

CENTRO

User Manual

AVANTIER



PREFACE

Thank you for choosing CENNTRO electric vehicle.

In order to use and maintain AVANTIER Vehicle correctly, please read this Manual carefully before use. This Manual should be considered as one part of the vehicle, which contains the important contents of safety, operation and maintenance in the use of the vehicle, so you should carefully read it.

When your vehicle is transferred, please transfer this Manual and the vehicle to the next user together.

The design and production status of the vehicle will be improved over time, while the User Manual is difficult to be revised and reprinted at any time. Therefore, in case of any inconsistency with this Manual during use, the actual vehicle status shall prevail. If you have any questions, please consult the dealer.

Wish you a pleasant driving experience!

CENNTRO

The latest edition of the manuals can be downloaded free of charge from the Pardisys website: www.pardisys.com.

Instructions to User

Instructions to Users

Please note that this Manual applies only to AVANTIER vehicle and describes all equipment including optional accessories. Therefore, there may be some content or equipment that does not apply to your vehicle, please refer to the instructions for the specific configuration of the vehicle you purchased.

Do not refit the vehicle, because the modification of the vehicle, especially the electrical wiring, may cause vehicle failure or other serious accidents (for example: fire). CENNTRO will bear no liability for any loss or accident caused by the modification of the vehicle.

All information in this manual is up to date until publication, but as CENNTRO continues to improve and optimize its design, your vehicle may differ from the description in this Manual, and CENNTRO reserves the right to make changes without prior notice. Under no circumstances shall anyone make any claim to CENNTRO on the basis of data, illustrations and descriptions in this Manual.

Part of the pictures in this Manual are schematic and for reference only. If the pictures do not match the real objects, the real objects shall prevail.

Thank you for choosing and using this vehicle. Your valuable comments or suggestions are welcomed.

Read this Manual

In this Manual, expressions such as "Warning", "Reading", "Environmental protection" and "Caution" are used to prompt different contents, which are represented as follows:

Warning

- It means that if it is not avoided, it may cause property damage, personal injury or death.

Caution

- It means that if it is not avoided, it may cause damage to the vehicle and equipment and reduce the service life.

Instructions to User

Reading

- It means that it is necessary to read relevant chapters of this Manual before any operation.

Environmental protection

- It means that the wastes must be properly treated or disposed according to local environmental protection regulations, otherwise it will pollute the environment.

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General

This Manual is applicable to the vehicle model of Avantier

Avantier is a mini battery electric vehicle, with exquisite interior trim and rich configuration, which can better meet the needs of daily travel and transportation of small amount of goods.

The vehicle body with short head structure not only increases your field of vision but also meets the safety requirements of the vehicle, so that you can feel at ease to drive. The safety belt and anti-lock braking system equipped on the vehicle provide maximum protection for your riding safety.

The excellent motor management system precisely controls the work of the drive motor, so that the vehicle has good starting performance, driving performance and acceleration performance, allowing you to fully enjoy driving fun and improve work efficiency. At the same time, the excellent front and rear suspension systems also provide comfortable shock absorption effect.

This vehicle is equipped with a heating and air conditioning system as standard configuration, which can provide you with satisfactory environmental comfort in hot summer or cold winter.

This vehicle is equipped with 2 doors and 1 back door, which is convenient for passengers to get on and off the vehicle and for loading and unloading of goods.

Avantier is an ideal urban transportation tool. The design of integrating comfort, safety, mobility and economy together as well as the advanced performance, is a satisfactory choice for your work and leisure.

Please do not refit the vehicle arbitrarily. The modification of the vehicle, especially the electrical wiring, may cause vehicle failure or other serious accidents (for example: fire). CENNTRO will bear no liability for any loss or accident caused by the modification of the vehicle.

New vehicle inspection

The dealer of CENNTRO new energy vehicle has carried out vehicle inspection according to the regulations of CENNTRO Group before handing over the vehicle to you.

Running-in of new vehicle

Due to processing and assembly errors, the friction resistance between the moving parts of a new vehicle at the initial stage of vehicle use is always much greater than that under normal conditions. The running-in of new vehicle is mainly to improve the surface quality and friction state of moving parts and extend the service life.

