

Contents

| | |
|---|-----------|
| Operation | 1 |
| Cab overview | 1 |
| Multifunctional steering wheel..... | 2 |
| Function button | 3 |
| Engine hood release handle..... | 4 |
| Driver's power window control button | 5 |
| Auto dimming interior rearview mirror* | 5 |
| Remote control key | 6 |
| ENGINE START/STOP button | 6 |
| Transmission gears..... | 7 |
| Start and shutdown..... | 8 |
| Parking brake..... | 9 |
| Instrument cluster with 7-inch display* | 10 |
| Instrument cluster with 12.3-inch display (classic theme)* | 11 |
| Instrument cluster with 12.3-inch display (technology theme)* | 12 |
| HCP | 13 |
| AV system | 14 |
| Routine inspection | 15 |
| Safety | 20 |
| Seat belt | 20 |
| Supplemental restraint system (SRS) | 22 |
| Child safety | 26 |
| Child safety seat..... | 28 |
| Fastening the seat belt | 30 |
| Driving | 31 |
| Driving posture and visual information | 31 |
| Brake assist control system..... | 35 |
| Instructions on driving assistance | 39 |

| | |
|---|----|
| Boarding and alighting essentials..... | 45 |
| Precautions before departure | 47 |
| Precautions during driving..... | 48 |
| Precautions for parking | 50 |
| Precautions under various road conditions | 51 |
| Precautions under various weather conditions .. | 54 |
| Other precautions | 55 |

Q&A..... 58

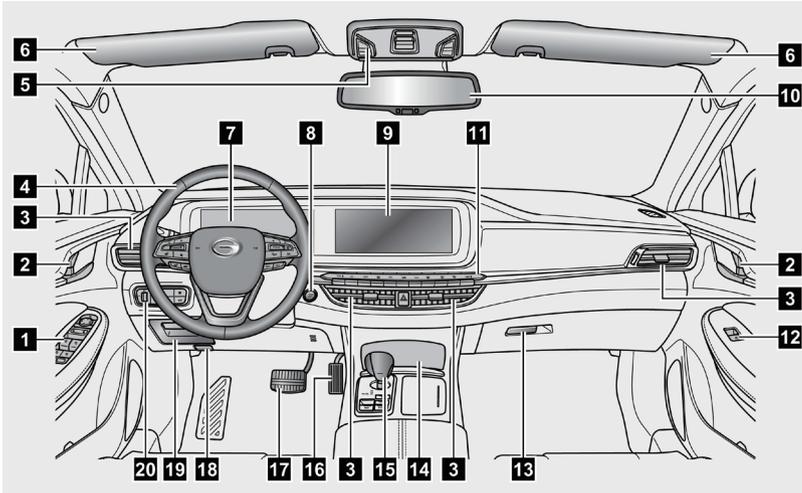
| | |
|--|----|
| How to achieve fuel-efficient driving?..... | 58 |
| What kind of damage will inferior fuel bring to the vehicle? | 59 |
| Why is there jitter during emergency braking (accompanied by slight noise)?..... | 60 |
| Why should the engine speed be decreased before parking? | 60 |
| Why is crackling sound heard from the chassis sometimes after cold start or shutdown of the engine?..... | 61 |
| Why is “cooing” noise heard when the brake pedal is released to start the vehicle?..... | 61 |
| Why is coasting in the “N” gear not allowed while the vehicle is running? | 62 |
| Why is a sound heard when the electric park brake is applied or released? | 62 |
| Why does the vehicle deviate? | 63 |
| Why does water dripping occur under the vehicle? | 64 |
| What points should be noticed during the battery use? | 64 |
| Why are the beam directions of left and right lamps inconsistent? | 65 |
| Why is noise heard from the radio sometimes? .. | 66 |
| Why does the wiper work improperly? | 67 |
| What points should be noticed during the use of wiper?..... | 68 |
| How to deal with the fog on the window?..... | 69 |

| | |
|--|----|
| How to decrease the cabin air temperature in a hot weather?..... | 70 |
| Why is heavy noise heard from the air outlet when the A/C is turned on in a hot weather?..... | 70 |
| Why does the cooling fan still run after the vehicle stops?..... | 71 |
| Why can the rear door not be opened from inside? | 71 |
| Why is an airflow sound “poof” heard in the vehicle when the rear door window is opened?..... | 72 |
| How to clean the stubborn stains in the interior trim? | 72 |
| How to remove the unpleasant odor in a new vehicle? | 73 |
| Why do scratches exist on the paintwork at the groove of door handle? | 73 |
| How is tire bulge generated? | 74 |
| Why is the engine of a hydraulic tappet structure so that a “click” sound is heard for a while during cold start?..... | 75 |
| How to avoid a traffic accident? | 75 |
| Why should the engine be kept idle for a period of time (3~5 minutes) after cold start? | 75 |
| How to deal with a serious traffic accident? | 76 |
| What is auto beauty? | 77 |
| How to perform auto beauty? | 78 |

Some functions and pictures described herein are only applicable to certain models, rather than your vehicle. In this regard, the actual vehicle shall prevail.

Some descriptions in this document with a symbol “*” are only applicable to the optional/special configurations of certain vehicle models. In this regard, the actual vehicle shall prevail.

Cab overview



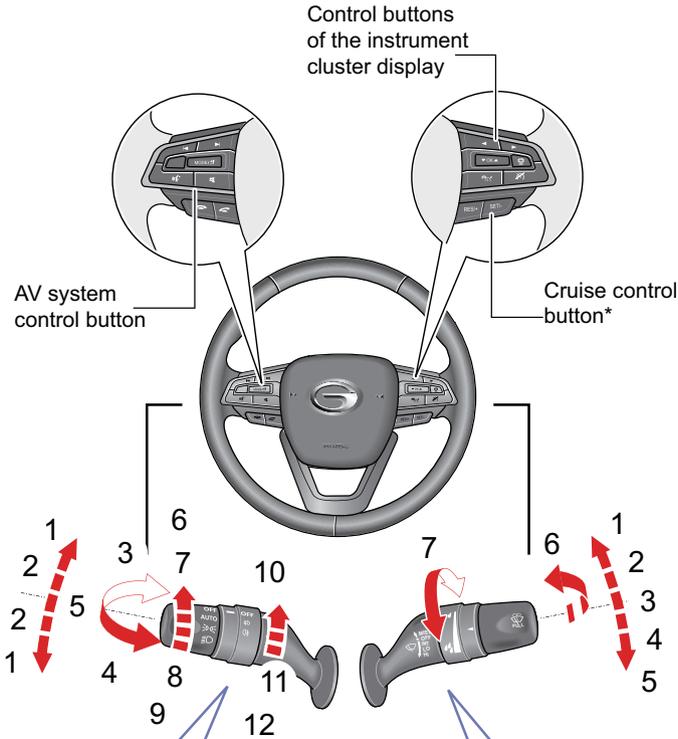
- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Driver's power window control button <ul style="list-style-type: none"> - Central locking button - Exterior rearview mirror adjusting button 2. Door latch and inside handle 3. A/C air outlet 4. Steering wheel <ul style="list-style-type: none"> - Buttons on steering wheel - Driver's frontal airbag 5. Front dome lamp <ul style="list-style-type: none"> - Power sunroof control button - Electric sunshade control button* - Emergency call button* - Spectacle case 6. Sun visor 7. Instrument cluster <ul style="list-style-type: none"> - Indicator lamp 8. ENGINE START/STOP button 9. AV system 10. Interior rearview mirror 11. HCP 12. Passenger's power window control button | <ol style="list-style-type: none"> 13. Handle for opening the glove box 14. Instrument panel front storage box <ul style="list-style-type: none"> - USB port - USB charging port - Mobile phone wireless charging area* 15. Transmission gearshift lever 16. Accelerator pedal 17. Brake pedal 18. Engine hood release handle 19. Storage box on lower protective plate of cab <ul style="list-style-type: none"> - Instrument panel power distribution unit 20. Instrument panel left switch block: <ul style="list-style-type: none"> - Manual headlamp leveling knob - ESP OFF button - RPA button - Trunk lid unlocking button - Fuel tank cap unlocking button |
|--|---|

Please refer to the picture index in the *Owner's Manual*.

Operation

Multifunctional steering wheel

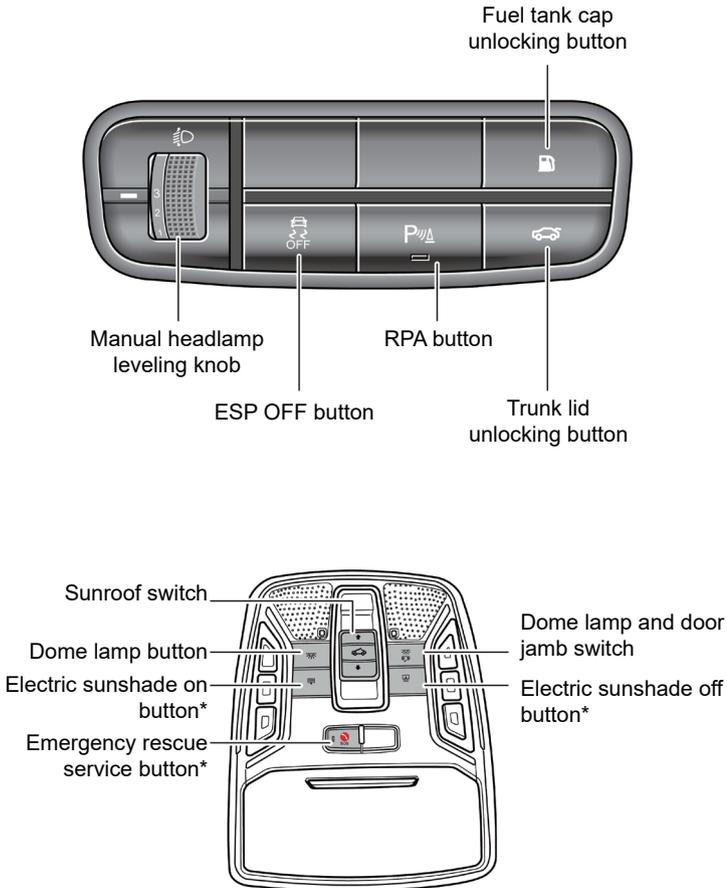
※ Please refer to the *Owner's Manual* for detailed operation!



- Lamp/light combination switch**
- ① Turn signal lamp
 - ② Turn signal lamp flashing for lane change
 - ③ High beam
 - ④ Headlamp flashing
 - ⑤ Low beam
 - ⑥ OFF Lamp off
 - ⑦ AUTO Automatic headlamp on/off*
 - ⑧ Position lamp
 - ⑨ Low beam
— Turn on the low beam manually
 - ⑩ OFF Fog lamp off
 - ⑪ Front fog lamp*
 - ⑫ Rear fog lamp

- Wiper combination switch**
- ① MIST Continuous wiping operation
 - ② OFF Wiper off
 - ③ INT Intermittent wiping operation*
— Adjust the time of intermittent wiping operation with the knob ⑦
 - ④ LO Low-speed wiping operation
 - ⑤ HI High-speed wiping operation
 - ⑥ Front windshield washer system on

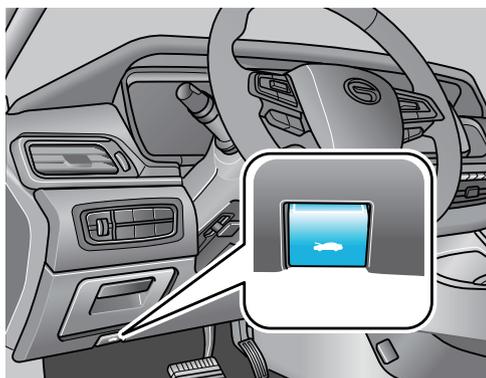
Function button



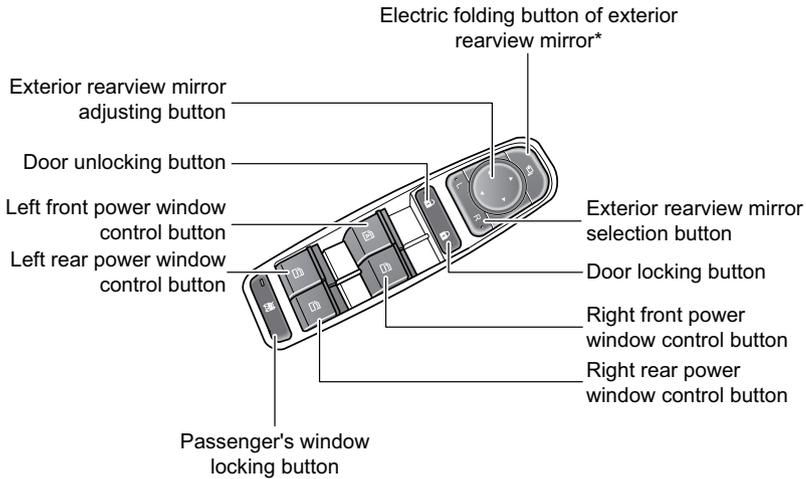
Operation



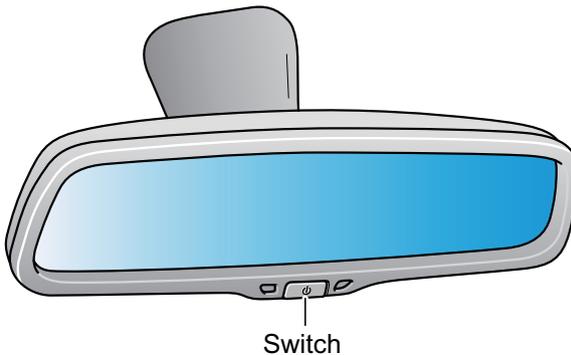
Engine hood release handle



Driver's power window control button



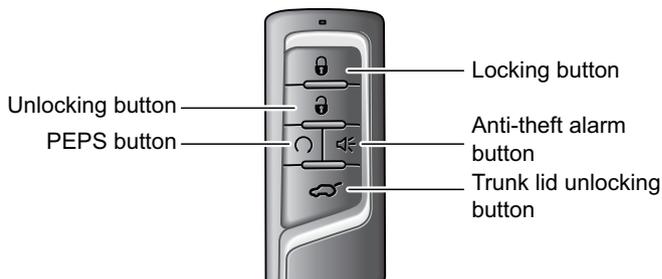
Auto dimming interior rearview mirror*



When the ENGINE START/STOP button is at "ON" position, the auto dimming function will be automatically activated and the switch indicator lamp will come on. The auto dimming function will be deactivated and the switch indicator lamp will go out if the switch is pressed. Press the switch again to activate the auto dimming function.

