

# Contents

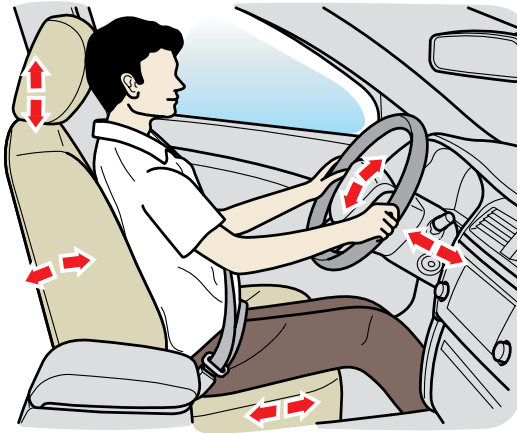
Driving Posture and Vision .....	1
Seat belt .....	5
SRS .....	7
Child Safety .....	11
ABS and EBD .....	13
ESP and TCS .....	15
HHC and HDC.....	16
AUTO and HOLD .....	17
HBA.....	18
ACC and AEB.....	19
AEB - Pedestrian Detection System.....	20
EPS .....	21
Start Stop System .....	22
Panorama Parking System.....	23
Instructions for Driving Assist System .....	24
Essentials for Getting on and off the Car .....	28
Precautions before Starting.....	31
Precautions for Driving .....	32
Precautions for Parking .....	34
Precautions for Various Road Conditions.....	35

Precautions for All Weather .....	38
Other Precautions .....	39
Daily check .....	42
FAQ .....	46

## Correct Driving Posture

Driver's driving posture can directly affect the driving safety and driver's fatigue degree.

Correct driving posture can enable you to operate this car naturally, which is conducive to driving safety.



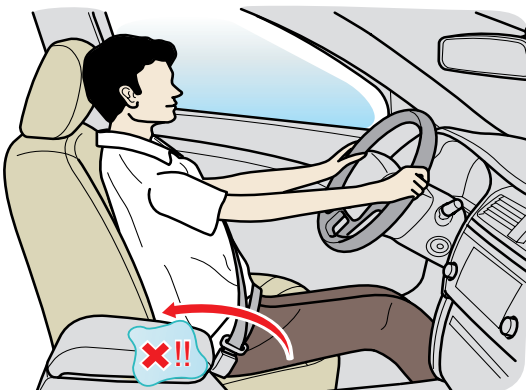
For the safety of yourself and the passengers, to reduce the risk of accidental injuries and deaths, the driver is recommended to do the following operation:

- Adjust the seat backrest to proper position, so that your back can fully contact driver's seat backrest.
- Adjust driver's seat head rest, so that the central back side of head can just rest on the center of head rest.
- Adjust the driver's seat forward or backward, so that you can effectively operate all pedals with legs bent slightly.
- Adjust steering wheel to ensure that the distance between steering wheel and your chest should not be less than 25cm.
- Wear the seat belt correctly.

## Driving Posture and Vision



Don't leave too large clearance between your back and the seat



Don't tilt the seat backward too much

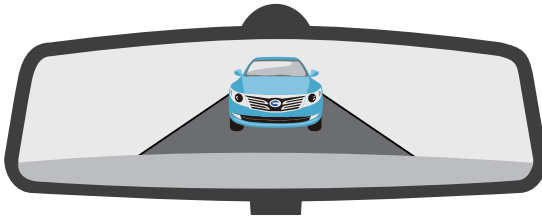
Correct driving posture can not only relieve driver's fatigue but also give a full play to seat belt and airbag for protection when a traffic accident occurs.

## Adjustment of rear-view mirror

It's important for your driving safety by adjusting the rear-view mirror to a suitable degree.

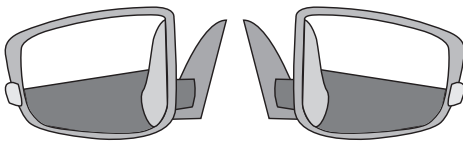
### Interior Rear-view Mirror

You should be able to see and estimate the distance from the car behind you through the interior rear-view mirror. Otherwise, it is risky to safe driving.



### Exterior Rear-View Mirror

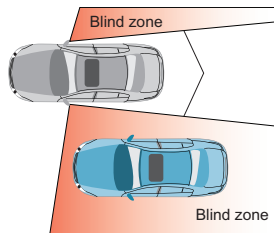
Using convex exterior rear-view mirrors can help you get wider vision to confirm whether there are other vehicles around you.



Adjust the angle of mirror to ensure that you can see the side of car through mirror and also you can see the ground line in the center of mirror.

Check the blind zone which you can't see through exterior rear-view mirror:

You can't see vehicles close to you from left or right side through exterior rear-view mirrors. Therefore, before changing route and turning, you need to directly observe surroundings by eyes except for using exterior rear-view mirrors.

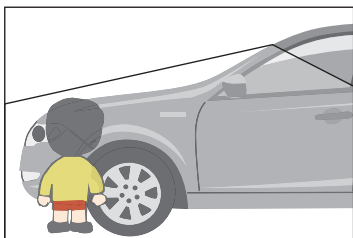


# Driving Posture and Vision

## Visual blind zone

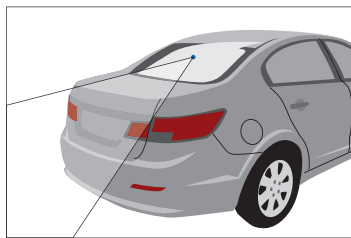
Different driving posture will lead to different blind zone. Please keep correct driving posture to confirm the range of blind zone.

The range of vision blind zone varies from vehicle models. Please don't drive into the blind zone of other cars during driving.



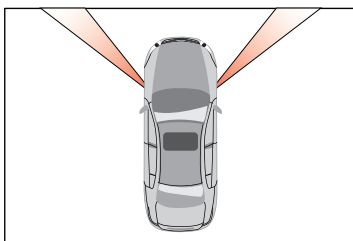
### Front blind zone

The front blind zone ranges from the ground to engine hood or doors. When parking, pay attention to check whether there is road curb or other barrier in front blind zone.



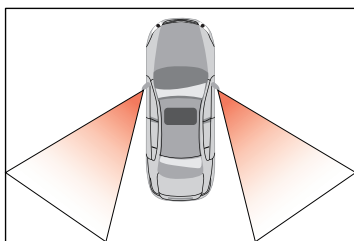
### Rear blind zone

Rear blind zone ranges from rear windshield to the ground. When reversing, make sure that there is no child or other potential hazard.



### Pillar blind zone

The pillar blind zone refers to a vision area which is shaded by pillar. This blind zone can be eliminated by merely turning around. When turning, you must form the habit of turning around to eliminate pillar blind zone.



### Rear-view mirror blind zone

The rear-view mirror blind zone refers to an area from the side-view of the vehicle to further area in the back. When driving forward or turning, you need to directly observe surroundings by eyes apart from using rear-view mirrors.

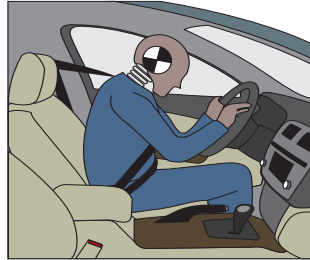
Wear seat belt correctly is a basic requirement for safe driving. When the car has a front impact, the seat belt can absorb forward movement of the passengers produced by inertia and effectively reduce passenger's impact injury.

When the car has a front impact to fixed obstruction at a low speed, it can reduce movement trend of driver and passengers.



**Movement without seat belt**

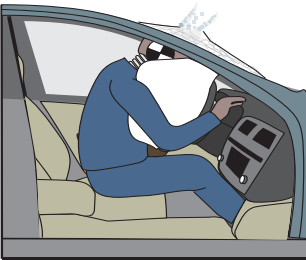
When the car has a front impact to fixed obstruction even at a low speed, you can't protect yourself just by your hands.



**Movement with seat belt**

When the car has a front impact to fixed obstruction, seat belt can firmly fix the driver and passengers and provide effective protection.

**When the car has a front impact to fixed obstruction at a high speed, it can reduce movement trend of the driver and passengers.**



**Movement without seat belt**

When the car has a front impact to obstruction at a high speed, if you don't wear seat belt, the driver and passengers may be forced to impact front windshield even if the car is equipped with front airbags.



**Movement with seat belt**

When the car has a front impact to obstruction at a high speed, correct wearing of seat belt can enable the driver and passengers to get effective protection from seat belt and airbag, and relieve impact of collision to the head and upper body.

**Correctly wear seat belt even the destination is not far.**

It is incorrect not to wear seat belt just because it is bothering you or the destination is not far. Passengers must wear seat belt even the destination is not far.

# Seat belt



Make sure the shoulder belt rests across the center of your shoulder. Do not let the belt cross your neck. Make sure the shoulder belt contact your shoulder.

Seat belt at waist should be tightly close to pelvis. Don't let the belt press your stomach. Seat belt must be tied as needed.



When a pregnant woman wears seat belt, ensure that the lap belt goes across the hip as low as possible, not across the abdomen to prevent the fetus from being affected.

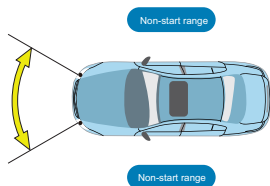
## Hint:

- The safety belt pretensioner together with the airbag will be triggered during high speed impact, to provide better protection.
- The safety belt pretensioner will not be triggered again once triggered.



SRS is short for Supplemental Restraint System. When the vehicle collides with obstacles violently, the airbag will be immediately inflated and become a gas cushion, or the pretensioner will be triggered to fasten the seat belt to reduce the impact of the collision on the passengers/driver and absorb the collision energy, thus lessen the extent of passengers/driver injury.

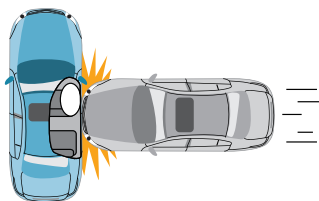
**SRS can be started when certain requirement is satisfied.**



If the front of vehicle is impacted seriously, the front airbag and side curtain airbag will be started automatically.



If the collision energy detected by the control unit is less than the ignition requirement of the control unit when a collision occurs, the system won't start the airbag. Therefore, even if the vehicle is damaged badly, this does not mean the airbag will start.

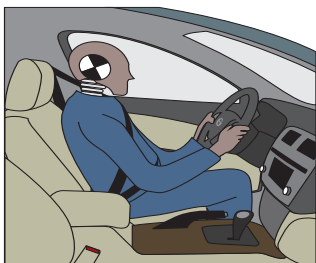


The side airbag and curtain will be deployed automatically during side strong impact.

SRS is a kind of assist protective device of seat belt. Please wear seat belt correctly.

## Trigger Procedure of SRS

When a vehicle has a serious front collision, the front crash sensor detects this impact (for example: the faces of driver and front passenger may also contact with steering wheel or instrument panel and get injured even if they correctly wear seat belts), and the front airbag will be quickly inflated to reduce driver/passenger's injury.



### **When a vehicle has a collision, the seat belt will tighten your body.**

When a vehicle has a collision, the seat belt will lock and tighten your body. SRS system can judge whether it is necessary to trigger the airbag according to the impact force.



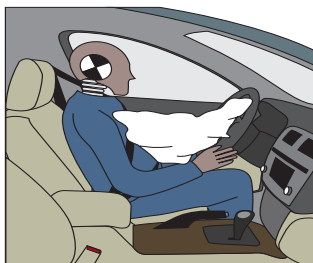
### **SRS deploying moment**

When SRS receives signal and is triggered, seat belts will firmly fix driver and passengers on their seats.



### **SRS provides protection for driver and passengers.**

SRS helps seat belts protect heads and upper bodies if driver and passengers.



### **SRS will shrink quickly after being triggered.**

The rapid release of air in SRS can relieve the impact to driver and passengers.

## Notes on SRS



During driving, don't lean your body to steering wheel. Otherwise, when SRS airbag is triggered, it may injure your upper body.



