KIA, THE COMPANY

Now that you are the owner of a Kia Vehicle, you'll probably be asked a lot of questions about your vehicle and the company like "What is a Kia?," "Who is Kia?," "What does 'Kia' mean?"

Here are some answers. First, Kia is the oldest car company in Korea. It's a company that has thousands of employees focused on building high-quality vehicles at affordable prices.

The first syllable, ***Ki***, in the word "Kia" means "to arise from to the world" or "to come up out of to the world." The second syllable, ***a***, means "Asia." So, the word ***Kia***, means "to arise from" or "to come up out of Asia to the world."

Enjoy your Vehicle!

Thank you for choosing a Kia vehicle.

When you require service, remember that your dealer knows your vehicle best. Your dealer has factory-trained technicians, recommended special tools, genuine Kia replacement parts and is dedicated to your complete satisfaction.

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

This manual will familiarize you with operational, maintenance and safety information about your new vehicle. It is supplemented by a Warranty and Maintenance book that provides important information on all warranties regarding your vehicle. We urge you to read these publications carefully and follow the recommendations to help assure enjoyable and safe operation of your new vehicle.

Kia offers a great variety of options, components and features for its various models.

Therefore, the equipment described in this manual, along with the various illustrations, may not all be applicable to your particular vehicle.

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

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

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Introduction 1

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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. Especially, in order to minimize the chance of death or injury, you must read the WARNING and CAUTION sections spread throughout 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. A good place to start is the index; it has an alphabetical listing of all information in your manual.

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

You'll find various WARNING's, CAUTION's, and NOTICE's in this manual. These were prepared to enhance your personal safety. You should carefully read and follow ALL procedures and recommendations provided in these WARNING's, CAUTION's and NOTICE's.

⚠ WARNING

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

CAUTION

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

✻ NOTICE

A NOTICE indicates interesting or helpful information is being provided.

VEHICLE RUN-IN PROCESS

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

- Do not race the engine.
- Do not maintain a single speed for long periods of time, either fast or slow. Varying engine speed is needed to properly run-in the engine.
- Avoid hard stops, except in emergencies, to allow the brakes to seat properly.
- Avoid full-throttle starts.

Your vehicle at a glance

2

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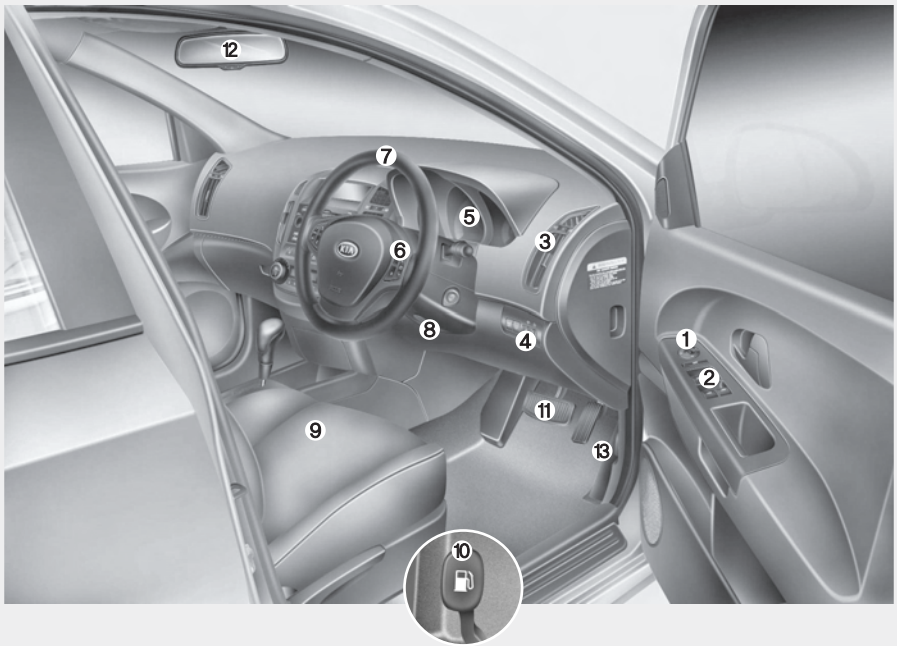
INTERIOR OVERVIEW



1. Outside rearview mirror control switch (if equipped)
2. Power window switches (if equipped)
3. Vent controls
4. Instrument panel illumination (if equipped)
5. Instrument cluster
6. Cruise control (if equipped)
7. Steering wheel
8. Steering wheel tilt (if equipped)
9. Seat
10. Fuel filler lid release lever
11. Brake pedal
12. Inside rearview mirror
13. Bonnet release lever

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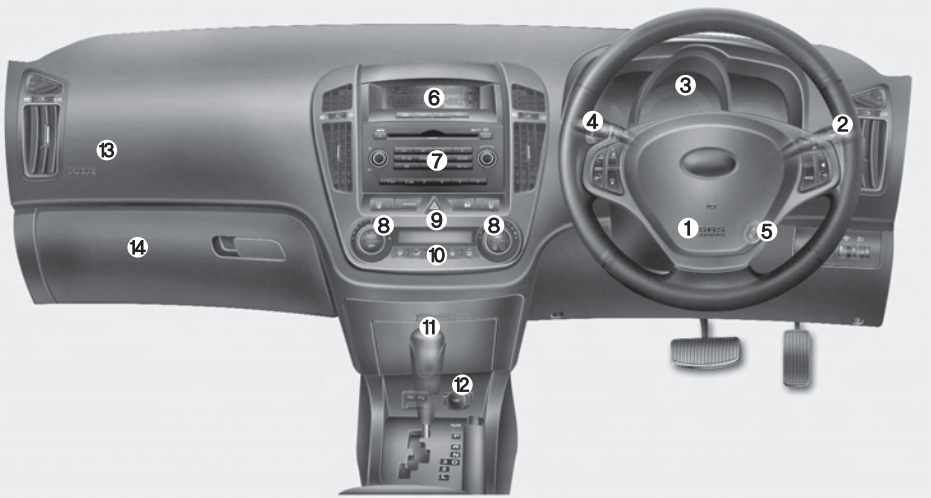
INSTRUMENT PANEL OVERVIEW



1. Driver's Air Bag (if equipped)
2. Light control / Turn signals
3. Instrument cluster
4. Wiper/Washer
5. Ignition switch
6. Trip computer / Information monitor (if equipped)
7. Audio controls (if equipped)
8. Seat warmer (if equipped)
9. Hazard
10. Climate control system
11. Shift lever
12. Power outlet
13. Passenger's airbag (if equipped)
14. Glove box

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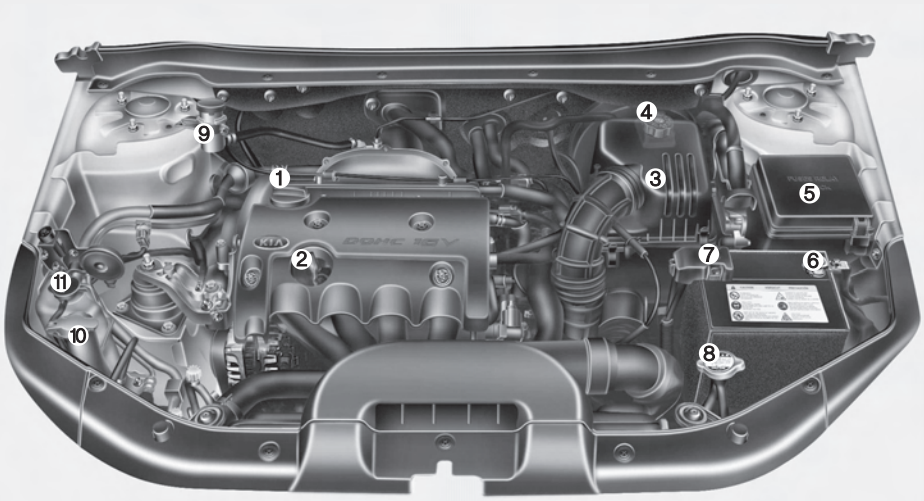
ENGINE COMPARTMENT



1. Engine oil filler cap
2. Engine oil dipstick
3. Air cleaner
4. Brake fluid reservoir
5. Fuse box
6. Negative battery terminal
7. Positive battery terminal
8. Radiator cap
9. Clutch fluid reservoir
10. Windscreen washer fluid reservoir
11. Engine coolant reservoir

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

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KEYS

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

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Key operations

(1) Master key

Used to start the engine, lock and unlock the doors, and the rear hatch.

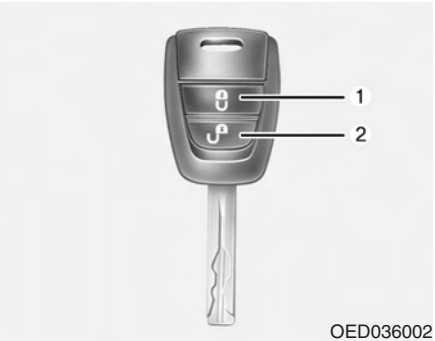
(2) Transmitter (if equipped)

Used to lock and unlock the doors and the rear hatch.

⚠ WARNING - Ignition key

- **Leaving children unattended in a vehicle with the ignition key is dangerous even if the key is not in the ignition. Children copy adults and they could place the key in the ignition. The ignition 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.**
- **Use only Kia original parts for the ignition key in your vehicle. If an aftermarket key is used, the ignition switch may not return to ON after START. If this happens, the starter will continue to operate causing damage to the starter motor and possible fire due to excessive current in the wiring.**

REMOTE KEYLESS ENTRY (IF EQUIPPED)



(1) Lock ( )
All doors are locked if the lock button is pressed.

(2) Unlock ( )
All doors are unlocked if the unlock button is pressed.

After depressing this button, the doors will be locked automatically unless you open them within 30 seconds.

✻ NOTICE

The transmitter will not work if any of following occur:
- **The ignition key is in ignition switch.**
- **You exceed the operating distance limit (30 m).**
- **The battery in the transmitter is weak.**
- **Other vehicles or objects may be blocking the signal.**
- **The weather is extremely cold.**
- **The transmitter is close to a radio transmitter such as a radio 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, contact an authorised Kia Dealer.

⚠ 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.

Operational distance may vary depending upon the area the transmitter is used in. For example, if the vehicle is parked near police stations, government and public offices, broadcasting stations, military installations, airports, or transmitting towers, etc.

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Battery replacement

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

1. Remove the screw (1) using a cross-tip screwdriver.
2. Insert a slim tool into the slot and gently pry open the transmitter centre cover (2).
3. Remove the battery cover (3).
4. Replace the battery with new one. When replacing the battery, make sure the battery positive “+” symbol faces up as indicated in the illustration.
5. Install the battery in the reverse order of removal.

CAUTION

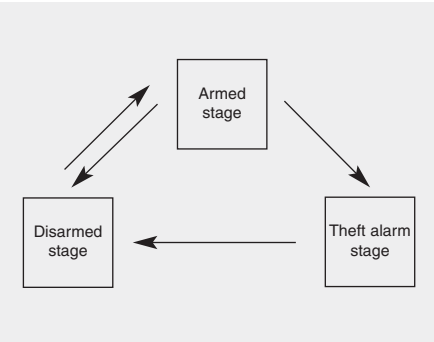
The keyless entry system transmitter is designed to give you years of troublefree use, however it can malfunction if exposed to moisture or static electricity. If you are unsure how to use your transmitter or replace the battery, contact an authorised Kia dealer.

For replacement transmitters, see an Authorised Kia Dealer for reprogramming.

CAUTION

- ***Using the wrong battery can cause the transmitter to malfunction. Be sure to use the correct battery.***
- ***To avoid damaging the transmitter, don't drop it, get it wet, or expose it to heat or sunlight.***

THEFT-ALARM SYSTEM (IF EQUIPPED)



Theft alarm system will not operate when the ignition key is in the ignition switch.

If the doors are locked by the transmitter key, unlock the doors with the transmitter.

Armed stage

When the ignition switch is in the "LOCK" position, and key is not in the ignition, the system will be armed and the hazard lights will flash once when the following conditions are met:

- The bonnet, rear hatch and doors are all closed and locked with the transmitter.
- If a door or the rear hatch is not opened within approximately 30 seconds after unlocking with the transmitter, all doors will be locked again and theft alarm system armed.

✻ NOTICE

Do not arm the system until all passengers have left the vehicle. If the system is armed whilst a passenger(s) remains in the vehicle, the alarm may be activated when the remaining passenger(s) leave the vehicle. If any door (or rear hatch) or engine bonnet is opened within 30 seconds after the system enters the armed stage, the system is disarmed to prevent an unnecessary alarm.

⚠ CAUTION

Before leaving your vehicle, check if the hazard warning lights flash once, to see whether the vehicle entered the armed stage. If the hazard warning lights does not flash, the vehicle will not operate the theft alarm system as it does not enter the armed stage. Therefore, have your vehicle checked by an authorised Kia dealer as soon as possible.

Theft alarm stage

The alarm will be activated when:

- Any door (or rearhatch) is opened without using the transmitter.
- The engine bonnet is opened.

The alarm sound and flash will be ON for 30 seconds.

Disarmed stage

The armed stage will be deactivated when:

- The " " button on the transmitter is pressed.

  After depressing unlock button, you must open the doors within 30 seconds or all doors will be locked again and automatically placed into the armed stage.
- The ignition switch is in the "ON" position.

The alarm will be deactivated when:

- The lock ( ) or unlock ( ) button on the transmitter is pressed.
- The ignition switch is in the "ON" position for 30 seconds or more.
- The engine starts by turning the ignition key to the starting position.

✻ NOTICE

If the ignition key is in the ignition switch, the transmitter will not function. Avoid trying to start the engine with the alarm activated.

IMMOBILISER SYSTEM (IF EQUIPPED)

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

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

With the immobiliser system, whenever you insert your ignition key into the ignition switch and turn it to ON, it checks and determines whether the ignition key is valid or not.

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

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

To deactivate the immobiliser system:

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

To activate the immobiliser system:

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

✻ NOTICE

When starting the engine, do not use the key with other immobiliser keys around.
Otherwise the engine may not start or may stop soon after it starts. Keep each key separately not to have any malfunction after you receive your new vehicle.

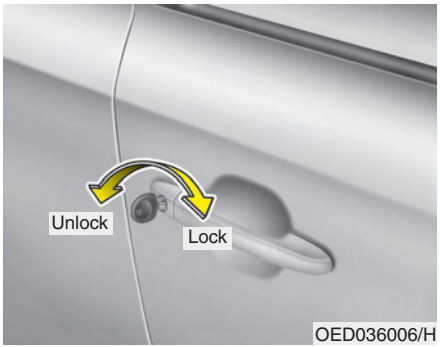
⚠ CAUTION

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

⚠ CAUTION

Do not change, alter or adjust the immobiliser system because it could cause the immobiliser system to malfunction and should only be serviced by an authorised Kia dealer.
Malfunctions caused by improper alterations, adjustments or modifications to the immobiliser system are not covered by your vehicle manufacturer warranty.

DOOR LOCKS



Operating door locks from outside the vehicle

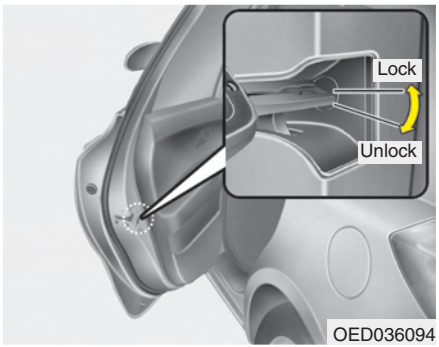
- Turn the key toward rear of vehicle to unlock and toward front of vehicle to lock.
- Doors can also be locked and unlocked with the transmitter key.
- Once the doors are unlocked, it may be opened by pulling the door handle.
- When closing the door, push the door by hand. Make sure that doors are closed securely.
- If you lock/unlock the front door with a key, all vehicle doors will lock/unlock automatically.

CAUTION

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

✻ NOTICE

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.



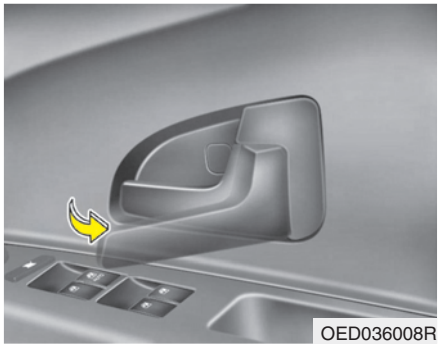
In case of an emergency

If the power door lock switch does not operate electrically, you can only lock the door(s) with the ignition key from the outside key hole.

The doors without the outside key hole, you can lock as follows;

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

The rear hatch will lock and will not unlock if you close the rear hatch when the power door lock switch does not operate electrically.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Operating door locks from inside the vehicle

With the door handle

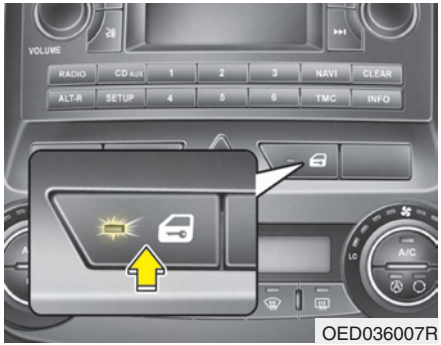
- Driver's side door

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

- Passenger's side 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 twice, the door will open.



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With central door lock switch

It is operated by depressing the door lock switch.

- When pushing the door lock switch, all vehicle doors will lock and the indicator light on the switch will illuminate.

  If any door is opened when the switch is pushed, all doors will not lock.

- If any door is unlocked, the indicator of the door lock switch will blink. If you push the switch when the indicator is blinking, all doors will lock.

- When pushing the door lock switch again, all vehicle doors will unlock and the indicator light on the switch will not illuminate.

Super lock system (if equipped)

If you turn the key to the “LOCK” position or depress the “LOCK” button on the transmitter to lock the doors, the locked doors are not unlocked by other tools except unlocking with the key or transmitter.

This feature is to prevent potential intruders from opening the door.

⚠ WARNING

Do not lock the doors by super locking with the key or the transmitter with anybody left in the vehicle. The passenger in the vehicle cannot unlock the doors with the inside handle or the door lock switch. For example, if the door is locked with the transmitter, the passenger in the vehicle cannot unlock the door without the transmitter.

⚠ WARNING

- **The doors should always be fully closed and locked whilst 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.**
- **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

Leaving your vehicle unlocked can invite theft or possible harm to you or others from someone hiding in your vehicle whilst 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.

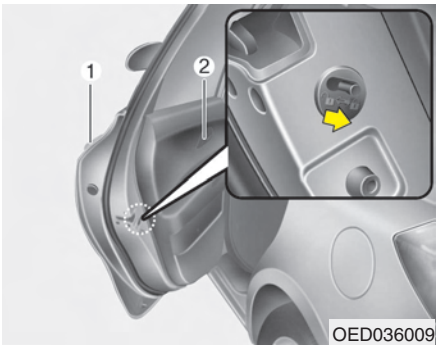
Impact sensing door unlock system

All doors will be automatically unlocked when the impact is delivered to impact sensors whilst the ignition switch ON.

However, the doors may not be unlocked when there are some problems of mechanical door lock system or battery.

Speed sensing door lock system

When the speed of the vehicle keeps above 40 km/h for 1 second, it will automatically lock all doors. For deactivation of this feature, contact an authorised Kia dealer.



Rear door child safety lock

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

1. Open the rear door.
2. Push the child safety lock located on the rear edge of the door to the “lock” position. When the child safety lock is in the “lock ( )” position, rear door will not open when the inner door handle is pulled inside the vehicle.
3. Close the rear door.
4. To open the rear door, pull the outside door handle (1) .

Even though the doors may be unlocked, the rear door will not open by pulling the inner door handle (2) until rear door child safety lock is unlocked ( ).

⚠ WARNING - Rear door locks

If children accidentally open the rear doors whilst 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.

Rear hatch

Opening the rear hatch

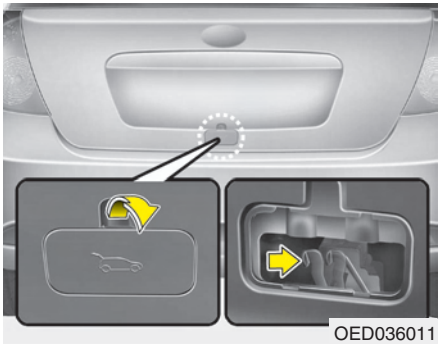
- You can lock/unlock the latch (but not release it) with the central door lock system.
- If unlocked, the rear hatch can be opened by pressing the handle (1) and pulling the hatch up.

CAUTION

Do not put any heavy object on the covering shelf. It may damage the covering shelf.

⚠ WARNING

- **Do not put any object on the covering shelf. If the vehicle suddenly stops or makes a curve, the object may injure passengers.**
- **Watch out for the edge of the covering shelf, when you are using the luggage room. You may injure yourself.**



Emergency rear hatch safety release

Your vehicle is equipped with emergency rear hatch safety release lever located on the bottom of the rear hatch. When someone is inadvertently locked in the luggage compartment, if the lever is pushed, the rear hatch latch mechanism is released and the rear hatch is opened by pushing backward.

⚠ WARNING

- **For emergency, be fully aware of the location of the emergency rear hatch safety release lever in their vehicle and how to open the rear hatch 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 highly dangerous location in the event of a crash.**
- **Use the release lever for emergency only. Use extreme caution whilst the vehicle is in motion.**

Luggage room lamp (if equipped)

Luggage room lamp turns on when the rear hatch is opened. It remains on until the rear hatch is securely closed.

✻ NOTICE

Make sure to close the rear hatch securely. If it remains open whilst engine is not running, it may cause battery discharge because luggage room lamp remains on.

✻ NOTICE

- In cold and wet climates door lock and door mechanisms may not work properly due to freezing conditions.
- When jacking up the vehicle to change a tyre or repair the vehicle, do not operate the rear hatch. This could cause the rear hatch to close improperly.

⚠ WARNING - Rear hatch

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

CAUTION

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

⚠ WARNING - Exhaust fumes

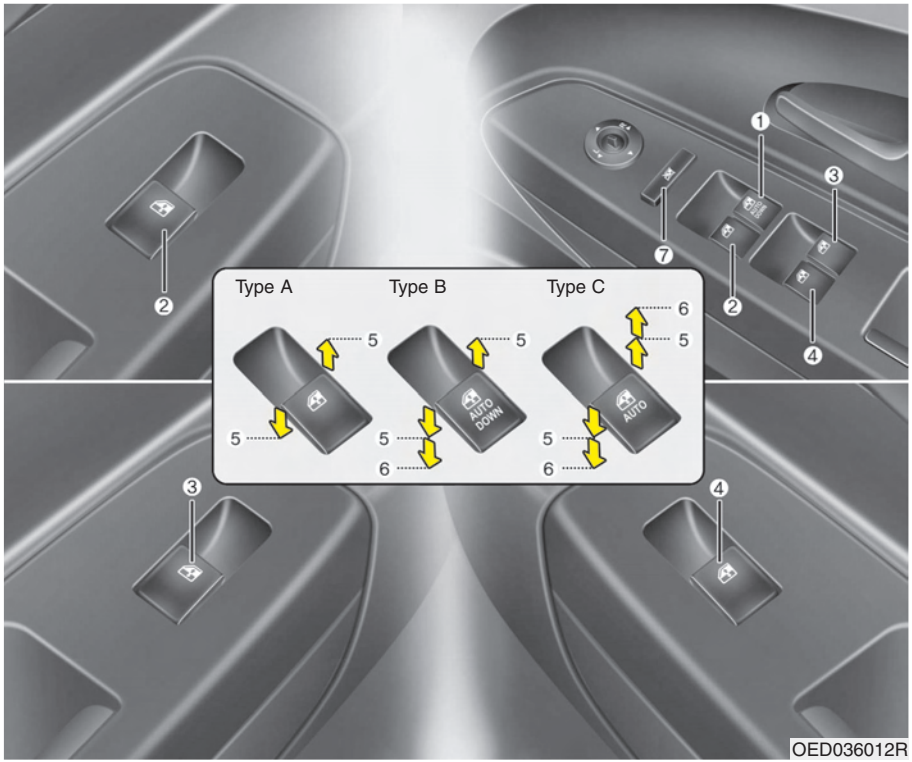
If you drive with the rear hatch open, you will draw dangerous exhaust fumes into your vehicle which can cause serious injury or death to vehicle occupants.

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

⚠ WARNING - Rear cargo area

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

WINDOWS



Power windows (if equipped)

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

- **Power window timer**

The power windows can be operated for approximately 30 seconds after the ignition key is removed or turned to the ACC or LOCK position. However, if the front doors are opened, the power windows cannot be operated even within the 30 seconds after the ignition key removal.

Power windows (if equipped)

The ignition switch must be in the ON position for power windows to operate. Each door has a power window switch that controls that door's window. However, the driver has a power window lock switch which can block the operation of passenger windows.

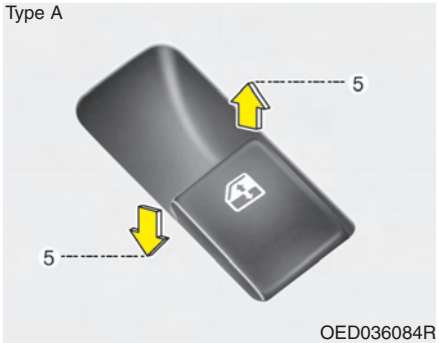
If you notice buffeting and pulsation (wind shock) with either side window open, you should open the opposite window slightly to reduce the condition.

CAUTION

- ***To prevent the power window system from the possibility of damage, do not open or close two windows 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 opposing directions at the same time. If this is done, the window will stop and cannot be opened or closed.***

WARNING

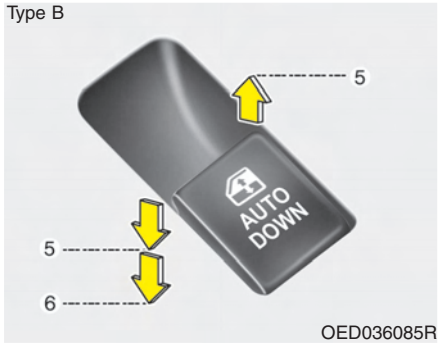
- **Make sure heads and hands are safely out of the way before closing a window.**
- **Do not allow children to play with the power windows. Keep the driver's door power window lock switch in the LOCK position (depressed). Serious injury can result from unintentional window operation by the child.**
- **Do not extend face or arms outside through the window opening whilst driving.**
- **Always double check to make sure all arms, hands and other obstructions are safely out of the way before closing a window**



Window opening and closing

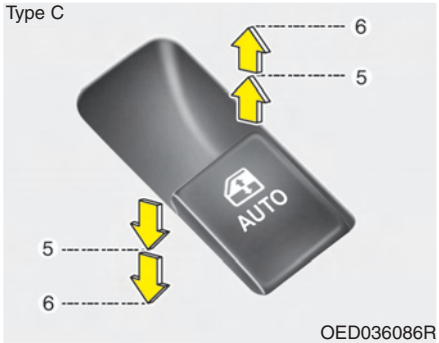
Type A

The driver's door has a master power window switch that controls all the windows in the vehicle. To open or close a window, press down (5) or pull up (5) the front portion of the corresponding switch.



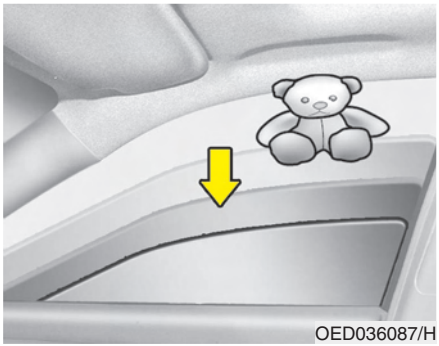
Type B - Automatic power window down (driver's window, if equipped)

Depressing the power window switch momentarily to the second detent position (6) completely lowers the driver's window even when the switch is released. To stop the window at the desired position whilst the window is in operation, pull up the switch momentarily to the opposite direction of the window movement.



Type C - Automatic power window

Depressing 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 whilst the window is in operation, pull up or depress the switch momentarily to the opposite direction of the window movement.



Automatic window reversal (When window is closed by the automatic power window)

If the upward movement of the window is blocked by an object or part of the body, the window will detect the resistance and will stop upward movement. The window will then lower approximately 30cm (11.8 in) from the top to allow the object to be cleared.

⚠ WARNING

- **The automatic window reversal feature will only operate when the automatic power window operation feature is used. Automatic window reversal will not operate if the window is raised using the first detent position (5) on the power window switch. Always double check to make sure all faces, arms, hands and other obstructions are safely out of the way of before operating the power window.**
- **If an object less than 4 mm in diameter is caught between the window glass and the upper window channel, the automatic reversal may not detect the resistance and will not operate. Therefore, always check for any obstructions before raising any window.**

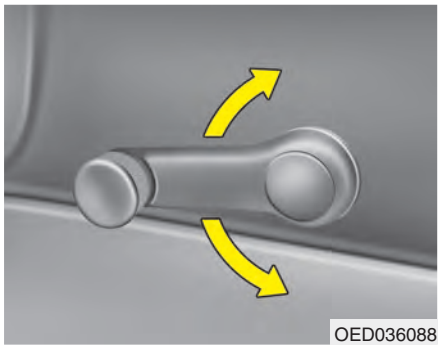
If the automatic power window system does not operate properly, you may reset as follows:

1. Turn the ignition key to ON position.
2. Close each window and continue pulling up on each power window switch for at least 0.5 second after the window is completely closed.

OED036013R

Power window lock switch (if equipped)

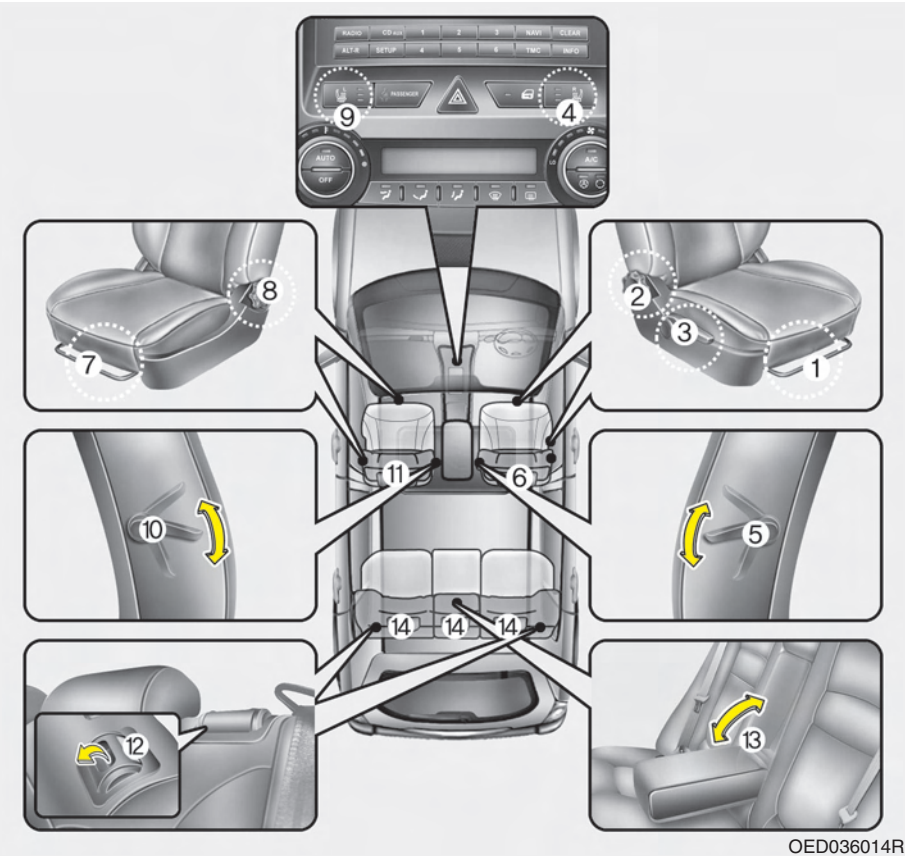
- The driver can disable the power window switches on a rear passenger door by depressing the power window lock switch located on the driver's door to LOCK (pressed).
- When the power window lock switch is ON, the driver's master control cannot operate the rear passenger door power windows either.


OED036088

Manual windows (if equipped)

Use the window crank to open and close each window.

SEAT



OED036014R

Driver's seat

(1) Seat adjustment, forward / backward
(2) Seatback recliner
(3) Seat adjustment, height*
(4) Seat warmer*
(5) Lumbar support*
(6) Headrest adjustment

Front passenger seat

(7) Seat adjustment, forward / backward
(8) Seatback recliner
(9) Seat warmer*
(10) Lumbar support*
(11) Headrest adjustment

Rear seat

(12) Split folding rear seat
(13) Armrest*
(14) Headrest adjustment

* ; if equipped

⚠ WARNING

- **Loose objects in the driver's foot area could interfere with the operation of the foot pedals, possibly causing an accident. Loose objects might interfere with the seat slide mechanism. Do not place anything under the front seats.**
- **Children should never be left unattended in the car.**

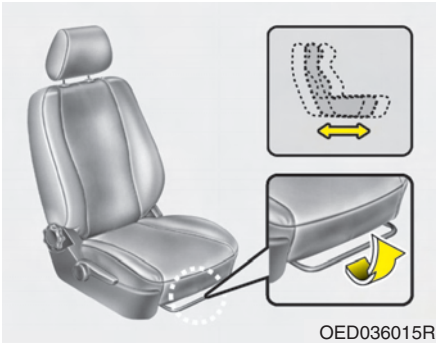
⚠ WARNING - Driver's seat

- **Never attempt to adjust seat whilst 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.**

(Continued)

(Continued)

- **Always drive and ride with your seatback upright and the lap portion of the seat belt, or lap belt, snug and low across the hips. This position puts your seat belts in the best position to protect you in case of an accident.**
- **In order to avoid unnecessary air bag injuries including the possibility of severe injury or death, always sit as far back as possible from the steering wheel so that your chest is away at least 250 mm (10 inches) away from the steering wheel.**


OED036015R

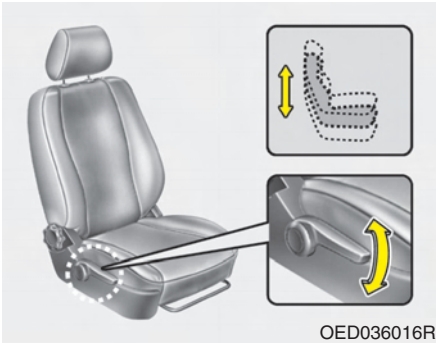
Front seat adjustment

Adjusting the seat forward and backward

To move the seat forward or backward:

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

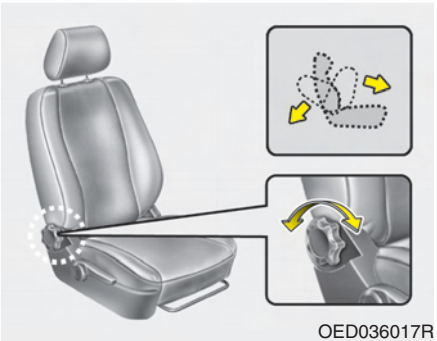
Adjust the seat before driving, and make sure the seat is locked securely by trying to move forward and backward without using the control knob. If the seat moves, it is not locked properly.


OED036016R

Adjusting height of the driver's seat cushion (if equipped)

Pivot the lever upward to raise the seat cushion.

Pivot the lever downward to lower the seat cushion.

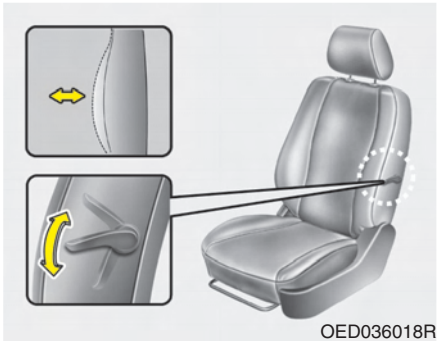

OED036017R

Adjusting the seatback recliner

To recline the seatback, rotate the knob forward or rearward to the desired angle.

⚠ WARNING

Driving or riding in a vehicle with a front seatback reclined could lead to serious or fatal injury in an accident. If a front 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 or neck. Serious or fatal internal injuries could result. Keep the seatbacks in a comfortably upright position whenever the vehicle is in motion.

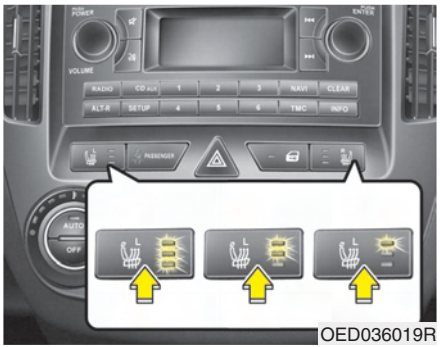

OED036018R

Lumbar support (if equipped)

You can adjust the lumbar support by moving the lever on the side of seatback.

Pivoting the lever toward the front of the vehicle increases the lumbar support.

Pivoting the lever toward the rear of the vehicle decreases the lumbar support.



Seat warmer (if equipped)

The front seats can be electrically heated individually when the ignition switch is ON. When you depress the seat warmer switch, a thermostat regulates seat temperature. Each time you push the button the temperature setting of the seat changes. To deactivate the heating system, depress the switch until the indicator light on the button turns off.

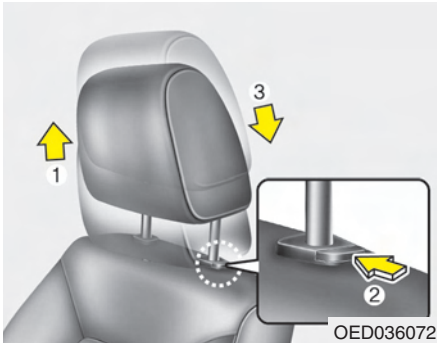
✻ NOTICE

- If the seat warmer doesn't work when the ambient temperature is below 21 °C (70 °F), have the system checked by an authorised dealer.
- When cleaning the seats, do not use an organic solvent such as thinner, benzene, alcohol and petrol. Doing so may damage the surface of the heater or seats.
- To prevent overheating the seat warmer, do not place blankets, cushions or seat covers on the seats whilst 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.

⚠ WARNING

Passengers should use extreme caution when using seat warmers due to the possibility of excess heating or burns. In particular, the following types of passengers should exercise extreme care:

1. **Infants, children, elderly or handicapped persons, or hospital outpatients**
2. **Persons with sensitive skin or those that burn easily**
3. **Fatigued individuals**
4. **Intoxicated individuals**
5. **Individuals taking medication that can cause drowsiness or sleepiness (sleeping pills, cold tablets, etc.)**

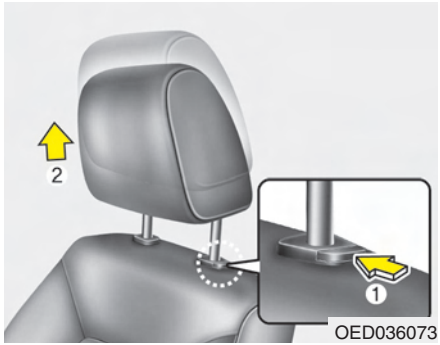


Headrest adjustment

Adjusting the height up and down

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

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). For best protection, adjust the headrest so its centre is as high as your ears. Also adjust the headrest so its distance from the head is as wide as your fist.



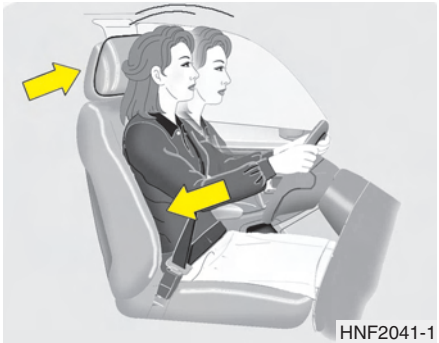
Removal

To remove the headrest, raise it as far as it can go then press the release lever (1) whilst pulling upward (2).

If the vehicle is equipped with an active headrest, you can not remove the headrest.

⚠ WARNING

To reduce the risk of head and neck injuries, do not drive the vehicle with the headrest removed or improperly positioned. Do not adjust the driver's headrest whilst driving.



Active headrest (if equipped)

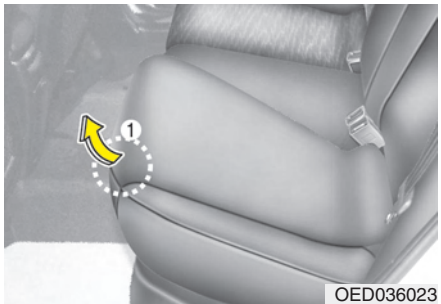
The active headrest is designed to move forward and upward during a rear impact. This helps to prevent the driver's and front passenger's heads from moving backward and thus helps prevent neck injuries.

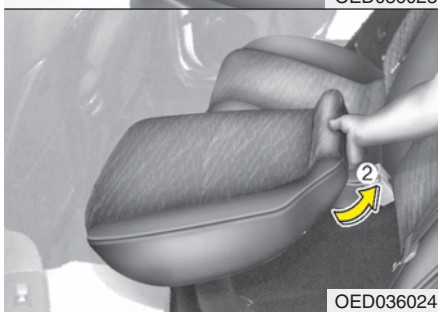
Rear seat

Split folding rear seat

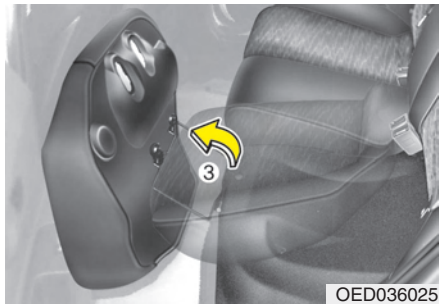
The rear seatbacks fold forward to provide additional cargo space and to provide access to the cargo area.

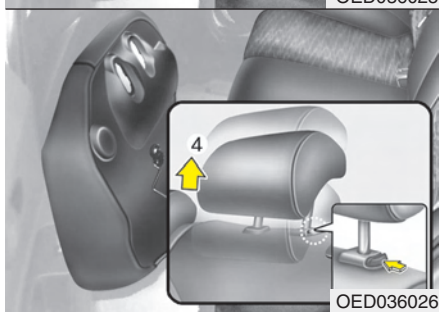
- To fold the rear seatback(s) down, pull the lock release lever, then fold the seatback forward and down.
- To raise the seatback, lift and push it firmly until it clicks into place.
- When you return the seatback to its upright position, reposition the rear seat belts so that they can be used by rear seat passengers.



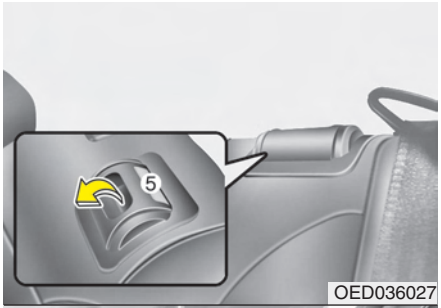


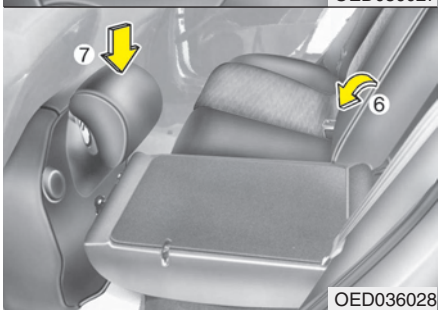
1. Lift the front side of the seat cushion (1) up.
2. Lift the rear of seat cushion up (2).





3. Move the seat cushion firmly until it clicks (3).
4. Remove the headrest (4).





5. Pull the lock release lever (5).
6. Fold the seatback forward and down firmly (6).
7. Put the headrest poles into the holes on the rear of the seat cushion (7).

To unfold the rear seat:

1. Remove the headrest.
2. Whilst slightly pushing the seat cushion towards the front of the vehicle, lift and push the seatback backward firmly until it clicks into place.
3. Place the headrest to the proper position.
4. Move and push the seat cushion downward firmly to the proper position.
5. Check the rear seat belt and buckle.

CAUTION

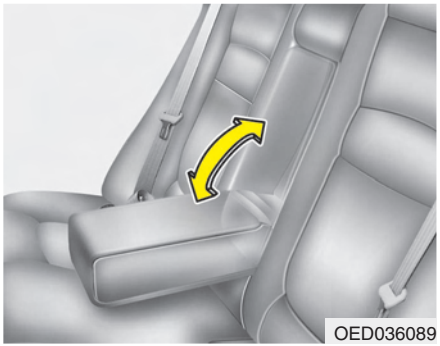
- ***When returning the rear seatbacks to the upright position, remember to return the rear shoulder belts to their proper position.***
- ***Do not remove the floor carpet in your vehicle. Emission control system components cause high exhaust temperatures under the floor.***

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.

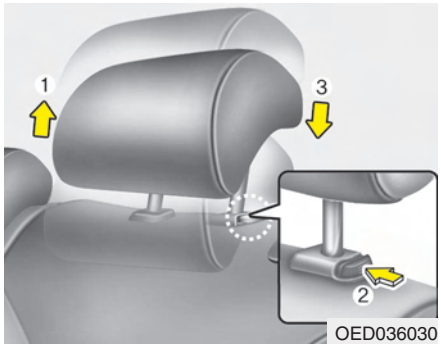
CAUTION

- ***Make sure the engine is off, the transaxle is in P and the parking brake is applied whenever loading or unloading cargo. Vehicle may move if shift lever is inadvertently moved to another position.***
- ***Be careful when loading cargo through the rear passenger seats to prevent damage to the vehicle interior.***
- ***When cargo is loaded through the rear passenger seats, ensure the cargo is properly secured to prevent it from moving whilst driving. Unsecured cargo in the passenger compartment can cause damage to the vehicle or injury to it's occupants.***



Armrest (if equipped)

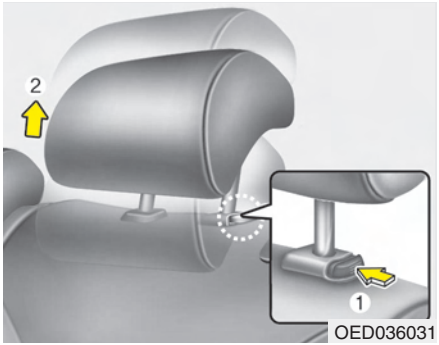
The armrest is located in the centre of the rear seat. Pull the armrest down from the seatback.



Headrest adjustment

Adjusting the height up and down

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



Removal

To remove the headrest, raise it as far as it can go then press the release lever (1) whilst pulling upward (2).

⚠ WARNING

To reduce the risk of head and neck injuries, do not drive the vehicle with the headrest removed or improperly positioned.

SEAT BELTS

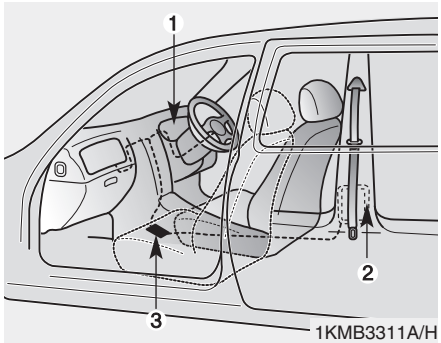
OMG035300/H

Pre-tensioner seat belt (if equipped)

Your vehicle is equipped with driver's and front passenger's pre-tensioner seat belts. The purpose of the pre-tensioner is to make sure that the seat belts fit tightly against the occupant's body in certain frontal collisions. The pre-tensioner seat belts can be activated, where the frontal collision is severe enough, together with the air bags.

When the vehicle stops suddenly, or if the occupant tries to lean forward too quickly, the seat belt retractor 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 seat belt 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)



1KMB3311A/H

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) Seatbelt pre-tensioner assembly

(3) SRS air bag control module

⚠ WARNING

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

- **The seat belt must be worn correctly.**
- **The seat belt must be adjusted to the correct position.**

⚠ WARNING

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 and are not toxic.

Although, it is harmless, the fine dust may cause skin irritation and should not be breathed for prolonged periods. Wash your hands and face thoroughly after an accident in which the air bags and/or pre-tensioner seat belts were activated.

CAUTION

- ***Because the sensor that activates the SRS air bag is connected with pre-tensioner seat belt, the SRS air bag warning light on the instrument panel will blink or illuminate for approximately 6 seconds after the ignition key has been turned to the "ON" position, then the light should go off.***
- ***If the pre-tensioner seat belt is not working properly, this warning light will illuminate even if there is no malfunction of SRS air bag system. If the SRS air bag warning light does not illuminate when the ignition key is turned to "ON", or if it remains illuminated after blinking or illuminating for approximately 6 seconds, or if it illuminates whilst the vehicle is being driven, please have an authorised Kia dealer inspect the pre-tensioner seat belt or SRS air bag system as soon as possible.***

⚠ WARNING

The pre-tensioner seat belt assembly mechanisms become hot during activation. Do not touch the pre-tensioner seat belt assembly for several minutes after they have been activated.

⚠ WARNING

- **Pre-tensioners are designed to operate once. 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.**

  And driver's and passenger's seat belt should always be replaced after a collision although they have not been worn during a collision.
- **Do not attempt to inspect or replace the pre-tensioner seat belts yourself. This must be done by an authorised Kia dealer.**

⚠ WARNING

- **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, place, service or repair the pre-tensioner seat belt assemblies may lead to improper operation or inadvertent activation causing serious injury.**

  Always wear the seat belts when driving or riding in a motor vehicle.

Seat belt restraint system

⚠ WARNING - Seat belts

To minimize the risk of serious or fatal injury in an accident, the driver and all passengers should use the appropriate safety restraints for their age and size. The presence of air bags does not change the need to be properly restrained by a seat belt or size-appropriate child restraint. In fact, air bags are designed to work the best when passengers are correctly restrained in the vehicle. Be sure you are familiar with the information in this section, including the information on infant and child restraints. Read the safety warnings on the sun visors of your vehicle also.

We strongly recommend that the driver and all passengers be properly restrained at all times by using the seat belts provided with the vehicle. Proper use of the seat belts decreases the risk of severe injury or death in accidents or sudden stops.

All seats have lap/shoulder belts. Inertial locks in the seat belt retractors allow all of the lap/shoulder seat belts to remain unlocked during normal vehicle operation. This allows the occupants some freedom of movement and increased comfort whilst using the seat belts. If a force is applied to the vehicle, such as a strong stop, a sharp turn, or a collision, the seat belt retractors will automatically lock the seat belts.

Since the inertial locks do not require a collision in order to lock up, you may become aware of the seat belts locking whilst braking or going around sharp corners.

Always use the rear seat position(s) to install your child restraint(s).

