system's performance may be degraded. This may result in unnecessary alarm or braking or no alarm or braking when necessary. Also, in certain instances the front radar sensor or front view camera recognition system may not detect the vehicle traveling on a curved road.

In these cases, the driver must maintain a safe braking distance, and if necessary, depress the brake

## Driving your vehicle

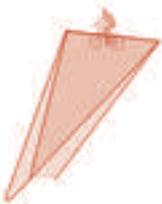
pedal to reduce your driving speed in order to maintain a safe distance. FCA system may recognize a vehicle in the next lane when driving on a curved road.



ODEEV069240NR



ODEEV069241NR



ODEEV069242NR

## Forward Collision-Avoidance Assist (FCA) (Sensor fusion)

In this case, the system may unnecessarily alarm the driver and apply the brake.

Always pay attention to road and driving conditions, while driving. If necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance. Also, when necessary depress the accelerator pedal to prevent the system from unnecessarily decelerating your vehicle.

Check to be sure that the road conditions permit safe operation of FCA.

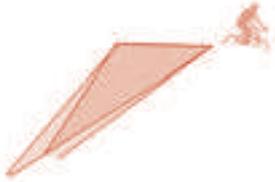
## Driving on a slope



ODEEV069243NR



ODEEV069244NR



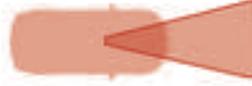
ODEEV069245NR

The performance of FCA decreases while driving upward or downward on a slope, not recognizing the vehicle in front in the same lane. It may unnecessarily produce the warning message and the warning alarm, or it may not produce the warning message and the warning alarm at all.

When FCA suddenly recognizes the vehicle in front while passing over a slope, you may experience sharp deceleration.

Always keep your eyes forward while driving upward or downward on a slope, and, if necessary, depress the brake pedal to reduce your driving speed in order to maintain distance.

## Changing lanes



OSP2059178

When a vehicle changes lanes in front of you, FCA system may not immediately detect the vehicle, especially if the vehicle changes lanes abruptly. In this case, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

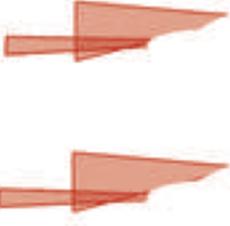


OSP2059016

When driving in stop-and-go traffic, and a stopped vehicle in front of you merges out of the lane, FCA system may not immediately detect the new vehicle that is now in front of you. In this case, you must maintain a safe braking distance, and if nec-

essary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

### Recognizing the vehicle



OCDP059210

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. FCA system may not be able to detect the cargo extending from the vehicle. In these instances, you must maintain a safe braking distance from the rearmost object, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain distance.

### Situation in which the system may not detect pedestrian and cyclist properly.

The sensor may be limited when:

- The pedestrians or cyclists are not fully detected by the front view camera recognition system, for example, if the pedestrian is leaning over or is not fully walking upright.
- The pedestrians or cyclists are moving very quickly or appears abruptly in the front view camera detection area.
- The pedestrians or cyclists are wearing clothing that easily blends into the background, making it difficult to be detected by the front view camera recognition system.
- The outside lighting is too bright (e.g. when driving in bright sunlight or in sun glare) or too dark (e.g. when driving on a dark rural road at night).
- It is difficult to detect and distinguish the pedestrians or cyclists from other objects in the surroundings, for example, when there is a group of pedestrians or cyclists or a large crowd.
- There is an item similar to a person's body structure.
- The pedestrians or cyclists are small.
- The pedestrian has impaired mobility.

- The sensor recognition is limited
- In case of radar or camera sensor recognition is in a marginal state.
- In case of a large number of pedestrians or cyclists are gathered.
- The radar sensor or front view camera is blocked with a foreign object or debris.
- The camera lens is contaminated due to tinted, filmed or coated windshield, damaged glass, or stuck of foreign matter (sticker, bug, etc.) on the glass.
- The brightness outside is too low such as when the headlamps are not on at night or the vehicle is going through a tunnel.
- Inclement weather such as heavy rain or snow obscures the field of view of the radar sensor or front view camera.
- When light coming from a street light or an oncoming vehicle is reflected on a wet road surface such as a puddle in the road.
- The field of view in front is obstructed by sun glare.
- The windshield glass is fogged up; a clear view of the road is obstructed.
- The adverse road conditions cause excessive vehicle vibrations while driving.
- The sensor recognition changes suddenly when passing over a speed bump.
- You are on a roundabout.
- When the pedestrian or cyclist suddenly interrupts in front of the vehicle.
- When the cyclist in front is riding intersected with the driving direction.
- When there is any other electromagnetic interference.
- When the construction area, rail or other metal object is near the cyclist.
- If the bicycle material is not reflected well on the radar.

**⚠ WARNING**

- Do not use Forward Collision-Avoidance Assist system when towing a vehicle. Application of FCA system while towing may adversely affect the safety of your vehicle or the towing vehicle.
- Use extreme caution when the vehicle in front of you has cargo that extends rearward from the cab, or when the vehicle in front of you has higher ground clearance.
- FCA system is designed to detect and monitor the vehicle ahead or detect a pedestrian or cyclist (if equipped) in the roadway through radar signals and camera recognition. It is not designed to detect bicycles, motorcycles, or smaller wheeled objects such as luggage bags, shopping carts, or strollers.

## Driving your vehicle

- Never try to test the operation of FCA system. Doing so may cause severe injury or death.
- If the front bumper, front glass, front radar or front view camera have been replaced or repaired, we recommend that you have your vehicle inspected by an authorized Kia dealer/service partner.

### \* NOTICE

In some instances, FCA system may be canceled when subjected to electromagnetic interference.

## Lane-Change Oncoming function

Lane-Change Oncoming function detects the oncoming vehicle with a front view camera at the front windshield. And it assists the driver's steering to help avoiding the collision to oncoming vehicle and keeping the vehicle in the lanes, when the vehicle drives over the centerline.

- This function is only a supplemental system. So, it does not replace the need for extreme care and attention of the driver. The sensing range of oncoming vehicle is limited. Pay attention to the road conditions at all times.

## Forward Collision-Avoidance Assist (FCA) (Sensor fusion)

- Always drive cautiously to prevent unexpected and sudden situations from occurring. The function does not steer the vehicle completely and is not a collision avoidance system.

### ***Warning message and function control***



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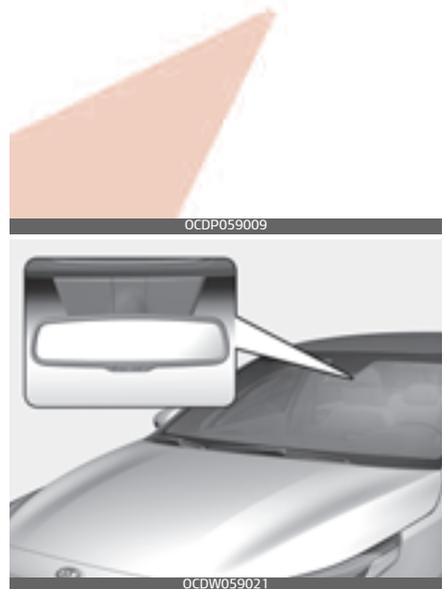
- After FCA is on, vehicle speed is over 60 km/h and if the vehicle crosses the centerline with an oncoming vehicle approaching, this warning message appears on the LCD display with audible warning.
- Additionally, steering assist is provided in order to return the car in between the lanes.

**⚠ WARNING**

- The steering control can not completely avoid the collision to oncoming vehicle. Driver is responsible for being aware of surroundings and steering the vehicle in a safely manner.
- The function operates within certain conditions, such as the distance and speed from the oncoming vehicle, the driver's vehicle speed, etc.  
The function can be canceled or not work properly according to road condition and surroundings. Always be cautious when driving.
- Never drive deliberately and dangerously to activate the system.

**Lane Keeping Assist (LKA) (if equipped)**

Lane Keeping Assist system detects the lane markers and road edge on the road with a front view camera at the front windshield, and assists the driver's steering to help keep the vehicle in the lanes.



When the system detects the vehicle straying from its lane or road, it alerts the driver with a visual and audible warning, while applying a slight counter-steering torque, trying to prevent the vehicle from moving out of its lane or road.

## WARNING

- Driver is responsible for being aware of surroundings and steering the vehicle for safe driving practices.
- Do not steer the steering wheel suddenly when the steering wheel is being assisted by the system.
- LKA system helps prevent the driver from moving out of the lane or road unintentionally by assisting the driver's steering. However, the system is just a convenience function and the steering wheel is not always controlled. While driving, the driver should pay attention to the steering wheel.
- The operation of LKA system can be canceled or not work properly according to road condition and surroundings. Always be cautious when driving.
- Do not disassemble a front view camera temporarily for tinted window or attaching any types of coatings and accessories. If you disassemble the camera and assemble it again, take your vehicle to an authorized Kia dealer and have the system checked to need a calibration.
- When you replace the windshield glass, front view camera or related parts of the steering, take your vehicle to an authorized Kia dealer and have the system checked to need a calibration.
- The system detects lane markers and road edge and controls the steering wheel by a front view camera, therefore, if the lane markers are hard to detect, the system may not work properly. Always be cautious when using the system.
- When the lane markers and road edge are hard to detect, please refer to "DRIVER'S ATTENTION" on page 6-78.
- Do not remove or damage the related parts of LKA system.
- Do not place objects on the crash pad that reflects light such as mirrors, white paper, etc. it may cause malfunction of LKA system if the sunlight is reflected.
- You may not hear warning sound of LKA system because of the excessive audio sound.
- While other beeps such as the seat belt warning sound are in operation and override the LKA alarming system, LKA beeps may not occur.
- If the vehicle speed is high, steering torque for assistance will not be enough to keep your vehicle within the lane. If so, the vehicle may move out of its lane. Obey speed limit when using LKA system.

- If you attach objects to the steering wheel, the system may not assist steering.
- If you attach objects to the steering wheel, hands off alarm may not work properly.

## LKA system operation



OCDP059022

To activate/deactivate LKA:

- With the ENGINE START/STOP button in the ON position, LKA turns on automatically. The indicator (  ) in the cluster display will initially illuminate white. If you press the LKA button located on the instrument panel on the lower left hand side of the driver, LKA will be turned off and the indicator on the cluster display will go off.

The color of indicator will change depend on the condition of LKA.

- **White:** Sensor does not detect the lane marker or vehicle speed is less than 60 km/h (37 mph).

- **Green:** Sensor detects the lane marker or road edge and system is able to control the steering.

### LKA system activation

- To see LKA system screen on the LCD display in the cluster, Tab to Driving Assist mode (  ).
- For further details, refer to "User settings mode (if equipped)" on page 5-70.
- After LKA system is activated, if both lane markers or road edge are detected, vehicle speed is over 60 km/h (37 mph) and all the activation conditions are satisfied, a green steering wheel indicator will illuminate and the steering wheel will be controlled.

### WARNING

Lane Keeping Assist System is a system to help prevent the driver from leaving the lane or road edge. However, the driver should not solely rely on the system but always check the road conditions when driving.

Lane undetected



Lane detected

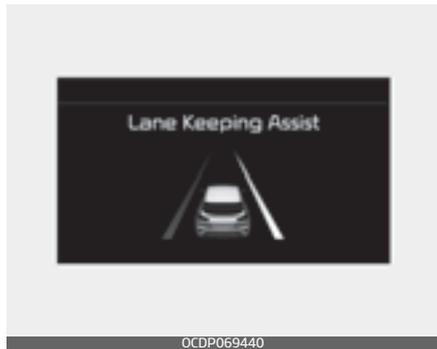


**Warning**

Left lane



Right lane



If the speed of the vehicle is over 60 km/h (37 mph) and the system detects lane markers, the color changes from gray to white.

If LKA can assist steering, a green steering wheel indicator will illuminate.

If the vehicle leaves a lane or road edge, the lane marker or road edge you cross will blink on the LCD display and the warning sound is provided.

\* Haptic specification

If the vehicle leaves a lane, the lane marker you cross will blink on the LCD display with steering wheel vibration warning.



If the driver takes hands off the steering wheel for several seconds while LKA is activated, the system will warn the driver.

### ⚠ WARNING

- The warning message may appear late according to road conditions. Therefore, always have your hands on the steering wheel while driving.
- If you hold the steering wheel lightly, the system would generate hands off warning because LKA system can treat the situation as you do not grab the wheel.

### ⚠ WARNING

- The driver is responsible for accurate steering.
- Even though the steering is assisted by the system, the driver may control the steering wheel.
- Turn off the system and drive the vehicle in below situations.

- In bad weather
- In bad road condition
- When the steering wheel needs to be controlled by the driver frequently.
- When towing a vehicle or trailer.
- The steering wheel may feel heavier when the steering wheel is assisted by the system than when it is not.

### \* NOTICE

- Even though the steering is assisted by the system, the driver may control the steering.
- The steering wheel may feel heavier when the steering wheel is assisted by the system than when it is not.

### *The system will be canceled when:*

- You change lanes with the turn signal.
  - Using the turn signal to change lanes.
  - If you change lanes without the turn signal on, the steering wheel might be controlled.
- LKA system can transit to steering assist mode when the car is near to middle of the lane after system on or the lane was changed. LKA system can not assist steering if the vehicle follows lane marker too close con-

tinuously before transition to steering assist mode.

- The control of ESC (Electronic Stability Control) or VSM (Vehicle Stability Management) is activated.
- The steering will not be assisted when your drive fast on a sharp curve.
- The steering will not be assisted when vehicle speed is below 60 km/h (37 mph) and over 200 km/h (125 mph).
- The steering will not be assisted when you change lanes or road edge fast.
- The steering will not be assisted when you brake suddenly.
- The steering will not be assisted when the lane is very wide or narrow.
- The steering will not be assisted when only one side lane marker is detected.
- There are more than two lane markers such as a construction area.
- Radius of a curve is too small.
- When you turn steering wheel suddenly, LKA system will be disabled temporarily.
- Driving on a steep slope or hill.

### ***DRIVER'S ATTENTION***

The driver must be cautious in the below situations may not work properly when recognition of the lane marker is poor or limited:

#### ***When lane and road condition is poor***

- It is difficult to distinguish the lane marker or road edge from road when the lane marker or road edge is covered with dust or sand.
- It is difficult to distinguish the color of the lane marker from road.
- There is something looks like a lane marker
- The lane marker or road edge is indistinct or damaged.
- The number of lanes increases/ decreases or the lane lines are crossing (Driving through a toll plaza/toll gate, merged/divided lane).
- There are more than two lane markers.
- The lane marker is very thick or thin.
- The lane marker or road edge is not visible due to snow, rain, stain, a puddle or other factors.
- A shadow is on the lane marker or road edge because of a median strip, guardrail, noise barriers and others.

- When the lane markers are complicated or a structure substitutes for the lines such as a construction area.
- There are crosswalk signs or other symbols on the road.
- The lane suddenly disappears such as at the intersection.
- The lane marker or road edge in a tunnel is covered with dirt or oil and etc.
- The lane is very wide or narrow.

### ***When external condition is intervened***

- The brightness of outside changes suddenly when entering/exiting a tunnel or passing under a bridge.
- The headlamps are not on at night or in a tunnel, or light level is low.
- There is a boundary structure in the roadway.
- The light of street, sun, oncoming vehicle and so on reflects from the water on the road.
- When light shines brightly in the reverse direction you drive.
- Road surface is not even.
- The distance from the vehicle ahead is very short or the vehicle ahead drives hiding the lane line or road edge.
- You drive on a steep grade or a sharp curve.
- The vehicle vibrates heavily.

- The temperature near inside mirror is very high due to direct sun light and etc.

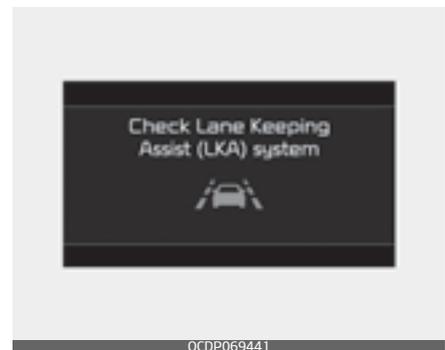
### ***When front visibility is poor***

- The lens or windshield is covered by strange materials.
- The sensor cannot detect the lane because of fog, heavy rain or snow.
- The windshield is fogged by humid air in the vehicle.
- Putting something on the crash pad and etc.

## **⚠ WARNING**

Lane Keeping Assist system is a system to help prevent the driver from leaving the lane. However, the driver should not solely rely on the system but always take the necessary actions for safe driving practices.

### **LKA system malfunction**



- If there is a problem with the system a message will appear. If the problem continues LKA system fail indicator will illuminate.

### ***LKA system fail indicator***

LKA system fail indicator (yellow) will illuminate with an audible warning if LKA system is not working properly. In this case, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### **When there is a problem with the system do one of the following:**

- Turn the system on after turning the engine off and on again.
- Check if the ENGINE START/STOP button is in the ON position.
- Check if the system is affected by the weather. (ex: fog, heavy rain, etc.)
- Check if there is foreign matter on the camera lens

If the problem is not solved, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner

### **LKA system function change**

The driver can change LKA to Lane Departure Warning (LDW) from the User Settings Mode on the LCD display.

### ***Lane Keeping Assist***

The LKA mode guides the driver to keep the vehicle within the lanes. It rarely controls the steering wheel, when the vehicle drives well inside the lanes. However, it starts to control the steering wheel, when the vehicle is about to deviate from the lanes.

### ***Lane Departure Warning***

LDW alerts the driver with a visual and acoustic warning when the system detects the vehicle leaving the lane. In this mode, the steering wheel will not be controlled. When the vehicle's front wheel contacts the inside edge of lane line, LKA issues the lane departure warning.

### ***OFF***

Lane Keeping Assist/Lane Departure Warning is OFF.

## Blind-Spot Collision Warning (BCW) (if equipped)

Blind-Spot Collision Warning system uses a radar sensor to alert the driver while driving.



OCDP059213

It senses the rear side territory of the vehicle and provides information to the driver.

### 1. Blind Spot Area

Warning range is dependent on your vehicle speed. However, if the speed of your vehicle is faster than other nearby vehicles, the warning is not operated.

### 2. Closing at high speed

When vehicles are approaching to your vehicle at high speed, the warning is operated. The distance at which the warning occurs may differ depending on the relative speed with the other vehicle.

## **⚠ WARNING**

- Always check the road condition while driving for unexpected situations even though Blind-Spot

Collision Warning system is operating.

- Blind-Spot Collision Warning system is a supplemental system to assist you. Do not entirely rely on the system. Always pay attention, while driving, for your safety.
- Blind-Spot Collision Warning system is not a substitute for proper and safe driving. Always drive safely and use caution when changing lanes or backing the vehicle up. Blind-Spot Collision Warning system may not detect every object alongside the vehicle.

## Operating conditions



OCDP059023

- The indicator on the switch will illuminate when Blind-Spot Collision Warning system switch is pressed with the ENGINE START/STOP button ON. If the vehicle speed exceeds 30 km/h (20 mph), the system will activate.

If you press the switch again, the switch indicator and system will be turned off.

If the ENGINE START/STOP button is turned OFF and ON the system returns to the previous state.

When the system is not used turn the system off by pressing the switch.

When the system is turned on the warning light will illuminate for 3 seconds on the outside rear view mirror.

- The driver can activate the system by placing the ENGINE START/STOP button to the ON position and by selecting "User Settings → Driver Assist → Blind-spot Safety"
  - BCW turns on and gets ready to be activated when 'Warning only' is selected. Then, if a vehicle approaches the driver's blind spot area a warning sounds.
  - The system is deactivated and the indicator on Blind-Spot Collision Warning system button is extinguished when 'Off' is selected.
- If you press Blind-Spot Collision Warning system button while 'Warning only' is selected the indicator on the button extinguishes and the system deactivates.
- If you press Blind-Spot Collision Warning system button while the system is canceled the indicator

on the button illuminates and the system activates. In this case, the system returns to the state before the engine turned off.

### Warning type

The system will activate when:

1. The system is on.
2. Vehicle speed is above 30 km/h (20 mph)
3. Other vehicles are detected in the rear side.

1st stage



OCDP059223

If a vehicle is detected within the boundary of the system, a warning light will illuminate on the outside rear view mirror.

If the detected vehicle is not in detection range, the warning will be turned off.

## 2nd stage



The second stage alarm will activate when:

1. The first stage alert is on
2. The turn signal is on to change a lane

When the second stage alert is activated, a warning light will be blinking on the outside rear view mirror and an alarm will sound.

If you move the turn signal switch to origin position, the second stage alert will be deactivated.

### ⚠ CAUTION

The alarm function helps alert the driver. Deactivate this function only when it is necessary.

### ⚠ WARNING

- The warning light on the outside rear view mirror will illuminate whenever a vehicle is detected at the rear side by the system. To avoid accidents, do not focus only on the warning light and neglect to see the surrounding of the vehicle.
- Drive safely even though the vehicle is equipped with a Blind-Spot Collision Warning system. Do not solely rely on the system but check your surrounding before changing lanes or backing the vehicle up.
- The system may not alert the driver in some conditions so always check your surroundings while driving.

### ⚠ CAUTION

- The driver should always use extreme caution while operating the vehicle, whether or not the warning light on the outside rear view mirror illuminates or there is a warning alarm.
- Playing the vehicle audio system at high volume may offset the

Blind-Spot Collision Warning system warning sounds.

- The warning of Blind-Spot Collision Warning system may not sound while other system's warning sounds.

### Detecting sensor

The sensors are located inside the rear bumper.

CUV



OCDP059212

Wagon



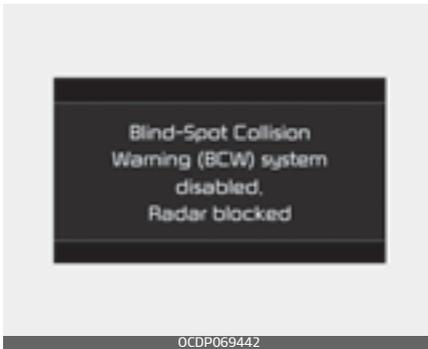
OCDP059211

Always keep the rear bumper clean for the system to work properly.

### ⚠ CAUTION

- The system may not work properly when the bumper has been damaged, or if the rear bumper has been replaced or repaired.
- The sensing range differs somewhat according to the width of the road. When the road is narrow, the system may detect other vehicles in the next lane.
- The system may turn off due to strong electromagnetic waves.
- Always keep the sensors clean.
- NEVER arbitrarily disassemble the sensor component nor apply any impact on the sensor component.
- Be careful not to apply unnecessary force on the radar sensor or sensor cover. If the sensor is forcibly moved out of proper alignment, the system may not operate correctly. In this case, a warning message may not be displayed. Take your vehicle to a professional workshop and have the system checked. Kia recommends to visit an authorized Kia dealer/service partner.
- Do not apply foreign objects such as a bumper sticker or a bumper guard near the radar sensor or apply paint to the sensor area. Doing so may adversely affect the performance of the sensor.

## Warning message



The message will appear to notify the driver if there are foreign substances on the surface or inside the rear bumper or it is hot near the rear bumper. The light on the switch and the system will be turned off automatically.

Remove the foreign substance on the rear bumper.

After the foreign substance is removed, if you drive for approximately 10 minutes, the system will work normally.

If the system does not work normally even though the foreign substance, trailer or carrier, or other equipment is removed, take your vehicle to a professional workshop and have the system checked. Kia recommends to visit an authorized Kia dealer/service partner.

It is possible to get the message with no foreign substance on the rear bumper, for example, when

driving in sparse rural or open area, such as desert, where there is insufficient data for operation.

This message may also activate during heavy rain or due to road spray.

In this case, the vehicle does not need service.

When the cargo area or other equipment is being used, turn all functions of the system [OFF].



If the system does not work properly, a warning message will appear and the light on the switch will turn off. The system will turn off automatically.

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

### Limitations of the system

The driver must be cautious in the below situations, because the system may not detect other vehicles or objects in certain circumstances.

- When a trailer or carrier is installed.
- The vehicle drives in inclement weather such as heavy rain or snow.
- The sensor is polluted with rain, snow, mud, etc.
- The rear bumper where the sensor is located is covered with a foreign object such as a bumper sticker, a bumper guard, a bike rack, etc.
- The rear bumper is damaged, or the sensor is out of the original default position.
- The vehicle height gets lower or higher due to heavy loading in a tailgate, abnormal tire pressure, etc.
- When the temperature of the rear bumper is high.
- When the sensors are blocked by other vehicles, walls or parking-lot pillars.
- The vehicle drives on a curved road.
- The vehicle drives through a toll-gate.
- The road pavement (or the peripheral ground) abnormally contains metallic components (i.e. possibly due to subway construction).
- There is a fixed object near the vehicle, such as a guardrail.
- While going down or up a steep road where the height of the lane is different.
- Driving on a narrow road where trees or grass or overgrown.
- Driving in rural areas where the sensor does not detect another vehicle or structure for an extended period of time.
- Driving on a wet road.
- Driving on a road where the guardrail or wall is in double structure.
- A big vehicle is near such as a bus or truck.
- When the other vehicle approaches very close.
- When the other vehicle passes at a very fast speed.
- While changing lanes.
- If the vehicle has started at the same time as the vehicle next to you and has accelerated.
- When the vehicle in the next lane moves two lanes away from you OR when the vehicle two lanes away moves to the next lane from you.
- A motorcycle or bicycle is near.
- A flat trailer is near.

- If there are small objects in the detecting area such as a shopping cart or a baby stroller.
- If there is a low height vehicle such as a sports car.

***Driving on a curve***



OCDP059114

BCW system may not operate properly when driving on a curved road. In certain instances the system may not detect the vehicle in the next lane.

Always pay attention to road and driving conditions, while driving.



OCDW059113

BCW system may not operate properly when driving on a curved road.

In certain instances the system may recognize a vehicle in the same lane.

Always pay attention to road and driving conditions, while driving.

***Driving where the road is merging/dividing***

BCW system may not operate properly when driving where the road is merging/dividing. In certain instances the system may not detect the vehicle in the next lane.

Always pay attention to road and driving conditions, while driving.

***Driving on a slope***



OCDP059112

BCW system may not operate properly when driving on a slope. In certain instances the system may not detect the vehicle in the next lane.

Also, in certain instances the system may wrongly recognize the ground or structures.

Always pay attention to road and driving conditions, while driving.

***Driving where the heights of the lanes are different***



OCDP059111

BCW system may not operate properly when driving where the heights of the lanes are different.

In certain instances, the system may not detect the vehicle on a road with different lane heights (underpass joining section, grade separated intersections, etc.).

Always pay attention to road and driving conditions, while driving.

***Driving where there is a structure beside the road***



OCDP059110

[A]: noise barrier, [B]: guardrail

BCW system may not operate properly when driving where there is structure beside the road.

In certain instances, the system may wrongly recognize the structures (noise barriers, guardrail, double guardrail, median strip, bollard, street light, road sign, tunnel wall, etc.) beside the road.

Always pay attention to road and driving conditions, while driving.

### Manual Speed Limit Assist (MSLA)

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, the warning system operates (set speed limit will blink and chime will sound) until the vehicle speed returns within the speed limit.

#### \* NOTICE

While Manual Speed Limit Assist is in operation, the cruise control system cannot be activated.

#### To set speed limit:

1. Press the CRUISE/⌚MODE button twice on the steering wheel, to turn the system on.



OCDMH059158

The speed limit indicator light will illuminate.



OCDP059036

2. Move the lever down (to SET-).



OCDMH059157

3. Move the lever up (to RES+) or down (to SET-), and release it at the desired speed. Move the lever up (to RES+) or down (to SET-) and hold it. The speed will increase or decrease by 10 km/h (5 mph).



OCDMH059159

Move the lever up (to RES+) or down (SET-) and release it immediately. The speed will increase or decrease by 1 km/h. The set speed limit will display on the instrument cluster.

The set speed limit will be displayed.



OCDP069420

To drive over the preset speed limit you must depress hard on the accelerator pedal (more than

approximately 80%) until the kick down mechanism works with a clicking noise. Then the set speed limit will blink and chime will sound until you return the vehicle speed within the speed limit.

**\* NOTICE**

- Depressing the accelerator pedal less than approximately 50%, the vehicle will not speed over the preset speed limit but maintain the vehicle speed within the speed limit.
- A clicking noise heard from the kick down mechanism by depressing the accelerator pedal fully is a normal condition.

**To turn off the Manual Speed Limit Assist, do one of the following:**



OCDMH059158

- Press the cruise switch.
- Turn the ignition off.

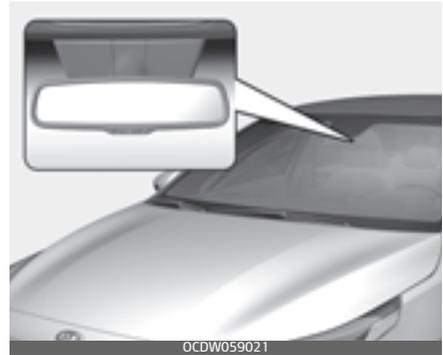
If you press the cancel CANCEL/O switch once, the set speed limit will cancel, but it will not turn the system off. If you wish to reset the speed limit, move the lever up (to RES+) or down (to SET-) to the desired speed.

### ⚠ CAUTION

The “---” indicator will blink if there is a problem with Manual Speed Limit Assist system.

If this occurs, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

## Intelligent Speed Limit Warning (ISLW) (if equipped)



ISLW displays the speed limit information and overtaking restriction of current road and detail conditional through the instrument cluster and the navigation.

ISLW detects the traffic signs through a front view camera, which is attached on the upper part of the inner front windshield.

ISLW also utilizes the navigation and vehicle information to display the speed limit information.

### ⚠ WARNING

- Intelligent Speed Limit Warning (ISLW) is only a supplemental system and is not always able to correctly display speed limits and overtaking restrictions.
- The driver still holds the responsibility not to exceed the designated speed limit.

- Do not install any accessories and stickers. Do not tint the front windshield, especially near the rear view mirror.
- ISLW detects the traffic signs through the camera to display the speed limit information. Therefore, ISLW may not properly operate, when it is hard to detect the traffic signs. For further details, please refer to "Driver's attention" on page 6–96.
- Pay extreme caution to keep the camera sensor out of water.
- Do not arbitrarily disassemble the camera assembly, nor apply any impact on the camera assembly.
- Do not locate any reflective objects (i.e. white paper, mirror) over the dashboard. Any light reflection may cause a malfunction of ISLW.
- The system is not available in all countries.

### \* NOTICE

In the following case, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner:

- The windshield glass is replaced.
- The the front view camera or related parts are repaired or removed.

### Intelligent Speed Limit Warning activation / deactivation

- The driver can activate ISLW by selecting 'User Settings → Driver Assistance → Intelligent Speed Limit Warning.'
- When ISLW is activated, the symbols appear on the instrument cluster to display the speed limit information and overtaking restriction, when your vehicle passes by the relevant traffic signs.
- When ISLW is activated in the navigation setting, the above information and the restriction are also displayed on the navigation.
- ISLW displays the previous speed limit information, right after the ENGINE START/STOP button is placed to the ON position.
- You may find different speed limit information for the same road. The information is displayed depending on the driving situations. Because, traffic signs with additional sign(e.g. rainy, arrow, etc.) are also detected and compared with vehicle internal data(e.g. wiper operation, turn signal, etc.)

## Operation

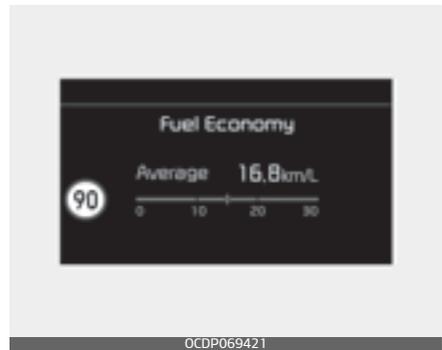
- If a traffic sign that is relevant to your vehicle is passed, the system displays the information of the speed limits and no passing restrictions to the driver.
- When the driver turn on the ignition, the system displays stored information of the speed limit before turn off the ignition.
- Sometimes different speed limits are displayed for the same road. The information displayed depending on the situation. Because, traffic signs with additional sign (e.g rainy, arrow...) are also detected and compared with vehicle interior data(e.g wiper operation, turn signal...).
- The system can update the speed limit information without visible speed limit signs in the following situations.
  - When you change your driving direction with right or left or U turning.
  - When vehicle changes roads. (e.g. from highway to country road...)
  - When you enter or exit into town or village.

## \* NOTICE

The speed limit information on the instrument cluster may differ from the one on the navigation. In this case, check the speed unit setting on the navigation.

## Display

Main cluster display



- The main cluster displays only the no passing sign or speed limit sign.

ISLW cluster display



- The ISLW cluster displays not only the no passing and speed limit sign, but also specific speed limits by certain conditions.

No reliable speed limit information



- The symbol is displayed on the instrument cluster and the navigation, when ISLW does not have any reliable speed limit information.

No passing information



- The symbol is displayed on the instrument cluster and the navigation, when ISLW detects a no overtaking sign.

End of a speed limit



- After passing "end of speed limitation" sign ISLW provides information from navigation to inform driver of perhaps afterwards applicable speed limit.

Unlimited speed (only in Germany)



- The symbol, 'end of limitation', is displayed on the instrument cluster for the roads in Germany, which have no speed limit applicable. It is displayed, until the vehicle passes by another speed limit sign.

***Warning message***

The warning message appears, when the camera lens is blocked by some objects. ISLW does not operate, until the objects are removed.

Check the windshield around the camera view area.

If the system does not work normally even though camera's field of view is cleared, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

***Check ISLW***

The warning message appears for a few seconds, when ISLW does not properly operate. After the message disappears, the master warning light will illuminate.

In this case, have the system checked by a professional workshop.

Kia recommends to visit an authorized Kia dealer/service partner.

ISLW may not operate or may not provide correct information in the following situations.

**When the traffic sign condition is poor**

- The traffic sign is located on a sharp curve.
- The traffic sign is improperly positioned (i.e. being turned over,

blocked by an object, and damaged).

- Another vehicle blocks the traffic sign.
- The LED light of the traffic sign is broken.
- There is bright light around the traffic sign.
- If road signs do not correspond to the standard and etc.

**When external condition is intervened**

- Your vehicle drives right after another vehicle.
- The bus or truck, on which the speed sticker is attached, passes by your vehicle.
- Your vehicle drives in an area, which is uncovered by the navigation system.
- There is a malfunction with the navigation.
- Your navigation has not been updated.
- Your navigation is being updated.
- There is something wrong with GPS.
- If the top speed limitations stored in the navigation system are incorrect.
- As a result of incorrect detection by the camera.
- When calibrating the camera immediately after vehicle delivery and etc.

**When front visibility is poor**

- The weather is bad, such as raining, snowing, and fogging.
- There is dirt, ice or frost on the front windshield, where the camera is installed.
- The camera lens is blocked by an object, such as sticker, paper, or fallen leaf and etc.

**Driver's attention**

The driver must be cautious in the below situations for the system may not assist the driver and may not work properly.

- Do not disassemble camera temporarily for tinted window or attaching any types of coatings and accessories. If you disassemble a camera and assemble it again, have the system checked to need a calibration by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
- Do not locate any reflective objects (i.e. white paper, mirror) over the dashboard. Any light reflection may cause a malfunction of ISLW.
- Pay extreme caution to keep the camera sensor out of water.
- Do not arbitrarily disassemble the camera assembly, nor apply any impact on the camera assembly.

- ISLW is only to assist the driver. The driver should pay great caution to the vehicle operation.
- The driver always holds the responsibility of safe driving by following the applicable road traffic rule(s) and regulation(s).
- For specific speed limit signs by certain conditions, the system only detect certain cases like the speed limit sign of a trailer or in snow or rain. Only words signs are not the objects detected by ISLW.
- The specific speed limit signs by certain conditions are not displayed properly due to lack of accuracy of the navigation information.

## Driver Attention Warning (DAW) (if equipped)

Driver Attention Warning, system is to warn the driver with any hazardous driving situations upon detecting the driver's fatigue level or inattentive driving practices.

### System setting and activation

#### System setting

- Driver Attention Warning system is set to be in the OFF position, when your vehicle is first delivered to you from the factory.
- To turn ON Driver Attention Warning system, turn on the engine, and then select 'User Settings → Driver Assistance → Driver Attention Warning → High Sensitivity/Normal Sensitivity/Off' on the LCD display.
- The driver can select Driver Attention Warning system mode.
  - High sensitivity: Driver Attention Warning system alerts the driver of his/her fatigue level or inattentive driving practices faster than Normal mode.
  - Normal sensitivity: Driver Attention Warning system alerts the driver of his/her fatigue level or inattentive driving practices.
  - Off: Driver Attention Warning system is deactivated.
- The set-up of Driver Attention Warning system will be maintained, as selected, when the engine is re-started.