Don't let children kneel on the seat or stand inside the vehicle. Otherwise, when SRS airbag is triggered, it may cause serious injury.



Don't hold your child on your knee. If you do so, when SRS is triggered, it may cause serious injury.

**Hint:**

- After SRS is triggered, please don't immediately touch the inflation device, because it is very hot.
- After the airbag completely deployed, it immediately starts deflating, so it won't interfere with your visibility.
- After SRS is triggered, you can see smoke fog. Actually this is a kind of powder on the surface of the airbag and has no harm to human body. But if the powder is in your eyes or on your skin, rinse your eyes or clean your skin with fresh water immediately.
- A triggered airbag won't be triggered again.

**The following actions may affect normal working of airbag:**

- Put umbrella and other stuffs between front seat and door.
- Install seat sleeve on front seat.
- Plastic protection film of the seat is not unpacked.

Children need adult's care and protection in the car. Although parents and other adults take good care of children, they may also don't know how to protect children in vehicle.

**Precautions when children are in vehicle:**

- Don't let children operate doors, windows, sunroof and seats.
- Use child safety lock to prevent children from opening doors during driving.
- Don't leave children in the car alone.
- Don't let children play with the seat belts.

**Common wrong methods of protection:**



**Hold child on your knee.**

If you are holding a child and not wearing the seat belt, you may dash to the instrument panel and the child may get injured when there is a collision. If you are wearing the seat belt, the powerful force formed from the collision may separate the child from your arm.

**Share the seat belt with your child.**

When there is a collision, the seat belt may deeply press the child and cause serious injury and even death.

# Child Safety

The children must wear seat belts correctly. For infants too little to wear seat belts, they must be put in child seats.

## Child Seat Classification (For Reference Only):



Baby seat

Weight: <10 kg

Suggested age: 0 - 12 months



Child seat

Weight: 7 - 18 kg

Suggested age:  
12 months - 4-year-old



Kid seat

Weight: 15-32 kg

Suggested age: 4 - 10-year-old

## Child seats must be installed firmly

The child seat must be firmly installed on seat.

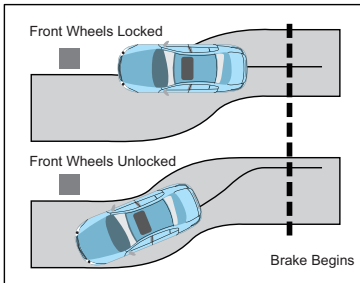
Don't install child seat with its back toward driving direction on the front passenger's seat.



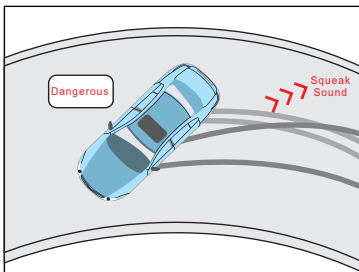
Please put the removed child seat into the trunk and fix it well or leave it at home. Don't leave it in vehicle. When there is an emergent braking or collision, the child seat which isn't installed well may be thrown forward and injure other passengers.

ABS is short for Anti-lock Braking System. It is an electronic device which prevents wheels from being locked and stabilizes vehicle when there is an emergent brake or brake on skidding road. It is an important part of positive safety system.

EBD is short for Electronic Brakeforce Distribution and is a part of ABS. When a vehicle takes normal brake, it can uniformly distribute brake force to front and rear wheels based on vehicle's loading condition. Especially on slippery road, it can improve stability and operation of the vehicle during braking.



If the front wheels are locked, the vehicle can't turn and only can slide along the braking direction.



If the rear wheels are locked, the drifting condition is easy to occur (even reach to 180° drifting under serious condition).

When there is an emergent brake, the brake pedal may vibrate. This is a normal working condition of ABS. At this moment, you need to continue to depress the brake pedal. Don't release the brake pedal merely because of the vibration.

# ABS and EBD

As ABS and EBD are safety assistant systems, their functions are very limit. For example, when making a brake on sand and stone road or snowy road, it may have a longer braking distance compared with braking on concrete road or dry road. Don't take it for granted that ABS and EBD can get ideal brake performance under any condition. You must adjust your vehicle speed according to the weather, road and traffic conditions. To avoid traffic accident, don't take a risk to drive your vehicle just depending on limit safety functions provided by the systems.

- The ABS cannot go beyond the kinematic law. It is still dangerous for a vehicle with ABS to drive on slippery roads! While driving, if the ABS is adjusting the brake pressure, immediately slow down to adapt to the road and traffic conditions.
- Improper operation or modification (such as modification of parts of braking system, or wheels and tires) may affect the functions of ABS and EBD.
- Specified size of tires must be used. If the vehicle is installed with tires in improper size or non-uniform size, ABS can't work normally.

**Under the following conditions, light depress the brake pedal to activate ABS. It is normal to feel vibration:**



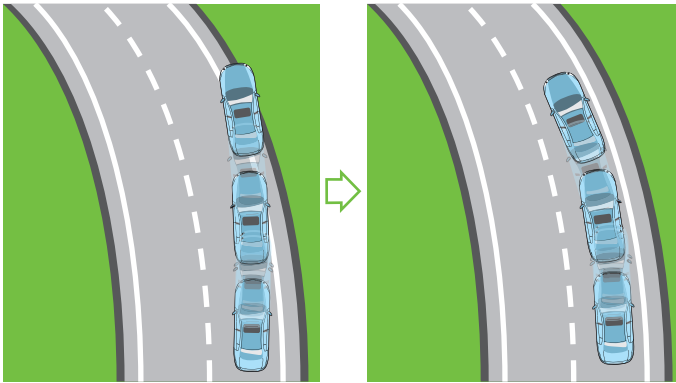
- When shifting gears.
- During emergency braking.
- When turning at high speed.
- When driving on slippery road.
- When driving on projected or pit road.
- When making sudden start after the vehicle is started



ESP is short for Electronic Stability Program. ESP system confirms the driver's driving intention according to steering wheel angle and vehicle speed, and constantly compares these information with actual driving condition. If the vehicle deviates from the normal running route (e.g., side skidding), the ESP will correct it by applying a brakeforce to the appropriate wheels.

TCS is short for Traction Control System. It is a subsystem of ESP. It can judge whether the drive wheel is skidding according to rotation speed of drive wheel and driven wheel. When the rotation speed of drive wheel is higher than that of driven wheel, this anti-skidding system can control the rotation speed of drive wheel.

**ESP can effectively reduce the risk of vehicle sliding.**



Car without ESP

Car with ESP

**The ESP function can be deactivated in special circumstances.**

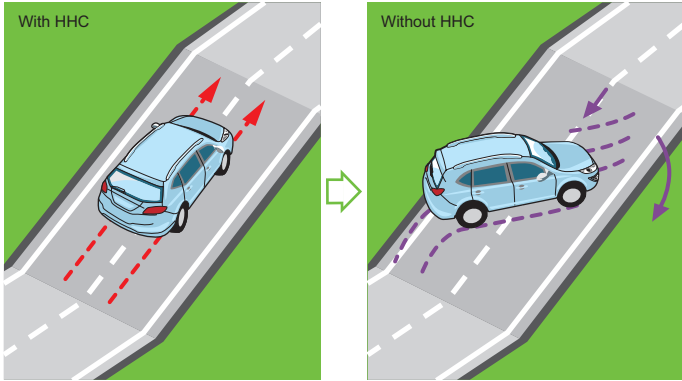
**For example:**

- The vehicle is running with tire chain.
- The vehicle is running on deep snowy or spongy road surfaces.
- The vehicle gets stuck (e.g., stuck in the muddy road), and needs to be moved back and forth.

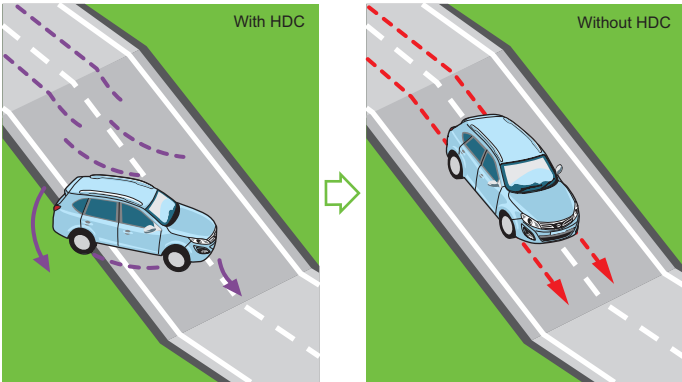
Otherwise, activate the ESP.

# HHC and HDC

HHC is short for Hill Hold Control. It is a subsystem of ESP. HHC is the integrated function of ESP and allows the driver to easily move his/her foot from the brake pedal to the accelerator pedal when starting on slopes without using the parking brake to avoid rolling accidents.



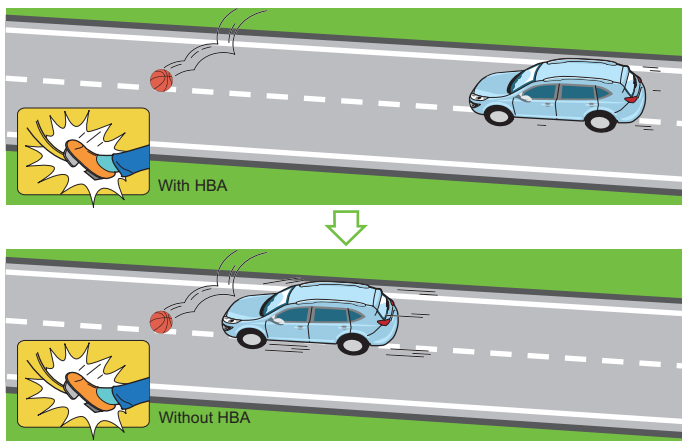
HDC is short for Hill Descent Control. It is a subsystem of ESP. HDC is an additional function in ESP system related to driving comfort. In the downhill process, the HDC exerts the brakeforce to drive down the slope actively through ESP without depressing the brake pedal.



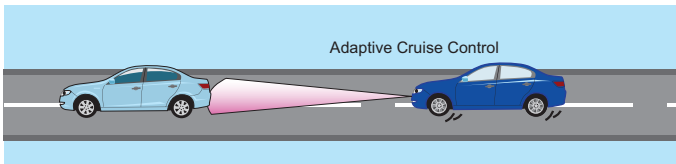
AUTO HOLD will keep the vehicle static automatically according to the driver's braking needs; the braking will be released automatically when the driver is tested to have intention of starting by the system (e.g., depressing the accelerator pedal); it may ensure the convenience of vehicle starting under auto release condition based on the ramp information and make the vehicle static by supercharging actively when the braking force is insufficient.

# HBA

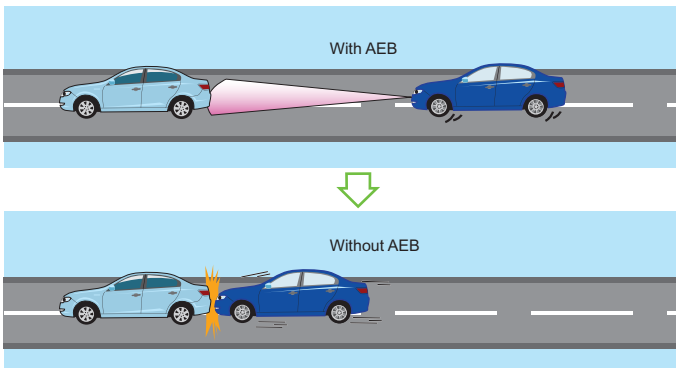
HBA is short for Hydraulic Brake Assist. HBA will produce a braking pressure larger than that of normal braking when you depressing the brake pedal quickly to gain shorter braking distance in emergency. The assist braking system will be closed automatically when the brake pedal is released, and then the braking system will return to its normal working state.