Never install a child restraint system in the front passenger position, as an inflating air bag could cause serious or fatal injury to a child in that position.

Seat belts provide the best restraint when:

- The seatback is upright.
- The occupant is sitting upright (not slouched).
- The lap belt is snug across the hips.
- The shoulder belt is snug across the chest.
- The knees are straight forward.

To help you remember to fasten your seat belt, a warning light will come on and a chime will sound.

⚠ WARNING - After a collision

- **Lap/shoulder belt assemblies may be stretched or damaged when subjected to the stress and forces of a collision.**
- **The entire restraint system should be inspected following any collision. All belts, retractors, anchors and hardware damaged by a collision should be replaced before the vehicle is operated again.**

⚠ WARNING - Cargo area (if equipped)

Passengers should never be allowed to ride in the cargo area of a vehicle. No seat belts are provided for the cargo area. Persons riding in the vehicle without a fastened seat belt are much more likely to suffer serious bodily injury or death during an accident.

⚠ WARNING - Twisted belts

A twisted or jammed seat belt cannot restrain you properly. If you cannot untwist or unjam the seat belt, have an authorised Kia dealer it immediately. Never drive or ride with a twisted or jammed seat belt.

⚠ WARNING - Belt use

Seat belts must be used correctly to work properly in an accident. Each seating position in your vehicle has a specific seat belt assembly that includes a buckle and tongue designed to be used together.

For greatest effectiveness, follow these guidelines in using seat belts:

- **Use the shoulder portion of the seat belt on the outside shoulder only. Never wear the shoulder portion under the arm.**
- **Never swing the seat belt around your neck to fit over the inside shoulder.**
- **Never wear the shoulder portion of the seat belt across the neck or face.**

(Continued)

(Continued)

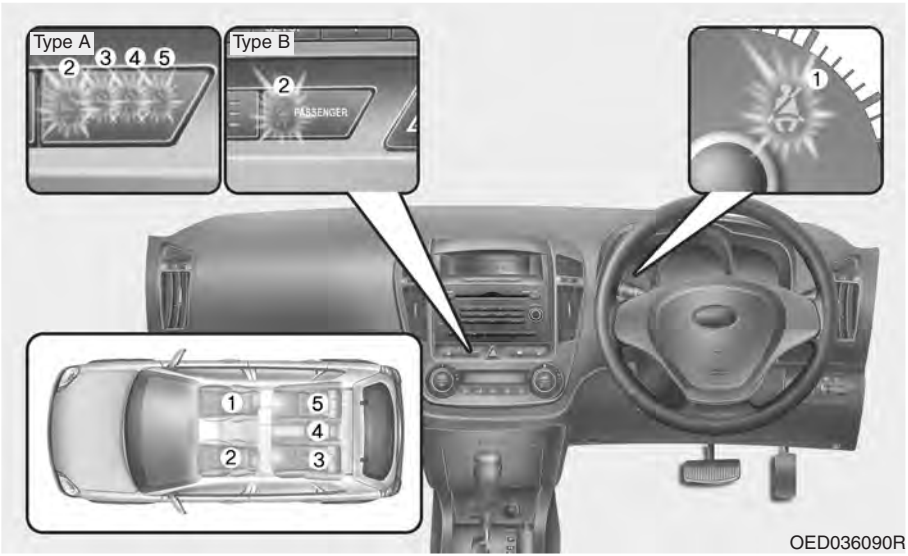
- **Wear the lap portion as low as possible. Be sure that the lap belt fits snugly around the hips. Never wear lap belt or a lap portion of a lap/shoulder belt over your waist; it should always go over the stronger area of your hips.**
- **Never use a single seat belt for more than one person.**
- **The front seatbacks should always remain in a comfortable, upright position when the vehicle is moving.**

⚠ WARNING - Seat belt care

- **A damaged belt may not give you the protection you need in an accident.**
- **Inspect your seat belts periodically for excessive wear or damage. Pull out each belt fully and look for fraying, cuts, burns or other damage. Pull the seat belt out and let it retract a number of times. Make sure that the lap/shoulder belts return smoothly and easily into the retractor.**
- **Check the latches to make sure they latch and release without interference or delay.**
- **Never close the doors on any part of the lap or shoulder belt.**
- **Any belt not in good condition or in good working order should be promptly replaced.**

⚠ CAUTION

Never close the doors on any part of the lap or shoulder belt. It can damage the seat belt or buckle which could increase the risk of injury in case of an accident.



Seat belt warning light and chime

(1) Driver's seat belt warning light
(2) Front passenger's seat belt warning light
(3) Rear left passenger's seat belt warning light (if equipped)
(4) Rear centre passenger's seat belt warning light (if equipped)
(5) Rear right passenger's seat belt warning light (if equipped)

Driver's and front passenger's seat belt warning light and chime

As a reminder to the driver and passenger, seat belt warning light will illuminate for approximately 6 seconds each time you turn the ignition switch ON.

If the front seat is occupied, the seat belt warning light and chime will operate as follows;

If the driver's and/or front passenger's lap/shoulder belt is not fastened when the key is turned ON or if it is disconnected after the key is turned ON, the corresponding seat belt warning light will illuminate until the belt is fastened.

If you continue not to fasten the seat belt and you drive over 9km/h, the illuminated warning light will start to blink until you drive under 6km/h.

If you continue not to fasten the seat belt and you drive over 20km/h for the first time, the seat belt warning chime will sound for approximately 100 seconds and the corresponding warning light will blink.

Also, when you unfasten your seat belt and drive over 9 km/h for the first time, the warning chime will sound for approximately 100 seconds.

Rear passenger's seat belt warning light (if equipped)

If the rear passenger's lap/shoulder belt is not fastened when the key is turned ON(engine is not running) the corresponding seat belt warning light will illuminate as red and if the belt is fastened the colour will change to green.

And then, if you start the engine and drive under 9km/h, the corresponding warning light will turn off after 35 seconds.

If all rear passenger's seat belts are fasten, the green seat belt warning lights will turn off.

If you drive over 9km/h, the corresponding warning light (fasten ; green colour, unfasten ; red colour) will turn on and turn off after 35 seconds.

If the rear seat belt is disconnected when you drive over the 9km/h, the corresponding seat belt warning light will blink for 35 seconds.

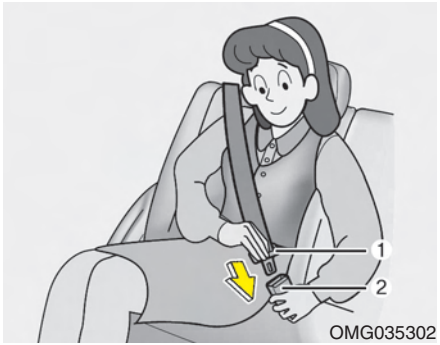
But, if the rear passenger's lap/shoulder belt is/are connected and disconnected twice within 9 seconds after the belt is fastened, the corresponding seat belt warning light will not operate.

OMG035301

Lap/shoulder belt

To fasten the front lap/shoulder belt:

1. Grasp the buckle and tongue plate.
2. Slowly pull the lap/shoulder belt out from the retractor.

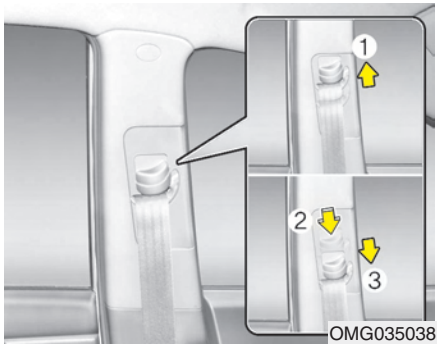


OMG035302

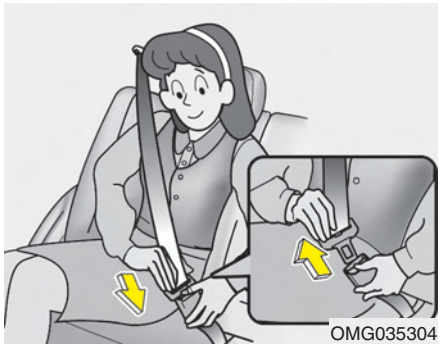
3. Insert the tongue plate (1) into the open end of the buckle (2) until an audible “click” is heard, indicating the belt is locked in the buckle.

OMG035303

4. Position the lap portion (1) of the belt across your lap as LOW ON THE HIPS as possible to reduce the risk of sliding under it during an accident. Adjust the belt to a SNUG FIT by pulling up on the shoulder portion (2) of the seat belt. The belt retractor is designed to take up excess webbing automatically and to maintain tension on the belt. For your safety, do not put any excess slack into the seat belt at any location.



5. Adjust the shoulder anchor position to your size. To raise the anchor position, push the anchor up (1). To lower the anchor position, press (2) the button and slide the anchor down (3). After adjustment, make sure the anchor is locked in position.



To unfasten the front lap/shoulder belt:

Press the release button on the buckle and allow the belt to slowly retract.

⚠ WARNING

- **The seatbacks should always remain in a comfortable, upright position whilst the vehicle is in motion. The seat belt system will provide the most protection with the seatbacks in an upright position.**
- **Never wear the shoulder portion of the seat belt under the outside arm or behind the back.**
- **Never wear the shoulder portion of the seat belt across the neck or face.**
- **Wear the lap portion of the seat belt as low on the hips as possible. Be sure the lap belt fits snugly around the hips. Never wear the lap belt over your waist.**

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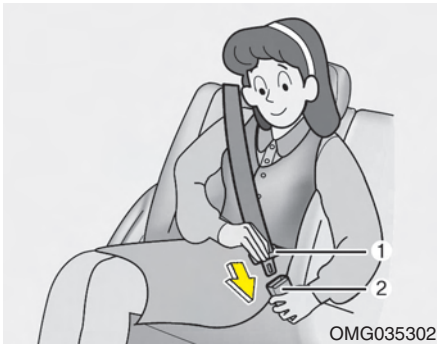
- **Never drive or ride with a twisted or jammed seat belt. If you cannot untwist or unjam the seat belt, see the nearest Kia dealer immediately.**
- **Never use a single belt to restrain more than one person at a time.**

Failure to follow these warnings will increase the risk and severity of injury in an accident.



Rear lap/shoulder belt

To fasten the rear lap/shoulder belt:

1. Grasp the buckle and tongue plate.
2. Slowly pull the lap/shoulder belt out.
3. Insert the tongue plate (1) into the open end of the buckle (2) until an audible “click” is heard, indicating the belt is locked in the buckle.

4. Position the lap portion (1) of the belt across your lap as LOW ON THE HIPS as possible to reduce the risk of sliding under it during an accident. Adjust the belt to a SNUG FIT by pulling up on the shoulder portion (2) of the seat belt. The belt retractor is designed to take up excess webbing automatically and to maintain tension on the belt. For your safety do not put any excess slack into the seat belt.

To unfasten:

Press the release button on the buckle and allow the belt to slowly retract.

⚠ WARNING

- **Never wear the shoulder portion of the seat belt under the outside arm or behind the back.**
- **Never wear the shoulder portion of the seat belt across the neck or face.**
- **Wear the lap portion of the seat belt as low as possible. Be sure the lap belt fits snugly around the hips. Never wear the lap belt over your waist.**

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- **Never drive or ride with a twisted or jammed seat belt. If you cannot untwist or unjam the seat belt, see the nearest Kia dealer immediately.**
- **Never use a single belt to restrain more than one person at a time.**

Failure to follow these warnings will increase the risk and severity of injury in an accident.

Proper use and care of the seat belt system

To ensure that the seat belts provide the maximum protection, please follow these instructions:

- Use the belts at all times - even on short trips.
- If the seat belt is twisted, straighten it prior to use.
- Keep sharp edges and damaging objects away from the belts.
- Periodically inspect belt webbing, anchors, buckles and all other parts for signs of wear and damage. Replace damaged, excessively worn or questionable parts immediately.

- To clean the belt webbing, use a mild soap solution recommended for cleaning upholstery or carpets. Follow the instructions provided with the soap.
- Do not make modifications or additions to the seat belt.
- After wearing a seat belt, make sure it fully retracts to the stowed position. Do not allow the belt to get caught in the door when you close it.

⚠ WARNING

Do not bleach or dye the webbing because this may weaken the webbing fibers and allow them to fail when loaded in a collision.

Restraint of pregnant women

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

⚠ WARNING - Pregnant women

Pregnant women must never place the lap portion of the seat 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.

Restraint of infants and small children

To increase their safety, infants and young children should always be restrained by a restraint system approved for their age and size.

Never allow a child to stand or kneel on the seat of a moving vehicle. Never allow a seat belt to be placed around both a child and an adult or around two children at the same time.

It is best for children to be seated in the rear seats.

⚠ WARNING - Children on laps

Never hold a child on your lap or in your arms in a moving vehicle.

Even a very strong person cannot hold onto a child in the event of even a minor collision.

CAUTION - Hot metal parts

Seat belts and seats can become hot in a vehicle that has been closed during warm/hot weather; they could burn a child. Check seat covers and buckles before you place a child anywhere near them.

Many companies manufacture child restraint systems (often called child seats) for infants and small children. An acceptable child restraint system must always satisfy the Safety Standards of your country. Make sure that any child-restraint system you use in your vehicle is labelled as complying with those safety standards.

The child-restraint system should be chosen to fit both the size of the child and the size of the vehicle seat. Be sure to follow any instructions provided by the child-restraint system manufacturer when installing the child-restraint system.

Restraint of larger children

As children grow, they may need to use new child-restraint systems, including larger child seats or booster seats, which are appropriate for their increased size.

A child who has outgrown available child-restraint systems should use the belts provided in the vehicle. When seated in the rear outboard seats, the child should be restrained by the lap/shoulder belt.

If the shoulder belt portion slightly touches the child's neck or face, try placing the child closer to the centre of the vehicle. If the shoulder belt still touches their face or neck they may need to be returned to a child restraint system. In addition, aftermarket devices are available from independent manufacturers which help pull the shoulder belt down and away from the child's face or neck.

⚠ WARNING - Shoulder belts on small children

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

Child restraint system (if equipped)

For small children and babies, the use of a child seat or infant seat is strongly recommended. This child seat or infant seat should be of appropriate size for the child and should be installed in accordance with the manufacturer's instructions. It is further recommended that the seat be placed in the vehicle's rear seat since this can make an important contribution to safety.

Children riding in the car should sit on the rear seat and must always be properly restrained to minimize the risk of injury in an accident, sudden stop or sudden manoeuvre. According to accident statistics, children are safer when properly restrained in the rear seats than in the front seat. Larger children should use one of the seat belts provided.

You are required by law to use safety restraints for children. If small children ride in your vehicle you must put them in a child restraint system (safety seat).

Children could be injured or killed in a crash if their restraints are not properly secured. For small children and babies, a child seat or infant seat must be used. Before buying a particular child restraint system, make sure it fits your car and seat belts, and fits your child. Follow all the instructions provided by the manufacturer when installing the child restraint system.

⚠ WARNING

- **A child restraint system must be placed in the rear seat. Never install a child or infant seat on the front passenger's seat.**

  Should an accident occur and cause the passenger air bag to deploy, it could severely injure or kill an infant or child seated in an infant or child seat. Thus, only use a child restraint in the rear seat of your vehicle.

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- **Since a seat belt or child restraint system can become very hot if it is left in a closed vehicle, be sure to check the seat cover and buckles before placing a child there.**
- **When the child restraint system is not in use, store it in the boot or fasten it with a seat belt so that it will not be thrown forward in the case of a sudden stop or an accident.**
- **Children who are too large to be in a child restraint should sit in the rear seat and be restrained with the available lap/shoulder belts. Never allow children to ride in the front passenger seat.**

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- **Always make sure that the shoulder belt portion of the outboard lap/shoulder belt is positioned midway over the shoulder, never across the neck or behind the back. Moving the child closer to the centre of the vehicle may help provide a good shoulder belt fit. The lap belt portion of the lap/shoulder belt must always be positioned as low as possible on the child's hips and as snug as possible.**
- **If the seat belt will not properly fit the child, we recommend the use of an approved booster seat in the rear seat in order to raise the child's seating height so that the seat belt will properly fit the child.**

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- **Never allow a child to stand up or kneel on the seat.**
- **Never allow a child to be held in a person's arms whilst they are in a moving vehicle, as this could result in serious injury to the child in the event of an accident or a sudden stop. Holding a child in a moving vehicle does not provide the child with any means of protection during an accident, even if the person holding the child is wearing a seat belt.**

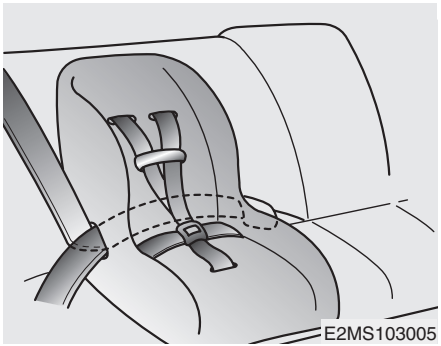
Installation on the rear seats

⚠ WARNING

- **Before installing the child restraint system, read the instructions supplied by the child restraint system manufacturer.**
- **Failure to observe this manual instructions regarding child restraint system and the instructions provided with the child restraint system could increase the chance and/or severity of injury in an accident.**

⚠ WARNING

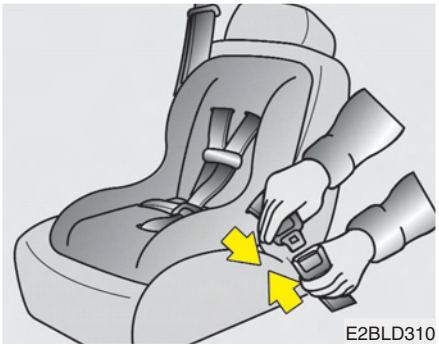
- **Do not install any child restraint system in the front passenger seat. Should an accident occur and cause the passenger air bag to deploy, it could severely injure or kill an infant or child seated in an infant or child seat. Therefore, only use a child restraint system in the rear seat of your vehicle.**
- **If the child restraint seat is not anchored properly, the risk of a child being seriously injured or killed in a collision greatly increases.**


E2MS103005

Installing a child restraint system by lap/shoulder belt (on the rear seat)

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

1. Place the child restraint system in the desired position.
2. Extend the shoulder/lap belt from its retractor.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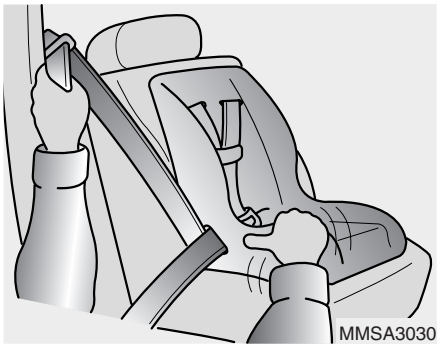
3. Route the lap/shoulder belt through the restraint according to the seat manufacturer's instructions.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4. Buckle the seat belt and allow the seat belt to take up any slack. After installation of the child restraint system, try to move it in all directions to be sure the child restraint system is securely installed.

If you need to tighten the belt, pull more webbing toward the retractor.

Child seat restraint suitability for seat position using the seat belt - For Europe

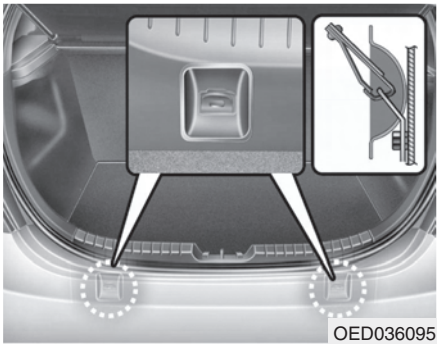
Use child safety seats that have been officially approved and are appropriate for your children. When using the child safety seats, refer to the following table.

Age group	Seating position		
	Front passenger	Rear Outboard	Rear Centre
0 : Up to 10 kg (0 - 9 months)	X	U	U
0+ : Up to 13 kg (0 - 2 years)	L1, L2	U	U
I : 9 kg to 18 kg (9 months - 4 years)	L3, L4, L5	U	U
II & III : 15 kg to 36 kg (4 - 12 years)	L6, L7	U	U

U : Suitable for "universal" category restraints approved for use in this mass group
L1 : Suitable for PegPerego primo Viaggio (E13 030010) approved for the use in this mass group
L2 : Suitable for GRACO Autobaby (E11 0344160 / E11 0344161) approved for the use in this mass group
L3 : Suitable for Romer Lord Plus (E1 03301136) approved for use in this mass group
L4 : Suitable for MAXI-COSI Priori XP (E1 03301153) approved for the use in this mass group
L5 : Suitable for BeSafe iZi COMFORT (E4 03443206) approved for use in this mass group
L6 : Suitable for Euro Kids Star (E1 03301129) approved for use in this mass group
L7 : Suitable for Bebe comfort HiPSOS (E2 031011) approved for use in this mass group
X : Seat position not suitable for children in this mass group

⚠ WARNING

We recommend that a child restraint seat be installed in the rear seat, even if the front passenger's air bag ON/OFF switch is set to the OFF position. To ensure the safety of your child, the front passenger's air bag must be deactivated when it should be necessary to install a child restraint seat on the front passenger seat in exceptional circumstances.


OED036095

Securing a child restraint seat with "Tether Anchor" system (if equipped)

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

OED036078

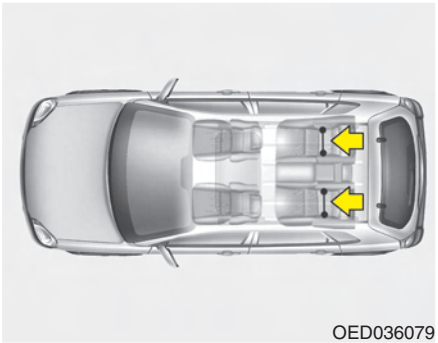
1. Route the child restraint seat strap over the seatback.

   For vehicles with adjustable headrest, route the tether strap under the headrest and between the headrest posts, otherwise route the tether strap over the top of the seatback.
2. Remove the covering shelf trim and place it in the luggage room. Make sure it does not move.
3. Connect the tether strap hook to the belonging child restraint hook holder and tighten to secure the seat.

Securing a child restraint system with "ISOFIX" system and "Tether Anchorage" system (if equipped)

ISOFIX is a standardised method of fitting child seats that eliminates the need to use the standard adult seat belt to secure the seat in the vehicle. This enables a much more secure and positive location with the added benefit of easier and quicker installation.

An ISOFIX-seat can only be installed if it has vehicle-specific approval in accordance with the requirements of ECE-R44.



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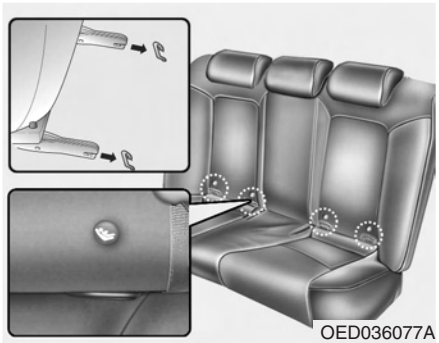
On each side of the rear seat, between the cushion and backrest, are located a pair of ISOFIX anchorage points together with a top tether mounting on the back panel behind the rear seats. During the installation, the seat has to be engaged at the anchorage-points in a way you can hear it clicking (check by pulling!) and has to be fixed with the Top Tether-belt on the belonging point on the transverse trim behind rear seats.

The installing and the use of a child-seat has to be done according to the installing-manual, which is added to the ISOFIX-seat.

⚠ WARNING

When using the vehicle's "ISOFIX" system to install a child restraint system in the rear seat, all unused vehicle rear seat belt metal latch plates or tabs must be latched securely in their seat belt buckles and the seat belt webbing must be retracted behind the child restraint to prevent the child from reaching and taking hold of unretracted seat belts. Unlatched metal latch plates or tabs may allow the child to reach the unretracted seat belts which may result in strangulation and a serious injury or death to the child in the child restraint.



OED036077A

To secure the child restraint seat

1. To engage the child restraint seat to the ISOFIX anchor, insert the child restraint seat latch into the ISOFIX anchor. Listen for the audible "click" sound.
2. Connect the tether strap hook to the child restraint hook holder and tighten to secure the seat. Refer to the previous page.

⚠ WARNING

- **Do not install a child restraint seat at the centre of the rear seat using the vehicle's ISOFIX anchors. The ISOFIX anchors are only provided for the left and right outboard rear seating positions. Do not misuse the ISOFIX anchors by attempting to attach a child restraint seat in the middle of the rear seat to the ISOFIX anchors. In a crash, the child restraint seat ISOFIX attachments may not be strong enough to secure the child restraint seat properly in the centre of the rear seat and may break, causing serious injury or death.**

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- **Do not mount more than one child restraint to a child restraint lower anchorage point. The improper increased load may cause the anchorage points or tether anchor to break, causing serious injury or death.**
- **Attach the ISOFIX or ISOFIX-compatible child restraint seat only to the appropriate locations shown in the illustration.**
- **Always follow the installation and use instructions provided by the manufacturer of the child restraint.**

Child seat restraint suitability for vehicle ISOFIX positions - For Europe

Mass Group	Size Class	Fixture	vehicle ISOFIX positions			
			Front Passenger	Rear Outboard (Driver side)	Rear Outboard (Passenger side)	Rear Centre
Carrycot	F	ISO/L1	-	X	X	-
	G	ISO/L2	-	X	X	-
0 : UP to 10kg	E	ISO/R1	-	IUF	IUF	-
0+ : UP to 13kg	E	ISO/R1	-	IUF	IUF	-
	D	ISO/R2	-	IUF	IUF	-
	C	ISO/R3	-	IUF	IUF	-
I : 9 to 18kg	D	ISO/R2	-	IUF	IUF	-
	C	ISO/R3	-	IUF	IUF	-
	B	ISO/F2	-	IUF	IUF	-
	B1	ISO/F2X	-	IUF	IUF	-
	A	ISO/F3	-	IUF	IUF	-

IUF = Suitable for ISOFIX forward child restraints systems of universal category approved for use in the mass group.

X = ISOFIX position not suitable for ISOFIX child restraint system in this mass group and/or this size class.

* Both ISO/R2 and ISO/R3 are able to be set up only at the foremost position of the passenger seat.

* ISOFIX child restraint system size classes and fixtures

A - ISO/F3: Full-Height Forward Facing toddler CRS (height 720 mm)

B - ISO/F2: Reduced-Height Forward Facing toddler CRS (height 650 mm)

B1- ISO/F2X: Reduced-Height Second Version Back Surface Shape Forward -Facing toddler CRS (height 650 mm)

C - ISO/R3: Full-Size Rearward Facing toddler CRS

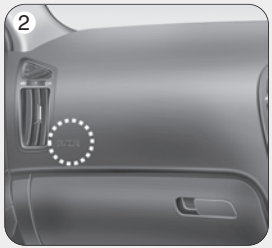
D - ISO/R2: Reduced-Size Rearward Facing toddler CRS

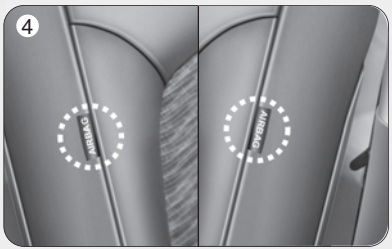
E - ISO/R1: Infant -Size Rearward Facing CRS

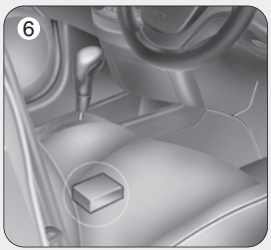
F - ISO/L1: Left Lateral Facing position CRS (carry-cot)

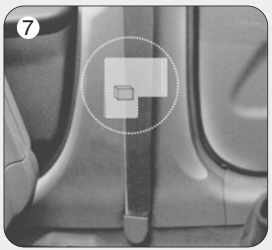
G - ISO/L2: Right Lateral Facing position CRS (carry-cot)

AIR BAG - SUPPLEMENTAL RESTRAINT SYSTEM (IF EQUIPPED)









(1) Driver's air bag
(2) Front passenger's air bag
(3) Front passenger's air bag ON/OFF switch
(4) Side air bag
(5) Curtain air bag
(6) SRS Control Module
(7) Side impact sensor
(8) Front impact sensor

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SRS components and functions

The SRS consists of the following components:

1. SRS “AIR BAG” warning light
2. Front passenger’s Air bag Module
3. Driver’s Air Bag Module
4. Front Impact Sensors
5. Side Impact Sensors
6. SRS Control Module (SRSCM)
7. Retractor Pre-tensioner Assemblies
8. Side Air Bag Modules
9. Curtain Air bag Modules
10. Front passenger’s air bag OFF indicator
11. Front passenger’s air bag ON/OFF switch

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

The SRS AIR BAG warning light on the instrument panel will blink or illuminate for about 6 seconds after the ignition switch is turned to the ON position, after which the AIR BAG warning light should go out.

If any of the following conditions occurs, this indicates a malfunetion of the SRS. Have an authorised Kia dealer inspect the air bag system as soon as possible.

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

What your air bag system does

Driver's air bag and front passenger's air bag are designed to supplement the protection offered by the seat belt in certain frontal collisions. Likewise, side air bag and curtain air bags are designed to supplement the protection offered by the seat belt in side collisions. seat belts are designed to reduce the injury of the driver or passengers in case of light impact or collision. However, to help reduce impact on driver or passengers in a serious collision, seat belts must also be correctly worn.

What your air bag system does not do

The air bag system is designed to supplement the protection offered by the seat belt system. IT IS NOT A SUBSTITUTE FOR THE SEAT BELT.

The importance of using seat belts

There are four very important reasons to use seat belts even with an air bag supplemental restraint system. They:

- help keep you in the proper position (away from the air bag) when it inflates.
- reduce the risk of harm in rollover, or rear impact collisions, because an air bag is not designed to inflate in such situations and even a side curtain air bag is designed to inflate only in certain side impact collisions.
- reduce the risk of harm in frontal or side collisions which are not severe enough to actuate the air bag supplemental restraint system.
- reduce the risk of being thrown from your vehicle.

⚠ WARNING - Air bags & seat belts

- **Even in vehicles with air bags, you and your passengers must always wear the seat belts provided in order to minimize the risk and severity of injury in the event of a collision or rollover.**
- **Always wear your seat belt. It can help keep you away from the air bags during heavy braking just before a collision.**
- **If occupants are not fastened or correctly seated, they cannot be protected, and thus face serious injury or death.**

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- **Driver's and front passenger's air bag are designed to inflate only in certain frontal collisions, and side and curtain air bags are designed to inflate in certain side impacts. They will generally not provide protection in rear impacts, rollovers, less severe frontal collisions. They will not provide protection from later impacts in a multi-impact collision.**

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- **If your vehicle has been subjected to flood conditions (e.g. soaked carpeting/standing water on the floor of the vehicle, etc.) or if your vehicle has become flood damaged in any way, do not attempt to start the vehicle or put the key in the ignition before disconnecting the battery. This may cause air bag deployment, which could result in serious personal injury or death. If flooded conditions are subjected to your vehicle, before starting the vehicle, have the vehicle towed to an authorised Kia dealer for inspection and necessary repairs.**

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HLZ2120/H

Driver's air bag

The driver's air bag is stored in the centre of the steering wheel.

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

⚠ WARNING

- **You must always sit as far back from the steering wheel air bag as possible (chest at least 250 mm (10 inches) away from the steering wheel), whilst still maintaining a comfortable seating position for good vehicle control, in order to reduce the risk of injury or death in a collision.**
- **Never place objects over the air bag storage compartments or between the air bags and yourself. Due to the speed and force of the air bag inflation, such objects could hit your body at high speed and cause severe bodily injury and even death.**
- **Do not put stickers or ornaments on the steering wheel cover. These may interfere with the deployment of the air bag.**

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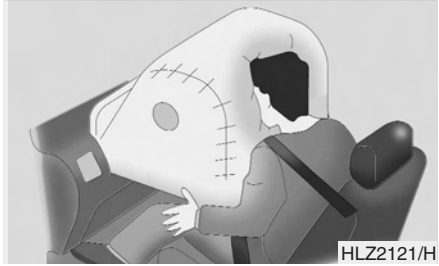
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Front passenger's air bag

Front passenger's air bag is stored in the instrument panel above the glove box.

Since you cannot anticipate which air bags will deploy or from what direction, never put any objects or ornaments on the instrument panel.

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

OED036075R

Front passenger's air bag ON/OFF switch (if equipped)

The front passenger's air bag can be deactivated by the front passenger's 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 front passenger's air bag must be deactivated when it should be necessary to install a rearward facing child seat on the front passenger seat in exceptional circumstances.

OED036076R

To deactivate or reactivate the front passenger's air bag

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

To reactivate the front passenger's air bag, insert the master key into the front passenger's air bag ON/OFF switch and turn it to the "ON" position. The front passenger's air bag OFF indicator will go out.

✻ NOTICE

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

CAUTION

- ***If the front passenger's air bag ON/OFF switch is not working properly, the air bag warning light on the instrument panel will illuminate.***
  And, the front passenger's air bag OFF indicator will not illuminate, the SRS Control Module reactivate the front passenger's air bag and the front passenger's air bag will inflate in frontal impact crashes even if the front passenger's air bag ON/OFF switch is set to "OFF" position.

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If this occurs, have an authorised Kia dealer inspect the front passenger's air bag ON/OFF switch, the pre-tensioner seat belt system and the SRS air bag system as soon as possible.

- *If the SRS air bag warning light does not illuminate when the ignition key is turned to the "ON" position, or if it illuminates whilst the vehicle is being driven, have an authorised Kia dealer inspect the front passenger's air bag ON/OFF switch, pre-tensioner seat belt and the SRS air bag system as soon as possible.*

⚠ WARNING

- **The driver is responsible for the proper position of the front passenger's air bag ON/OFF switch.**
- **Deactivate the front passenger's air bag only when the ignition switch 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 front passenger's 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.**

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- **Even though your vehicle is equipped with the front passenger's 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.**

⚠ WARNING

- **The front seat passenger's air bag is much larger than the steering wheel air bag and inflates with considerably more force. It can seriously hurt or kill a passenger who is not in the proper position and wearing the seat belt properly. The front passengers should always move their seat as far back as practical and sit back in their seat.**
- **It is essential that the front passengers always wear their seat belts, even when the vehicle is moving in a parking lot or up a driveway into garage.**

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- **If driver brakes the vehicle heavily in an urgent situations, occupants will be thrown forward. If front passengers are not wearing the seat belts, they will be directly in front of the storage compartment when inflation occurs. In that situation, serious injury or death is possible.**
- **Never allow front passenger to put their hands or feet on the instrument panel or put their face close to the instrument panel. The air bag will impact the front passenger when it inflates.**

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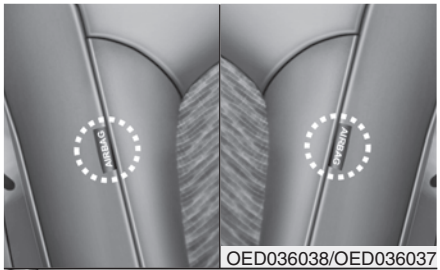
- **Never allow children/old and feeble persons/pregnant women to sit on the front passenger's seat. Do not put child restraint system on the front passenger's seat either. They may be seriously injured by the air bag inflation when air bag deploys.**
- **Do not put objects or stickers on the instrument panel. Do not apply any accessory on the front windscreen glass or do not install aftermarket mirrors or accessories on the factory installed rearview mirror. These may interfere with the deployment of air bag inflation or could hit your body at high speed and cause severe bodily injury and even death.**



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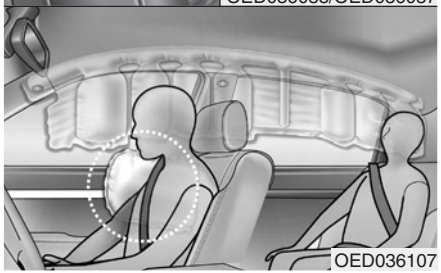
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Side air bag

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

The side impact 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 situations.

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

⚠ WARNING

- **The side air bag is supplemental to the driver's and the passenger's seat belt systems and is not a substitute for them. Therefore your seat belts must be worn at all times whilst the vehicle is in motion. The air bags deploy only in certain side impact conditions 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 seat occupants should sit in an upright position with the seat belt properly fastened. The driver's hands should be placed on the steering wheel at the 9:00 and 3:00 positions. The passenger's arms and hands should be placed on their laps.**

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- **Do not use any accessory seat covers.**
- **Use of seat covers could reduce or prevent the effectiveness of the system.**
- **Do not install any accessories on the side or near the side air bag.**
- **Do not place any objects over the air bag or between the air bag and yourself.**
- **Do not place any objects (an umbrella, bag, etc.) between the front door and the front seat. Such objects may become dangerous projectiles and cause injury if the supplemental side air bag inflates.**

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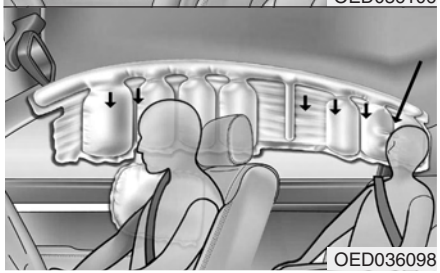
- **To prevent unexpected deployment of the side air bag that may result in personal injury, avoid impact to the side impact sensor when the ignition switch is on.**
- **If seat or seat cover is damaged, have the vehicle checked and repaired by an authorised KIA dealer.**



Curtain air bag

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

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

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 rollover situations.

⚠ WARNING

- **In order for side and curtain air bags to provide the best protection, both front seat occupants and both 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 put the child restraint system as far away from the door side as possible, and secure the child restraint system in a locked position.**

(Continued)

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- **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. This should only be done by an authorised KIA dealer.**

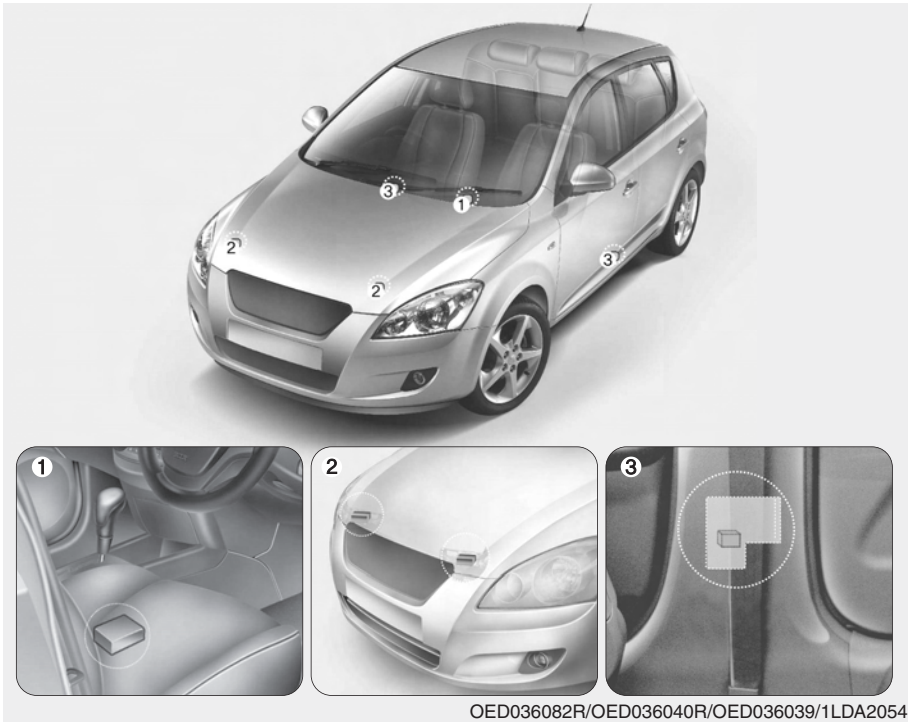
Failure to follow the above mentioned instructions can result in injury or death to the vehicle occupants in an accident.

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. In other words, just because your vehicle is damaged and even if it is totally unusable, don't be surprised that the air bags did not inflate.



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Air bag collision sensors

(1) SRS control module
(2) Front impact sensor
(3) Side impact sensor

⚠ WARNING

- **Do not hit or allow any objects to impact the locations where air bag 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 vehicle checked and repaired by the authorised Kia dealer.

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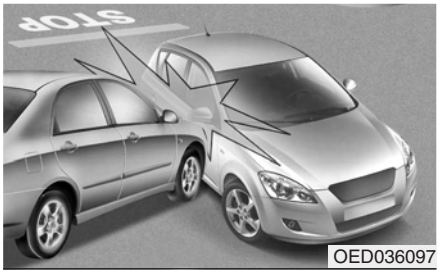
- **Problems may arise if the sensor installation angles are changed due to the deformation of front bumper, body or B pillar where side collision sensors are installed. Have the vehicle checked and repaired by the authorised Kia dealer.**
- **Your vehicle has been designed to absorb impact and deploy the air bag(s) in certain collisions. Installing aftermarket bumper guards or replacing a bumper with non-genuine parts may adversely affect your vehicles collision and air bag deployment performance.**

Air bag inflation condition

Front air bag

Front air bags (driver's and front passenger's air bags) are designed to inflate when the impact is delivered to front collision sensors depending on the intensity, speed or angles of impact of the front collision - generally from an area a little to the left to a little to the right of straight ahead.



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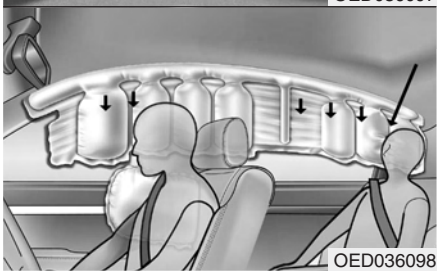

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Side air bags (if equipped)

Side air bags (side and/or curtain air bags) are designed to inflate when the impact is delivered to side collision sensors depending on the strength, speed or angles of impact of side impact collision or rollover by the side impact.

Although the front air bags (driver's and front passenger's air bags) are designed to inflate only in frontal collision, it may inflate in any collision if front impact sensors are delivered with certain impact.

Side air bags (side and/or curtain air bags) are designed to inflate only in side impact collision, it may inflate in any collision if side impact sensors are delivered with certain impact.

In other words, they may inflate in accidents such as slant collision or impact, collision or impact where the front portion of the vehicle goes under a vehicle with a higher ground clearance (bus or truck), collision with a utility pole or rollover. Therefore, drive safely at all times.

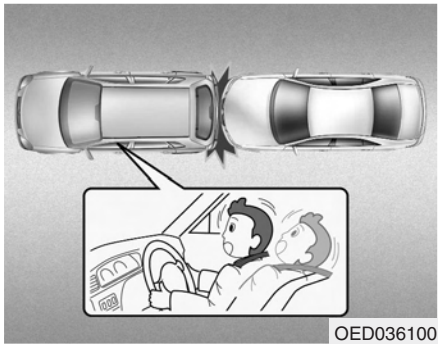
If the vehicle chassis is impacted by bumps or objects on unimproved roads or sidewalks, air bags may deploy. Drive carefully on unimproved roads or on surfaces not designed for vehicle traffic.

To protect occupants, front air bags and pre-tensioner seat belts may deploy in certain side impact collisions.

OED036099

Air bag non-inflation conditions

- In collisions, the vehicle seat belts are sufficient to protect the vehicle occupants and the air bags may not deploy. In some cases, deploying air bags in low-speed collisions can cause a secondary impact to the occupants (light abrasions, cuts, burns, etc.), or loss of vehicle control.

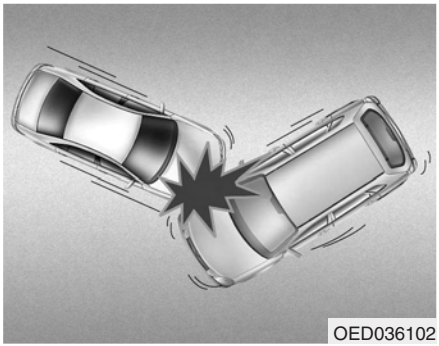

OED036100

- Air bags may not inflate in rear collisions, because occupants are moved backward by the force of the impact. In this case, the air bags do not provide proper protection.

OED036101

- Front air bags may not inflate in side impact collision, because occupants move to the direction of the collision, and thus front air bag deployment does not provide proper protection.

  However, side or curtain air bags may inflate depending on the intensity, vehicle speed and angles of impact.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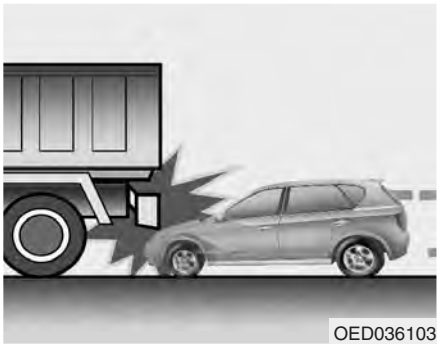
- In a slant impact or collision, the force delivered will be relatively weaker than that of frontal collision. So, the air bags may not inflate.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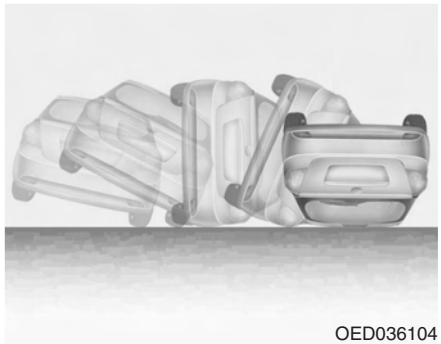
- At the moment of an accident, drivers brake heavily with reflex. In such heavy braking, the front portion of the vehicle is lowered by the force of the braking and the vehicle can go under a vehicle with a higher ground clearance. Air bags may not inflate in this situation because impacts may not be delivered or may be delivered with less intensity.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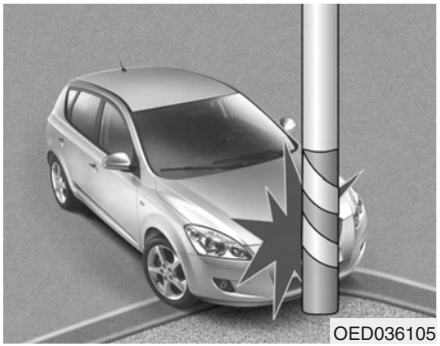
- Air bags may not inflate in rollover accidents because air bag deployment would not provide proper protection to the occupants.

  However, side air bags may inflate when the vehicle is rolled over by a side impact collision.


OED036105

- 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.

How does the air bag system operate

- Air bag only operates when the ignition switch is turned to ON or START position.
- Air bags inflate instantly in the event of serious frontal or side collision in order to help protect the occupants from serious physical injury.
- There is no single speed at which the air bags will inflate.

  Generally, air bags are designed to inflate by the severity of a collision and its direction. These two factors determine whether the sensors send out an electronic deployment/inflation signal.
- Air bag deployment depends on a number of factors including vehicle speed, angles of impact and the density and stiffness of the vehicles or objects which your vehicle hits in the collision. Though, factors are not limited to those mentioned above.
- The front air bags will completely inflate and deflate in an instant.

  It is virtually impossible for you to see the air bags inflate during an accident. It is much more likely that you will simply see the deflated air bags hanging out of their storage compartments after the collision.

- In order to help provide protection in a severe collision, the air bags must inflate rapidly. The speed of air bag inflation reduces the likelibonnet of serious or life-threatening injuries and is thus a mandatory part of the air bag design.

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

- **Driver should sit as far back (at least 250 mm (10 inches) away) from the steering wheel air bag as possible to reduce the risk of injury or death in a collision. The front passenger should always move their seat as far back as possible and sit back in their seat.**
- **Air bag inflates instantly in an event of collision, passengers may be injured by the air bag expansion force if they are not in proper position.**
- **Air bag inflation may cause injuries which normally include facial or bodily abrasions, injuries by the broken glasses or burns by the explosives.**

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 to both the seat belt and the air bag, as well as from breathing the smoke and powder. **We strongly urge you to open your doors and/or windows as soon as possible after impact in order to reduce discomfort and prevent prolonged exposure to the smoke and powder.**

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

⚠ WARNING

When the air bags deploy, the air bag related parts in 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 areas internal components immediately after an air bag has inflated.

Installing a child restraint on a front passenger seat is forbidden.

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

In addition, do not place front-facing child restraint in the front passenger seat either. If the front passenger air bag inflates, it would cause serious or fatal injuries to the improperly positioned or improperly restrained child.

⚠ WARNING

- **Never put child restraint in the front passenger seat. If the front passenger air bag inflates, it would cause serious or fatal injuries.**
- **When children are seated in the rear outboard seats in which curtain air bags are equipped, be sure to put the child restraint system as far away from the door side as possible, and secure the child restraint system to be locked in position.**

  Inflation of side or curtain air bag could cause serious injury or death due to the expansion impact.

AIR BAG

Air bag warning light

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

When the ignition switch is turned ON, the indicator light should blink or illuminate for approximately 6 seconds, then go off.

Have the system checked if:

- The light does not turn on briefly when you turn the ignition ON.
- The light stays on after the engine starts.
- The light comes on whilst the vehicle is in motion.

SRS Care

The SRS is virtually maintenance-free and so there are no parts you can safely service by yourself. If the SRS "AIR BAG" warning light does not illuminate, or continuously remains on, have your vehicle immediately inspected by an authorised KIA dealer.

Any work on the SRS system, such as removing, installing, repairing, or any work on the steering wheel must be performed by an authorised KIA dealer. Improper handling of the SRS system may result in serious personal injury.

⚠ 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.**

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- **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, they must be replaced by an authorised KIA dealer.**
- **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.**

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- **If components of the air bag system must be discarded, or if the vehicle must be scrapped, certain safety precautions must be observed. An authorised 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; have the car towed to an authorised KIA dealer.**

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 whilst 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 seatback in an upright position, centred 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.

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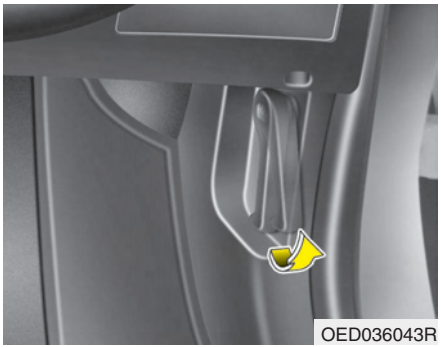
Air bag warning label

Air bag warning label is attached to alert driver and passengers of potential risk of air bag system.

BONNET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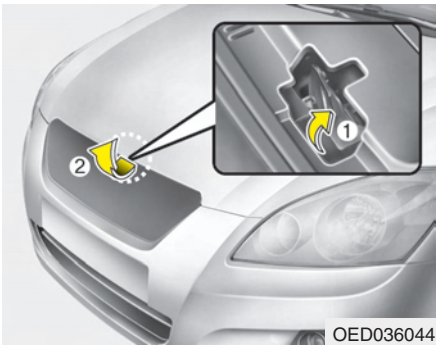
Opening the bonnet:

1. Pull the release lever on the lower left side of the instrument panel to unlatch the bonnet. The bonnet should pop open slightly.