#### Display of the driver's attention level



- The driver can monitor their driving conditions on the LCD display.
  - Select 'Driving Assist Mode' and then 'Driver Attention Warning' on the LCD display. (For more information, refer to "LCD windows (if equipped)" on page 5-64.)
- The driver's attention level is displayed on the scale of 1 to 5. The lower the number is, the more inattentive the driver is.
- The number decreases when the driver does not take a break for a certain period of time.
- The number increases when the driver attentively drives for a certain period of time.

- When the driver turns on the system while driving, it displays 'Last Break time' and level reflected that.

### Take a break



- The "Consider taking a break" message appears on the LCD display and a warning sounds in order to suggest the driver to take a break, when the driver's attention level is below 1.
- Driver Attention Warning system does not suggest the driver to take a break, when the total driving time is shorter than 10 minutes.

### Resetting the system



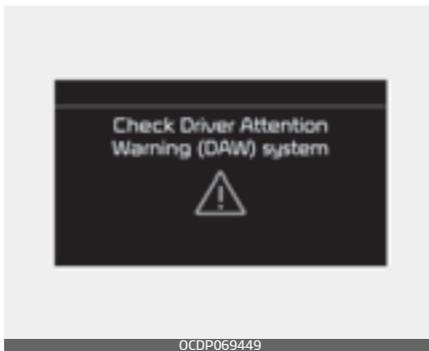
- The last break time is set to 00:00 and the driver's attention level is set to 5 (very attentive) when the driver resets the Driver Attention Warning system.
- The driver attention warning system resets in the following situations.
  - The engine is turned OFF.
  - The driver unfastens the seat belt and then opens the driver's door.
  - Stop lasting more than 10 minutes.
- The driver attention warning system operates again, when the driver restarts driving.

## System disabled

Driver Attention Warning system enters the ready status and displays the 'Disabled' screen in the following situations.

- The camera sensor keeps failing to detect the lanes.
- Driving speed remains under 60 km/h or over 180 km/h.

## System malfunction



When the "Check System" warning message appears, the system is not working properly. In this case, we recommend you to have the vehicle inspected by an authorized Kia dealer.

## ⚠ WARNING

- Driver Attention Warning system is not a substitute for safe driving practices, but a convenience function only. It is the responsibility of the driver to always drive cautiously to prevent unexpected and sudden situations from occurring. Pay attention to the road conditions at all times.
- It may suggest a break according to the driver's driving pattern or habits even if the driver doesn't feel fatigued.
- The driver, who feels fatigued, should take a break, even though there is no break suggestion by Driver Attention Warning system.

## \* NOTICE

Driver Attention Warning system utilizes the camera sensor on the front windshield for its operation. To keep the camera sensor in the best condition, you should observe the followings:

- Do not disassemble camera temporarily for tinted window or attaching any types of coatings and accessories. If you disassemble a camera and assemble it again, take your vehicle to an authorized Kia dealer and have the system checked to need a calibration.

- Do not locate any reflective objects (i.e. white paper, mirror) over the dashboard. Any light reflection may cause a malfunction of Driver Attention Warning system.
  - Pay extreme caution to keep the camera sensor out of water.
  - Do not arbitrarily disassemble the camera assembly, nor apply any impact on the camera assembly.
  - Playing the vehicle audio system at high volume may offset Driver Attention Warning system warning sounds.
- 
- The vehicle drives on a curvy road.
  - The vehicle drives on a bumpy road.
  - The vehicle drives through a windy area.
  - The vehicle is controlled by the following Advanced Driver Assistance system:
    - Lane Keeping Assist system
    - Forward Collision-Avoidance Assist system
    - Smart Cruise Control system
- 

**⚠ CAUTION**

The Driver Attention Warning system may not properly operate with limited alerting in the following situations:

- The lane detection performance is limited. (For more information, refer to "Lane Keeping Assist (LKA) (if equipped)" on page 6-73.)
- The vehicle is violently driven or is abruptly turned for obstacle avoidance (e.g. construction area, other vehicles, fallen objects, bumpy road).
- Forward drivability of the vehicle is severely undermined (possibly due to wide variation in tire pressures, uneven tire wear-out, toe-in/toe-out alignment).

## Cruise Control system (if equipped)

The cruise control system allows you to program the vehicle to maintain a constant speed without depressing the accelerator pedal.

This system is designed to function above approximately 30 km/h (20 mph).

### ⚠ WARNING

- If the cruise control is left on, (CRUISE indicator light in the instrument cluster illuminated) the cruise control can be switched on accidentally. Keep the cruise control system off (CRUISE indicator light OFF) when the cruise control is not in use, to avoid inadvertently setting a speed.
- Use the cruise control system only when traveling on open highways in good weather.
- Do not use the cruise control when it may not be safe to keep the car at a constant speed, for instance, driving in heavy or varying traffic, or on slippery (rainy, icy or snow-covered) or winding roads or over 6% uphill or downhill roads.
- Pay particular attention to the driving conditions whenever using the cruise control system.

### \* NOTICE

During normal cruise control operation, when the SET switch is activated or reactivated after applying the brakes, the cruise control will energize after approximately 3 seconds. This delay is normal.

### \* NOTICE

To activate cruise control, depress the brake pedal at least once after turning the ENGINE START/STOP button to the ON position or starting the engine. This is to check if the brake switch which is important part to cancel cruise control is in normal condition.

## Cruise control switch



OCDMH049473

- 0: Cancels cruise control operation.
- CRUISE/🚗MODE : Turns cruise control system on or off.

- RES+: Resumes or increases cruise control speed.
- SET-: Sets or decreases cruise control speed.

**To set cruise control speed**



OCDMH059158

1. Press the CRUISE/RES MODE button on the steering wheel, to turn the system on. The set speed will illuminate.
2. Accelerate to the desired speed, which must be more than 30 km/h (20 mph).



OCDMH059157

3. Move the lever down (to SET-), and release it at the desired speed. The cruise set speed will illuminate. Release the accelerator pedal at the same time. The desired speed will automatically be maintained.

On a steep grade, the vehicle may slow down or speed up slightly while going downhill.

**To increase cruise control set speed:**



OCDMH059159

Follow either of these procedures:

- Move the lever up (to RES+) and hold it. Your vehicle set speed will increase by 10 km/h. Release the lever at the speed you want.
- Move the lever up (to RES+) and release it immediately. The cruising speed will increase by 1.0 km/h (1.0 mph) each time you move the lever up (to RES+) in this manner.

**To decrease the cruising speed:**

OCDMH059157

Follow either of these procedures:

- Move the lever down (to SET-) and hold it. Your vehicle set speed will decrease by 10 km/h (5 mph). Release the lever at the speed you want to maintain.
- Move the lever down (to SET-) and release it immediately. The cruising speed will decrease by 1.0 km/h (1.0 mph) each time you move the lever down (to SET-) in this manner.

**To temporarily accelerate with the cruise control on:**

If you want to speed up temporarily when the cruise control is on, depress the accelerator pedal. Increased speed will not interfere with cruise control operation or change the set speed.

To return to the set speed:

- Take your foot off the accelerator pedal.

**To cancel cruise control, do one of the following:**

OCDMH059160

- Depress the brake pedal.
- Press the 0 button located on the steering wheel.
- Decrease the vehicle speed lower than the memory speed by 20 km/h (12 mph).
- Decrease the vehicle speed to less than approximately 30 km/h (20 mph).

Each of these actions will cancel cruise control operation (the cruise set indicator light will go off), but it will not turn the system off. If you wish to resume cruise control operation, move up the lever (to RES+) located on your steering wheel. You will return to your previously preset speed.

**To resume cruising speed at more than approximately 30 km/h (20 mph):**



OCDMH059159

If any method other than the CRUISE/ⓂODE button was used to cancel cruising speed and the system is still activated, the most recent set speed will automatically resume when you move the lever up (to RES+).

It will not resume, however, if the vehicle speed has dropped below approximately 30 km/h (20 mph).

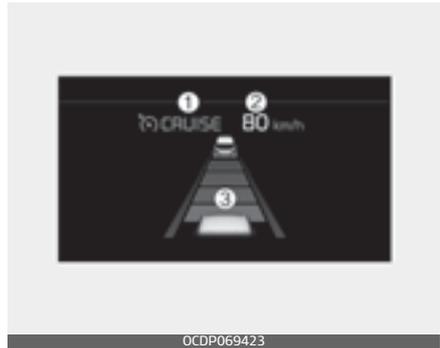
**To turn cruise control off, do one of the following**

- Press the CRUISE/ⓂODE button (the cruise indicator light will be turn off).
- Turn the ignition off.

Both of these actions cancel cruise control operation. If you want to resume cruise control operation, repeat the steps provided in "To set cruise control speed" on the previous page.

**Smart Cruise Control (SCC) (if equipped)**

Smart Cruise Control system allows you to program the vehicle to maintain constant speed and distance detecting the vehicle ahead without depressing the accelerator or brake pedal.



OCDP069423

1. Cruise indicator
2. Set speed
3. Vehicle-to-vehicle distance

**⚠ WARNING**

For your safety, please read the owner's manual before using the smart cruise control system.

**\* NOTICE**

To activate smart cruise control, depress the brake pedal at least once after turning the ENGINE START/STOP button to the ON position or starting the engine. This is to check if the brake switch which is

important part to cancel smart cruise control is in normal condition.

---

### WARNING

- If the smart cruise control is left on, (cruise indicator in the instrument cluster illuminated) Smart Cruise Control can be activated unintentionally. Keep Smart Cruise Control system off (cruise indicator turn off) when Smart Cruise Control is not used.
  - Use Smart Cruise Control system only when traveling on open highways in good weather.
  - Do not use Smart Cruise Control when it may not be safe to keep the car at a constant speed. For instance.
    - Highway interchange and toll-gate
    - Road surrounded by abnormally multiple steel constructions (subway construction, steel tunnel, etc)
    - Parking lot
    - Lanes beside guard rail on a road
    - Slippery road with rain, ice, or snow covered
    - Abrupt curved road
    - Steep hills
    - Windy roads
    - Off roads
    - Roads under construction
    - Rumble strip
  - The sensing ability decreases if the level of front and rear vehicle is changed from the factory.
  - When driving in heavy traffic or when traffic conditions make it difficult to drive at a constant speed
  - When driving on rainy, icy, or snow-covered roads
  - When driving with limited view (possibly due to bad weather, such as fog, snow, rain or sand-storm)
  - Pay particular attention to the driving conditions whenever using Smart Cruise Control system.
  - Smart Cruise Control system is not a substitute for safe driving. It is the responsibility of the driver to always check the speed and distance of the vehicle ahead.
  - Be careful when driving downhill using SCC.
  - Limited visibility (rain, snow, smog, etc.)
  - Cruise function should not be used when the vehicle is being towed to prevent any damage.
  - Always set the vehicle speed under the speed limit in your country.
  - Unexpected situations may lead to possible accidents. Pay attention continuously to road conditions and driving even when Smart Cruise Control system is being operated.
-

### Speed setting

#### *To set cruise control speed:*



OCDMH059158

1. Press the CRUISE/  MODE button, to turn the system on. The CRUISE indicator in the instrument cluster will illuminate.
2. Accelerate to the desired speed. The speed can be set as follows:
  - 10 km/h (5 mph) ~ 160 km/h (100 mph): when there is no vehicle in front
  - 0 km/h (0 mph) ~ 160 km/h (100 mph): when there is a vehicle in front



OCDMH059157

3. Move the lever down (to SET-), and release it at the desired speed. The set speed and vehicle to vehicle distance on the LCD screen will illuminate.
4. Release the accelerator pedal. The desired speed will automatically be maintained.

If there is a vehicle in front of you, the speed may decrease to maintain the distance to the vehicle ahead.

On a steep grade, the vehicle may slow down or speed up slightly while going uphill or downhill

Vehicle speed may decrease on an upward slope and increase on a downward slope.

The speed will be set to 30 km/h when there is a vehicle ahead and your vehicle speed is 0~30 km/h.

Also, the speed will be set to 30 km/h when there is no vehicles ahead and your vehicle speed is 10~30 km/h.

**To increase cruise control set speed:**

OCDMH059159

Follow either of these procedures:

- Move the lever up (to RES+), and hold it.  
Your vehicle set speed will increase by 10 km/h (5 mph). Release the lever at the speed you want.
- Move the lever up (to RES+), and release it immediately.  
The cruising speed will increase by 1.0 km/h (1.0 mph) each time you move the lever up (to RES+) in this manner.
- You can set the speed to 160 km/h (100 mph).

**⚠ CAUTION**

Check the driving condition before using the toggle switch. Driving speed sharply increases, when you push up and hold the toggle switch.

**To decrease the cruise control set speed:**

OCDMH059157

Follow either of these procedures:

- Move the lever down (to SET-), and hold it.  
Your vehicle set speed will decrease by 10 km/h (5 mph). Release the lever at the speed you want.
- Move the lever down (to SET-), and release it immediately.  
The cruising speed will decrease by 1.0 km/h (1.0 mph) each time you move the lever down (to SET-) in this manner.
- You can set the speed to 30 km/h (20 mph).

***To temporarily accelerate with the cruise control on:***

If you want to speed up temporarily when the cruise control is on, depress the accelerator pedal. Increased speed will not interfere with cruise control operation or change the set speed.

To return to the set speed:

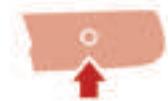
- Take your foot off the accelerator. If you move the lever down (to SET-) at increased speed, the increased cruising speed will be set again.

**\* NOTICE**

Be careful when accelerating temporarily, because the speed is not controlled automatically at this time even if there is a vehicle in front of you.

***Smart Cruise Control will be temporarily canceled when:***

***Canceled manually***



OCDMH059160

Smart Cruise Control is temporarily canceled when the brake pedal is depressed or the CANCEL/O button is pressed. Depress the brake pedal and press the CANCEL/O button at the same time, when the vehicle is at a standstill. The speed and vehicle to vehicle distance indicator on the cluster is disappeared and the CRUISE indicator is illuminated continuously.

***Canceled automatically***

- The driver's door is opened.
- The shift lever is shifted to N (Neutral), R (Reverse) or P (Parking).
- The EPB (electronic parking brake) is applied.
- The vehicle speed is over 170 km/h (105 mph).
- The ESC, ABS or TCS is operating.
- The ESC is turned off.
- The sensor or the cover is dirty or blocked with foreign matter.
- The accelerator pedal is continuously depressed for long time.
- The engine speed is in dangerous range.
- SCC system has malfunctioned.
- When the braking control is operated for Forward Collision-Avoidance Assist system.
- The vehicle is stopped for more than 5 minutes.
- The vehicle stops and goes repeatedly for a long period of time.
- The driver starts driving by pushing the toggle switch up (RES+)/down (SET-), after the vehicle is stopped by Smart Cruise Control system with no other vehicle ahead.
- When the parking brake is locked.
- Engine has some problems.

Each of these actions will cancel the smart cruise control operation. (the set speed and vehicle to vehicle dis-

tance on the LCD display will go off.) In a condition the smart cruise control is canceled automatically, Smart Cruise Control will not resume even though the RES+ or SET-lever is moved.

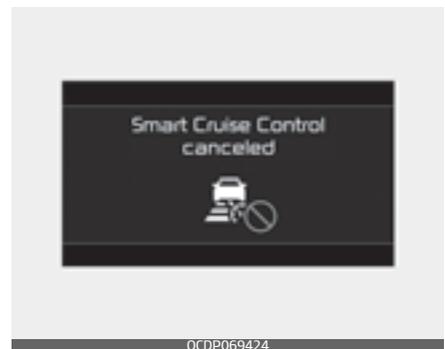
In a condition Smart Cruise Control is canceled automatically when the vehicle stops, the EPB will activate and the parking brake will be locked.

**⚠ CAUTION**

If Smart Cruise Control is canceled by other than the reasons mentioned, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

**⚠ CAUTION**

If the system is automatically canceled, the warning chime will sound and a message will appear for a few seconds.



You must adjust the vehicle speed by depressing the accelerator or brake pedal according to the road condition ahead and driving condition.

Always check the road conditions. Do not rely on the warning chime.

**\* NOTICE**

To reduce the risk of an accident, always check the road conditions when reactivating the smart cruise control using the RES+ lever to ensure the road conditions permit safe use of the cruise control.

***To resume cruise control set speed:***



OCDMH059159

If any method other than the CRUISE/⏸️MODE button was used to cancel cruising speed and the system is still activated, the cruising speed will automatically resume when you move the lever up (to RES+).

If you move the lever up (to RES+), the speed will resume to the recently set speed. However, if vehicle speed drops below 10 km/h (5 mph), it will resume when there is a vehicle in front of your vehicle.

***To turn cruise control off:***



OCDMH059158

- Press the CRUISE/⏸️MODE button. (the CRUISE indicator in the instrument cluster will go off). When Smart Cruise Control System is not needed, press the [CRUISE] switch and deactivate the system.

**\* NOTICE**

The mode changes, as below, whenever the CRUISE/MODE button is pressed.



**Vehicle to vehicle distance setting**

*To set vehicle to vehicle distance:*



OCDMH059164

This function allows you to program the vehicle to maintain relative distance to the vehicle ahead without depressing the accelerator pedal or brake pedal.

The vehicle to vehicle distance will automatically activate when Smart Cruise Control system is on.

Select the appropriate distance according to road conditions and vehicle speed.

Each time the button is pressed, the vehicle to vehicle distance changes as follows:

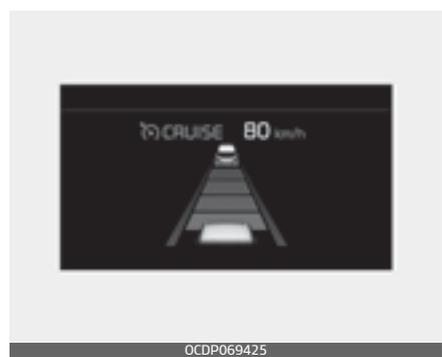


For example, if you drive at 90 km/h (56 mph), the distance maintain as follows;

- Distance 4 - approximately 52.5 m
- Distance 3 - approximately 40 m
- Distance 2 - approximately 32.5 m
- Distance 1 - approximately 25 m

**\* NOTICE**

The distance is set to the last set distance when the system is used for the first time after starting the engine.



OCDP069425



OCDP069426



OCDP069427



OCDP069428

- The vehicle will maintain the set speed, when the lane ahead is clear.
- The vehicle will slow down or speed up to maintain the selected distance, when there is a vehicle ahead of you in the lane. (A vehicle will appear in front of your vehicle in the LCD display only when there is an actual vehicle in front of you)

- If the vehicle ahead speeds up, your vehicle will travel at a steady cruising speed after accelerating to the selected speed.
- If distance from the front vehicle has been changed due to accelerating or decelerating of front vehicle, the distance on the LCD may be changed.

**⚠ WARNING**



OCDP069414

When using Smart Cruise Control system:

- The warning message appears and warning chime sounds if the vehicle is unable to maintain the selected distance from the vehicle ahead.
- If the warning message appears and warning chime sounds, depress the brake pedal to actively adjust the vehicle speed,

and the distance to the vehicle ahead.

- Even if the warning message does not appear and warning chime does not sound, always pay attention to the driving conditions to prevent dangerous situations from occurring.
- Playing the vehicle audio system at high volume may offset the system warning sounds.

## ⚠ CAUTION



OCDP069429

If the vehicle ahead (vehicle speed: less than 30 km/h) disappears to the next lane, the warning chime will sound and a message will appear. Adjust your vehicle speed for vehicles or objects that can suddenly appear in front of you by depressing the brake pedal according to the road condition ahead and driving condition.

## *In traffic situation*



OCDP069430

Use switch or pedal to accelerate

- In traffic, your vehicle will stop if the vehicle ahead of you stops. Also, if the vehicle ahead of you starts moving, your vehicle will start as well. However, if the vehicle stops for more than 3 seconds, you must depress the accelerator pedal or push up the toggle switch (RES+) to start driving.
- If you push the smart cruise control toggle switch (RES+ or SET-) while Auto Hold and smart cruise control is operating the Auto Hold will be released regardless of accelerator pedal operation and the vehicle will start to move. The AUTO HOLD indicator changes from green to white. (if equipped with EPB (Electronic Parking Brake))

**WARNING**

Smart Cruise Control system is deactivated if the accelerator pedal is depressed or [RES +] or [SET -] switch is activated when there is no vehicle in front.

***Radar to detect distance to the vehicle ahead***



OCDP059008

The sensor detects the distance to the vehicle ahead.

If the sensor is covered with dirt or other foreign matter, the vehicle to vehicle distance control may not operate correctly.

Always keep the area in front of the sensor clean.

***Radar check message***

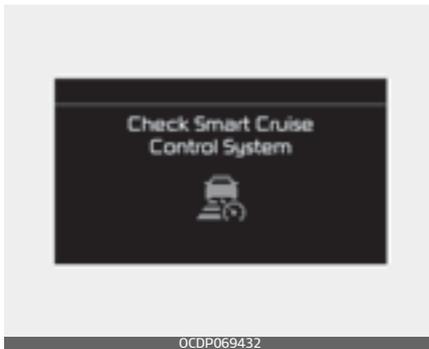


If the radar or cover is dirty or obscured with foreign matter such as snow, this message will appear and it will disappear after for a while.

In this case, the system may not function temporarily, but it does not indicate a malfunction of the smart cruise control System. Clean the radar or cover by using a soft cloth and it will operate normally.

Smart Cruise Control system may not properly activate, if the radar is totally contaminated, or if any substance is not detected after turning ON the engine (e.g. in an open terrain).

### ***Smart Cruise Control system malfunction message***



The message will appear when Smart Cruise Control is not functioning normally.

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

#### **⚠ CAUTION**

- Do not install accessories around the sensor and do not replace the bumper by yourself. It may interfere with the sensor performance.
- Always keep the sensor and bumper clean.
- To prevent sensor cover damage from occurring, wash the car with a soft cloth.
- Do not damage the sensor or sensor area by a strong impact. If the sensor moves slightly off position, Smart Cruise Control system will not operate correctly without any

warning or indicator from the cluster. If this occurs, have the system checked by a professional workshop.

Kia recommends to visit an authorized Kia dealer/service partner.

- Use only a genuine Kia sensor cover for your vehicle. Do not paint anything on the sensor cover.

#### **To adjust the sensitivity of smart cruise control**

The sensitivity of vehicle speed when following the front vehicle to maintain the set distance can be adjusted. Go to the User Settings Mode (Driver Assistance) and select SCC Responsiveness. You may select one of the three stages you prefer.

- Fast: Vehicle speed following the front vehicle to maintain the set distance is faster than normal speed.
- Normal: Vehicle speed following the front vehicle to maintain the set distance is normal
- Slow: Vehicle speed following the front vehicle to maintain the set distance is slower than normal speed.

**\* NOTICE**

The last selected mode remains in the system.

**To convert to cruise control mode:**



The driver may choose to only use the cruise control mode (speed control function) by doing as follows:

1. Turn the smart cruise control system on (the cruise indicator light will be on but the system will not be activated).
2. Push the distance to distance switch for more than 2 seconds.

3. Choose between "Smart Cruise Control mode" and "Cruise Control mode".

When the system is canceled using the CRUISE/⌚MODE button or the CRUISE/⌚MODE button is used after the engine is turned on, Smart Cruise Control mode will turn on.

**⚠ WARNING**

When using the cruise control mode, you must manually adjust the distance to other vehicles as the system will not automatically brake to slow down for other vehicles.

**Leading Vehicle Departure Alert**

Leading Vehicle Departure Alert alerts the driver of the departure of the vehicle in front when the vehicle is stopped and Smart Cruise Control system is in activation.

***System setting and operating conditions***

***System setting***

With the engine ON, the Leading Vehicle Departure Alert system turns on and gets ready to be activated when the 'User Settings → Driver Assistance → Driving Assist → Leading Vehicle Departure Alert' is selected on the cluster. The system stops operation when the set-

ting is deactivated. However, if the engine is turned off then on again, the system maintains the previous state.

**Operating conditions**



OCDP069430

While Smart Cruise Control system is in operation, your vehicle stops behind the vehicle in front when it stops. The message is displayed on the cluster within 3 seconds after the stop and the system will be in the standby position.

**System activation**



OCDP069450

If the driver does not take action for a certain period of time after the vehicle in front departs, the message is displayed on the cluster.

The vehicle departs automatically if the accelerator pedal is depressed or [RES +] or [SET -] switch is activated when there is a vehicle in front.

**⚠ WARNING**

Always check the front of the vehicle and road conditions before departure.

**Limitations of the system**

Smart Cruise Control system may have limits to its ability to detect distance to the vehicle ahead due to road and traffic conditions.

**On curves**



OCDW059133

- On curves, Smart Cruise Control system may not detect a moving vehicle in your lane, and then your

vehicle could accelerate to the set speed. Also, the vehicle speed will rapidly down when the vehicle ahead is recognized suddenly.

- Select the appropriate set speed on curves and adjust your vehicle speed by depressing the accelerator or brake pedal according to the road condition ahead and driving condition.



OCDW059134

- Your vehicle speed can be reduced due to a vehicle in the adjacent lane. Adjust your vehicle speed by depressing the brake pedal according to the road condition ahead and driving condition. Apply the accelerator pedal and select the appropriate set speed. Check to be sure that the road conditions permit safe operation of Smart Cruise Control.

### ***On inclines***



OCDP059125

- During uphill or downhill driving, Smart Cruise Control system may not detect a moving vehicle in your lane, and cause your vehicle to accelerate to the set speed. Also, the vehicle speed will rapidly down when the vehicle ahead is recognized suddenly.
- Select the appropriate set speed on inclines and adjust your vehicle speed by depressing the accelerator or brake pedal according to the road condition ahead and driving condition.

***Lane changing***

OCDW059135

- A vehicle which moves into your lane from an adjacent lane cannot be recognized by the sensor until it is in the sensor's detection range.
- The sensor may not detect immediately when a vehicle cuts in suddenly. Always pay attention to the traffic, road and driving conditions.
- If a vehicle which moves into your lane is slower than your vehicle, your speed may decrease to maintain the distance to the vehicle ahead.
- If a vehicle which moves into your lane is faster than your vehicle, your vehicle will accelerate to the selected speed.



OCDW059153

- Your vehicle may accelerate when a vehicle ahead of you disappears.
- When you are warned that the vehicle ahead of you is not detected, drive with caution.

***Vehicle recognition***

OCDW059152

Some vehicles ahead in your lane cannot be recognized by the sensor as follows:

- Narrow vehicles such as motorcycles or bicycles
- Vehicles offset to one side
- Slow-moving vehicles or sudden-decelerating vehicles
- Stopped vehicles

- Vehicles with small rear profile such as trailers with no loads

A vehicle ahead cannot be recognized correctly by the sensor if any of following occurs:

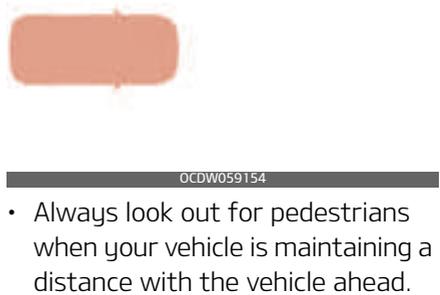
- When the vehicle is pointing upwards due to overloading in the tailgate
- While making turns by steering
- When driving to one side of the lane
- When driving on narrow lanes or on curves

Adjust your vehicle speed by depressing the brake pedal according to the road condition ahead and driving condition.



- When vehicles are at a standstill and the vehicle in front of you changes to the next lane, be careful when your vehicle starts to move because it may not recognize the stopped vehicle in front of you.

In this case, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.



- Always be cautious for vehicles with higher height or vehicles carrying loads that sticks out to the back of the vehicle.

### **WARNING**

- Smart Cruise Control system cannot guarantee the stop for every emergency situation.  
If an emergency stop is necessary, you must apply the brakes.
- Keep a safe distance according to road conditions and vehicle speed. If the vehicle to vehicle distance is too close during a high-speed driving, a serious collision may result.
- Smart Cruise Control system cannot recognize a stopped vehicle, pedestrians or an oncoming vehicle. Always look ahead cautiously to prevent unexpected and sudden situations from occurring.
- SCC system may have difficulty in maintaining the correct distance or speed, if the vehicle is driving on a steep incline or towing a trailer.
- When other vehicles are changing lanes in front of you frequently, Smart Cruise Control system may not operate appropriately. Always look ahead cautiously to prevent unexpected and sudden situations from occurring.
- Smart Cruise Control system is not a substitute for safe driving practices but a convenience function only. It is the responsibility of the driver to always check the speed and the distance to the vehicle ahead.
- Always be aware of the selected speed and vehicle to vehicle distance.
- Always maintain sufficient braking distance and decelerate your vehicle by applying the brakes if necessary.
- As Smart Cruise Control system may not recognize complex driving situations, always pay attention to driving conditions and control your vehicle speed.
- For safe operation, carefully read and follow the instructions in this manual before use.
- After an engine start, please stop for several seconds. If system initialization is not completed, the SCC does not normally operate.
- After an engine start, if any objects are not detected or the sensor cover is obscured with foreign substances, there is a possibility that SCC system may not work.

- Below conditions are not allowed: over baggage loading in a tailgate, suspension remodeling, tire replacement with unauthorized tires or tires with different worn-out and pressure levels.
- Do not use Smart Cruise Control when towing a trailer.

**⚠ CAUTION**

Smart Cruise Control system may not operate temporarily due to electrical interference.

**Lane Following Assist (LFA) (if equipped)**



Lane Following Assist System is designed to center the vehicle in the chosen lane by using a front mounted camera on top of the windshield.

It can only become active in combination with Smart Cruise Control system and therefore assists the driver in his task to control the lateral and longitudinal movement of the vehicle.

**⚠ WARNING**

- It is the driver's responsibility to operate the steering wheel for safe driving.
- Do not turn the steering wheel hastily if LFA is in work.
- LFA system assists the steering wheel control over the direction so that the vehicle can stay in the center of the lane. LFA system does not automatically control the steering wheel always, which

means the driver must not take the hands off the wheel while driving.

- When using LFA system, always be aware of your surroundings and road conditions that may interrupt or stop LFA system.

### CAUTION

- Do not attach glass tinting, stickers, accessories to the windshield where the front camera near the indoor mirror is placed.
  - The removal or re-assembly of the front camera to attach tinting, stickers, accessories may require LFA system to be thoroughly inspected and modified. In such case, have the system be inspected by an authorized Kia dealer.
  - Inspection or modification may be required when replacing parts related to the windshield or front camera, steering. Have the system be inspected by an authorized Kia dealer.
  - Depending on your surroundings and road conditions, LFA system could fail to recognize the lane and stop working. In turn, extra caution is required while driving with LFA system on.
  - Be sure to check the non-operating conditions and cautions for the driver before using LFA system.
- Do not place reflective materials such as white paper or mirror on the crash pad. Sunlight reflections can cause a malfunction in LFA system.
  - Too high volume from the sound system can interrupt the alarming sound from LFA system.
  - Keeping your hands off the wheel while driving will trigger the hands-off warning and deactivate the steering-assist system. Put your hands back on the wheel, then the steering-assist system will be reactivated.
  - When driving at a high speed, the steering assist force can become weak and the vehicle can drive out of its lane. Extra caution is required, and comply with the speed limit.
  - Attaching an object to the steering wheel could deter steering assistance.
  - Attaching an object to the steering wheel could deter the hands-off alarming system.

### LFA system operation

To use Lane Following Assist two steps are necessary:

1. LFA system has to be enabled, and
2. SCC system has to be activated

With the ignition [ON], select or release the setting from "User Set-

ting →Driver Assistance →Driving Assist → Lane Following Assist".

Select LFA system in the user setting of the instrument panel.

LFA system status is remembered by the system and therefore does not need to be enabled again for each new journey.



OCDMH059157

3. Move the lever down (to SET-), and release it at the desired speed. The set speed and vehicle to vehicle distance on the screen will illuminate.
4. Release the accelerator pedal. The desired speed will automatically be maintained.

OCDMH059158

1. Press the CRUISE/⏸️MODE button, to turn the system on. The CRUISE indicator in the instrument cluster will illuminate.
2. Accelerate to the desired speed. Smart Cruise Control speed can be set as follows:
  - 10 km/h (5 mph) ~ 160 km/h (100 mph): when there is no vehicle in front
  - 0 km/h (0 mph) ~ 160 km/h (100 mph): when there is a vehicle in front

Once the system starts working, the indicator light ⏸️ comes on the instrument panel.

The indicator light colors according to the system status are as follows.

**Green:** Active

**White:** Standby

For more SCC settings and details refer to "Smart Cruise Control (SCC (if equipped))" on page 6-104.

**LFA system activation**

If the vehicle is inside the lane with both lanes recognized by the system, and there is no steep steering made by the driver, LFA system changes into steering assist mode.

The indicator light will come on green, and the system helps the vehicle stay in line by controlling the steering wheel.

When the steering wheel is not controlled temporarily, the indicator light will flash green and changes to white.

Once LFA system recognizes the lanes, the color of the lane on the screen will change from gray to white.

For more details, refer to "User settings mode (if equipped)" on page 5-70.

**⚠ WARNING**

LFA system ensures the vehicle stays in its lane. LFA system does not guarantee 100% safety. Make sure you make decisions on the road after checking the road conditions and safety matters while driving. Never completely rely on your LFA system.

**Warning**

If you keep your hands off the wheel while driving with LFA system assisting the steering, the hands-off warning will be triggered.

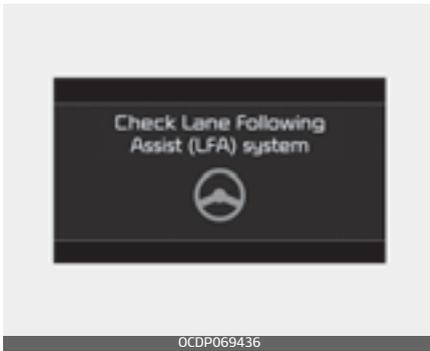
If the driver keeps hands off the wheel even with the hands-off warning on, the steering assist is temporarily released automatically.

If you put your hands back on the wheel with LFA system released, the steering assist will re-start.

**⚠ CAUTION**

- Hands-off warnings may be delayed depending on road conditions. Always keep your hands on the steering wheel while driving.
- Hold the steering wheel tight. Otherwise, LFA system could misjudge that the driver hands off the wheel, and a hands-off warning may occur.

## LFA system malfunction



The warning message popped up (turned off after a certain period of time) means a problem with LFA system. In this case, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### ⚠ CAUTION

- It is the driver's responsibility to operate the steering wheel while driving.
- With LFA system on, the driver can steer the vehicle by operating the wheel on his own.
- We recommend that the driver turns off LFA system and operates the steering wheel by himself in the following cases
  - bad weather
  - bad road conditions
  - when frequent operation of the steering wheel is required
- When towing other vehicle or trailers
- The steering wheel can feel heavy or light if LFA system is assisting the steering.

### Limitation of the system

- If the driver turns on the turn signal light or the emergency warning light to change the lane
  - Operate the turn signal light switch before changing the lane
  - If you change the lane without operating the turn signal lights, steering reaction force of the wheel may occur.
- Once LFA system is turned on or the lane is changed, the vehicle should be in the center of the road to switch to the steering assist mode. If the driver keeps driving along the lane, LFA system will not assist the steering.
- When the ESC or VSM is activated, the system does not assist steering.
- When driving on a curved road at a high speed, steering assist mode may not work.
- When driving at a speed faster than 180 km/h, steering assist mode may not work.
- When sudden steering is made, the system could be temporarily deactivated.

- If you change the lane in a hurry, the system does not assist the steering.
- If the vehicle suddenly stops, it does not assist the steering.
- If the lane is too narrow or too wide, steering is not assisted.
- If either of the lanes is not recognized, the steering is not assisted.
- If the radius is too small for the curve.

### ***Cautions for the driver***

If the lane recognition is difficult or limited for LFA system as shown below, the driver may need to be careful because it may not operate or may cause unnecessary operation.

