

Foreword

Thanks for choosing Trumpchi manufactured by GAC Motor Co., Ltd. (hereinafter referred to as “GAC Motor”). For a better driving pleasure, please read the *Owner's Manual* carefully. Through this manual, you can fully understand the operation methods and precautions of the vehicle. Proper operation of the vehicle can improve driving safety and prolong the service life of the vehicle.

The *Warranty Manual* supplied with the vehicle clearly describes the warranty services provided by GAC Motor and the regular maintenance of the vehicle. Please read this manual carefully to know your rights and responsibilities.

After reading this manual, please store it with the vehicle for future reference.

In case of any doubts about this manual, please contact the GAC Motor authorized shop for detailed explanation.

If you have any suggestions or recommendations, please contact GAC Motor through the customer service hotline: +86-400-158-9999.

We are grateful for your support and love for Trumpchi. Have a nice drive!

GAC Motor Co., Ltd.

Notices to Readers

The safety of you and the passengers is crucial, so driving safely is an important responsibility of the driver.

In order to make clear the safety precautions, we provide operation steps and precautions through the various signs on the vehicle and this manual, reminding you to pay attention to the potential dangers that will hurt you or the passengers.

It is impossible to list all the precautions for danger related to operation and maintenance of the vehicle in the manual, so it is up to you to make the correct judgment in time.

Safety instructions are available in many forms, including:

- **Safety signs** pasted on the vehicle.
- **Safety notes:** the texts marked with the symbol 、、 and one of the three words "WARNING", "CAUTION", or "NOTE" in front.

 WARNING	Very important instructions of which the nonobservance can cause casualties.
 CAUTION	Important instructions of which the nonobservance can cause damage to the vehicle.
 NOTE	General instructions of which the nonobservance could not cause injuries.

- Some paragraphs of this manual do not apply to all vehicle models. For the description of options, the title of them is followed by the symbol "*".
- Unless otherwise specified, the directions of the vehicle (front, rear, left and right) referred to in this manual are based on the traveling direction of the vehicle.

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1. Important Safety Precautions

◆ Be sure to fasten the seat belt correctly

The seat belt is the best protection device in the event of a collision. Airbags are only designed as auxiliaries, rather than replacements, of the seat belts, so even if the vehicle is equipped with airbags, make sure that you and the passengers always fasten the seat belts correctly.

◆ Do not leave children in an unattended vehicle

Do not leave children in an unattended vehicle, as injury or even death may occur if they trigger a control device accidentally, or when the vehicle is moved accidentally and collided with other objects due to their mis-operation, and besides, the temperature inside the vehicle may reach an extreme condition, depending on the ambient temperature.

◆ Protect all children

Children aged 12 or under should be properly restrained in the rear seats rather than the front seats. Child safety seats shall be used for infants and toddlers; and child safety seats and three-point seat belts shall be used for older children.

◆ Beware of danger of airbag

Airbags can save lives, but they can also cause serious or fatal injuries to occupants who are too close to the airbags or improperly restrained.

Airbags pose the greatest risk to infants, toddlers and short adults, so please follow all instructions and warnings in this manual.

◆ Never drink and drive

Drinking alcohol, even a little, will reduce your response capability, and your reaction time after drinking will become longer, so drinking and driving is strictly prohibited.

◆ During driving, please abide by the road traffic safety laws and yield to pedestrians.

◆ Be sure to pay attention to driving safety

Traffic accident will occur if you are busy answering the phone or handling other things so that you can not pay attention to road conditions, other traffics and pedestrians during driving. Please avoid distraction during driving.

◆ Control speed

Excessive speed is one of the main causes of traffic accidents. The faster the speed is, the greater the risk will be. Therefore, please choose the appropriate speed for safe driving according to the actual road conditions.

◆ Regular maintenance

Tire burst or mechanical failure is very dangerous. In order to reduce the possibility of such problems, please check the tire pressure and status frequently, and carry out regular maintenance as specified in the *Warranty Manual*.

1. Important Safety Precautions

Event Data Recorder (EDR)

This vehicle is equipped with an event data recorder (EDR). The main function of EDR is to record data in the event of certain collisions or risk of collisions (such as airbag deployment or colliding with a barrier), so as to help understanding the operation of the vehicle system. EDR is specially used to record data related to vehicle dynamic control and safety systems in a short period of time. However, depending on the severity and type of collision, data may not be recorded.

The data specially recorded by the EDR of this vehicle include:

- The status of driver depressing the brake pedal (if applicable).
- The vehicle speed.

These data help better understanding the situation in the event of a collision and personal injury, and are used to assist accident analysis.

i NOTE

The vehicle will only record EDR data when a certain degree of collision occurs; EDR will not record data during normal driving.

EDR data disclosure

Except for the following circumstances, GAC Motor will not disclose the data recorded in the EDR to third parties:

- Reaching an agreement with the owner (or the lessee of the rental vehicle).
- At the official request of the police, courts or government agencies.

If necessary, the data will be used in:

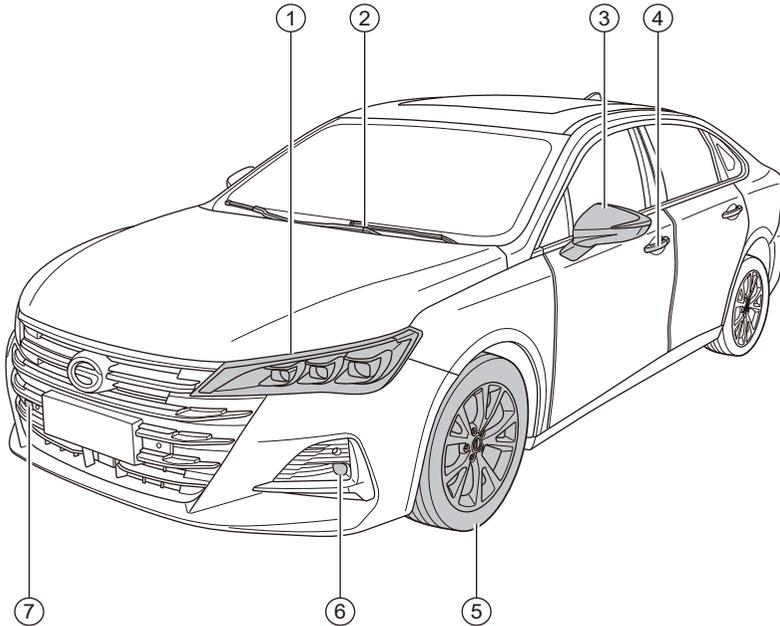
- Research on vehicle safety performance.

How to obtain EDR data reading tool

Special technical equipment is required to read EDR data. For more information, please contact GAC Motor authorized shop.

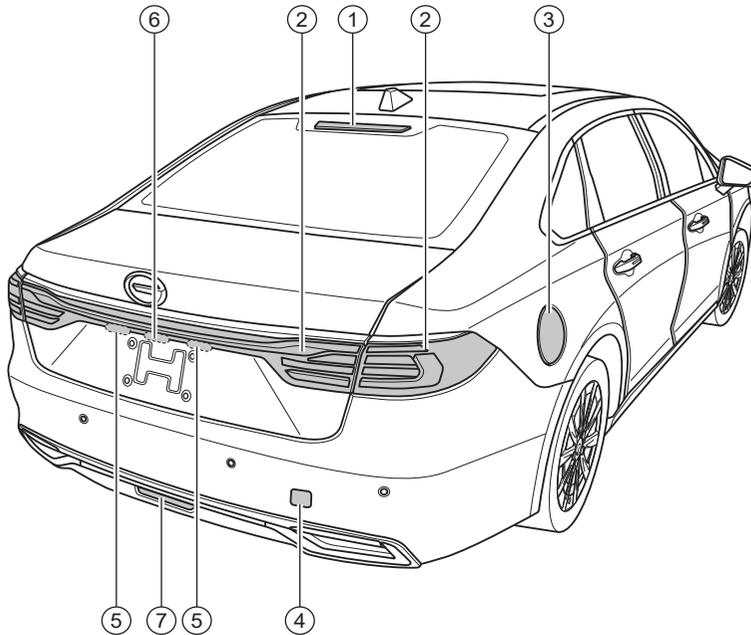
2. Picture index

2.1 Exterior



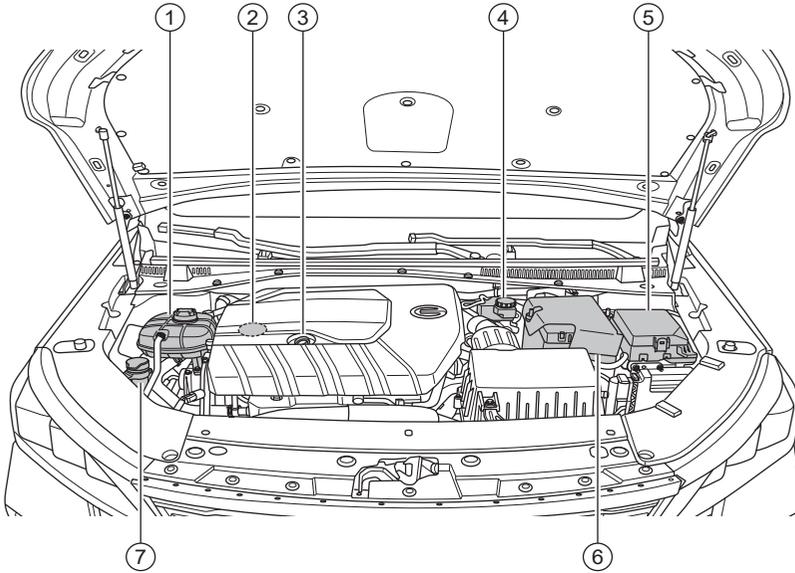
- ① Front combination lamp
 - Turning on lamps => [See page 70](#)
 - Replacing bulb => [See page 255](#)
 - Specifications of front combination lamp bulb => [See page 273](#)
- ② Replacing front windshield wiper blades
=> [See page 248](#)
- ③ Exterior rearview mirror => [See page 84](#)
 - Side turn signal lamp => [See page 70](#)
 - Specifications of side turn signal lamp => [See page 273](#)
- ④ PEPS system => [See page 58](#)
 - Door lock hole => [See page 54](#)
- ⑤ Wheel => [See page 258](#)
- ⑥ Front fog lamp* => [See page 75](#)
 - Specifications of front fog lamp* => [See page 273](#)
- ⑦ Front towing eye => [See page 291](#)

2. Picture index



- ① High-mounted stop lamp
 - Specifications of high-mounted stop lamp => [See page 273](#)
- ② Rear combination lamp
 - Specifications of rear combination lamp bulb => [See page 273](#)
- ③ Fuel tank cap => [See page 240](#)
- ④ Rear towing eye => [See page 291](#)
- ⑤ License plate lamp
 - Specifications of license plate lamp => [See page 273](#)
- ⑥ Trunk lid unlocking button => [See page 60](#)
- ⑦ Rear fog lamp => [See page 75](#)
 - Specifications of rear fog lamp => [See page 273](#)

2. Picture index

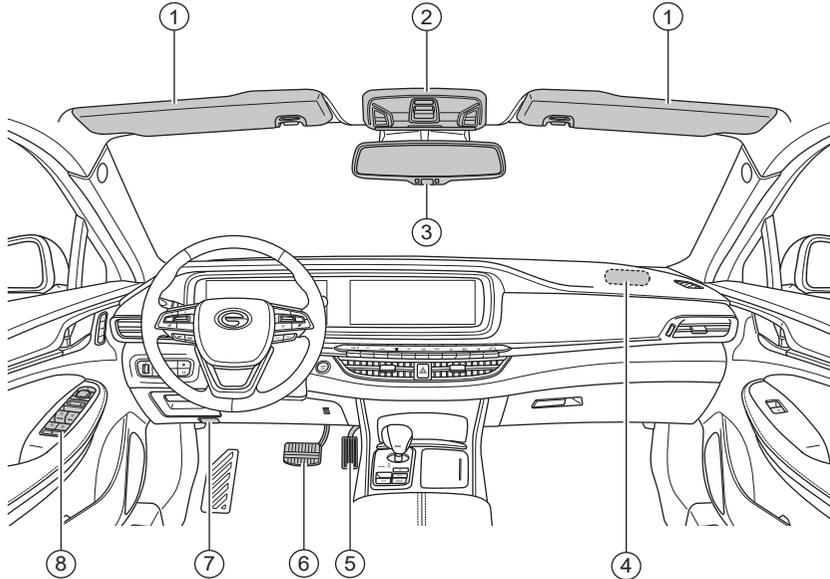


Engine compartment

- ① Expansion tank => [See page 246](#)
- ② Oil filler cap => [See page 244](#)
- ③ Oil dipstick => [See page 243](#)
- ④ Brake fluid reservoir => [See page 249](#)
- ⑤ Engine compartment PDU => [See page 281](#)
- ⑥ Battery => [See page 251](#)
- ⑦ Windshield washer fluid reservoir => [See page 248](#)

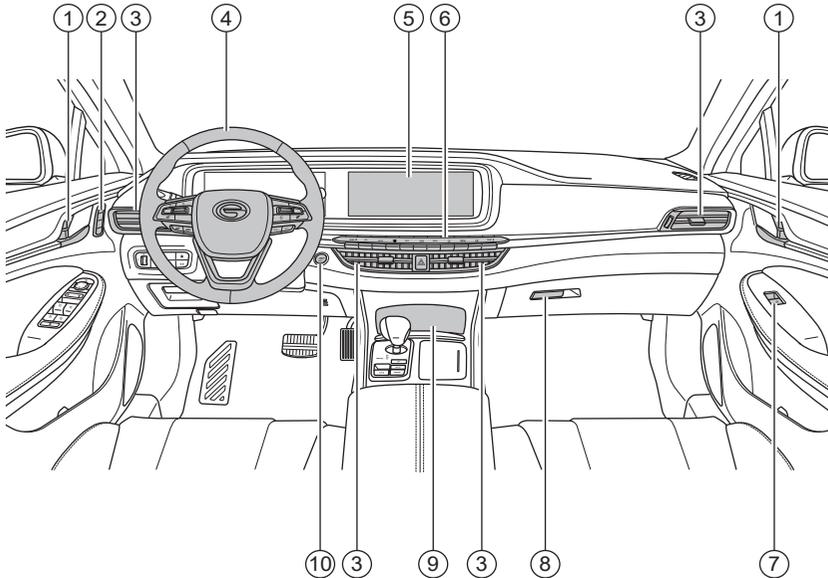
2. Picture index

2.2 Interior



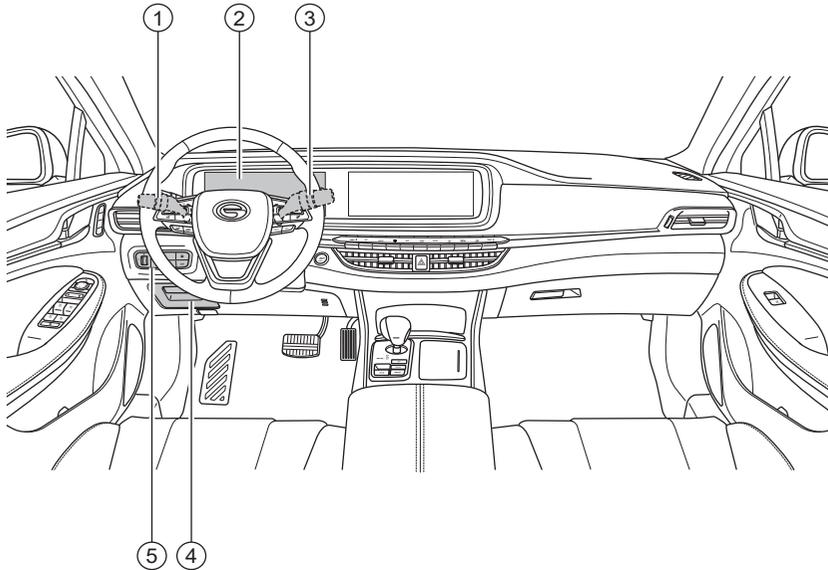
- ① Sun visor => [See page 87](#)
- ② Front dome lamp => [See page 77](#)
 - Power sunroof control button => [See page 65](#)
 - Electric sunshade control button* => [See page 66](#)
 - Emergency call button of GAC Motor T-BOX APP* => [See page 145](#)
 - Spectacle case => [See page 96](#)
- ③ Exterior rearview mirror => [See page 83](#)
- ④ Front passenger's frontal airbag => [See page 19](#)
- ⑤ Accelerator pedal
- ⑥ Brake pedal
- ⑦ Engine hood release handle => [See page 62](#)
- ⑧ Driver's power window control button => [See page 63](#)
 - Central locking control button => [See page 53](#)
 - Exterior rearview mirror adjusting button => [See page 84](#)

2. Picture index



- ① Door latch and inside handle => [See page 54](#)
- ② Seat/ exterior rearview mirror position memory button* => [See page 91](#)
- ③ A/C air outlet => [See page 113](#)
- ④ Steering wheel => [See page 34](#)
 - Steering wheel buttons => [See page 35](#)
 - Driver's frontal airbag => [See page 18](#)
- ⑤ AV system => [See page 114](#)
- ⑥ A/C system control panel => [See page 105](#)
- ⑦ Passenger's power window control button => [See page 63](#)
- ⑧ Glove box opening handle => [See page 96](#)
- ⑨ Instrument panel front storage box => [See page 94](#)
 - USB port => [See page 98](#)
 - USB charging port => [See page 98](#)
 - Mobile phone wireless charging area* => [See page 99](#)
- ⑩ ENGINE START STOP button => [See page 148](#)

2. Picture index



- ① Lamplight combination switch => [See page 70](#)
- ② Instrument cluster => [See page 36](#)
 - Indicator lamps => [See page 45](#)
- ③ Wiper combination switch => [See page 80](#)
- ④ Storage box on lower guard plate of cab => [See page 94](#)
 - Instrument panel PDU => [See page 281](#)
- ⑤ Instrument panel left switch block
 - Manual headlamp leveling knob* => [See page 74](#)
 - STT OFF button* => [See page 164](#)
 - ESP OFF button => [See page 161](#)
 - RPA button => [See page 212](#)
 - Trunk lid unlocking button => [See page 60](#)
 - Fuel tank cap unlocking button => [See page 240](#)

3. Instructions for safe operation

3.1 Safe driving

3.1.1 General description

This section introduces important information, operating essentials, recommendations and safety precautions for safe driving. For the safety of you and the passengers, please read carefully and follow the relevant regulations.

NOTE

Please always keep the *Owner's Manual* in the vehicle. If you lend or resell the vehicle to someone else, be sure to hand the complete set of accompanying documents over to the new owner.

The following inspections must be carried out before driving:

- Check that all lamps are working properly.
- Check that the fuel level is normal.
- Check that the coolant level is normal.
- Check that the brake fluid level is normal.
- Check that the windshield washer fluid level is normal.
- Check that the tire pressure is normal.
- Check that all windows are clear and have a good view.
- Check that no objects obstruct the movement of the driver's foot pedals.
- Adjust the seat, head restraint and rearview mirror according to your body height and shape.
- Use appropriate child safety seats to protect children and help them fasten the seat belts correctly.
- Fasten the seat belt correctly and remind all passengers in the vehicle to fasten the seat belts correctly.
- Check that the surrounding environment is safe.

WARNING

When installing the driver's floor mat, please observe the following precautions:

- Do not overlap two or more floor mats.
- Do not make the bottom surface of the floor mat upward or back-to-front.
- Do not use floor mats that are incompatible with this model.

CAUTION

- Do not distract yourself from external factors during driving.
- Do not drive the vehicle when your response capability reduces, such as due to medicines, alcohol, or drugs.
- Strictly abide by traffic regulations.

3. Instructions for safe operation

3.1.2 Correct sitting posture of the driver and passengers

Correct sitting posture of the driver

The driver's sitting posture directly affects his/her fatigue level and driving safety. Before driving, the driver should:

- sit up straight and adjust the seat back to a suitable position so that your back fits completely the seat back.
- adjust the seat position so that all pedals can be operated effectively with slightly bent legs.
- correctly adjust the headrest. => [See page 87](#)
- fasten the seat belt correctly. => [See page 13](#)
- adjust the steering wheel position. => [See page 34](#)

WARNING

Do not adjust the seat, headrest or steering wheel during driving; otherwise the vehicle may be out of control, leading to an accident.

Correct sitting posture of the passengers

To guarantee the safety of the passengers and reduce the risk of casualties, the passengers should:

- sit up straight and adjust the headrest correctly. [bookmark132 => See page 87](#)
- The front passenger should adjust the distance between the seat and the instrument panel according to his or her own needs.
- The front passenger should adjust the seat back to a suitable position so that the back fits completely the seat back.
- fasten the seat belt correctly. => [See page 13](#)
- place both feet on the floor.
- use appropriate child safety seat in accordance with applicable regulations for children. => [See page 25](#)

WARNING

- It is forbidden to install a child safety seat in the front passenger's seat.
- If the front passenger is too close to the instrument panel, the SRS will not provide effective protection.
- When the vehicle is running, be sure to maintain a correct sitting posture and fasten the seat belt correctly, so as to avoid unexpected injuries in case of emergency braking or accidents.

3. Instructions for safe operation

3.2 Seat belt

3.2.1 Why must you fasten the seat belt

Protection of the driver and passengers by seat belts



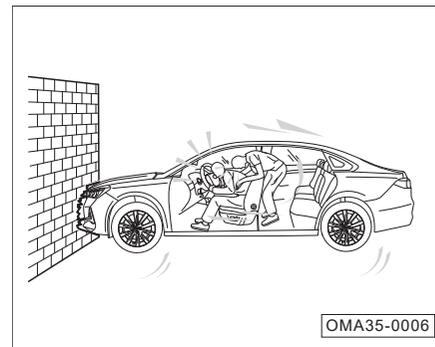
In the event of a vehicle collision, the seat belt, if fastened correctly, can restrain the driver and passengers in a proper position and slow down the inertia of their forward movement, thus preventing them from being thrown forward, and at the same time allow airbags to give them the best protection, thus reducing their impact injury as much as possible.

In the event of a collision, the seat belt will assist other safety systems in simultaneously absorbing the energy generated by the collision, further reducing the injuries suffered by the driver and passengers.

WARNING

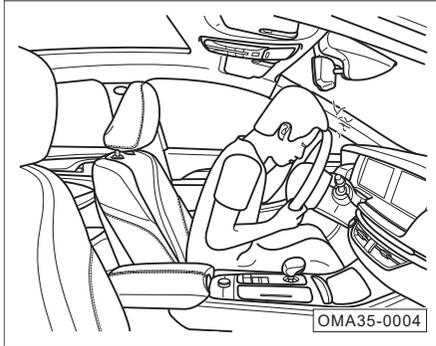
Airbags cannot replace seat belts. Regardless of the availability of airbags, the seat belts should be fastened correctly.

Consequences of not fastening the seat belt

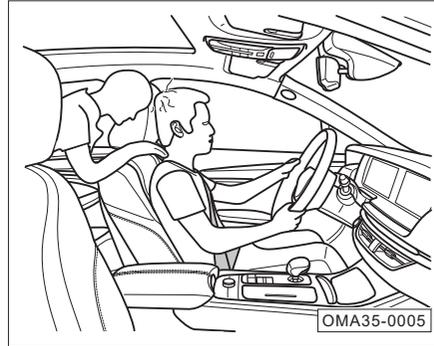


In the event of a collision, the driver or passenger who does not fasten the seat belt will be thrown forward due to inertia and thereby injured.

3. Instructions for safe operation



Even if the vehicle speed is very low, the force acting on the human body in the event of a collision is so great that the occupant cannot control his or her body with hands at all. In that case, the occupant who does not fasten the seat belt will be thrown forward, and injured if colliding with any interior objects.



Rear passengers must also fasten the seat belts correctly, otherwise they will be thrown forward when an accident occurs. The passenger who does not fasten the seat belt will not only hurt himself or herself, but also endanger other occupants in the vehicle.

3.2.2 Seat belt

Seat belt indicator lamp

: Driver's seat belt indicator lamp

: Front passenger's seat belt indicator lamp

The following alarms will be triggered when the ENGINE START/STOP button is set to "ON" position:

- When the vehicle speed is lower than 20km/h, if the driver or front passenger does not fasten the seat belt, the corresponding indicator lamp in the instrument cluster will flash for about 6s and stay on, accompanied by an alarm message.
- When the vehicle speed is higher than or equal to 20km/h, if the driver or front passenger does not fasten the seat belt, the corresponding indicator lamp in the instrument cluster will flash for about 20s and stay on, accompanied by an alarm message and a continuous audible alarm.

3. Instructions for safe operation

CAUTION

- Before driving, please check whether there are any heavy objects on the front passenger's seat to avoid the system mistakenly determining that the seat is occupied and issuing a false alarm.
- If the alarm remains on after the seat belt is fastened correctly, it means that the SRS is failed. In that case, please go to the GAC Motor authorized shop for inspection in time.

 : Rear seat belt indicator lamp*

If rear seat belt indicator lamp is on in white, it indicates that the seat belt is fastened, and if the indicator lamp is on in red, it indicates that the seat belt is not fastened or the SRS is faulty. If the indicator lamp stays red after the seat belt is fastened correctly, it means that the SRS is failed. In that case, please go to the GAC Motor authorized shop for inspection in time.

The rear seat belt indicator lamp is on for 35s and then goes off in normal cases, and it will be lighted up under the following conditions:

- The rear passenger seat belt is not fastened when the engine starts.
- The rear passenger seat belt is not fastened when the rear door is opened/closed.
- The rear passenger fastens or unfastens the seat belt.

Seat belt pretensioner and load limiter



The seat belt pretensioner and load limiter can reduce the pressure of the seat belt on the chest of the driver or passenger and improve the protection performance.

- Before the collision, the seat belt pretensioner and load limiter can restrain the driver or passenger and enable him or her to maintain a correct sitting posture to prevent the body from leaning forward.
- In the event of a severe collision where the triggering condition is reached, the seat belt pretensioner and load limiter will be triggered, driving the seat belt webbing to be quickly retracted and tensioned.

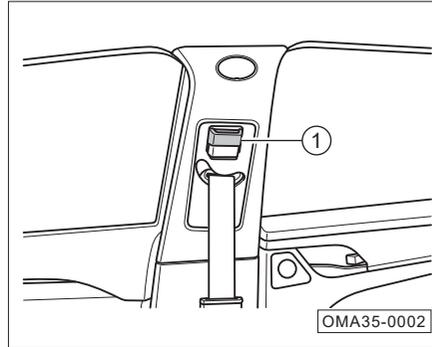
3. Instructions for safe operation

- When a collision occurs, the human body will move forward, and the seat belt pretensioner and load limiter will be activated at this time, so that the restraint force of the seat belt on the human body will be within a certain range, preventing the driver or passenger from being further injured due to excessive force. And at the same time, the seat belt pretensioner and load limiter will coordinate with the airbag to achieve a better safety protection performance.

i NOTE

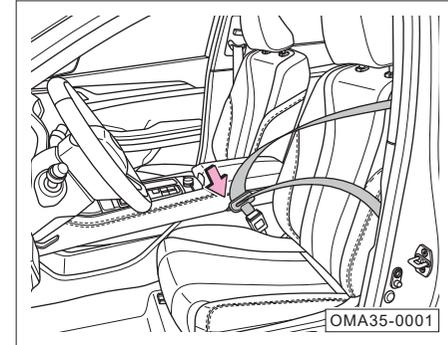
- When the seat belt pretensioner and load limiter is activated, a little harmless smoke together with a sound will be produced, which is normal.
- The seat belt pretensioner and load limiter cannot be used any more if deployed, and in this case, the SRS indicator lamp  stays on, please contact the GAC Motor authorized shop for replacement.

Adjusting the shoulder belt height



- Moving up: Grasp the guide and move it up to adjust the shoulder belt to the appropriate height.
- Moving down: Press the guide to unlock the switch ① and move it down to adjust the shoulder belt to the appropriate height.
- After the adjustment, check whether the guide is firmly locked.

Fastening the front seat belt



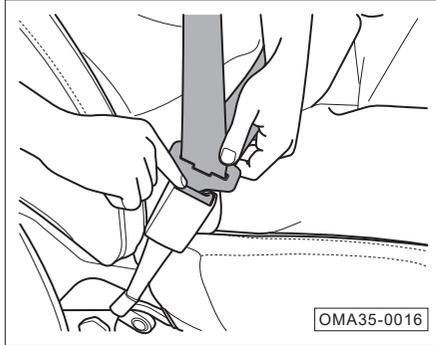
- Keep a correct sitting posture. => [See page 11](#)
- Pull out the seat belt slowly at a uniform speed, insert the lock tongue into the corresponding buckle until a click sound is heard.
- Pull the seat belt and confirm that the lock tongue is properly locked.

i NOTE

All seat belts are fastened in the same way, and the driver is responsible for reminding passengers to fasten the seat belts correctly.

3. Instructions for safe operation

Unfastening the seat belt



- Press the red button of the buckle. Then the lock tongue will pop out automatically.
- Grasp the seat belt to allow it to retract slowly.

Pregnant women must fasten the seat belts correctly



How does a pregnant woman correctly fasten the seat belt?

- Adjust the seat and headrest to the proper position.
- Grasp the lock tongue, slowly pull the seat belt over the shoulder, and ensure that the lap belt is as low as possible and not pressed against the abdomen.
- Insert the lock tongue into the corresponding buckle until a click sound is heard.
- Pull the shoulder belt upward parallel to the upper body, tension the lap belt, and make sure that the lock tongue is properly locked.

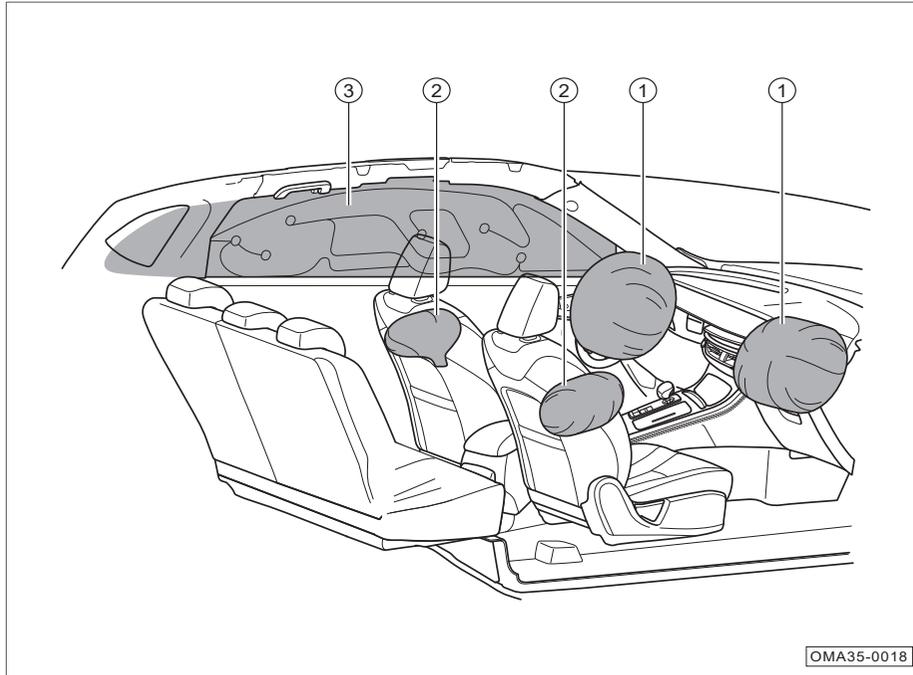
WARNING

To reduce the risk of injury during emergency braking or accidents, please observe the following precautions:

- Before driving, make sure that all occupants have properly fastened the seat belts.
- Each seat belt is for one person only. Do not share a seat belt with other persons (including children).
- Do not recline the front seat back excessively for comfort.
- Do not put the shoulder belt under or behind your arm.
- Be sure to insert the lock tongue into the buckle of corresponding side instead of the buckle of other side.
- Never unfasten the seat belt before the vehicle comes to a complete stop.

3. Instructions for safe operation

3.3 Supplemental restraint system (SRS)



Depending on vehicle configurations, the deployment positions of the SRS are as shown below:

- ① Front seat frontal airbags.
- ② Front seat side airbags*.
- ③ Side curtain airbag*.

i NOTE

The airbag will produce a little harmless smoke when deployed, which is normal.

3. Instructions for safe operation

Supplemental restraint system (SRS) indicator lamp

After the ENGINE START/STOP BUTTON is switched to "ON" position, the indicator lamp  will be on for a few seconds and go out after the system completes self-test.

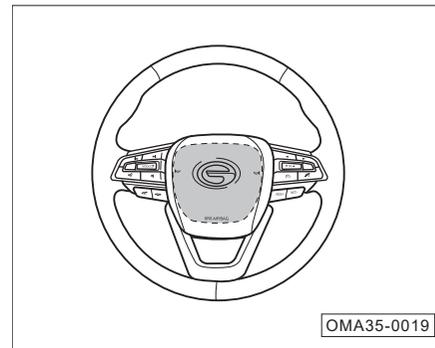
A system fault is indicated when the indicator lamp  is in the following conditions:

1. After the ENGINE START/STOP BUTTON is switched to "ON" position, the indicator lamp does not come on.
2. After the ENGINE START/STOP BUTTON is switched to "ON" position, the indicator lamp does not go out after the system completes self-test.
3. After the ENGINE START/STOP BUTTON is switched to "ON" position, the indicator lamp goes out after the self-test, but then comes on again.
4. The indicator lamp comes on or flashes while the vehicle is running.

WARNING

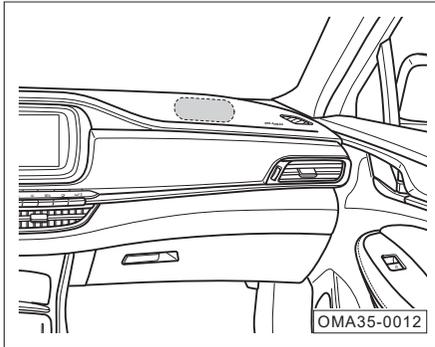
- **Never attempt to repair, adjust or modify the airbag.**
- **The airbag can be deployed once only, and thus, if it is deployed in the event of an accident, please contact the GAC Motor authorized shop for replacement.**
- **When the SRS is faulty, please contact the GAC Motor authorized shop for inspection; otherwise the system will not trigger or abnormally trigger the airbag in the event of a collision.**

Front seat frontal airbag



The driver's frontal airbag is installed inside the steering wheel (as indicated by the dotted dash) marked with "SRS AIRBAG".

3. Instructions for safe operation



The front passenger's frontal airbag is installed inside the instrument panel (as indicated by the dotted dash) marked with "SRS AIRBAG".

In the event of a severe frontal collision where the triggering condition is met, the frontal airbags will be triggered by the system and deploy rapidly to assist the seat belts in protecting the driver and front passenger.

In certain collision accidents, the system may simultaneously trigger other airbags.

WARNING

Do not attach or place any decorative objects on the surface of instrument panel, because when the vehicle is running or the airbag deploys, these objects will fall, be knocked over and roll around in the vehicle, affecting the driver and hurting the passengers in the vehicle.

The front seat frontal airbags might not be triggered in the following cases:

- When the ENGINE START/STOP BUTTON is in "ACC" or "OFF" position.
- Minor frontal collision.
- Side collision.
- Rear collision.
- Rollover.
- Other special circumstances.

NOTE

The word "minor" implies the severity of collision sensed by the SRS controller and has nothing to do with the damage of the vehicle.

3. Instructions for safe operation

Front seat side airbag*



The front seat side airbags are installed in the outboard sides of the driver's seat back and the front passenger's seat back respectively (as indicated by the dotted dash) marked with "SRS AIRBAG".

In the event of a severe side collision where the triggering condition is met, the side airbags on the side where the vehicle collides will be triggered by the system and deploy rapidly to assist the seat belts in protecting the driver and front passenger.

In certain collision accidents, the system may simultaneously trigger other airbags.

The front seat side airbags might not be triggered in the following cases:

- When the ENGINE START/STOP BUTTON is in "ACC" or "OFF" position.
- 100% frontal collision.
- Minor side collision.
- Rear collision.
- Other special circumstances.

i NOTE

The word "minor" implies the severity of collision sensed by the SRS controller and has nothing to do with the damage of the vehicle.

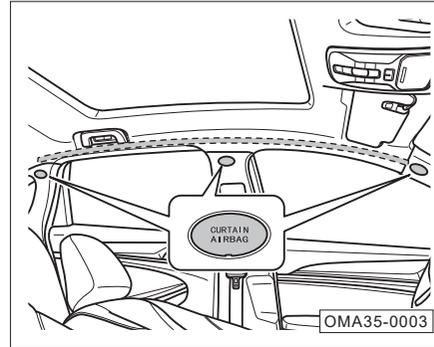
3. Instructions for safe operation



WARNING

- **Observe the instructions on the warning label pasted on the side of the door. Do not lean your body against the door side equipped with side airbags during driving.**
- **Do not cover the side airbags with seat covers or other objects; otherwise, the side airbags will not be triggered to protect the occupants when an accident occurs.**

Side curtain airbag*



Side curtain airbags are installed in the left and right sides of the roof respectively (as indicated by the dotted dash) marked with "CURTAIN AIRBAG".

In the event of a severe side collision, the side curtain airbags on the side where the vehicle collides will be triggered by the system and deploy rapidly to assist the seat belts in protecting the driver and passengers.

In certain collision accidents, the system may simultaneously trigger other airbags.

The side curtain airbags might not be triggered in the following cases:

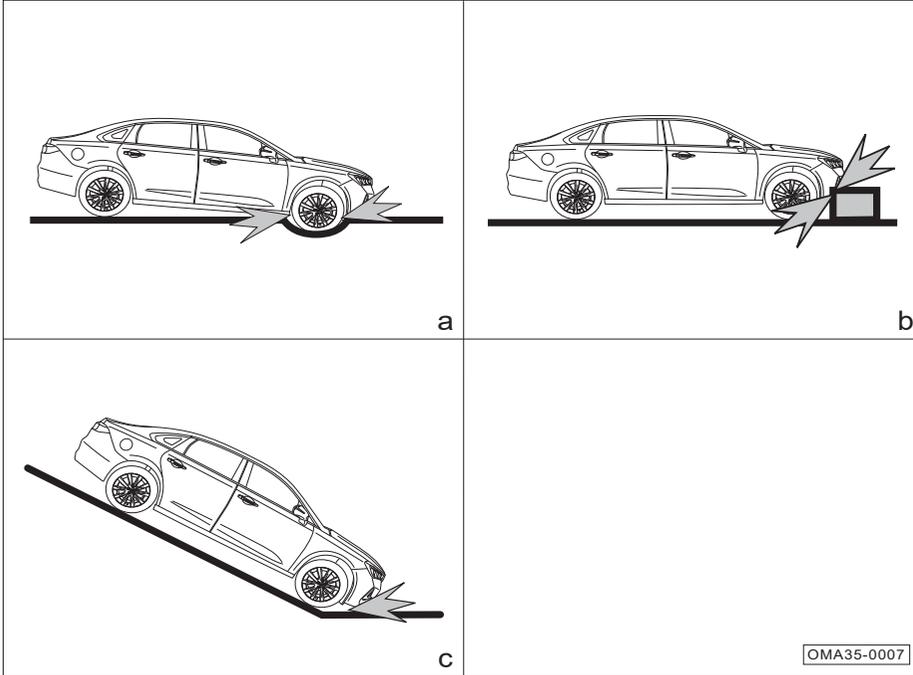
- When the ENGINE START/STOP BUTTON is in "ACC" or "OFF" position.
- 100% frontal collision.
- Minor side collision.
- Rear collision.
- Other special circumstances.

NOTE

The word "minor" implies the severity of collision sensed by the SRS controller and has nothing to do with the damage of the vehicle.

3. Instructions for safe operation

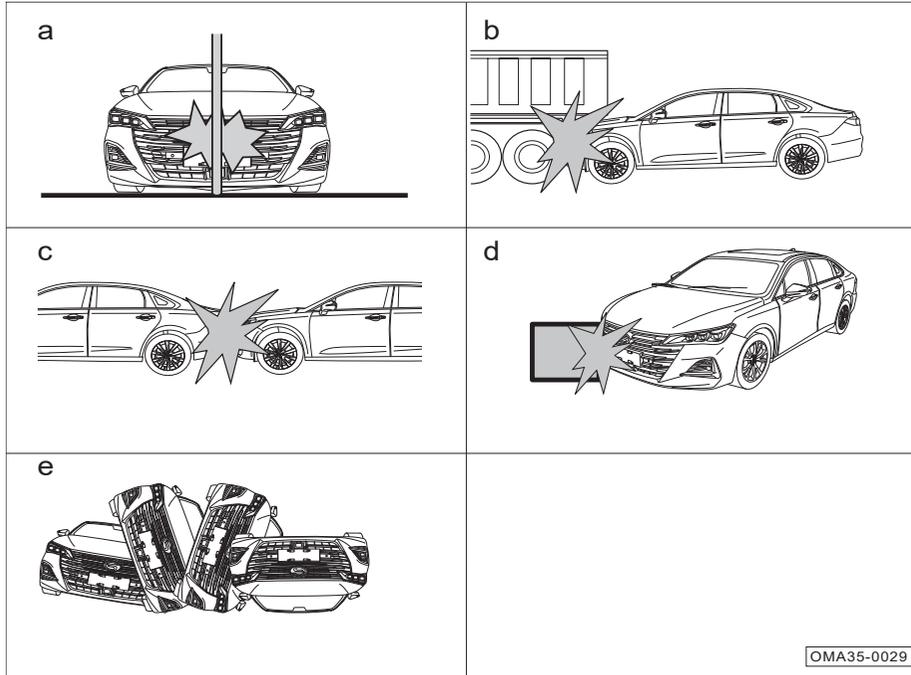
3.3.1 Cases where the airbags may deploy



- a. Nose-down to the ground when the vehicle crosses a deep groove.
- b. Collision with roadside protrusions, curbs, etc.
- c. Nose-down to the ground when the vehicle runs down a steep slope.

3. Instructions for safe operation

3.3.2 Cases where the airbags might not deploy



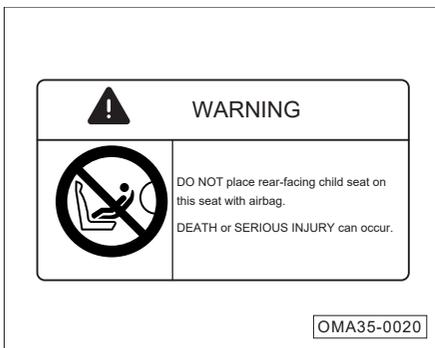
- a. Collision with concrete pillars, trees or other elongated objects.
- b. Rear-end collision with the lower rear end of large truck.
- c. Rear-end collision by other vehicles.
- d. Collision with a wall or another vehicle, other than frontal collision.
- e. Rollover or tilting.

3. Instructions for safe operation

3.4 Safe ride of children

3.4.1 General description

The child must sit in a rear seat, and a suitable child safety seat should be selected according to the body size of the child.



Warning labels are pasted on the front and back of the right sun visor to remind the front passenger of the danger of frontal airbag. Be sure to read and follow the instructions on the labels.

⚠ WARNING

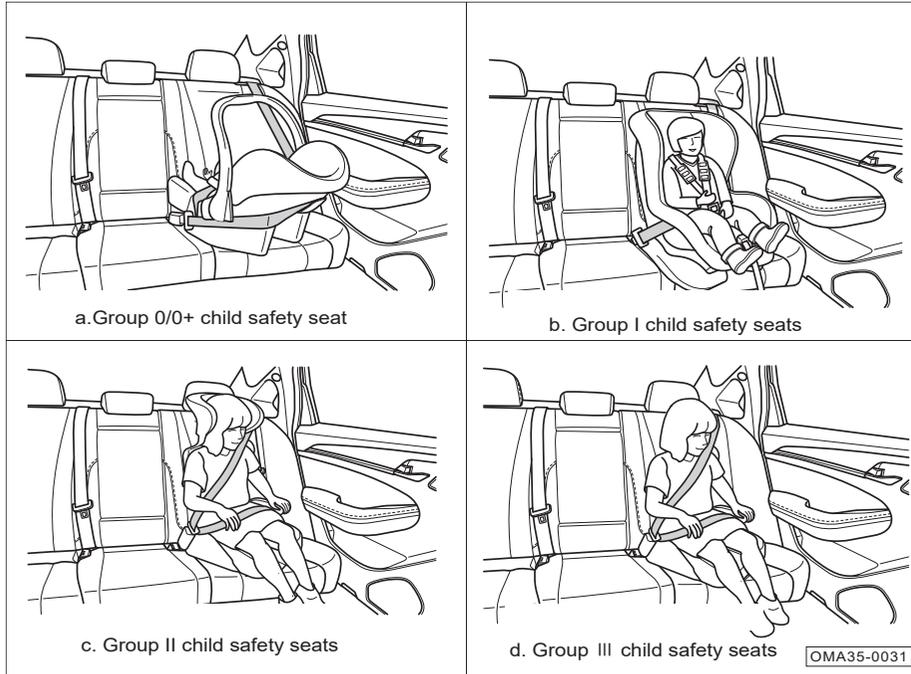
- Do not install any rear-facing child safety seats on seats with frontal airbags!
- Even if the child has been put in a child safety seat, do not let the head or any part of the body rest on the door area (the deployment area of the front seat side airbag* or side curtain airbag*); otherwise the impact force of the deployed front seat side airbag* or side curtain airbag* can cause serious injury or even death of the child.
- Do not let children stand or kneel on the seat.
- Do not allow children to operate devices that may cause pinch to themselves (such as power window, sunroof, etc.).

⚠ WARNING

- Never leave children alone in the vehicle!
- Never hold infants or toddlers on your knees!
- Seat belts are not suitable for infants and toddlers as they can cause injuries in the event of an accident.
- Ensure that in the event of a collision or emergency braking, children are less likely to be injured by hitting any hard objects in the vehicle.
- Lock the child safety lock of the door on the side where the child sits.

3. Instructions for safe operation

3.4.2 Child safety seat



Classification of child safety seats (for reference only):

- a. **Group 0/0+ child safety seat**
 - Suitable for infants weighing less than 13kg.
- b. **Group I child safety seats:**
 - Suitable for toddlers weighing between 9kg and 18kg.
- c. **Group II child safety seats:**
 - Suitable for children weighing between 15kg and 25kg.
- d. **Group III child safety seats:**
 - Suitable for children weighing between 22kg and 36kg.

3. Instructions for safe operation

3.4.3 Information about child safety seat

Information about the applicability of different seating positions for child restraint systems:

Weight group	Mounting position		
	Front passenger's seat	Outboard rear seats	Center rear seat
Group 0: <10 kg	X	U	X
Group 0+: <13 kg	X	U	X
Group I: 9~18 kg	X	U/UF	X
Group II: 15~25 kg	X	UF	X
Group III: 22~36 kg	X	UF	X

Note: The uppercase letters in the table are defined as follows:

U = Suitable for all "general" child safety seats for this weight group.

UF = Suitable for all forward-facing "general" child safety seats for this weight group.

X = Not suitable for the child safety seats for this weight group.

For some child safety seats, a size class is specified. Be sure to check the size class according to the manufacturer's instructions, packaging, and child safety seat label. For guidance on proper installation, please refer to the instruction of the child safety seat.

3. Instructions for safe operation

ISOFIX mounting positions for ISOFIX child safety seats

Weight group	Size class	Fixture module	Mounting position		
			Front passenger's seat	Outboard rear seats	Center rear seat
Carry-cot	F	ISO/L1	X	X	X
Group 0: <10 kg	G	ISO/L2	X	X	X
	E	ISO/R1	X	IL	X
Group 0+: <13 kg	E	ISO/R1	X	IL	X
	D	ISO/R2	X	IL	X
	C	ISO/R3	X	IL	X
Group I: 9~18 kg	D	ISO/R2	X	IL	X
	C	ISO/R3	X	IL	X
	B	ISO/F2	X	IUF	X
	B1	ISO/F2X	X	IL	X
	A	ISO/F3	X	IUF	X
Group II: 15~25 kg	—	—	X	—	X
Group III: 22~36 kg	—	—	X	—	X

Note: The uppercase letters in the table are defined as follows:

IUF—Suitable for “forward-facing” general ISOFIX child safety seats for this weight group that are fixed with top tether.

IL— Suitable for the listed special ISOFIX child restraint systems, which may be for special vehicles, or of restricted or semi-general categories.

X—Not suitable for the child safety seats for this weight group.

For some child safety seats, a size class is specified. Be sure to check the size class according to the manufacturer's instructions, packaging, and child safety seat label. For guidance on proper installation, please refer to the instruction of the child safety seat.

3. Instructions for safe operation

3.4.4 Correct installation of child safety seat

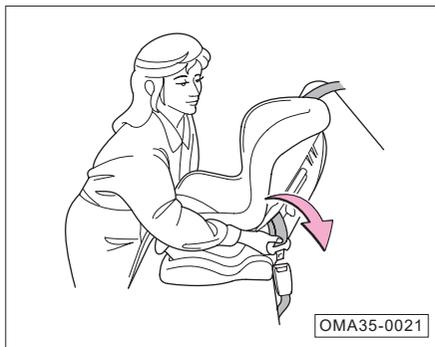
The child safety seat is installed by following three means: three-point seat belt, ISOFIX system, and LATCH system.

i NOTE

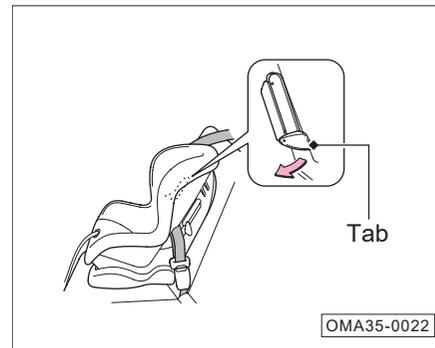
The word "minor" implies the severity of collision sensed by the vehicle control unit and has nothing to do with the damage of the vehicle.

During the actual installation of the child safety seat, be sure to refer to the instruction of the child safety seat for correct installation.

Installation of child safety seat by three-point seat belt

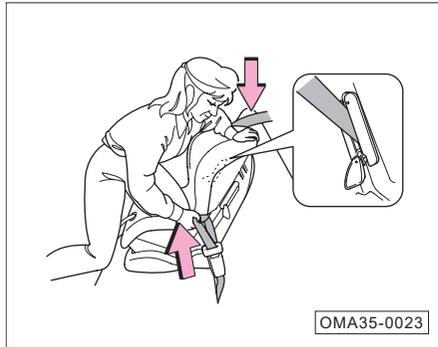


1. Place the child safety seat on the rear seat.
2. Pass the seat belt through the child safety seat and fully insert the tongue into the buckle until a click sound is heard.

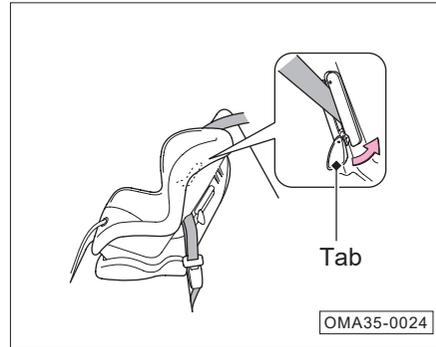


3. Push the tongue down and pass the shoulder belt through the slit on the side of the child safety seat.

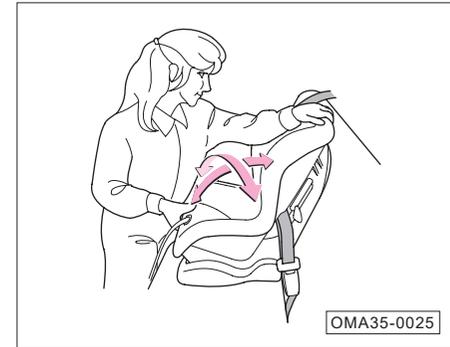
3. Instructions for safe operation



4. Grasp the shoulder belt near the buckle and pull it up to tension the lap belt. At this time, press the child safety seat with your own weight and push it into the vehicle seat.



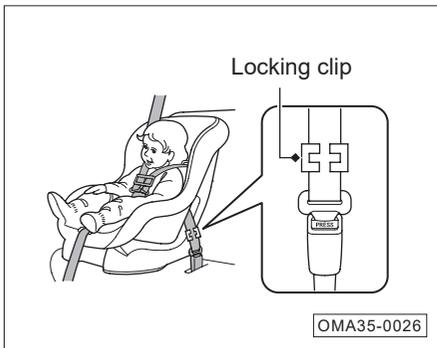
5. Place the seat belt correctly and push the tab up. Make sure the seat belt is not twisted. When pushing the tab up, pull upward the upper part of the shoulder belt to tension the belt.



6. Shake the child safety seat back and forth, left and right to make sure it is firmly fixed.

7. Make sure that all unused seat belts in the reach of the children are locked.

3. Instructions for safe operation



If no means are provided on the child safety seat for securing the seat belt, please install a locking clip on the seat belt.

- After the above steps 1 and 2, pull up the shoulder belt and make sure the lap belt is tensioned.
- Firmly grasp the seat belt near the locking tab. Pinch the two parts of the seat belt together so that they do not slip out of the locking tab. Unbuckle the seat belt.

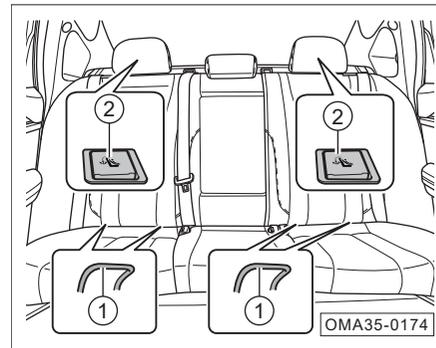
Install the locking clip as shown. Place the buckle as close as possible to the locking tab and insert the locking tab into the locking clip. Go to steps 6 and 7.

Installing LATCH or ISOFIX system

The rear seats of this vehicle are equipped with the LATCH system, and thus suitable for the LATCH or ISOFIX system child safety seats. Below are mainly the installation instructions of the LATCH system child safety seat.

⚠ WARNING

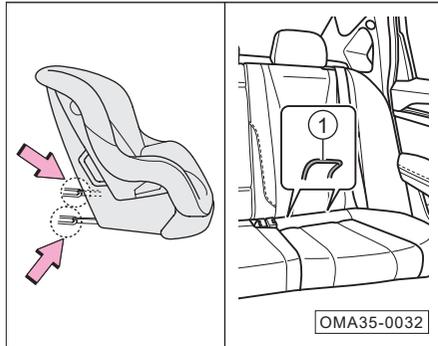
- **The child safety seat anchorages installed in this vehicle can be used to fix the child safety seats only.**
- **Do not connect straps, hard and sharp objects or any other objects other than child safety seats to the anchorages; otherwise children may be endangered in the event of an accident.**



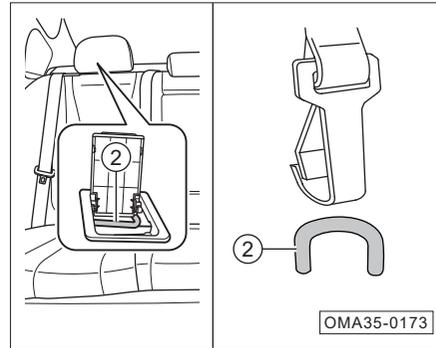
The lower anchorage ① of the rear seat is hidden in the gap between the seat back and the seat cushion; the upper anchorage ② is directly behind the rear seat headrest and can be seen by opening the trim cover.

3. Instructions for safe operation

Below are mainly the installation instructions of the LATCH system child safety seat.



1. Put the child safety seat on the seat, find the lower anchorage ①, and insert the lower guide groove of the child safety seat as arrowed into the lower anchorage ① until a click sound is heard.



2. Lift the headrest to the highest position, then pass the strap through the headrest pillar, open the protective cover of the upper anchorage ②, and catch the upper anchorage ② with the strap hook to ensure that the strap is not twisted.
3. Tension the strap and shake the child safety seat to ensure it is firmly fixed.

3. Instructions for safe operation

3.5 Exhaust gas hazard

Carbon monoxide gas

The exhaust gas emitted by the engine contains the toxic carbon monoxide gas. Please use the vehicle correctly to prevent the carbon monoxide gas from entering the vehicle.

Please contact the GAC Motor authorized shop to check whether the exhaust system is normal in the following cases:

- The exhaust system makes abnormal noises.
- The exhaust color is abnormal.

When the vehicle is driven with the trunk lid open, the exhaust gas will enter the vehicle, which is dangerous. If you must drive the vehicle with the trunk lid open, please open all windows and turn on the A/C system:

1. Select the fresh air mode.
2. Select  mode.
3. Set the fan speed to the highest.

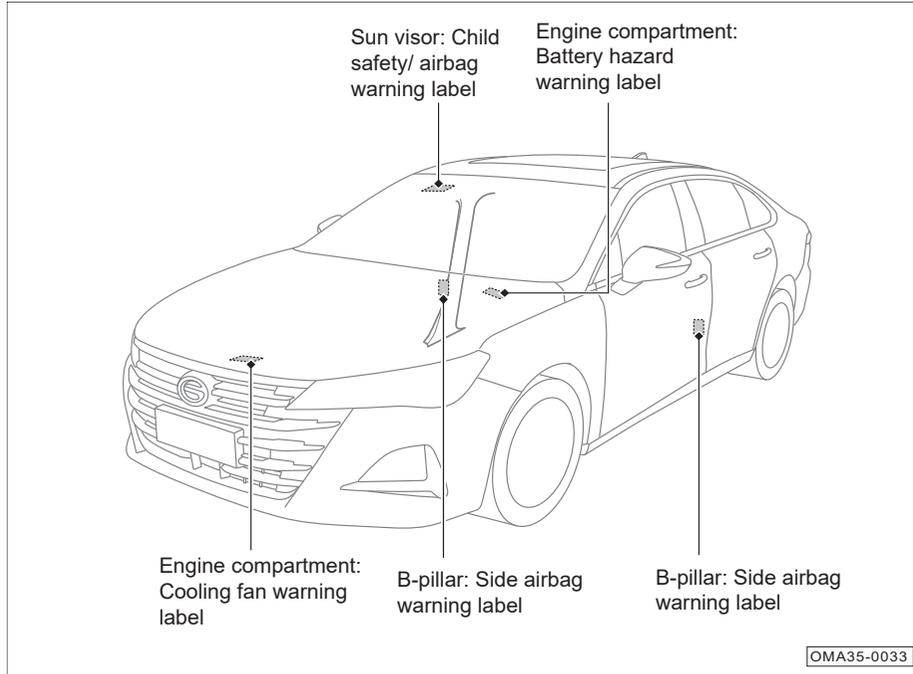
If the engine is idling during parking, adjust the A/C system in the same way.

WARNING

- **Carbon monoxide gas is toxic, and inhaling a great quantity of it will cause loss of consciousness and even death.**
- **When the engine is started for a long time in a confined space (such as a garage, etc.), carbon monoxide will quickly accumulate, resulting in excessive carbon monoxide in the vehicle. After starting the engine, drive the vehicle away from the confined space immediately.**

3. Instructions for safe operation

3.6 Safety label



The labels are located as shown to remind you of the potential danger that can cause serious injury or death. Please read these labels carefully.

If the label comes off or is difficult to read, please go to the GAC Motor authorized shop in time for replacement.

i NOTE

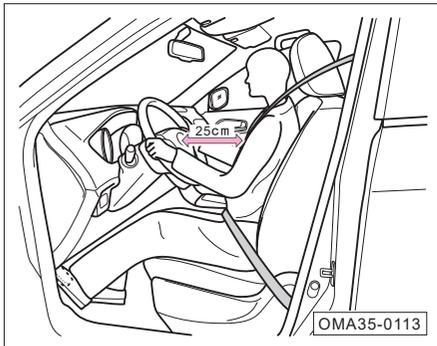
In case of any discrepancy in the illustrated location or quantity of the labels, the actual vehicle shall prevail.

4. Operation of systems and equipment

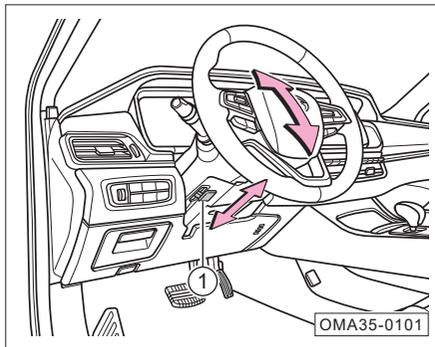
4.1 Cab

4.1.1 Steering wheel

Adjustment of the steering wheel position



- Adjust the driver's seat to a suitable position, so that the distance between the steering wheel and your chest is not less than 25 cm.



- Push down the locking handle ① to unlock the steering wheel.
- Adjust the steering wheel to the appropriate position up, down, front, and back as required, so that you can see the instrument cluster and all indicator lamps.
- Pull up the locking handle ① to lock the steering wheel and make sure it is firmly locked.

⚠ WARNING

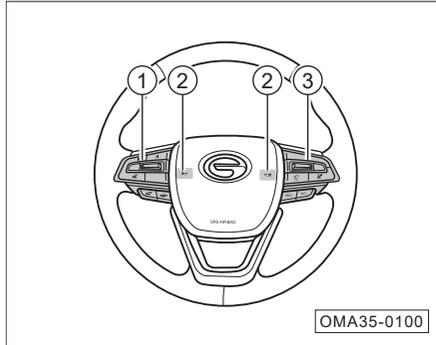
- During driving, the driver's hands should always grasp the outer ring of the steering wheel (9 o'clock and 3 o'clock positions).
- After adjustment, the steering wheel must be locked to prevent shifting while the vehicle is running.
- Only when the vehicle is stopped can the steering wheel be adjusted to avoid traffic accidents.
- To ensure safety, the steering wheel should face your chest, otherwise the airbag cannot provide effective protection in the event of an accident.

👁 CAUTION

If a great locking force is applied for locking the locking handle, you can release the locking handle again and then shake it up and down for locking again.

4. Operation of systems and equipment

Buttons on steering wheel



- ① AV system control button ==> [See page 116](#)
- ② Horn button: Press  button to sound the horn; release the button to stop sounding the horn.

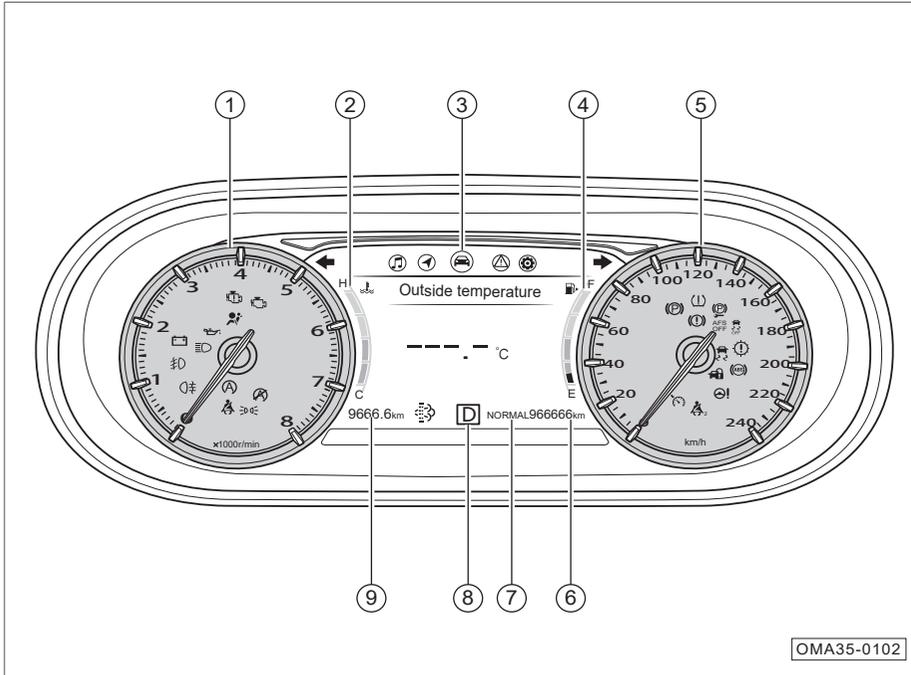
WARNING

Do not press and hold  button for a long time; otherwise the horn is highly prone to be damaged.

- ③ The right buttons include the control buttons of the instrument cluster display and the cruise control buttons:
 - Control buttons of the instrument cluster display:
 - Driving information => [See page 40](#)
 - Menu setting => [See page 41](#)
 - Alarm information => [See page 42](#)
 - Cruise control button:
 - Cruise control buttons* => [See page 167](#)
 - ACC button* => [See page 168](#)

4. Operation of systems and equipment

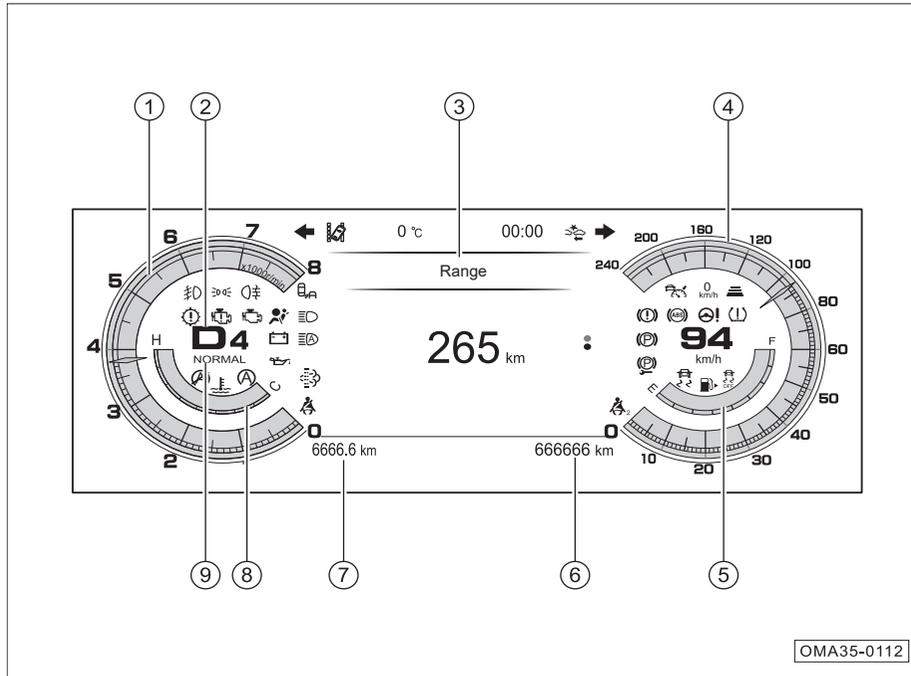
4.1.2 Instrument cluster



Instrument cluster with 7-inch display*

- ① Tachometer
- ② Engine coolant temperature gauge
- ③ Instrument cluster display
- ④ Fuel gauge
- ⑤ Speedometer
- ⑥ Odometer
- ⑦ Driving mode
- ⑧ Gear display
- ⑨ Trip meter

4. Operation of systems and equipment



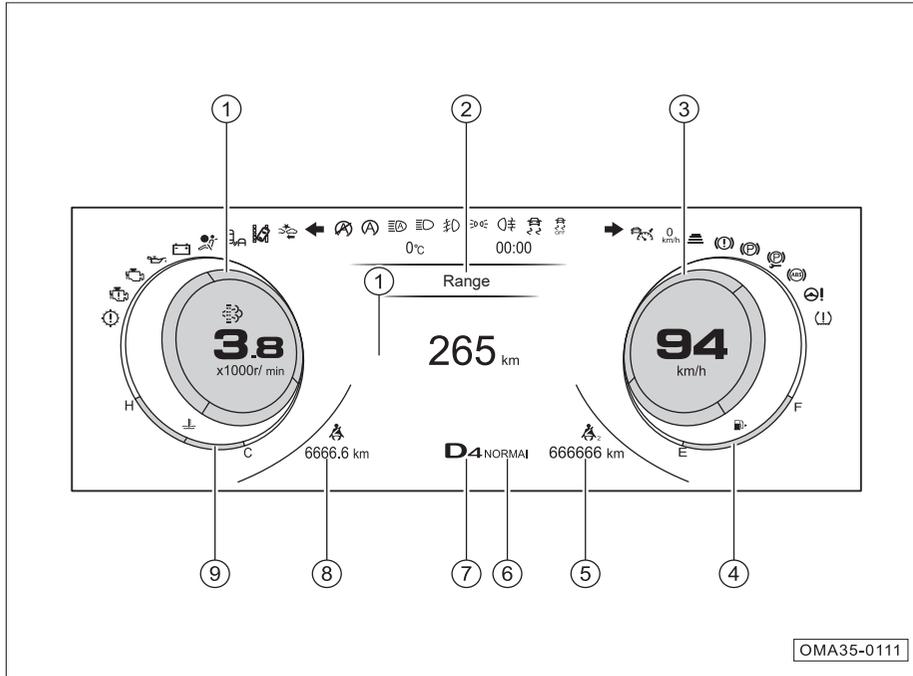
Instrument cluster with 12.3-inch display (classic theme)*

- ① Tachometer
- ② Gear display
- ③ Instrument cluster display
- ④ Speedometer
- ⑤ Fuel gauge
- ⑥ Odometer
- ⑦ Trip meter
- ⑧ Engine coolant temperature gauge
- ⑨ Driving mode

i NOTE

The instrument cluster shows different colors corresponding to the switched driving modes.