ACC is short for Adaptive Cruise Control, which detects the relative distance and speed between this vehicle and the vehicle ahead based on the millimeter-wave radar mounted behind the front grilling and the smart forward camera mounted on the front windshield. ACC may implement braking to the vehicle to stop it when the front vehicle is stopped and the vehicle will restart under specific conditions. Thus, there's no need of operating the brake pedal and accelerator pedal actively when driving in expressway or in the queue. Besides, the driver doesn't need to stop the vehicle actively when driving in congested road and the front vehicle stopped; and this vehicle will start automatically when the front vehicle starts. The system may make the vehicle run at a set constant speed without depressing the accelerator pedal when there's no vehicle driving in the front, enhancing the comfort greatly.



AEB is short for Autonomous Emergency Braking. AEB detects the relative distance and speed between this vehicle and the vehicle ahead and it will implement braking to the vehicle automatically when detects the impending impact. The system will increase the braking force automatically to avoid or mitigate impact when the driver is applying braking but it's insufficient to avoid the impact.



# AEB - Pedestrian Detection System

This system can detect the pedestrian in front of the car by the millimeter-wave radar mounted behind the front grilling and the smart forward camera mounted on the front windshield and actively assist the driver to avoid or mitigate the pedestrian collision and accordingly reduce the possibility of an accident within its scope of capacity. This system can alert the driver of possible collision, assist the driver during braking when the car is ready for emergency braking and trigger auxiliary function of active brake.

## Proximity Alarm

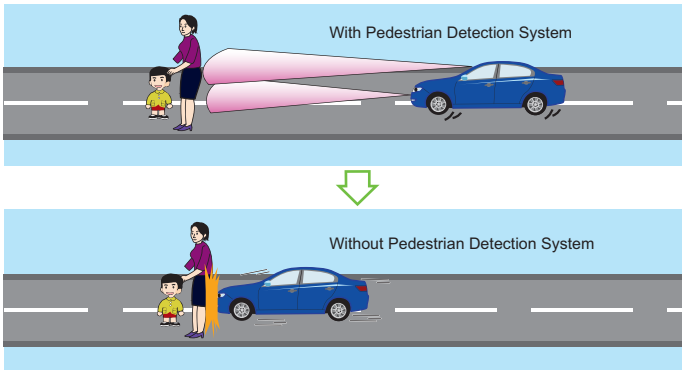
If detecting possible pedestrian collision accident, this system can, within the speed range of 30km/h~64km/h, alert the driver through audible alarm and warning light of the instrument cluster to actively implement the braking. The alarm time varies based on actual traffic conditions and the driver's actions. Meanwhile, the car is ready for emergency braking at any time.

## Autonomous Emergency Braking

If the driver makes no response to the alarm, AEB may automatically implement full braking within the speed range of 4km/h~64km/h. In possible collision risk, AEB reduces the speed by braking and thus reduces the possibility of an accident.

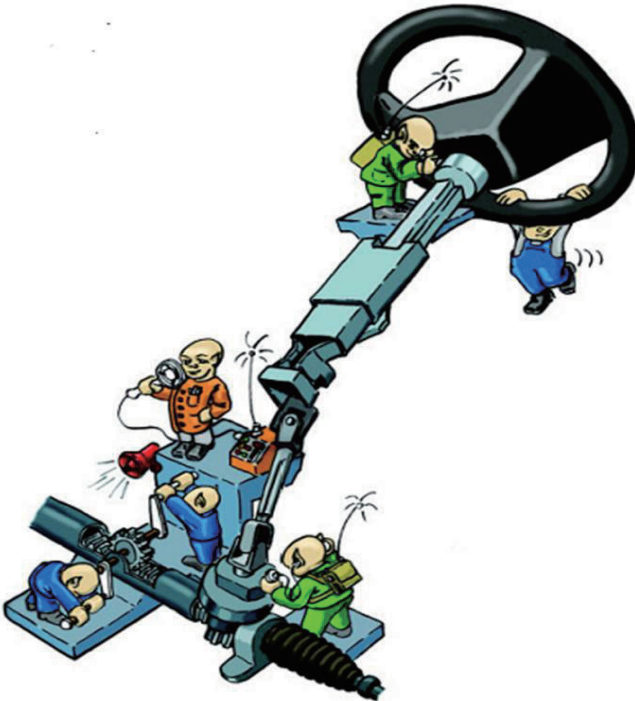
The AEB function in the pedestrian detection functions is included in AEB. The on/off methods are described in AEB.

It is required to detect the accurate information about pedestrian as far as possible to ensure correct triggering of this function.



EPS is short for Electric Power Steering system which directly relies on motor to provide auxiliary torque. EPS is mainly composed of torque sensor, motor, decelerating mechanism and electronic control unit (ECU).

By detecting the driver's torque input and signals of whole car conditions, for example, car speed and engine speed, the ECU controls the torque output of the assist motor in real-time manner, so as to realize the best steering assist, ensure flexibility at low speed and stability at high speed, and improve driving comfort and car safety.



Compared to a traditional hydraulic steering system, EPS has the following advantages:

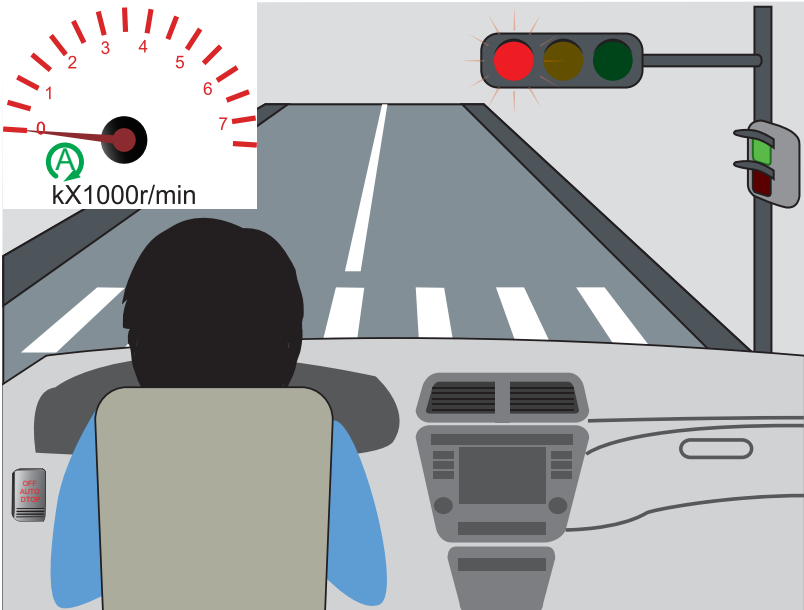
- It can significantly reduce fuel consumption;
- The steering assist can be adjusted by the control unit to ensure both flexibility at low speed and stability at high speed and realize sound steering returnability.
- It is structurally compact, light, with good production line and easy for maintenance.

# Start Stop System

The Start Stop System is a micro hybrid power technology. This device may stop the operation of the engine when the traffic light is red or when the vehicle is in a traffic jam and it will start the engine rapidly when sensing that the driver has the intention of starting such as depressing the clutch pedal and brake pedal.

Advantages:

- In urban areas, it can reduce the oil consumption effectively in idling and decrease the emission of noxious gas.





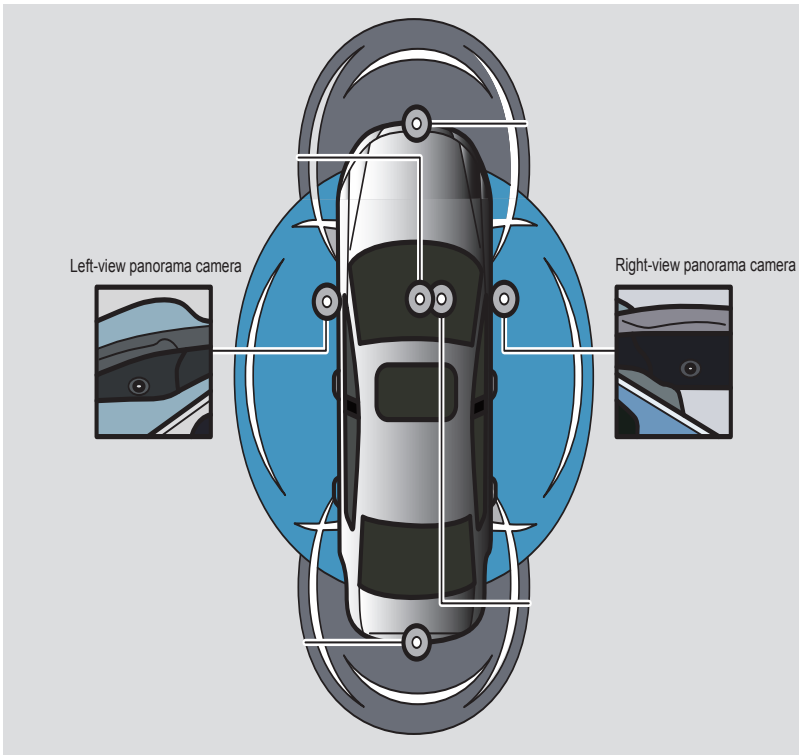
# Panorama Parking System

The panorama parking system consists of a control host module and four 180° cameras. Images in the front, rear, left, and right directions relative to the vehicle are captured, spliced into the 360° bird's view through the image processing algorithm, and displayed on the display of the audio system.

The panorama parking system can display the parking information in four modes:

- Panorama + front view
- Panorama + rear view
- Panorama + left view
- Panorama + right view

The user can switch between the aforesaid modes by touching the display screen of the audio system.



# Instructions for Driving Assist System

## Forward Collision Warning System

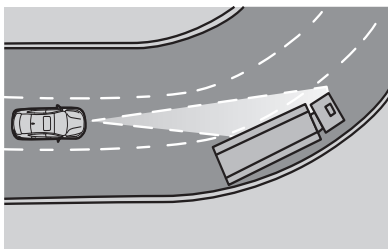
When collision risk is detected, the forward collision warning system can remind the driver of taking necessary measures through instrument cluster to avoid collision and improve the vehicle safety.

### Operating Principle

It consists of the millimeter-wave radar and smart forward camera. The front vehicle can be detected by the millimeter-wave radar mounted behind the front grilling and the smart forward camera mounted on the front windshield; the vehicle location and the distance from the vehicle can be measured by the ranging module; relative speed of two vehicles can be measured using tracing method to obtain pre-collision time. This system can trigger the alarm if it is not greater than the pre-collision time threshold and remind the driver in the form of trip computer graphics and audible alarm.

### Warning:

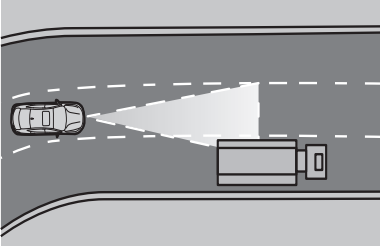
- The forward collision warning system cannot cover all the driving, traffic, weather and road conditions. The driver must keep this in mind when using this function.
- The forward collision warning system is an auxiliary system. It does not take the place of the driver's awareness and judgment of the vehicle. The driver shall be fully responsible for safe distance and safe speed.
- The forward collision warning system cannot detect narrow objects such as animal or bicycle as well as slowly-moving objects.
- In severe weather (like rain or snow), microwave radar may delay or fail to identify the front vehicle, resulting in restricted or ineffective functions of the forward collision warning system.
- Please pay special attention to that the forward collision warning system may experience false alarm or alarm failure in the following conditions:



### Driving onto a curve road:

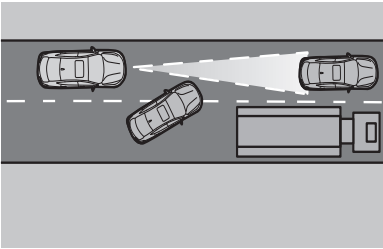
The forward collision warning system may respond to the cars on adjacent lanes and give alarm.