### **Roads or lane markings in bad condition**

- When the lane is tainted or invisible
- When the driver cannot see the lane due to rain, snow, dust, sand, oil, puddles, etc
- When roads are set or the colors of the lane and road are not distinctive
- If there is a sign other than the lane near the lane or a mark similar to the lane
- When the lane is not clear or damaged
- If the road is covered in the shadows of objects around the road,

such as medians, guard rails, noise walls, and trees

- If the number of lanes increases or decreases, or if the lanes intersect with each other more intensely (tollgate entry section, road section / joining section, etc.)
- When there are two or more lane markings such as a construction section, a designated lane, etc.
- When the lane is crowded such as the construction section or the lane is replaced by some structures
- If there is a road marking such as a zigzag lane, crosswalk mark, or road surface milestone
- When a lane suddenly becomes invisible or disappears from an intersection

### **The external environment affecting the system**

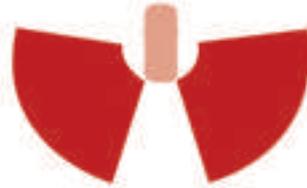
- If the outside brightness of the vehicle suddenly changes, such as when entering or exiting the tunnel or passing under the bridge
- If the vehicle's headlights are not used at night or in the tunnel, or the brightness of the headlights is too weak
- If there are boundary structures such as tollgate booths and sidewalk blocks
- If it is difficult to distinguish lanes due to the reflection on the wet road made by sunlight, street-light, and oncoming traffic.

- When the backlight is strongly reflected in the direction of the vehicle
- When driving to the left or right lane by bus lane or on the bus lane
- If there is no enough distance between the front car or if the lane is covered by the car ahead of me
- When the lane change is large, such as a steep curve or a continuous curve
- When passing through speed bump, sudden up / down or left / right slope
- If the vehicle is severely shaken
- When the temperature around the mirror is very high due to direct sunlight

**If the front camera clock is of poor quality**

- If the windshield of the vehicle and the front part of the lens of the product are covered with dust, fingerprints, or tinting
- If the clock doesn't work properly due to bad weather such as fog, heavy rain or heavy snow.
- If moisture is not completely removed from the windscreen.
- When placing an object on the crash pad, etc.

**Rear Cross-Traffic Collision Warning (RCCW) (if equipped)**



OCDW059155

When your vehicle moves backwards from a parking position, the sensor detects approaching vehicles to the left or right side direction and gives information to the driver.

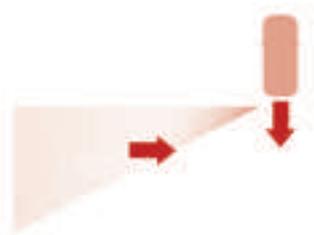
The driver can select the initial warning activation time in the User Settings in the LCD display by selecting "User Settings → Driver Assistance → Warning Timing". The options for the initial Rear Cross-Traffic Collision Warning includes the following:

- Normal:  
When this condition is selected, the initial Rear Cross-Traffic Collision Warning is activated normally. If this setting feels too sensitive change the option to 'late'.
- Later:  
The warning activation time may feel late if the side/rear vehicle abruptly accelerates.

Select this warning activation time when the traffic is light and you are driving in a low speed. However, if you change the warning activation time, the warning activation time of vehicle's other system may also change. Check the warning activation time before changing it.

based on conditions. Always pay attention to surrounding.

**Warning type**



**Operating conditions**

- Select RCCW (Rear Cross-Traffic Collision Warning) in "User Settings → Driver Assistance → Parking Safety → Rear Cross-Traffic Safety". The system will turn on and stand by to be activated.
- Select RCCW again, to turn the system off.
- If the vehicle is turned off and on again, RCCW system will return to the state right before the vehicle was turned off. Turn RCCW system off when not in use.
- The system is operated when the vehicle speed is below 10 km/h (7 mph) with the shift lever in R (Reverse).
- RCCW system detection range is approximately 0.5 ~ 20 m based on side direction. If an approaching vehicle speed is 8 ~ 36 km/h (5 ~ 22.5 mph) in detection range, The warning is on. However, the system sensing range is different



If the vehicle detected by the sensors approaches from the rear left/

right side of your vehicle, the warning chime will sound, the warning light on the outside rearview mirror will blink and a message will appear on the LCD display. If the rear view monitor system is in activation, a message will also appear on the infotainment system screen.

The warning will stop when:

- the detected vehicle moves out of the sensing area or
- when the vehicle is right behind your vehicle or
- when the vehicle is not approaching your vehicle or
- when the other vehicle slows down or
- the vehicle's approaching speed is decreased.

### CAUTION

- When the operation condition of Rear Cross-Traffic Collision Warning system is satisfied the warning will occur every time a vehicle approaches the side/rear of your stopped (0 km/h vehicle speed) vehicle.
- The system's warning may not operate properly if the left/right of your vehicle's rear bumper is blocked by a vehicle or obstacle.
- The driver should always use extreme caution while operating the vehicle, whether or not the warning light on the outside rear

view mirror illuminates or there is a warning alarm.

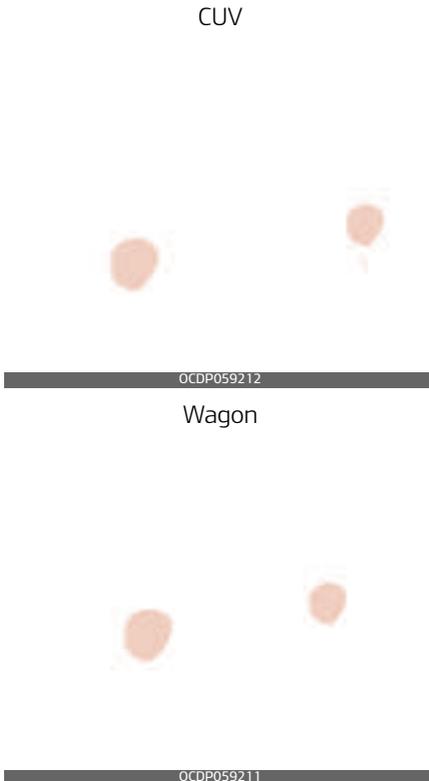
- Playing the vehicle audio system at high volume may offset the system's warning sounds.
- The warning of Rear Cross-Traffic Collision Warning system may not sound while other system's warning sounds.

### WARNING

- Drive safely even though the vehicle is equipped with a BCW system. Do not solely rely on the system but check for yourself before changing lanes. The system may not alert the driver in some conditions so always check the surroundings while driving.
- Always pay extreme caution while driving. Rear Cross-Traffic Collision Warning system may not operate properly or unnecessarily operate in accordance with your driving situations.

## Detecting sensor

The sensors are located inside the rear bumper.



Always keep the rear bumper clean for the system to work properly.

## ⚠ CAUTION

- The system may not work properly when the bumper has been damaged, or if the rear bumper has been replaced or repaired.
- The sensing range differs somewhat according to the width of the road. When the road is narrow, the system may detect other vehicles in the next lane.
- The system may turn off due to strong electromagnetic waves.
- Always keep the sensors clean.
- NEVER arbitrarily disassemble the sensor component nor apply any impact on the sensor component.
- Be careful not to apply unnecessary force on the radar sensor or sensor cover. If the sensor is forcibly moved out of proper alignment, the system may not operate correctly. In this case, a warning message may not be displayed. Take your vehicle to a professional workshop and have the system checked. Kia recommends to visit an authorized Kia dealer/service partner.
- Do not apply foreign objects such as a bumper sticker or a bumper guard near the radar sensor or apply paint to the sensor area. Doing so may adversely affect the performance of the sensor.

### Warning message



The message will appear to notify the driver if there are foreign substances on the surface or inside the rear bumper or it is hot near the rear bumper. The light on the switch and the system will be turned off automatically.

Remove the foreign substance on the rear bumper.

After the foreign substance is removed, if you drive for approximately 10 minutes, the system will work normally.

If the system does not work normally even though the foreign substance, trailer or carrier, or other equipment is removed, take your vehicle to a professional workshop and have the system checked. Kia recommends to visit an authorized Kia dealer/service partner.

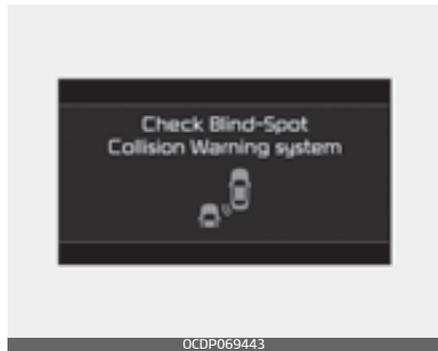
It is possible to get the message with no foreign substance on the rear bumper, for example, when

driving in sparse rural or open area, such as desert, where there is insufficient data for operation.

This message may also activate during heavy rain or due to road spray.

In this case, the vehicle does not need service.

When the cargo area or other equipment is being used, turn all functions of the system [OFF].



If the system does not work properly, a warning message will appear and the light on the switch will turn off. The system will turn off automatically.

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

**⚠ CAUTION**

- The system may not work properly if the bumper has been replaced or if a repair work has been done near the sensor.
- The detection area differs according to the roads width. If the road is narrow the system may detect other vehicles in the second next lane.
- On the contrary, if the road is very wide the system may not detect other vehicles in the next lane.
- The system might be turned off due to strong electromagnetic waves.

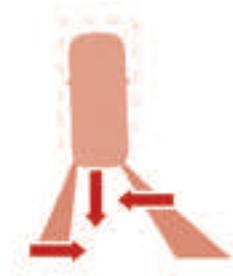
**Limitations of the system**

The driver must be cautious in the below situations, because the system may not detect other vehicles or objects in certain circumstances.

- When a trailer or carrier is installed.
- The vehicle drives in inclement weather such as heavy rain or snow.
- The sensor is polluted with rain, snow, mud, etc.
- The rear bumper where the sensor is located is covered with a foreign object such as a bumper sticker, a bumper guard, a bike rack, etc.
- The rear bumper is damaged, or the sensor is out of the original default position.
- The vehicle height gets lower or higher due to heavy loading in a tailgate, abnormal tire pressure, etc.
- When the temperature of the rear bumper is high.
- When the sensors are blocked by other vehicles, walls or parking-lot pillars.
- The vehicle drives on a curved road.
- The road pavement (or the peripheral ground) abnormally contains metallic components (i.e. possibly due to subway construction).
- There is a fixed object near the vehicle, such as a guardrail.
- While going down or up a steep road where the height of the lane is different.
- Driving on a narrow road where trees or grass or overgrown.
- Driving in rural areas where the sensor does not detect another vehicle for an extended period of time.
- Driving on a wet road.
- Driving on a road where the guardrail or wall is in double structure.
- A big vehicle is near such as a bus or truck.
- When the other vehicle approaches very close.

- When the other vehicle passes at a very fast speed.
- While changing lanes.
- If the vehicle has started at the same time as the vehicle next to you and has accelerated.
- When the vehicle in the next lane moves two lanes away from you OR when the vehicle two lanes away moves to the next lane from you.
- A motorcycle or bicycle is near.
- A flat trailer is near.
- If there are small objects in the detecting area such as a shopping cart or a baby stroller.
- If there is a low height vehicle such as a sports car.
- The vehicle sharply stops.
- Temperature is extremely low around the vehicle.
- The vehicle severely vibrates while driving over a bumpy road, uneven/bumpy road, or concrete patch.
- The vehicle drives on a slippery surface due to snow, water puddle, or ice.

***Driving where there is a vehicle or structure near***



OCDW059115

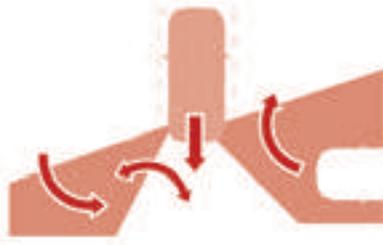
[A]: Structure

The system may not operate properly when driving where there is a vehicle or structure near.

In certain instances, the system may not detect the vehicle approaching from behind and the warning may not operate properly.

Always pay attention to your surrounding while driving.

***When the vehicle is in a complex parking environment***



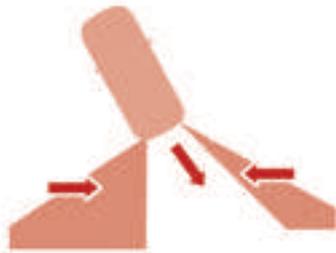
OCDW059116

The system may not operate properly when the vehicle is in a complex parking environment.

In certain instances, the system may not be able to exactly determine the risk of collision for the vehicles which are parking or pulling out near your vehicle (e.g. a vehicle escaping beside your vehicle, a vehicle parking or pulling out in the rear area, a vehicle approaching your vehicle making a turn, etc.).

In this case, the warning may not operate properly.

***When the vehicle is parked diagonally***



OCDW059117

[A]: Vehicle

The system may not operate properly when the vehicle is parked diagonally.

In certain instances, when the diagonally parked vehicle is pulled out of the parking space, the system may not detect the vehicle approaching

from the rear left/right of your vehicle. In this case, the warning may not operate properly.

Always pay attention to your surrounding while driving.

***When the vehicle is on/near a slope***



OCDP059118

The system may not operate properly when the vehicle is on/near a slope.

In certain instances, the system may not detect the vehicle approaching from the rear left/right and the warning may not operate properly.

Always pay attention to your surrounding while driving.

***Pulling into the parking space where there is a structure***



OCDW059119

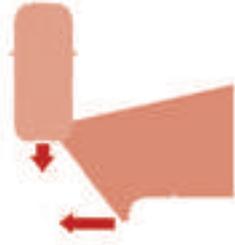
[A]: Structure, [B]: Wall

The system may not operate properly when pulling in the vehicle to the parking space where there is a structure at the back or side of your vehicle.

In certain instances, when backing into the parking space, the system may not detect the vehicle moving in front of your vehicle. In this case, the warning may not operate properly.

Always pay attention to the parking space while driving.

***When the vehicle is parked rearward***



OCDW059120

If the vehicle is parked rearward and the sensor detects the another vehicle in the rear area of the parking space, the system can warn. Always pay attention to the parking space while driving.

## Sport system (if equipped)

The sport mode may be selected according to the driver's preference or road condition.



The mode changes whenever the Sport button is pressed.

- **NORMAL mode:** NORMAL mode provides soft driving and comfortable riding.
- **SPORT mode:** SPORT mode provides sporty but firm riding.

The driving mode will be set to NORMAL mode when the engine is restarted.

## SPORT mode

### SPORT

SPORT mode manages the driving dynamics by automatically adjusting the steering effort, and the engine and transmission control logic for enhanced driver performance.

- When SPORT mode is selected by pressing the sport button, the SPORT indicator (orange color) will illuminate.
- Whenever the engine is restarted, the sport will revert back to NORMAL mode. If SPORT mode is desired, re-select SPORT mode from the sport button.
- When SPORT mode is activated:
  - The engine rpm will tend to remain raised over a certain length of time even after releasing the accelerator
  - Upshifts are delayed when accelerating

### \* NOTICE

In SPORT mode, the fuel efficiency may decrease.

## Economical operation

Your vehicle's fuel economy depends mainly on your style of driving, where you drive and when you drive.

Each of these factors affects how many kilometers (miles) you can get from a liter (gallon) of fuel. To operate your vehicle as economically as possible, use the following driving suggestions to help save money in both fuel and repairs:

- Drive smoothly. Accelerate at a moderate rate. Don't make "jack-rabbit" starts or full-throttle shifts and maintain a steady cruising speed. Don't race between stoplights. Try to adjust your speed to the traffic so you don't have to change speeds unnecessarily. Avoid heavy traffic whenever possible. Always maintain a safe distance from other vehicles so you can avoid unnecessary braking. This also reduces brake wear.
- Drive at a moderate speed. The faster you drive, the more fuel your vehicle uses. Driving at a moderate speed, especially on the highway, is one of the most effective ways to reduce fuel consumption.
- Don't "ride" the brake pedal. This can increase fuel consumption and also increase wear on these components. In addition, driving with your foot resting on the brake pedal may cause the brakes to overheat, which reduces their effectiveness and may lead to more serious consequences.
- Take care of your tires. Keep them inflated to the recommended pressure. Incorrect inflation, either too much or too little, results in unnecessary tire wear. Check the tire pressures at least once a month.
- Be sure that the wheels are aligned correctly. Improper alignment can result from hitting curbs or driving too fast over irregular surfaces. Poor alignment causes faster tire wear and may also result in other problems as well as greater fuel consumption.
- Keep your car in good condition. For better fuel economy and reduced maintenance costs, maintain your car in accordance with the "Normal maintenance schedule – for Europe (Except Russia)" on page 8-11. If you drive your car in severe conditions, more frequent maintenance is required (Refer to "Maintenance under severe usage conditions – for Europe (Except Russia)" on page 8-14, "Severe driving conditions" on page 8-15).
- Keep your car clean. For maximum service, your vehicle should be kept clean and free of corrosive materials. It is especially important that mud, dirt, ice, etc.

not be allowed to accumulate on the underside of the car. This extra weight can result in increased fuel consumption and also contribute to corrosion.

- Travel lightly. Don't carry unnecessary weight in your car. Weight reduces fuel economy.
- Don't let the engine idle longer than necessary. If you are waiting (and not in traffic), turn off your engine and restart only when you're ready to go.
- Remember, your vehicle does not require extended warm-up. After the engine has started, allow the engine to run for 10 to 20 seconds prior to placing the vehicle in gear. In very cold weather, however, give your engine a slightly longer warmup period.
- Don't "lug" or "over-rev" the engine. Lugging is driving too slowly in too high a gear resulting in the engine bucking. If this happens, shift to a lower gear. Over-revving is racing the engine beyond its safe limit. This can be avoided by shifting at the recommended speeds.
- Use your air conditioning sparingly. The air conditioning system is operated by engine power so your fuel economy is reduced when you use it.
- Open windows at high speeds can reduce fuel economy.

- Fuel economy is less in cross-winds and headwinds. To help offset some of this loss, slow down when driving in these conditions.

Keeping a vehicle in good operating condition is important both for economy and safety. Therefore, have the system serviced by a professional workshop.

Kia recommends to visit an authorized Kia dealer/service partner.

### **WARNING**

#### **Engine off during motion**

Never turn the engine off to coast down hills or anytime the vehicle is in motion. The power steering and power brakes will not function properly without the engine running. Instead, keep the engine on and downshift to an appropriate gear for engine braking effect. In addition, turning off the ignition while driving could engage the steering wheel lock resulting in loss of vehicle steering which could cause serious injury or death.

## Special driving conditions

### Hazardous driving conditions

When hazardous driving conditions are encountered such as water, snow, ice, mud, sand, or similar hazards, follow these suggestions:

- Drive cautiously and allow extra distance for braking.
- Avoid sudden braking or steering.
- When braking with non-ABS brakes pump the brake pedal with a light up-and-down motion until the vehicle is stopped.

#### WARNING

#### ABS

Do not pump the brake pedal on a vehicle equipped with ABS.

- If stalled in snow, mud, or sand, use second gear. Accelerate slowly to avoid spinning the drive wheels.
- Use sand, rock salt, tire chains, or other non-slip material under the drive wheels to provide traction when stalled in ice, snow, or mud.

### 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. Do not race the engine, and spin the wheels as little as possible. If you are still stuck after a few tries, have the vehicle pulled out by a tow vehicle to avoid engine overheating and possible damage to the transmission.

#### CAUTION

Prolonged rocking may cause engine over-heating, transmission damage or failure, and tire damage.

#### WARNING

#### 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 may injure bystanders.

#### NOTICE

The ESC system should be turned OFF prior to rocking the vehicle.

**⚠ WARNING**

If your vehicle becomes stuck in snow, mud, sand, etc., then you may attempt to rock the vehicle free by moving it forward and backward. Do not attempt this procedure if people or objects are anywhere near the vehicle. During the rocking operation the vehicle may suddenly move forward or backward as it becomes unstuck, causing injury or damage to nearby people or objects.

**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**

OCDP059026

Because night driving presents more hazards than driving in the daylight, here are some important tips to remember:

- Slow down and keep more distance between you and other vehicles, as it may be more difficult to see at night, especially in areas where there may not be any street lights.
- Adjust your mirrors to reduce the glare from other driver's headlights.
- Keep your headlights clean and properly aimed on vehicles not equipped with the automatic headlight aiming feature. Dirty or improperly aimed headlights will make it much more difficult to see at night.
- Avoid staring directly at the headlights of oncoming vehicles. You could be temporarily blinded, and it will take several seconds for your eyes to readjust to the darkness.

## Driving in the rain



Rain and wet roads can make driving dangerous, especially if you're not prepared for the slick pavement. Here are a few things to consider when driving in the rain:

- A heavy rainfall will make it harder to see and will increase the distance needed to stop your vehicle, so slow down.
- Keep your windshield wiping equipment in good shape. Replace your windshield wiper blades when they show signs of streaking or missing areas on the windshield.
- If your tires are not in good condition, making a quick stop on wet pavement can cause a skid and possibly lead to an accident. Be sure your tires are in good shape.
- Turn on your headlights to make it easier for others to see you.
- Driving too fast through large puddles can affect your brakes. If you must go through puddles, try to drive through them slowly.

- If you believe you may have gotten your brakes wet, apply them lightly while driving until normal braking operation returns.

## Driving in flooded areas

Avoid driving through flooded areas unless you are sure the water is no higher than the bottom of the wheel hub. Drive through any water slowly. Allow adequate stopping distance because brake performance may be affected.

After driving through water, dry the brakes by gently applying them several times while the vehicle is moving slowly.

## Driving off-road

Drive carefully off-road because your vehicle may be damaged by rocks or roots of trees. Become familiar with the off-road conditions where you are going to drive before you begin driving.

## Highway driving

### Tires



Adjust the tire inflation pressures to specification. Low tire inflation pressures will result in overheating and possible failure of the tires.

Avoid using worn or damaged tires which may result in reduced traction or tire failure.

#### \* NOTICE

Never exceed the maximum tire inflation pressure shown on the tires.

#### ⚠ WARNING

- Underinflated or overinflated tires can cause poor handling, loss of vehicle control, and sudden tire failure leading to accidents, injuries, and even death. Always check tires for proper inflation before driving. For proper tire pressures, refer to "Tires and

wheels (Wagon)" on page 9-4, "Tires and wheels (CUV)" on page 9-4.

- Driving on tires with no or insufficient tread is dangerous. Worn-out tires can result in loss of vehicle control, collisions, injury, and even death. Worn-out tires should be replaced as soon as possible and should never be used for driving. Always check the tire tread before driving your car. For further information and tread limits, refer to "Tires and wheels (Wagon)" on page 9-4, "Tires and wheels (CUV)" on page 9-4.

### **Fuel, engine coolant and engine oil**

High speed travel consumes more fuel than urban motoring. Do not forget to check both engine coolant and engine oil.

### **Drive belt**

A loose or damaged drive belt may result in overheating of the engine.

## Winter driving



More severe weather conditions of winter result in greater wear and other problems. To minimize winter driving problem, you should follow these suggestions:

\* Snow tires and tire chains for the national language (Icelandic, Bulgarian) see the Appendix.

### Snowy or icy conditions

To drive your vehicle in deep snow, it may be necessary to use snow tires or to install tire chains on your tires. If snow tires are needed, it is necessary to select tires equivalent in size and type of the original equipment tires. Failure to do so may adversely affect the safety and handling of your car. Furthermore, speeding, rapid acceleration, sudden brake applications, and sharp turns are potentially very hazardous practices.

During deceleration, use engine braking to the fullest extent. Sudden brake applications on snowy or icy roads may cause skids to occur. You need to keep sufficient distance between the vehicle in operation in front and your vehicle. Also, apply the brake gently. It should be noted that installing tire chains on the tire will provide a greater driving force, but will not prevent side skids.

### \* NOTICE

Tire chains are not legal in all countries. Check the country laws before fitting tire chains.

### *Snow tires*

If you mount snow tires on your vehicle, make sure they are radial tires of the same size and load range as the original tires. Mount snow tires on all four wheels to balance your vehicle's handling in all weather conditions. Keep in mind that the traction provided by snow tires on dry roads may not be as high as your vehicle's original equipment tires. You should drive cautiously even when the roads are clear. Check with the tire dealer for maximum speed recommendations.

**⚠ 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.

Do not install studded tires without first checking local, state and municipal regulations for possible restrictions against their use.

***Tire chains***

Since the sidewalls of radial tires are thinner, they can be damaged by mounting some types of snow chains on them. Therefore, the use of snow tires is recommended instead of snow chains. Do not mount tire chains on vehicles equipped with aluminum wheels; snow chains may cause damage to the wheels. If snow chains must be used, use wire-type chains with a thickness of less than 12 mm (0.47

in). Damage to your vehicle caused by improper snow chain use is not covered by your vehicle manufacturer's warranty.

Install tire chains only on the front tires.

**⚠ CAUTION**

- Make sure the snow chains are the correct size and type for your tires. Incorrect snow chains can cause damage to the vehicle body and suspension and may not be covered by your vehicle manufacturer warranty. Also, the snow chain connecting hooks may be damaged from contacting vehicle components causing the snow chains to come loose from the tire. Make sure the snow chains are SAE class "S" certified.
- Always check chain installation for proper mounting after driving approximately 0.5 to 1 km (0.3 to 0.6 miles) to ensure safe mounting. Retighten or remount the chains if they are loose.
- Even with the appropriate chain installed, do not make a full turn (turn the steering wheel fully to one side) when driving the vehicle. (If you are making a full turn, drive with the speed below 10km/h.)

## Chain installation

When installing chains, follow the manufacturer's instructions and mount them as tightly as you can. Drive slowly with chains installed. If you hear the chains contacting the body or chassis, stop and tighten them. If they still make contact, slow down until it stops. Remove the chains as soon as you begin driving on cleared roads.

### WARNING

#### Mounting chains

When mounting snow chains, park the vehicle on level ground away from traffic. Turn on the vehicle Hazard Warning flashers and place a triangular emergency warning device behind the vehicle if available. Always place the vehicle in P (Park), apply the parking brake and turn off the engine before installing snow chains.

### WARNING

#### Tire chains

- The use of chains may adversely affect vehicle handling.
- Do not exceed 30 km/h (20 mph) or the chain manufacturer's recommended speed limit, whichever is lower.
- Drive carefully and avoid bumps, holes, sharp turns, and other road

hazards, which may cause the vehicle to bounce.

- Avoid sharp turns or locked-wheel braking.

### CAUTION

#### Tire chains

- Chains that are the wrong size or improperly installed can damage your vehicle's brake lines, suspension, body and wheels.
- Stop driving and retighten the chains any time you hear them hitting the vehicle.

#### Use high quality ethylene glycol coolant

Your vehicle is delivered with high quality ethylene glycol coolant in the cooling system. It is the only type of coolant that should be used because it helps prevent corrosion in the cooling system, lubricates the water pump and prevents freezing. Be sure to replace or replenish your coolant in accordance with the maintenance schedule in "Maintenance" on page 8-5.

Before winter, have your coolant tested to assure that its freezing point is sufficient for the temperatures anticipated during the winter.

### **Check battery and cables**

Winter puts additional burdens on the battery system. Visually inspect the battery and cables as described in "Maintenance" on page 8-5. Have the level of charge in your battery checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### **Change to "winter weight" oil if necessary**

In some climates it is recommended that a lower viscosity "winter weight" oil be used during cold weather. See "Specifications, Consumer information and Reporting safety defects" on page 9-2. If you aren't sure what weight oil you should use, Kia recommends to consult an authorized Kia dealer/service partner.

### **Check spark plugs and ignition system**

Inspect your spark plugs as described in "Maintenance" on page 8-5 and replace them if necessary. Also check all ignition wiring and components to be sure they are not cracked, worn or damaged in any way.

### **To keep locks from freezing**

To keep the locks from freezing, squirt an approved de-icer fluid or glycerine into the key opening. If a lock is covered with ice, squirt it with an approved de-icing fluid to remove the ice. If the lock is frozen internally, you may be able to thaw it out by using a heated key. Handle the heated key with care to avoid injury.

### **Use approved window washer anti-freeze in system**

To keep the water in the window washer system from freezing, add an approved window washer anti-freeze solution in accordance with instructions on the container. Window washer anti-freeze is available from an authorized Kia dealer/service partner and most auto parts outlets. Do not use engine coolant or other types of anti-freeze as these may damage the paint finish.

### **Don't let your parking brake freeze**

Under some conditions your parking brake can freeze in the engaged position. This is most likely to happen when there is an accumulation of snow or ice around or near the rear brakes or if the brakes are wet. If there is a risk the parking brake may freeze, apply it only temporarily while you put the gear shift lever in P (Park) 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 car to be sure the movement of the front wheels and the steering components is 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 tire chains, tow straps or chains, flashlight, emergency flares, sand, shovel, jumper cables, window scraper, gloves, ground cloth, covers, blanket, etc.

## **Trailer towing (For europe)**

If you are considering towing with your car, you should first check with your country's Department of Motor Vehicles to determine their legal requirements.

Since laws vary the requirements for towing trailers, cars, or other types of vehicles or apparatus may differ. Kia recommends to ask an authorized Kia dealer/service partner.

### **⚠ WARNING**

#### **Towing a trailer**

If you don't use the correct equipment and drive improperly, you can lose control when you pull a trailer. For example, if the trailer is too heavy, the brakes may not work well – or even at all. You and your passengers could be seriously or fatally injured. Pull a trailer only if you have followed all the steps in this section.

### **⚠ WARNING**

#### **Weight limits**

Before towing, make sure the total trailer weight, gross combination weight, gross vehicle weight, gross axle weight and trailer tongue load are all within the limits.

## \* NOTICE

- The technically permissible maximum load on the rear axle(s) may be exceeded by not more than 15 % and the technically permissible maximum laden mass of the vehicle may be exceeded by not more than 10 % or 100 kg (220.4 lbs), whichever value is lower. In this case, do not exceed 100 km/h (62.1 mph) for vehicle of category M1 or 80 km/h (49.7 mph) for vehicle of category N1.
- When towing a trailer, the additional load imposed at the trailer coupling device may cause the rear tire maximum load ratings to be exceeded, but not by more than 15%. In such a case, do not exceed 100km/h, and the rear tire pressure should be at least 20 kPa(0.2 bar) above the tire pressure(s) as recommended for normal use (i.e. without a trailer attached).

## ▲ CAUTION

Pulling a trailer improperly can damage your vehicle and result in costly repairs not covered by your warranty. To pull a trailer correctly, follow the advice in this section.

Your vehicle can tow a trailer. To identify what the vehicle trailering capacity is for your vehicle, refer to

"Weight of the trailer" on page 6-156 that appears later in this section.

Remember that trailering is different than just driving your vehicle by itself. Trailering means changes in handling, durability, and fuel economy. Successful, safe trailering requires correct equipment, and it has to be used properly.

This section contains many time tested, important trailering tips and safety rules. Many of these are important for your safety and that of your passengers. Please read this section carefully before you pull a trailer.

Load-pulling components such as the engine, transmission, wheel assemblies, and tires are forced to work harder against the load of the added weight. The engine is required to operate at relatively higher speeds and under greater loads. This additional burden generates extra heat. The trailer also considerably adds wind resistance, increasing pulling requirements.

CUV



OCDP059124

Wagon



OCDP059121

**\* NOTICE**

**Location of trailer mounting**

The mounting hole for hitches are located on both sides of the underbody behind the rear tires.

**Hitches**

It's important to have the correct hitch equipment. Crosswinds, large trucks going by, and rough roads are a few reasons why you'll need the

right hitch. Here are some rules to follow:

- Do you have to make any holes in the body of your vehicle when you install a trailer hitch? If you do, then be sure to seal the holes later when you remove the hitch. If you don't seal them, deadly carbon monoxide (CO) from your exhaust can get into your vehicle, as well as dirt and water.
- The bumpers on your vehicle are not intended for hitches. Do not attach rental hitches or other bumper-type hitches. Use only a frame-mounted hitch that does not attach to the bumper.
- Kia trailer hitch accessory is available at an authorized Kia dealer/ service partner.

**Safety chains**

You should always attach chains between your vehicle and your trailer. Cross the safety chains under the tongue of the trailer so that the tongue will not drop to the road if it becomes separated from the hitch.

Instructions about safety chains may be provided by the hitch manufacturer or by the trailer manufacturer. Follow the manufacturer's recommendation for attaching safety chains. Always leave just enough slack so you can turn with

your trailer. And, never allow safety chains drag on the ground.

### Trailer brakes

If your trailer is equipped with a braking system, make sure it conforms to your country's regulations and that it is properly installed and operating correctly.

If your trailer weighs more than the maximum trailer weight without trailer brakes loaded, then it needs its own brakes and they must be adequate. Be sure to read and follow the instructions for the trailer brakes so you'll be able to install, adjust and maintain them properly.

- Don't tap into your vehicle's brake system.

### WARNING

#### Trailer brakes

Do not use a trailer with its own brakes unless you are absolutely certain that you have properly set up the brake system. This is not a task for amateurs. Use an experienced, competent trailer shop for this work.

### Driving with a trailer

Towing a trailer requires a certain amount of experience. Before setting out for the open road, you must get to know your trailer. Acquaint yourself with the feel of handling and braking with the added weight of the trailer. And always keep in mind that the vehicle you are driving is now a good deal longer and not nearly so responsive as your vehicle is by itself.

Before you start, check the trailer hitch and platform, safety chains, electrical connector(s), lights, tires and mirror adjustment. If the trailer has electric brakes, start your vehicle and trailer moving and then apply the trailer brake controller by hand to be sure the brakes are working. This lets you check your electrical connection at the same time.

During your trip, check occasionally to be sure that the load is secure, and that the lights and trailer brakes are still working.

### *Following distance*

Stay at least twice as far behind the vehicle ahead as you would when driving your vehicle without a trailer. This can help you avoid situations that require heavy braking and sudden turns.

***Passing***

You'll need more passing distance up ahead when you're towing a trailer. And, because of the increased vehicle length, you'll need to go much farther beyond the passed vehicle before you can return to your lane.

***Backing up***

Hold the bottom of the steering wheel with one hand. Then, to move the trailer to the left, just move your hand to the left. To move the trailer to the right, move your hand to the right. Always back up slowly and, if possible, have someone guide you.

***Making turns***

When you're turning with a trailer, make wider turns than normal. Do this so your trailer won't strike soft shoulders, curbs, road signs, trees, or other objects. Avoid jerky or sudden maneuvers. Signal well in advance.

***Turn signals when towing a trailer***

When you tow a trailer, your vehicle has to have a different turn signal flasher and extra wiring. The green arrows on your instrument panel will flash whenever you signal a turn or lane change. Properly connected, the trailer lights will also flash to

alert other drivers you're about to turn, change lanes, or stop.

When towing a trailer, the green arrows on your instrument panel will flash for turns even if the bulbs on the trailer are burned out. Thus, you may think drivers behind you are seeing your signals when, in fact, they are not. It's important to check occasionally to be sure the trailer bulbs are still working. You must also check the lights every time you disconnect and then reconnect the wires.

Do not connect a trailer lighting system directly to your vehicle's lighting system. Use only an approved trailer wiring harness.

Have yourself assisted by a professional workshop in installing the wiring harness.

Kia recommends to visit an authorized Kia dealer/service partner.

**⚠ WARNING**

Failure to use an approved trailer wiring harness could result in damage to the vehicle electrical system and/or personal injury.

### ***Driving on grades***

Reduce the speed and shift to a lower gear before you start down a long or steep downgrade. If you don't shift down, you might have to use your brakes so much that they would get hot and no longer operate efficiently.

On a long uphill grade, shift down and reduce your speed to around 70 km/h (45 mph) to reduce the possibility of engine and transmission overheating.

#### **⚠ CAUTION**

- When towing a trailer on steep grades (in excess of 6%) pay close attention to the engine coolant temperature gauge to ensure the engine does not overheat. If the needle of the coolant temperature gauge moves across the dial towards "H (HOT) (or 130°C / 260°F)", pull over and stop as soon as it is safe to do so, and allow the engine to idle until it cools down. You may proceed once the engine has cooled sufficiently.
- You must decide the driving speed depending on trailer weight and uphill grade to reduce the possibility of engine and transmission overheating.

### ***Parking on hills***

Generally, if you have a trailer attached to your vehicle, you should not park your vehicle on a hill. People can be seriously or fatally injured, and both your vehicle and the trailer can be damaged if unexpectedly roll down hill.

#### **⚠ WARNING**

##### **Parking on a hill**

Parking your vehicle on a hill with a trailer attached could cause serious injury or death, should the trailer break loose.

However, if you ever have to park your trailer on a hill, here's how to do it:

1. Pull the vehicle into the parking space. Turn the steering wheel in the direction of the curb (right if headed down hill, left if headed up hill).
2. Set the parking brake and shut off the vehicle.
3. Place chocks under the trailer wheels on the down hill side of the wheels.
4. Start the vehicle, hold the brakes, shift to neutral, release the parking brake and slowly release the brakes until the trailer chocks absorb the load.
5. Reapply the brakes.