4. Operation of systems and equipment



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

- ① Tachometer
- ② Instrument cluster display
- ③ Speedometer
- ④ Fuel gauge
- ⑤ Odometer
- ⑥ Driving mode
- ⑦ Gear display
- ⑧ Trip meter
- ⑨ Engine coolant temperature gauge

i NOTE

The instrument cluster shows different colors corresponding to the switched driving modes.

4. Operation of systems and equipment

Tachometer

The tachometer is used to indicate the current engine speed in x1000 r/min.

NOTE

6000~8000 r/min is the high load area of the engine, which shall never be reached for fear of engine damage.

Instrument cluster display

Displayed information includes driving information, menu setting information, navigation information*, AV and entertainment information, alarm information, and call information*.

CAUTION

If the instrument cluster display is abnormal, stop the vehicle immediately for the sake of safety, and contact the GAC Motor authorized shop for inspection.

Engine coolant temperature gauge

The engine coolant temperature gauge (coolant temperature gauge) is used to indicate the current temperature of the engine coolant.

- The indication range covers C~H, where “C” means low temperature and “H” means high temperature.
- After the engine is started, the corresponding scale divisions of the coolant temperature gauge will be illuminated according to different temperatures; when all scale divisions of the coolant temperature gauge are illuminated, it indicates that the current coolant temperature is too high.

Fuel gauge

The fuel gauge is used to indicate the current amount of fuel remaining in the fuel tank.

- The indication range is E~F, where “E” means the fuel tank is empty, and “F” means the fuel tank is full.
- The corresponding scale divisions will be illuminated according to the amount of remaining fuel in the fuel tank. When no scale division or only the first scale division is illuminated, it means that the fuel in the fuel tank is insufficient, and the indicator lamp  on the instrument cluster will flash in yellow, accompanied by an alarm message.

Gear display

- The current gear information of the vehicle such as “P”, “R”, “N” or “D” is displayed according to the received signal.

Driving mode

- The current driving mode of the vehicle is displayed according to the received signal.

Trip meter

- The indication range is 0 km ~ 9999.9 km. When the indication of the trip meter is greater than 9999.9 km, the trip meter will be reset, and then its indication will be continued to accumulate.
- The trip meter can be reset through the trip meter option in the menu setting of the instrument cluster.

Odometer

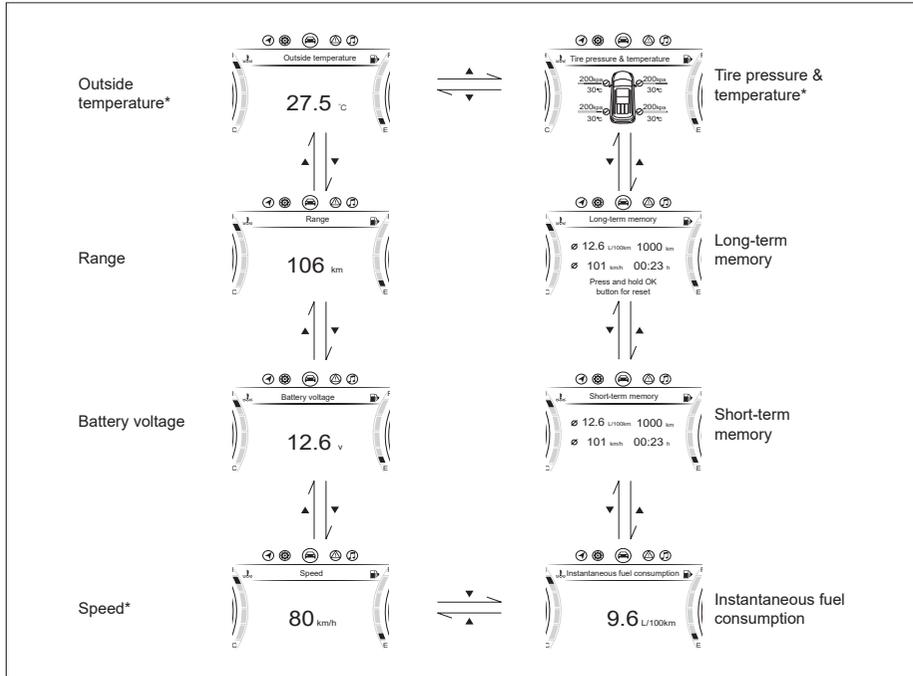
- The indication range is 0 km ~ 999999km. Speedometer

The speedometer is used to indicate the current speed of the vehicle in km/h.

CAUTION

For driving safety, please strictly abide by the traffic rules, and do not speed the vehicle at will.

4. Operation of systems and equipment



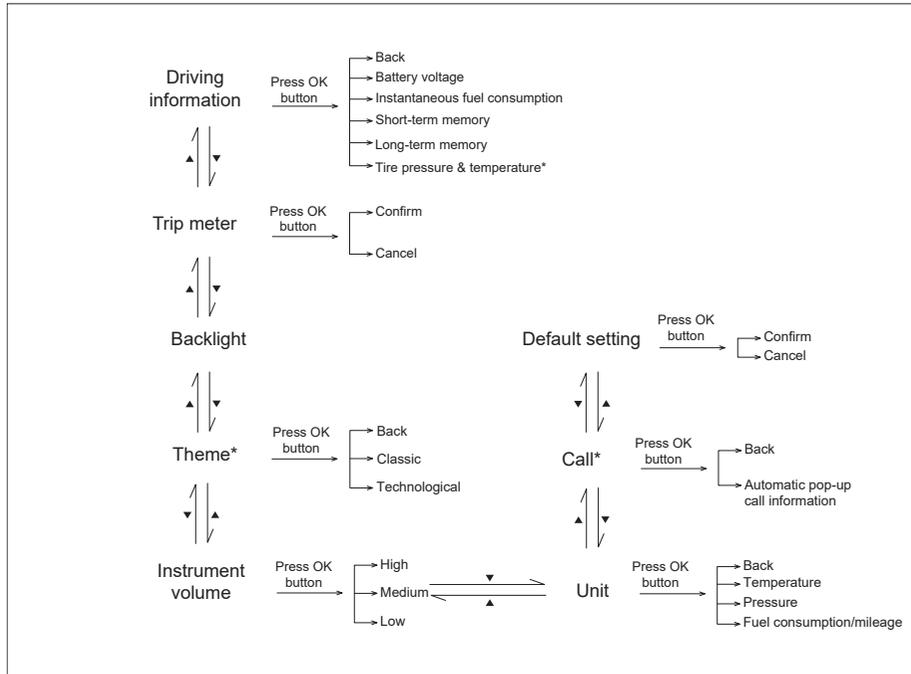
Driving information

When the ENGINE START/STOP button is at “ON” position, press ◀ or ▶ button on the right of the steering wheel to switch to the driving information screen, and then turn the OK button upwards or downwards to switch the display information screens.

i NOTE

- When no valid information is received, the driving information screen will not display valid data.
- The data on the long-term memory screen can be reset by pressing and holding the OK button.
- The figure shows the operations of the 7-inch instrument cluster as an example, which are similar to other instrument clusters.
- In case of any discrepancy in the driving information screen, the actual vehicle configuration shall prevail.

4. Operation of systems and equipment



Menu setting

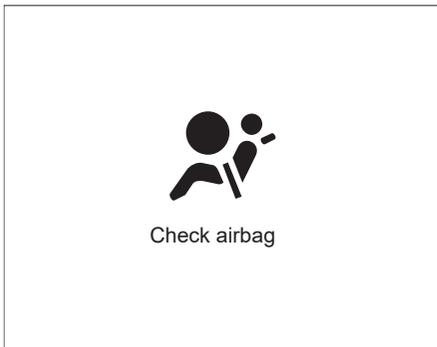
- When the vehicle speed is zero with the ENGINE START/STOP button set to "ON" position, press the ◀ or ▶ button on the right of the steering wheel to switch to the menu setting screen, where you can turn the OK button upward or downward to move the cursor for selection, press the OK button to enter the sub-menu, and then press the OK button for selection, confirmation or cancellation.

i NOTE

- The figure shows the operations of the 12.3-inch instrument cluster as an example, which are similar to other instrument clusters.
- If menu setting is carried out when the vehicle speed is not zero, the warning message "Safe driving tip: setting needs to be performed when the vehicle stops" will be displayed; if the warning message appears for more than 5 s, the instrument cluster will automatically switch to the driving information screen.
- In case of any discrepancy in the menu setting, the actual vehicle configuration shall prevail.

4. Operation of systems and equipment

Alarm message



On the alarm message screen, the current state of the vehicle is displayed in the form of texts, pictures, beep sound or others. The driver should always pay attention to checking for alarm message.

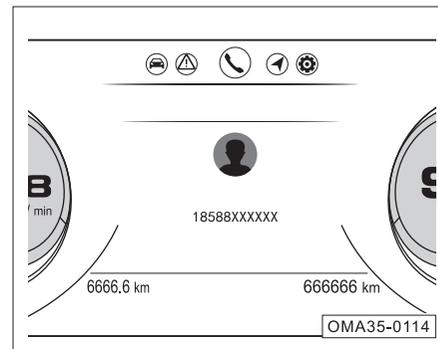
- When the vehicle is abnormal with the ENGINE START/STOP button set to "ON" position, the instrument cluster will give priority to the display of the alarm message, where you can press the OK button to confirm the alarm message, after which the system will go back to the previous screen. If there is no operation after 5 s, the alarm message will be displayed again.

- When there is more than one alarm message, press the ◀ or ▶ button to switch to the alarm information screen, where you can turn the OK button upward/downward to view the previous/next alarm information.
- If the vehicle is in good condition and there is no alarm message, the alarm message screen will display "No message".

i NOTE

When multiple alarm messages exist, be sure to read and confirm them one by one before the system returns to the previous screen.

Call information*

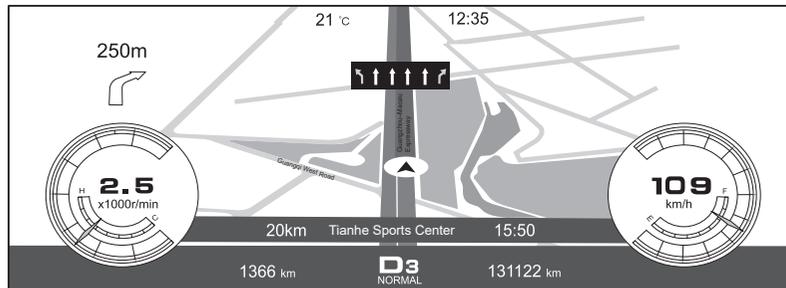


- When the AV system is connected to the Bluetooth of the mobile phone and there is an incoming call, the call information screen will display incoming call, calling, missed call, etc.
- When the B-CALL or E-CALL is used, the call information screen will display B-CALL or E-CALL status.

i NOTE

The figure shows the operations of the 12.3-inch instrument cluster as an example, which are similar to other instrument clusters.

4. Operation of systems and equipment



OMA35-0105

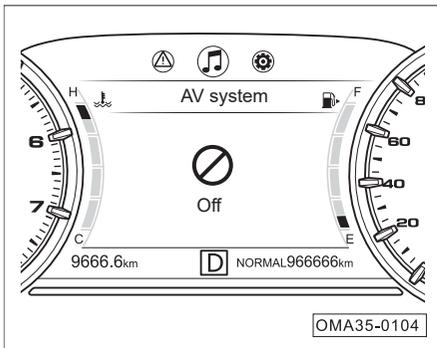
Navigation information *

When the ENGINE START/STOP button is at "ON" position, press the ◀ or ▶ button to switch to the navigation information screen.

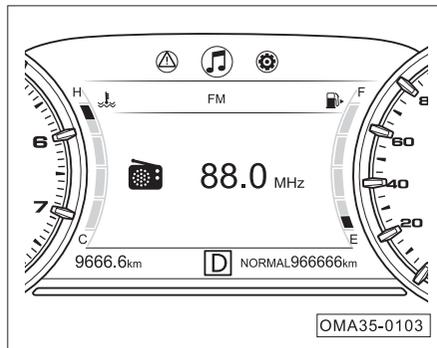
- When the navigation function of the AV system is activated, the corresponding navigation information is displayed according to the navigation function status of the AV system.

4. Operation of systems and equipment

AV and entertainment information *



- When the ENGINE START/STOP button is at "ON" position, press the ◀ or ▶ button on the steering wheel to switch to the AV and entertainment information screen. When the AV system is not turned on, the words "AV Off" will be displayed on the AV and entertainment information screen.



- When the AV system is turned on, the current playback information will be displayed on the AV and entertainment information screen.

i NOTE

- The figure shows the operations of the 7-inch instrument cluster as an example, which can be referred to by 12.3-inch instrument cluster.
- When the AV system activates the CarLife, the AV and entertainment information screen will display the CarLife connection status rather than entertainment functions.

4. Operation of systems and equipment

4.1.3 Indicator lamp

No.	Icon	Designation	Color	Function
1		Charging system warning lamp	Red	This warning lamp will come on when the engine is not started with the ENGINE START/STOP button set to "ON" position, and will go out after the engine is started.
				If this warning lamp comes on after the engine is started, it indicates that the charging system is faulty.
2		MIL	Yellow	If there is no fault, this indicator lamp will come on for a few seconds when the engine is not started with the ENGINE START/STOP button set to "ON" position, and then will go out after the system self-test.
				If this indicator lamp comes on after the engine is started, it indicates that the engine system is faulty.
3		Low oil pressure warning lamp	Red	This warning lamp will come on when the engine is not started with the ENGINE START/STOP button set to "ON" position, and will go out after the engine is started.
				If this warning lamp comes on after the engine is started, it indicates that the engine oil pressure is low.
4		Emission fault indicator lamp	Yellow	This indicator lamp will come on when the engine is not started with the ENGINE START/STOP button set to "ON" position, and will go out after the engine is started.
				If this indicator lamp comes on after the engine is started, it indicates that the exhaust system is faulty.
5		Left turn signal and hazard warning indicator lamp	Green	When the left turn signal indicator lamp flashes alone, it indicates that the left turn signal lamp of the vehicle is on. When the hazard warning lamp switch is pressed, the left/right turn signal indicator lamps and all turn signal lamps will flash simultaneously.
6		LDWS status indicator lamp *	White	If the white indicator lamp comes on, it indicates that the LDWS is activated.
			Yellow	If the yellow indicator lamp comes on, it indicates that the LDWS intervenes with the steering wheel for deviation correction.
			Red	If the red indicator lamp comes on, it indicates that the lane departure warning system is faulty. In that case, please go to the GAC Motor authorized shop for inspection in time.
			Green	If the green indicator lamp comes on, it indicates that the LDWS is working normally.

4. Operation of systems and equipment

No.	Icon	Designation	Color	Function
7		FCWS status indicator lamp *	Green	If the green indicator lamp comes on, it indicates that the FCWS is activated.
			Red	If the red indicator lamp comes on, it indicates that the FCWS is faulty. In that case, please go to the GAC Motor authorized shop for inspection in time.
				If the red indicator lamp flashes, it indicates that the FCWS is being triggered and activated.
8		High engine coolant temperature indicator lamp	Red	If the red indicator lamp comes on, it indicates that the engine coolant temperature is too high.
9		Supplemental restraint system (SRS) indicator lamp	Red	If the red indicator lamp comes on, it indicates that the SRS system is faulty.
10		Low fuel level indicator lamp	Yellow	If the yellow indicator lamp flashes, it indicates that the fuel level of the fuel tank is low.
				If the yellow indicator lamp comes on, it indicates that the fuel pump may be faulty.
11		ACC indicator lamp (no vehicle ahead) *	White	If the white indicator lamp comes on, it indicates that the ACC is in the ready state, and there is no target vehicle ahead.
			Green	If the green indicator lamp comes on, it indicates that the ACC is working, and there is no target vehicle ahead.
12		ACC indicator lamp (a vehicle ahead) *	White	If the white indicator lamp comes on, it indicates that the ACC is in the ready state, and there is a target vehicle ahead.
			Green	If the green indicator lamp comes on, it indicates that the ACC is working, and there is a target vehicle ahead.
13		ACC fault indicator lamp *	Yellow	If the yellow indicator lamp comes on, it indicates that the ACC is faulty.
14		Right turn signal and hazard warning indicator lamp	Green	If the right turn signal indicator lamp flashes alone, it indicates that the right turn signal lamp of the vehicle is on. When the hazard warning lamp switch is pressed, the left/right turn signal indicator lamps and all turn signal lamps will flash simultaneously.
15		IMMO indicator lamp	Red	If the red indicator lamp comes on, it indicates that the engine immobilizer system or the body anti-theft system is working.
16		Electric park brake (EPB) status indicator lamp	Red	If the red indicator lamp comes on, it indicates that the EPB is applied.
			Green	If the red indicator lamp flashes, it indicates that the EPB is engaged partially or faulty.
				If the green indicator lamp comes on, it indicates that the EPB is activated.

4. Operation of systems and equipment

No.	Icon	Designation	Color	Function
17		Electric park brake (EPB) fault indicator lamp	Yellow	If the yellow indicator lamp comes on, it indicates that the EPB system is faulty.
			Yellow	If the yellow indicator lamp flashes, it indicates that the EPB is in the service mode.
18		Parking brake and brake system indicator lamp	Red	If the red indicator lamp comes on, it indicates that the brake fluid is too low or the electronic brake force distribution (EBD) system is faulty.
19		Electronic stability program (ESP) indicator lamp	Yellow	If the yellow indicator lamp comes on, it indicates that the ESP is faulty.
				If the yellow indicator lamp flashes, it indicates that the ESP is working.
20		ESP OFF indicator lamp	Yellow	If the yellow indicator lamp comes on, it indicates that the ESP is off.
21		Anti-lock brake system (ABS) indicator lamp	Yellow	If the yellow indicator lamp comes on, it indicates that the ABS is faulty.
22		Transmission fault indicator lamp	Yellow	If the yellow indicator lamp comes on, it indicates that the transmission system is faulty.
				If the yellow indicator lamp flashes, it indicates that the transmission fluid temperature is high.
23		Tire pressure monitoring system (TPMS) indicator lamp	Yellow	If the yellow indicator lamp comes on, it indicates that the TPMS is faulty.
24		Electric power steering (EPS) indicator	Yellow	If the yellow indicator lamp comes on, it indicates that the EPS system is faulty.
25		Cruise control indicator lamp *	White	If the white indicator lamp comes on, it indicates that the cruise control is in the ready state.
			Green	If the green indicator lamp comes on, it indicates that the cruise control is activated.
26		Front passenger seat belt indicator lamp	Red	If the red indicator lamp comes on, it indicates that the front passenger's seat belt is not fastened or the system is faulty.
27		BSD system status indicator lamp *	Green	If the green indicator lamp comes on, it indicates that the BSD system is activated.
			Yellow	If the yellow indicator lamp comes on, it indicates that the BSD system is faulty.
28		Driver's seat belt indicator lamp	Red	If the red indicator lamp comes on, it indicates that the driver's seat belt is not fastened or the seat belt system is faulty.
29		STT fault indicator lamp *	White	If the white indicator lamp comes on, it indicates that the activation conditions of STT are not met temporarily.
			Yellow	If the yellow indicator lamp comes on, it indicates that the STT is faulty.

4. Operation of systems and equipment

No.	Icon	Designation	Color	Function
30		STT ON indicator lamp*	Green	If the green indicator lamp comes on, it indicates that the STT is activated.
31		High beam indicator lamp	Blue	If the blue indicator lamp comes on, it indicates that the high beam is on.
32		Position lamp indicator lamp	Green	If the green indicator lamp comes on, it indicates that the position lamp, instrument panel lamp, license plate lamp, ambient light, etc. are on.
33		Rear fog lamp indicator lamp	Yellow	If the yellow indicator lamp comes on, it indicates that the rear fog lamp is on.
34		Front fog lamp indicator lamp*	Green	If the green indicator lamp comes on, it indicates that the front fog lamp is on.
35		Intelligent high beam indicator lamp *	White	If the white indicator lamp comes on, it indicates that the intelligent high beam is activated.
			Yellow	If the yellow indicator lamp comes on, it indicates that the intelligent high beam is faulty.
36		Rear seat belt indicator lamp *	White	If the white indicator lamp comes on, it indicates that the second seat belt is fastened.
			Red	If the red indicator lamp comes on, it indicates that the rear seat belt is not fastened or the seat belt system is faulty.
37		Gasoline particulate filter (GPF) indicator lamp *	White	If the white indicator lamp comes on, it indicates that the accumulated carbon of the GPF exceeds a certain limit, and it is necessary to run at a high speed for more than 40 minutes to clean the carbon.
			Yellow	If the yellow indicator lamp comes on, it indicates that the accumulated carbon of the GPF is excessive, and it is necessary to go to the GAC Motor authorized shop for cleaning.

Note: If any indicator or warning lamp appears in the instrument cluster after the vehicle is started or during driving, it indicates that the related system or function is in a certain working state or faulty. Therefore, you should read carefully and understand the meaning of each indicator or warning lamp. In case of a fault, please go to or contact the GAC Motor authorized shop for inspection in time.

4. Operation of systems and equipment

4.2 Vehicle locking and unlocking

4.2.1 Remote control key

This model is accompanied with two intelligent remote control keys (including emergency mechanical key) and the corresponding key barcodes. If the key needs to be re-customized or the key barcode is missing, please contact GAC Motor authorized shop.

Poor signal strength of remote control key

The operation of the remote control key button may be interfered or unstable in the following cases:

- Nearby equipment is emitting strong radio waves.
- The remote control key is carried together with telecommunication equipment, laptop, mobile phone, access control card or wireless signal transmitter.
- The remote control key is put together with magnetic cards (such as bank card and bus card).
- Metal objects contact or cover the remote control key.

CAUTION

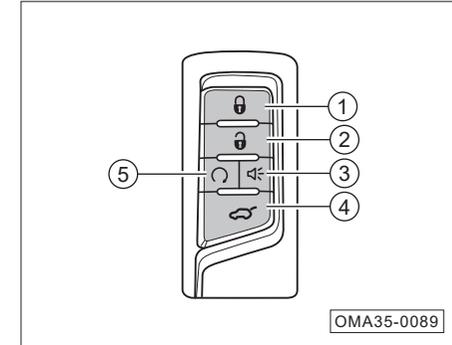
The remote control key contains an electronic circuit that can trigger the engine immobilizer system. If the circuit is damaged, the engine may not be started. Therefore,

- Avoid placing the remote control key in direct sunlight or in a high-temperature or humid place.
- Avoid dropping the remote control key from a high place or crushing it by heavy objects.
- Avoid exposing the remote control key to any liquid. If the key gets wet accidentally, dry it immediately.

NOTE

- The buttons of the remote control key cannot be operated when the ENGINE START/STOP button is in the "ACC" or "ON" position.
- If the unlocking or locking function of the remote control key is deactivated, you can try to press the buttons on the remote control key 3 times continuously to activate the function.

Button operations



- ① : Locking button
- ② : Unlocking button
- ③ : Anti-theft alarm button
- ④ : Trunk lid unlocking button
- ⑤ : PEPS button

4. Operation of systems and equipment

① Locking button

- If this button is pressed once within the effective range of the remote control key, all doors will be locked; if this button is pressed and held for 2 s, the windows* will be automatically closed, and if pressed and held for 3 s, the sunroof will be automatically closed; if the button is released when the windows or the sunroof is being closed automatically, the windows or the sunroof will stop moving.
- If this button is pressed twice consecutively within 0.5 s, the vehicle locating function will be realized and the turn signal lamps will flash 3 times quickly.

CAUTION

Before closing the windows or the sunroof by the remote control key, make sure that there are no body parts (such as head and hands) in the movement path of the windows or the sunroof so as to prevent a risk of pinch injury.

NOTE

- If this button is pressed and held for 2 s, either the driver's door window or all the four door windows will be automatically closed for different vehicle models, which subject to the actual vehicle configurations.
- This function can be activated or deactivated via "Vehicle Settings → Intelligent Body → Remote Control Windows" in the AV system.
- When the doors are locked, the turn signal lamps will flash once and the horn will sound once. The horn prompt can be activated or deactivated via "Settings → Sounds → Unlock/Lock Horn Prompt" in the AV system.

② Unlocking button

- If this button is pressed once within the effective range of the remote control key, all doors will be unlocked; if this button is pressed and held for 2 s, the windows* will be automatically opened, and if pressed and held for 3 s, the sunroof will be automatically opened; if the button is released when the windows or the sunroof is being opened automatically, the windows or the sunroof will stop moving.

NOTE

- The remote control key cannot control the tilting of the sunroof.
- If this button is pressed and held for 2 s, either the driver's door window or all the four door windows will be automatically opened for different vehicle models, which subject to the actual vehicle configurations.
- When the doors are unlocked, the turn signal lamps will flash twice and the horn will sound twice. The horn prompt can be activated or deactivated via "Settings → Sounds → Unlock/Lock Horn Prompt" in the AV system.

4. Operation of systems and equipment

NOTE

- This remote control function can be activated or deactivated via “Vehicle Settings → Intelligent Body → Remote Control Windows” in the AV system.
- All the four doors or the left front door can be unlocked by setting the  button via “Vehicle Settings → Intelligent Body → Remote Unlock” in the AV system.

CAUTION

After the  button is pressed to unlock the door, if the door is not opened within 30 s, the system will re-lock the door.

③ Anti-theft alarm button

- If the button is pressed and held for 3 s, the anti-theft alarm will be triggered, then the horn will sound and the turn signal lamps will flash for 30 s; if the  or  button is pressed, the anti-theft alarm will be stopped.

④ Trunk lid unlocking button

- If this button is pressed and held for 2 s within the effective range, the trunk lid will be unlocked.

⑤ PEPS button

- Within the effective range, if the  button is pressed and then the  button is pressed and held within 2 s, the turn signal lamps will flash and the engine can be remotely started.
- Then if the  button is pressed and held for 3 s, the engine can be remotely stopped.

NOTE

- Before remotely stopping the engine, make sure that the vehicle is in the locked state, and if you are not sure about it, press the  button once, and then press and hold the  button to remotely stop the engine.
- To remotely stop the engine, keep the key within the effective range, otherwise the unlocking function may be triggered and then the engine cannot be started.
- The maximum default start hold duration is 5 min. If you need to change the duration, please go to GAC Motor authorized shop to change it.

4. Operation of systems and equipment

Switching between audible-visual alarm and visual alarm

The visual alarm is to remind the owner of the vehicle only through the flashing of the turn signal lamps; the audible-visual alarm is to remind the owner of the vehicle through both the flashing of the turn signal lamps and the sounding of the horn

When the ENGINE START/STOP button is in the "OFF" position, if the  and  buttons on the remote control key are pressed and held for 2 s at the same time, the audible-visual alarm and the visual alarm can be switched between each other. If the switching is successful, the turn signal lamps will flash 3 times (only for electronic anti-theft alarm).

NOTE

The switching function is only applicable to the anti-theft alarm. For details, please refer to the basic operations of body anti-theft => [See page 69](#).

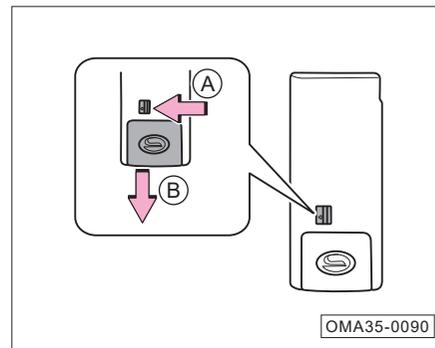
Battery replacement

Each time you press the buttons on the remote control key, the indicator lamp of the key will flash once. If the indicator lamp fails to flash, or you need to press the buttons several times to lock or unlock the doors, the battery may be exhausted or about to run out. It is recommended to go to GAC Motor authorized shop for the battery replacement.

CAUTION

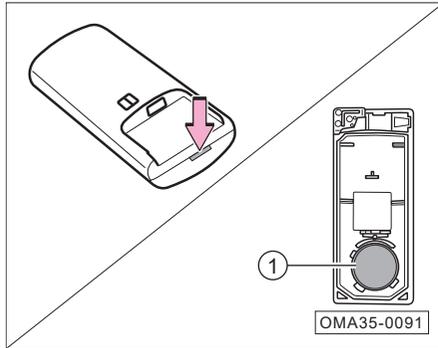
- Be sure to replace the battery with a new one of the same rated voltage and size.
- An inappropriate battery may damage the remote control key.
- Always comply with relevant environmental regulations to dispose the exhausted battery.

Battery replacement steps



- Pull the switch in the direction of arrow A and pull out the emergency mechanical key in the direction of arrow B.

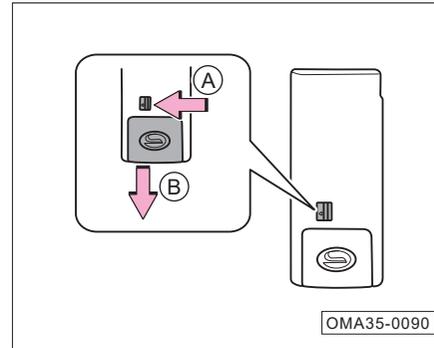
4. Operation of systems and equipment



- Use the emergency mechanical key to pry open the remote control key housing at the arrow position.
- Take out the battery ①.
- Assemble the remote control key in the reverse steps mentioned above.

4.2.2 Emergency mechanical key

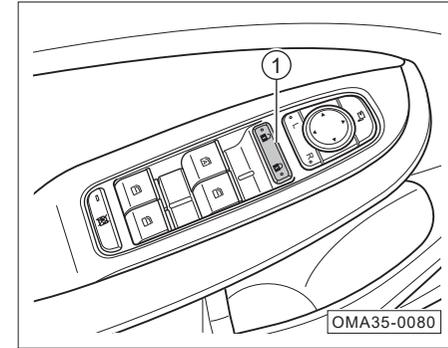
Emergency mechanical key



- Pull the switch in the direction of arrow A and pull out the emergency mechanical key in the direction of arrow B.
- The emergency mechanical key can be used to lock all doors or unlock the driver's door, but cannot be used to start the vehicle.

4.2.3 Door lock system

Central locking button

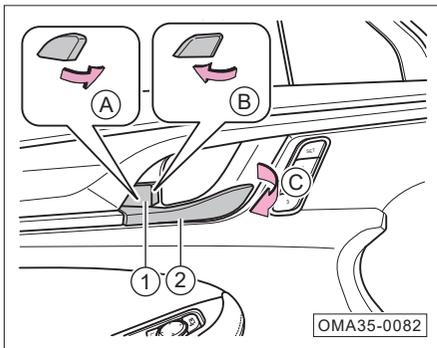


The central locking button ① can be used to lock and unlock the doors in the vehicle:

- Lock all the doors: Press the  button of ①.
- Unlock all the doors: Press the  button of ①.

4. Operation of systems and equipment

Door latch and inside handle



- If the door latch ① is pushed inward in the direction of arrow A, the corresponding door can be locked.
- If the door latch ① is pulled out in the direction of arrow B, the corresponding door can be unlocked; then if the inside handle ② is pulled in the direction of arrow C, the door can be opened.

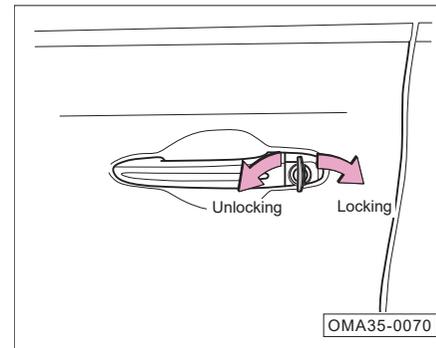
i NOTE

When the child safety lock is activated (=> [See page 55](#)), even if the rear door latch is unlocked, the inside handle cannot open the rear door. In this case, the rear door shall be opened from outside. And do not pull the inside handle with force to avoid damages.

👁 CAUTION

After the door latch is locked, please do not forcibly pull the inside handle.

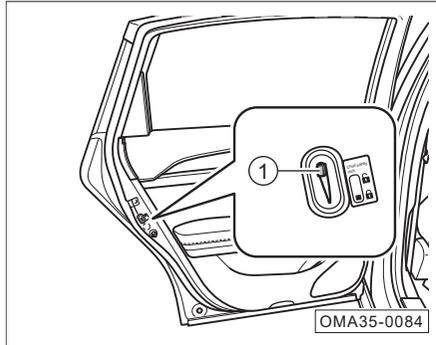
Door lock hole



- Take out the emergency mechanical key. => [See page 53](#)
- Insert the emergency mechanical key into the driver's door lock hole.
- Turn the key clockwise to lock all the doors.
- Turn the key counterclockwise to unlock the driver's door only.

4. Operation of systems and equipment

Child safety lock



- Activation: Turn the child safety lock switch ① from  to  position to activate the child safety lock.
- Deactivation: Turn the child safety lock switch ① from  to  position to deactivate the child safety lock.

i NOTE

- The child safety lock can prevent children in the vehicle from unintentionally opening the rear door and thus reduce the risk of accidents.
- When the child safety lock is activated, the inside handle cannot open the rear door. In this case, the rear door shall be opened from outside. And do not pull the inside handle with force to avoid damages.

⚠ WARNING

Never leave children or handicapped persons in the vehicle alone. Once the doors are locked, it is difficult for children or handicapped persons to leave the vehicle in an emergency; the locked doors in an accident will make it more difficult to rescue persons inside the vehicle.

Automatic unlock function

If the traveling vehicle stops with the doors locked and the ENGINE START/STOP button is switched to the "OFF" position, the four doors will be automatically unlocked.

i NOTE

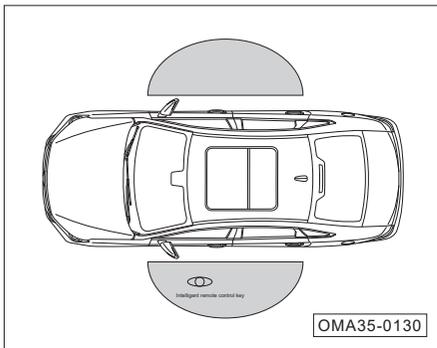
This function can be activated or deactivated via "Vehicle Settings → Intelligent Body → Auto Unlock" in the AV system.

Collision unlock function

If the vehicle encounters a collision while the ENGINE START/STOP button is in the "ON" position and the required conditions are met, the four doors will be simultaneously unlocked, and after 3 s will be simultaneously unlocked again.

4. Operation of systems and equipment

Intelligent active unlock

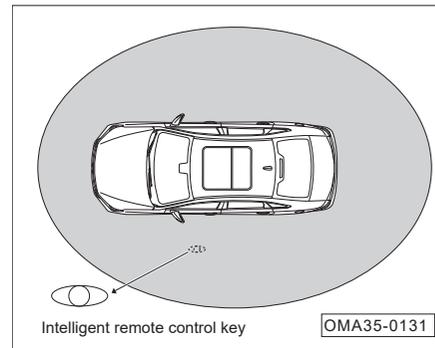


- When the intelligent active unlock function is activated and the intelligent remote control key is brought to the area within 1 m of the vehicle, the vehicle will be automatically unlocked.

i NOTE

- This function can be activated or deactivated via "Vehicle Settings → Intelligent Body → Intelligent Active Unlock" in the AV system.
- If the intelligent active unlock is successful, the turn signal lamps will flash twice and the horn will sound twice.
- When the vehicle is parked for more than 7 days, the intelligent active unlock function will be automatically deactivated in order to reduce the power consumption of the vehicle. In this case, you need to use the intelligent remote control key or touch the door handle to unlock the doors, and after the vehicle is started, the intelligent active unlock function will be restored.

Intelligent active lock



- When the intelligent active lock function is activated, the ENGINE START/STOP button is in the "OFF" position and all doors are closed, if the intelligent remote control key is taken away from the vehicle within 2 m for more than 2 minutes or more than 2 m, the vehicle will be automatically locked.
- If the intelligent remote control key is taken away from the vehicle within 2 m for more than 2 minutes, the intelligent active lock function will be deactivated temporarily for power saving purpose, and if more than 4 minutes, the intelligent active unlock function, intelligent courtesy lamp and other functions will be deactivated temporarily.

4. Operation of systems and equipment

You need to open and then close one of the doors to re-activate the intelligent active lock function.

NOTE

- This function can be activated or deactivated via “Vehicle Settings → Intelligent Body → Intelligent Active Lock” in the AV system.
- If the intelligent active lock is successful, the turn signal lamps will flash once and the horn will sound once.
- If the key is within 2 m from the vehicle, the indicator lamp of the intelligent remote control key will flash continuously until the doors are locked for 2 min.
- If the intelligent active lock is successful but the trunk lid is ajar, the audible and visual alarms will be sent to remind you.
- If one of the doors is ajar, there will be a corresponding indication on the instrument cluster.

NOTE

- If the user approaches the vehicle within 3 s after the intelligent active lock is activated, the system will not activate the intelligent active unlock but will consider that the user wants to confirm whether the vehicle is locked. The user can confirm whether the doors are locked by pulling the rear door handles.

It should be noted that the intelligent active lock function will not be activated in case of the followings:

- The power mode is in any mode other than “OFF”.
- The battery voltage is low.
- The intelligent remote control key is in the vehicle.
- No intelligent remote control key is detected within 2 m of the vehicle.

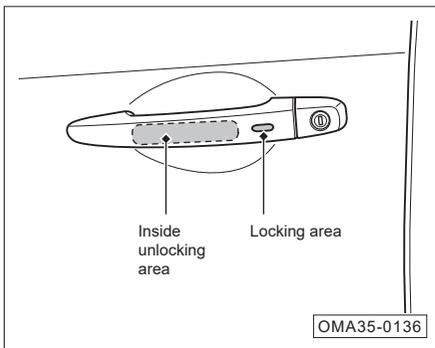
- One door (including the engine hood and the trunk lid, for example, when you take the key away from the vehicle more than 2 m during the trunk lid closing) is ajar.
- The intelligent remote control key is thrown into the vehicle from the door window.
- The intelligent remote control key is in the trunk.
- The intelligent remote control key is too close to the vehicle.

CAUTION

- The intelligent active lock function cannot automatically close the door windows, so before leaving the vehicle, make sure that all door windows and the sunroof are closed.
- Do not leave children or handicapped persons in the vehicle alone when using the intelligent active lock function.

4. Operation of systems and equipment

PEPS system*



- When the ENGINE START/STOP button is in the "OFF" position, if you bring the intelligent remote control key to approach the vehicle doors and put your hand into the unlocking area inside the front door handle, all the doors will be unlocked after effective induction.
- When the ENGINE START/STOP button is in the "OFF" position, if you take the intelligent remote control key from the vehicle, close all the doors and touch the locking area, all the doors will be locked after effective induction.

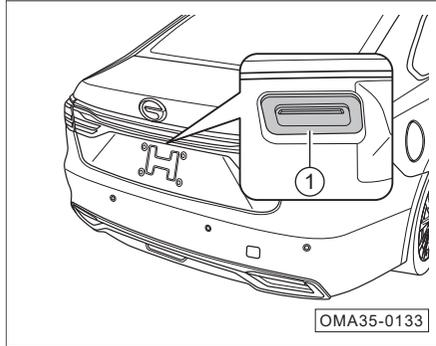
CAUTION

- After using the PEPS function to lock the doors, please wait for 5 s before using it again to unlock the doors.
- If you touch the unlocking and locking areas at the same time, priority will be given to the unlocking function, so please do not touch them at the same time.
- If there is snow or ice on the front door handle, the PEPS function will be affected, so please clear the snow or ice as soon as possible.
- If the front door handle gets wet and the intelligent remote control key is within the effective range during heavy rain or vehicle washing, the doors may be unlocked.

CAUTION

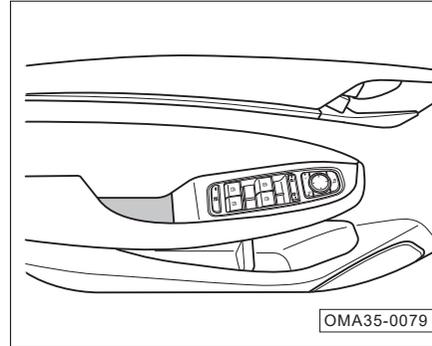
- If you touch the front door handle while wearing gloves, the door sensor may slowly respond to or may not respond to unlock the doors.
- If you grab the front door handle and pull it immediately, the doors may not be opened. Please grab the handle again and confirm that the doors are unlocked, and then pull the handle.
- Even within 1 m, if the intelligent remote control key is higher or lower than the front door handle, the PEPS system may fail to lock/unlock the doors.
- If the intelligent remote control key is too close to the doors and the door windows, the PEPS system may not work properly; if the working distance of the remote control transmitter changes, the battery power may be low.

4. Operation of systems and equipment



- When the ENGINE START/STOP button is in the "OFF" position, if you bring the intelligent remote control key to approach the trunk lid and then press the trunk lid unlocking button ①, the trunk lid will be opened.
- When the vehicle is in unlocked and stationary state, if you press the trunk lid unlocking button ① directly without carrying the intelligent remote control key, the trunk lid will also be opened.

4.2.4 Door



- To close the door in the vehicle, grab the door armrest and pull it inward.
- To close the door outside, directly push the door toward the vehicle.

CAUTION

Before opening the door, always pay attention to other vehicles or pedestrians outside the vehicle to avoid accidents caused by collision.

WARNING

- Always ensure that all doors are closed to prevent suddenly opening during driving, which may cause personal injuries or accident.
- Open or close the doors only when the vehicle is stationary.
- Do not put your hands on the edge of the door when closing the door, otherwise there will be a risk of pinching.

NOTE

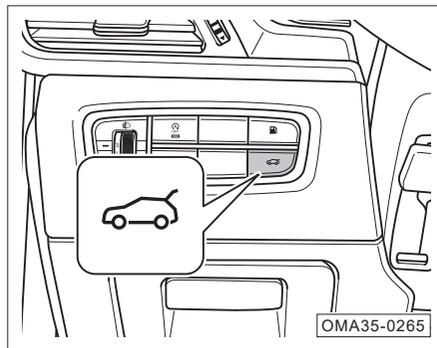
- If the door is not closed properly, please re-open the door and close it again.
- If the door is ajar, there will be a corresponding indication on the instrument cluster; then when the vehicle speed exceeds 5 km/h, there will be a buzzer sound.

4. Operation of systems and equipment

4.2.5 Trunk lid

Unlocking of trunk lid

1. Use the remote control key: When the ENGINE START/STOP button is in the "OFF" position, if you press the  button on the remote control key for about 2 s within the effective range, the trunk lid will be unlocked.
2. Use the PEPS function: If you carry the intelligent remote control key within about 1 m away from the trunk and then press the trunk lid unlocking button, the trunk lid will be unlocked. => [See page 59](#)



3. Use the instrument panel button: If you press and hold the trunk lid unlocking button , the trunk lid will be unlocked.

Easy Open function of trunk lid

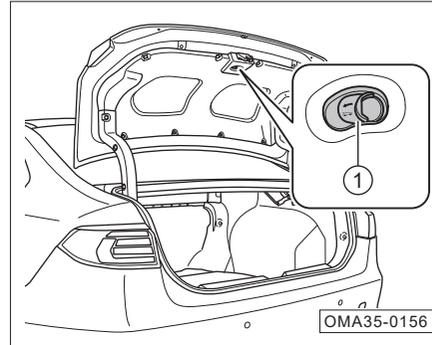
When the ENGINE START/STOP button is in the "OFF" position and the four doors are closed, if the user carries the intelligent remote control key to enter the trunk Easy Open area, about 0.5 m away from the trunk, the horn will sound once (with the horn prompt function activated in the multi-function touch screen), and the high-mounted stop lamp will flash at the same time. In this case, if the user stays or steps backward, the trunk lid will be unlocked. If the user leaves the trunk area while the high-mounted stop lamp is flashing, the trunk lid will not be unlocked.

4. Operation of systems and equipment

i NOTE

- This function can be activated or deactivated via “Vehicle Settings → Intelligent Body → Trunk Lid Easy Open” in the AV system.
- If you carry the intelligent remote control key to approach the trunk within about 0.5 m, the high-mounted stop lamp will flash 4 times, and after 3.2 s, the trunk lid will be unlocked. If you don't want to open the trunk, just leave the trunk area within 3.2 s or press the  button on the intelligent remote control key to temporarily deactivate this function.
- If you want to re-activate the trunk lid Easy Open function after deactivating it by the  button on the intelligent remote control key, you need to open and then close one of the front doors.

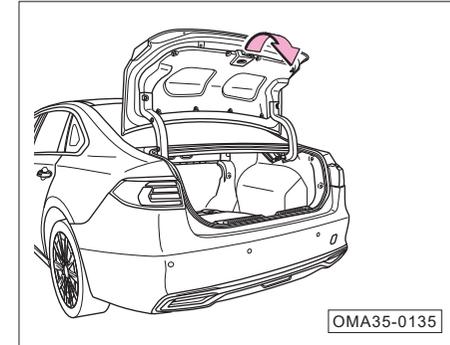
Emergency unlocking of trunk lid



When the vehicle is out of power or the trunk lid fails to be opened normally, you can try the emergency interior opening of trunk lid:

- Fold down the rear seat back. => See [page 93](#)
- Push the emergency unlocking button ① to unlock the trunk lid.

Locking of trunk lid



- Lower the trunk lid close to the rear bumper cover, and then press the trunk lid firmly to lock it.

4. Operation of systems and equipment

i NOTE

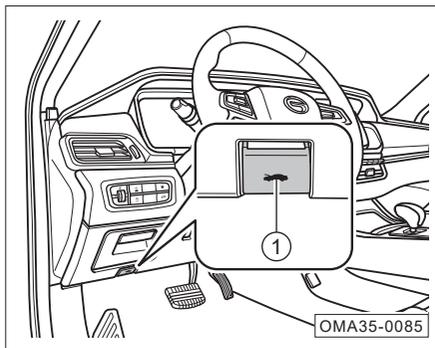
If the trunk lid is ajar, there will be a corresponding alarm indication on the instrument cluster; then when the vehicle speed exceeds 5 km/h, there will be a buzzer sound.

👁 CAUTION

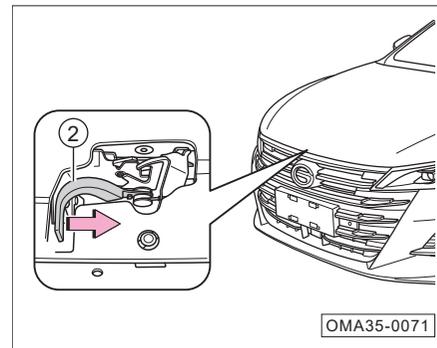
- Be careful when closing the trunk lid to ensure that no person is within the movement range of the trunk lid.
- Always ensure that the closed trunk lid is locked to prevent suddenly opening during driving, which may cause an accident.

4.2.6 Engine hood

Unlocking of engine hood



- If the engine hood release handle ① is pulled, the engine hood will be unlocked and pop up slightly.



- If the locking mechanism ② is pushed as arrowed, the engine hood will be fully unlocked.
- If the engine hood is opened upward, the stay bar will automatically support the engine hood at the limit position.

4. Operation of systems and equipment

Locking of engine hood

- Lower the engine hood to a height close to the fenders, and then slightly press down the front end of the engine hood for firm locking.

i NOTE

Proper lubrication of the locking mechanism moving parts of the engine hood is helpful for opening or closing the engine hood.

If the engine hood is ajar, there will be a corresponding alarm indication on the instrument cluster; then when the vehicle speed exceeds 5 km/h, there will be a buzzer sound.

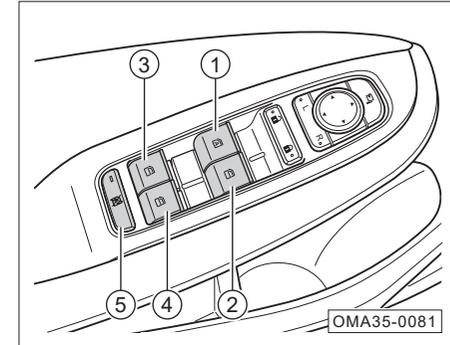
4.2.7 Power window

The power window can be operated when the ENGINE START/STOP button is in the "ON" position. It will still be operable within 40 s after the ENGINE START/STOP button is switched from the "ON" position to the "ACC" or "OFF" position, but will become inoperable if one of the doors is opened within the 40 s.

👁 CAUTION

- Please close all windows before leaving the vehicle.
- Do not put your hands on the edges of the windows when closing the windows, otherwise there will be a risk of pinching.

Driver's power window control button



- ① Left front power window control button
- ② Right front power window control button
- ③ Left rear power window control button
- ④ Right rear power window control button
- ⑤ Passenger's window locking button

4. Operation of systems and equipment

- If the button ① is pulled up to the first stop position, the power window will be lifted for closing until the button is released or the window reaches the highest position.
- If the button ① is pulled up to the limit position, the power window will be lifted automatically for closing until the window reaches the highest position.
- If the button ① is pressed down to the first stop position, the power window will be lowered for opening until the button is released or the window reaches the lowest position.
- If the button ① is pressed down to the limit position, the power window will be lowered automatically for opening until the window reaches the lowest position.

i NOTE

If you want to stop the window during the automatic lifting or lowering, just press down/pull up the button ①.

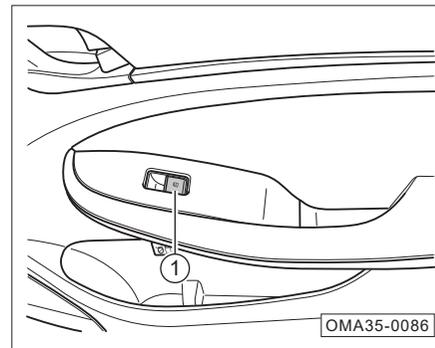
- The operation methods of the buttons ②, ③ and ④ are the same as that of the button ①, only corresponding to the respective windows

i NOTE

The four-door windows have the express-up and down feature (with anti-pinch function) or only the driver's window has the express-up and down feature, which subject to the actual vehicle configurations.

- If you press the passenger's power window control button ⑤, the button indicator lamp will come on and the passenger's power windows cannot be operated anymore. If you press this button again, this function will be deactivated and the button indicator lamp will go out.

Passenger's power window control button



- For the operation methods of the passenger's power window control button ①, please refer to the driver's power window control button.

4. Operation of systems and equipment

Initialization of anti-pinch function

If the express-up feature is not available, or the anti-pinch function fails, or the initialization becomes invalid automatically because the anti-pinch function is triggered multiple times in a short period of time, the power window needs to be initialized again.

1. Pull up the power window control button, and then the window is lifted in steps until it is completely closed.
2. After the window is completely closed, continue to pull up the power window control button and hold it for 2~3 s to complete the initialization.

WARNING

- If the window has no anti-pinch function during the initialization learning process, please do not use any part of your body or other objects to hinder the closing of the window, otherwise it will cause personal injury and affect the result of the initialization learning.
- If the power window system fails, please go to the GAC Motor authorized shop for inspection in time.

4.2.8 Power sunroof

The power sunroof can be operated when the ENGINE START/STOP button is in the "ON" position. It will still be operable within 40 s after the ENGINE START/STOP button is switched from the "ON" position to the "ACC" or "OFF" position, but will become inoperable if one of the doors is opened within the 40 s.

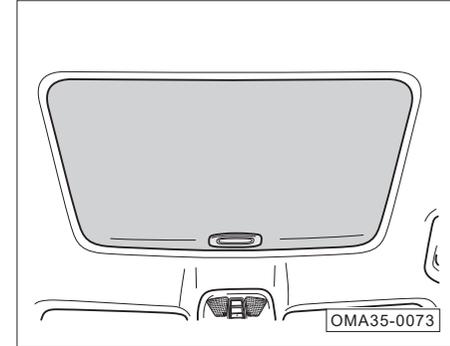
NOTE

When the ENGINE START/STOP button is in the "OFF" position with the power sunroof not closed and the driver's door opened, the instrument cluster will display the message "Sunroof Open" and send a buzzer sound; in this case, be sure to check whether the sunroof is closed.

CAUTION

Please close the sunroof, otherwise there will be a risk of water ingress on rainy days.

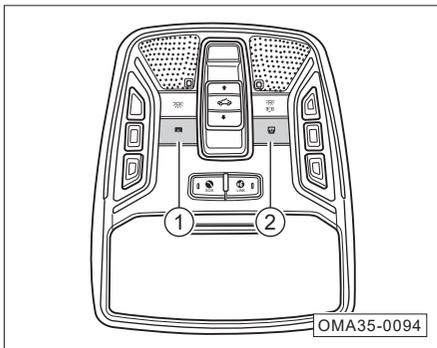
Sun visor*



- Automatic opening: The sun visor will be automatically opened as the sunroof is opened.
- Manual opening: Just push the sun visor backward.
- Manual closing: Just push the sun visor forward after the power sunroof is closed.

4. Operation of systems and equipment

Electric sunshade*

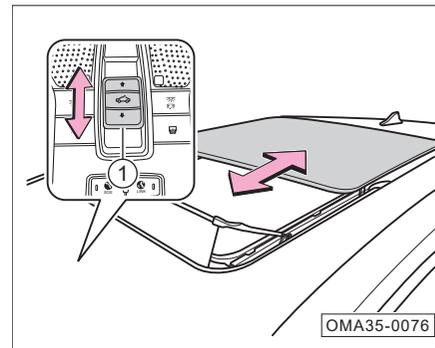


- If you press the switch ①, the electric sunshade will move a short distance for slight opening and then stop.
- If you press the switch ②, the electric sunshade will move a short distance for slight closing and then stop.
- If you press and hold the switch ① for several seconds, the electric sunshade will be fully opened automatically.
- If you press and hold the switch ② for several seconds, the electric sunshade will be fully closed automatically.

i NOTE

- The electric sunshade will be automatically opened as the sunroof is opened.
- The electric sunshade will be automatically closed as the sunroof is closed.
- If the switch ① or ② is pressed during the automatic opening or closing of the electric sunshade, the electric sunshade will stop at the current position.

Opening or closing of sunroof



- If you push the sunroof switch ① backward, the sunroof will move a short distance for slight opening and then stop.
- If you push the sunroof switch ① forward, the sunroof will move a short distance for slight closing and then stop.

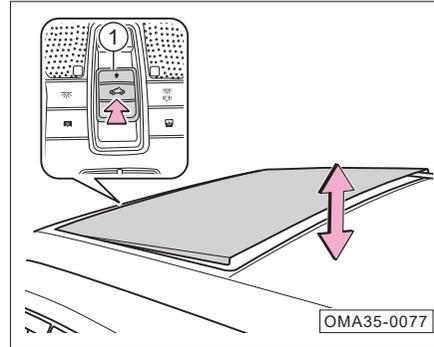
4. Operation of systems and equipment

- If you push the sunroof switch ① backward and hold it for several seconds, the sunroof will be fully opened automatically (for ordinary sunroof*).
- If you push the sunroof switch ① backward and hold it for several seconds, the sunroof will automatically move to a comfortable position; if you push the sunroof switch ① backward again, the sunroof will be fully opened (for panoramic sunroof*).
- If you push the sunroof switch ① forward and hold it for several seconds, the sunroof will be fully closed automatically.

i NOTE

- If the sunroof switch ① is pushed during the automatic opening or closing of the sunroof, the sunroof will stop at the current position.
- The designed comfortable position can balance the wind noise generated by the sunroof of the traveling vehicle (for panoramic sunroof*).

Tilting of sunroof



- When the sunroof is fully closed, if you manually open the sun visor (for ordinary sunroof*) and press the  button on the sunroof switch ①, the sunroof will be tilted outward. Just push the sunroof switch ① forward to deactivate the tilting function.

Speech operations (ordinary sunroof*)

The speech operations can be used to open, close and tilt the sunroof:

- If you say "Open sunroof", the sunroof will be fully opened automatically, during which the sun visor will be opened by the mechanical structure.
- If you say "Close sunroof", the sunroof will be fully closed automatically. But the sun visor needs to be closed manually.
- If you say "I need some fresh air/Tilt sunroof", the sunroof will be automatically opened first (so as to push open the sun visor), then closed and finally tilted.

4. Operation of systems and equipment

Speech operations (panoramic sunroof*)

The speech operations can be used to open, close and tilt the sunroof, as well as to open and close the sunshade:

- If you say "Open sunroof", the sunroof will be fully opened automatically, during which the electric sunshade will be opened accordingly.
- If you say "Close sunroof", the sunroof will be fully closed automatically, during which the electric sunshade will be closed accordingly.
- If you say "I need some fresh air/Tilt sunroof", the sunroof will be automatically tilted and the sun visor will be automatically opened half or more.
- If you say "Open sunshade", the electric sunshade will be opened (but the sunroof will not move).
- If you say "Close sunshade", the electric sunshade will be closed (and the sunroof will be closed accordingly).

Anti-pinch function of sunroof

The anti-pinch function is available for the closing of the sunroof:

- When the sunroof is closed by sliding, if the anti-pinch function is activated, the sunroof will move in the opening direction for a certain distance and then stop.
- When the sunroof is closed by tilting, if the anti-pinch function is activated, the sunroof will move in the tilting direction until it reaches the maximum tilting position.

CAUTION

Do not operate the sunroof when the ambient temperature is below -20°C , at which the anti-pinch function of the sunroof may not be activated, resulting in accidents. In addition, the low temperature will also damage the motor to a certain extent.

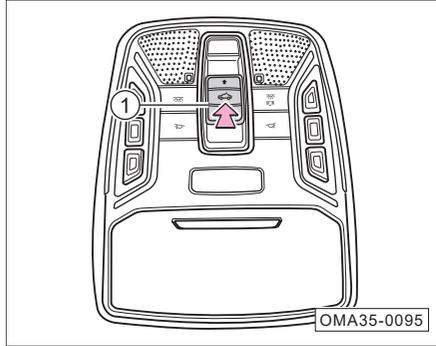
WARNING

- **The anti-pinch function of the sunroof cannot prevent pinching of light or thin objects.**
- **When closing the sunroof, make sure that no one is within the movement range of the sunroof to avoid any pinching.**
- **The sunroof will stop detecting obstacles at a position where the sunroof is about to be closed fully, so the anti-pinch function will be deactivated at this time.**
- **Do not try to activate the anti-pinch function by your hand or any part of your body, otherwise there will be a risk of pinching.**

4. Operation of systems and equipment

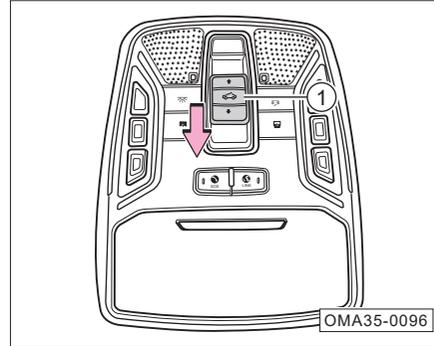
Manual initialization and self-learning of sunroof

Ordinary sunroof*



- When the sunroof is tilted, if you press the  button on the sunroof switch ① upward and hold it for more than 10 s, the sunroof will start to be initialized.
- If you press the  button on the sunroof switch ① upward and hold it (or push the sunroof switch ① forward and hold it), the sunroof will be “closed by tilting → opened by sliding → closed fully” and then will stop, thus completing the self-learning.

Panoramic sunroof*



- When the sunroof is closed, if you push the sunroof switch ① forward and hold it for more than 10 s, the sunroof will start to be initialized.
- If you push the sunroof switch ① forward and hold it, the sunroof will be “tilted → opened → closed” and then will stop, thus completing the self-learning.

CAUTION

If the power sunroof fails, please go to the GAC Motor authorized shop for inspection in time.

4.2.9 Basic operation of body anti-theft system

Body anti-theft function - unlock

When the ENGINE START/STOP button is in the “OFF” position and the vehicle is in the anti-theft state, if you bring the intelligent remote control key to approach the vehicle doors and put your hand into the unlocking area inside the front door handle for effective induction or if you unlock the vehicle by remote control, all the doors will be unlocked to release the vehicle from the anti-theft state, and the turn signal lamps will flash twice.

Body anti-theft function - lock

When the ENGINE START/STOP button is in the “OFF” position and the four doors, engine hood and trunk lid are closed, if you take the intelligent remote control key away from the vehicle and put your hand into the locking area on the front door handle for effective induction or if you lock the vehicle by remote control, all the doors will be locked to enable the vehicle to enter the anti-theft state, and the turn signal lamps will flash once.

4. Operation of systems and equipment

Activation of body anti-theft function

When the ENGINE START/STOP button is in the “OFF” position and the vehicle is in the anti-theft state, if the door is unlocked by an illegal key or is forcibly unlocked, the anti-theft system will be activated, the anti-theft horn will sound and the turn signal lamps will flash for about 30 s.

When the vehicle is locked by remote control to enter the anti-theft state, if the emergency mechanical key is used to unlock the driver’s door, the anti-theft system will trigger the horn to sound and the turn signal lamps will flash.

i NOTE

Before or during the anti-theft alarm triggered, if you press the  button on the remote control key or switch the ENGINE START/STOP button to the “ON” position, the anti-theft alarm can be canceled and the vehicle can be released from the anti-theft state; the alarm can be triggered up to 10 times in one cycle.

Engine immobilizer

When the ENGINE START/STOP button is switched from the “OFF” position to the “ON” position with the body anti-theft state released and the legal key in the vehicle, if the engine immobilizer system passes the verification, it will be deactivated.

If the engine immobilizer system does not pass the verification, the engine cannot be started and an immobilizer alarm will be triggered.

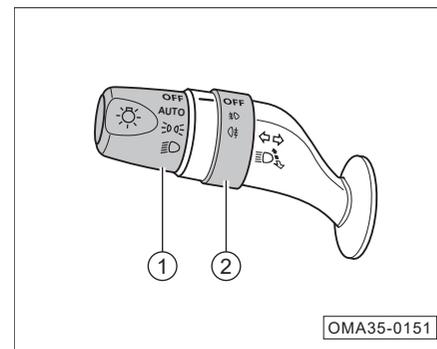
Body anti-theft maintenance instructions

No maintenance is required during normal use. If you have any doubt, please contact the GAC Motor authorized shop.

4.3 Lamps and vision

4.3.1 Exterior lamps

Lamplight combination switch



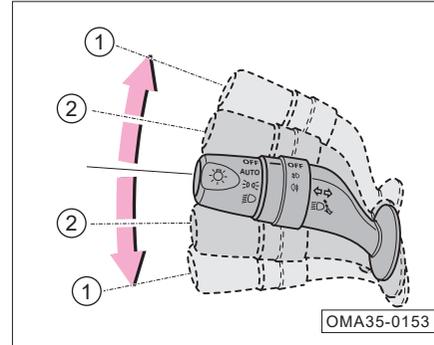
- ① Lamplight switch
- ② Fog lamp switch

4. Operation of systems and equipment

i NOTE

- Water vapors or even water drops may appear on the inner surfaces of the lamps under certain conditions (such as high air humidity and vehicle washing conditions), similar to the fogging phenomenon on the windows when the vehicle is traveling in the rain, but this is not a malfunction.
- This fogging phenomenon can be eliminated by parking the vehicle in a dry environment, turning on the lamps or driving the vehicle, but may recur.
- If there are a lot of water drops or water ingress in the lamps, please contact the GAC Motor authorized shop for inspection.

Turn signal lamp



- When the ENGINE START/STOP button is in the "ON" position, if you turn the lamplight combination switch up or down to the limit position ① and turn on the right or left turn signal lamp, the corresponding indicator lamp ➡ or ⬅ on the instrument cluster will flash.

Turn signal lamp flashing for lane change

- In case of lane changing or overtaking, if you quickly turn the lamplight combination switch up or down to the position ② and then release it to the original position, the corresponding turn signal lamp and the indicator lamp ➡ or ⬅ on the instrument cluster will flash 3 times.

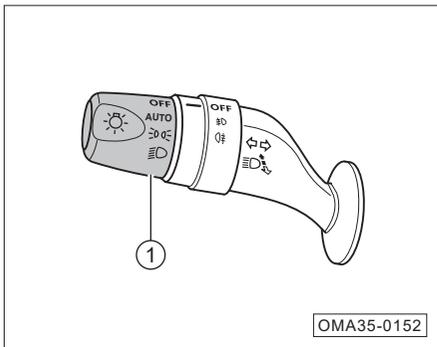
- If you turn the lamplight combination switch up or down and hold it at the position ②, the corresponding turn signal lamp and the indicator lamp ➡ or ⬅ on the instrument cluster will flash continuously. Releasing the switch to the original position can stop the flashing.

👁 CAUTION

If the corresponding indicator lamp ➡ or ⬅ on the instrument cluster flashes faster, one of the turn signal lamps may be faulty, please go to the GAC Motor authorized shop for inspection in time.

4. Operation of systems and equipment

Lamplight switch



When the ENGINE START/STOP button is in the "ON" position, turn the lamplight switch ① to activate or deactivate AUTO (automatic headlamp on/off function)*, ② (position lamp), and ③ (low beam).

When the lamplight switch is turned to the "OFF" position, all lamps will go out.

AUTO (automatic headlamp on/off function)*

- Turn the lamplight switch to the AUTO position to activate the automatic headlamp on/off function.

i NOTE

- If the automatic headlamp on/off function is activated, the vehicle will automatically turn on or off the headlamp according to the ambient light. When the ambient light gradually becomes dark, the position lamps and the low beam will be turned on simultaneously; when the ambient light gradually becomes bright, the position lamps and the low beam will be turned off simultaneously.
- Adjustment can be carried out in "Vehicle Settings → Light Control → Automatic Headlamp On/Off Sensitivity" in the AV system.