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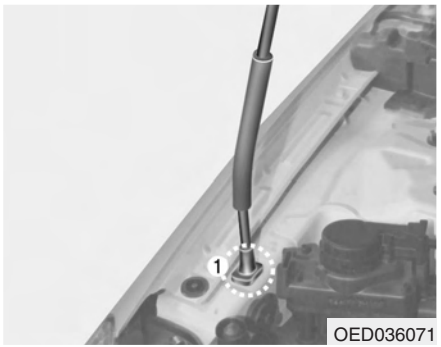
2. Go to the front of the vehicle, raise the bonnet slightly, push the secondary latch (1) inside of the bonnet centre and lift (2) the bonnet.



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3. Lift the bonnet and hold it open with the support rod by inserting the free end of the rod into the slot (1).

CAUTION

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.

Closing the bonnet

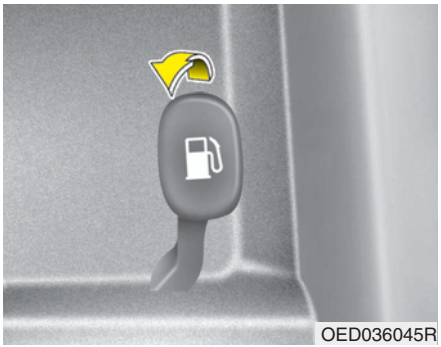
1. Before closing the bonnet, check the following:
   - All filler caps in engine compartment must be correctly installed.
   - Gloves, rags or any other combustible material must be removed from the engine compartment.
2. Secure the support rod in its clip.
3. Lower the bonnet to about 30 cm (12 inches) height and then let it drop to properly lock in place.

   Make sure the bonnet is properly locked before driving.

⚠ WARNING

- **Before closing the bonnet, make sure that all engine parts and tools have been removed from the engine area and that no one's hands are near the bonnet opening.**
- **Do not leave gloves, rags or any other combustible material in the engine compartment. Doing so may cause a heat-induced fire.**

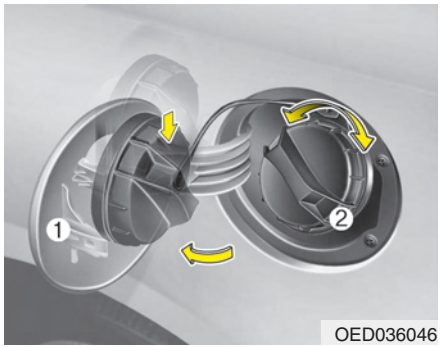
FUEL FILLER LID


OED036045R

1. Stop the engine.
2. To open the fuel filler lid, pull the release lever.

⚠ WARNING

To avoid injury from sharp objects, it is recommended that protective gloves be worn when opening the fuel filler door manually.



OED036046

3. Pull the fuel filler lid out to open.
4. To remove the cap, turn the fuel tank cap counter-clockwise.
5. Refuel as needed.
6. To install the cap, turn it clockwise until it “clicks”. This indicates that the cap is securely tightened.
7. Close the fuel filler lid and push it lightly and make sure that it is securely closed.

⚠ WARNING - Refueling

If pressurized fuel sprays out, it can cause serious injuries. 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.

⚠ WARNING

Automotive fuels are flammable/explosive 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.

- **Before refueling always note the location of the Emergency Petrol Shut-Off, if available, at the gas station facility.**
- **Before touching the fuel nozzle or fuel filler cap, you should eliminate potentially dangerous static electricity discharge by touching another metal part of the front of the vehicle, a safe distance away from the fuel filler neck, nozzle, or other gas source.**

(Continued)

(Continued)

- **Do not get back into a vehicle once you have begun refueling. Do not touch, rub or slide against any item or fabric (polyester, satin, nylon, etc.) capable of producing static electricity. Static electricity discharge can ignite fuel vapours resulting in explosion. If you must re-enter 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 petrol source.**
- **When using a portable fuel container be sure to place the container on the ground prior to refueling. Static electricity discharge from the container can ignite fuel vapours causing a fire. Once refueling has begun, contact with the vehicle should be maintained until the filling is complete.**

(Continued)

(Continued)

Use only portable fuel containers designed to carry and store petrol.

- **Do not use cellular phones around a gas station or whilst refueling any vehicle. Electric current and/or electronic interference from cellular phones can potentially ignite fuel vapours causing a fire. If you must use your cellular phone use it in a place away from the gas station.**
- **When refueling always shut the engine off. Sparks produced by electrical components related to the engine can ignite fuel vapours causing a fire. Always insure that the engine is OFF before and during refueling. Once refueling is complete, check to make sure the fuel filler cap and door are securely closed, before starting the engine.**

(Continued)

(Continued)

- **Do not light any fire around a gas station. DO NOT use matches or a lighter and DO NOT SMOKE or leave a lit cigarette in your vehicle whilst at a gas station especially during refueling. Automotive fuel is highly flammable and can, when ignited, result in explosion by flames.**
- **If a fire breaks out during refueling, leave the vicinity of the vehicle, and immediately contact the manager of the gas station or contact the police and local fire department. Follow any safety instructions they provide.**

CAUTION

- ***Make sure to refuel with petrol only for the petrol engine vehicles and diesel fuel only for the diesel engine vehicles.***
- ***Check to make sure the fuel filler cap is securely closed after refueling.***
- ***If the fuel filler cap requires replacement, use only a genuine Kia cap or the equivalent specified for your vehicle. An incorrect fuel filler cap can result in a serious malfunction of the fuel system or emission control system. Correct replacement caps are available at authorised Kia dealers.***
- ***Do not spill fuel on the exterior surfaces of the vehicle. Any type of fuel spilled on painted surfaces may damage the paint.***

✻ NOTICE

If the fuel filler lid will not open in cold weather because the area around it is frozen, push or lightly tap the lid.

MIRRORS

Outside rearview mirror

Be sure to adjust mirror angles before driving.

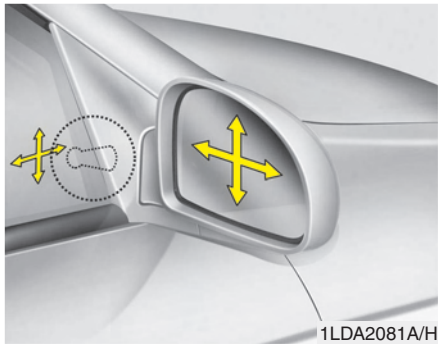
Your vehicle is equipped with both left-hand and right-hand outside rearview mirrors. The mirrors can be adjusted remotely with the control levers or remote switch, depending on the type of mirror control installed. The mirror heads can be folded back to prevent damage during an automatic car wash or when passing in a narrow street.

⚠ WARNING

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

CAUTION

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.



Manual remote control (if equipped)

To adjust an outside mirror, move the control lever which is located at the forward inside area of the window frame.

OED036047R

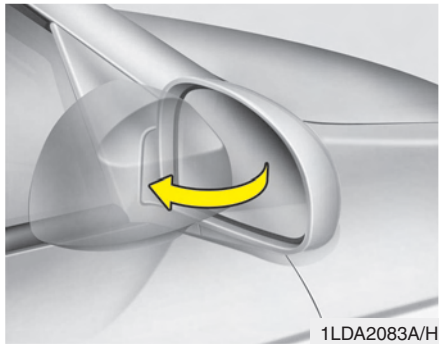
Electric remote control (if equipped)

The electric remote control mirror switch allows you to adjust the position of the left and right outside rearview mirrors. To adjust the position of either mirror, move the lever (1) to R or L 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.

After adjustment, put the lever into neutral position to prevent the inadvertent adjustment.

CAUTION

- ***The mirrors stop moving when they reach the maximum adjusting angles, but the motor continues to operate whilst the switch is depressed. Do not depress the switch longer than necessary, the motor may be damaged.***
- ***Do not attempt to adjust the outside rearview mirror by hands. Doing so may damage the parts.***


1LDA2083A/H

Folding the outside rearview mirror

Manual type

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

Electric type (if equipped)

To fold the outside rearview mirror, depress the button.

To unfold it, depress the button again.

✻ NOTICE

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

Outside rearview mirror heater (if equipped)

The outside rearview mirror heater is actuated in connection with the rear window defroster. To heat the outside rearview mirror glass, push the button ( ) for the rear window defroster.

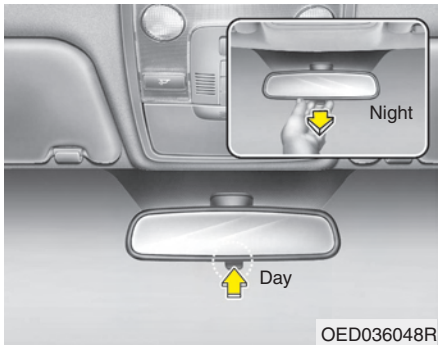
The outside rearview mirror glass will be heated for defrosting or defogging and will give you improved rear vision in inclement weather conditions. Push the button again to turn the heater off. The outside rearview mirror heater automatically turns off after 20 minutes.

Day/night rearview mirror

Adjust the rearview mirror to centre on the view through the rear window. Make this adjustment before you start driving.

CAUTION

Do not place objects in the rear seat or cargo area which would interfere with your vision out the rear window.

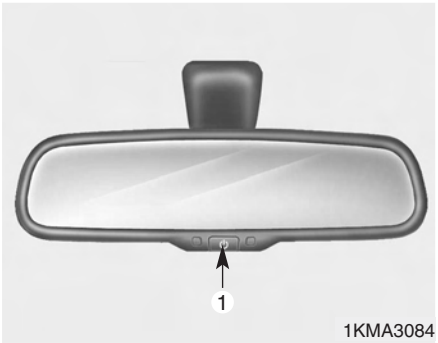


Manual type

Make this adjustment before you start driving and whilst the day/night lever is in the day position.

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

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



Electric type (if equipped)

The sensor mounted in the mirror senses the light level around the vehicle, and through a chemical reaction, automatically controls the headlight glare from vehicles behind you.

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.

When the ignition switch is ON, the automatic- dimming function will turn on automatically.

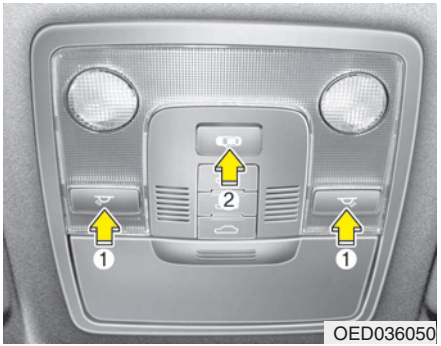
Press the ON/OFF button (1) to turn the automatic- dimming function off. The mirror indicator light will turn off.

Press the ON/OFF button (1) once again to turn the automatic- dimming function on, the mirror indicator light will illuminate.

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 as that may cause the liquid cleaner to enter the mirror housing.

INTERIOR LIGHTS



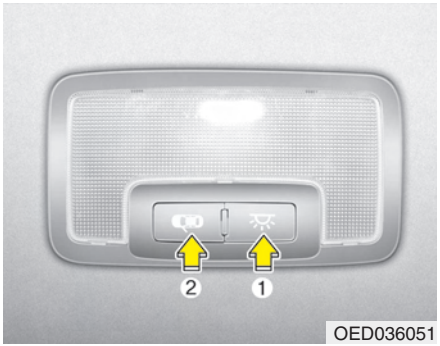
OED036050

Front (if equipped)

(1) The lights are turned ON or OFF by pressing the corresponding switch.

(2) DOOR:

The light turns on when a door is opened or when a door is unlocked by the transmitter (if equipped). Interior light goes out slowly after 30 seconds if the door is closed. However if the ignition switch is ON or all vehicle doors are locked by the transmitter when the door is closed, interior light will turn off even within 30 seconds.



OED036051

Centre (if equipped)

(1) The lights are turned ON or OFF by pressing the corresponding switch.

(2) DOOR:

The light turns on when a door is opened or when a door is unlocked by the transmitter (if equipped). Interior light goes out slowly after 30 seconds if the door is closed. However if the ignition switch is ON or all vehicle doors are locked by the transmitter when the door is closed, interior light will turn off even within 30 seconds.

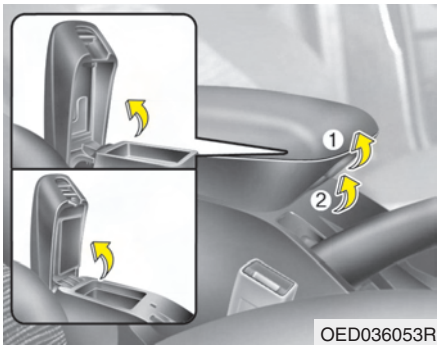
STORAGE COMPARTMENT

✻ NOTICE

- To avoid possible theft, do not leave valuables in the storage compartment.
- Since stored items may move whilst driving, be sure to position them in the storage compartment so that they do not make noise or cause a potential safety hazard when the vehicle is moving.
- Always keep the storage compartment covers closed whilst driving. Do not attempt to place many items in the storage compartment that the storage compartment cover can not close securely.

⚠ WARNING

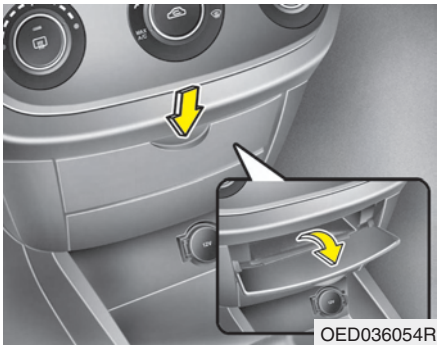
Do not store cigarette lighters, propane cylinders, or other flammable/explosive materials in the vehicle. These items may catch fire and/or explode if the vehicle is exposed to hot temperatures for extended periods.



Centre console storage (if equipped)

To open either of the console storage compartments, pull up on the locking tab 1 or 2.

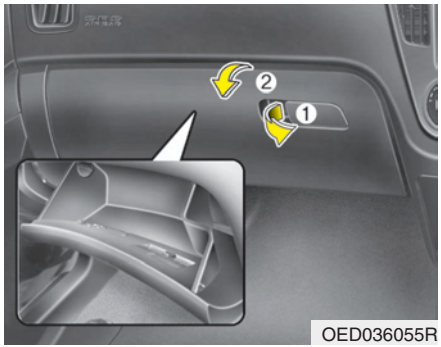
These compartments can be used to store small items required by the driver or front passenger.


OED036054R

Multi Box (if equipped)

To open the cover, push the button.

It can be used for storing small items.



OED036055R

Glove box

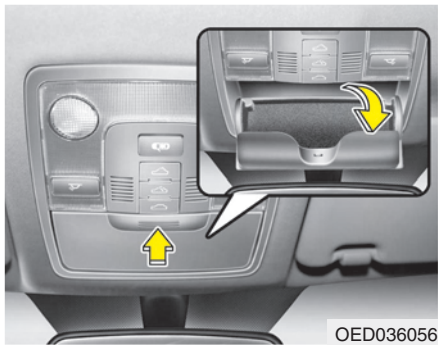
To open the glove box, pull the handle (1) and the glove box will automatically open (2). Close the glove box after use.

If the cool box is equipped, you can keep beverage cans or other items warm or cool using the open/close lever of the vent installed in the glove box.

For details, see chapter 4.

CAUTION

To reduce the risk of injury in case of an accident or sudden stop, always keep the glove box door closed whilst driving.


OED036056

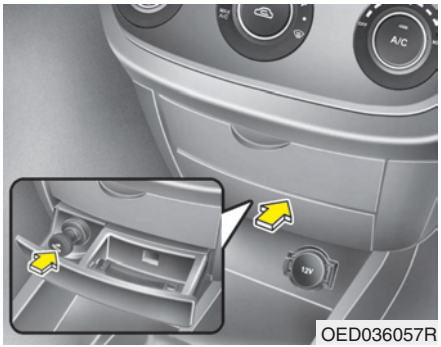
Sunglass holder (if equipped)

A sunglass storage compartment is provided on the overhead console. To open the sunglass holder, press the cover and the holder will slowly open. Place your sunglasses in the compartment door with the lenses facing out. Push to close.

✻ NOTICE

Make sure the sunglass holder is closed whilst driving.

INTERIOR FEATURES



OED036057R

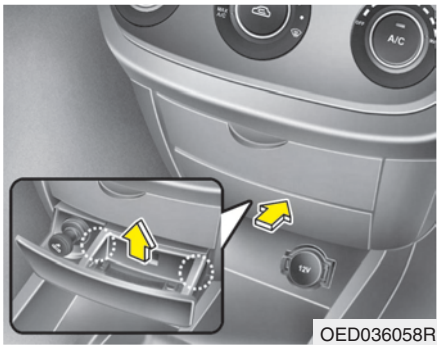
Cigarette lighter (if equipped)

To operate the cigarette lighter, press it in and release it. When it is heated, it automatically pops out ready for use.

If the engine is not running, the ignition switch must be in the ACC position for the lighter to operate.

✻ NOTICE

- **Do not hold the lighter in after it is already heated because it will overheat.**
- **Only a genuine Kia lighter should be used in the cigarette lighter socket. The use of plug-in accessories (shavers, hand-held vacuums, and coffee pots, for example) may damage the socket or cause electrical failure.**
- **If the lighter does not pop out within 30 seconds, remove it to prevent overheating.**



OED036058R

Ashtrays (if equipped)

To use the ashtray, press the front face and release it to allow the cigarette lighter and ashtray to slowly extend from centre panel.

To remove the ashtray, grasp the ashtray bucket and carefully pull it out.

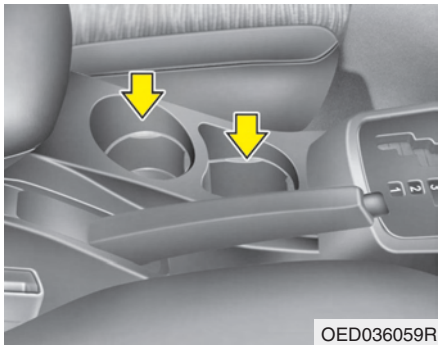
⚠ WARNING - Ashtray use

- **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.**

Cup holder

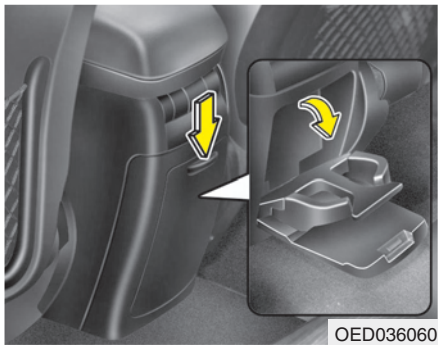
⚠ WARNING - Hot liquids

- **Do not place uncovered cups of hot liquid in the cup holder whilst the vehicle is in motion. If the hot liquid spills, you could be burned. Such a burn to the driver could cause a 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 insecure bottles, glasses, cans, etc., in the cup holder whilst the vehicle is in motion.**



Front

Cups or small beverage cans may be placed in the cup holders.

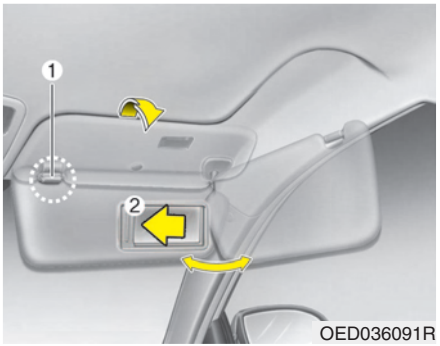


Rear (if equipped)

To use the cup holders in rear seat, push the button. Push the cover to close after use.

✻ NOTICE

Do not place heavy cups or cans in cup holders. Cup holders could be damaged.



Sunvisor

Use the sunvisor to shield direct light through the front or side windows.

To use a sunvisor, pull it downward.

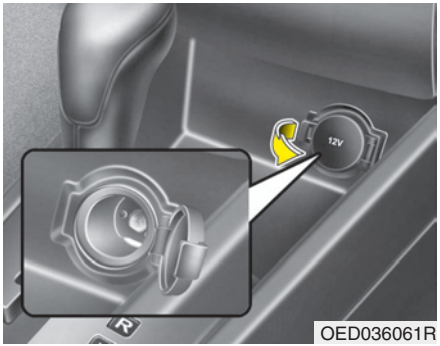
To use a sunvisor for a side window, pull it downward, unsnap it from the bracket (1) and swing it to the side.

To use the vanity mirror, pull down the visor and open the mirror cover (2).

The vanity mirror lamp (if equipped) will turn off after closing the mirror cover or returning the sunvisor to its original position.

✻ NOTICE

- **Close the vanity mirror cover securely and return the sunvisor to its original position after use.**
- **If the vanity mirror lamp (if equipped) stays on, it could result in battery discharge and possible sunvisor damage.**

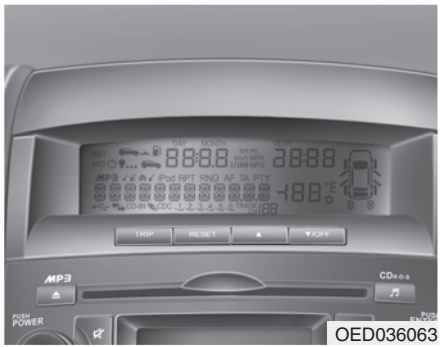


Power outlet

The power outlets are 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.

✻ NOTICE

- **Use the power outlet when the engine is running, and remove a plug from the power outlet after using the electric appliance. Using when the engine stops or remaining the electric appliance with plugged in for many hours may cause the battery to be discharged.**
- **Only use the electric appliances which are less than 12V and 10A in electric capacity.**
- **Adjust the air-conditioner or heater to the lowest operation level when you have to use the power socket whilst using air-conditioner or heater.**
- **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.**



OED036063

Digital clock (if equipped)

Whenever the battery terminals, ROOM fuse, or Power Connect are disconnected, you must reset the time.

For details, see trip computer on chapter 4.

OED036062R

Aux and USB port (if equipped)

If your vehicle has an aux and/or USB(universal serial bus) port, you can use an aux port to connect audio devices and an USB port to plug in an USB.

✻ 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.

SUNROOF (IF EQUIPPED)

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

(1) Slide button

(2) Tilt button

(3) Close button

The sunroof can only be opened, closed, or tilted when the ignition switch is in the ON position.

✻ NOTICE

- **In cold and wet climates, the sunroof may not work properly due to freezing conditions.**
- **After washing the car or after there is rain, be sure to wipe off any water that is on the sunroof before operating it.**

CAUTION

Do not continue to press the sunroof control button(s) after the sunroof is in the fully open, closed, or tilt position(s). Damage to the motor or system components could occur.

✻ NOTICE

The sunroof cannot slide when it is in the tilt position nor can it be tilted whilst in an open or slide position.

⚠ WARNING

Never adjust the sunshade whilst driving. This could result in loss of control and an accident that may cause death, serious injury, or property damage.

Sliding the sunroof

To open the sunroof (autoslide feature), press the slide button (1) on the overhead console for more than 0.5 second.

The sunroof will slide to the recommended open position (about 50mm before the maximum slide open position).

To stop the sunroof sliding at any point, press any sunroof control button.

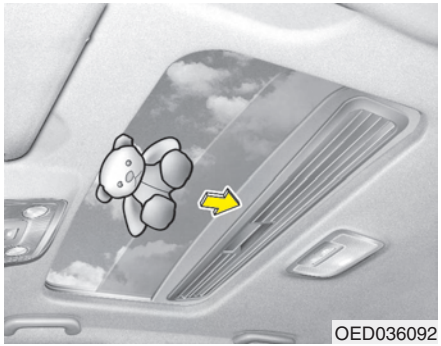
To open the sunroof to the maximum slide open position, press the slide button (1) once again and hold it until the sunroof slide all the way open.

✻ NOTICE

To reduce wind noise whilst driving, we recommend you to drive at the recommended postion (about 50mm before the maximum slide open positon).

To close the sunroof (autoslide feature), press the close button (3) on the overhead console for more than 0.5 second.

The sunroof will slide all the way close. To stop the sunroof sliding at any point, press any sunroof control button.



Automatic reversal

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

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.

OED036064

Tilting the sunroof

To open the sunroof (autotilt feature), press the tilt button (2) on the overhead console for more than 0.5 seconds.

The sunroof will tilt all the way open. To stop the sunroof tilting at any point, press any sunroof control button.

To close the sunroof, press the close button (3) on the overhead console and hold it until the sunroof is closed.

OED036093

Sunshade

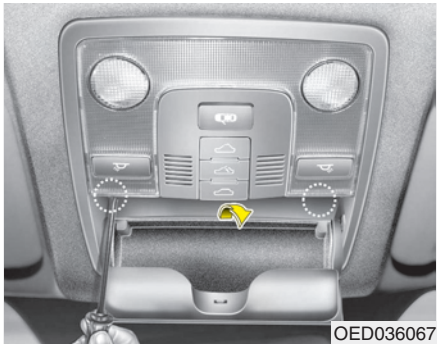
The sunshade will be opened with the glass panel automatically when the glass panel is slid. Close it manually if you want it closed.

⚠ WARNING

- **Be careful that someone's head, hands and body are not trapped by a closing sunroof.**
- **Do not extend face, neck, arms or body outside through the sunroof opening whilst driving.**
- **Make sure hand and face are safely out of the way before closing a sunroof.**

CAUTION

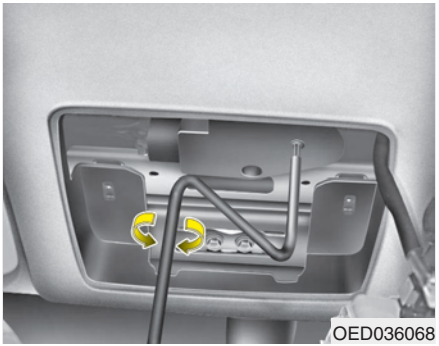
- ***Periodically remove any dirt that may accumulate on the guide rail.***
- ***If you try to open the sunroof when the temperature is below freezing or when the sunroof is covered with snow or ice, the glass or the motor could be damaged.***
- ***The sunroof is made to slide together with sunshade. Do not leave the sunshade closed whilst the sunroof is open.***


OED036067

In case of an emergency

If the sunroof does not open electrically:

1. Open the sunglass holder.
2. Remove the two (2) screws, and then remove the overhead console.


OED036068

3. Insert the emergency handle (provided with the vehicle) and turn the handle clockwise to open or counterclockwise to close.

Resetting the sunroof

Whenever the vehicle battery is disconnected or discharged, or you use the emergency handle to operate the sunroof, you must reset your sunroof system as follows:

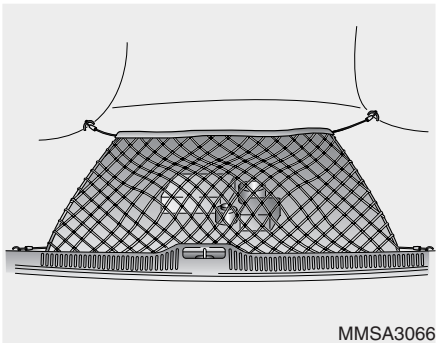
1. Turn the ignition switch to the ON position.
2. Set the sunroof to the maximum TILT-UP position using the corresponding sunroof switch.
3. Release the tilt button.
4. Press and hold the tilt button (for more than 10 seconds) until the sunroof has returned to the original position of tilt after it is raised a little higher than the maximum tilt position. Then, release the button.
5. Press and hold the tilt button (for more than 5 seconds) until the sunroof is operated as follows;

   TILT DOWN → SLIDE OPEN → SLIDE CLOSE

   Then, release the button.

When this is complete, the sunroof system is reset.

LUGGAGE NET (IF EQUIPPED)



MMSA3066

To keep items from shifting in the boot, you can use the four rings located in the boot to attach the cargo net.

✻ NOTICE

Do not put fragile, bulky or an excessive quantity of items into luggage net. They could be damaged.

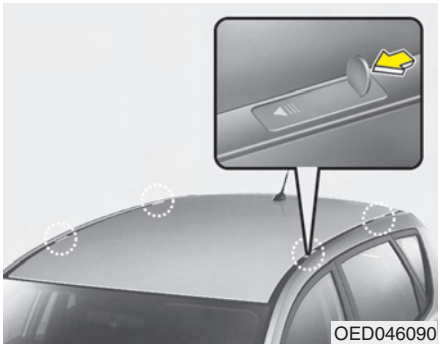
⚠ WARNING

To avoid eye injury, DO NOT overstretch the netting.

ALWAYS keep face and body out of recoil path of the net, in case of strap.

DO NOT use the luggage net when strap has visible signs of wear or damage.

MOUNTING BRACKET FOR ROOF CARRIER


OED046090

To install or remove a roof carrier, you can use the mounting bracket and cover on the roof.

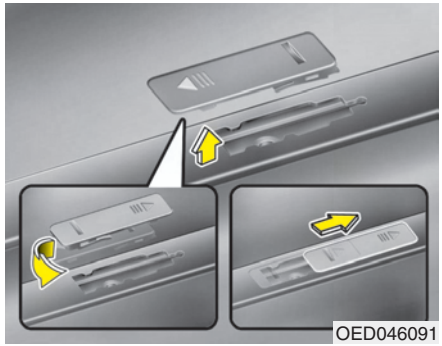
When you install a roof carrier, use the following procedure.

1. Insert a slim tool(coin or flat blade driver) into the slot and slide the cover toward the arrow on the cover.

⚠ WARNING

Use a coin or flat blade driver when you remove the roof carrier cover.

If you use your fingernail, it may damage your fingernail.


OED046091

2. Rotate the cover half way and insert the cover on the roof hole as the illustration.

✻ NOTICE

To prevent loosing the roof carrier cover, install the cover on the roof before you install the roof carrier.

3. After using the roof carrier, install the cover back on the roof in the reverse order.

ANTENNA

Roof type antenna

If your vehicle has an audio system, an amplifying antenna is installed in your vehicle.

This antenna can be removed from the vehicle when needed such as washing the vehicle.

To remove the antenna, turn it counterclockwise.

To install the antenna, turn it clockwise.

✻ NOTICE

- **Be sure to remove the antenna before washing the car in an automatic car wash or it may be damaged.**
- **When reinstalling your antenna, it is important that it is fully tightened to ensure proper reception.**

AUDIO SYSTEM

General information

Notes on operating instructions

The following reading aids are used to simplify these operating instructions:

☞ asks you to perform an action
✓ shows the unit's reaction
✎ provides extra info
❑ identifies a list

⚠ WARNING

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

CAUTION

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

Class 1 laser product

CAUTION

Any inappropriate use of the device may expose the user to invisible laser rays which exceed the limits for Class 1 laser products.

⚠ WARNING

Don't use a cellular phone when you are driving. You must stop at a safe place to use a celluar phone.

⚠ WARNING

When driving your vehicle, be sure to keep the volume of the unit set low enough to allow you to hear sounds coming from the outside.

CAUTION

- ***Do not place beverages close to the audio system. The audio system mechanism may be damaged if you spill them.***
- ***Do not strike or allow anything to impact the audio system, damage to the system mechanisms could occur.***

Safety instructions

⚠ WARNING

Make all inputs via the remote control only when the vehicle is stationary, or have the passenger make them. Otherwise, you may endanger the occupants and other road users.

⚠ WARNING

Avoid inserting any foreign objects into the slot of this player. Failure to observe this may cause malfunction due to the precise mechanism of this unit.

⚠ WARNING

Keep the volume level low enough to be aware of road and traffic conditions.

⚠ WARNING

Do not open covers and do not repair yourself. Refer servicing to qualified personnel.

Notes on USB stick (thumb drive)

⚠ WARNING

- **We strongly recommend only using USB sticks (thumb drives) of well-known manufacturers.**
- **On no account must other USB devices such as hard discs or other digital equipment or multi plug USB hub be connected to the USB hub. Connecting other devices can cause malfunction or even destroy the audio equipment.**
- **Avoid using the USB memory when it might hinder your safety driving.**

(Continued)

(Continued)

- **It is possible that noise is heard during playback when using the AUX-IN together with the power outlet due to system-related not a malfunction. If this happens, use the power source of the AUX device.**
- **In rare cases it is possible that an USB stick (thumb drive) is not recognized by the unit or may cause a malfunction. Please only use USB sticks that comply with the USB thumb drive specifications.**

RDS (Radio Data System)

Many VHF stations transmit RDS information.

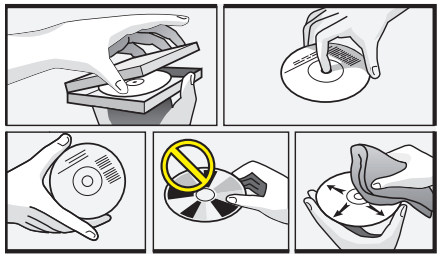
The radio evaluates the RDS telegram and offers the following advantages:

- ❑ PS (Program Service name): Display of station name.
- ❑ Radio text: Display of additional infomation concerning the radio station.
- ❑ PTY (Program TYpe): Station selection by program type.
- ❑ AF (Alternative Frequency): Automatic retuning to best alternative frequency.
- ❑ TA (Traffic Announcement): Traffic announcements.
- ❑ EON (Enhanced Other Networks): Automatic fade-in of traffic announcements onother stations.

Notes on CD formats

The following CD formats are supported by the CD player:

- ❑ CD Audio (CD-DA in accordance with the Red Book Standard)
- ❑ CD-R/RW (in accordance with Orange Book, part 2/3)
- ❑ Multisession CD (in accordance with multisession CD specification 1.0)



Handling CDs

Avoid leaving fingerprints on the CD when removing it.

Always store map and audio CDs in their protective covers.

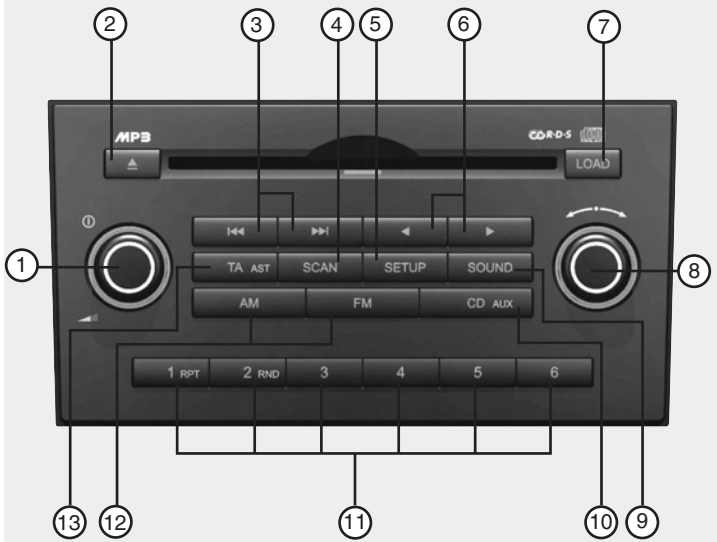
Always ensure that CDs are clean and dry before inserting.

Protect CDs from heat and direct sunlight.

Cleaning the unit

Do not clean using cleaning fluid, alcohol or other solvents. Use only a damp cloth.

Control elements



1 ⏻ . . . . . Press: Switching on/ off
. . . . . Turn: Volume control
2 ⏏ . . . . . CD eject button
3 ⏮ / ⏭ . . . . FM: Previous or next station
CD: Previous or next track
CDC: Previous or next track
4 SCAN . . . . . FM: Frequency scans
CD/CDC: Scan first 10 secs of each track of the CDs.
5 SETUP . . . . . Opens the setup menu containing setting at each feature.
6 ◀ / ▶ . . . . . MP3 only: change the current playback folder.
7 LOAD* . . . . . CDC: Load CDs into the unit.
8 . . . FM/CD/CDC: Rotary knob to manually seek up/down.
SETUP: To adjust settings.
9 SOUND . . . . . Opens the menu for the sound settings.
10 CD (AUX) Short press: Change the current source to CD mode or USB (if connected).
Long press: Auxiliary (if connected)
11 1 to 6 . . . . . FM/CD/CDC: Press to tune to desired stored station or to select desired disc in CDC.
RPT . . . . . CD/CDC: To activate repeat track
RND . . . . . CD/CDC: To activate random track
12 FM/AM . . . . . Change current source to FM/AM mode.
13 TA (AST) . . . . . Short press: to activate TA.
Long press: to activate Autostore (Tuner)

* Depend on version

Inserting and removing CDs

Inserting a CD

☞ Insert the CD into the drive (printed side up).

✎ For audio/ MP3 CDs, playback starts automatically.

Removing a CD

☞ Press the ⏏ button and carefully remove the CD.

Switching on/ off

☞ Press the ⏻ button to switch the unit on or off.

Switching on and off with the ignition key

If the unit is switched on, it can be switched off and on automatically by removing or inserting and turning the ignition key.

Automatic switch off

If the unit was turned on using the ⏻ button with the ignition off, it automatically switches itself off after a set time.

Volume

⚠ WARNING

When setting the volume, please make sure that traffic noises (horns, sirens, emergency vehicles, etc.) are still audible.

☞ Turn the ◢ button to set the volume.

Menu operation

The central element for operating the menus is the knob.

☞ Turn the knob to select a menu option.

Sound settings

☞ Press the SOUND button.

☞ Press SOUND button repeatedly to access the following submenus.

☞ Turn the knob to select desired settings.

☞ To exit, press SETUP, CD, FM or AM buttons.

The following options are available:

Bass

☞ Set the required bass level setting between -10 to +10.

Treble

☞ Set the required treble level setting between -10 to +10.

Balance

☞ Set the required volume balance between L10 to R10.

Fader

☞ Set the required volume balance between R10 to F10.

✎ Fader level is only transmitted via the front loudspeakers, the rear signals are muted.

Volume settings

☞ Adjusts the volume level between its minimum and maximum. Settings: 0 ... 35

Equalizer

Set the frequency response of the selected sound sources with the 5-band equalizer (EQ OFF, JAZZ, POP, CLASSICAL, ROCK)

☞ Press and hold SOUND button.

☞ Turn the knob to select desired setting.

Listening to radio

If the unit is not yet in radio mode:

☞ Press FM or AM.

✎ The unit switches to radio mode.

Select waveband

In radio mode:

☞ Press FM or AM to select the desired waveband.

Available wavebands:

- ❑ FM 123: Memory for up to 18 manually programmable FM stations.
- ❑ FM AST: Memory for up to 6 automatically stored FM stations.

Selection of MW

- ❑ MW 1: Memory for up to 6 manually programmable MW stations.
- ❑ MW AST: Memory for up to 6 automatically stored MW stations.
- ❑ LW: Memory for up to 6 manually programmable LW stations.

Autostore

Automatic storage of strong stations in the current waveband (FM AST, AM AST and MW AST).

☞ Press and hold AST button to activate/deactivate this function.

✎ The maximum possible number of stations for each band is 6. Execute “Autostore” to update the list of the stations with strong reception (e.g. when driving through different receiving areas).

Automatic search

☞ Press the ⏮ or ⏭ button for the previous/next station receivable station in the currently selected waveband.

✓ It will always starts to search for strong signal station at LOCAL search level. If no station can be found at LOCAL level, it will search at DISTANCE level.

☞ To exit, press ⏮ or ⏭ button respectively.

Manual seek

Manual reception frequency setting.

☞ Rotate the knob clockwise or anti-clockwise to increment or decrement the frequency.

Frequency Scan

Radio will tune to each available station from the current waveband for 10 seconds before scanning for the next higher frequency station.

☞ Press SCAN button to activate/deactivate the scan function.

Station memory

In the FM 123 waveband there are 18 station memories, in the “123” wavebands for MW and LW there are 6 station memories each

(also see “Select waveband”).

Storing preset stations

☞ Tune to the desired station.

☞ Press and hold one of the preset (1 - 6) buttons until you hear a confirmation tone.

✓ The station selected is stored on the preset button.

✎ You can also select a station in a different waveband (e.g. FM AST or FM 123) and then store this on one of the preset buttons.

Recalling preset stations

Tune to the desired station.

☞ Select the button (1 - 6) for memorized station.

Radio Data System (RDS) on FM

Many FM stations broadcast RDS information.

The RDS provide you with information of the following:

Traffic programme (TP)

Switch this function on if you want to hear traffic announcements. You will also hear traffic announcements whilst a CD/ MP3 is playing.

☞ Press the TA button to enable/disable funtion.

☞ Select SCAN to activate 10 secs scan for TP stations.

☞ Select ⏮ or ⏭ to search for TP stations.

☞ Set the required volume for the traffic announcements in the SETUP menu.

✓ TA symbol will be displayed when Traffic info has been activated.

If no TP stations found

If no TP stations are found the unit will remain at current station with display 'No TA/TP' for 3 seconds. If TP signal of tuned station is lost for 30 seconds, it will perform an automatic TP seek for the next TP station. If no TP station is found, the unit will remain at current station with display 'TP LOST' for 3 seconds.

✓ TP seek will be performed periodically every 30 secs until TP station is found.

Traffic announcements from other stations – EON

With the RDS function EON (Enhanced Other Networks) you will hear traffic announcements even if the set station does not provide this service but is operating on a network with other stations.

✎ If you have activated Traffic info, stations with EON will be treated like traffic stations, i.e. the search will also stop at these stations.

✎ When a traffic announcement is made, the unit switches to a traffic information station linked to EON. After the announcement, the unit returns to the previous programme.

Alarm Messages

(PTY ALARM / EON network)

The unit automatically receives emergency messages made by the broadcaster.

✓ Display shows 'ALARM'.

☞ Press TA button to stop current announcement message and it will not disable alarm functions.

Alternative Frequency

This function enable or disable the automatic tuning to an alternative frequency with the best reception condition.

✓ AF symbol will be displayed when AF feature has been activated at the SETUP menu.

PTY search (FM only)

Searching for stations by programme type.

Select the required programme type from the list.

✓ The search begins and finds the nearest station that transmits this programme type.

PI seek

This function performs an automatic seek for the best-received frequency of a RDS station with a specific PI-code.

✓ System will trigger to search for a better quality AF at recall/preset station.

✓ The unit will display 'PI SEARCH'.

Listening to CD

Notes on CD

- This CD player is suitable for 12cm disc and 8cm disc with adaptor only and can read both audio and MP3 format CD.
- Please do not use irregular shaped CD.
- CD-Rs or CD-RWs can generally be played. Due to varying quality of CDs, surface condition of the disc, as well as the performance and condition of the CD writer, certain CD-R/CD-RW CD may not operate normally on this unit.

CD playback

Starting/Stopping a disc

☞ Press CD button to begin.

✓ Playback will stop when another source becomes active.

For CDP: ths disc will play back from the beginning of the first file.

For CDC: the unit will play the next available disc if there is more than 1 discs.

Ejecting a disc

☞ Press the ⏏ button.

☞ Remove the disc from the disc slot.

Previous/Next Track

☞ Press the ⏮ or ⏭ buttons to select previous or next song track OR

☞ Rotary knob in clock-wise direction to seek up and anti-clockwise direction to seek down.

Fast Forward/Reverse

☞ Press and hold ⏮ or ⏭ buttons to for fast foward and reverse.

Random Track

☞ Press RND button to activate/ deactivate track random.

Repeat Track

☞ Press RPT button to activate/ deactivate track repeat.

Scan Track

☞ Press SCAN button to activate/ deactivate track scan.

✓ CD plays the first 10 seconds of the song.

Listening to MP3

Notes on MP3 files

The following MP3 files are supported by the CD player:

- ❑ Files conform with MPEG1/2 or 2.5-Layer 3.
- ❑ The format of the CD must be ISO 9660 Level 1 or Level 2 or Joliet with sector format in Mode 1 or Mode 2 Form 1. Other formats cannot be played reliably.
- ❑ Up to maximum number of folders and number of files is 345, maximum number of folders is 254 (total number of characters displayed are 24).
- ❑ Bit rate: Maximum of 320 kbit/s, constant or variable.
- ❑ Sampling frequency: Maximum of 48 kHz.
- ❑ Text display: ID3 tag V1 and ID3 tag V2. MP3 tracks can contain addition information such as artist, track and album names (ID3 tags with maximum not more than 12 characters). Characters other than uppercase/lowercase letters (“Aa to Zz”) and underscore (“_”) may not be displayed.
- ❑ Only files with .mp3 extension are recognized as MP3 files.
- ❑ The unit may not play the first track in the order that you wrote them to the disc.
- ❑ The unit plays only the first session if the disc contains both CD audio tracks and MP3 files.
- ❑ When playing a disc of 8k bps or variable bit rate (VBR), the elapsed playing time in the display window may not be correct.
- ❑ Make sure that a MP3 CD-R/CD-RW is burned that is formatted as a data disc and NOT as an audio disc.
- ❑ MP3 files are not compatible with packet write data transfer.
- ❑ The MP3 symbol will be shown in the display if an MP3 is being played.

Starting/Stopping playback

☞ Press CD button to start playback.

✓ Playback will stop when another source becomes active.

Previous/Next Folder

☞ Press the ◀ or ▶ buttons to select previous or next folder.

Previous/Next Track

☞ Press the ⏮ or ⏭ buttons to select previous or next song track OR

☞ Rotary in clockwise direction to go to next track and anticlockwise direction to previous track.

Fast Forward/Reverse

☞ Press and hold ⏮ or ⏭ buttons to for fast foward and reverse.

Random

☞ CDC mode*: Press and hold RND button to activate or deactivate random in the tracks.

☞ CDP mode: Press RND button to activate or deactivate random in the tracks.

Repeat

☞ CDC mode*: Press and hold RPT button to activate or deactivate repeat track.

☞ CDP mode: Press RPT button to activate or deactivate repeat tracks.

Scan

☞ Press the SCAN button to activate or deactivate scan track.

✓ CD plays the first 10 seconds of the song.

✓ When a folder ends: scanning continues with the first file of the next folder.

✓ When a CD ends: scanning continues with the first file of the first folder.

Setting Text

To retrieves text information from the MP3 files for display.

☞ Press and hold SETUP button in MP3 mode to set information in available sequence Filename/ Playtime/Title/Artist/Album/ Directory Name.

*** CD Changer version only**

CDC mode *

(CD Changer version only)

☞ To load single disc: Press LOAD button.

☞ To load all discs: Press and hold LOAD button.

☞ Insert the disc with printed side facing up. CDC playback begins.

Ejecting a disc

☞ To eject single disc: Press the ⏏ button.

☞ To eject all disc: Press and hold ⏏ button.

☞ Remove the disc from the disc slot.

Starting/Stopping playback

☞ Press CD button to start playback.

✓ Playback start from the current disc position in the magazine.

Direct disc access

☞ Press button 1-6 to play the desired CD.

✓ The CDs in the CD changer are displayed as “CDC 1, 2, 3, 4, 5, 6” etc.

Previous/Next Track

☞ Press the ⏮ or ⏭ buttons to select previous or next song track OR

☞ Rotary knob in clockwise direction to go to next track and anticlockwise direction to previous track.

Fast Forward/Reverse

☞ Press and hold ⏮ or ⏭ buttons to for fast foward and reverse.

Random Track

☞ Press and hold RND button to activate or deactivate random in the tracks.

Repeat Track

☞ Press and hold RPT button to activate or deactivate repeat track.

Scan Track

☞ Press the SCAN button to activate or deactivate scan track.

✓ CD plays the first 10 seconds of the song.

✓ When a last track of CD ends: scanning continues with the first track of current disc.

OED036062R

☞ Lift to open the lid.

☞ Please keep lid close when not in use.

USB Hub & Auxiliary (if equipped)

Notes of USB Hub

Due to constant changes of USB products in the market and their respective Software, it can be possible that some of the USB devices are not compatible with this head unit.

It supports the formats of files:

- ❑ MP3
- ❑ WMA
- ❑ OGG

☞ Press CD button to start playback.

Previous/Next Folder

☞ Press the ◀ or ▶ buttons to select previous or next folder.

Previous/Next File

☞ Press the ⏮ or ⏭ buttons to select previous or next song file OR

☞ Rotary knob in clockwise direction to go to next track and anticlockwise direction to previous file.

Fast Forward/Reverse

☞ Press and hold ⏮ or ⏭ buttons to for fast foward and reverse.

Random File

☞ CDC*: Press and hold RND button to activate or deactivate random in the file.

☞ CDP: Press RND button to activate or deactivate random in the file.

Repeat File

☞ CDC*: Press and hold RPT button to activate or deactivate repeat file.

☞ CDP: Press RPT button to activate or deactivate repeat file.

Scan File

☞ Press the SCAN button to activate or deactivate scan file.

✓ CD plays the first 10 seconds of the song.

✓ When a last track of CD ends: scanning continues with the first track of current disc.

Setting Text

To retrieves text information from the MP3 files for display.

☞ Press and hold SETUP button in MP3 mode to set information in available sequence Filename/ Playtime/Title/Artist/Album/Direct ory Name.

Auxiliary In

You can input Aux in to this unit.

☞ Press and hold CD button when an auxiliary is connected.

✓ Playback will stop when another source becomes active.

*** CD Changer version only**

Steering wheel remote control

Dual steering wheel remote control*

CH ▲/ CH ▼ . . . . Radio mode : Select preset up/down from the preset list of the current waveband

CDC : Select next or previous disc

Seek ⏮ / ⏭ . . . Radio mode : Select previous/next station

CD/CDC/USB : Select previous/next track

Mute . . . . . Muting the system

🔈 + / - . . . . . Volume control up / down

Mode . . . . . Switchover between TUNER (FM)/CD/USB/AUX mode

Single steering wheel remote control*

Seek ⏮ / ⏭ . . . Radio mode: Select previous/next station

CD/CDC/USB: Select previous/next track

🔈 + / - . . . . . Volume control up / down

CH ▲. . . . . Radio mode: Select Preset up

CDC: Next disc

Mode. . . . . Switchover between TUNER (FM)/CD/USB/AUX mode

Note : To enable the following functions to be controlled by the steering wheel keys, please ensure there is CD in the unit and USB/AUX is connected.

* Depend on version

Setup menu

In the setup menu you can change to your preferred settings.

☞ Press the SETUP button to enter setup menu.

☞ Press SETUP button repeatedly to access the following sub-menus.

- START VOL
- TA VOL
- SDVC
- PTY
- REGIONAL
- AF
- MP3
- SECURITY CODE

☞ Use the knob to select desired settings.

☞ To exit, press SETUP, CD, FM or AM buttons.

The following options are available:

Max.start vol.

Setting the maximum volume when the unit is switched on.

Settings: 5 ... 25

✓ When you switch on the unit, the volume will always be set to this level if the volume was louder than this level when you switched off.

TA vol.

Setting the volume for traffic announcement.

Settings: 5 ... 25

SDVC Adjustment for speed-dependent volume control.