6. Shut off the vehicle and release the vehicle brakes but leave the parking brake set.

### **⚠ WARNING**

#### **Parking brake**

It can be dangerous to get out of your vehicle if the parking brake is not firmly set.

If you have left the engine running, the vehicle can move suddenly. You or others could be seriously or fatally injured.

#### **When you are ready to leave after parking on a hill**

1. Slowly remove your foot from the brake pedal.
2. Drive slowly until the trailer is clear of the chocks.
3. Stop and have someone pick up and store the chocks.

#### **Maintenance when trailer towing**

Your vehicle will need service more often when you regularly pull a trailer. Important items to pay particular attention to include engine oil, axle lubricant and cooling system fluid. Brake condition is another important item to frequently check. Each item is covered in this manual, and the Index will help you find them quickly. If you're trailering, it's a good idea to review these sections before you start your trip.

Don't forget to also maintain your trailer and hitch. Follow the maintenance schedule that accompanied your trailer and check it periodically. Preferably, conduct the check at the start of each day's driving. Most importantly, all hitch nuts and bolts should be tight.

### **⚠ CAUTION**

- Due to higher load during trailer usage, overheating might occur in hot days or during uphill driving. If the coolant gauge indicates overheating, switch off the A/C and stop the vehicle in a safe area to cool down the engine.
- When towing, check the transmission fluid more frequently.
- If your vehicle is not equipped with an air conditioner, you should install a condenser fan to improve engine performance when towing a trailer.

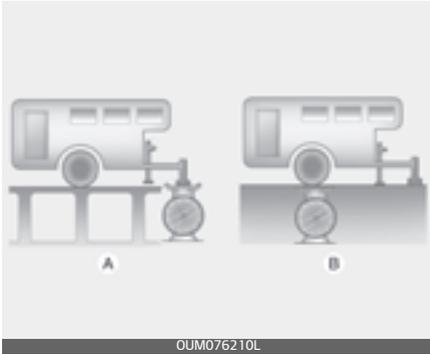
**If you do decide to pull a trailer**

Here are some important points if you decide to pull a trailer:

- Consider using a sway control. You can ask a hitch dealer about sway control.
- Do not do any towing with your car during its first 2,000 km (1,200 miles) in order to allow the engine to properly break in. Failure to heed this caution may result in serious engine or transmission damage.
- When towing a trailer, Kia recommends that you consult an authorized Kia dealer/service partner on additional requirements such as a towing kit, etc.
- Always drive your vehicle at a moderate speed (less than 100 km/h (60 mph)).
- On a long uphill grade, do not exceed 70 km/h (45 mph) or the posted towing speed limit, whichever is lower.
- The chart contains important considerations that have to do with weight:

Item		Wagon (trailer package)	CUV (trailer package)
Maximum trailer weight [kg (lbs.)]	With brake	1,300 (2,866)	
	Without brake	600 (1,323)	
Maximum permissible static vertical load on the coupling device [kg (lbs.)]		75 (165)	
Recommended distance from rear wheel center to coupling point [mm (inch)]		1,195 (47.0)	915 (36.0)

### ***Weight of the trailer***



A: Tongue Load

B: Total Trailer Weight

What is the maximum safe weight of a trailer? It should never weigh more than the maximum trailer weight with trailer brakes. But even that can be too heavy.

It depends on how you plan to use your trailer. For example, speed, altitude, road grades, outside temperature and how often your vehicle is used to pull a trailer are all important. The ideal trailer weight can also depend on any special equipment that you have on your vehicle.

### ***Weight of the trailer tongue***



A: Gross Axle Weight

B: Gross Vehicle Weight

The tongue load of any trailer is an important weight to measure because it affects the total gross vehicle weight (GVW) of your vehicle. This weight includes the curb weight of the vehicle, any cargo you may carry in it, and the people who will be riding in the vehicle. And if you tow a trailer, you must add the tongue load to the GVW because your vehicle will also be carrying that weight.

The trailer tongue should weigh a maximum of 10% of the total loaded trailer weight, within the limits of the maximum trailer tongue load permissible.

After you've loaded your trailer, weigh the trailer and then the tongue, separately, to see if the weights are proper. If they aren't, you may be able to correct them

simply by moving some items around in the trailer.

### **⚠ WARNING**

#### **Trailer**

- Never load a trailer with more weight in the rear than in the front. The front should be loaded with approximately 60% of the total trailer load; the rear should be loaded with approximately 40% of the total trailer load.
- Never exceed the maximum weight limits of the trailer or trailer towing equipment. Improper loading can result in damage to your vehicle and/or personal injury. Check weights and loading at a commercial scale or highway patrol office equipped with scales.
- An improperly loaded trailer can cause loss of vehicle control.

### **\* NOTICE**

With increasing altitude the engine performance decreases. From 1,000m above sea level and for every 1,000m thereafter 10% of vehicle/trailer weight (trailer weight + gross vehicle weight) must be deducted.

## **Vehicle weight**

This section will guide you in the proper loading of your vehicle, to keep your loaded vehicle weight within its design rating capability. Properly loading your vehicle will provide maximum return of the vehicle design performance. Before loading your vehicle, familiarize yourself with the following terms for determining your vehicle's weight ratings, from the vehicle's specifications and the certification label:

### **Base curb weight**

This is the weight of the vehicle including a full tank of fuel and all standard equipment. It does not include passengers, cargo, or optional equipment.

### **Vehicle curb weight**

This is the weight of your new vehicle when you picked it up from your dealer plus any aftermarket equipment.

### **Cargo weight**

This figure includes all weight added to the Base Curb Weight, including cargo and optional equipment.

**GAW (Gross axle weight)**

This is the total weight placed on each axle (front and rear) – including vehicle curb weight and all payload.

**GAWR (Gross axle weight rating)**

This is the maximum allowable weight that can be carried by a single axle (front or rear). These numbers are shown on the certification label.

The total load on each axle must never exceed its GAWR.

**GVW (Gross vehicle weight)**

This is the Base Curb Weight plus actual Cargo Weight plus passengers.

**GVWR (Gross vehicle weight rating)**

This is the maximum allowable weight of the fully loaded vehicle (including all options, equipment, passengers and cargo). The GVWR is shown on the certification label located on the driver's (or front passenger's) door sill.

**Overloading** **WARNING****Vehicle weight**

The gross axle weight rating (GAWR) and the gross vehicle weight rating (GVWR) for your vehicle are on the certification label attached to the driver's (or front passenger's) door. Exceeding these ratings can cause an accident or vehicle damage. You can calculate the weight of your load by weighing the items (and people) before putting them in the vehicle. Be careful not to overload your vehicle.

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## WHAT TO DO IN AN EMERGENCY

### Road warning

#### Hazard warning flasher



OCDP069001

The hazard warning flasher serves as a warning to other drivers to exercise extreme caution when approaching, overtaking, or passing your vehicle.

It should be used whenever emergency repairs are being made or when the vehicle is stopped near the edge of a roadway.

Depress the flasher switch with the ENGINE START/STOP button in any position. The flasher switch is located in the center console switch panel. All turn signal lights will flash simultaneously.

- The hazard warning flasher operates whether your vehicle is running or not.
- The turn signals do not work when the hazard flasher is on.
- Care must be taken when using the hazard warning flasher while the vehicle is being towed.

## In case of an emergency while driving

### If the engine stalls at a crossroad or crossing

If the engine stalls at a crossroad or crossing, set the shift lever in the N (Neutral) position and then push the vehicle to a safe place.

### If you have a flat tire while driving

If a tire goes flat while you are driving:

1. Take your foot off the accelerator pedal and let the vehicle slow down while driving straight ahead. Do not apply the brakes immediately or attempt to pull off the road as this may cause a loss of control. When the vehicle has slowed down to such a speed that it is safe to do so, brake carefully and pull off the road. Drive off the road as far as possible and park on a firm level ground. If you are on a divided highway, do not park in the median area between the two traffic lanes.
2. When the vehicle is stopped, turn on your emergency hazard flashers, set the parking brake.
3. Have all passengers get out of the vehicle. Be sure they all get out on the side of the vehicle that is away from traffic.
4. When changing a flat tire, follow the instruction provided later in this section.

### If engine stalls while driving

1. Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place.
2. Turn on your emergency flashers.
3. Try to start the engine again. If your vehicle does not start, consult a professional workshop. Kia recommends to consult an authorized Kia dealer/service partner.

## If the engine will not start

### If engine doesn't turn over or turns over slowly

1. Check the battery connections to be sure they are clean and tight.
2. Turn on the interior light. If the light dims or goes out when you operate the starter, the battery is discharged.
3. Check the starter connections to be sure they are securely tightened.
4. Do not push or pull the vehicle to start it. See instructions for "Jump starting".

### **WARNING**

If the engine will not start, do not push or pull the vehicle to start it. This could result in a collision or cause other damage. In addition, push or pull starting may cause the catalytic converter to be overloaded and create a fire hazard.

---

### If engine turns over normally but does not start

1. Check the fuel level.
2. With the ENGINE START/STOP button in the OFF position, check all connectors at the ignition coils and spark plugs. Reconnect any that may be disconnected or loose.
3. Check the fuel line in the engine compartment.
4. If the engine still does not start, call a professional workshop. Kia recommends to call an authorized Kia dealer/service partner.

## Emergency starting



ODEEV088002NR

Connect cables in numerical order and disconnect in reverse order.

## Jump starting

Jump starting can be dangerous if done incorrectly. Therefore, to avoid harm to yourself or damage to your vehicle or battery, follow the jump starting procedures. If in doubt, we strongly recommend that you have a competent technician or towing service jump start your vehicle.

### ⚠ CAUTION

Use only a 12-volt jumper system. You can damage a 12-volt starting motor, ignition system, and other electrical parts beyond repair by use of a 24-volt power supply (either two 12-volt batteries in series or a 24-volt motor generator set).

### ⚠ WARNING

#### Battery

Never attempt to check the electrolyte level of the battery as this may cause the battery to rupture or explode causing serious injury.

### ⚠ WARNING

#### Battery

- Keep all flames or sparks away from the battery. The battery produces hydrogen gas which may explode if exposed to flame or sparks. If these instructions are not followed exactly, serious personal injury and damage to the vehicle may occur! If you are not sure how to follow this procedure, seek qualified assistance. Automobile batteries contain sulfuric acid. This is poisonous and highly corrosive. When jump starting, wear protective glasses and be careful not to get acid on yourself, your clothing or on the vehicle.
- Do not attempt to jump start the vehicle if the discharged battery is frozen or if the electrolyte level is low; the battery may rupture or explode.
- Do not allow the (+) and (-) jumper cables to touch. It may cause sparks.

- The battery may rupture or explode when you jump start with a low or frozen battery.

### ***Jump starting procedure***

1. Make sure the booster battery is 12-volt and that its negative terminal is grounded.
2. If the booster battery is in another vehicle, do not allow the vehicles come in contact.
3. Turn off all unnecessary electrical loads.
4. Connect the jumper cables in the exact sequence shown in the illustration. First connect one end of a jumper cable to the positive terminal of the discharged battery (1), then connect the other end to the positive terminal on the booster battery (2).

Proceed to connect one end of the other jumper cable to the negative terminal of the booster battery (3), then the other end to a solid, stationary, metallic point (for example, the engine lifting bracket) away from the battery (4). Do not connect it to or near any part that moves when the engine is cranked.

Do not allow the jumper cables to contact anything except the correct battery terminals or the correct ground. Do not lean over the battery when making connections.

## **⚠ CAUTION**

### **Battery cables**

Do not connect the jumper cable from the negative terminal of the booster battery to the negative terminal of the discharged battery. This can cause the discharged battery to overheat and crack, releasing battery acid. Make sure to connect one end of the jumper cable to the negative terminal of the booster battery, and the other end to a metallic point, far away from the battery.

5. Start the engine of the vehicle with the booster battery and let it run at 2,000 rpm, then start the engine of the vehicle with the discharged battery.

If the cause of your battery discharging is not apparent, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

## Push-starting

Vehicles equipped with dual clutch transmission cannot be push-started.

Follow the directions in this section for jump-starting.

### **WARNING**

Never tow a vehicle to start it because the sudden surge forward when the engine starts could cause a collision with the tow vehicle.

---

## If the engine overheats

If your temperature gauge indicates overheating, you will experience a loss of power, or hear loud pinging or knocking, the engine is probably too hot. If this happens, you should:

1. Pull off the road and stop as soon as it is safe to do so.
2. Put the vehicle in P (Park) and set the parking brake. If the air conditioning is ON, turn it OFF.
3. If engine coolant is running out under the vehicle or steam is coming out from the hood, stop the engine. Do not open the hood until the coolant has stopped running or the steaming has stopped. If there is no visible loss of engine coolant and no steam, leave the engine running and check to be sure the engine cooling fan is operating. If the fan is not running, turn the engine off.
4. Check to see if the water pump drive belt is missing. If it is not missing, check to see that it is tight. If the drive belt seems to be satisfactory, check for coolant leaking from the radiator, hoses or under the vehicle. (If the air conditioning had been in use, it is normal for cold water to be draining from it when you stop).

**⚠ WARNING**

While the engine is running, keep hair, hands and clothing away from moving parts such as the fan and drive belts to prevent injury.

5. If the water pump drive belt is broken or engine coolant is leaking out, stop the engine immediately and call a professional workshop. Kia recommends to call an authorized Kia dealer/service partner.

**⚠ WARNING**

Do not remove the radiator cap when the engine is hot. This can allow coolant to blow out of the opening and cause serious burns.

6. If you cannot find the cause of the overheating, wait until the engine temperature has returned to normal. Then, if coolant has been lost, carefully add coolant to the reservoir to bring the fluid level in the reservoir up to the halfway mark.
7. Proceed with caution, keeping alert for further signs of overheating. If overheating happens again, call a professional workshop. Kia recommends to call an authorized Kia dealer/service partner.

**⚠ CAUTION**

- Serious loss of coolant indicates there is a leak in the cooling system. In this case, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
- When the engine overheats from low engine coolant, suddenly adding engine coolant may cause cracks in the engine. To prevent damage, add engine coolant slowly in small quantities.

## Tire Pressure Monitoring System (TPMS)



OCDP069002



OCDP079400

1. Low tire pressure telltale /TPMS malfunction indicator
2. Low tire pressure position telltale (Shown on the LCD display)

### Check tire pressure

- You can check the tire pressure in the assist mode on the cluster.
  - Refer to "User settings mode (if equipped)" on page 5-70.
- Tire pressure is displayed 1~2 minutes later after driving.
- If tire pressure is not displayed when the vehicle is stopped,

"Drive to display" message displays. After driving, check the tire pressure.

- You can change the tire pressure unit in the user settings mode on the cluster.
  - psi, kpa, bar (Refer to "User settings mode (if equipped)" on page 5-70).

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label.

(If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a tire pressure monitoring system (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation

also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale.

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the low tire pressure telltale. When the system detects a malfunction, the telltale will flash for approximately 1 minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists. When the TPMS malfunction indicator remains illuminated after blinking for approximately 1 minute, 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 a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

1. The low tire pressure telltale/ TPMS malfunction indicator do not illuminate for 3 seconds when the ENGINE START/STOP button is turned or engine is running.
2. The TPMS malfunction indicator remains illuminated after blinking for approximately 1 minute.
3. The Low tire pressure position telltale remains illuminated.

## Low tire pressure telltale (⚠)

### *Low tire pressure position telltale*



When the tire pressure monitoring system warning indicators are illuminated and warning message displayed on the cluster LCD display, one or more of your tires is significantly under-inflated. The low tire pressure position telltale light will indicate which tire is significantly under-inflated by illuminating the corresponding position light.

If either 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 a spare tire.

If you drive the vehicle for about 10 minutes at speeds above 25 km/h after replacing the low pressure tire with the spare tire, one of the following will happen:

- The TPMS malfunction indicator may blink for approximately 1 minute and then remain continuously illuminated because the TPMS sensor is not mounted on the spare wheel. (changed tire equipped with a sensor not in the vehicle)
- The TPMS malfunction indicator will remain continuously illuminated while driving because the TPMS sensor is not mounted on the spare wheel. (changed tire equipped with a sensor in the vehicle)

### **⚠ CAUTION**

- In winter or cold weather, the low tire pressure telltale may illuminate 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 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

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

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

#### Tire Pressure Monitoring System (TPMS) malfunction indicator

The TPMS malfunction indicator will illuminate after it blinks for approximately one minute when there is a problem with the Tire Pressure Monitoring System.

In this case, have the system checked by a professional workshop to determine the cause of the prob-

lem. Kia recommends to visit an authorized Kia dealer/service partner.

### NOTICE

If there is a malfunction with the TPMS, the low tire pressure position telltale will not be displayed even though the vehicle has an underinflated tire.

### CAUTION

- The TPMS malfunction indicator may blink for approximately 1 minute and then remain continuously illuminated if the vehicle is moving around electric power supply cables or radios transmitter such as at police stations, government and public offices, broadcasting stations, military installations, airports, or transmitting towers, etc. This can interfere with normal operation of the Tire Pressure Monitoring System (TPMS).
- The TPMS malfunction indicator may blink for approximately 1 minute and then remain continuously illuminated if snow chains are used or some separate electronic devices such as notebook computer, mobile charger, remote starter or navigation etc., are used in the vehicle.

This can interfere with normal operation of the Tire Pressure Monitoring System (TPMS).

---

### Changing a tire with TPMS

If you have a flat tire, the low Tire Pressure and Position telltales will come on. In this case, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### CAUTION

We recommend that you use the sealant approved by Kia. The sealant on the tire pressure sensor and wheel shall be eliminated when you replace the tire with a new one.

---

Each wheel is equipped with a tire pressure sensor mounted inside the tire behind the valve stem. You must use TPMS specific wheels. Have your tires serviced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

If you drive the vehicle for about 10 minutes at speeds above 25 km/h after replacing the low pressure tire with the spare tire, one of the following will happen:

- The TPMS malfunction indicator may blink for approximately 1 minute and then remain continuously illuminated because the TPMS sensor is not mounted on the spare wheel. (changed tire equipped with a sensor not in the vehicle)
- The TPMS malfunction indicator will remain continuously illuminated while driving because the TPMS sensor is not mounted on the spare wheel. (changed tire equipped with a sensor in the vehicle)

You may not be able to identify a low tire by simply looking at it. Always use a good quality tire pressure gauge to measure the tire's inflation pressure. Please note that a tire that is hot (from being driven) will have a higher pressure measurement than a tire that is cold (from sitting stationary for at least 3 hours and driven less than 1 mile (1.6 km) during that 3 hour period).

Allow the tire to cool before measuring the inflation pressure. Always be sure the tire is cold before inflating to the recommended pressure.

A cold tire means the vehicle has been sitting for 3 hours and driven for less than 1 mile (1.6 km) in that 3 hour period.

**⚠ CAUTION**

We recommend that you use the sealant approved by Kia if your vehicle is equipped with a Tire Pressure Monitoring System. The liquid sealant can damage the tire pressure sensors.

---

**⚠ WARNING**

**TPMS**

- 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.
- 

**⚠ WARNING**

**Protecting TPMS**

Tampering with, modifying, or disabling the Tire Pressure Monitoring System (TPMS) components may interfere with the system's ability to warn the driver of low tire pressure conditions and/or TPMS malfunctions. Tampering with, modifying, or disabling the Tire Pressure Monitoring System (TPMS) components may void the warranty for that portion of the vehicle.

---

**⚠ WARNING**

**For EUROPE**

- Do not modify the vehicle, it may interfere with the TPMS function.
  - The wheels on the market do not have a TPMS sensor. For your safety, use parts for replacement from a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
  - If you use the wheels on the market, use a TPMS sensor approved by an authorized Kia dealer. If your vehicle is not equipped with a TPMS sensor or TPMS does not work properly, you may fail the periodic vehicle inspection conducted in your country.
  - All vehicles sold in the EUROPE market during below period must be equipped with TPMS.
    - New model vehicle: Nov. 1, 2012 ~
    - Current model vehicle : Nov. 1, 2014~ (Based on vehicle registrations)
-

### If you have a flat tire (with tire mobility kit)

CUV



OCDP069041

Wagon



OCDP069046

Please read the instructions before using the Tire Mobility Kit.

1. Compressor
2. Sealant bottle

The Tire Mobility Kit is a temporary fix to the tire and have the tire inspected by a professional workshop as soon as possible. Kia recommends to visit an authorized Kia dealer/service partner.

### ⚠ CAUTION

#### One sealant for one tire

When two or more tires are flat, do not use the tire mobility kit because the supported one sealant of Tire Mobility Kit is only used for one flat tire.

### ⚠ WARNING

#### Tire wall

Do not use the Tire Mobility Kit to repair punctures in the tire walls. This can result in an accident due to tire failure.

### ⚠ WARNING

#### Temporary fix

Have your tire repaired as soon as possible. The tire may lose air pressure at any time after inflating with the Tire Mobility Kit.

### ⚠ CAUTION

- When replacing or repairing the tire after using tire sealant, make certain to remove the sealant attached to the inner part of the tire and wheel. If the sealant is not removed, noise and vibration may occur.
- We recommend use original Kia manufactured sealant.

- If the TPMS warning light illuminates after using the TMK, have your vehicle inspected by a professional workshop. Kia recommends to contact an authorized Kia dealer/service partner.

## Introduction



With the Tire Mobility Kit (TMK) you stay mobile even after experiencing a tire puncture.

The system of compressor and sealing compound effectively and comfortably 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 (up to 200 km (120 miles)) at a max. speed of 80 km/h (50 mph) in order to reach a vehicle or tire dealer to have the tire replaced.

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 TMK is not designed or intended as a permanent tire repair method and is to be used for one tire only.

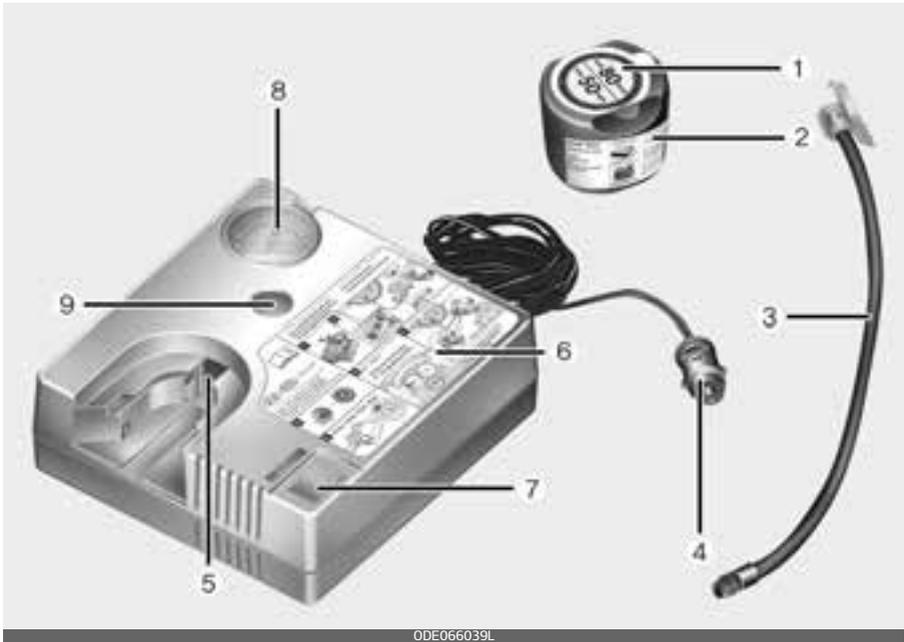
This instruction shows you step by step how to temporarily seal the puncture simply and reliably.

Refer to "Notes on the safe use of the Tire Mobility Kit" on page 7-22"

### **⚠ WARNING**

Do not use the TMK if a tire is severely damaged by driving run flat or with insufficient air pressure. Only punctured areas located within the tread region of the tire can be sealed using the TMK.

### Components of the Tire Mobility Kit (TMK) - Type A

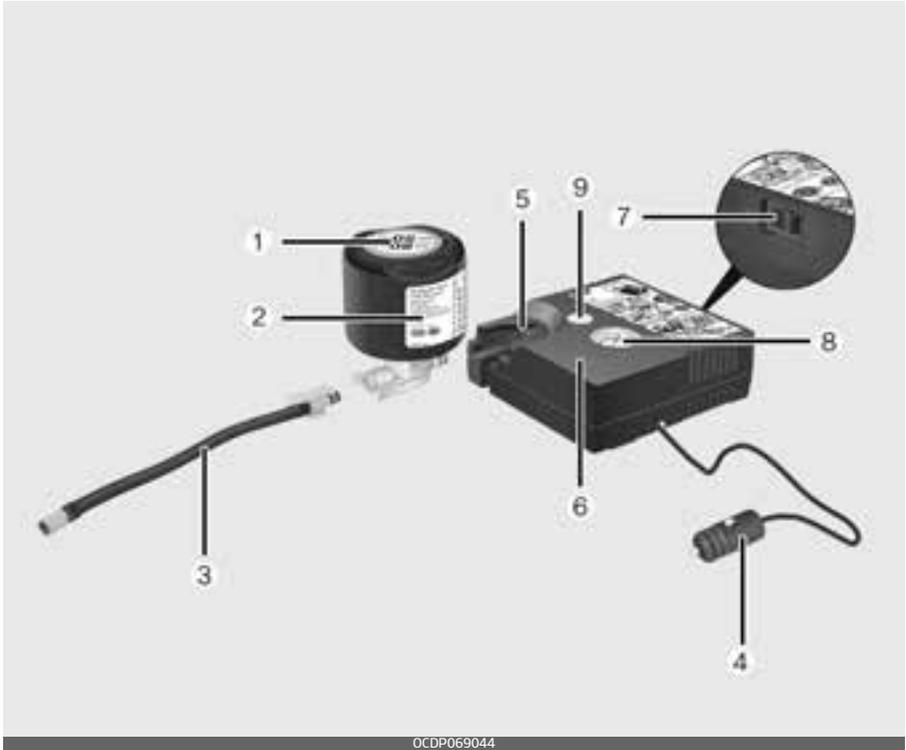


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- 1. Speed restriction label
- 2. Sealant bottle
- 3. Filling hose from sealant bottle to wheel
- 4. Connectors and cable for the power outlet direct connection
- 5. Holder for the sealant bottle
- 6. Compressor
- 7. On/off switch
- 8. Pressure gauge for displaying the tire inflation pressure
- 9. Button for reducing tire inflation pressure

Connectors, cable and connection hose are stored in the compressor housing.

## Components of the Tire Mobility Kit (TMK) - Type B



1. Speed restriction label
2. Sealant bottle
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

Connectors, cable and connection hose are stored in the compressor housing.

**⚠ WARNING**

Before using the Tire Mobility Kit, follow the instructions on the sealant bottle.

Remove the label with the speed restriction from the sealant bottle and apply it to the steering wheel. Please note the expiry date on the sealant bottle.

**Using the Tire Mobility Kit**

1. Detach the speed restriction label (1) from the sealant bottle (2), and place it in a highly visible place inside the vehicle such as on the steering wheel to remind the driver not to drive too fast.
2. Filling the sealant Strictly follow the specified sequence, otherwise the sealant may escape under high pressure.
3. Shake the sealant bottle.



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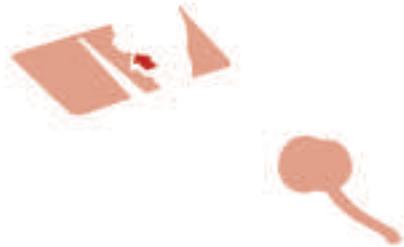
4. Connect the filling hose (3) onto the connector of the sealant bottle (A).

5. Ensure that button (9) on the compressor is not pressed.
6. Unscrew the valve cap from the valve of the defective wheel and screw filling hose (3) of the sealant bottle onto the valve.
7. Insert the sealant bottle into the housing of the compressor so that the bottle is upright (B).



OCDP069005

8. Ensure that the compressor is switched off, position 0.



OCDP069006

9. Connect between compressor and the vehicle power outlet using the cable and connectors.

**\* NOTICE**

Only use the front passenger side power outlet.

10. With the ENGINE START/STOP button position on: Switch on the compressor and let it run for approximately 3 minutes to fill the sealant. The inflation pressure of the tire after filling is unimportant.
11. Switch off the compressor.
12. Detach the hose from the sealant bottle connector and from the tire valve.

**Distributing the sealant**

- Immediately drive approximately 7~10km (4~6miles or, about 10min) to evenly distribute the sealant in the tire.

Return the Tire Mobility Kit to its storage location in the vehicle.

**⚠ WARNING**

Carbon monoxide poisoning and suffocation is possible if the engine is left running in a poorly ventilated or unventilated location (such as inside a building).

**⚠ CAUTION**

Do not exceed a speed of 60 km/h (35 mph). If possible, do not fall below a speed of 20 km/h (12 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. Call for road side service or towing.

When you use the Tire Mobility Kit, the wheel may be stained by sealant. Therefore, remove the wheel stained by sealant and have the vehicle inspected at a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

**Checking the tire inflation pressure**

1. After driving approximately 7~10 km (4~6 miles or about 10 minutes), stop at a suitable location.
2. Connect the filling hose (3) of the compressor (clip mounted side) directly and then connect the filling hose (3) (opposite side) to the tire valve.
3. Connect between compressor and the vehicle battery using the cable and connectors.
4. Adjust the tire inflation pressure to 200 kPa (29 psi). With the ENGINE START/STOP button position on, proceed as follows.

7

- **To increase the inflation pressure:** Switch on the compressor, position I. To check the current inflation pressure setting, briefly switch off the compressor.

**⚠ WARNING**

Do not let the compressor run for more than 10 minutes, otherwise the device will overheat and may be damaged.

- To reduce the inflation pressure: Press the button (9) on the compressor.

**⚠ CAUTION**

If the inflation pressure is not maintained, drive the vehicle a second time, refer to "Checking the tire inflation pressure" on page 7-21. Then repeat steps 1 to 4.

Use of the TMK may be ineffectual for tire damage larger than approximately 4 mm (0.16 in).

Contact a professional workshop if the tire cannot be made roadworthy with the Tire Mobility Kit. Kia recommends to visit an authorized Kia dealer/service partner.

**⚠ WARNING**

The tire inflation pressure must be at least 200 kPa (29 psi). If it is not, do not continue driving. Call for road side service or towing.

**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 TMK away from moving traffic. Place your warning triangle in a prominent place to make passing vehicles aware of your location.
- To be sure your vehicle will not move, even when you're on fairly level ground, always set your parking brake.
- Only use the TMK for sealing/inflation passenger car tires. Do not use on motorcycles, bicycles or any other type of tires.
- Do not remove any foreign objects such as nails or screws – that have penetrated the tire.
- Before using the TMK, read the precautionary advice printed on the sealant bottle!
- Provided the car is outdoors, leave the engine running. Otherwise operating the compressor may eventually drain the car battery.
- Never leave the TMK 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 TMK if the ambient temperature is below  $-30^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$ ).
- When the tire and wheel are damaged, do not use Tire Mobility Kit for your safety.

### Technical Data

#### ***For 16 inch tire (For Wagon)***

- System voltage: DC 12 V
- Working voltage: DC 10 – 15 V
- Amperage rating: max. 10 A
- Suitable for use at temperatures:  $-30 \sim +70^{\circ}\text{C}$  ( $-22 \sim +158^{\circ}\text{F}$ )
- Max. working pressure: 6 bar (87 psi)
- Size
  - Compressor: 161 x 150 x 55.8 mm (6.3 x 5.9 x 2.2 in.)
  - Sealant bottle: 81 x 85.5  $\varnothing$  mm (3.2 x 3.4  $\varnothing$  in.)
  - Compressor weight: 0.7 kg (1.5 lbs)
  - Sealant volume: 200 ml (12.2 cu. in.)

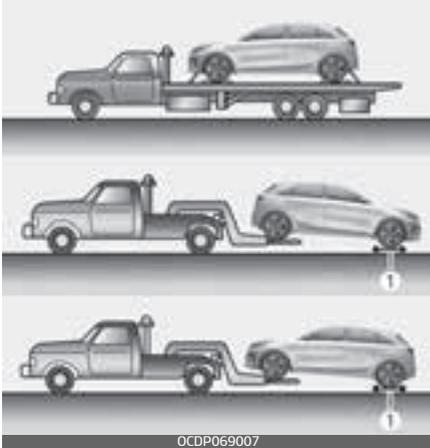
#### ***For 17/18 inch tire (including 16/18 inch tire of CUV)***

- System voltage: DC 12 V
- Working voltage: DC 10 – 15 V
- Amperage rating: max. 15 A
- Suitable for use at temperatures:  $-30 \sim +70^{\circ}\text{C}$  ( $-22 \sim +158^{\circ}\text{F}$ )
- Max. working pressure: 6 bar (87 psi)
- Size
  - Compressor: 161 x 150 x 55.8 mm (6.3 x 5.9 x 2.2 in.)
  - Sealant bottle: 104 x 85  $\varnothing$  mm (4.1 x 3.3  $\varnothing$  in.)
  - Compressor weight: 0.7 kg (1.5 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

### Towing service



If emergency towing is necessary, we recommend having it done by an authorized Kia dealer or a commercial tow-truck service. Proper lifting and towing procedures are necessary to prevent damage to the vehicle. The use of wheel dollies (1) or flatbed is recommended.

It is acceptable to tow the vehicle with the rear wheels on the ground (without dollies) and the front wheels off the ground.

If any of the loaded wheels or suspension components are damaged or the vehicle is being towed with the front wheels on the ground, use a towing dolly under the front wheels.

When being towed by a commercial tow truck and wheel dollies are not used, the front of the vehicle should always be lifted, not the rear.



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### **⚠ CAUTION**

- Do not tow the vehicle backwards with the front wheels on the ground as this may cause damage to the vehicle.
- Do not tow with sling-type equipment. Use wheel lift or flatbed equipment.

When towing your vehicle in an emergency without wheel dollies :

1. Set the ENGINE START/STOP button in the ACC position.
2. Place the transmission shift lever in N (Neutral).
3. Release the parking brake.

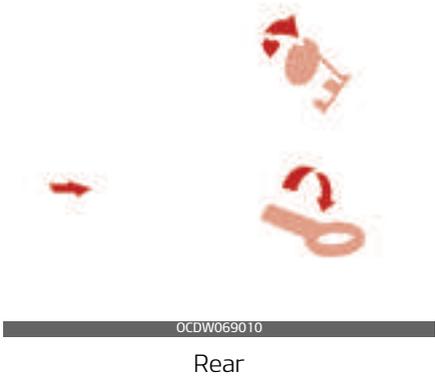
**⚠ CAUTION**

Failure to place the transmission shift lever in N (Neutral) may cause internal damage to the transmission.

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.

**Removable towing hook**

Front



Front



Rear

Rear



OCDW069029

**If towing is necessary, we recommend you to have it done by an authorized Kia dealer or a commercial tow truck service.**

1. Open the tailgate, and remove the towing hook from the tool case.
2. Remove the hole cover pressing the upper (front) or lower (rear) part of the cover on the bumper.

If towing service is not available in an emergency, your vehicle may be temporarily towed using a cable or

chain secured to the emergency towing hook under the front (or rear) of the vehicle. Use extreme caution when towing the vehicle. A driver must be in the vehicle to steer it and operate the brakes.

Towing in this manner may be done only on hard-surfaced roads for a short distance and at low speed. Also, the wheels, axles, power train, steering and brakes must all be in good condition.

- Do not use the tow hooks to pull a vehicle out of mud, sand or other conditions from which the vehicle cannot be driven out under its own power.
- Avoid towing a vehicle heavier than the vehicle doing the towing.
- The drivers of both vehicles should communicate with each other frequently.

### CAUTION

- Attach a towing strap to the tow hook.
- Using a portion of the vehicle other than the tow hooks for towing may damage the body of your vehicle.
- Use only a cable or chain specifically intended for use in towing vehicles. Securely fasten the cable or chain to the towing hook provided.

- Accelerate or decelerate the vehicle in a slow and gradual manner while maintaining tension on the tow rope or chain to start or drive the vehicle, otherwise tow hooks and the vehicle may be damaged.