👁 CAUTION

- If the instrument cluster displays "Sensor Failure, Please Manually Control Light", the system will keep the low beam on for the sake of safety. At this time, you should manually control the light and go to the GAC Motor authorized shop for inspection in time.
- The automatic headlamp on/off function may be affected in the haze environment, so please manually control the light in this case.

4. Operation of systems and equipment

Daytime running lamp*

- When the engine is started and the position lamps are off, the daytime running lamps can be automatically turned on; when the position lamps are turned on or the engine is shut down, the daytime running lamps can be automatically turned off.

NOTE

This function can be activated or deactivated via "Vehicle Settings → Light Control → Daytime Running Lamp" in the AV system.

Position lamp

- If you turn the lamplight switch to the  position, the position lamps, instrument panel lamps, license plate lamps and other lamps will be turned on, and the corresponding indicator lamp  on the instrument cluster will come on.

NOTE

If you forget to turn off the position lamps when the ENGINE START/STOP button is switched to the "OFF" position and the vehicle is not locked, the position lamps will stay on for 15 min and then go out automatically in order to save the battery power; when the ENGINE START/STOP button is switched to the "OFF" position and the vehicle is locked, the position lamps will go out immediately.

WARNING

- **When driving the vehicle at night or on a road with poor visibility, please do not only turn on the position lamps. Otherwise, accidents may easily occur.**
- **When temporarily parking the vehicle at night or on a road with poor visibility with the need of indicating the position of the vehicle, do not use the position lamps as the parking lamps but be sure to turn on the hazard warning lamp due to the battery power saving function of the position lamps.**

Low beam

- Turn the lamplight switch to the  position to turn on the low beam.

High beam

- After turning on the low beam, if you push the lamplight combination switch forward to the limit position, the high beam will be turned on and the corresponding indicator lamp  on the instrument cluster will come on.
- If you pull the lamplight combination switch backward to the original position, the high beam will be turned off.

Headlamp flashing

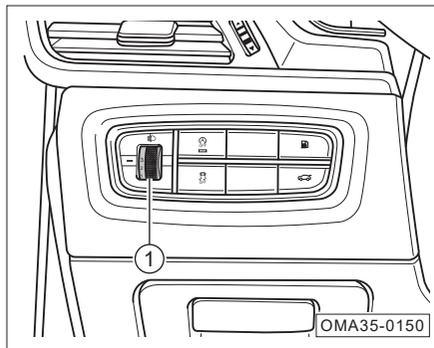
- If you pull the lamplight combination switch backward to the limit position, the high beam will be turned on.
- If you release the switch, the lamplight combination switch will automatically return to its original position and the high beam will be turned off.

4. Operation of systems and equipment

i NOTE

- The high beam may cause dazzling to drivers of oncoming vehicles at close range, which may easily cause accidents. Therefore, please use the high beam reasonably.
- When all the lamps are turned off, if you pull and hold the lamplight combination switch backward, the high beam will stay on, and the corresponding indicator lamp  on the instrument cluster will come on.

Manual headlamp leveling



Rotate the knob ① to manually level the headlamp (low beam) at 0, 1, 2 and 3 positions. The level of the headlamp will decrease as the adjustment value increases.

Position lamp on warning

When the ENGINE START/STOP button is switched to the "OFF" position with the position lamps turned on, if you open the driver's door, the system will send a buzzer sound and the instrument cluster will display the message "Lamp On".

Headlamp delay off (follow me home) function

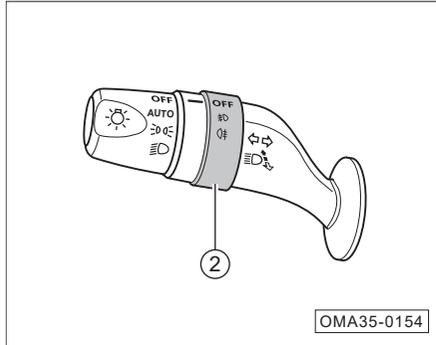
Within 10 minutes after switching the ENGINE START/STOP button to the "OFF" position, if you turn the lamplight switch from the OFF position to other positions and then back to the OFF position within 2 s, the headlamp delay off function will be activated. In this case, the low beam will stay on for 30 s, within which if one of the doors (including four doors, engine hood and trunk lid) is opened, this function will be re-timed, and then the low beam will stay on for 80 s, within which if all the doors are closed, this function will be re-timed again, and then the low beam will stay on for 30 s repeatedly.

i NOTE

This function can be activated or deactivated via "Vehicle Settings → Light Control → Follow Me Home" in the AV system.

4. Operation of systems and equipment

Fog lamp switch



When the ENGINE START/STOP button is in the "ON" position with the position lamp or low beam turned on, turn the fog lamp switch ② to turn on or off the ㊦ (front fog lamp)* or ㊧ (rear fog lamp).

- When the fog lamp switch ② is turned to the ㊦ position, the front fog lamp* will come on.
- After the fog lamp switch ② is turned to the ㊧ position and then released to the ㊦ position*, the rear fog lamp will come on. Repeat the operation to switch between turning on the front fog lamp* and turning on both the front* and rear fog lamps.

- When the fog lamp switch is turned to the "OFF" position, the front fog lamp will go out.

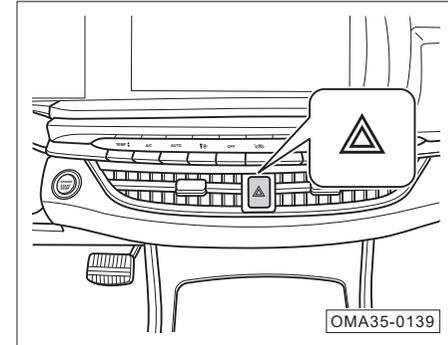
i NOTE

When the front* and rear fog lamps are both turned on, if you turn the lamplight switch to the "OFF" position, the front* and rear fog lamps will be both turned off; if you turn the lamplight switch to the ㊦ position, the front fog lamp* will be turned on, and the rear fog lamp needs to be turned on via the fog lamp switch ②.

Static cornering light function*

When the headlamps are on and the vehicle speed is lower than 40km/h, if you turn on the turn signal lamp on one side or turn the steering wheel by no less than 100°, the static cornering light function* will be activated, and the front fog lamp of that side will come on.

Hazard warning lamp



When the ENGINE START/STOP button is in any position, if you press the switch ㊦, the switch red indicator lamp will flash and the hazard warning lamp will be turned on. Press this switch again to turn off the hazard warning lamp.

If the hazard warning lamp is turned on, all turn signal lamps and the indicator lamps ➡ and ➠ on the instrument cluster will flash simultaneously.

4. Operation of systems and equipment

The hazard warning lamp shall be turned on in the following cases so as to attract the attention of persons on the road and reduce the risk of traffic accidents:

- The vehicle is involved in any failure.
- The vehicle is at the tail end of a traffic jam.
- The vehicle tows another vehicle or is towed.
- The vehicle is temporarily parked due to poor visibility.

NOTE

- The use of the hazard warning lamp will consume the battery power, so please turn it off when not in use.
- Be sure to strictly abide by the relevant regulations when using the hazard warning lamp.
- In the event of an emergency, if the hazard warning lamp is faulty, other methods that comply with the relevant traffic rules and regulations must be taken to attract the attention of persons on the road.

Emergency braking warning lamp

- When the vehicle is traveling at a high speed and the emergency braking is performed, the brake lamps will come on and the turn signal lamps will flash.

Vehicle assisted lighting

- If you press the unlock button  on the remote control key within the effective range, the position lamps will stay on for 25 s for the purpose of helping you to approach your vehicle. If you press the unlock button  on the remote control key again, the position lamps can stay on for another 25 s. When the ENGINE START/STOP button is switched to the "ON" position, the position lamps will go out.

Vehicle locating lighting

- If you press the lock button  on the remote control key twice within 0.5 s, the position lamps will stay on for 8 s and the turn signal lamps will flash 3 times for the purpose of helping you to locate your vehicle.

Intelligent courtesy lamp*

- When the ENGINE START/STOP button is in the "OFF" position with all doors closed and locked, if you bring the intelligent remote control key to approach the vehicle within 3 m, the exterior rearview mirrors will be automatically unfolded* and the position lamps will come on automatically, and then if you don't open the door or if you take away the intelligent remote control key within 25 s, the lamps will go out automatically.

NOTE

This function can be activated or deactivated via "Vehicle Settings → Light Control → Intelligent Courtesy Lamp" in the AV system.

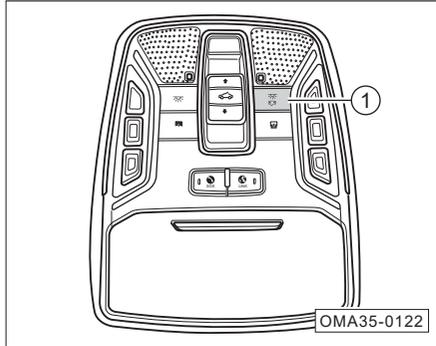
CAUTION

If the engine has not been started for more than 7 days, the intelligent courtesy lamp function will be automatically turned off. When the engine is started, the intelligent courtesy lamp function will be reactivated.

4. Operation of systems and equipment

4.3.2 Interior amp

Automatic light-on function of dome lamps



- Press the switch ① (depressed) to activate the automatic light-on function of the dome lamps; press the switch ① (popping up) again to deactivate this function.

Delay off function of interior lamps

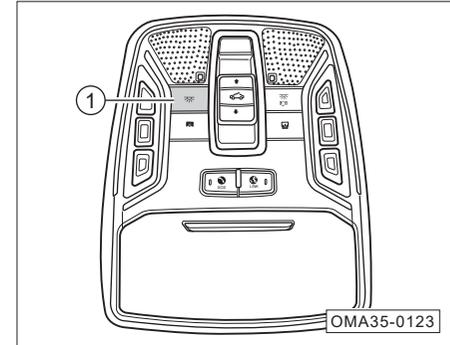
When the dome lamps are off and the automatic light-on function of dome lamps is activated:

- If the ENGINE START/STOP button is in the "OFF" position and one of the doors is opened, the dome lamps will come on automatically, and then go out about 30 s after the doors are closed.
- If the ENGINE START/STOP button is in the "OFF" position and the doors are unlocked remotely, the dome lamps will come on automatically and then go out after about 30 s.
- If the ENGINE START/STOP button is switched from the "ON" position to the "OFF" position, the dome lamps will come on automatically and then go out after about 30 s.

i NOTE

When all the doors are closed and the dome lamps are on as mentioned above, if the vehicle is locked remotely or the ENGINE START/STOP button is switched to the "ON" position, the dome lamps will go out automatically.

Dome lamp



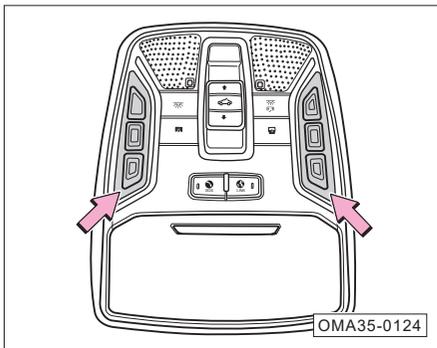
- When the dome lamps are off, press the switch ① (depressed) to turn on all the dome lamps; press the switch ① (popping up) again to turn off all the dome lamps.

i NOTE

The switch ① will be invalid if it is not used to turn on the dome lamps.

4. Operation of systems and equipment

For models with panorama sunroof

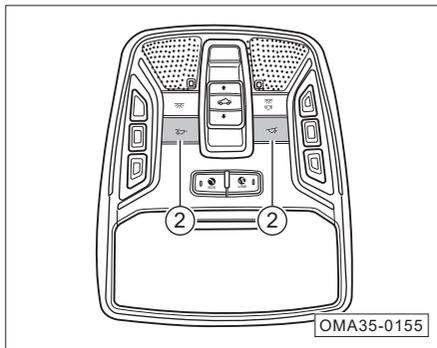


- When the front dome lamps are off, touch the front dome lamp on the corresponding side to turn it on; touch it again to turn it off.

i NOTE

- The touch position should be close to the center area and the touch diameter should be larger than 12mm.
- The touching will be invalid if it is not used to turn on the front dome lamps.

For models with ordinary sunroof

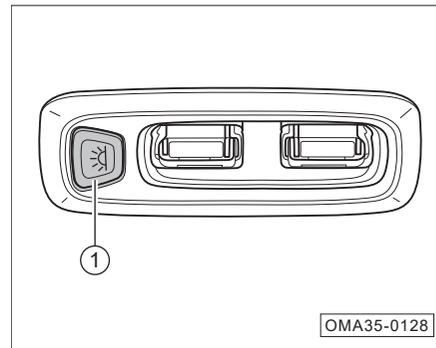


- When the front dome lamps are off, press the switch ② (depressed) to turn on the front dome lamp on the corresponding side; press the switch ② (popping up) again to turn it off.

i NOTE

The switch ② will be invalid if it is not used to turn on the front dome lamps.

Rear dome lamp



- When the rear dome lamps are off, press the switch ① to turn on the dome lamp on the corresponding side; press the switch ① again to turn it off.

i NOTE

The switch ① will be invalid if it is not used to turn on the rear dome lamps.

4. Operation of systems and equipment

Glove box lamp*

- If the glove box is opened, the glove box lamp will come on automatically.
- If the glove box is closed, the glove box lamp will go out automatically.

Trunk lamp

- If the trunk lid is opened, the trunk lamp will come on automatically.
- If the trunk lid is closed, the trunk lamp will go out automatically.

Courtesy lamp*

- If the door is opened, the courtesy lamp will come on automatically.
- If the door is closed, the courtesy lamp will go out automatically.

Vanity mirror lamp*

- If the vanity mirror cover is opened, the vanity mirror lamp will come on automatically.
- If the vanity mirror cover is closed, the vanity mirror lamp will go out automatically.

Ordinary ambient light*

- If the position lamp is turned on, the ambient light will come on automatically.
- If the position lamp is turned off, the ambient light will go out automatically.

Smart ambient light*

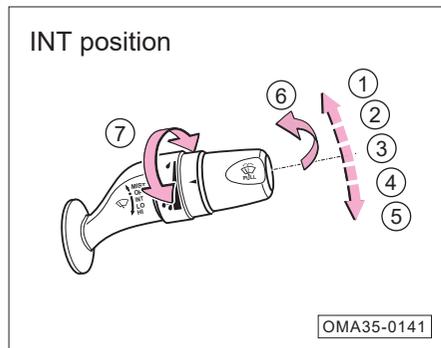
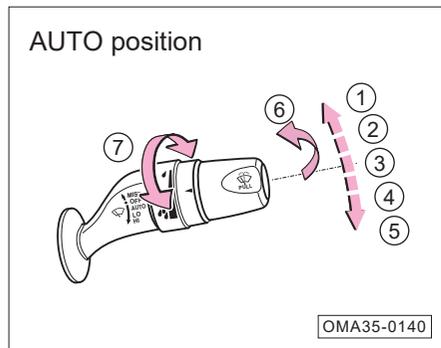
- When the position lamps are turned on, the ambient light will display the lighting effects of different scenes according to settings.
- If the position lamp is turned off, the ambient light will go out automatically.

i NOTE

This function can be activated or deactivated via "Vehicle Settings → Light Control → Ambient Light Control" in the AV system.

4. Operation of systems and equipment

4.3.3 Wiper combination switch



When the ENGINE START/STOP button is in "ON" position, the wiper combination switch can be operated as follows:

- ① MIST: continuous wiping
- ② OFF: wiper off
- ③ AUTO: automatic wiping*
- INT: intermittent wiping*
- ④ LO: slow speed wiping
- ⑤ HI: high speed wiping
- ⑥ Front windshield washer system on
- ⑦ Adjusting knob:
- Adjust the sensitivity of automatic wiping (AUTO)*
- Adjust the intermittent wiping (INT) *

MIST: continuous wiping

- If the wiper combination switch is turned to the ① MIST position, the front wiper will start wiping continuously.
- If the wiper combination switch is released to automatically return to the ② OFF position, the front wiper will stop wiping.

OFF: wiper off

- If the wiper combination switch is turned to the ② OFF position, the front wiper will stop wiping.

AUTO: automatic wiping*

- If the wiper combination switch is turned to the ③ AUTO position, the automatic wiping function will be activated, and the wiper system will adjust the wiper speed according to the current rainfall and the real-time vehicle speed.
- The auto wiping function can be activated or deactivated via "Vehicle Settings → Intelligent Body → Auto Wiping" in the AV system. When this function is deactivated, the function of the wiper in the AUTO position is equivalent to that in the INT position.

4. Operation of systems and equipment

- Adjust the wiping sensitivity by turning the knob ⑦ up/down.

CAUTION

- If the instrument cluster displays “Sensor Failure, Please Manually Control Wiper”, for the sake of safety, you should manually control the wiper and go to the GAC Motor authorized shop for inspection in time.
- Before activating the automatic wiping function in winter, please check whether the wiper blade is frozen.
- It is recommended to deactivate the automatic wiping function when cleaning the vehicle, in dusty weather and in rainless weather to avoid unintentional wiping of the wipers which may cause damage or personal injury.
- The automatic wiping function is an assist, so the driver should manually operate the wipers when necessary according to the driving situation to ensure driving safety.

INT: intermittent wiping*

- If the wiper combination switch is turned to the ③ INT position, the front wiper will start wiping intermittently.
- For the models equipped with the auto wiping function, intermittent wiping mode can be activated via “Vehicle Settings → Intelligent Body → Auto Wiping” in the AV system.
- Adjust the intermittent wiping speed by turning the knob ⑦ up/down.

LO: slow speed wiping

- If the wiper combination switch is turned to the ④ LO position, the front wiper will wipe at a slow speed.

HI: high speed wiping

- If the wiper combination switch is turned to the ⑤ HI position, the front wiper will wipe at a high speed.

Front windshield washer system on

- If the wiper combination switch is turned toward the rear of the vehicle to the ⑥ position, the front washer will start spraying water and then the front wiper will start wiping.
- If the wiper combination switch is released to return to its original position, the front windshield washer system will be stopped and the front wiper will wipe twice.
- After the front wiper stops wiping for 6 s, it will wipe once again so as to clear the residual water stains from the glass.

Wiper maintenance

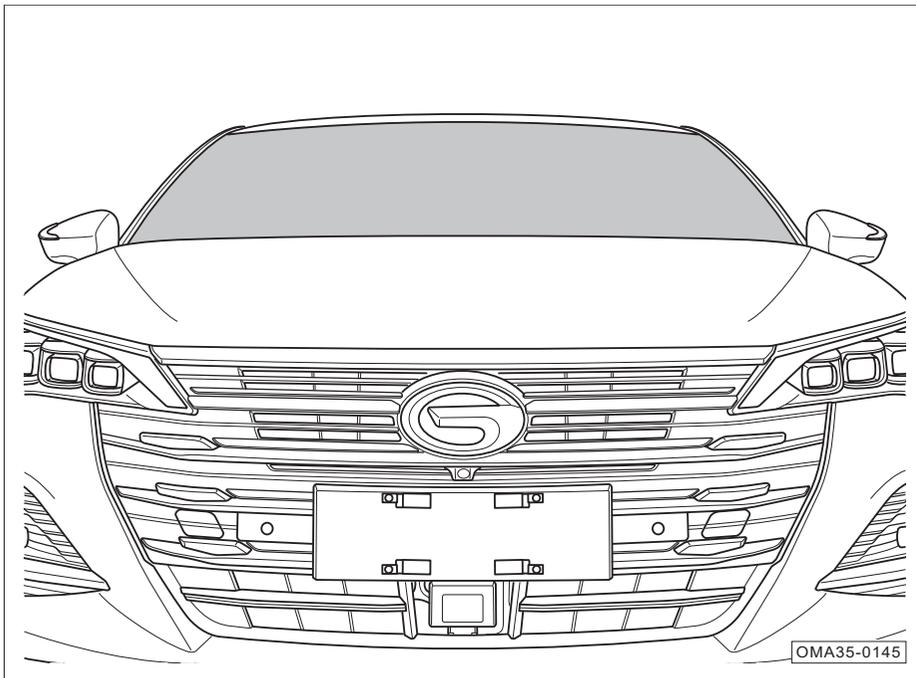
- Within 10 s after switching the ENGINE START/STOP button to the “OFF” position, if you turn the control lever of the wiper combination switch to the MIST position and then quickly release it to return it to the original position, the front wiper will move to the highest position and then stop.

NOTE

This function can be activated or deactivated via “Vehicle Settings → Intelligent Body → Wiper Maintenance” in the AV system.

4. Operation of systems and equipment

4.3.4 Windshield



Windshield glass

The green heat-insulation and laminated anti-scattering glass is used for the front windshield, which can effectively reduce the personal injury in an accident.

WARNING

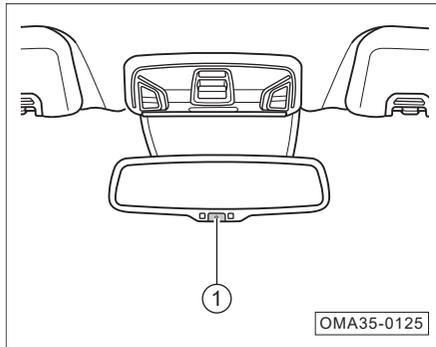
- Always keep the glass surface clean.
- Please affix the necessary identifications according to local traffic laws, rules and regulations. Do not stick paper or hang objects on the surface of the front windshield glass, otherwise the front view will be obstructed, which may easily cause traffic accidents.

4. Operation of systems and equipment

4.3.5 Rearview mirror

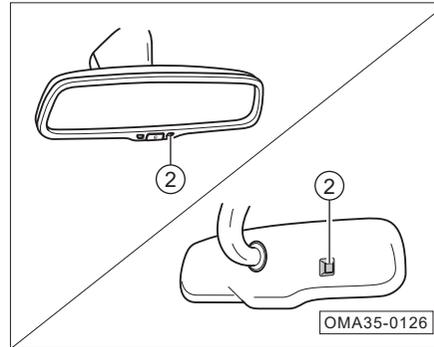
Interior rearview mirror

Auto dimming interior rearview mirror*



The auto dimming interior rearview mirror monitors the light in front and rear of the vehicle according to the light sensor, and reduces the glare reflected off the rear to the mirror surface, thus realizing the optimal rear view.

- When the ENGINE START/STOP button is in the "ON" position, the auto dimming function will be automatically activated and the switch indicator lamp will come on. Press the switch ① to manually activate or deactivate this function. When this function is deactivated, the switch indicator lamp will go out.



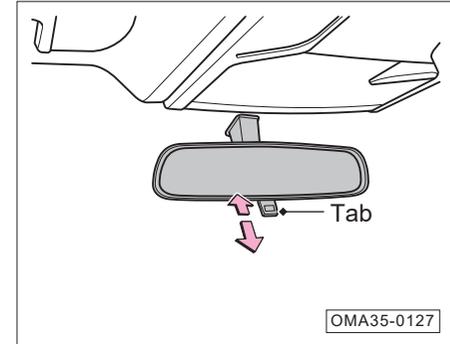
CAUTION

Do not cover the light sensor ② in order to ensure its normal function.

NOTE

If the inside temperature is low, the anti-glare rearview mirror may take a longer time to reduce the glare.

Manual anti-glare interior rearview mirror*



Manually adjusting the manual anti-glare interior rearview mirror can reduce the light reflected off the mirror surface, thus realizing the optimal rear view.

- As shown in the figure, the tab is at a rearview normal position, which can be pulled forward to offset the light reflected off the mirror surface to achieve the anti-glare function.
- Push the tab backward to return to the normal rearview angle.

4. Operation of systems and equipment

Exterior rearview mirror

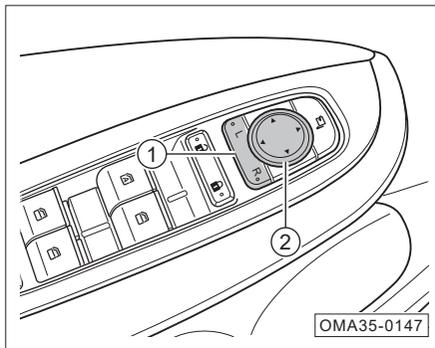
⚠ WARNING

Although the curved (convex and spherical) rearview mirror can expand the field of view, the reflected object image is smaller and farther than the real object. Therefore, when changing the lanes, do not judge the distance between your vehicle and the following vehicle by the reflected image, otherwise accidents may occur due to wrong judgment.

i NOTE

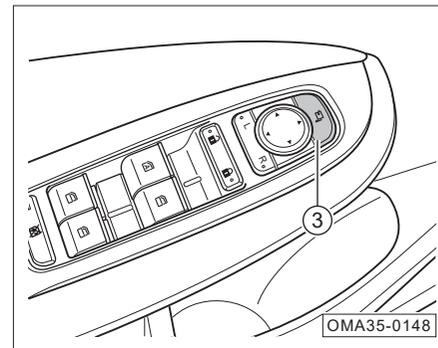
If the function of the exterior rearview mirror fails, please go to the GAC Motor authorized shop for inspection in time.

Electric adjustment



- Press "L" or "R" end on the selection button ① to select the left or right exterior rearview mirror.
- Press the adjusting button ② to adjust the selected exterior rearview mirror to the appropriate rearview angle.
- After adjusting the exterior rearview mirror, restore the selection button ① to its original state.

Electric folding*



- Press the folding button ③ to fold the exterior rearview mirror electrically.
- Press the folding button ③ again to unfold the exterior rearview mirror electrically.

Automatic folding*

- If the vehicle is locked from outside, the exterior rearview mirror will be folded automatically.
- If the vehicle is unlocked from outside, the exterior rearview mirror will be unfolded automatically.

4. Operation of systems and equipment

NOTE

This function can be activated or deactivated via “Vehicle Settings → Intelligent Body → Auto Folding of Exterior Rearview Mirror” in the AV system.

CAUTION

- If the exterior rearview mirror is not equipped with the electric folding function or the electric folding function fails, the mirror can be manually folded which then shall be manually unfolded. A click sound can be heard when the mirror is manually unfolded.
- Be careful when operating the electric folding function of the exterior rearview mirror to prevent your fingers from being pinched by the rearview mirror and its base.

Turning down of exterior rearview mirror when reversing*

Memory of turning down position of exterior rearview mirror when reversing:

1. Manual turning down of exterior rearview mirror when reversing:
 - Turn the ENGINE START/STOP button to the “ON” position, enter “Vehicle Settings → Intelligent Body → Manual Angle Adjustment of Exterior rearview Mirror” in the AV system, and activate the “Manual Turning Down of Exterior rearview Mirror When Reversing” function.
 - Depress the brake pedal and shift the gear to “R” position.
 - Adjust the corresponding exterior rearview mirror to a suitable reversing position. After the adjustment, release the brake pedal, and then this position is memorized as the turning down position of exterior rearview mirror when reversing.

2. Automatic turning down of exterior rearview mirror when reversing:

- Turn the ENGINE START/STOP button to the “ON” position, enter “Vehicle Settings → Intelligent Body → Manual Angle Adjustment of Exterior rearview Mirror” in the AV system, and activate the “Automatic Turning Down of Exterior rearview Mirror When Reversing” function.
- Click the “Setting” soft key for automatic turning down of exterior rearview mirror when reversing, and adjust the exterior rearview mirrors on both sides to suitable reversing positions. After the adjustment, click the “OK” soft key, and then this position is memorized as the turning down position of exterior rearview mirror when reversing.

Activation of manual turning down of exterior rearview mirror when reversing

- Enter the AV system to activate the “Manual Turning Down of Exterior rearview Mirror When Reversing” function.
- Switch the ENGINE START/STOP button to the “ON” position, depress the brake pedal and engage the “R” gear.
- Select the “L” or “R” side exterior rearview mirror.
- The exterior rearview mirror is turned down to the memory position.

4. Operation of systems and equipment

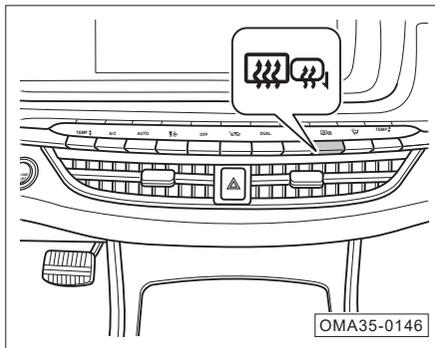
Activation of automatic turning down of exterior rearview mirror when reversing

- Enter the AV system to activate the “Automatic Angle Adjustment of Exterior rearview Mirror” function.
- Switch the ENGINE START/STOP button to the “ON” position, depress the brake pedal and engage the “R” gear.
- The exterior rearview mirrors on both sides are automatically turned down to the memory positions.

i NOTE

- If the gear is shifted from the “R” position to other positions for more than 10 s, or the vehicle speed exceeds 10 km/h, or the selection button is restored to its original state, the mirror will automatically return to the previous position.
- The manual turning down of exterior rearview mirror when reversing is affected by the selection of “L” or “R”, but the automatic turning down of exterior rearview mirror when reversing is not affected by it.

Defrosting and defogging function*



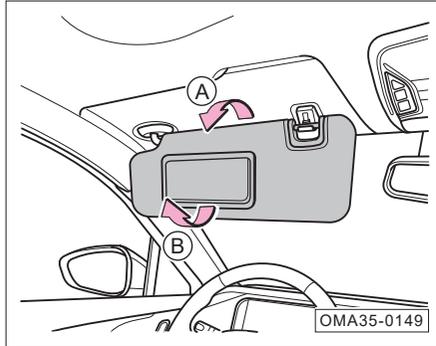
- If the button  is pressed, the button indicator lamp will come on, and the defrosting and defogging function will be activated to clear the fog or frost on the exterior rearview mirrors and the rear windshield glass.
- This function will be deactivated automatically after about 15 minutes or pressing the button again can manually deactivate this function; when this function is deactivated, the button indicator lamp will go out.

CAUTION

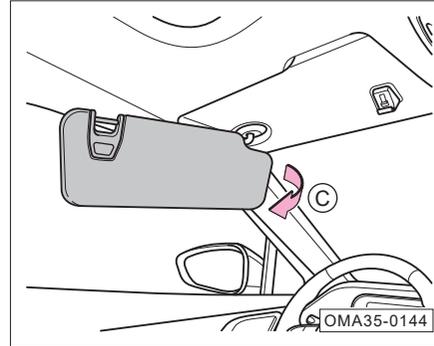
- If there is residual fog or frost after the defrosting and defogging function is deactivated automatically, just press the button  again.
- Do not use the defrosting and defogging function for a long time, otherwise the heater may be damaged due to overheating.
- If the defrosting and defogging function is out of use, please deactivate it to avoid wasting battery power.

4. Operation of systems and equipment

4.3.6 Sun visor



- Turn down the sun visor on the driver's side or front passenger's side in the direction of arrow A to shelter from the incoming sunlight from the front windshield.
- To use the vanity mirror, just turn down the sun visor and pull open the vanity mirror cover in the direction of arrow B, and then the vanity mirror lamp comes on automatically.



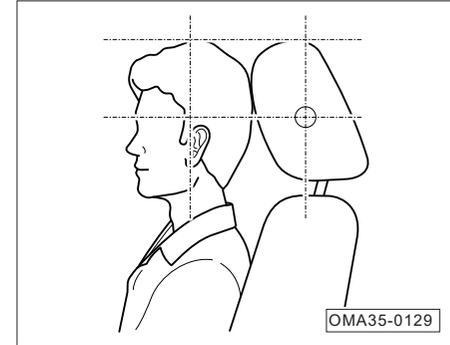
- After turning down the sun visor on the driver's side or front passenger's side, pull it out from the movable bracket in the direction of arrow C to shelter from the incoming sunlight from the side window.

i NOTE

When the ENGINE START/STOP button is in the "OFF" position or the vehicle is locked for a few minutes, the vanity mirror lamp will go out automatically.

4.4 Seats and storage facilities

4.4.1 Headrest



Correct adjustment of the headrests is essential to protect the occupants and reduce the personal injuries in accidents.

All occupants must adjust the headrests to the correct position (as shown in the figure) according to their body shape.

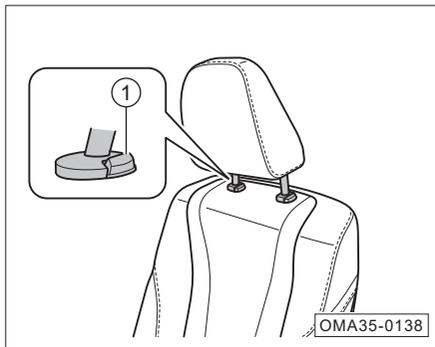
4. Operation of systems and equipment

WARNING

In order to reduce the risk of accidental casualties, please strictly observe the followings:

- Do not adjust the headrest while driving.
- Always keep the headrest in its mounting position. If the headrest is removed or installed improperly, the driver may be seriously injured in an accident.

Height adjustment of front seat headrest



- Downward adjustment: Press and hold the lock button ①, and press down the headrest to the desired position.
- Upward adjustment: Lift up the headrest directly to the desired position.

NOTE

The adjustment method of other seat headrests is the same.

4.4.2 Front seats

NOTE

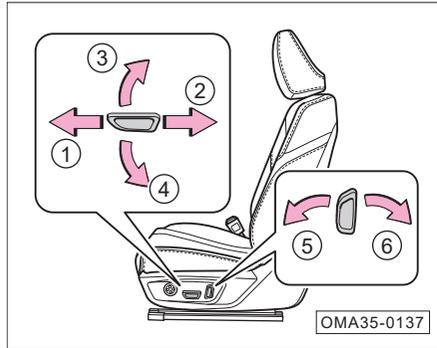
When measuring the depth of the seat cushion, be sure to adjust the horizontal position of the seat to the middle of the slider and the seat back to the normal operating state (25°).

WARNING

- Do not place objects under the front seats, for these objects may be caught between the seat and the slider, hindering the seat from being locked.
- Please adjust the front seat only when the vehicle is in a stationary state, because incorrect sitting posture during the seat adjustment may easily cause casualties.
- Never leave children alone in the vehicle to prevent them from accidentally operating the power seat and causing accidents, because the power seat* adjustment mechanism still works after switching the ENGINE START/STOP button to the “OFF” position.

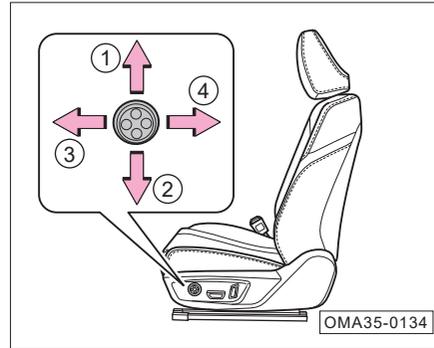
4. Operation of systems and equipment

Power seat*



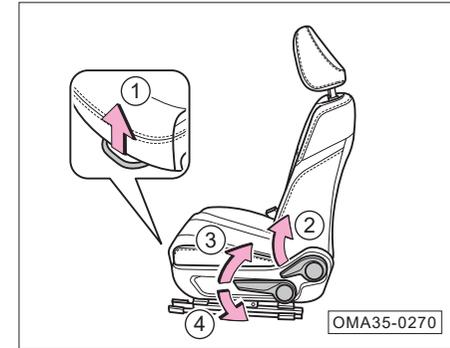
- Push the switch in the direction of arrow ① or ② to adjust the seat to slide forward or backward. Upward and downward adjustment of seat (for driver's seat)*:
- Pull the switch in the direction of arrow ③ or ④ to adjust the seat upward or downward. Forward and backward adjustment of seat back:
- Pull the switch in the direction of arrow ⑤ or ⑥ to recline the seat back forward or backward.

Adjustment of driver's seat lumbar support*



- Press the switch in the direction of arrow ①, ②, ③ or ④ for upward and forward support, and downward and backward retraction respectively.

Manual seat*



Forward and backward adjustment of seat:

- Pull the adjusting handle in the direction of arrow ① to adjust the seat to slide forward or backward. Then release the adjusting handle, and slide the seat forward or backward slightly until the seat is firmly locked.

Forward and backward adjustment of seat back:

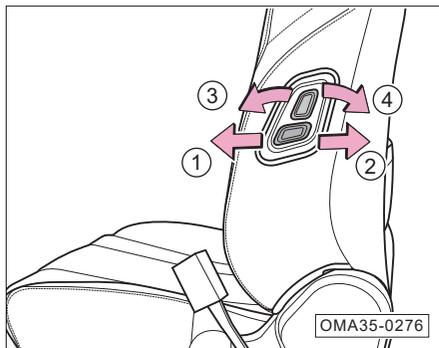
- Pull up the adjusting handle in the direction of arrow ② to adjust the seat back to a desired position, and then release the handle.

Upward and downward adjustment of seat (for driver's seat)*:

- Pull the switch in the direction of arrow ③ or ④ to adjust the seat upward or downward.

4. Operation of systems and equipment

Adjustment of front passenger's seat rear adjusting switch*



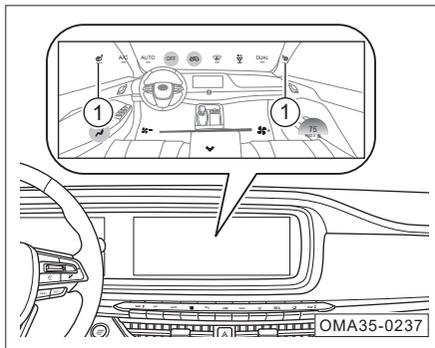
Forward and backward adjustment of seat:

- Push the switch in the direction of arrow ① or ② to adjust the seat to slide forward or backward.

Forward and backward adjustment of seat back:

- Pull the switch in the direction of arrow ③ or ④ to recline the seat back forward or backward.

Seat heater*



- Switch the ENGINE START/STOP button to the "ON" position.
- Switch the AV system to the A/C system control interface, and click the soft key ①. Then the soft key indicator lamp comes on, and the corresponding seat is started to be heated.
- When there is only 1 indicator lamp of soft key ①, clicking the soft key ① can directly deactivate the heating function, and then the soft key indicator lamp will go out.

The seat heater has three heating positions corresponding to three different seat surface temperatures, among which the 3rd position has the highest temperature followed by the 2nd position, and the 1st position has the lowest temperature. Each press on the soft key changes the heating position to the next position, and you can change the heating position in the sequence of "0→3→2→1→0". The number of lit button indicator lamps changes accordingly.

If you press the corresponding soft key during the automatic heating process, the automatic heating function will be deactivated and the current heating position will be changed to the next position.

i NOTE

This function can be activated or deactivated via "Vehicle Settings → Seat Settings → Automatic Heating" in the AV system.

4. Operation of systems and equipment

WARNING

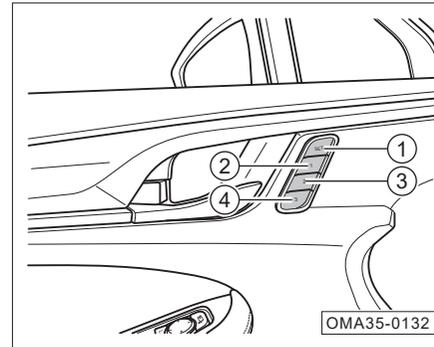
If you are sensitive to the temperature change of the seat heater function, please do not use this function to avoid burns by the heater.

CAUTION

- Do not kneel on the seat or apply pressure to a point on the seat cushion or seat back, in order to avoid damaging the electrical components in the seat.
- If you feel no temperature change of the seat or feel hot after turning on the heater for a long time, please immediately turn off the seat heater and go to the GAC Motor authorized shop for inspection in time.

Memory system of seat/exterior rearview mirror*

Seat memory switch



- ① SET button
- ② Position 1 button
- ③ Position 2 button
- ④ Position 3 button

CAUTION

The seat herein refers to the driver's seat, because other seats have no memory function.

Position memorizing

1. Adjust the positions of the seat and exterior rearview mirror.
2. Press the SET button.
3. Release the SET button and press the Position 1/2/3 button within 3 s. Then the instrument cluster sends a "Ding" prompt sound, and the current positions of the seat and the exterior rearview mirror are memorized successfully.

Retrieval of memory position

1. Fast retrieval
 - When the ENGINE START/STOP button is in the "OFF" or "ACC" position, press any one of the position 1/2/3 buttons to retrieve the corresponding position information.

4. Operation of systems and equipment

2. Normal retrieval

- When the ENGINE START/STOP button is in the "ON" position and the transmission gear is in the position other than "P", press and hold any one of the position 1/2/3 buttons to retrieve the corresponding position information. If the position button is released during the retrieval process, the retrieval will be interrupted immediately.

Seat welcome function

This function can be activated or deactivated via "Vehicle Settings → Seat Settings → Seat Welcome" in the AV system, and when this function is activated:

- If you switch the ENGINE START/STOP button to the "OFF" position and open the driver's door, the seat will automatically move back to the welcome position.
- If you switch the ENGINE START/STOP button to the "ON" position, the seat will automatically return to its original position.

CAUTION

If the seat position is manually changed after the seat moves to the welcome position, next time the seat will not move after the ENGINE START/STOP button is switched to the "ON" position.

Seat memory function

This function can be activated or deactivated via "Vehicle Settings → Seat Settings → Intelligent Remote Control Key" in the AV system, and when this function is activated:

- If you take away the intelligent remote control key and leave and lock the vehicle, the positions of the seat and the exterior rearview mirrors used before you leave the vehicle will be memorized by the used intelligent remote control key.
- If you use this intelligent remote control key to unlock the vehicle, the seat and the exterior rearview mirrors will be automatically adjusted to the positions memorized by the key.

NOTE

The position memorized by the key is independent of that memorized by the memory switch.

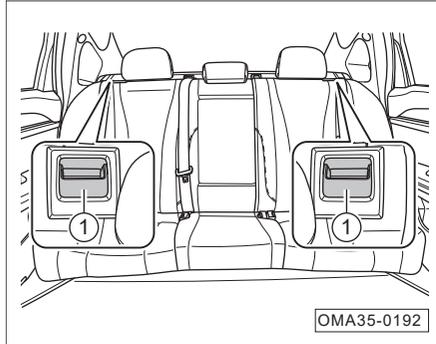
NOTE

When the seat memory and welcome functions are turned on at the same time, if you switch the ENGINE START/STOP button to the "OFF" position and open the driver's door, the seat will automatically move back to the welcome position, and if you use the key to lock the vehicle, the MSM will memorize the position of the seat before moving back, not the welcome position. If you use the key to unlock the vehicle, the horizontal position of the seat will still stay in the welcome position, and other seat directions and the exterior rearview mirrors will move to the position memorized by the key, and if you get into the vehicle and switch the ENGINE START/STOP button to the "ON" position, the seat will move forward from the welcome position to the position memorized by the key.

4. Operation of systems and equipment

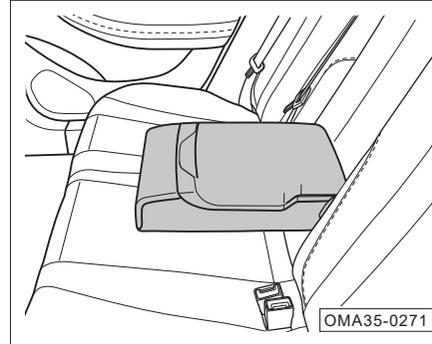
4.4.3 Rear seats

Folding down of rear seat back



- Fold down: Pull the rear seat back switch ① forward, and recline the rear seat back forward to the limit position.
- Restore: Push the rear seat back directly backward until the seat back is locked.

Rear central armrest



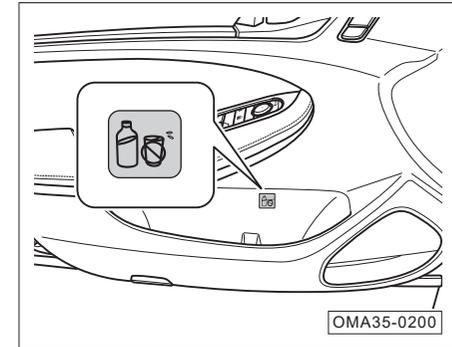
- Turn down the central armrest forward to use it.

i NOTE

The central armrest shall not be seated by anyone, and shall return to the seat back if the rear middle seat needs to be occupied.

4.4.4 Storage facilities

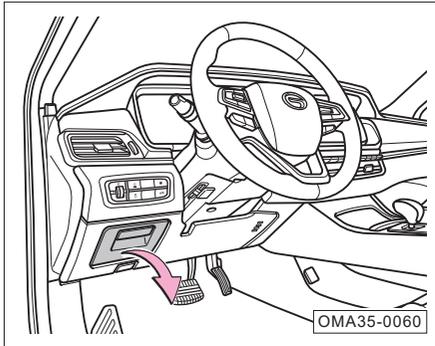
Storage compartment on door interior trim panel



- Place beverage bottles, map manuals and other articles here.

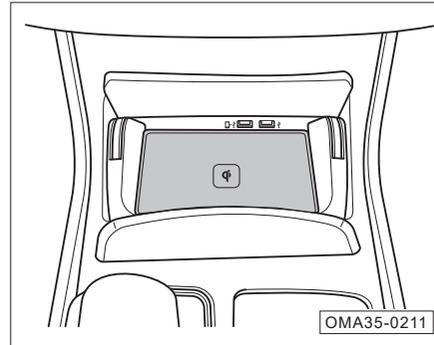
4. Operation of systems and equipment

Storage box on lower protective plate of cab



- Open the storage box on lower protective plate of cab as arrowed to place small articles.
- Push back to close the storage box until you hear a "click" sound.

Instrument panel front storage box

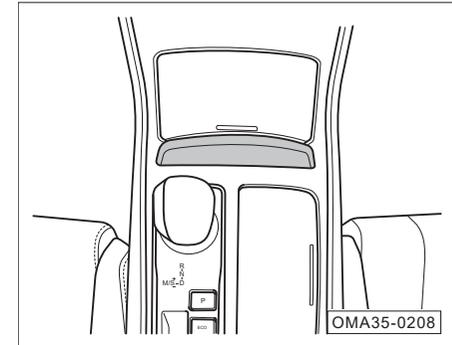


- Press to open the storage box cover automatically and place small articles.

i NOTE

For models equipped with mobile phone wireless charging function*, this area is used as the mobile phone wireless charging area, so be sure to deactivate the mobile phone wireless charging function before placing articles in it. => See page 100

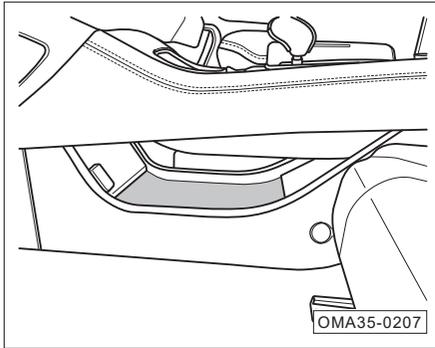
Mobile phone slot



- Place mobile phone here.

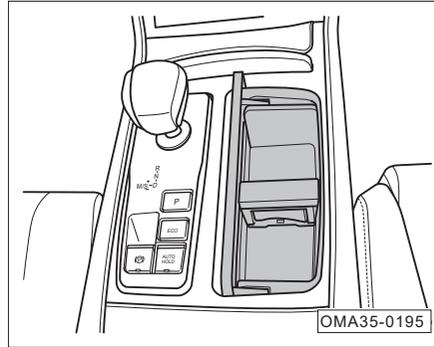
4. Operation of systems and equipment

Instrument panel lower storage compartment



- Place books, ipad, etc. here.

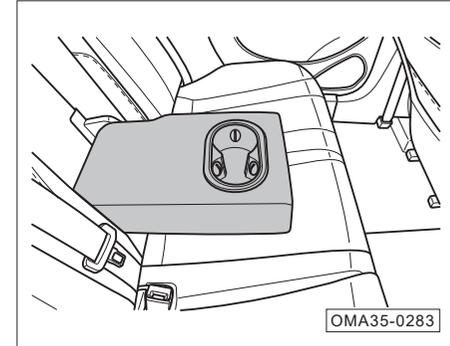
Cup holder



- Front cup holder: Press to open the front cup holder cover automatically and place beverage bottles.

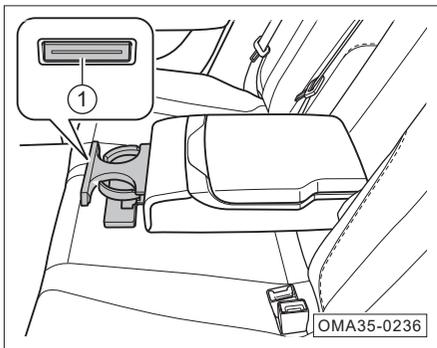
i NOTE

For some models with different configurations, the cup holder can be used directly because of no cover.



- Rear cup holder: Turn down the central armrest forward and then place beverage bottles.

4. Operation of systems and equipment



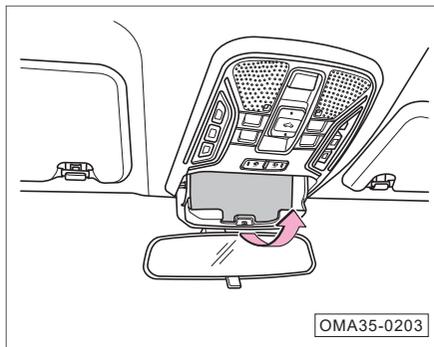
- Rear cup holder (rear seat multifunctional armrest)*:

Turn down the central armrest forward, and then press the switch ① to open the rear cup holder cover to place beverage bottles.

WARNING

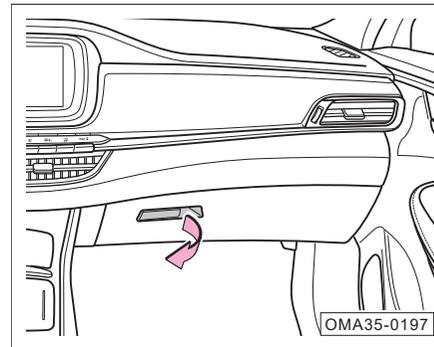
Do not place hot beverages on the cup holder, or hot beverages may spill out while driving, scalding the driver.

Spectacle case



- Press to slowly open the spectacle case and place small articles such as sunglasses.
- Push back to close the spectacle case until you hear a “click” sound.

Front passenger's glove box



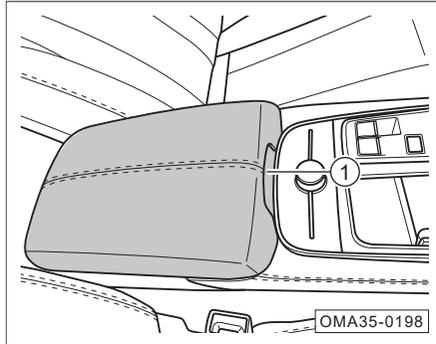
- Pull the handle to open the glove box and place articles such as file bags.
- Push back to close the glove box until you hear a “click” sound.

WARNING

The glove box must be closed when the vehicle is traveling, otherwise the articles in the glove box may fly out and cause personal injury to the occupants in case of an emergency braking or an accident.

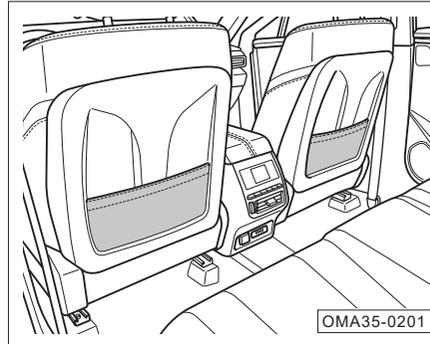
4. Operation of systems and equipment

Front central armrest box



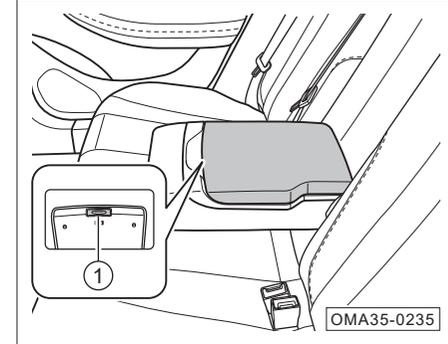
- Press the switch ①, open the front central armrest box cover and place wallets and other articles.

Storage bag on the back of front seat



- Pull open the storage bag to place books, foldable umbrellas and other articles.

Rear central armrest box

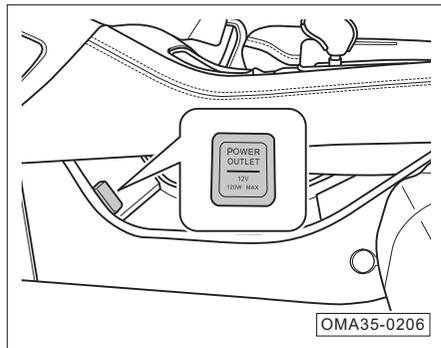


- Turn down the central armrest forward to use it.
- Press the switch ① and lift up to open the cover of the rear central armrest box to place small articles.

4. Operation of systems and equipment

4.4.5 Power outlet

Front power outlet

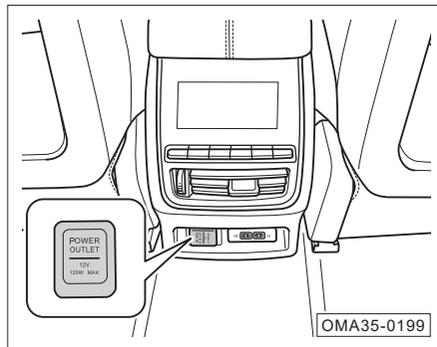


- With the ENGINE START/STOP button in the "ACC" or "ON" position, after the front power outlet cover is opened, a device to be charged can be connected.

i NOTE

Devices of 12V/120W or below supported.

Rear power outlet

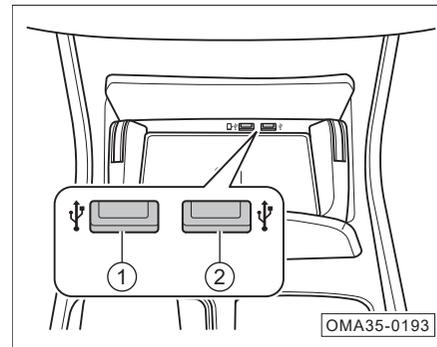


- With the ENGINE START/STOP button in the "ACC" or "ON" position, after the rear power outlet cover is opened, a device to be charged can be connected.

i NOTE

Devices of 12V/120W or below supported.

Front USB port

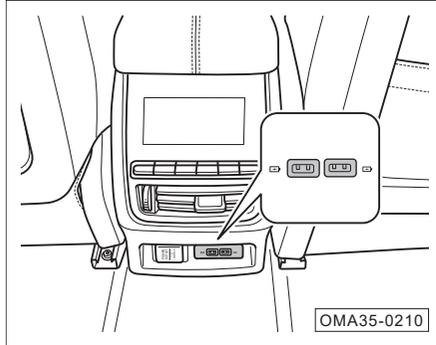


- With the ENGINE START/STOP button in the "ACC" or "ON" position, after the instrument panel front storage box cover is opened, a device to be charged can be connected.

- Port ① for charging or data transmission.
- Port ② for charging only.

4. Operation of systems and equipment

Rear USB port



With the ENGINE START/STOP button in the “ACC” or “ON” position, a device to be charged can be connected.

- Only for charging.

CAUTION

- To avoid damage to the electrical system of the vehicle, never connect power generation equipment to a power outlet.
- Only use electrical equipment that complies with national electromagnetic compatibility regulations.
- Before turning on or off the ENGINE START/STOP button, always disconnect the device connected to the power outlet to avoid damage to the electrical equipment due to voltage fluctuations.

CAUTION

- **Never use the power outlet when no one is in the vehicle. Improper use may easily cause a fire.**
- **Do not let children use the power outlet.**
- **Never use the high-power electrical equipment.**

4.4.6 Mobile phone wireless charging system*

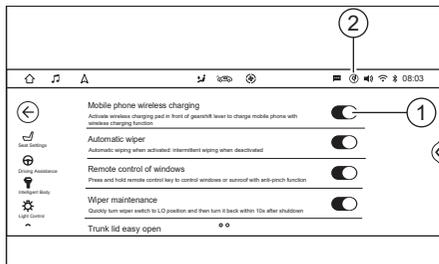
The mobile phone wireless charging system utilizes electromagnetic induction to realize the charging of the mobile phone without the need for wire connections.

CAUTION

The mobile phone wireless charging system is only for the Qi-certified mobile phones, not suitable for all mobile phones. GAC will not assume responsibility and bear losses for any accident caused by the use of mobile phones and charger receivers that have not passed the “Qi” certification.

4. Operation of systems and equipment

Mobile phone wireless charging switch



When the ENGINE START/STOP button is in the “ON” position, enter “Vehicle Settings → Intelligent Body → Mobile Phone Wireless Charging” in the AV system:

- Click the slider ① to turn on or off the mobile phone wireless charging system.

i NOTE

After the mobile phone wireless charging system is turned on, a symbol will be displayed at the position ② on the interface. The symbol status will change as the mobile phone wireless charging system is used.

Symbol status

Symbol	Color	Status	NOTE
	White	Standby	-
	Green	Being charged	Click the symbol to display "The phone is being charged"
	Green	Fully charged	Click the symbol to display "The phone is fully charged"
	Red	Charging failure	Click the symbol to display related failure information. See "Mobile phone wireless charging failure" table

Mobile phone wireless charging failure

Symptom	Troubleshooting
The internal temperature of the wireless charging module is too high.	The temperature is too high, so please move away the mobile phone and make another attempt later.
There are metallic foreign objects in the wireless charging module area.	There are metallic foreign objects, so please clear the foreign objects and relocate the mobile phone.
The power supply voltage of the wireless charging module is too low or too high.	The voltage is abnormal, so please move away the mobile phone and make another attempt later.
The charging power requested by the receiving end is too high, or the wireless charging module transmit power is too high.	The power is abnormal, so please move away the mobile phone and make another attempt later.
The receiving end status is abnormal.	The charging is interrupted, so please move away the mobile phone and make another attempt later.

4. Operation of systems and equipment

NOTE

- Only charge one mobile phone at a time.
- When using the mobile phone wireless charging function, make sure that the doors are closed. The opening of the door will deactivate the charging function.
- In order to ensure the normal charging of the mobile phone, please try to ensure that the center of the mobile phone is aligned with the Qi logo in the front storage box.
- On bumpy roads, the mobile phone wireless charging function may be intermittently discontinued and continued. If the mobile phone deviates from the charging area and stops being charged, please move the mobile phone back to the charging area.
- If the system or the mobile phone malfunctions, it may cause charging failure.
- The charging of the mobile phone may be discontinued when the temperature is too high, and will be continued after the temperature decreases.

CAUTION

- Please do not place anything between the mobile phone and the charging pad during the charging. Non-metallic articles may cause the charging performance degradation. Magnetic cards, chip cards or other similar articles may be damaged. Metal foreign objects such as keys and coins may be heated, causing hidden driving safety hazards.
- To place metal foreign objects in the front storage box, please first deactivate the wireless charging function through the central console display menu to prevent the metal objects from sliding into the charging area and being heated during driving, which may cause hidden safety hazards.
- If there is a metal foreign object between the mobile phone and the rubber pad during the wireless charging, do not remove the metal object immediately by hand to avoid scalding your fingers, but first deactivate the system immediately, and wait until the metal object is cooled down and then remove it.
- Do not spill water on the charging area to prevent the failure of the wireless charging module due to water entering the wireless charging module through the rubber pad gap.

WARNING

- **When the driver is not in the vehicle, please do not charge the mobile phone in the vehicle to avoid hidden safety hazards.**
- **While driving a vehicle, do not check the charging status of your mobile phone for a long time to avoid hidden traffic safety hazards.**
- **Please do not place heavy objects in the charging area to avoid damage to the mobile phone wireless charging system.**
- **If the product is faulty and cannot be used normally, please stop using it and go to the GAC Motor authorized shop for inspection in time.**
- **GAC will not assume responsibility for any problem caused by abnormal use (such as the use of external wireless charging coil); if the product is disassembled or modified without any authorization, the free warranty service will be terminated.**

4. Operation of systems and equipment

4.4.7 Trunk

In order to ensure the maneuvering stability of the whole vehicle, the luggage shall be placed as evenly as possible, and the heavy objects shall be placed at the front of the trunk.

WARNING

- **The center of gravity of the vehicle carrying heavy objects may change. If the heavy objects in the trunk suddenly slip, the maneuvering stability of the vehicle will change.**
- **The articles in the trunk must be fixed, otherwise they may fly forward and cause personal injury to the occupants in case of an emergency braking or an accident.**
- **Never place fragile, flammable and explosive articles in the trunk!**

Trunk volume

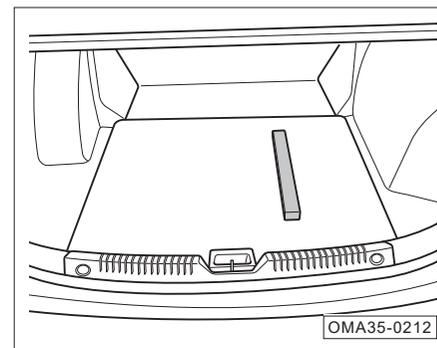
- Fold down the rear seat back to increase the trunk volume.

CAUTION

When placing liquids in the trunk, make sure that the container is sealed and the liquid does not leak. Try not to place liquids on the seat back folded down to prevent the liquid leakage and wetting.

Objects in trunk

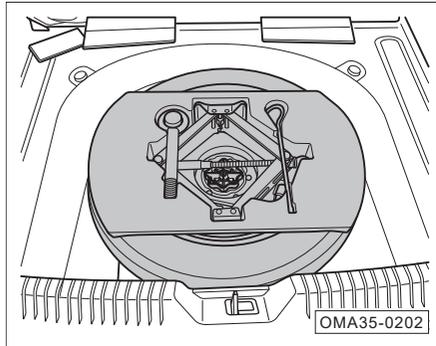
Warning triangle



- There is a warning triangle in the trunk.

4. Operation of systems and equipment

Driver's tools/spare tire



- The driver's tools and spare tire are under the trunk carpet.

4.4.8 Accessories and modification

Data labels and signs are affixed to fuel tank cap, engine hood latch and other components of the delivered vehicle, which indicating important data and information about the use of the vehicle. Do not remove or damage these labels and signs, and always keep the data and information on them legible.

The vehicle is designed with the latest safety technologies by GAC to ensure excellent active safety and passive safety. Therefore, in order to maintain the excellent characteristics of this vehicle, please be sure to consult the GAC Motor authorized shop before installing accessories or replacing parts.

The accessories and parts approved by GAC are recommended for you. The parts other than GAC ones will not be covered by the warranty.

WARNING

The installation of inappropriate accessories or the modification of the vehicle may affect the maneuvering stability and other performance of the vehicle, and even may cause serious casualties.

To install a car phone, alarm device, transceiver, low-power AV system, etc., ensure that they will not interfere with the electronic control unit such as anti-lock braking system (ABS) on the vehicle.

4. Operation of systems and equipment

Before installing the accessories, please ensure that:

1. The accessories neither dim the lamps, nor affect the normal operation or performance of the vehicle.
2. For the vehicle equipped with side curtain airbags, the accessories must not be installed on the B-pillar or across the rear door window. Because the installation in these areas will interfere with the normal function of the side curtain airbags.

NOTE

When additions (such as headrest, seat cover, floor mat, sun protection mat, etc.) are required, inferior additions may contain VOCs that do not meet national standards, and may emit unusual odors, causing hidden dangers that affect the air quality in the vehicle; therefore, the genuine high-quality additions are recommended to ensure a comfortable driving environment.

Modification of vehicle

Dismantling the parts from the vehicle or replacing the genuine parts with non-GAC Motor parts will seriously damage the maneuvering stability and reliability of the vehicle. For example:

- The installation of larger or smaller wheel and tire will interfere with the normal operation of the anti-lock braking system (ABS) and other systems.
- The modification of the steering wheel and other safety devices may cause the system failure.

WARNING

- **Improper modification of the vehicle or installation of inappropriate accessories may easily cause failures and accidents. The accessories and parts approved by GAC are always recommended, because the adaptability, reliability and safety of these accessories and parts have been strictly verified by GAC.**

WARNING

- **Improper modification or maintenance of the vehicle may weaken the protective effect of the airbag, resulting in the system failures and fatal accidents. The accessories such as beverage cup holder and mobile phone holder must not be installed or connected to the cover of the airbag assembly or within the working range of the airbag.**
- **Improper operation or modification of the vehicle (such as the modification of the engine, brake system, or components that affect the performance of the wheels and tires) will affect the SRS function, causing serious casualties.**
- **Do not install wheels and tires that are not approved by GAC.**
- **The modifications of the front and the engine compartment of the vehicle may weaken the function of the pedestrian detection system and violate road traffic regulations.**

4. Operation of systems and equipment

4.5 A/C system

4.5.1 General description

The A/C filter can filter pollen and dust entering the air inlet of A/C system.

The A/C filter must be regularly cleaned and replaced according to "Regular Maintenance Schedule" in "Warranty Manual".

If the vehicle is often driven in areas with poor air quality, the replacement interval of the A/C filter should be shortened. If the airflow from the A/C air outlet is not as smooth as usual, it may be due to the dirty and clogged A/C filter. In this case, clean or replace the A/C filter as soon as possible.

WARNING

If the air in the vehicle is foul, it will make the driver easily fatigued, lack of energy, and distracted, which is easy to cause an accident, resulting in personal injury or even death. Therefore, use the air circulation mode according to the actual situation.

CAUTION

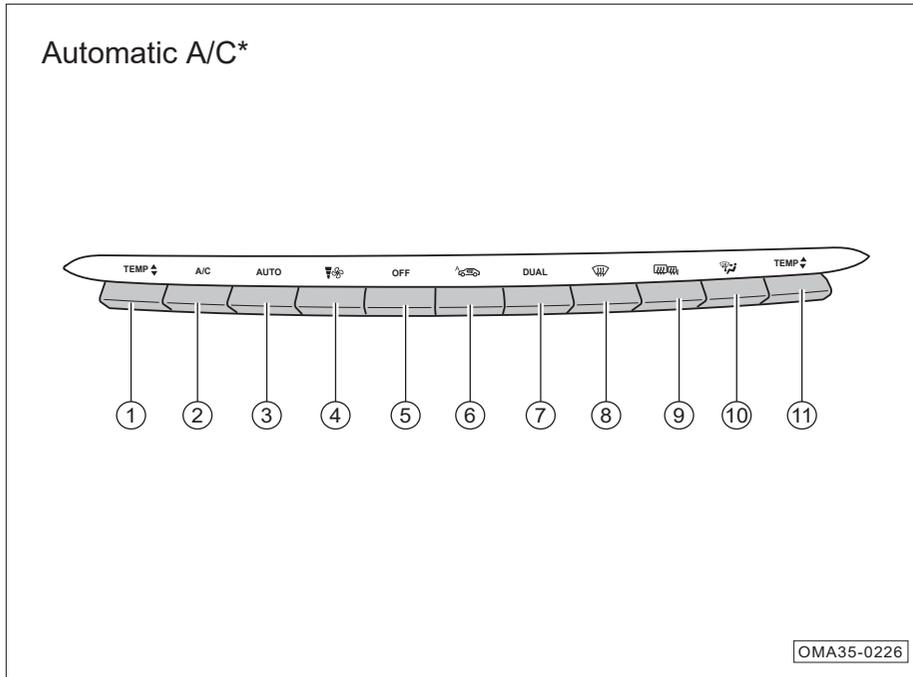
If the A/C system has failure (such as no cooling, odor in outlet air, etc.), please go to the GAC Motor authorized shop for inspection.