Operation

Remote control key



ENGINE START/STOP button



When the transmission gearshift lever is at “P” position and the brake pedal is depressed, the ENGINE START/STOP button indicator lamp will turn green. At that time, press the ENGINE START/STOP button to start the engine.

When the brake pedal is not depressed, press the ENGINE START/STOP button to switch the positions in the following order: “OFF → ACC → ON → OFF”.

OFF: The ENGINE START/STOP button indicator lamp goes out.

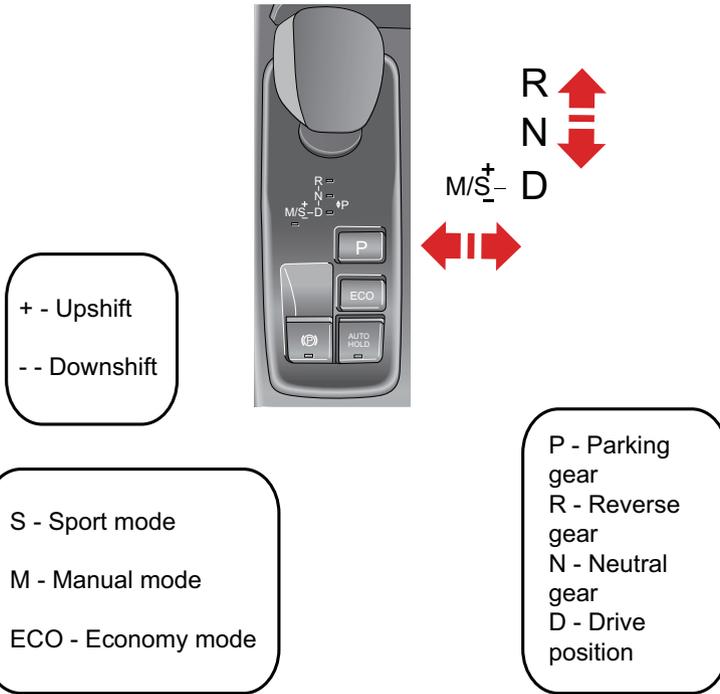
ACC: The ENGINE START/STOP button indicator lamp turns orange, and the circuits of 12V power supply and other accessories are connected.

ON: The ENGINE START/STOP button indicator lamp turns orange, the instrument cluster backlight comes on, and the circuits of all electrical consumers are connected.

NOTE

i The ENGINE START/ STOP button works only when the intelligent remote control key is detected in the vehicle.

Transmission gears



When starting the vehicle, set the gearshift lever to "P" or "N" position.

Operation

Start and shutdown

Start

1. Enter the vehicle with the intelligent remote control key.
2. Make sure the gearshift lever is at "P" or "N" position.
3. Depress the brake pedal and make sure the ENGINE START/STOP button indicator lamp turns green.
4. Press the ENGINE START/STOP button to start the engine.



Start to move

1. Set the gearshift lever to the corresponding position.
2. Release the parking brake.
3. Release the brake pedal.
4. Slowly depress the accelerator pedal; then the vehicle starts to move.

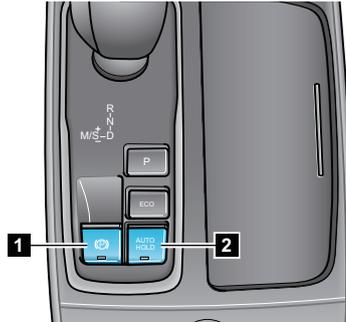


Shutdown

1. Park the vehicle steady and apply the parking brake.
2. Set the gearshift lever to "P" position.
3. Press the ENGINE START/STOP button to shut down the engine.

Parking brake

- EPB

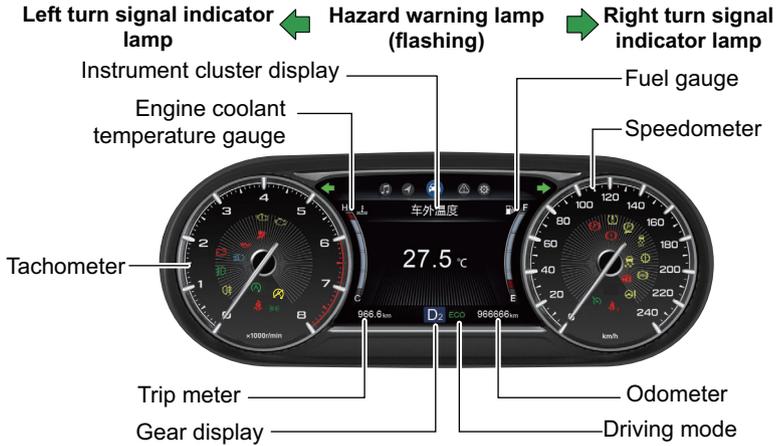


- When the vehicle stops, pull up the EPB button ① to apply the electric park brake to avoid vehicle sliding.
- If the service brake fails during driving, try to continuously pull up the EPB button ① for emergency braking.
- Press the EPB button ① to release the electric park brake.
- When the vehicle is started and the driver's seat belt is buckled, press the AUTO HOLD button ② to activate the Auto Hold function. At that time, the indicator lamp on the button lights up. Press the button again to disable the Auto Hold function. At that time, the indicator lamp on the button goes out.

Operation

Instrument cluster with 7-inch display*

※ Some indicator lamps apply to certain vehicle models only. Please refer to the Owner's Manual for details!

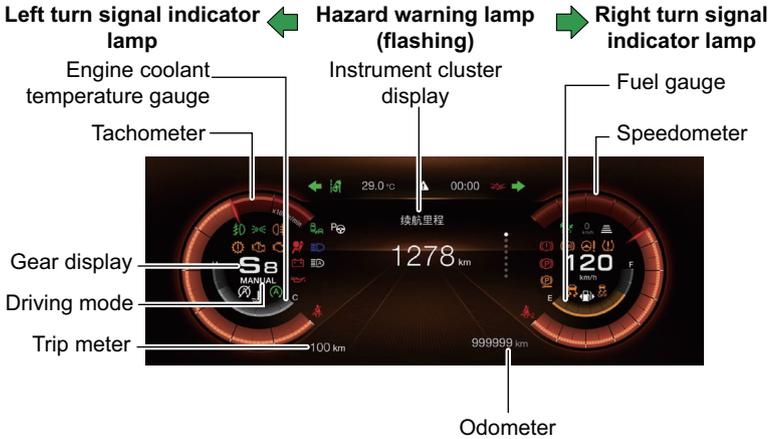


Switch the driving information and set the menu with the buttons on the right of the steering wheel including ▼OK▲, ◀ and ▶: please refer to the Owner's Manual.

- | | | | |
|---|--|---|---|
|  | Supplemental restraint system (SRS) indicator lamp |  | EPB status indicator lamp |
|  | Low oil pressure warning lamp |  | Front passenger seat belt indicator lamp |
|  | Charging system warning lamp |  | Cruise control indicator lamp |
|  | High engine coolant temperature indicator lamp |  | Electronic stability program (ESP) indicator lamp |
|  | Low fuel level indicator lamp |  | Anti-lock braking system (ABS) indicator lamp |
|  | Emission fault indicator lamp |  | Transmission fault indicator lamp |
|  | MIL |  | Tire pressure monitoring system (TPMS) indicator lamp |
|  | Position lamp indicator lamp |  | Electric park brake (EPB) fault indicator lamp |
|  | High beam indicator lamp |  | IMMO indicator lamp |
|  | Rear fog lamp indicator lamp |  | ESP OFF indicator lamp |
|  | Front fog lamp indicator lamp |  | Electric power steering (EPS) indicator lamp |
|  | Driver's seat belt indicator lamp |  | Gasoline particulate filter (GPF) indicator lamp |
|  | Parking brake and brake system indicator lamp | | |

Instrument cluster with 12.3-inch display (classic theme)*

※ Some indicator lamps apply to certain vehicle models only. Please refer to the Owner's Manual for details!



Switch the driving information and set the menu with the buttons on the right of the steering wheel including ▼OK▲, ◀ and ▶: please refer to the Owner's Manual.

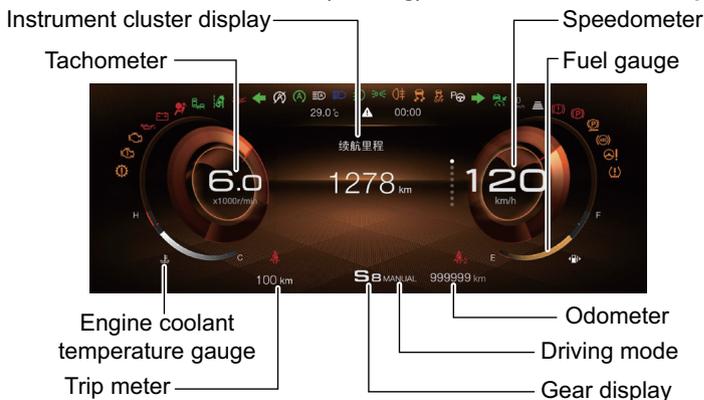
- | | | | |
|--|--|--|---|
| | LDW status indicator lamp | | Rear seat belt indicator lamp |
| | Supplemental restraint system (SRS) indicator lamp | | ACC indicator lamp (no vehicle ahead) |
| | Low oil pressure warning lamp | | ACC indicator lamp (a vehicle ahead) |
| | Charging system warning lamp | | ACC fault indicator lamp |
| | High engine coolant temperature indicator lamp | | TJA/ICA indicator lamp |
| | Low fuel level indicator lamp | | Electronic stability program (ESP) indicator lamp |
| | Emission fault indicator lamp | | Anti-lock braking system (ABS) indicator lamp |
| | MIL | | Transmission fault indicator lamp |
| | Position lamp indicator lamp | | Tire pressure monitoring system (TPMS) indicator lamp |
| | High beam indicator lamp | | Electric park brake (EPB) fault indicator lamp |
| | Rear fog lamp indicator lamp | | ESP OFF indicator lamp |
| | Front fog lamp indicator lamp | | Electric power steering (EPS) indicator lamp |
| | Driver's seat belt indicator lamp | | BSD status indicator lamp |
| | Parking brake and brake system indicator lamp | | FCW status indicator lamp |
| | EPB status indicator lamp | | Gasoline particulate filter (GPF) indicator lamp |
| | Front passenger seat belt indicator lamp | | |

Operation

Instrument cluster with 12.3-inch display (technology theme)*

※ Some indicator lamps apply to certain vehicle models only. Please refer to the Owner's Manual for details!

Left turn signal indicator lamp ← Hazard warning lamp (flashing) → Right turn signal indicator lamp

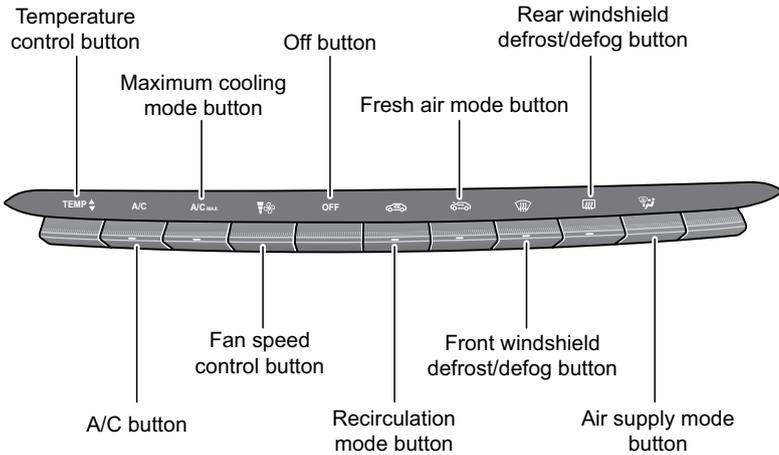


Switch the driving information and set the menu with the buttons on the right of the steering wheel including ▼OK▲, ◀ and ▶: please refer to the Owner's Manual.

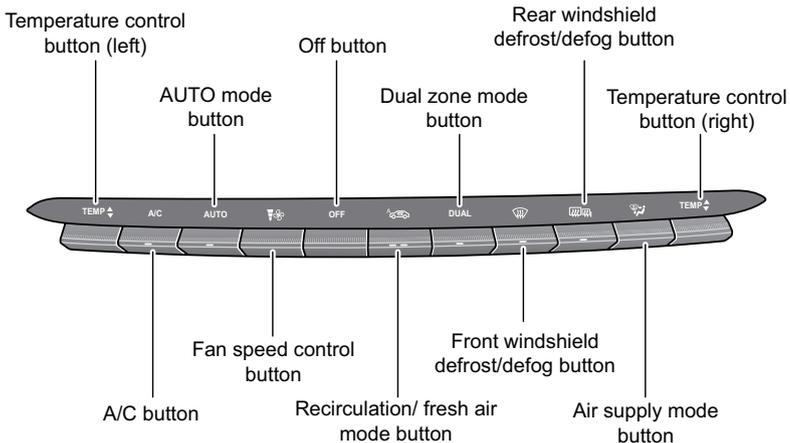
- | | | | |
|--|--|--|---|
| | LDW status indicator lamp | | Rear seat belt indicator lamp |
| | Supplemental restraint system (SRS) indicator lamp | | ACC indicator lamp (no vehicle ahead) |
| | Low oil pressure warning lamp | | ACC indicator lamp (a vehicle ahead) |
| | Charging system warning lamp | | ACC fault indicator lamp |
| | High engine coolant temperature indicator lamp | | TJA/ICA indicator lamp |
| | Low fuel level indicator lamp | | Electronic stability program (ESP) indicator lamp |
| | Emission fault indicator lamp | | Anti-lock braking system (ABS) indicator lamp |
| | MIL | | Transmission fault indicator lamp |
| | Position lamp indicator lamp | | Tire pressure monitoring system (TPMS) indicator lamp |
| | High beam indicator lamp | | Electric park brake (EPB) fault indicator lamp |
| | Rear fog lamp indicator lamp | | ESP OFF indicator lamp |
| | Front fog lamp indicator lamp | | Electric power steering (EPS) indicator lamp |
| | Driver's seat belt indicator lamp | | BSD status indicator lamp |
| | Parking brake and brake system indicator lamp | | FCW status indicator lamp |
| | EPB status indicator lamp | | Gasoline particulate filter (GPF) indicator lamp |
| | Front passenger seat belt indicator lamp | | |