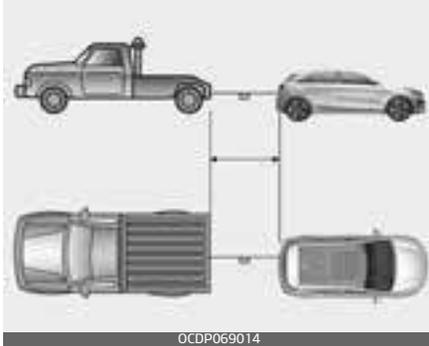
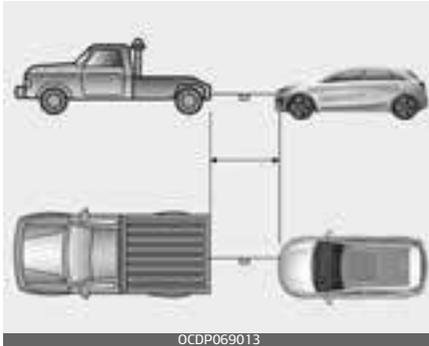
- Before emergency towing, check if the hook is not broken or damaged.
- Fasten the towing cable or chain securely to the hook.
- Do not jerk the hook. Apply it steadily and with even force.
- To avoid damaging the hook, do not pull from the side or at a vertical angle. Always pull straight ahead.

### WARNING

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.



- Use a towing strap less than 5 m (16 feet) long. Attach a white or red cloth (about 30 cm (12 inches) wide) in the middle of the strap for easy visibility.
- 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.

### **Emergency towing precautions**

- Turn the ENGINE START/STOP button to ACC so the steering wheel isn't locked.
- Place the transmission shift lever in N (Neutral).
- Release the parking brake.
- The vehicle should be towed at a speed of 25 km/h (16 mph) or less within the distance of 20 km (12 miles).
- Press the brake pedal with more force than normal since you will have reduced brake performance.
- More steering effort will be required because the power steering system will be disabled.
- If you are driving down a long hill, the brakes may overheat and brake performance will be reduced. Stop often and let the brakes cool off.

### **⚠ CAUTION**

#### **Dual clutch transmission**

- If the car is being towed with all four wheels on the ground, it can be towed only from the front. Be sure that the transmission is in neutral. Be sure the steering is unlocked by placing the ENGINE START/STOP button in the ACC position. A driver must be in the

towed vehicle to operate the steering and brakes.

- To avoid serious damage to the dual clutch transmission, limit the vehicle speed to 15 km/h (10 mph) and drive less than 1.5 km (1 mile) when towing.
  - Before towing, check the dual clutch transmission for fluid leaks under your vehicle. If the dual clutch transmission fluid is leaking, flatbed equipment or a towing dolly must be used.
- 

## If an accident occurs

### WARNING

- 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.
  - Any gas or electrolyte leakage from your vehicle is not only poisonous but also flammable. Upon witnessing one of those, open the windows, and remain a safe distance from the vehicle out of the road.  
Immediately contact a professional work shop and advise them that a hybrid vehicle is involved. Kia recommends to contact an authorized Kia dealer/service partner.
  - If you need towing, refer to "Towing" in the previous pages.
  - When the vehicle is severely damaged, remain a safe distance of 15 meter or more between your vehicle and other vehicles/flam-mables.
-

**⚠ 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, remain a safe distance from the vehicle and immediately call your local fire emergency responders. Also, advise them that a hybrid 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**

When a submersion in water occurs: When your vehicle is flooded in water, a high-voltage battery may cause shock or may catch on fire. Thus, turn the hybrid system OFF, take the key in your possession and move to a safe place. Never attempt physical contact with your flooded vehicle. Immediately contact a professional work shop and advise them that a hybrid vehicle is involved. Kia recommends to contact an authorized Kia dealer/service partner.

**Emergency commodity (if equipped)**

There are some emergency commodities in the vehicle to help you respond to the emergency situation.

**Fire extinguisher (if equipped)**

If there is small fire and you know how to use the fire extinguisher, take the following steps carefully.

1. Pull the pin at the top of the extinguisher that keeps the handle from being accidentally pressed.
2. Aim the nozzle toward the base of the fire.
3. Stand approximately 2.5 m (8 ft) away from the fire and squeeze the handle to discharge the extinguisher. If you release the handle, the discharge will stop.
4. Sweep the nozzle back and forth at the base of the fire. After the fire appears to be out, watch it carefully since it may re-ignite.

**First aid kit (if equipped)**

There are some items such as scissors, bandage and adhesive tape and etc. in the kit to give first aid to an injured person.

**Triangle reflector (if equipped)**

Place the triangle reflector on the road to warn oncoming vehicles during emergencies, such as when the vehicle is parked by the roadside due to any problems.

**Tire pressure gauge (if equipped)**

Tires normally lose some air in day-to-day use, and you may have to add a few pounds of air periodically and it is not usually a sign of a leaking tire, but of normal wear. Always check tire pressure when the tires are cold because tire pressure increases with temperature.

To check the tire pressure, take the following steps;

1. Unscrew the inflation valve cap that is located on the rim of the tire.
2. Press and hold the gauge against the tire valve. Some air will escape as you begin and more will escape if you don't press the gauge in firmly.
3. A firm non-leaking push will activate the gauge.
4. Read the tire pressure on the gauge to know whether the tire pressure is low or high.
5. Adjust the tire pressures to the specified pressure. Refer to "Tires and wheels (Wagon)" on page 9-4, "Tires and wheels (CUV)" on page 9-4.
6. Reinstall the inflation valve cap.

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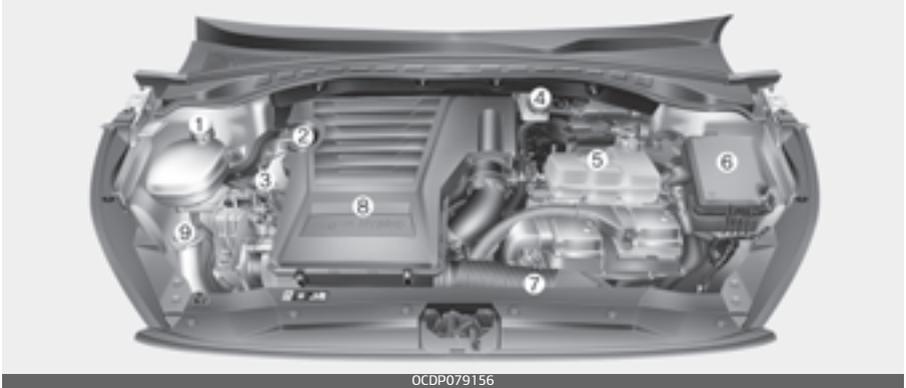
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## MAINTENANCE

### Engine compartment

Kappa 1.6L GDI Engine



OCDP079156

\* The actual engine cover in the vehicle may differ from the illustration.

1. Engine coolant reservoir
2. Engine oil filler cap
3. Engine oil dipstick
4. Brake fluid reservoir
5. Inverter coolant reservoir
6. Fuse box
7. Engine clutch actuator reservoir tank
8. Air cleaner
9. 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.

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.

Have your vehicle serviced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

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 & Maintenance book.

Repairs and adjustments required as a result of improper maintenance or a lack of required maintenance are not covered when your vehicle is covered by warranty.

### 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.

#### \* NOTICE

Improper owner maintenance during the warranty period may affect warranty coverage. For details, read the separate Warranty & Maintenance book provided with the vehicle. If you're unsure about any servicing or maintenance procedure, have the system serviced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

**⚠ WARNING****Maintenance work**

- Performing maintenance work on a vehicle can be dangerous. You can be seriously injured while performing some maintenance procedures. If you lack sufficient knowledge and experience or the proper tools and equipment to do the work, have the system serviced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
- Working under the hood with the engine running is dangerous. It becomes even more dangerous when you wear jewelry or loose clothing. These can become entangled in moving parts and result in injury. Therefore, if you must run the engine while working under the hood, make certain that you remove all jewelry (especially rings, bracelets, watches, and necklaces) and all neckties, scarves, and similar loose clothing before getting near the engine or cooling fans.

**⚠ CAUTION**

- Do not put heavy objects or apply excessive force on top of the engine cover (if equipped) or fuel related parts.
- When you inspect the fuel system (fuel lines and fuel injection devices), contact a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
- Do not drive long time with the engine cover (if equipped) removed.
- When checking the engine room, do not go near fire. Fuel, washer fluid, etc. are flammable oils that may cause fire.
- Before touching the battery, ignition cables and electrical wiring, you should disconnect the battery "-" terminal. You may get an electric shock from the electric current.
- When you remove the interior trim cover with a flat bed (-) driver, be careful not to damage the cover.
- Be careful when you replace and clean bulbs to avoid burns or electrical shock.

## Owner maintenance

The following lists are vehicle checks and inspections that should be performed at the frequencies indicated to help ensure safe, dependable operation of your vehicle.

Any adverse conditions should be brought to the attention of your dealer as soon as possible.

These Owner Maintenance Checks are generally not covered by warranties and you may be charged for labor, parts and lubricants used.

### Owner maintenance schedule

#### *When you stop for fuel:*

- Check the engine oil level.
- Check the coolant level in the coolant reservoir.
- Check the windshield washer fluid level.
- Look for low or under-inflated tires.

### **WARNING**

Be careful when checking your engine coolant level when the engine is hot. Scalding hot coolant and steam may blow out under pressure. This could cause burns or other serious injury.

---

#### *While operating your vehicle:*

- Note any changes in the sound of the exhaust or any smell of exhaust fumes in the vehicle.
- Check for vibrations in the steering wheel. Notice any increased steering effort or looseness in the steering wheel, or change in its straightahead position.
- Notice if your vehicle constantly turns slightly or “pulls” to one side when traveling on smooth, level road.
- When stopping, listen and check for unusual sounds, pulling to one side, increased brake pedal travel or “hard-to-push” brake pedal.
- If any slipping or changes in the operation of your transmission occurs, check the transmission fluid level.
- Check the parking brake.
- Check for fluid leaks under your vehicle (water dripping from the air conditioning system during or after use is normal).

***At least monthly:***

- Check the coolant level in the engine coolant reservoir.
- Check the operation of all exterior lights, including the stoplights, turn signals and hazard warning flashers.
- Check the inflation pressures of all tires including the spare 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 muffler, exhaust pipes, shields and clamps.
- Check the lap/shoulder belts for wear and function.

***At least once a year:***

- Clean the body and door drain holes.
- Lubricate the door hinges and checks, and hood hinges.
- Lubricate the door and hood locks and latches.
- Lubricate the door rubber weatherstrips.
- Check the air conditioning system.
- Clean the battery and terminals.
- Check the brake fluid level.

## Scheduled maintenance service

### Scheduled maintenance service precaution

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 engine idling or low speed driving for long distances
- Driving on rough, dusty, muddy, unpaved, graveled or salt-spread roads
- Driving in areas using salt or other corrosive materials or in very cold weather
- Driving in heavy dust condition
- Driving in heavy traffic area
- Driving on uphill, downhill, or mountain road repeatedly
- Towing a trailer or using a camper, or roof rack
- Driving as a patrol car, taxi, other commercial use of vehicle towing
- Driving over 170 km/h (106 mile/h)
- Frequently driving in stop-and-go condition

If your vehicle is operated under the above conditions, you should inspect, replace or refill more frequently than the following Normal Maintenance Schedule. After the periods or distance shown in the chart, continue to follow the prescribed maintenance intervals.

### ***Normal maintenance schedule - for Europe (Except Russia)***

The following maintenance services must be performed to ensure good emission control and performance. Keep receipts for all vehicle emission services to protect your warranty. Where both mileage and time are shown, the frequency of service is determined by whichever occurs first.

NO.	ITEM	REMARK
* 1	Engine oil and engine oil filter	Check the engine oil level and leak every 500 km (350 miles) or before starting a long trip.
* 2	Coolant (Engine/ Inverter)	When adding coolant, use only deionized water or soft water for your vehicle and never mix hard water in the coolant filled at the factory. An improper coolant mixture can result in serious malfunction or engine damage.
* 3	Drive belts (Engine)	<ul style="list-style-type: none"> <li>Adjust alternator, water pump and air conditioner drive belt. Inspect and if necessary repair or replace.</li> <li>Inspect drive belt tensioner, idler and alternator pulley and if necessary correct or replace.</li> </ul>
* 4	Valve clearance	Inspect for excessive valve noise and/or engine vibration and adjust if necessary. In this case, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
* 5	HSG (Hybrid Starter & Generator) belt	Inspect HSG belt for evidence of cuts, crocks, excessive wear or oil saturation and replace if necessary. If drive belt noise occurred, readjust drive belt tension before replace.
* 6	Spark plug	For your convenience, it can be replaced prior to it's interval when you do maintenance of other items.
* 7	Dual clutch transmission (DCT) fluid	Dual clutch transmission (DCT) fluid should be changed anytime it has been submerged in water.
* 8	Fuel additives	<p>Kia recommends that you use unleaded gasoline which has an octane rating of RON (Research Octane Number) 95 / AKI (Anti Knock Index) 91 or higher (for Europe) or Octane Rating of RON (Research Octane Number) 91 / AKI (Anti-Knock Index) 87 or higher (except Europe).</p> <p>For customers who do not use good quality gasolines including fuel additives regularly, and have problems starting or the engine does not run smoothly, one bottle of additives should be added to the fuel tank at every 15,000 km (10,000 miles) (for Europe, Australia and New Zealand) / 10,000 km (6,500 miles) (except Europe, Australia and New Zealand, China, Brazil) / 5,000 km (3,000 miles) (for China, Brazil). Additives are available from a professional workshop along with information on how to use them. Kia recommends to visit an authorized Kia dealer/service partner. Do not mix other additives.</p>

I: Inspect and if necessary, adjust, correct, clean or replace.

R: Replace or change.

MAINTENANCE INTERVALS / MAINTENANCE ITEM	Normal Maintenance Schedule - For Europe (Except Russia)								
	Number of months or driving distance, whichever comes first								
	Months	24	48	72	96	120	144	168	192
	Miles×1,000	20	40	60	80	100	120	140	160
	Km×1,000	30	60	90	120	150	180	210	240
Engine oil and engine oilfilter *1	Replace every 15,000 km (10,000 miles) or 12 months								
Coolant (Engine / Inverter) *2	At first, Replace 210,000 km (140,000 miles) or 120 months after that, Replace every 30,000 km (20,000 miles) or 24 months								
HSG (Hybrid Starter & Generator) belt *5	I	I	I	I	I	I	I	I	I
Drive belts (Engine) *3	At first, Inspect 90,000 km (60,000 miles) or 48 months after that, Inspect every 30,000 km (20,000 miles) or 24 months								
Valve clearance *4	-	-	I	-	-	I	-	-	
Vacuum hoses and crankcase ventilation hoses	I	I	I	I	I	I	I	I	I
Spark plugs *6	Replace every 150,000km(100,000miles)								
Dual clutch transmission (DCT) fluid (if equipped) *7	-	I	-	I	-	I	-	I	
Engine clutch actuator fluid	I	R	I	R	I	R	I	R	
Engine clutch actuator hose and line	I	I	I	I	I	I	I	I	
Drive shaft and boots	I	I	I	I	I	I	I	I	
Fuel additives *8	Add every 15,000 km (10,000 miles) or 12 months								
Fuel lines, hoses and connections	-	I	-	I	-	I	-	I	
Fuel tank air filter (if equipped)	-	I	-	I	-	I	-	I	
Vapor hose and fuel filler cap	-	I	-	I	-	I	-	I	
Air cleaner filter	I	R	I	R	I	R	I	R	
Intercooler, in/out hose, air intake hose	Inspect every 15,000 km (10,000 miles) or 12 months								
Exhaust system	I	I	I	I	I	I	I	I	
Cooling system	-	I	I	I	I	I	I	I	
Air conditioner compressor/refrigerant	I	I	I	I	I	I	I	I	
Climate control air filter	R	R	R	R	R	R	R	R	
Brake discs and pads	I	I	I	I	I	I	I	I	
Brake lines, hoses and connections	I	I	I	I	I	I	I	I	
Brake fluid	R	R	R	R	R	R	R	R	

MAINTENANCE INTERVALS / MAINTENANCE ITEM	Normal Maintenance Schedule - For Europe (Except Russia)								
	Number of months or driving distance, whichever comes first								
	Months	24	48	72	96	120	144	168	192
	Miles×1,000	20	40	60	80	100	120	140	160
	Km×1,000	30	60	90	120	150	180	210	240
Steering gear rack, linkage and boots									
Suspension ball joints									
Tire (pressure & tread wear)									
Battery (12V) condition									
Pan-European eCall system battery (if equipped)	Replace every 3 years.								

- The fuel filter is considered to be maintenance free but periodic inspection is recommended for this maintenance schedule depends on fuel quality.
  - If there are some important safety matters like fuel flow restriction, surging, loss of power, hard starting problem etc, replace the fuel filter immediately regardless of maintenance schedule and consult an authorized KIA dealer for details.

***Maintenance under severe usage conditions - for Europe (Except Russia)***

Maintenance operation

I: Inspect and if necessary, adjust, correct, clean or replace.

R: Replace or change.

MAINTENANCE ITEM	MAINTENANCE OPERATION	MAINTENANCE INTERVALS	DRIVING CONDITION
Engine oil and engine oil filter	R	Every 7,500 km (5,000 miles) or 6 months	A, B, C, D, E, F, G, H, I, J, K
HSG (Hybrid Starter & Generator) belt	R	Every 45,000 km (30,000 miles) or 24 months	C, D, E, K
	I	Every 15,000 km (10,000 miles) or 12 months	
Spark plugs	R	Replace more frequently depending on the condition	B, H, I, K
Dual clutch transmission (DCT) fluid	R	Every 120,000 km (80,000 miles)	C, D, E, F, G, H, I, J
Drive shaft and boots	I	Inspect more frequently depending on the condition	C, D, E, F, G, H, I, J
Air cleaner filter	R	Replace more frequently depending on the condition	C, E
Climate control air filter	R	Replace more frequently depending on the condition	C, E, G
Brake discs and pads, calipers and rotors	I	Inspect more frequently depending on the condition	C, D, E, G, H
Steering gear rack, linkage and boots	I	Inspect more frequently depending on the condition	C, D, E, F, G
Suspension ball joints	I	Inspect more frequently depending on the condition	C, D, E, F, G

***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 engine idling or low speed driving for long distances.

C: Driving on rough, dusty, muddy, unpaved, graveled or saltspread roads.

D: Driving in areas using salt or other corrosive materials or in very cold weather

E: Driving in heavy dust condition.

F: Driving in heavy traffic area.

G: Driving on uphill, downhill, or mountain roads repeatedly.

H: Towing a trailer or using a camper on roof rack.

I: Driving for patrol car, taxi, other commercial use of vehicle towing.

J: Driving over 170 km/h (106 mile/h).

K: Frequently driving in stop-and-go conditions.

**Normal maintenance schedule - except Europe (Including Russia)**

The following maintenance services must be performed to ensure good emission control and performance. Keep receipts for all vehicle emission services to protect your warranty. Where both mileage and time are shown, the frequency of service is determined by whichever occurs first.

NO.	ITEM	REMARK
* 1	Engine oil and engine oil filter	Check the engine oil level and leak every 500 km (350 miles) or before starting a long trip.
* 2	Coolant (Engine / Inverter)	When adding coolant, use only deionized water or soft water for your vehicle and never mix hard water in the coolant filled at the factory. An improper coolant mixture can result in serious malfunction or engine damage.
* 3	Drive belts (Engine)	<ul style="list-style-type: none"> <li>• Adjust alternator, water pump and air conditioner drive belt. Inspect and if necessary repair or replace.</li> <li>• Inspect drive belt tensioner, idler and alternator pulley and if necessary correct or replace.</li> </ul>
* 4	Valve clearance	Inspect for excessive valve noise and/or engine vibration and adjust if necessary. In this case, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
* 5	HSG (Hybrid Starter & Generator) belt	Inspect HSG belt for evidence of cuts, cracks, excessive wear or oil saturation and replace if necessary. If drive belt noise occurred, readjust drive belt tension before replace.
* 6	Spark plug	For your convenience, it can be replaced prior to it's interval when you do maintenance of other items.
* 7	Dual clutch transmission (DCT) fluid	Dual clutch transmission (DCT) fluid should be changed anytime it has been submerged in water.
* 8	Fuel additives	Kia recommends that you use unleaded gasoline which has an octane rating of RON (Research Octane Number) 95 / AKI (Anti Knock Index) 91 or higher (for Europe) or Octane Rating of RON (Research Octane Number) 91 / AKI (Anti-Knock Index) 87 or higher (except Europe). For customers who do not use good quality gasolines including fuel additives regularly, and have problems starting or the engine does not run smoothly, one bottle of additives should be added to the fuel tank at every 15,000 km(10,000 miles) (for Europe, Australia and New Zealand) / 10,000 km(6,500 miles) (except Europe, Australia and New Zealand, China, Brazil)/ 5,000 km(3,000 miles) (for China, Brazil). Additives are available from a professional workshop along with information on how to use them. Kia recommends to visit an authorized Kia dealer/service partner. Do not mix other additives.

I: Inspect and if necessary, adjust, correct, clean or replace.

R: Replace or change.

MAINTENANCE INTERVALS / MAINTENANCE ITEM	NORMAL MAINTENANCE SCHEDULE - EXCEPT EUROPE (INCLUDING RUSSIA)								
	Number of months or driving distance, whichever comes first								
	Months	12	24	36	48	60	72	84	96
	Miles×1,000	10	20	30	40	50	60	70	80
	Km×1,000	15	30	45	60	75	90	105	120
Engine oil and engine oil filter *1	Except China	Replace every 10,000 km (6,500 miles) or 12 months							
	For China	Replace every 5,000 km (3,000 miles) or 6 months							
Coolant (Engine / Inverter) *2	At first, Replace 210,000 km (140,000 miles) or 120 months after that, Replace every 30,000 km (20,000 miles) or 24 months								
HSG (Hybrid Starter & Generator) belt *5									
Drive belts (Engine) *3	-	I	-	I	-	I	-	I	
Valve clearance *4	-	-	-	-	-	I	-	-	
Vacuum hoses and crankcase ventilation hoses	-	I	-	I	-	I	-	I	
Spark plugs *6	Unleaded	Replace every 150,000km (100,000miles)							
Dual clutch transmission (DCT) fluid*7		-	-	-	I	-	-	-	I
Engine clutch actuator fluid									
Engine clutch actuator hose and line									
Drive shaft and boots		-	I	-	I	-	I	-	I
Fuel additives *8	For Australia and New Zealand	Add every 15,000 km (10,000 miles) or 12 months							
	Except Australia and New Zealand, China, Brazil	Add every 10,000 km (6,500 miles) or 6 months							
	For China, Brazil	Add every 5,000 km (3,000 miles) or 6 months							
Fuel filter	For China, Brazil	-	I	-	R	-	I	-	R
Fuel lines, hoses and connections		-	-	-	I	-	-	-	I
Fuel tank air filter (if equipped)		-	I	-	R	-	I	-	R
Vapor hose and fuel filler cap		-	-	-	I	-	-	-	I

MAINTENANCE INTERVALS / MAINTENANCE ITEM	NORMAL MAINTENANCE SCHEDULE - EXCEPT EUROPE (INCLUDING RUSSIA)								
	Number of months or driving distance, whichever comes first								
	Months	12	24	36	48	60	72	84	96
	Miles×1,000	10	20	30	40	50	60	70	80
	Km×1,000	15	30	45	60	75	90	105	120
Air cleaner filter	Except China, India, Middle East	I	I	R	I	I	R	I	I
	For China, India, Middle East	R	R	R	R	R	R	R	R
Intercooler, in/out hose, air intake hose		Inspect every 10,000 km (6,500 miles) or 12 months							
Exhaust system		-	I	-	I	-	I	-	I
Cooling system		-	-	-	I	-	I	-	I
Air conditioner compressor/refrigerant		I	I	I	I	I	I	I	I
Climate control air filter	Except Australia and New Zealand	R	R	R	R	R	R	R	R
	For Australia and New Zealand	I	R	I	R	I	R	I	R
Brake discs and pads		-	I	-	I	-	I	-	I
Brake lines, hoses and connections		-	I	-	I	-	I	-	I
Brake fluid		I	R	I	R	I	R	I	R
Steering gear rack, linkage and boots		I	I	I	I	I	I	I	I
Suspension ball joints		I	I	I	I	I	I	I	I
Tire (pressure & tread wear)		I	I	I	I	I	I	I	I
Battery (12V) condition	Except Middle East	-	I	-	I	-	I	-	I
	For Middle East	Inspect every 10,000 km (6,500 miles) or 6 months							
ERA-GLONASS system battery (if equipped)		Replace every 3 years.							

- The fuel filter is considered to be maintenance free but periodic inspection is recommended for this maintenance schedule depends on fuel quality.
  - If there are some important safety matters like fuel flow restriction, surging, loss of power, hard starting problem etc, replace the fuel filter immediately regardless of maintenance schedule and consult an authorized KIA dealer for details.

## ***Maintenance under severe usage conditions - except Europe (Including Russia)***

### Maintenance operation

I: Inspect and if necessary, adjust, correct, clean or replace.

R: Replace or change.

MAINTENANCE ITEM		MAINTENANCE OPERATION	MAINTENANCE INTERVALS	DRIVING CONDITION
Engine oil and engine oil filter	Except Middle East, India, Libia, Algeria, Morocco, Tunisia, Sudan, Egypt, Iran, Brazil, Central & South America, China	R	Every 7,500 km (5,000 miles) or 6 months	A, B, C, D, E, F, G, H, I, J, K
	For Middle East, India, Libia, Algeria, Morocco, Tunisia, Sudan, Egypt, Iran, Brazil, Central & South America	R	Every 5,000 km (3,000 miles) or 6 months	
HSG (Hybrid Starter & Generator) belt	For Middle East	R	Every 30,000 km (20,000 miles) or 12 months	C, D, E, K
		I	Every 10,000 km (6,500 miles) or 12 months	C, D, E, K
	Except Middle East, Brazil	R	Every 45,000 km (30,000 miles) or 24 months	C, D, E, K
		I	Every 15,000 km (10,000 miles) or 12 months	C, D, E, K
Spark plugs		R	Replace more frequently depending on the condition	B, H, I, K
Dual clutch transmission (DCT) fluid		R	Every 120,000 km (80,000 miles)	C, D, E, F, G, H, I, J
Drive shaft and boots		I	Inspect more frequently depending on the condition	C, D, E, F, G, H, I, J
Air cleaner filter		R	Replace more frequently depending on the condition	C, E
Climate control air filter		R	Replace more frequently depending on the condition	C, E, G

MAINTENANCE ITEM	MAINTENANCE OPERATION	MAINTENANCE INTERVALS	DRIVING CONDITION
Brake discs and pads, calipers and rotors	I	Inspect more frequently depending on the condition	C, D, E, G, H
Steering gear rack, linkage and boots	I	Inspect more frequently depending on the condition	C, D, E, F, G
Suspension ball joints	I	Inspect more frequently depending on the condition	C, D, E, F, G

**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 engine idling or low speed driving for long distances.

C: Driving on rough, dusty, muddy, unpaved, graveled or saltspread roads.

D: Driving in areas using salt or other corrosive materials or in very cold weather

E: Driving in heavy dust condition.

F: Driving in heavy traffic area.

G: Driving on uphill, downhill, or mountain roads repeatedly.

H: Towing a trailer or using a camper on roof rack.

I: Driving for patrol car, taxi, other commercial use of vehicle towing.

J: Driving over 170 km/h (106 mile/h).

K: Frequently driving in stop-and-go conditions.

## Explanation of scheduled maintenance items

### Engine oil and filter

The engine oil and filter should be changed at the intervals specified in the maintenance schedule. If the vehicle is being driven in severe conditions, more frequent oil and filter changes are required.

### HSG (Hybrid starter & generator) belt

The HSG belt should be changed at the intervals specified in the maintenance schedule.

### Drive belts

Inspect all drive belts for evidence of cuts, cracks, excessive wear or oil saturation and replace if necessary. Drive belts should be checked periodically for proper tension and adjusted as necessary.

### CAUTION

When you are inspecting the belt, place the ENGINE START/STOP button in the OFF or ACC position.

### Fuel filter

Kia gasoline vehicle is equipped a lifetime fuel filter that integrated with the fuel tank. Regular maintenance or replacement is not needed but depends on fuel quality. If there are some important safety matters like fuel flow restriction, surging, loss of power, hard starting problem etc, fuel filter inspection or replace is needed.

Have the fuel filter inspected or replaced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### Fuel lines, fuel hoses and connections

Check the fuel lines, fuel hoses and connections for leakage and damage. Have the fuel lines, fuel hoses and connections replaced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### Vapor hose and fuel filler cap

The vapor hose and fuel filler cap should be inspected at those intervals specified in the maintenance schedule. Make sure that a new vapor hose or fuel filler cap is correctly replaced.

### **Vacuum crankcase ventilation hoses (if equipped)**

Inspect the surface of hoses for evidence of heat and/or mechanical damage. Hard and brittle rubber, cracking, tears, cuts, abrasions, and excessive swelling indicate deterioration. Particular attention should be paid to examine those hose surfaces nearest to high heat sources, such as the exhaust manifold.

Inspect the hose routing to assure that the hoses do not come in contact with any heat source, sharp edges or moving component which might cause heat damage or mechanical wear. Inspect all hose connections, such as clamps and couplings, to make sure they are secure, and that no leaks are present. Hoses should be replaced immediately if there is any evidence of deterioration or damage.

### **Air cleaner filter**

Have the air cleaner filter replaced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### **Spark plugs**

Make sure to install new spark plugs of the correct heat range.

## **⚠ WARNING**

Do not disconnect and inspect spark plugs when the engine is hot. You may burn yourself.

### **Valve clearance**

Inspect for excessive valve noise and/or engine vibration and adjust if necessary. In this case, have the system serviced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### **Cooling system**

Check the cooling system components, such as the radiator, coolant reservoir, hoses and connections for leakage and damage. Replace any damaged parts.

### **Coolant**

The coolant should be changed at the intervals specified in the maintenance schedule.

### **Dual clutch transmission fluid**

Inspect the dual clutch transmission fluid according to the maintenance schedule.

**⚠ CAUTION**

The use of a non-specified fluid could result in transmission malfunction and failure.

**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 4 specification.

**\* NOTICE**

To maintain the best braking performance and ABS/ESC performance, we recommend that you use genuine brake fluid that conform to specifications. (Standard : SAE J1704 DOT-4 LV, ISO4925 CLASS-6 and FMVSS 116 DOT-4)

**Brake discs, pads, calipers and rotors.**

Check the pads for excessive wear, discs for run out and wear, and calipers for fluid leakage.

For more information on checking the pads or lining wear limit, we recommend to refer to the Kia web site.

**([www.kia-hotline.com](http://www.kia-hotline.com))**

**Suspension mounting bolts**

Check the suspension connections for looseness or damage. Retighten to the specified torque.

**Steering gear box, linkage & boots/ lower arm ball joint**

With the vehicle stopped and engine off, check for excessive free-play in the steering wheel.

Check the linkage for bends or damage. Check the dust boots and ball joints for deterioration, cracks, or damage. Replace any damaged parts.

## Drive shafts and boots

Check the drive shafts, boots and clamps for cracks, deterioration, or damage. Replace any damaged parts and, if necessary, repack the grease.

## Air conditioning refrigerant

Check the air conditioning lines and connections for leakage and damage.

## Engine oil (Gasoline)

### Checking the engine oil level



OCDP079003

1. Be sure the vehicle is on level ground.
2. Start the engine and allow it to reach normal operating temperature.
3. Turn the engine off and wait for a few minutes (about 5 minutes) for the oil to return to the oil pan.
4. Pull the dipstick out, wipe it clean, and re-insert it fully.

### **WARNING**

#### Radiator hose

Be very careful not to touch the radiator hose when checking or adding the engine oil as it may be hot enough to burn you.

5. Pull the dipstick out again and check the level. The level should be between F (Full) and L (Low).

**⚠ CAUTION**

- Do not overfill the engine oil. It may damage the engine.
- Do not spill engine oil, when adding or changing engine oil. If you drop the engine oil on the engine room, wipe it off immediately.
- When you wipe the oil level gauge, you should wipe it with a clean cloth. When mixed with debris, it can cause engine damage.



OCDP079004

If it is near or at L (Low), add enough oil to bring the level to F (Full). **Do not overfill.**

**Use a funnel to help prevent oil from being spilled on engine components.**

Use only the specified engine oil. (Refer to "Recommended lubricants and capacities" on page 9-7.)

**Changing the engine oil and filter**

Have the engine oil and filter replaced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

**⚠ WARNING**

Used engine oil may cause skin irritation or cancer if left in contact with the skin for prolonged periods of time. Used engine oil contains chemicals that have caused cancer in laboratory animals. Always protect your skin by washing your hands thoroughly with soap and warm water as soon as possible after handling used oil.

## Engine coolant

The high-pressure cooling system has a reservoir filled with year round antifreeze coolant. The reservoir is filled at the factory.

Check the antifreeze protection and coolant level at least once a year, at the beginning of the winter season, and before traveling to a colder climate.

### ⚠ CAUTION

- When the engine overheats from low engine coolant, suddenly adding engine coolant may cause cracks in the engine. To prevent damage, add engine coolant slowly in small quantities.
- Do not drive with no engine coolant. It may cause water pump failure and engine seizure, etc.

## Checking the coolant level

### ⚠ CAUTION



#### Removing radiator cap

Never attempt to remove the radiator cap while the engine is operating or hot. Doing so might lead to cooling system and engine damage. Also, hot coolant or steam could cause serious personal injury.

Turn the engine off and wait until it cools down. Use extreme care when removing the radiator cap. Wrap a thick towel around it, and turn it counterclockwise slowly to the first stop. Step back while the pressure is released from the cooling system.

When you are sure all the pressure has been released, press down on the cap, using a thick towel, and continue turning counterclockwise to remove it.

Even if the engine is not operating, do not remove the radiator cap or the drain plug while the engine and radiator are hot. Hot coolant and steam may still blow out under pressure, causing serious injury.

### ⚠ WARNING



The electric motor (cooling fan) is controlled by engine coolant temperature, refrigerant pressure and vehicle speed. It may sometimes operate even when the engine is not running. Use extreme caution when working near the blades of the cooling fan so that you are not injured by a rotating fan blades. As the engine coolant temperature decreases, the electric motor will automatically shut off. This is a normal condition.

The electric motor (cooling fan) may operate until you disconnect the negative battery cable.



OCDP079007

Check the condition and connections of all cooling system hoses and heater hoses. Replace any swollen or deteriorated hoses.

The coolant level should be filled between MAX and MIN (F and L) marks on the side of the coolant reservoir when the engine is cool.

If the coolant level is low, add enough distilled (deionized) or soft water. Bring the level to MAX (F), but do not overfill.

If frequent additions are required, have the system inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

Inverter coolant



OCDP079152

Check the condition and connections of all cooling system hoses and heater hoses. Replace any swollen or deteriorated hoses.

The coolant level should be filled between MAX and MIN marks on the side of the coolant reservoir when the engine is cool.

If the coolant level is low, add enough specified coolant to provide protection against freezing and corrosion. Bring the level to MAX, but do not overfill. If frequent additions are required, have the system inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

**\* NOTICE**

Make sure the coolant cap is properly closed after refill of coolant. Otherwise the engine could be overheated while driving.

1. Check if the radiator cap label is straight in front.

Engine room front view



OCDW079116

2. Make sure that the tiny protrusions inside the coolant cap are securely interlocked.

Engine room rear view



OCDP079010

**Recommended engine coolant**

- When adding coolant, use only deionized water or soft water for your vehicle and never mix hard water in the coolant filled at the factory. An improper coolant mixture can result in serious malfunction or engine damage.

- The engine in your vehicle has aluminum engine parts and must be protected by an ethylene-glycol with phosphate based coolant to prevent corrosion and freezing.
- DO NOT USE alcohol or methanol coolant or mix them with the specified coolant.
- Do not use a solution that contains more than 60% antifreeze or less than 35% antifreeze, which would reduce the effectiveness of the solution.

For mixture percentage, refer to the following table.

Ambient Temperature	Mixture Percentage (volume)	
	Antifreeze	Water
-15°C (5°F)	35	65
-25°C (-13°F)	40	60
-35°C (-31°F)	50	50
-45°C (-49°F)	60	40

Engine coolant reservoir cap



OCDP079008

Inverter coolant reservoir cap



QC DP079151

## ⚠ WARNING



### Radiator cap

Do not remove the radiator cap when the engine and radiator are hot. Scalding hot coolant and steam may blow out under pressure causing serious injury.

### Changing the coolant

Have the coolant replaced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

## ⚠ CAUTION

Put a thick cloth around the radiator cap before refilling the coolant in order to prevent the coolant from overflowing into engine parts such as the alternator.

## ⚠ WARNING

### Coolant

- Do not use radiator coolant or antifreeze in the washer fluid reservoir.
- Radiator coolant can severely obscure visibility when sprayed on the windshield and may cause loss of vehicle control or damage the paint and body trim.