# Instructions for Driving Assist System



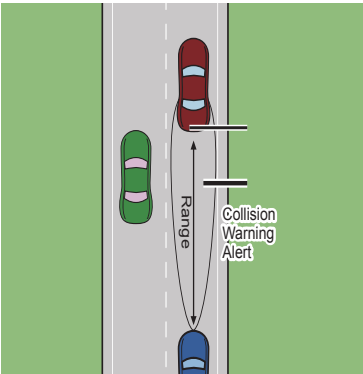
## Driving out of a curve road:

The forward collision warning system may respond to the cars on adjacent lanes and give alarm.



## Lane changing of other vehicles:

If any other vehicle which is very close to your car changes to your lane, the microwave radar may fail to timely identify the vehicle changing the lane. In this case, the forward collision warning system will not trigger the alarm.



## Structural composition:

- Radar, camera and controller
- Switch of forward collision warning system
- System work and indicator light

# Instructions for Driving Assist System

## Lane Departure Warning System

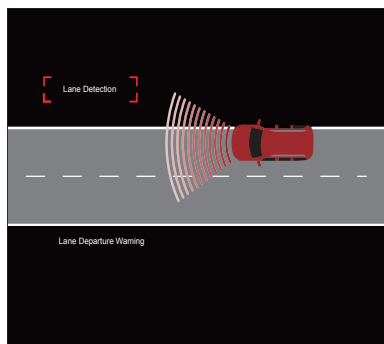
The lane departure warning system acquires the front image by smart forward camera mounted on the front windshield and determines the real-time position of the car to the lane line. When detecting that the car departs from the lane, it reminds of the driver in the form of image or sound.

The system is designed with the alarm function to reduce the occurrence of any accident due to unconscious lane departure.

The lane departure warning system has no control on movement of the car. The driver is held responsible throughout the driving, even if this system is enabled.

The car may depart from the lane due to many factors such as the driver's fatigue or distraction, even resulting in car crash. The lane departure warning system can identify unconscious lane departure and give alarm to remind the driver in most cases. However, the driver cannot rely on this system completely or even drive fatigued or do other things that may divert attention during driving.

In case of any alarm given by the lane departure warning system, please do not panic or turn the steering wheel suddenly so as to avoid car instability. In case of any alarm, the driver should pay attention to surroundings again and stably regain focus.

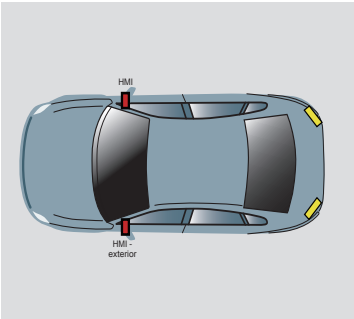


The alarm is not certainly given upon occurrence of lane departure even if the system is enabled unless relevant conditions are met:

- System is enabled without fault;
- Vehicle speed is  $\geq 60\text{km/h}$ ;
- Lane line is detected by camera;
- The system determines current lane departure is performed accidentally and no alarm limitation conditions exist.

## Blind Zone Detection System

The blind zone detection system consists of two 24G microwave radars and warning light and detects the driving conditions within the blind zones at both sides behind the car by using the ultrasonic wave radars mounted at both sides of the rear bumper. When any other car or object is within the detectable area, this system will make its alarm light turn on and give audible alarm to remind the driver.



### System Function

The blind zone detection system can fulfill the functions of BSW, LCW and RCTA simultaneously.

# Essentials for Getting on and off the Car

- Before getting on/off the vehicle, check the surrounding conditions, specially the rear of the vehicle.
- When getting on or off in wet condition, pay attention not to let your shoes carry snow or water, to avoid sliding on pedal and cause accident.
- Adults must help children to get on or off.
- Get into a good habit when getting on or off the vehicle.

## Essentials for getting on the vehicle



1. Make sure that the surrounding condition is safe.

Stand in front of the vehicle to check whether there is any vehicle coming.



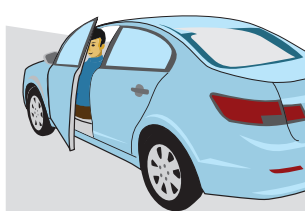
2. Confirm whether it is safe in the rear of the vehicle.

Stand at the side of the vehicle to check whether there is any vehicle coming.



3. Open the door.

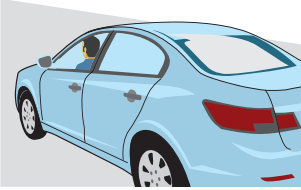
Please open the door to a degree that just suitable for your body to enter when getting on. Enter the vehicle quickly and don't let your hand off the door.



4. Close the door

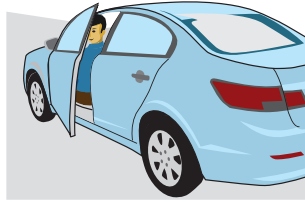
Shut the door when your hand is 10-20cm away from the door, and make sure that the door is closed tightly.

## Essentials for getting off the vehicle



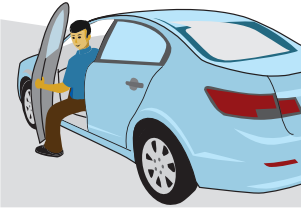
1. Make sure that it is safe in the rear of the vehicle.

Check whether there are pedestrians or vehicles behind through interior and exterior rear-view mirrors.



2. Open the door.

After making sure it is safe, unlock the door and open the door slightly. After making sure it is safe again, open the door.



3. Make sure that it is safe in the rear of the vehicle.

After opening the door, get off the vehicle quickly but don't let your hand off the door.

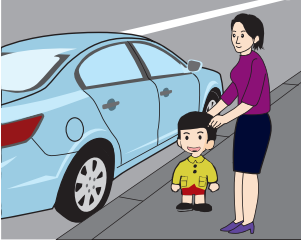


4. Close the door

First push the door to a position about 10-20cm away and then use hard force to close the door and confirm whether the door is closed tightly. After locking the door, leave from the rear of the vehicle.

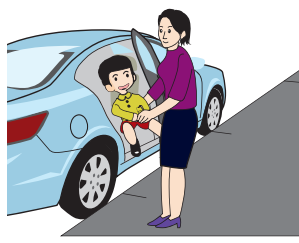
# Essentials for Getting on and off the Car

## Essentials for child to get on and off the vehicle



### 1. Getting on

After making sure that the surrounding is safe, the adult open the door to let the child get on.



### 2. Getting off

The adult should get off first. After making sure that the surrounding is safe, the adult open the door to let the child get off.



## Check before starting

Before starting, you should give daily check and regular maintenance to your vehicle. If any abnormality is found (such as abnormal sound, unpleasant smell, and oil stains on the ground), please contact GAC MOTOR dealer for inspection.

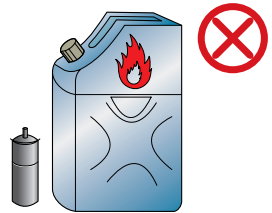
### Height of luggage in vehicle

If you want to carry luggage in vehicle, the height of your luggage should not exceed that of the seat. Otherwise, it may injure passengers in vehicle when there is an emergency brake or collision.



### Don't carry hazardous articles.

Don't carry hazardous articles in vehicle. Otherwise, it may result in serious risks.



### Don't put anything in the footwell

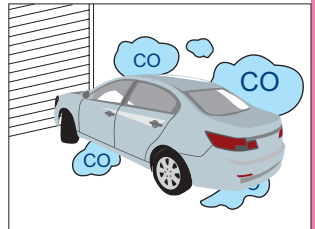
Do not place anything in the driver's footwell. Otherwise, the objects may slide into pedal area and hinder the driver's operation to the pedals. When there is an emergency brake or urgent cases occur, the driver can't operate the brake pedal or accelerator pedal, which may cause accidents.



### Pay attention to exhaust emission

Make sure that the trunk lid is closed fully. Otherwise, the exhaust may enter the vehicle.

Please don't run the engine at idle speed in a garage or other poor ventilation places for a long time. Otherwise, the exhaust may enter the vehicle and cause carbon monoxide poisoning.



# Precautions for Driving

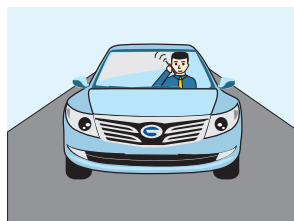
## **Don't turn off the engine when the vehicle is running.**

Don't turn off the engine when the vehicle is running. Otherwise, the vacuum booster will be disabled and cause the brake pedal stiffening and hazard potential.



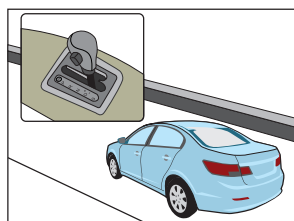
## **Don't answer your mobile phone during driving**

Don't answer your mobile phone during driving, because this may affect your attention and judgment to surroundings and cause traffic accidents.



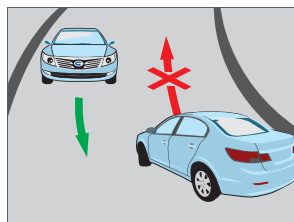
## **Downhill road**

If the downhill road is too long, please select low gear speed according to driving speed and make use of engine to brake. It is strictly forbidden to slide in neutral.



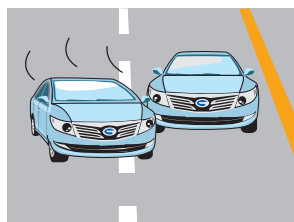
## **Meeting**

When meeting, please clearly identify the status of the vehicle passing you and the road condition. Properly reduce vehicle speed and select commodious and solid road for meeting. Follow the "three courtlinesses" of first give away, first lower speed and first stop.



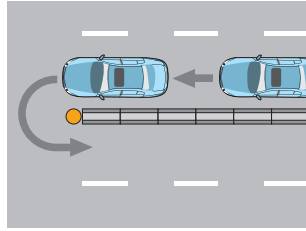
## **Overtaking**

When overtaking other vehicles, you should select a wide and straight road section with good visibility. The overtaking speed should not exceed the limit speed specified by Traffic Law. Don't do this when the above conditions aren't satisfied.



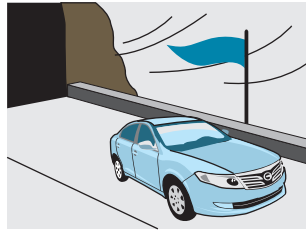
## Turning around

When turning around, select plazas, intersections or flat, commodious and solid road sections to do so under safe circumstances. Avoid turning around on slopes, narrow roads or under traffic jam conditions. Do not turn around at bridges, tunnels, city gates or railway crossings.



## When side wind is strong

When the side wind is strong, you should reduce the driving speed. When driving on tunnel ports, bridges, dams and overtaking large-duty vehicles, the vehicle is easy to be affected by side wind. At this moment, please firmly hold the steering wheel and reduce driving speed.



## Be dazzled by oncoming headlights

If you are dazzled by oncoming headlights, avert eyes to right side to escape dazzling light. Or take road curb as driving reference object. If the light is very strong, you can reduce the vehicle speed gradually and park the vehicle on road side if necessary.



## About malfunction indicator light

During driving, if the high engine coolant temperature indicator light and the Low engine oil pressure warning light are on, park the vehicle on road side immediately under safe condition and ask GAC MOTOR dealer whether you can continue driving.



# Precautions for Parking

## **Do not park the car near inflammables and explosives.**

Do not park the car near inflammables and explosives such as dry grass, wood and oil tank. Otherwise, it may cause fire or explosion due to tail gas or heat of exhaust pipe.



## **Do not emit tail gas toward green belts.**

When parking the car near green belts, please pay attention to the parking direction and do not emit tail gas directly towards them to avoid damage.



## **Do not place inflammables and explosives inside the car.**

When parking the car in hot weather, some inflammables and explosives such as lighters may combust spontaneously and bottles and tanks may crack because of high interior temperature and cause casualties.



## **When leaving the car**

When leaving the car, please pull up the parking brake handle, turn off the engine, pull out the ignition key and carry it around, and lock the car.

When leaving the car, do not leave valuables in it. It's better to carry them along with you.

For cars equipped with EPB, be sure the car is in parking state before leaving the car.