HCP

● Manual A/C*



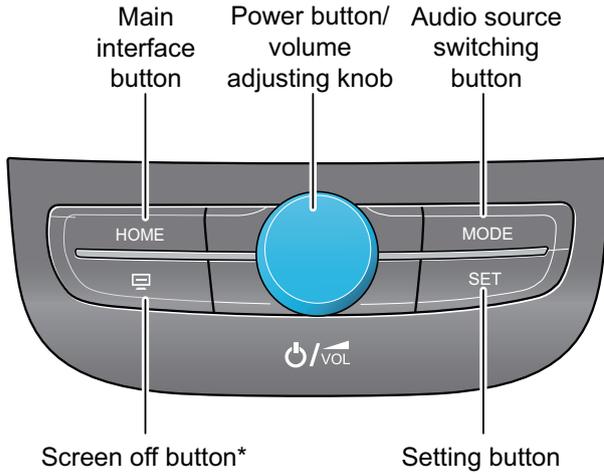
● Automatic A/C*



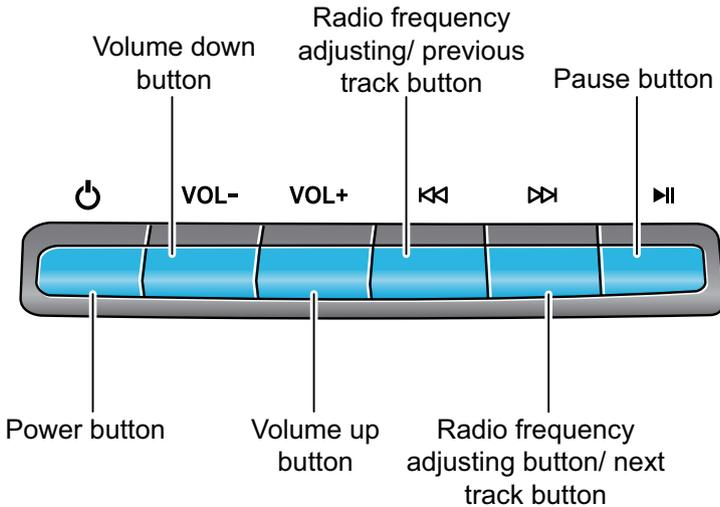
Operation

AV system

- Front control panel*



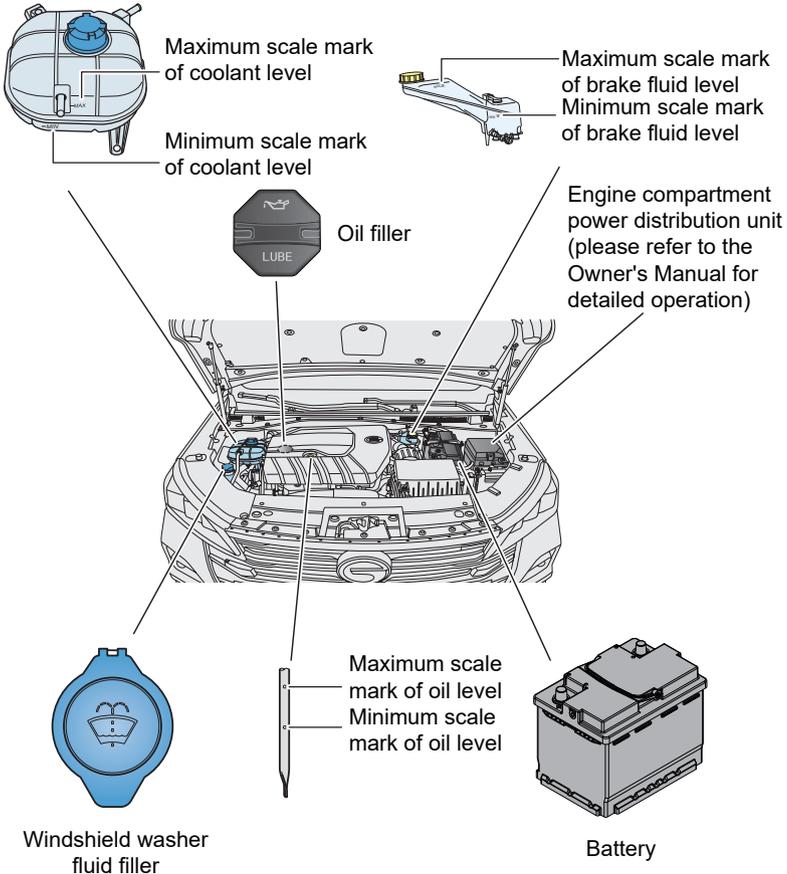
- Rear control panel*



Routine inspection

● Engine compartment

※ In case of any discrepancy between the picture and actual vehicle, the actual vehicle shall prevail!



※ Ensure the level of various fluids are between the MAX and the MIN scale marks.

Operation

- **Inspection of engine compartment (refer to the *Owner's Manual*)**

Brake fluid level

When the engine is cold, inspect whether the level of the brake fluid reservoir is between the “maximum scale mark (MAX)” and the “minimum scale mark (MIN)”. If the level is below the “minimum scale mark (MIN)”, the brake fluid must be added.

Coolant level

When the engine is cold, inspect whether the coolant level is between the “maximum scale mark (MAX)” and the “minimum scale mark (MIN)”. If the coolant level is below the “minimum scale mark (MIN)”, the coolant must be added.

Battery

Inspect the appearance of the battery (for any crack or swelling) and inspect the connection between the battery connector and cable for any corrosion or looseness.

If the battery condition is poor, please go to the GAC Motor authorized shop for battery repair.

Windshield washer fluid

The washer fluid shall be added in time after every use.

Engine oil level

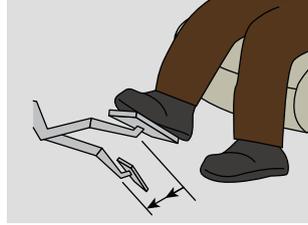
When the engine is cold, inspect whether the engine oil level is between the “maximum scale mark ”and the “minimum scale mark”. If the engine oil level is below the “minimum scale mark”, the engine oil must be added.

● Interior inspection

Inspection of brake pedal

Start the engine, depress the brake pedal firmly, and then inspect the distance between the pedal and the floor.

When you depress the brake pedal, if you feel that the brake pedal is spongy or soft, it may be caused by the air in the brake system or the system leakage, which may lead to the system functional failure. In that case, please contact the GAC Motor authorized shop in time for inspection.



Inspection of EPB

Pull up the EPB button to apply the electric park brake and verify the parking state through the yellow indicator lamp on the button and the EPB status indicator lamp on the instrument cluster.



Inspection of windshield washer fluid spraying

Run the windshield washer to inspect whether the windshield washer fluid is sprayed normally.



Inspection of wiper

Toggle the lever of windshield wiper to run the wiper so as to inspect the high-speed and low-speed wiping operation for any abnormality.



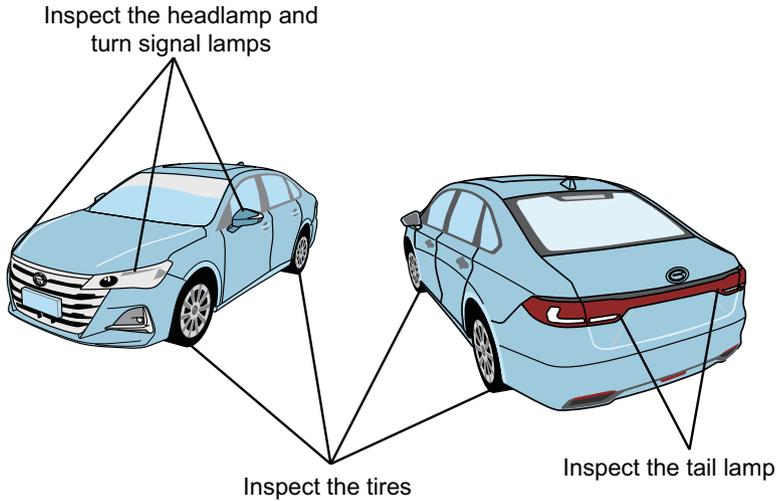
Operation

- **Exterior inspection**

Lamps

Turn on the front combination lamp, rear combination lamp, turn signal lamp, position lamp, license plate lamp and fog lamp to inspect if they work normally and if their surfaces are clean or intact.

Depress the brake pedal repeatedly to inspect if the brake lamp works normally.

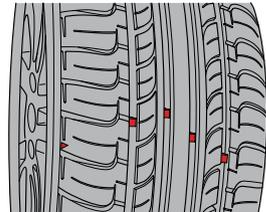
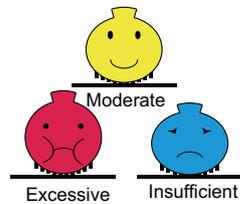


Inspection of tire condition

Tire pressure will affect the service life of tire, therefore it should be inspected regularly in accordance with the provisions.

Visually inspect the tire tread for crack or damage and for nails or stones.

Visually inspect the tire circumference for excessive wear, localized wear or broken cords. When the tire wear indicator is exposed, the tire should be replaced.



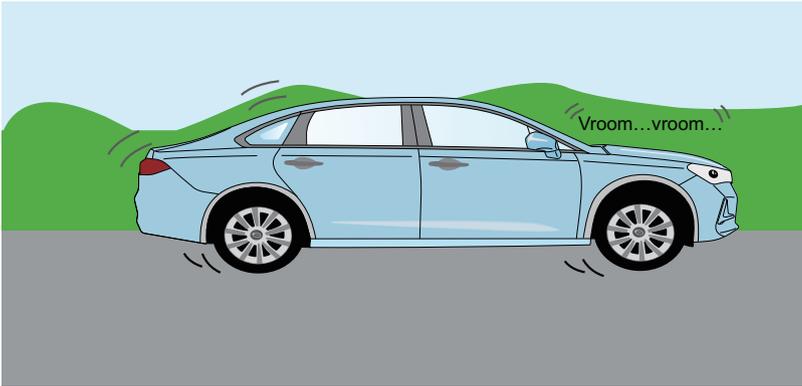
- **Inspection during driving**

Inspection of braking effect

When driving the vehicle on a dry road at a low speed, depress the brake pedal to inspect the brake function of the vehicle.

Low-speed running and acceleration status

Depress the accelerator pedal slowly to inspect whether the accelerator pedal works smoothly. Inspect whether the vehicle runs at a low speed and accelerates smoothly.



Safety

Seat belt

Fastening the seat belt properly is a basic requirement for safe driving. In a traffic collision where the seat belt reaches the triggering condition, the seat belt pretensioner and load limiter will be activated to tension the seat belt so that the driver and passengers will be restrained in proper position to slow down the forward movement inertia, thus preventing the driver and passengers from being thrown out and reducing the impact injury to them as much as possible.

Seat belts can slow down the movement of the driver and passengers when the vehicle suffers the frontal collision at a low speed.



Movement without seat belt fastened

In a frontal collision, even if the vehicle runs at a low speed, the driver and passengers cannot be protected effectively only by their hands.



Movement with seat belt fastened

In a frontal collision, the seat belts can secure the driver and passengers properly and protect them effectively.

Seat belts can slow down the movement of the driver and passengers when the vehicle suffers a frontal collision at a high speed.



Movement without seat belt fastened

When the vehicle suffers a frontal collision at a high speed, even if the airbag works normally, it still cannot protect the driver and passengers effectively.

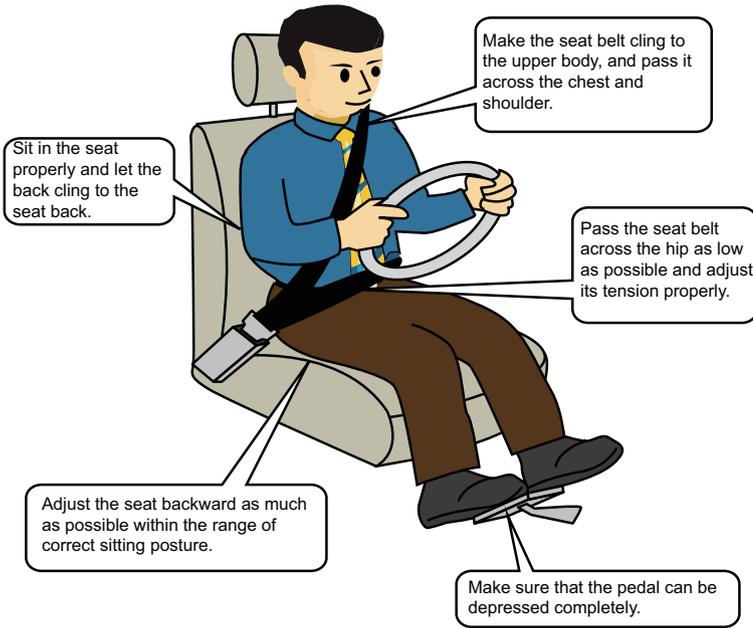


Movement with seat belt fastened

When the vehicle suffers a frontal collision at a high speed, the driver and passengers fastening the seat belts properly can be protected effectively by the seat belts and airbags.

Be sure to fasten the seat belt properly during driving.

For the sake of safety, you and your passengers must fasten the seat belts properly during driving.



The shoulder belt must pass through the middle of shoulder and fit the shoulder. Do not twine the shoulder belt around the neck; the lap belt must pass through the pelvis and fit the pelvis. Do not press the lap belt against the stomach. Besides, adjust the tension of seat belt as needed.



When a pregnant woman wears the seat belt, make sure that the lap belt crosses her hips and is fastened as low as possible and do not press the belt against her belly, so as not to affect the fetus.

Note:

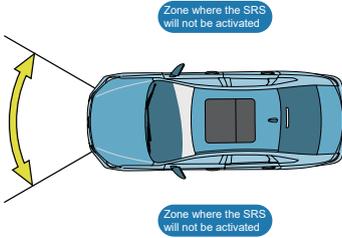
- When the vehicle suffers a frontal collision at a high speed, the seat belt with pretensioner and load limiter and the airbag will be triggered together to provide better protection.
- The seat belt with pretensioner and load limiter that has been triggered cannot be used any more and must be replaced.

Safety

Supplemental restraint system (SRS)

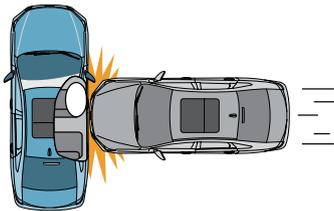
In a severe collision where the system triggering condition is met, the system will be triggered and airbags will deploy rapidly to work with the seat belts to protect the driver and passengers.

- **SRS triggering condition**



When the vehicle suffers a severe collision at the front, the frontal airbags and side curtain airbags will be activated automatically.