Settings:

✓ 1 ... 5: Small (1) to large (5) increase in volume on acceleration.

✓ 0: OFF, no speed-dependent volume control.

PTY search

Searching for stations by programme type.

✓ None: No PTY

✓ 1 ... 29: PTY programme type

✓ 30 ... 31: Cannot be selected. For emergency test and alarm only.

☞ Press the knob once to enter the selected PTY.

✓ The search begins and finds the nearest station that transmits this programme type.

Regional

Setting the RDS regional function.

Settings:

✓ ON: The radio only tunes to alternative frequencies of the selected station which transmit the same regional programme.

✓ OFF: The radio tunes to all the alternative frequencies of the selected station even if different regional programmes are transmitted.

AF retuning

Setting the RDS AF function.

Settings:

- ✓ ON: Automatic retuning to alternative frequencies for the same station.
- ✓ OFF: No automatic retuning to alternative frequencies. The radio keeps to the receiving frequency set.

MP3 Display

Activating/ deactivating text display with MP3 playback. The text appears in the middle line of the screen.

Settings:

- ❑ FILENAME: The filename the user defined
- ❑ PLAYTIME: Song duration
- ❑ TITLE: Song title
- ❑ ARTIST: Artist of the song
- ❑ ALBUM: Song album
- ❑ DIRECTORY NAME: Song directory

Security code feature

Battery reconnection

In any event when the battery of the car is being disconnected and reconnected again, you will be prompted to enter your password

☞ Enter '0000' (Default code)

User is allowed to enter the correct password twice. If the password is not entered correctly after the second attempt, the unit will be locked. The unit has to be left on for 1 hour. After that, user can re-enter the password again.

To change the security code:

☞ Press the SETUP button to enter setup menu.

☞ Press the SETUP button repeatedly to access the submenus ("SECURITY CODE")

☞ Press the knob to select SECURITY CODE.

☞ Enter saved password.
(Refer 'To enter PASSWORD ')

☞ Enter NEW password
(Refer 'To enter PASSWORD')

. In the event when no new password has been set, the default password will remain to be '0000'

To enter PASSWORD:

☞ Turn the knob to change the digits of security code.

☞ Press knob once to go to next digit.

☞ Repeat this until you have finished entering 4 digits.

☞ To confirm new password, press and hold knob button.

✓Your new password has been saved.

In the event if you have forgotten the password and the unit is 'locked', please approach your car authorised dealers for assistance.

Troubleshooting

In rare instances, your radio may not function the way you expect it to. Before calling the service department, please read the operating instructions thoroughly and go through the following check list; it may be possible to quickly remedy an apparent malfunction.

> Symptoms
• Possible cause / remedy

General

> Audio/ MP3 rejected by the unit.
• The CD may be dirty.
• Clean the CD with a damp cloth
• The CD does not comply with the CD player's specifications.
• See "Notes on audio and MP3 CDs"

> The operating panel generates some heat.
• No error. The unit feels warm.
> The volume decreases automatically. The volume can no longer be increased.
• An integrated safety circuit prevents the temperature in the unit from exceeding a certain value.
• Allow the unit to cool down (set low volume).

Radio

> Poor or no radio reception.
• Check if the antenna is completely and correctly connected.
• Check whether the supply voltage's negative pole (brown cable) is correctly connected to earth (vehicle chassis).
> FM ABC and FM AST station list has only few or no stations.
• Antenna (disc antenna) obscured, antenna rod bent or antenna defective.
• Please arrange for an authorised dealer to check the antenna.
> The frequency instead of the station name is displayed.
• The unit is tuned to a station that does not transmit RDS signals or the transmitter is too weak.

> The required station cannot be tuned to using automatic search.
• The desired station is too weak.
• Set desired station manually (manu. tuning).
• Check whether the antenna is completely and correctly connected.

> No traffic announcements are switched through (during CDC playback).
• Activate the traffic announcement by pressing TA button

CDC / MP3

> Distorted sound/ skips during CD play.

- Player cannot read CD. CD is damaged or soiled.

> CD player does not work.

- In cold weather conditions, condensation may occur on the laser.
- With the set on, wait for 5 minutes until the condensation evaporates.

> No sound during CD playback.

- Some CDs contain multimedia data which is not recognised by the unit.
- Advance the tracks until music is heard.
- See “Notes on audio and MP3 CDs”.

> Problems with new copy-protected audio CDs.

- Some copy protection procedures are incompatible with accepted standards for audio CDs. This is not a fault on the unit
- See “Notes on audio and MP3 CDs”.

Ignition switch / 4-3
Starting the engine / 4-5
Manual transaxle / 4-7
Automatic transaxle / 4-10
Brake system / 4-16
Steering wheel / 4-22
Cruise control system / 4-24
Electronic stability program / 4-28
Instrument cluster / 4-32

Driving your vehicle 4

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⚠ 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 colourless, 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 car, have the exhaust system checked as soon as possible by an authorised KIA dealer.

- **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 boot 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.

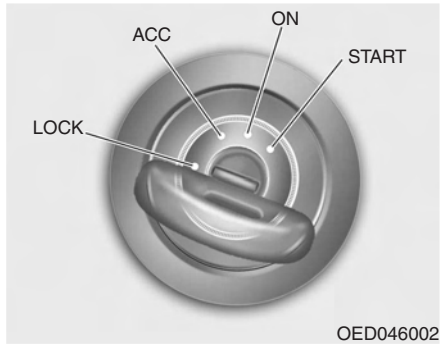
To assure proper operation of the ventilation system, be sure the ventilation air intakes located just in front of the windscreen are kept clear of snow, ice, leaves or other obstructions.

IGNITION SWITCH

OED046001

Illuminated ignition switch (if equipped)

Whenever a door is opened, the ignition switch will be illuminated for your convenience, provided the ignition switch is not in the ON position. The light will go off approximately 30 seconds after closing the door or when the ignition switch is turned on.



OED046002

Ignition switch and anti-theft steering column lock

Ignition switch position

LOCK

The steering wheel locks to protect against theft. The ignition key can be removed only in the LOCK position. When turning the ignition switch to the LOCK position, push the key inward at the ACC position and turn the key toward the LOCK position.

ACC (Accessory)

The steering wheel is unlocked and electrical accessories are operative.

ON

The warning lights can be checked before the engine is started. This is the normal running position after the engine is started.

Do not leave the ignition switch ON if the engine is not running to prevent battery discharge.

START

Turn the ignition key to the START position to start the engine. The engine will crank until you release the key; then it returns to the ON position. The brake warning lamp can be checked in this position.

✻ NOTICE

If difficulty is experienced in turning the ignition key to the START position, turn the steering wheel right and left to release the tension and then turn the key.

⚠ WARNING - Ignition key

- **Never turn the ignition switch to LOCK or ACC whilst the vehicle is moving. This would result in loss of directional control and braking function, which could cause an immediate 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 1st gear for manual transaxle or P (Park) for automatic transaxle, set the parking brake fully and shut the engine off. Unexpected and sudden vehicle movement may occur if these precautions are not taken.**

(Continued)

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- **Never reach for the ignition switch, or any other controls through the steering wheel whilst the vehicle is in motion. The presence of your hand or arm in this area could cause a 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 whilst 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 and accelerator pedal, and the clutch (if equipped).

Starting the petrol engine

1. Make sure the parking brake is applied.
2. **Manual Transaxle** - Depress the clutch pedal fully and shift the transaxle into Neutral. Keep the clutch pedal depressed whilst turning the ignition switch to the start position.

   Automatic Transaxle - Place the transaxle shift lever in P (Park). Depress the brake pedal fully.

   You can also start the engine when the shift lever is in the N (Neutral) position.
3. Turn the ignition switch to START and hold it there until the engine starts (a maximum of 10 seconds), then release the key.
4. In extremely cold weather (below -18°C / 0°F) or after the vehicle has not been operated for several days, let the engine warm up without depressing the accelerator.

Whether the engine is cold or warm, it should be started ***without depressing the accelerator.***

CAUTION

If the engine stalls whilst you are in motion, do not attempt to move the shift lever to the P (Park) position. If traffic and road conditions permit, you may put the shift lever in the N (Neutral) position whilst the vehicle is still moving and turn the ignition switch to the START position in an attempt to restart the engine.

CAUTION

Do not engage the starter for more than 10 seconds. If the engine stalls or fails to start, wait 5 to 10 seconds before re-engaging the starter. Improper use of the starter may damage it.

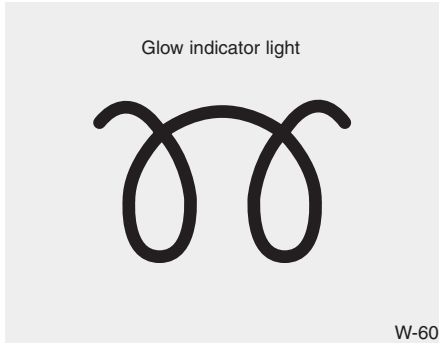
Starting the diesel engine

To start the diesel engine when the engine is cold, it has to be pre-heated before starting the engine and then has to be warmed up before starting to drive.

1. Make sure the parking brake is applied.
2. **Manual Transaxle** - Depress the clutch pedal fully and shift the Transaxle into the Neutral. Keep the clutch pedal depressed whilst cranking the engine.

   Automatic Transaxle - Place the Transaxle 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.



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3. Turn the ignition switch ON position to pre-heat the engine. Then the glow indicator light will illuminate.
4. If the glow indicator light goes out, turn the ignition switch to START and hold it there until the engine starts (a maximum of 10 seconds), then release the key.

✻ NOTICE

If the engine were not started within 2 seconds after the preheating is completed, turn the ignition key once more to the LOCK position during 10 seconds, and then to the ON position, in order to preheat again.

Starting and stopping the engine for turbocharger intercooler

1. Do not race or accelerate the engine immediately after starting.

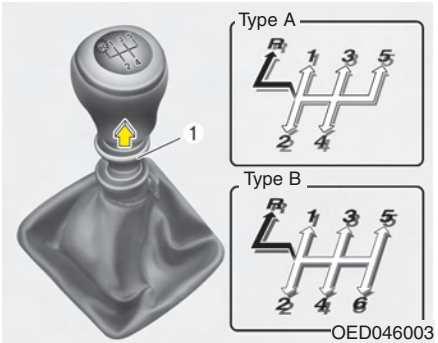
   If the engine is cold, idle for several seconds before sufficient lubrication is ensured in the turbocharger unit.
2. After high speed or extended driving, requiring a heavy engine load, idle the engine about 1 minute before turning it off.

   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.

MANUAL TRANSAXLE (IF EQUIPPED)



⇨ The shift lever can be moved without pulling the ring (1).

➡ The ring (1) must be pulled whilst moving the shift lever.

Manual transaxle operation

The manual transaxle has five/six (if equipped) forward gears.

Press the clutch pedal down fully whilst shifting, then release it slowly.

The gearshift lever must be returned to the neutral position before shifting into R (Reverse).

Make sure the vehicle is completely stopped before shifting into R (Reverse).

Never operate the engine with the tachometer (rpm) in the red zone.

CAUTION

- ***When downshifting from fifth gear to fourth gear, caution should be taken not to inadvertently press the gear shift lever sideways in such a manner that second gear is engaged. Such a drastic downshift may cause the engine speed to increase to the point that the tachometer will enter the red-zone. Such over-revving of the engine may possibly cause engine damage.***
- ***Do not downshift more than 2 gears or downshift the gear when the engine is running at high speed (5,000 RPM or higher). Such a downshifting may damage the engine.***

- During cold weather, shifting may be difficult until the transaxle lubricant has warmed up. This is normal and not harmful to the transaxle.
- If you've come to a complete stop and it's hard to shift into 1st or R(Reverse), put the shift lever in N(Neutral) position and release the clutch. Press the clutch pedal back down, and then shift into 1st or R(Reverse) gear position.

CAUTION

- ***To avoid premature clutch wear and damage, do not drive with your foot resting on the clutch pedal. Also, don't use the clutch to hold the vehicle stopped on an uphill grade, whilst waiting for a traffic light, etc.***
- ***Do not use the shift lever as a handrest during driving, as this can result in premature wear of the transaxle shift forks.***

⚠ WARNING - Manual transaxle

Before leaving the driver's seat, always set the parking brake fully and shut the engine off. Then make sure the transaxle is shifted into 1st gear when the vehicle is parked on a level or uphill grade, and shifted into R (Reverse) on a downhill grade. Unexpected and sudden vehicle movement can occur if these precautions are not followed in the order identified.

Using the clutch

The clutch should be pressed all the way to the floor before shifting, then released slowly. The clutch pedal should always be fully released whilst driving. Do not rest your foot on the clutch pedal whilst driving. This can cause unnecessary wear. Do not partially engage the clutch to hold the car on an incline. This causes unnecessary wear. Use the foot brake or parking brake to hold the car on an incline. Do not operate the clutch pedal rapidly and repeatedly.

Downshifting

When you must slow down in heavy traffic or whilst driving up steep hills, downshift before the engine starts to labour. Downshifting reduces the chance of stalling and gives better acceleration when you again need to increase your speed. When the vehicle is traveling down steep hills, downshifting helps maintain safe speed and prolongs brake life.

Good driving practices

- Never take the car out of gear and coast down a hill. This is extremely hazardous. Always leave the car in gear.
- Don't "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. This will help avoid over-revving the engine, which can cause damage.
- Slow down when you encounter cross winds. This gives you much better control of your car.
- Be sure the car is completely stopped before you attempt to shift into reverse. The transaxle can be damaged if you do not. To shift into reverse, depress the clutch, move the shift lever to neutral, wait 3 seconds, then shift to the reverse position.
- 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.

⚠ 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.**

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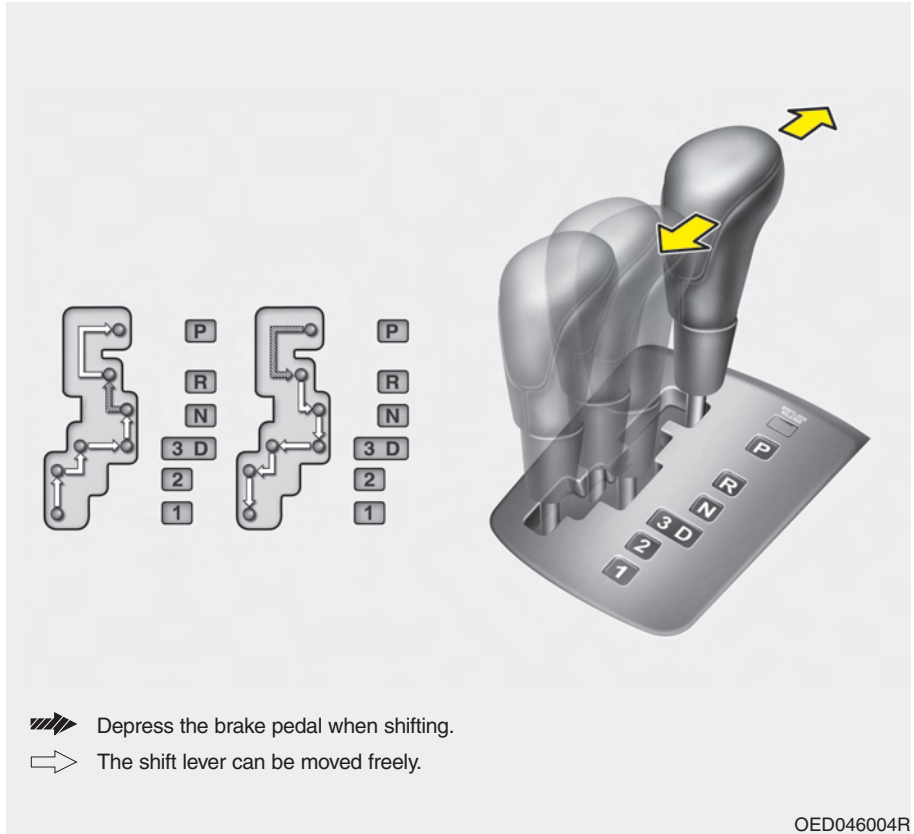
- **The risk of rollover is greatly increased if you lose control of your vehicle at highway speeds.**
- **Loss of control often occurs if two or more wheels drop off the roadway and the driver oversteers to reenter the roadway.**
- **In the event your vehicle leaves the roadway, do not steer sharply. Instead, slow down before pulling back into the travel lanes.**
- **Never exceed posted speed limits.**

AUTOMATIC TRANSAXLE (IF EQUIPPED)



Automatic transaxle operation

All normal forward driving is done with the shift lever in the D (Drive) position.

To move the shift lever from the P (Park) position, the brake pedal must be depressed.

For smooth operation, depress the brake pedal when shifting from N (Neutral) to a forward or reverse gear.

⚠ WARNING - Automatic transaxle

Before leaving the driver's seat, always make sure the shift lever is in the P (PARK) position; then set the parking brake fully and shut the engine off. Unexpected and sudden vehicle movement can occur if these precautions are not followed in the order identified.

CAUTION

- *To avoid damage to your transaxle, do not accelerate the engine in R (Reverse) or any forward gear position with the brakes on.*
- *When stopped on an upgrade, do not hold the vehicle stationary with engine power. Use the service brake or the parking brake.*
- *Do not shift from N (Neutral) or P (Park) into D (Drive), or R (Reverse) when the engine is above idle speed.*

Transaxle ranges

P (park)

This position locks the transaxle and prevents the front wheels from rotating. Always come to a complete stop before shifting into this position.

⚠ WARNING

- **Shifting into P (Park) whilst the vehicle is in motion will cause the drive wheels to lock which will cause you to lose control of the vehicle.**
- **Do not use the P (Park) position in place of the parking brake. Always make sure the shift lever is latched in the P (Park) position so that it cannot be moved AND set the parking brake fully.**

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- **Before leaving the driver's seat, always make sure the shift lever is in the P (PARK) position. Set the parking brake fully, shut the engine off and take the key with you. Unexpected and sudden vehicle movement can occur if you do not follow these precautions in the order specified.**
- **Never leave a child unattended in a vehicle.**

✻ NOTICE

The transaxle may be damaged if you shift into P (Park) whilst the vehicle is in motion.

R (reverse)

Use this position to drive the vehicle backward.

✻ NOTICE

Always come to a complete stop before shifting into or out of R (Reverse); you may damage the transaxle if you shift into R whilst the vehicle is in motion, except as explained in "Rocking the Vehicle", in this manual.

N (neutral)

With the gearshift in the N position, the wheels and transaxle are not locked. The vehicle will roll freely even on the slightest incline unless the parking brake or service brakes are applied.

D (drive)

This is the normal forward driving position. The transaxle will automatically shift through a 4-gear sequence, providing the best fuel economy and power.

For extra power when passing another vehicle or climbing grades, depress the accelerator fully, at which time the transaxle will automatically downshift to the next lower gear.

3 (Third Gear, if equipped)

Move the shift lever to this position for towing a trailer during hill climbing.

This position also provides engine braking when going down hills.

2 (Second Gear)

Use 2 (Second Gear) for more power when climbing hills and for increased braking when going down hills. This position also helps reduce wheel spin on slippery surfaces. When the shift lever is placed in 2 (Second Gear), the transaxle will automatically shift from first to second gear.

1 (First gear)

Move the shift lever to this position in hard pulling situations and for climbing steep grades.

CAUTION

Do not exceed the recommended maximum speeds in 2 (Second Gear) or 1 (First Gear). Operating the vehicle at speeds above the maximum recommended, for 2 (Second Gear) or 1 (First Gear) may cause excessive heat to develop which could result in damage to or failure of the automatic transaxle.

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 whilst releasing the service brakes.

When accelerating from a stop on a steep hill, the vehicle may have a tendency to roll backwards. Shifting the shift lever into 2 (Second Gear) will help prevent the vehicle from rolling backwards.

Shift lock system (if equipped)

For your safety, the automatic transaxle has a shift lock system which prevents shifting the transaxle from P (Park) or N (Neutral) into R (Reverse) unless the brake pedal is depressed.

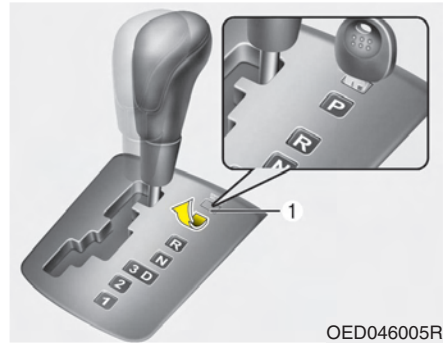
To shift the transaxle from P (Park) or N (Neutral) into R (Reverse):

1. Depress and hold the brake pedal.
2. Start the engine or turn the ignition switch to the ON position.
3. Move the shift lever.

If the brake pedal is repeatedly depressed and released with the shift lever in the P (Park) position, a chattering noise near the shift lever may be heard. This is a normal condition.

⚠ WARNING

Always fully depress the brake pedal before and whilst 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

If the shift lever cannot be moved from the P (Park) or N (Neutral) position into R (Reverse) position with the brake pedal depressed, continue depressing the brake, then do the following:

1. Carefully remove the cap (1) covering the shift-lock override access hole.
2. Insert a screwdriver (or key) into the access hole and press down on the screwdriver (or key).
3. Move the shift lever.
4. Have your vehicle inspected by an authorised KIA dealer immediately.

Good driving practices

- Never move the gear selector lever from P (Park) or N (Neutral) to any other position with the accelerator pedal depressed.
- Never move the gear selector 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).
- 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 transaxle 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.**

(Continued)

(Continued)

- 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 of backward as it becomes unstuck, causing injury or damage to nearby people or objects.

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.

In the event of brake failure

If service brakes fail to operate whilst 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

Pulling the parking brake whilst 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.

⚠ 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.**

(Continued)

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- **Wet brakes may result in the vehicle not slowing down at the usual rate and pulling 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 whilst maintaining a safe forward speed until brake performance returns to normal.**

Disc brakes wear indicator

Your vehicle has disc brakes.

When your brake pads are worn and it's time for new pads, you will hear a high-pitched warning sound from your front brakes or rear brakes (if equipped). 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

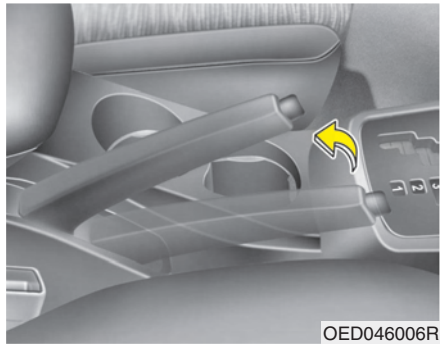
To avoid costly brake repairs, do not continue to drive with worn brake pads.

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.

CAUTION

Always replace brake pads as complete front or rear axle sets.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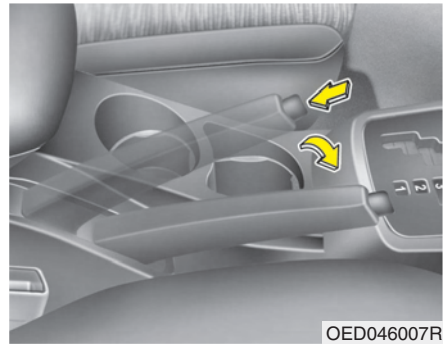
Parking brake

To engage the parking brake, first apply the foot brake and then without pressing the release button in, pull the parking brake lever up as far as possible. In addition it is recommended that when parking the vehicle on a gradient, the shift lever should be in a low gear on manual transaxle vehicles or in the Park position on automatic transaxle vehicles.

CAUTION

Driving with the parking brake applied will cause excessive brake pad and brake rotor wear.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To release the parking brake, first apply the foot brake and pull up the parking brake lever slightly.

Secondly, depress the release button and lower the parking brake lever whilst holding the button.

⚠ WARNING - Parking brake

- **To prevent unintentional movement when stopped and leaving the vehicle, do not use the gearshift lever in place of the parking brake. Set the parking brake AND make sure the gearshift lever is securely positioned in 1st (First) gear or R (Reverse) for manual transaxle equipped vehicles and in P (Park) for automatic transaxle equipped vehicles.**
- **Never allow a person who is unfamiliar with the vehicle or children to touch the parking brake. If the parking brake is released unintentionally, serious injury may occur.**

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Check the brake warning light by turning the ignition switch ON (do not start the engine). This light will be illuminated when the parking brake is applied with the ignition switch in the START or ON position.

Before driving, be sure the parking brake is fully released and the brake warning light is off.

If the brake warning light remains on after the parking brake is released, there may be a malfunction in the brake system. Immediate attention is necessary.

If at all possible, cease driving the vehicle immediately. If that is not possible, use extreme caution whilst operating the vehicle and only continue to drive the vehicle until you can reach a safe location or repair shop.

Parking on curbed streets

- When parking your vehicle on an uphill grade, park as close to the curb as possible and turn the front wheels away from the curb so that the front wheels will contact the curb if the vehicle moves backward.
- When parking your vehicle on a downhill grade, park as close to the curb as possible and turn the front wheels toward the curb so that the front wheels will contact the curb if the vehicle moves forward.

Anti-lock brake system (ABS) (if equipped)

⚠ WARNING - ABS Brakes

Your ABS is not a substitute for good driving judgement. You can still have an accident. In fact, your ABS system will probably not be able to prevent an accident in the following driving conditions:

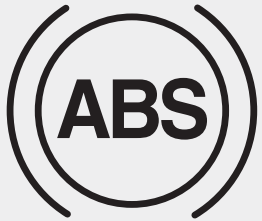
- **Dangerous driving, such as neglecting safety precautions, speeding, or driving too close to the vehicle in front of you.**
- **Driving at high speed in situations providing considerably less traction, such as wet conditions where hydroplaning could occur.**
- **Driving too fast on poor road surfaces. The ABS is designed to improve maximum braking effectiveness on typical highways and roads in good condition. On poor road surfaces in poor condition, the ABS may actually reduce braking effectiveness.**

The ABS system 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 system is active.

In order to obtain the maximum benefit from your ABS system 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 system to control the force being delivered to the brakes.

- 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.



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CAUTION

- *If the ABS warning light is on and stays on, you may have a problem with the ABS system. In this case, however, your regular brakes will work normally.*
- *The ABS warning light will stay on for approximately 3 seconds after the ignition switch is ON. During that time, the ABS will go through self-diagnosis and the light will go off if everything is normal. If the light stays on, you may have a problem with your ABS system. Contact an authorised Kia dealer as soon as possible.*

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. Contact an authorised Kia dealer as soon as possible.*

✻ NOTICE

When you jump start your vehicle because of a drained battery, the engine may not run as smoothly and the ABS warning light may turn on at the same time. This happens because of 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.**

STEERING WHEEL

Electronic power steering

Power steering uses the 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 motor driven power steering is controlled by power steering control unit which sense 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 the better control of the steering wheel.

Should you notice any change in the effort required to steer during normal vehicle operation, have the power steering checked by an authorised Kia dealer.

✻ NOTICE

The following symptoms may occur during normal vehicle operation:

- **The EPS warning light does not illuminate.**
- **The steering wheel becomes heavier after turning the ignition switch 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.**
- **Click noise may be heard from the EPS relay after the ignition switch is turned to the ON or LOCK position.**
- **Motor noise may be heard when the vehicle is at a stop or at a low driving speed.**
- **The steering effort can suddenly increase, if the operation of EPS system is stopped to prevent serious accidents when the malfunction of EPS system is detected by self-diagnosis.**

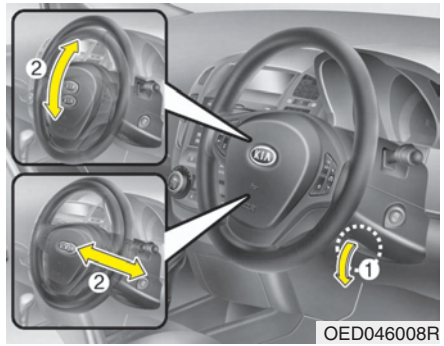
Tilt steering (if equipped)

A tilt steering wheel allows you to adjust the steering wheel before you drive.You can also raise it to the highest level 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, whilst permitting you to see the instrument panel warning lights and gauges.

⚠ WARNING

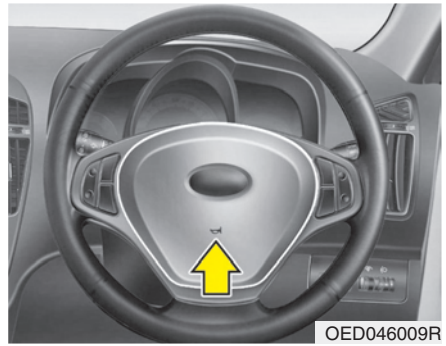
- **Never adjust the angle of steering wheel whilst driving. You may lose your steering control and cause severe personal injury or accidents.**
- **After adjusting, push the steering wheel both up and down to be certain it is locked in position.**



OED046008R

To change the steering wheel angle, pull down (1) the lock release lever, adjust the steering wheel to the desired angle (2), 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.


OED046009R

Horn

To sound the horn, press the horn symbol on your steering wheel.

Check the horn regularly to be sure it operates properly.

CAUTION

- ***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.***
- ***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.***

CRUISE CONTROL SYSTEM (IF EQUIPPED)

The cruise control system allows you to program the vehicle to maintain a constant speed without resting your foot on the accelerator pedal.

This system is designed to function above approximately 40 km/h (24 mph).

⚠ WARNING - Cruise control

Do not use the cruise control feature under the following conditions:

- **Heavy or unsteady traffic**
- **Slippery or winding roads**
- **Situations that involve varying speeds**

OED046010

To set cruise control speed:

1. Push the CRUISE ON/OFF button on the steering wheel, to turn the system on. The CRUISE indicator light ( ) in the instrument cluster will illuminate.
2. Accelerate to the desired speed, which must be more than 40 km/h (24 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 cruise control is not in use.

OED046011

3. Push the SET (-) switch, and release it at the speed you want. The “SET” indicator light in the instrument cluster will illuminate. Release the accelerator at the same time. The desired speed will automatically be maintained.

The SET function cannot be activated until approximately 2 seconds after the CRUISE ON-OFF button has been engaged.

On a steep grade, the vehicle may momentarily slow down whilst going downhill.

OED046012

To cancel cruise control, do one of the following:

- Press the brake pedal.
- Press the clutch pedal with a manual transaxle or shift into N (Neutral) with an automatic transaxle.
- Push the cancel switch

Each of these actions will cancel cruise control operation (the “SET” indicator light in the instrument cluster will go OFF), but it will not turn the system off. If you wish to resume cruise control operation, push the + switch located on your steering wheel. You will return to your previously preset speed.

To turn cruise control off, do one of the following:

- Push the CRUISE ON-OFF button (the CRUISE ( ) indicator light in the instrument cluster will go 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.

OED046013

To increase cruise control set speed:

Follow either of these procedures:

- Push the + switch and hold it. Your vehicle will accelerate. Release the switch at the speed you want.
- Push the + switch and release it immediately. The cruising speed will increase 1.6 km/h (1 mph) by one touch and will be memorized to the reset speed.

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.

OED046011

To decrease the cruising speed:

Follow either of these procedures:

- Push the - switch and hold it. Your vehicle will gradually slow down. Release the switch at the speed you want to maintain.
- Push the - switch and release it immediately. The cruising speed will decrease 1.6 km/h (1 mph) by one touch and will be memorized to the reset speed.

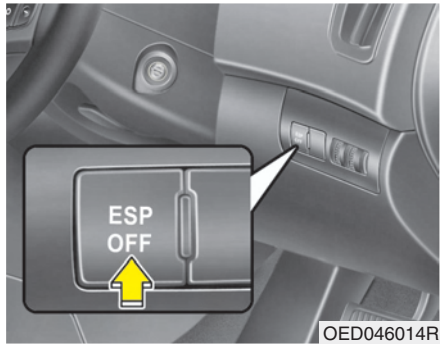
OED046013

To resume cruising speed at more than 40 km/h (24 mph):

If any method other than the CRUISE ON-OFF switch was used to cancel cruising speed and the system is still activated, the most recent set speed will automatically resume when the + switch is pushed.

It will not resume, however, if the vehicle speed has dropped below 40 km/h (24 mph).

ELECTRONIC STABILITY PROGRAM (IF EQUIPPED)



Electronic stability program (ESP) (if equipped)

The Electronic Stability Program (ESP) system is designed to stabilize the vehicle during cornering manoeuvres. ESP checks where you are steering and where the vehicle is actually going. ESP 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 program (ESP) will not prevent accidents. Excessive speed in turns, abrupt manoeuvres and hydroplaning on wet surfaces can still result in serious accidents. Only a safe and attentive driver can prevent accidents by avoiding manoeuvres that cause the vehicle to lose traction. Even with ESP installed, always follow all the normal precautions for driving - including driving at safe speeds for the conditions.

The Electronic Stability Program (ESP) 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 ESP 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.

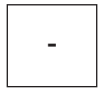
When you apply your brakes under conditions which may lock the wheels, you may hear a “tik-tik” sound from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your ESP is active.

✻ 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 Program System is functioning properly.

ESP operation

ESP ON condition



- When the ignition is turned ON, ESP and ESP OFF indicator lights illuminate for approximately 3 seconds, then ESP is turned on.
- Press the ESP OFF button for at least half a second after turning the ignition ON to turn ESP off. (ESP OFF indicator will illuminate). To turn the ESP on, press the ESP OFF button (ESP OFF indicator light will go off).
- When starting the engine, you may hear a slight ticking sound. This is the ESP performing an automatic system self-check and does not indicate a problem.

When operating

When the ESP is in operation, ESP indicator light blinks.

- When the Electronic Stability Program 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 slippery road, pressing the accelerator pedal may not cause the engine rpm (revolutions per minute) to increase.

ESP operation off

ESP OFF state

- To cancel ESP operation, press the ESP OFF button (ESP OFF indicator light illuminates).
- If the ignition switch is turned to LOCK position when ESP is off, ESP remains off. Upon restarting the engine, the ESP will automatically turn on again.

■ ESP indicator light (blinks)

■ ESP OFF indicator light (comes on)

Indicator light

When ignition switch is turned to ON, the indicator light illuminates, then goes off if ESP system is operating normally.

The ESP indicator light blinks whenever ESP is operating.

ESP OFF indicator light comes on when either the ESP is turned off with the button, or ESP fails to operate when turned on.

CAUTION

Driving with varying tyre or wheel sizes may cause the ESP system to malfunction. When replacing tyres, make sure they are the same size as your original tyres.

⚠ WARNING

The Electronic Stability Program 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 ESP indicator light is blinking, or when the road surface is slippery.

✻ NOTICE

After reconnecting or recharging a discharged battery, the ESP OFF indicator may illuminate.
In this case, turn the handle half way to the left and right whilst the ignition switch is in the ON position. Then, restart the engine after the ignition is off. The ESP OFF indicator may turn off. If the ESP OFF indicator does not turn off, have the system checked by an authorised Kia dealer as soon as possible.

ESP OFF usage

When driving

- It's a good idea to keep the ESP turned on for daily driving whenever possible.
- To turn ESP off whilst driving, press the ESP OFF button whilst driving on a flat road surface.

Never press ESP OFF button whilst ESP is operating (ESP indicator light blinks).

If ESP is turned off whilst ESP is operating, the vehicle may slip out of control.

✻ NOTICE

- **When operating the vehicle on a dynamometer, ensure that the ESP is turned off (ESP OFF light illuminated). If the ESP is left on, it may prevent the vehicle speed from increasing, and result in false diagnosis.**
- **Turning the ESP off does not affect ABS or brake system operation.**

⚠ WARNING

Never press the ESP OFF button whilst ESP is operating.

If the ESP is turned off whilst ESP is operating, the vehicle may go out of control.

To turn ESP off whilst driving, press the ESP OFF button whilst driving on a flat road surface.

INSTRUMENT CLUSTER

■ **Petrol Engine**

■ **Diesel Engine**

1. Tachometer
2. Turn signal indicators
3. Speedometer

Type A (if equipped) Type B (if equipped)

4. Engine temperature gauge
5. Warning and indicator lights
6. Shift position indicator
   (Automatic transaxle only)
7. Odometer / Tripmeter
8. Tripmeter mode/reset button
9. Fuel gauge

OED046015R/OED046071R/OED046018R

GAUGES

Speedometer

The speedometer indicates the forward speed of the vehicle.

Odometer/Tripmeter

You can choose the odometer, tripmeter A and tripmeter B by pressing the tripmeter mode button.

Odometer

The odometer indicates the total distance the vehicle has been driven.

Tripmeter

TRIP A: Tripmeter A

TRIP B: Tripmeter B

The tripmeter indicates the distance of individual trips selected by the driver. Tripmeter A and B can be reset to 0 by pressing the reset button for 1 second or more, and then releasing.

Tachometer

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

Use the tachometer to select the correct shift points and to prevent lugging and/or over-revving the engine.

The tachometer pointer may move slightly when the ignition switch is in ACC or ON position with the engine OFF. This movement is normal and will not affect the accuracy of the tachometer once the engine is running.

✻ NOTICE

Do not operate the engine within the tachometer's RED ZONE.
This may cause severe engine damage.

Engine temperature gauge

This gauge shows the temperature of the engine coolant when the ignition switch is ON.

Do not continue driving with an overheated engine. If your vehicle overheats, refer to “Overheating” in the Index.

✻ NOTICE

If the gauge pointer moves beyond the normal range area toward the “130” position, it indicates overheating that may damage the engine.

Fuel gauge

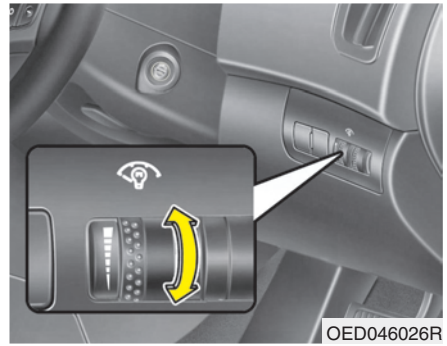
The fuel gauge indicates the approximate amount of fuel remaining in the fuel tank. The fuel tank capacity is given in chapter 8. The fuel gauge is supplemented by a low fuel warning light, which will illuminate when the fuel tank is near empty.

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.



OED046026R

Instrument panel illumination (if equipped)

When the vehicle's parking lights or headlights are on, rotate the illumination control knob to adjust the instrument panel illumination intensity.

WARNINGS AND INDICATORS

Checking operation

All warning lights are checked by turning the ignition switch ON (do not start the engine). Any light that does not illuminate should be checked by an Authorised Kia Dealer.

After starting the engine, check to make sure that all warning lights are off. If any are still on, this indicates a situation that needs attention. When releasing the parking brake, the brake system warning light should go off. The fuel warning light will stay on if the fuel level is low.

Anti-lock brake system (ABS) warning light (if equipped)

This light illuminates if the key is turned to ON and goes off in approximately 3 seconds if the system is operating normally.

If the light stays on, you may have a problem with your ABS system. Contact an authorised Kia dealer as soon as possible.

Electronic brake force distribution (EBD) system warning light (if equipped)

If two warning lights illuminate at the same time whilst driving, your vehicle has a problem with ABS and EBD system.

In this case, your ABS system and regular brake system may not work normally. Have the vehicle checked by an Authorised Kia Dealer as soon as possible.

⚠ WARNING

If the both ABS and Brake warning lights are ON and stay ON, your vehicle's brake system will not work normally. So you may experience an unexpected and dangerous situation during sudden braking. In this case, avoid high speed driving and abrupt braking. Have your vehicle checked by Authorised Kia Dealer as soon as possible.

Engine oil pressure warning

This warning light indicates the engine oil pressure is low.

If the warning light illuminates whilst driving:

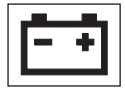
1. Drive safely to the side of the road and stop.
2. With the engine off, check the engine oil level. If the level is low, add oil as required.

If the warning light remains on after adding oil or if oil is not available, call an Authorised Kia Dealer.

CAUTION

If the engine is not stopped immediately, severe damage could result.

Charging system warning



This warning light indicates a malfunction of either the generator or electrical charging system.

If the warning light comes on whilst the vehicle is in motion:

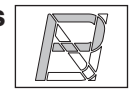
1. Drive to the nearest safe location.
2. With the engine off, check the generator drive belt for looseness or breakage.
3. If the belt is adjusted properly, a problem exists somewhere in the electrical charging system. Have an Authorised Kia Dealer correct the problem as soon as possible.

Seat belt warning

As a reminder to the driver and passenger, seat belt warning light will blink or illuminate for approximately 6 seconds each time you turn the ignition switch ON.

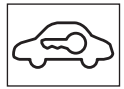
For details, refer to the seat belt on chapter 3.

Shift pattern indicators (if equipped)



The individual indicators illuminate to show the automatic transaxle shift lever selection.

Immobiliser indicator (if equipped)



This light illuminates when the immobiliser key is inserted and turned to the ON position to start the engine.

If this light turns off or blinks when the ignition switch is in the ON position before starting the engine, have the system checked by an authorised Kia Dealer.

Parking brake & brake fluid warning

Parking brake warning

This light is illuminated when the parking brake is applied with the ignition switch in the START or ON position. The warning light should go off when the parking brake is released.

Low brake fluid level warning

If the warning light remains on, it may indicate that the brake fluid level in the reservoir is low.

If the warning light remains on:

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. Then check all brake components for fluid leaks.
3. Do not drive the vehicle if leaks are found, the warning light remains on or the brakes do not operate properly. Have it towed to any Authorised Kia Dealer for a brake system inspection and necessary repairs.

To check bulb operation, check whether the parking brake and brake fluid warning light illuminates when the ignition switch is in the ON position.

⚠ WARNING

Driving the vehicle with a warning light on is dangerous. If the brake warning light remains on, have the brakes checked and repaired immediately by an authorised Kia Dealer.

Rear hatch warning (if equipped)

This warning light activates when the rear hatch is not closed securely.

Low fuel level warning

This warning light indicates the fuel tank is nearly empty. The warning light will come on when the fuel level has dropped to about 8 litres. Refuel as soon as possible.

Door ajar warning

This warning light illuminates when a door is not closed securely with the ignition in any position.

Headlight high beam indicator

This indicator illuminates when the headlights are on and in the high beam position or when the turn signal lever is pulled into the Flash-to-Pass position.

Front fog light indicator (if equipped)

This light comes on when the front fog lights are ON.

Rear Fog light Indicator (if equipped)

This light comes on when the rear fog lights are ON.

Malfunction indicator (if equipped)

This indicator light is part of the Engine Control System which monitors various emission control system components. If this light illuminates whilst driving, it indicates that a potential problem has been detected somewhere in the emission control system.

This light will also illuminate when the ignition switch is turned to the ON position, and will go out in a few seconds after the engine is started. If it illuminates whilst driving, or does not illuminate when the ignition switch is turned to the ON position, take your vehicle to your nearest authorised KIA dealer and have the system checked.

Generally, your vehicle will continue to be drivable and will not need towing, but have the system checked by an authorised Kia Dealer as soon as possible.

CAUTION

- ***Prolonged driving with the Emission Control System Malfunction Indicator Light (CHECK) illuminated may cause damage to the emission control systems which could effect drivability and/or fuel economy.***
- ***If the Emission Control System Malfunction Indicator Light (CHECK) begins to flash ON and OFF, potential catalytic converter damage is possible which could result in loss of engine power. Have the Engine Control System inspected as soon as possible by an authorised Kia Dealer.***

CAUTION - Diesel engine (if equipped)

If the malfunction indicator light blinking, have the Particulate Filter System inspected by an authorised KIA dealer (before driving more than 50 km/31 miles).

Low washer fluid level warning indicator (if equipped)

This warning light indicates the washer fluid reservoir is near empty. Refill the washer fluid as soon as possible.

Auto cruise indicator (if equipped)

CRUISE indicator

The indicator light illuminates when the cruise control system is enabled.

SET indicator

The indicator light illuminates when the cruise function switch (-) is ON.

Air bag warning (if equipped)

This warning light will blink or illuminate for approximately 6 seconds each time you turn the ignition switch to the ON position.

If this indicator does not go out, or if it illuminates whilst the vehicle is being driven, see an authorised Kia Dealer for immediate service.

Front passenger's air bag OFF indicator (if equipped)

The front passenger's air bag OFF indicator illuminates for about 4 seconds after the ignition switch is turned to the ON position.

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

CAUTION

If there is a malfunction of the front passenger's air bag ON/OFF switch, the front passenger's air bag OFF indicator will not illuminate and the front passenger's air bag will inflate in frontal impact crashes even if the front passenger's air bag ON/OFF switch is set to OFF position.

If this occurs, have an authorised KIA dealer inspect the passenger's front air bag ON/OFF switch and the SRS air bag system as soon as possible.

ESP indicator (Electronic Stability Program) (if equipped)

The ESP indicator will illuminate when the ignition switch is turned ON, but should go off after approximately 3 seconds. When the ESP is on, it monitors the driving conditions and under normal driving conditions, the ESP light will remain off. When a slippery or low traction condition is encountered, the ESP will operate, and the ESP indicator will blink to indicate the ESP is operating.

ESP OFF indicator (if equipped)

The ESP OFF indicator will illuminate when the ignition switch is turned ON, but should go off after approximately 3 seconds. To switch to ESP OFF mode, press the ESP OFF button. The ESP OFF indicator will illuminate indicating the ESP is deactivated. If this indicator stays on when ESP OFF is not selected, the ESP may have a malfunction. Take your car to an authorised KIA dealer and have the system checked.

✻ NOTICE

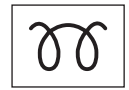
After reconnecting or recharging a discharged battery, the ESP OFF indicator may illuminate.
In this case, turn the handle half way to the left and right whilst the ignition switch is in the ON position. Then, restart the engine after the ignition is off. The ESP OFF indicator may turn off. If the ESP OFF indicator does not turn off, have the system checked by an authorised Kia dealer as soon as possible.

Electric power steering system(EPS) warning Light (if equipped, diesel engine only)

This indicator light comes on after the ignition key is turned to the ON position and then it will go out when the engine starts. This light also comes on when the EPS has some troubles.

If it comes on whilst driving, have your vehicle inspected by an authorised Kia dealer.

Glow indicator (Diesel engine only)

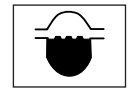


This light is turned on during warm-up and turned off after it.

✻ NOTICE

If the glow indicator continues to illuminate after the engine has warmed up or whilst driving, check the system by an Authorised Kia Dealer or other competent repair shop as soon as possible.

Fuel filter warning light (Diesel engine)



This warning light illuminates for 3 seconds after the ignition switch is set to the ON position and then it will go out. If it lights up whilst the engine is running, it indicates that water has accumulated inside the fuel filter. If this happens, remove the water from the fuel filter. For more information, refer to “Fuel filter” in chapter 7.

CAUTION

When the fuel filter warning light is illuminated, engine power (vehicle speed & idle speed) may decrease. If you keep driving with the warning light on, you can damage your vehicle's engine parts and injection system of the Common Rail. If this occurs, have your vehicle checked by an authorised KIA dealer as soon as possible.

TRIP COMPUTER (IF EQUIPPED)

OED046020

Trip computer is a microcomputer-controlled driver information gauge that displays information related to driving, such as estimated distance to empty, average speed and driving time on the LCD.

If you press the ▼/OFF button for less than 1second, the light of the LCD will turn off. If you press the ▼/OFF button again, the lights of the LCD will turn on.

Mode

Press the MODE button less than 1 second to as follows;

- Calendar (if equipped)
- Elapsed time
- Average fuel consumption
- Instantaneous fuel consumption
- Distance to empty
- Average vehicle speed

OED046021

Calendar and Clock (if equipped)

Type A - without navigation

The Calendar includes the day, month, year and the clock. The day, month and year shows only in the calendar mode. The clock is displayed in every mode.

Calendar setup mode

If you press the MODE button for more than 2 seconds whilst in the calendar mode, you will enter the calendar setup mode. The order of the setup is YEAR→ MONTH→ DAY.

To go to the next setting press the MODE button less than 1second and set the data using the UP(▲) and DOWN(▼) button whilst the selected setting blinks.

Clock setup mode

If you press the MODE button for more than 2 seconds whilst in other modes, you will enter the clock setup mode. The order of the setup is HOUR→ MINUTE.

To go to the next setting press the MODE button less than 1second and set the data using the UP(▲) and DOWN(▼) button whilst the selected setting blinks.

When the minute digit is lower than 30 and the RESET button is pressed less than 1 second, the minute digit will change to :00 whilst the hour digit does not change.

When the minute digit is over 30 and the RESET button is pressed less than 1 second, the minute digit will change to :00 whilst the hour digit increases 1 hour.

OED046022

Type B - with navigation

The calendar mode is displayed in every mode.

To enter the calendar and clock set up mode whilst in other modes, press the MODE button for more than 2 seconds. The order of the setup is HOUR→MINUTE→YEAR→MONTH → DAY.

To go to the next setting press the MODE button less than 1 second and set the data using the UP(▲) and DOWN(▼) button whilst the selected setting blinks.

When the minute digit is lower than 30 and the RESET button is pressed less than 1 second, the minute digit will change to 0 whilst the hour digit does not change.

When the minute digit is over 30 and the RESET button is pressed less than 1 second, the minute digit will change to 0 whilst the hour digit increases 1 hour.

OED046023

Elapsed Time

This mode indicates the total time traveled since the last elapsed time reset.

To reset the elapsed time to 0:00, press the RESET button for more than 1 second, when the elapsed time is displayed.

When it reaches 99:59, the time will start all over from 0:00.

The display ranges from 0:00 to 99:59.

OED046024

Average Fuel Consumption

This mode calculates the average fuel consumption from the total fuel used and the distance since the last average fuel consumption reset. The fuel used is calculated from the fuel consumption input. For an accurate calculation, drive more than 500 m (0.3 miles).

To reset the average fuel consumption to 0.0 l /100 km (MPG), press the RESET button for more than 1 second, when average fuel consumption is displayed.

To change the average fuel consumption display unit (*l* /100km ↔ MPG), press the UP(▲) button for more than 3 seconds.

The display ranges from 0.0 to 99.9 *l* /100 km (MPG).

OED046025

Instantaneous Fuel Consumption

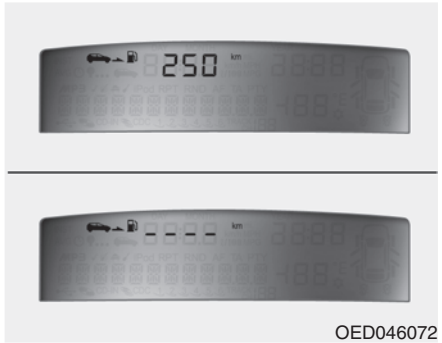
This mode calculates the instantaneous fuel consumption from the instantaneous fuel used and the distance starting from ignition on. The instantaneous fuel consumption is calculated from the fuel consumption input. The display is updated every second.