## Brake fluid

### Checking the brake fluid level

Check the fluid level in the reservoir periodically. The fluid level should be between MAX and MIN marks on the side of the reservoir.



OCDP079011

1. Before removing the reservoir cap and adding brake fluid, clean the area around the reservoir cap thoroughly to prevent brake fluid contamination.
2. If the level is low, add fluid to the MAX level. The level will fall with accumulated mileage. This is a normal condition associated with the wear of the brake linings. If the fluid level is excessively low, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

Use only the specified brake fluid. (Refer to "Recommended lubricants and capacities" on page 9-7.)

Never mix different types of fluid.

### **⚠ WARNING**

#### Loss of brake fluid

In the event the brake system requires frequent additions of fluid, have the system inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### **⚠ WARNING**

#### Brake fluid

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**

Do not allow brake fluid to contact the vehicle's body paint, as paint damage will result. Brake fluid, which has been exposed to open air for an extended time should never be used as its quality cannot be guaranteed. It should be properly disposed. Don't put in the wrong kind of fluid. A few drops of mineral-based oil, such as engine oil, in your brake/ clutch system can damage brake system parts.

## Engine clutch actuator fluid

### Checking the engine clutch actuator fluid level



OCDPQ019044

In normal driving conditions, the actuator fluid level does not go down rapidly. However, oil consumption rate may rise as vehicle mileage increases, and leakage in actuator related parts may result in increased consumption of the engine clutch actuator oil. Regularly check and make sure the engine clutch actuator oil fluid level is between MIN and MAX marks.

If the oil level is below MIN mark, have the vehicle checked by a professional workshop.

Kia recommends to visit an authorized Kia dealer/service partner.

If the fluid level is excessively low, have the system checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

Use only the specified engine clutch actuator fluid.

(Refer to "Recommended lubricants and capacities" on page 9-7.)

Never mix different types of fluid.

#### **⚠ WARNING**

##### **Loss of engine clutch actuator fluid**

In the event the engine clutch actuator requires frequent additions of fluid, have the system inspected by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

#### **⚠ WARNING**

##### **Engine clutch actuator fluid**

When changing and adding engine clutch actuator fluid, handle it carefully. Do not let it come in contact with your eyes. If engine clutch actuator fluid should come in contact with your eyes, immediately flush them with a large quantity of fresh tap water. Have your eyes examined by a doctor as soon as possible.

## Washer fluid

### Checking the washer fluid level

The reservoir is translucent so that you can check the level with a quick visual inspection.



OCDP079012

- 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**

#### Coolant

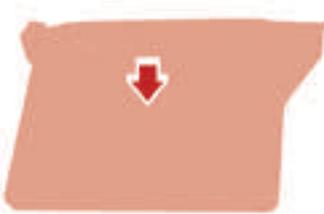
- Do not use radiator coolant or antifreeze in the washer fluid reservoir.
- Radiator coolant can severely obscure visibility when sprayed on the windshield and may cause loss of vehicle control or damage to paint and body trim.

- Windshield Washer fluid agents contain some amounts of alcohol and can be flammable under certain circumstances. Do not allow sparks or flame to contact the washer fluid or the washer fluid reservoir. Damage to the vehicle or occupants could occur.
- Windshield washer fluid is poisonous to humans and animals. Do not drink and avoid contacting windshield washer fluid. Serious injury or death could occur.

## Air cleaner

### Filter replacement

It must be replaced when necessary, and should not be washed.



OCDP079145

You can clean the filter when inspecting the air cleaner element.

Clean the filter by using compressed air.

1. Loosen the air cleaner cover attaching clips and open the cover.



OCDP079146

2. Wipe the inside of the air cleaner.

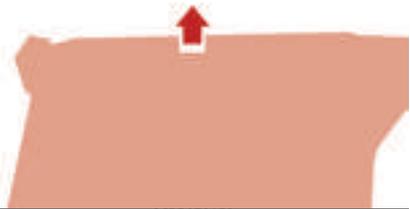


OCDP079147

3. Replace the air cleaner filter.
4. Lock the cover with the cover attaching clips.

### \* NOTICE

Insert the hinge and engage the clips when mounting the air cleaner cover.



OCDP079159

Replace the filter according to the Maintenance Schedule.

If the vehicle is operated in extremely dusty or sandy areas, replace the element more often than the usual recommended inter-

vals. (Refer to "Maintenance under severe usage conditions – for Europe (Except Russia)" on page 8–14, "Maintenance under severe usage conditions – except Europe (Including Russia)" on page 8–19.)

### **⚠ CAUTION**

- Do not drive with the air cleaner removed; this will result in excessive engine wear.
- When removing the air cleaner filter, be careful that dust or dirt does not enter the air intake, or damage may result.
- Use parts for replacement from a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

## **Climate control air filter**

### **Filter inspection**

The climate control air filter should be replaced according to the maintenance schedule. If the vehicle is operated in severely air-polluted cities or on dusty rough roads for a long period, it should be inspected more frequently and replaced earlier. When you replace the climate control air filter, replace it performing the following procedure, and be careful to avoid damaging other components.

1. Open the glove box and remove the stoppers on both sides.



OCDW079017

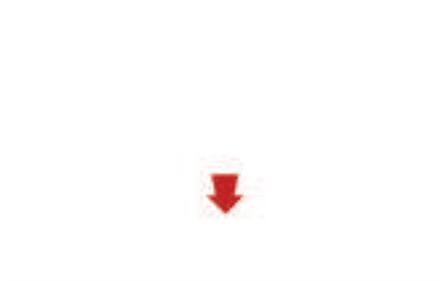
2. With the glove box open, pull the support strap (1).



3. Remove the climate control air filter cover by pulling out both sides of the cover.



4. Replace the climate control air filter.



5. Reassemble in the reverse order of disassembly.

**\* NOTICE**

When replacing the climate control air filter install it properly. Otherwise, the system may produce noise and the effectiveness of the filter may be reduced.

## Wiper blades

### Blade inspection



0DEEV098012NR

#### \* NOTICE

Commercial hot waxes applied by automatic car washes have been known to make the windshield difficult to clean.

Contamination of either the windshield or the wiper blades with foreign matter can reduce the effectiveness of the windshield wipers. Common sources of contamination are insects, tree sap, and hot wax treatments used by some commercial car washes. If the blades are not wiping properly, clean both the window and the blades with a good cleaner or mild detergent, and rinse thoroughly with clean water.

#### ⚠ CAUTION

To prevent damage to the wiper blades, do not use gasoline, kerosene, paint thinner, or other solvents on or near them.

### Blade replacement

When the wipers no longer clean adequately, the blades may be worn or cracked, and require replacement.

#### ⚠ CAUTION

To prevent damage to the wiper arms or other components, do not attempt to move the wipers manually.

#### ⚠ CAUTION

The use of a non-specified wiper blade could result in wiper malfunction and failure.

**Front windshield wiper blade**

OCDP079110

For your convenience, move the windshield wiper blades to the service position as follows;

After turning off the engine, move the wiper switch to the single wiping (MIST) position within 20 seconds and hold the switch more than 2 seconds until the wiper blade is in the fully up position.

**⚠ CAUTION**

Do not allow the wiper arm to fall against the windshield, since it may chip or crack the windshield.

1. Raise the wiper arm.



ODEEV098016NR

2. Lift up the wiper blade clip. Then pull down the blade assembly and remove it.



ODEEV098017NR

3. Install the new blade assembly.
4. Return the wiper arm on the windshield.
5. Turn ignition to the ON position and wiper arms will return to the normal operating position.

### Rear window wiper blade

1. Raise the wiper arm and pull out the wiper blade assembly.



OCDW079117

2. Install the new blade assembly by inserting the center part into the slot in the wiper arm until it clicks into place.



OCDW079118

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 the wiper blade replaced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### Battery (Plug-in hybrid)

#### For best battery service



OCDP079153

- Keep the battery securely mounted.
- Keep the battery top clean and dry.
- Keep the terminals and connections clean, tight, and coated with petroleum jelly or terminal grease.
- Rinse any spilled electrolyte from the battery immediately with a solution of water and baking soda.
- If the vehicle is not going to be used for an extended time, disconnect the battery cables.

#### \* NOTICE

Basically equipped battery is maintenance free type. If your vehicle is equipped with the battery marked with LOWER and UPPER on the side, you can check the electrolyte level. The electrolyte level should be between LOWER and UPPER. If the

electrolyte level is low, it needs to add distilled (demineralized) water (Never add sulfuric acid or other electrolyte). When refill, be careful not to splash the battery and adjacent components. And do not overfill the battery cells. It can cause corrosion on other parts. Then make sure to tighten the cell caps. Contact a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

## WARNING

### Battery dangers



Always read the following instructions carefully when handling a battery.



Keep lighted cigarettes and all other flames or sparks away from the battery.



Hydrogen, a highly combustible gas, is always present in battery cells and may explode if ignited.



Keep batteries out of the reach of children because batteries contain highly corrosive SULFURIC ACID. Do not allow battery acid to contact your skin, eyes, clothing or paint finish.



If any electrolyte gets into your eyes, flush your eyes with clean water for at least 15 minutes and get immediate medical attention.

If electrolyte gets on your skin, thoroughly wash the contacted area. If you feel pain or burning sensation, get medical attention immediately.



Wear eye protection when charging or working near a battery. Always provide ventilation when working in an enclosed space.



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. Contact a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

- When lifting a plastic-cased battery, excessive pressure on the case may cause battery acid to leak, resulting in personal injury. Lift with a battery carrier or with your hands on opposite corners.
- Never attempt to recharge the battery when the battery cables are connected.
- The electrical ignition system works with high voltage. Never touch these components with the engine running or the ENGINE START/STOP button position on.

Failure to follow the above warnings can result in serious bodily injury or death.

### ⚠ CAUTION

- When you don't use the vehicle for a long time in the low temperature area, separate the battery and keep it indoors.
- Always charge the battery fully to prevent battery case damage in low temperature area.
- If you connect unauthorized electronic devices to the battery, the battery may be discharged. Never use unauthorized devices.

### Battery capacity label

Example



\* The actual battery label in the vehicle may differ from the illustration.

1. CMF 45L-DiN : The Kia model name of battery
2. 45Ah (20HR) : The nominal capacity (in Ampere hours)
3. 80RC : The nominal reserve capacity (in min.)
4. 12V : The nominal voltage

5. 410CCA (SAE) : The cold-test current in amperes by SAE
6. 328A : The cold-test current in amperes by EN

### 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 20-30A for two hours.

### ⚠ WARNING

#### Recharging battery

When recharging the battery, observe the following precautions:

- The battery must be removed from the vehicle and placed in an area with good ventilation.
- Do not allow cigarettes, sparks, or flame near the battery.
- Watch the battery during charging, and stop or reduce the charging rate if the battery cells begin gassing (boiling) violently or if the temperature of the electro-

lyte 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.

### **⚠ WARNING**

- Before performing maintenance or recharging the battery, turn off all accessories and stop the engine.
- The negative battery cable must be removed first and installed last when the battery is disconnected.
- Operation related to the battery is recommended to be done by a professional workshop. Kia recommends to visit an authorized Kia dealer/ service partner.

### **⚠ CAUTION**

- Keep the battery away from water or any liquid.
- For your safety, use parts for replacement from a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### **Reset items**

Items should be reset after the battery has been discharged or the battery has been disconnected.

- Auto up/down window
- Sunroof
- Trip computer
- Climate control system
- Driver position Memory System
- Audio

## Tires and wheels

### Tire care

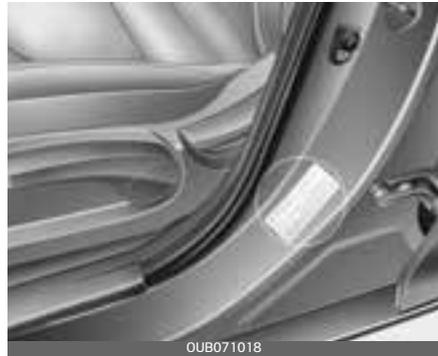
For proper maintenance, safety, and maximum fuel economy, you must always maintain recommended tire inflation pressures and stay within the load limits and weight distribution recommended for your vehicle.

### Recommended cold tire inflation pressures

All tire pressures (including the spare) should be checked when the tires are cold. "Cold Tires" means the vehicle has not been driven for at least three hours or driven less than 1.6 km (one mile).

Recommended pressures must be maintained for the best ride, top vehicle handling, and minimum tire wear.

For recommended inflation pressure, refer to "Tires and wheels (Wagon)" on page 9-4, "Tires and wheels (CUV)" on page 9-4.



All specifications (sizes and pressures) can be found on a label attached to the vehicle.

### ⚠ WARNING

#### Tire underinflation

Severe underinflation (70 kPa (10 psi) or more) can lead to severe heat build-up, causing blowouts, tread separation and other tire failures that can result in the loss of vehicle control leading to severe injury or death. This risk is much higher on hot days and when driving for long periods at high speeds.

### ⚠ CAUTION

- Underinflation also results in excessive wear, poor handling and reduced fuel economy. Wheel deformation also is possible. Keep your tire pressures at the proper levels. If a tire frequently needs refilling, have the system checked by a professional workshop. Kia

recommends to visit an authorized Kia dealer/service partner.

- Overinflation produces a harsh ride, excessive wear at the center of the tire tread, and a greater possibility of damage from road hazards.

### ⚠ CAUTION

- 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.
- Be sure to reinstall the tire inflation valve caps. Without the valve cap, dirt or moisture could get into the valve core and cause air leakage. If a valve cap is missing, install a new one as soon as possible.

### ⚠ 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.

### ⚠ CAUTION

#### 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 (one 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.
- Worn, old tires can cause accidents. If your tread is badly worn, or if your tires have been damaged, replace them.

#### Checking tire inflation pressure

Check your tires once a month or more.

Also, check the tire pressure of the spare tire.

#### *How to check*

Use a good quality gauge to check tire pressure. You can not tell if your tires are properly inflated simply by looking at them. Radial tires may look properly inflated even when they're underinflated.

- Check the tire's inflation pressure when the tires are cold. - "Cold"

means your vehicle has been sitting for at least three hours or driven no more than 1.6 km (1 mile).

- Remove the valve cap from the tire valve stem. Press the tire gauge firmly onto the valve to get a pressure measurement. If the cold tire inflation pressure matches the recommended pressure on the tire and loading information label, no further adjustment is necessary. If the pressure is low, add air until you reach the recommended amount. If you overfill the tire, release air by pushing on the metal stem in the center of the tire valve. Recheck the tire pressure with the tire gauge. Be sure to put the valve caps back on the valve stems. They help prevent leaks by keeping out dirt and moisture.

### **WARNING**

- 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.

- Worn tires can cause accidents. Replace tires that are worn, show uneven wear, or are damaged.
- Remember to check the pressure of your spare tire. Kia recommends that you check the spare every time you check the pressure of the other tires on your vehicle.

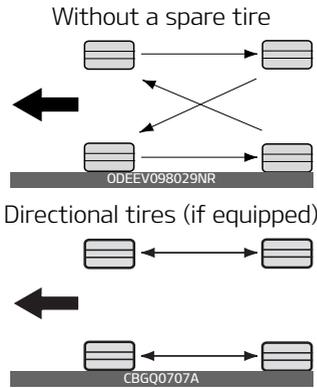
### **Tire rotation**

To equalize tread wear, it is recommended that the tires be rotated every 10,000 km (6,500 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 (Wagon)" on page 9-4, "Tires and wheels (CUV)" on page 9-4.



Disc brake pads should be inspected for wear whenever tires are rotated.

### \* NOTICE

Rotate radial tires that have an asymmetric tread pattern only from front to rear and not from right to left.

### ▲ WARNING

- Do not use the compact spare tire for tire rotation.
- Do not mix bias ply and radial ply tires under any circumstances. This may cause unusual handling characteristics that could result in death, severe injury, or property damage.

### 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

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.

### \* NOTICE

We recommend that when replacing tires, use the same originally supplied with the vehicles. ALWAYS use tires with the same type, size, brand, construction and tread pattern for all four wheels.

If not, that affects driving performance.

### ⚠ CAUTION

When replacing the tires, recheck and tighten the wheel nuts after driving about 50 km (31 miles) and recheck after driving about 1,000 km (620 miles). If the steering wheel shakes or the vehicle vibrates while driving, the tire is out of balance. Align the tire balance. If the problem is not solved, contact a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### ⚠ WARNING

#### Replacing tires

To reduce the chance of serious or fatal injuries from an accident caused by tire failure or loss of vehicle control:

- Replace tires that are worn, show uneven wear, or are damaged. Worn tires can cause loss of braking effectiveness, steering control, and traction.
- Do not drive your vehicle with too little or too much pressure in your tires. This can lead to uneven wear and tire failure.
- When replacing tires, never mix radial and bias-ply tires on the same car. You must replace all tires (including the spare) if moving from radial to bias-ply tires.

- 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.
- Using tires and wheels other than the recommended sizes could cause unusual handling characteristics and poor vehicle control, resulting in a serious accident.
- Wheels that do not meet Kia's specifications may fit poorly and result in damage to the vehicle or unusual handling and poor vehicle control.
- The ABS works by comparing the speed of the wheels. The tire size affects wheel speed. When replacing tires, all 4 tires must use the same size, type, construction and tread pattern originally supplied with the vehicle. Using tires of a different size can cause the ABS (Anti-lock Brake System) and ESC (Electronic Stability Control) to work irregularly.

### ***Compact spare tire replacement (if equipped)***

A compact spare tire has a shorter tread life than a regular size tire. Replace it when you can see the tread wear indicator bars on the tire. The replacement compact spare tire should be the same size and design tire as the one provided with your new vehicle and should be mounted on the same compact spare tire wheel. The compact spare tire is not designed to be mounted on a regular size wheel, and the compact spare tire wheel is not designed for mounting a regular size tire.

### **Wheel replacement**

When replacing the metal wheels for any reason, make sure the new wheels are equivalent to the original factory units in diameter, rim width and offset.

#### **⚠ WARNING**

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.

## 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.

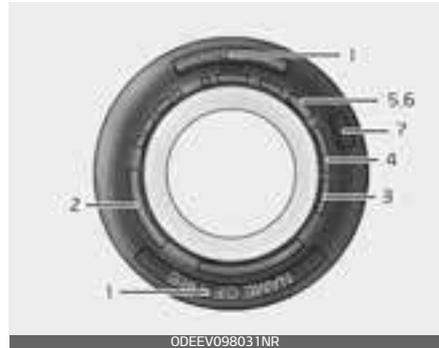
## Tire maintenance

In addition to proper inflation, correct wheel alignment helps to decrease tire wear. If you find a tire is worn unevenly, have a professional workshop check the wheel alignment. Kia recommends to visit an authorized Kia dealer/service partner.

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.)

## 205/55R16 91H

205 – Tire width in millimeters.

55 – Aspect ratio. The tire's section height as a percentage of its width.

R – Tire construction code (Radial).

16 – Rim diameter in inches.

91 – Load Index, a numerical code associated with the maximum load the tire can carry.

H – Speed Rating Symbol. See the speed rating chart in this section for additional information.

### Wheel size designation

Wheels are also marked with important information that you need if you ever have to replace one. The following explains what the letters and numbers in the wheel size designation mean.

Example wheel size designation:

### 6.5J X 16

6.5 – Rim width in inches.

J – Rim contour designation.

16 – Rim diameter in inches.

### Tire speed ratings

The chart below lists many of the different speed ratings currently being used for passenger car 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)
W	270 km/h (168 mph)
Y	300 km/h (186 mph)

### 3. Checking tire life (TIN : Tire Identification Number)

Any tires that are over 6 years old, based on the manufacturing date, (including the spare tire) should be replaced by new ones. You can find the manufacturing date on the tire sidewall (possibly on the inside of the wheel), displaying the DOT Code. The DOT Code is a series of numbers on a tire consisting of numbers and English letters. The manufacturing date is designated by the last four digits (characters) of the DOT code.

### **DOT: XXXX XXXX 0000**

The front part of the DOT means a plant code number, tire size and

tread pattern and the last four numbers indicate week and year manufactured.

For example:

DOT XXXX XXXX 1619 represents that the tire was produced in the 16th week of 2019.

### **WARNING**

#### **Tire age**

Tires degrade over time, even when they are not being used. Regardless of the remaining tread, we recommend that tires be replaced after approximately six (6) years of normal service. Heat caused by hot climates or frequent high loading conditions can accelerate the aging process. Failure to follow this warning can result in sudden tire failure, which could lead to a loss of control and an accident involving serious injury or death.

#### **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 con-

struction; 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 "Tire specification and pressure label" on page 9–10.

#### **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

### Tread wear

The tread wear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one-and-a-half times (1½) as well on the government course as a tire graded 100.

The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

These grades are molded on the side-walls of passenger vehicle tires. The tires available as standard or optional equipment on your vehicle may vary with respect to grade.

### Traction – AA, A, B & C

The traction grades, from highest to lowest, are AA, A, B and C. Those grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

### Temperature –A, B & C

The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

#### **WARNING**

The traction grade assigned to this tire is based on straightahead braking traction tests, and does not include acceleration, cornering, hydroplaning, or peak traction characteristics.

#### **WARNING**

### Tire temperature

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat build-up and possible sudden tire failure. This can cause loss of vehicle control and serious injury or death.

### 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, inspect the tire condition or contact a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.
  - To prevent damage to the tire, inspect the tire condition and pressure every 3,000 km.
- 

#### CAUTION

- 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, manhole, or curb stone, it will not be covered by the warranty.
  - You can find out the tire information on the tire sidewall.
-

## Fuses

Blade type



Cartridge type



Multi fuse



BFT



\* Left side: Normal, Right side: Blown

A vehicle's electrical system is protected from electrical overload damage by fuses.

This vehicle has 2 (or 3) fuse panels, one located in the driver's side panel bolster, the others in the engine compartment near the battery.

If any of your vehicle's lights, accessories, or controls do not work, check the appropriate circuit fuse. If a fuse has blown, the element inside the fuse will melt.

If the electrical system does not work, first check the driver's side fuse panel.

Before replacing a blown fuse, disconnect the negative battery cable.

Always replace a blown fuse with one of the same rating.

If the replacement fuse blows, this indicates an electrical problem. Avoid using the system involved and immediately consult a professional workshop. Kia recommends to consult an authorized Kia dealer/service partner.

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 of the vehicle.

### ⚠ CAUTION

Do not use a screwdriver or any other metal object to remove fuses because it may cause a short circuit and damage the system.

### \* NOTICE

- When replacing fuse, turn the ignition "OFF" and turn off switches of all electrical devices then remove battery (-) terminal.
- The actual fuse/relay panel label may differ from equipped items.

### ⚠ CAUTION

- When replacing a blown fuse or relay with a new one, make sure the new fuse or relay fits tightly into the clips. The incomplete fastening fuse or relay may cause the vehicle wiring and electric systems damage and a possible fire.

- Do not remove fuses, relays and terminals fastened with bolts or nuts. The fuses, relays and terminals may be fastened incompletely, and it may cause a possible fire. If fuses, relays and terminals fastened with bolts or nuts are blown, consult a professional workshop. Kia recommends to consult an authorized Kia dealer/service partner.
- Do not input any other objects except fuses or relays into fuse/relay terminals such as a driver or wiring. It may cause contact failure and system malfunction.
- Do not plug in screwdrivers or aftermarket wiring into the terminal originally designed for fuse and relays only. The electrical system and wiring of the vehicle interior may be damaged or burned due to contact failure.
- If you directly connect the wire on the taillight or replace the bulb which is over the regulated capacity to install trailers etc., the inner junction block can get burned.

### ⚠ CAUTION

Visually inspect the battery cap to ensure it is securely closed. If the battery cap is not securely closed, moisture may enter the system and damage the electrical components.

### \* NOTICE

#### Random wiring prohibited when retrofitting equipment

Use of random wiring in the vehicle might cause danger due to failure and damage of the vehicle's performance.

Using random wires especially when retrofitting AVN or theft alarm system, remote engine control, car phone or radio might damage the vehicle or cause fire.

### \* NOTICE

#### Remodeling Prohibited

Do not try remodeling the vehicle in any way. It is illegal, and may affect the vehicle's performance, durability, and safety. Warranty is also not provided for problems caused by remodeling.

Be aware of safety problems caused by remodeling the vehicle with unauthorized electrical devices (lamp, black box, electrical equipment, diagnostic device, communication device, etc.). It might cause malfunction of the vehicle, battery discharge, damage on wiring or connectors, or even fire.

### \* NOTICE

#### Window tinting precaution

Window tint (especially metallic film) might cause communication disorder or poor radio reception, and malfunction of the automatic lighting system due to excessive change of illumination inside the vehicle.

The solution used might also flow into electric, electronic devices causing disorder and failure.

#### Inner panel fuse replacement

1. Turn the ENGINE START/STOP button to the OFF position and all other switches off.
2. Open the fuse panel cover.



OCDP079021

3. Pull the suspected fuse straight out. Use the removal tool provided in the main fuse box in the engine compartment.



OCDP079022

4. Check the removed fuse; replace it if it is blown.  
Spare fuses are provided in the instrument panel fuse panel (or in the engine compartment fuse panel).
5. Push in a new fuse of the same rating, and make sure it fits tightly in the clips.

If it fits loosely, consult a professional workshop. Kia recommends to consult an authorized Kia dealer/service partner.

If you do not have a spare, use a fuse of the same rating from a circuit you may not need for operating the vehicle, such as the cigarette lighter fuse.

If the headlights or taillights, stoplights, courtesy lamp, day time running lights (D.R.L) do not work and the fuses are OK, consult a professional workshop. Kia recommends to

consult an authorized Kia dealer/service partner.

### Engine compartment fuse replacement

1. Turn the ENGINE START/STOP button to the OFF position and all other switches off.
2. Remove the fuse panel cover by pressing the tab and pulling the cover up.



OCDP079023

When the blade type fuse is disconnected, remove it by using the clip designed for changing fuses located in the engine room fuse box. Upon removal, securely insert reserve fuse of equal quantity.

3. Check the removed fuse; replace it if it is blown. To remove or insert the fuse, use the fuse puller in the engine compartment fuse panel.
4. Push in a new fuse of the same rating, and make sure it fits tightly in the clips. If it fits loosely, consult a professional workshop. Kia recommends to consult an authorized Kia dealer/service partner.

**⚠ CAUTION**

After checking the fuse panel in the engine compartment, securely install the fuse panel cover through the audible clicking sound.

If not, electrical failures may occur from water contact.

**Multi fuse**

OCDP079024

If the multi fuse is blown, it must be removed as follows:

1. Disconnect the negative battery cable.
2. Remove the nuts shown in the picture above.
3. Replace the fuse with a new one of the same rating.
4. Reinstall in the reverse order of removal.

**\* NOTICE**

If the multi fuse is blown, consult a professional workshop. Kia recommends to consult an authorized Kia dealer/service partner.

**Main fuse (Plug-in Hybrid)**

OCDP079154

If the main fuse is blown, it must be removed as follows:

1. Turn off the engine.
2. Disconnect the negative battery cable.
3. Remove the nuts shown in the picture above.
4. Replace the fuse with a new one of the same rating.
5. Reinstall in the reverse order of removal.

**\* NOTICE**

The electronic system may not function correctly even when the engine room and internal fuse box's individual fuses are not disconnected. In such case the cause of the problem may be disconnection of the main fuse (BFT type), which is located inside the positive battery terminal (+) cap. Since the main fuse is designed more intricately than other parts, visit a professional workshop. Kia recommends to visit

the nearest authorized Kia dealer/  
service partner.

**⚠ CAUTION**

Visually inspect the battery cap for  
secure closing. If the battery cap is  
not securely latched, the electrical  
system may be damaged to due  
influx of moisture into the system.

**⚠ CAUTION**

Visually inspect the battery cap for  
secure closing. If the battery cap is  
not securely latched, the electrical  
system may be damaged to due  
influx of moisture into the system.

***Battery fuse***



OCDP079025

**\* NOTICE**

If the battery fuse is blown, consult  
a professional workshop. Kia recom-  
mends to consult an authorized Kia  
dealer/service partner.

**Fuse/relay panel description**

Driver’s side fuse panel



OCDP079027

Engine compartment fuse panel



OCDP079028



## Instrument panel (Driver's side fuse panel) (Plug-in Hybrid)

Fuse Name	Symbol	Fuse rating	Circuit Protected
HEV ECU1	<sup>1</sup> HEV ECU	10 A	HPCU (Hybrid Power Control Unit)
MEMORY1	<sup>1</sup> MEMORY	10 A	Driver IMS (Integrated memory system) Module, A/C Control Module, Power Tail Gate Module, Instrument Cluster
MODULE1	<sup>1</sup> MODULE	10 A	Data Link Connector, Hazard Switch, Instrument Cluster, ICM (Integrated Circuit Module) Relay Box (Outside Mirror Folding/Unfolding/Fuel Lid Relay), Auto Light & Photo Sensor, Console Switch, Driver/Passenger Smart Key Outside Handle, Charger Connector Lamp, Engine Room Junction Block (CHARGER LOCK Relay, CHARGER UNLOCK Relay)
TAIL GATE		10 A	Tail Gate Relay
P/WDW RH	RH 	25 A	Power Window RH Relay, Driver/Passenger Safety Power Window Module, Rear Safety Power Window Module RH
P/WDW LH	LH 	25 A	Power Window LH Relay, Driver/Passenger Safety Power Window Module, Rear Safety Power Window Module LH
P/SEAT DRV	DRV 	25 A	Driver IMS (Integrated memory system) Module, Driver Seat Manual Switch
MODULE4	<sup>4</sup> MODULE	7.5 A	Parking Assist-Parallel Control Module, Crash Pad Switch, IBU (Integrated Body Control Unit), Lane Keeping Assist-Line Unit, Blind-Spot Collision Warning Unit LH/RH, Electric Parking Brake Switch, VESS Speaker, Electric Water Pump (Engine), Forward Collision-Avoidance Assist Unit
OBC	OBC	10 A	OBC (On-Board Charger) Unit
S/HEATER RR	RR 	20 A	Rear Seat Warmer Control Module
HEATED MIRROR		10 A	Driver/Passenger Power Outside Mirror, A/C Control Module
S/HEATER FRT	FRT 	20 A	Front Seat Warmer Control Module, Front Air Ventilation Seat Control Module
IG3	<sup>3</sup> IG3	20 A	Rear Sub Block (IG3 1 Relay), ICM (Integrated Circuit Module) Relay Box (IG3 2/3 Relay)
MULTI MEDIA	MULTI MEDIA	15 A	Audio, Audio/Video & Navigation Head Unit

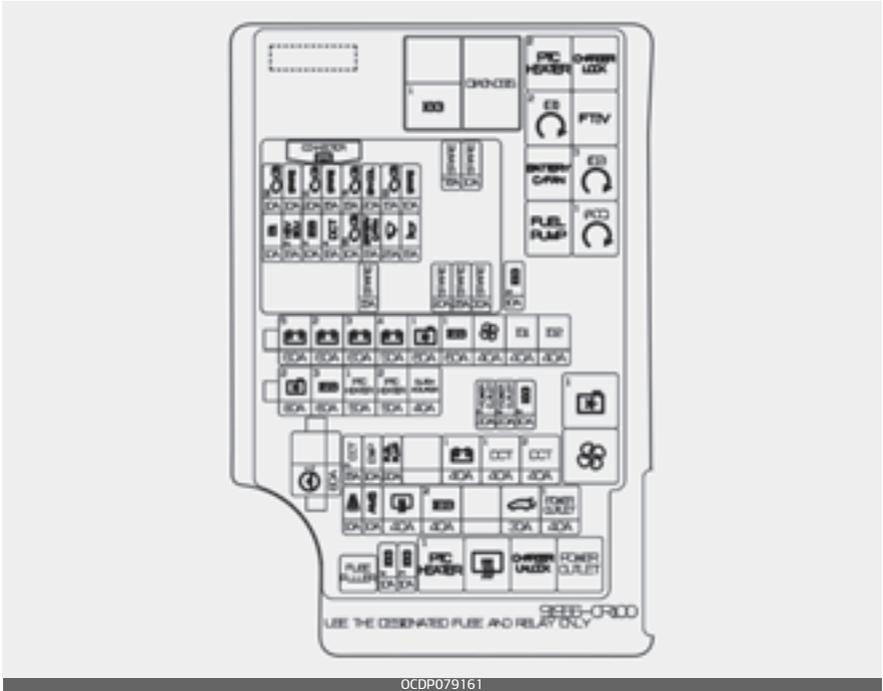
Fuse Name	Symbol	Fuse rating	Circuit Protected
MODULE5	<sup>5</sup> <b>MODULE</b>	10 A	Rear Seat Warmer Control Module, Crash Pad Switch, Data Link Connector, Electro Chromic Mirror, Audio, Audio/Video & Navigation Head Unit, ATM (Automatic Transmission) Shift Lever Illumination, A/C Control Module, Front Seat Warmer Control Module, Front Air Ventilation Seat Control Module, Driver IMS (Integrated memory system) Module, Head Lamp LH/RH
REAR WIPER		15 A	Rear Wiper Motor, ICM (Integrated Circuit Module) Relay Box (Rear Wiper Relay)
DR LOCK		20 A	Door Lock/Unlock Relay, ICM (Integrated Circuit Module) Relay Box (Dead Lock Relay)
IBU1	<sup>1</sup> IBU	15 A	IBU (Integrated Body Control Unit)
BRAKE SWITCH	<b>BRAKE SWITCH</b>	10 A	IBU (Integrated Body Control Unit), Stop Lamp Switch
P/SEAT PASS	<sup>PASS</sup> 	10 A	Passenger Seat Manual Switch
IG1	<b>IG1</b>	25 A	PCB Block (Fuse Name - IG3 1, HEV HCU2, IEB4, DCT4)
WIPER	<sup>LO/HI</sup> 	10 A	PCB Block (Front Wiper (Low) Relay), Front Wiper Motor, IBU (Integrated Body Control Unit), ECM (Engine Control Module)
A/C1	<sup>1</sup> A/C	7.5 A	Engine Room Junction Block (PTC HEATER 2 Relay, BLOWER Relay, PTC HEATER 1 Relay, CHARGER UNLOCK Relay), A/C Control Module, Electric A/C Compressor
AIR BAG2	<sup>2</sup> 	10 A	SRS Control Module
WASHER		15 A	Multiduction Switch
MDPS	 <sup>1</sup>	10 A	MDPS (Motor Driven Power Steering) Unit
BATTERY MANAGEMENT	<b>BATTERY MANAGEMENT</b>	7.5 A	BMS (Battery Management System) Control Module
MODULE7	<sup>7</sup> <b>MODULE</b>	7.5 A	Rear Seat Warmer Control Module, Front Seat Warmer Control Module, Front Air Ventilation Seat Control Module, Nozzle Heater, Cooling Fan Controller
SUNROOF 2	<sup>2</sup> 	20 A	Panorama Sunroof Motor
SUNROOF 1	<sup>1</sup> 	20 A	Panorama Sunroof Motor
CLUSTER	<b>CLUSTER</b>	7.5 A	Instrument Cluster
MODULE3	<sup>3</sup> <b>MODULE</b>	7.5 A	Sport Mode Switch, Stop Lamp Switch

Fuse Name	Symbol	Fuse rating	Circuit Protected
START		7.5 A	Inhibitor Switch,
IBU2	<sup>2</sup> 	7.5 A	IBU (Integrated Body Control Unit)
AIR BAG IND	<sup>IND</sup> 	7.5 A	Instrument Cluster, Hazard Switch
MODULE6	<sup>6</sup> <b>MODULE</b>	7.5 A	IBU (Integrated Body Control Unit)
MODULE2	<sup>2</sup> <b>MODULE</b>	10 A	Audio, Audio/Video & Navigation Head Unit, IBU (Integrated Body Control Unit), Wireless Charger, Engine Room Junction Block (POWER OUTLET Relay), Power Outside Mirror Switch
AIR BAG1	<sup>1</sup> 	15 A	SRS Control Module
POWER OUTLET	<b>POWER OUTLET</b>	20 A	Power Outlet LH