NOTE

- When the ENGINE START/STOP button is in "ON" position, the A/C system can be operated.
- When the A/C is turned on, there will be dripping water at the bottom of the vehicle. Prolonged parking with the A/C on will cause water to accumulate, which is normal.
- Regularly clean the front windshield wiper cover of snow, ice, and leaves to avoid clogging the A/C air inlet and ensure normal air intake.
- The A/C system can achieve its maximum effect with the windows and sunroof closed. However, when the indoor temperature is high under hot sun, open the windows briefly to allow the indoor heat to dissipate, and then use the A/C for cooling.

4. Operation of systems and equipment

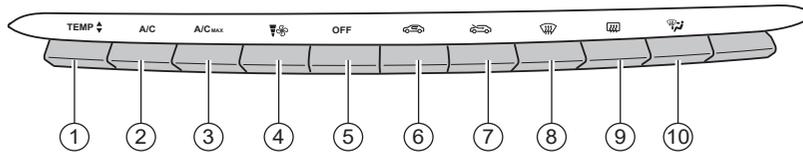
4.5.2 A/C system



- ① TEMP ⇄ Temperature control button (left)
- ② A/C cooling button
- ③ AUTO mode button
- ④ Fan speed control button
- ⑤ OFF button
- ⑥ Recirculation/fresh air mode button
- ⑦ DUAL zone mode button
- ⑧ Front windshield defrost/defog button
- ⑨ Rear windshield/exterior rearview mirror defrost/defog button
- ⑩ Air supply mode button
- ⑪ TEMP ⇄ Temperature control button (right)

4. Operation of systems and equipment

Manual A/C*



OMA35-0274

- ① TEMP ⇄ Temperature control button
- ② A/C cooling button
- ③ A/C_{MAX} Maximum cooling mode button
- ④ ̳ Fan speed control button
- ⑤ OFF button
- ⑥ ̳ Recirculation mode button
- ⑦ ̳ Fresh air mode button
- ⑧ ̳ Front windshield defrost/defog button
- ⑨ ̳ Rear windshield defrost/defog button
- ⑩ ̳ Air supply mode button

4. Operation of systems and equipment

NOTE

- The A/C system can also be controlled by pressing any button on the HCP and switching the AV system display interface to the A/C system control interface.
- Some functions specific to the A/C system can be set via "Vehicle Settings → A/C Settings" in the AV system.

Temperature setting

Pull up/press down the TEMP  button to increase/decrease the temperature at increments of 0.5°C.

In auto mode (automatic A/C)*, when LO/HI is displayed, the system will keep high air volume.

In auto mode (automatic A/C)*, in order to obtain the most satisfactory inside temperature, it is recommended to set the temperature to 25.0°C, and adjust the temperature if necessary.

A/C button

Press the A/C cooling button. The button indicator lamp will come on, and the A/C system will start cooling.

Press the A/C cooling button again. The button indicator lamp will go out, and the A/C system will stop cooling.

Auto mode (automatic A/C)*

Press the AUTO mode button. The button indicator lamp will come on, and the A/C system will enter the auto mode.

Press  button or  button to exit the auto mode of the A/C system.

Maximum cooling mode button (manual A/C)*

Press the A/C_{MAX} button. The button indicator lamp will come on, and the A/C system will enter the maximum cooling mode.

Press the A/C_{MAX} button again. The button indicator lamp will go out, and the A/C system will exit the maximum cooling mode and return to the previous state.

Air speed setting

Pull up or press  button to increase/decrease the air speed by one level. The AV system display shows the corresponding air speed level.

In auto mode (automatic A/C)*, in order to make the inside temperature reach the target value, the A/C system will automatically control the air speed. Press the  button to exit the auto mode of the A/C system.

Turn off the A/C

Press the OFF button to turn off the A/C system.

After the A/C system is turned off, the  button,  button, and  button can be effectively operated without turning on the A/C system; operating the TEMP  button has no effect; operating the AUTO button*, A/C button, A/C_{MAX} button*,  button or  button can turn on the A/C system.

4. Operation of systems and equipment

Air circulation (automatic A/C)*

Automatic recirculation/fresh air mode

Press the  button. When the left button indicator lamp is on, the air circulation will enter the automatic recirculation/fresh air mode.

This mode automatically controls the air intake mode according to the quality of outside air. When the quality of outside air is poor, the recirculation mode will be set; when the quality of outside air is good, the fresh air mode will be set.

Recirculation mode

Press the  button. When the right button indicator lamp is on, the air circulation will enter the recirculation mode.

When the quality of outside air is poor, use this mode to prevent the outside air from entering the vehicle and recirculate the inside air.

Fresh air mode

Press the  button. When all button indicator lamps are off, the air circulation will enter the fresh air mode.

When the quality of outside air is good, use this mode to bring the fresh outside air into the vehicle.

CAUTION

- Long-term use of recirculation mode will cause accumulation of carbon dioxide in the vehicle, which is not conducive to keeping the driver awake.
- Using recirculation mode in cold or rainy weather can easily cause the windows to mist up, affecting the driver's visibility, which may cause serious accidents.

Recirculation mode (manual A/C)*

Press the  button. When the button indicator lamp is on, the air circulation will enter the recirculation mode.

When the quality of outside air is poor, use this mode to prevent the outside air from entering the vehicle and recirculate the inside air.

Fresh air mode (manual A/C)*

Press the  button. When the button indicator lamp is on, the air circulation will enter the fresh air mode.

When the quality of outside air is good, use this mode to bring the fresh outside air into the vehicle.

4. Operation of systems and equipment

CAUTION

- Long-term use of recirculation mode will cause accumulation of carbon dioxide in the vehicle, which is not conducive to keeping the driver awake.
- Using recirculation mode in cold or rainy weather can easily cause the windows to mist up, affecting the driver's visibility, which may cause serious accidents.

Dual zone mode (automatic A/C)*

Press the DUAL button to light up the button indicator lamp, or press the temperature control button (right side). Then the A/C system will enter the dual zone mode. The temperatures in the left and right zones are controlled independently.

Then click the DUAL soft key. The soft key indicator lamp will go out, the A/C system will exit the dual zone mode and enter the single zone mode, and the temperatures in all zones will be controlled simultaneously.

Front windshield defrost/defog function

Press the  button. The button indicator lamp will come on, and the front windshield defrost/defog function will be activated.

Press the  button again: the button indicator lamp will go out, the front windshield defrost/defog function will be deactivated, and the system will restore the state before defrosting/defogging; or press the AUTO button (automatic A/C)* to enter the auto mode to deactivate the front windshield defrost/defog function.

In auto mode (automatic A/C)*, if the "Vehicle Settings → A/C Settings → Auto Defog" function is activated in the AV system, the A/C system will automatically detect the fogging of the front windshield inside the vehicle and then automatically defog the front windshield to ensure more safe driving.

CAUTION

- When the temperature is set to the lowest, using the defrost/defog function will cause the outside of windshield to mist up, affecting the driver's visibility, which may cause serious accidents. When using the defrost/defog function, set the temperature close to the ambient temperature outside the vehicle.
- When using the defrost/defog function, if you manually turn off the A/C cooling function, it will cause the windshield to mist up, affecting the driver's visibility, which may cause serious accidents.

4. Operation of systems and equipment

Rear windshield defrost/defog function

Press the  button. The button indicator lamp will come on, the rear windshield defrost/defog function will be activated, and the rear windshield and exterior rearview mirrors* will be electrically heated.

When the rear windshield defrost/defog function is activated, press the  button again. Then the button indicator lamp will go out, and the rear windshield defrost/defog function will be deactivated. If you do not manually turn off the rear windshield defrost/defog function, this function will be automatically deactivated after 15 minutes.

NOTE

With the engine not started, using the rear windshield defrost/defog function for a long time will cause too low battery voltage, making it impossible to start the engine.

Air supply mode

Press the  button to cycle through the following air supply modes:

-  Panel mode: Air flows out from the panel outlets.
-  Panel/floor mode: Air flows out from the panel and floor outlets.
-  Floor mode: Air flows out from the floor outlets.
-  Floor/defrost mode: Air flows out from the front windshield defrost outlets and floor outlets.

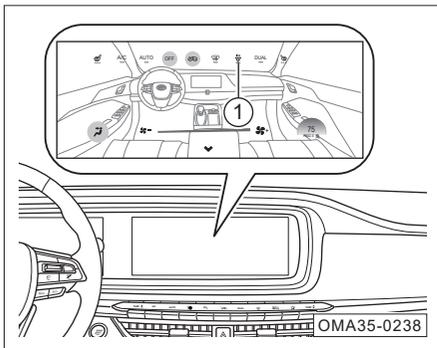
In auto mode (automatic A/C)*, the A/C system will automatically control the air supply mode. When the outlet air temperature is high, most of the air will be directed through the floor outlets; when the outlet air temperature is low, most of the air will be directed through the panel outlets. Press the  button to exit the auto mode of the A/C system.

NOTE

-  The panel/floor mode is mainly used when the outside temperature is slightly lower in spring and autumn. Therefore, the temperature of the upper outlets is slightly lower than that of the lower outlets, which is a normal phenomenon.
- The air supply mode, set temperature and comfort curve can be adjusted for personal comfort.
- In order to ensure that the A/C system can effectively control all the air supply modes automatically, please keep all air outlets open.
- During cold start in winter, in the auto mode, A/C system will start from the defrost mode and enable a gradual transition to other modes.

4. Operation of systems and equipment

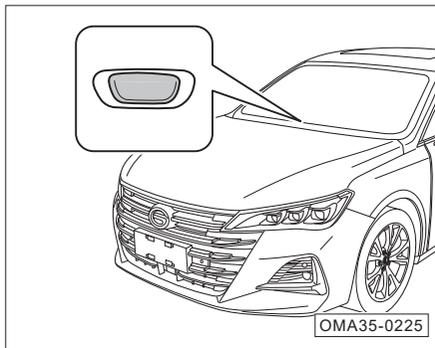
Negative ion air purifier (automatic A/C)*



Switch the AV system to the A/C system control interface, and click the soft key ①. The soft key indicator lamp will come on, and the A/C system will turn on the negative ion air purifier. It can produce negative ions, effectively decompose harmful gases such as formaldehyde and benzene in the vehicle, and purify the inside air.

Click the soft button ① again. The soft key indicator lamp will go out, and the A/C system will turn off the negative ion air purifier.

Sunlight sensor (automatic A/C)*



In auto mode, the A/C system can detect the temperature and sunlight inside and outside the vehicle through the sunlight sensor. Be careful not to cover the sunlight sensor.

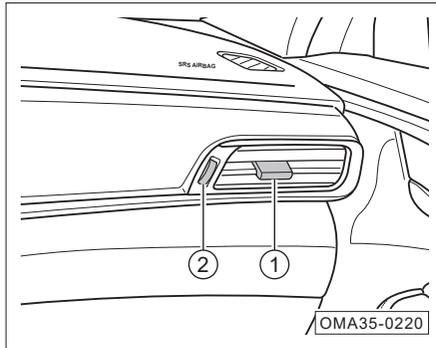
👁 CAUTION

According to different environmental and vehicle conditions, there may be a difference between the indicated ambient temperature and the actual ambient temperature.

4. Operation of systems and equipment

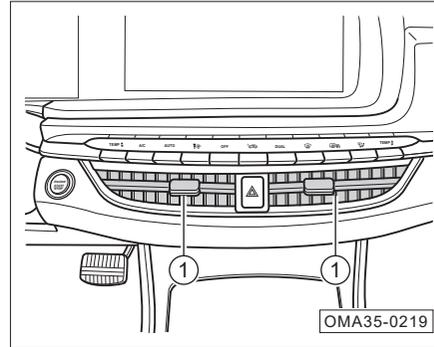
4.5.3 A/C air outlet

Panel side air outlet



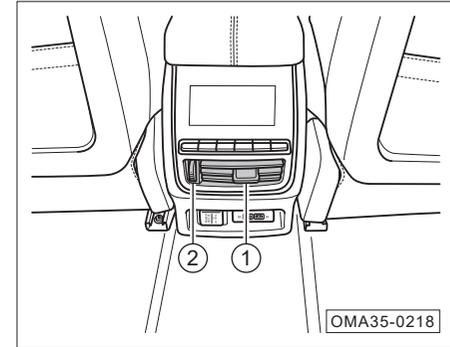
- Toggle the paddle ① to adjust the air direction.
- Turn the knob ② to adjust the air volume or close the air outlet.

Panel central air outlet



- Toggle the paddle ① to adjust the air direction.

Rear air outlet

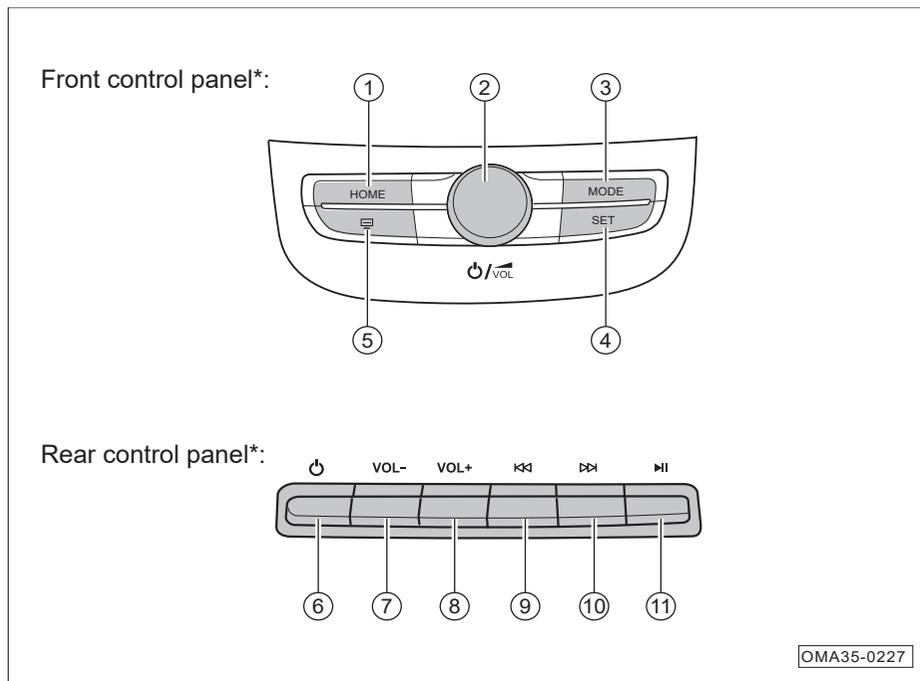


- Toggle the paddle ① to adjust the air direction.
- Turn the knob ② to adjust the air volume or close the air outlet.

4. Operation of systems and equipment

4.6 AV system

4.6.1 Control panel



Front control panel*

- ① Main interface button
 - In other media interfaces, press this button to return to the card mode interface.
- ② Power button/volume adjusting knob
 - Turn the volume adjusting knob to adjust the sound volume.
 - With power on, a short press on this button will show screensaver on the display, and the audio source does not work; another short press on this button will activate the audio source again.
- ③ Audio source switching button
 - Press this button several times in succession to switch between the interfaces as follows: FM → AM → Online Radio* → USB → Bluetooth Music → Online Music* → FM.
 - Pressing this button will not actively switch to CarPlay/CarLife music; if CarPlay/CarLife music is currently playing, pressing this button will switch to radio mode.

4. Operation of systems and equipment

④ Setting button*

- Press this button to enter the setting interface.

⑤ Screen off button*

- With power on, a short press on this button will turn off the display and the audio source still works; another short press on this button will turn on the display again.

Rear control panel*

⑥ Power button

- With power on, a short press on this button will show screensaver on the display, and the audio source does not work; another short press on this button will activate the audio source again.

⑦ Volume down button

- Press this button to reduce the volume.

⑧ Volume up button

- Press this button to increase the volume.

⑨ Radio frequency adjusting/ previous track button

- In radio mode, press this button to automatically search for a valid radio station with lower frequency.
- In media source playing mode, press this button to skip to the previous track.

⑩ Radio frequency adjusting button/ next track button

- In radio mode, press this button to automatically search for a valid station with higher frequency.
- In media source playing mode, press this button to skip to the next track.

⑪ Pause button

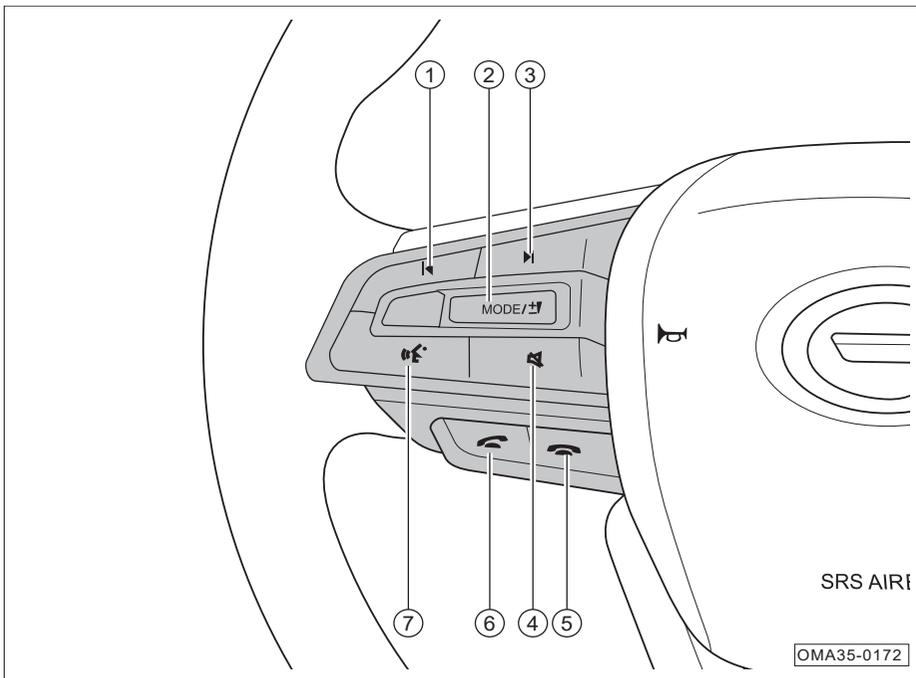
- When the audio source is working, a short press on this button will pause the working; another short press on this button will resume it.

i NOTE

The interfaces or functions of the AV system introduced in the "Owner's Manual" may vary depending on the vehicle configuration, which are for reference only.

4. Operation of systems and equipment

4.6.2 Control buttons on steering wheel



① ◀ button

- In radio mode, press this button to automatically search for a valid station with lower frequency. If a valid station is found, the automatic search will be stopped and the station will start playing.
- In media source playing mode, press this button to skip to the previous track.

② Audio source switching/volume adjusting button

- Press this button several times in succession to switch between the interfaces as follows: FM → AM → Online Radio* → USB Music → Bluetooth Music → Online Music* → FM.
- Pressing this button will not actively switch to CarPlay/CarLife music; if CarPlay/CarLife music is currently playing, pressing this button will switch to radio mode.
- This button will interrupt the local voice process and switch to the audio source currently playing.
- Toggle up/down this button to adjust the sound volume.

4. Operation of systems and equipment

③ ▶| button

- In radio mode, press this button to automatically search for a valid station with higher frequency. If a valid station is found, the automatic search will be stopped and the station will start playing.
- In media source playing mode, press this button to skip to the next track.

④ Mute button

- Press this button to mute the media source.
- Press this button to unmute the media source.

⑤ End call button

- When there is an incoming call via the Bluetooth, you can press this button to reject the call.
- During a call, you can press this button to end the current call.
- You can press and hold this button to restart the unit system.

⑥ Answer call button

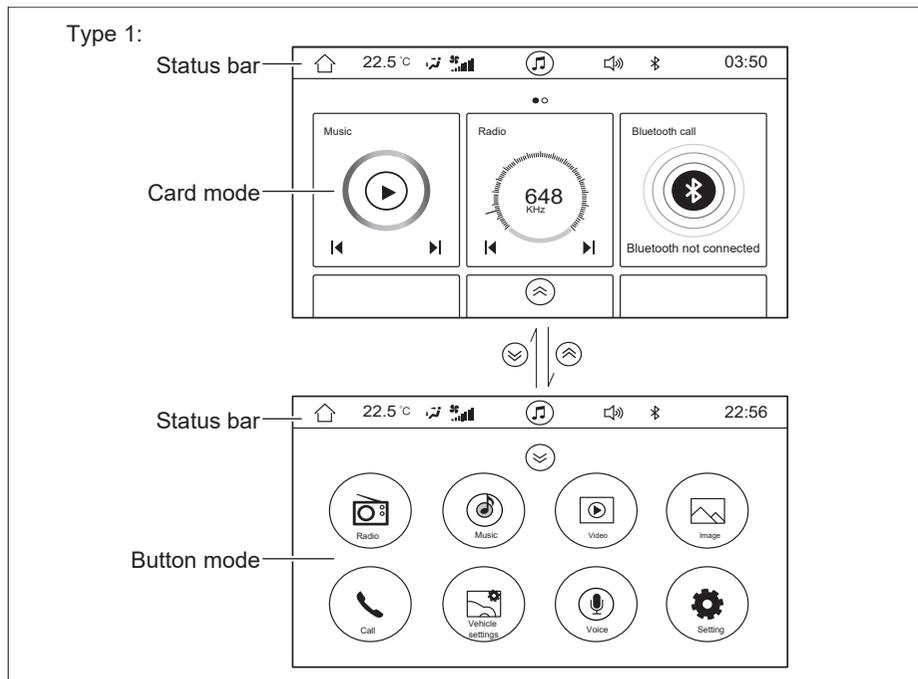
- When there is an incoming call via the Bluetooth, you can press this button to answer the call.
- When there is no incoming call via the Bluetooth, you can press this button to enter the Bluetooth Dialing interface.
- When there is no incoming call via the Bluetooth and no Bluetooth connection, you can press this button to enter the Bluetooth Settings interface.

⑦ Voice button*

- Press this button to activate or end the local voice.
- With the mobile phone connected to the unit, after the CarPlay/CarLife function is activated, press this button to activate or end the CarPlay/CarLife voice.

4. Operation of systems and equipment

4.6.3 Basic operation



The main interface includes the card mode and button mode.

- Swipe left and right to switch between interfaces.
- Click on a card to enter the corresponding function interface; click on soft keys on this card to enable the corresponding function.
- Swipe your thumb and index finger to the center of the display from two diagonal corners at the same time to enter the editing mode, press and hold the card and drag it to edit the card sequence.
- Click on the soft key of the corresponding function in the button mode to enable the corresponding function.

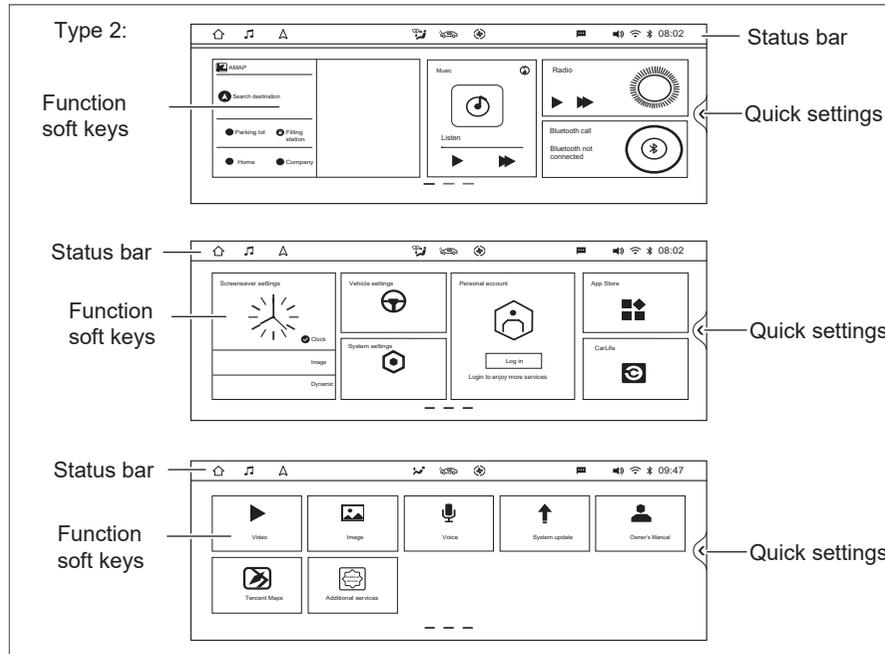
Status bar

- The status bar displays the system information. Some icons support entry into the corresponding function interfaces by a click.

i NOTE

The main interface shown is only an example of configuration. It can be used as a guide for vehicle models with an AV unit. The specific functions and interfaces depend on the actual vehicle configuration.

4. Operation of systems and equipment



- Swipe left and right to switch between interfaces.
- Click on a card to enter the corresponding function interface; click on a soft key on this card to enable the corresponding function.

Status bar

- The status bar displays the system information. Some icons support entry into the corresponding function interfaces by a click.

Quick settings

- Click on the "Quick settings" soft key to make the quick settings interface pop up to allow for setting some functions.

i NOTE

The main interface shown is only an example of configuration. It can be used as a guide for vehicle models with an AVNT unit. The specific functions and interfaces depend on the actual vehicle configuration.

The AVNT unit will automatically and synchronously refresh the GPS time, without need to set it by yourself.

4. Operation of systems and equipment

CarLife*

Via CarLife, the in-car system can share functions of mobile phones such as calls, navigation and music.

i NOTE

- CarLife is developed by Baidu for connecting mobile phones with vehicles. It only supports mobile phones with Android 4.0 or above and iPhones with IOS 8.0 or above. For supported mobile phones, refer to the latest list on Baidu's official website. The CarLife interface/function will be updated with the APP version. For the specific interface/function, refer to the actual version used.
- If an abnormality occurs in CarLife, it is recommended to unplug and replug the connecting cable. At the same time, it is recommended to check whether the connecting cable is good. If the connecting cable is damaged, it is recommended to replace the connecting cable with a new genuine one.

i NOTE

- When the operating system of mobile phones/iPhones (Android/IOS) is upgraded, all or some CarLife functions may become unavailable. This is because, after the operating system of mobile phones/iPhones is upgraded, the original interaction protocol is changed or the version is not supported by CarLife. As a result, the CarLife functions are affected.
- iPhones do not currently support WiFi connection.
- Due to different compatibility of CarLife with various versions of operating system of mobile phones, mobile phones with CarLife APP may not be normally connected with the in-car system. For details, please consult your mobile phone dealer.

How to obtain the application

Vehicles with AV unit*



CarLife APP is required on your mobile phone.
Please scan the QR Code to download and install it now

Vehicles with AVNT unit*



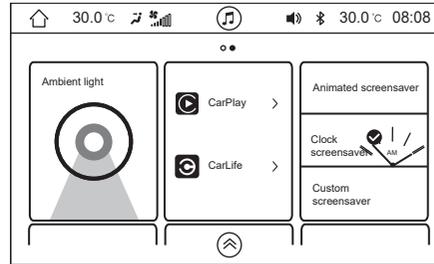
4. Operation of systems and equipment

- If the CarLife APP is not installed on your mobile phone, you can connect your mobile phone to the unit via a USB cable, and then click on the “CarLife” soft key in the main interface in the card mode.
- When the interface occurs as shown, scan the QR code to download the APP, or install the CarLife APP on the mobile phone before using CarLife to connect the mobile phone to the unit.

i NOTE

For more information, please click “Help”.

Apple CarPlay*



The Apple CarPlay allows you to use navigation, make calls, send and receive messages, and enjoy music while focusing on driving.

- After selecting CarPlay/iPod via “Settings → General → Prioritized Phone” in the AV system, use a USB cable to connect the mobile phone to the unit. If you select CarLife, you cannot connect the mobile phone to Apple CarPlay.
- After successful connection, the system will automatically switch to the CarPlay main interface, and the CarPlay icon in the system interface will be highlighted.

- In other function interfaces, you can enter the Apple CarPlay by clicking the CarPlay icon on the card mode interface or on the button mode interface.

i NOTE

- For the functions and applications supported by CarPlay, refer to the Apple's official website. According to the information released by Apple in 2019, Apple CarPlay supports iPhone5 and above.
- When using CarPlay, make sure that the CarPlay function is enabled in “Settings → General → Access Restriction” in the iPhone, otherwise the iPhone will only be used as iPod and the Apple CarPlay will not be available.
- Please use the original iPhone data cable, otherwise it may cause connection failure.

4. Operation of systems and equipment

Voice

After the AV system is turned on and working normally, wake up the voice recognition engine in the following ways before issuing a voice command to the voice recognition engine that needs to be waken up:

- Click the “Voice” soft key on the main interface to enter the voice mode.
- Press the button  on the left side of the steering wheel to enter the voice mode.
- Wake-up word: the default wake-up word is “Hello, Xiaoqi”. The customized wake-up-word is “Dingdang Dingdang” by default, and is optional.

Customize wake-up word as follows:

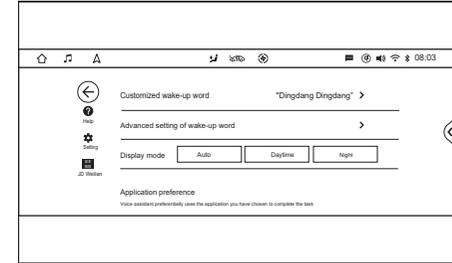
1. Wake up the voice assistant by saying “Hello, Xiaoqi” or “Dingdang Dingdang”, and say “Give you a name XXX” to set another wake-up word.
2. Enter the internal settings of voice assistant to set the wake-up word.

After you wake up the voice recognition engine and hear a beep, you can perform the voice control setting.

i NOTE

Whether the voice recognition can work is affected by external factors such as the objective environment (including ambient noise, network signal, etc), user habits and pronunciation. The specific recognition effect depends on the usage scenarios of the actual vehicle.

Voice settings



After waking up the voice recognition engine, click ●●● on the upper right corner to enter the voice setting or voice help option.

Customized wake-up word

- It can be 2~6 Chinese characters, and the following symbols are allowed: “, . !”.

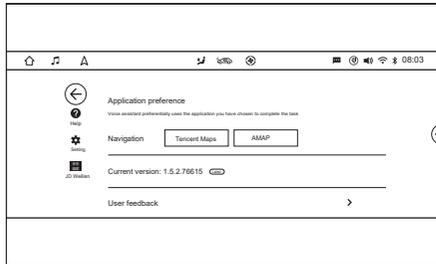
Advanced setting of wake-up word

- There are five volume levels: loud voice, stable voice, moderate voice, light voice, and whisper.

Display mode

- Automatic switching, daytime, night.

4. Operation of systems and equipment



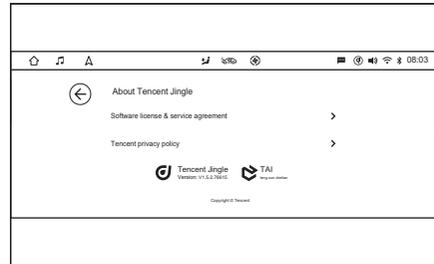
Application preference

The voice assistant will preferentially use the application you have chosen to complete the task.

- Navigation: Tencent Maps or AMAP can be preferential.
- Music: QQ Music or Kuwo Music (Kuwo Music APP is required) can be preferential.

Current version

- Display the current version information and remind the driver about version update when there is a new version.



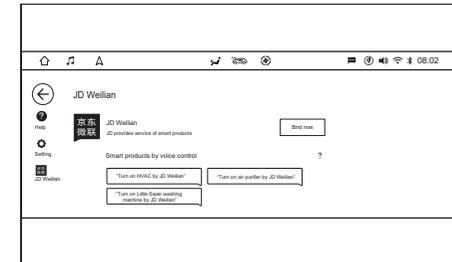
User feedback

- Make records for voice messages, and click OK to send them.

About Dingdang

- Display the software license, service agreement and Tencent privacy policy.

JD Weilian voice control



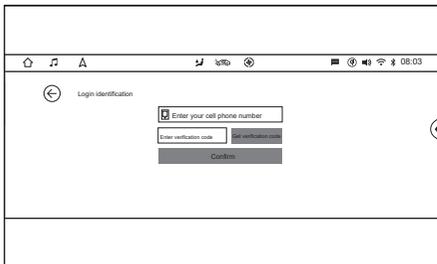
Bind your Jingdong account in JD Weilian on the voice setting interface. Then you can realize remote control of smart products via JD Weilian voice.

i NOTE

- Via JD Weilian, you can realize "household equipment control and smart fence".
- You can click "Help" for the detailed information.

4. Operation of systems and equipment

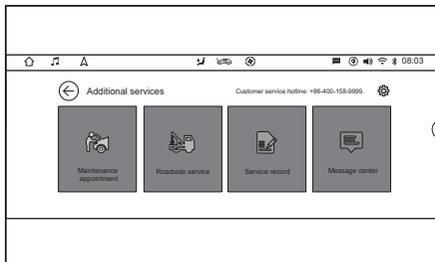
Additional services*



- In the application login interface, enter the cell phone number according to prompts, obtain and write down the verification code, and then click the “OK” soft key to complete the login identification.

i NOTE

The verification code is valid in 1min. After 1min, the obtained code will be invalid and it needs to obtain another verification code again.



- Log in and enter the home page which provides four functions: maintenance appointment, roadside service, service record, message center.

i NOTE

On the top left corner of the home page shows the Back soft key and the application name; on the top right corner shows the customer service hotline and the Set soft key.

4.6.4 Personal account*

Identification for activation



When using the unit for the first time, the user needs to perform owner identification to activate the unit (this page cannot be skipped and the user cannot operate the unit before activation).

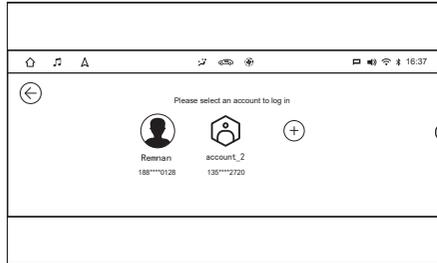
Step 1: Scan the QR code or download the GAC Motor T-BOX APP from the App Store.

Step 2: Register an account on the GAC Motor T-BOX APP.

Step 3: Enter the vehicle information on the GAC Motor T-BOX APP, and scan the QR code for identification and activation. After owner identification, this owner account will be logged in automatically and the home page will show.

4. Operation of systems and equipment

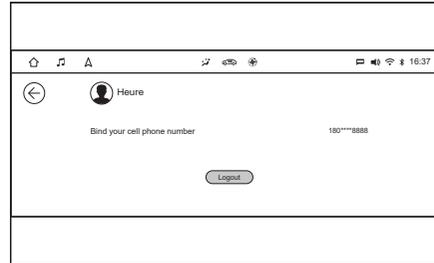
Account login



Enter the Personal Center, and select an existing user account avatar to log in or add a new account by registering it on the GAC Motor T-BOX APP to log in.

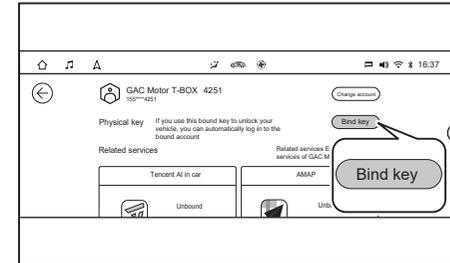
- Select either "Scan QR code" or "Password" to log in.

Account logout



Enter the Personal Center, click the user avatar to enter the account details interface, and click "Logout" and then "OK" to log out of the current account. The precondition for the logout is that the transmission gear is in a position other than "R" and the vehicle speed is 0, and if this cannot be met, the logout will fail, and a prompt "Stop vehicle to log out for the sake of your safety" will appear.

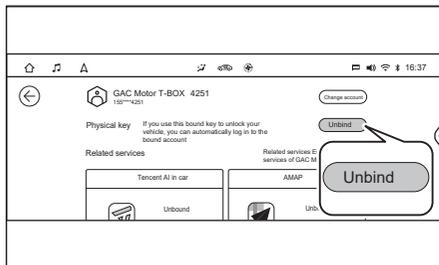
Bind key



- Click the "Bind key" in the Personal Center to bind the account ID with the physical key, and then if you use this key to approach the unlocked vehicle, you can perform the welcome customizations and automatically log in to the bound account.
- The interface prompts the user to press the "unlock key" button of the physical key.
- If the physical key unlock signal is detected within 6 s, it indicates that the binding is successful.
- If the physical key unlock signal is not detected within 6 s, it indicates that the binding fails, and the interface prompts that no signal is detected and please try again.

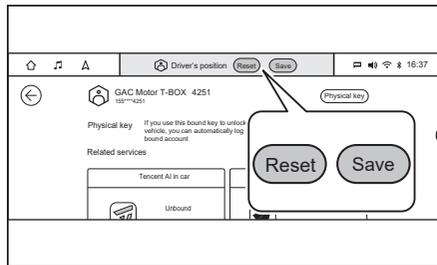
4. Operation of systems and equipment

Unbind key



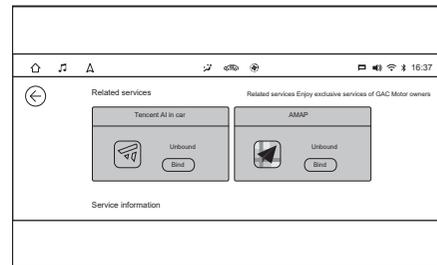
- Click the “Unbind” in the Personal Center to cancel the association between the key and the account.

Save seat/rearview mirror position



- After you log in the account, if you manually adjust the position of the seat or rearview mirror, a pop-up window will prompt you to save the adjusted position (only for models with the seat/rearview mirror memory function).
 1. Click “Save” to save the adjusted position in the current account.
 2. Click “Restore” to restore the seat to the position before adjustment.
 3. If there is no operation within 5 s, the account will not save the adjusted position.

Bind third-party service

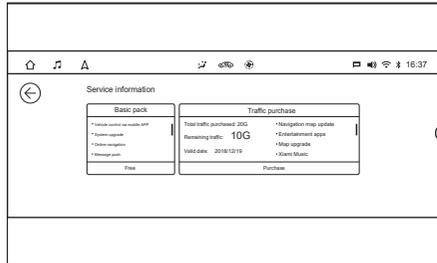


The account system can be bound to “Tencent AI in car” and “AMAP”.

- Enter the Personal Center, and click the “Bind” to bind the “Tencent AI in car” according to the prompts.
- Enter the Personal Center, and click the “Bind” to bind the AMAP according to the prompts.

4. Operation of systems and equipment

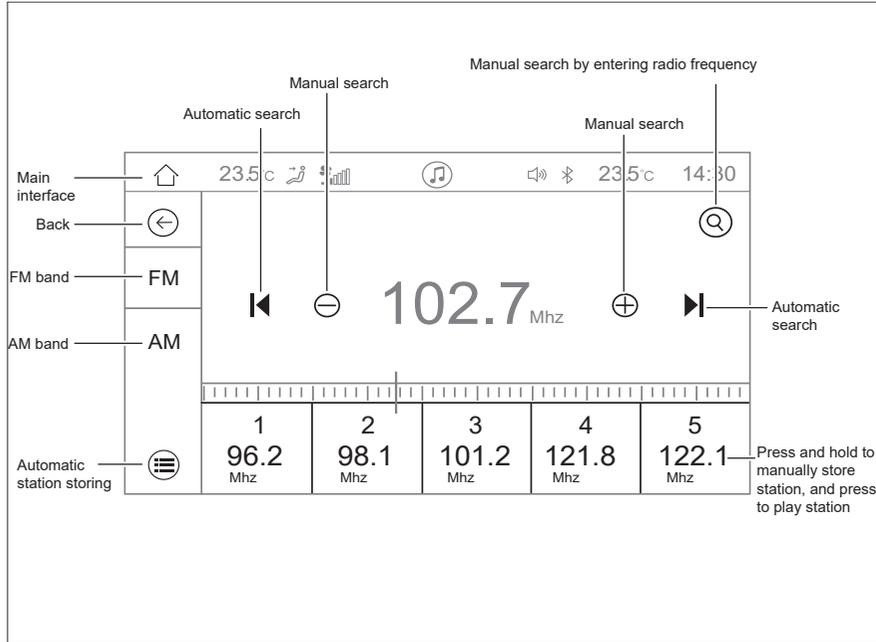
Traffic query



Enter the Personal Center to check the total traffic package and remaining traffic.

4. Operation of systems and equipment

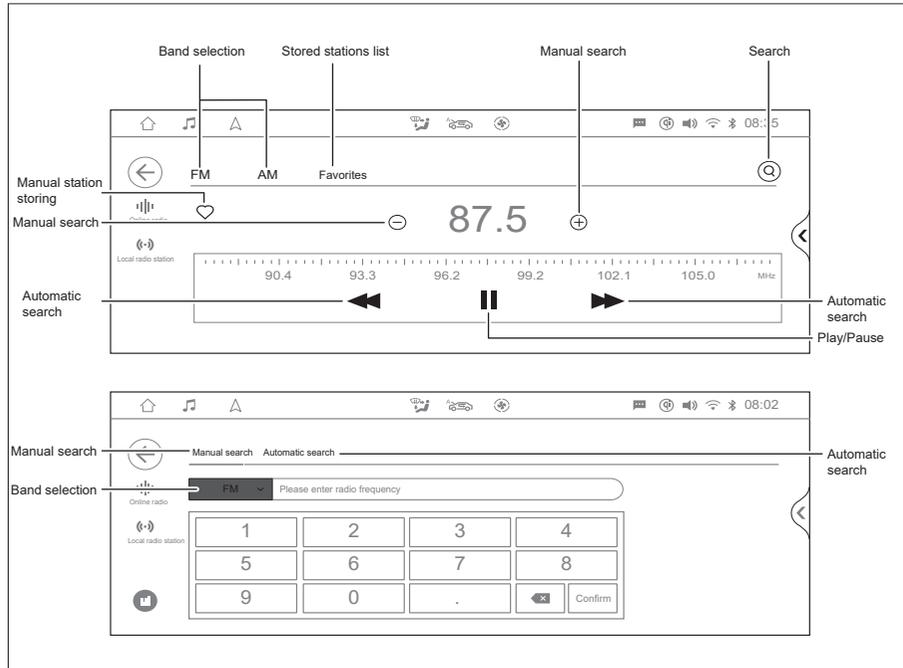
4.6.5 Radio



Enter the Radio interface of the AV unit in the following ways:

- Click on the "Radio" card in the card mode to enter the Radio mode.
- Click on the "Radio" soft key in the button mode to enter the Radio mode.
- Press the audio source switching button on the front control panel or rear control panel* repeatedly to switch to the radio mode.
- Press the MODE button on the left side of the steering wheel repeatedly to switch to the radio mode.

4. Operation of systems and equipment



Enter the Radio interface of the AVNT unit in the following ways:

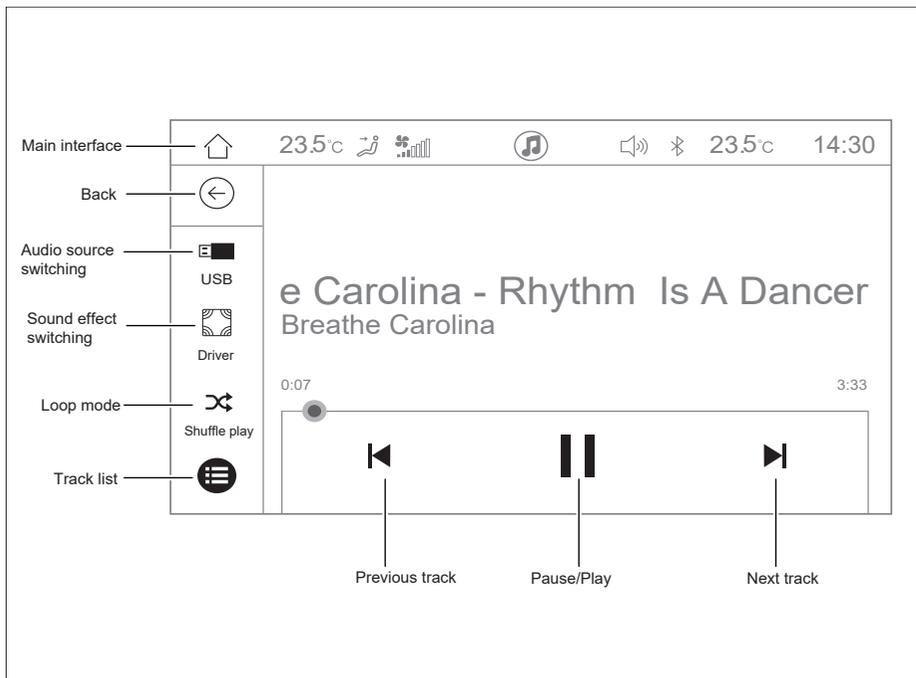
- Click on the "Radio" soft key on the main interface, and then click on the "Local radio" soft key to enter the radio mode.
- Press the audio source switching button on the front control panel or rear control panel* repeatedly to switch to the radio mode.
- Press the MODE button on the left side of the steering wheel repeatedly to switch to the radio mode.

i NOTE

The radio station is divided into two modes: local radio and online radio. Only local radio is described here.

4. Operation of systems and equipment

4.6.6 USB media play



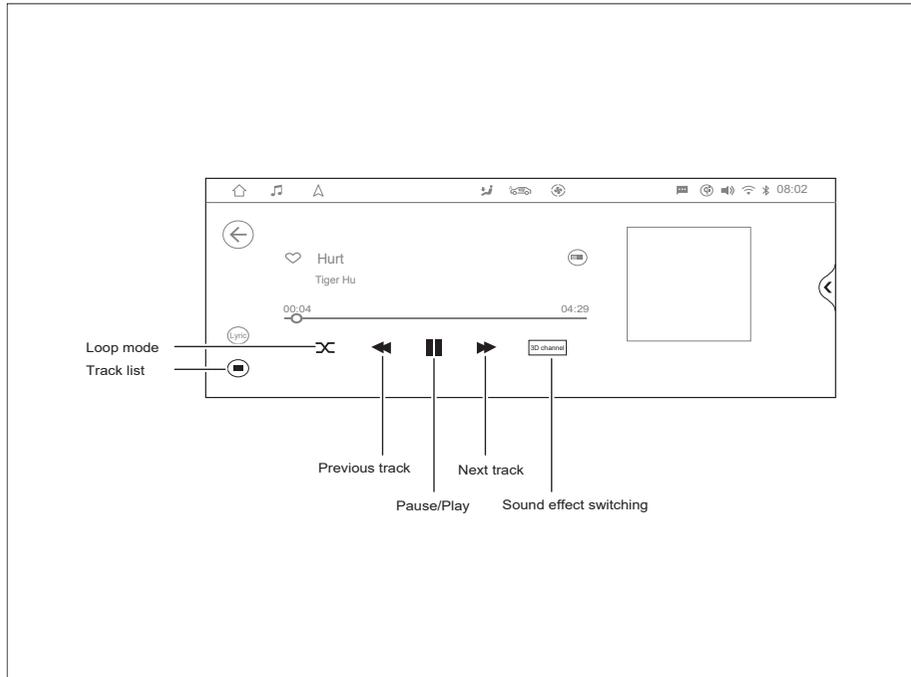
Enter the USB media play mode of the AV unit in the following ways:

- Click on the "Music" card in the card mode to enter the USB media play mode.
- Press the audio source switching button on the front control panel or rear control panel* repeatedly to switch to the USB media play mode.
- Press the MODE button on the left side of the steering wheel repeatedly to switch to the USB media play mode.
- Click on the "Music", "Image" or "Video" soft key on the main interface in the button mode to switch to the USB media play mode.

i NOTE

- After the USB device is successfully connected, a prompt of selecting USB music, image and video will pop up.
- If there is iPod function, refer to the operation methods for USB.

4. Operation of systems and equipment



Enter the USB media play mode of the AVNT unit in the following ways:

- Click the "Music" soft key in the main interface to enter the music application interface, and then click "Local music".
- Press the audio source switching button on the front control panel or rear control panel* repeatedly to switch to the USB media play mode.
- Press the MODE button on the left side of the steering wheel repeatedly to switch to the USB media play mode.
- Click on the "Image" or "Video" soft key on the main interface to switch to the USB media play mode.

i NOTE

- After the USB device is successfully connected, a prompt of selecting USB music, image and video will pop up.
- The music application interface has three functions: Music hall (Online music), Local music, My music; only "Local music" is introduced here.

4. Operation of systems and equipment

USB format

Vehicles with AV unit:

- The AV system supports USB flash drives with capacity up to 32GB FAT, FAT32 and ExFAT.

Vehicles with AVNT unit:

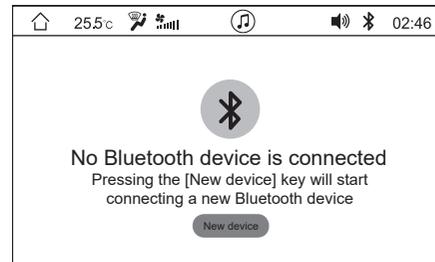
- The AV system supports USB flash drives with capacity up to 64GB FAT32 and NTFS.

4.6.7 Bluetooth function

Bluetooth mode of AV unit

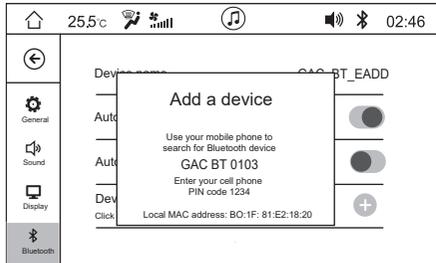
Enter the Bluetooth mode in the following ways:

- Click on the “Bluetooth phone” card in the main interface in the card mode to enter the Bluetooth mode.
- In non-call mode, press the Call button  on the left side of the steering wheel to enter the Bluetooth mode.
- Click on the “Call” soft key in the main interface in the button mode to enter the Bluetooth mode.

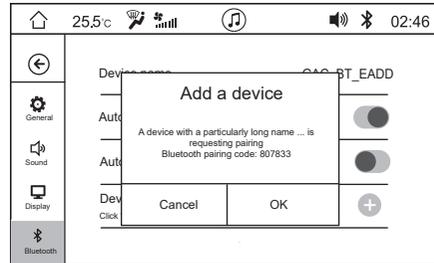


- If no Bluetooth device is connected, the system will prompt you to connect a new device.
- Click on the  soft key to enter the Bluetooth setting interface, set and connect the Bluetooth function before use.

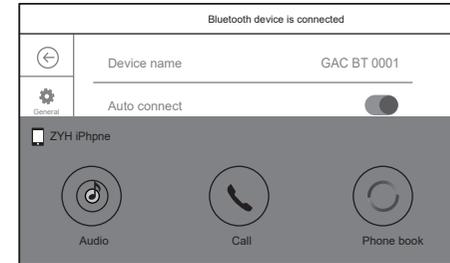
4. Operation of systems and equipment



- Click the “+” soft key on the right side of the device list to make Bluetooth function visible.



- Search for the device name on the mobile phone, and click on it to start pairing. The system receives the pairing request and then a confirmation dialog box pops up (whether the PIN needs to be entered depends on the mobile phone model).
- Click on the “OK” soft key to start pairing; click on the “Cancel” soft key to end pairing; once the connection succeeds, the device name will be displayed in the device list.



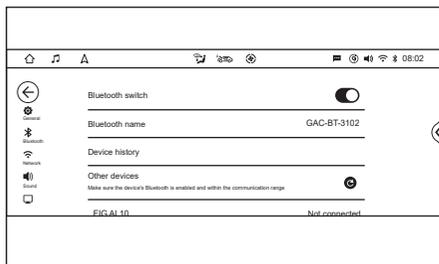
- After connecting the Bluetooth device, enter the call interface, and tap the call record, phone book and dial pad to enter the corresponding interface.

4. Operation of systems and equipment

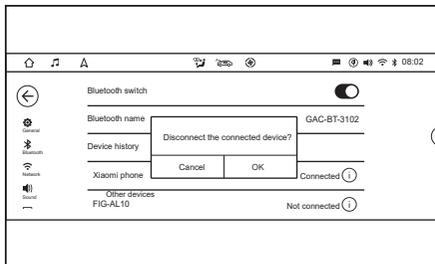
Bluetooth mode of AVNT unit

Enter the Bluetooth mode in the following ways:

- Click on the “Bluetooth phone” card in the main interface to enter the Bluetooth mode.
- In non-call mode, press the  button on the left side of the steering wheel to enter the Bluetooth mode.



- If no Bluetooth device is connected, click on the “Bluetooth call” card or press the  button on the left side of the steering wheel to enter the Bluetooth setting interface.
- Click on the “Other devices” soft key to let the system search for nearby devices with Bluetooth activated, and follow the instructions to connect them.



Disable the Bluetooth in the following ways:

- In the Bluetooth setting interface, click the connected device in the history setting, and click “OK” in the pop-up box to disable the Bluetooth.
- Click on the Bluetooth icon in the center of Bluetooth call in the main interface, and click “OK” in the pop-up box to disable the Bluetooth.
- Disable the Bluetooth on the phone side.

Bluetooth connection failure

Possible cause	Solution
The device's Bluetooth is set incorrectly	Set the device's Bluetooth so that it can be “Visible to Everyone” or can be searched or opened for detection
The current device is not compatible with the in-car Bluetooth system	Confirm the compatibility of the device with the Bluetooth version, upgrade the mobile phone system to the latest version and try again
The mobile phone's Bluetooth was connected to other devices	It is recommended to delete the Bluetooth devices that were connected

4. Operation of systems and equipment

4.6.8 System settings

Model with AV unit: Click the “Settings” soft key on the main interface in the button mode to enter the system settings interface.

Model with AVNT unit: Click the “System settings” soft key on the main interface to enter the system settings interface. In the settings interface, click on an option to select it, click on the slider  to enable or disable the function, and drag the progress bar for adjustment.

Settings group	Function	Description	Options
General	Language*	Change display language	Chinese/English
	Time and date	Set time and date	24-hour system/settings*/GPS time and date sync*
	Prioritized iPhone*	Set the system to connect to CarLife or iPod first when connecting to a mobile phone	CarLife/CarPlay/iPod
	Navigation signal mode*	Select the navigation mode for receiving signals	GPS/BeiDou/GPS+BeiDou
	Version*	View information of unit software version	/
	Vehicle information*	View information of vehicle unit	/
Sound	Multimedia volume*	Adjust the volume of radio, USB music, Bluetooth music and App Store music	/
	Voice recognition/call volume*	Adjust the volume of voice recognition/Bluetooth call	/
	Navigation volume*	Adjust the navigation volume to sync with the navigation APP	/
	3D sound effect*	Select the optimal listening position	Off/Driver/All passengers
	Preset sound effect*	Manually customize the sound effect in Treble, Alto and Bass modes after disabling 3D sound effect	Classic/Pop/Jazz/Rock/Default/Custom
	Treble	Set to treble mode	Range: 0~9 Range: 0~10

4. Operation of systems and equipment

Settings group	Function	Description	Options
Sound	Alto	Set to alto mode	Range: 0~9 Range: 0~10
	Bass	Set to bass mode	Range: 0~9 Range: 0~10
	Virtual subwoofer*	Set virtual subwoofer when 3D sound effect is in the Driver or All passengers mode	On/Off
	Sound field	Touch to adjust the sound field position	Reset
	Startup volume	Set the volume at startup	Unchanged/Adaptive
	Speed-sensitive volume control	Adjust the volume change rate as the vehicle speed changes	Off*/Low*/Medium*/High* (Not sensitive*/Weakly sensitive*/Generally sensitive*/Strongly sensitive*)
	Touch tone	Adjust the touch tone of the touch screen	Off/Modern/Retro
	Media volume during reversing		
	(Assistance warning sound and media sound)	Select the volume of the AV system during driving assistance warning (such as reversing)	Unchanged/Mute
	Door lock/unlock horn sound* (Unlock and lock prompt sound*) (Unlock/lock prompt sound*)	Set the horn sound during door lock/unlock	On/Off
	Seat mode*	Set seat mode	Front seat/all seats
Sound source compensation*	Set source compensation on or off	On/Off	

4. Operation of systems and equipment

Settings group	Function	Description	Options
Display	Screen brightness	Adjust the screen brightness	/
	Brightness mode*	Set the brightness mode	Day/night/auto
	A/C interface hold time	Set the A/C interface hold time after no operation	5 s/10 s/15 s/30 s
Bluetooth	Bluetooth switch*	Turn the Bluetooth on or off	On/Off
	Bluetooth name* (device name*)	Show the Bluetooth device name	/
	Automatic connection*	Set whether to connect the Bluetooth device automatically	On/Off
	Automatic answering*	Set whether to answer automatically	On/Off
	Device list*	Add a device to the device list	/
	Device history*	View the previously connected Bluetooth devices	/
Network*	Other devices*	View the searched Bluetooth devices	/
	Mobile network*	Connect or disconnect the mobile network	On/Off
	Mobile hotspot*	Turn on or off mobile hotspot	On/Off
Factory reset	WIFI	Disable/Enable WIFI when mobile hotspot (if any) is "off"	On/Off
	/	Restore the settings groups above to the factory defaults.	Reset

4. Operation of systems and equipment

4.6.9 Vehicle settings

Model with AV unit: Click the “Vehicle Settings” soft key on the main interface in the button mode to enter the vehicle settings interface.

Model with AVNT unit: Click the “Vehicle settings” soft key on the main interface to enter the vehicle settings interface. In the settings interface, click on an option to select it, click on the slider  to enable or disable the function, and drag the progress bar for adjustment.

Settings group	Function	Description	Options
Seat settings*	Automatic heating*	/	On/Off
	Seat welcome function*	/	On/Off
	Intelligent remote control key*	/	On/Off
Driving assistance	Safe speed warning (km/h)	Set the safe speed warning	Range: 0~200
	AEB*	/	On/Off
	Cruise control mode*	Select the cruise control mode	Adaptive cruise control/integrated cruise assist
	FCW*	/	On/Off
	FCW distance*	Select the desired distance	Far/Medium/Near
	Steering mode	Set the turning force on the steering wheel	Comfort/Standard/Sport
	BSD*	/	On/Off
	Rear crossing traffic alert*	/	On/Off
	Door opening warning*	/	On/Off
LKA*	Select the LKA mode	Steering assist/warning/steering assist and warning	

4. Operation of systems and equipment

Settings group	Function	Description	Options
Intelligent body	Intelligent active lock*	/	On/Off
	Intelligent active unlock*	/	On/Off
	Remote unlock	Set the remote unlock	All doors/Left front door only* All doors/Driver's door only*
	Automatic unlock	/	On/Off
	Mobile phone wireless charging*	/	On/Off
	Remote control of windows* (Remote control of left front window and sunroof*)	/	On/Off
	Automatic wiper*	/	On/Off
	Wiper maintenance	/	On/Off
	Trunk lid easy open*	Select the trunk lid opening mode	Off/on/prompt sound on
	Automatic folding of exterior rearview mirror*	/	On/Off
	Automatic angle adjustment of exterior rearview mirror*	/	On/Off
		Set the angle of exterior rearview mirror	Setting
	Manual angle adjustment of exterior rearview mirror*	/	On/Off

4. Operation of systems and equipment

Settings group	Function	Description	Options
Light control	Ambient light control*	/	On/Off
		Select the brightness of ambient light	Range: 1~8
		Select the color of ambient light	32 colors
	Automatic headlamp on/off sensitivity*	Select the automatic headlamp on/off sensitivity	Low*/Medium*/High* (Low sensitivity*/Medium sensitivity*/High sensitivity*)
	Follow me home	Select the follow me home mode	Off/Low beam/Low beam and rear fog lamp
	Daytime running lamp*	/	On/Off
	Intelligent high beam*	/	On/Off
Intelligent courtesy lamp*	/	On/Off	
A/C settings	Intelligent control of recirculation/fresh air mode*	/	On/Off
	A/C comfort curve	Select the A/C comfort curve mode	Soft/Normal/Fast
	Air quality sensor	Select the air quality sensor mode	Low sensitivity/Medium sensitivity/High sensitivity
	Automatic air volume setting*	Select the automatic air volume mode	Low*/Medium*/High* (Low air volume*/Medium air volume*/High air volume*)
	Automatic defogging*	Select the windshield defogging mode	Off/Low sensitivity/Medium sensitivity/High sensitivity
Factory reset*	/	Select the factory default settings	Reset

4. Operation of systems and equipment

4.7 GAC Motor T-BOX*

4.7.1 General description

GAC Motor T-BOX is an intelligent in-car service system for GAC Motor series vehicles.

GAC Motor T-BOX was self-developed by GAC as GAC Motor's latest generation of automotive electronic system. It uses mobile communication networks, and is connected into the professional TSP platform. Relying on global satellite-based positioning systems, owners can enjoy services such as security self-help, vehicle control via mobile APP, and infotainment in real time through emergency rescue service and owner self-service website and the GAC Motor T-BOX. GAC Motor T-BOX is dedicated to creating a quality intelligent vehicle for you, bringing you an intelligent, secure and enjoyable driving experience.

This section aims to introduce the GAC Motor T-BOX, so you can quickly learn about its use and operation. For further information, please read the "Help Center" on the GAC Motor T-BOX's owner self-service website or mobile APP.

Before using the GAC Motor T-BOX for the first time, be sure to read the "Service Agreement" and "Help Center" carefully to familiarize yourself with its usage and associated provisions.

If you have any questions, please consult a GAC Motor authorized shop or call the service hotline: +86-400-158-9999.

Tips

GAC Motor T-BOX will be restricted under any of the following conditions:

1. If the communication company's termination, postponement, gradual withdrawal, etc. leads to the inability to provide network services of the current communication standard (4G), the OEM will not assume the corresponding responsibility.
2. The GAC Motor T-BOX terminal integrated with the electronic equipment of the vehicle has been repaired or altered without authorization.
3. Power supply to the terminal is interrupted due to natural disasters, violent impacts, etc., or power supply is unavailable due to electric leakage of the vehicle's battery.
4. The vehicle cannot be located accurately due to abnormal GPS satellite signals, external interference in the airwaves, restricted airwaves in a certain area, etc.
5. The vehicle is running in the area where GPS satellite cannot accurately locate the vehicle, such as a place between high buildings, a tunnel and underground space.
6. All or partial services may be limited or terminated due to overhaul, replacement or malfunction of the center's system, natural disasters, national unrest, equipment failure, a dramatic increase in service usage, etc.

4. Operation of systems and equipment

Communication service

Communication service is required when you use the GAC Motor T-BOX. During the experience period, the following backstage support services will be provided:

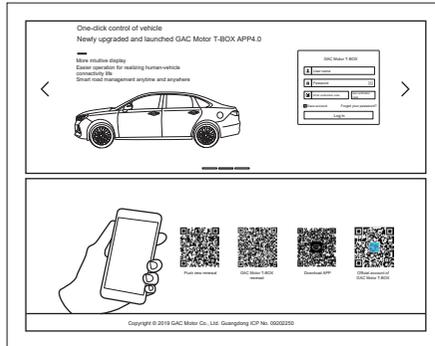
- A communication package provided by China Mobile will be available to vehicles equipped with the backstage support service system. Please consult the GAC Motor authorized shop for the details of the communication package.
- The communication package contains a certain amount of data traffic and call duration. After the set amount of the package is exceeded, some functions will be unavailable and users need to purchase new traffic packages at their own expense.

CAUTION

- GAC Motor T-BOX provides you with services such as vehicle control via mobile APP, vehicle condition query via mobile APP, and safety and security, allowing vehicle control via mobile APP anytime and anywhere and enhancing the convenience of vehicle usage. Since the in-car Internet device will cause communication costs, if you don't use it for a long time, there may be a risk that your SIM card will be deactivated and your number will be canceled by the telecoms operator. It is recommended that after purchasing the vehicle, you can open your account as soon as possible to experience the convenient life brought about by the GAC Motor T-BOX.
- The in-car device of GAC Motor T-BOX is integrated with SIM card's communication function. The basic traffic package of the SIM card can be used normally during the basic warranty period. But after that, the SIM card number will be canceled by the telecoms operator and cannot be activated. To restore this function, you need to replace the components of T-BOX assembly at your own expense at a GAC Motor authorized shop.

4. Operation of systems and equipment

4.7.2 Owner self-service website



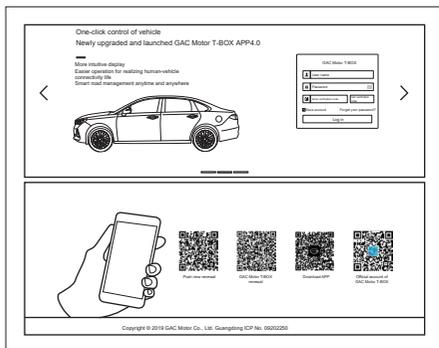
1. Use the browser to open the link: "<http://trumpchi.gacmotor.timasync.com/selfservice-portal/>".
2. Enter the user name and password.
3. Click the "Get Verification Code" (sent to the bound mobile phone number).
4. Enter the verification code.
5. Click the "Login" to enter the home page of GAC Motor T-BOX.

i NOTE

- Check the box "Save Account" so that you can log in this account directly next time without entering the user name and password.
- The user name is the mobile phone number that you bind to the GAC Motor T-BOX. If you need to change the password, you can log in the account to change it.

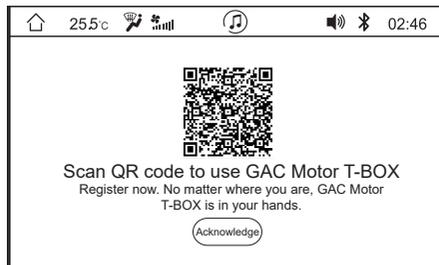
4. Operation of systems and equipment

4.7.3 Download APP on mobile phone



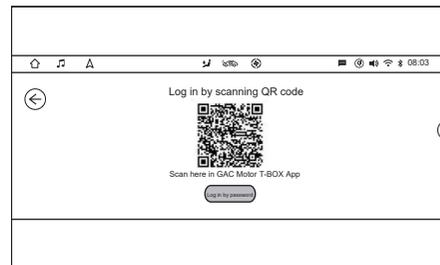
1. Use the browser to open the link: "<http://trumpchi.gacmotor.timasync.com/selfservice-portal/>".
2. Use the mobile phone to scan the APP QR code to download the APP.

AV system*



1. Click on the "GAC Motor T-BOX" soft key in the Button mode. At this time, the QR code for registration will pop up.
2. Users can scan the QR code on the screen to download the GAC Motor T-BOX APP according to the operating system of their mobile phones.
3. Once the download is completed, click on the APP to open it and follow the prompts to complete registration.
4. After registration is completed, the "GAC Motor T-BOX" icon in the button mode will no longer be displayed.

AVNT system*



1. Click on the "Personal account" soft key on the main interface to enter the personal account interface.
2. Click on the account and package, scan the QR code to download the GAC Motor T-BOX APP and register your account.