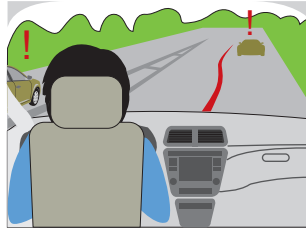


# Precautions for Various Road Conditions

The uncertain and changing nature of complex traffic conditions, which involve persons, cars and roads, lead to the randomness and contingency of traffic accidents. Therefore, a driver should maintain alert mind, stay calm under pressure and has good driving skill to ensure safety. The driver should quickly respond to a driving emergency and take measures. Also, a driver should be capable of handling a dangerous situation, reducing losses as lower as possible and simplifying complexities.

## Driving on bustling roads

A bustling road with complicated traffic conditions is adverse to driving safety with massive crowds and moving cars. Therefore, a driver must stay focused, concentrate on pedestrians and other cars, and make correct judgments. On a bustling road, drivers should drive orderly in the car queue and do not overtake.



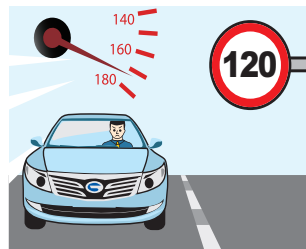
## Driving at night

When driving at night, make sure that the car lights work normally and meet regulations. Control the speed according to visibility and do not overtake if possible. When overtaking, change high-beam and low-beam lights for several times and use the horn if necessary; then drive past front cars after they give way for your car. In addition, pay attention to the safety of persons riding bicycles and pedestrians since they are easily dazzled by car lights and can't see clearly.



## Driving on expressway

When driving on a freeway, always hold the steering wheel firmly. When changing lane or overtaking, keep the steering angle as small as possible to prevent the fast-moving car from drifting. When braking, do not press down the pedal in one sudden move, to prevent brake deviation.



Also, always follow the traffic rules and do not exceed the limit speed even on a freeway.

# Precautions for Various Road Conditions

## Driving on mountain road

When driving on mountain road, it is safe to offer to give way to other cars. Drive on the right side; reduce car speed if necessary and honk the horn in advance.



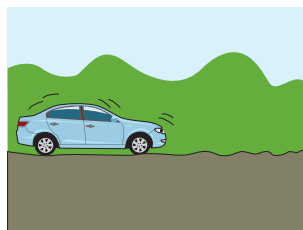
## Driving on muddy road

When driving on a muddy road, drive slowly to keep stable.



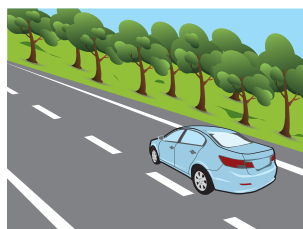
## Driving on uneven road

When driving on an uneven road, drive slowly to prevent chassis scratching.



## Driving on wide and straight road

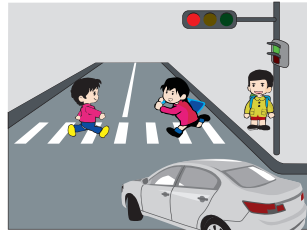
Driving on wide and straight roads is accident-prone because simple operation and unchanged view may make the driver lose focus and cause fatigue. Therefore, the driver should still focus on driving at proper speed on wide and straight roads.



# Precautions for Various Road Conditions

## Driving at crossroad

It is often very crowded at crossroad. Traffic accident is easy to occur at a crossroad; therefore, the driver here should be on a high alert. Drive according to the traffic light if there is one. Where there is no traffic light at a crossroad, drivers should notice movement trend of pedestrians and vehicles in advance before entering into the crossroad to guarantee safe and smooth pass.



## Driving on curve road

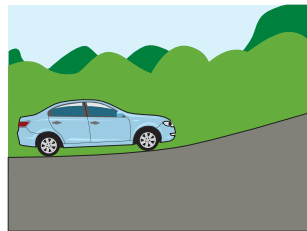
Fast moving cars have great inertia and centrifugal force. The higher the car speed is, the sharper the steering angle is, the greater the centrifugal force is. Under such conditions, cars are prone to skidding. Cars with high gravity center are prone to rollover accidents on roads with poor adhesion conditions. Reduce speed before making a turn. Detect meeting cars, barriers and hazards in advance and respond according to actual conditions.



## Driving on hill road

Before going uphill, carefully check car conditions for proper brake performance and even load. Try the brake function if necessary. Finish going uphill with low gear and do not change gears midway.

Carefully check brake performance before going downhill. Engine-off coasting and neutral-position coasting are prohibited. In case the brake does not work, fully use the engine traction resistance to lower car speed. Use natural barriers as resistance to weaken car inertia so that the car stops at the barrier and is out of danger.

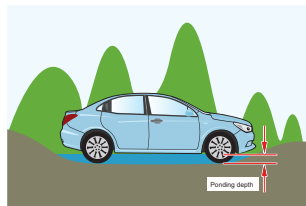


# Precautions for All Weather

## Driving on rainy days

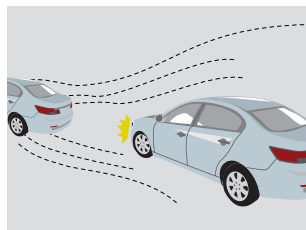
Only after checking for good conditions of brake, wipers, lights, horn and steer mechanism, can one drive in rainy days. The driver may lower the speed according to circumstances and keep a larger distance between cars. It is better to not overtake. In case of abnormalities, take early measures and avoid sharp turning and braking, so as to prevent skid and rollover.

As driving in rainy days on ponding roads, detect ponding conditions before passing. For roads with indications, ponding depth shall not be larger than the minimum clearance between the car base and the ground (refer to "Dimension" in "Car Parameters" section of the *User's Manual*) Slowly pass such sections without flameout or stopping the car midway. Take a detour to avoid sections where ponding depth is unidentified.



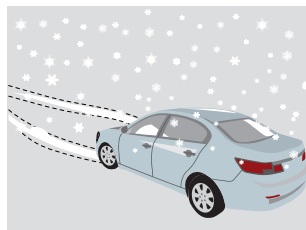
## Driving on foggy days

Because the visibility is low and vision is blurred on foggy days, it is difficult for the driver to clearly see road conditions, which causes driving hazards. Drive slowly and turn on foglights and taillights. If the fog is too thick, pull over the car and drive after the fog lifted.



## Driving on icy and snowy days

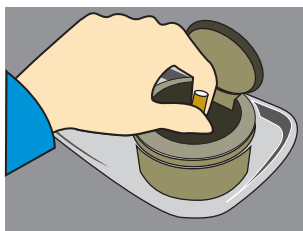
Sliding road surface and poor adhesion make the rear wheels prone to sliding and turning without moving forward. Under such conditions, slowly start the car and drive at low and constant speed. Use the brake as less frequent as possible, and avoid sudden braking. On snowy and icy roads, the braking distance is 3 times longer than that on common asphalt pavement. Therefore, keep sufficient distance with front cars. Make advanced preparation for stopping the car. Neutral-position coasting is strictly forbidden. The driver may have view fatigue and be dazzled by light reflection of snow. Under such conditions, the driver must slow down and stop the car, and can only drive again until his/her vision is recovered.





### Put out the cigarette.

Throw the cigar end and match into ashtray after the engine is stopped. Flick the cigarette inside the ashtray to avoid flying sparks. Timely clean the ashtray, and don not leave too many cigarette butts or other inflammables in it.



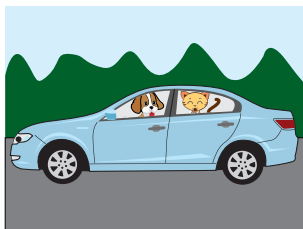
### Pay attention to coolant expansion tank.

Please do not open the cover if it is still hot. Otherwise, the steam or hot water may blow out and cause serious burn.



### Pets in car

When carrying pets in car, make sure to not let them run around so that they won't disturb the driver.



### Animal rushing onto the road

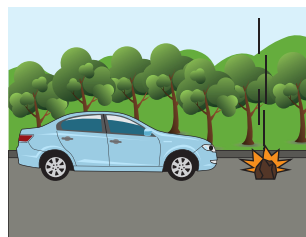
To avoid startle the animal, it is better to not honk. Check traffic conditions in rearview mirrors, and make sure that no hazard is caused when giving way to animal.



## Other Precautions

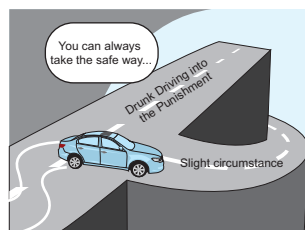
### Objects falling off the front car

If there is a safe distance with the front car, try to reduce car speed and change lane. If your car is too close to the front car and your front windshield is broken by the objects, slow down your car and contact GAC MOTOR.



### Avoid drunk driving

Drunk driving is extremely dangerous. You must aware that even one cup of alcohol can affect your judgment. If you had a drink, ask others to drive. Do not drive after drinking.



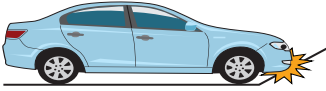
### Accident handling

Get out of the on-fire car immediately and call "119". Inform both the firemen and your GAC MOTOR dealer.

Note: Liquid extinguishers are prohibited!



**Pay attention to the possible damage on your car base.**



Driving from flat to uphill and downhill, and from uphill and downhill to flat



Passing uneven sections or sections with car track



Pulling over along road shoulders



Parking where there are blocks

## Meaning of routine check

Routine check is crucial to safety. Parts in bad conditions must be checked for safety of the driver, the passengers and other people.

Frequent routine check helps save maintenance costs.

Frequent routine check helps reduce air pollution and noises.

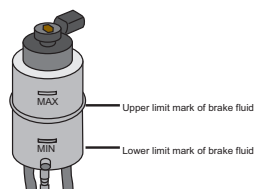
Frequent daily check can prevent danger and reduce repair cost.

The car owner is obliged to carry out routine check and regular maintenance.

## Inspection of engine compartment

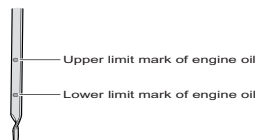
### Brake fluid reservoir

Check whether the brake fluid level is between the MAX and MIN marks on the side of the tank when the engine cools down. The brake fluid level shall be between the upper limit "MAX" and the lower limit "MIN". Fill with brake fluid if the level is below "MIN".



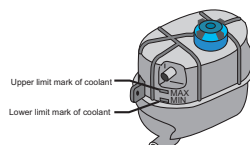
### Engine oil level

Park the car on flat road and open the hood. Take out the dipstick and wipe off the old oil stains with clean cloth. Plug it in until it reaches the end. Take the dipstick out to see if the oil level is between the upper limit "MAX" and the lower limit "MIN".



### Coolant level

When the engine is in cold state, check whether the coolant level is between the upper limit "MAX" and the lower limit "MIN".

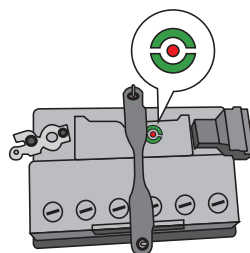


## Battery capacity

Blue outside and red inside in check indicator means sufficient energy.

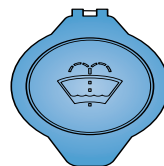
Red outside and white inside in check indicator means inadequate liquid of the battery.

White outside and red inside in check indicator means insufficient energy.



## Windshield cleaning liquid

Add the washer after use.



## Interior check

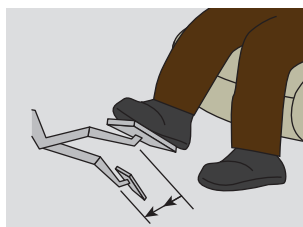
### Check whether the engine runs in good condition.

Start the engine and let it run at idle speed. Check whether there is abnormal sound, and then slightly press the accelerator pedal to see whether the engine runs in good condition.

### Checking brake pedal

Start the engine and give the brake pedal a hard press. Check the distance between pedal and floor.