To reset the instantaneous fuel consumption, press the RESET button for more than 1 second, when the instantaneous fuel consumption is displayed.

To change the instantaneous fuel consumption display unit (*l* /100km ↔ MPG), press the UP(▲) button for more than 3 seconds.

The display ranges from 0.0 to 99.9 *l* /100 km (0.0 to 99.9 MPG).

When you drive less than 30 km/h, "--" symbol will be displayed.



OED046072

Distance to Empty

This mode indicates the estimated distance to empty based on the current fuel in the fuel tank. When the remaining distance is below 50 km (30 miles), a blinking "---" symbol will be displayed next to the distance to empty indicator.

To change the distance to empty display unit (km ↔ miles), press the UP(▲) button for more than 3 seconds.

The display ranges from 0 to 1500 km (0 to 1500 miles).

✻ 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 trip computer may not register additional fuel if less than 6 litres of fuel are added to the vehicle.
- **Trip computer provides a driver with supplemental information about the current operating status of your vehicle. So the estimated distance to empty can be changed according to operating status of your vehicle, average fuel consumption and previously driving style. Therefore the values approved or displayed on LCD for the first time can be different with your vehicle's.**
- **The figure of distance to empty is estimated driving distance, so it can be different from the driving distance really is.**

OED046073

Average Vehicle Speed

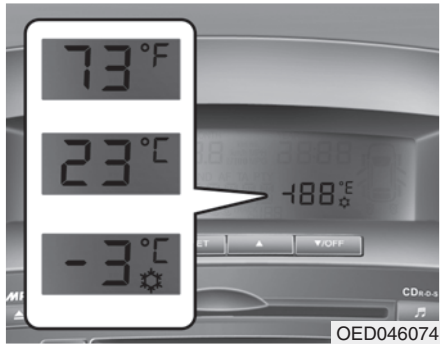
This mode calculates the average speed of the vehicle since the last average speed reset.

To reset the average vehicle speed, press the RESET button for more than 1 second, when the average vehicle speed is displayed.

To change the instantaneous fuel consumption display unit (km/h ↔ MPH), press the UP(▲) button for more than 3 seconds.

The display ranges from 0 to 260kph (160mph)

INFORMATION MONITOR (IF EQUIPPED)



OED046074

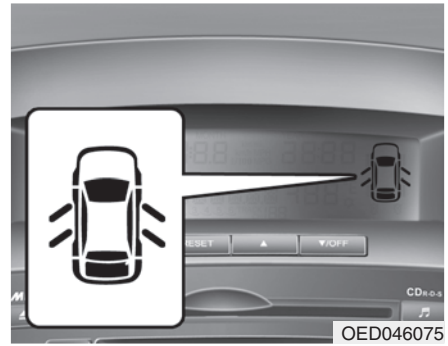
Outside Ambient Temperature

The monitor will display the current outside ambient temperature.

To change the outside ambient temperature display unit (°C ↔ °F), press the DOWN(▼) button for more than 3 seconds. But the temperature unit does not change when the trip computer is in the calendar mode.

The display ranges from -40°C to +80°C (-40°F to 176°F)

- Between -5°C and 3°C/23°F and 37°F(Freezing range), 'Ice on road' segment is active.
- Freezing segment will turn on after the outside ambient temperature display flashes 5 times when in transition from the non-freeze range to freeze range.


OED046075

Door and Rear Hatch Open Display

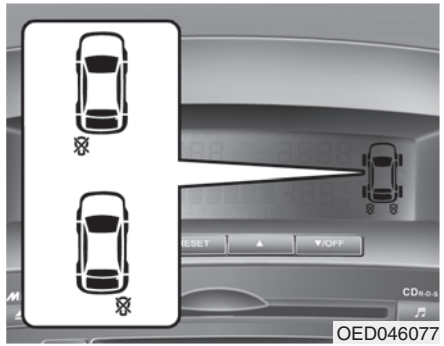
The trip computer will display the corresponding door or rear hatch that is not closed securely.

OED046076

TPMS (if equipped)

The monitor will display the corresponding tyre that is low with pressure.

For details, see Tyre Pressure Monitoring System on chapter 6.


OED046077

Stop Lamp Fail Display (if equipped)

The monitor will display the corresponding stop light that has malfunctioned.

BACK WARNING SYSTEM (IF EQUIPPED)

OED046092

The back warning system assists the driver during backward movement of the vehicle by chiming if any object is sensed within a distance of 120 cm (47 in.) behind the vehicle. This system is a supplemental system and it is not intended to nor does it replace the need for extreme care and attention of the driver. The sensing range and objects detectable by the back sensors are limited. Whenever backing-up, pay as much attention to what is behind you as you would in a vehicle without a back warning system.

⚠ WARNING

The Back Warning System is a supplementary function only. The operation of the Back Warning System can be affected by several factors (including environmental conditions). It is the responsibility of the driver to always check the area behind the vehicle before and whilst backing up.

Operation of the back warning system

Operating condition

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

  If the vehicle is moving at a speed over 5 km/h (3 mph), the system may not be activated correctly.
- The sensing distance whilst the Back Warning System is in operation is approximately 120 cm (47 in.).
- When more than two objects are sensed at the same time, the closest one will be recognized first.

Types of warning sound

- When an object is 120 cm to 81 cm (47 in. to 32 in.) from the rear bumper: Buzzer beeps intermittently
- When an object is 80 cm to 41 cm (31 in. to 16 in.) from the rear bumper: Buzzer beeps more frequently
- When an object is within 40 cm (15 in.) of the rear bumper:
  Buzzer sounds continuously.

Non-operational conditions of back warning system

The back warning system may not operate properly when:

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

The detecting range may decrease when:

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

The following objects may not be recognized by the sensor:

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

Back warning system precautions

- The back warning may not sound sequentially depending on the speed and shapes of the objects detected.
- The back 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 40 cm (15 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. Sensor damage could occur.

✻ NOTICE

This system can only sense objects within the range and location of the sensors; It can not detect objects in other areas where sensors are not installed. Also, small or slim objects, 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 object's 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

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

⚠ WARNING

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

LIGHTING

Battery saver function

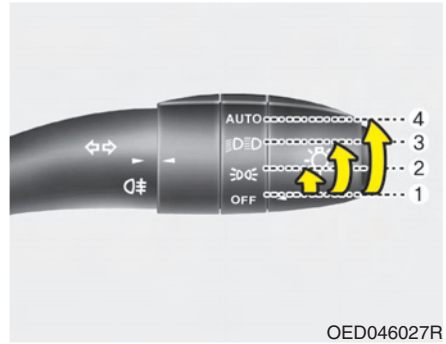
- The purpose of this feature is to prevent the battery from being discharged. The system automatically turns off the parking light when the driver removes the ignition key and opens the driver- side door.
- With this feature, the parking light will be turned off automatically if the driver parks on the side of road at night.

If necessary, to keep the lights on when the ignition key is removed, turn the parking lights OFF and ON again using the light switch on the steering column.

Headlight escort function (if equipped)

The headlights remain on for approximately 5 minutes after the ignition key is removed or turned to the ACC or LOCK position. However, if the driver's door is opened and closed, the headlights are turned off after 30 seconds.

The headlights can be turned off by pressing the lock button on the transmitter twice or turning off the light switch from the headlight or Auto light position.



OED046027R

Lighting control

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) Parking light position

(3) Headlight position

(4) Auto light position (if equipped)

OED046028R

Parking light position ( )

When the light switch is in the parking light position (1st position), the tail, position, license and instrument panel lights are ON.

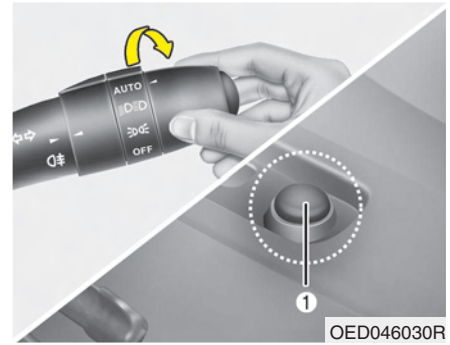
OED046029R

Headlight position ( )

When the light switch is in the headlight position (2nd position) the head, tail, position, license and instrument panel lights are ON.

✻ NOTICE

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



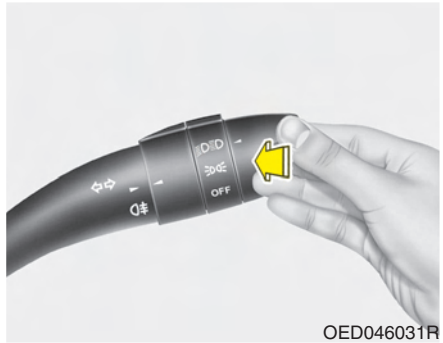
OED046030R

Auto light position (if equipped)

When the light switch is in the AUTO light position, the taillights and headlights will be turned ON or OFF automatically depending on 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 coating on the front windscreen, the Auto light system may not work properly.***



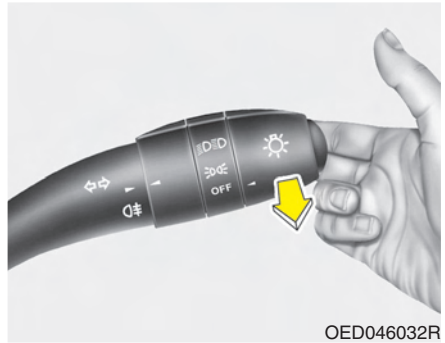
OED046031R

High - beam operation

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.

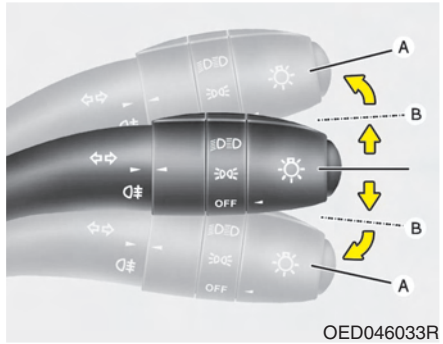
To prevent the battery from being discharged, do not leave the lights on for a prolonged time whilst the engine is not running.



OED046032R

Flashing headlights

To flash the headlights, pull the lever towards you. It will return to the normal (low-beam) position when released. The headlight switch does not need to be on to use this flashing feature.



OED046033R

Turn signals (A)

The ignition switch must be on for the turn signals to function. To turn on the turn signals, move the lever up or down. 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.

Lane change signals (B)

To signal a lane change, move the turn signal lever slightly and hold it in position. The lever will return to the OFF position when released.

If an indicator stays on and does not flash or if it flashes abnormally, one of the turn signal bulbs may be burned out and will require replacement.

✻ NOTICE

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

OED046035R

Front fog light (if equipped)

Fog lights are used to provide improved visibility and avoid accidents when visibility is poor due to fog, rain or snow etc. The fog lights will turn on when the fog light switch (1) is turned to the ON (2) position after the parking light is turned on.

To turn off the fog lights, turn the switch to the ON (2) position again.

CAUTION

When in operation, the fog lights consume large amounts of vehicle electrical power. Only use the fog lights when visibility is poor or unnecessary battery and generator drain could occur.

OED046034R

Rear fog light (if equipped)

To turn the rear fog lights on, turn the headlight switch to the headlight on position and turn the rear fog light switch (light on cluster will illuminate) to the ON position.

The rear fog lights turn on when the rear fog switch is turned on after the front fog switch is turned ON and the headlight switch to the parking light position (if equipped).

To turn the rear fog lights off, turn the rear fog light switch to the ON position again or turn the headlight switch off.

Daytime running light (if equipped)

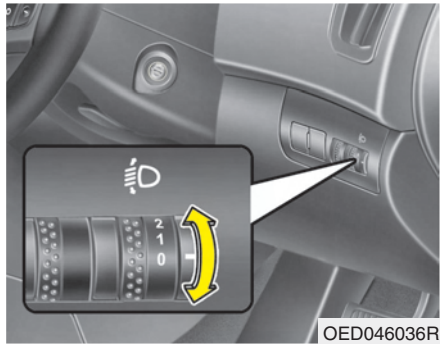
Daytime Running Lights (DRL) can make it easier for others to see the front of your vehicle during the day. DRL can be helpful in many different driving conditions, and it is especially helpful after dawn and before sunset.

The DRL system will make your low-beam headlights turn OFF when:

1. The headlight switch is ON.
2. The parking light switch is ON.
3. Engine stops.

✻ NOTICE

If you want the DRL off, open the driver's side fuse panel cover and insert any spare fuse into the DRL OFF position.



OED046036R

Headlight leveling device (if equipped)

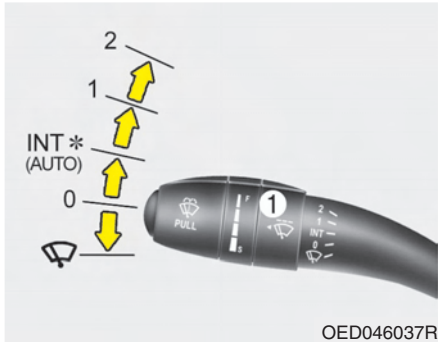
To adjust the headlight beam level according to the number of the passengers and the loading weight in the luggage area, turn the beam leveling switch.

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



Windscreen wipers

Type A

Operates as follows when the ignition switch is turned ON.

0 : Wiper is not in operation

INT : Wiper operates intermittently at the same wiping intervals. Use this mode in a light rain or mist. To vary the speed setting, turn the speed control knob (1).

1 : Normal wiper speed

2 : Fast wiper speed

: For a single wiping cycle, push the lever downward and release it with the lever in the 0 position. The wipers will operate continuously if the lever is pushed downward and held.

✻ NOTICE

If there is heavy accumulation of snow or ice on the windscreen, defrost the windscreen for about 10 minutes, or until the snow and/or ice is removed before using the windscreen wipers to ensure proper operation.

Type B

Operates as follows when the ignition switch is turned ON.

0/1/2/ :

See the explanation for type A operation.

AUTO (if equipped) :

The rain sensor located on the upper end of windscreen glass senses the amount of rainfall and controls the wiping cycle for the proper intervals. 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 ignition switch is turned ON when the wiper switch is set in AUTO mode, or wiper switch is set in AUTO mode when the ignition switch is ON, wiper will operate once to perform a self-check of the system. Set the wiper to OFF position when the wiper is not in use.

CAUTION

When washing the vehicle, set the wiper switch in the OFF position to stop the auto wiper operation.

Wiper may operate and be damaged if the switch is set in AUTO mode whilst washing vehicle.

Do not remove the sensor cover located on the upper end of the passenger side windscreen glass. Damage to system parts could occur and may not be covered by you vehicle warranty.

When the starting the vehicle in winter, set the wiper switch in the OFF position. Otherwise, wipers may operate and ice may damage the windscreen wiper blades. Always remove all snow and ice and defrost the windscreen properly prior to operating the windscreen wipers.

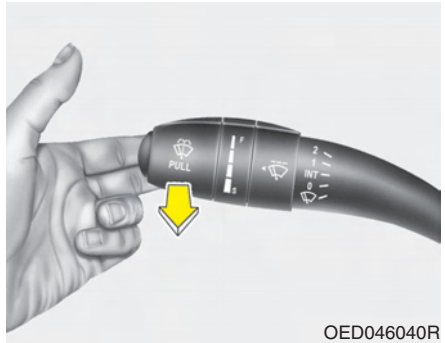
⚠ WARNING

When the ignition switch is ON and the windscreen 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 windscreen glass facing the rain sensor.**
- **Do not wipe the upper end of the windscreen glass with a damp or wet cloth.**
- **Do not put pressure on the windscreen glass.**

CAUTION

- *To prevent possible damage to the wipers or windscreen, do not operate the wipers when the windscreen is dry.*
- *To prevent damage to the wiper blades, do not use petrol, kerosene, paint thinner, or other solvents on or near them.*
- *To prevent damage to the wiper arms and other components, do not attempt to move the wipers manually.*



OED046040R

Windscreen washers

In the OFF position, pull the lever gently toward you to spray washer fluid on the windscreen and to run the wipers 2-3 cycles.

Use this function when the windscreen 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 windscreen washer fluid to the washer reservoir.

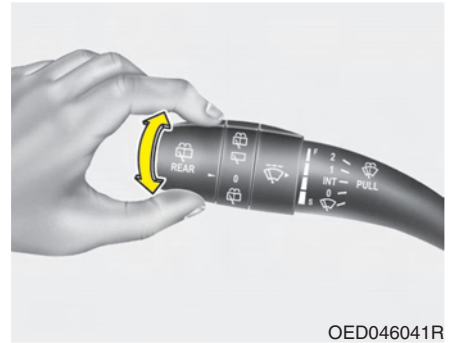
The reservoir filler neck is located in the front of the engine compartment on the passenger side.

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 windscreen with the defrosters; the washer solution could freeze on contact with the windscreen and obscure your vision.



OED046041R

Rear window wiper and washer switch (if equipped)

The rear window wiper and washer switch is located at the end of the wiper and washer switch lever. Turn the switch to desired position to operate the rear wiper and washer.

- - Spraying washer fluid and wiping
- - Normal wiper operation
- o - Wiper is not in operation
- - Spraying washer fluid and wiping

DEFROSTER

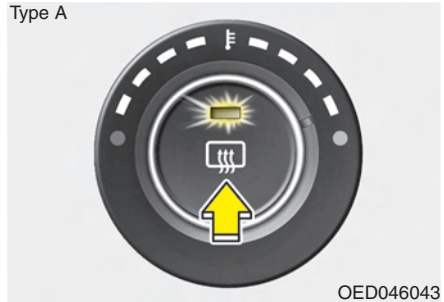
CAUTION

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

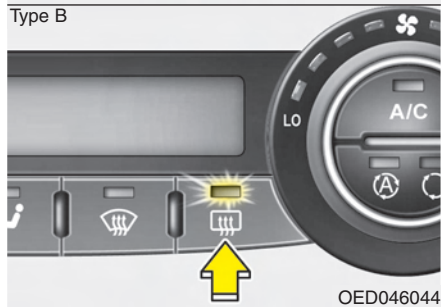
If you want to defrost and defog on the front windscreen, refer to "Windscreen Defrosting and Defogging" in this section.

Type A



OED046043

Type B



OED046044

Rear window defroster

The defroster heats the window to remove frost, fog and thin ice from the interior and exterior of the rear window, whilst engine is running.

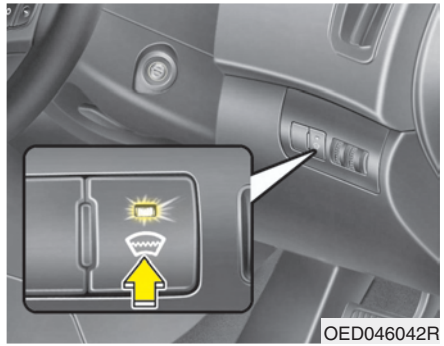
To activate the rear window defroster, press the rear window defroster button. The indicator on the rear window defroster button illuminates when the defroster is ON.

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 ignition switch is turned off. To turn off the defroster, press the rear window defroster button again.

Outside mirror defroster (if equipped)

If your vehicle is equipped with outside mirror defrosters, they will operate at the same time when you turn on the rear window defroster.



Front windscreen deicer (if equipped)

The engine must be running to enable this feature. To activate the front windscreen deicer, press the front windscreen deicer button. The indicator on the button illuminates when the deicer is ON. The front windscreen deicer automatically turns off after 20 minutes or when the ignition switch is turned off. To turn off the deicer, press the front windscreen deicer button again.

HAZARD WARNING FLASHER

The hazard warning flasher should be used whenever you find it necessary to stop the car in a hazardous location. When you must make such an emergency stop, always pull off the road as far as possible.

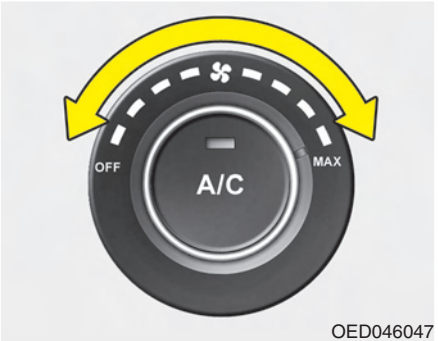
The hazard warning lights are turned on by pushing in the hazard switch. This causes all turn signal lights to blink. The hazard warning lights will operate even though the key is not in the ignition switch.

To turn the hazard warning lights off, push the switch a second time.

MANUAL CLIMATE CONTROL SYSTEM (IF EQUIPPED)

1. Temperature control knob
2. Mode selection knob
3. Fan speed control knob
4. Air conditioning button (if equipped)
5. Air intake control button
6. Rear window defroster button

OED046046



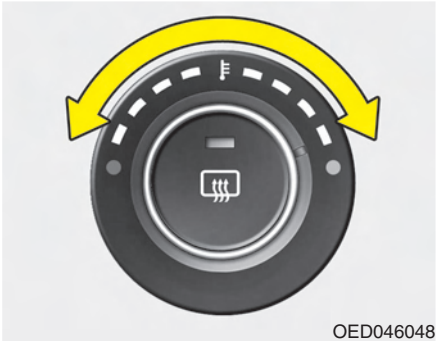
OED046047

Fan speed control knob

The ignition switch must be in the ON position for fan operation.

The fan speed control knob allows you to control the fan speed of the air flowing from the ventilation system. To change the fan speed, turn the knob to the right for higher speed or left for lower speed.

Setting the fan speed control knob to the “OFF” position turns off the fan.


OED046048

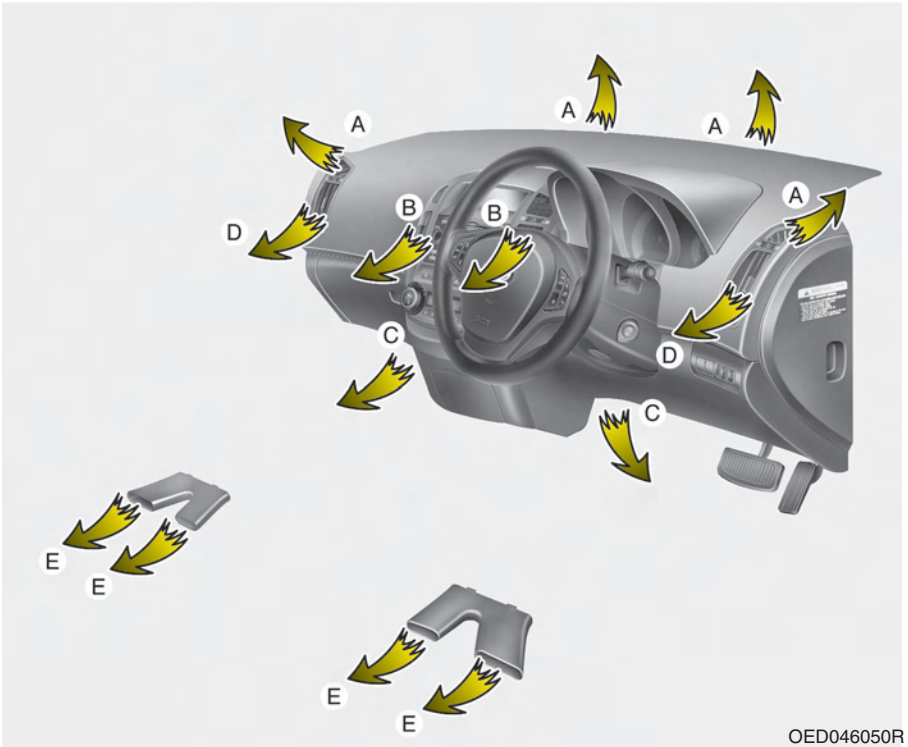
Temperature control knob

The temperature control knob allows you to control the temperature of the air flowing from the ventilation system. To change the air temperature in the passenger compartment turn the knob to the right for warm and hot air or left for cooler air.

OED046049

Mode selection knob

The mode selection knob controls the direction of the air flow through the ventilation system.



MAX/ A/C position

MAX A/C

When you select the MAX A/C mode whilst the fan speed is on, the following system settings will be made automatically;

- the air conditioning system will be turned on.
- the recirculated air position will be selected.
- the face mode will be selected.

If you select MAX A/C mode, you will not be able to cancel the A/C system operation, or change the recirculated air mode position.

Set the fan speed control knob to the desired speed and rotate the temperature control knob to the extreme left position for maximum cooling.
(outlet port: B, D)

Face position

Air flow is directed toward the upper body and face. Additionally, each outlet can be controlled to direct the air discharged from the outlet.
(outlet port: B, D)

Face - floor position

Air flow is directed towards the face and the floor. The air to the floor is warmer than the air to the face (except when the temperature control is set to the extreme cold position).
(outlet port: B, D, C, E)

Floor position

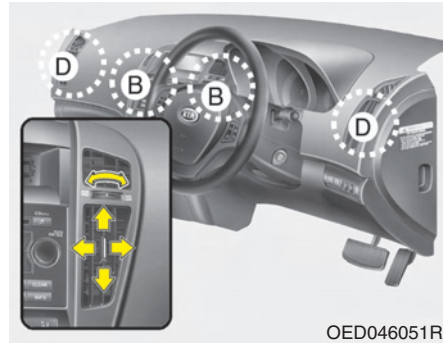
Most of the air flow is directed to the floor, with a small amount of the air being directed to the windscreen and side window defroster.
(outlet port: C, E, A, D)

Floor - defrost position

Most of the air flow is directed to the floor and the windscreen with a small amount directed to the side window defrosters.
(outlet port: A, C, E, D)

Defrost position

Most of the air flow is directed to the windscreen with a small amount of air directed to the side window defrosters.
(outlet port: A, D)



OED046051R

Instrument panel vents

The outlet vents (B, D) can be opened or closed separately using the horizontal thumbwheel. To close the vent, rotate it left to the maximum position. To open the vent, rotate it right to the desired position.

Also, you can adjust the direction of air delivery from these vents using the vent control lever as shown.

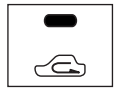
OED046052

Air intake control button

This is used to select outside (fresh) air position or recirculated air position.

To change the air intake control position, push the control button.

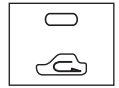
Recirculated air position



The indicator light on the button is illuminated when the recirculated air position is selected.

With the recirculated air position selected, air from passenger compartment will be drawn through the heating system and heated or cooled according to the function selected.

Outside (fresh) air position



The indicator light on the button is not illuminated when the outside (fresh) air position is selected.

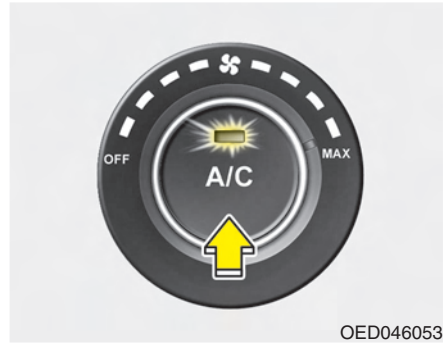
With the outside (fresh) air position selected, air enters the vehicle from outside and is heated or cooled according to the function selected.

✻ NOTICE

It should be noted that prolonged operation of the heating in recirculated air position will cause fogging of the windscreen and side windows and the air within the passenger compartment will 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 vehicle which may fog the glass and obscure visibility.**
- **Do not sleep in a vehicle with 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. Set the air intake control to the outside (fresh) air position as much as possible whilst driving.**



OED046053

Air conditioning button (if equipped)

Push the A/C button to turn the air conditioning system on (indicator light will illuminate). Push the button again to turn the air conditioning system off.

System operation

Ventilation

1. Set the mode to the position.
2. Set the air intake control to the outside (fresh) air position.
3. Set the temperature control to the desired position.
4. Set the fan speed control to the desired speed.

Heating

1. Set the mode to the position.
2. Set the air intake control to the outside (fresh) air position.
3. Set the temperature control to the desired position.
4. Set the fan speed control to the desired speed.
5. If dehumidified heating is desired, turn the air conditioning system (if equipped) on.

- If the windscreen fogs up, set the mode to the , position.

Air conditioning (if equipped)

All Kia Air Conditioning Systems are filled with environmentally friendly R-134a refrigerant which is not damaging to the ozone layer.

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.

- When maximum cooling is desired, set the temperature control to the extreme left position, set the air intake control to the recirculated air position, then set the fan speed control to the highest speed.

✻ NOTICE

- **When using the air conditioning system, monitor the temperature gauge closely whilst driving up hills or in heavy traffic when outside temperatures are high. Air conditioning system operation may cause engine overheating. Continue to use the blower fan but turn the air conditioning system off if the temperature gauge indicates engine overheating.**
- **When opening the windows in humid weather air conditioning may create water droplets inside the vehicle. Since excessive water droplets may cause damage to electrical equipment, air conditioning should only be run with the windows closed.**

Air conditioning system operation tips

- If the vehicle has been parked in direct sunlight during hot weather, open the windows for a short time to let the hot air inside the vehicle escape.
- To help reduce moisture inside of windows on rainy 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 at idle as the air conditioning compressor cycles on. This is a normal system operation characteristics.
- Use the air conditioning system every month if only for a few minutes to ensure maximum system performance.
- When using the air conditioning system, you may notice clear water dripping (or even pudding) on the ground under the passenger side of the vehicle. This is a normal system operation characteristics.
- Operating the air conditioning system in the recirculated air position does provide maximum cooling, however, continual operation in this mode may cause the air inside the vehicle to become stale.

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 an authorised Kia dealer.

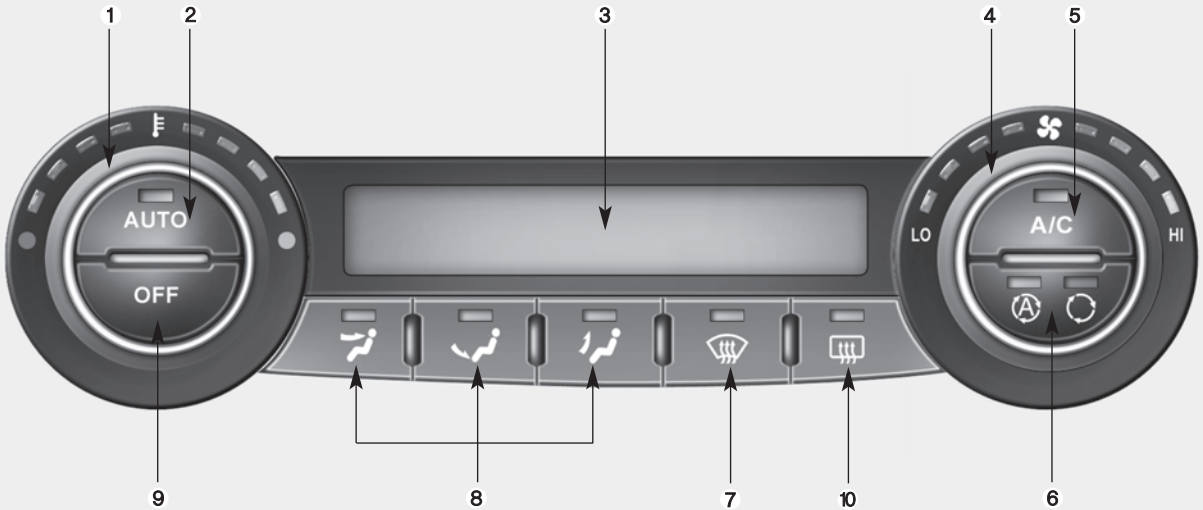
⚠ WARNING

The air conditioning system should be serviced by an authorised Kia dealer. Improper service may cause serious injury.

✻ NOTICE

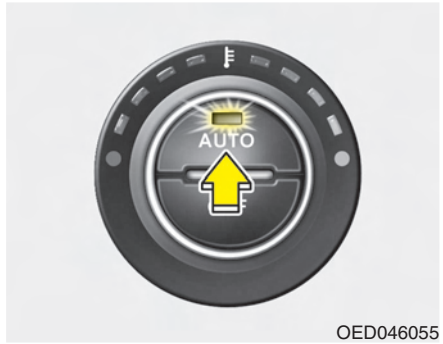
When the performance of the air conditioning system is reduced it is important that the correct type and amount of oil and refrigerant is used. Otherwise, damage to the compressor and abnormal system operation may occur.

AUTOMATIC CLIMATE CONTROL SYSTEM (IF EQUIPPED)



1. Temperature control knob
2. AUTO (automatic control) button
3. A/C display
4. Fan speed control knob
5. Air conditioning button
6. Air intake control button / Air quality control system button (if equipped)
7. Front windscreen maximum defrost button
8. Mode selection button
9. OFF button
10. Rear window defroster button

OED046054



OED046055

Automatic operation

The automatic climate control system is controlled by simply setting the desired temperature.

The Full Automatic Temperature Control (FATC) system automatically controls the heating and cooling system as follows;

1. Push the AUTO button. It is indicated by AUTO on the display. The modes, fan speeds, air intake and air-conditioning will be controlled automatically by temperature setting.
2. Turn the TEMP knob to set the desired temperature.

   If the temperature is set to the lowest setting Lo, the air conditioning system will operate continuously.
3. To turn the automatic operation off, press any button except temperature control button and AQS button. If you press the mode selection button, air-conditioning button, defrost button, air intake control button or fan speed button, the selected function will be controlled manually whilst other functions operate automatically.

Regardless of the temperature setting, when using automatic operation, the air conditioning system will automatically turn on to decrease the humidity inside the vehicle, even if the temperature is set to warm.

OED046078R

✻ NOTICE

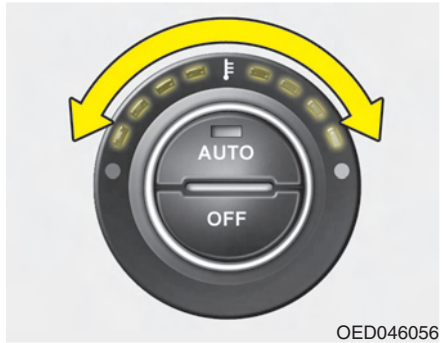
Never place anything over the sensor located on the instrument panel to ensure better control of the heating and cooling system.

Manual operation

The heating and cooling system can be controlled manually as well 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 except AUTO button whilst automatic operation, the functions of the buttons not selected will be controlled automatically.

Press the AUTO button in order to convert to full automatic control of the system.



OED046056

Temperature control knob

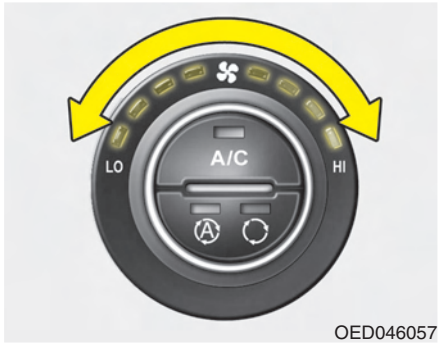
The temperature will increase to the maximum HI by turning the knob to the right extremely.
The temperature will decrease to the minimum Lo by turning the knob to the left extremely.
When turning the knob, the temperature will increase or decrease by 0.5°C/1°F. When set to the lowest temperature setting, the air conditioning will operate continuously.

Temperature conversion

If the battery has been discharged or disconnected, the temperature mode will reset as Centigrade degree.

This is normal condition and you can switch the temperature mode between Centigrade to Fahrenheit as follows;

Whilst depressing the OFF button, depress the AUTO button for 3 seconds or more. The display will change from Centigrade to Fahrenheit, or from Fahrenheit to Centigrade.



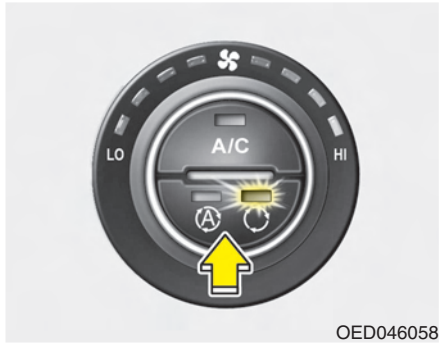
OED046057

Fan speed control knob

The fan speed can be set to the desired speed by turning the fan speed control knob.

The higher the fan speed is, the more air is delivered.

Pressing the OFF button turns off the fan.



OED046058

Air intake control button

This is used to select outside (fresh) air position or recirculated air position.

To change the air intake control position, push the control button.

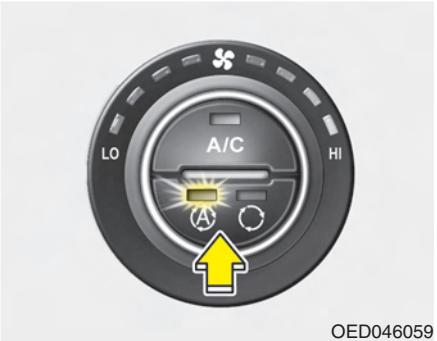
Each time you push the button, intake air position is changed as follows:

Recirculated air position
↓
AQS mode (if equipped)
↓
Outside (fresh) air position
↑

Recirculated air position

The indicator light on the button is illuminated when the recirculated air position is selected.

With the recirculated air position selected, air from passenger compartment will be drawn through the heating system and heated or cooled according to the function selected.



OED046059

Air quality control system (if equipped)

The air inflow from outside vehicle can be automatically controlled. Press the button to activate the air quality control system.

When using AQS mode, AQS(Air Quality Control System) automatically senses outdoor air pollutants and minimizes them from entering the vehicle, however, unpleasant or foul odors that might be present may still be noticeable within the vehicle.

To deactivate the system;

- press the button again.
- press the air intake button.
- press the AUTO button.
- set the mode to the ( ) or ( ) position (when the defogging logic is activated).
- set the temperature control to Lo or HI position whilst automatic operation (the indicator light in the AUTO button is illuminate).
- Press the OFF button.

CAUTION

- ***Prolonged driving with the "Air Quality Control System" ON will cause fogging inside the vehicle.***
- ***To defrost inside the vehicle, press the button or set the air intake button to the outside position.***
- ***The air quality control sensor is located at the side of radiator, be careful to avoid damaging the sensor.***

Outside (fresh) air position

The indicator light on the button is not illuminated when the outside (fresh) air position is selected.

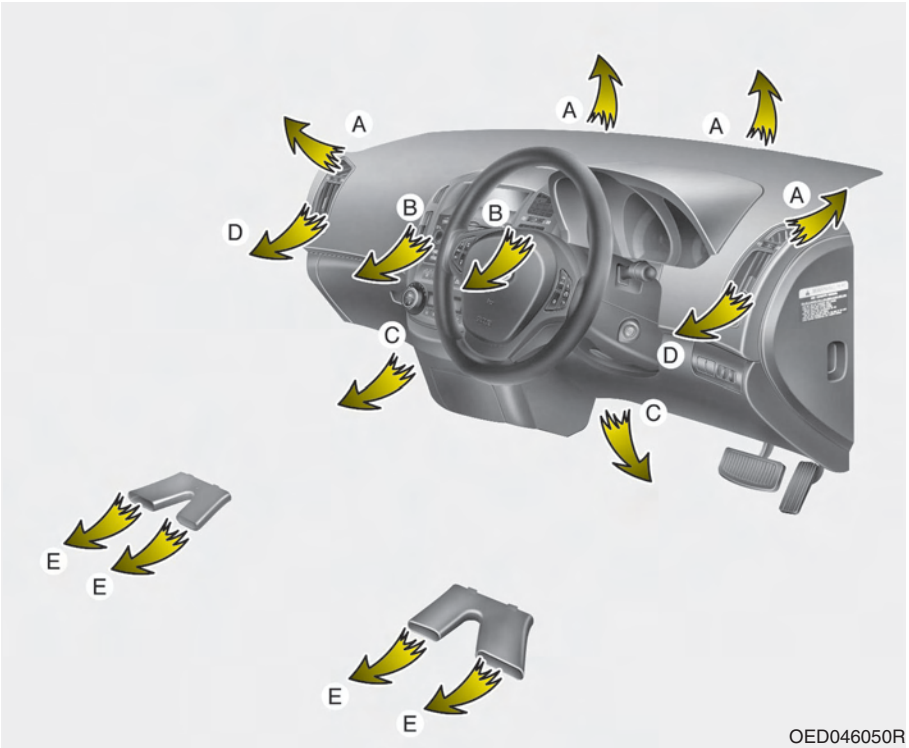
With the outside (fresh) air position selected, air enters the vehicle from outside and is heated or cooled according to the function selected.

✻ NOTICE

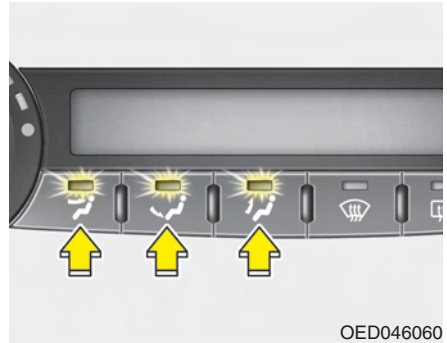
It should be noted that prolonged operation of the heating in recirculated air position will cause fogging of the windscreen and side windows and the air within the passenger compartment will become stale.
In addition, prolonged use of the air conditioning with the "recirculated air position" selected, 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 vehicle which may fog the glass and obscure visibility.**
- **Do not sleep in a vehicle with 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 reciruclated air position can cause drowsiness or sleepiness, and loss of vehicle control. Set the air intake control to the outside (fresh) air position as much as possible whilst driving.**



OED046050R


OED046060

Mode selection button

The mode selection button controls the direction of the air flow through the ventilation system.

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.

Face mode

Air flow is directed toward the upper body and face. Additionally, each outlet can be controlled to direct the air discharged from the outlet. (outlet port: B, D)

Floor mode

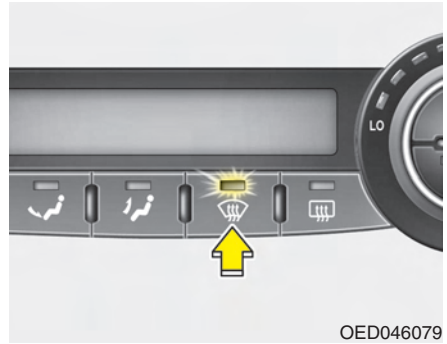
Most of the air flow is directed to the floor.
(outlet port: C, E, A, D)

Defrost mode

Most of the air flow is directed to the windscreen.
(outlet port: A, D)

Also you may select 2~3 modes at the same time for desired air flow.

- face ( ) + floor ( ) mode
- face ( ) + defrost ( ) mode
- floor ( ) + defrost ( ) mode
- face ( ) + floor ( ) + defrost ( ) mode



OED046079

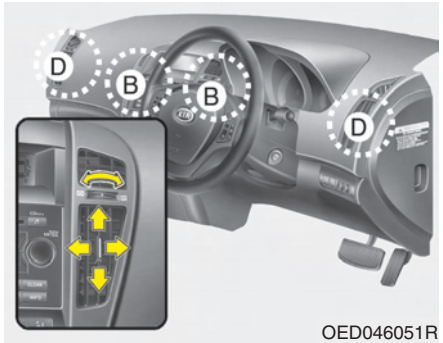
Maximum (MAX) defrost mode

When you select the MAX defrost mode, the following system settings will be made automatically;

- the air conditioning system will be turned on.
- the outside(fresh) air position will be selected.
- the fan speed will be set to the high speed.

If you select the MAX defrost mode, you will not be able to cancel the A/C system operation or change the outside(fresh) air position but you will be able to change the fan speed and the temperature.

To turn the MAX defrost mode off, press the mode button or MAX defrost button again or AUTO button.

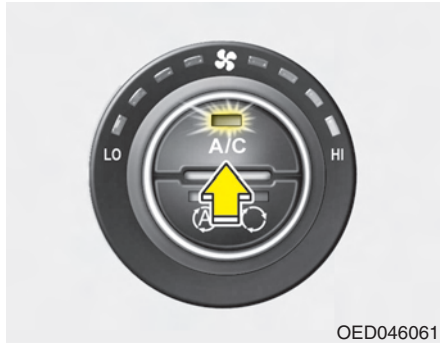


OED046051R

Instrument panel vents

The outlet vents (B, D) can be opened or closed separately using the horizontal thumbwheel. To close the vent, rotate it left to the maximum position. To open the vent, rotate it right to the desired position.

Also, you can adjust the direction of air delivery from these vents using the vent control lever as shown.

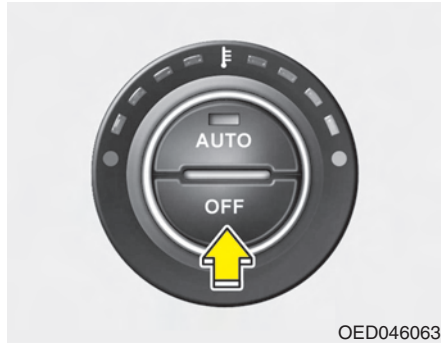


OED046061

Air conditioning button

Push the A/C button to turn the air conditioning system on (indicator light will illuminate).

Push the button again to turn the air conditioning system off.



OED046063

OFF button

Push the OFF button to turn off the air climate control system. However you can still operate the mode and air intake buttons as long as the ignition switch is ON.

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 windows on rainy 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 at idle as the air conditioning compressor cycles on. This is a normal system operation characteristics.
- Use the air conditioning system every month if only for a few minutes to ensure maximum system performance.
- When using the air conditioning system, you may notice clear water dripping (or even pooling) on the ground under the passenger side of the vehicle. This is a normal system operation characteristics.
- Operating the air conditioning system in the recirculated air position does provide maximum cooling, however, continual operation in this mode may cause the air inside the vehicle to become stale.

✻ NOTICE

When using the air conditioning system, monitor the temperature gauge closely whilst 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.

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 an authorised Kia dealer.

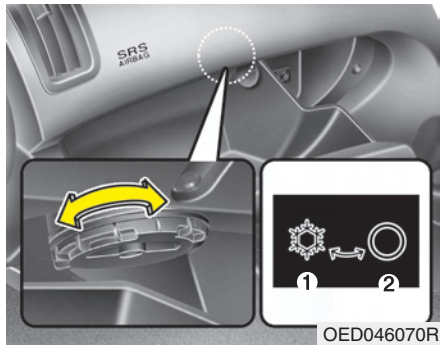
⚠ WARNING

The air conditioning system should be serviced by an authorised Kia dealer. Improper service may cause serious injury.

✻ NOTICE

When the performance of the air conditioning system is reduced it is important that the correct type and amount of oil and refrigerant is used. Otherwise, damage to the compressor and abnormal system operation may occur.

COOL BOX (IF EQUIPPED)

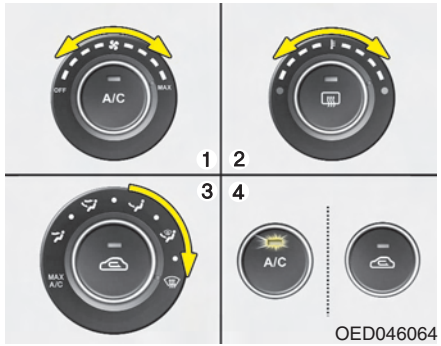


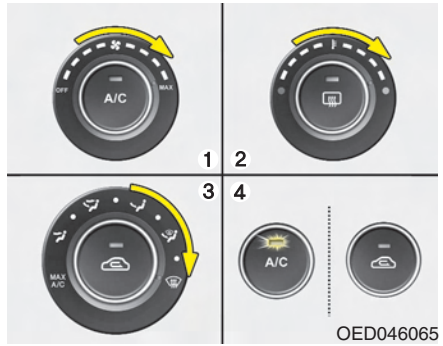
You can keep beverage cans or other items warm or cool using the open/close lever of the vent installed in the glove box.

1. Turn on the fan control switch.
2. Set the air flow control to the face ( ) mode.
3. Turn the open/close lever of the vent installed in the glove box to the open position.
   (1) OPEN
   (2) CLOSE
4. Set the temperature control to warm or cool.

When the cool box is not used, turn the lever to its closed position.

WINDSCREEN DEFROSTING AND DEFOGGING





Manual climate control system

To defog inside windscreen

1. Select any fan speed except “OFF”.
2. Select desired temperature.
3. Select the or position.
4. The outside (fresh) air and air conditioning will be selected.

To defrost outside windscreen

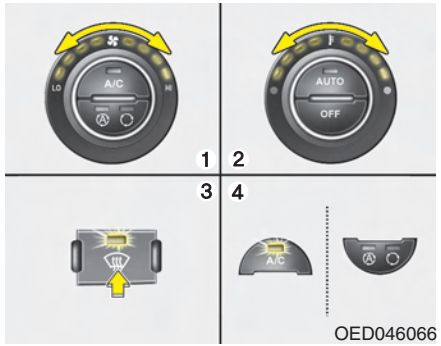
1. Set the fan speed to the right position.
2. Set the temperature to the extreme hot position.
3. Select the position.
4. The outside (fresh) air and air conditioning will be selected.

To reduce the probability of fogging up the inside of the windscreen, the air intake control is set to the outside (fresh) air position automatically if the mode is selected to the or position and the air conditioning will automatically operate if the mode is selected to the position. If you don't want the air conditioning and the outside (fresh) air position, press the corresponding button to cancel the operation.

CAUTION

Do not use the or position during cooling operation in extremely humid weather. The difference between the temperature of the outside air and that of the windscreen could cause the outer surface of the windscreen to fog up, causing loss of visibility. In this case, set the mode selection knob to the position and fan speed control knob to the lower speed.

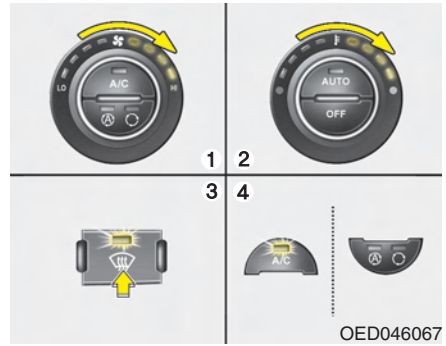
- For maximum defrosting, set the temperature control to the extreme right/hot position and the fan speed control to the highest speed.
- If warm air to the floor is desired whilst defrosting or defogging, set the mode to the floor-defrost position.
- Before driving, clear all snow and ice from the windscreen, rear window, outside rear view mirrors, and all side windows.
- Clear all snow and ice from the bonnet and air inlet in the cowl grill to improve heater and defroster efficiency and to reduce the probability of fogging up inside of the windscreen.



Automatic climate control system

To defog inside windscreen

1. Select desired fan speed.
2. Select desired temperature.
3. Press the defrost button ( ).
4. The air-conditioning will be turned on and outside (fresh) air position will be selected.



To defrost outside windscreen

1. Set fan speed to the highest (extreme right) position.
2. Set temperature to the extreme hot (HI) position.
3. Press the defrost button ( ).
4. The air-conditioning will be turned on and outside (fresh) air position will be selected.