4. Operation of systems and equipment

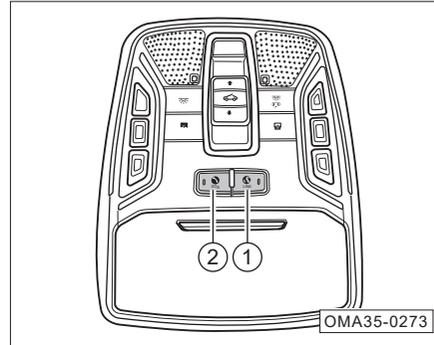
4.7.4 Emergency rescue

The emergency rescue function includes automatic call after crash, roadside service and manual emergency call. Automatic call after crash will be automatically enabled by GAC Motor T-BOX under certain circumstances, while roadside service and manual emergency call need to be manually enabled by pressing the emergency call button.

Both the automatic call after crash and manual emergency call can call the GAC rescue center.

- Automatic call after crash: when the vehicle is involved in an accidental collision and the airbag is deployed, GAC Motor T-BOX will activate the automatic call after crash function to automatically call the GAC rescue center.
- Manual emergency call: when the automatic call after crash function does not work, manually press the emergency call button to activate the manual emergency call function to call the GAC rescue center.

Emergency call button



- ① LINK button: press and hold this button (3s) to link to the BCALL roadside service and call the roadside service phone number (this number was written in the unit when the vehicle was delivered from the factory and cannot be changed). After the call is answered, the call center will communicate with the vehicle owner and arrange the nearest GAC Motor authorized shop to provide service.

- ② SOS button: press and hold this button (3s) to link to the ECALL emergency rescue service and call the emergency rescue phone number (this number was written in the unit when the vehicle was delivered from the factory and cannot be changed). After the call is answered, the call center will communicate with the vehicle owner and provide emergency rescue services, for example, calling 120.

i NOTE

The emergency rescue phone number and roadside service phone number were written in the vehicle's electronic system when the vehicle was delivered from the factory and they cannot be changed.

4. Operation of systems and equipment

4.7.5 Function list

You can obtain the GAC Motor T-BOX services by pressing the in-car emergency call button, using the mobile APP, or logging into the owner self-service website.

Category	Service	Description	Access method			Notification method		
			Website	APP	Button	Website	APP	Text message
Emergency rescue service	Automatic call after crash	When the vehicle is involved in an accidental collision and the airbag is deployed, GAC Motor T-BOX will activate the automatic call after crash function to automatically call the GAC rescue center.	Auto					○
	Roadside service	If the vehicle has a problem, you can seek for roadside service from the GAC Motor authorized shop by pressing the "LINK" button.			○			○
	Manual emergency call	In case of emergency, you can call the GAC rescue center for emergency rescue services by pressing the "SOS" button immediately.			○			○
Vehicle control via mobile APP	Vehicle locating	When the vehicle is missing, you can locate it through the GAC Motor T-BOX APP on your mobile phone.		○		○	○	
	Door lock/unlock via mobile APP	You can lock or unlock the doors via the GAC Motor T-BOX APP.		○			○	
	Horn sounding via mobile APP	You can control the horn of the vehicle via the GAC Motor T-BOX APP.		○			○	
	Lamp flashing via mobile APP	You can control the lamps of the vehicle via the GAC Motor T-BOX APP.		○			○	
	Engine start/shutdown via mobile APP	You can start or shut down the engine via the GAC Motor T-BOX APP.		○			○	
	A/C turning on/off via mobile APP	You can control the A/C, including temperature, air volume and recirculation mode, via the GAC Motor T-BOX APP.		○			○	

4. Operation of systems and equipment

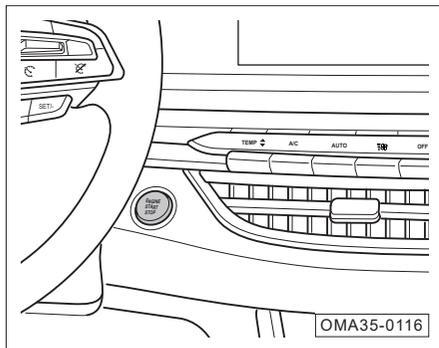
Category	Service	Description	Access method			Notification method		
			Website	APP	Button	Website	APP	Text message
Vehicle care service	Vehicle condition query ^{*1}	You can query about the vehicle conditions, including door lock status, tire pressure, etc., in real time via the GAC Motor T-BOX APP.	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	
	Self-diagnosis ^{*1}	You can query about the vehicle conditions in real time via the GAC Motor T-BOX APP which will prompt you when an abnormality occurs.	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	
	Vehicle abnormality alarm	The in-car GAC Motor T-BOX terminal monitors the vehicle conditions in real time, and uploads abnormalities if any. According to the abnormality information, specialists in GAC Motor T-BOX Service Center will contact you and remind you to go to the GAC Motor authorized shop for inspection as soon as possible.	Auto			<input type="radio"/>		<input type="radio"/>
Safety and security service	Vehicle anti-theft and abnormal event alarm	When the engine is shutdown, if illegal movement of the vehicle (such as towing) occurs, the GAC Motor T-BOX Service Center will send a text message to notify you.	Auto					<input type="radio"/>
		Break-in alarm: in case of a break-in when doors are locked and the engine is shutdown, the GAC Motor T-BOX Service Center will send a text message to notify you.						

*1: Only when the vehicle is armed.

5. Driving Guide

5.1 Starting and driving

5.1.1 ENGINE START/STOP button



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

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

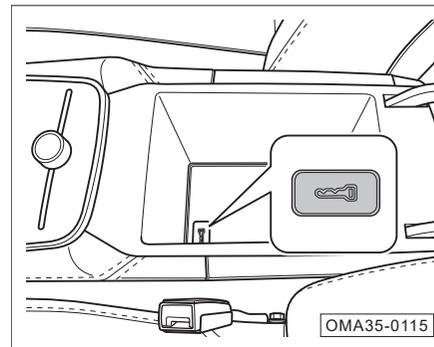
When the brake pedal is not depressed, press the ENGINE START/STOP button to switch the positions in the following order: "OFF → ACC → ON → OFF".

- OFF: The ENGINE START/STOP button indicator lamp goes out.
- ACC: The ENGINE START/STOP button indicator lamp turns orange, and the circuits of 12V power supply and other accessories are connected.
- ON: The ENGINE START/STOP button indicator lamp turns green, the instrument cluster backlight comes on, and the circuits of all electrical consumers are connected.

i NOTE

- When the ENGINE START/STOP button is switched from "OFF" to "ACC" and remains in "ACC" position for one hour, the vehicle will enter the battery saver mode and the ENGINE START/STOP button will automatically return to "OFF" position.

Limphone mode



When "No key detected" appears on the instrument cluster display due to low battery of the intelligent remote control key, you can try to place the key horizontally at the mark on the bottom of the armrest box, then press the ENGINE START/STOP button to switch it to "ACC" or "ON" position and depress the brake pedal, and after the ENGINE START/STOP button indicator lamp turns green, press the ENGINE START/STOP button to start the engine.

This method is intended for emergency start. Please replace the battery of the intelligent remote control key as soon as possible.

5.1.2 Engine start

- Enter the vehicle with the intelligent remote control key.
- Make sure the gearshift lever is at “P” or “N” position.
- Depress the brake pedal and ensure that the ENGINE START/STOP button indicator lamp turns green.
- Press the ENGINE START/STOP button to start the engine.

i NOTE

- In case of a cold start, run the engine at idle speed to warm up it before driving. At the same time, the valve tappet takes a few seconds to reach the normal working pressure and operation noise will occur, which is normal.

CAUTION

- The engine start time cannot exceed 15s. If the engine is not started successfully, you must wait about 30s before next attempt.
- Do not depress the accelerator pedal hard to make the engine run at high speed or overload after starting. Otherwise, the engine is likely to be damaged.
- If the battery level is low and the engine cannot be started, try to start it by a jumper cable. => [See page 290](#)
- It is prohibited to start the engine by pushing or towing the vehicle.

WARNING

- **Do not keep starting the engine for a long time in a poorly ventilated place or an enclosed place. The engine exhaust contains harmful gases which can make people comatose and even suffocate.**
- **Never let the engine idle at unattended condition.**
- **Do not add a starting aid for starting the engine, as it is likely to make the engine run at high speed or cause an explosion.**

5. Driving Guide

5.1.3 Engine shutdown

- Park the vehicle steady and apply the parking brake.
- Set the gearshift lever to “P” position.
- Press the ENGINE START/STOP button to shut down the engine.

i NOTE

After the engine is shut down, the radiator fan may still run for a while.

Emergency shutdown

When the vehicle is running, press and hold the ENGINE START/STOP button or press it three times to switch it from “ON” to “ACC” position for emergency shutdown of the engine.

The engine can only be restarted in a few seconds after emergency shutdown. Restart the engine as follows:

- Depress the brake pedal, and then press the ENGINE START/STOP button to start the engine.

⚠ WARNING

- **Emergency shutdown is forbidden during normal driving, as it is likely to lead to vehicle damage, safety and power steering failure, and traffic accidents.**

Precautions for parking

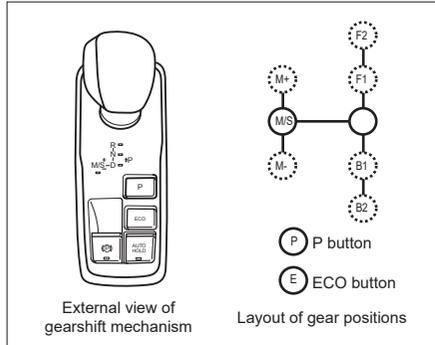
When parking the vehicle, set the gearshift lever to “P” or “N” position, and pay attention to the following:

- Pay attention to the direction when the vehicle is parked, for fear of damage to the green belt due to the exhaust gas spraying on the plants.
- Try to park on a flat and straight road, instead of a steep slope.
- For parking on a slope, regardless of whether the vehicle is facing the top or bottom of the slope, the front wheels should be turned towards the curb.
- Apply the parking brake, shut down the engine, and turn off all lamps and electrical consumers.
- When leaving the vehicle, be sure to take away your valuables and the key, and check that the sunroof, windows, doors and trunk lid are closed and locked.

⚠ WARNING

- **When leaving the vehicle, be sure to shut down the engine, apply the parking brake and take away the key.**
- **Do not leave any person in the vehicle. Otherwise, suffocation, coma and even death can easily occur in the closed space.**
- **Do not park near flammable and explosive materials.**

5.1.4 Gear description



The transmission system is adopted with the Shift by Wire technology and the in-line bistability gear arrangement, with the first stable state for shifting of gears “R”, “N” and “D”, and the second stable state for shifting of gears “S” and “M+/M-”. The engagement/disengagement of P gear and the activation/deactivation of ECO mode are controlled by buttons. When the gearshift is performed with IGN ON, the instrument cluster will display the corresponding gear information.

⚠ WARNING

The “R” or “P” gear can be engaged only when the vehicle is completely stationary, otherwise the transmission will be damaged.

P: Parking

- When the vehicle is completely stationary with transmission in other positions than P, press the “P” button to shift to the “P”.

In either of the following two conditions, the shift-by-wire system will automatically shift the transmission to “P”.

- When the ENGINE START/STOP button is switched from “ON” to “OFF” or from “OFF” to “ON” at a vehicle speed $\leq 3\text{km/h}$ with transmission in other positions than P, the “P” gear will be engaged automatically.
- When the driver’s seat belt is not fastened, the driver’s door is open and the brake pedal is not depressed at a vehicle speed $\leq 3\text{km/h}$, the “P” gear will be engaged automatically.

i NOTE

When the shift system fails and the “P” gear can not be disengaged, please contact the GAC Motor authorized shop for repair.

R: Reverse

- With the vehicle completely stationary and the transmission in “P”, “D”, or “M/S” position (if the transmission is in the “M/S” position, it is required to set the gearshift lever to the first stable state before performing the following operations), depress the brake pedal and push the gearshift lever up to the F2 position to shift to “R” position.
- With the vehicle completely stationary and the transmission in “N” position, depress the brake pedal and push the gearshift lever up to the F1 or F2 position to shift to “R” position.

5. Driving Guide

N: Neutral

- With the transmission in “P” position, depress the brake pedal and push the gearshift lever up to the F1 position to shift to “N” position.
- With the transmission in “D” or “S” position (if the transmission is in the “M/S” position, it is required to set the gearshift lever to the first stable state before performing the following operations), push the gearshift lever up to the F1 position to shift to “N” position.
- With transmission in “R” position, pull the gearshift lever down to the B1 position to shift to “N” position.

WARNING

- **Do not make the vehicle coast with the gearshift lever in “N” position. Otherwise, it is likely to cause an accident.**
- **In the first stable-state position, it is not allowed to engage any gear before the vehicle comes to a stable stop, otherwise, it is likely to cause damage to the vehicle or even accidents.**

D: Drive

This gear is to be engaged for driving, and during driving, the transmission system will automatically perform upshift or downshift according to the engine load and vehicle speed.

- With the transmission in the “P” position, depress the brake pedal and pull the gearshift lever down to the B1 or B2 position to shift to “D” position.
- With the transmission in the “R” position, depress the brake pedal and pull the gearshift lever down to the B2 position to shift to “D” position.
- With the transmission in the “N” position, depress the brake pedal (only required when the vehicle speed is less than 3km/h) and pull the gearshift lever down to the B1 or B2 position to shift to “D” position.
- With the transmission in the “M/S” position, move the gearshift lever rightwards to the first stable-state position to shift to “D” position.

S: Sport

The “S” position is for Sport mode. When this position is engaged, the transmission will shift into a lower gear according to the changes in resistance (such as traction, climbing a long slope, etc.), and the engine will run at a higher speed to give more power. The “S” position is mainly intended for driving with high power and also for hill driving, which can avoid frequent gear shifting.

- With the transmission in “D” position (if the gearshift lever is in another position, move it to the “D” position), move the gearshift lever leftwards to the “M/S” position to shift to “S” position.

After the Sport mode is activated, move the gearshift lever up or down to upshift/downshift, and at this time, the transmission enters manual mode.

ECO mode

In this mode, both the transmission control unit and the A/C system will operate under the economic strategy.

- When the ENGINE START/STOP button is in "ON" position and the transmission is in a position other than "P", press the "ECO" mode button to enter the economy mode.

NOTE

- When the ECO mode is activated, the "ECO" indicator lamp on the instrument cluster comes on.
- ECO mode has the memory function, so that when the engine is shut down and restarted, the transmission will still work in the ECO mode.

5.2 Brake system

5.2.1 Service brake

Under certain driving and weather conditions, squeaks, screams, or other noises may be heard from brakes when the brake pedal is depressed for the first time or lightly stepped on, or braking noise during light or moderate braking, especially for new vehicles (as their brakes have not undergone running-in), which is normal, and does not constitute a symptom of brake system failure and has no effect on the braking safety and performance.

CAUTION

- If there is metal friction rasp, the brake lining may be worn to the limit. Please go to the GAC Motor authorized shop for inspection as soon as possible.
- If the steering wheel vibrates or twitches continuously during braking, go to the GAC Motor authorized shop for inspection as soon as possible.

NOTE

- Do not rest your foot on the brake pedal during driving, otherwise the brakes will be overheated, and the brake linings and brake discs will wear excessively, increasing the braking distance.
- When driving down a long slope or a steep slope, downshift to a lower gear (in manual mode) to avoid continuous application of the brake, so as to make full use of engine braking and reduce brake load.
- Continuous application of the brake will cause brake overheat and result in a temporary loss of braking performance.

5. Driving Guide

NOTE

- Under normal driving conditions, the brakes will wear, and dust will accumulate on wheels, which is inevitable but yet has no effect on the braking performance.
- If rust or corrosion occurs as the brake linings and brake discs are not used or used rarely, noise may be heard from brakes during the first use, which is normal. It is recommended to choose a safe area and good road conditions and apply the brake several times to clean the brake linings and brake discs.

Brake booster

The brake booster is used to increase the pressure applied by the driver on the brake pedal, and it only works when the engine is running.

If the brake booster does not work properly due to a fault, or when the vehicle is towed, the force on the brake pedal must be increased to compensate for the assist power loss of brake booster.

WARNING

- **Never make the vehicle coast with the engine shut down, because at this moment, the brake booster does not work, the braking distance will be greatly increased, and an accident is likely to be caused.**
- **If the brake booster does not work (for example, when the vehicle is being towed), please depress the brake pedal with force much greater than that applied under normal condition.**

Braking effect and braking distance

The braking effect and braking distance mainly depend on the driving environment, road conditions and driving style,

When the brake lining has been worn, the braking effect will be reduced accordingly. The wear rate of the brake lining mainly depends on the use conditions and driving style. If the vehicle is often operated for city driving, short-distance driving, or as a racing vehicle, it is recommended to check the brake lining thickness more frequently based on the maintenance interval specified in the *Service Manual*.

After wading, heavy rain or vehicle washing, the brake lining may be wet or icy (in winter), resulting in a reduction in braking effect. In this case, always depress the brake pedal lightly to heat the brake by friction and evaporate the moisture to restore the braking effect.

WARNING

A new tire and brake lining will not have the best adhesion and friction characteristics without running-in.

- The new tires do not yet have the best adhesion, so please drive carefully within the first 500km to avoid accidents!
- The new brake lining does not reach the best friction characteristics within the first 200km to 300km of driving, and the braking effect is not as good as expected, so it must be subject to running-in. The braking effect can be compensated by increasing the force applied to the brake pedal. The new brake lining must also be subject to running-in.
- When driving, do not get too close to other vehicles or bring the vehicle to a situation where emergency braking is necessary. Take care especially when driving with a new tire and new brake lining without running-in, for fear of accidents!

WARNING

When the brake is wet or icy or when the vehicle is running on a salted road, the braking lag may occur, resulting in a longer braking distance. Therefore, be careful to prevent accidents.

- A longer braking distance or a fault in the braking system will increase the accident rate.
- Lightly depress the brake pedal to check the brake.
- Lightly depress the brake pedal to dry the brake or remove ice or anti-skid salt from the brake.

WARNING

When the brake is overheated, the braking effect will reduce, increasing the braking distance!

- Take care to avoid overheating the brake.
- When driving downhill, the brake is likely to be overheated as the brake load increases.
- It is recommended to engage a low gear (manual mode) before driving down a long and steep slope to reduce the vehicle speed, and make full use of the engine braking effect to reduce the brake load.
- Do not keep depressing the brake pedal. Otherwise, the brake will overheat and the braking distance will increase. Brake the vehicle intermittently according to road and traffic conditions.

5. Driving Guide

⚠ WARNING

- **The brake fluid must be changed every two years. If the brake fluid stays in the brake system for a long period, air resistance may occur in the pipeline during braking, reducing the braking effect significantly and impairing driving safety, and even causing failure of the brake system, resulting in an accident thereby!**
- **If the front spoiler is out of standard or damaged, it will block the cooling airflow to the brake, causing the brake to overheat and degrade the braking effect.**

5.2.2 Electronic parking brake (EPB)

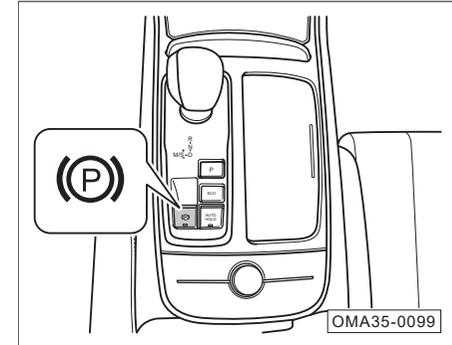
The driver can apply or release the parking brake by operating the EPB button. HSA can be applied for driving on a slope. When the accelerator pedal is depressed with the vehicle parked, the EPB will be automatically released to provide driving assistance for the driver.

👁 CAUTION

The EPB will apply a fixed force according to the gradient for braking.

- If the vehicle slides downwards after parking, the EPB will automatically increase the brake force.
- If the vehicle continues to slide after the brake force is automatically increased, please depress the brake pedal, and drive the vehicle to a flat road. Contact the GAC Motor authorized shop for inspection in time.

Application of static parking brake



- When the vehicle is stationary, pull up the EPB button. The button indicator lamp and the indicator lamp (Ⓟ) on the instrument cluster will come on, indicating that the EPB has been applied.
- When the transmission is shifted to P, the EPB will be applied automatically.
- When the vehicle is powered off, the EPB will be applied automatically.

i NOTE

- The EPB can also be applied when the ENGINE START/STOP button is in the "OFF" position.
- After the vehicle is parked steadily, the EPB should be applied first.
- When the EPB is working, operating noise can be heard, which is normal.
- If the vehicle is coupled with a trailer or is to be parked on a steep slope, it is recommended to pull up the EPB button again after the first application of EPB to ensure the maximum braking effect.

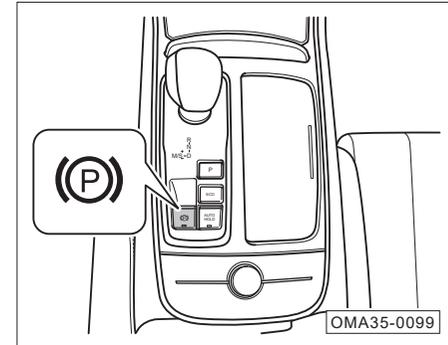
i NOTE

- On a slope with a gradient of 17% to 30%, EPB will work for braking again in 5 minutes after the EPB is applied for the first time and operating noise can be heard at this time, which is normal.
- To disable the EPB from automatic braking after power-off, when the vehicle is powered on or the engine is started, press and hold the EPB button after releasing the EPB, and then press the ENGINE START/STOP button to power off the vehicle. This method can cope with towing conditions.

⚠ WARNING

- **Be sure to apply the EPB during parking.**
- **When the vehicle is running, do not apply the EPB for speed reduction unless necessary, as the EPB only applies braking force to rear wheels, which is likely to cause traffic accidents.**

Release of static parking brake



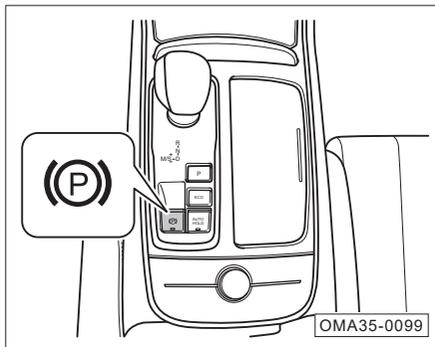
- When the ENGINE START/STOP button is in the "ON" position, depress the brake pedal.
- Press the EPB button. The button indicator lamp and the indicator lamp (P) on the instrument cluster will go out, indicating that the EPB has been released.

5. Driving Guide

i NOTE

- If the EPB button is pressed without depressing the brake pedal, the EPB will not be released, and the instrument cluster will give a visible warning tell-tale together with an audible beep alarm.
- When the EPB is being released, operation noise will occur, which is normal.
- When the vehicle battery is low, the system cannot release the EPB. If possible, connect a jumper cable for emergency start => [See page 290](#) to release the EPB. In this case, contact the GAC Motor authorized shop for inspection.
- If the EPB has not been used for a long time, the system will perform automatic test, and operation noise will be heard at this time.

Application of dynamic emergency brake



- If the service brake fails during driving, try to pull up the EPB button ① without release for emergency braking. To exit the emergency braking, release the EPB button or depress the accelerator pedal.

👁 CAUTION

In the following cases, operate the EPB again. If the fault is not eliminated, please contact the GAC Motor authorized shop for inspection.

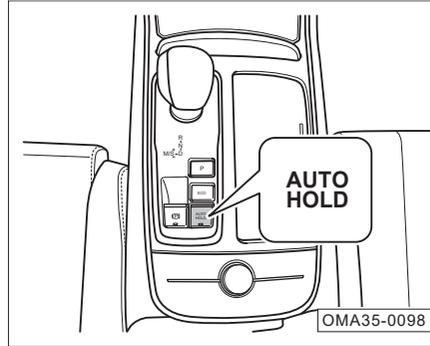
- If the indicator lamp (P) flashes red continuously, it indicates that the EPB is partially engaged/disengaged or the system is malfunctioning.
- If the indicator lamp (P) comes on in red when EPB is not applied, it indicates that the system is abnormal.
- If the indicator lamp (P) comes on in yellow, it indicates that a fault is detected in EPB and the EPB is degraded.

CAUTION

- Do not use dynamic emergency braking unless necessary, as it is likely to cause traffic accidents. Moreover, the braking distance is longer than braking by depressing the brake pedal, and the service life of the parking brake system will be shortened.
- If you pull up the EPB button when the vehicle is running, the instrument cluster will give an visible warning tell-tale together with an audible beep alarm.
- If you release the EPB or depress the accelerator pedal during application of dynamic emergency brake, the EPB will be released. If the EPB button is pulled up until the vehicle stops, the EPB will remain engaged.

AUTO HOLD

Power-on/off



- When the engine is started and the driver's seat belt is fastened, press the AUTO HOLD button. Then, the button indicator lamp comes on, and the AUTO HOLD is enabled. Press this button again. The button indicator lamp goes out, and the AUTO HOLD is disabled.

Activation

When this function is enabled, it supports automatic brake application and release under stop & go conditions. When the driver brakes the vehicle, the vehicle will be automatically parked to avoid slide at startup.

Deactivation

Under the following conditions, AUTO HOLD will be disabled and the parking brake will not be locked:

1. The accelerator pedal is depressed at startup.
2. The engine stops while the vehicle is running.
3. The EPB is manually released.
4. The AUTO HOLD button is pressed when the brake pedal is depressed.

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For the sake of safety, the AUTO HOLD will be disabled and the parking brake will be locked under the following conditions:

1. The engine is shut down.
2. The driver's door is opened or the seat belt is unfastened when the vehicle is stopped.
3. The AUTO HOLD button is pressed to disable AUTO HOLD.

CAUTION

When driving into a mechanism such as a vehicle washing device that transports the vehicle through a conveyor belt, be sure to disable the AUTO HOLD, otherwise the vehicle cannot move or may run off the path.

EPB self-learning

In some cases (for example, upon sudden battery failure or after long-term stop), the indicator lamp (Ⓟ) will flash in red, and EPB will not work when the EPB button is pulled up manually. At this time, please depress the brake pedal, press and then pull up the EPB button, so that EPB button indicator lamp does not flash and EPB can complete self-learning to restore its normal operation.

5.3 Electronic service brake system

5.3.1 Anti-lock braking system (ABS)

When the driver brakes, ABS automatically monitors the slip rate of the front and rear wheels, and when the wheels are to be locked, adjusts the wheel cylinder hydraulic pressure through pressure holding, depressurisation, and pressurisation to keep the wheel slip rate within the specified range, thereby preventing the wheels from being locked.

When the ABS starts working after the driver depresses the brake pedal in an emergency, the driver will feel the brake pedal shuddering, accompanied by the "click" sounds when the master cylinder is running. It is normal that shuddering is felt when the ABS works after the brake pedal is depressed in the following situations:

- during gear shifting.
- during emergency braking.
- during sharp turns at high speed.
- during driving on a slippery road.
- when passing over bumps or ditches.
- when driving off immediately after the engine is started.

Anti-lock braking system (ABS) indicator lamp

After the ENGINE START/STOP button is switched to "ON" position, the indicator lamp (ABS) will be on for a few seconds and go out after the system completes self-test.

If the following conditions occur, it indicates that the system is faulty:

- The indicator lamp (ABS) does not come on after the ENGINE START/STOP button is switched to "ON" position.
- After the ENGINE START/STOP button is switched to "ON" position, the indicator lamp (ABS) does not go out after it is on for a few seconds.
- The indicator lamp (ABS) comes on when the vehicle is running.
- The indicator lamps (ESP), (ABS) and (HBA) come on when the ABS is faulty.

Electronic brake force distribution (EBD)

As a part of ABS, EBD balances the distribution of brake force on the front and rear wheels according to the vehicle load during normal braking.

Hydraulic brake assist (HBA)

HBA makes use of the pressure quickly built up in the brake system to assist you to shorten the braking distance in case of emergency. It fully utilizes the characteristics of ABS. After the brake pedal is released, HBA will be deactivated automatically, and the brake system will be restored to its normal working state.

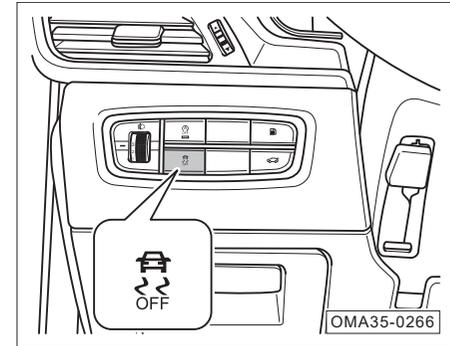
WARNING

HBA is only an assist system for improving the driving safety, but it is subject to the limitation of the laws of kinematics. Therefore, please adjust the driving speed according to the road conditions and traffic regulations.

5.3.2 Electronic stability program (ESP)

Electronic stability program (ESP) can effectively reduce the risk of sideslip.

On and Off



ESP is on by default when the vehicle is running. If the button  is pressed and held for a certain period of time, the ESP will be deactivated, and the indicator lamp  on the instrument cluster will come on and an alarm message will be displayed.

5. Driving Guide

NOTE

- When the vehicle speed is greater than 80 km/h, the ESP will be activated automatically.
- When the vehicle speed is less than 80km/h, the ESP, if inactive, can be activated by pressing the button .
- If the button  is pressed and held for more than 10 s, the system will identify it as a wrong operation, and the working state of the system will not be affected.

ESP indicator lamp

- After the ENGINE START/STOP button is switched to "ON" position, the indicator lamps  and  will be on for a few seconds and go out after the system completes self-test.
- If ESP works during driving, the indicator lamp  will flash.
- After ESP is turned off, the indicator lamp  will come on.
- When ESP is faulty, the indicator lamp  will come on.

If the indicator lamp  comes on after the engine is started, it indicates that ESP has been disabled, and the instrument cluster display shows an alarm message. To enable the ESP, please turn off and then turn on the ENGINE START/STOP button. When the indicator lamp  goes out, it indicates that the system has started working.

If the battery connector is disconnected and then connected, the indicator lamp  may come on when the ENGINE START/STOP button is turned on, and then goes out after a short driving distance.

For driving safety, it is recommended to enable ESP. The ESP can be disabled in the following special cases:

- when the vehicle travels with tire chains.
- when the vehicle travels on roads covered with deep snow or on soft grounds.
- when the vehicle is trapped on muddy roads, etc., and you need to move it back and forth.

Traction control system (TCS)

As the subsystem of ESP, TCS determines if the driving wheel slips based on the speed of the driving wheel and the drive wheel, and if the speed of driving wheel is higher than that of drive wheel, it will limit the speed of the driving wheel to prevent vehicle slip.

When ESP is turned off or on, TCS will be turned off or on accordingly.

5.3.3 Hill hold control (HHC)

HHC allows the driver to move his foot from the brake pedal to the accelerator pedal when driving off on a slope without application of the parking brake, so as to prevent accidents resulted from sliding.

Activation conditions of HHC

- On a slope with a gradient greater than 4%, if the vehicle is stopped by depressing the brake pedal with transmission in "P" or "N" position and the EPB not applied, HHC will be activated when the driver releases the brake pedal to apply brake pressure to the vehicle for 1 s.
- If the engine torque rises above the drag torque of the vehicle when HHC is working, the brake pressure will be released to allow you to drive off successfully.
- During driving downhill with transmission in "R" position, the HHC will also work.

i NOTE

- When you drive off on a steep slope or drive downhill with transmission in "R" position, HHC will automatically apply brake to prevent vehicle from sliding.
- HHC is integrated in the ESP. If HHC fails, the ESP indicator lamp will come on, and a graphic prompt message will be displayed on the instrument cluster display.

5.3.4 Hydraulic boost failure compensation (HBC)

When the vacuum booster fails, the HBC can compensate for the temporary low vacuum pressure caused by the vacuum failure and increase the brake pressure. Meanwhile the instrument cluster will display an alarm message reading "Please check the HBC". In this case, please contact the GAC Motor authorized shop for inspection as soon as possible.

5. Driving Guide

5.4 Driver assistance systems

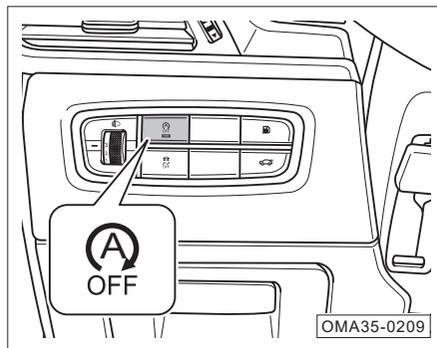
5.4.1 Stop & Start system (STT)*

Stop & Start is abbreviated to STT. After STT is activated, the engine is automatically shut down when the vehicle stops running. The ENGINE START/STOP button stays on when the engine is off, and the engine is started automatically restarted when needed.

CAUTION

When the engine is shut down by STT, the ENGINE START/STOP button remains on. If you are to leave the vehicle at this time, please turn off the ENGINE START/STOP button.

Activation and deactivation of STT



- Activation: If the button  is pressed, the button indicator lamp will go out, the STT will be activated, and the indicator lamp  on the instrument cluster will come on.
- Deactivation: If the button  is pressed again, the button indicator lamp will come on, the STT will be deactivated, and the indicator lamp  on the instrument cluster will go out.

NOTE

- The STT has the power cutoff memory function, so that the system will keep working in the state before power off when the engine is restarted.
- Before driving through water, please deactivate the STT.
- To avoid unexpected personal injury during inspection or operation with engine hood opened, please deactivate the STT at first.

CAUTION

If the battery needs to be replaced, please go to the GAC Motor authorized shop to replace the battery with a new one of the specified type => [See page 273](#). Otherwise, the normal operation of the STT will be affected.

Basic working conditions of STT

The STT can work normally only when the following conditions are met:

1. The STT is switched on.
2. The driver sits in the driver's seat and fastens the seat belt properly, and the driver's door is closed.
3. The engine hood is closed.
4. The engine coolant temperature is higher than 54°C (after the engine is started and runs normally for a period of time).
5. The vehicle speed exceeds 8 km/h since the last stop.

i NOTE

If the vehicle speed remains below 8 km/h, the STT will not shut down the engine.

Working process of STT

- When the basic working conditions of STT are met, if the driver gets the vehicle stopped by depressing the brake pedal without release, the STT will shut down the engine automatically, and the indicator lamp (A) on the instrument cluster will come on.
- When the engine is off and the ENGINE START/STOP button is on, if the brake pedal is released, the engine will be started automatically, the indicator lamp (A) on the instrument cluster will go out, and the white indicator lamp (A) will come on.

i NOTE

If the driver does not carry out any operation within a certain period of time after the engine is started, the STT will shut down the engine again.

After shut down automatically by STT, the engine can be started via the following operations:

- Turn the steering wheel over a certain angle.
- Operate the ENGINE START/STOP button.
- Press (A) the button.
- Release the brake pedal with the gearshift lever at "D" position.
- With the gearshift lever at "D" position, depress the brake pedal and shift to the "S" position.
- With the gearshift lever at "N" position, release the brake pedal and then depress the brake pedal again.
- With the gearshift lever at "N" position and the brake pedal not released, shift to "R" or "D" position.

5. Driving Guide

Inoperation conditions of STT

The STT will not work under the following circumstances:

- The engine coolant temperature fails to reach the minimum temperature in the basic working conditions of STT.
- The vacuum pressure of brake booster is too low.
- The indoor temperature set through the A/C system has not been reached.
- The outside temperature is very high or low.
- The defrost function of front windshield is activated.
- The battery voltage is too low.
- The altitude is too high.
- The steering wheel is deflected greatly.
- The transmission is shifted to "P" position.
- The slope is steep.
- The STT is deactivated.
- The AUTO HOLD is activated.

Automatic restart of engine

If the engine is shut down by STT automatically, the normal operation of the STT will be interrupted under the following circumstances, and the engine can start again automatically without the driver's operation:

- The vehicle slides on a slope.
- The indoor temperature deviates from the value set through the A/C system.
- The front windshield defrosting is working for defrosting.
- The vacuum pressure of brake booster is too low.
- The battery voltage is too low.

Description of automatic start failure

If the engine is not started automatically after shut down by STT under the following circumstances, the instrument cluster will display a message reading "STT is off, please start the engine manually", and the driver should start the engine manually:

- The STT is faulty.
- Automatic start of the engine fails more than 3 times.
- The engine hood or any door is opened.
- The driver unfastens the seat belt.

i NOTE

- When the engine hood or any door is opened, automatic start will not be triggered even after the hood or door is closed properly.
- When the driver unfastens the seat belt, automatic start will not be triggered even after the seat belt is fastened.

Self-learning after battery disconnection

When the battery is connected again after disconnection or replacement, be sure to operate as follows to complete the self-learning of STT:

1. Turn off the ENGINE START/STOP button and all the electrical consumers on the vehicle, and set the vehicle aside for more than 4 hours.
2. Start the engine 3 times and run it for no less than 1 min each time.

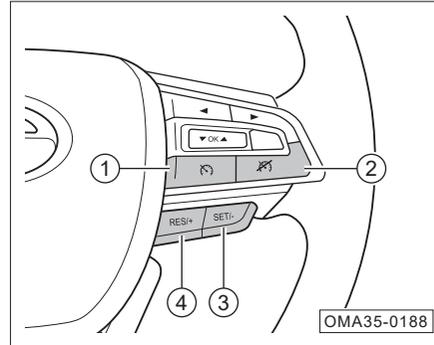
5.4.2 Cruise control*

The cruise control allows the vehicle to run without depressing the accelerator pedal at the set vehicle speed of 40~120 km/h.

⚠ WARNING

- When driving on high-traffic roads, slopes, multi-curve roads or wet and slippery roads, do not apply the cruise control for fear of accidents.
- Be prudent when using the cruise control, and after setting the vehicle speed, ensure that the vehicle can maintain a safe distance from the vehicle ahead.
- After exiting the cruise control, turn off the cruise control in time.
- The cruise control is only used as an assist for driving and cannot replace automatic driving, so the driver must be vigilant to drive and control the vehicle.

Control buttons



- ① : enabling/disabling the cruise control
- ② : exiting the cruise control
- ③ : activating the cruise control/ deceleration.
- ④ : resetting the cruise control/ acceleration.

Enabling of cruise control

- If the button is pressed, the cruise control will be enabled, and the indicator lamp in the instrument cluster will come on in white.
- Increase the vehicle speed above 40 km/h.
- If the SET/- button is pressed, the indicator lamp on the instrument cluster will turn green, and the vehicle will enter the cruise control status. After that, release the accelerator pedal.

Exiting of cruise control

The cruise control can be exited as follows:

- depressing the brake pedal.
- pressing the button (after this, the vehicle will keep running at the set speed).
- pressing the button (after this, the set vehicle speed will be cleared).
- starting the ESP.
- shifting the transmission to "N".

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Resetting of cruise control

When the cruise control is exited by depressing the brake pedal or pressing the button , the indicator lamp  on the instrument cluster becomes white, and the cruise control can be reset by pressing the RES/+ button:

- When the vehicle speed is higher than 40 km/h, if the RES/- button is pressed, the indicator lamp  on the instrument cluster will turn green from white, and the vehicle speed will return to the value set during the last cruise control.

Increase of cruising speed

- Press the RES/+ button; each time the button is pressed, the vehicle speed increases by 2.0km/h.
- Press and hold the RES/+ button, after which the vehicle speed will continue increasing until the button is released.

NOTE

- The maximum setable cruising speed is 120 km/h. When the vehicle speed is higher than 120 km/h, it cannot be adjusted by the RES/+ button.
- When the accelerator pedal is depressed for acceleration, the vehicle will temporarily deactivate the cruise control and run at the increased speed; after the accelerator pedal is released, the vehicle will resume the cruise control.

Reduction of cruising speed

- Press the SET/- button; each time the button is pressed, the vehicle speed reduces by 2.0km/h.
- Press and hold the SET/- button, after which the vehicle speed will continue decreasing until the button is released.

NOTE

When the vehicle speed is lower than 40 km/h, it can no longer be adjusted by the SET/- button.

5.4.3 Adaptive cruise control (ACC)*

The adaptive cruise control, abbreviated to ACC, can automatically adjust the distance from the vehicle ahead in the cruise control mode, for which the applicable cruising speed is 0~150km/h.

ACC detects the relative distance and speed with the vehicle ahead on the same path according to the signals from the MMW radar installed on the front of the vehicle and the IFC installed on the windshield:

- If a vehicle ahead is stopped, ACC controls the vehicle to stop automatically; if the vehicle ahead is started, ACC controls the vehicle to start again under certain conditions. After stop for a specific period of time, the vehicle can be started by operating the RES/+ button or depressing accelerator pedal as the vehicle ahead is started.
- When the speed of vehicle ahead is lower than the target speed set by the driver, ACC controls your vehicle at a safe distance from the vehicle ahead.
- When no vehicle is in front, ACC controls your vehicle to travel at the target speed set before.

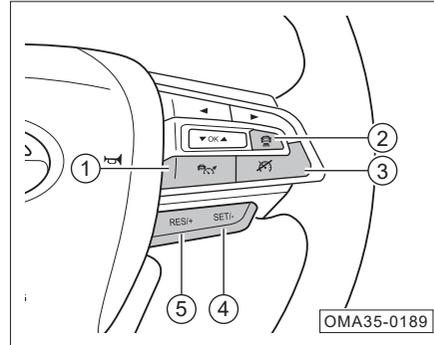
i NOTE

Precautions for use of radars and cameras.
=> See page 206

⚠ WARNING

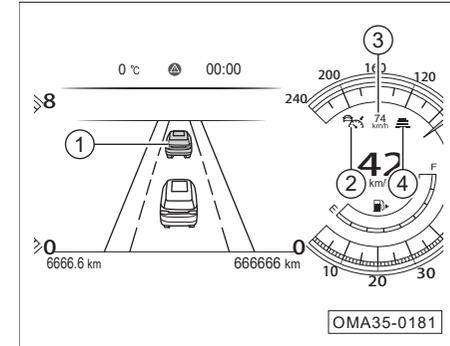
- ACC is only a comfort-oriented system instead of a safety system, an obstacle detector or a collision warning system, so the driver must always keep control of the vehicle and take full responsibility for the vehicle.
- The ACC must be used cautiously according to the visibility, weather conditions, road and traffic conditions at the time. The driver must always keep control of the vehicle and take full responsibility for the speed of the vehicle and the distance from other vehicles.

Control buttons



- ① : enabling/disabling ACC
- ② : controlling ACC distance
- ③ : canceling ACC
- ④ SET-: setting ACC/deceleration
- ⑤ RES+/: resetting ACC/acceleration

Interface description



① indicates the detected vehicle ahead.

② ACC indicator lamp:

- If the indicator lamp comes on in white, it indicates that ACC is in the ready state and a target vehicle is in front; if the indicator lamp turns green, it indicates that ACC is working and a target vehicle is in front.
- If the indicator lamp comes on in white, it indicates that a target vehicle is in front; if the indicator lamp turns green, it indicates that ACC is working and there is no target vehicle in front.

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- If indicator lamp  comes on in yellow, it indicates that ACC is faulty. In that case, go to the GAC Motor authorized shop for inspection in time.

③ indicates the set cruising speed.

④  indicates the set cruising distance from the vehicle ahead.

When the braking capacity of ACC is not enough to maintain a proper distance from the vehicle ahead, ACC will send a “driver hands-on operation request”, and the instrument cluster will give a visible alarm and an audible alarm. In this case, the driver shall depress the brake pedal to reduce the vehicle speed according to the system requirements.

Activating ACC

- Press the button , and then the corresponding indicator lamp in the instrument cluster will come on in white.
- Press the SET/- button, and then the corresponding indicator lamp in the instrument cluster will turn green from white.
- After the vehicle enters the ACC control mode, release the accelerator pedal.

i NOTE

- The minimum setable cruising speed is 30 km/h.
- When the transmission is other positions than D, ACC cannot be activated.
- When ACC is activated, the indicator lamp  in the instrument cluster comes on (when the indicator lamp  comes on, it indicates that a vehicle is in front), and meanwhile the instrument cluster shows the stored ACC speed and status.

Canceling ACC

ACC can be canceled by:

- opening the driver's door.
- unfastening the driver's seat belt.
- depressing the brake pedal.
- shifting the transmission to “P”, “N” or “R”.
- pressing the button  (after that, the corresponding indicator lamp in the instrument cluster will turn white, ACC will be exited temporarily, but the set speed will be kept).
- pressing the button  (after that, the corresponding indicator lamp in the instrument cluster will go out, ACC will be exited, and the set speed will be cleared).
- pulling up the EPB button.
- switching off the ESP.

If canceled by the following ways, ACC can be resumed by pressing the RES/+ button:

- depressing the brake pedal.
- pressing the button .
- shifting the transmission "P", "N" or "R" (it is required to shift the transmission to "D" or "S" for resuming the ACC).
- pulling up the EPB button. (it is required to release EPB for resuming the ACC).
- switching off the ESP (it is required to switch on the ESP for resuming the ACC).

Resuming ACC

When the corresponding indicator lamp in the instrument cluster comes on in white, ACC can be reset by the following ways:

- pressing the RES/+ button, after which the corresponding indicator lamp in the instrument cluster will come on in green, the vehicle speed will return to the value set during the last cruise, and the cruise control will be resumed. If no cruising speed has been stored and the SET/- button is pressed, ACC will set the current vehicle speed as the cruising speed (if the current vehicle speed is less than 30 km/h, the cruising speed will be set at 30 km/h).

If canceled by the following ways, ACC cannot be resumed by pressing the RES/+ button:

- pressing the button .
- shifting the transmission to "P", "N" or "R".

Increase of cruising speed

To increase the vehicle speed, please operate as follows:

- depress the accelerator pedal to increase the vehicle speed as desired and press the SET/- button for cruising at the increased speed.
- Press the RES/+ button; each time the button is pressed, the vehicle speed increases by 1km/h.
- press and hold the RES/+ button to increase the vehicle speed continuously at an increment of 5 km/h.

NOTE

- The maximum settable cruising speed is 150km/h.
- When the accelerator pedal is depressed for acceleration, the vehicle will temporarily deactivate the cruise control and run at the increased speed; after the accelerator pedal is released, the vehicle will resume the cruise control.

5. Driving Guide

Reduction of cruising speed

To reduce the vehicle speed, please operate as follows:

- press the SET/- button; each time the button is pressed, the vehicle speed reduces by 1km/h.
- press and hold the SET/- button to reduce the cruising speed at a decrement of 5 km/h until the button is released or the cruising speed is 30 km/h. When the button is released, the vehicle will keep running at the decreased speed.

Controlling ACC distance

After the ENGINE START/STOP button is set to "ON" position, when ACC is activated, the default distance setting is in the fourth range (the following distance in the fourth range is the farthest).

By pressing the button  , the distance setting can be changed recurrently in the order of "fourth range → third range → second range → first range → fourth range...". At the same time, the cruise control distance indicator lamp  on the instrument cluster will display the same number of cross bars as the ordinal number of the range.

Activating ACC after following stop

When following a vehicle ahead, your vehicle will also be stopped if the vehicle ahead is stopped. During a certain period after such stop, ACC will keep your vehicle stationary by active pressurization of ESP; after this period, ACC will keep your vehicle stationary by activating EPB. When the vehicle in front drives off, the ACC may be activated as follows:

1. If the indicator lamp  is green, ACC can be reset actively and re-drive the vehicle after the vehicle ahead is driven off;
2. If the indicator lamp  turns white and EPB is not activated, ACC can be reset actively to re-drive the vehicle by pressing the RES/+ button or depressing the accelerator pedal;
3. If the indicator lamp  turns white and EPB is activated, ACC can be reset to re-drive the vehicle by depressing the accelerator pedal first and then pressing the RES/+ button after EPB is automatically released.

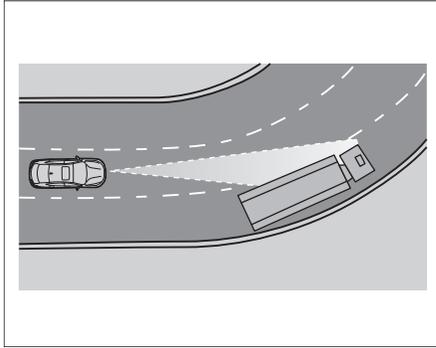
Special driving environment

ACC is subject to limitation of physical laws, and thus in some driving environments, the driver may find that the vehicle is not controlled as expected after the reaction of ACC, therefore, the driver must always be ready to control the vehicle.

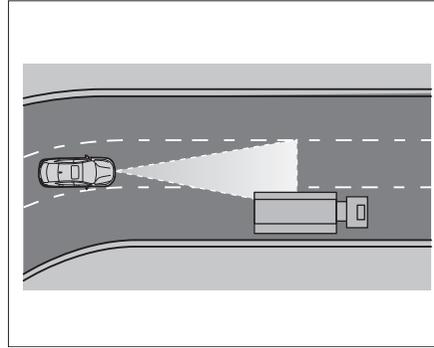
The following conditions will affect functions of the radar, so the driver must be particularly alert under these conditions:

1. Decelerating to stop. If the vehicle ahead is stopped by braking, ACC will also decelerate your vehicle until the alarm is deactivated. In that case, the driver may actively intervene in the brake as needed to stop your vehicle completely.

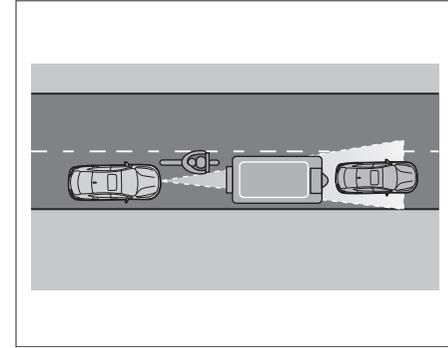
5. Driving Guide



2. Driving through a curve. During driving through a curve, the radar or camera may fail to capture the vehicle ahead in this lane, or may react to vehicles in adjacent lanes. In this case, ACC may not respond to the vehicle ahead, or may brake the vehicle to reduce the vehicle speed. ACC can be exited by depressing the brake pedal or manually deactivating ACC.

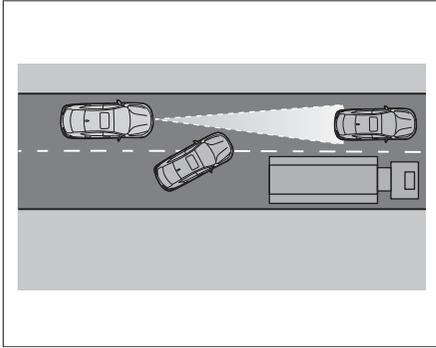


3. Driving out of a curve. During driving out of a long curve, as ACC will calculate the lane in advance, the radar may respond to the vehicles in adjacent lanes and apply the brake of your vehicle. This braking process can be interrupted by depressing the accelerator pedal.

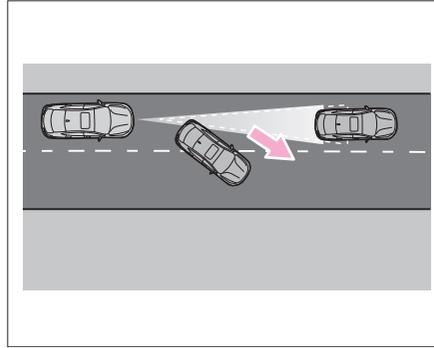


4. Narrow vehicles and Z-shaped traffic in front. The narrow vehicles and Z-shaped traffic in front can be detected by radar and front camera only when they enter the detection range of the radar and the front camera. That is to say, the system cannot identify vehicles out of the detection range of the sensors. ACC may be unable to identify narrow vehicles such as motorcycles and electric bicycles, and has a risk of failing to accurately identify the distance from modified vehicles and vehicles involving non-standard transportation in front, so it is not recommended to take such vehicles as the target vehicle ahead.

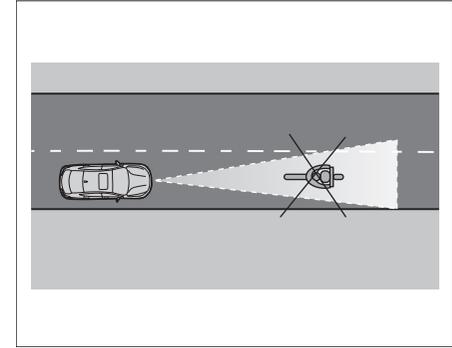
5. Driving Guide



5. When another vehicle changes the lane. When a vehicle in the adjacent lane moves into the lane in which your vehicle travels, the front radar may fail to detect it if it is not in its detection range, thus resulting in a response lag of ACC.



6. If the target vehicle ahead is driven out suddenly and a stationary or slow-moving vehicle appears at close range, the radar and brake actuator will incur a response lag, causing delayed braking response.



7. ACC should not be used in cities with traffic jams and poor visibility (night/backlighting/rain/snow/dense fog, etc.). ACC does not take braking measures in face of people, animals or narrow vehicles such as bicycles, motorcycles or electromobiles, so the driver should be particularly alert during driving. ACC may not take braking measures in face of drop frame trailers, approaching or stationary vehicles, and low-speed or stationary trucks, so the driver should be particularly alert and always be ready to take over the vehicle.

8. Factors possibly affecting the function of sensors:
 - a. Heavy rain, water mist, ice, snow or sludge, which will deteriorate the function of the radar, causing temporary disabling of ACC and display of following tell-tales on instrument cluster: "ACC is not available for use currently", "Please check FCW" or "Please check AEB". At this time, FCW, ACC and AEB are unable to play their roles.
 - b. Frosting or fogging of front windshield due to temperature difference or frost in low-temperature and alpine areas, which will obstruct the camera, and cause display of following telltales on the instrument cluster: "ACC is not available for use currently", "Please check FCW" or "Please check AEB". At this time, FCW, ACC and AEB are unable to play their roles.
9. Brake overheating. If the brake is overheated due to emergency braking or driving down a steep slope, ACC will be deactivated automatically, and meanwhile the instrument cluster will display a tell-tale reading "ACC is not available currently". After this time, ACC cannot be activated, until the brake temperature drops to a reasonable degree.

WARNING

- **The driver must always be ready to control the vehicle.**
- **The ACC cannot address all driving scenarios and traffic, weather and road conditions.**
- **The ACC is only a driver assist system, and cannot replace your attention and judgment. It is your responsibility to maintain a safe distance and speed, and you must be ready to intervene if the ACC fails to maintain a proper speed or distance from the vehicle ahead.**
- **For the sake of safety, it is not allowed to use ACC under conditions such as urban driving, traffic jams, multi-curve roads and poor road conditions (e.g., icing, fog, gravel, heavy rain, and phenomena prone to water skiing), because there is a danger of accident.**

WARNING

- **Do not enable ACC during driving in roadless areas or on earth roads. ACC can only be enabled on hard roads.**
- **The hands-on reminder of ACC only warns the driver of vehicles detected by its radar and camera, so ACC may not send an alarm, or may send an alarm after a certain delay. Therefore, the driver shall apply the brake as required instead of waiting for the AEB system to operate.**
- **The ACC is not a collision avoidance system. If your vehicle is getting closer and closer to the vehicle ahead at a speed higher than that of the vehicle ahead and the braking effect of ACC is unable to stop the vehicle safely before a collision with the vehicle ahead, the driver must depress the brake pedal to reduce the vehicle speed.**

5. Driving Guide

WARNING

ACC will make no or limited response to the followings:

- **large speed difference with the vehicle ahead.**
- **driving in different lanes, lane changes or driving on curves with small radius.**
- **pedestrians, animals, bicycles, tricycles, stationary vehicles or unexpected obstacles.**
- **complex traffic conditions.**
- **oncoming traffic or cross traffic.**
- **low trailers or trucks, high frame/high body trucks, and vehicles with irregular/non-standard towing or characteristics.**

Therefore, be sure to notice traffic conditions and respond accordingly. Apply brake as needed instead of waiting for the system to identify the target or apply the brake.

CAUTION

- ACC may not respond under certain circumstances. for example, when your vehicle approaches a stationary obstacle such as a broken-down vehicle or a vehicle stuck in traffic jams, or when a vehicle traveling in the same lane approaches your vehicle.
- ACC may not respond to people, animals and vehicles crossing or approaching the vehicle in the same lane.
- When driving through crossroads, speed bumps, steep roads and zebra crossings, or at changing lanes, highway access, ramps or construction sections, it is required to exit ACC for manual driving, lest the vehicle should be automatically accelerated to the set speed, causing traffic accidents.

CAUTION

- ACC can automatically drive the vehicle out after a short stop or confirmation from the driver (control of buttons or accelerator pedal). During this period, the driver must ensure that there are no obstacles or other traffic participants such as pedestrians/bicycles/motorcycles /tricycles directly in front of the vehicle.
- Do not bump the radar and camera. If the sensor is misaligned due to bumps, it will deteriorate the system performance and even cause the system shutdown through correction is made.
- If the surface of the radar or camera is dirty or covered by heavy rain, ice, snow, sludge, etc., ACC may not function, and the instrument cluster will display the message reading "Please check ACC". After the dirt is cleaned off the sensor surface, ACC will return to normal.

CAUTION

- Do not spray the front bumper with vehicle paint without permission, otherwise the performance of the frontal radar may be degraded.
- Do not spray or decorate the vehicle logo without permission, otherwise, the performance of the forward radar may be degraded.

NOTE

- ACC can only provide limited braking force, and thus cannot be used for emergency braking.
- Prevent placing your foot on the accelerator pedal when not required; otherwise, ACC cannot function for braking, as the depressing of accelerator pedal will cause excessive control of vehicle speed and distance.
- If ACC fails to function as described in this chapter, stop using it, and go to the GAC Motor authorized shop for inspection in time.
- When the vehicle is traveling in heavy rain or snow such that ACC is difficult or unable to identify the vehicle ahead, it is required to switch off the ACC.
- If your vehicle is getting closer and closer to the vehicle ahead at a speed higher than that of the vehicle ahead and the braking effect of ACC is unable to stop the vehicle safely, the driver must depress the brake pedal to reduce the vehicle speed.

NOTE

- ACC may be unable to accurately identify all driving environments.
- When ACC is activated, the ACC status displayed on the instrument cluster may be overwritten by other functions (for example, during a call).
- When ACC brakes the vehicle automatically after activation, there will be a sound different from manual braking sound or the brake pedal will be depressed automatically, which is normal. Such sound and pedal action are caused by the operation of the brake system, so there is no need to worry.
- For the sake of safety, the stored cruising speed will be deleted after the ENGINE START/STOP button is turned off.

5. Driving Guide

i NOTE

- The accelerator pedal can be depressed when required to increase the vehicle speed. After the accelerator pedal is released, ACC will readjust the vehicle speed to the previously stored value.
- If the vehicle enters a tunnel, the radar and camera may enter the blind mode, and ACC may be turned off temporarily.

5.4.4 Traffic jam assist (TJA)/ Integrated cruise assist (ICA)*

TJA/ICA can automatically adjust the distance from the vehicle ahead during cruise control and keep the vehicle traveling in the middle of the lane at the cruising speed of 0~150km/h.

Specifically speaking, within the speed of 0-60km/h, the system can not only control the vehicle to run in the middle of lane according to the lane markings on both sides, but also control the vehicle to follow the trajectory of the valid target vehicle ahead. The horizontal and vertical cruise assist function within this speed range is called traffic jam assist, abbreviated as TJA.

Within the speed range of 60~150km/h, the system can only control the vehicle to run in the middle of lane according to the lane markings on both sides. The horizontal and vertical cruise assist function within this speed range is called integrated cruise assist, abbreviated as ICA.

The TJA/ICA system detects the relative distance and speed with the vehicle ahead in the same path through the MMW radar installed on the front of the vehicle, and detects the lane marking through the IFC installed on the front windshield, so as to control the vehicle to run in the middle of the lane during following cruise control to assist the driver in lateral and longitudinal intelligent handling.

i NOTE

Precautions for use of radars and cameras.
=> [See page 206](#)

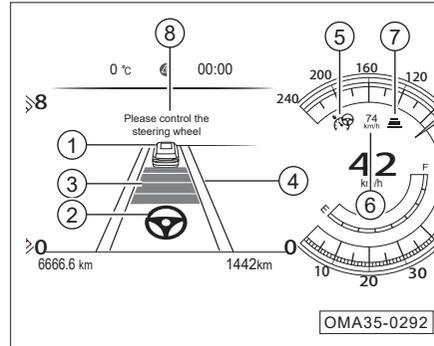
Operation instruction

- The driver can select ACC or TJA/ICA by clicking "System Settings → Driving Assistance → Cruise Mode" in the A/V system.
- After selected, TJA/ICA can be turned on or activated according to the operation method of ACC. => [See page 168](#)

i NOTE

- The cruise mode can be changed regardless of the status of ACC, including OFF/ON/Active.
- When TJA/ICA involves a specific fault not affecting ACC, the cruise mode will automatically switch back to ACC mode. At this time, the driver cannot choose to enter the TJA/ICA mode, but ACC can still be used normally.
- TJA/ICA has cruise mode memory function, so that the cruise mode the same as that before last shutdown will be selected after the engine is restarted.

Interface description



- ① indicates the detected vehicle ahead.
- ② indicates the lateral control status:
- If the indicator lamp  is gray, it indicates that TJA/ICA is not performing lateral control currently.
 - If the indicator lamp  turns green, it indicates that TJA/ICA is performing lateral control currently.
- ③ indicates longitudinally controlling the target distance from the vehicle ahead (4 speed ranges in total).

- ④ indicates whether a valid lane marking is detected currently, specifically speaking, blue for valid lane marking detected, and off for no valid lane marking detected.

i NOTE

Indications ① ~ ④ are displayed only when the TJA/ICA is activated, and not displayed when TJA/ICA is turned on but not activated.

⑤ TJA/ICA indicator lamp:

- If the indicator lamp  is white, it indicates that the TJA/ICA is in the ready for longitudinal and lateral control of the vehicle.
 - If the indicator lamp  turns green, it indicates that the TJA/ICA is activated for synchronous longitudinal and lateral control, or for longitudinal control only with lateral control suppressed.
- ⑥ indicates the currently stored cruising speed.
- ⑦ indicates the set cruising distance from the vehicle ahead.

5. Driving Guide

i NOTE

Indications ⑤ ~ ⑦ are displayed for a long time when the function is turned on.

⑧ Text reminder: Please control the steering wheel.

Lateral control

With "TJA/ICA" selected as cruise mode, when the ACC button on steering wheel is pressed, TJA/ICA lateral control will be activated automatically under the following situations:

1. Valid lane markings are detected on both sides.
2. Valid front target is detected, and the vehicle speed shall be below 60km/h.

When TJA/ICA detects valid lane markings and valid front target simultaneously, the lane marking shall prevail. When lane markings on both sides are used, TJA/ICA will keep the vehicle traveling in the middle between the lane markings on both sides; when the valid front target is used, TJA/ICA will keep the vehicle following the vehicle ahead for limited lateral movement.

The lateral control will be automatically exited under the following conditions, to which the driver shall pay close attention:

- high curvature or missing of lane marking.
- missing of lane marking on one side or two sides.
- too wide lane (> 5.5 m).
- too narrow lane (< 2.5 m).
- violent driving.
- turn signal lamp on.
- hazard warning lamp on.
- lane change.
- brake applied by the driver.
- hands-on reminder given by the system when both hands are off the steering wheel for a long time.
- EPS fault.
- ACC deactivated. => [See page 170](#)

i NOTE

TJA/ICA cannot address all driving conditions. The driver must keep his hands on the steering wheel all the time and drive with care.

i NOTE

When TJA/ICA intervenes in the steering wheel for lateral assist control, the driver can still turn the steering wheel to control the vehicle. When the torque applied by the system is found improper, the driver can control the vehicle to travel according to his intention when required.

Hands-on reminder



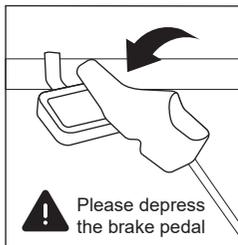
- When detecting that the steering wheel is out of the driver's hands for a long time, TJA/ICA will issue a hands-on reminder and the instrument cluster will give a visible alarm and an audible alarm.

5. Driving Guide

- When the driver receives the hands-on reminder, the lateral assist control function of TJA/ICA will be suppressed, and the driver is required to control the steering wheel immediately. If TJA/ICA identifies that the driver's hands are on the steering wheel, the hands-on reminder will be canceled, and TJA/ICA will reactivate the lateral assist control function automatically.

i NOTE

- TJA/ICA may misjudge that the driver's hands are off the steering wheel when the driver puts his/her hands slightly on the steering wheel. In this case, it is only required to hold the steering wheel a little tightly or shake the steering wheel slightly.



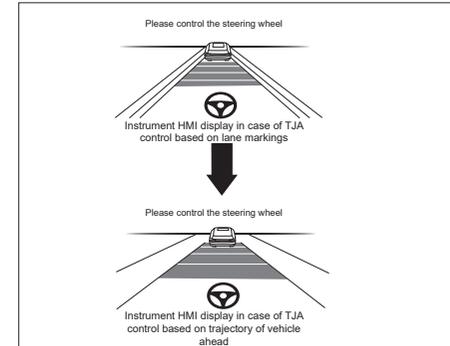
OMA35-0290

- The brake capacity of service brake system that can be used by TJA/ICA is limited, and when TJA/ICA requires the driver to intervene in braking, the instrument cluster will give a visible alarm and the buzzer will beep.
- When receiving the hands-on reminder, the driver shall immediately depress the brake pedal for proper braking.
- After the brake pedal is depressed, TJA/ICA will be deactivated. If TJA/ICA reactivation is required after an emergency is eliminated, press the resetting or setting button of ACC. => See [page 168](#)

Functional limitation

The capacity of steering system and brake system that can be used by TJA/ICA is limited, and TJA/ICA cannot maintain an appropriate distance from the vehicle ahead or keep the vehicle in the lane under all road conditions.

TJA/ICA may incorrectly detect lane markings or fail to detect lane markings, or may incorrectly detect target vehicles or fail to detect target vehicles ahead.



When the lane marking in the instrument HMI disappears and the steering wheel indication in the middle is still blue, it means that the TJA is working. When the TJA is activated, it means that the system has been unable to detect valid lane markings, and the system may control the vehicle to turn unexpectedly following the vehicle ahead, and thus the driver needs to pay close attention to the traffic conditions and lateral control.

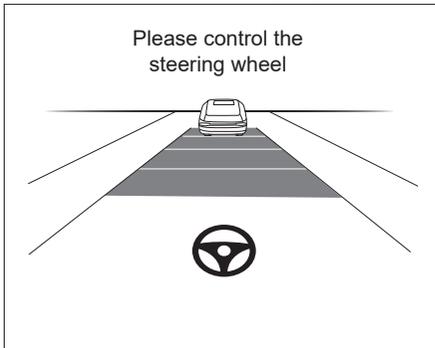
The TJA request torque and the accuracy of the trajectory of the vehicle ahead detected by the sensor are limited, and the driver's intention cannot be fully met when the vehicle follows the trajectory of the vehicle ahead. Therefore, the drivers are required to drive prudently with both hands kept on the steering wheel.

5. Driving Guide

The indications of TJA on instrument HMI are different for traveling based on lane marking and traveling based on trajectory of vehicle ahead. Therefore, drivers are required to pay close attention to the change in indication.

The function of TJA/ICA will be degraded in the following situations, that is, TJA/ICA only maintains longitudinal ACC control and no longer provides lateral steering assistance.