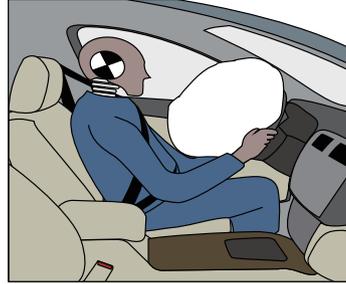
The airbag control unit calculates the energy generated by the collision. If the triggering conditions are reached, the SRS will be activated; otherwise, it will be deactivated. Therefore, even if the vehicle is damaged seriously, the SRS might not be activated.



When the vehicle suffers a severe side collision, the side airbags and side curtain airbags will be activated automatically.

SRS is only a supplement to the seat belt. Please be sure to fasten the seat belt correctly.

● SRS triggering process



The seat belt will tie up the body at the moment of collision

In a collision, the seat belt will lock and tie up the body, and the SRS will determine the need for triggering according to the impact force.

Moment of SRS airbag deployment

When the SRS is triggered, the seat belt will also restrain the driver and passengers to the seats.



SRS protects the driver and passengers

SRS work with the seat belts to protect the driver and passengers.

SRS airbags will deflate rapidly after being triggered

The SRS airbags will mitigate the impact on the driver and passengers during collision through releasing the internal gas rapidly.

Safety

- Precautions for SRS



The upper body of the driver should not be too close to the steering wheel, otherwise it can be injured when the SRS is triggered



Do not let a child kneel on the seat or stand in the vehicle; otherwise the child can be seriously injured when the SRS is triggered.



Do not put a young child on the leg; otherwise the child can be seriously injured when the SRS is triggered.

Note:

- After the SRS is triggered, do not touch the airbag as it is at a high temperature.
- After the SRS is triggered, there is smoke, which is the powder on the airbag surface and harmless to human. If the smoke is attached to eyes or skin, clean in time.
- Once the airbag deploys, it may not be reused and should be replaced in time.

The normal operation of the airbags might be affected in the following cases:

- An umbrella or similar object is placed between the front seat and door.
- A seat cover is installed on the front seat.
- The plastic protective film on new vehicle seat has not be removed.
- Objects like perfume bottle and doll are placed in the deployment area for front passenger's airbag of the instrument panel.
- The SRS has been replaced or modified without permission.

Safety

Child safety

Pay attention to the followings when there is a child passenger:

- Be sure to protect the child with the child safety seat.
- Be sure to operate the doors, windows, sunroof and seats by an adult only.
- Activate the child safety lock to prevent the child from opening the door during driving.
- Do not leave a child alone in the vehicle.

The followings are prohibited when there is a child passenger:



Hold the infant on the leg

In a collision, you and the infant will both rush forward by inertia, and the infant may be hit by your forward movement or be thrown out of your arm and injured because of the serious collision.

Share one seat belt with the infant

In a collision, the seat belt may squeeze the infant seriously, causing serious injury or even death to the infant.

Classification of child safety seats (for reference only):



Baby seat
Weight: less than 10 kg
Age: 0-12 months



Toddler seat
Weight: 7-18 kg
Age: 12 months ~ 4 years



School-age child seat
Weight: 15-32 kg
Age: 4-10 years

Do not install a rear-facing child safety seat on the front passenger seat and let the children sit in the seat during driving.

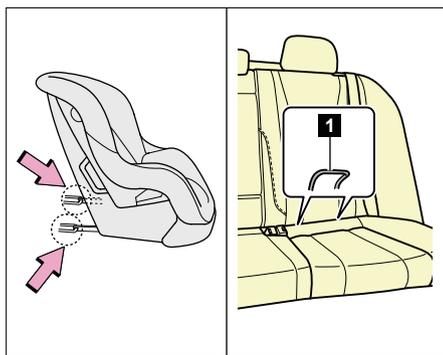


Child safety seat

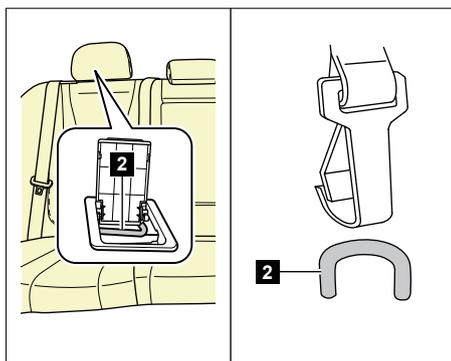
● Installing child safety seat

Both the LATCH system child safety seats and the ISOFIX system child safety seats can be installed in outboard rear seats of the vehicle. Be sure to install the child safety seats in strict accordance with the instructions provided by the manufacturer of child safety seats.

To ensure a better protection effect and prevent the headrest from affecting the performance of the child safety seat during use, it is recommended to remove the headrest of the seat on which the child safety seat is installed.



1. Place the child safety seat on the seat and insert it into the lower anchorage ① in the seat cushion gap until a click is heard.



2. Lift the head restraint to the highest position, then thread the strap through the head restraint stay rod and catch the upper anchorage ② with the strap hook to ensure that the strap is not twisted.
3. Pull both sides of the child safety seat to inspect whether it is installed firmly.

NOTE

- 
- The lower anchorage ① is hidden in the gap between the seat back and cushion and can be seen after the gap is split by hand.
 - The upper anchorage ② is directly in rear of the rear seat headrest and can be seen after the trim cover is opened.

WARNING



The child safety seat suitable for the weight and body shape of children must be used to restrain the child during driving.

- The child safety seat anchorages in the vehicle can be used to fix the child safety seat only.
- Do not attach straps, hard and sharp articles or any articles other than the child safety seat to the anchorages; otherwise the children may be endangered in case of accident.

Safety

Fastening the seat belt

1. Adjust the seat (front seat) correctly.
2. Adjust the headrest correctly.
3. Pull out the seat belt slowly at a constant speed and stretch it across the shoulder and hips. Insert the tongue into the buckle till a buckling sound is heard.
4. Pull up the shoulder belt parallel to the upper body to tension the lap belt and ensure that the tongue is properly buckled.

Caution

- Before driving, make sure that all occupants have properly fastened the seat belts.
- The occupant who does not fasten the seat belt correctly will not be protected effectively and will be injured seriously in case of an accident.

NOTE

i

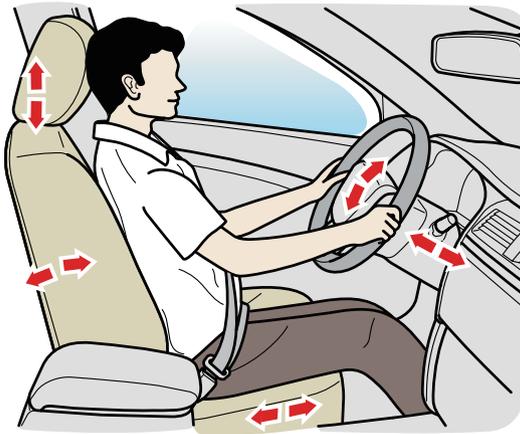
- The fastening method of the rear seat belts is the same as that of the front seat belts.

Driving posture and visual information

- **Correct driving posture**

Whether the driving posture is correct directly affects the driver's fatigue level and driving safety.

Correct driving posture enables the driver to manipulate the vehicle naturally in a coordinated manner, which is beneficial to driving safety.



To ensure driving safety and reduce the risk of casualties, you are recommended to carry out the following steps:

- Adjust the seat back and forth so that all pedals can be operated effectively with slightly bent legs.
- Adjust the seat back to a suitable position so that the back fits completely the seat back.
- Adjust the head restraint of the seat so that the middle of your back brain is leaned precisely against the middle of the head restraint.
- Adjust the steering wheel to ensure that the distance between the steering wheel and your chest is not less than 25 cm.
- Fasten the seat belt correctly.

Driving



The gap between your back and the seat must not be too large.



Do not tilt the seat backward excessively.

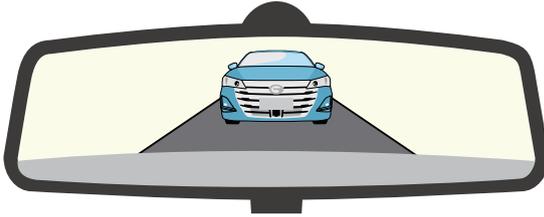
Correct driving posture can not only reduce the driver's fatigue, but also make full use of the seat belt and the airbag.

● Adjustment of rearview mirror

Adjusting the rearview mirror to a proper angle is favorable to safe driving.

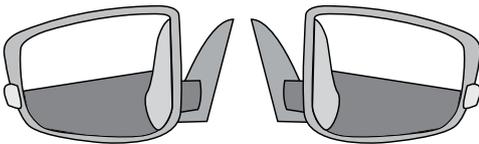
Interior rearview mirror

The traffic conditions behind the vehicle can be observed through the interior rearview mirror. Failing that, it is unfavorable to safe driving.



Exterior rearview mirror

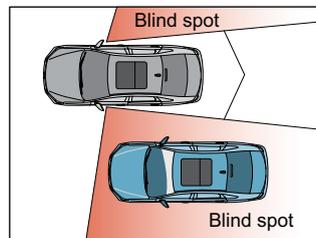
Exterior rearview mirrors help to confirm if there are other vehicles around.



Adjust the mirror angle to slightly reflect the side of the vehicle body, and keep adjusting till the horizon appears in the middle of the mirror.

Blind spot of exterior rearview mirrors:

The exterior rearview mirrors have blind spots, therefore in case of a lane change or turn, it is necessary to carefully observe the traffic conditions in the blind spots.

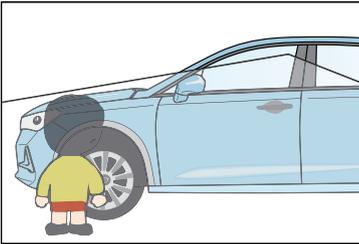


Driving

- **Blind spot**

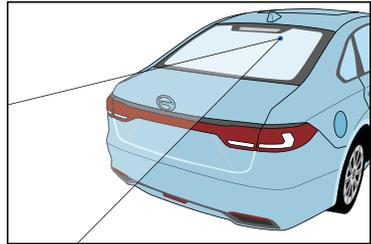
Different driving postures may lead to a scope change of the blind spot. Therefore, please maintain correct driving posture to confirm the scope of the blind spot.

The specific scope of the blind spot also varies with different vehicle models. Please do not drive into the blind spot of other vehicles as much as possible during driving.



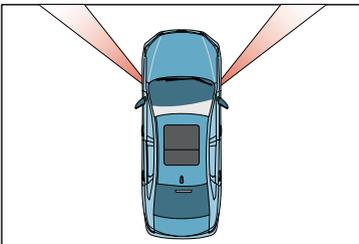
Front blind spot

The front blind spot covers an area from the ground to the engine hood or doors. The driver must take care to check if there are curbs or other obstacles in the front blind spot when parking the vehicle.



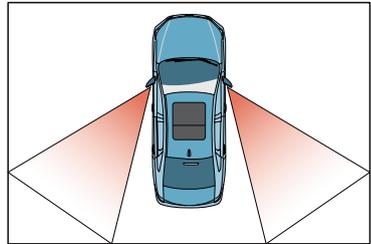
Rear blind spot

The rear blind spot covers an area from the rear windshield to the ground. When reversing, make sure that there is no child or other safety hazards in the rear blind spot.



Blind spot of the pillar

The visibility range blocked by the pillar is the blind spot of the pillar, which can be eliminated by adjusting the direction of the head repeatedly.



Blind spot of rearview mirrors

The blind spots of rearview mirrors cover both the front side of the vehicle and the position slightly behind that. In case of a lane change or turn, it is necessary to carefully observe the traffic conditions in the blind spots of the exterior rearview mirrors.

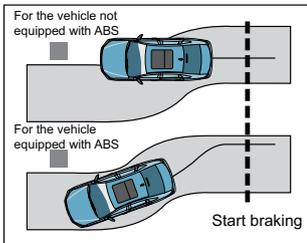
Brake assist control system

- **Anti-lock braking system (ABS)**

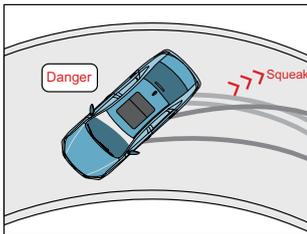
ABS can prevent the wheels from being locked during emergency braking or braking on a slippery road so as to stabilize the driving state of the vehicle. It is an important part of the vehicle's active safety system.

- **Electronic brake force distribution (EBD)**

As a part of ABS, EBD balances the distribution of brake force on the front and rear wheels according to the vehicle load during normal braking, and improves the braking stability and operability, especially during driving on a slippery road.



If the front wheels are locked, the vehicle will be unable to make a turn, and can only slide forward in the braking direction.



If the rear wheels are locked, the vehicle will tend to be inclined to drift up to 180° in severe conditions.

In case of emergency braking, the brake pedal may vibrate, which is normal during operation of ABS. At this point, continue depressing the brake pedal with force instead of releasing it due to the vibration of the brake pedal.

Driving

ABS and EBD are merely auxiliary safety systems with quite limited effect. Compared with braking on a concrete or dry road, the braking distance may be longer during braking on a road covered with sandstone or fresh snow. Do not suppose that the ABS and EBD can reach the ideal braking performance under any circumstances. Be sure to adjust the speed according to weather, road and traffic conditions at any time. Never risk driving merely by virtue of the finite safety functions provided by the systems.

- ABS cannot work beyond the kinematic law! Even if the vehicle is equipped with ABS, it is still quite dangerous to drive on a slippery road! If it is found that the ABS adjusts the brake pressure during driving, the driver must decelerate the vehicle immediately to adapt it to the current road and traffic conditions.
- Improper operation or modifications (such as modifications to the brake system, wheels, tires and other components) of the vehicle will affect the functions of ABS and EBD.
- Tires must be of a specified size. Incorrect tire size or inconsistent sizes of all tires will affect the normal working of ABS.

After the brake pedal is depressed, ABS will be activated and vibration will be felt, which are normal, in the following cases:



- Gear shifting.
- Emergency braking.
- Sharp turns at high speed.
- Driving on a slippery road.
- Passing over bumps or ditches.
- Driving off immediately after the engine is started.