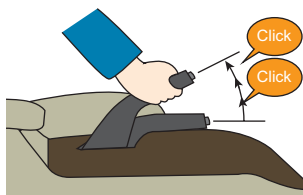
If you feel like stepping on the air when stepping the pedal, there might be air or leakage in the brake system and may cause mal function of the brake. Please contact your GAC MOTOR repair shop immediately.



### Check parking brake

Pull the mechanical parking brake handle up to upper limit position, and check whether parking brake handle is locked.

For cars equipped with EPB, the parking condition can be detected through red EPB indicator. If the car is shut down for a long time and the instrument has no display, please pull up the EPB switch to confirm that the car is in parking state.



# Daily check

Check the injection of windshield cleaning liquid  
Enable the windshield washer squirt function,  
and check whether it works normally.



## Inspect the action of wiper

Operate the windshield wiper handle to make  
the wipers work, and then check whether the  
wipers work normally at high gear and low gear.



## Exterior check

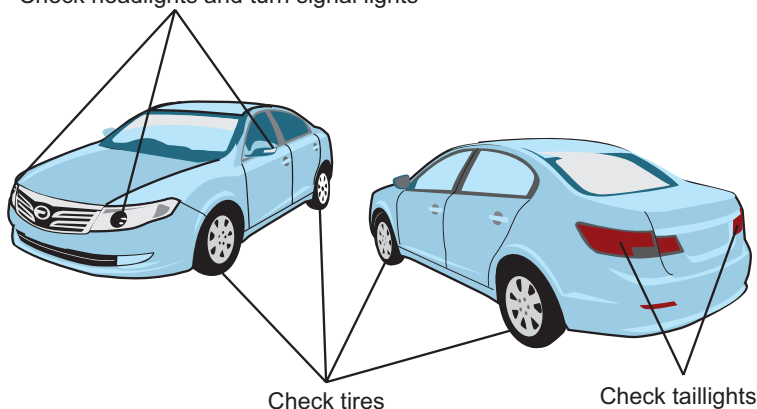
### Lights

Check whether headlights and brake lights work normally. Check whether the  
appearance is clean and free from damage.

Turn on headlights, taillights, turn signal lights, position lights and number plate  
lights to frequently check whether these lights work normally, and whether their  
appearances are clean or damaged.

Step on the brake pedal for several times and check whether the brake light works  
normally.

Check headlights and turn signal lights



## Check tire condition

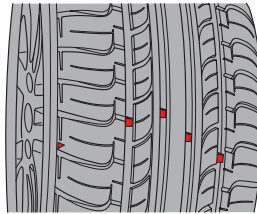
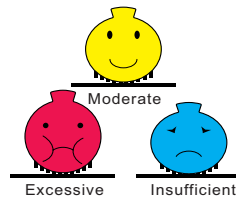
The service life of tire depends on tire pressure, driving style and tire assembly condition. Tires should be inflated to specific pressure and checked regularly.

Check the grounding condition of tires, and check whether tire pressure is sufficient. If permitted, please use a tire pressure gauge to check the tire pressure in cooling condition.

Visually check whether there is crack or damage on grounding surface and side surface of tires, or whether there is any nail or rock inset on the surface.

Visually check whether there is massive tire abrasion, local abrasion or broken tire.

Visually check the abrasion condition. Change the tire worn to the abrasion mark.



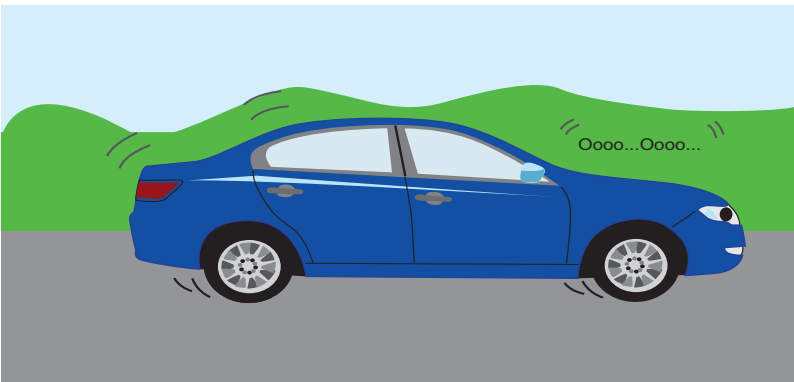
## Check during driving

### Check braking effect

While driving slowly on dry road, step on the brake pedal to check whether the braking performance is normal.

### Status at low speed and acceleration speed

When the engine is warm, check whether the engine runs normally at idle speed. Slowly step on the accelerator pedal, and check whether the accelerator pedal moves smoothly. Check whether the engine runs smoothly, and whether there is engine fault or knock.



How to save oil during driving? .....	48
What damage will be caused to the car by poor quality fuel? .....	49
Why does the car vibrate (with light noise) in emergency braking? .....	50
Before stopping the car, why the engine speed should be reduced from the maximum value gradually(3 to 5 minutes)?	50
In a few minutes after cold start or engine off, why is there sometimes a light snapping sound from the bottom of the car? .....	51
Why is there "cooing" sound when the brake pedal is released for starting the car with automatic transmission (AT)? .....	51
Why cannot "N" gear be used during coasting of AT cars? ....	52
Why sometimes does the manual brake have insufficient brake force to stop the car? .....	52
Why does the car depart? .....	53
Why is there dripping from the bottom of the engine compartment? .....	54
What should be noted for battery use? .....	54
Why do the left and right lights have different irradiating direction? .....	55
Why does the radio have noise sometimes? .....	56
Why does the car deviate from pavement in navigation?	
Why can't the audio system with navigation set date? .....	56
Why cannot the wiper wipe clean? .....	57
What should be noted in daily use of wiper? .....	58
How to deal with the fog on windows? .....	59
How to rapidly reduce the interior temperature in hot days? ..	60
Why does the air vent have loud noise when turning on A/C in hot days? .....	60



Why does the radiator fan still run after the car stops? .....	61
Why cannot the rear doors be opened inside the car? .....	61
Why is there “proofing” airflow sound inside the car when the back windows open? .....	62
How to remove stains from trim? .....	63
How to remove unpleasant smell from a new car? .....	63
Why does the paint surface of door handle groove have scratches? .....	64
Why do the tires have bulges? .....	65
Why is the engine of the hydraulic tappet structure and why does “rattling” sound occur when the car is started in cold conditions for some time? .....	66
How to avoid traffic accidents? .....	66
Why the engine should be kept at idling for some time (3 to 5 minutes) after car cold start? .....	66
How to deal with a serious traffic accident? .....	67
What is car care? How to carry out car care? .....	68
For the G-DCT model, why is there a squeaking sound in the engine compartment when a door opens? .....	69
For the G-DCT model, why is there a click sound during gear shifting? .....	69
Why is there “clutch overtemperature” information shown by the instrument? .....	69
Why does the car slide backward on a moderate slope? .....	70

### How to save oil during driving?

- There are many factors causing high fuel consumption, commonly including bad driving habit, dirty air filter, leaded gasoline or poor quality gasoline, blockage of oil nozzle and improper tire pressure or size.
- Correct driving habits concerns many aspects. The most important one is: run the engine at idle speed for a few seconds according to the exterior temperature or engine water temperature after the car starts, and then shift gear to driving position, and slowly press the accelerator pedal.
- During driving, do not press the accelerator/ brake pedal in one sudden move. You should stably accelerate or brake; observe front traffic conditions; leave safety distance with the front car in downtown. If the red traffic light suddenly lights up, you should release the accelerator pedal early to coast through. Do not run the engine at idle speed for a long time. Keeping car speed at 90~100 km/ h on the expressway can reduce fuel consumption. Cruise control can accurately control accelerator and keep constant car speed, contributing to fuel consumption reduction.
- Keeping your car in good condition is also an effective way to save fuel, for example, whether spark plug works normally, whether air filter is clean, whether gasoline or engine oil filter is clean, or whether fuel nozzle is blocked, etc. Moreover, keep normal tire pressure. Insufficient air pressure will increase fuel consumption. Please bear in mind that it is better to replace with a tire of manufacturer-recommended brand and size. Last, choose suitable clean gasoline, because high-quality oil product is crucial to fuel saving.
- For new cars in run-in period, the fuel consumption may be higher than normal, but a good driving habit may help. For example, keeping the driving speed in city or suburb at 50-80 km/h and the rotation speed of engine between 1500-3000r/ min can effectively reduce fuel consumption in run-in period.
- For cars with automatic transmission, the gear shifting time is determined by the use of accelerator. Gear changing takes shorter time with low acceleration. While with high acceleration, in order to get more motivation, the car stays in low gear for longer time by the gearbox, consuming more fuel. Generally a 1/4 of full accelerator stroke is suggested when driving in city.

## What damage will be caused to the car by poor quality fuel?

Poor fuel quality will produce a great quantity of carbon deposit. The piston with carbon deposit will cause powerless acceleration, difficult startup, increased fuel consumption and abnormal wear.

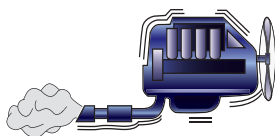
If paraffin wax and sulfur contained in fuel exceed the standard, the acidic materials produced during combustion will corrode the engine seriously.

Impurities mixed in fuel will block filter and fuel line. In severe case they will cut off the fuel line and increase mechanical wear.

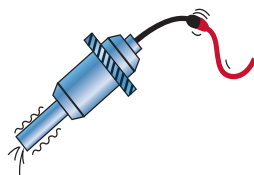
If water mixed in fuel, it will corrode parts and lead to failure of additives in fuel to produce more gum, thereby shortening the service life of the engine.

Good fuel quality has to be of the following points:

- Strong accelerating ability
- Air-lock prevention
- Strong anti-knock ability
- Corrosion resistance
- Powerful movement
- Smooth running of engine
- Less fuel consumption
- Difficult to go bad and produce gum



Insufficient octane number (i.e. gasoline label) will cause engine knock.



Excessive arene and alkene will cause excessive gum level to block the fuel line and fuel spray nozzle.

### Why does the car vibrate (with light noise) in emergency braking?

When the emergency braking is applied, in order to guarantee the shortest braking distance and ensure that the car does not lose the steering at the same time, the vehicle-mounted ABS module will play a role in distributing braking force to tires to make the tires in altered states of rolling and coasting in accordance with the computer commands, so the driver may feel vibration of car body and brake pedal.

When ABS is in operation or self-check, the motor in ABS will run for a short time and the valve body will open and close frequently. The movement of motor and valve body will produce slight sound.



Above conditions are normal, and please rest assured.

### Before stopping the car, why the engine speed should be reduced from the maximum value gradually (3 to 5 minutes)?

The rotation speed and temperature of the turbocharger reach the maximum values when the engine operates under maximum output or maximum torque condition, at this time, before being stopped, the engine needs to operate for a while at medium speed and idle speed or under light load conditions, to make the engine still maintain a certain lubricating and cooling capacities so as to lower the operating temperature of the turbocharger gradually, so it can prevent the turbocharger from running with fuel starvation and avoid the formation of carbon deposit due to carbonization of residual lubricating oil in the bearing or intermediate housing.

In a few minutes after cold start or engine off, why is there sometimes a light snapping sound from the bottom of the car?

When the car is started, the exhaust pipe and other parts will expand rapidly due to being heated and produce crackling sound occasionally. Similarly, after the car is flamed out, the exhaust system will shrink due to temperature drop, at this time, it also will produce similar sound. This is common phenomenon of thermal expansion and contraction. It won't cause any damage to the car. Please don't worry.

As the gas exhausted from the engine has very high temperature, when the high-temperature gas goes through the exhaust system in the cold start, the exhaust system will have a rapid temperature rise. The exhaust pipe will expand slightly to produce slight sound due to thermal expansion and contraction. Similarly, after the car is flamed out, the exhaust pipe will shrink slightly due to thermal expansion and contraction to produce slight sound as well.

Above conditions are normal, and please rest assured.

Why is there "cooing" sound when the brake pedal is released for starting the car with automatic transmission (AT)?