- The vehicle is traveling at a low speed (0-60km/h) on a road without lane markings, with no valid target vehicle in front of the radar.
- The vehicle is traveling at a speed above 60km/h on a road without lane markings or with one lane marking only.



When TJA/ICA is degraded and only ACC control is available, the lane marking indication on the HMI in the middle of instrument display disappears, and the small steering wheel icon will turn gray.

When degraded due to missing lane markings, high curvature of lane markings, too wide lanes, too narrow lanes, running across the lane marking, hazard warning lamp turned on, excessive body yaw, etc., TJA/ICA will give a "ding" sound, and a prompt reading "TJA/ICA is deactivated" will pop up on the instrument cluster.

Even if enabled and activated, TJA/ICA may be affected, malfunction or not function under the following conditions:

- Poor line of sight caused by, e.g., snow, rain, fog or water spots.
- Dirty or foggy windshield, or obstruction in front of the windshield camera.
- Overtemperature around the camera due to direct sun exposure.
- Glare due to direct sunlight, oncoming traffic, reflected light from road water-logging, etc.
- Sudden changes in ambient light, such as entering/exiting tunnels.

- Headlamp not turned on at night or when the light illumination is low in tunnels.
- No lane marking, or difficulty in distinguishing the lane marking color from the road surface color.
- Unobvious, too thin, worn, blurred or dirty/snow-covered lane markings.
- Too wide or narrow lanes.
- Inclination of vehicle to the lower side when the system cannot identify the laterally sloping roads.
- Increase or decrease in lanes, or complicated routing of lane markings.
- More than two lane markings on the left and right sides of the vehicle.
- Marks or objects similar to lane markings on roads.
- Fences on lane markings.
- Mistaking of flower beds, curbs, and iron sheet for road maintenance as lane markings.
- Isolation strips or other objects casting shadows on lane markings.
- Short-term change of marking, such as ramp or expressway exit.

- Driving on steep slopes or winding roads.
- Close distance from the vehicle ahead or lane markings blocked by the vehicle ahead.
- Severe shaking of the vehicle.
- Longitudinal control of TJA/ICA is based on ACC. For more limitation conditions, please refer to the relevant sections of ACC. => [See page 172](#)

The lateral assist control performance of TJA/ICA may be affected under the following conditions:

- Vehicle overload.
- Abnormal tire pressure.
- Uneven road.
- Strong crosswinds.
- Modification of vehicle control-related parts by the driver.
- Replacement of vehicle control-related parts with non-genuine parts.
- Improper assembly of vehicle control-related parts.

WARNING

- **TJA/ICA is only a driver assist system and cannot address all road, traffic and weather conditions. It is the responsibility of the driver to always pay attention to road conditions and actively control the vehicle.**
- **The driver must hold the steering wheel all the time to actively control the vehicle. When TJA/ICA does not provide proper steering assist or appropriate headway, the driver shall intervene timely.**
- **Before using TJA/ICA, the driver must read through all sections about this function in the User Manual to understand the system limitations.**
- **TJA/ICA is not a collision avoidance system. When TJA/ICA does not take proper control, the driver must intervene.**

WARNING

- **Improper use of TJA/ICA or negligence may lead to accidents. The driver always bears the ultimate responsibility for controlling the vehicle and maintaining an appropriate speed and headway to keep the vehicle traveling correctly in the lane, even when TJA/ICA is working.**
- **TJA/ICA may not always identify lane markings correctly, for example, missing detection of lane marking due to adverse weather, poor night lighting, water logging and snow on road surfaces, damage and blurs of lane markings, etc, or mistaking of specific objects and structure as lane markings due to road surface damage, water logging and snow on curb, other road structure and road surfaces, shadows cast on road surfaces, etc. Therefore, TJA/ICA may not generate lateral assist torque when needed, or may generate unnecessary lateral assist torque by mistake. It is the responsibility of the driver to always pay attention to road conditions and actively control the vehicle.**

5. Driving Guide

WARNING

- The capability of steering system that can be used by TJA/ICA is limited, so it cannot cope with all driving conditions. The driver must keep his hands on the steering wheel all the time and drive with care. The driver must hold the steering wheel or reduce the vehicle speed appropriately on high-speed curves.
- TJA/ICA can be used only when the vehicle travels on highways or in areas with less traffic. Under conditions such as urban traffic, crossroads, water-logged or snowy roads, adverse weather, mountain roads, rough roads and highway access, it is recommended not to use TJA/ICA. Do not use TJA/ICA when a trailer is coupled.

WARNING

- TJA/ICA cannot perform braking in face of pedestrians, animals, foreign objects, lowbed trailers or oncoming traffic.
- TJA/ICA cannot address all traffic conditions. For example, the lateral assist may be suddenly exited under conditions such as high curvature of lane marking before a sharp curve, and roads without lane markings, and in these cases, the driver shall always hold the steering wheel to actively control the vehicle.
- TJA/ICA cannot detect objects or accessories on a target vehicle that protrude from the body side, rear end or roof. Therefore, when overtaking a vehicle ahead equipped with such objects or accessories, be sure to deactivate TJA/IC, and operate for braking and steering actively according to the actual conditions.
- If a vehicle ahead is driven in or out with TJA/ICA active, please be on high alert and ready to take over the vehicle at any time.

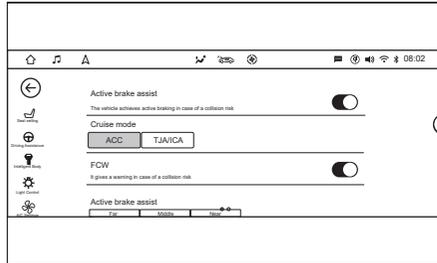
5.4.5 Forward collision warning (FCW) *

The forward collision warning (FCW) system assesses the danger level of pre-collision by detecting the relative distance and speed with the vehicle ahead in the same path according to the signal from the MMW radar installed on the front of the vehicle and the IFC installed on the windshield and the driver's other operations (such as depressing the brake pedal or accelerator pedal), warns the driver as necessary, and timely reminds the driver to take measures to avoid or mitigate the collision in case of a collision risk.

NOTE

Precautions for use of radars and cameras.
=> See page 206

On and Off



When the ENGINE START/STOP button is set to “ON” position and the vehicle speed is greater than 30 km/h, the FCW will be activated by default.

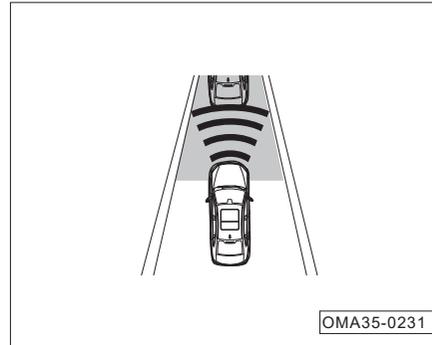
To activate/deactivate it manually, please operate as follows:

- Click “Vehicle Settings → Driving Assistance → FCW” in the A/V system, and select ON/OFF to set the FCW.

i NOTE

After being turned off, FCW will no longer give alarm in face of any target vehicle and pedestrian.

Alarm



The FCW gives a warning by the following three methods:

1. Distance warning

The distance warning will be triggered when your vehicle is too close to the front traffic and involves risk of general collision, and once triggered, an icon will flash on the instrument panel.

2. Proximity warning

When the FCW warning is triggered, an icon will flash on the instrument cluster and an audible alarm will be given at the same time.

3. Brake jerk warning

Brake jerk warning will be triggered in case of a high risk of collision to better remind the driver to apply the brake.

i NOTE

- “Far, Middle and Near” can be set by clicking “Vehicle Settings → Driving Assistance → FCW Warning Distance” on the A/V system display. The FCW is designed with the memory function to remember the last set warning distance.
- The FCW warning can be stopped by depressing the accelerator pedal or turning the steering wheel.
- The minimum applicable speed of distance warning is 80km/h, so as to avoid distracting the driver’s attention by frequent warning triggering.
- The minimum applicable speed of proximity warning is 30 km/h.

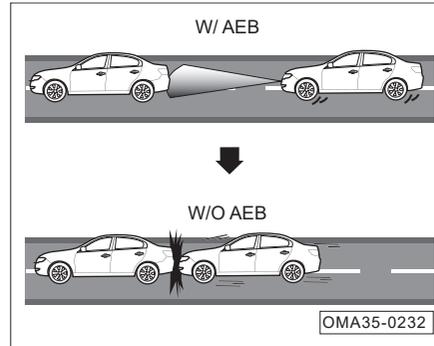
5. Driving Guide

WARNING

FCW is subject to the limitations of laws of physics, and thus shall never be used for risky driving.

- FCW is not always effective under all circumstances.
- In a complex driving environment (e.g., during traveling on a circuitous road), FCW may give an unnecessary warning.
- When FCW gives a warning, the driver must apply the brake to reduce the vehicle speed or avoid obstacles according to traffic conditions.
- The driver must always be ready to control the vehicle.

5.4.6 Autonomous emergency braking (AEB)*

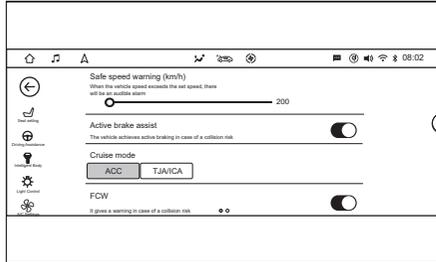


The autonomous emergency braking (AEB) assesses the danger level of collision by detecting the relative distance and speed with the vehicle ahead in the same path according to the signals from the MMW radar installed on the front of the vehicle and the IFC installed on the windshield and driver's other operations (such as depressing the brake pedal or accelerator pedal), and applies brake when necessary. When it detects that a collision is about to occur, AEB will automatically brake the vehicle, or when the driver applies brake but the brake force is not enough to avoid the collision, automatically increase the braking force to avoid or alleviate the collision.

NOTE

Precautions for use of radars and cameras.
=> See page 206

On and Off

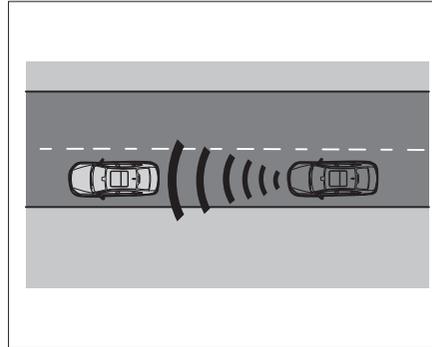


When the vehicle speed is greater than 4km/h, AEB will be automatically turned on. You can switch it off manually, but it will automatically turn on after the engine is restarted.

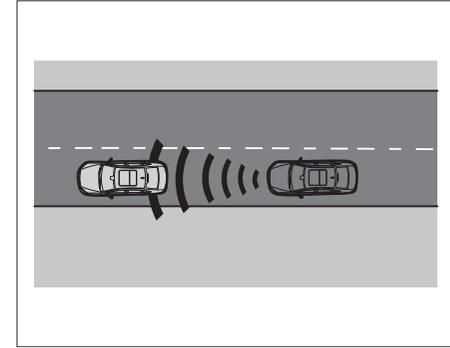
To activate/deactivate it manually, please operate as follows:

- Click "Vehicle Settings → Driving Assistance → AEB" in the A/V system and select ON/OFF to set the AEB.

AEB braking level

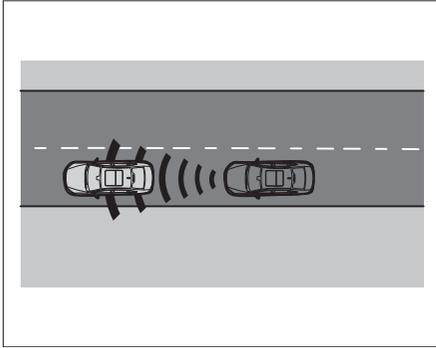


- First-level braking: Brake jerk warning is provided when your vehicle is approaching a vehicle ahead.



- Second-level braking: Slight automatic emergency braking is applied while your vehicle continues to approach the vehicle ahead after the first-level warning.

5. Driving Guide



- Third-level braking: Full braking is applied automatically when a rear-end collision is inevitable.

The AEB must be switched off under the following conditions:

- The vehicle is towed.
- The vehicle is on a chassis dynamometer.
- The radar is faulty.
- An external force (such as a rear-end collision) acts on the radar.

The AEB may become ineffective under the following conditions:

- The vehicle passes an extremely tight turn.
- The accelerator pedal is depressed to the end.
- Transmission is not shifted to D.
- The ESP is manually deactivated.
- The driver's seat belt is not fastened.
- The radar is dirty or covered.
- The vehicle runs in a snowy or heavily rainy day.
- A narrow vehicle (such as a motorcycle) is traveling ahead.

- The vehicle meets a crossing approaching vehicle.
- There is a stationary obstacle (such as a broken-down vehicle) in front.
- There is an animal, an oncoming vehicle or a road-crossing vehicle in front.
- The deflection capability and performance of AEB is degraded due to interference by the environmental factors (for example, electromagnetic interference or the target itself).

NOTE

- AEB's intervention in braking can be stopped by depressing the accelerator pedal or turning the steering wheel.
- When AEB is triggered, braking force will be applied to the vehicle and the foot may feel vibration from the brake pedal, which is normal.
- In a complex driving condition (such as winding road driving), AEB may intervene in braking as needed.
- When AEB is negatively affected by the environmental factors (for example, electromagnetic interference or the target itself), the detection function will be interfered and the AEB performance will be degraded.

WARNING

AEB can improve the driving safety, but it is still subject to the limitations of laws of kinematics, and thus shall never be used for risky driving. The driver must always be ready to apply the brake to reduce the vehicle speed or avoid obstacles.

The braking effect that can be realized by AEB to reduce injuries due to collision is limited and it cannot work autonomously to prevent vehicle accidents or personal injuries. Therefore, when the AEB is working, the driver is still required to apply braking when necessary.

When AEB is activated, the driver shall keep controlling the vehicle during driving, and shall take full responsibility for the vehicle speed and the distance to other vehicles.

WARNING

The AEB is only effective to vehicles/ pedestrians detected by the radar and camera to mitigate injuries due to collision, and thus, it may not respond or may respond after a certain delay. The driver shall apply the brake as required instead of waiting for the AEB to act.

The AEB may not always be able to clearly identify objects and complex traffic conditions. In these cases, the AEB may:

- issue a warning or apply braking when unnecessary.
- fail to issue any warning or apply braking when necessary.

Therefore, the driver shall always observe traffic conditions instead of completely relying on the AEB. As AEB is only a driver assistance function, the driver shall be fully responsible for keeping a proper distance from the vehicle ahead, controlling the speed and braking in time. The driver must always be ready for braking or steering.

5. Driving Guide

5.4.7 Pedestrian detection system (PDS) *

Pedestrian detection system (PDS) will, based on the signals from MMW radar installed on the front bumper and the IFC installed on the windshield, detects pedestrians ahead and actively assists the driver in avoiding or mitigating collisions with pedestrians within its operating range so as to lower the likelihood of accidents. When a collision is incoming, PDS will issue an alarm for alert the driver that the vehicle is ready to apply emergency braking, and then the PDS will assist in braking and activate the AEB.

NOTE

Precautions for use of radars and cameras.
[=> See page 206](#)

CAUTION

The PDS cannot be substituted for a driver's attention during driving!

Proximity warning

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

The proximity warning function of PDS is integrated in FCW. For its activation/deactivation method, refer to description of FCW. [=> See page 184](#)

Active brake assist

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

The autonomous emergency braking function of PDS is integrated in AEB. For its activation/deactivation method, refer to the description of AEB. [=> See page 186](#)

The accurate activation of PDS depends on the accuracy of pedestrian information detected.

CAUTION

The PDS cannot be substituted for a driver's attention during driving!

PDS fault indication

- When the PDS is faulty, the instrument cluster will display a message reading "PDS is not available" to the driver.

NOTE

The PDS is still subject to the limitations of some physical conditions, and it may be unable to play its full within the vehicle speed range specified by the system. Therefore, the driver is required to apply effective braking when necessary. The response of PDS, including alarm, and braking or avoiding pedestrians with the help of the brake pedal, depends on the practical conditions.

- The PDS may fail to avoid some collisions or serious injuries in some occasions.
- In case of some complex road conditions (such as curved main roads), the PDS may response to some targets of similar shape or size with pedestrians and issue an alarm or intervene in braking by mistake.

NOTE

- When the PDS malfunctions, for example, due to misaligned radar/camera angle, there may be unwanted alarms or interventions in braking.
- The driver shall always be ready to take over control of the vehicle when necessary.
- If the PDS activates braking, the driver will feel hard while depressing the brake pedal.
- When the driver depresses the accelerator pedal or turns the steering wheel, the AEB activated by PDS will be terminated.
- The system may have no time to help the driver in avoiding a collision after sending an alarm.
- If the PDS has the anomalies other than those described above (for example, repeated abnormal activation), please deactivate the PDS and go to the GAC Motor authorized shop for inspection in time.

WARNING

Never ignore any suddenly activated alarm lamp and reminder displayed on the instrument cluster, otherwise a traffic accident and even serious injuries may occur.

System limitations

PDS is subject to physical and system limitations. For example, in some cases, the PDS may be activated unintentionally or after a certain delay due to intervention by the driver. Therefore, the driver shall stay vigilant and take over control of the vehicle if necessary.

The PDS may be activated unintentionally or after a certain delay when:

- The vehicle is running on a narrow curve.
- The accelerator pedal is depressed to the floor or the vehicle accelerates quickly.
- The driver assists are deactivated or malfunction.
- The ESP is manually deactivated.
- The ESP control is activated.
- The IFC or the radar is dirty or blocked by foreign objects.

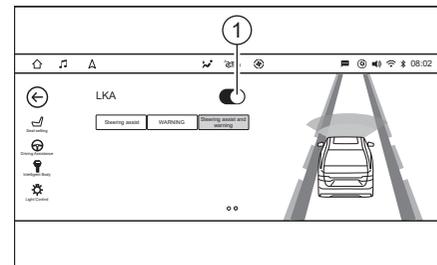
5. Driving Guide

- The vehicle is reversing.
- Traffic is chaotic.
- The vehicle is towing another vehicle.
- A pedestrian is standing on a refuge island or a curve.
- A pedestrian is completely or partially covered by other objects, e.g. a worker with a ladder.
- A pedestrian is wearing fancy clothes, such as the carnival costume.
- External conditions such as sunset, night, ice, snow, heavy rain, fog and backlight lower the visibility.

5.4.8 Lane departure warning (LDW) *

The lane departure warning (LDW) system detects the lane markings on the road, analyzes the action of the driver and gives a warning when the vehicle unexpectedly drifts out of lane due to fatigue, distraction or phone calls of the driver. The warning is usually given in the manner of graphic indication or beeping of instrument cluster when the front wheel crosses a lane marking.

Switch-on/off



When the ENGINE START/STOP button is set to the "ON" position, click "System Settings → Driving Assistance → LKA→" on the A/V system display.

- Click slider ① to switch on or off the LDW. If the system has been switched on, the indicator lamp  goes on. If the system has been switched off, the indicator lamp  goes off.

i NOTE

The system has the button state memory function, so that when the vehicle is restarted, the button will keep at the state before last shutdown.

Select the LKA mode

When the ENGINE START/STOP button is set to the "ON" position and the LDW is switched on, click "System Settings → Driving Assistance → LKA" on the A/V system display to select lane assist mode.

1. Steering assist
 - When "Steering Assist" is selected, the system only intervenes in turning of steering wheel for corrective steering adjustment.
2. Warning
 - When "Warning" is selected, the system only works for alarming.
3. Steering Assist & Warning
 - When "Steering Assist & Warning" is selected, the system will not only issue a warning but also intervene in turning of the steering wheel for corrective steering adjustment.

NOTE

The LDW has the lane keeping assist mode memory function, so that the lane keeping assist mode before last shutdown will be selected when the vehicle is restarted.

Alarm

The LDW warning will be triggered only when the assist mode is "Warning" or "Steering Assist & Warning".

- When the instrument shows a speed greater than 65km/h and the system detects at least one valid lane marking on one side, the indicator lamp  on the instrument cluster turns green, indicating that the system may issue a warning in this case. When only the lane marking on one side is detected, the system only alerts the driver to the side with the lane marking.

When the indicator lamp  turns green, the system may not issue a warning if the vehicle departs from the lane under one of the following conditions.

- The brake pedal is depressed with great force;
- The turn signal lamp on the side to which the vehicle turns to is on.
- The hazard warning lamp is turned on.
- The interval between two warnings is too short.
- The vehicle is rolling on or crossing over the lane marking.
- The lane is too narrow.
- The radius of the lane curve is less than 250 m.

However, if no condition mentioned above happens with indicator lamp  green, the system will alert the driver by flashing of the lane marking on the instrument cluster and beeping when the vehicle deviates from the lane accidentally.

Steering assist

The lane keeping assist indication will be triggered only when the assist mode is "Steering Assist" or "Steering assist & Warning", and steering assist is mainly for lane keeping assist.

When the instrument shows a speed greater than 65 km/h and the system detects valid lane marking on at least one side, the indicator lamp  on the instrument cluster turns green, indicating that the system may intervene in turning of steering wheel for corrective steering adjustment. When only the lane marking on one side is detected, the system only works for lane keeping assist to the side with the lane marking.

5. Driving Guide

When the indicator lamp  turns green, the system will not intervene in turning of the steering wheel for corrective steering adjustment under any one of the following conditions:

- The brake pedal is depressed with great force;
- The turn signal lamp on the side to which the vehicle turns to is on.
- The hazard warning lamp is turned on.
- The interval between two corrective steering adjustments is short.
- The vehicle is rolling on or crossing over the lane marking.
- The lane is too narrow.
- The radius of the lane curve is less than 250 m.
- The system reminds the driver to control the steering wheel or of the deactivation of lateral assist function because the steering wheel has been out of the driver's hands for a long time.

When the system intervenes in turning of steering wheel for corrective steering adjustment, the indicator lamp  turns yellow, and the driver can feel the torque applied to the steering wheel by the system.

Hands-on reminder



When the LDW detects that the steering wheel is out of the driver's hands for a long time, the system will issue a hands-on reminder and the instrument cluster displays an alarm message while beeping.

The driver shall immediately hold the steering wheel immediately after receiving the hands-on reminder, and after detecting that the driver is holding the steering wheel, the system will cancel the hands-on reminder, and meanwhile, the LDW is automatically reactivated.

NOTE

- LDW may misjudge that the driver's hands are off the steering wheel when the driver puts his/her hands slightly on the steering wheel. In this case, it is only required to hold the steering wheel a little tightly or shake the steering wheel slightly.

Other indications

When it is detected that the camera is inoperative, a text message reading “LDW is temporarily not available” will pop up on the instrument cluster.

Usually, it is caused by dirty windshield glass or the direction exposure of camera to sunlight. The LDW will not be damaged on that and needs not to be inspected.

The driver can try to clean the windshield glass by operating the washer and wiper.

When a fault is detected, the message reading “Please check the LDW” will pop up on the instrument cluster and the indicator lamp  turns red.

i NOTE

If the message reading “Please check the LDW” pops up on the instrument cluster, it indicates that the LDW is faulty, please go to the GAC Motor authorized shop for inspection in time.

Functional limitation

The LDW, even activated, may involve wrong or failed detection of lane marking due to inevitable environmental factors and conditions. The system may become affected or inoperative under the following conditions:

- Poor line of sight caused by, e.g., snow, rain, fog or water spots.
- Dirty or foggy windshield, or obstruction in front of the windshield camera.
- Overtemperature around the camera due to direct sunlight.
- Glare due to direct sunlight, oncoming traffic, reflected light from road water-logging, etc.
- Sudden changes in ambient light, such as entering/exiting tunnels.
- Headlamp not turned on at night or when the light illumination is low in tunnels.
- No lane marking, or difficulty in distinguishing the lane marking color from the road surface color.
- Unobvious, too thin, worn, blurred or dirty/snow-covered lane markings.
- Too wide or narrow lanes.
- Increase or decrease in lanes, or complicated routing of lane markings.
- More than two lane markings on the left and right sides of the vehicle.
- Marks or objects similar to lane markings on roads.
- Isolation strips or other objects casting shadows on lane markings.
- Short-term change of marking, such as ramp or expressway exit.
- Driving on steep slopes or winding roads.
- Close distance from the vehicle ahead or lane markings blocked by the vehicle ahead.
- Severe shaking of the vehicle.

5. Driving Guide

The performance of the system to intervene in turning of steering wheel for corrective steering adjustment may be affected under the following conditions:

- Vehicle overload.
- Abnormal tire pressure.
- Uneven road.
- Strong crosswinds.
- Modification or replacement with non-genuine spares of vehicle control-related parts.
- Improper assembly of vehicle control-related parts.

CAUTION

- Do not color or coat the windshield with any material not meeting the corresponding specifications. Any additional objects that negatively affecting the sight of the system camera may lead to improper operation of the system.
- If the camera fails to detect a lane or the speed is less than 65km/h, the LDW will not issue a warning even if the vehicle deviates from or leaves the lane.

CAUTION

- To ensure normal operation of the LDW, please make sure that there is no dirt, ice, snow or other obstructions on the top surface of the outside of front windshield.
- The operation of the A/V system in the vehicle or the noise outside the vehicle may prevent you from hearing the warning beeps. Thus, try to avoid these sounds and focus on observing the road conditions.

WARNING

- **The LDW is only a driver assist system and cannot actively control your vehicle for lane changing or lane keeping. Therefore, the driver must always check the road conditions and actively control the vehicle.**
- **The LDW is only a driver assist system and the driver must always hold the steering wheel to actively control the vehicle.**

WARNING

- **When the LDW issues an alarm, please neither panic nor turn the steering wheel suddenly, so as to prevent control loss of the vehicle.**
- **Do not place reflective objects on the instrument panel, which may not only cause dazzling to the driver but also reflect the light to the LDW camera, causing abnormal operation.**
- **Protect the camera against strong impact, moisture or heat; and never remove and refit any part without authorization.**
- **Improper use of the LDW or negligence may cause accidents. Thus, the driver is required to concentrate on observing road and traffic conditions and drive carefully.**
- **When detecting an unintentional lane departure, LDW will issue a warning or intervene in turning of the steering wheel to assist in corrective steering adjustment. Neither panic nor turn the steering wheel fiercely.**

WARNING

- When it is detected that the steering wheel is out of the driver's hands for a long time, LDW will issue a warning. In this case, neither panic nor turn the steering wheel fiercely, and instead, please hold the steering wheel and drive the vehicle as usual.
- When the LDW intervenes in turning of the steering wheel for corrective steering adjustment, the driver can still turn the steering wheel to control the vehicle. When the torque applied by the system is found improper, the driver can control the vehicle to travel according to his intention when required.
- Cracks, scratches, or damage by gravel in the front windshield area in front of the IFC view may cause LDW degraded, unserviceable, or abnormal. In this case, it is recommended to replace the front windshield. Please contact a GAC Motor authorized shop to ensure that a correct front windshield is installed.

WARNING

- The LDW is not always able to identify lane markings. for example, missing detection of lane marking due to adverse weather, poor night lighting, water logging and snow on road surfaces, damage and blurs of lane markings, etc, or mistaking of specific objects and structure as lane markings due to road surface damage, water logging and snow on curb, other road structure and road surfaces, shadows cast on road surfaces, etc. If this occurs, missing and false activation of warning may occur, so drivers shall concentrate on observing road and traffic conditions and drive carefully.

5.4.9 Intelligent headlight control (IHC) *

The Intelligent headlight control (IHC) detects the traffic and environmental conditions in real time via the IFC installed on the upper edge of the windshield and automatically switches between the low beam and high beam. For example, if the driver activates the IHC during driving on a road with poor lighting at night, IHC will switch on the high beam automatically when it is detected that the operating conditions of high beam are met; and switches the headlamp from high beam to low beam when vehicle meeting or too close following driving is detected.

NOTE

- In the case of heavy fog, rain, etc., which may cause dazzling to the driver, a request to turn on low beam will be initiated.
- Low-speed driving or violent driving will disable the functioning of IHC.
- The functioning of IHC will be disabled if the driver manually switches on the high beam or headlamp flashing light.

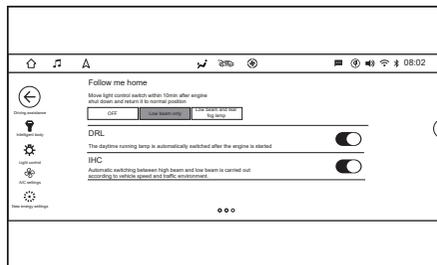
5. Driving Guide

WARNING

IHC is a driver assist function, and it can help you to select the lighting way best suitable for the actual condition. The driver shall always be responsible for manual switching between the high and low beams when the traffic and environmental conditions require.

- The IHC may not be able to correctly identify all driving environments and cannot operate properly in some environments.
- If the IFC is blocked by dirt, stickers, ice and snow, etc., the IHC may become inoperative.
- If the vehicle's lighting system is modified (for example, the headlights are modified), the IHC may involve performance degradation or malfunction.
- When your vehicle is about to meet a non-motor vehicle (such as, a bicycle or an electric bicycle) or a pedestrian, the IHC shall be de-activated in time to avoid dazzling the rider of the non-motor vehicle or the pedestrian.

Activating IHC



1. Click "Vehicle Settings → Light control → IHC" on the A/V system display, and press the soft key  to set the IHC to "ON".

NOTE

The IHC has the memory function, so that it will work at the state before last shutdown when the vehicle is restarted.

2. Turn the lamp switch to AUTO position to switch on the "Automatic headlamp".

- The IHC is ready for working after switched on, and the indicator lamp  on the instrument cluster will not come on.
- When the low beam is switched on by the automatic headlamp function, the IHC is activated and the indicator lamp  on the instrument cluster comes on in white.
- When the IHC is activated and the high beam is requested to be switched on, the indicator lamp  on the instrument cluster stays on in white and the high beam indicator lamp  comes on.
- When the driver manually switches on the high beam or the headlamp flashing light, the IHC is ready for working, the indicator lamp  on the instrument cluster goes out and the high beam indicator lamp  comes on.

NOTE

- When your vehicle is about to meet a non-motor vehicle (such as, a bicycle or an electric bicycle), the IHC shall be de-activated in time to avoid dazzling the rider of the non-motor vehicle.
- The high beam and headlamp flashing light can be manually switched on/off when required.

Disabling conditions of IHC

The switch-on of high beam is disabled when:

- The instrument cluster shows a speed lower than 15km/h.
- The fog lamp is switched on.
- The wiper has been set to "HI" position for a period of time.
- The luminance of ambient light is high.
- A street light, a vehicle ahead or an oncoming vehicle is detected.

Switching between high beam and low beam is disabled when:

- The lateral acceleration or yaw rate is too high.
- The vehicle is at the highly dynamic state (with ABS or ESP active).
- The instrument cluster shows a speed lower than 35km/h.
- turn signal lamp on.

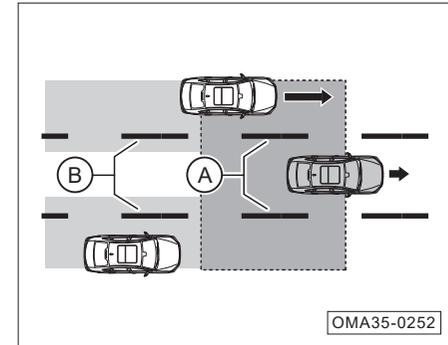
Functional limitation

The IHC, after activated, may be unable to work for automatic switching of high beam and low beam when:

- The windshield glass in front of the IFC is covered with ice, snow, fog, dirt, sticker or other objects.
- There is highly reflective object on a poorly illuminated street.
- The vehicle meets a pedestrian or a cyclist on a road with poor lighting or on a roadside.
- The light of the front incoming vehicle is blocked by a crash barrier, a high bow-top road fence, a green belt, etc.
- The illuminance of the tail lamps of the vehicle ahead is low or not in line with national standards.
- The vehicle meets another incoming vehicle in case of an extremely tight turn/mountain road/low-lying ground.
- The vehicle is traveling on a slope or a bumpy road.
- The vehicle is traveling in a heavily rainy, snowy or foggy day.
- The IFC is damaged or its power supply has been cut off.

5.4.10 Blind spot detection (BSD) *

The BSD detects the vehicles in the blind spot and the area behind the blind spot via the MMW radar installed at the rear of the vehicle. If it is detected that another vehicle is approaching quickly, the BSD alerts the driver through the visual signal on the exterior rearview mirrors.



- A: Blind spot in the adjacent lane.
- B: Area behind the blind spot.

5. Driving Guide

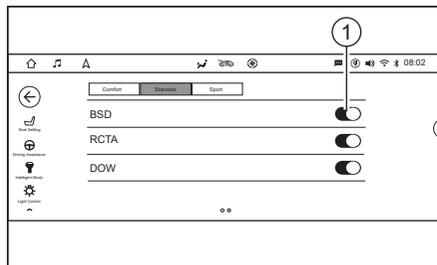
⚠ WARNING

- The BSD is only a driver assist system, and thus it cannot be substituted for the driver to observe the external traffic conditions or to make judgments.
- The driver shall correctly use the interior rearview mirror and both exterior rearview mirrors instead of completely relying on the BSD radar.

i NOTE

The system has the button state memory function, so that when the vehicle is restarted, the system will work at the state before last shutdown.

On and Off

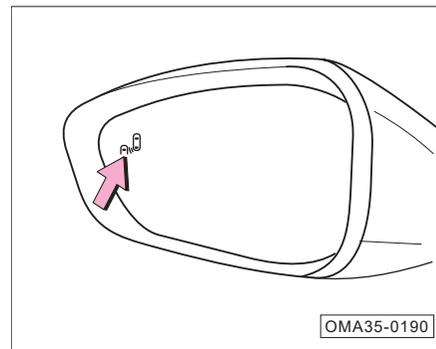


When the ENGINE START/STOP button has been set to the "ON" position or the engine has been started, click "System Settings → Driving Assistance → BSD" on the A/V system display:

- Click slider ① to switch on/off the BSD.

If the BSD is switched on properly, the indicator lamp on exterior rearview mirror temporarily comes on, and the indicator lamp on the instrument cluster turns green. If a fault is detected in the BSD, the indicator lamp on the display of the instrument cluster turns yellow, and a fault indication is shown on the display of the instrument cluster. If the BSD is switched off, the indicator lamp goes off.

Alarming method



The BSD alerts the driver via the yellow indicator lamp on the exterior rearview mirror, whose illuminance can be adjusted automatically according to the ambient light.

👁 CAUTION

When the vehicle has been started or the system has been switched on, the yellow indicator lamp will come on for two seconds, indicating that the function is switched on normally.

Working conditions

Under the following three conditions during driving (vehicle speed >30km/h):

- another vehicle enters the blind spot from the rear or from one side;
- another vehicle approaches this vehicle quickly from the rear of the adjacent lane;
- another vehicle enters the blind spot from the front and these vehicles stay in the blind spot longer than a certain period of time;

the BSD issues an alarm and the indicator lamp on left/right exterior rearview mirror comes on, and if the turn signal lamp on the same side is activated in this case, the indicator lamp flashes to alert you that it is risky to change lane.

CAUTION

When the vehicle overtakes another vehicle ahead at a very high speed, the alarm will not be activated for the vehicle in the blind spot as the time that the vehicle stays in the blind spot is too short.

False alarm

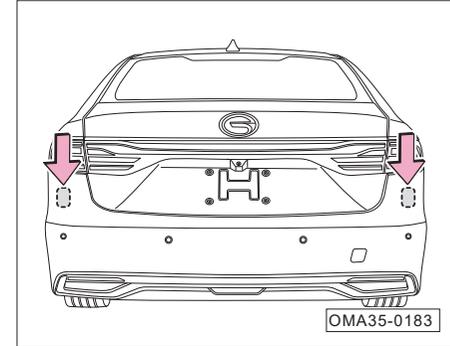
When there is no vehicle in the blind spot, the system may issue a false alarm when:

- The vehicle is near a road guardrail.
- The vehicle is near a highway concrete wall.
- The vehicle is in a building area.
- The vehicle is near shrubs and trees.
- The vehicle is too close to the vehicle behind during parking.
- There is electromagnetic interference.

CAUTION

The false alarm, if triggered, just lasts for a short time and can be corrected automatically.

Radar



The BSD radars are installed as shown above.

CAUTION

Make sure that the area around the rear bumper sensors is not covered by ice, snow or other objects.

5. Driving Guide

If any sensor is interfered, the system performance will be degraded and the instrument cluster will display a message reading "BSD sensor is blocked" and issue an alarm. The system will automatically return to normal if any of the following conditions is met:

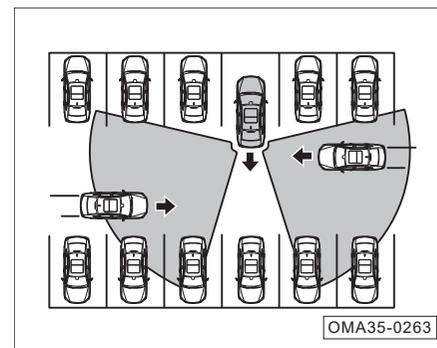
- Two vehicles are detected on both sides of the vehicle.
- The ENGINE START/STOP button is turned off and turned on again.

If the sensor is still interfered when the engine has been restarted, the reminder will be given again and an alarm will be issued. If the message reading "Please check the side assist system" is displayed on the instrument cluster, it indicates that the system is faulty, please go to the GAC Motor authorized shop for inspection in time.

The BSD may not work properly or even be inoperative under the following special conditions:

- The detected target is too small, such as a bicycle, an electric segway, etc.
- The target is stationary.
- The weather is too severe (such as rain, snow, etc.).
- The vehicle is running on a curved road, a ramp, etc.

5.4.11 Rear crossing traffic alert (RCTA) *



The rear crossing traffic alert (RCTA) system detects blind spots on both sides of the rear of the vehicle via the BSD sensor installed at the rear of vehicle. If it is detected that another vehicle is approaching quickly during reversing, the RCTA alerts the driver through the visual signal on the exterior rearview mirrors and the panoramic image.

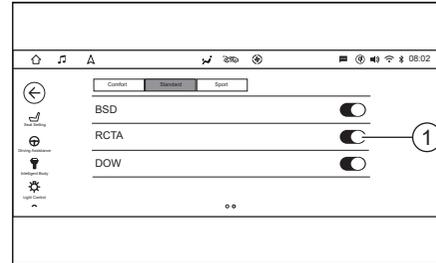
⚠ WARNING

- The RTCA is only a driver assist system, and thus it cannot be substituted for the driver to observe the external traffic conditions or to make judgments.
- The driver shall correctly use the interior rearview mirror and both exterior rearview mirrors instead of completely relying on the BSD radar.

i NOTE

The system has the button state memory function, so that when the vehicle is restarted, the button will keep at the state before last shutdown.

On and Off

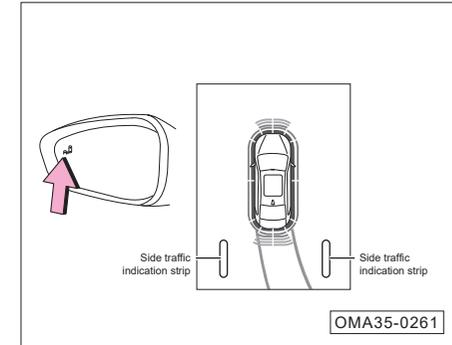


When the ENGINE START/STOP button has been set to the "ON" position or the engine has been started, click "System Settings → Driving Assistance → RTCA" on the A/V system display:

- Click slider ① to switch on/off the RTCA.

If the system is switched on properly, the indicator lamp Q_{RTCA} on the instrument cluster turns green. If a fault is detected in the system, the indicator lamp Q_{RTCA} turns to red, and a fault indication is shown on the display of the instrument cluster. If the BSD is switched off, the indicator lamp goes off.

Alarming method



The RTCA alerts the driver via the yellow indicator lamp Q_{RTCA} on the exterior rearview mirror and the panoramic image. The illuminance of indicator lamp can be automatically adjusted according to the ambient light.

5. Driving Guide

Working conditions

The preconditions required for activating the function are as follows:

- The vehicle is reversing and the gearshift lever is in "R" position.
- The RTCA is switched on and has no malfunction.

When the radar detects that the vehicle is reversing and another vehicle is approaching to the vehicle on either side from the rear and may collide with the vehicle, the RTCA will alert the driver in the following way:

- The yellow indicator lamp  on the exterior rearview mirror at the side with risk of collision flashes.
- The red strip at the side with risk of collision in the panoramic image flashes.
- The system issues an audible alarm as a supplementary alarm.

CAUTION

This function cannot detect the object through another vehicle or obstacle.

False alarm

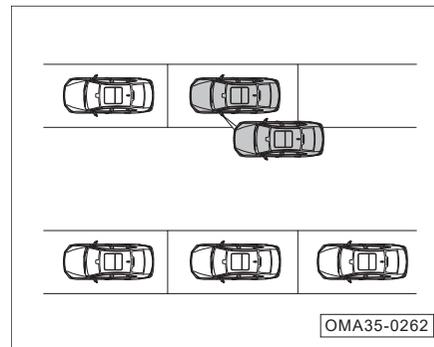
When there is no vehicle in the detection area, the system may also issue a false alarm when:

- The vehicle is near a road guardrail.
- The vehicle is near a highway concrete wall.
- The vehicle is in a building area.
- The vehicle is near shrubs and trees.
- The vehicle is too close to the vehicle behind during parking.
- There is electromagnetic interference.

CAUTION

The false alarm, if triggered, just lasts for a short time and can be corrected automatically.

5.4.12 Door open warning (DOW) *



The door open warning (DOW) system uses the BSD sensor installed at the rear of the vehicle to detect the adjacent lane during parking, and when another vehicle is detected approaching quickly and will cause risk of collision if the door is opened, alerts the driver via the visible signal on the exterior rearview mirror and the audible alarm.

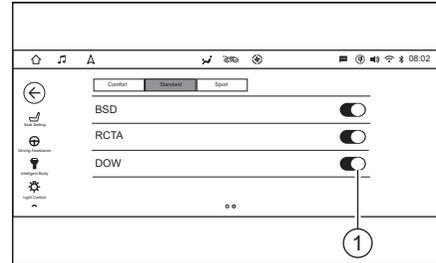
⚠ WARNING

- The DOW is only a driver assist system, and thus it cannot be substituted for the driver to observe the external traffic conditions or to make judgments.
- The driver shall correctly use the interior rearview mirror and both exterior rearview mirrors instead of completely relying on the BSD radar.

i NOTE

The system has the button state memory function, so that when the vehicle is restarted, the system will work at the state before last shutdown.

Switch on/off

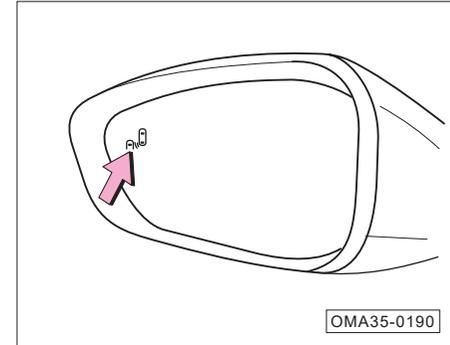


When the ENGINE START/STOP button has been set to the “ON” position or the engine has been started, click “System Settings → Driving Assistance → DOW” on the A/V system display:

- Click the slider ① to switch on/off the DOW.

If the system is switched on properly, the indicator lamp $\mathcal{D}_{(r)}$ on the instrument cluster turns green. If a fault is detected in the system, the indicator lamp $\mathcal{D}_{(r)}$ turns to red, and a fault indication is shown on the display of the instrument cluster. If the BSD is switched off, the indicator lamp goes off.

Alarming method



The DOW alerts the driver via the yellow indicator lamp $\mathcal{D}_{(r)}$ on the exterior rearview mirror, whose illuminance can be adjusted automatically according to the ambient light.

5. Driving Guide

Working conditions

The preconditions required for activating the function are as follows:

- The vehicle speed is ≤ 2 km/h, and the transmission is not in R.
- The ENGINE START/STOP button is in "ACC" or "ON", or within 3 minutes after the ENGINE START/STOP button is turned from ON to ACC or OFF.
- The DOW is switched on and has no malfunction

When the radar detects that another vehicle on an adjacent lane is approaching your vehicle from the rear and a risk of collision is expected if the driver opens the door at this moment, the DOW will alert the driver in the following way:

- If the door is closed, the yellow indicator lamp  on the exterior rearview mirror at the side with risk of collision is always on.
- If the door is opened, the yellow indicator lamp  on the exterior rearview mirror at the side with risk of collision is flashing. The system issues an audible alarm as a supplementary alarm.

CAUTION

This function cannot detect the object through another vehicle or obstacle.

False alarm

When there is no vehicle in the blind spot, the system may issue a false alarm when:

- The vehicle is near a road guardrail.
- The vehicle is near a highway concrete wall.
- The vehicle is in a building area.
- The vehicle is near shrubs and trees.
- The vehicle is too close to the vehicle behind during parking.
- There is electromagnetic interference.

CAUTION

The false alarm, if triggered, just lasts for a short time and can be corrected automatically.

5.4.13 Radars and cameras *

Radars

The radars are installed in the middle of the grille under the front bumper to monitor the traffic conditions and detect the front vehicles at a certain distance from the vehicle.

A radar must be adjusted and calibrated under the following conditions:

- The fixing bracket of the radar is removed and refitted;
- The radar is removed and refitted;
- The toe-in or rear wheel camber has been adjusted during the wheel alignment;
- The vehicle has a collision.

NOTE

- Special tools are required to be used in adjustment and calibration of a radar. If a radar needs adjustment and calibration, please go to the GAC Motor authorized shop for relevant operation.
- When the radar is failed or maladjusted, the functioning of ACC, ICA, FCW, AEB and PDS may be affected.

Special considerations on radar

The radars are installed at the front end the vehicle, and no obstacle is allowed in the sight of the radar. Do not install other obstacles such as after-sales license plate frame when installing the front license plate. Otherwise, it will affect the detection performance of the radar, resulting in working failure of systems such as the ACC, ICA, FCW, AEB and PDS.

CAUTION

- If the radar is dirty, blocked by the license plate frame, or covered by any foreign matter such as heavy rain, ice, snow, mud, the functions dependent on the radar may not work and the instrument will give disable/fault indication for these functions. To restore these functions to normal, clean the related dirt and/or foreign matters.
- When strong reflection of radar waves is involved, such as in parking lots, the functions dependent on the radar may be affected.
- Prevent the front and surrounding of radar from being covered by sticker, driving assistance lamp, license plate trim frame and the similar, otherwise, the functions dependent on the radar may be affected.
- It is recommended to remove the snow on the radar with a brush and to remove the ice on the surface with the insoluble de-icer spray.

CAUTION

- Bodywork of the front end of vehicle may change the direction of the radar and affect the functions dependent on the radar (ACC/ICA/FCW/AEB). Therefore, please go to the GAC Motor authorized shop for service in time.
- If a radar is damaged or its direction changes, please deactivate the functions dependent on the radar (ACC/ICA/FCW/AEB), and go to the GAC Motor authorized shop for recalibration in time.
- Direction of a radar may be changed due to vibration, for example, when the part near the front bumper radar bumps against a curb/flower bed. Change of the direction of the sensor may affect the performance of the functions dependent on the radar or even cause abnormal deactivation of these functions.

5. Driving Guide

Intelligent front camera (IFC)

An intelligent front camera (IFC) is installed on the upper part of the windshield glass to detect the surrounding environment, which can identify pedestrians standing up to 80 m away from the vehicle when no obstacle is present (in case that the environmental factors such as lighting are ideal) with a height no less than 0.8m. The IFC must be calibrated under the following conditions:

- The windshield or the camera bracket has been removed and replaced.
- The IFC has been removed and replaced.

NOTE

If the IFC fails, the systems such as ACC, ICA, LDW, FCW, AEB and IHC will fail as well.

NOTE

- Special tools are required to be used for calibration of the IFC. If the camera needs calibration, please go to the GAC Motor authorized shop for relevant operation.
- When the IFC is failed, maladjusted or blocked, the functions including ACC, FCW, AEB, LDW, ICA and IHC may be affected and will not work properly.

CAUTION

- Poor lighting conditions, night, backlight, heavy rain, mist, snow or sludge may pose effect on IFC, leading to interruption/performance degrade and even disabling of FCW, ACC, ICA, AEB, LDW and IHC, and in this case, the instrument cluster will display alarm messages such as "Please check the LDW", "Please check the ACC", "Please check the FCW" and "Please check the AEB".

CAUTION

- Obstacles such as dust, sediment, mist, ice, snow, or sludge on the windshield glass may block the sight the IFC, and if this occurs, the systems such as LDW, FCW, AEB, ACC, ICA and IHC will be disabled. In this case, please wipe the area around the camera on the windshield glass or activate the A/C defrosting, and thereafter the system will return to normal.

CAUTION

- If the interference of IFC is cleared, the PDS will become available again.
- Low light conditions at sunset or night may affect the functioning of PDS. Never block the sight around the IFC with stickers or opaque objects; otherwise, the PDS may not work properly.
- Before driving the vehicle, please check whether there is any obstacle in the area around the camera.
- Keep the sight of the camera on windshield glass free from any obstacle.

5.4.14 Tire pressure monitoring system (TPMS)*

The tire pressure monitoring system (TPMS) monitors pressure and temperature of the tire, and displays them on the instrument cluster. In case of tire anomalies such as low/high pressure, rapid air leakage and high temperature, the instrument cluster will display an alarm message accordingly.

When the ENGINE START/STOP button has been set to the "ON" position, the tire pressure and temperature displayed on the instrument cluster are both "---" if the vehicle speed is within 0~25km/h, and display the real-time tire pressure and temperature if the vehicle speed is above 25km/h.

5. Driving Guide

The alarming method of TPMS includes fault indicator lamp and alarm messages, including low/high tire pressure alarm, rapid leakage alarm and high temperature alarm.

The recommended cold pressure (RCP) of the tire varies with models, and is generally labeled on the B-pillar of driver side.

- If the tire pressure is too high, the TPMS indicator lamp will come on, and the alarm message reading high tire pressure will be displayed on the instrument.
- If the tire pressure is lower than 75% of RCP, the TPMS indicator lamp will come on and the alarm message reading low tire pressure will be displayed on the instrument.
- If the tire pressure continuously decreases at a rate higher than the specification, the TPMS indicator lamp will come on, and the alarm message reading tire leakage will be displayed on the instrument.
- If the tire temperature is higher than 85°C, the TPMS indicator lamp will go on, and the alarm message reading high tire pressure will be displayed on the instrument.

CAUTION

- Some electronic add-ons may make the TPMS unable to operate normally.
- If the tire pressure sensor in the tire need replacement, or the tires need replacement or rotation, the tire pressure sensor shall be subject to learning. Therefore, please go to the GAC Motor authorized shop for replacement.

NOTE

- In case of tire anomalies such as high temperature, low/high pressure or rapid air leakage, the instrument cluster will display corresponding alarm message and cyclically display the position of the faulty tire; when the TPMS has a fault, the instrument cluster will give warning and cyclically display "Please check the TPMS".
- When the high tire temperature alarm is activated, it is recommended to stop the vehicle, and wait for the tire temperature to decrease before continuing to drive.
- If the driving alarm record has not been cleared after parking, the alarm message will be shown and the pressure and temperature will be shown as "--" on the display for next driving; but when the vehicle speed rises above 25km/h, the receiver will receive the updated data and the alarm message will disappear.
- If the low tire pressure alarm does not disappear while you continue to drive as the tire pressure sensor is missing when a tire is replaced with spare tire or a new tire, please do not mistake that the tire pressure is abnormal.

5.5 Parking assist system (PAS)

5.5.1 Reversing parking aid (RPA)

The reversing parking aid (RPA) measures the distance with an obstacle via the radars sending and receiving ultrasonic waves reflected from the obstacles.

On and Off

For models with RPA:

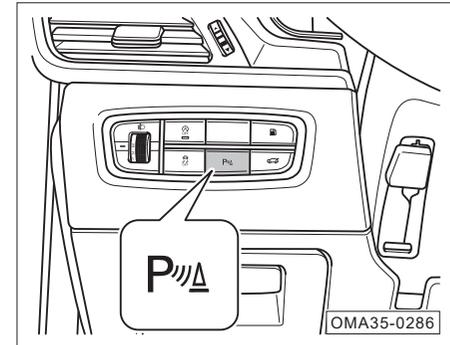
- When the transmission is shifted to "R" position and the vehicle speed is less than 10km/h, the RPA will start working.
- When the vehicle speed is greater than 12km/h or the transmission is not in "R" position, the RPA will stop working.

For models with APA:

- When the vehicle runs at a speed not greater than 15km/h with EPB released and transmission not in "R" position, the RPA will start working.
- When the vehicle speed is greater than 15km/h, the transmission is shifted to "P" position or the EPB is applied, the RPA will stop working.

i NOTE

When APA is being activated, the RPA will be forcibly turned on and cannot be turned off.



For models with RPA:

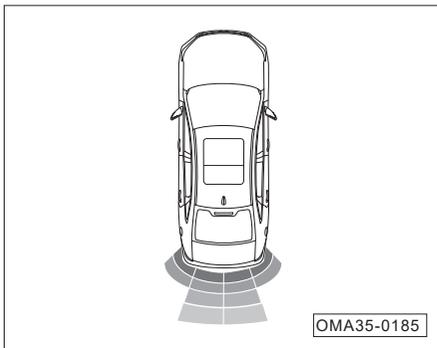
- When RPA is active during reversing, the RPA can be switched off and on manually by pressing the button **P**. If switched off during last driving, it will be switched on again when the vehicle is restarted.

For models with APA:

- The RPA can be switched off and on manually by pressing the button **P**.

5. Driving Guide

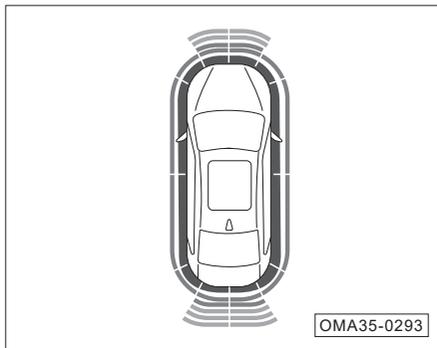
Dynamic view (RPA)



The dynamic view on the display indicates the distance between the vehicle and the front & rear obstacle by different colors, specifically, blue-orange-red from far to near, and when the vehicle is getting closer and closer to an obstacle detected, the activated sector comes nearer and nearer to the vehicle icon.

Change of dynamic view is synchronized with that of the distance audible alarm.

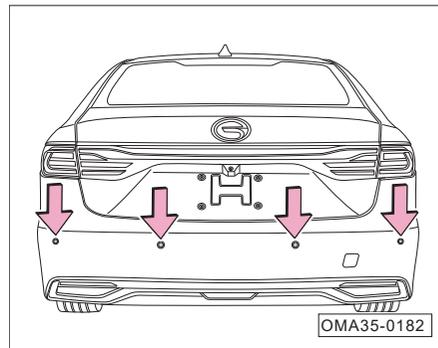
Dynamic view (APA)



The dynamic view on the display indicates the distance between the vehicle and the front & rear obstacle by different colors, specifically, blue-orange-red from far to near, and when the vehicle is getting closer and closer to an obstacle detected, the activated sector comes nearer and nearer to the vehicle icon.

Change of dynamic view is synchronized with that of the distance audible alarm.

Distribution of radars



The radars are installed on the rear bumper cover.

CAUTION

- Always keep the surface of the radars clean and never cover a radar.
- Keep the radars clean and protect them from freezing to ensure the radars operate properly.
- Clean the radar surface with a piece of soft damp cloth to avoid scratching.

WARNING

- **The RPA cannot take the place of the driver's observation to the surrounding environment. The driver shall be concentrated and reverse safely according to the actual conditions.**
- **The radars have blind spots while they are detecting obstacles. During reversing, the driver shall observe the surrounding environment carefully to avoid scratches or collisions.**
- **When the vehicle is reversing at a narrow place or on an uphill slope, the radars may not detect railings, trees or slope surfaces, which is normal.**
- **When the reversing speed is too high, the radar detection accuracy reduces. Thus the reversing speed had better not to exceed 10km/h. When the RPA sends the continuous audible alarms, it indicates that the vehicle is extremely close to the detected obstacle, and reversing shall be stopped immediately to prevent an accident.**

WARNING

- **When a high-pressure cleaner is used, clean the radars in snatches gently, with the nozzle at least 30cm away from the sensor.**
- **If water drops are on the surface of the radars on the rear bumper, the sensitivity of the radar will reduce. Wiping off them can restore the sensitivity of the radar.**
- **The surface of some materials cannot reflect the signal from the RPA sensor, so that the radar cannot detect such materials or people wearing the clothing made of such materials.**
- **Noise sources outside the vehicle may interfere with the RPA sensor, preventing it from detecting any object.**
- **The radar is a precision component, which shall not be removed, refitted and repaired without authorization. Otherwise, GAC will not assume any responsibility for the damage arising therefrom.**

5. Driving Guide

For models with RPA:

Distance to detected obstacle				Audible alarm
Rear left sensor	Rear right sensor	Rear left middle sensor	Rear right middle sensor	
-	-	90~150cm	90~150cm	Regular slow audible alarm
-	-	60~90cm	60~90cm	Regular slow audible alarm
30~60cm	30~60cm	30~60cm	30~60cm	Regular rapid audible alarm
< 30cm	< 30cm	< 30cm	< 30cm	Continuous audible alarm

For models with APA:

Distance to detected obstacle			Audible alarm
Front side area	Front corner area	Front central area	
-	-	90~150cm	Regular slow audible alarm
-	-	60~90cm	Regular medium audible alarm
30~60cm	30~60cm	30~60cm	Regular rapid audible alarm
< 30cm	< 30cm	< 30cm	Continuous audible alarm
Distance to detected obstacle			Audible alarm
Rear side area	Rear corner area	Rear central area	
-	-	150~90cm	Regular slow audible alarm
-	-	90~60cm	Regular medium audible alarm
30~60cm	30~60cm	60~30cm	Regular rapid audible alarm
< 30cm	< 30cm	< 30cm	Continuous audible alarm

Distance audible alarm

The audible alarm changes with reference to the distance between a detected obstacle and the rear bumper, and meanwhile, the color of activated sectors shown on the A/V system display changes accordingly. If the vehicle approaches an obstacle, the system sends an intermittent audible alarm to the driver. The closer the vehicle to the obstacle is, the briefer the audible alarm becomes; when the vehicle is very close to the obstacle, the system sends a continuous audible alarm. If the vehicle goes on approaching the obstacle in this case, the system cannot detect the obstacle any more.

5.5.2 Reverse image system *

The reverse image system can cover the video at a wide angle up to 130° and display a wide-range image behind the vehicle on the A/V system display to allow the driver to know various complex road conditions behind the vehicle and improve the safety of reversing.

Switch-on/off

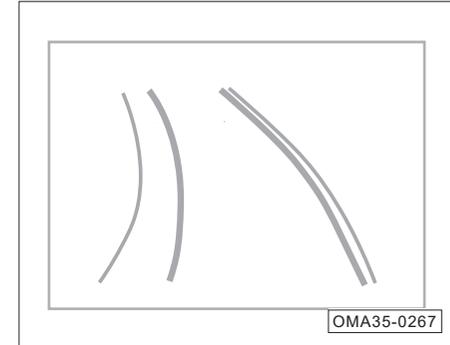
With ENGINE START/STOP button set in "ON", the reverse image system automatically starts working if the gearshift lever is moved to the "R" position. In this case, the A/V system display begins to show the image behind the vehicle and displays the dynamic guide line in the reverse image.

If the gearshift lever is move out of the "R" position, the reverse image system automatically stops working and the A/V system exits from the reverse image.

WARNING

The reverse image system cannot take the place of the driver's observation to the surrounding environment. The driver shall be concentrated and reverse safely according to the actual conditions.

Dynamic guide line



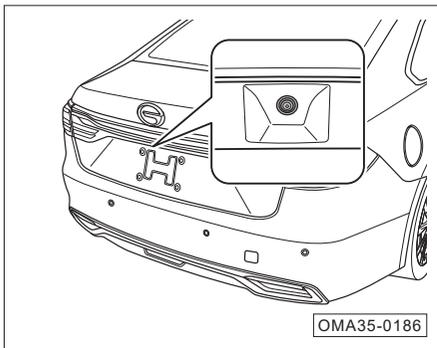
Dynamic guide line: It is the movement trajectory of the rear end of vehicle plotted on the reverse image according to the current steering wheel angle.

Starting position: $\leq 25\text{cm}$ from the rear end of the vehicle.

Range of guide line: The guide line includes tire guide line and vehicle guide line.

5. Driving Guide

CCD



CCD is installed next to the license plate lamp.

⚠ WARNING

- **The CCD have blind spots, for example, it may not detect young children or small pets. Therefore, the driver is required to pay special attention to the young children or small pets around the vehicle during reversing.**
- **The CCD may not be able to recognize the vertical objects at high position, such as wall flange.**

👁 CAUTION

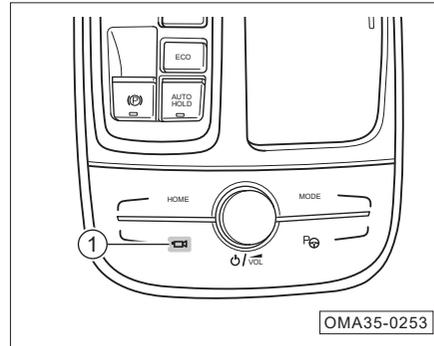
- Always keep the CCD surface clean. Clean the surface of the CCD with a piece of soft damp cloth to avoid scratching.
- Do not use a high-pressure cleaner to clean the CCD for a long time, and if it to be used, please keep the nozzle at least 30 cm away from the CCD.
- Do not cover the CCD.

5.5.3 Around view monitor (AVM)*

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

On and Off

1. With ENGINE START/STOP button in the "ON" position, the system can be activated/deactivated via the gearshift lever as follows:
 - The AVM is automatically activated if the gearshift lever is moved to the "R" position.
 - When the gearshift lever is moved out of the "R" position and the driver do not carry out any relevant operation, the instrument cluster will indicate that the AVM will be deactivated automatically after 30s.



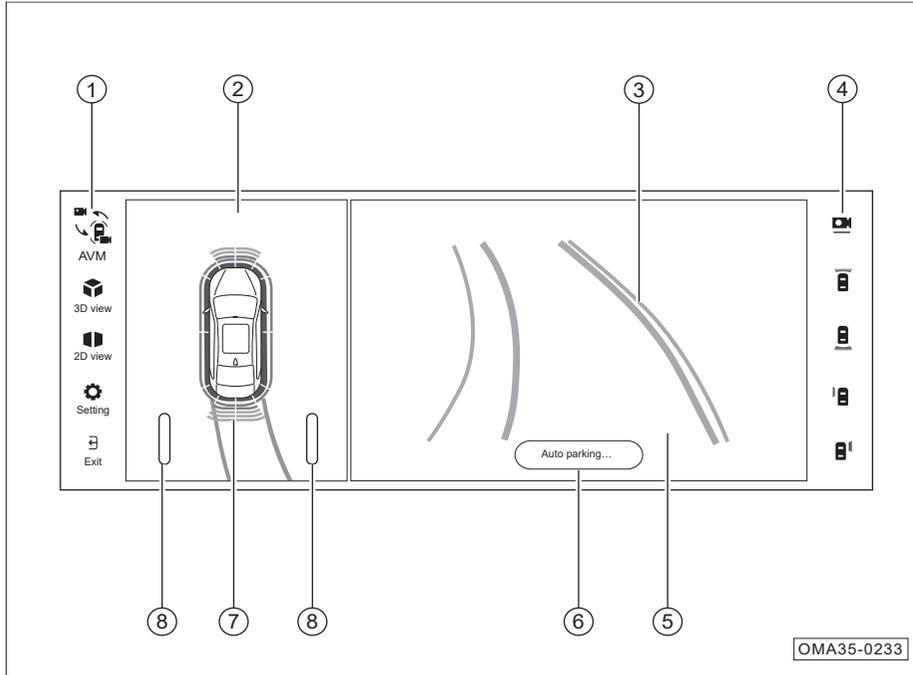
2. With ENGINE START/STOP button in the "ON" position, the system can be activated/deactivated via pressing button ①  as follows:
 - Press button ① , and then the button indicator lamp comes on and the AVM is activated.
 - Press button ①  again, and then the button indicator lamp goes out, and the AVM is deactivated.

i NOTE

- When the AVM has been activated, the A/V system display shows the image around the vehicle and the reversing guidelines.
- If the driving speed is greater than 20km/h, the system will be automatically deactivated.
- When the gearshift lever is not in the "R" position and the AVM has been activated for more than 30s, the AVM will be automatically deactivated (when the speed is zero).
- If the A/V system is not completely activated, the AVM cannot function as normal.

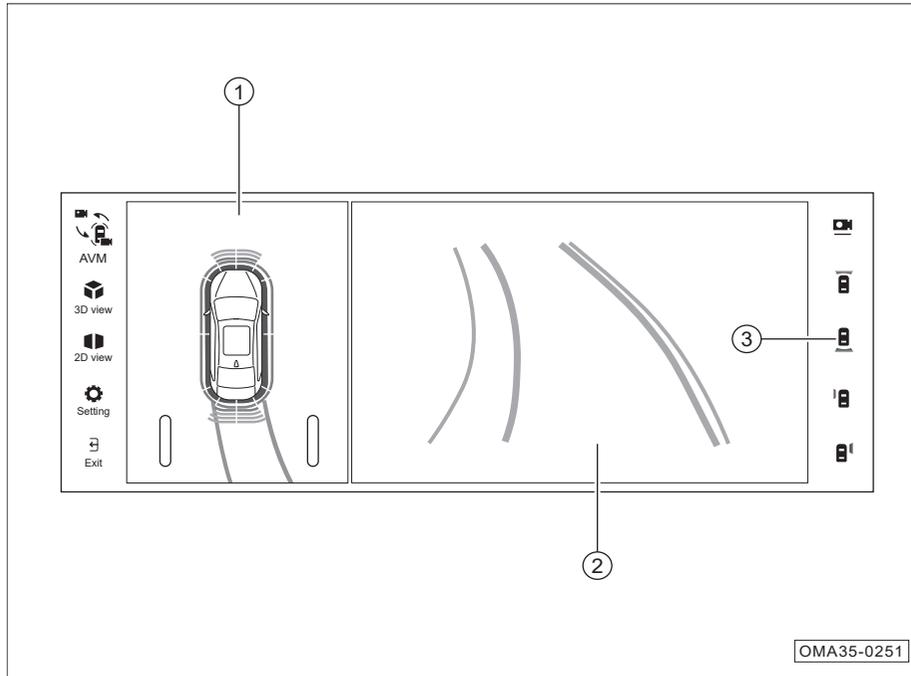
5. Driving Guide

Interface description



- ① Button
- ② Integrated view section
- ③ Dynamic guide line
- ④ Button status bar
- ⑤ Single view section
- ⑥ Text prompt
- ⑦ Indication section of radar
- ⑧ Reminder of parallel oncoming vehicle

5. Driving Guide



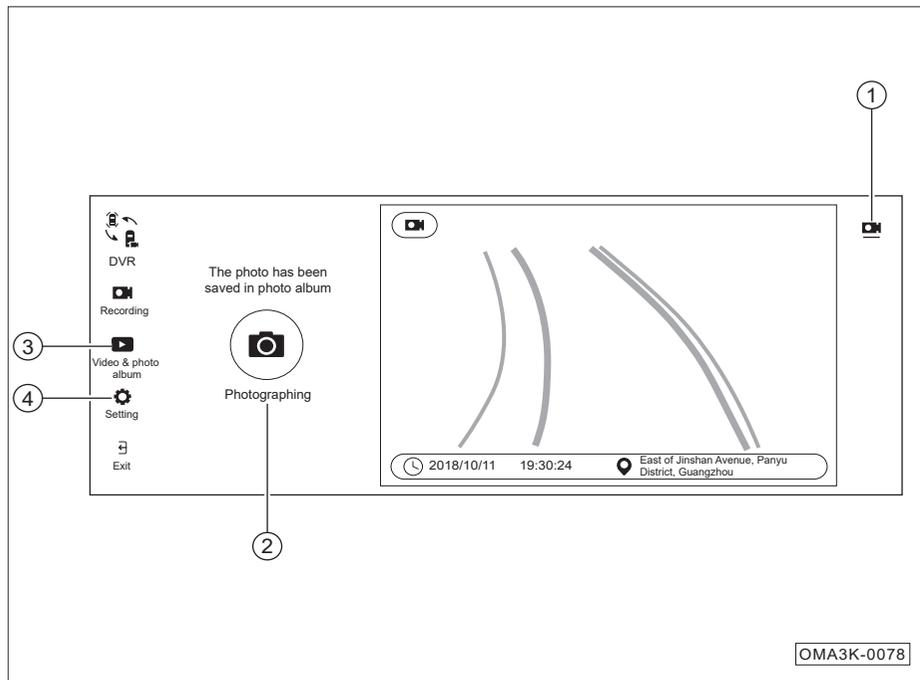
When the AVM starts working, the display shows the 2D view interface:

- When the front/rear/left/right area in the integrated view section ① is clicked, or the soft key ③, which is used to switch among the front/back/left/right image of the vehicle, is pressed, the single view section ② displays the front/back/left/right image of the vehicle accordingly.

i NOTE

- The description of display interface is for reference only. In case of any discrepancy, the actual vehicle shall prevail.
- Click button  to switch to 3D image interface.
- When the gearshift lever has been moved to "R" position, the rear view interface is shown by default; when the gearshift lever has been moved out of the "R" position, the front view interface is shown by default.