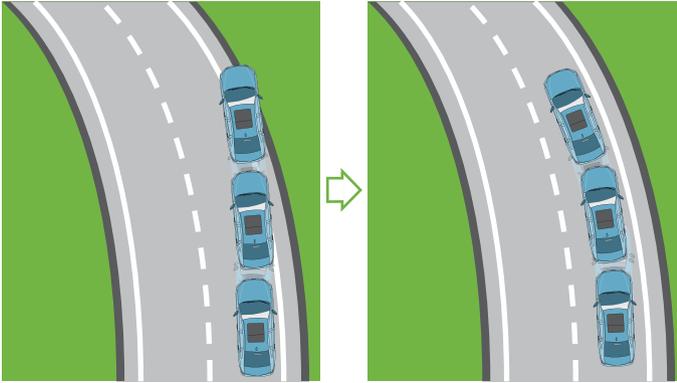
● Electronic stability program (ESP)

ESP determines the driving intention of the driver according to the steering wheel angle and the vehicle speed, and compares it with the actual driving condition of the vehicle continuously. If the vehicle deviates from the normal driving route (such as sideslip), ESP will correct it by applying brake force to the corresponding wheels.

● Traction control system (TCS)

As the subsystem of ESP, TCS determines if the driving wheel slips based on the speed of the driving wheel and the drive wheel, and if the former exceeds the latter, it will limit the speed of the driving wheel to prevent vehicle slip.

ESP can effectively reduce the risk of vehicle sideslip.



Vehicle not equipped with ESP

Vehicle equipped with ESP

The ESP can be disabled in special cases.

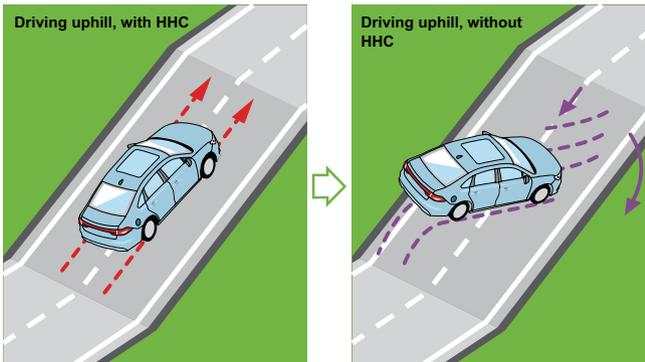
For example:

- When the vehicle travels with tire chains.
- When the vehicle travels on roads covered with deep snow or on soft grounds.
- When the vehicle is stuck somewhere (such as muddy road), and requires to be moved back and forth.

In cases other than those mentioned above, the ESP shall be activated.

● Hill Hold Control (HHC)

As the subsystem of ESP, HHC can prevent accidents caused by sliding when the vehicle is started on a slope without using the parking brake.



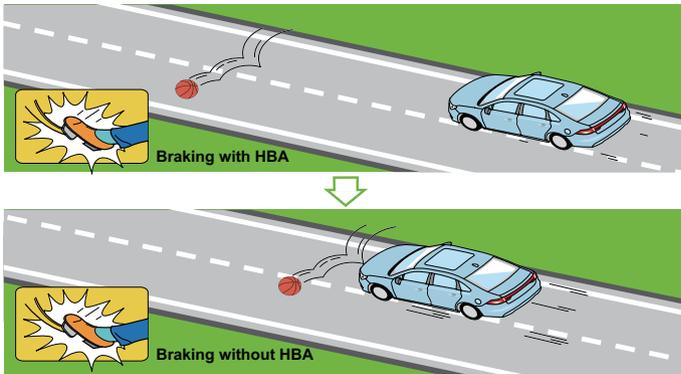
Driving

- **AUTO HOLD**

AUTO HOLD can keep the vehicle still automatically based on the braking needs of the driver; when the system detects the starting intention of the driver (such as depressing the accelerator pedal), it will automatically release the brake; AUTO HOLD can facilitate vehicle starting according to the slope information when the brake is released automatically; AUTO HOLD can make the vehicle still by active pressurization when the brake force is insufficient.

- **Hydraulic Brake Assist (HBA)**

HBA helps achieve a short braking distance in an emergency by producing brake pressure larger than that during normal braking when you depress the brake pedal quickly. After the brake pedal is released, HBA will be deactivated automatically, and the brake system will be restored to its normal working state.



Instructions on driving assistance

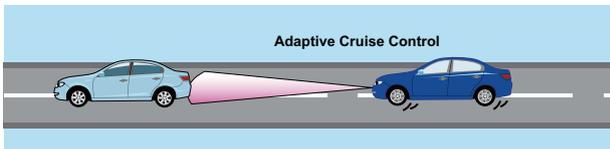
● Adaptive Cruise Control (ACC)

ACC, the abbreviation of Adaptive Cruise Control, controls the relative distance and speed between the vehicle ahead in the same path and your vehicle in a real time manner by means of the front MMW radar and the IFC on the windshield:

If the vehicle ahead is stopped, ACC applies the brake of your vehicle until it may come to a stop; if the vehicle ahead is started, ACC restarts your vehicle under certain conditions.

If the speed of the vehicle ahead is lower than that set by the driver, ACC controls your vehicle to travel based on the set distance.

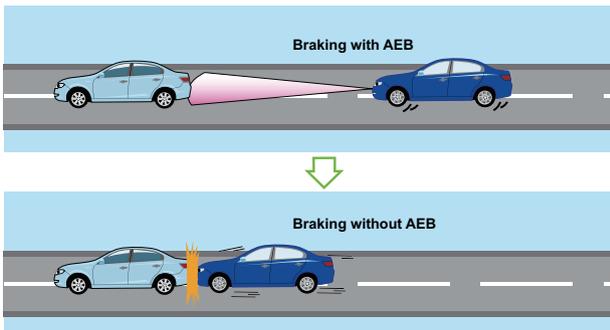
If there is no vehicle ahead, ACC controls your vehicle to travel at the set speed.



● Autonomous emergency braking (AEB)

AEB, the abbreviation of Autonomous Emergency Braking, detects the relative distance and speed between the vehicle ahead in the same path and this vehicle, and applies the brake automatically when an impending collision is detected. When the driver is braking while the braking force is insufficient to avoid a collision, the system will automatically increase the braking force to avoid or alleviate the collision.

The AEB system can improve the driving safety, but it is impossible to go beyond the laws of kinematics. Thus never drive riskily with the convenience provided by the system. The driver must always be ready to apply the brake, in order to reduce the vehicle speed or avoid obstacles.



● Pedestrian detection system

Based on the MMW radar installed on the front bumper and the IFC on the windshield, the pedestrian detection system detects pedestrians ahead and actively assists the driver in avoiding or reducing collisions with pedestrians within its operating range so as to lower the likelihood of accidents. The system issues an alarm for impending collision to alert the driver to the fact that the vehicle is ready to apply emergency braking, and then the system assists in braking and triggers the AEB.

Note: There are physical and system limitations to the pedestrian detection function. For example, in some cases, the pedestrian detection function may be unintentionally activated or have activation delay due to intervention by the driver. Therefore, the driver shall stay vigilant and take over control of the vehicle if necessary.

Proximity warning

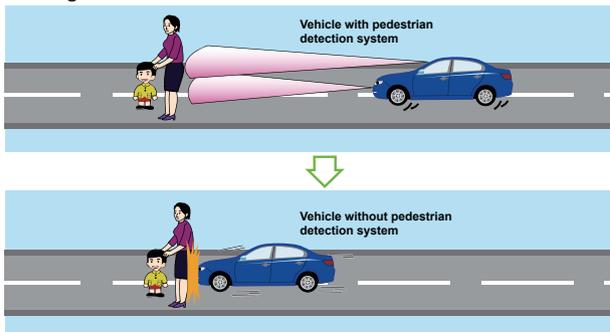
If a potential collision with a pedestrian is detected, the system will alert the driver to actively apply braking through the audible warning and warning lamps on the instrument cluster when the speed is between 30km/h and 64km/h. The duration of warning is contingent on the practical traffic conditions and the driver's action. In addition, the vehicle is ready for applying emergency braking at any time.

Active brake assist

If the driver does not respond to the alarm issued by the system, the pedestrian detection system may automatically apply full braking when the vehicle speed is between 4 km/h and 64 km/h. If a potential collision is detected, the system reduces the speed by braking to lower the likelihood of the collision.

The active brake assist function of the pedestrian detection system is covered by the AEB system. For the method to activate/deactivate the function, refer to the section on the AEB system.

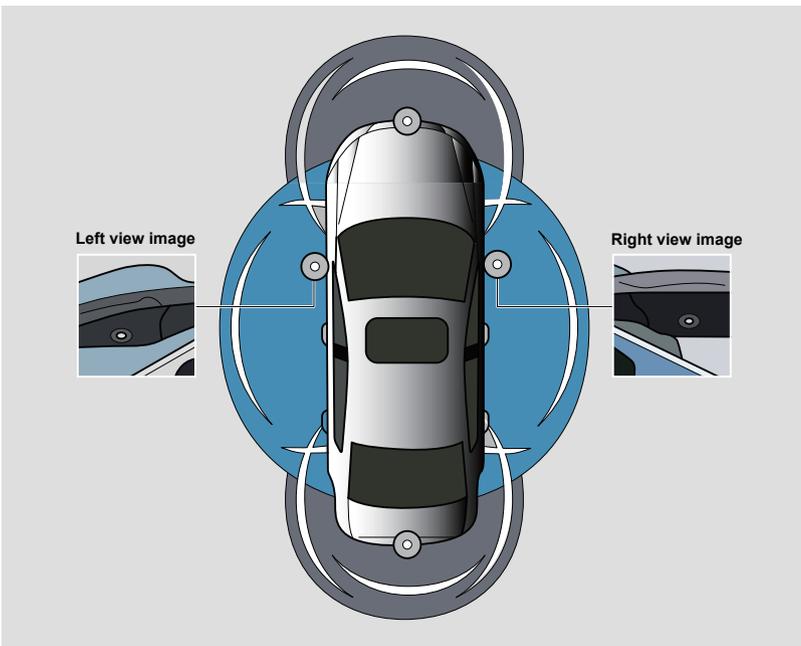
In order to activate this function accurately, it is necessary to detect accurate driving information.



- **Surround View Monitor (SVM)***

The SVM system collects the left, right, front, rear images of the vehicle and integrates them into a 360° bird's-eye view of the surrounding environment, which is displayed on the SVM system display to provide the driver with information on the surrounding environment of the vehicle and to reduce blind spots during driving. In addition, it can take the parameters such as steering wheel angle and vehicle dimensions into consideration to predict the vehicle's motion trajectory as well as superimpose the predicted track on the panoramic image to provide the driver with full information on the vehicle's direction of travelling, helping the driver to determine whether reversing is safe.

Users can switch the display modes by touching the AV system display.



● Forward Collision Warning (FCW)

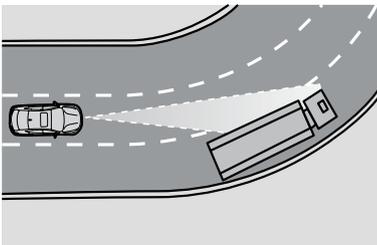
The FCW system will remind the driver to take necessary measures through the instrument cluster to avoid collisions and improve the safety of the vehicle when a collision risk is detected.

Operating principle

Composed of the millimeter wave radar installed on the front bumper and the intelligent front camera installed on the front windshield, the FCW system detects the vehicle in front, determines the vehicle location using the ranging module, measures the distance between this vehicle and the vehicle in front, and then measures their relative speed using a tracking method, such that the pre-collision time can be calculated. If the pre-collision time is equal to or below the threshold, the alarm will be triggered, warning the driver through the ECU graphs of the instrument cluster and the audible alarm.

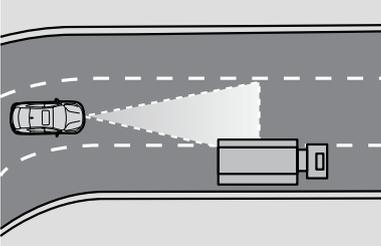
Warning:

- The FCW system cannot cover all driving, traffic, weather and road conditions. The driver must be aware of that before using this function.
- As an auxiliary system, the FCW system can never replace the driver's awareness and judgment on the vehicle. Instead, the driver takes full responsibility for the safe driving distance and vehicle speed.
- The FCW system cannot detect relatively narrow objects such as animals or bicycles, as well as slow-moving objects.
- The microwave radar may be unable to timely or fail to identify the vehicle ahead in bad weather (such as rain and snow), leading to limitation or failure of the forward collision warning function.
- Please pay special attention to the following working conditions where the FCW system may have false or omitted alarm:



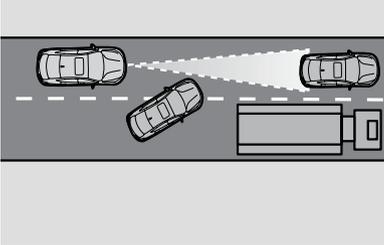
During driving into a curve:

The FCW system may react to vehicles in the adjacent lane and send an alarm.



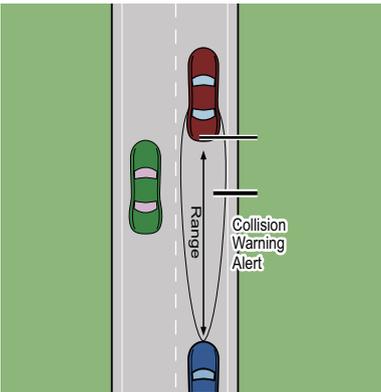
During driving out of a curve:

The FCW system may react to vehicles in the adjacent lane and send an alarm.



When other vehicles change the lane:

If other vehicles travel to the lane of this vehicle at quite close distance, the microwave radar may fail to timely identify a vehicle that changes its lane, and the FCW system will not trigger the alarm.



Structure and composition of the system:

- Radar
- Camera
- ECU
- FCW system switch
- System indicator lamp

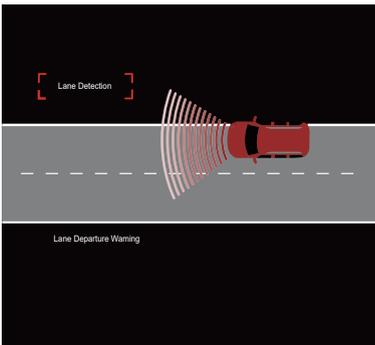
● Lane departure warning system*

The lane departure warning system is designed to reduce accidents caused by unconscious lane departure.

The lane departure warning system detects the lane markings on the road through the camera installed on the front windshield, analyzes the driving behavior of the driver and moving status of the vehicle, and gives a warning or interferes with the steering wheel to correct the lane departure when the vehicle unconsciously deviates from the lane due to fatigue, distraction or phone calls of the driver. It usually gives a warning or interferes with the steering wheel when the front wheel crosses a lane marking.

When the lane departure warning system intervenes in turning of the steering wheel for corrective steering adjustment, the driver may still turn the steering wheel to control the vehicle. When the torque applied by the system is found improper, the driver can control the vehicle to travel according to his intention when required.