To reduce the probability of fogging up the inside of the windscreen, the air intake control is set to the outside (fresh) air position automatically and the air conditioning will automatically operate if the mode is selected to the position. If you select the mode, you will not be able to cancel the A/C system operation or change the outside (fresh) air position.

CAUTION

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 windscreen could cause the outer surface of the windscreen to fog up, causing loss of visibility. In this case, set the mode selection knob to the position and fan speed control knob 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 whilst defrosting or defogging, set the mode to the floor-defrost position.
- Before driving, clear all snow and ice from the windscreen, rear window, outside rear view mirrors, and all side windows.
- Clear all snow and ice from the bonnet and air inlet in the cowl grill to improve heater and defroster efficiency and to reduce the probability of fogging up inside of the windscreen.

Defogging logic

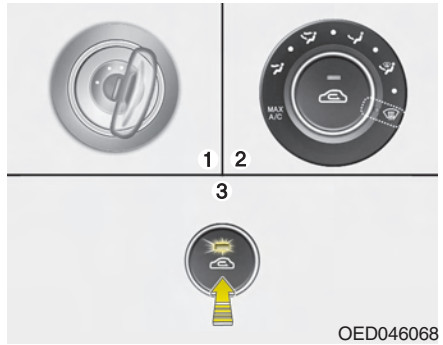
Manual climate control system

To reduce the probability of fogging up the inside of the windscreen, the air intake control is set to the outside (fresh) air position automatically if any of following occur.

- The mode is selected to the or whilst the system is activated.
- The ignition switch is turned on whilst the mode is selected to the or .

In this case, the air conditioning will automatically operate if the mode is selected to the .

If you don't want the air-conditioning or outside (fresh) air position, press the corresponding button to cancel the operation.



How to cancel or return defogging logic of manual climate control system

1. Turn the ignition switch to the "ON" position.
2. Turn the mode selection knob to the defrost position ( ).
3. Push the air intake control button ( ) at least 5 times within 3 seconds.

Then the indicator light in the air intake control button will blink 3 times with 0.5 second of interval. It indicates that the defogging logic is canceled or returned to the programmed status.

If the battery has been discharged or disconnected, it is reset as the defog logic status.

Automatic climate control system

To reduce the probability of fogging up inside of the windscreen, the air intake control is set to outside (fresh) air position automatically if any of following occur.

- The ignition switch is turned on.
- The OFF button is pushed.
- The mode is selected to the position.

In this case, the air conditioning will automatically operate if the mode is selected to the .

If you select the mode, you will not be able to cancel the A/C system operation or change the outside (fresh) air position.

Fuel requirements / 5-2
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Driving tips 5

FUEL REQUIREMENTS

Petrol engine (unleaded)

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

You may use unleaded petrol with an octane rating of RON 91~94/AKI 87~90 but it may result in slight performance reduction of the vehicle.

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

✻ NOTICE

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

Petrol engine (Leaded)

In countries using LEADED FUEL, your new Kia vehicle must use LEADED FUEL. Your new Kia Vehicle is designed to correspond to LEADED FUEL specifically. Please check your vehicle whether your vehicle can use LEADED FUEL or not.

Petrol containing alcohol and methanol

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

Do not use gasohol containing more than 10% ethanol, and do not use petrol or gasohol containing any methanol. Either of these fuels may cause drivability problems and damage to the fuel system.

Discontinue using gasohol of any kind if drivability problems occur.

EMISSION CONTROL SYSTEM

Vehicle damage or driveability 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. Petrol 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.

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.

Vehicle modifications

This vehicle should not be modified. Modification of your Kia 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.

Engine exhaust gas precautions (carbon monoxide)

⚠ WARNING

Engine exhaust gases contain carbon monoxide (CO). Though colorless and odorless, it is dangerous and could be lethal if inhaled. Follow the instructions following to avoid CO poisoning.

- 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 by an authorised Kia dealer. 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.

- 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.
- Inspect the emission control system whenever engine stalls.
- If the engine stalls or fails to start, do not re-engaging the starter over 3 times. If the engine stalls or re-engaged excessively, it may cause damage to the emission control system.

Operating precautions for catalytic converters

⚠ 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 dry grass, paper, leaves, etc.

Your vehicle is equipped with a catalytic converter emission control device.

Therefore, the following precautions must be observed:

- Use only UNLEADED FUEL for petrol engine (unleaded).
- Do not operate the vehicle when there are signs of engine malfunction, such as misfire or a noticeable loss of performance.
- Do not misuse or abuse the engine. Examples of misuse are coasting with the ignition off and descending steep grades in gear with the ignition off.
- Do not operate the engine at high idle speed for extended periods (5 minutes or more).
- Do not modify or tamper with any part of the engine or emission control system. All inspections and adjustments must be made by an authorised Kia dealer.

Failure to observe these precautions could result in damage to the catalytic converter and to your vehicle. Additionally, such actions could void your warranties.

BEFORE DRIVING

Before entering vehicle:

- Be sure that all windows, outside mirror(s), and outside lights are clean.
- Check the condition of the tyres.
- 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. Further details are provided in Section 7, Maintenance.

Before starting

- Close and lock all doors.
- Position the seat so that all controls are easily reached.
- Adjust the inside and outside rearview mirrors.
- Be sure that all lights work.
- Check all gauges.
- Check the operation of warning lights when the ignition switch is turned to the ON position.
- Release the parking brake and make sure the brake warning light goes out.

For safe operation, be sure you are familiar with your vehicle and its equipment.

⚠ WARNING - 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 judgement.

You are much more likely to have a serious accident if you drink 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.

Driving whilst under the influence of drugs is as dangerous or more dangerous than driving drunk.

SUGGESTIONS FOR 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 litre (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:

- Avoid lengthy warm-up idling. Once the engine is running smoothly, begin driving. Remember, engine warm-up may take a little longer on cold days.
- Save fuel by accelerating slowly after stopping.
- Keep the engine in tune and follow the recommended periodic maintenance schedule. This will increase the life of all parts and lower your operating costs.
- Do not use the air conditioner unnecessarily.
- Slow down when driving on rough roads.
- For longer tyre life and better fuel economy, always keep the tyres inflated to the recommended pressures.
- Maintain a safe distance from other vehicles to avoid sudden stops. This will reduce wear on brake linings and pads. Driving in such a way will also save fuel because extra fuel is required to accelerate back to driving speed.
- Do not carry unnecessary weight in the vehicle.
- Do not rest your foot on the brake pedal whilst driving. This can cause needless wear, possible damage to the brakes, and poor fuel economy.
- Improper wheel alignment results in faster tyre wear and lower fuel economy.
- Open windows at high speeds can reduce fuel economy.
- Fuel economy is less in crosswinds and headwinds. To help offset some of this loss, slow down when driving in these conditions.

Keeping a vehicle in good operating condition is important both for economy and safety. Therefore, have an authorised Kia dealer perform scheduled inspections and maintenance.

⚠ WARNING - Engine off during motion

Never turn the engine off to coast down hills or anytime the vehicle is in motion. The power steering and power brakes will not function without the engine running. Instead, keep the engine on and downshift to an appropriate gear for engine braking effect.

SPECIAL DRIVING CONDITIONS

Hazardous driving conditions

When hazardous driving conditions are encountered such as water, snow, ice, mud, sand, or similar hazards, follow these suggestions:

- Drive cautiously and allow extra distance for braking.
- Avoid sudden movements in braking or steering.
- When braking, pump the brake pedal with a light up-and-down motion until the vehicle is stopped.

✻ NOTICE

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, tyre chains, or other non-slip material under the drive wheels to provide traction when stalled in ice, snow, or mud.

⚠ WARNING - Downshifting

Downshifting with an automatic transaxle, whilst driving on slippery surfaces can cause an accident. The sudden change in tyre speed could cause the tyres to skid. Be careful when downshifting on slippery surfaces.

Rocking the vehicle

If it is necessary to rock the vehicle to free it from snow, sand, or mud, first turn the steering wheel right and left to clear the area around your front wheels. Then, shift back and forth between 1 (First) and R (Reverse) in vehicles equipped with a manual transaxle or R (Reverse) and any forward gear in vehicles equipped with an automatic transaxle. 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 transaxle.

CAUTION

Prolonged rocking may cause engine over-heating, transaxle damage or failure, and tyre damage.

⚠ WARNING - Spinning tyres

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 tyre to overheat, explode and injure bystanders.

✻ NOTICE

The ESP system (if equipped) should be turned OFF prior to rocking the vehicle.

Smooth cornering

Avoid braking or gear changing in corners, especially when roads are wet. Ideally, corners should always be taken under gentle acceleration. If you follow these suggestions, tyre wear will be held to a minimum.

Driving at night

Because night driving presents more hazards than driving in the daylight, here are some important tips to remember:

- Slow down and keep more distance between you and other vehicles, as it may be more difficult to see at night, especially in areas where there may not be any street lights.
- Adjust your mirrors to reduce the glare from other driver's headlights.
- Keep your headlights clean and properly aimed on vehicles not equipped with the automatic headlight aiming feature. Dirty or improperly aimed headlights will make it much more difficult to see at night.
- Avoid staring directly at the headlights of oncoming vehicles. You could be temporarily blinded, and it will take several seconds for your eyes to readjust to the darkness.

Driving in the rain

Rain and wet roads can make driving dangerous, especially if you're not prepared for the slick pavement. Here are a few things to consider when driving in the rain:

- A heavy rainfall will make it harder to see and will increase the distance needed to stop your vehicle, so slow down.
- Keep your windscreen wiping equipment in good shape. Replace your windscreen wiper blades when they show signs of streaking or missing areas on the windscreen.
- If your tyres 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 tyres 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 whilst 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 whilst the vehicle is moving slowly.

Highway driving

Tyres

Adjust the tyre inflation pressures to specification. Low tyre inflation pressures will result in overheating and possible failure of the tyres.

Avoid using worn or damaged tyres which may result in reduced traction or tyre failure.

✻ NOTICE

Never exceed the maximum tyre inflation pressure shown on the tyres.

⚠ WARNING

- **Underinflated or overinflated tyres can cause poor handling, loss of vehicle control, and sudden tyre failure leading to accidents, injuries, and even death. Always check tyres for proper inflation before driving. For proper tyre pressures, refer to "Tyres and wheels" in chapter 8.**
- **Driving on tyres with no or insufficient tread is dangerous. Worn-out tyres can result in loss of vehicle control, collisions, injury, and even death. Worn-out tyres should be replaced as soon as possible and should never be used for driving. Always check the tyre tread before driving your car. For further information and tread limits, refer to "Tyres and wheels" in chapter 7.**

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

- We recommend that you carry emergency equipment, including tyre chains, a window scraper, windscreen de-icer, a bag of sand or salt, flares, a small shovel and jumper cables.
- Make sure you have sufficient ethylene-glycol coolant in the radiator.
- Check the battery condition and cables. Cold temperatures reduce the capacity of any battery, so it must be in excellent condition to provide enough winter starting power.
- Make sure the engine oil viscosity is suitable for cold weather.
- Check the ignition system for loose connections and damage.
- Use antifreeze-formulated windscreen washer fluid. (Do not use engine coolant antifreeze.)
- Do not use the parking brake if it might freeze. When parking, shift to 1 (First) or R (Reverse) with a manual transaxle or P (Park) with an automatic transaxle and block the rear wheels.

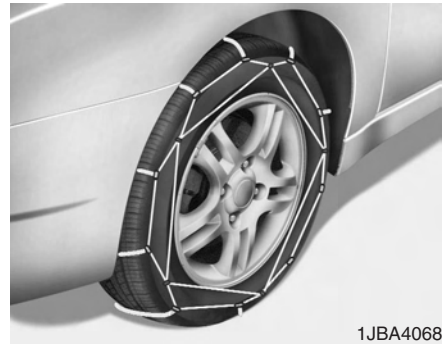
Snow tyres

If you mount snow tyres on your Kia, make sure they are radial tyres of the same size and load range as the original tyres. Mount snow tyres on all four wheels to balance your vehicle's handling in all weather conditions. Keep in mind that the traction provided by snow tyres on dry roads may not be as high as your vehicle's original equipment tyres. You should drive cautiously even when the roads are clear. Check with the tyre dealer for maximum speed recommendations.

⚠ WARNING - Snow tyre size

Snow tyres should be equivalent in size and type to the vehicle's standard tyres. Otherwise, the safety and handling of your vehicle may be adversely affected.

Do not install studded tyres without first checking local, state and municipal regulations for possible restrictions against their use.



Tyre chains

Since the sidewalls of radial tyres are thinner, they can be damaged by mounting some types of snow chains on them. Therefore, the use of snow tyres is recommended instead of snow chains. Do not mount tyre 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 15 mm (0.59 in). Damage to your vehicle caused by improper snow chain use is not covered by your vehicle manufacturers warranty.

Install them only on the front tyres.

CAUTION

- ***If your vehicle is equipped with 225/45R17 tyres, do not use tyre chains.***
- ***Make sure the snow chains are the correct size and type for your tyres. 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 tyre. 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.***

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 park (P), apply the parking brake and turn off the engine before installing snow chains.

⚠ WARNING - Tyre 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

- ***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 chapter 7. Before winter, have your coolant tested to assure that its freezing point is sufficient for the temperatures anticipated during the winter.

Check battery and cables

Winter puts additional burdens on the battery system. Visually inspect the battery and cables as described in chapter 7. The level of charge in your battery can be checked by an authorised KIA dealer or a service station.

Change to "winter weight" oil if necessary

In some climates it is recommended that a lower viscosity "winter weight" oil be used during cold weather. See chapter 8 for recommendations. If you aren't sure what weight oil you should use, consult an authorised KIA dealer.

Check spark plugs and ignition system

Inspect your spark plugs as described in chapter 7 and replace them if necessary. Also check all ignition wiring and components to be sure they are not cracked, worn or damaged in any way.

To keep locks from freezing

To keep the locks from freezing, squirt an approved de-icer fluid or glycerine into the key opening. If a lock is covered with ice, squirt it with an approved de-icing fluid to remove the ice. If the lock is frozen internally, you may be able to thaw it out by using a heated key. Handle the heated key with care to avoid injury.

Use approved window washer anti-freeze in system

To keep the water in the window washer system from freezing, add an approved window washer anti-freeze solution in accordance with instructions on the container. Window washer anti-freeze is available from an authorised KIA dealer and most auto parts outlets. Do not use engine coolant or other types of anti-freeze as these may damage the paint finish.

Don't let your parking brake freeze

Under some conditions your parking brake can freeze in the engaged position. This is most likely to happen when there is an accumulation of snow or ice around or near the rear brakes or if the brakes are wet. If there is a risk the parking brake may freeze, apply it only temporarily whilst you put the gear selector lever in P (automatic transaxle) or in first or reverse gear (manual transaxle) and block the rear wheels so the car 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 where you drive your car, you should carry appropriate emergency equipment. Some of the items you may want to carry include tyre chains, tow straps or chains, flashlight, emergency flares, sand, a shovel, jumper cables, a window scraper, gloves, ground cloth, coveralls, a blanket, etc.

TRAILER TOWING (FOR EUROPE)

⚠ WARNING - Towing a trailer

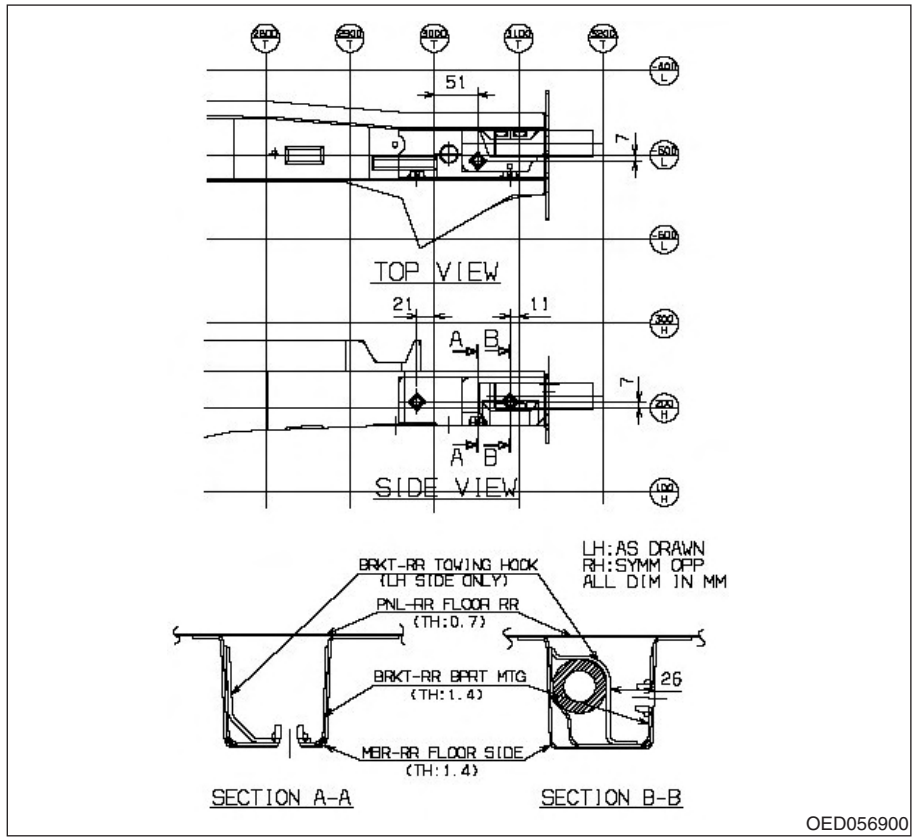
If you don't use the correct equipment and drive properly, you can lose control when you pull a trailer. For example, if the trailer is too heavy, the brakes may not work well - or even at all. You and your passengers could be seriously or fatally injured. Pull a trailer only if you have followed all the steps in this section.

✻ NOTICE

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.

Item \ Engine		Petrol Engine			Diesel Engine	
		1.4/1.6 Engine	2.0 Engine		1.6 Engine	2.0 Engine
			M/T	A/T		
Maximum trailer weight kg (lbs.)	Without brake System	550 (1212)	550 (1212)	550 (1212)	550 (1212)	550 (1212)
	With brake System	1200 (2645)	1500 (3301)	1400 (3086)	1400 (3086)	1500 (3307)
Maximum permissible static vertical load on the coupling device kg (lbs.)		55	75	75	75	75
Recommended distance from rear wheel centre to coupling point mm (Inch)		820				

M/T : Manual transaxle
A/T : Automatic transaxle



Your vehicle can tow a trailer. To identify what the vehicle trailering capacity is for your vehicle, you should read the information in “Weight of the Trailer” that appears later in this section.

Remember that trailering is different than just driving your vehicle by itself. Trailering means changes in handling, durability, and fuel economy. Successful, safe trailering requires correct equipment, and it has to be used properly.

This section contains many time-tested, important trailering tips and safety rules. Many of these are important for your safety and that of your passengers. Please read this section carefully before you pull a trailer.

Load-pulling components such as the engine, transaxle, wheel assemblies, and tyres are forced to work harder against the load of the added weight. The engine is required to operate at relatively higher speeds and under greater loads. This additional burden generates extra heat. The trailer also adds considerably to wind resistance, increasing the pulling requirements.

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 towbar hitch dealer about sway control.
- After your odometer indicates 800 km (500 miles) or more, you can tow a trailer. For the first 800 km (500 miles) that you tow a trailer, don't drive over 80 km/h (50 mph) and don't make starts at full throttle. This helps your engine and other parts of your vehicle "wear" in at the heavier loads.
- Always drive your vehicle less than 100 km/h. If your vehicle is a comercial vehicle, drive less than 80 km/h.
- The important considerations have to do with weight:

Weight of the trailer

How heavy can a trailer safely be? 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 much your vehicle is used to pull a trailer are all important. The ideal trailer weight can also depend on any special equipment that you have on your vehicle.

Weight of the trailer tongue

The nose weight of any trailer is an important weight to measure because it affects the total gross vehicle weight (GVW) of your vehicle. This weight includes the curb weight of the vehicle, any cargo you may carry in it, and the people who will be riding in the vehicle. And if you will tow a trailer, you must add the nose weight to the GVW because your vehicle will also be carrying that weight.

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

- **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.**

Towbar hitches

It's important to have the correct towbar hitch equipment. Crosswinds, large trucks going by, and rough roads are a few reasons why you'll need the right towbar hitch. Here are some rules to follow:

- Will you have to make any holes in the body of your vehicle when you install a trailer towbar hitch? If you do, then be sure to seal the holes later when you remove the towbar 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 towbar hitches. Do not attach rental towbar hitches or other bumper-type towbar hitches to them. Use only a frame-mounted towbar hitch that does not attach to the bumper.

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 towbar hitch.

Instructions about safety chains may be provided by the towbar hitch manufacturer or by the trailer manufacturer. Follow the manufacturer's recommendation for attaching safety chains. Always leave just enough slack so you can turn with your trailer. And, never allow safety chains to drag on the ground.

Trailer brakes

If your trailer 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

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 towbar hitch and platform, safety chains, electrical connector(s), lights, tyres and mirror adjustment. If the trailer has electric brakes, start your vehicle and trailer moving and then apply the trailer brake controller by hand to be sure the brakes are working. This lets you check your electrical connection at the same time.

During your trip, check occasionally to be sure that the load is secure, and that the lights and any trailer brakes are still working.

Following distance

Stay at least twice as far behind the vehicle ahead as you would when driving your vehicle without a trailer. This can help you avoid situations that require heavy braking and sudden turns.

Passing

You'll need more passing distance up ahead when you're towing a trailer. And, because you're a good deal longer, 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 manoeuvres. 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.

Your Authorised Kia Dealer can assist you in installing the wiring harness.

⚠ 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 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 transaxle overheating.

If your trailer weighs more than the maximum trailer weight without trailer brakes and you have an automatic transaxle, you should drive in D (Drive) when towing a trailer.

Operating your vehicle in D (Drive) when towing a trailer will minimize heat buildup and extend the life of your transaxle.

If you have a manual transaxle, drive in fourth gear (or, as you need to, a lower gear).

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), pull over and stop as soon as it is safe to do so, and allow the engine to idle until it cools down. You may proceed once the engine has cooled sufficiently.***
- ***You must decide driving speed depending on trailer weight and uphill grade to reduce the possibility of engine and transaxle overheating.***

✻ **NOTICE - For petrol engine (1.6 or 2.0*l*) with Automatic Transaxle**

If you tow a trailer on steep grades(in excess of 12%) at a speed over 30 km/h with the maximum gross vehicle weight and the maximum trailer weight, it can cause the engine or transaxle to overheat. When driving in such conditions, allow the engine to idle until it cools down. You may proceed once when the engine or transaxle has cooled sufficiently.

Parking on hills

Generally, you should not park your vehicle, with a trailer attached, on a hill. People can be seriously or fatally injured, and both your vehicle and the trailer can be damaged if they begin a downhill trajectory.

⚠ 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 lose.

However, if you ever have to park your trailer on a hill, here's how to do it:

1. Apply your brakes, but don't shift into gear.
2. Have someone place chocks under the trailer wheels.
3. When the wheel chocks are in place, release the brakes until the chocks absorb the load.
4. Reapply the brakes. Apply your parking brake, and then shift to R (Reverse) for a manual transaxle or P (Park) for an automatic transaxle.
5. Release the brakes.

⚠ 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. With the manual transaxle in Neutral or automatic transaxle in P (Park), apply your brakes and hold the brake pedal down whilst you:
   - Start your engine;
   - Shift into gear; and
   - Release the parking brake.
2. Slowly remove your foot from the brake pedal.
3. Drive slowly until the trailer is clear of the chocks.
4. Stop and have someone pick up and store the chocks.

Maintenance when trailer towing

Your vehicle will need service more often when you regularly pull a trailer. Important items to pay particular attention to include engine oil, automatic transaxle fluid, axle lubricant and cooling system fluid. Brake condition is another important item to frequently check. Each item is covered in this manual, and the Index will help you find them quickly. If you're trailering, it's a good idea to review these sections before you start your trip.

Don't forget to also maintain your trailer and towbar 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 towbar 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 transaxle fluid more frequently.***
- ***If your vehicle is not equipped with the air conditioner, you should install a condenser fan to improve engine performance when towing a trailer.***

VEHICLE WEIGHT

This section will guide you in the proper loading of your vehicle and/or trailer, to keep your loaded vehicle weight within its design rating capability, with or without a trailer. Properly loading your vehicle will provide maximum return of the vehicle design performance. Before loading your vehicle, familiarize yourself with the following terms for determining your vehicle's weight ratings, with or without a trailer, from the vehicle's specifications and the certification label:

Base curb weight

This is the weight of the vehicle including a full tank of fuel and all standard equipment. It does not include passengers, cargo, or optional equipment.

Vehicle curb weight

This is the weight of your new vehicle when you picked it up from your dealer plus any aftermarket equipment.

Cargo weight

This figure includes all weight added to the Base Curb Weight, including cargo and optional equipment.

GAW (Gross axle weight)

This is the total weight placed on each axle (front and rear) - including vehicle curb weight and all payload.

GAWR (Gross axle weight rating)

This is the maximum allowable weight that can be carried by a single axle (front or rear). These numbers are shown on the certification label.

The total load on each axle must never exceed its GAWR.

GVW (Gross vehicle weight)

This is the Base Curb Weight plus actual Cargo Weight plus passengers.

GVWR (Gross vehicle weight rating)

This is the maximum allowable weight of the fully loaded vehicle (including all options, equipment, passengers and cargo). The GVWR is shown on the certification label located on the driver's (or front passenger's) door sill.

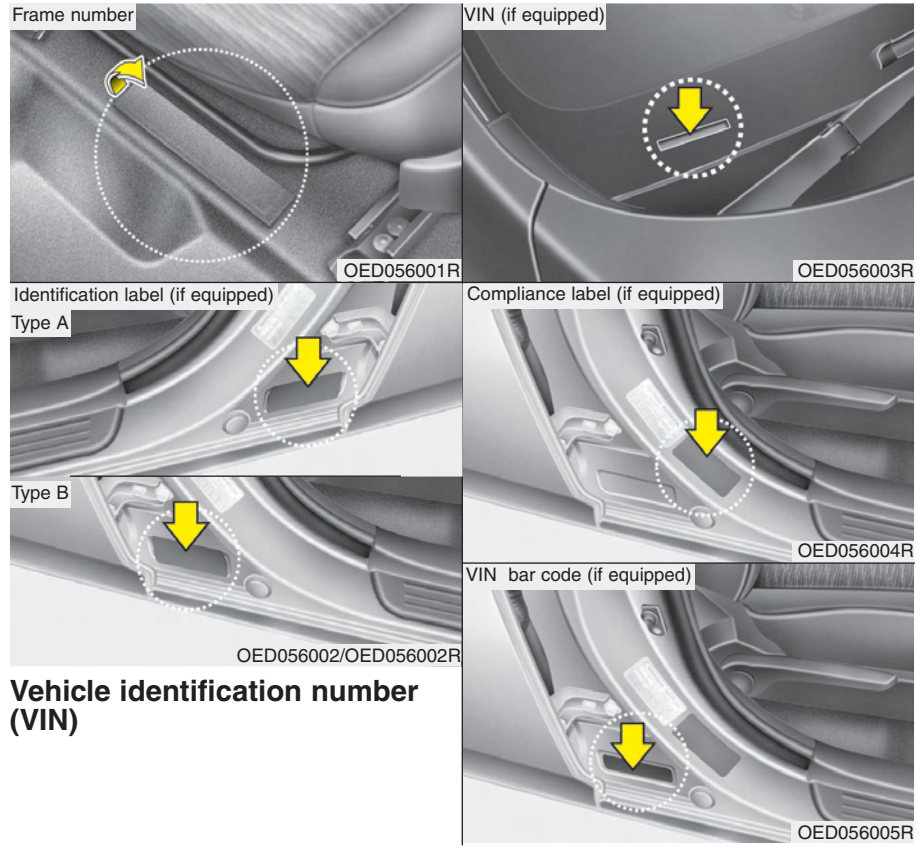
Overloading

⚠ WARNING

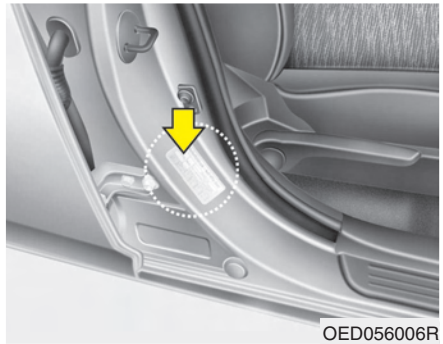
The gross axle weight rating (GAWR) and the gross vehicle weight rating (GVWR) for your vehicle are on the manufacturer's label attached to the driver's door. Exceeding these ratings can cause an accident or vehicle damage. You can calculate the weight of your load by weighing the items (or people) before putting them in the vehicle. Be careful not to overload your vehicle.

LABEL INFORMATION

There are several important labels and identification numbers located on your vehicle. The label locations are identified in the illustrations shown.



Vehicle identification number (VIN)



Tyre specification / pressure label

Road warning / 6-2
In case of an emergency whilst driving / 6-3
If the engine will not start / 6-4
Emergency starting / 6-5
Overheating / 6-8
Electrical circuit protection / 6-9
Towing / 6-16
Tyre pressure monitoring system / 6-21
If you have a flat tyre / 6-25

In case of an emergency 6

ROAD WARNING

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Hazard warning flasher

The hazard warning flasher serves as a warning to other drivers to exercise extreme caution when approaching, overtaking, or passing your vehicle. It should be used whenever emergency repairs are being made or when the vehicle is stopped near the edge of a roadway.

Depress the flasher switch with the ignition switch in any position. The flasher switch is located in the centre 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 whilst the vehicle is being towed.

IN CASE OF AN EMERGENCY WHILST DRIVING

If you have a flat tyre whilst driving

If a tyre goes flat whilst you are driving:

1. Take your foot off the accelerator pedal and let the car slow down whilst 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 car has slowed to such a speed that it is safe to do so, brake carefully and pull off the road. Drive off the road as far as possible and park on 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 car is stopped, turn on your emergency hazard flashers, set the parking brake and put the transaxle in P (automatic transaxle) or reverse (manual transaxle).
3. Have all passengers get out of the car. Be sure they all get out on the side of the car that is away from traffic.
4. When changing a flat tyre, follow the instruction provided later in this section.

If engine stalls whilst driving

1. Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place.
2. Turn on your emergency flashers.
3. Try to start the engine again. If your vehicle will not start, contact an authorised KIA dealer or seek other qualified assistance.

IF THE ENGINE WILL NOT START

If engine doesn't turn over or turns over slowly

1. If your car has an automatic transaxle, be sure the gear selector lever is in N (Neutral) or P (Park) and the parking brake is set.
2. Check the battery connections to be sure they are clean and tight.
3. Turn on the interior light. If the light dims or goes out when you operate the starter, the battery is discharged.
4. Check the starter connections to be sure they are securely tightened.
5. Do not push or pull the vehicle to start it. See instructions for “Jump starting”.

⚠ WARNING

If the engine will not start, do not push or pull the car 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 fuel level.
2. With the ignition switch in the LOCK position, check all connectors at ignition, coil and spark plugs (if equipped). Reconnect any that may be disconnected or loose.
3. Check the fuel line in the engine compartment.
4. If the engine still does not start, call an authorised KIA dealer or seek other qualified assistance.

EMERGENCY STARTING

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 listed on page 6-6. If in doubt, we strongly recommend that you have a competent technician or towing service jump start your vehicle.

✻ NOTICE

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

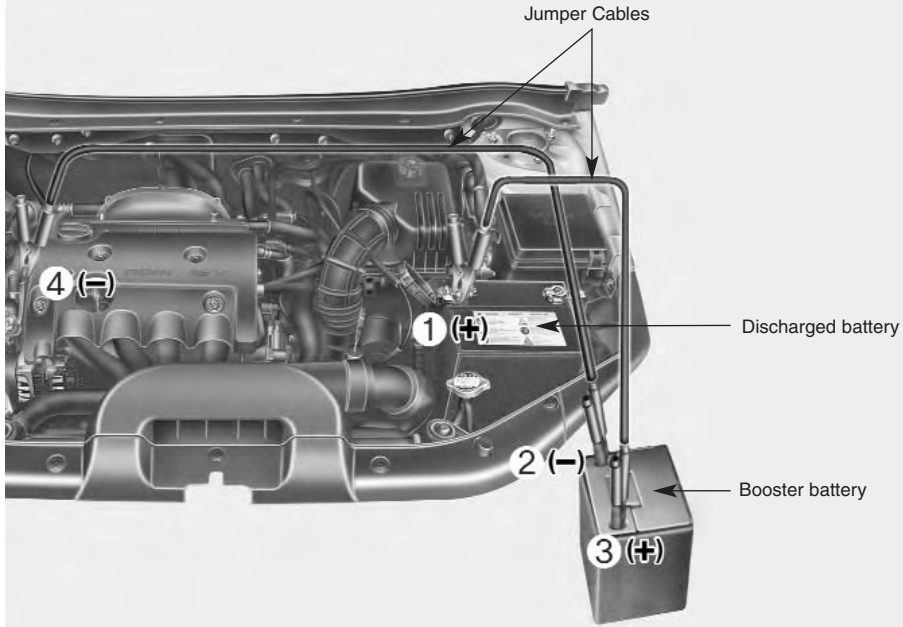
Never attempt to check the electrolyte level of the battery as this may cause the battery to rupture or explode causing serious injury.

⚠ 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.**
- **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.**

Connecting jumper cables

Connect cables in numerical order and disconnect in reverse order.



* The engine lifting bracket position may differ from the illustration according to the engine type.

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Jump starting procedure

1. Make sure the booster battery is 12-volt and that its negative terminal is grounded.
2. If the booster battery is in another vehicle, do not allow the vehicles to touch.
3. Turn off all unnecessary electrical loads.
4. Connect the jumper cables in the exact sequence shown in the previous 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).

5. 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 connect the jumper cable from the negative terminal of the booster battery to the negative terminal of the discharged battery.

   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.

6. Start the engine of the vehicle with the booster battery and let it run at 2,000 rpm, then start the engine of the vehicle with the discharged battery.

If the cause of your battery discharging is not apparent, you should have your vehicle checked by an Authorised Kia Dealer.

Push-starting

Your manual transaxle-equipped vehicle should not be push-started because it might damage the emission control system.

Vehicles equipped with automatic transaxle cannot be push-started.

Follow the directions in this section for jump-starting.

CAUTION

Never tow a vehicle to start it because the sudden surge forward when the engine starts could cause a collision with the tow vehicle.

OVERHEATING

If your temperature gauge indicates overheating, if you experience a loss of power, or if you hear a loud knocking or pinging noise, the engine has probably overheated. Should any of these symptoms occur, use the following procedure:

1. Turn on the hazard warning flasher, then drive to the nearest safe location and stop your vehicle; set the automatic transaxle in P (Park), or shift the manual transaxle to N (Neutral) and apply the parking brake.
2. Make sure the air conditioner is off.
3. If coolant or steam is boiling out of the radiator, stop the engine and call an Authorised Kia Dealer for assistance.

If coolant is not boiling out, allow the engine to idle and open the bonnet to permit the engine to cool gradually.

⚠ WARNING

Whilst the engine is running, keep hair, hands and clothing away from moving parts such as the fan and drive belts to prevent injury.

If the temperature does not go down with the engine idling, stop the engine and allow sufficient time for it to cool.

⚠ WARNING

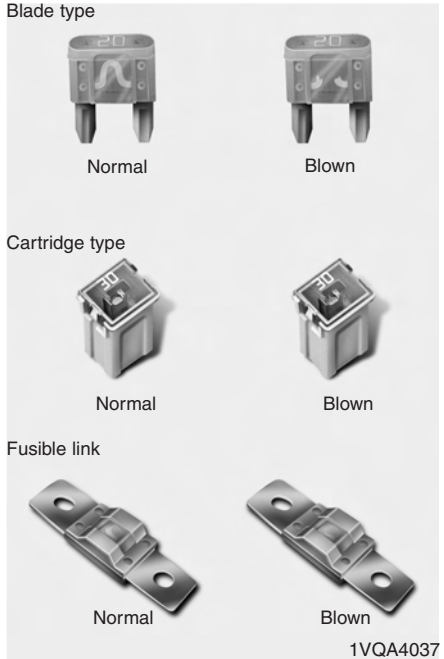
Do not remove the radiator cap when the engine is hot. This can allow coolant to be blown out of the opening and cause serious burns.

4. The coolant level should then be checked. If the level in the reservoir is low, look for leaks at the radiator hoses and connections, heater hoses and connections, radiator, and water pump. If you find a major leak or another problem that may have caused the engine to overheat, do not operate the engine until it has been corrected. Call an Authorised Kia Dealer for assistance. If you do not find a leak or other problem, carefully add coolant to the reservoir.

CAUTION

Serious loss of coolant indicates there is a leak in the cooling system and this should be checked as soon as possible by an authorised KIA dealer.

ELECTRICAL CIRCUIT PROTECTION



Fuses

A vehicle's electrical system is protected from electrical overload damage by fuses.

This vehicle has two fuse panels, one located in the driver's side, the other in the engine compartment.

The diesel engine has more one fuse panel which located in the engine compartment near the washer tank reservior.

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 be melted.

If the electrical system does not work, first check the driver's side fuse panel.

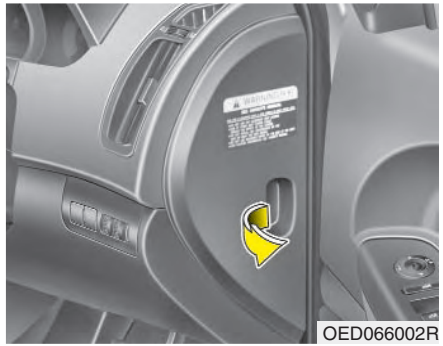
Always replace a blown fuse with one of the same rating.

If the replacement fuse blows, this indicates an electrical problem. Avoid using the system involved and immediately consult an Authorised Kia Dealer.

Fuse replacement

⚠ WARNING - Fuse replacement

- **Never replace a fuse with anything but another fuse of the same rating.**
- **A higher capacity fuse could cause damage through overheating and possibly a fire.**
- **Never install a wire instead of the proper fuse - even as a temporary repair. It may cause extensive wiring damage and possibly a fire.**
- **Do not use a screwdriver or any other metal object to remove fuses because it may cause a short circuit and damage the system.**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Inner panel fuse replacement

1. Turn the ignition switch and all other switches off.
2. Open the fuse panel cover.

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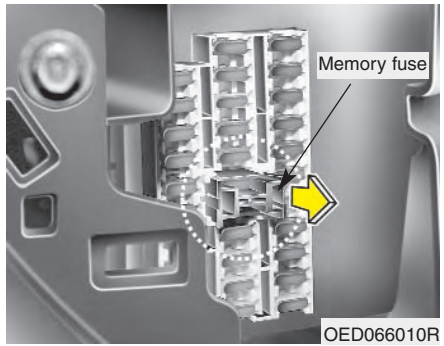
3. Pull the suspected fuse straight out. Use the removal tool provided in the engine compartment fuse panel.
4. Check the removed fuse; replace it if it is blown.

   Spare fuses are provided in the inner fuse panel (or in the engine compartment fuse panel).
5. Push in a new fuse of the same rating, and make sure it fits tightly in the clips.

If it fits loosely, consult an authorised Kia dealer.

If you do not have a spare, use a fuse of the same rating from a circuit you may not need for operating the vehicle, such as the cigarette lighter fuse.

If the headlights or other electrical components do not work and the fuses are OK, check the fuse block in the engine compartment. If a fuse is blown, it must be replaced.



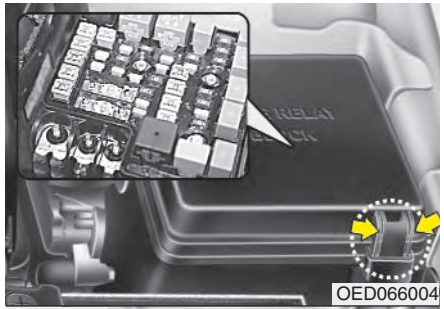
Memory fuse

Your vehicle is equipped with a memory fuse to prevent battery discharge if your vehicle is parked without being operated for prolonged periods. Use the following procedures before parking the vehicle for prolonged period.

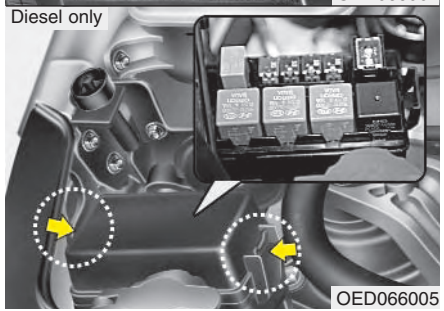
1. Turn off the engine.
2. Turn off the headlights and tail lights.
3. Open the inner fuse panel cover and pull up the memory fuse (ROOM LP 15A).

✻ NOTICE

- **If the memory fuse is pulled up from the fuse panel, the warning chime, audio, clock and interior lamps, etc., will not operate. Some items must be reset after replacement.**
- **Even though the memory fuse is pulled up, the battery can still be discharged by operation of the headlights or other electrical devices.**



Diesel only



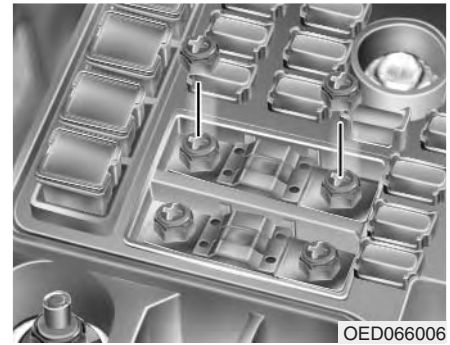
Engine compartment

1. Turn the ignition switch and all other switches off.
2. Remove the fuse box cover by pressing the taps and pulling up.
3. Check the removed fuse; replace it if it is blown.
4. Push in a new fuse of the same rating, and make sure it fits tightly in the clips.

If it fits loosely, consult an Authorised Kia Dealer.

✻ NOTICE

After checking the fuse box in the engine compartment, securely install the fuse box cover. If not, electrical failures may occur from water leaking in.



Main fuse

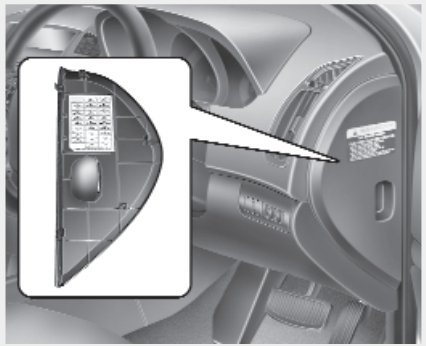
If the ALTERNATOR (Petrol 125A, Diesel 150A) or MDPS (80A) fuse are blown, it must be removed as follows:

1. Disconnect the negative battery cable.
2. Remove the screws 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.

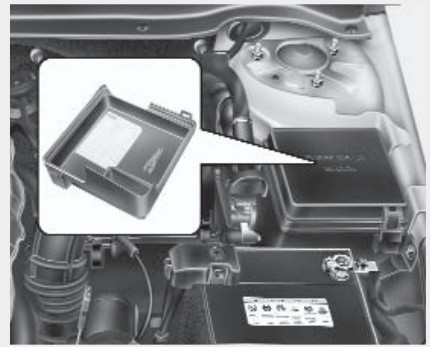
Fuse/Relay panel description

Inside the fuse/relay box covers, you can find the fuse/relay label describing fuse/relay name and capacity.

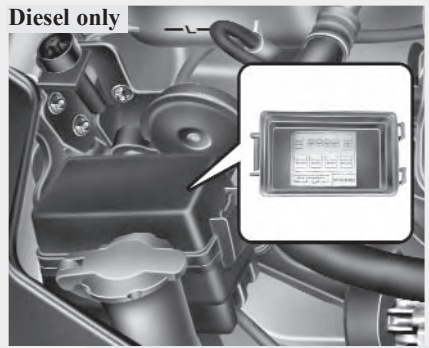
Inner fuse panel



Engine compartment fuse panel



Diesel only



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✻ NOTICE

Not all fuse panel descriptions in this manual may be applicable to your vehicle. It is accurate at the time of printing. When you inspect the fuse panel in your vehicle, refer to the fuse panel label.

Inner fuse panel

Description	Fuse rating	Protected component
START	10A	Start motor relay
A/CON SW	10A	Air-conditioning system
HTD MIRR	10A	Outside review mirror defroster
SEAT HTR	15A	Seat warmer
A/CON	10A	Air-conditioning system
HEAD LAMP	10A	Headlight
FR WIPER	25A	Wiper (front)
RR WIPER	15A	Rear wiper
DRL OFF	-	Daytime running light off
RR FOG	10A	Fog light (rear)
P/WDW (LH)	25A	Power window (left)
CLOCK	10A	Clock
C/LIGHTER	15A	Cigar lighter
DR LOCK	20A	Sunroof, ICM relay box
DEICER	20A	Front deicer relay
STOP	15A	Stop lamp switch
ROOM LP	15A	Room lamp
AUDIO	15A	Audio, Trip Computer
T/LID	15A	Rear hatch
SAFETY P/WDW RH	25A	Safety power window (right)
SAFETY P/WDW LH	25A	Safety power window (left)
P/WDW(RH)	25A	Power window (right)
P/OUTLET	15A	Electrical power socket
T/SIG	10A	Switch module

Description	Fuse rating	Protected component
A/BAG IND	10A	Air bag indicator
CLUSTER	10A	Cluster
A/BAG	15A	Air bag
SPARE	15A	Spare fuse
TAIL RH	10A	Tail light (right)
TAIL LH	10A	Tail light (left)

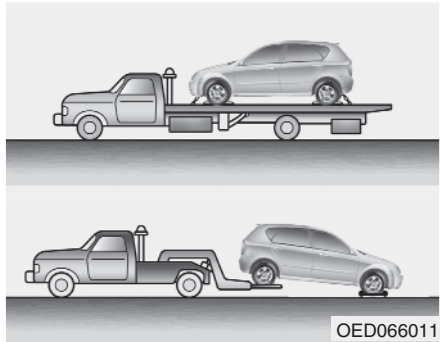
Engine compartment fuse panel

Description	Fuse rating	Protected component
ALT	125A/150A (DIESEL)	Alternator
MDPS	80A	MDPS control module
ABS 2	20A	Anti-lock brake system
ABS 1	40A	Anti-lock brake system
B+.1	50A	In panel B+
RR HTD	40A	Outside rearview mirror defroster
BLOWER	40A	Blower
C/FAN	40A	Condenser fan
B+.2	50A	In panel B+
IGN 2	40A	Ignition switch
IGN 1	30A	Ignition switch
ECU	30A	Engine control unit
SPARE.1	20A	Spare fuse
FR FOG	15A	Fog light relay (front)
A/CON	10A	Air conditioner relay
HAZARD	15A	Hazard warning light
F/PUMP	15A	Fuel pump relay
ECU.1	10A	Engine control unit
ECU.3	10A	Engine control unit
ECU.4	20A	Engine control unit
INJ	15A	Air conditioner relay, Injector
SNSR.2	10A	Sensors
HORN	15A	Horn relay
ABS	10A	Anti-lock brake system
ECU.2	10A	Condenser, Ignition coil
B/UP	10A	Back-up light
H/LP LO-RH	10A	Headlight (low beam-right)
H/LP LO-LH	10A	Headlight (low-left)
H/LP HI	20A	Headlight relay (high beam)
SNSR.1	10A	Oxygen sensor
SPARE	10A	spare fuse
SPARE	15A	spare fuse
SPARE	20A	spare fuse

Engine compartment fuse panel (Diesel only)

Description	Fuse rating	Protected component
GLOW PLUG	80A	Glow plug
PTC HEATER #1	50A	PTC heater 1
PTC HEATER #2	50A	PTC heater 2
PTC HEATER #3	50A	PTC heater 3
FUEL FILTER HEATER	30A	Fuel filter heater

TOWING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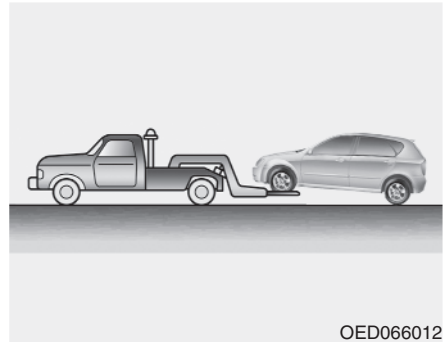
If emergency towing is necessary, we recommend having it done by an authorised Kia dealer or a commercial tow-truck service. Proper lifting and towing procedures are necessary to prevent damage to the vehicle. The use of wheel dollies or flatbed is recommended.

For trailer towing guidelines information, refer to section 5 “Driving Tips”.

CAUTION

Before towing, check the level of the automatic transaxle fluid. If it is below the "HOT" range on the dipstick, add fluid. If you cannot add fluid, a towing dolly must be used.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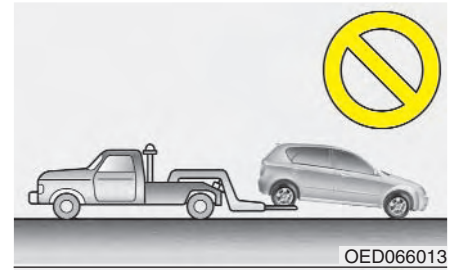
It is acceptable to tow the vehicle with the rear wheels on the ground (without dollies) and the front wheels off the ground.

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.

CAUTION

When towing the vehicle, take care not to cause damage to the bumper or under body of the vehicle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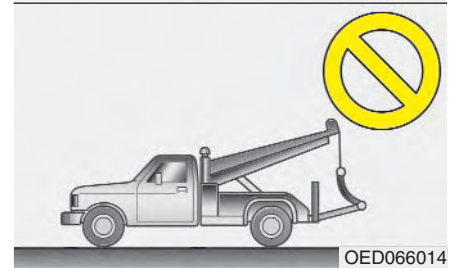
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CAUTION

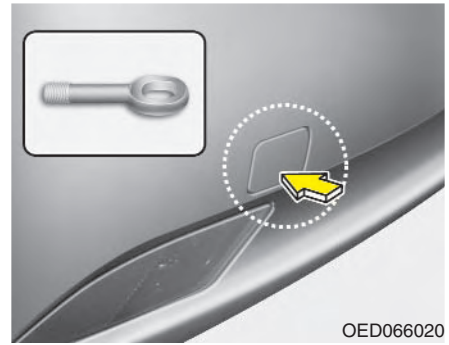
- ***Do not tow the vehicle backwards with the front wheels on the ground as this may cause damage to the vehicle.***
- ***Do not tow with sling-type equipment. Use wheel lift or flatbed equipment.***

When towing your vehicle in an emergency without wheel dollies :

1. Set the ignition switch in the ACC position.
2. Place the transaxle shift lever in N (Neutral).
3. Release the parking brake.