5. Driving Guide



Data video recorder

The AVM is integrated with a data video recorder (DVR), and after inserting a TF card, the video recording, video & photo album, and setting functions of DVR can be operated. The DVR collects and processes the video taken in the front, rear, left and right sides of the vehicle, and displays and plays the video on the A/V system display; the recorded videos are stored in the TF card of the AVM ECU.

Click the "AVM/DVR" selection soft key in the upper left corner to enter the DVR-Recording main interface (as shown on the left):

5. Driving Guide

① Power on/off

- Click the soft key  to turn on or off the DVR.

② Photographing

- Click the soft key  to take a photo of the current surround view and save it to the TF card.

③ Video & photo album

- Click the soft key  to enter the Video & Photo Album menu interface.
- Select the desired video or photo in the Video & Photo Album menu interface for display/play, or for locking/deletion when required.

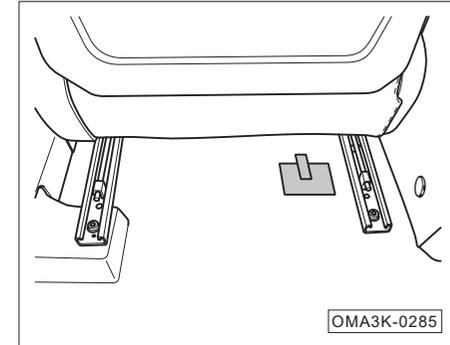
④ Setting

- Click the soft key  to enter the Setting menu interface.
- In the Setting menu, you can change the video recording time, and also format the TF card through the format soft key.

i NOTE

- The video under recording will not be displayed in the menu bar.

Installation location of DVR TF card



The DVR TF card is installed under the front passenger's seat.

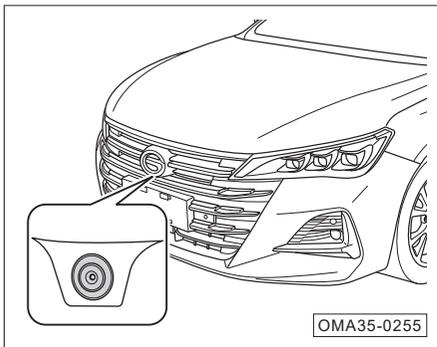
- It can be accessed by unfastening the hook & loop fastener on the carpet.

i NOTE

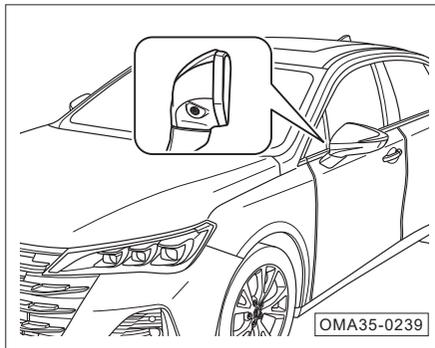
- The vehicle is not installed with a TF card upon delivery, and users need to install a TF card before use. The TF card shall meet the ClassIO standard and has a capacity above 16G.
- Do not pull out the TF card directly during video recording, and instead, operate after the power supply is cut off.

5. Driving Guide

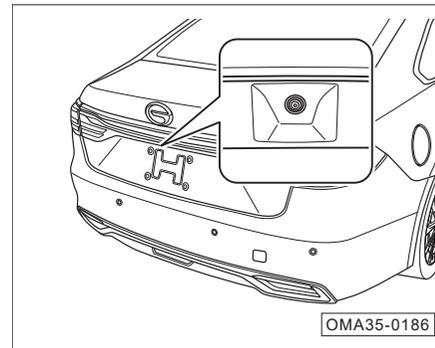
Layout of cameras



The front camera is installed under the front logo.



The left & right cameras are installed on the left & right exterior rearview mirrors.



CCD is installed next to the license plate lamp.

CAUTION

- Please keep the camera surface clean.
- Do not use a high-pressure cleaner to clean the camera for a long time, and be sure to keep the nozzle at least 30 cm away from the camera during cleaning.

5.5.4 Autonomous parking assist (APA) *

The autonomous parking assist (APA) detects the surrounding environment of the vehicle through the ultrasonic sensor to assist the driver in searching for available parking bay(s), and when the APA is working for parking, the driver does not need to operate the steering wheel because APA will automatically control steering, speed, braking and gear position to achieve the APA.

CAUTION

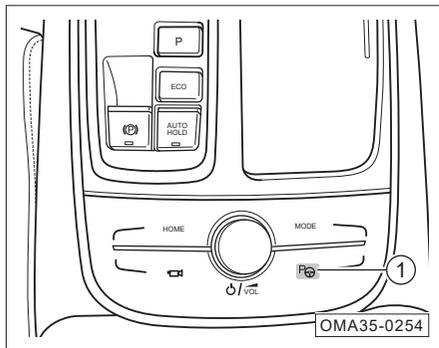
- The APA is only a driver assist system, and thus the driver shall still take full responsibility for the vehicle safety.
- During parking, the driver shall observe the surrounding environment to avoid the driving safety from being affected by obstacles out of the detection capability of the system.

CAUTION

- Although the APA can provide assistance to the driver during parking, it cannot be substituted for the driver, so the driver shall be vigilant during such automated parking!
- When parking starts, do not touch the steering wheel, otherwise the automated parking will be canceled.
- Please find a legal, suitable and safe parking bay while using the system. The APA may be not always able to detect the objects on the parking bay. Therefore, be sure to visually inspect that the parking bay is suitable and safe.
- During parking, always check the surrounding environment of the vehicle and be ready to brake at any time to avoid vehicles, pedestrians or objects.

5. Driving Guide

Switch-on/off



- With gearshift lever at “P/N/D” position, press button  ① once to activate the APA, and then you can select among “Parallel Parking, Vertical Parking and Parallel Unparking” on the center console display; press button  ① twice to deactivate the APA.

i NOTE

- The APA can automatically search for available parking bays on the left and right. If the available parking bays are found on both sides, the driver may select a parking bay by switching on the turn signal lamp of the desired side.
- Then, operate as per the instructions on the center console display for parking while the system is being activated.
- Please drive at a low speed while searching for an available parking bay, because the system will exit when the vehicle speed exceeds 30km/h.
- If the vehicle speed is higher than 7km/h during parking, the system will exit.
- Keep the vehicle 0.6-1.5m away from an obstacle while the system is searching for available parking bays.
- The minimum length of an effective parallel parking bay should be 5.9m; the minimum width of an effective vertical parking bay should be 2.9m.
- At most 8 movements are allowed when the vehicle is being parked into the specified parking bay.
- The tire pressure remains at the factory setting.

The operation required for resuming parking are described as follows:

- If the parking is stopped by releasing the APA button, it can be resumed by pressing and holding the APA button.
- If the parking is stopped when any door other than the driver’s door is opened, it can be resumed by closing the door.
- If the parking is stopped in face of an obstacle, it can be resumed by moving the obstacle away.

5. Driving Guide

Parking cannot be resumed under the following conditions:

- An associated system is faulty.
- A parking failure occurs.
- The vehicle speed exceeds the specified limit.
- The parking duration exceeds the specified limit.
- The times of parking movements exceeds the specified limit.
- The times of pauses during parking exceeds the specified limit.
- The accelerator pedal is intervened.
- The gearshift control is intervened.
- An associated system is activated.
- Parking trajectory is out of the planned range.
- Space of the parking bay is limited.
- Driver's seat belt is unfastened.
- The driver's door is opened.
- The steering wheel or EPB is intervened.
- The vehicle cannot move.
- The trunk lid is opened.
- ACC is activated.

Limitations

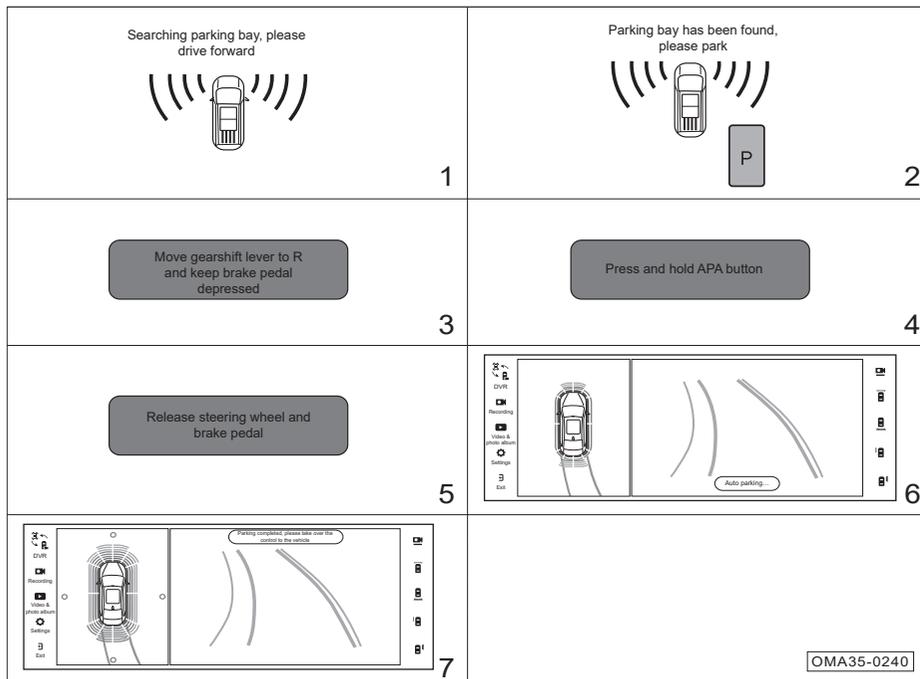
APA may involve safety risk and fail to operate normally under the following conditions:

- Road with a slope.
- Poor visibility (due to heavy rain, snow, fog, etc.).
- Curb made of other materials than stone, or curb out of the detection capability.
- One or more ultrasonic sensors contaminated or blocked by obstacles (such as sludge, ice or snow).
- Bad weather (such as, heavy rain, snow, fog, incredibly high or low temperature) which cause interference with the sensor operation.

- Narrow parking bay.
- Existence of the following objects in the parking bay: objects that cannot reflect the radar signal well, and objects that are not within the detection range of the ultrasonic sensor, such as thin and sharp objects, strip/flake-like objects, columns, low objects and suspended objects.
- Sensors affected by other electrical equipment or devices which can generate ultrasonic waves.

5. Driving Guide

Operation instruction



Take parallel parking as an example:

1. With gearshift lever at "P/N/D" position, press the APA button and select the "Parallel Parking" on the center console display to search for an available parking bay.
2. An available parking bay has been found, please stop the vehicle.
3. Move the gearshift lever to "R" position and apply the brake without release.
4. Press and hold the APA button.
5. Release the steering wheel and brake.
6. APA is working for parking.
7. The parking has been completed.

5.6 Electric power steering (EPS)

The electric power steering (EPS) is a power steering system which directly uses the motor for providing torque. It is mainly composed of a torque sensor, a motor, a retarding mechanism and an electronic control unit (ECU).

The ESP ECU controls the torque provided by the EPS motor in real time by detecting the torque applied by the driver, the vehicle speed, the engine speed and other status signals of the vehicle to augment the steering effort in the best way so as to ensure the easiness of steering at a low speed and the stability of steering at a high speed, and to improve the driving comfort and vehicle safety.

Electric power steering (EPS) indicator lamp

With ENGINE START/STOP button set in "ON" position, the indicator lamp  comes on, and if it goes out several seconds after the engine is started, it means that the system has passed the self-test and no fault is found.

If the indicator lamp  does not go out after the engine is started or goes on during driving, it indicates that the EPS is faulty, and in this case, the instrument cluster will display an alarm message. In this case, it is required to park the vehicle in a safe place, and shut down and restart the engine. If the indicator lamp does not go out or comes on again while driving, stop driving, and contact the GAC Motor authorized shop for inspection.

Steering mode

There are three steering modes: Standard, Sport and Comfort modes, where the hand force of the driver turning the steering wheel in Sport mode will be a little greater than that in the Standard mode, and the system is set to the Standard mode by default. For setting of steering mode, click "Vehicle Settings → Driving Assistance → Steering Mode" on the A/V system display.

CAUTION

To prevent an accident, never set the steering mode during driving.

5. Driving Guide

5.7 Driving skills

5.7.1 Pre-driving safety inspection

Routine inspection

- Check the tire for high/low pressure, cuts, bulges, damage or excessive wear.
- Check whether the wheel studs are missing or loose.
- Check whether the front & rear combination lamps and other lamps work properly; check the lighting direction of the front combination lamp.
- Check that the seat belt is not worn or damaged; check that the seat belt is fastened securely after seat belt fastening.
- Check that the free travel of the pedal is sufficient.
- Check whether the levels of coolant, engine oil, brake fluid and windshield washer fluid are normal.
- Check the battery terminals for corrosion or looseness, and check the battery case for cracks or deformation caused by expansion.
- Check for leakage of fuel, engine oil, water or other fluids under the vehicle, and pay attention that water drip found after A/C operation is normal.

Inspections after starting/during driving

- Check whether the instrument cluster works properly; check whether any indicator lamp come up or any alarm message is shown, etc.
- Check whether all controls (such as the lamplight combination switch, wiper combination switch and defrosting switch) work properly.
- Check that the vehicle does not deviates to one side during braking on a road without safety risks.
- Check for other anomalies, such as part looseness, leakage and unusual noise.

5.7.2 Driving during running-in period

In order to prolong the service life of the vehicle, the vehicle shall be subject to running-in of certain mileage before it is brought into use. Please comply with the following rules in the running-in period:

- The running-in period shall be 1500km.
- Choose roads in good condition and drive it at reduced load and limited speed.
- Do not start the engine with full throttle or drive with harsh acceleration.
- Avoid emergency braking in first 300 km.
- Strictly follow the operating procedures and make sure that the engine has reached normal operating temperature. Do not change the oil before regular maintenance.
- Carry out daily maintenance of the vehicle carefully; check and tighten the external bolts and nuts frequently; check the sound and temperature changes of the assemblies generated by operation and adjust them timely.

Engine running-in

The running-in period of new engine shall be 1500km. Within the first 1000km of driving:

- Keep the vehicle speed no more than 3/4 of the maximum allowable speed.
- Do not drive the vehicle with full throttle.
- Avoid running the engine at high speed.
- Do not tow any trailer.

Within 1000km-1500km, it is allowed to increase the engine & vehicle speeds gradually to the maximum allowable range.

The internal frictional resistance of the engine at the beginning of running-in is much greater than that after running-in, and all the moving parts of the engine can have the best fitting after running-in.

After fully running in, both the service life and the fuel efficiency of the engine can be improved.

Running-in of tire and brake lining

Within the first 500km of driving, drive the vehicle at a moderate speed to get the new tires run in fully.

Within the first 200km-300km of driving, the brake linings have not reached the optimal friction condition, so please drive at a low speed and avoid emergency braking as much as possible.

WARNING

- **A new tire and brake lining will not have the best adhesion and friction characteristics without running-in. Therefore, drive the vehicle cautiously within the first 500km to get the tires fully run in to prevent accidents.**
- **Newly replaced brake lining shall be run in according to the above requirements as well.**
- **During driving, keep an appropriate distance from other vehicles to prevent emergency braking, as the new tires and brake linings have not been fully run in at this time and if an emergency braking is applied, a traffic accident is likely to occur.**

WARNING

- **If a brake is wet or icy or the vehicle travels on a salted road, the braking effect will be reduced.**
- **When the vehicle is being driven downhill, the brake works under a high load so the brake is very easy to overheat. It is recommended to downshift (in manual mode) and reduce the vehicle speed before driving downhill so as to make full use of the engine braking effect to reduce the load on the brake.**
- **Apply the brake according to road and traffic conditions; do not depress the brake pedal when unnecessary, otherwise the brake will overheat due to friction, resulting in longer braking distance and excessive brake wear.**
- **Do not coast with engine shut down, because, when the engine is off, the brake booster cannot work and the braking distance will increase greatly, and an accident is likely to occur.**

5. Driving Guide

5.7.3 Driving essentials

Precautions under various road conditions:

- When the vehicle is driving on a road with crosswinds and gusts, please decelerate in advance and control the speed and steering wheel.
- Avoid driving on sharp-edged objects or other road obstacles, otherwise it may cause serious damage such as tire burst.
- Reduce the speed and drive at a low speed while driving on a bumpy or uneven road; otherwise, the chassis may be scratched, which result in vehicle damage.
- When the vehicle is being driven downhill, decelerate and downshift in advance (in manual mode); avoid emergency braking, otherwise the brake system will overheat or be worn prematurely.
- When the vehicle is running on a slippery road, be careful during accelerating, upshifting/downshifting (in manual mode) or braking; avoid sudden acceleration or emergency braking, otherwise it is likely to cause wheel slip.
- When the vehicle is running on an icy or snowy road, drive at a low and constant speed; avoid sudden acceleration or emergency braking and install tire chains for the wheels when necessary.

Precautions while driving over a water-logged road section:

1. Before driving over a water-logged road section, check the depth of water, which shall not be higher than the lower edge of the vehicle body.
2. Before driving through water, switch off the A/C before starting, decelerate and then gently depress the accelerator pedal without release to drive over the water-logged road section at a stable and low speed.
3. Do not stop the vehicle, reverse or shut down the engine in water.
4. After the vehicle is successfully driven through the water-logged road section, gently depress the brake pedal for several times to evaporate the moisture on the brake discs so as to restore the braking performance as soon as possible.

i NOTE

The brake linings and brake discs are soaked in water while the vehicle is washed or driven over a road with deep water logging, and the braking effect will be greatly reduced; the braking distance will be longer than usual and the vehicle may be deviated to one side, and the parking brake cannot hold the vehicle still. In this case, it is recommended to drive the vehicle at a low speed and constantly depress the brake pedal slightly to remove residual moisture in the brake to recover the braking effect to the normal level. And then, normal driving can be resumed.

Driving essentials in winter

1. Check if the coolant is in good condition and if it has good anti-freeze effect as follows:
 - Fill the cooling system with the coolant of the same type as the original one according to the ambient temperature.
 - Filling unsuitable coolant may cause damage to the engine.
2. Check the battery and cables as follows:
 - A low temperature in chilly days will reduce the capacity of battery, and therefore, fully charge the battery for start-up in winter.
3. Prevent the door lock from being frozen by ice and snow as follows:
 - Spray some de-icer spray or glycerin into the door lock hole to prevent the door lock from being frozen.
4. Use washer fluids containing antifreeze:
 - These products are available at GAC Motor authorized shop.
 - The mix ratio of water to antifreeze shall comply with the manufacturer's instructions.
5. Avoid accumulated ice and snow beneath the mudguard:
 - Accumulated ice and snow beneath the mudguard may result in difficult steering. Stop the vehicle regularly to check for accumulated ice or snow beneath the mudguard while driving the vehicle in severe cold winter.
6. It is recommended to bring some necessary emergency items according to the road conditions, such as:
 - Tire chains, a window scraper, a bag of sand or salt, a flashing light, a plough staff, connecting cables, etc., which are recommended to be placed in the vehicle.
7. In cold winter (especially in northern China), avoid starting the engine frequently and shutting down the engine immediately after a short-time start. If the engine is often in an alternating heat & cold cycle, the condensed water is likely to form in the engine, and when the condensed water adheres to the engine oil, it may give an illusion of water-in-oil emulsion, and after the engine is restarted and warmed up, this illusion will be shattered; in addition, please change the oil regularly as required in the Warranty Manual.

5. Driving Guide

5.7.4 Efficient use of vehicle

- Before driving, make sure that the parking brake is completely released and the parking brake indicator lamp is off.
- Maintain sufficient tire pressure, as a too low tire pressure can cause premature tire wear and higher fuel consumption.
- Ensure that the wheel alignment is accurate. Otherwise, it will cause premature tire wear, increased engine load and higher fuel consumption.
- Do not overload the vehicle, and unload unnecessary items from the vehicle, as excessive load will increase the engine load and the fuel consumption thereafter.
- Accelerate the vehicle slowly and smoothly to avoid rapid acceleration.
- Avoid roads with traffic jams as much as possible as, as driving in traffic jam will increase the fuel consumption.
- Follow the instructions of traffic lights or maintain a safe distance with other vehicles while driving to avoid unnecessary stop or emergency braking, so as to save fuel and reduce wear on the brake system.

- Do not step on the brake pedal when the vehicle is running, for fear of premature wear and overheating of brake linings and waste of fuel.
- When driving, select good road surface. If driving on uneven roads, control the vehicle speed to avoid collision or scratches.
- If the chassis is stained with objects such as excessive dirt, clean them in time to reduce the vehicle's weight and prevent corrosion.
- Perform regular maintenance on the vehicle to maintain its optimal working condition, as dirty air filter, spark plugs, oil, and grease will reduce the engine performance and increase fuel consumption.
- When starting the engine at a low temperature, drive slowly for a few minutes, and ensure the engine is warmed up before acceleration.
- Do not open windows when driving at high speed.
- Properly use the A/C, etc.
- In case of parking for a long time, please shut down the engine to avoid wasting fuel due to long time idling of engine.

5.7.5 Fire prevention

In order to prevent vehicle fires, pay attention to the followings during use:

1. Store flammables or explosives in the vehicle:
 - In hot summer days, the internal temperature of vehicles parked in the sun can be as high as 70°C or more. If flammables or explosives such as lighters, cleaning agents and perfumes are stored in the vehicle, fire and even explosion is likely to occur.
 - Items with risk of fire such as lithium batteries or power banks left in the vehicle by passengers are also likely to cause fire.
2. Make sure the cigarette butts are completely extinguished after smoking:
 - If the cigarette butts are not completely extinguished, fire may be caused.

5. Driving Guide

3. It is recommended to regularly drive to the GAC Motor authorized shop for inspections:
 - Also subject all electric lines of the vehicle to regular inspections. Specifically speaking, check whether the connectors, insulation, and fixing positions of electrical components and harnesses are normal, and handle any problems found during inspection in a timely manner.
4. Never modify the electrical circuits or install additional electrical units:
 - Installation of additional electrical components (such as high-power audio device and xenon headlamps) will cause excessive load on the electrical line, causing overheating and even fire of harnesses.
 - Never use fuses that exceed the rated specifications of the electrical component or other metal wires to replace the fuses.
5. Precautions for driving:
 - During driving and parking, especially in summer, be sure to check if there are flammables such as hay, dry branches, leaves and wheat stalks under the vehicle, as they may be ignited by the components heated after long-time driving, such as engine exhaust pipe.
 - Do not park the vehicle in places involving serious rat infestation, such as garbage dumps, and do not place items that attract rats, such as snacks in the vehicle, because rats will bite through the harnesses and a fire will be caused therefrom.
6. Always place a lightweight fire extinguisher in the vehicle, and know its operation method:
 - In order to ensure the safety of the vehicle, place a fire extinguisher in the vehicle, and regularly check and replace it; at the same time, be familiar with the operation method of the fire extinguisher, so as to be prepared for handling any unexpected fire accident.

6. In-service maintenance

6.1. Maintenance instructions

Safety precautions

To avoid potential hazards, please read this section before work and confirm that you have the necessary tools and techniques.

- Make sure that the vehicle is parked on a level ground, shut down the engine and apply the parking brake.
- When cleaning parts and components, use the commercially available de-greaser or parts cleaner, instead of gasoline.
- Keep lit cigarettes, sparks, and open flames away from batteries and all fuel system related components.
- When working on batteries or with compressed air, wear goggles and protective clothing.

WARNING

Incorrect vehicle maintenance or driving the vehicle before the problem is solved may cause a traffic accident, resulting in serious injury or death.

Potential hazards of the vehicle

- Carbon monoxide: carbon monoxide in the exhaust gas of the engine is toxic. Be sure to start the engine in a well-ventilated place.
- Burns: the engine and exhaust system are at high temperature during operation, which can easily cause burns. Therefore, wait till the engine and exhaust system cool down before touching the related parts and components.

CAUTION

This section lists some of important safety precautions. We cannot list all the dangers you may encounter during maintenance work.

6.2 Interior maintenance

Cleaning and maintenance of instruments and plastic parts

Clean the surface of instruments and plastic parts with a clean soft cloth and clean water.

If it cannot be cleaned, it is required to use a special solvent-free plastic cleaning agent for cleaning.

CAUTION

Solvent-based cleaning agents can damage plastic parts.

WARNING

It is forbidden to use cab sprays and solvent-based cleaning agents to clean the surface of the instrument panel and airbag assembly. Otherwise, it may loosen the surface and trigger the airbag, which may cause serious injury to occupants.

6. In-service maintenance

Cleaning and maintenance of carpet

Vacuum the dust on the carpet frequently.

Scrub the carpet regularly with detergent to keep it clean.

CAUTION

Please perform the cleaning in strict accordance with the use instructions of cleaning agents.

WARNING

It is forbidden to add water to the foam cleaner. The carpet shall be kept as dry as possible.

Cleaning and maintenance of leather*

- Vacuum the dust.
- Clean the leather with a clean soft cloth and clean water.
- Wipe the leather dry with another dry soft cloth.
- If the cleaning methods described above are not enough to clean stains, please combine these methods with special leather cleaning soap or detergent.

CAUTION

If a leather stain remover is used, wipe it dry with a soft dry cloth as soon as possible.

WARNING

Never leave a soft cloth wet with leather stain remover on any part of the interiors for a long time. Avoid discoloring or breaking the resin or fibers of interior fabrics.

Cleaning and maintenance of seat belts

- Pull the seat belt out slowly and keep it being extracted.
- Remove dirt from the seat belt by using a soft brush and neutral soapy water.
- After seat belts dry completely, retract the seat belts.

CAUTION

- Wait till the seat belts dry completely before retracting them. Otherwise, seat belt retractors may be damaged.
- Regularly check all the seat belts in the vehicle to ensure that the seat belts are clean and avoid hindering the normal operation of seat belts.

6. In-service maintenance

WARNING

- **If the seat belt webbing, connectors, retractor mechanism or buckles are damaged, please go to the GAC Motor authorized shop for replacement as soon as possible.**
- **For the overhaul of an accident vehicle, seat belts must be replaced, no matter whether they are damaged or intact.**
- **Avoid foreign objects or liquids entering the seat belt buckles, which may result in the buckles and seat belts not working properly.**
- **Under any circumstances, it is forbidden to remove or modify seat belts without authorization.**
- **It is forbidden to use chemical cleaning agents to clean the seat belts, for fear of damaging the seat belt base and impairing the function of seat belt.**

Cleaning and replacement of filters

The vehicle is equipped with an air filter, an A/C filter, an oil filter, a fuel filter, etc. They aim to filter gas or fluids. If they are too dirty or clogged, the normal operation of corresponding systems will be affected. Therefore, it is recommended to regularly clean or replace the filters at the GAC Motor authorized shop according to the provisions of the *Warranty Manual*.

6.3 Exterior maintenance

Vehicle washing

Washing the vehicle frequently helps to protect its appearance.

Vehicle washing shall be performed in a cool place, rather than under direct sunlight. If the vehicle is left in the sun for a long time, wait till the vehicle body surface cools down before washing the vehicle.

When using an automatic vehicle washer, be sure to follow the instructions of the operator of the automatic vehicle washer.

WARNING

The ENGINE START/STOP button must be set to OFF before vehicle washing.

6. In-service maintenance

CAUTION

The paint surface of the vehicle body is strong enough to withstand the washing of the automatic vehicle washer. However, it is important to pay attention to the effects on the paint surface. The structure of the automatic vehicle washer, the cleaning agent, the filtering state of the clean water, and the type of wax solvent that do not meet the requirements may cause damage to the paint surface.

Manual vehicle washing

- Rinse the vehicle with plenty of water to remove floating dust.
- Prepare a bucket of water and add a special cleaning agent for vehicle washing to it.
- Gently scrub the vehicle with a soft cloth, sponge or soft brush and rinse it several times from top to bottom.
- Rinse the parts such as wheels and door sills at last. Replace sponges or soft cloth while washing the vehicle.
- After scrubbing, rinse the vehicle thoroughly with plenty of water.
- After washing, carefully dry the paint surface of the vehicle using a soft towel or antelope skin.

CAUTION

When the vehicle body has dirt such as asphalt, it needs to be cleaned with a special cleaning agent, and then rinsed with clean water to avoid damaging the surface finish of the vehicle body. Check the body for paint peeling and scratches while wiping the body. If any, drive to the GAC Motor authorized shop for touch-up.

When using a steam cleaner or a high-pressure cleaner to wash the vehicle, be sure to be very careful. Be sure to wash the vehicle in accordance with the operation instructions and requirements of the steam cleaner or high-pressure cleaner. Pay attention to the working pressure, temperature and spraying distance:

- When using a steam cleaner or a high-pressure cleaner to wash the vehicle, keep a sufficient water spray distance from the vehicle, and ensure the temperature does not exceed 60°C.

- If the vehicle is equipped with an electric sunroof, keep the water spray distance more than 80 cm when washing the vehicle. If the high-pressure cleaner is close to the vehicle, or if excessive pressure or temperature is used, the vehicle may be damaged.
- Do not wash a radar sensor or a parking assist camera with a high-pressure cleaner for a long time; when washing the radar sensor or parking assist cameras, keep the water spray distance more than 30 cm.

WARNING

- **When washing the vehicle manually, pay attention to personal safety and beware of angular parts at the bottom of the vehicle to avoid being scratched.**
- **When washing the vehicle, pay special attention to the bottom of the vehicle and the inner side of wheelhouses. Do not hurt hands and arms with sharp parts.**
- **Never spray water directly into the engine compartment when washing the vehicle. Otherwise, it will affect the service life of various parts and components in the engine compartment.**

6. In-service maintenance

Waxing

Regular waxing can protect the paint surface of the vehicle body and keep the vehicle body clean. In order to effectively protect the paint surface of the vehicle body, it is recommended to apply high-quality hard wax once a year to protect the paint surface against corrosion by external bad environments and to resist light mechanical scratch.

Be sure to wipe the appearance of the entire vehicle dry before waxing. Before waxing the vehicle, please select a high-quality wax protectant. High-quality wax protectant generally falls into the following two types:

- Vehicle body wax: a wax used to protect the paint surface against damage by external bad environments such as sun exposure and air pollution. This type of wax is generally used for new vehicles.
- Polishing wax: a wax which can restore the gloss of the paint surface that has been oxidized or tarnished. This type of wax is generally used to restore the gloss of paint surface.

Cleaning and maintenance of external plastic parts

External plastic parts are generally washed with clean water, soft cloth and soft brushes. If they cannot be cleaned, please use the special solvent-free plastics cleaner approved by our company.

CAUTION

Do not use solvent-based cleaning agents when washing plastic parts. Otherwise, it is easy to damage the plastic parts.

Washing of window glasses and rearview mirrors

Clean the window glasses and rearview mirrors with alcohol-based glass cleaner, and then wipe the glass surface dry with a clean, lint-free soft cloth or antelope skin.

After curing the surface of the vehicle body, remove the wax residue on the glasses with a special cleaning agent and cleaning cloth. Avoid scratching the wiper blades.

Remove snow from the windows and rearview mirrors using a small brush.

Remove accumulated ice using de-icing spray. An ice shovel can also be used, but special care must be taken to avoid damage to the components, and ice must be shaved in the same direction.

CAUTION

- It is forbidden to scrape the surface back and forth.
- It is forbidden to remove ice and snow from the windshields and rearview mirrors using warm water or hot water. Otherwise, the windshields may burst.
- If there are residual objects such as rubber, grease and silicone on the glass, they must be removed with a special window cleaner or silicone cleaner.

6. In-service maintenance

Cleaning of wiper blades

- Raise the wiper arm and carefully wipe off the dust and dirt on the wiper blade with a soft cloth.
- After cleaning, gently lower the wiper arm back to the windshield.

CAUTION

- Be careful when lowering the wiper arm to prevent it from falling and hitting the windshield instantly.
- The wiper blades are coated with a layer of graphite which makes the wiping operation smooth and does not produce scraping noise. Solvent-based cleaning agents, hard sponges and sharp objects can damage the graphite layer. Damaged graphite layer will increase the wiping noise of the wiper, and the wiper shall be replaced in time.
- In winter or cold conditions, be sure to check whether the wiper blade is frozen together with the windshield before using the wiper. If so, perform de-icing first. Otherwise, the wiper blade and wiper motor will be damaged.

Maintenance of sealing strips

Frequent and proper protection of the rubber sealing strips of the doors, windows and other parts of the vehicle is intended to maintain their flexibility and prolong their service life. Such protection can also improve the tightness, make the door easy to open, reduce the impact sound of closing the door, and prevent freezing in winter.

When performing maintenance on sealing strips, remove dust and dirt from surfaces using a soft cloth. Apply special protective agent to rubber sealing strips regularly.

Cleaning and maintenance of wheels

Regularly remove anti-skid salts on the wheels and debris on the brake linings, keep the wheels aesthetic, maintain the surface smooth and prolong the service life of wheels. It is recommended to perform the following operations regularly:

- Remove anti-skid salts on the wheels and debris on the brake linings using acid-free detergent every two weeks.
- Apply high-quality hard wax to the alloy wheels every three months.

CAUTION

- It is prohibited to maintain the wheel surface with vehicle polish or other abrasives.
- The wheels with damaged protective coating on surface must be repaired in time.
- Using a high-pressure cleaner may cause permanent visible or invisible damage to the wheels, resulting in serious injury or death.
- It is forbidden to use cluster head nozzles to spray the tires. Otherwise the tires will be damaged, causing traffic accidents.

6. In-service maintenance

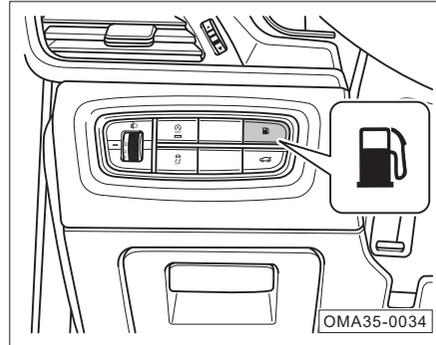
6.4 Inspecting and adding fluids

6.4.1 Fuel

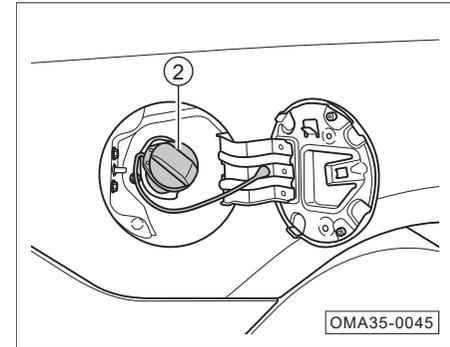
As the amount of fuel decreases when the vehicle is running, the fuel gauge scale will gradually decrease. => [See page 39](#)

When the fuel level is too low, the yellow indicator lamp  flashes, and the instrument cluster will give an alarm message. At this time, fuel shall be added as soon as possible.

Adding fuel

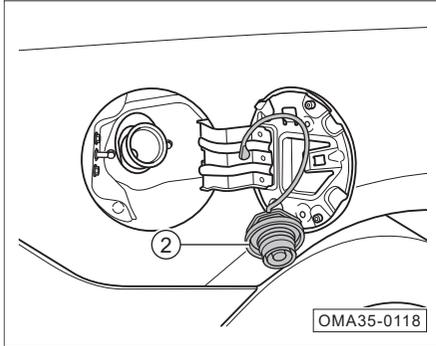


- Press and hold the fuel tank cap opening button  to make the fuel tank cap pop up.



- Open the fuel tank cap, and slowly unscrew the filler cap ② counterclockwise. Keep the filter cap ② at the original place for a while when it is unscrewed completely to allow fuel tank to release the fuel vapor inside, and then remove it.

6. In-service maintenance



- Suspend the fuel filler cap ② tether on the inner side of the fuel tank cap and start adding fuel.
- After adding the fuel, tighten the fuel filler cap ② clockwise till the "click" sound is heard, which indicates that the flap has been tightened.

i NOTE

Grade of fuel: 92# or above high-quality lead-free gasoline

i NOTE

This model complies with China VI emission standards. The fuel supply system of China VI is designed with a closed fuel and gas recovery system. During refueling, the fuel gun switch may be triggered due to high ambient temperature or high fuel flow rate, and the fuel gun is switched off when the fuel tank is not filled fully. This is a normal phenomenon. At this time, the refueling speed shall be slowed down.

👁 CAUTION

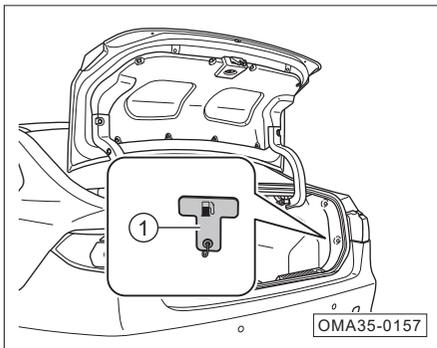
Low-grade fuel or substandard fuel may damage the engine or make the engine fail to meet performance requirements.

⚠ WARNING

- **At any time, be sure to shut down the engine when refueling, and pay attention to open flames and fire.**
- **Please avoid contact of fuel with skin or clothing.**
- **Please refuel the vehicle according to the vehicle fuel grade. If fuel not complying with the regulations is added accidentally, do not start the engine. Please contact the GAC Motor authorized shop immediately for treatment.**

6. In-service maintenance

Emergency unlocking



When the battery is out of power or the electric switch of the fuel tank cap does not work, open the fuel tank cap by the following steps:

- Open the trunk lid.
- Pull the emergency unlock switch ① to unlock the fuel tank cap.

6.4.2 Engine oil

Function of engine oil

Engine oil has functions such as lubrication, sealing, cooling, anti-rusting and cleaning.

Specifications of engine oil

The engine has been filled with high-quality engine oil, which can be used in the year-round climate except for extreme cold weather before delivery.

When purchasing engine oil, please check whether the specifications indicated on the outer packaging of the engine oil are suitable for the engine of this vehicle.

i NOTE

- Engine oil grade: SN and above.
- Engine oil viscosity: SAE5W-30.

⚠ WARNING

Always use the engine oil approved by our company. Otherwise, the ensuing engine damage will not be covered by the warranty.

i NOTE

- Be sure to go to the GAC Motor authorized shop to change the engine oil according to the period specified in the Warranty Manual.
- If the vehicle is running under severe conditions, fuel with high sulfur content is used, engine idles for a long time (e.g., a taxi), the vehicle is driven in a high-dust area, the vehicle often tows a trailer, or the vehicle is used in an alpine area, the maintenance periods shall be shortened and the maintenance times shall be increased.

6. In-service maintenance

Low oil pressure warning lamp

When driving, if the warning lamp  comes on, be sure to stop the vehicle in a safe place and shut down the engine. After the engine cools down, check the oil level.

If the engine oil level is normal, but the warning lamp is still on after the engine is started, do not continue to start the engine. In this case, contact the GAC Motor authorized shop timely for inspection.

WARNING

- Ignoring the warning lamps and related warning instructions may damage the engine.
- The low oil pressure warning lamp can not indicate the oil level, and the oil level must be checked regularly.

Inspecting the oil level

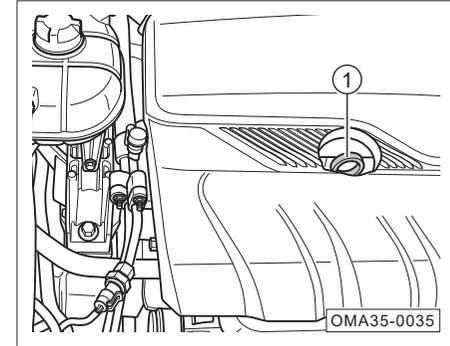
Be sure to check the oil level regularly. Park the vehicle on a level ground, apply the park brake, and shut down the engine. After the engine cools down, open the engine hood and check the oil level.

WARNING

- Be extremely careful when working in the engine compartment.
- The engine compartment is a high-risk area. Be sure to read and follow the relevant warning instructions carefully before opening the engine hood.

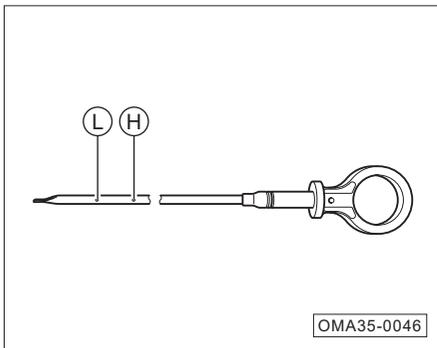
NOTE

While checking the oil level, ensure the engine is cold.



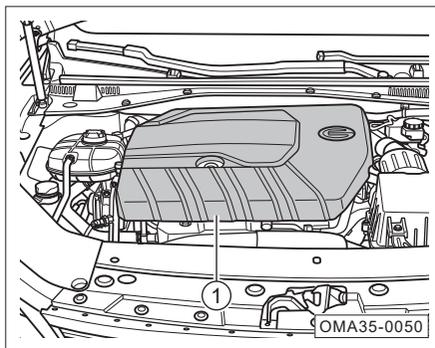
- Pull out the oil dipstick ①.

6. In-service maintenance



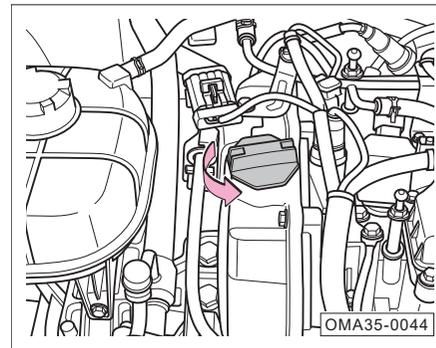
- Wipe off the oil stains on the dipstick using a clean cloth, and then insert the oil dipstick to the end.
- Pull out the oil dipstick again and read the measured oil level, which shall be between “L” (lower limit mark) and “H” (upper limit mark).
- If there is too little engine oil, please add engine oil in time. Otherwise, poor lubrication will damage the engine.

Adding engine oil



After checking the oil level, if required, add engine oil following the steps below:

- Remove the engine upper guard plate assembly ① by lifting it.



- Unscrew the oil filler cap counterclockwise.
- Add small amounts of engine oil repeatedly, and check the oil level after each filling.
- When the oil level is close to the upper limit mark “H”, indicating the engine oil is sufficient, stop adding oil, refit the oil filler cap and tighten it clockwise.

WARNING

- Be careful while adding the engine oil. Do not spill it. If the engine oil gets on skin, be sure to rinse the skin thoroughly.
- If too much oil is added, do not start the engine. In this case, please contact the GAC Motor authorized shop as soon as possible. Otherwise, the three-way catalytic converter may be damaged.
- After filling, be sure to tighten the oil filler cap to prevent the engine oil from splashing when the engine is being started, for fear of a fire.
- Since engine oil is toxic, it shall be stored in the original container and kept out of children's contact to avoid poisoning due to accidental ingestion.
- Do not add any lubricants to the engine oil. Otherwise, the engine will be damaged. Engine failure caused by adding lubricants is not covered by the warranty.

6.4.3 Coolant

Function of coolant

Coolant has functions such as cooling, anti-freezing and anti-corrosion.

Specifications of coolant

When the vehicle leaves the factory, the cooling system has been filled with coolant, which can be used in the year-round climate except for extreme cold weather.

NOTE

Specifications of coolant: DF-6, -35 °C.

NOTE

- Be sure to go to the GAC Motor authorized shop to change the coolant according to the period specified in the Warranty Manual.
- If the coolant discolors, the maintenance period shall be shortened and the coolant shall be changed at the GAC Motor authorized shop.

High engine coolant temperature indicator lamp

If the coolant temperature is too high, the indicator lamp  on the instrument cluster comes on in red, and an alarm message is given to prompt the driver; at this time, the vehicle must be stopped in a safe place and the engine shut down. After the engine cools down, check the coolant level.

If the coolant level is normal but the indicator lamp is still on after the engine is started, do not continue to start the engine. In this case, contact the GAC Motor authorized shop timely for inspection.

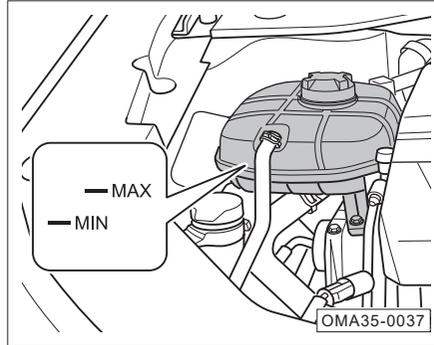
6. In-service maintenance

Inspecting the coolant level

Be sure to check the coolant level regularly. Park the vehicle on level ground, apply the park brake, and shut down the engine. After the engine cools down, open the engine hood and then check the coolant level.

WARNING

- **The engine compartment is a high-risk area. Be sure to read and follow the relevant warning instructions carefully before opening the engine hood.**
- **If steam or coolant flows out from the engine compartment, do not open the engine hood, for fear of burns; wait till there is no steam or coolant overflowing and the engine cools down before opening the engine hood.**



Check whether the coolant level in the expansion tank is between the upper limit mark "MAX" and the lower limit mark "MIN".

NOTE

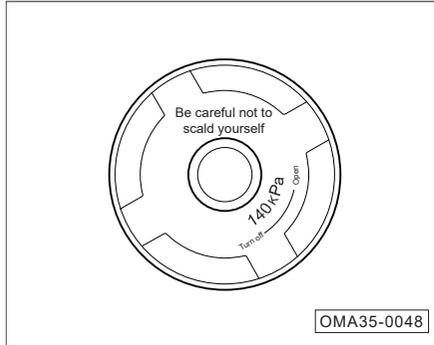
When the engine is not cooled, the coolant level will be high, and there will be errors in checking the coolant level.

CAUTION

When the coolant level is lower than the lower limit mark "MIN", coolant must be added. Too little coolant will affect the cooling effect and cause engine damage.

6. In-service maintenance

Adding coolant



After checking the coolant level, if required, add coolant following the steps below:

- Wrap the expansion tank cap with a thick cloth and unscrew it counterclockwise.
- Add coolant to a level between the upper limit mark "MAX" and the lower limit mark "MIN".
- Tighten the expansion tank cap clockwise.

CAUTION

- When the engine is not cooled, the cooling system is under high pressure. In this case, do not open the expansion tank cap, otherwise the emerging coolant will cause scald.
- Coolant can only be added after the engine has cooled down. The coolant level after filling must not exceed the upper limit mark "MAX". Otherwise, when the engine is started and the cooling system is under high pressure, coolant will overflow.
- Only fresh coolant is allowed to be added.

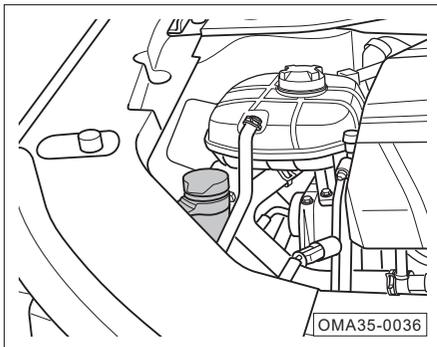
WARNING

- It is forbidden to mix coolant that is not approved by our company in the original coolant.
- In case of emergency, if other coolant is used or pure water is added, go to the GAC Motor authorized shop to clean the cooling system and change the coolant in time.
- If the too much coolant is consumed or it is consumed too fast, there may be a leak in the cooling system. In this case, please go to the GAC Motor authorized shop for inspection in time.
- Coolant must be contained in the original container, and kept out of children's contact to avoid poisoning due to accidental ingestion.

6. In-service maintenance

6.4.4 Windshield washer fluid and wiper blades

Adding windshield washer fluid



If the level of the washer fluid is too low, the washer fluid shall be added in time.

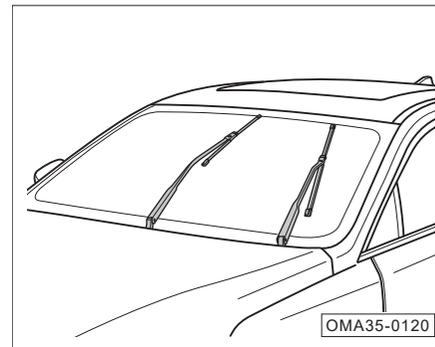
CAUTION

Do not mix and use the windshield washer fluid with other cleaning liquids. Otherwise, the washer fluid will decompose and block the nozzle of the windshield washer.

WARNING

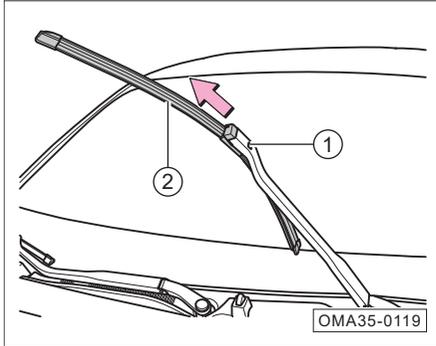
- Be extremely careful while working in the engine compartment. Before operation, be sure to carefully read and follow the relevant warning instructions.
- Do not misuse coolant or any other additives as windshield washer fluid. Otherwise, oil stains will be left on the windshield during cleaning of the windshield, which will affect the visibility and easily cause accidents.
- It is forbidden to use windshield washer fluid with more than 10% ethanol content. In high temperature environment, this type of windshield washer fluid will cause corrosion and even crack of tail lamps. It is recommended to use methanol washer fluid.

Replacing front windshield wiper blades



- Set the ENGINE START/STOP button to the "ON" position and then to the "OFF" position.
- Move the wiper combination switch to the "MIST" position within 10 s. The wiper arm will stop after running for half a circle.

6. In-service maintenance



- Lift up the wiper arm, press the lock button ①, and slide the wiper blade ② upward in the direction of arrow to remove it.
- Install the new wiper blade into the wiper arm in reverse steps. It is installed in place when a “click” is heard.
- Gently put the wiper arm back into the windshield.
- Set the ENGINE START/STOP button to the “ON” position to let the wiper arm automatically return in place.

If replacing wiper blades is required, it is recommended to go to the GAC Motor authorized shop for replacement.

CAUTION

- When lifting the wiper arm, please grasp the wiper arm with hands, rather than grasp the soft wiper blade.
- New wiper blades with the same length and specifications as the previous ones must be used.
- Be careful while lowering the wiper arm to prevent it from falling and hitting the windshield instantly.
- The status of the wiper blades must be checked regularly, and the wiper blades must be replaced as specified. Damaged wiper blades must be replaced in time.
- Excessively worn or dirty wiper blades are very easy to scratch the windshield and will affect the field of vision when used, reducing driving safety.

6.4.5 Brake fluid

Function of brake fluid

Brake fluid is used to transmit power in the hydraulic brake system of the vehicle.

The brake fluid is water-absorbent, so it can continuously absorb moisture in the surrounding air during use. If the brake fluid stays in the system for too long and absorbs too much moisture, air resistance will generate in the system pipeline during braking, reducing the braking effect and impairing driving safety; it may even cause the complete failure of the brake system, resulting in accidents. Therefore, be sure to go to the GAC Motor authorized shop to check the brake fluid level or change the brake fluid according to the period specified in the *Warranty Manual*.

i NOTE

Specifications of brake fluid: DOT4.

6. In-service maintenance

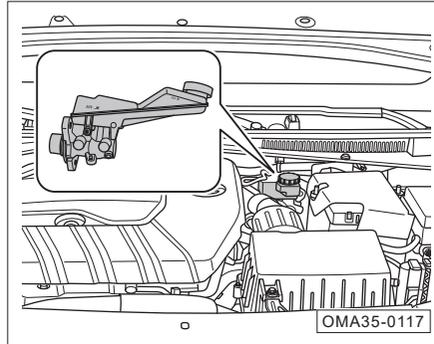
WARNING

- Using waste brake fluid or using brake fluid not applicable to the vehicle will remarkably reduce the braking effect and even cause the brake system to fail! The company does not assume any responsibility (including quality guarantee) for vehicle failures and damage caused thereby.
- Brake fluid in use must meet the criteria and be fresh.

Brake system indicator lamp

When the vehicle is running, if the indicator lamp  comes on in red, and the instrument cluster displays the information "Please add brake fluid", be sure to immediately stop the vehicle at a safe place and check whether the brake fluid level is normal.

Inspecting brake fluid level



When the engine cools down, check whether the brake fluid level is between the upper limit mark "MAX" and the lower limit mark "MIN".

During vehicle use, the brake fluid level will slightly drop due to the worn brake linings and automatic adjustment.

If the brake fluid level drops significantly in a short period of time or drops below "MIN", it indicates that the brake system may leak.

NOTE

- After check of the brake fluid level, if the fluid level is below "MIN", brake fluid must be added.
- If the brake system warning lamp does not go out or comes on again after the brake fluid is added, there may be a leak in the brake system, causing the brake fluid level to drop quickly, or the brake system malfunctions. In this case, do not continue to drive and contact the GAC Motor authorized shop in time for inspection.

Adding brake fluid

In order to ensure the normal operation of the brake system, the added brake fluid shall meet the specifications:

- Open the brake fluid reservoir cap counterclockwise.
- Add fresh brake fluid to the upper limit mark "MAX" and stop adding.
- Tighten the brake fluid reservoir cap clockwise.

6. In-service maintenance

CAUTION

- The brake fluid will corrode the paint surface of the vehicle body. Brake fluid splashed on the paint surface shall be wiped off in time.
- Using waste brake fluid or using brake fluid not applicable to the vehicle will remarkably reduce the braking effect due to incompatibility and even cause the brake system to fail.

WARNING

- **Brake fluid is toxic. It must be contained in the original sealed container, placed in a safe place, and kept out of children's contact to avoid poisoning due to accidental ingestion.**
- **Brake fluid must be stored in accordance with environmental protection laws.**

6.4.6 Battery

Warning symbols and instructions for battery operation

	Goggles must be wore during operation!
	The battery electrolyte is highly corrosive. Protective gloves and goggles must be wore during operation!
	Open flames, sparks, uncovered lamps and smoking are prohibited in the workplace!
	Very explosive gas mixture is generated when the battery is being charged!
	Children must stay away from electrolytes and vehicle batteries!

If not familiar with the operation process or without special tools, never carry out any operations on the electrical system of the vehicle. The relevant operations shall be carried out by the GAC Motor authorized shop.

Charging system warning lamp

The warning lamp is used to indicate alternator failure.

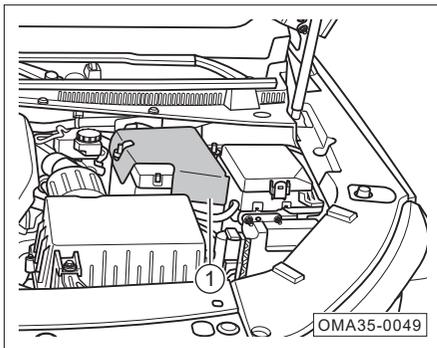
When the ENGINE START/STOP button is set the "ON" position and the engine is not started, the warning lamp  comes on. After the engine is started, the warning lamp shall go out.

When the vehicle is running, if the warning lamp comes on, it indicates that the alternator is no longer charging the battery. In this case, please go to the GAC Motor authorized shop for inspection as soon as possible.

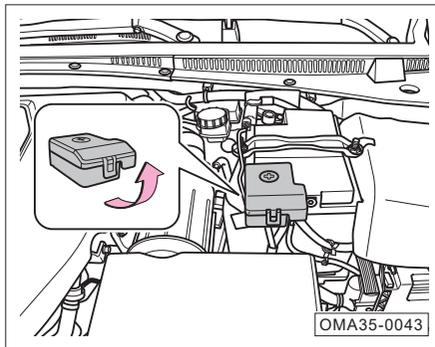
6. In-service maintenance

Inspecting the battery

The battery must be checked according to the period specified in the Warranty Manual.



- Open the battery heat shield ①.



- Flip up the cover of the battery positive terminal.
- Check the connection of the battery connector and the cable for corrosion or looseness; check the appearance of the battery for cracks, swelling, etc. If the phenomena above are found, please go to the GAC Motor authorized shop for inspection as soon as possible.
- If the vehicle is not in use for a long period of time, check the battery condition frequently.

i NOTE

- If the battery is low in power or damaged, making the engine difficult to start, please contact the GAC Motor authorized shop to charge or replace the battery.
- If it is required to replace the battery, please go to the GAC Motor authorized shop for replacement; if a wrong type of battery is used, the vehicle may not run due to incompatibility or the electrical system may fail.

6. In-service maintenance

Instructions for using the battery

After the engine is turned off, the battery will quickly discharge when an electrical consumer on the vehicle is being used:

1. Do not use an electrical consumer on the vehicle for a long time after the engine is turned off.
2. While leaving the vehicle, make sure that the doors are closed and all electrical consumers (e.g., lamps) are turned off.

CAUTION

- If the engine can not be started due to depleted battery, please try emergency start. If the engine still can not be started, please contact the GAC Motor authorized shop for overhaul.
- To avoid damage to the electrical system of the vehicle, never connect power generation equipment such as solar panels or vehicle battery chargers to a 12V power outlet.
- The battery contains toxic substances such as sulfuric acid and lead, so it must be disposed of properly and must not be treated as ordinary household waste.

6.5 A/C filter

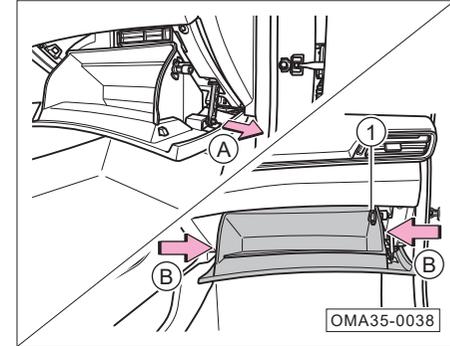
Inspecting and cleaning the A/C filter

Check or clean the A/C filter regularly according to the provisions in the Warranty Manual. If the vehicle is running in harsh conditions and the A/C filter gets too dirty, it is recommended to replace the A/C filter at an interval shorter than that specified.

NOTE

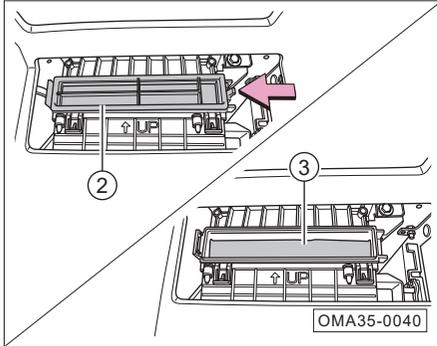
If it is impossible to remove and refit the A/C filter by yourself, please go to GAC Motor authorized shop for professional help.

Removing and installing A/C filter



1. Open the glove box cap.
2. Disconnect the glove box from the damper in the direction of arrow A.
3. Unscrew the glove box support block ① counterclockwise.
4. Press the glove box in the direction of arrow B and disconnect the glove box from the instrument panel assembly by pulling the glove box.
5. Remove the glove box.

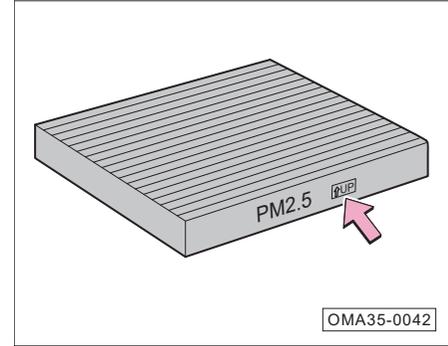
6. In-service maintenance



5. Press the filter element cover clip in the direction of arrow to take out the filter element cover ②.
6. Take out the A/C filter ③. Tap the A/C filter to remove the dust.
7. Refit the A/C filter as per the reverse steps.

CAUTION

- Because the fiber layer on the back of the A/C filter can not be blown off with an air gun, it can not be cleaned and needs to be replaced in time after getting dirty.
- Because the A/C filter is made of special material which shall not be washed with water. Otherwise, dust will accumulate and form clots, which will cause decreased air volume of A/C or even blockage.



- The A/C filter should be installed according to the upward mark on it.

6.6 Replacing bulb

Instructions for replacing bulbs

When replacing bulbs, be careful not to touch the bulb glass with fingers. Otherwise, the heat of the bulb will evaporate the grease on the bulb from fingerprints and condense it on the bulb glass, reducing the illuminance of the lamp.

After replacing bulbs, be sure to check the operating status of lamps, and go to the GAC Motor authorized shop to check the beam status in time.

i NOTE

- Lamps for the vehicle include halogen and LED types. If the halogen bulb is damaged, please go to the GAC Motor authorized shop for replacement.
- The removing and installing methods of the left and right bulbs are basically the same. Here only the removing and installing methods of halogen bulbs on one side are described.

CAUTION

Damaged bulbs must be replaced with new ones with the same specifications; for the specific specifications => [See page 273](#).

WARNING

If you are unfamiliar with the operation process, safe operation specifications and tool operation methods, do not replace bulbs yourself.

- **Turn off all lamps before replacing bulbs, and wait for bulbs till they are cool before replacement.**
- **Pay attention to the sharp parts on the combination lamp housing in the engine compartment during operation, and be careful not to scratch hands while replacing bulbs.**

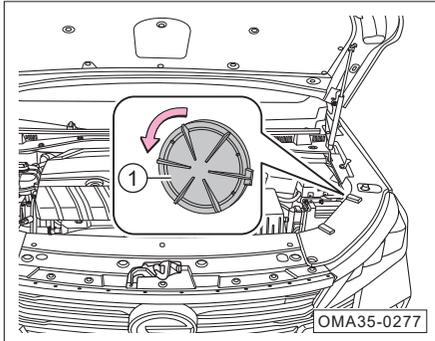
Preparation for replacing bulbs

If it is found that any bulb is damaged, replace the bulb as soon as possible. Before replacement, make the following preparations:

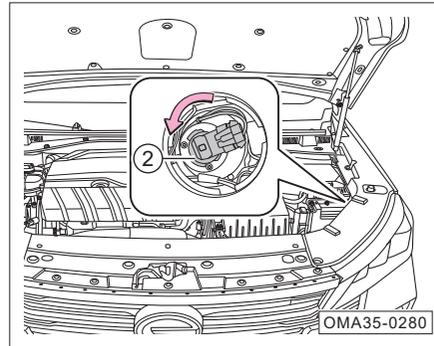
1. Turn off all lamps.
2. Set the ENGINE START/STOP button to the "OFF" position.
3. Check whether the related fuse is blown. When the fuse is in good conditions, perform bulb inspection and replacement.

6. In-service maintenance

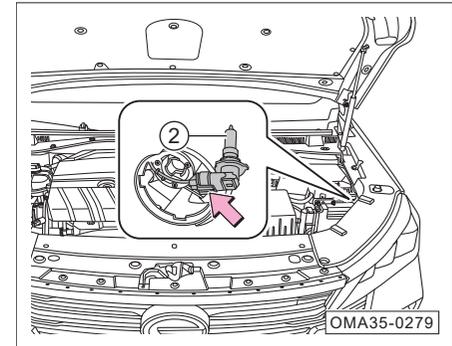
Replace the low beam bulb



1. Unscrew the low beam sealing cover ① counterclockwise.



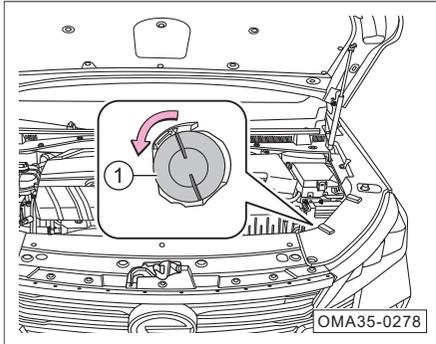
2. Unscrew the low beam bulb ② counterclockwise.



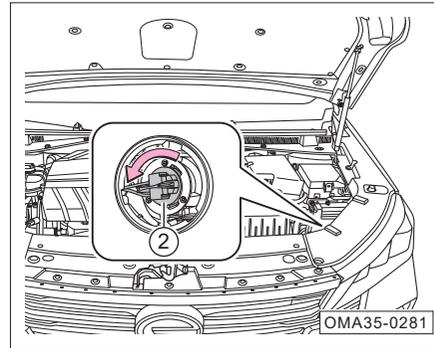
3. Use a slotted screwdriver to slightly pry the connector clip as arrowed, and pull out the low beam bulb ②.
4. Install the new low beam bulb in the reverse order.

6. In-service maintenance

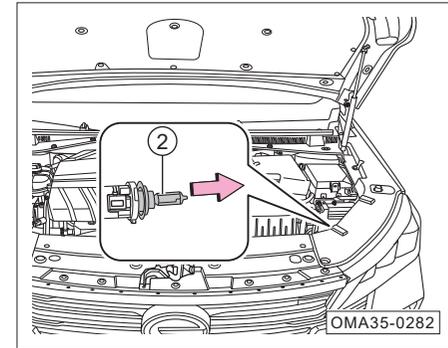
Replace the high beam bulb



1. Unscrew the high beam sealing cover ① counterclockwise.



2. Unscrew the high beam bulb ② counterclockwise.



3. Pull out the high beam bulb ② in the direction of arrow.
4. Replace the original bulb with a new high beam bulb in the reverse order.

6. In-service maintenance

6.7 Wheels

WARNING

Within the first 500 km, the road adhesion of new tires is unlikely to reach the best condition. Therefore, the vehicle shall be driven carefully at a moderate speed to prevent accidents.