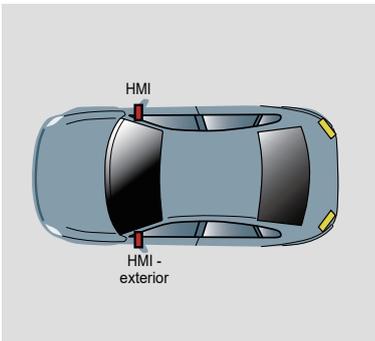
When the lane departure warning system issues an alarm, please do not panic or turn the steering wheel suddenly to prevent loss of control of the vehicle. When the lane departure warning system issues an alarm, pay attention to your surroundings and steadily concentrate on driving again.



Pay attention to the conditions for triggering the alarm, because the system may not always be able to trigger the alarm in the event of lane departure after it is activated:

- the system is activated without faults;
- the vehicle speed is not lower than 65 km/h;
- the camera detects lane markings;
- the system detects unintentional lane departure and there are no other alarm suppression conditions.

● Blind spot detection system



Consisting of two millimeter-wave radar sensors, the blind spot detection system detects the vehicles behind in the adjacent lanes, and gives an alert to the driver through the visible signal on the exterior rearview mirrors on both sides of the vehicle.

Boarding and alighting essentials

- Be sure to confirm the surrounding situation, the situation behind this vehicle in particular, before opening the door.
- Before getting on the vehicle in a humid environment, take care not to have snow or water left on the shoes to avoid accidents resulted from slipping in depressing the pedal.
- Children must be assisted by adults when getting in or out of the vehicle.

● Boarding essentials



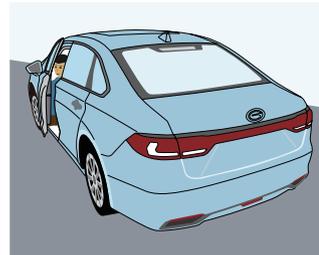
1. Confirm if there are oncoming vehicles around.



2. Reconfirm if there are other vehicles coming behind this vehicle before you are going to open the door.

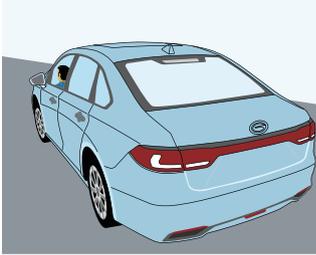


3. After confirming the safety, quickly open the door, get in the vehicle and immediately close the door.

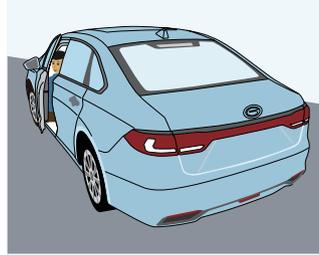


4. Close the door with slight force at a distance of about 10-20 cm away from the door, and make sure the door is closed properly and your own clothes are not stuck in the door.

● Alighting essentials



1. Observe if there are other vehicles or pedestrians behind this vehicle through the interior and exterior rearview mirrors.



2. Open the door slightly after confirming the safety and then open it completely after reconfirming the safety.

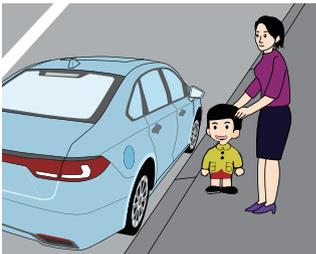


3. After the door is opened, get out of the vehicle and close the door quickly.

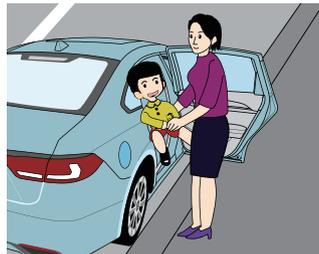


4. Close the door with slight force at a distance of about 10-20 cm away from the door, and make sure the door is closed properly and your own clothes are not stuck in the door. Then leave the vehicle from its rear.

● Boarding and alighting essentials of children



1. Boarding
An adult shall confirm that the surrounding environment is safe and then open the door to get a child in the vehicle.



2. Alighting
An adult shall get out of the vehicle first, confirm that the surrounding environment is safe, and then open the door to get a child out of the vehicle.

Precautions before departure

Inspections before departure

Perform routine inspection and regular maintenance for the vehicle before departure. In case of any abnormality (abnormal sound from the vehicle, unpleasant smell, oil stains on the ground and other phenomena), please contact the GAC Motor authorized shop for inspection in time.

Height of luggage in the compartment

The height of luggage shall not be higher than that of the seat when luggage is carried in the compartment. Otherwise, the luggage will be cast forward in the event of emergency braking or a crash, causing injuries to persons in the vehicle.



No hazardous articles

It is forbidden to carry inflammable, explosive and other hazardous articles. Otherwise, severe danger will be brought about.



No articles placed in footwell

Do not place any article in the footwell. Otherwise the articles may slip into the pedal area, hampering the driver from operating the pedal; accidents are quite likely to happen if the driver fails to operate the pedal in the event of emergency braking or other unexpected situations.



Precautions during driving

No poweroff during driving

It is forbidden to stop the engine during driving; otherwise, the vacuum booster won't work, which will cause more effort to depress the brake pedal, longer braking distance, and safety hazards.



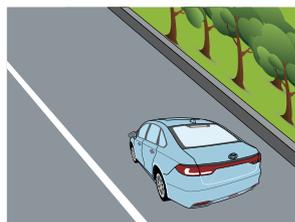
No phone calls during driving

It is forbidden to take phone calls during driving, which will reduce the driver's attention to and judgment on the environment, causing traffic accidents easily.



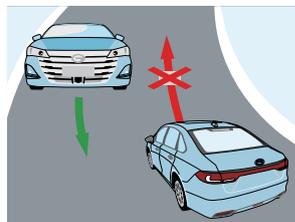
Downhill road

In case of a long downhill road, please decelerate by depressing the brake pedal according to the driving speed, and do not engage the neutral gear for coasting.



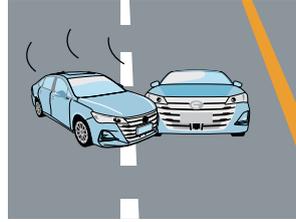
Meeting

During meeting, pay attention to conditions of an oncoming vehicle and the road, reduce the speed properly, choose a wide and firm road section for meeting, and observe the principle of "give way first, slow down first and stop first".



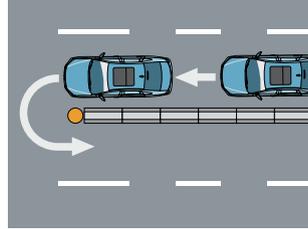
Overtaking

Choose a wide and straight road with good view for overtaking, and do not let the overtaking speed exceed the speed limit. Do not try to overtake if the overtaking conditions cannot be met.



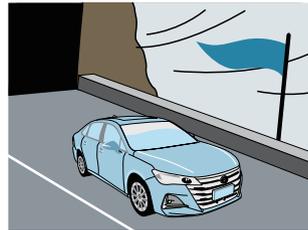
Turning around

Whenever the vehicle needs to turn around, choose a flat and wide road section with small traffic flow after confirming the safety and the permission of the traffic laws; do not try to turn around on slopes, bridges and other road sections not allowed by the traffic laws.



In a strong crosswind

The vehicle is easily affected by a crosswind when traveling on tunnel portals, bridges and dikes or overtaking large vehicles. In that case, the driver shall grasp the steering wheel firmly and decelerate.



Dazzling due to oncoming vehicle lamps

In case of dazzling due to harsh lamplight from an oncoming vehicle, take care to slow down, and slightly look to the right side to avoid the harsh lamplight after confirming the safety in front.



Instructions on the fault indicator lamp

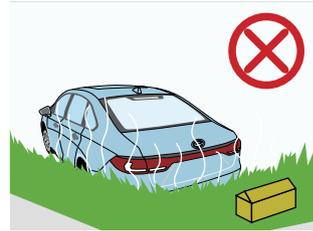
If the indicator lamp on the instrument cluster is on during driving and the safety is ensured, pull over immediately and consult the GAC Motor authorized shop to check whether the driving can continue.



Precautions for parking

No parking in the vicinity of inflammable and explosive articles

It is forbidden to park the vehicle in the vicinity of withered grass, timber, oil tank and other inflammable and explosive articles. Otherwise spontaneous combustion or explosion of the inflammable and explosive articles may occur due to high-temperature parts of the vehicle.



No inflammable and explosive articles in the vehicle

It is forbidden to place lighters, gas tanks and other inflammable and explosive articles in the vehicle during parking in hot weather. During long-time parking, the inflammable and explosive articles will easily self-ignite or explode due to high temperature in the vehicle caused by direct sunlight.



When leaving the vehicle

Be sure to confirm that the parking brake has been applied after shutting down the engine; please take your keys and valuables and lock the door properly before leaving the vehicle.

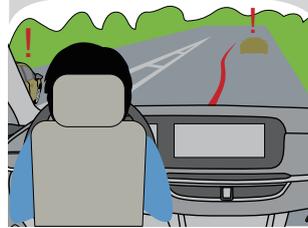


Precautions under various road conditions

Factors that lead to traffic accidents are uncertain and random during driving. The driver shall always keep sober-minded and cool, and be resourceful to make quick judgment and take actions to ensure safe driving in the event of emergencies.

Busy road

With a large number of pedestrians and vehicles and complicated traffic conditions, accidents are likely to happen on a busy road. When passing a busy and accident-prone road, the driver shall concentrate on driving, keep an eye for pedestrians or vehicles all the time, and let them pass first.



Driving at night

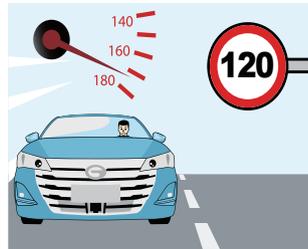
Make sure that all vehicle lamps can work normally during driving at night. Control the speed according to the visibility; switch the low and high beams consecutively, honk the horn when necessary, and confirm that the vehicle in front is about to give way before overtaking. In addition, riders and pedestrians can be dazzled by the lights of oncoming vehicles and fail to watch the road. Thus attention must also be paid to the safety of the riders and pedestrians.



Expressway

Be sure to clench the steering wheel all the time when driving on an expressway; when changing the lane or overtaking, rotate the steering wheel slowly with the smallest possible rotation angle to prevent the vehicle from losing balance due to fast speed, fast rotation of the steering wheel and large rotation angle; depress the brake pedal gently before braking, and do not perform emergency braking so as to prevent the vehicle from deviating.

Follow the traffic rules and regulations during driving on an expressway. Speeding is not allowed; be sure to decelerate timely to keep a safe distance from the vehicle in front.



Driving

Mountain road

Avoid other vehicles actively, keep to the right, decelerate timely and honk the horn in advance when driving on a mountain road.



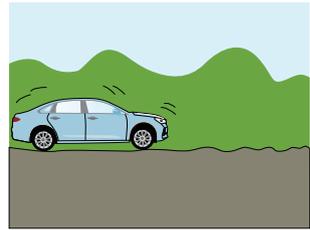
Muddy road

Slow down and drive safely when driving on a muddy road.



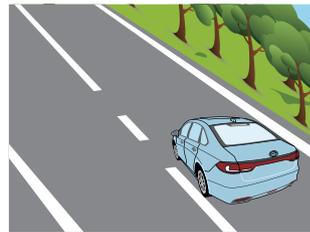
Uneven road

Slow down to prevent the chassis from being scraped when driving on an uneven road.



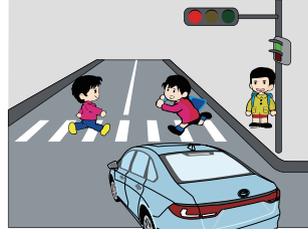
Wide and straight road

Do not relax vigilance, become distracted and do speeding owing to the wide road, a few vehicles and pedestrians when driving on a wide and straight road.



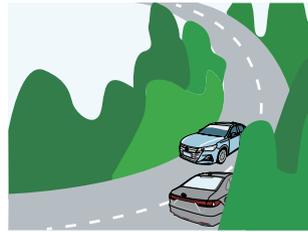
Crossroad

With many pedestrians or vehicles, traffic accidents are quite likely to happen at a crossroad. Therefore, stay highly focused when driving through a crossroad. If traffic lights are installed at a crossroad, follow the guidance of the traffic lights to drive through the crossroad; if not, keep an eye on the pedestrians or vehicles and confirm the safety before driving through the crossroad.



Curve road

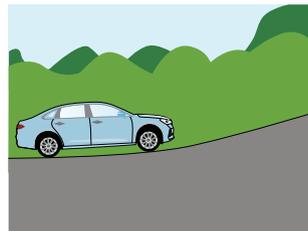
During driving through a curve road, the faster the speed is and the faster the steering wheel is rotated, the greater the inertia of the vehicle is and the greater the centrifugal force is, leading to vehicle sideslip easily or even rollover. Accordingly, decelerate in advance, rotate the steering wheel slowly and pay attention to the front traffic conditions when driving through a curve road.



Slope

Before driving uphill, carefully check if the vehicle is loaded uniformly and reasonably, check the condition of the vehicle, braking performance in particular, and try the braking effect if necessary.

Before driving downhill, check the braking performance carefully. It is forbidden to shut down the engine or engage the neutral gear for coasting. If the brake fails, release the accelerator pedal, use the vehicle's own drag to control the speed, and decisively take advantage of a natural obstacle to block the vehicle and consume its inertia so that the vehicle is parked at the natural obstacle to get out of danger.



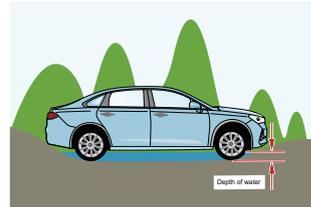
Precautions under various weather conditions

Driving on a rainy day

Drive slowly and maintain a certain distance from the vehicle in front; in the event of emergencies, take measures timely, and do not rotate the steering wheel urgently or perform emergency braking to prevent vehicle sideslip and rollover.

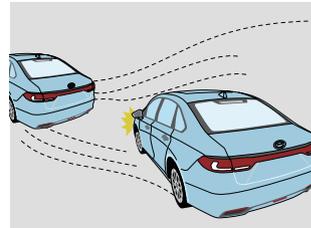


Before driving through a water-logged road section, check the water regime first: For a road with a sign, the depth of the water shall not be greater than the minimum ground clearance of the vehicle (for specific data, see "Dimension" in Section "Vehicle Parameters" of the Owner's Manual). Drive slowly and do not shut down the engine when passing through a water-logged road section. For a road section where the depth of water cannot be judged, take a detour.