**Battery terminal cover (Plug-in Hybrid)**



### Engine room compartment fuse panel (Plug-in Hybrid)



OCDP079161

## Engine Room Junction Block

Fuse Name	Symbol	Fuse rating	Circuit Protected
MDPS1	 1	80 A	MDPS (Motor Driven Power Steering) Unit
BATT5	 5	60 A	PCB Block (Fuse Name: BATTERY C/FAN, WIPER, HORN, ECU2, Engine Control Relay)
BATT2	 2	60 A	ICU Junction Block (SPOC+(4CH), SPOC+(4CH), IPS(1CH), IPS(1CH), IPS(1CH))
BATT3	 3	60 A	ICU Junction Block (SPOC+(4CH), SPOC+(4CH), IPS(2CH), IPS(2CH), IPS(2CH), IPS(1CH))
BATT4	 4	50 A	ICU Junction Block (Fuse Name: TAIL GATE, P/WDW RH, P/WDW RH, P/SEAT DRV, S/HEATER FRT, IG3, P/SEAT PASS, MDPS (Motor Driven Power Steering), SUNROOF 2, SUNROOF 1)
COOLING FAN1	 1	60 A	COOLING FAN 1 Relay
IEB1	 1 IEB	60 A	Integrated Electric Brake Module
BLOWER		40 A	BLOWER Relay
IG1	<b>IG1</b>	40 A	PDM 2 (IG1) Relay, PDM 1 (ACC) Relay
IG2	<b>IG2</b>	40 A	PDM 3 (IG2) Relay
COOLING FAN2	 2	80 A	Cooling Fan Controller
IEB3	 3 IEB	60 A	Integrated Electric Brake Module
PTC HEATER1	 1 PTC HEATER	50 A	PTC HEATER 1 Relay
PTC HEATER2	 2 PTC HEATER	50 A	PTC HEATER 2 Relay
CLUTCH ACTUATOR	 CLUTCH ACTUATOR	40 A	Clutch Actuator (HEV)
POWER OUTLET3	 3 POWER OUTLET	20 A	Rear Power Outlet
POWER OUTLET2	 2 POWER OUTLET	20 A	Power Outlet RH
IG3 2	 2 IG3	10 A	Instrument Cluster, Charger Lamp, Audio, Audio/Video & Navigation Head Unit
DCT3	 3 DCT	15 A	TCM (Transmission Control Module)
EWP	<b>EWP</b>	10 A	Electric Water Pump (Engine)
FUEL PUMP	<b>FUEL PUMP</b>	20 A	FUEL PUMP Relay

Fuse Name	Symbol	Fuse rating	Circuit Protected
BATT1		40 A	ICU Junction Block (LONG TERM LOAD LATCH RELAY, Fuse Name: HEV ECU1, MODULE1, OBC (On-Board Charger), S/HEATER RR, DR LOCK, IBU (Integrated Body Control Unit)1, BRAKE SWITCH, AIR BAG2)
DCT1	<sup>1</sup> DCT	40 A	TCM (Transmission Control Module)
DCT2	<sup>2</sup> DCT	40 A	TCM (Transmission Control Module)
BURGLAR ALARM		10 A	ICM (Integrated Circuit Module) Relay Box (B/Alarm Horn Relay)
AMS	AMS	10 A	Battery Sensor
RR HTD		40 A	REAR HEATED Relay
IEB2	<sup>2</sup> IEB	40 A	Integrated Electric Brake Module, Multipurpose Check Connector
PTGM		30 A	Power Tail Gate Module
POWER OUTLET1	<sup>1</sup> POWER OUTLET	40 A	POWER OUTLET Relay
IG3 4	<sup>4</sup> IG3	10 A	OBC (On-Board Charger) Unit, HPCU (Hybrid Power Control Unit), ECM (Engine Control Module), TCM (Transmission Control Module)
IG3 3	<sup>3</sup> IG3	10 A	Electric Water Pump (HEV)
IG3 5	<sup>5</sup> IG3	10 A	BMS (Battery Management System) Control Module, Inhibitor Switch, BATTERY C/FAN Relay, ICU Junction Block (IPS Control Module)

PCB Block

Fuse Name	Symbol	Fuse rating	Circuit Protected
IG3 1	<sup>1</sup> IG3	10 A	Engine Room Sub Block (PTC HEATER 2 Relay)
HEV HCU2	<sup>2</sup> HEV HCU	15 A	HPCU (Hybrid Power Control Unit), Clutch Actuator (HEV)
IEB4	<sup>4</sup> IEB	10 A	Integrated Electric Brake Module, Multipurpose Check Connector
DCT4	<sup>4</sup> DCT	15 A	Sport Mode Switch
SENSOR3	S3 	10 A	Engine Room Junction Block (FUEL PUMP Relay)
BATTERY C/FAN	<b>BATTERY C/FAN</b>	15 A	Engine Room Junction Block (BATTERY C/FAN Relay)
WIPER		25 A	Front Wiper Relay
HORN		15 A	Horn Relay
SENSOR2	S2 	10 A	Engine Room Junction Block (COOLING FAN 1 Relay, TIV Relay), Camshaft Position Sensor #1 (Intake), Camshaft Position Sensor #2 (Exhaust), Purge Control Solenoid Valve, Ma Air Flow Sensor, Oil Control Valve #1 (Intake), Oil Control Valve #2 (Exhaust)
ECU1	E1 	20 A	ECM (Engine Control Module)
SENSOR1	S1 	15 A	Oxygen Sensor (Up/Down)
IGN COIL	<b>IGN COIL</b>	20 A	Ignition Coil #1/#2/#3/#4
ECU2	E2 	15 A	ECM (Engine Control Module)

## Relay (Plug-in Hybrid)

Symbol	Relay Name	Type
<sup>2</sup> PTC HEATER 	PTC HEATER 2 Relay	MICRO
<sup>2</sup> (IG1) 	PDM 2 (IG1) Relay	MICRO
<b>BATTERY C/FAN</b>	BATTERY C/FAN Relay	MICRO
<b>FUEL PUMP</b>	FUEL PUMP Relay	MICRO
CHARGER LOCK 	CHARGER LOCK Relay	MICRO
FTIV 	FTIV Relay	MICRO
<sup>3</sup> (IG2) 	PDM 3 (IG2) Relay	MICRO
<sup>1</sup> (ACC) 	PDM 1 (ACC) Relay	MICRO
<sup>1</sup> 	COOLING FAN 1 Relay	MINI
	BLOWER Relay	MINI
<sup>1</sup> PTC HEATER 	PTC HEATER 1 Relay	MICRO
	REAR HEATED Relay	MICRO
CHARGER UNLOCK 	CHARGER UNLOCK Relay	MICRO
<b>POWER OUTLET</b>	POWER OUTLET Relay	MICRO
<sup>1</sup> IG3 	IG3 1 Relay (Engine Room Sub Block)	MICRO

## Light bulbs

### Bulb replacement precaution

Please prepare bulbs with appropriate standards in case of emergencies. Refer to "Bulb wattage" on page 9-3.

When changing bulbs and sorts, first turn off the engine at a safe place, firmly apply the side brake and take out the battery's negative (-) terminal.

### ⚠ WARNING

#### Working on the lights

Prior to working on the light, firmly apply the parking brake, ensure that the ENGINE 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 the bulbs of the specified wattage.

### ⚠ WARNING

Be sure to replace the burnedout bulb with one of the same wattage rating. Otherwise, it may cause extensive wiring damage and possible fire.

### ⚠ CAUTION

If you don't have necessary tools, the correct bulbs and the expertise, consult a professional workshop. Kia recommends to consult an authorized Kia dealer/service partner.

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 headlight assembly to get to the bulb(s). Removing/installing the headlight assembly can result in damage to the vehicle.

### ⚠ CAUTION

- If unauthentic parts or substandard lights are used when changing lights, it may lead to fuse disconnection and malfunction, and other wiring damages.
- Do not install extra lamps or LED to the vehicle. If supplementary lights are installed, it may lead to lamp malfunction and flickering of the lights. In addition, the fuse box and other wiring may be damaged.

### ***Lamp part malfunction due to network failure***

The headlamp, taillight, and fog light may light up when the head lamp switch is turned ON, and not light up when the taillight or fog light switch is turned ON. This may be caused by network failure or vehicle electrical control system malfunction. If there is a problem, have the system serviced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

### ***Lamp part malfunction due to electrical control system stabilization***

A normally functioning lamp may flicker momentarily. This momentary occurrence is due to stabilization function of the vehicle's electrical control system. If the lamp soon returns to normal, the vehicle does not require service.

However, if the lamp goes out after the momentary flickering, or the flickering continues, have the system serviced by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

#### **\* NOTICE**

- If the light bulb or lamp connector is removed from an operating lamp activated by electricity, the fuse box's electronic device may scan it as a malfunction. Therefore, a lamp malfunction history may be recorded in Diagnostic Trouble Code (DTC) in the fuse box.

#### **\* NOTICE**

After an accident or after the headlight assembly is reinstalled, have the headlight aiming adjusted by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

#### **\* NOTICE**

##### **Traffic Change (For Europe)**

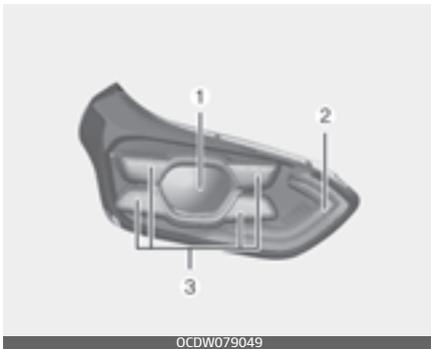
The low beam light distribution is asymmetric. If you go abroad to a country with opposite traffic direction, this asymmetric part will dazzle oncoming car driver. To prevent dazzle, ECE regulation demand several technical solutions (ex. automatic change system, adhesive sheet, down aiming). This headlamps are designed not to dazzle opposite drivers. So, you need not change your headlamps in a country with opposite traffic direction.

**\* NOTICE**

After driving in heavy rain or washing, headlamp and taillamp lenses could appear frosty. This condition is caused by the temperature difference between the lamp inside and outside. This is similar to the condensation on your windows inside your vehicle during the rain and doesn't indicate a problem with your vehicle. If the water leaks into the lamp bulb circuitry, have the vehicle checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

**Light bulb position (Front)**

Head lamp - Wagon



Head lamp - CUV



Front fog lamp - Wagon



Front fog lamp - CUV



- 1. Headlamp (Low/High) (LED type)
- 2. Front turn signal lamp (LED type)

- 3. Day time running lamp / Position lamp (LED type)
- 4. Front fog lamp (Bulb type)

**Light bulb position (Rear)**

Rear combination lamp – Wagon



Rear combination lamp



Rear fog lamp – CUV



Back up lamp – wagon



OCDP079099

Back up lamp – CUV



License plate lamp



OCDP079042

High mounted stop lamp - Wagon, CUV



OCDP079043

- 1. Rear fog lamp (Bulb type)
- 2. Tail lamp (LED type)
- 3. Stop lamp (LED type)
- 4. Rear turn signal lamp (LED type)
- 5. Rear fog lamp - CUV (LED type)
- 6. Backup lamp (Bulb type)
- 7. License plate lamp (Bulb type)
- 8. High mounted stop lamp (LED type)

Light bulb position (Side)

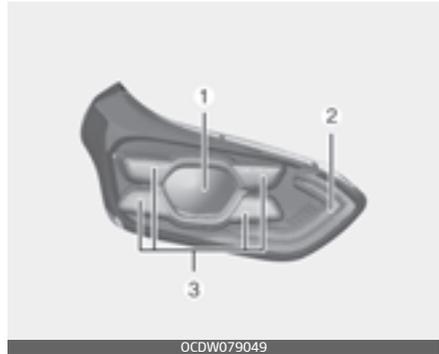


OCDW079111

- 1. Side repeater lamp (LED type)

Headlamp (LED type) replacement - Head lamp for Wagon, CUV

Head lamp - Wagon



OCDW079049

Head lamp - CUV



If the Low/High beam lamp(1), Front turn signal lamp(2), Day time running lamp/Position lamp(3) does not operate, have your vehicle checked by a professional workshop.

Kia recommends to visit an authorized Kia dealer/service partner.

The LED lamp cannot be replaced as a single unit because it is an integrated unit.

The LED lamp has to be replaced with the unit. A skilled technician should check or repair the head lamp (LED), for it may damage related parts of the vehicle.

## Front fog lamp bulb replacement

Front fog lamp - Wagon



Front fog lamp - CUV



If the front fog lamp (1) does not operate, have your vehicle checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

## Side repeater lamp (LED type) bulb replacement



OCDW079111

If the side repeater lamp (LED), does not operate, have your vehicle checked by a professional workshop.

Kia recommends to visit an authorized Kia dealer/service partner.

The LED lamp cannot be replaced as a single unit because it is an integrated unit. The LED lamp has to be replaced with the unit.

A skilled technician should check or repair the side repeater lamp (LED), for it may damage related parts of the vehicle.

## Rear turn signal lamp (LED)

Rear combination lamp – Wagon



OCDW079091

Rear combination lamp – CUV



OCDW079132

If the rear turn signal lamp (1) does not operate, have your vehicle checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

## Back up lamp (Bulb type) bulb replacement - Rear combination lamp for Wagon, CUV

Wagon



OCDW079099

CUV



OCDP079150

If the rear Back up lamp (1) does not operate, have your vehicle checked by a professional workshop. Kia recommends to visit an authorized Kia dealer/service partner.

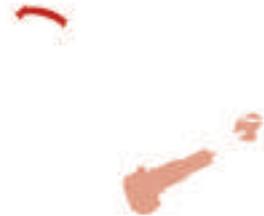
## Rear fog lamp (bulb type) bulb replacement - Wagon

1. Open the tailgate.



OCDW079057

2. Open the service cover.
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.



OCDW079096

4. Remove the bulb from bulb-socket by pulling it out.
5. Insert a new bulb by inserting it into the bulb-socket.

6. Install the socket in the assembly by aligning the tabs on the socket with the slots in the assembly. Push the socket into the assembly and turn the socket clockwise.
7. Install the service cover by putting it into the service hole.

**Rear fog lamp (LED type) bulb replacement – CUV**



If the rear fog lamp (LED) (5) does not operate, have your vehicle checked by a professional workshop.

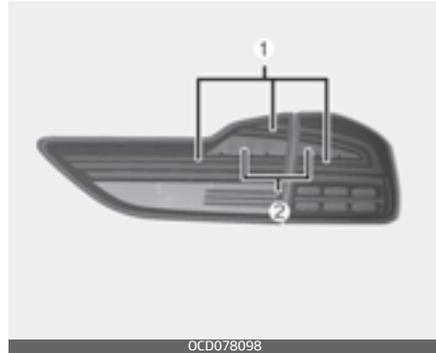
Kia recommends to visit an authorized Kia dealer/service partner.

The LED lamp cannot be replaced as a single unit because it is an integrated unit. The LED lamp has to be replaced with the unit.

A skilled technician should check or repair the rear fog lamp (LED), for it may damage related parts of the vehicle.

**Stop and tail lamp (LED type) bulb replacement**

Wagon



CUV



If the stop and tail lamp (LED) (1,2) does not operate, have your vehicle checked by a professional workshop.

Kia recommends to visit an authorized Kia dealer/service partner.

The LED lamp cannot be replaced as a single unit because it is an integrated unit. The LED lamp has to be replaced with the unit.

A skilled technician should check or repair the stop and tail lamp (LED), for it may damage related parts of the vehicle.

### Rear turn signal lamp (LED type) bulb replacement

Wagon



OCDW079076

CUV



OCDW079075

### High mounted stop lamp (LED type) bulb replacement



OCDW079063

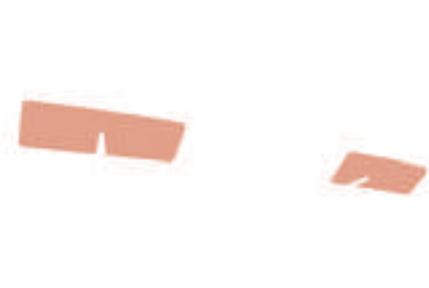
If the high mounted stop lamp (LED) (1) does not operate, have your vehicle checked by a professional workshop.

Kia recommends to visit an authorized Kia dealer/service partner.

The LED lamp cannot be replaced as a single unit because it is an integrated unit. The LED lamp has to be replaced with the unit.

A skilled technician should check or repair the high mounted stop lamp (LED), for it may damage related parts of the vehicle.

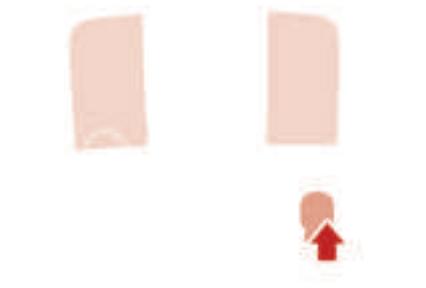
## License plate lamp bulb replacement



OCDW079107

1. Remove the lamp assembly by using a screwdriver.
2. Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
3. Remove the bulb from 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 lamp housing.

## Map lamp (Bulb type) bulb replacement



OSK3078084NR

### ⚠ WARNING

Prior to working on the Interior lamps, ensure that the "OFF" button is depressed to avoid burning your fingers or receiving an electric shock.

1. Using a flat-blade screwdriver, gently pry the lens cover from lamp housing.
2. Remove the bulb by pulling it straight out.
3. Install a new bulb in the socket.
4. Align the lens cover tabs with the lamp housing notches and snap the lens into place.

### ⚠ CAUTION

Be careful not to dirty or damage the lens, lens tab, and plastic housings.

## Map lamp (LED type) bulb replacement



05K3078085NR

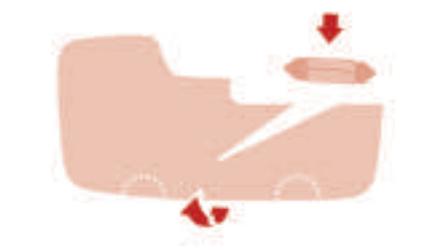
If the map lamp (LED) (1), does not operate, have your vehicle checked by a professional workshop.

Kia recommends to visit an authorized Kia dealer/service partner.

The LED lamp cannot be replaced as a single unit because it is an integrated unit. The LED lamp has to be replaced with the unit.

A skilled technician should check or repair the map lamp (LED), for it may damage related parts of the vehicle.

## Room lamp (Bulb type) bulb replacement



0DEEV098066NR

### ⚠ WARNING

Prior to working on the Interior lamps, ensure that the "OFF" button is depressed to avoid burning your fingers or receiving an electric shock.

1. Using a flat-blade screwdriver, gently pry the lens cover from lamp housing.
2. Remove the bulb by pulling it straight out.
3. Install a new bulb in the socket.
4. Align the lens cover tabs with the lamp housing notches and snap the lens into place.

### ⚠ CAUTION

Be careful not to dirty or damage the lens, lens tab, and plastic housings.

## Personal lamp (LED type) bulb replacement (if equipped)



OCDW079065

If the personal lamp (LED) (1) does not operate, have your vehicle checked by a professional workshop.

Kia recommends to visit an authorized Kia dealer/service partner.

The LED lamp cannot be replaced as a single unit because it is an integrated unit. The LED lamp has to be replaced with the unit.

A skilled technician should check or repair the personal lamp (LED), for it may damage related parts of the vehicle.

## Vanity mirror lamp bulb replacement (if equipped)



ODEEV098065NR

### ⚠ WARNING

Prior to working on the Interior lamps, ensure that the "OFF" button is depressed to avoid burning your fingers or receiving an electric shock.

1. Using a flat-blade screwdriver, gently pry the lamp assembly from interior.
2. Remove the bulb by pulling it straight out.
3. Install a new bulb in the socket.
4. Install the lamp assembly to interior.

### ⚠ CAUTION

Be careful not to dirty or damage the lens, lens tab, and plastic housings.

## Glove box lamp replacement



OCDW079066

1. Using a flat-blade screwdriver, gently pry the lamp assembly from interior.
2. Remove the cover from the lamp assembly.
3. Remove the bulb by pulling it straight out.
4. Install a new bulb in the socket.
5. Install the cover to the lamp assembly.
6. Install the lamp assembly to interior.

### ⚠ CAUTION

Be careful not to dirty or damage the lens, lens tab, and plastic housings.

## Luggage lamp bulb replacement



OCDW079067

1. Using a flat-blade screwdriver, gently pry the lamp assembly from interior.
2. Remove the cover from the lamp assembly.
3. Remove the bulb by pulling it straight out.
4. Install a new bulb in the socket.
5. Install the cover to the lamp assembly.
6. Install the lamp assembly to interior.

### ⚠ CAUTION

Be careful not to dirty or damage the lens, lens tab, and plastic housings.

## Headlamp and front fog lamp aiming (for Europe)

### *Headlamp aiming*

Wagon



OCDW079069

CUV



OCDW079126

1. Inflate the tires to the specified pressure and remove any loads from the vehicle except the driver, spare tire, and tools.
2. The vehicle should be placed on a flat floor.

3. Draw vertical lines (Vertical lines passing through respective head lamp centers) and a horizontal line (Horizontal line passing through center of head lamps) on the screen.
4. With the head lamp and battery in normal condition, aim the head lamps so the brightest portion falls on the horizontal and vertical lines.
5. To aim the low and high beams left or right, turn the driver (1) clockwise or counterclockwise. To aim the low and high beams up or down, turn the driver (2) clockwise or counterclockwise.

## *Front fog lamp aiming*

Wagon



OCDW079113

CUV

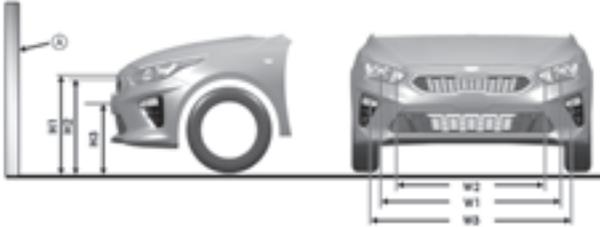


OCDW079133

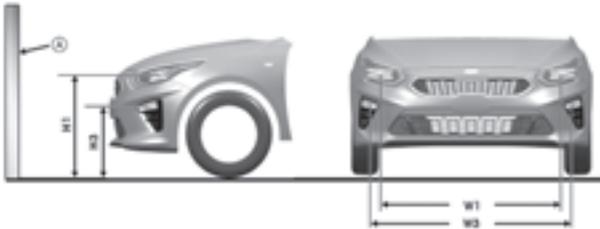
- The front fog lamp can be aimed as the same manner of the head lamps aiming.
- With the front fog lamps and battery normal condition, aim the front fog lamps.
- To aim the front fog lamp up or down, turn the driver clockwise or counterclockwise.

**Aiming point**

Wagon (standard model)



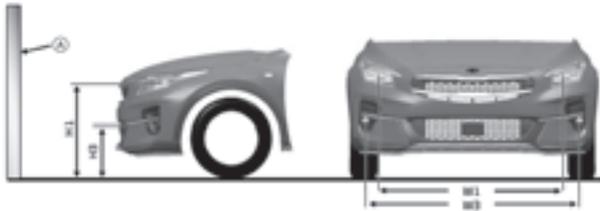
OCD078073



OCD078073

\* A: Screen

CUV (16/18 inch tire)



OCDW079131

\* A: Screen

**Wagon**

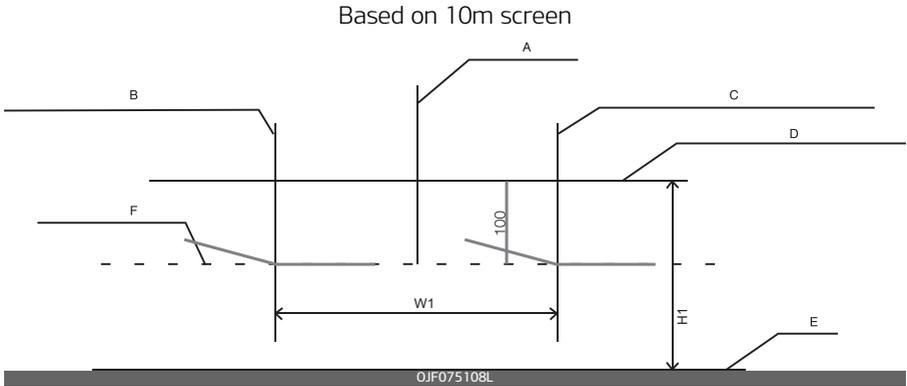
Vehicle condition	Head lamp (LED type)	
	Ground Height	Distance between lamps
	Low/High beam	Low/High beam
	H1'	W1'
<b>without driver</b> [mm (in)]	712 (28)	1,354 (53.3)
<b>with driver</b> [mm (in)]	706 (27.8)	1,354 (53.3)

Vehicle condition	Front Fog lamp (Bulb type)	
	Ground Height	Distance between lamps
	H3	W3
<b>without driver</b> [mm (in)]	490 (19.3)	1,494 (58.8)
<b>with driver</b> [mm (in)]	486 (19.1)	1,494 (58.8)

**CUV (16 in tire)**

Vehicle condition	Head lamp (LED type)		Front Fog lamp (Bulb type)	
	Ground Height	Distance between lamps	Ground Height	Distance between lamps
	Low/High beam	Low/High beam	H3	W3
	H1	W1		
<b>without driver</b> [mm (in)]	743 (29.3)	1,339 (52.7)	423 (16.7)	1,547 (60.9)
<b>with driver</b> [mm (in)]	737 (29.0)	1,339 (52.7)	429 (16.9)	1,547 (60.9)

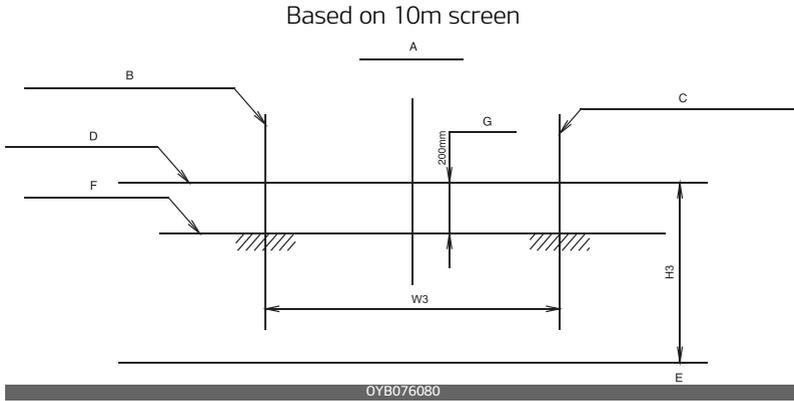


**Head lamp low beam (RHD Vehicle)**

- A: Vehicle axis
- B: Vertical line of the left head lamp bulb center
- C: Vertical line of the right head lamp bulb center
- D: Horizontal line of head lamp bulb center
- E: Ground
- F: Cut-Off line

1. Turn the low beam on with 1 driver(75kg) aboard.
2. The cut-off line should be projected in the cut-off line shown in the picture.
3. First, adjust Cut-off line to be matched with the horizontal line and then adjust with the vertical line.
4. If head lamp leveling device is equipped, adjust the head lamp leveling device switch with 0 positions.

**Front fog lamp**



- A: Vehicle axis
- B: Vertical line of the left fog lamp bulb center
- C: Vertical line of the right fog lamp bulb center
- D: Horizontal line of fog lamp bulb center
- E: Ground
- F: Cut-Off line
- G: Upper limit

1. Turn the front fog lamp on without the driver aboard.
2. The cut-off line should be projected in the allowable range (shaded region).

## Appearance care

### Exterior care

#### *Exterior general caution*

It is very important to follow the label directions when using any chemical cleaner or polish. Read all warning and caution statements that appear on the label.

#### *Finish maintenance*

#### Washing

To help protect your vehicle's finish from rust and deterioration, wash it thoroughly and frequently at least once a month with lukewarm or cold water.

If you use your vehicle for off-road driving, you should wash it after each off-road trip. Pay special attention to the removal of any accumulation of salt, dirt, mud, and other foreign materials. Make sure the drain holes in the lower edges of the doors and rocker panels are kept clear and clean. Insects, tar, tree sap, bird droppings, industrial pollution and similar deposits can damage your vehicle's finish if not removed immediately.

Even prompt washing with plain water may not completely remove all these deposits. A mild soap, safe for use on painted surfaces, may be used. After washing, rinse the vehicle thoroughly with lukewarm or

cold water. Do not allow soap to dry on the finish.

#### **⚠ 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.

#### **⚠ WARNING**

#### **Wet brakes**

After washing the vehicle, test the brakes while driving slowly to see if they have been affected by water. If braking performance is impaired, dry the brakes by applying them lightly while maintaining a slow forward speed.

### High-pressure washing

- When using high-pressure washers, make sure to maintain sufficient distance from the vehicle. Insufficient clearance or excessive pressure can lead to component damage or water penetration.
- Do not spray the camera, sensors or its surrounding area directly with a high pressure washer. Shock applied from high pressure water may cause the device to not operate normally.
- Do not bring the nozzle tip close to boots (rubber or plastic covers) or connectors as they may be damaged if they come into contact with high pressure water.



OCDP079030

#### ⚠ CAUTION

- Water washing in the engine compartment including high pressure water washing may cause the failure of electrical circuits located in the engine compartment.

- Never allow water or other liquids to come in contact with electrical/electronic components inside the vehicle as this may damage them.

### Waxing

Wax the vehicle when water will no longer bead on the paint.

Always wash and dry the vehicle before waxing. Use a good quality liquid or paste wax, and follow the manufacturer's instructions. Wax all metal trim to protect it and to maintain its luster.

Removing oil, tar, and similar materials with a spot remover will usually strip the wax from the finish. Be sure to re-wax these areas even if the rest of the vehicle does not yet need waxing. Do not apply wax on embossed unpainted unit, as it may tarnish the unit.

#### ⚠ CAUTION

- 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***

Corrosive materials used for ice and snow removal and dust control may collect on the underbody. If these materials are not removed, accelerated rusting can occur on underbody parts such as the fuel lines, frame, floor pan and exhaust system, even though they have been treated with rust protection.

Thoroughly flush the vehicle underbody and wheel openings with lukewarm or cold water once a month, after off-road driving and at the end of each winter. Pay special attention to these areas because it is difficult to see all the mud and dirt. It will do more harm than good to wet down the road grime without removing it. The lower edges of the doors, rocker panels, and frame members have drain holes that should not clog with dirt; trapped water in these areas can cause rusting.

#### **⚠ 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.

### ***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 car wash brushes.
- Do not use any alkaline or acid detergent. 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 longterm 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 evaporate slowly. Mud is particularly corrosive because it dries slowly and holds moisture in contact with the vehicle. Although the mud appears to be dry, it can still retain moisture and promote corrosion. High temperatures can also accelerate corrosion

of parts that are not properly ventilated so the moisture can be dispersed.

For all these reasons, it is particularly important to keep your vehicle clean and free of mud or accumulations of other materials. This applies not only to the visible surfaces but particularly to the underside of the vehicle.

### **To help prevent corrosion**

You can help prevent corrosion from getting started 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 accumu-

lated mud rather than washing it away will accelerate corrosion rather than prevent it. Water under high pressure and steam are particularly effective in removing accumulated mud and corrosive materials.

- When cleaning lower door panels, rocker panels and frame members, be sure that drain holes are kept open so that moisture can escape and not be trapped inside to accelerate corrosion.

#### ***Keep your garage dry***

Don't park your vehicle in a damp, poorly ventilated garage. This creates a favorable environment for corrosion. This is particularly true if you wash your vehicle in the garage or drive it into the garage when it is still wet or covered with snow, ice or mud. Even a heated garage can contribute to corrosion unless it is well ventilated so moisture is dispersed.

#### ***Keep paint and trim in good condition***

Scratches or chips in the finish should be covered with "touch-up" paint as soon as possible to reduce the possibility of corrosion. If bare metal is showing through, the attention of a qualified body and paint shop is recommended.

**Bird droppings:** Bird droppings are highly corrosive and may damage painted surfaces in just a few hours. Always remove bird droppings as soon as possible.

### ***Don't neglect the interior***

Moisture can collect under the floor mats and carpeting and cause corrosion. Check under the mats periodically to be sure the carpeting is dry. Use particular care if you carry fertilizers, cleaning materials or chemicals in the vehicle.

These should be carried only in proper containers and any spills or leaks should be cleaned up, flushed with clean water and thoroughly dried.

## **Interior care**

### ***Interior general precautions***

Prevent chemicals such as perfume, cosmetic oil, sun cream, hand cleaner, and air freshener from contacting the interior parts because they may cause damage or discoloration. If they do contact the interior parts, wipe them off immediately. If necessary, use a vinyle cleaner, see instructions for correct usage.

### **⚠ CAUTION**

Never allow water or other liquids to come in contact with electrical/electronic components inside the vehicle as this may damage them.

### **⚠ CAUTION**

When cleaning leather products (steering wheel, seats etc.), use neutral detergents or low alcohol content solutions. If you use high alcohol content solutions or acid/alkaline detergents, the color of the leather may fade or the surface may get stripped off.

### ***Taking care of leather seats***

- Vacuum the seat periodically to remove dust and sand on the seat. It will prevent abrasion or damage of the leather and maintain its quality.
- Wipe the natural leather seat cover often with dry or soft cloth.
- Sufficient use of a leather protective may prevent abrasion of the cover and helps maintain the color. Be sure to read the instructions and consult a specialist when using leather coating or protective agents.
- Leather with bright colors (beige, cream beige) is easily contaminated and clear in appearance. Clean the seats frequently.

- Avoid wiping with wet cloth. It may cause the surface to crack.

### ***Cleaning the leather seats***

- Remove all contaminations instantly. Refer to instructions below for removal of each contaminant.
- Cosmetic products(sunscreen, foundation, etc.)
  - Apply cleansing cream on a cloth and wipe the contaminated point. Wipe off the cream with a wet cloth and remove water with a dry cloth.
- Beverages(coffee, soft drink, etc.)
  - Apply a small amount of neutral detergent and wipe until contaminations do not smear.
- Oil
  - Remove oil instantly with absorbable cloth and wipe with stain remover for natural leather only.
- Chewing gum
  - Harden the gum with ice and remove gradually.

### ***Fabric seat cover using precautions (if equipped)***

Please clean the fabric seats regularly with a vacuum cleaner in consideration of fabric material characteristics. If they are heavily soiled with beverage stains, etc., use a suitable interior cleaner. To prevent damage to seat covers, wipe off the

seat covers down to the seams with a large wiping motion and moderate pressure using a soft sponge or microfiber cloth.

Velcro closures on clothing or sharp objects may cause snagging or scratches on the surface of the seats. Make sure not to rub such objects against the surface.

### ***Cleaning the upholstery and interior trim***

#### **Vinyl**

Remove dust and loose dirt from vinyl with a whisk broom or vacuum cleaner. Clean vinyl surfaces with a vinyl cleaner.

#### **Fabric**

Remove dust and loose dirt from fabric with a whisk broom or vacuum cleaner. Clean with a mild soap solution recommended for upholstery or carpets. Remove fresh spots immediately with a fabric spot cleaner. If fresh spots do not receive immediate attention, the fabric can be stained and its color can be affected. Also, its fire-resistant properties can be reduced if the material is not properly maintained.

**⚠ CAUTION**

Using anything but recommended cleaners and procedures may affect the fabric's appearance and fire-resistant properties.

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***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**

Do not scrape or scratch the inside of the rear window. This may result in damage of the rear window defroster grid.

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**Emission control system (if equipped)**

The emission control system of your vehicle is covered by a written limited warranty. Please see the warranty information contained in the Warranty & Maintenance book in your vehicle.

Your vehicle is equipped with an emission control system to meet all applicable emission regulations.

There are three emission control systems, as follows.

1. Crankcase emission control system
2. Evaporative emission control system
3. Exhaust emission control system

In order to assure the proper function of the emission control systems, have your vehicle inspected and maintained by a professional workshop in accordance with the maintenance schedule in this manual. Kia recommends to visit an authorized Kia dealer/service partner.

**Caution for the Inspection and Maintenance Test (With Electronic Stability Control (ESC) system)**

- **To prevent the vehicle from misfiring during dynamometer testing, turn the Electronic Stability Control (ESC) system off by pressing the ESC switch.**

- **After dynamometer testing is completed, turn the ESC system back on by pressing the ESC switch again.**

### **1. Crankcase emission control system**

The positive crankcase ventilation system is employed to prevent air pollution caused by blow-by gases being emitted from the crankcase. This system supplies fresh filtered air to the crankcase through the air intake hose. Inside the crankcase, the fresh air mixes with blow-by gases, which then pass through the PCV valve into the induction system.

### **2. Evaporative emission control system**

The Evaporative Emission Control System is designed to prevent fuel vapors from escaping into the atmosphere.

#### **Canister**

Fuel vapors generated inside the fuel tank are absorbed and stored in the onboard canister. When the engine is running, the fuel vapors absorbed in the canister are drawn into the surge tank through the purge control solenoid valve.

### **Purge Control Solenoid Valve (PCSV)**

The purge control solenoid valve is controlled by the Engine Control Module (ECM); when the engine coolant temperature is low during idling, the PCSV closes so that evaporated fuel is not taken into the engine. After the engine warms up during ordinary driving, the PCSV opens to introduce evaporated fuel to the engine.