- Inadequate road adhesion of tires not subject to running-in period or excessively worn can directly affect the braking effect.
- If it is found that the vehicle is abnormally vibrating or deviating, stop the vehicle immediately and check whether the tires are damaged.
- If it is found that the tires are unevenly and excessively worn, please go to the GAC Motor authorized shop for inspection as soon as possible.

WARNING

If tires burst or leak when the vehicle is running, it is very easy to cause serious traffic accidents.

- Never use damaged tires and wheels, or use tires of which the treads have been worn to the wear indicators. Otherwise, it is very easy to cause an accident, because such tires may burst during driving, causing traffic accidents and injury. Such tires and wheels shall be replaced in time.
- The tire pressure must meet the regulations. Otherwise, it may cause an accident. If the tire pressure is insufficient, the continuous high-speed running of the vehicle will cause the tire to deflect, and the tire is extremely easy to overheat, which may cause tread separation or tire burst.
- Be careful not to expose the tires to chemicals, oil, grease, fuel and brake fluid.

WARNING

- Never use old wheels and tires of unknown origin under any circumstances. Although such wheels and tires do not have visible damage, they may have been damaged. During driving, they may cause the vehicle to lose control and lead to traffic accidents.
- It is not recommended to use recycled tires. For such tires, the carcass may degrade as the service time passes, and the durability may also be restrained, impairing the driving safety.

6. In-service maintenance

Precautions for wheel failure

- When driving over curbs or similar obstacles, keep a slow speed in the vertical direction of the obstacles as much as possible.
- Be careful not to let the tires contact with grease, oil and fuel.
- Regularly check the damage status of tires (i.e., splitting, abrasion, shedding, deformation or bulging).
- Regularly remove debris embedded in the grooves of the tire pattern.

Instructions for storing tires

- Before removing the tire, make a mark on the tire to indicate the rotation direction of the tire. Refit the tire according to the mark to ensure the rotation direction and the dynamic balance of the wheel are unchanged.
- Store the removed wheels or tires in a cool, dry place, and preferably in a dark place.
- The tire mounted on the rim must not be stored upright.

New tires and wheels

- Select the new tire and wheel carefully, and make sure that the dimensions, load range, rated speed and structure type of new tire are the same as those of original one.
- Replace at least two tires on the same axle at the same time, rather than only one tire individually.
- Do not use tires of different dimensions or types, and do not mix summer tires, all season tires and winter tires in use.
- Once wheels are installed, check whether the tightening torque (125 ± 10 N m) of the wheel bolts meets the requirements.

Non-full-size spare tires

Spare tires and standard tires are different in aspects such as structure, pattern, speed rating and load index, and can not be exchanged.

After emergency use of the spare tire, it is necessary to drive safely to the GAC Motor authorized shop or the wheel repair shop as soon as possible to replace it with a standard tire, so as to avoid the hidden safety hazards of long-term use of the spare tire.

WARNING

- **Spare tires can only be used temporarily for emergency, and the maximum driving speed shall not exceed 80 km/h.**
- **The storage and service life of spare tires is 6 years. It is prohibited to use them beyond the time limit.**

6. In-service maintenance

Summer tires

Summer is a rainy season. The tire tread depth directly affects the driving safety in rainy days. In summer, when the tire tread depth is less than 3 mm, there is a high risk of water slippage.

Winter tires

Winter tires still have good grip performance when roads are covered with snow and ice. The specially designed rubber tread makes the tires less affected by low temperature environment and excellent braking ability, ensuring driving safety.

- Use winter tires on all the four wheels.
- It is recommended to use winter tires while driving in icy or snowy days in winter or when the temperature is below 7°C.
- Use only radial winter tires of same dimensions, load range and rated speed as original ones on this vehicle.

- Please note that the tread of winter tires shall have patterns deep enough (tread depth not less than 4 mm; otherwise, the applicability in winter will be limited).
- After installation of tires, check the tire inflation pressure.

WARNING

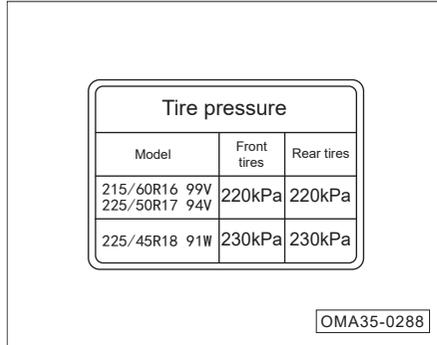
- **Winter and summer tires are designed according to their respective typical lane conditions under the corresponding seasonal conditions. It is recommended to use winter tires in winter. At low temperatures, the adaptability of summer tires is significantly poorer, thereby losing road adhesion and braking ability.**
- **If summer tires are used in severe cold conditions, cracks may appear on the tires, thereby completely damaging the tires, and causing excessive tire noise and loss of balance.**

WARNING

- **Winter tires may lead to decreased traction force of the vehicle on dry roads, increased road noise and shortened service life of tread. Please pay attention to the performance change of the vehicle in terms of maneuvering and braking after the winter tires are used.**
- **Please note that the maximum speed for winter tires is relatively low. Do not exceed the allowable maximum speed for the tires.**
- **Please note that please replace the winter tires with summer tires in time in order to ensure driving safety and performance when driving in the environment at the atmospheric temperature rising above 7°C.**
- **When driving with winter tires, if a spare tire is installed, unstable steering characteristics may occur due to different tires, weakening driving stability. In this case, driving styles need to be adjusted and driving shall be performed carefully.**

6. In-service maintenance

Inspecting tire pressure



The standard tire pressure data label of the original tire of this vehicle is attached to the B pillar on the driver's side.

- Check the tire pressure applicable to the vehicle from the data label (the listed pressure apply to both summer and winter tires).
- Unscrew the valve cap (if the valve cap is missing, a new one shall be provided in time).
- A high-quality tire pressure gauge is required to check the tire pressure. It is impossible to determine whether the tire pressure is appropriate only by visual inspection.

- Attach the tire pressure gauge to the valve.
- For inspection of tire pressure, the tire must be in a cold state. When the temperature increases, the tire pressure can be slightly higher than the specified value, and it is not necessary to reduce the tire pressure.
- Balance the weight of occupants and luggage, avoid slopes and adjust tire pressure according to vehicle load.
- Check the tire pressure of the spare wheel or emergency spare wheel at the same time.
- Install and tighten the valve cap.

NOTE

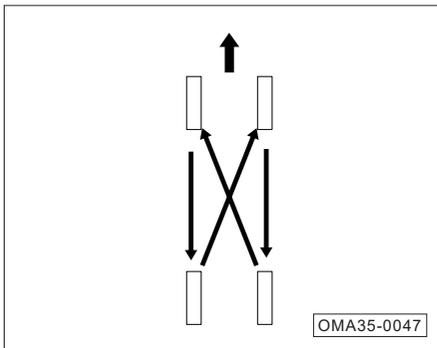
- The current tire pressure of the wheel can be checked through the information on the display of the instrument cluster.
- Be sure to refit the valve cap to the valve core. The valve cap can prevent dust and moisture from entering the tire.

WARNING

- **Abnormal tire pressure may cause tire burst, resulting in a traffic accident, injury or even death.**
- **Check the tire pressure at least once a month and before long-distance driving. The tire pressure must meet the specified requirements to prevent accidents.**
- **Insufficient tire pressure will exacerbate tire deflection, and tires are extremely prone to overheating, which may lead to tread separation and tire burst.**
- **Abnormal tire pressure, too low or too high, will cause early wear of tires and reduce the maneuvering stability of the vehicle.**

6. In-service maintenance

Service life of tires



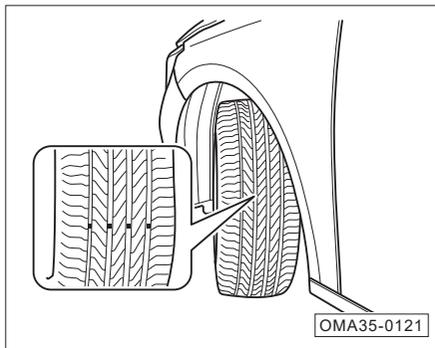
Service life of tires depends on tire pressure, driving style and tire assembly conditions.

If the front tires are worn more serious than the rear tires, it is recommended to perform tire rotation for the front and rear wheels as shown, so as to make the service life of all tires about the same.

WARNING

For vehicles with a tire pressure monitoring system, tire rotation or replacement needs to be operated by professionals at the GAC Motor authorized shop.

Tread wear indicator



The tread wear indicator is 1.6 mm high. If the tread pattern wears to the marked surface, the tire can no longer be used safely and must be replaced immediately.

Wheel balance

The wheels of the new vehicle are already balanced. Due to various reasons, the wheels may go unbalanced during operation, which can be manifested by the vibration of the steering mechanism.

Because unbalanced wheels can cause excessive wear on the steering system, wheel suspension mechanism and tires, the wheels shall be rebalanced.

In addition, wheels must be rebalanced after installation of a new tire or tire repair for any wheel.

Wheel misalignment

Wheel misalignment will cause uneven and excessive wear of the tires, affecting driving safety. If uneven and excessive wear of the tires is found, please go to the GAC Motor authorized shop to check the wheel alignment as soon as possible.

6.8 Tire chain

In winter, driving in harsh environments such as snowy or icy roads can increase the degree of tire wear or cause other failures. To reduce failures in winter, the following opinions must be followed:

- When driving in deep snow, it is necessary to install tire chains on the tires. If so, be sure to choose an equivalent product whose size and type meet the specifications of the tires on the vehicle. Failure to do this will adversely affect the performance and safety of the vehicle. Moreover, operations such as full-load driving, speeding, emergency acceleration, emergency braking, and emergency turning are potentially dangerous.
- During deceleration, make full use of the engine braking function. Emergency braking on snowy or icy roads will cause the vehicle to flick and slip. Maintain an appropriate safety distance from the vehicle in front, depress the brake pedal slightly, and pay attention to that installing tire chains on the tires can increase certain friction force, but can not prevent side slipping.

NOTE

Various countries and regions have different regulations on tire chains. Before assembling tire chains, please refer to the laws and regulations of the corresponding country and region. Do not install tire chains without understanding the laws and regulations of the corresponding country and region that may restrict the use of tire chains.

CAUTION

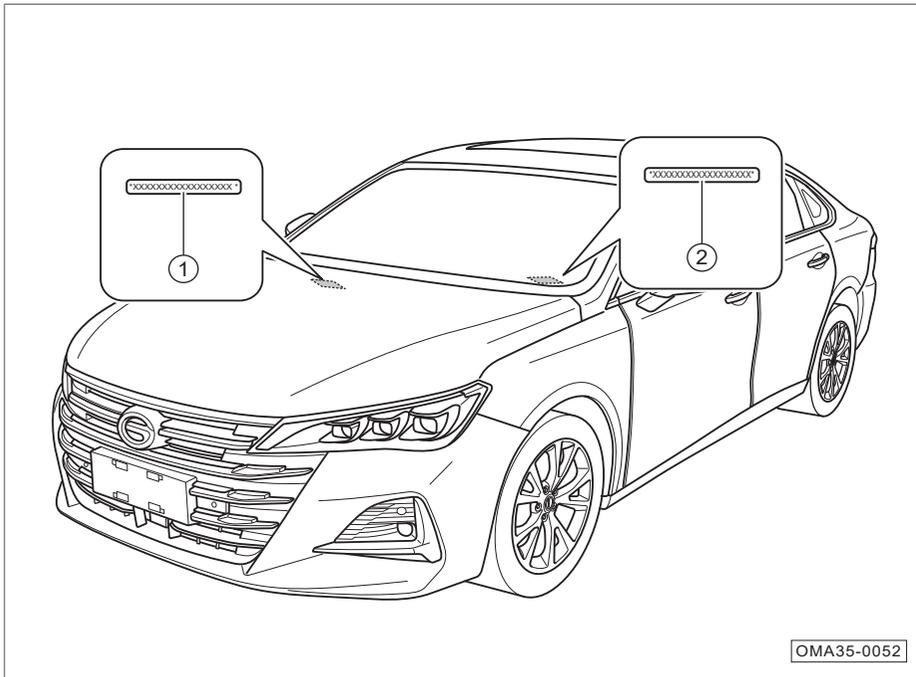
- For installation of tire chains on all tires, ensure that the vehicle can be driven in a balanced manner in all weathers. It shall be borne in mind that after installation of tire chains, the vehicle may be underpower. Even if the road surface is in good condition, drive carefully. While driving, neither exceed the specified speed limit of tire chains nor exceed 50 km/h, whichever is lower.

CAUTION

- If tire chains are installed on the tires, the size and type of tire chains shall be consistent with those of the standard tires of the vehicle. Otherwise, the driving safety and maneuvering of the vehicle will be adversely affected.
- Tire chains must be installed in pairs on the front wheels rather than on the rear wheels.
- Do not install the tire chain on an emergency spare tire. If a spare tire is installed on the front wheel and a tire chain is required, be sure to exchange the positions of the spare tire and the rear tire.
- Do not use tire chains on dry ground. After driving to snow-free roads, remove tire chains.
- After installing the tire chains as closely as possible to the front tires, drive 0.5-1.0 km and then tighten the tire chains again. Tighten the tire chain again.

7. Technical data

7.1 VIN



The locations of the vehicle identification number (VIN) is shown in the figure:

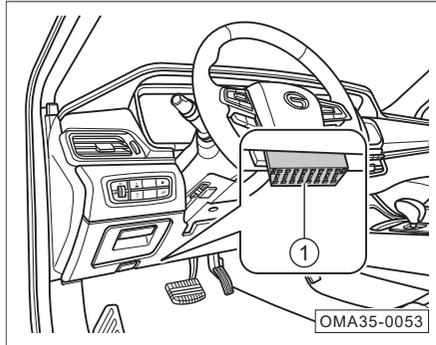
- ① VIN: located on the engine compartment partition.
- ② VIN: located on the left side of the instrument panel.

i NOTE

The position indication and quantity of vehicle identification number (VIN) are not complete. Please refer to the actual vehicle.

7. Technical data

OBD DLC

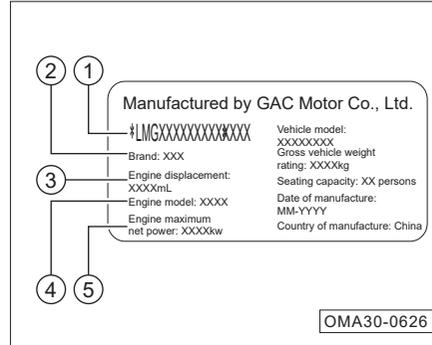


The OBD interface ① for reading the electronic VIN is located at the lower left rear of the instrument panel. Data such as the electronic VIN and vehicle status information can be read through a special scan tool.

i NOTE

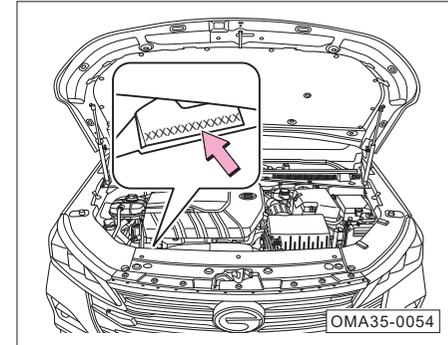
If you need to buy a scan tool, you can go to the GAC Motor authorized shop for consultation and purchase.

Vehicle nameplate



- ① VIN, vehicle model
- ② Brand, gross vehicle weight rating
- ③ Engine displacement, seating capacity
- ④ Engine model, date of manufacture
- ⑤ Maximum net power of engine, country of manufacture

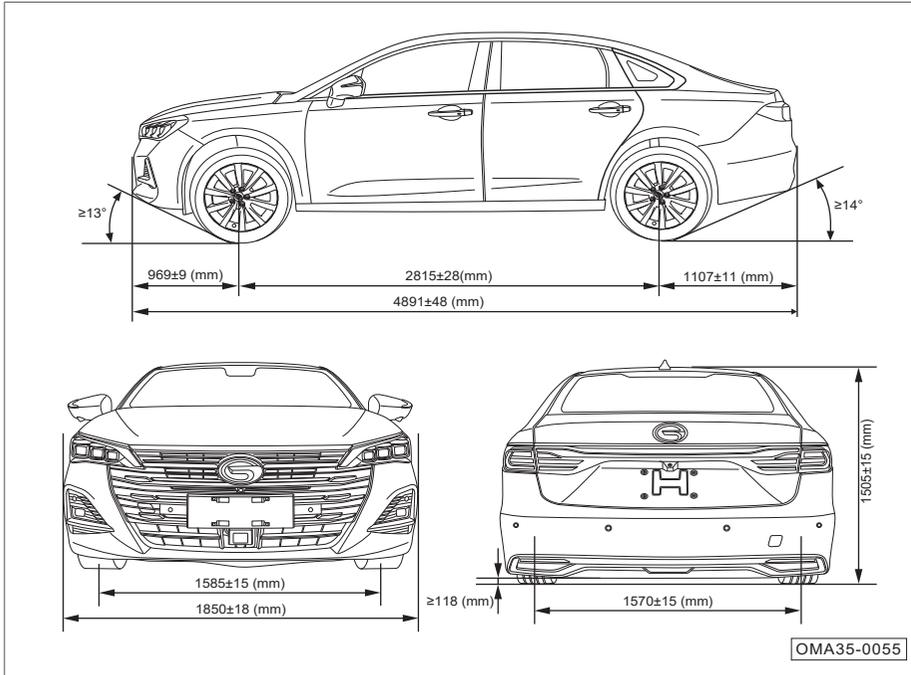
Engine model and factory number



Engine model and factory number as arrowed are indicated on the engine block (behind the alternator).

7. Technical data

7.2 Dimensions & parameters of vehicle



Dimensions

Item Value	Parameters		
	Unit		
Overall length	4891±48	mm	
Overall width	1850±18	mm	
Overall height	1505±15	mm	
Wheelbase	2815±28	mm	
Wheel track	Front wheel	1585±15	mm
	Rear wheel	1570±15	
Front overhang	969±9	mm	
Rear overhang	1107±11	mm	
Minimum ground clearance (full load)	≥1118	mm	
Approach angle (full load)	≥113	°	
Departure angle (full load)	≥114	°	

Note: External rearview mirrors (one on the right and one on the left) near the junction of the lower end of the A pillar and the front door and the antenna above the rear of the roof are not included in the overall width.

7.3 Vehicle mass & parameters of engine and fluids

Mass

Model:	Kerb mass of vehicle (kg)			Gross vehicle weight rating (kg)		
	Kerb mass (kg)	Front axle	Rear axle	Gross vehicle weight rating	Front axle	Rear axle
GAC7152B1A6 GAC7152B1A6A GAC7152B1A6B GAC7152B1A6C	1455±43	872±26	583±17	1887	1004	883
GAC7152B2A6 GAC7152B2A6B	1498±44	897±26	601±18			
GAC7152B2A6A GAC7152B2A6C	1512±45	899±26	613±18			

7. Technical data

Comprehensive parameters

Item	Performance parameter		Unit
	GAC7152B1A6	GAC7152B1A6A	
	GAC7152B1A6B	GAC7152B1A6C	
	GAC7152B2A6	GAC7152B2A6A	
	GAC7152B2A6B	GAC7152B2A6C	
Seating capacity	5	5	Person
Minimum turning diameter	≤11.5	≤11.5	m
Maximum gradeability	≥40	≥40	%
Time required to accelerate from 0 km/h to 100 km/h after start	≤10.5	<10.5	s
Maximum speed	≥200	≤200	km/h
Fuel consumption in urban driving cycle	≤8.9	≤8.3	L/100km
Fuel consumption in extra-urban driving cycle	≤5.3	≤5.2	L/100km
Fuel consumption in combined driving cycle	≤6.6	≤6.3	L/100km

7. Technical data

Parameters of engine

Model:	4A15J1
Type	Gasoline engine, spark-ignition, in-line, four-stroke, liquid-cooled, direct injection, double overhead camshafts, exhaust gas turbocharging
Number of cylinders	4
Ignition order	1-3-4-2
Bore (mm)	75
Travel (mm)	84.6
Displacement (mL)	1495
Compression ratio	9.8: 1
Rated power/speed (kW/(r/min))	124/5000
Maximum net power/speed (kW/(r/min))	117/5000
Maximum torque/speed (N m/(r/min))	265/1700~4000
Maximum net torque/speed (N m/(r/min))	250/1700~4000
Stable idling speed (r/min)	700±50
Emission level	China VI

7. Technical data

Specifications and capacity of fuel/oil/fluid

Item	Specification	Capacity	
Fuel	92# or above high-quality lead-free gasoline ¹⁾	-	55L
Engine coolant ²⁾	DF-6, -35°C	Capacity	7.2L
Engine oil:	Engine oil grade: SN grade and above Engine oil viscosity: SAE5W-30	Capacity	4.5L
ATF	AW-1	Capacity	6.7L
Brake fluid	DOT4	-	0.8L
Windshield washer fluid	44% methanol, and 56% water with hardness not more than 205 g/t	-	1L
A/C refrigerant	R134a	-	470±25g

Notes: 1) Long-term use of fuels with a sulfur content higher than the standard value may result in excessive emissions. Please pay attention and use fuels that comply with local standards for vehicles.

2) Including the coolant in the expansion tank and the residual coolant in the engine.

7.4 Transmission and chassis parameters

Transmission parameters

Model:	TF-71SC
Type	Hydraulic automatic transmission, 6-speed
Final ratio	3.944
1st gear	4.044
2nd gear	2.371
3rd gear	1.556
4th gear	1.159
5th gear	0.852
6th gear	0.672
Reverse gear	3.193

Wheels

Specifications of rim	6.5Jx16*, 7Jx17*, 7.5Jx18*	
Tire specification	215/60R16*, 225/50R17*, 225/45R18*	
Tire pressure	Front wheel	Rear wheel
	220kPa (215/60R16, 225/50R17)	220kPa (215/60R16, 225/50R17)
	230kPa (225/45R18)	230kPa (225/45R18)
Specifications of spare rim	4Tx16	
Specifications of spare rim	T135/80D16	
Pressure of spare tire	420kPa	

Note: The standard tire pressure data label of the original tire of this vehicle is attached under the B pillar on the driver's side.

7. Technical data

Suspension

Type	Front suspension	Rear suspension
	McPherson, independent	Multi-link, independent

Steering gear

Type	Rack and pinion
Power steering type	Electric power steering

Brake

Type	Vacuum booster, X-type hydraulic double circuit
Front wheel	Disc brake
Rear wheel	Disc brake
Parking brake	Electric park brake (EPB)

Drive mode

Drive mode	Front-wheel drive

Dynamic balance of wheels

Designation		Residue dynamic unbalance
Front wheel	Inner side	≤ 8 g
	Outer side	≤ 8 g
Rear wheel	Inner side	≤ 8 g
	Outer side	≤ 8 g

Free travel of brake pedal

Designation	Parameters
Travel	106mm
Free travel	10.5mm

Technical parameters of brake linings

Designation	Parameters
Wear limit of front wheel brake lining (excluding the backplate of brake lining)	2mm
Wear limit of rear wheel brake lining (excluding the backplate of brake lining)	2mm

7. Technical data

Wheel alignment

Designation		Parameters
Front wheel	Individual toe-in	2' ±3'
	Wheel camber	-15'±30'
	Kingpin caster angle	7°22'±45'
	Kingpin inclination angle	12°54'±45'
Rear wheel	Individual toe-in	5' ±3'
	Wheel camber	-51' ±30'

Battery

Model:		LOC H5 AGM (for model with STT)	SLII5 (for model without STT)
Parameters	Rated voltage	12V	12V
	Capacity at 20 hr	60Ah	55Ah
	Low temperature start current (EN)	680A	530A

Fuse

Instrument panel PDU	=> See page 283
Engine compartment PDU	=> See page 286

Lamps

Lamps		Model:	Power
Front combination lamp	High beam	H7 (Halogen)	12V55W
	Low beam	HB3 (Halogen)	12V60W
	High beam	LED	/
	Low beam	LED	/
	Daytime running lamp*	LED	/
	Front position lamp	LED	/
	Front turn signal lamp	LED	/
Side turn signal lamp of rearview mirror		LED	/
Front fog lamp		LED	/
Front fog lamp		H16 (Halogen)	12V19W
Rear fog lamp		P21W	12V21W
Rear combination lamp	Brake lamp	LED	/
	Rear position lamp	LED	/
	Rear turn signal lamp	LED	/
	Reverse lamp	LED	/
License plate lamp		LED	/
High-mounted stop lamp		LED	/
Front dome lamp		LED	/
Rear dome lamp		LED	/

7. Technical data

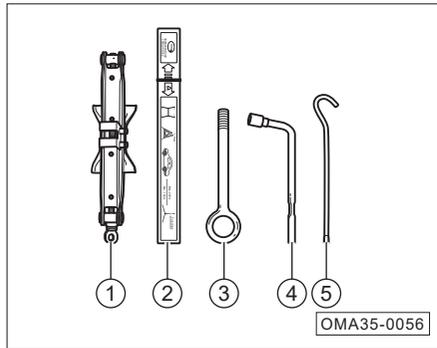
Lamps		Model:	Power
Interior lamps	Courtesy lamp*	T10WB (matte version)	12V5W
	Glove box lamp*	LED	/
	Trunk lamp*	C10W	12V10W
	Smart ambient light*	LED	/
	Sun visor vanity mirror lamp	LED	/

For replacement of bulbs => [See page 255](#), some bulbs are only suitable for certain models. The actual vehicle configuration shall prevail!

8. Accident handling

8.1 Driver's tools and spare tire

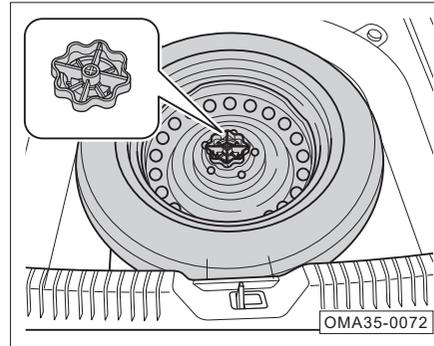
Driver's tools



The following tools are provided with this vehicle. After use, they shall be cleaned in time and placed in the tool kit.

- ① Jack
- ② Warning triangle
- ③ Towing hook
- ④ Wheel bolt removal wrench
- ⑤ Special wrench for jack

Installing spare tire



Remove the spare tire:

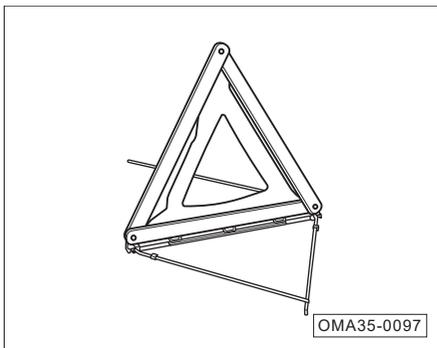
- Open the trunk lid and remove the trunk carpet.
- Take out the driver's tool kit.
- Turn spare tire center handwheel and take out the spare tire.
- The spare tire has been inflated. Check its pressure regularly to ensure that it is at the specified maximum tire pressure, and perform multiple inspections every year.

⚠ WARNING

- The spare tire shall be used strictly in accordance with its use requirements to avoid danger.
- It is strictly prohibited to install and use more than 1 spare tire at the same time.
- It is forbidden to use spare tires that have been damaged or worn to the limit.
- The storage and service life of spare tires is 6 years. It is prohibited to use them beyond the time limit.
- After installing the spare tire, check the tire pressure as soon as possible to keep it within the specified range.
- The maximum speed of spare tires must not exceed 80 km/h, and sharp acceleration and emergency braking shall be avoided.

8. Accident handling

8.2 Use of warning triangle



- Open the trunk lid to take out the warning triangle and unfold it for use.

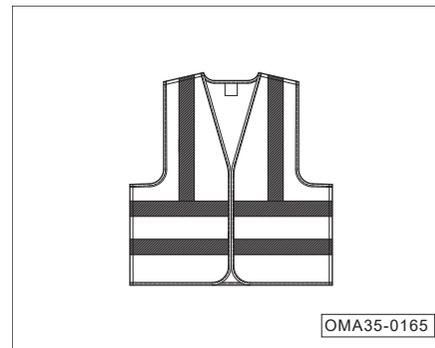
Placement distance

Ordinary highway		Expressway
Daytime	Night	
≥ 50 m	≥ 80m	≥ 150m

 **CAUTION**

The data above is for reference only.
Please place the warning triangle at the distance specified by traffic regulations.

8.3 Use of reflective vest



- If it is necessary to stop the vehicle due to an accident or other failures, take out the reflective vest from the glove box to put on it well before getting off the vehicle for checking and troubleshooting.

8. Accident handling

i NOTE

- While handling vehicle accidents, be sure to wear a reflective vest as required to attract the attention of passersby or other drivers regardless of the lighting conditions.
- After using the reflective vest, please store it in the glove box properly. If necessary, clean it according to the indication on the collar mark to maintain the reflective performance.

8.4 Replacing flat tires

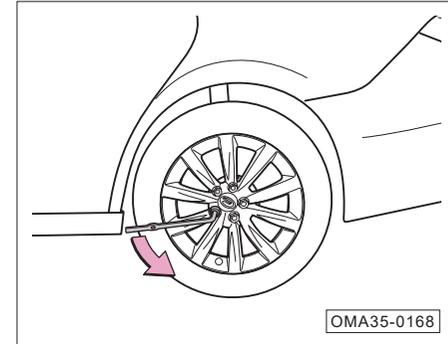
Preparations

- Apply the parking brake.
- Shift the transmission to “P” position.
- Set the ENGINE START/STOP button to the “OFF” position, and turn on the hazard warning lamp.
- Place a warning triangle in a suitable position behind the vehicle.
- Find a suitable object to wedge the wheel in the diagonal position of the one to be replaced to prevent the vehicle from moving.
- Take out the driver's tools and the spare tire.

⚠ WARNING

- **Relevant regulations must be strictly followed.**
- **All occupants must leave the vehicle and wait in a safe place.**

Unscrewing the wheel bolts



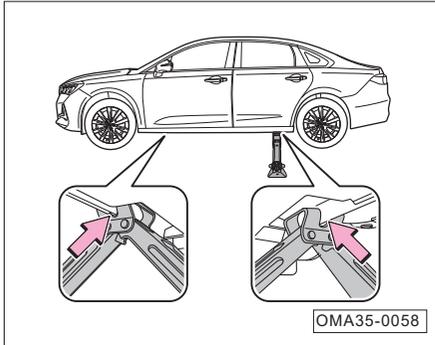
Set the wheel bolt removal wrench firmly on a wheel bolt, and unscrew the wheel bolt counterclockwise.

i NOTE

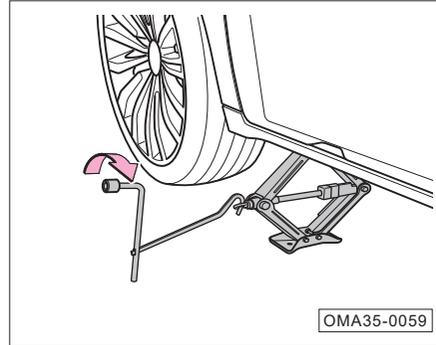
Loosen the wheel bolts just one turn before lifting the vehicle. After lifting the vehicle, unscrew the wheel bolts completely, and then remove the flat tire.

8. Accident handling

Lifting the vehicle



- Place the jack directly under the spine closest to the flat tire.
- Extend the jack high to ensure that the groove of the jack can engage with the spine.
- Check whether the jack is stable and tightly attached to the ground.



- Assemble the wheel bolt removal wrench, the special wrench for jack and the jack.
- Extend the jack clockwise to lift the vehicle and lift the tire off the ground.

WARNING

Improper use of jacks will cause serious injury.

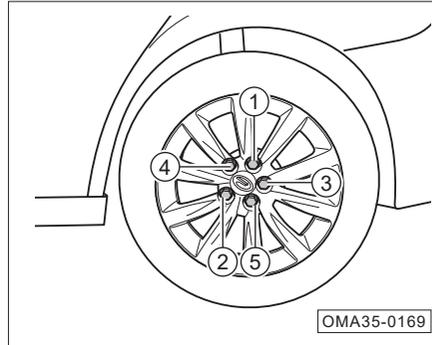
- The jack must be used on a hard and flat ground or a hard pad (not thicker than 1 cm) may be placed under the jack as needed.
- Strictly observe the precautions for jack operation.
- If a trailer is connected to the vehicle, the trailer must be separated from the vehicle.
- Observe the status of the vehicle continuously during the lifting. If the vehicle body is noticeably tilted, stop the lifting, identify the problem, and then lift the vehicle after solving the problem.

8. Accident handling

WARNING

- The jack on the vehicle can only be used to lift the vehicle rather than other heavy objects or vehicles.
- While using the jack, do not start the engine; otherwise an accident may occur.
- While lifting the vehicle with a jack, remember not to place any part of your body under the vehicle to avoid accidents.
- If it is required to work under the vehicle, be sure to place a suitable protective support under the vehicle.

Installing spare tire



- Install the spare tire to the vehicle.
- Install all the wheel bolts, and pre-tighten them using the wheel bolt removal wrench according to the sequence ①~⑤ in the figure.
- Give a verbal alert to confirm that nobody is around the vehicle, and then rotate the jack wrench counterclockwise to lower the vehicle.
- Tighten all wheel bolts using the wheel bolt removal wrench.

- In order to avoid the noise of the vehicle during driving later on, please remember the locations of various tools, put them back in place after use and fix them.

CAUTION

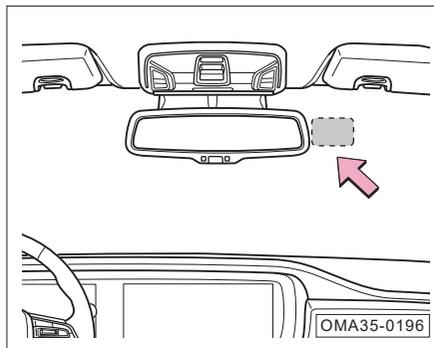
After installing the wheel, please go to the GAC Motor authorized shop in time to check the tightening torque of the wheel bolts ($125\pm 10\text{N}\cdot\text{m}$). Otherwise, the bolts may loosen while the vehicle is running, which is prone to cause traffic accidents.

8. Accident handling

WARNING

- The thread on the wheel bolt and the hub must be kept clean and free from adherent matters such as grease so that the bolt is easy to tighten.
- For replacement of a tire, if the bolts are rusted or difficult to be tightened, they must be replaced and the thread hole cleaned.
- When the spare tire is not in use, it must be securely fixed in the place where the spare tire is mounted.

8.5 Microwave window



- The microwave window is set on the right of the front windshield corresponding to the interior rearview mirror.

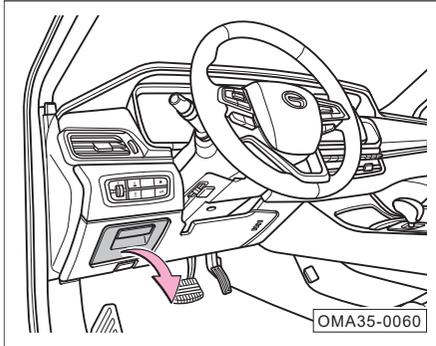
NOTE

The microwave window can be used for installation of ETC card.

8. Accident handling

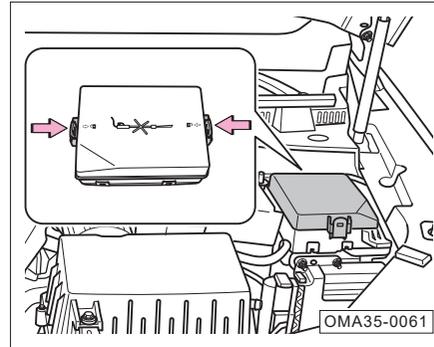
8.6 Fuse

Instrument panel PDU



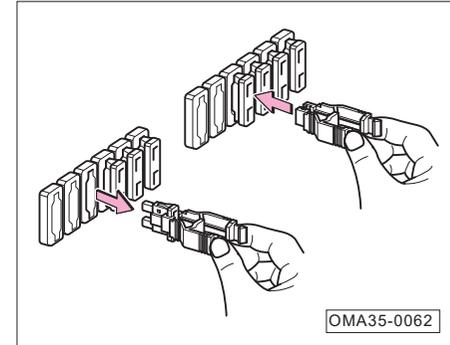
- Open the cab lower protective plate storage box in the direction of arrow and pull it out to see the fuse above the instrument panel PDU.

Engine compartment power distribution unit



- Open the engine hood.
- Press the fixing clip in the direction of arrow to release the cover of the PDU.
- The fuse above the engine compartment PDU is exposed when the cover of the PDU is removed.

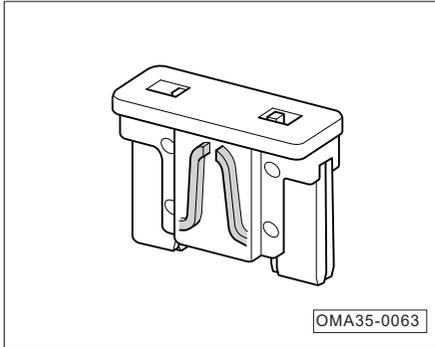
Replacing fuse



- Remove or install the fuse using the fuse puller in the engine compartment PDU.

8. Accident handling

Blown fuse



- If the fuse has blown, it is recommended to replace it at a GAC Motor authorized shop.

i NOTE

Some electrical consumers may be equipped with multiple fuses each, or multiple electrical consumers may share a single fuse.

👁 CAUTION

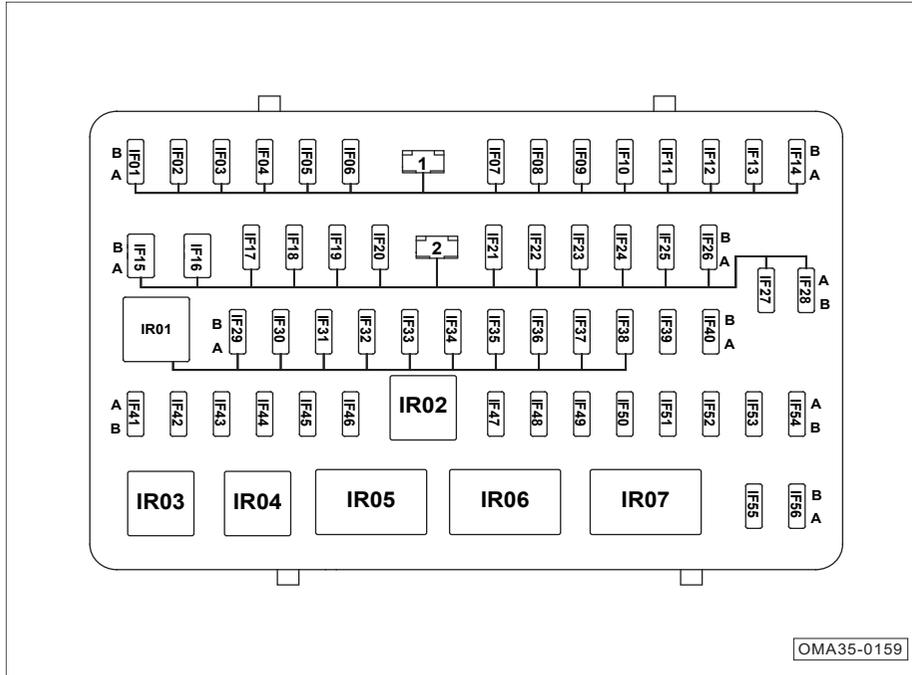
- All electrical consumers must be turned off before replacement of fuses.
- If it is required to replace the fuse, please consult the GAC Motor authorized shop.

⚠ WARNING

- **Fuses must not be reused.**
- **Do not use a fuse with rated current higher than the specified value, otherwise other components of the electrical system will be damaged.**
- **Using an inappropriate or repaired fuse will cause a short circuit or even a fire.**
- **The color and logo of the replaced fuse must be exactly the same as the original one.**
- **Never replace a fuse with metal sheets, clips, etc.**
- **The PDU must be kept clean inside. Pay attention to protection against moisture.**

8. Accident handling

8.6.1 Fuses in instrument panel PDU



The picture is not guaranteed to be suitable for all vehicle models. If it is required to know the purpose of the fuse, please check it on an actual vehicle. The fuses may slightly vary from vehicle to vehicle.

8. Accident handling

No.	Rated value	Feature/component
IF01	20A	Electric adjustment of right front seat*
IF02	20A	Electric adjustment of left front seat*
IF03	20A	Power sunroof control unit*/panorama sunroof control unit*/panorama sunroof sunshade motor*
IF04	—	—
IF05	20A	BCM (right front door window regulator motor)*/right front door window regulator motor (with express-up & down)*
IF06	20A	Left front door window regulator motor
IF07	20A	BCM (right rear door window regulator motor)*/right rear door window regulator motor (with express-up & down)*
IF08	20A	BCM (left rear door window regulator motor)*/left rear door window regulator motor (with express-up & down)*
IF09	15A	Amplifier module*
IF10	15A	Amplifier module*
IF11	15A	BCM (wiper and washer)
IF12	10A	MSM*/rearview mirror folding relay*
IF13	—	—
IF14	—	—
IF15	30A	DC-DC converter*
IF16	30A	DC-DC converter*/instrument panel PDU*
IF17	7.5A	OBD DLC
IF18	20A	BCM (main lamps)

No.	Rated value	Feature/component
IF19	7.5A	GWM
IF20	30A	GSM
IF21	10A	BCM (turn signal lamp)
IF22	30A	GSM
IF23	7.5A	PEPS ECU
IF24	20A	BCM
IF25	7.5A	High-mounted stop lamp
IF26	20A	BCM (door lock)
IF27	10A	Fuel filler cap lock relay/fuel filler cap lock motor
IF28	SHUNT	Shorting link
IF29	10A	SRS ECU
IF30	7.5A	ECM/TCU
IF31	7.5A	GWM/BCM/PEPS ECU
IF32	—	—
IF33	7.5A	SAS/electric power steering control unit/GSM
IF34	7.5A	Brake switch/ESPI
IF35	7.5A	RPA ECU*/brake switch/ESPI/SVM ECU*/APA control unit*/LDW ECU*/MRR*/ACU/T-BOX control unit*/DC-DC converter*
IF36	7.5A	IPC

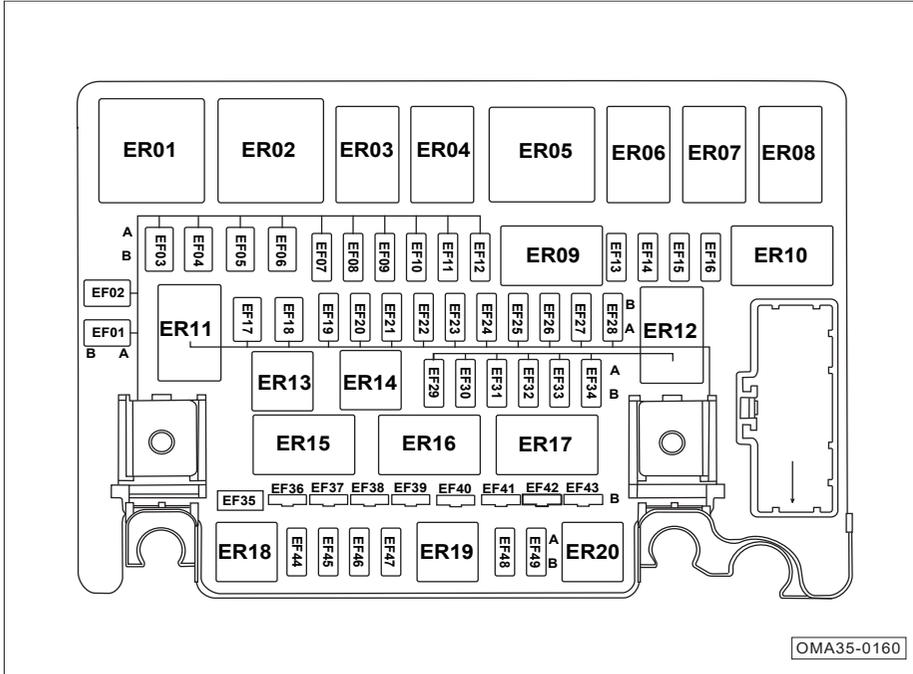
8. Accident handling

No.	Rated value	Feature/component
IF37	7.5A	Left front combination lamp (adjustment motor)/right front combination lamp (adjustment motor)/air quality sensor*/ALS switch/negative ion generator*
IF38	7.5A	RLS*/panorama sunroof ECU*/power sunroof control unit*/HVAC control unit/HCP/left front seat heating*/left instrument panel switch block (ENGINE START/STOP button)*/rear central control panel/front central control panel
IF39	15A	TCU
IF40	15A	ACU
IF41	7.5A	BCM/PEPS ECU
IF42	7.5A	USB 5V power supply*
IF43	25A	Rear 12V power outlet*
IF44	7.5A	MSM*/Amplifier module*/ACU/Exterior rearview mirror adjusting switch (without memory mirror module)*
IF45	25A	Front 12V power outlet*
IF46	—	—
IF47	7.5A	Defogger relay ER09/Blower relay ER01/electronic anti-glare interior rearview mirror*/PEPS ECU
IF48	—	—
IF49	—	—
IF50	7.5A	IPC

No.	Rated value	Feature/component
IF51	7.5A	SVM ECU*/BSD main control unit*/BSD auxiliary control unit*
IF52	7.5A	T-BOX ECU*/Mobile phone WCM*/Smart Bluetooth module*
IF53	7.5A	Left front door handle antenna/right front door handle antenna*
IF54	7.5A	Intelligent ambient light control unit*/HVAC control unit/left front door centralized control switch/PM2.5 sensor*
IF55	15A	BCM (main lamps)
IF56	7.5A	HCP/rear central control panel*/AV display/*front central control panel
IR01	—	IG1 relay
IR02	—	IG2 relay
IR03	—	Fuel filler cap lock relay
IR04	—	—
IR05	ACC	ACC relay
IR06	—	Rearview mirror folding relay*
IR07	—	Rearview mirror unfolding relay*

8. Accident handling

8.6.2 Fuses in engine compartment PDU



The picture is not guaranteed to be suitable for all vehicle models. If it is required to know the purpose of the fuse, please check it on the actual vehicle. The fuses may slightly vary from vehicle to vehicle.

8. Accident handling

No.	Rated value	Feature/component
EF01	—	—
EF02	—	—
EF03	—	—
EF04	40 A/60 A	ESPI
EF05	—	—
EF06	—	—
EF07	7.5A	A/C compressor
EF08	—	—
EF09	—	—
EF10	20A	Seat heater*
EF11	20A	High beam relay/left front high beam/right front high beam
EF12	—	—
EF13	15A	Left front low beam
EF14	15A	Right front low beam
EF15	7.5A	ECM/DC-DC converter*
EF16	7.5A	Rearview mirror heater*
EF17	—	—
EF18	40A	ACC relay/IG1 relay
EF19	7.5A	Low beam relay
EF20	—	—
EF21	—	—
EF22	—	—

No.	Rated value	Feature/component
EF23	20A	Fuel pump
EF24	25A	Wiper
EF25	7.5A	ECM/brake switch/main relay ER12
EF26	15A	Horn relay/horn
EF27	—	—
EF28	—	—
EF29	—	—
EF30	10A	CSV/VCT (intake end)/VCT (exhaust end)/waste gate/relief valve/oil pump solenoid valve/canister solenoid valve
EF31	10A	Compressor relay ER13/upstream oxygen sensor/downstream oxygen sensor
EF32	15A	ECM/starter relay 1/starter relay 2
EF33	15A	Ignition coil 1/ignition coil 2/ignition coil 3/ignition coil 4
EF34	10A	Fuel pump relay ER03/cooling fan relay ER05
EF35	80A	Electric power steering control unit
EF36	40A	Instrument panel PDU
EF37	40A	Blower
EF38	40A	ESPI
EF39	40A	Defogger*
EF40	150A	Main fuse
EF41	30A	Starter relay 1/IG2 relay
EF42	—	—
EF43	50A	Instrument panel PDU

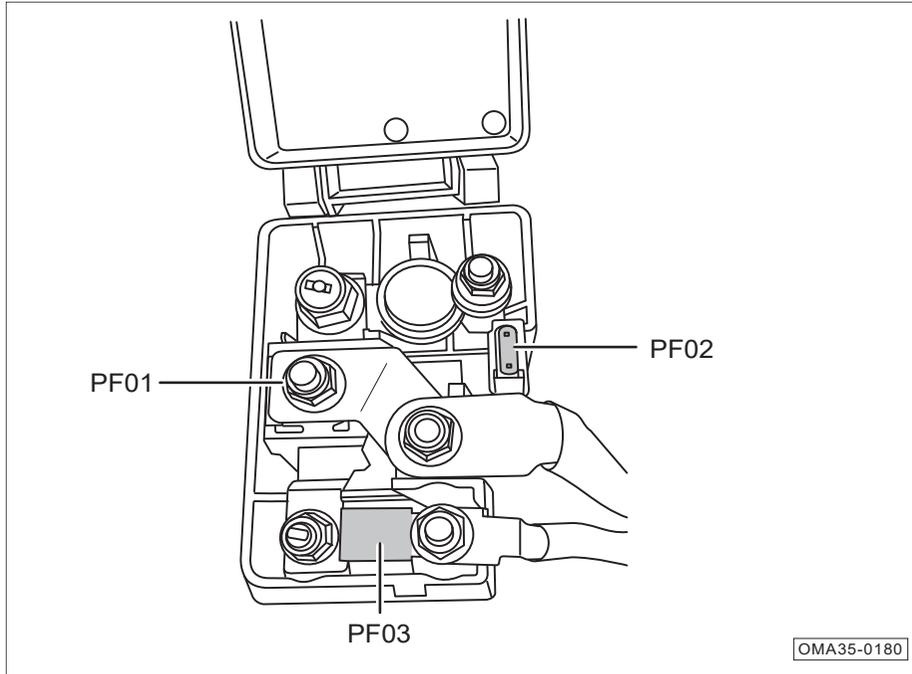
8. Accident handling

No.	Rated value	Feature/component
EF44	—	—
EF45	—	—
EF46	—	—
EF47	—	—
EF48	—	—
EF49	—	—
ER01	—	Blower relay
ER02	—	—
ER03	—	Fuel pump relay
ER04	—	—
ER05	—	Cooling fan relay
ER06	—	Wiper speed control relay
ER07	—	Wiper relay
ER08	—	High beam relay
ER09	—	Defogger relay*
ER10	—	—
ER11	—	Low beam relay
ER12	—	Main relay
ER13	—	Compressor relay
ER14	—	—
ER15	—	Starter relay 1
ER16	—	Starter relay 2

No.	Rated value	Feature/component
ER17	—	—
ER18	—	—
ER19	—	Horn relay
ER20	—	—

8. Accident handling

8.6.3 Fuses in battery PDU



The picture is not guaranteed to be suitable for all vehicle models. If it is required to know the purpose of the fuse, please check it on the actual vehicle. The fuses may slightly vary from vehicle to vehicle.

No.	Rated value	Feature/ component
PF01	300A	Starter/engine compartment PDU
PF02	7.5A	EBS
PF03	60A	Cooling fan module

8. Accident handling

8.7 Emergency start

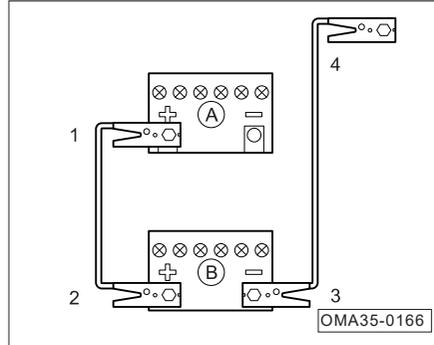
Jumper cable

If the engine can not start because the battery is too low, it can be started by connecting this battery to the battery of another vehicle a jumper cable.

⚠ WARNING

- The engine compartment is a high-risk area. Improper operation can easily cause casualties.
- Before starting work on the battery, be sure to carefully read and follow the warning instructions for safety related to battery operation.

While connecting the batteries of two vehicles, be sure to first connect the positive terminal and then the negative terminal.



- Set the ENGINE START/STOP button to the "OFF" position.
- Connect the ① end of the red cable to the positive terminal (+) of the depleted battery "A", and the other end ② to the positive terminal (+) of the power battery "B".

- Connect end ③ of the black cable to the negative pole (-) of the power battery "B", and connect the other end ④ to the engine block or a metal part firmly connected to the engine block of the vehicle with the depleted battery "A".

👁 CAUTION

Properly place the jumper cable to avoid contact between the cable and the moving parts of the engine.

- Start the engine of the vehicle with power battery and let it idle. Then, start the engine of the vehicle with the depleted battery till the engine runs smoothly.

8. Accident handling

WARNING

- Be sure to turn off the headlamps before removing the jumper cables.
- Turn on the blower and rear windshield heater of the vehicle with the depleted battery to reduce the voltage peak generated when the cable are being removed.
- Remove the jumper cables with the engine running in the reverse order.

WARNING

Improper use of jumper cables may cause battery explosion and serious injury.

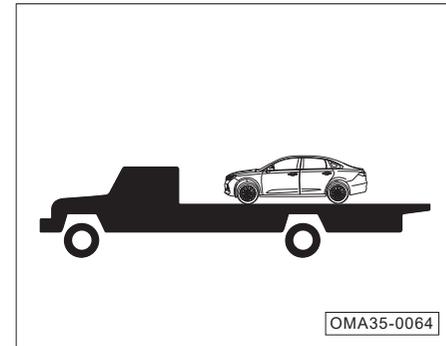
- The voltage of the power battery must be the same as that of the depleted battery, and the capacities of the two batteries shall also be the same. Otherwise, it may cause an explosion.
- Never expose the battery to an open flame, for fear of an explosion.
- Never connect the negative cable directly to the negative terminal of a depleted battery. There shall be no static electricity near the battery. Otherwise, the combustible gas produced by the battery may be ignited by sparks, causing an explosion accident.
- Never connect the negative cable to a fuel system component or a brake line. Never lean over the battery during operation. Be careful not to get burned by acid.

8.8 Vehicle towing

If the vehicle needs to be towed, it shall be towed by the GAC Motor authorized shop or a professional towing company.

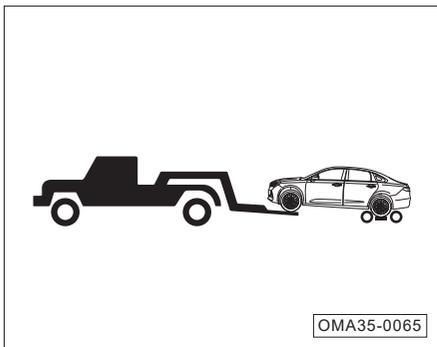
It is recommended to use a rollback tow truck for towing. If the conditions can not be met, a wheel-lift truck can also be used for towing the vehicle as appropriate.

Being towed by a rollback tow truck



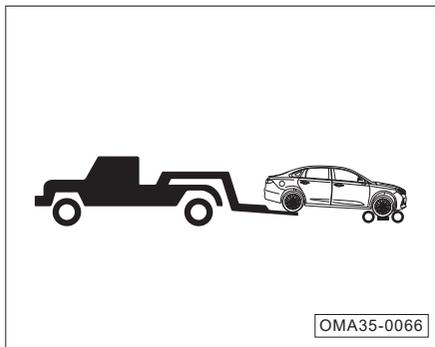
8. Accident handling

Being towed by a wheel-lift truck from the front



- Place a dolly under the rear wheels.

Being towed by a wheel-lift truck from the rear



- Place a dolly under the front wheels.

Emergency towing

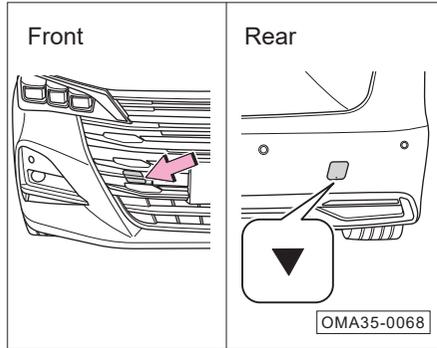
If it is impossible to find a tow truck in an emergency, fasten the towing cable or towing chain in the emergency towing ring to temporarily tow the vehicle. However, this method is only suitable for low speed and short distance towing on a solid and flat road.

 **WARNING**

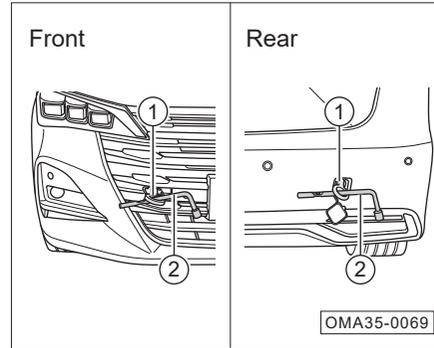
In emergency towing, drive slowly to avoid violent operation. Excessive towing force will damage the vehicle.

8. Accident handling

Installing a towing hook



- Front: Pry off the towing hook cover at the arrowed position using a slotted screwdriver wrapped with a cloth.
- Rear: Slightly press the position where the triangle mark is located on the towing hook cover with fingers to lift it, and then remove the towing hook cover.



- Take out the towing hook ① and wheel bolt removal wrench ② from the driver's tool kit in the trunk.
- Screw the towing hook ① clockwise into the thread hole.
- Insert the wheel bolt removal wrench ② into the round opening of the towing hook, and turn the wheel bolt removal wrench clockwise to make the towing hook be firmly screwed into the thread hole.

Precautions for towing

Before emergency towing, be sure to follow the instructions below:

- Hazard warning lamps of both towing and towed vehicles must be turned on and local traffic regulations must be complied with.
- The towing hook must be firmly tightened in the thread hole. Otherwise, the towing hook may slip out of the thread hole during towing.
- For the towed vehicle, the gearshift lever must be switched to the "N" gear.
- For the towed vehicle, set the ENGINE START/STOP button to the "ON" position and turn the steering wheel back and forth to confirm that the steering wheel can be turned.

8. Accident handling

During the emergency towing, be sure to follow the instructions below:

- Start the engine and drive at a slow speed till the towing rope is tight and then accelerate the vehicle slowly.
- Be sure to drive steadily and avoid sharp acceleration, sharp deceleration or abrupt turning.
- During towing, the towed vehicle shall be braked earlier than in normal conditions with the brake pedal lightly depressed.
- During towing, the towing rope must always be in a tight state.

8.9 Getting out of a trap

If the vehicle is stuck on a soft road such as sandy, muddy or snowy road, follow the steps below to get out of a trap:

1. Observe the areas in front of and behind the vehicle to ensure that there are no obstacles.
2. Turn the steering wheel to the left and to the right to grind areas around the front wheels to remove mud, snow or sand trapped around the tires.
3. Place wooden blocks, stones or other materials to help increase tire friction.
4. Start the engine and accelerate the vehicle slowly to get the vehicle out of the pit.
5. If the vehicle still can not get out of the trap after attempts for several times, it is required to have a tow truck for rescue.

i NOTE

In the acceleration process, human assistance can be provided to push the vehicle from the front and rear for driving the vehicle out of the trap.

9. Environmental protection information

9.1 Environmental protection information code

No.	Type	Environmental protection information code	No.
1	GAC7152B1A6	CNQQG6Z2 0B82000010	000001
2	GAC7152B2A6A	CNQQG6Z2 0B82000011	000001
			000002
3	GAC7152B1A6A	CNQQG6Z2 0B82000012	000001
4	GAC7152B2A6	CNQQG6Z2 0B82000013	000001
			000002
5	GAC7152B1A6B	CNQQG6Z2 0B82000054	000001
			000002
6	GAC7152B1A6C	CNQQG6Z2 0B82000063	000001
			000002
7	GAC7152B2A6B	CNQQG6Z2 0B82000064	000001
			000002
			000003
			000004
8	GAC7152B2A6C	CNQQG6Z2 0B82000055	000001
			000002
			000003
			000004

9. Environmental protection information

9.2 Environmental protection information

Environmental protection information	Type			
	GAC7152B1A6	GAC7152B2A6A	GAC7152B1A6A	GAC7152B2A6
Engine model/manufacture	4A15J1/GAC Motor Co., Ltd.			
Catalytic converter model/ manufacturer	Front: 2056553X/front: Sanshui Branch of Faurecia (Guangzhou) Automotive Systems Co., Ltd.; Rear: 2304171X/rear: Sanshui Branch of Faurecia (Guangzhou) Automotive Systems Co., Ltd.			
Painting/carrier/packaging manufacturer	Painting: Front: unit 1: Johnson Matthey (Shanghai) Chemical Co., Ltd./Rear: unit 1: Johnson Matthey (Shanghai) Chemical Co., Ltd. Carrier: Front : unit 1: Corning (Shanghai) Co., Ltd./Rear: unit 1: Corning (Shanghai) Co., Ltd. Packaging: Front: Sanshui Branch of Faurecia (Guangzhou) Automotive Systems Co., Ltd./Rear: Sanshui Branch of Faurecia (Guangzhou) Automotive Systems Co., Ltd.			
Particulate filter model/ manufacturer	/			
Painting/carrier/packaging manufacturer	/			
Canister model/manufacture	2140003ARX00/Langfang Huan Automotive Equipment Co., Ltd.			
Oxygen sensor model/ manufacturer	Front: LSF4; Rear: LSF4/UAES			
Crankcase emission control device model/manufacture	10090082040000/Shentong Technology Group Co., Ltd.			
EGR model/manufacture	/			
OBD system supplier	UAES			
ECU model/manufacture	MED17/UAES			
Transmission type/gear number	Automatic/6			
Muffler model/manufacture	1-stage: 82525861; 2-stage: 82529302/Tenneco Automotive Industry (Guangzhou) Co., Ltd			
Turbocharger model/ manufacturer	KP39/Borgwarner Automotive Components (Ningbo) Co., Ltd.			
Intercooler type	Air-to-air			

9. Environmental protection information

Environmental protection information	Type			
	GAC7152B1A6B	GAC7152B1A6C	GAC7152B2A6B	GAC7152B2A6C
Engine model/manufacturer	4A15J1/Guangzhou Qisheng Powertrain Co., Ltd.			
Catalytic converter model/ manufacturer	Front: 2537501X/front: Sanshui Branch of Faurecia (Guangzhou) Automotive Systems Co., Ltd.; Rear: 2304168X/rear: Sanshui Branch of Faurecia (Guangzhou) Automotive Systems Co., Ltd.			
Painting/carrier/packaging manufacturer	Painting: Front: unit 1: Wuxi Weifu Environmental Catalysts Co., Ltd./Rear: unit 1: Johnson Matthey (Shanghai) Chemical Co., Ltd. Carrier: Front : unit 1: Corning (Shanghai) Co., Ltd./Rear: unit 1: NGK AUTOMOTIVE CERAMICS (Suzhou) Packaging: Front: Sanshui Branch of Faurecia (Guangzhou) Automotive Systems Co., Ltd./Rear: Sanshui Branch of Faurecia (Guangzhou) Automotive Systems Co., Ltd.			
Particulate filter model/ manufacturer	Rear: 2304168X/rear: Sanshui Branch of Faurecia (Guangzhou) Automotive Systems Co., Ltd.			
Painting/carrier/packaging manufacturer	Painting: Rear: unit 1: Johnson Matthey (Shanghai) Chemical Co., Ltd. Carrier: Rear: unit 1: NGK AUTOMOTIVE CERAMICS (Suzhou) Packaging: Rear: Sanshui Branch of Faurecia (Guangzhou) Automotive Systems Co., Ltd.			
Canister model/manufacturer	2140003ARX01/Langfang Huaan Automotive Equipment Co., Ltd.			
Oxygen sensor model/ manufacturer	Front: LSUADV; Rear: LSF4/UAES			
Crankcase emission control device model/manufacturer	10090082040000/Shentong Technology Group Co., Ltd.			
EGR model/manufacturer	/			
OBD system supplier	UAES			
ECU model/manufacturer	MED17/UAES			
Transmission type/gear number	Automatic/6			
Muffler model/manufacturer	1-stage: 82525861; 2-stage: 82529302/Tenneco Automotive Industry (Guangzhou) Co., Ltd			
Turbocharger model/ manufacturer	KP39/Borgwarner Automotive Components (Ningbo) Co., Ltd.			
Intercooler type	Air-to-air			

9. Environmental protection information

Environmental protection information	Type			
	GAC7152B1A6B	GAC7152B1A6C	GAC7152B2A6B	GAC7152B2A6C
Engine model/manufacturer	4A15J1/Guangzhou Qisheng Powertrain Co., Ltd.			
Catalytic converter model/ manufacturer	Front: 2537501X/front: Sanshui Branch of Faurecia (Guangzhou) Automotive Systems Co., Ltd.; Rear: 2304168X/rear: Sanshui Branch of Faurecia (Guangzhou) Automotive Systems Co., Ltd.			
Painting/carrier/packaging manufacturer	Painting: Front: unit 1: Wuxi Weifu Environmental Catalysts Co., Ltd./Rear: unit 1: Johnson Matthey (Sanghai) Chemical Co., Ltd. Carrier: Front: unit 1: NGK AUTOMOTIVE CERAMICS (Suzhou)/Rear: unit 1: NGK AUTOMOTIVE CERAMICS (Suzhou) Packaging: Front: Sanshui Branch of Faurecia (Guangzhou) Automotive Systems Co., Ltd./Rear: Sanshui Branch of Faurecia (Guangzhou) Automotive Systems Co., Ltd.			
Catalyzed gasoline particulate filter (CGPF) model/ manufacturer	Rear: 2304168X/rear: Sanshui Branch of Faurecia (Guangzhou) Automotive Systems Co., Ltd.			
Painting/carrier/packaging manufacturer	Painting: Rear: unit 1: Johnson Matthey (Shanghai) Chemical Co., Ltd. Carrier: Rear: unit 1: NGK AUTOMOTIVE CERAMICS (Suzhou) Packaging: Rear: Sanshui Branch of Faurecia (Guangzhou) Automotive Systems Co., Ltd.			
Canister model/manufacturer	2140003ARX01/Langfang Huan Automotive Equipment Co., Ltd.			
Oxygen sensor model/ manufacturer	Front: LSUADV; Rear: LSF4/UAES			
Crankcase emission control device model/manufacturer	10090082040000/Shentong Technology Group Co., Ltd.			
EGR model/manufacturer	/			
OBD system supplier	UAES			
ECU model/manufacturer	MED17/UAES			

9. Environmental protection information

Transmission type/gear number	Automatic/6
Muffler model/manufacturer	1-stage: 82525861; 2-stage: 82529302/Tenneco Automotive Industry (Guangzhou) Co., Ltd
Turbocharger model/ manufacturer	KP39/Borgwarner Automotive Components (Ningbo) Co., Ltd.
Intercooler type	Air-to-air

This manual describes related information of entire GAC Motor series, including their configuration, functions, performance parameters and product schematic diagrams. Its content is valid when allowed to be printed. However, the actual configuration and function of the vehicles are subject to the specific vehicles delivered. If there is any difference between the schematic diagrams and the specific vehicle delivered, the actual vehicle shall prevail.

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For operation guidelines of GS6 model, please refer to:

<https://www.gacmotor.com/service/manual>