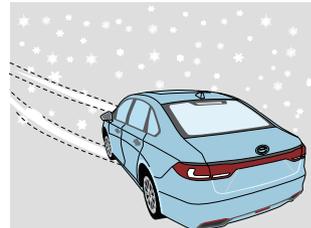
Driving on a foggy day

It is hard for the driver to see the road condition clearly on a foggy day because of low visibility and blurry vision, making driving dangerous. In this case, turn on the fog and tail lamps and drive slowly. In case of dense fog, stop the vehicle, and continue to drive after the fog disperses.



Driving on a snowy day

The rear wheels are prone to wheel-spin on a slippery road with little adhesion. Accordingly start the vehicle and drive slowly at a constant speed. On a road covered with ice or snow, the braking distance will be longer. Therefore, maintain a sufficient distance from the vehicle in front while driving so that you can detect the forthcoming situation early and get ready to stop the vehicle in advance. It is forbidden to engage the neutral gear for coasting. The driver may have eye fatigue or even be dazzled for a short time by the reflected light of the snow on the road. Under such circumstance, the driver must decelerate to stop the vehicle, and continue to drive after his or her vision recovers.



Other precautions

Precautions for expansion tank

Do not open the expansion tank when its cap is hot. Otherwise, steam or coolant comes out, easily leading to a severe scald.



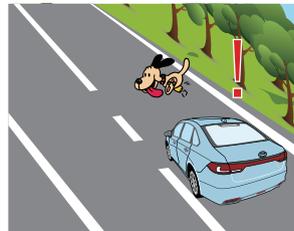
Carrying animals

Be careful not to let animals carried in the vehicle run around to avoid impeding driving.



Animals rushing to the center of the road

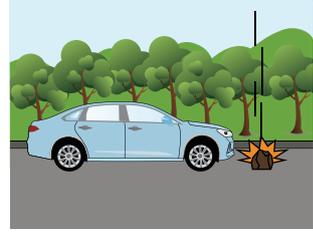
Try not to honk the horn to prevent the animals from being frightened. Check the traffic condition behind this vehicle to ensure that no danger will appear while the animals are avoided.



Driving

In case of falling objects from the vehicle in front

If you maintain a safe distance from the vehicle in front, slow down and try to change the lane. If the front windshield is broken by a falling object because of the close distance, decelerate to stop the vehicle and contact the GAC Motor authorized shop for inspection.



No drunk driving

Drunk driving is quite dangerous. Even one cup of wine may affect the judgment of a person. Thus never drive after drinking.

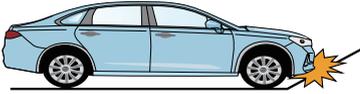


Accident handling

In case of vehicle fires, leave the vehicle quickly, call the fire department, and meanwhile inform the GAC Motor authorized shop.



Avoiding damage to the underbody



During driving from a flat road to an upslope, driving uphill and downhill, and driving from a downslope to a flat road



During driving on an uneven or rutty road



During parking along the shoulder curbs



During parking at a location with blocks

How to achieve fuel-efficient driving?

- Common reasons for high fuel consumption: bad driving habits, dirty air cleaner, using leaded or inferior gasoline, blockage of the fuel injector nozzle, insufficient tire pressure and so on.
- After the vehicle is started, run the engine at an idle speed for a period of time, start to drive, and then slowly depress the accelerator pedal to speed up.
- Do not speed up or brake rapidly while driving. Instead, do it steadily, and take care to observe the driving condition in front of this vehicle. Do not follow the vehicle in front too closely in downtown, and release the accelerator pedal early at a red light; the idling time of the engine should not be too long; keep driving at a constant speed of 90~100 km/h on an expressway. In this way, fuel consumption can be reduced properly. Cruise control helps control the accelerator more precisely to maintain a steady speed, which is conducive to reducing the fuel consumption.
- Keeping the vehicle in good condition is also an effective means to save fuel. For example, check if the spark plug works normally, if the air cleaner is clean, if the gasoline or oil filter is clean and if the fuel injector nozzle is blocked, etc. Next, ensure that the tire pressure is normal in that insufficient tire pressure will increase the fuel consumption. Please bear in mind that you'd better choose the brand and size recommended by the manufacturer when replacing tires.
- For new vehicles in the running-in period, high fuel consumption may occur. Nevertheless, the fuel consumption in the running-in period can be effectively reduced if you get into good driving habits, and control the driving speed in cities and suburbs at 50~80 km/h and the engine speed at 1500~3000 r/min.
- The automatic transmission determines the gear shifting time based on the operation of the accelerator. If the accelerator is eased back, the upshifting time will be early. If not, the transmission will stay in the low gear for a longer period of time to obtain more power, and the fuel consumption will also be higher.

What kind of damage will inferior fuel bring to the vehicle?

Inferior fuel will generate plentiful carbon deposits, and carbon deposits on the piston will lead to weak acceleration, start difficulty, increased fuel consumption and abnormal wear.

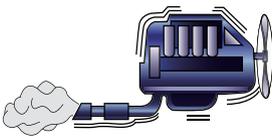
If the paraffin and sulfur in the fuel exceed the limit, acidic materials generated during combustion will corrode the engine severely.

Impurities mixed in the fuel will block the filter and fuel passage or even cut off the fuel passage in severe cases, and increase mechanical wear.

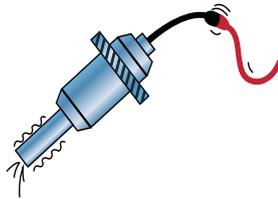
If the fuel contains water, it will corrode the vehicle components and lead to failure of the additive in the fuel, producing more gelatine which affects the engine life.

Good fuel must have the following features:

- Strong accelerating ability
- Air resistance prevention
- Great knock resistance
- Corrosion resistance
- Strong moving ability
- Steady operation of the engine
- Low fuel consumption
- Not prone to deterioration and generation of gelatine



Insufficient octane number (namely grade of the gasoline) will induce the engine knock.



Excessive arene and olefin will lead to excessive content of gelatine, blocking the fuel passage and fuel injector nozzle.

Why is there jitter during emergency braking (accompanied by slight noise)?

During emergency braking, to ensure the minimum braking distance and steering of the vehicle, ABS will work and distribute brake force to tires according to computer commands to roll and slide the tires alternately so that the vehicle body and brake pedal shake.

When ABS works or performs self-test, the motor inside the module will operate for a short time and the valve body will be opened and closed frequently, accompanied by slight noise.



Please feel relieved to use the vehicle because the phenomena mentioned above are normal.

Why should the engine speed be decreased before parking?

The speed and temperature of the turbocharger will be the highest when the engine works at its maximum output power or maximum torque. Accordingly, before parking, the engine is required to operate at a moderate or idle speed or under light load for a period of time so that the engine keeps certain lubricating and cooling abilities to lower the operating temperature of the turbocharger gradually. In this way, the turbocharger can be prevented from operating in lack of oil, and the lubricating oil left in the bearing or bearing housing can be prevented from being carbonized to generate carbon deposits.

Why is crackling sound heard from the chassis sometimes after cold start or shutdown of the engine?

During cold start, the exhaust pipe and other components will expand rapidly due to heating, producing crackling sound occasionally; likewise, after the engine is shut down, the exhaust system will contract with temperature drop, and similar sound will arise occasionally at this moment. Please don't worry because it is a normal phenomenon of expansion caused by heat and contraction by cold, which won't cause any damage to the vehicle.

The temperature of the gas exhausted from the engine is high. During cold start, the temperature of the exhaust system will rise rapidly when the high-temperature gas passes through the exhaust system. Owing to the principle of expansion and contraction, the exhaust pipe will expand slightly, producing light sound in the vicinity of the exhaust pipe; likewise, after the engine is shut down, the exhaust pipe will contract slightly due to the principle of expansion and contraction, making light sound in the vicinity of the exhaust pipe.

Please feel relieved to use the vehicle because the phenomena mentioned above are normal.

Why is “cooing” noise heard when the brake pedal is released to start the vehicle?

When the driver is going to brake or release the brake pedal to start the vehicle, the engine is still transmitting power for the vehicle, and meanwhile the brake force still exists between the brake disc and brake pad, generating friction sound between them. And this sound becomes cooing after being amplified by the compartment. Most vehicles have such sound, which is normal.

Please feel relieved to use the vehicle because the phenomena mentioned above are normal.

Why is coasting in the “N” gear not allowed while the vehicle is running?

The structure of automatic transmission is different from that of manual transmission, which performs self-lubrication according to the vehicle speed, namely splash lubrication. However, the automatic transmission is lubricated by pressure internally, while the pressure is dependent on the engine speed. For example, when the “N” gear is engaged at a vehicle speed of 40 km/h, the transmission is operating at high speed internally at this time, but the engine remains idling, and accordingly the oil pump of the transmission can only provide the lubricating oil pressure at idling. Hence if the “N” gear is engaged for coasting in a long time, the clutch in the automatic transmission will be worn excessively due to lack of effective temperature drop.

Therefore, please do not engage the “N” gear during driving!

Why is a sound heard when the electric park brake is applied or released?

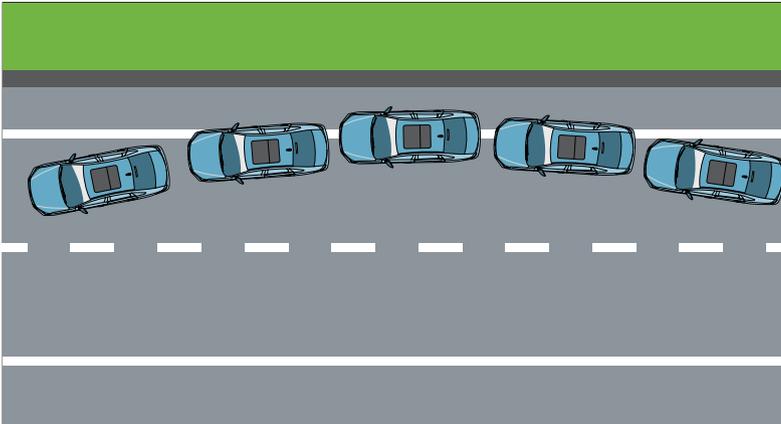
As the electric park brake is controlled by motor, the motor will work and make an operating sound when the electric park brake is applied or released.

Please feel relieved to use the vehicle because the phenomena mentioned above are normal.

Why does the vehicle deviate?

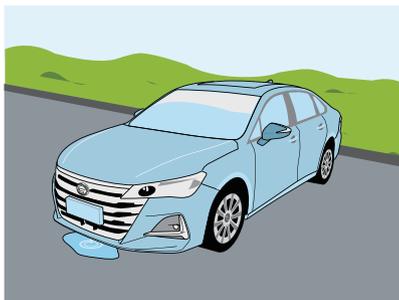
Strict four-wheel alignment and deviation inspection must be performed on the vehicle before delivery. Obvious deviation shall not be allowed during driving. During actual driving, the vehicle may slightly deviate owing to the effect of road surface roughness, wind direction, inconsistent left and right tire pressure and other external environments.

Besides, please avoid some bad driving habits, such as hands off the steering wheel. Under such circumstance, the vehicle will also deviate because the steering wheel is not centered due to the effect of external environmental factors. Furthermore it may be quite dangerous during high-speed driving or emergency braking. Thus please do not take your hands off the steering wheel at the same time for your own safety.



Why does water dripping occur under the vehicle?

When the A/C system performs cooling, the air temperature in the vehicle drops rapidly on the evaporator of the A/C system, and vapor in the air is condensed into water and discharged through the drain pipe to the ground directly. In addition, the temperature of the low-pressure pipe of A/C is lower than the ambient temperature during cooling, and vapor in the outside air will also condense into water drops on the surface of the low-pressure pipe at cold temperature and then drip to the ground.



What points should be noticed during the battery use?

If too low battery voltage makes the vehicle fail to be started, it does not mean that the battery has been damaged, but most likely to be undervoltage, and can completely recover its function after being charged.

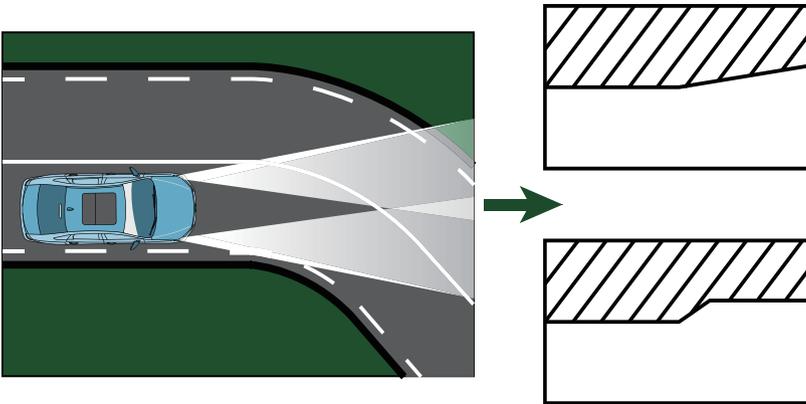
Attention shall be paid to the following aspects during daily use:

Before parking to leave the vehicle, please turn off all lamps and electrical equipment in the vehicle to prevent the battery from discharging for a long time.

If the vehicle is to be put aside for more than 15 days, cut off the negative wiring of the battery, or start the vehicle every several days for a period of time to charge the battery properly.

Why are the beam directions of left and right lamps inconsistent?

Since China adopts the rule that left-hand drive vehicles travel on the right side of the road, according to the regulations of headlamp lens for vehicles, all vehicle lights are low on the left side and high on the right side, namely low on the driver side and high on the passenger side. Such rule is aimed at avoiding obstructing the view of the driver in an oncoming vehicle during meeting, as well as illuminating the road ahead. As a result, the inconsistent beam directions of left and right headlamps are required by regulations.



Why is noise heard from the radio sometimes?

Radio signals are sent from the broadcasting station, received by antenna and then enter the radio through the antenna amplifier. The intensity of the received signals depends on the following factors:

1. Too small power output of the broadcasting station (the transmission distance and range of low-power radio broadcast are limited).
2. The position of the vehicle relative to the launch tower (the closer the vehicle is to the launch tower, the stronger the signals are).
3. Atmospheric conditions (for example, a strong electromagnetic field in the atmosphere will disturb the signals).
4. Frequency band of the radio broadcast (FM or AM).
5. Ground conditions (for example, tall buildings, hills or surrounding vehicles will disturb the FM signals, which makes the sound fade in and out).
6. Obstacles between the launch tower and the vehicle.