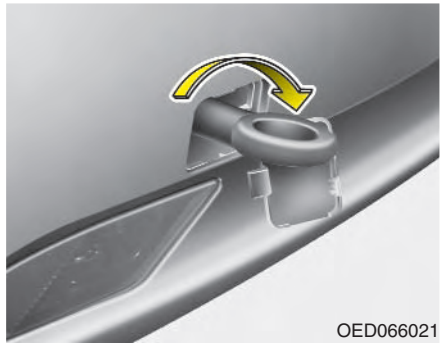
CAUTION

Failure to place the transaxle shift lever in N (Neutral) may cause internal damage to the transaxle.



Removable towing hook (rear)

1. Open the rear hatch and remove the towing hook from the tool case.
2. Remove the hole cover pressing the lower part of the cover on the rear bumper.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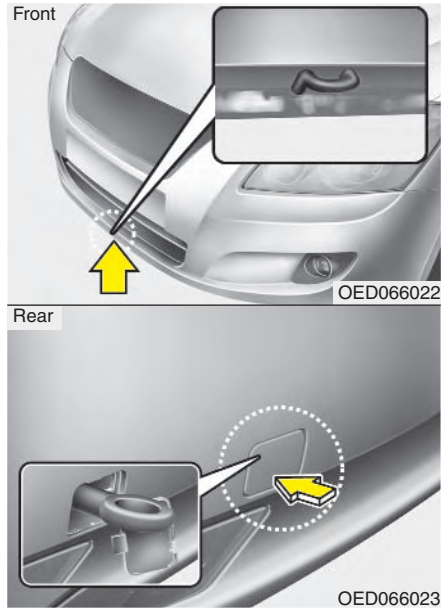
3. Install the towing hook by turning it clockwise into the hole until it is fully secured.
4. Remove the towing hook and install the cover after use.



Towing with a vehicle other than a tow truck

If towing is necessary, we recommend you to have it done by an Authorised Kia dealer or a commercial tow truck service.

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 speeds. 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

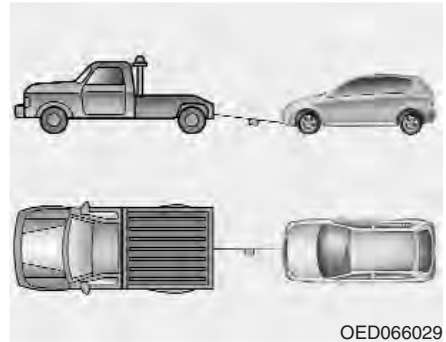
- ***Attach a towing strap to the tow hook.***
- ***Using a portion of the vehicle other than the tow hooks for towing may damage the body of your vehicle.***
- ***Use only a cable or chain specifically intended for use in towing vehicles. Securely fasten the cable or chain to the towing hook provided.***

- Before emergency towing, check that the hook is not broken or damaged.
- Fasten the towing cable or chain securely to the hook.
- Do not jerk the hook. Apply steady and 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 manoeuvres 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 towing vehicle can hardly move, do not forcibly continue the towing. Contact an Authorised 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.**



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- 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.

Emergency towing precautions

- Turn the ignition switch to ACC so the steering wheel isn't locked.
- Place the transaxle shift lever in N (Neutral).
- Release the parking bake.
- 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

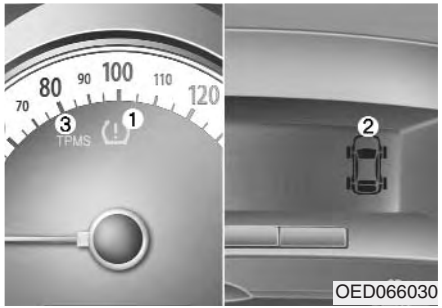
If the car is being towed with all four wheels on the ground, it can be towed only from the front. Be sure that the transaxle is in neutral. Do not tow at speeds greater than 40 km/h (25 mph) and for more than 25 km (15 miles). Be sure the steering is unlocked by placing the ignition switch in the ACC position. A driver must be in the towed vehicle to operate the steering and brakes.

Tips for towing a stuck vehicle

The following methods are effective when your vehicle is stuck in mud, sand or similar substances that prevent the vehicle from being driven out under its own power.

- Remove the soil and sand, etc. from the front and the back of the tyres.
- Place a stone or wood under the tyres.

TYRE PRESSURE MONITORING SYSTEM (TPMS) (IF EQUIPPED)



(1) Low Tyre Pressure Telltale

(2) Low Tyre Pressure Position Telltale

(3) TPMS Malfunction Indicator

Each tyre, including the spare (if equipped), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tyre inflation pressure label. (If your vehicle has tyres of a different size than the size indicated on the vehicle placard or tyre inflation pressure label, you should determine the proper inflation pressure for those tyres.)

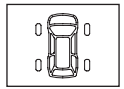
As an added safety feature, your vehicle has been equipped with a tyre pressure monitoring system (TPMS) that illuminates a low tyre pressure telltale when one or more of your tyres is significantly under-inflated. Accordingly, when the low tyre pressure telltale illuminates, you should stop and check your tyres as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tyre causes the tyre to overheat and can lead to tyre failure. Under-inflation also reduces fuel efficiency and tyre tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS is not a substitute for proper tyre maintenance, and it is the driver's responsibility to maintain correct tyre pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tyre 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 provided by a separate telltale, which displays the symbol "TPMS" when illuminated. When the malfunction indicator is illuminated, the system may not be able to detect or signal low tyre pressure as intended. TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tyres or wheels on the vehicle that prevent the TPMS from functioning properly. Always check the TPMS malfunction indicator after replacing one or more tyres or wheels on your vehicle to ensure that the replacement or alternate tyres and wheels allow the TPMS to continue to function properly.

Low tyre pressure telltale

Low tyre pressure position telltale



The low tyre pressure and the low tyre pressure position telltales illuminate when one or more tyres is under inflated. The low tyre pressure position telltale indicates which tyre or tyres are under inflated.

Immediately reduce your speed, avoid hard cornering and anticipate increased stopping distances. You should stop and check your tyres as soon as possible when the tyres are cool. And inflate the tyres to the proper pressure as indicated on the vehicle's placard or tyre inflation pressure label located on the driver's side centre pillar outer panel. If you cannot reach a service station or if the tyre cannot hold the newly added air, replace the low pressure tyre with the spare tyre.

However, if you replace the low pressure tyre with the spare tyre or other tyres, the low tyre pressure and position telltales will go off and the TPMS malfunction indicator will go on after a few minutes. For the spare tyre or other tyres are not equipped with a tyre pressure monitoring sensor.

CAUTION

In winter or cold weather, the low tyre pressure telltale may be illuminated if the tyre pressure was adjusted to the recommended tyre inflation pressure in warm weather. It does not mean your TPMS is malfunctioning because the decreased temperature leads to a proportional lowering of tyre 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 significantly increases or decreases, you should check the tyre inflation pressure and adjust the tyres to the recommended tyre inflation pressure.

⚠ WARNING - Low tyre pressure

Significantly low tyre pressure makes the vehicle unstable and can contribute to loss of vehicle control and increased braking distances.

Continued driving on low pressure tyres will cause the tyres to overheat and fail.

TPMS (Tyre Pressure Monitoring System) malfunction indicator

The TPMS malfunction indicator comes on and stays on when there is a problem with the Tyre Pressure Monitoring System. If Front Left sensor fails, the TPMS malfunction indicator comes on, but if Front Right, Rear Left, or Rear Right tyre is under-inflated, the low tyre pressure and position telltales may come on together with the TPMS malfunction indicator.

Have the system checked by an authorised Kia dealer as soon as possible to determine the cause of the problem.

✻ NOTICE

- **The TPMS malfunction indicator may be illuminated if the vehicle is moving around electric power supply cable or radio transmitter such as police stations, government and public offices, broadcasting stations, military installations, airports, or transmitting tower, etc. this can interfere with normal operation of the Tyre Pressure Monitoring System (TPMS).**
- **The TPMS malfunction indicator may be illuminated if some electronic devices, such as notebook computers, are used in the vehicle. This can interfere with normal operation of the Tyre Pressure Monitoring System (TPMS).**

Changing a tyre with TPMS

If you have a flat tyre, the low tyre pressure and position telltales will come on. Have the flat tyre repaired by an authorised Kia dealer as soon as possible or replace the flat tyre with the spare tyre.

NEVER use a puncture-repairing agent to repair and/or inflate a low pressure tyre. If used, you will have to replace the tyre pressure sensor.

Each wheel is equipped with a tyre pressure sensor mounted inside the tyre behind the valve stem. You must use TPMS specific wheels. It is recommended that you always have your tyres serviced by an authorised Kia dealer as soon as possible.

The spare tyre is not equipped with a tyre pressure monitoring sensor. Therefore, when the low pressure tyre is replaced with the spare tyre, the low tyre pressure and the low tyre pressure position telltales will extinguish and the TPMS malfunction indicator will illuminate after a few minutes.

This TPMS malfunction indicator may remain light until the original tyre equipped with a tyre pressure sensor is re-inflated to the recommended pressure and re-installed on the vehicle.

Once the low pressure tyre is re-inflated to the recommended pressure and installed on the vehicle, the TPMS malfunction indicator and the low tyre pressure and position telltales will extinguish within a few minutes.

If the indicators are not extinguished after a few minutes, please visit an authorised Kia dealer.

You may not be able to identify a low tyre by simply looking at it. Always use a good quality tyre pressure gauge to measure the tyre's inflation pressure. Please note that a tyre that is hot (from being driven) will have a higher pressure measurement than a tyre that is cold (from sitting stationary for at least 3 hours and driven less than 1 mile (1.6km) during that 3 hour period). Allow the tyre to cool before measuring the inflation pressure.

Always be sure the tyre is cold before inflating to the recommended pressure.

A cold tyre means the vehicle has been sitting for 3 hours and driven for less than 1 mile (1.6km) in that 3 hour period.

✻ NOTICE

Do not use any tyre sealant if your vehicle is equipped with a Tyre Pressure Monitoring System. The liquid sealant can damage the tyre pressure sensors.

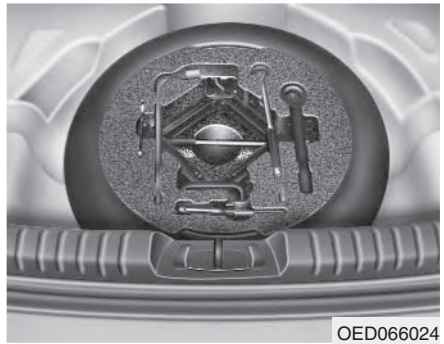
⚠ WARNING - TPMS

- **The TPMS cannot alert you to severe and sudden tyre damage caused by external factors.**
- **If you feel any vehicle instability, immediately take your foot off the accelerator and slowly move to a safe position off the road.**

⚠ WARNING

Tampering with, modifying, or disabling the Tyre Pressure Monitoring System (TPMS) components may interfere with the system's ability to warn the driver of low tyre pressure conditions and/or TPMS malfunctions. Tampering with, modifying, or disabling the Tyre Pressure Monitoring System (TPMS) components may void the warranty for that portion of the vehicle.

IF YOU HAVE A FLAT TYRE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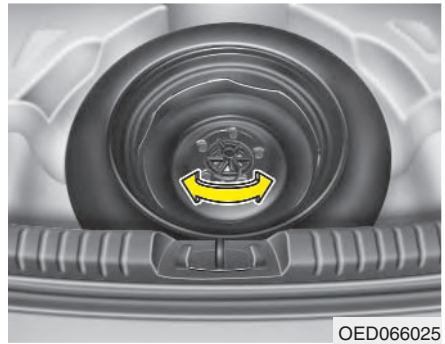
The spare tyre, jack, jack handle, wheel lug nut wrench are stored in the luggage compartment. Move the carpeting out of the way to reach this equipment.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Removing the spare tyre

Turn the tyre hold-down wing bolt counterclockwise.

Store the tyre in the reverse order of removal.

To prevent the spare tyre and tools from “rattling” whilst the vehicle is in motion, store them properly.

Important - use of compact spare tyre (if equipped)

Your vehicle is equipped with a compact spare tyre. This compact spare tyre takes up less space than a regular-size tyre. This tyre is smaller than a conventional tyre and is designed for temporary use only.

CAUTION

- ***You should drive carefully when the compact spare is in use. The compact spare should be replaced by the proper conventional tyre and rim at the first opportunity.***
- ***The operation of this vehicle is not recommended with more than one compact spare tyre in use at the same time.***

⚠ WARNING

This spare tyre should be used only for VERY short distances. Compact spares should NEVER be used for long drives or extended distances.

The compact spare should be inflated to 60 psi (420 kPa).

✻ NOTICE

Check the inflation pressure after installing the spare tyre. Adjust it to the specified pressure, as necessary.

When using a compact spare tyre, observe the following precautions:

- Under no circumstances should you exceed 50 mph (80 km/h); a higher speed could damage the tyre.
- Ensure that you drive slowly enough for the road conditions to avoid all hazards. Any road hazard, such as a pothole or debris, could seriously damage the compact spare.
- Any continuous road use of this tyre could result in tyre failure, loss of vehicle control, and possible personal injury.
- Do not exceed the vehicle's maximum load rating or the load-carrying capacity shown on the sidewall of the compact spare tyre.
- Avoid driving over obstacles. The compact spare tyre diameter is smaller than the diameter of a conventional tyre and reduces the ground clearance approximately 1 inch (25 mm), which could result in damage to the vehicle.
- Do not take this vehicle through an automatic car wash.
- Do not use tyre chains on this tyre. Because of the smaller size, a tyre chain will not fit properly. This could damage the vehicle and result in loss of the chain.
- This tyre should not be installed on the front axle if the vehicle must be driven in snow or on ice.
- Do not use the compact spare tyre on any other vehicle because this tyre has been designed especially for your vehicle.
- The compact spare tyre's tread life is shorter than a regular tyre. Inspect your compact spare tyre regularly and replace worn compact spare tyres with the same size and design, mounted on the same wheel.
- The temporary spare tyre should not be used on any other wheels, nor should standard tyres, snow tyres, wheel covers or trim rings be used with the temporary spare wheel. If such use is attempted, damage to these items or other car components may occur.
- Do not use more than one temporary spare tyre at a time.
- Do not tow a trailer whilst the temporary spare tyre is installed.

Changing tyres

Jacking instructions

The jack is provided for emergency tyre changing only.

Follow jacking instructions to reduce the possibility of personal injury.

⚠ WARNING - Changing tyres

- **Never attempt vehicle repairs in the traffic lanes of a public road or highway.**
- **Always move the vehicle completely off the road and onto the shoulder before trying to change a tyre. The jack should be used on level firm ground whenever possible. If you cannot find a firm, level place off the road, call a towing service company for assistance.**

(Continued)

(Continued)

- **Be sure to use the correct front and rear jacking positions on the vehicle; never use the bumpers or any other part of the vehicle for jack support.**
- **The vehicle can easily roll off the jack causing serious injury or death. No person should place any portion of their body under a vehicle that is supported only by a jack ; use vehicle support stands.**
- **Do not start or run the engine whilst the vehicle is on the jack.**
- **Do not allow anyone to remain in the vehicle whilst it is on the jack.**
- **Make sure any children present are in a secure place away from the road and from the vehicle to be raised with the jack.**

Tyre replacement

1. Park on a level surface and apply the parking brake firmly.
2. Shift the shift lever into R (Reverse) with manual transaxle or P (Park) with automatic transaxle.
3. Activate the hazard warning flasher.

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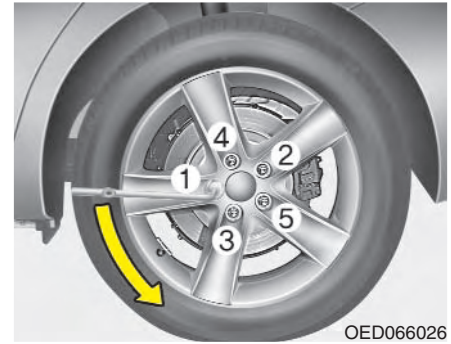
4. Remove the wheel lug nut wrench, jack, jack handle, and spare tyre from the vehicle.
5. Block both the front and rear of the wheel that is diagonally opposite the jack position.

⚠ WARNING - Changing a tyre

- **To prevent vehicle movement whilst changing a tyre, always set the parking brake fully, and always block the wheel diagonally opposite the wheel being changed.**
- **It is recommended that the wheels of the vehicle be chocked, and that no person should remain in a vehicle that is being jacked.**



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6. Loosen the wheel lug nuts counterclockwise one turn each, but do not remove any nut until the tyre has been raised off the ground.

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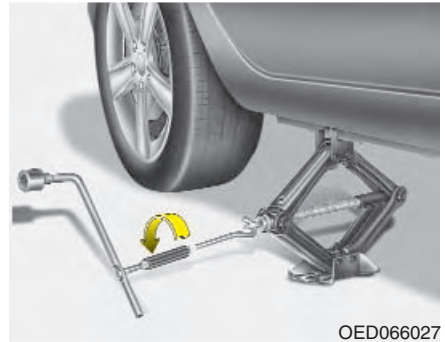
7. Place the jack at the front or rear jacking position closest to the tyre you are changing. Place the jack at the designated locations under the frame. The jacking positions are plates welded to the frame with two tabs and a raised dot to index with the jack.

⚠ WARNING - Jack location

To reduce the possibility of injury, be sure to use only the jack provided with the vehicle and in the correct jack position; never use any other part of the vehicle for jack support.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8. Insert the jack handle into the jack and turn it clockwise, raising the vehicle until the tyre just clears the ground. This measurement is approximately 30 mm (1.2 in). Before removing the wheel lug nuts, make sure the vehicle is stable and that there is no chance for movement or slippage.

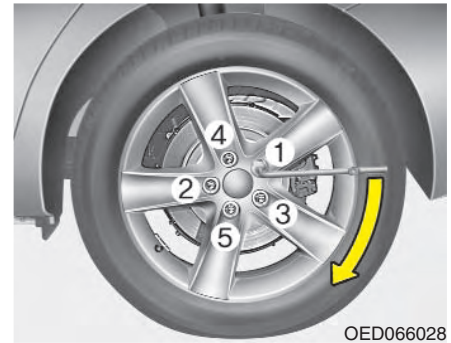
9. Loosen the wheel nuts and remove them with your fingers. Slide the wheel off the studs and lay it flat so it cannot roll away. To put the wheel on the hub, pick up the spare tyre, line up the holes with the studs and slide the wheel onto them. If this is difficult, tip the wheel slightly and get the top hole in the wheel lined up with the top stud. Then jiggle the wheel back and forth until the wheel can be slid over the other studs.

⚠ WARNING

Wheels and wheel covers may have sharp edges. Handle them carefully to avoid possible severe injury. Before putting the wheel into place, be sure that there is nothing on the hub or wheel (such as mud, tar, gravel, etc.) that interferes with the wheel from fitting solidly against the hub.

If there is, remove it. If there is not good contact on the mounting surface between the wheel and hub, the wheel nuts could come loose and cause the loss of a wheel. Loss of a wheel may result in loss of control of the vehicle. This may cause serious injury or death.

10. To reinstall the wheel, hold it on the studs, put the wheel nuts on the studs and tighten them finger tight. The nuts should be installed with their tapered small diameter ends directed inward. Jiggle the tyre to be sure it is completely seated, then tighten the nuts as much as possible with your fingers again.
11. Lower the car to the ground by turning the wheel nut wrench counterclockwise.



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Then position the wrench as shown in the drawing and tighten the wheel nuts. Be sure the socket is seated completely over the nut. Do not stand on the wrench handle or use an extension pipe over the wrench handle. Go around the wheel tightening every other nut until they are all tight. Then double-check each nut for tightness. After changing wheels, have an authorised KIA dealer tighten the wheel nuts to their proper torque as soon as possible.

Wheel nut tightening torque:

Steel wheel & aluminum alloy wheel:

9~11 kg·m (65~79 lb·ft)

If you have a tyre gauge, remove the valve cap and check the air pressure. If the pressure is lower than recommended, drive slowly to the nearest service station and inflate to the correct pressure. If it is too high, adjust it until it is correct. Always reinstall the valve cap after checking or adjusting tyre pressure. If the cap is not replaced, air may leak from the tyre. If you lose a valve cap, buy another and install it as soon as possible.

After you have changed wheels, always secure the flat tyre in its place and return the jack and tools to their proper storage locations.

CAUTION

Your vehicle has metric threads on the wheel studs and nuts. Make certain during wheel removal that the same nuts removed are reinstalled - or, if replaced, that nuts with metric threads and the same chamfer configuration are used. Installation of a non-metric thread nut on a metric stud or vice-versa will not secure the wheel to the hub properly and will damage the stud so that it must be replaced.

Note that most lug nuts do not have metric threads. Be sure to use extreme care in checking for thread style before installing aftermarket lug nuts or wheels. If in doubt, consult an Authorised Kia Dealer.

WARNING - Wheel studs

If the studs are damaged, they may lose their ability to retain the wheel. This could lead to the loss of the wheel and a collision.

To prevent the jack, jack handle, wheel lug nut wrench and spare tyre from rattling whilst the vehicle is in motion, store them properly.

WARNING

Check the inflation pressures as soon as possible after installing the spare tyre. Adjust it to the specified pressure, if necessary. Refer to Section 8, Specifications.

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Maintenance 7

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MAINTENANCE SERVICES

You should exercise the utmost care to prevent damage to your vehicle and injury to yourself whenever performing any maintenance or inspection procedures.

Should you have any doubts concerning the inspection or servicing of your vehicle, we strongly recommend that you have an Authorised Kia Dealer perform this work.

An Authorised Kia Dealer has factory-trained technicians and genuine Kia parts to service your vehicle properly. For expert advice and quality service, see an Authorised Kia Dealer.

Inadequate, incomplete or insufficient servicing may result in operational problems with your vehicle that could lead to vehicle damage, an accident, or personal injury.

Owner's responsibility

✻ NOTICE

Maintenance Service and Record Retention are the owner's responsibility.

You should retain documents that show proper maintenance has been performed on your vehicle in accordance with the scheduled maintenance service charts shown on the following pages. You need this information to establish your compliance with the servicing and maintenance requirements of your Kia 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.

We recommend you have your vehicle maintained and repaired by an authorised Kia dealer.

An authorised Kia dealer meets Kia's high service quality standards and receives technical support from Kia in order to provide you with a high level of service satisfaction.

Scheduled maintenance service

Follow Normal Maintenance Schedule if the vehicle is usually operated where none of the following conditions apply. If any of the following conditions apply, follow Maintenance Under Severe Usage Conditions.

- Repeated short distance driving.
- Driving in dusty conditions or sandy areas.
- Extensive use of brakes.
- Driving in areas where salt or other corrosive materials are being used.
- Driving on rough or muddy roads.
- Driving in mountainous areas.
- Extended periods of idling or low speed operation.
- Driving for a prolonged period in cold temperatures and/or extremely humid climates.
- More than 50% driving in heavy city traffic during hot weather above 32°C (90°F).

If your vehicle is operated under the above conditions, you should inspect, replace or refill more frequently than the following Normal Maintenance Schedule. After 96 month or 80,000 miles (120,000 km, Petrol Engine) / 100,000 miles (160,000 km, Diesel Engine) continue to follow the prescribed maintenance intervals.

NORMAL MAINTENANCE SCHEDULE - PETROL ENGINE

MAINTENANCE INTERVALS / MAINTENANCE ITEM		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**
Drive belts *1		I	I	I	I	I	I	I	I
Engine oil and engine oil filter *2		R	R	R	R	R	R	R	R
Engine timing belt	2.0L Petrol	Inspect every 60,000 miles (90,000 km) or 48 months and replace every 90,000 miles (135,000 km) or 72 months *3							
Tensioner/idler	2.0L Petrol	Inspect when timing belt is inspected or replaced							
Air cleaner filter		I	I	R	I	I	R	I	I
Spark plugs	1.4/1.6L Petrol			R			R		
	2.0L Petrol		R		R		R		R
Valve clearance *4		Inspect every 60,000 miles (90,000 km) or 48 months *3							

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

*1 : Adjust alternator and power steering (and water pump drive belt) and air conditioner drive belt (if equipped). Inspect and if necessary correct or replace.

*2 : Check the engine oil level and leak every 500 km (350 miles) or before starting a long trip.

*3 : For your convenience, it can be replaced prior to it's interval when you do maintenance of other items.

*4 : Inspect for excessive valve noise and/or engine vibration and adjust if necessary. An authroized KIA dealer should perform the operation.

NORMAL MAINTENANCE SCHEDULE - PETROL ENGINE (cont.)

MAINTENANCE INTERVALS / MAINTENANCE ITEM		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
Vapour hose and fuel filler cap			I		I		I		I
Fuel tank air filter		I	I	R	I	I	R	I	I
Vacuum and crankcase ventilation hoses			I		I		I		I
Vacuum hose (for EGR & throttle body)		I	I	I	I	I	I	I	I
Fuel filter					R				R
Fuel lines, hoses and connections		I	I	I	I	I	I	I	I
Cooling system		Inspect “Coolant level adjustment and leak” every day Inspect “Water pump” when replacing the drive belt or timing belt							

I : Inspect and if necessary, adjust, correct, clean or replace.
R : Replace or change.

NORMAL MAINTENANCE SCHEDULE - PETROL ENGINE (cont.)

MAINTENANCE INTERVALS / MAINTENANCE ITEM		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 coolant *5		At first, replace at 60,000 miles (90,000 km) or 60 months: after that, replace every 30,000 miles (45,000 km) or 24 months *3							
Battery condition		I	I	I	I	I	I	I	I
All electrical systems			I		I		I		I
Brake lines, hoses and connections		I	I	I	I	I	I	I	I
Brake pedal, clutch pedal			I		I		I		I
Parking brake			I		I		I		I
Brake/clutch fluid		I	R	I	R	I	R	I	R
Disc brakes and pads		I	I	I	I	I	I	I	I

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

*3 : For your convenience, it can be replaced prior to it's interval when you do maintenance of other items.

*5 : When adding coolant, use only a qualified coolant additive 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.

NORMAL MAINTENANCE SCHEDULE - PETROL ENGINE (cont.)

MAINTENANCE INTERVALS / MAINTENANCE ITEM		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
Steering gear rack, linkage and boots		I	I	I	I	I	I	I	I
Drive shaft and boots		I	I	I	I	I	I	I	I
Tyre (pressure & tread wear)		I	I	I	I	I	I	I	I
Front suspension ball joints		I	I	I	I	I	I	I	I
Bolt and nuts on chassis and body		I	I	I	I	I	I	I	I
Air conditioner refrigerant (if equipped)		I	I	I	I	I	I	I	I
Air conditioner compressor (if equipped)		I	I	I	I	I	I	I	I
Climate control air filter (if equipped)		R	R	R	R	R	R	R	R
Manual transaxle fluid (if equipped)		I	I	I	I	I	I	I	I
Automatic transaxle fluid (if equipped)		I	I	I	I	I	R	I	I

I : Inspect and if necessary, adjust, correct, clean or replace.
R : Replace or change.

MAINTENANCE UNDER SEVERE USAGE CONDITIONS - PETROL ENGINE

The following items must be serviced more frequently on cars mainly used under severe driving conditions. Refer to the chart below for the appropriate maintenance intervals.

R : Replace I : Inspect and if necessary, adjust, correct, clean or replace

MAINTENANCE ITEM		Maintenance operation	Maintenance intervals	Driving condition
Engine oil and engine oil filter		R	Every 5,000 miles (7,500 km) or 6 months	A, B, C, D, E, F, G, H, I
Air cleaner filter		R	Replace more frequently depending on the condition	C, E
Spark plugs		R	Replace more frequently depending on the condition	B, H
Engine timing belt	2.0L Petrol	R	Every 40,000 miles (60,000 km) or 48 months	D, E, F, G
Manual transaxle fluid (if equipped)		R	Every 62,500 miles (100,000 km)*1	C, D, E, G, H, I, J
Automatic transaxle fluid (if equipped)		R	Every 30,000 miles (45,000 km)	A, C, E, F, G, H, I
Steering gear rack, linkage and boots		I	Inspect more frequently depending on the condition	C, D, E, F, G

*1 : For your convenience, it can be replaced prior to it's interval when you do maintenance of other items.

MAINTENANCE ITEM	Maintenance operation	Maintenance intervals	
Front suspension ball joints	I	Inspect more frequently depending on the condition	C, D, E, F, G
Disc brakes and pads, calipers and rotors	I	Inspect more frequently depending on the condition	C, D, E, G, H
Parking brake	I	Inspect more frequently depending on the condition	C, D, G, H
Drive shaft and boots	I	Inspect more frequently depending on the condition	C, D, E, F, G, H, I
Climate control air filter (if equipped)	R	Inspect more frequently depending on the condition	C, E

Severe driving conditions

A : Repeated short distance driving
B : Extensive idling
C : Driving in dusty, rough roads
D : Driving in areas using salt or other corrosive materials or in very cold weather
E : Driving in sandy areas
F : More than 50 % driving in heavy city traffic during hot weather above 32 °C (90 °F)
G : Driving in mountainous areas.
H : Towing a trailer
I : Driving for patrol car, taxi, commercial car or vehicle towing
J : Driving over 170 km/h (106 mile/h)

NORMAL MAINTENANCE SCHEDULE - DIESEL ENGINE

MAINTENANCE ITEM / MAINTENANCE INTERVALS		Number of months or driving distance, whichever comes first							
	Months	**12**	**24**	**36**	**48**	**60**	**72**	**84**	**96**
	Miles×1,000	**12.5**	**25**	**37.5**	**50**	**62.5**	**75**	**87.5**	**100**
	Km×1,000	**20**	**40**	**60**	**80**	**100**	**120**	**140**	**160**
Drive belts *1		I	I	I	I	I	I	I	I
Engine oil and engine oil filter *2	Without CPF *a	R	R	R	R	R	R	R	R
	With CPF *a	Replace every 10,000 miles (15,000 km)							
Engine timing belt	2.0L Diesel				I				R*3
Tensioner/idler/damper pulley		Inspect when replacing the drive belt or timing belt							
Air cleaner filter		I	R	I	R	I	R	I	R

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

*1 : Adjust alternator and power steering (and water pump drive belt) and air conditioner drive belt (if equipped). Inspect and if necessary correct or replace.

*2 : Check the engine oil level and leak every 500 km (350 miles) or before starting a long trip.

*3 : For your convenience, it can be replaced prior to it's interval when you do maintenance of other items.

*a : CPF - Catalyzed Particulate filter

NORMAL MAINTENANCE SCHEDULE - DIESEL ENGINE (cont.)

MAINTENANCE INTERVALS / MAINTENANCE ITEM		Number of months or driving distance, whichever comes first							
	Months	12	24	36	48	60	72	84	96
	Miles×1,000	12.5	25	37.5	50	62.5	75	87.5	100
	Km×1,000	20	40	60	80	100	120	140	160
Vapour hose and fuel filler cap		I	I	I	I	I	I	I	I
PCV and Crank ventilation hose		I	I	I	I	I	I	I	I
Vacuum hose (for EGR & throttle body)		I	I	I	I	I	I	I	I
Vacuum pump and vacuum hose		I	I	I	I	I	I	I	I
Vacuum pump oil hose		I	I	I	I	I	I	I	I
Fuel filter cartridge *4		Replace every 20,000 miles (30,000 km) *3							
Fuel lines, hoses and connections		I	I	I	I	I	I	I	I
Cooling system		Inspect “Coolant level adjustment and leak” every day Inspect “Water pump” when replacing the drive belt or timing belt							

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

*3 : For your convenience, it can be replaced prior to it's interval when you do maintenance of other items.

*4 : If the diesel fuel specifications don't meet the European standards EN590, replace it more frequently. Consult an authorised Kia dealer for details.

NORMAL MAINTENANCE SCHEDULE - DIESEL ENGINE (cont.)

MAINTENANCE INTERVALS / MAINTENANCE ITEM	Number of months or driving distance, whichever comes first							
Months	12	24	36	48	60	72	84	96
Miles×1,000	12.5	25	37.5	50	62.5	75	87.5	100
Km×1,000	20	40	60	80	100	120	140	160
Engine coolant *5	At first, replace at 62,500 miles (100,000 km) or 60 months: after that, replace every 25,000 miles (40,000 km) or 24 months *3							
Battery condition	I	I	I	I	I	I	I	I
All electrical systems	I	I	I	I	I	I	I	I
Brake lines, hoses and connections	I	I	I	I	I	I	I	I
Brake pedal, clutch pedal	I	I	I	I	I	I	I	I
Parking brake	I	I	I	I	I	I	I	I
Brake/clutch fluid	I	R	I	R	I	R	I	R
Disc brakes and pads	I	I	I	I	I	I	I	I

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

*3 : For your convenience, it can be replaced prior to it's interval when you do maintenance of other items.

*5 : When adding coolant, use only a qualified coolant additive 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.

NORMAL MAINTENANCE SCHEDULE - DIESEL ENGINE (cont.)

MAINTENANCE INTERVALS / MAINTENANCE ITEM		Number of months or driving distance, whichever comes first							
	Months	12	24	36	48	60	72	84	96
	Miles×1,000	12.5	25	37.5	50	62.5	75	87.5	100
	Km×1,000	20	40	60	80	100	120	140	160
Steering gear rack, linkage and boots		I	I	I	I	I	I	I	I
Drive shaft and boots		I	I	I	I	I	I	I	I
Tyre (pressure & tread wear)		I	I	I	I	I	I	I	I
Front suspension ball joints		I	I	I	I	I	I	I	I
Bolt and nuts on chassis and body		I	I	I	I	I	I	I	I
Air conditioner refrigerant (if equipped)		I	I	I	I	I	I	I	I
Air conditioner compressor (if equipped)		I	I	I	I	I	I	I	I
Climate control air filter (if equipped)		R	R	R	R	R	R	R	R
Manual transaxle fluid (if equipped)		I	I	I	I	I	I	I	I

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

MAINTENANCE UNDER SEVERE USAGE CONDITIONS - DIESEL ENGINE

The following items must be serviced more frequently on cars mainly used under severe driving conditions. Refer to the chart below for the appropriate maintenance intervals.

R : Replace I : Inspect and if necessary, adjust, correct, clean or replace

MAINTENANCE ITEM		Maintenance operation	Maintenance intervals	Driving condition
Engine oil and engine oil filter		R	Every 5,000 miles (7,500 km) or 6 months	A, B, C, F, G, H, I, J, K, L
Air cleaner filter		R	Replace more frequently depending on the condition	C, E
Engine timing belt	2.0L Diesel	R	Every 40,000 miles (60,000 km) or 48 months	D, E, F, G
Manual transaxle fluid (if equipped)		R	Every 62,500 miles (100,000 km)*1	C, D, E, G, H, I, K
Steering gear rack, linkage and boots		I	Inspect more frequently depending on the condition	C, D, E, F, G

*1 : For your convenience, it can be replaced prior to it's interval when you do maintenance of other items.

MAINTENANCE ITEM	Maintenance operation	Maintenance intervals	Driving condition
Front suspension ball joints	I	Inspect more frequently depending on the condition	C, D, E, F, G
Disc brakes and pads, calipers and rotors	I	Inspect more frequently depending on the condition	C, D, E, G, H
Parking brake	I	Inspect more frequently depending on the condition	C, D, G, H
Drive shaft and boots	I	Inspect more frequently depending on the condition	C, D, E, F, I, G, H
Climate control air filter (if equipped)	R	Inspect more frequently depending on the condition	C, E

Severe driving conditions

A : Repeated short distance driving
B : Extensive idling
C : Driving in dusty, rough roads
D : Driving in areas using salt or other corrosive materials or in very cold weather
E : Driving in sandy areas
F : More than 50 % driving in heavy city traffic during hot weather above 32 °C (90 °F)
G : Driving in mountainous areas.
H : Towing a trailer
I : Driving for patrol car, taxi, commercial car or vehicle towing
J : Driving in very cold weather
K : Driving over 170 km/h (106 mile/h)
L : 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 car is being driven in severe conditions, more frequent oil and filter changes are required.

Drive belts

Inspect all drive belts for evidence of cuts, cracks, excessive wear or oil saturation and replace if necessary. Drive belts should be checked periodically for proper tension and adjusted as necessary.

Fuel filter (cartridge)

A clogged filter can limit the speed at which the vehicle may be driven, damage the emission system and cause multiple issues such as hard starting. If an excessive amount of foreign matter accumulates in the fuel tank, the filter may require replacement more frequently.

After installing a new filter, run the engine for several minutes, and check for leaks at the connections. Fuel filters should be installed by an authorised KIA dealer.

Fuel lines, fuel hoses and connections

Check the fuel lines, fuel hoses and connections for leakage and damage. Have an authorised KIA dealer replace any damaged or leaking parts immediately.

⚠ WARNING - Diesel only

Never work on injection system with engine running or within 30 seconds after shutting off engine. High pressure pump, rail, injectors and high pressure pipes are subject to high pressure even after the engine stopped. The fuel jet produced by fuel leaks may cause serious injury, if it touch the body. People using pacemakers should not move than 30cm closer to the ECU or wiring harness within the engine room whilst engine is running, since the high currents in the Common Rail system produce considerable magnetic fields.

Timing belt (if equipped)

Inspect all parts related to the timing belt for damage and deformation. Replace any damaged parts immediately.

Vapour hose and fuel filler cap

The vapour hose and fuel filler cap should be inspected at those intervals specified in the maintenance schedule. Make sure that a new vapour 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

A Genuine KIA air cleaner filter is recommended when the filter is replaced.

Spark plugs (for petrol engine)

Make sure to install new spark plugs of the correct heat range.

Valve clearance (if equipped)

Inspect excessive valve noise and/or engine vibration and adjust if necessary. An authorised KIA dealer should perform the operation.

Cooling system

Check cooling system components, such as 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.

Manual transaxle fluid (if equipped)

Inspect the manual transaxle fluid according to the maintenance schedule.

Automatic transaxle fluid (if equipped)

The fluid level should be in the "HOT" range of the dipstick, after the engine and transaxle are at normal operating temperature. Check the automatic transaxle fluid level with the engine running and the transaxle in neutral, with the parking brake properly applied.

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 brake fluid level in the brake fluid reservoir. The level should be between “MIN” and “MAX” marks on the side of the reservoir. Use only hydraulic brake fluid conforming to DOT 3 or DOT 4 specification.

Parking brake

Inspect the parking brake system including the parking brake pedal and cables.

Brake discs, pads, calipers and rotors

Check the pads for excessive wear, discs for run out and wear, and calipers for fluid leakage.

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 (if equipped)

Check the air conditioning lines and connections for leakage and damage.

OWNER MAINTENANCE

Owner maintenance schedule

The following lists are vehicle checks and inspections that should be performed by the owner or an Authorised Kia Dealer at the frequencies indicated to help ensure safe, dependable operation of your vehicle.

Any adverse conditions should be brought to the attention of your dealer as soon as possible.

These Owner Maintenance Checks are generally not covered by warranties and you may be charged for labour, parts and lubricants used.

When you stop for fuel:

- Check the engine oil level.
- Check coolant level in coolant reservoir.

⚠ 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 serious injury.

- Check the windscreen washer fluid level.
- Look for low or under-inflated tyres.

Whilst operating your vehicle:

- Note any changes in the sound of the exhaust or any smell of exhaust fumes in the vehicle.
- Check for vibrations in the steering wheel. Notice any increased steering effort or looseness in the steering wheel, or change in its straight-ahead position.
- Notice if your vehicle constantly turns slightly or “pulls” to one side when traveling on smooth, level road.
- When stopping, listen and check for strange 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 transaxle occurs, check the transaxle fluid level.
- Check automatic transaxle P (Park) function.
- Check parking brake.
- Check for fluid leaks under your vehicle (water dripping from the air conditioning system after use is normal).

At least monthly:

- Check coolant level in the coolant recovery reservoir.
- Check the operation of all exterior lights, including the stoplights, turn signals and hazard warning flash-ers.
- Check the inflation pressures of all tyres including the spare.

At least twice a year (i.e., every Spring and Fall) :

- Check radiator, heater, inter cooler, turbocharger and air conditioning hoses for leaks or da-mage.
- Check windscreen washer spray and wiper operation. Clean wiper blades with clean cloth dampened with washer fluid.
- Check headlight alignment.
- Check muffler, exhaust pipes, shields and clamps.
- Check the lap/shoulder belts for wear and function.
- Check for worn tyres and loose wheel lug nuts.

At least once a year :

- Clean body and door drain holes.
- Lubricate door hinges and checks, and bonnet hinges.
- Lubricate door and bonnet locks and latches.
- Lubricate door rubber weather-strips.
- Check the air conditioning system before the warm weather season.
- Inspect and lubricate automatic transaxle linkage and controls.
- Clean battery and terminals.
- Check the brake fluid level.

Owner maintenance precautions

Improper or incomplete service may result in problems. This section gives instructions only for the maintenance items that are easy to perform.

As explained earlier in this section, several procedures can be done only by an Authorised Kia Dealer with special tools.

✻ NOTICE

Improper owner maintenance during the warranty period may affect warranty coverage. For details, read the separate Kia Warranty & Maintenance book provided with the vehicle. If you're unsure about any servicing or maintenance procedure, have it done by an Authorised Kia Dealer.

⚠ WARNING - Maintenance work

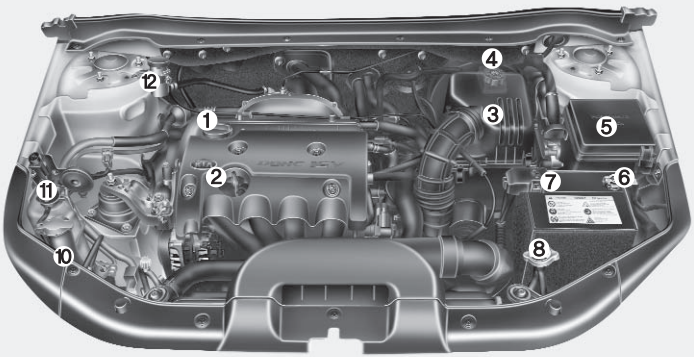
- **Performing maintenance work on a vehicle can be dangerous. You can be seriously injured whilst performing some maintenance procedures. If you lack sufficient knowledge and experience or the proper tools and equipment to do the work, have it done by an Authorised Kia Dealer.**
- **Working under the bonnet 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 whilst working under the bonnet, 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.**

⚠ WARNING - Diesel Engine

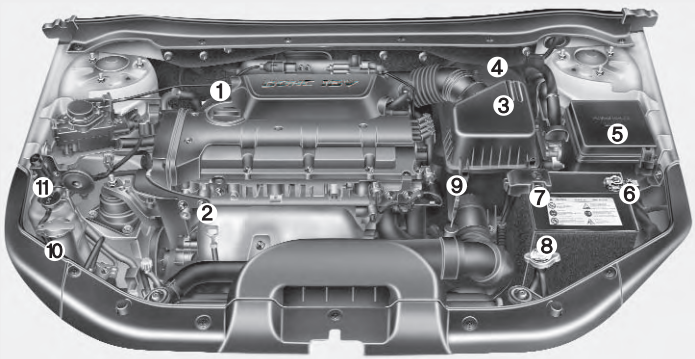
Never work on injection system with engine running or within 30 seconds after shutting off engine. High-pressure pump, rail, injectors and high-pressure pipes are subject to high pressure even after the engine stopped. The fuel jet produced by fuel leaks may cause serious injury, if it touches the body. People using pacemakers should not move than 30cm closer to the ECU or wiring harness within the engine room whilst engine is running, since the high currents in the electronic engine control system produce considerable magnetic fields.

ENGINE COMPARTMENT

■ 1.4L/1.6L Petrol Engine



■ 2.0L Petrol Engine



1. Engine oil filler cap
2. Engine oil dipstick
3. Air cleaner
4. Brake fluid reservoir
5. Fuse box
6. Negative battery terminal
7. Positive battery terminal
8. Radiator cap
9. Auto transaxle oil dipstick (if equipped)
10. Windscreen washer fluid reservoir
11. Engine coolant reservoir
12. Clutch fluid reservoir (if equipped)

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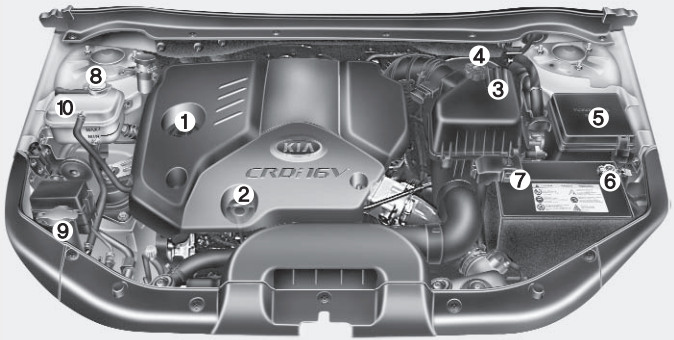
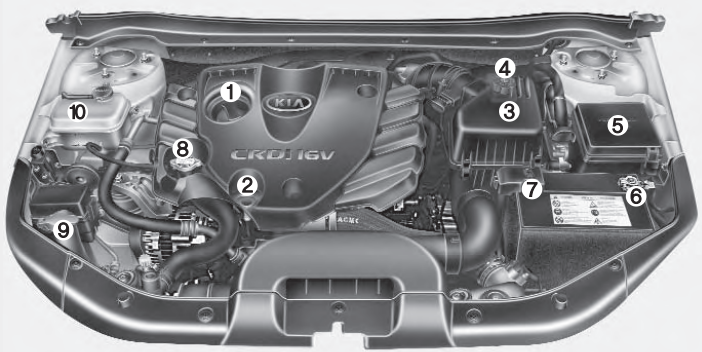
■ 1.6L Diesel Engine



■ 2.0L Diesel Engine



1. Engine oil filler cap
2. Engine oil dipstick
3. Air cleaner
4. Brake fluid reservoir
5. Fuse box
6. Negative battery terminal
7. Positive battery terminal
8. Radiator cap
9. Windscreen washer fluid reservoir
10. Engine coolant reservoir

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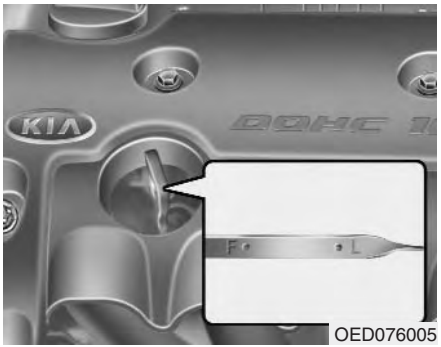
ENGINE OIL



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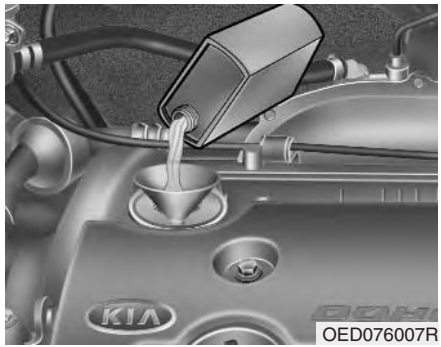
Checking the engine oil level

1. Be sure the vehicle is on level ground.
2. Start the engine and allow it to reach normal operating temperature.
3. Turn the engine off and wait for a few minutes (about 5 minutes) for the oil to return to the oil pan.
4. Pull the dipstick out, wipe it clean, and re-insert it fully.

⚠ WARNING - Radiator hose

Be very careful not to touch the radiator hose when checking or adding the engine oil as it may be hot enough to burn you.

5. Pull the dipstick out again and check the level. The level should be between F and L.



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If it is near or at L, add enough oil to bring the level to F. **Do not overfill.**

Use only the specified engine oil. (Refer to "Recommended Lubricants" in chapter 8.)

Changing the engine oil and filter

Have engine oil and filter changed by an authorised KIA dealer according to the Maintenance Schedule at the beginning of this section.

⚠ WARNING

Used engine oil may cause irritation or cancer of the skin if left in contact with the skin for prolonged periods of time. Used engine oil contains chemicals that have caused cancer in laboratory animals. Always protect your skin by washing your hands thoroughly with soap and warm water as soon as possible after handling used oil.

ENGINE COOLING SYSTEM

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.

Checking the coolant level

⚠ WARNING - Removing radiator cap

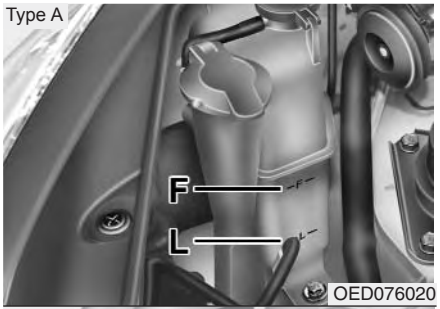
- **Never attempt to remove the radiator cap whilst the engine is operating or hot. Doing so might lead to cooling system and engine damage and could result in serious personal injury from escaping hot coolant or steam.**
- **Turn the engine off and wait until it cools down. Even then, use extreme care when removing the radiator cap. Wrap a thick towel around it, and turn it counterclockwise slowly to the first stop. Step back whilst 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.**

(Continued)

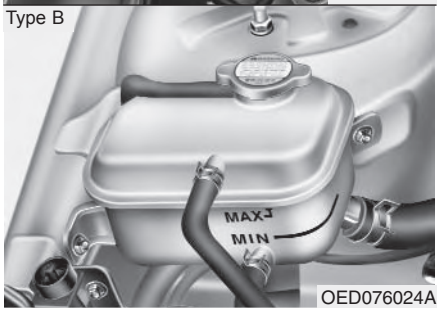
(Continued)

- **Even if the engine is not operating, do not remove the radiator cap or the drain plug whilst the engine and radiator are hot. Hot coolant and steam may still blow out under pressure, causing serious injury.**

Type A



Type B



Check the condition and connections of all cooling system hoses and heater hoses. Replace any swollen or deteriorated hoses.

The coolant level should be filled between F and L or MAX and MIN marked on the side of the coolant reservoir when the engine is cool.

If the coolant level is low, add enough specified coolant to provide protection against freezing and corrosion. Bring the level to F, but do not overfill. If frequent additions are required, see an Authorised Kia Dealer for a cooling system inspection.

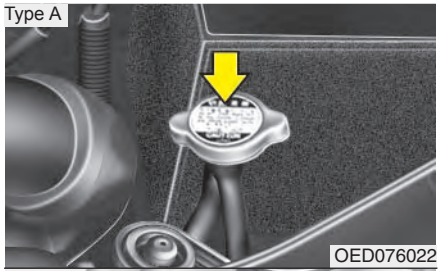
Recommended engine coolant

- Use only soft (de-mineralized) water in the coolant mixture.
- The engine in your vehicle has aluminum engine parts and must be protected by an ethylene-glycol-based coolant to prevent corrosion and freezing.
- DO NOT USE alcohol or methanol coolant or mix them with the specified coolant.
- Do not use a solution that contains more than 60% antifreeze or less than 35% antifreeze, which would reduce the effectiveness of the solution.