When the brake pedal is loosened to start the car with automatic transmission, the engine still transfers power to the car, and the braking force still exists between brake disc and brake pad, so it makes frictional sound. Such sound becomes "cooing" sound when going through the compartment. Most of cars equipped with automatic transmissions have such sound; therefore, it is a common condition in cars with automatic transmissions.

Above conditions are normal, and please rest assured.

### Why cannot "N" gear be used during coasting of AT cars?

The structures of automatic transmission differ from those of manual transmission. Cars with manual transmissions are lubricated according to vehicle speed, also called "splashed lubrication". However, cars with automatic transmissions are lubricated according to pressure. Such pressure is determined by rotation speed of the engine. For example, when vehicle speed is at 40 km/h and N gear is engaged, the transmission is at high rotation speed; while the engine at this moment runs at idle speed. Correspondingly, oil pump of transmission only can provide lubrication pressure for condition at idle speed. If the car coasts at N gear for a long time, the clutch in the automatic transmission will lead to excessive wear due to unavailability of effective temperature reduction.

Therefore, do not switch the gear into N (Neutral) gear when the car is traveling!

### Why sometimes does the manual brake have insufficient brake force to stop the car?

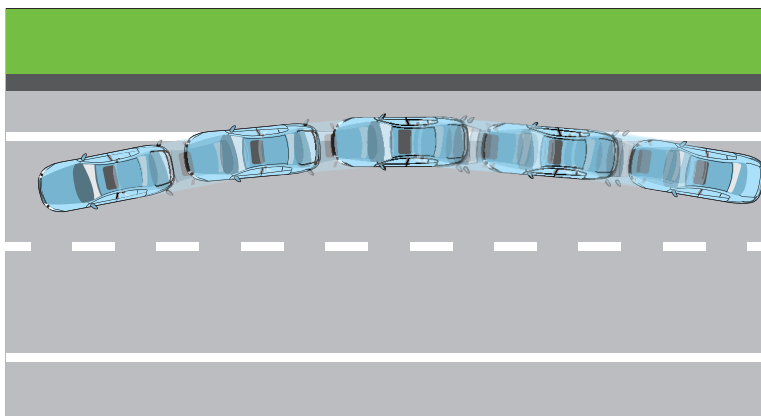
If your car is equipped with electrical park brake (EPB), when activating or releasing the EPB function, don't heave up or press down the switch for a short time. If so, the EPB may be unable to receive signal to normally activate or release the EPB function. At the same time, you can observe the EPB indicator light on instrument panel to check whether your EPB is activated or released.

If your car is equipped with traditional mechanical handbrake, when heaving up it to the first gear, the handbrake indicator light will be on, but the parking force at this moment is very small. We suggest you heaving up the handbrake to upper gear, especially on slope road condition, to obtain bigger parking brake force.

### Why does the car depart?

Before being put into the market, the cars must be adjusted in strict four-wheel alignment and checked in deviation. There should have no obvious deviation during driving. In actual driving process, due to road roughness, wind direction, discord of air pressure in left and right tires and other factors, the car may have slight deviation.

In addition, please abandon the bad driving habits, such as two hands off the steering wheel. In this case, the misalignment of steering wheel due to the influences of external environment factors may also cause car deviation. Moreover, this may also cause potential risk in high-speed driving or emergency braking. To ensure your safety, please don't take your both hands off the steering wheel at the same time during driving.



### Why is there dripping from the bottom of the engine compartment?

This is condensate water produced during the normal refrigeration of A/C. When A/C is refrigerating, in-car air has a sharp temperature reduction on the evaporator of A/C. Water vapor in air condenses into water and drains through weep pipe, and directly drips down to the ground. In addition, when A/C is refrigerating, the temperature of low-pressure pipeline of A/C in engine compartment is lower than ambient temperature. Water vapor in outside air also condenses into water on the surface of low-pressure pipe and drips down to the ground.



### What should be noted for battery use?

If the car cannot start due to low battery voltage, this doesn't indicate that the battery is already damaged. Probably, the battery at this moment may be just in power-lack condition. After being charged, its functions can be fully restored.

The following items should be paid attention to in daily use:

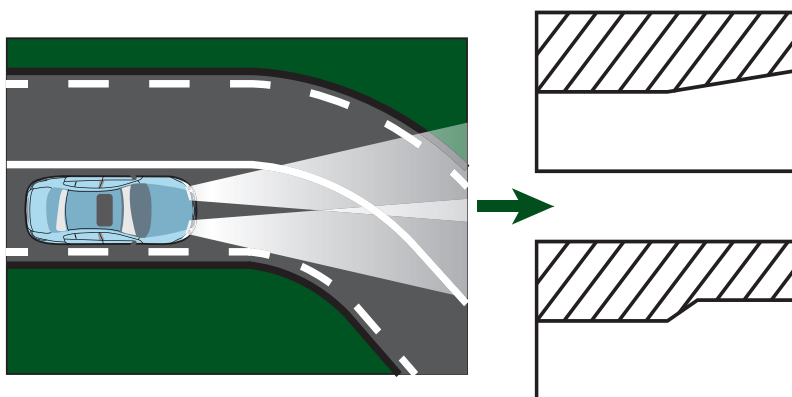
Before leaving the car, please turn off all lights and in-car electrical appliances to prevent battery from discharging for a long time.

If the car will not be used for 15 days or more, please disconnect the negative cable of battery, or start the engine once every several days and keep it running for a while to recharge the battery properly.



### Why do the left and right lights have different irradiating directions?

As the traffic law of China specifies that LHD cars should travel on right side, according to the law of headlight lens, the light directions of all car lights are low on left side and high on right side, i.e. the light directions are high on driver's side and low on passenger's side. Such specification is to avoid interrupting driver's sight on opposite side and light up the road ahead. Therefore, the difference in irradiation direction of left headlight and right headlight meets the regulatory requirements.



### Why does the radio have noise sometimes?

Radio signal is sent out from broadcasting station, received by hidden antenna on the window and then transmitted to the radio after being processed by antenna amplifier. The received signal strength is determined by the following factors. The changes of these factors may affect the receiving effect of station.

1. Too small power output of broadcasting station (Broadcasting station with small power has limited transmitting distance and range).
2. Location of car relative to launch tower (The closer the distance of car to launch tower is, the stronger the signal is).
3. Atmospheric conditions (If there is stronger electromagnetic field in air, it may interrupt the signal transmission).
4. Frequency band broadcasted by station (FM or AM).
5. Ground conditions (high-rise buildings, hills or surrounding vehicles will interrupt the FM signal and cause intermittent sound hearing).
6. Barrier between launch tower and car.

### Why does the car deviate from pavement in navigation? Why can't the audio system with navigation set date?

Navigation system positions the car with GPS satellite positioning signal, vehicle speed signal and gyroscopic signal. When GPS satellite positioning signal is stronger, the navigation system can calculate car's exact position. However, if the satellite positioning signal is weaker for a long time (such as in tunnel), the navigation system cannot correct the error of vehicle speed signal and gyroscopic signal according to the satellite positioning signal. At this moment, the calculated car position is not accurate enough, so it may occur the situation that the car position deviates from pavement. When the car pulls out of tunnel, the car position will be repositioned rapidly after being received effective GPS satellite positioning signal.

The date shown on audio system with navigation system can be automatically updated with GPS time. You needn't to adjust the time manually.

## Why cannot the wiper wipe clean?

As the rubber strip of wiper blade is made of rubber and exposed outside and weathered sun light and rain for a long time, the deterioration of wiper blade starts from the time that it is installed.

### Damage that can be recognized with eyes:

Cracks, rusting, deformation, attachments, discoloration, etc.

### Damage that can be heard with ears:

Jumping, vibration and other abnormal sounds.

### Damage that can be felt with hands:

Rubber hardening, looseness of metal parts, etc.



**Phenomenon:** Slim cross stripe occurs to affect the sight.  
**Cause:** The rubber strip of wiper blade has foreign matters or the edge of rubber strip is damaged.  
**Countermeasure:** Clean the edge of rubber strip. Replace the wiper blade if the phenomenon still exists.



**Phenomenon:** The wiper blade gives out abnormal sound and jumps to be unable to rotate smoothly.  
**Cause:** Oil is present on the glass, or the rubber strip is deformed.  
**Countermeasure:** Clean the glass. Replace the wiper blade if the phenomenon still exists.



**Phenomenon:** Spot-shaped water stains appear after the wiper blade scraps.  
**Cause:** The rubber strip is deformed.  
**Countermeasure:** Replace the wiper blade.



**Phenomenon:** The rubber strip cannot fit the glass surface to cause uneven scraping and brushing.  
**Cause:** Rubber strip is deformed or wiper blade frame is deformed, which causes insufficient pressure.  
**Countermeasure:** Replace the wiper blade.

### What should be noted in daily use of wiper?

1. Wiper must be used for rainwater. Wiper blade is namely used to wipe rainwater from windshield. Don't use wiper blade if there is no rainwater. If the wiper blade is used without water, the friction force will increase, and cause damage to rubber blade and wiper motor.
2. Even if there is only a little rainwater, it is also unnecessary to use wiper blade to wipe so little rainwater. Wait until there is enough rainwater on the windshield. Here "enough" doesn't mean a degree shading driver's vision.
3. It is not encouraged to use wiper blade to wipe dust from windshield surface. If you have to do this, please spray some water onto the glass. Never use wiper blade to wipe dust without water.
4. If there are some solid things on the windshield, such as bird's droppings, don't directly use wiper blade to wipe them away. Please first use your hands to clean them. These solid things may cause local damage of wiper blade, and cause the condition that the wiper can't wipe rainwater cleanly.
5. Some earlier waste of wiper blade is directly related to improper cleaning of the car. If the windshield is improperly wiped when cleaning the car, oil film on the surface will be wiped away. First, water cannot drip down smoothly and may stick on glass surface. Second, the friction between rubber blade and glass surface will increase. This is also the reason for intermittent stop of the wiper blade. If the wiper blade is stuck while motor continues to run, it may cause damage to motor.
6. Normally the wiping result can be seen several seconds later after wiper blade stops working. The optimal cleaning effect appears after the water on the surface of glass is dry.

## How to deal with the fog on windows?

### Mechanism of window fogging

Generation mechanism: In winter or on rainy days, inside temperature is higher than outside temperature. Water vapor inside condenses into mist after encountering cold glasses. Misting is a natural condition. The narrower the car space is and the more the passengers in car, the more serious this condition will be.



Treatment: For front windshield and side windshield, you can use A/C to remove mist. For rear windshield, you must use defroster/ defogger to remove mist.

### Working principles of A/C defroster

#### A/C circulation

Switch the A/C circulation mode to "outer circulation" mode to enhance air changing with outside air and reduce inside humidity and temperature difference.

#### Defrosting by cooling air

Adjust A/C to low temperature mode to remove mist from glass surface by using cooling air.

#### Windshield defroster/defogger

Heat the whole glass directly by using warm air or electric wire to make the glass temperature be higher than condensing point under such humidity, so that mist can't be produced on the glass surface and condensed mist is evaporated due to high temperature.

### How to rapidly reduce the interior temperature in hot days?

Set A/C to AUTO mode and adjust A/C temperature to the expected value; set circulation mode to "outer circulation" mode, and open the window for 1 to 2 min (this can help rapidly remove high-temperature air). And then set A/C circulation mode to "inner circulation" mode, close windows, and the A/C will automatically adjust temperature to the set value.

### Why does the air vent have loud noise when turning on A/C in hot days?

When turning on A/C, if the set temperature is significantly different from the actual inside temperature, A/C system will automatically select maximum wind speed to achieve rapid temperature drop. At this moment, the noise at air vent is very obvious. This is normal condition. Don't worry about it.