### **3. Exhaust emission control system**

The Exhaust Emission Control System is a highly effective system which controls exhaust emissions while maintaining good vehicle performance.

#### **Engine exhaust gas precautions (carbon monoxide)**

- Carbon monoxide can be present with other exhaust fumes. Therefore, if you smell exhaust fumes of any kind inside your vehicle, have it inspected and repaired immediately. If you ever suspect exhaust fumes are coming into your vehicle, drive it only with all the windows fully open. Have your vehicle checked and repaired immediately.

**⚠ WARNING****Exhaust**

Engine exhaust gases contain carbon monoxide (CO). Though colorless and odorless, it is dangerous and could be lethal if inhaled. Follow the instructions on this page to avoid CO poisoning.

- Do not operate the engine in confined or closed areas (such as garages) any more than what is necessary to move the vehicle in or out of the area.
- When the vehicle is stopped in an open area for more than a short time with the engine running, adjust the ventilation system (as needed) to draw outside air into the vehicle.
- Never sit in a parked or stopped vehicle for any extended time with the engine running.
- When the engine stalls or fails to start, excessive attempts to restart the engine may cause damage to the emission control system.

**Operating precautions for catalytic converters (if equipped)****⚠ WARNING****Fire**

- A hot exhaust system can ignite flammable items under your vehicle. Do not park the vehicle over or near flammable objects, such as grass, vegetation, paper, leaves, etc.
- The exhaust system and catalytic system are very hot while the engine is running or immediately after the engine is turned off. Keep away from the exhaust system and catalytic, you may get burned.  
Also, do not remove the heat sink around the exhaust system, do not seal the bottom of the vehicle or do not coat the vehicle for corrosion control. It may present a fire risk under certain conditions.

Your vehicle is equipped with a catalytic converter emission control device.

Therefore, the following precautions must be observed:

- Make sure to refuel your vehicle according to "Fuel requirements" on page 2-2.
- Do not operate the vehicle when there are signs of engine malfunction, such as misfire or a noticeable loss of performance.

- Do not misuse or abuse the engine. Examples of misuse are coasting with the ignition off and descending steep grades in gear with the ignition off.
- Do not operate the engine at high idle speed for extended periods (5 minutes or more).
- Do not modify or tamper with any part of the engine or emission control system. All inspections and adjustments must be made by a professional workshop. Kia recommends to visit an authorized Kia dealer/service center.
- Avoid driving with an extremely low fuel level. Running out of fuel could cause the engine to misfire, damaging the catalytic converter. Failure to observe these precautions could result in damage to the catalytic converter and to your vehicle. Additionally, such actions could void your warranties.

### Gasoline particulate filter (if equipped)

The Gasoline Particulate Filter (GPF) is the system that removes the soot from the exhaust gas. Unlike a disposable air filter, the GPF system automatically burns (oxidizes) and removes the accumulated soot while driving.

However, repeated short-distance driving or long-distance driving at a low speed can stop the accumulated soot from automatically being removed by the GPF system. If the accumulated soot reaches a certain amount, the GPF warning light

() will illuminate. To re-operate the GPF system, the vehicle should be driven for more than 30 minutes at a speed of 80 km/h and faster. Ensure the following conditions are met: safe road conditions, transmission 3 or above, and engine speed of 1,500–4,000 rpm. Driving at 80 km/h or faster for recommended hours will get the GPF system back to work and stop the GPF warning light.

If the GPF warning light stays on or the warning message “check exhaust system” pops up even after driving at recommended speed and for recommended hours, visit a professional workshop and have them check the GPF system. Constant driving with the GPF warning light on can damage the GPF system and undermine fuel economy.



# Specifications, Consumer information and Reporting safety

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## SPECIFICATIONS, CONSUMER INFORMATION AND REPORTING SAFETY DEFECTS

### Engine

Item	Kappa 1.6L GDI
Displacement [cc (cu.in)]	1,580 (96.42)
Bore x Stroke [mm (in)]	72 x 97 (2.83 x 3.30)
Firing order	1-3-4-2
No. of cylinders	4

### Dimensions

#### Wagon

Item	mm (in)	
Overall length	4,605 (181.3)	
Overall width	1,800 (70.9)	
Overall height	1,465 (57.7)	
Front tread	205/55R16	1,565 (61.6)
	225/45R17	1,559 (61.3)
Rear tread	205/55R16	1,573 (61.9)
	225/45R17	1,567 (61.7)
Wheelbase	2,650 (104.3)	

#### CUV

Item	mm (in)	
Overall length	4,395 (173.0)	
Overall width	1,826 (71.9)	
Overall height	16": 1,478 (58.2)	
	18": 1,490 (58.7)	
Front tread	205/60R16	1,585 (62.4)
	235/45R18	1,575 (62.0)
Rear tread	205/60R16	1,583 (62.3)
	235/45R18	1,573 (61.9)
Wheel base	2,650 (104.3)	

## Bulb wattage

Light bulb		Type	Wattage (W)
Front	Headlamp	High	LED
		Low	LED
	Daytime running light		LED
	Position lamp		LED
	Turn signal lamp		LED
	Side repeater lamp		W5W
	Front fog lamp		HB4
Rear	Tail/stop lamp		LED
	Turn signal lamp		LED
	Back up lamp		W16W
	Rear fog lamp	Wagon	H21W
		CUV	LED
	High mounted stop lamp		LED
	License plate lamp		W5W
Interior	Map lamps		W10W
	Room lamp		FESTOON
	Luggage lamp		FESTOON
	Glove box lamp		FESTOON
	Personal lamp *		LED
	Vanity mirror lamps *		FESTOON

\*: if equipped

### Tires and wheels (Wagon)

Item	Tire size	Wheel size	Load Capacity		Speed capacity		Inflation pressure [psi (kPa)]					
			LI <sup>*2</sup>	kg	SS <sup>*3</sup>	km/h	Normal load <sup>*1</sup>		Maximum load		High-speed driving	
							Front	Rear	Front	Rear	Front	Rear
Full size tire	205/55R16	6.5Jx16	91	615	H	210	2.5 (36, 250)	2.5 (36, 250)	2.7 (39, 270)	3.0 (43.5, 300)	2.7 (39, 270)	3.0 (43.5, 300)
	225/45R17	7.0JX17	91	615	W	270	2.3 (33, 230)	2.3 (33, 230)	2.4 (35, 240)	2.8 (40.5, 280)	2.4 (35, 240)	2.8 (40.5, 280)

\*1. Normal load – Up to 3 persons

\*2. Load Index

\*3. Speed Symbol

### Tires and wheels (CUV)

Item	Tire size	Wheel size	Load Capacity		Speed capacity		Inflation pressure [psi (kPa)]					
			LI <sup>*2</sup>	kg	SS <sup>*3</sup>	km/h	Normal load <sup>*1</sup>		Maximum load		High-speed driving	
							Front	Rear	Front	Rear	Front	Rear
Full size tire	205/60R16	6.5JX16	92	630	H	210	2.5 (36,250)	2.5 (36,250)	2.5 (36,250)	2.7 (39,270)	2.5 (36,250)	2.7 (39,270)
	235/45R18	7.5JX18	94	670	V	240	2.3 (33,230)	2.3 (33,230)	2.5 (36,250)	2.7 (39,270)	2.5 (36,250)	2.7 (39,270)

\*1. Normal load – Up to 3 persons

\*2. Load Index

\*3. Speed Symbol

### \* NOTICE

- We recommend that when replacing tires, use the same originally supplied with the vehicles. ALWAYS use tires with the same type, size, brand, construction and tread pattern for all four wheels. If not, that affects driving performance.
  - When driving in high altitude grades, it is natural for the atmospheric pressure to decrease. Therefore, please check the tire pressure and add more air when necessary. Additionally required tire air pressure per km above sea level: 1.5psi/km
- 

### ▲ 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.

---

## Weight/volume

### Wagon

Item		Standard package	Trailer package	
			With brake	Without brake
Gross vehicle weight kg (lbs.)		2,030 (4,475)	3,330 (7,341)	2,630 (5,798)
Luggage volume l (cu ft)	MIN	437 (15.4)		
	MAX	1,506 (53.2)		

### CUV

Item		Standard package	Trailer package	
			With brake	Without brake
Gross vehicle weight kg (lbs.)		2,030 (4,475)	3,330 (7,341)	2,630 (5,798)
Luggage volume l (cu ft)	MIN	291 (10.3)		
	MAX	1,243 (43.9)		

## Air conditioning system

ITEM	Weight of volume	Classification
Refrigerant	500 ± 25g	R-1234yf
		R-134a
Compressor lubricant	130 ± 10g	POE

Please contact a professional workshop for more details.

Kia recommends to contact an authorized Kia dealer/service partner.

## Recommended lubricants and capacities

To help achieve proper engine and powertrain performance and durability, use only lubricants of the proper quality.

The correct lubricants also help promote engine efficiency that results in improved fuel economy.

These lubricants and fluids are recommended for use in your vehicle.

Lubirant	Volume	Classification
Engine oil <sup>*1*2</sup> (drain and refill) Recommends 	3.8 L (4.0 US qt.)	API Latest or ACEA A5/AB
Dual clutch transmission fluid	1.6~1.7 L (1.7~1.8 US qt.)	SAE 70W, API GL-4 HK D DCTF TGO-10 (SK) SPIRAX S6 GHDE 70W DCTF (H.K.SHELL) 7 DCTF HKM (S-OIL)
Coolant	5.8 L (6.1 US qt.)	Mixture of antifreeze and water (Ethylene-glycol with phosphate based coolant for cooling device)
Inverter coolant	2.8 L (2.96 US qt.)	
Brake fluid <sup>*3</sup>	374.5±26 cc	SAE J1704 DOT-4LV, ISO4925 CLASS-6, FMVSS116 DOT-4
Engine clutch actuator fluid	100±20 cc (0.088±0.018 US qts.)	DOT 3
Fuel	37 L (9.8 US gal.)	Refer to "Fuel requirements" on page 2-2.

\*1. Refer to the "Recommended SAE viscosity number" on page 9-8.

\*2. Engine oils labeled Energy Conserving Oil are now available. Along with other additional benefits, they contribute to fuel economy by reducing the amount of fuel necessary to overcome engine friction. Often, these improvements are difficult to measure in everyday driving, but in a year's time, they can offer significant cost and energy savings.

\*3. To maintain the best braking performance and ABS/ESC performance, we recommend that you use genuine brake fluid that conform to specifications.

## Recommended SAE viscosity number

### ⚠ CAUTION

Always be sure to clean the area around any filler plug, drain plug, or dipstick before checking or draining any lubricant. This is especially important in dusty or sandy areas and when the vehicle is used on unpaved roads. Cleaning the plug and dipstick areas will prevent dirt and grit from entering the engine and other mechanisms that could be damaged.

Engine oil viscosity (thickness) has an effect on fuel economy and cold

weather operating (engine start and engine oil flowability). Lower viscosity engine oils can provide better fuel economy and cold weather performance, however, higher viscosity engine oils are required for satisfactory lubrication in hot weather.

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

When choosing an oil, consider the range of temperature your vehicle will be operated in before the next oil change. Proceed to select the recommended oil viscosity from the chart.

### ***Kappa 1.6L GDI***

Temperature Range for SAE Viscosity Numbers										
Temperature	°C	-30	-20	-10	0	10	20	30	40	50
	(°F)	-10	0	20	40	60	80	100	120	
For all countries					0W-30, 5W-30					

\* NOTICE Kia distributor in Baltics recommends:

- Gasoline engines - Valvoline engine oil SynPower FE 5W30 (replaceable SynPower ENV C2 5W30)
- Diesel engines - Valvoline engine oil SynPower MST C3 5W30

## Vehicle Identification Number (V N)

Type A



OCDW089001

The vehicle identification number (VIN) is the number used in registering your car and in all legal matters pertaining to its ownership, etc.

The number is punched on the floor under the passenger seat. To check the number, remove the cover.

## VIN label

Type B (if equipped)



OCDW089002

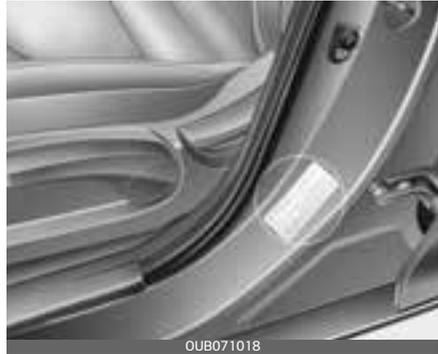
The VIN is also on a plate attached to the top of the dashboard. The number on the plate can easily be seen through the windshield from outside.

### Vehicle certification label (if equipped)



The vehicle certification label attached on the driver's (or front passenger's) side center pillar gives the vehicle identification number (VIN).

### Tire specification and pressure label



The tires supplied on your new vehicle are chosen to provide the best performance for normal driving.

The tire label located on the driver's side center pillar gives the tire pressures recommended for your car.

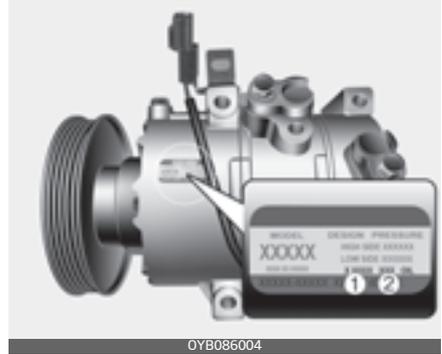
## Engine number



OCDP089009

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

## Air conditioner compressor label



A compressor label informs you the type of compressor your vehicle is equipped with such as model, supplier part number, production number, refrigerant (1) and refrigerant oil (2).

## Refrigerant label (if equipped)



OCDW049077

The refrigerant label is located :

- Type A: The underside of the hood
- Type B: The front of the engine room.

## Declaration of conformity



The radio frequency components of the vehicle comply with requirements and other relevant provisions of Directive 1995/5/EC.

Further information including the manufacturer's declaration of conformity is available on Kia web site as follows;

<http://www.kia-hotline.com>

## Fuel label (if equipped)

### Gasoline (Petrol) engine

The fuel label is attached on the fuel filler door.



- A. Octane rating of unleaded Gasoline (Petrol)
  1. RON/ROZ: Research Octane Number
  2. (R+M)/2, AKI: Anti Knock Index
- B. Identifiers for Petrol-type fuels
  - \* This symbol means usable fuel. Do not use any other fuel.
- C. For further details, refer to the "Fuel requirements" on page 2-2.

### Plug-in Hybrid vehicle

For Europe



Except Europe

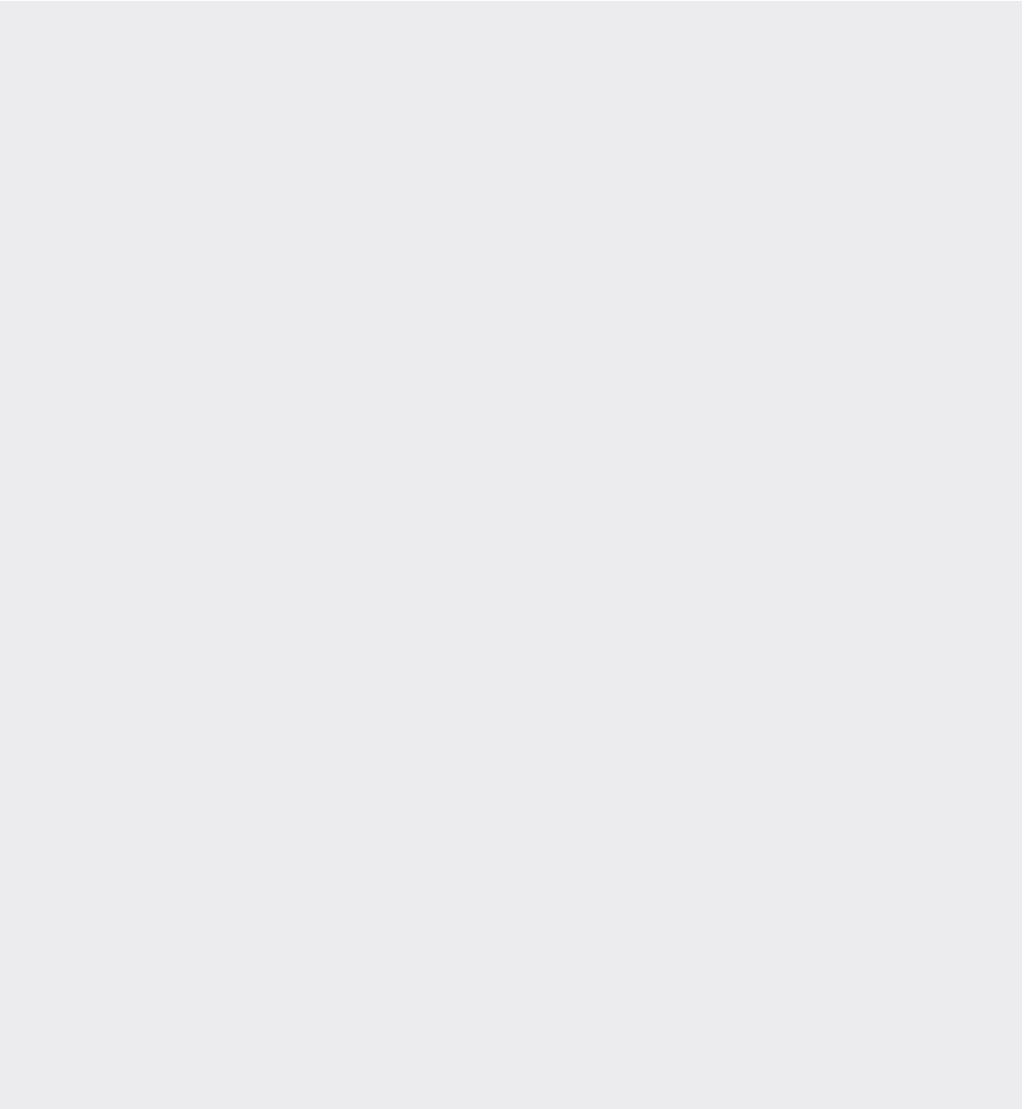


The fuel label is attached on the fuel filler door.

- A. Octane rating of unleaded Gasoline (Petrol)
  1. RON : Research Octane Number
  2. (R+M)/2 : Anti Knock Index
- B. Identifiers for Petrol-type fuels
  - \* This symbol means usable fuel. Do not use any other fuel.
- C. For further details, refer to "Fuel requirements" on page 2-2.
- D. Add fuel into the fuel tank within 20 min.



# Abbreviation **A**



**Abbreviation**

**ABBREVIATION**

**ABS**

Anti-Lock Brake System

**ACC**

Accessory

**AVN**

Audio Video Navigation

**BCW**

Blind-spot Collision Warning

**CC**

Cruise Control

**CD**

Charge Depleting

**CO**

Carbon Monoxide

**CS**

Charge Sustaining

**CRS**

Child Restraint System

**DAW**

Driver Attention Warning

**DCT**

Double Clutch Transmission

**DRL**

Daytime Running Light

**EBD**

Electronic Brake force Distribution

**ECM**

Electric Chromic Mirror

**EPB**

Electronic Parking Brake

**EPS**

Electronic Power Steering

**ESC**

Electronic Stability Control

**ESS**

Emergency Stop Signal

**FAME**

Fatty Acid Methyl Ester

**FCA**

Forward Collision-Avoidance Assist

**GAW**

Gross Axle Weight

**GAWR**

Gross Axle Weight Rating

**GPF**

Gasoline Particulate Filter

**GPS**

Global Positioning System

**GVW**

Gross Vehicle Weight

**GVWR**

Gross Vehicle Weight Rating

## Abbreviation

### **HAC**

Hill-start Assist Control

### **HBA**

High Beam Assist

### **HID**

High-Intensity Discharge

### **HPCU**

Hybrid Power Control Unit

### **HSG**

Hybrid starter generator

### **ICCB**

In-Cable Control Box

### **ISLW**

Intelligent Speed Limit Warning

### **LFA**

Lane Following Assist

### **LKA**

Lane Keeping Assist

### **LNT**

Lean NOx Trap

### **MIL**

Malfunction Indicator Lamp

### **MPI**

Multi Point Injection

### **MSLA**

Manual Speed Limit Assist

### **MTBE**

Methyl Tertiary Butyl Ether

### **ODO**

Odometer

### **PA**

Parking Assist

### **PCSV**

Purge Control Solenoid Valve

### **PDW**

Parking Distance Warning

### **RCCW**

Rear Cross-Traffic Collision Warning

### **RME**

Rapeseed Methyl Ester

### **RON**

Research Octane Number

### **RVM**

Rear View Monitor

### **SCC**

Smart Cruise Control

### **SOC**

State of Charge

### **SRS**

Supplemental Restraint System

### **SRSCM**

Supplemental Restraint System Control Module

**Abbreviation**

**TMK**

Tire Mobility Kit

**TPMS**

Tire Pressure Monitoring System

**VESS**

Virtual Engine Sound System

**VIN**

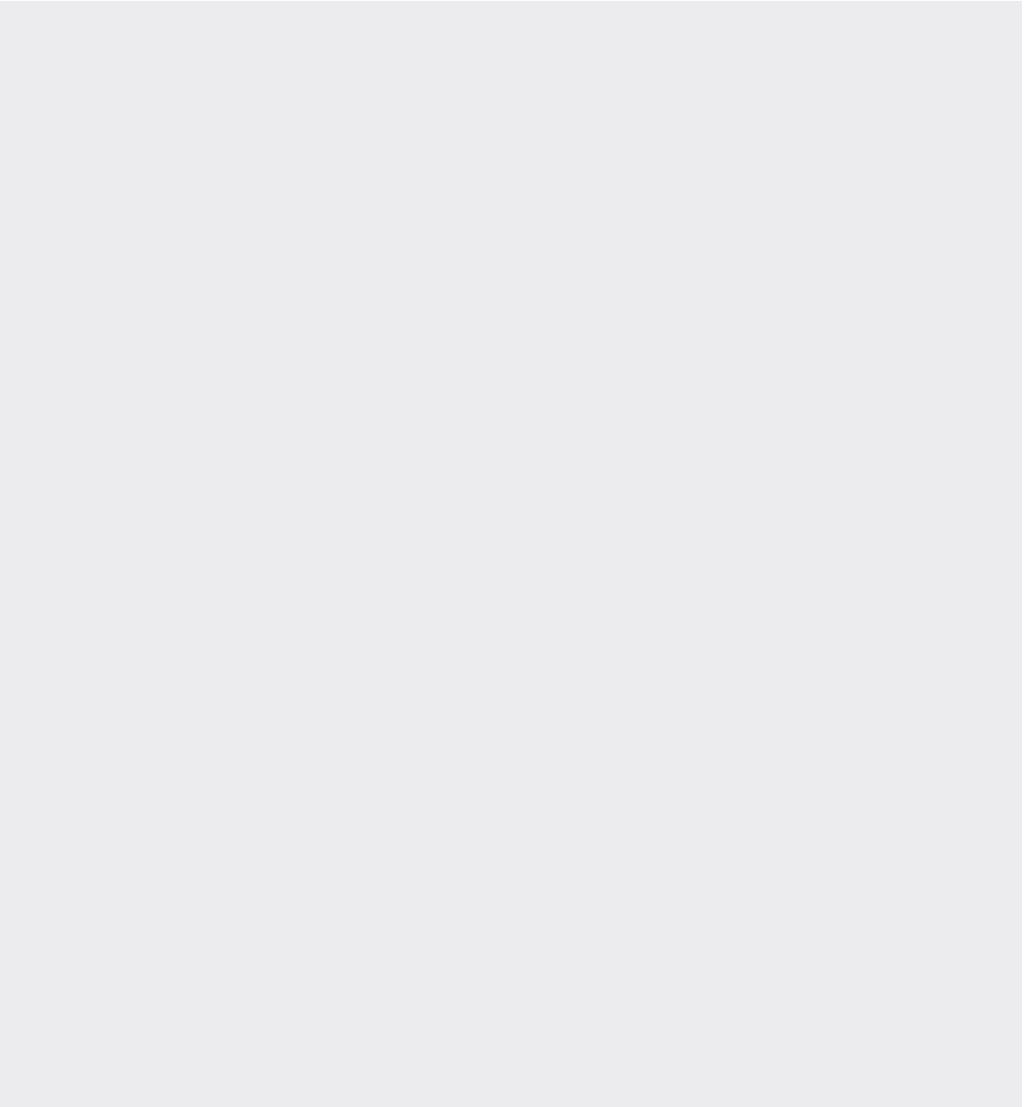
Vehicle Identification Number

**VME**

Vegetable Oil Methyl Ester

**VSM**

Vehicle Stability Management



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## APPENDIX

### Зимно шофиране (Bulgarian version)



OCDP059028

По-тежките метеорологични условия през зимата водят до по-голямо износване и други проблеми. За да сведете до минимум проблемите при зимно шофиране, трябва да следвате тези предписания:

#### Условия на сняг или лед

За да шофирате вашия автомобил в дълбок сняг, може да е необходимо използването на зимни гуми или поставянето на вериги за сняг на вашите гуми. Ако са ви нужни зимни гуми, необходимо е да изберете такива, които са еднакви по размер и тип с оригиналните гуми. Ако не го направите, това може да повлияе негативно върху сигурността и управляемостта на вашия автомобил. Освен това шофирането с превишена скорост,

бързото ускоряване, внезапното използване на спирачки и рязкото завиване могат да бъдат много опасни.

При намаляване на скоростта използвайте двигателната спирачка възможно най-много. Внезапното използване на спирачки по снежна и заледена настилка може да доведе до подхлъзване. Необходимо е да спазвате достатъчно голяма дистанция между автомобила, който се движи пред вас, и вашия автомобил. Освен това натискайте спирачката леко. Трябва да се има предвид, че поставянето на вериги за сняг върху гумите ще осигури по-голяма задвижваща сила, но няма да предотврати страничното занасяне.

#### \* БЕЛЕЖКА

Веригите за гуми не са позволени от закона във всички държави. Проверете законите на държавата, преди да сложите вериги за гуми.

## **Зимни гуми**

Ако монтирате зимни гуми на вашия автомобил, уверете се, че това са радиални гуми със същия размер и товароносимост като оригиналните гуми. Монтирайте зимни гуми и на четирите колела, за да балансирате управляемостта на автомобила при всякакви метеорологични условия. Имайте предвид, че сцеплението, което осигуряват зимните гуми при суха настилка, може да не е толкова високо като това на оригиналните гуми на автомобила ви. Трябва да шофирате внимателно дори когато пътищата са чисти. Попитайте търговеца на гуми за препоръки във връзка с максималната скорост.

### **▲ ВНИМАНИЕ**

#### **Азмер на зимните гуми**

Зимните гуми трябва да са еднакви по размер и тип със стандартните гуми на автомобила. В противен случай сигурността и управляемостта на вашия автомобил могат да бъдат повлияни негативно.

Не поставяйте гуми с шипове преди първо да проверите за възможни ограничения за използването на такива в местните, щатските и общинските разпоредби.

## **Вериги за гуми**



Тъй като страничните стени на радиалните гуми са по-тънки, те могат да се повредят при монтирането на някои типове вериги за гуми върху тях. Поради това се препоръчва използване на зимни гуми, вместо вериги за сняг. Не монтирайте вериги за гуми на автомобили, оборудвани с алуминиеви джанти – веригите за сняг могат да повредят джантите. Ако се налага използването на вериги за сняг, използвайте кабелни вериги с дебелина, по-малка от 12 мм. Повреди по вашия автомобил, предизвикани от използването на неподходящи вериги за сняг, не се покриват от гаранцията на производителя на автомобила ви.

Поставете вериги за гуми само на предните гуми.

**⚠ ПРЕДУПРЕЖДЕНИЕ**

- Уверете се, че веригите за сняг са с правилния размер и тип за вашите гуми. Неподходящи вериги за сняг могат да повредят шасито и окачването на автомобила, които може да не се покриват от гаранцията на производителя на автомобила ви. Също и куките за свързване на веригите за сняг могат да бъдат повредени от допирането до компоненти на автомобила, в резултат на което веригите за сняг да се разхлабят от гумата. Уверете се, че веригите за сняг са сертифицирани по стандарта SAE, клас „S”.
- Винаги проверявайте дали правилно сте монтирали веригите след приблизително 0,5 до 1 км шофиране, за да се уверите, че монтажът е безопасен. Стегнете или монтирайте отново веригите, ако са хлабави.
- Дори и с правилната монтирана верига, не правете пълен завой (да завъртите волана изцяло на една страна) при шофиране на автомобила. (Ако правите пълен завой, шофирайте със скорост под 10 км/ч.)

**Поставяне на вериги**

При поставяне на вериги следвайте инструкциите на производителя и ги монтирайте възможно най-плътно. Шофирайте бавно с поставените вериги. Ако чуете, че веригите се допират до каросерията или шасито, спрете и ги затегнете. Ако все още се допират, намалете скоростта, докато спрат. Махнете веригите веднага щом започнете да шофирате по изчистени пътища.

**⚠ ВНИМАНИЕ****Монтиране на вериги**

При монтиране на вериги за сняг паркирайте автомобила на нивото на земята, далеч от пътното движение. Включете аварийните светлини на автомобила и поставете предупредителен светлоотразителен триъгълник зад него, ако имате такъв. Винаги оставяйте автомобила на Р (паркиране), използвайте ръчната спирачка и изключвайте двигателя, преди да поставите веригите за сняг.

## ⚠ ВНИМАНИЕ

### Вериги за гуми

- Използването на вериги може да повлияе негативно на управляемостта на автомобила.
- Не превишавайте 30 км/ч (20 мили/час) или препоръчаното от производителя на вериги ограничение на скоростта – което от двете е по-ниско.
- Шофирайте внимателно и избягвайте неравности, дупки, остри завои и други опасности на пътищата, които могат да доведат до отскачане на автомобила.
- Избягвайте остри завои или блокиране на колелата при спиране.

## ⚠ ПРЕДУПРЕЖДЕНИЕ

### Вериги за гуми

- Вериги, които са с неправилен размер или са неправилно поставени, могат да повредят спиращите маркучи, окачването, каросерията и джантите на вашия автомобил.
- Спрете да шофирате и стегнете наново веригите всеки път, когато чуете, че се удрят в автомобила.

## Akstur að vetri til (Icelandic version)



Alvarlegri veðuraðstæður að vetri til leiða til meira slits og annarra vandamála. Til að lágmarka akstursvandamál að vetri til ættir þú að fylgja eftirfarandi uppástungum:

### Aðstæður í snjó eða hálfu

Til að geta ekið ökutækinu þínu í djúpum snjó kann að vera nauðsynlegt að nota snjóhjólbörða eða setjasnjókeðjur á hjólin. Ef þörf er á snjóhjólbörðum er nauðsynlegt að velja hjólbörða sem eru jafngildir upprunalegu hjólbörðunum að stærð og tegund. Misbrestur á að gera svo hefur óhagstæð áhrif á öryggi og aksturseyginleika bílsins þíns. Ennfremur kunna hraðakstur, snögg hröðun, skyndileg beiting hemla og krappar beygjur hugsanlega að reynast mjög hættuleg iðja.

Meðan á hraðaminnkun stendur skal nota hreyfilhemilinn til hins útrasta. Skyndileg beiting hemla á snævi þöktum eða ísuðum vegum kann að valda því að billinn renni til. Þú þarft að halda hæfilegri fjarlægð frá ökutækjunum fyrir framan þitt ökutæki. Beittu einnig hemlunum varlega. Taka ætti fram að uppsetning snjókeðja á hjólbarðana veitir meiri aksturskraft en kemur ekki í veg fyrir hliðarskrík.

### \* TILKYNNING

Snjókeðjur eru ekki löglegar í öllum löndum. Athugaðu landslög áður en snjókeðjur eru settar á.

### *Snjóhjólarðar*

Ef þú setur snjóhjólarða undir ökutækið þitt skaltu ganga úr skugga um að þeir séu þverbandahjólarðar af sömu stærð og á sama álagssviði og upprunalegu hjólarðarnir. Settu snjóhjólarða á öll fjögur hjólin til að jafna út aksturseinleika ökutækisins við allar veðuraðstæður. Hafðu í huga að gripið sem snjóhjólarðar veita á þurrum vegum kann að vera minna en hjólarðanna sem ökutækið var upphaflega búið. Þú ættir að aka varlega, jafnvel þegar vegurinn er auður. Athugaðu með ráðleggingar um hámarkshraða hjá hjólarðasalanum.

### ⚠ VIÐVÖRUN

#### **Stærð snjóhjólarða**

Snjóhjólarðar ættu að vera af jafngildri stærð og tegund og venjulegir hjólarðar ökutækisins. Að öðrum kosti kann það að hafa óhagstæð áhrif á aksturseinleika ökutækisins.

Settu ekki undir neglda hjólarða án þess að athuga fyrst staðbundnar reglugerðir ríkis og bæja vegna mögulegra takmarkana á notkun þeirra.

#### *Snjókeðjur*



Þar sem hliðar þverbandahjólarða eru þynnri kunna þeir að skemmast ef sumar tegundir af snjókeðjum eru festar við þá. Þar af leiðandi er mælt með notkun snjóhjólarða í stað snjókeðja. Ekki skal setja keðjur á ökutæki sem búið eru álfelgum; snjókeðjur kunna að valda skemmdum á felgunum. Ef það verður að nota snjókeðjur skal nota

vírkeðjur sem eru innan við 12 mm að þykkt. Skemmdir á ökutækinu þínu af völdum rangrar notkunar snjókeðja falla ekki undir ábyrgð framleiðandans.

Settu snjókeðjur aðeins upp á hjólbörðunum að framan.

### ▲ VARÚÐ

- Gakktu úr skugga um að snjókeðjurnar séu af réttri stærð og tegund fyrir hjólarðana þína. Rangar snjókeðjur geta valdið skemmdum á yfirbyggingu ökutækisins og fjöðrun og ekki er víst að þær falli undir ábyrgð framleiðanda ökutækisins. Einnig geta tengikrókar snjókeðjanna skemmst vegna snertingar við ökutækið sem veldur því að snjókeðjurnar losna frá hjólarðanum. Gakktu úr skugga um að snjókeðjurnar séu af SAE-flokki og "S"-vottaðar.
- Athugaðu alltaf uppsetningu og rétta festingu keðja eftir að hafa ekið um það bil 0,5 til 1 km til að tryggja örugga festingu. Hertu keðjurnar eða settu þær upp aftur ef þær eru lausar.
- Jafnvel með viðeigandi keðju uppsetta skal ekki taka fulla beygju (snúa stýrinu til fulls til annarrar hliðar) þegar ökutækinu er ekið. (Ef þú ert að taka fulla beygju skaltu aka á hraða undir 10 km/klst.)

### Uppsetning á keðjum

Þegar þú setur upp keðjur skaltu fylgja leiðbeiningum framleiðandans og festa þær eins þétt og þú getur. Aktu hægt með uppsettar keðjur. Ef þú heyrir keðjurnar snerta yfirbyggingu eða undirvagn skaltu stöðva og herða þær. Ef þær snerta enn skaltu hægja á þar til það hættir. Fjarlægðu keðjurnar um leið og þú byrjar að aka á hreinsuðum vegum.

### ▲ VIÐVÖRUN

#### Keðjur festar á

Þegar þú festir snjókeðjur á skaltu leggja ökutækinu á jafnsléttu fjarri umferð. Kveiktu á blikkandi hættuljósum ökutækisins og settu neyðarviðvörðunarþrihyrning fyrir aftan ökutækið, ef til staðar. Settu ökutækið alltaf í P (Leggja), settu stöðuhemilinn á og slökktu á hreyflinum áður en þú setur upp snjókeðjur.

**⚠ VIÐVÖRUN****Snjókeðjur**

- Notkun keðja kann að hafa óhagstæð áhrif á aksturseyiginleika ökutækisins.
  - Farðu ekki umfram 30 km/klst. eða ráðlögð hraðatak mörk framleiðanda keðjanna, hvort sem er lægra.
  - Aktu varlega og forðastu ójöfnur, holur, krappar beygjur og aðrar hættur á veginum sem kunna að valda því að ökutækið skoppi.
  - Forðastu krappar beygjur og læsingu hjóla lvið hemlun.
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**⚠ VARÚÐ****Snjókeðjur**

- Keðjur sem eru af rangri stærð eða rangt settar upp kunna að skemma hemlaleiðslur ökutækisins, fjöðrun, yfirbyggingu og hjól.
  - Stöðvaðu ferð og hertu keðjurnar aftur hvenær sem þú heyrir þær slást í ökutækið.
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