For mixture percentage, refer to the following table.

Ambient Temperature	Mixture Percentage (volume)	
	Coolant Solution	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

Type A



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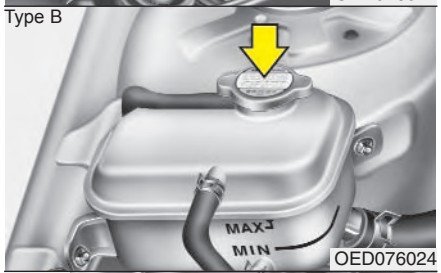
Type B



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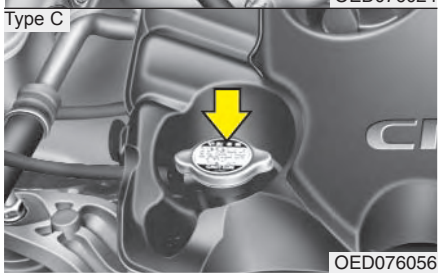
Type C



OED076056

⚠ WARNING

Do not remove the radiator cap when the engine and radiator are hot. Scalding hot coolant and steam may blow out under pressure. This could cause serious injury.

Changing the coolant

Have coolant changed by an authorised KIA dealer according to the Maintenance Schedule at the beginning of this section.

CAUTION

Put a thick cloth or fabric around the radiator cap before refilling the coolant in order to prevent the coolant from overflowing into engine parts such as generator.

BRAKES AND CLUTCH (IF EQUIPPED)

OED076023

Checking 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.

Before removing the reservoir cap and adding brake fluid, clean the area around the reservoir cap thoroughly to prevent brake fluid contamination.

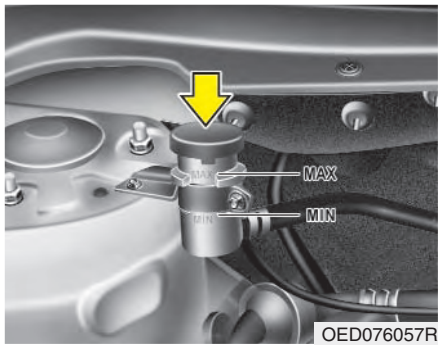
If the level is low, add fluid to the MAX level. The level will fall with accumulated mileage. This is a normal condition associated with the wear of the brake linings. If the fluid level is excessively low, have the brake system checked by an Authorised Kia Dealer.

Use only the specified brake fluid. (Refer to "Recommended Lubricants" in chapter 8.)

Never mix different types of fluid.

⚠ WARNING

In the event the brake system requires frequent additions of fluid, the vehicle should be inspected by an Authorised Kia Dealer.



OED076057R

Checking clutch fluid level (if equipped)

Check the fluid level in the reservoir periodically. The fluid level should be between MAX and MIN marks on the side of the reservoir.

Before removing the reservoir cap and adding clutch fluid, clean the area around the reservoir cap thoroughly to prevent clutch fluid contamination.

If the level is low, add fluid to the MAX level. If the fluid level is excessively low, have the clutch system checked by an Authorised Kia Dealer.

Use only the specified clutch fluid. (Refer to "Recommended Lubricants" in chapter 8.)

Never mix different types of fluid.

⚠ WARNING

In the event the clutch system requires frequent additions of fluid, the vehicle should be inspected by an Authorised Kia Dealer.

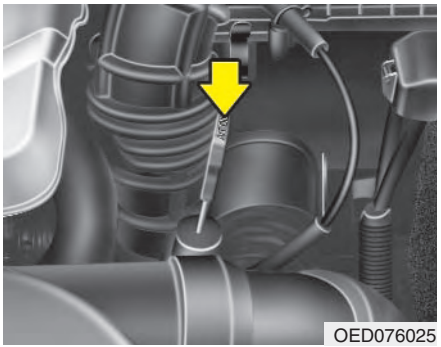
⚠ WARNING

When changing and adding brake/clutch fluid, handle it carefully. Do not let it come in contact with your eyes. If brake/clutch 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/clutch fluid to contact the vehicle's body paint, as paint damage will result. Brake/clutch 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 thrown out. Don't put in the wrong kind of fluid. For example, just a few drops of mineral-based oil, such as engine oil, in your brake clutch system can damage brake clutch system parts.

AUTOMATIC TRANSAXLE (IF EQUIPPED)

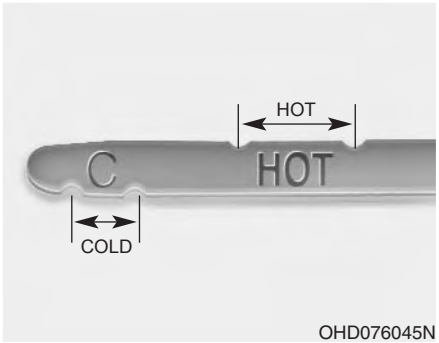

OED076025

Checking the automatic transaxle fluid level

The automatic transaxle fluid level should be checked regularly.

Keep the vehicle on level ground with the parking brake applied and check the fluid level according to the following procedure.

1. Place the shift lever in N (Neutral) position and confirm the engine is running at normal idle speed.
2. After the transaxle is warmed up sufficiently [(fluid temperature 70~80°C (158~176°F)], for example by 10 minutes usual driving, move the shift lever through all positions then place the shift lever in N (Neutral) or P (Park) position.



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3. Confirm if the fluid level is in the "HOT" range on the level gauge. If the fluid level is lower, add the specified fluid from the fill hole. If the fluid level is higher, drain the fluid from the drain hole.
4. If the fluid level is checked in cold condition [(fluid temperature 20~30°C (68~86°F)], add the fluid to the "COLD" line and then recheck the fluid level according to the above step 2.

⚠ WARNING

The transaxle fluid level should be checked when the engine is at normal operating temperature. This means that the engine, radiator, radiator hose and exhaust system etc., are very hot. Exercise great care not to burn yourself during this procedure.

CAUTION

- ***Low fluid level causes transaxle slippage. Overfilling can cause foaming, loss of fluid and transaxle malfunction.***
- ***The use of a non-specified fluid could result in transaxle malfunction and failure.***

⚠ WARNING - Parking brake

To avoid sudden movement of the vehicle, apply parking brake and depress the brake pedal before moving the shift lever.

✻ NOTICE

"COLD" scale is for reference only and should NOT be used to determine transaxle fluid level.

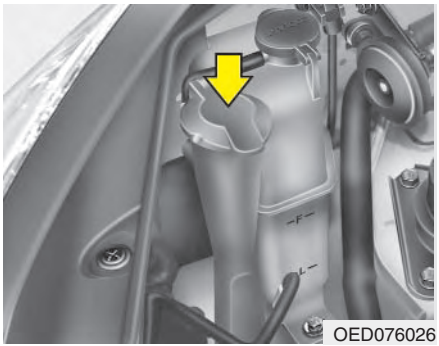
✻ NOTICE

New automatic transaxle fluid should be red. The red dye is added so the assembly plant can identify it as automatic transaxle fluid and distinguish it from engine oil or antifreeze. The red dye, which is not an indicator of fluid quality, is not permanent. As the vehicle is driven, the automatic transaxle fluid will begin to look darker. The colour may eventually appear light brown. Therefore, have an Authorised Kia dealer change the automatic transaxle fluid according to the Scheduled Maintenance at the beginning of this section.

Changing the automatic transaxle fluid

Have automatic transaxle fluid changed by an authorised KIA dealer according to the Maintenance Schedule at the beginning of this section.

LUBRICANTS AND FLUIDS


OED076026

Checking the washer fluid level

The reservoir is translucent so that you can check the level with a quick visual inspection.

Check the fluid level in the washer fluid reservoir and add fluid if necessary. Plain water may be used if washer fluid is not available. However, use washer solvent with antifreeze characteristics in cold climates to prevent freezing.

⚠ WARNING

- **Do not use radiator coolant or antifreeze in the washer fluid reservoir.**
- **Radiator coolant can severely obscure visibility when sprayed on the windscreen and may cause loss of vehicle control or damage to paint and body trim.**
- **Windscreen 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 it's occupants could occur.**
- **Windscreen washer fluid is poisonous to humans and animals. Do not drink and avoid contacting windscreen washer fluid. Serious injury or death could occur.**

Body lubrication

All moving points of the body, such as door hinges, bonnet hinges, and locks, should be lubricated each time the engine oil is changed. Use a non-freezing lubricant on locks during cold weather.

Make sure the engine bonnet secondary latch keeps the bonnet from opening when the primary latch is released.

FUEL FILTER (FOR DIESEL)

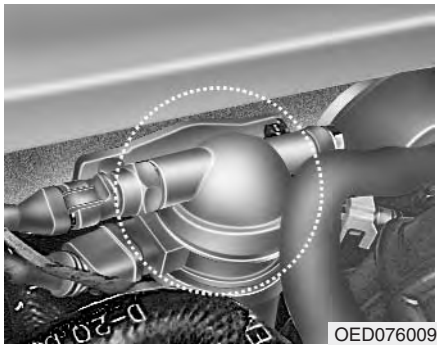
The fuel filter for diesel engine plays an important role of separating water from fuel and accumulating the water in its bottom.

If water accumulates in the fuel filter, the warning light comes on when the ignition key is in the “ON” position.

If the light is turned on, take your car to the authorised Kia dealer and have drain the water and checked the system.

CAUTION

If the water accumulated in the fuel filter is not drained at proper times, damages to the major parts such as the fuel system can be caused by water permeation in the fuel filter.



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Extracting air in the fuel filter (1.6L Diesel engine)

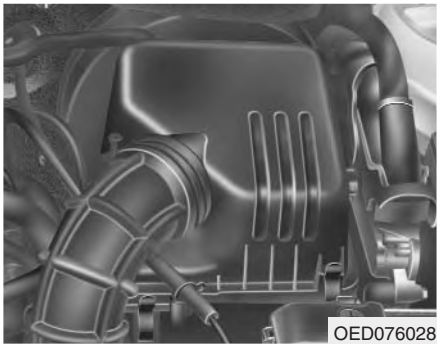
If you drove until you have no fuel left or if you replaced the fuel filter, be sure to extract air in the fuel system as it makes you difficult to start the engine.

1. Remove the air extract nozzle cap on the fuel filter.
2. Pump up and down until the fuel flows out of the plug opening.

✻ NOTICE

- **Use cloths when you extract air so that the fuel is not sprayed around.**
- **Clean the fuel around the fuel filter or the injection pump before starting the engine to prevent fire.**
- **Finally, check each part if the fuel is leaking.**

AIR CLEANER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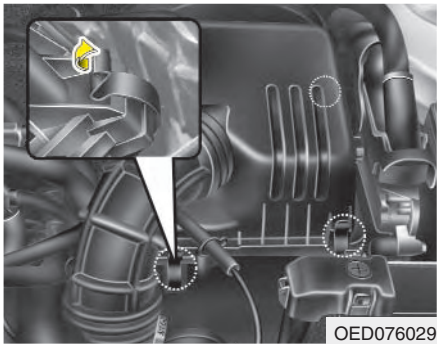
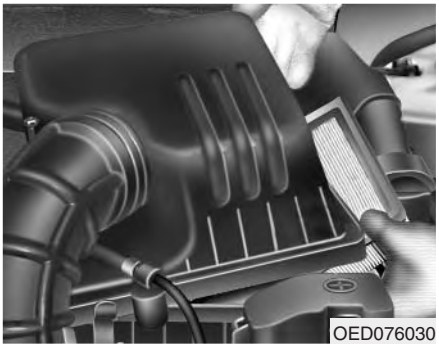
Filter replacement

It must be replaced when necessary.


OED076029

1. Loosen the air cleaner cover attaching clips and open the cover.


OED076030

2. Replace the air cleaner filter.
3. Lock the cover with the cover attaching clips.

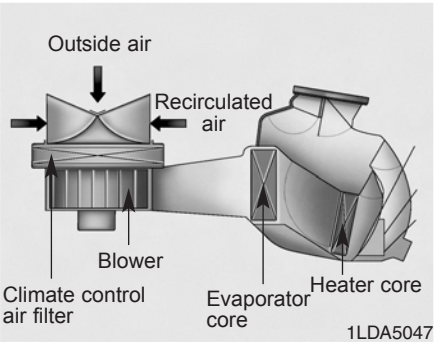
Replace the filter according to the Scheduled Maintenance Section.

If the vehicle is operated in extremely dusty or sandy areas, replace the filter more often than the usual recommended intervals. (Refer to Maintenance Under Severe Usage Conditions in this section.)

CAUTION

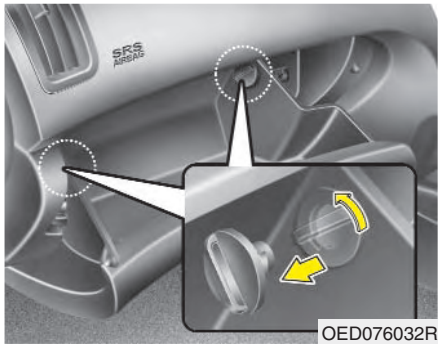
- ***Do not drive with the air cleaner removed; this will result in excessive engine wear.***
- ***When removing the air cleaner filter, be careful that dust or dirt does not enter the air intake, or damage may result.***
- ***Use a KIA genuine part. Use of non-genuine part could damage the air flow sensor or turbocharger.***

CLIMATE CONTROL AIR FILTER (IF EQUIPPED)



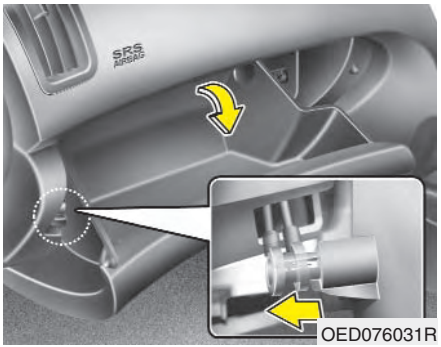
The climate control air filter installed behind the glove box filters the dust or other pollutants that come into the vehicle from the outside through the heating and air conditioning system. If dust or other pollutants accumulate in the filter over a period of time, the air flow from the air vents may decrease, resulting in moisture accumulation on the inside of the windscreen even when the outside (fresh) are position is selected. If this happens, have the climate control air filter replaced by an Authorised Kia Dealer.

The climate control air filter should be replaced every 15,000 km (Diesel Engine 20,000 km). If the vehicle is operated in the severely air-polluted cities or on dusty rough roads for a long period, it should be inspected more frequently and replaced earlier. When you try to replace the climate control air filter by owner maintenance, replace it performing the following procedure, and in this case, be careful to avoid damaging other components.



Filter replacement

1. With the glove box open, remove the stoppers on both sides to allow the glove box hang freely on the hinges.



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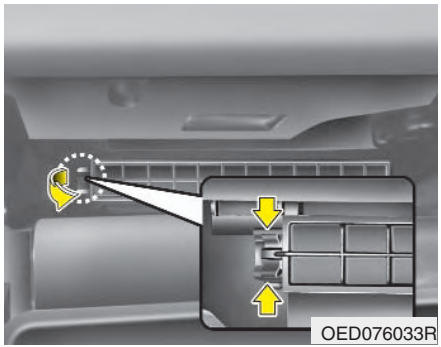
2. Open the glove box part way, reach inside and pull out the elastic line and push the retaining clip through the hole on the side of the glove box. Allow the glove box to open.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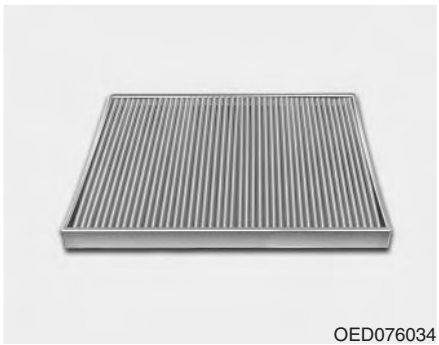
3. Pull out the cover pressing the hooks of the climate control air filter case.


OED076034

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

Wiper blade maintenance

✻ NOTICE

Commercial hot waxes applied by automatic car washes have been known to make the windscreen difficult to clean.

Contamination of either the windscreen or the wiper blades with foreign matter can reduce the effectiveness of the windscreen 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 petrol, kerosene, paint thinner, or other solvents on or near them.

Windscreen wiper blade replacement

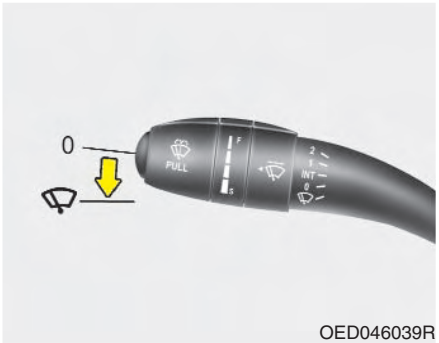
When the wipers no longer clean adequately, the blades may be worn or cracked, and require replacement.

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.



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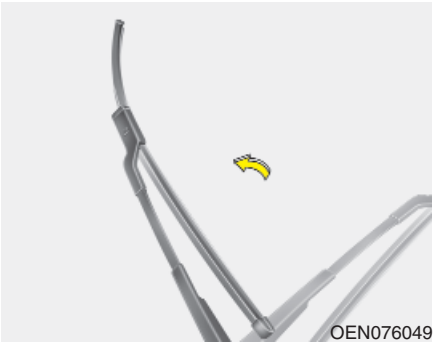
1. Turn the ignition swich off and remove the key.
2. Push the wiper lever downward to the one touch wiper position for more than 2 seconds, then the wiper blades will stop upward position. (if equipped)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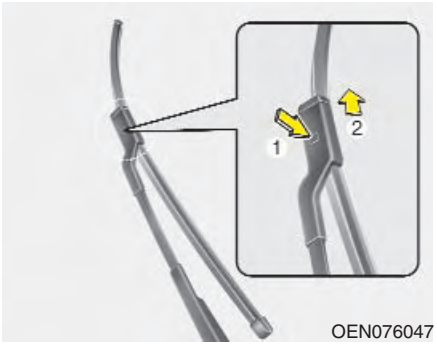
3. Raise the wiper arm and turn the wiper blade assembly to expose the plastic locking clip.



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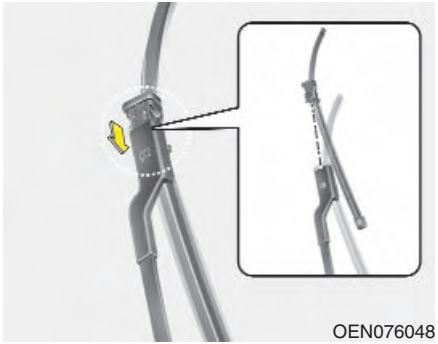
4. Compress the clip and slide the blade assembly upward.
5. Lift it off the arm.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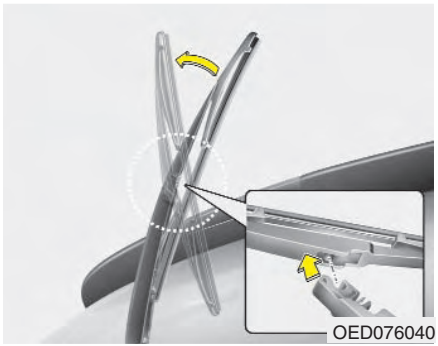
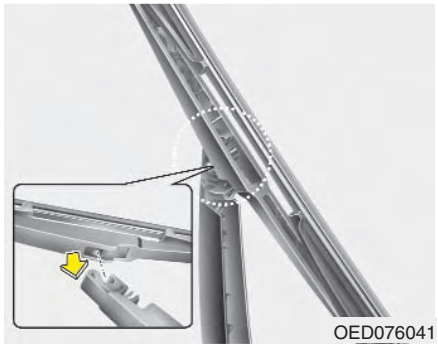
6. Install the blade assembly until it clicks into place.
7. Place back the wiper arm to the proper position.

✻ NOTICE

Do not allow the wiper arm to fall against the windscreen.





Rear window wiper blade replacement (if equipped)

1. Raise the wiper arm and pull out the wiper blade assembly.
2. Install the new blade assembly by inserting the centre part into the slot in the wiper arm until it clicks into place.
3. Make sure the blade assembly is installed firmly by trying to pulling it slightly.
4. Place back the wiper arm to the proper position.

BATTERY

OED076042

For best battery service :

- Keep the battery securely mounted.
- Keep the battery top clean and dry.
- Keep the terminals and connections clean, tight, and coated with petroleum jelly or terminal grease.
- Rinse any spilled electrolyte from the battery immediately with a solution of water and baking soda.
- If the vehicle is not going to be used for an extended time, disconnect the battery cables.

⚠ WARNING - 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, which is 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.

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If any electrolyte gets into your eyes, flush your eyes with clean water for at least 15 minutes and get immediate medical attention. If possible, continue to apply water with a sponge or cloth until medical attention is received.

If electrolyte gets on your skin, thoroughly wash the contacted area. If you feel a pain or a 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.

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- **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 charge 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 ignition switched on.**

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 whilst 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 whilst 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 electrolyte of any cell exceeds 49°C (120°F).**
- **Wear eye protection when checking the battery during charging.**

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- **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.**

Reset items

Items should be reset after the battery has been discharged or the battery has been disconnected.

- Auto up/down window (See chapter 3)
- Sunroof (See chapter 3)
- Trip computer (See chapter 4)
- Climate control system (See chapter 4)
- Clock (See chapter 3, 4)
- Audio (See chapter 3)

TYRES AND WHEELS

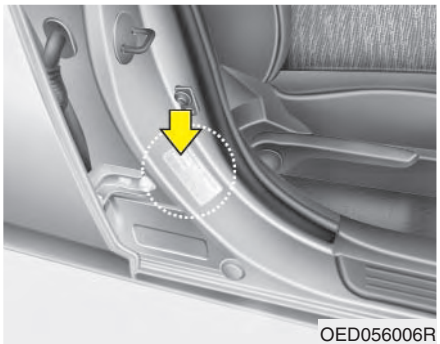
Tyres care

For proper maintenance, safety, and maximum fuel economy, you must always maintain recommended tyre inflation pressures and stay within the load limits and weight distribution recommended for your vehicle.

Recommended cold tyre inflation pressures

All tyre pressures (including the spare) should be checked every day when the tyres are cold. “Cold Tyres” 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 tyre wear.



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All specifications (sizes and pressures) can be found on a label attached to the front driver’s door sill.

⚠ WARNING

Severe underinflation (70 kPa (10 psi) or more) can lead to severe heat build-up, especially on hot days and when driving at high speed. This can potentially cause tread separation and other tyre irregularities to appear that can result in the loss of vehicle control leading to severe injury or death.

CAUTION

- ***Warm tyres normally exceed recommended cold tyre pressures by 28 to 41 kPa (4 to 6 psi). Do not release air from warm tyres to adjust the pressure or the tyres will be underinflated.***
- ***Underinflation results in excessive wear, poor handling, reduced fuel economy, and the possibility of blowouts from overheated tyres. Also, low tyre pressure can cause poor sealing of the tyre bead. If the tyre pressure is excessively low, wheel deformation and/or tyre separation is possible. So, keep your tyre pressures at the proper levels. If a tyre frequently needs refilling, have it checked by an Authorised Kia Dealer.***

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- ***Overinflation produces a harsh ride, handling problems, excessive wear at the centre of the tyre tread, and a greater possibility of damage from road hazards.***
- ***Be sure to reinstall the tyre inflation valve caps. Without the valve cap, dirt or moisture could get into the valve core and cause air leakage. If the cap have been lost, install new one as soon as possible.***

⚠ WARNING - Tyre Inflation

Overinflation or underinflation can reduce tyre life, adversely affect vehicle handling, and lead to sudden tyre failure. This could result in loss of vehicle control.

CAUTION - Tyre pressure

Always observe the following:

- ***Check tyre pressure when the tyres 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 tyre each time you check the pressure of other tyres.***
- ***Never overload your vehicle. Be careful not to overload a vehicle luggage rack if your vehicle is equipped with one.***
- ***Worn, old tyres can cause accidents. If your tread is badly worn, or if your tyres have been damaged, replace them.***

Checking tyre inflation pressure

Check your tyres once a month or more.

Also, check the tyre pressure of the spare tyre.

How to check

Use a good quality gage to check tyre pressure. You can not tell if your tyres are properly inflated simply by looking at them. Radial tyres may look properly inflated even when they're underinflated.

Check the tyre's inflation pressure when the tyres 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 tyre valve stem. Press the tyre gage firmly onto the valve to get a pressure measurement. If the cold tyre inflation pressure matches the recommended pressure on the tyre 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 tyre, release air by pushing on the metal stem in the centre of the tyre valve. Recheck the tyre pressure with the tyre gage. Be sure to put the valve caps back on the valve stems. They help prevent leaks by keeping out dirt and moisture.

Tyre rotation

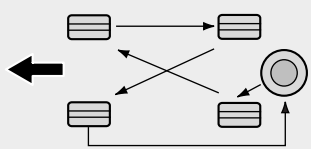
To equalize tread wear, it is recommended that the tyres be rotated every 12,000 km (7,500 miles) or sooner if irregular wear develops.

During rotation, check the tyres for correct balance.

When rotating tyres, check for uneven wear and damage. Abnormal wear is usually caused by incorrect tyre pressure, improper wheel alignment, out-of-balance wheels, severe braking or severe cornering. Look for bumps or bulges in the tread or side of tyre. Replace the tyre if you find either of these conditions. Replace the tyre also if you can see fabric or cord. After rotation, be sure to bring the front and rear tyre pressures to specification and check lug nut tightness.

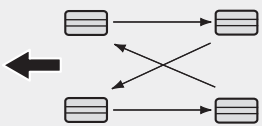
Refer to Section 8, Specifications.

With a full-size spare tyre



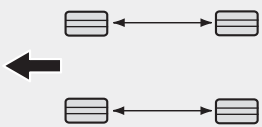
CBGQ0706

Without a spare tyre



CBGQ0707

Directional tyres (if equipped)



CBGQ0707A

Disc brake pads should be inspected for wear whenever tyres are rotated.

✻ NOTICE

Rotate radial tyres that have an asymmetric tread pattern only from front to rear and not from right to left.

⚠ WARNING

- **Do not use the compact spare tyre for tyre rotation**
- **Do not mix bias ply and radial ply tyres under any circumstances. This may cause unusual handling characteristics that could result in death, severe injury, or property damage.**

Tyre replacement

If the tyre 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 inch) of tread left on the tyre. Replace the tyre when this happens.

Do not wait for the band to appear across the entire tread before replacing the tyre.

Wheel alignment and tyre balance

The wheels on your vehicle were aligned and balanced carefully at the factory to give you the longest tyre life and best overall performance.

In most cases, you will not need to have your wheels aligned again. However, if you notice unusual tyre 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.

⚠ WARNING

- **When replacing tyres, never mix radial, bias-belted, and bias-type tyres. All four tyres should be of the same size, design and construction. Use only the tyre sizes listed on the Tyre Label found below the door striker on the driver's side. Make sure that all tyres and wheels are the same size and have the same load-carrying capacity. Use only tyre and wheel combinations recommended on the Tyre Label or by an Authorised Kia Dealer. Failure to follow these precautions can adversely affect the safety and handling of your vehicle.**

(Continued)

(Continued)

- **The use of any other tyre size or type may seriously affect ride, handling, ground clearance, tyre clearance, and speedometer calibration.**
- **Driving on worn-out tyres is very hazardous and will reduce braking effectiveness, steering accuracy, and traction.**
- **It is best to replace all four tyres at the same time. If that is not possible, or necessary, then replace the two front or two rear tyres as a pair. Replacing just one tyre can seriously affect your vehicle's handling.**

Compact spare tyre replacement (if equipped)

A compact spare tyre has a shorter tread life than a regular size tyre. Replace it when you can see the tread wear indicator bars on the tyre. The replacement compact spare tyre should be the same size and design tyre as the one provided with your new vehicle and should be mounted on the same compact spare tyre wheel. The compact spare tyre is not designed to be mounted on a regular size wheel, and the compact spare tyre wheel is not designed for mounting a regular size tyre.

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-tyre clearance, snow chain clearance, speedometer calibration, headlight aim and bumper height.

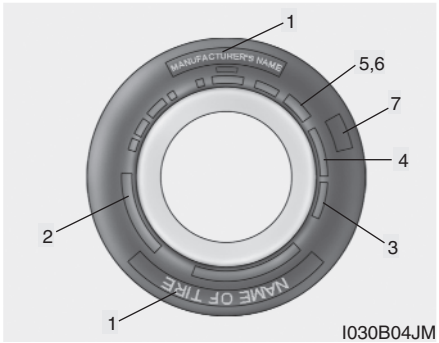
Tyre traction

Tyre traction can be reduced if you drive on worn tyres, tyres that are improperly inflated or on slippery road surfaces. Tyres should be replaced when tread wear indicators appear. To reduce the possibility of losing control, slow down whenever there is rain, snow or ice on the road.

Tyre maintenance

In addition to proper inflation, correct wheel alignment helps to decrease tyre wear. If you find a tyre is worn unevenly, have your dealer check the wheel alignment.

When you have new tyres installed, make sure they are balanced. This will increase vehicle ride comfort and tyre life. Additionally, a tyre should always be rebalanced if it is removed from the wheel.



Tyre sidewall labeling

This information identifies and describes the fundamental characteristics of the tyre and also provides the tyre identification number (TIN) for safety standard certification. The TIN can be used to identify the tyre in case of a recall.

1. Manufacturer or brand name

Manufacturer or Brand name is shown.

2. Tyre size designation

A tyre's sidewall is marked with a tyre size designation. You will need this information when selecting replacement tyres for your car. The following explains what the letters and numbers in the tyre size designation mean.

Example tyre size designation:

(These numbers are provided as an example only; your tyre size designator could vary depending on your vehicle.)

P205/65R15 92H

P - Applicable vehicle type (tyres marked with the prefix "P" are intended for use on passenger cars or light trucks; however, not all tyres have this marking).

205 - Tyre width in millimeters.

65 - Aspect ratio. The tyre's section height as a percentage of its width.

R - Tyre construction code (Radial).

15 - Rim diameter in inches.

92 - Load Index, a numerical code associated with the maximum load the tyre 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:

6.0JX15

6.0 - Rim width in inches.

J - Rim contour designation.

15 - Rim diameter in inches.

Tyre speed ratings

The chart below lists many of the different speed ratings currently being used for passenger cars. The speed rating is part of the tyre size designation on the sidewall of the tyre. This symbol corresponds to that tyre's designed maximum safe operating speed.

Speed Rating Symbol	Maximum Speed
S	180 km/h (112 mph)
T	190 km/h (118 mph)
H	210 km/h (130 mph)
V	240 km/h (149 mph)
Z	Above 240 km/h (149 mph)
W*	270 km/h (168 mph)

* W speed rating is sub-category of the Z speed rating.

3. Checking tyre life (TIN : Tyre Identification Number)

Any tyres that are over 6 years, based on the manufacturing date, tyre strength and performance, decline with age naturally (even unused spare tyres). Therefore, the tyres (including the spare tyre) should be replaced by new ones. You can find the manufacturing date on the tyre sidewall (possibly on the inside of the wheel), displaying the DOT Code. The DOT Code is a series of numbers on a tyre consisting of numbers and English letters. The manufacturing date is designated by the last four digits (characters) of the DOT code.

DOT : XXXX XXXX OOOO

The front part of the DOT means a plant code number, tyre size and tread pattern and the last four numbers indicate week and year manufactured.

For example:

DOT XXXX XXXX 1606 represents that the tyre was produced in the 16th week of 2006.

⚠ WARNING - Tyre age

A tyre more than 6 years old may sustain separation of cord layers inside the tyre. Tyre failure to separation of cord, can cause accidents resulting in severe injuries or death.

Make sure to check the manufacturing date of the tyre and replace it within 6 years of that date.

4. Tyre ply composition and material

The number of layers or plies of rubber-coated fabric are in the tyre. Tyre manufacturers also must indicate the materials in the tyre, which include steel, nylon, polyester, and others. The letter "R" means radial ply construction; the letter "D" means diagonal or bias ply construction; and the letter "B" means belted-bias ply construction.

5. Maximum permissible inflation pressure

This number is the greatest amount of air pressure that should be put in the tyre. Do not exceed the maximum permissible inflation pressure. Refer to the Tyre and Loading Information label for recommended inflation pressure.

6. Maximum load rating

This number indicates the maximum load in kilograms and pounds that can be carried by the tyre. When replacing the tyres on the vehicle, always use a tyre that has the same load rating as the factory installed tyre.

7. Uniform tyre quality grading Tread wear

The tread wear grade is a comparative rating based on the wear rate of the tyre when tested under controlled conditions on a specified government test course. For example, a tyre graded 150 would wear one-and-a-half times as well on the government course as a tyre graded 100.

The relative performance of tyres depends upon the actual conditions of their use. However, performance may differ from the norm because of variations in driving habits, service practices and differences in road characteristics and climate.

These grades are molded on the side-walls of passenger vehicle tyres. The tyres available as standard or optional equipment on your vehicles may vary with respect to grade.

Traction - AA, A, B & C

The traction grades, from highest to lowest, are AA, A, B and C. The grades represent the tyres ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tyre marked C may have poor traction performance.

Temperature -A, B & C

The temperature grades are A (the highest), B and C. The grades represent the tyre'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 tyre to degenerate and reduce tyre life, and excessive temperature can lead to sudden tyre failure. Grades A and B represent higher levels of performance on the laboratory test wheel than the minimum required by the law.

⚠ WARNING - Tyre temperature

The temperature grade for this tyre is established for a tyre 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 tyre failure. This can cause loss of vehicle control and serious injury or death.

BULB REPLACEMENT

⚠ WARNING - Working on the lights

Prior to working on the light, firmly apply the parking brake, ensure that the ignition switch is turned to the "LOCK" position and turn off the lights to avoid sudden movement of the vehicle and burning your fingers or receiving an electric shock.

Use only the bulbs of the specified wattage.

CAUTION

Be sure to replace the burned-out bulb with one of the same wattage rating. Otherwise, it may cause damage to the fuse or electric wiring system.

CAUTION

If you don't have necessary tools, the correct bulbs and the expertise, consult an Authorised Kia Dealer. In many cases, it is difficult to replace vehicle light bulbs because other parts of the vehicle must be removed before you can get to the bulb. This is especially true if you have to remove the front bumper to get to the bulb(s). Removing/installing the front bumper or bumper hardware can result in damage to the vehicle.

✻ NOTICE

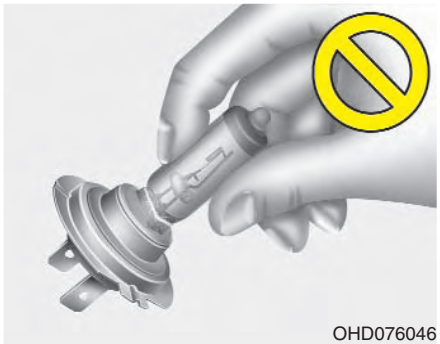
After heavy, driving rain or washing, headlight and taillight lenses could appear frosty. This condition is caused by the temperature difference between the lamp inside and outside. This is similar to the condensation on your windows inside your vehicle during the rain and doesn't indicate a problem with your vehicle. If the water leaks into the lamp bulb circuitry, have the vehicle checked by an Authorised Kia Dealer.

OED076044

(1) Position light (Parking light)
(2) Headlight (High)
(3) Headlight (Low)
(4) Front turn signal light
(5) Front fog light (if equipped)

Headlight bulb replacement

If the light bulb is not operating, have the vehicle checked by an authorised Kia Dealer.


OHD076046

⚠ WARNING - Halogen bulbs

- **Halogen bulbs contain pressurized gas that will produce flying pieces of glass if broken.**
- **Always handle them carefully, and avoid scratches and abrasions. If the bulbs are lit, avoid contact with liquids. Never touch the glass with bare hands. Residual oil may cause the bulb to overheat and burst when lit. A bulb should be operated only when installed in a headlight.**

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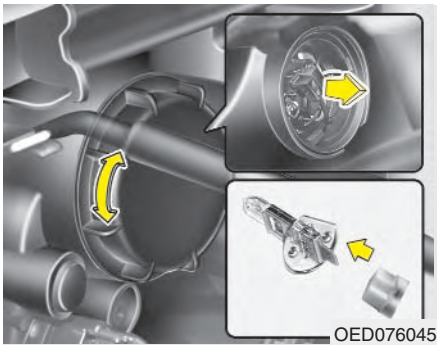
- **If a bulb becomes damaged or cracked, replace it immediately and carefully dispose of it.**
- **Wear eye protection when changing a bulb. Allow the bulb to cool down before handling it.**

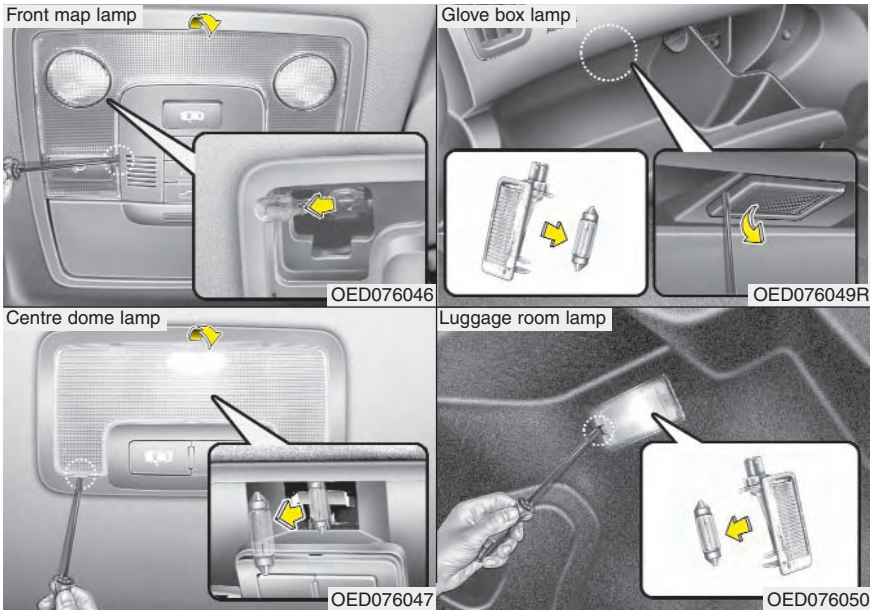

OED076045

Front turn signal/position light bulb replacement

1. Open the bonnet.
2. Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
3. Remove the bulb from the socket by pressing it in and rotating it until the tabs on the bulb align with the slots in the socket. Pull the bulb out of the socket.
4. Insert a new bulb by inserting it into the socket and rotating it until it locks into place.
5. Install the socket in the assembly by aligning the tabs on the socket with the slots in the assembly. Insert the socket into the assembly and turn the socket clockwise.

Front fog light bulb replacement

If the light bulb is not operating, have the vehicle checked by an authorised Kia Dealer.



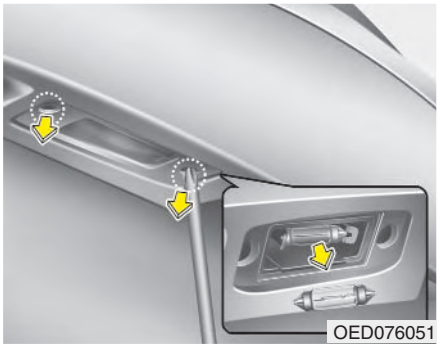
Interior lights bulb replacement

1. Using a flat-blade screwdriver, gently pry the lens from the interior light housing.

⚠ WARNING

Prior to working on the Interior Lights, ensure that the "OFF" button is depressed to avoid burning your fingers or receiving an electric shock.

2. Remove the bulb by pulling it straight out.
3. Install a new bulb in the socket.
4. Align the lens tabs with the interior light housing notches and snap the lens into place.


OED076051

License plate lights bulb replacement

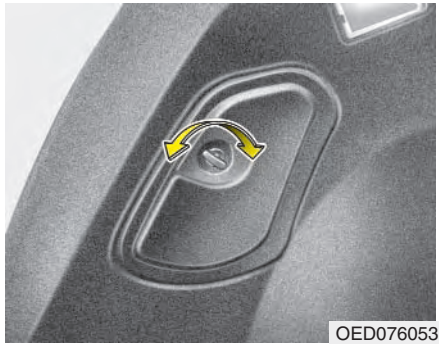
1. Loosen the lens retaining screws with a cross-tip screwdriver.
2. Remove the lens.
3. Remove the bulb by pulling it straight out.
4. Install a new bulb.
5. Reinstall the lens securely with the lens retaining screws.

OED076052

(1) Rear fog light (if equipped)
(2) Rear turn signal light
(3) Back-up light
(4) Stop and tail light

Rear combination light bulb replacement

1. Open the rear hatch.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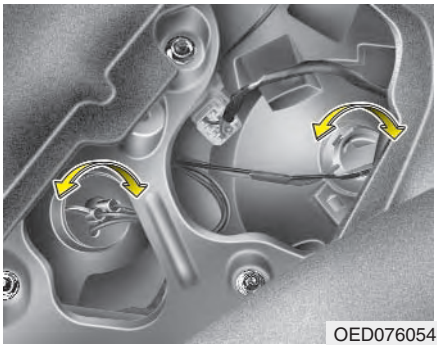
2. Remove the service cover by turning the plastic screw counterclockwise and removing the cover.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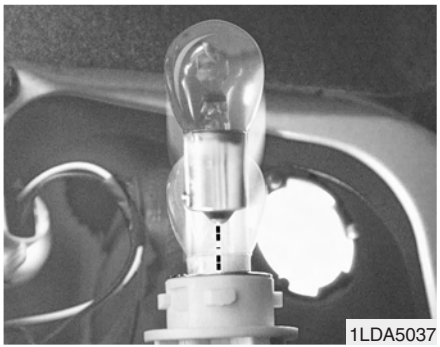
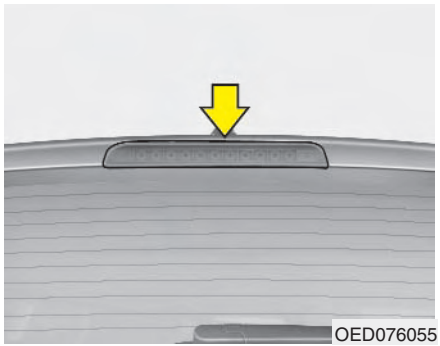
3. Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.

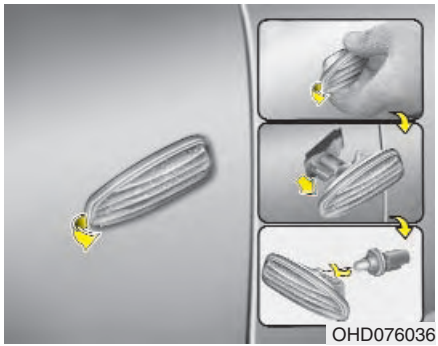

1LDA5037

4. Remove the bulb from the socket by pressing it in and rotating it until the tabs on the bulb align with the slots in the socket. Pull the bulb out of the socket.
5. Insert a new bulb by inserting it into the socket and rotating it until it locks into place.
6. Install the socket in the assembly by aligning the tabs on the socket with the slots in the assembly. Push the socket into the assembly and turn the socket clockwise.
7. Reinstall the service cover and tighten the screws.


OED076055

High mounted stop light bulb replacement

If the light bulb is not operating, have the vehicle checked by an authorised Kia Dealer.


OHD076036

Side repeater light bulb replacement (if equipped)

1. Remove the light assembly from the vehicle by pushing the lens forward and pulling the assembly out.
2. Disconnect the bulb electrical connector.
3. Separate the socket and the lens parts by turning the socket counter clockwise until the tabs on the socket align with the slots on the lens part.
4. Remove the bulb by pulling it straight out.
5. Insert a new bulb in the socket.
6. Reassemble the socket and the lens part.
7. Connect the bulb electrical connector.
8. Reinstall the light assembly to the body of the vehicle.

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.

WARNING

After washing the vehicle, test the brakes whilst driving slowly to see if they have been affected by water. If braking performance is impaired, dry the brakes by applying them lightly whilst maintaining a slow forward speed.

CAUTION

- ***Water washing in the engine compartment 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.

CAUTION

- ***Wiping dust or dirt off the body with a dry cloth will scratch the finish.***
- ***Do not use steel wool, abrasive cleaners, or strong detergents containing highly 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 doors, rocker panels, and frame members have drain holes that should not be allowed to clog with dirt; trapped water in these areas can cause rusting.

⚠ WARNING

After washing the vehicle, test the brakes whilst driving slowly to see if they have been affected by water. If braking performance is impaired, dry the brakes by applying them lightly whilst 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.
- 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 acid detergent. It may damage and corrode the aluminum wheels coated with a clear protective finish.

INTERIOR CARE

Interior general precautions

Prevent caustic solutions such as perfume and cosmetic oil from contacting the dashboard and door trim because they may cause damage or discoloration. If they do contact the dashboard, wipe them off immediately. See the instructions that follow for the proper way to clean vinyl.

CAUTION

If wax for synthetic leather contacts the dashboard and door trim, it may cause stain and blot.

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 colour 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.

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 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 to the rear window defroster grid.

Specifications 8

SPECIFICATIONS

The specifications given here are for general information only. Please check with an authorised Kia dealer for more precise and more up-to-date information.

Dimensions

Item	mm (in)
Overall length	4235 (166.7)
Overall width	1790 (70.5)
Overall height	1480 (58.3)
Front tread	1546*1/1538*2/1528*3 (60.9*1/60.6*2/60.2*3)
Rear tread	1544*1/1536*2/1527*3 (60.8*1/60.5*2/60.1*3)
Wheelbase	2650 (104.3)

*1 Fitted with 185/65R15 or 195/65R15 tyres.
*2 Fitted with 205/55R16 tyres.
*3 Fitted with 225/45R17 tyres.

Tyres

Item	Tyre size	Wheel size	Inflation pressure bar (psi,kPa)				Wheel lug nut torque kg•m (lb•ft, N•m)
			Normal load *1		Maximum load		
			Front	Rear	Front	Rear	
Full size tyre	185/65R15	5.5J×15	2.2 (32, 220)	2.2 (32, 220)	2.2 (32, 220)	2.2 (32, 220)	9~11 (65~79, 88~107)
	195/65R15	5.5J×15					
	205/55R16	6.0J×16					
	225/45R17	7.0J×17					
Compact spare tyre (if equipped)	T125/80D15	5.5J×15	4.2 (60, 420)	4.2 (60, 420)	4.2 (60, 420)	4.2 (60, 420)	

*1 Normal load : Up to 4 persons

Light bulbs

Light Bulb		Wattage
Headlights	High	55
	Low	55
Front turn signal lights		21
Position lights		5
Side repeater lights (if equipped)		5
Front fog lights (if equipped)		55
Stop and tail lights		21/5
Rear turn signal lights		21
Back-up lights		21
Rear fog lights (if equipped)		21
High mounted stop light		2
License plate lights		5
Front map lamp		10
Centre dome lamp		8
Door courtesy lamps		5
Luggage room lamp		5
Glove box lamp		5

Recommended lubricants and capacities

To help achieve proper engine and powertrain performance and durability, use only lubricants of the proper quality. The correct lubricants also help promote engine efficiency that results in improved fuel economy.

These lubricants and fluids are recommended for use in your vehicle.

Lubricant			Volume	Classification
Engine oil *1 *2 (drain and refill)	Petrol Engine	1.4L/1.6L	3.3 *l* (3.5 US qt.)	API Service SJ, SL or above, ILSAC GF-3 or above
		2.0L	4.0 *l* (4.2 US qt.)	
	Diesel Engine	1.6L	5.3 *l* (5.6 US qt.)	Without CPF (Catalyzed Particulate filter) ; API Service CH-4 or above, ACEA B4
		2.0L	5.9 *l* (6.2 US qt.)	With CPF (Catalyzed Particulate filter); ACEA C3
Manual transaxle fluid	Petrol Engine	1.4L/1.6L	1.9 *l* (2.0 US qt.)	API Service GL-4 SAE 75W-85 (fill for-life)
		2.0L	2.0 *l* (2.1 US qt.)	
	Diesel Engine	1.6L	2.0 *l* (2.11 US qt.)	
		2.0L	2.10 *l* (2.22 US qt.)	
Automatic transaxle fluid		1.4L/1.6 Engine	6.8 *l* (7.2 US qt.)	DIAMOND ATF SP-III, SK ATF SP-III
		2.0L Engine	6.6 *l* (6.9 US qt.)	
Power steering			0.8 *l* (0.8 US qt.)	PSF-III
Coolant	Petrol Engine	1.4L/1.6L	5.8~5.9 *l* (6.1~6.2 US qt.)	Ethylene glycol base for aluminum radiator
		2.0L	6.2~6.3 *l* (6.6~6.7 US qt.)	
	Diesel Engine	1.6L	6.3 *l* (6.7 US qt.)	
		2.0L	7.3 *l* (7.7 US qt.)	
Brake/Clutch fluid			0.7~0.8 *l* (0.7~0.8 US qt.)	FMVSS116 DOT-3 or DOT-4
Fuel			53 *l* (14 US gal)	-

*1 Refer to the recommended SAE viscosity numbers on the next page.

*2 Engine oils labeled Energy Conserving Oil are now available. Along with other additional benefits, they contribute to fuel economy by reducing the amount of fuel necessary to overcome engine friction. Often, these improvements are difficult to measure in everyday driving, but in a year's time, they can offer significant cost and energy savings.

Recommended SAE viscosity number

✻ NOTICE

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 (starting and oil flow). Lower viscosity engine oils can provide better fuel economy and cold weather performance, however, higher viscosity engine oils are required for satisfactory lubrication in hot weather. Using oils of any viscosity other than those recommended could result in engine damage.

When choosing an oil, consider the range of temperature your vehicle will be operated in before the next oil change. Proceed to select the recommended oil viscosity from the chart.

Temperature Range for SAE Viscosity Numbers

Temperature	°C	-30	-20	-10	0	10	20	30	40	50
	(°F)	-10	0	20	40	60	80	100	120	
Petrol Engine Oil *1				20W-50						
				15W-40						
				10W-30						
				5W-20, 5W-30						
Diesel Engine Oil				15W-40						
				10W-30						
				5W-30						
				0W-30 *2						

1. For better fuel economy, it is recommended to use the engine oil of a viscosity grade SAE 5W-20,5W-30 (API SJ, SL / ILSAC GF-3). However, if the engine oil is not available in your country, select the proper engine oil using the engine oil viscosity chart.
2. It is only for extreme cold area and to be restricted by driving condition and area. (Especially, not recommended for sustained high loaded and high speed operation.)

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