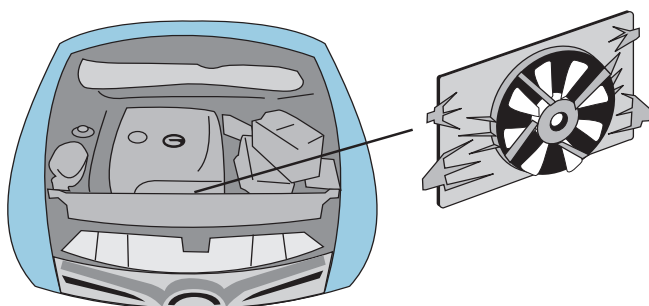


If you are troubled by noise at air vent, carry out the following operation:

1. Adjust your expected temperature to get close to actual inside temperature.
2. Change AUTO mode into MANUAL mode, and reduce wind speed of blower.

### Why does the radiator fan still run after the car stops?

Running of radiator fan is not necessarily related to the start of the car. When the engine's water temperature is higher than the set value or A/C's pressure is higher than the specified value, the radiator fan will run to reduce engine's water temperature and protect engine's parts from being damaged, ensure normal working of A/C under normal pressure condition and obtain perfect refrigeration effect.



### Why cannot the rear doors be opened inside the car?

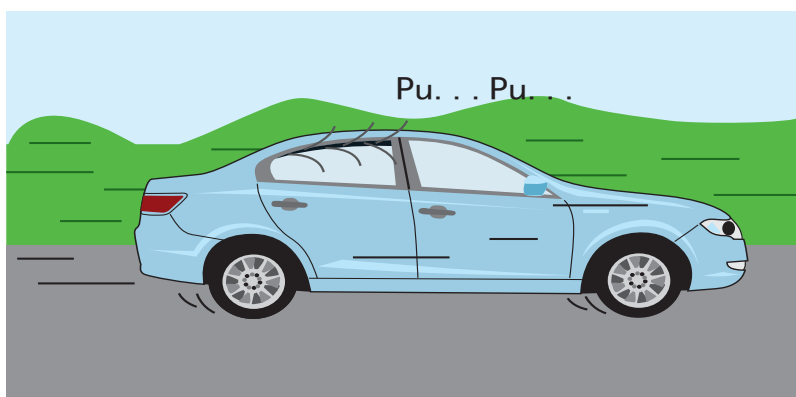
In daily use, sometimes the rear door can't be opened from the inner side of the car. At this moment, please check whether you activate child lock unintentionally.

Child lock is used to prevent child sitting on rear seat from being injured by playing door lock device. Therefore, once being locked by child lock, the rear door can't be opened from the inner side of the car.

Why is there “proofing” airflow sound inside the car when the back windows open?

This is a normal condition. Most of cars will produce similar sound under the specified condition. This is normal aerodynamics phenomenon.

You just open any of the front door window for more than 5cm, or close up all door windows to eliminate airflow sound.





### How to remove stains from trim?

In the use of the car, it's hard to avoid trim stains. If there are some stains difficult to remove, please contact GAC MOTOR dealer to consult or buy relevant detergent to clean trim.

### How to remove unpleasant smell from a new car?

As a new car is like a newly-decorated house, some unpleasant smell is unavoidable. After using a period of time, this unpleasant smell will gradually disappear.

Methods to eliminate unpleasant smell from a new car:

Natural ventilation: keep good ventilation in car.

Absorption: place some smell absorber in car. Such as activated carbon, bamboo carbon, and pomelo peel.

Good habit in using car: don't use cheap perfume, because it only covers unpleasant smell, but cannot eliminate it. Don't smoke or eat in car as much as possible, etc.

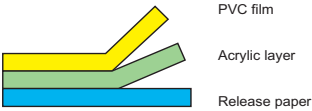
Why does the paint surface of door handle groove have scratches?

This position is frequently touched by user's nail. The reasons of painting scratches are as follows:

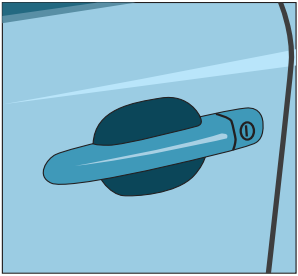
- 1 When opening vehicle door, your nail often touches oil paint, which causes scratches on the paint surface of door handle groove.
- 2 After using a period of time, the user carelessly scratches the paint.

This is normal car condition. We suggest you being careful when opening the door. Meanwhile, our company provides you with relevant products to protect painting surface of door handle. You can contact GAC MOTOR dealer to consult and purchase.

Multiple protection



Rhinoceros hide painting protection film



## Why do the tires have bulges?

### Causes:

During driving, tire shoulder or edge near tire shoulder is seriously impacted by external objects (such as pit, road shoulder, rocks), which causes the condition that the tire is seriously pressed between wheel rim and external object. The curtain gauze is cut, and air in tire is bulged from the cut position. Therefore, the bulge is produced.

### Solution:

Tire bulges can greatly reduce safety and cause tire blowout. We suggest to replace the bulged tires. If you don't replace bulged tire (not seriously bulged), you should at least move it to rear wheel.

### Preventive measures:

Too large or too small pressure is bad to tires. Too much air pressure may cause tire hardness, which indeed can reduce riding comfort. It's like a rubber band being tensioned too long and lost elasticity. Once a big external force is exerted, it is easy to be cut. Too little air pressure may cause tire softness, thus increasing fuel consumption. Once being impacted, tire will produce a shear stress between barrier and wheel ring and cause breaking.

In addition, it is very important to improve your driving habits. When driving at high speed on bad road condition, tire may impact deep pit or other foreign matters, which will cause serious deformation due to serious pressing between barrier and wheel rim, and cause curtain gauze cut. At this moment, air inside tire will be bulged from the cut position and form bulges. In addition, frequent going on road shoulder or scratching tire with barrier when stopping the vehicle may cause damage to tire wall and form bulges. Therefore, you should do your best to avoid above conditions.



Why is the engine of the hydraulic tappet structure and why does "rattling" sound occur when the car is started in cold conditions for some time?

If air valve clearance is reserved in valve mechanism, some impact and noise may be produced when the engine works. To eliminate this drawback, some engine is equipped with hydraulic tappet to eliminate valve clearance.

There is an engine oil chamber in hydraulic tappet. When the air valve is closed, the engine oil chamber is filled with oil, so that the tappet always contacts with cam. When the cam opens air valve, engine oil is squeezed out (the squeezed amount is controlled by clearance), so that the tappet always contacts with cam.

But when the car is on cool condition, because the engine oil pressure inside hydraulic rod can't immediately reach to the specified value, there may have some noise for a short time. This is normal condition. Don't worry about it.

How to avoid traffic accidents?

When following other vehicles, you should keep your head clear and keep a high alert. When driving the car, never distract yourself. Turn on signal light in advance so that other drivers can know your driving intention. Predict other drivers' intention and keep an oval space around four wheels. Focus on driving and don't pay much attention to irrelevant things.

Why the engine should be kept at idling for some time (3 to 5 minutes) after car cold start?

Accelerating immediately when the engine is started will make the turbocharger running at the maximum speed before its bearing could be lubricated fully. Such condition will damage the bearing of the turbocharger and decrease its service life.

### How to deal with a serious traffic accident?

If a traffic accident occurs when driving, both the driver and passengers have responsibility to rescue injured persons. We suggest preparing a first-aid box and practicing first-aid rescue to enrich experience in first-aid rescue.

#### 1.Prevent accident from going on:

- Move the car to a safe place, turn on hazard warning light, and place a warning triangle behind the car to notify subsequent drivers of the accident.

#### 2.Give the injured persons emergent treatment before the ambulance arrives:

- Observe the injuries of the injured persons;
- Whether the injured person still has consciousness (call injured person);
- Whether the injured person is still able to breathe (check whether injured person's breast goes up and down, etc.);
- Whether the injured person still has pulse (feel his pulse by putting your forefinger and middle finger on the neck of injured person);
- Whether the injured person loses blood (check whether each body position of the injured person loses blood);
- If the injured person loses consciousness but still has breath, you should pull up his chin to let his head tilt backward, so that he can have a smooth breath path. Encourage the injured person to wake his desire to survive.

#### 3.Dial 110 to contact doctor and rescue the injured person.

- Report the following information and wait for instructions;
- Accident place
- Number of injured person and conditions
- Car damaged condition

## What is car care? How to carry out car care?

### Overview of car beauty

In early stage, cars are often cleaned by the drivers themselves. The clean tools are also very simple, such as a water tube, a brush, a bucket, a pack of detergent and a piece of cloth. For cleaning of trucks, these tools are enough; but for modern cars, these tools are unscientific and coarse. Using the above tools to perform cleaning can't clean the car well, and also may damage finish paint and cause new rusting which will shorten the car service life.

"Car Beauty" is also called "Car Care" in some western countries. With the development of automobile industry, Car Beauty is developed very well in western countries. They call this industry as "Car care center", and also call it "fourth industry". The so-called fourth industry, namely involves three steps including vehicle manufacture, sales and maintenance. Car Care is a very ordinary and professional service sector. It is a completely new car maintenance concept. It has some essential differences with traditional vehicle waxing.

Car Beauty is not simply related to regular car cares including vehicle waxing, stain removal, deodorization, and dust absorption and inside and outside cleaning. The Car Beauty means giving the vehicle a complete maintenance by using professional and hi-tech vehicle care equipment and technology, distinct vehicle care products and processes based on material requirements on different vehicle positions. Car Beauty can not only make the car new and colorful, but also can renew old car and retain new car's value, and span service life of the car.

### Main Items for Car Beauty

Modern car beauty can be divided into body beauty, trim beauty and paint treatment.

#### Body beauty

Body beauty service includes cleaning vehicle by high pressure, asphalt and tar stain removal, waxing, coloring, and mirror surface treatment, new vehicle waxing, renovation of steel rings, tires and bumpers, and corrosion resistance and glue treatment of chassis, etc.

#### Trim beauty

Trim beauty service includes compartment beauty, engine beauty and cleaning of trunk, etc. Compartment beauty service includes dust absorption and cleaning of instrument console, roof, carpet, seat sleeve and door trim, steam sterilization, deodorization from cold/warm air vent, and inside air purification, etc. Engine beauty service includes flushing and cleaning of engine, spraying protective polish agent, renovation, cleaning, check and maintenance of battery and three-filtration of water tank.

#### Paint treatment

Paint treatment service includes treatment of oxide film, paint peeling off and acid rain, and deep/shallow scratch treatment of paint surface, damage treatment of paint panel and complete vehicle painting.

For the G-DCT model, why is there a squeaking sound in the engine compartment when a door opens?

When the driver opens the door, G-DCT transmission oil pump will make a "squeak"; this is the sound produced when the oil pump of G-DCT transmission quickly building up pressure acts. The sound is normal condition. Don't worry about it.

For the G-DCT model, why is there a click sound during gear shifting?

Sometimes, driver may hear "click" from the transmission. This is the sound produced by gearshift control mechanism and synchronization mechanism during normal operation (similar to gear shifting operation of manual transmission). Don't worry about it.

Why is there "clutch overtemperature" information shown by the instrument?

The indication of "clutch overtemperature" on the instrument of G-DCT car may be caused by car operation overload, long-time climbing and congestion or long-time frequent start and emergency braking. In this case, the clutch overheats due to long-time friction; to guarantee the clutch service life, the instrument will indicate "clutch overtemperature" and buzzing will be given for 1~2S to remind the driver. At this moment, the gear shifting impact may increase, the clutch may give off smell of burning, and the car still can run under normal functions; but the driving quality will decrease somewhat. For this reason, please reduce frequent gear shifting and frequent start operation. The car will resume the normal running when the information indicated on the instrument disappears, please don't worry (when the above information of overtemperature is indicated, if the car is still in frequent gear shifting or frequent start operation for a long time, the clutch may be damaged).

### Why does the car slide backward on a moderate slope?

A G-DCT car has hill-start assist control, it will stand still for about 2s during hill-start. But when the car is stopped on a ramp of less than 4% (2.3°), it may slide backward slightly. For start on a little ramp, we suggest the driver to pull handbrake or electrical park brake (EPB) to prevent backward sliding.