Why does the wiper work improperly?

Mainly made of rubber and exposed to sunlight and rain for a long time, rubber strips of wiper blades cause aging of the wiper blades.

Damage that can be recognized through eyes:

Crack, rust, deformation, adherent matter, discoloration, etc.

Damage that can be recognized through ears:

Abnormal sounds such as runout and jitter sounds

Damage that can be recognized through hands:

Hardened rubber, loose metal parts, etc.



Phenomenon: Spindly horizontal stripes affect the view.
Reason: The rubber strips of wiper blades are covered with foreign objects or the edges of the rubber strips are damaged.
Solution: Clean the edges of the rubber strips and replace the wiper blades if the phenomenon does not disappear.



Phenomenon: The wiper blades make abnormal sound, jump and fail to move smoothly.
Reason: There is oil on the windshield or the rubber strip is out of shape.
Solution: Clean the windshield and replace the wiper blades if the phenomenon does not disappear.



Phenomenon: Spotty water marks remain after the wiper blades work.
Reason: The rubber strip is out of shape.
Solution: Replace the wiper blade.



Phenomenon: The rubber strip fails to fit the windshield surface, leading to uneven wiping.
Reason: The rubber strip or the frame of the blades is out of shape, leading to insufficient pressure.
Solution: Replace the wiper blades.

What points should be noticed during the use of wiper?

1. The wiper blades are used to clear the rainwater on the windshield, and thus must be applied in the event of rainwater. The wiper blade can never be applied without rainwater on the windshield because the frictional resistance will increase in this case, which may cause damage to the rubber blades and the wiper motor.
2. When clearing dust on the windshield surface using the wiper blades, be sure to spray windshield washer fluid simultaneously. Never apply the wiper blade without the fluid.
3. In case of hard things on the windshield, such as dry faeces of pigeon and other birds, do not directly wipe them using the wiper. Instead, please manually remove the bird droppings first. These hard things are extremely easy to cause local damage of the wiper blade sheet, making the wiper work improperly.
4. Premature scrapping of some wiper blades is directly related to improper vehicle washing. If the oil film on the surface is washed away when the windshield is wiped carelessly during vehicle washing, firstly, it is unfavorable for rainwater to flow down, causing rain easy to stop on the windshield surface, and secondly, it will increase the frictional resistance between the sheet rubber and the windshield surface. This is also the reason for instant pause of the wiper blades due to wiping failure. If the wiper blades do not work but the motor continues operating, it is quite easy to cause the motor burnout.
5. The windshield is usually cleaned by the wiper blades in a few seconds after wiping stop. Only when the water on the windshield surface is dried by wind in a moment can the best cleaning effect be realized.

How to deal with the fog on the window?

Solution to fogging on the windows

Cause: Since the air temperature in the vehicle is higher than that of the outside in winter or rainy days, vapor in the vehicle will condense into fog when touching the windows with low temperature. The generation of fog is a natural phenomenon. And the smaller the space is in the vehicle, the larger the number of occupants is, the more severe the situation will be.



Solution: The front windshield and side windows can be defogged by the A/C; the rear windshield must be defogged with the rear windshield defrosting/defogging function.

Principle of defogging with A/C

Air circulation

Change the air circulation mode to the fresh air mode to improve the air exchange with the outside air and reduce the humidity and temperature difference in the vehicle.

Defogging by cold air

Set the A/C to low temperature and remove the fog on the window surface by drying with cold air.

Windshield defrosting/defogging function

Heat the whole windshield using warm air or a heating wire to make the windshield temperature much higher than the condensation point at the humidity so that the fog is unable to condense on the windshield and the condensed fog is evaporated due to high temperature.

How to decrease the cabin air temperature in a hot weather?

Adjust the A/C to the expected temperature, set the air circulation mode to the fresh air mode and open the window for one to two minutes (which can exhaust the high-temperature air from the vehicle quickly), then change it to the recirculation mode and close the window.

Why is heavy noise heard from the air outlet when the A/C is turned on in a hot weather?

If there is a huge difference between the set temperature and the actual one in the vehicle when the A/C is turned on, the A/C system will choose the maximum air speed automatically to reduce the temperature rapidly. At this time, noise from the air outlet will be relatively obvious, which is normal and requires no worry.

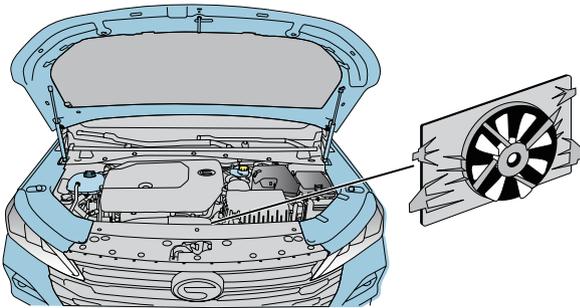


If bothered by noise from the air outlet, you may take the following measures:

1. Adjust the expected temperature to make it closer to the actual temperature in the vehicle.
2. Change the automatic mode to the manual one and reduce the fan speed.

Why does the cooling fan still run after the vehicle stops?

When the temperature of coolant is higher than the set value or the pressure of A/C is greater than the prescribed value, the cooling fan will operate to reduce the temperature of the coolant, protect the parts against damage, and ensure that the A/C system works under normal pressure so as to realize better cooling effect.



Why can the rear door not be opened from inside?

During daily use, the rear door may not be opened from inside. In this case, please check if you have accidentally operated the child safety lock.

The child safety lock is used to prevent a child at the rear seat from opening the rear door when he plays with the door handle during driving, to avoid unnecessary safety risks. Thus once the child safety lock is activated, the rear door cannot be opened from inside.

Why is an airflow sound “poof” heard in the vehicle when the rear door window is opened?

This is a common phenomenon for general vehicles. Most vehicles will make similar sound under specific circumstances, which is a normal aerodynamic phenomenon.

All you have to do is to open the front window on any side by over 5 cm or close all windows to eliminate the airflow sound.



How to clean the stubborn stains in the interior trim?

During use of the vehicle, it is inevitable to soil the interior trim sometimes. In case of stubborn stains that are difficult to be cleared, you can go to the GAC Motor authorized shop for consultation and purchase related cleaning agent to clean the interior trim.

How to remove the unpleasant odor in a new vehicle?

Methods of removing the unpleasant odor in a new vehicle:

Natural ventilation: Maintain good ventilation of the vehicle.

Absorption method: Place some articles that can absorb unpleasant odor (such as activated charcoal, bamboo charcoal and pomelo peel) in the vehicle.

Good using habits: Do not use cheap perfume in the vehicle, which can only cover the unpleasant odor instead of eliminating it thoroughly; try to avoid smoking and feeding in the vehicle.

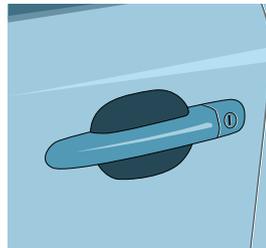
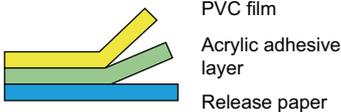
Why do scratches exist on the paintwork at the groove of door handle?

This is the location that the user's nails usually touch during use of the vehicle. The main reasons for the paint scratches are as follows:

1. The user pays little attention to the scrape between the nails and paint when opening the door, thus leaving scratches on the paint at the door handle groove.
2. The user leaves scratches inadvertently after using the vehicle for a long time.

This is a common phenomenon for vehicles. It is suggested that you open the door carefully. Meanwhile, the GAC Motor authorized shop also provides appropriate products to protect the paintwork at the door handle. You can consult and purchase these products in the GAC Motor authorized shop.

Multiple protection



Paintwork protective film

How is tire bulge generated?

Causes:

Since the tire shoulder or the tire bead close to the tire shoulder heavily hits against the outside foreign objects (e.g. pot hole, road shoulder and stone) during driving, severe extrusion between the rim flange and the object causes broken yarn of the tire fabric, and then the inner air of the tire rises from the broken yarn and forms bulges.

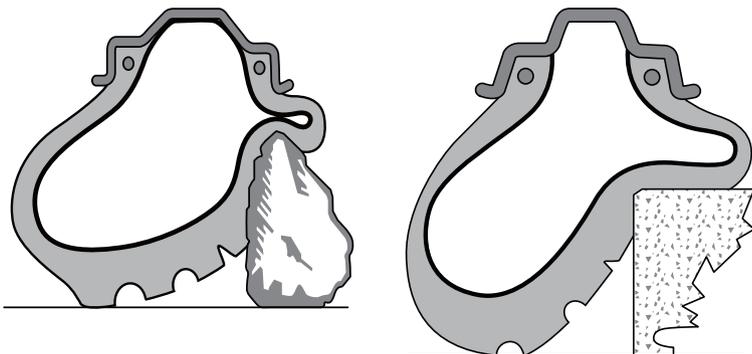
Countermeasures:

If a tire is bulged, its safety will greatly decrease and the tire is easily to burst. It is recommended to replace the bulged tire. If you insist on using it (suppose the bulge is not severe), install it to the rear wheel.

Preventive measures:

Either too high or too low pressure does no good to the tires. If the pressure is too high, the tire will become hard, reducing the riding comfort of the vehicle, and the tire will be stretched too long like a rubber band, have no elasticity, and be easily broken when subject to great external force; if the pressure is too low, the fuel consumption of the vehicle will rise, and the tire will tend to break due to great shear stress generated between an obstacle and the rim in case of collision.

Moreover, it is also important to improve the driving habits. During driving at high speed on a road section with bad road conditions, the tires are likely to run into a pit or other foreign objects, leading to severe compression deformation of the tires between the impacting object and the rim flange, which causes broken yarn of the tire fabric at the sidewall. In this case, the inner air of the tire rises from the broken yarn and forms bulges. Besides, during climbing the road shoulder or parking, tire scraping against an obstacle may also damage the sidewall, forming bulges. Accordingly, try to avoid these situations.



Why is the engine of a hydraulic tappet structure so that a “click” sound is heard for a while during cold start?

Leaving valve clearance in the valve train will cause the valve train to make impact and noise while the engine is operating. To eliminate such a defect, some engines adopt a hydraulic tappet mechanism to realize zero valve clearance.

There is an oil cavity in the hydraulic tappet. When the valve is closed, the oil cavity will be filled with oil, making the tappet touch the cam all the time; when the cam opens the valve, the oil will be squeezed out again (the amount of the squeezed oil is controlled by the clearance) to ensure that the tappet keeps touching the cam.

However, when the engine is cold, running noise may occur for a short time because the oil pressure in the hydraulic rod cannot reach the prescribed value immediately. This is a normal phenomenon and requires no worry.

How to avoid a traffic accident?

Keep sober-minded and step up vigilance when following other vehicles. Never get distracted during driving. Clearly and effectively communicate with other drivers by turning on the signal lamp in advance to inform them of your driving intention. Adopt a preventive driving method, predict the driving intention of the users on other roads, and keep an elliptical space around this vehicle. Stay focused and do not pay any attention to other matters that have nothing to do with driving.

Why should the engine be kept idle for a period of time (3~5 minutes) after cold start?

If the engine accelerates immediately after start, the turbocharger will work at the maximum speed before its bearing is lubricated fully, which will damage its bearing and reduce its service life.

How to deal with a serious traffic accident?

In case of traffic accidents during driving, both the driver and the passengers are obliged to save the injured. It is suggested that you prepare some first-aid appliance, practise first aid and accumulate knowledge about first-aid.

1. Prevent the accident from worsening:
 - Move the vehicle to a safe location, turn on the hazard warning lamp and place a warning triangle behind the vehicle, informing subsequent vehicles of the accident ahead.
2. Perform emergency treatment on the injured before the ambulance arrives:
 - Observe the injury of the injured.
 - Check for consciousness (call the injured).
 - Check for breath (check if the chest of the injured rises and falls, and so on).
 - Check for pulse (use your index and middle fingers to feel the pulse at the neck of the injured).
 - Check for bleeding (check if each part of the injured bleeds).
 - If the injured are unconscious but still breathe, tilt their heads back to keep the respiratory tract smooth, and then encourage their sense of survival in words.
3. Call 120 to save the injured:
 - Report the following information and wait for instructions.
 - The location where the accident takes place.
 - The number and state of the injured.
 - Damage to the vehicle.

What is auto beauty?

Concept of auto beauty

In the early days, drivers clean their cars mostly by themselves merely using simple tools, including a water pipe, a brush, a bucket, a packet of washing power and a piece of cleaning cloth. It is feasible to use these things to deal with trucks, but unscientific and rough to clean modern cars with these tools. This cleaning method not only fails to clean and care for the vehicle properly, but causes damage and new rust to the top coat, thus reducing the service life of the vehicle.

“Auto beauty” is referred to as “Car Beauty” or “Car Care” in western countries. With the development of the entire automobile industry, the auto beauty industry has reached a quite perfect state in western countries. They describe such an industry as “Car care center”, also referred to as “the quaternary industry”. The so-called quaternary industry, as its name suggests, refers to the fourth step following automobile production, sales and maintenance. Car care has become a popular and professional service industry. It is a brand-new concept of automobile maintenance, which is fundamentally different from car waxing.

Auto beauty not merely includes simple waxing, deodorization, stains and dust removing, cleaning services inside and outside the vehicle and other regular beauty care. Instead, the so-called auto beauty is to care for the vehicle by using professional high-tech equipment for auto beauty as well as different auto beauty care products and processes according to the maintenance conditions required for different materials of parts of the car. It not only makes the car new and maintains its bright color, but changes the old car into a new one, keeps the value of the new car, and prolongs its service life.

How to perform auto beauty?

Main items of auto beauty

The modern auto beauty services can generally be divided into body beauty, interior trim beauty, and paintwork treatment.

Body beauty

The body beauty services comprise high-pressure car washing, removing of pitch, tar and other pollutants, waxing and mirror finish, sealing wax removing (for new cars), renovation of wheel rims, tires and bumpers, treatment of the anti-corrosive coating on the chassis and other items.

Interior trim beauty

The interior trim beauty services consist of compartment beauty, engine compartment beauty, trunk cleaning and other items. The compartment beauty includes the dust removing and cleaning of the instrument panel, roof, carpet, seats, seat covers and door interior trim, steam sterilization, deodorization of the air outlet, indoor air purification and other items.

Paintwork treatment

The paintwork treatment services can be divided into treatment of the oxidation film, splashed paint and acid rain, treatment of deep and shallow scratches on the paintwork, treatment of partial damage to the paintwork, and vehicle painting.