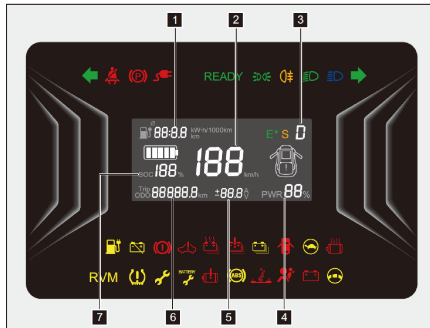
In order to ensure the maximum performance and reliability of the vehicle in the future, the following principles should be followed when the new vehicle is used in the first 1000 km (620 miles) running-in period:

- During the running-in period, try to drive on flat roads and avoid driving on muddy or sandy roads.
- Try to avoid driving more than 90 km/h (56 mph).
- Emergency braking should be avoided in the first 200 km (124 miles), because the brake does not have ideal friction at this time, and the braking distance during emergency braking is longer than that after running-in. At this time, the reduced braking force can be increased by pressing the brake pedal harder.
- New tires do not have the best adhesion at the beginning of use, so you should drive carefully in the first 500 km (310 miles).

Combination instrument

View of combination instrument

Combination instrument (Type A)



- ① Driving information
- ② Speedometer
- ③ Gear indication
- ④ Wattmeter
- ⑤ Ammeter/voltmeter
- ⑥ Odometer

- ⑦ Battery power meter

Driving information

The driving information includes the driving mileage, driving time and power consumption per 100 km (62 miles).

Speedometer

Current driving speed (in km/h).

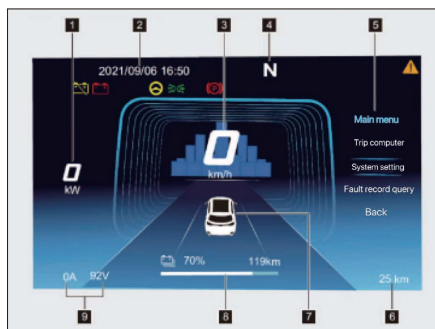
Gear indication

Display the current gear.

Odometer

Including total mileage and subtotal mileage.

Combination instrument (Type B)



- ① Wattmeter
- ② Date and clock
- ③ Speedometer
- ④ Gear indication
- ⑤ Multi-function display area
- ⑥ Total mileage indication

- ⑦ Door status indication
- ⑧ Driving mileage and battery power meter
- ⑨ Ammeter/voltmeter

Speedometer

Current driving speed (in km/h).

Caution

- Please keep the speed limit in the speed limit area.
- The speedometer will be affected by the size of the tires used in the vehicle. Please use the original size tires.

Driving mileage and battery power meter

Display the mileage of remaining battery and power of the power battery.

 Caution

- When the low battery power warning lamp is on, the discharge capacity of the power battery will be greatly reduced. At this time, do not drive for a long distance, and charge the vehicle in time.
- The driving mileage is calculated by the trip computer and can only be used as a reference.
- The actual driving mileage is related to the current road conditions (such as large and long slopes), driving habits (such as frequent acceleration and deceleration), temperature (such as low temperature), and whether the electrical equipment (such as air conditioning system) is turned on or not.

Wattmeter and ammeter/voltmeter

Display power, voltage and current of the power battery.

Total mileage

Display the total distance the vehicle has traveled.

Multi-function display area

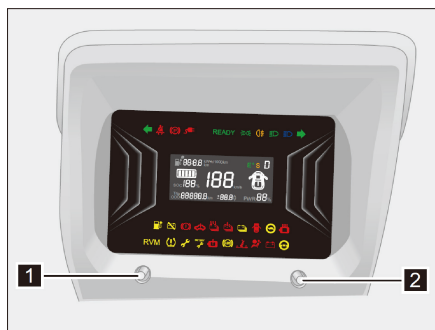
The multi-function display area displays motor speed, available residual power, trip computer information (including tire pressure system, subtotal mileage, average speed, driving time, maintenance information, etc.), multimedia information (radio, Bluetooth music (if equipped), USB music), warning information, etc.

 Caution

- Do not make the motor rotate too high for a long time. The motor may be overheated and seriously damaged if it runs at high speed for a long time.

Combination instrument adjustment switch

Combination instrument (Type A)



① Switchover button

② Confirm button

Long press the switchover button for 3 seconds to enter the driving information, and then short press the switchover button to cycle among the driving mileage, driving time, and power consumption per 100 km (62 miles). After that, short press the

confirm button to enter the mileage information, and short press the switchover button to cycle between the total mileage and subtotal mileage.

Combination instrument (Type B)



① Switchover button

- Short press to select options. Long press for 3 seconds to enter the primary menu. In the fault query interface, short press to turn pages.

② Confirm button

- Confirm.

Working/fault indicator lamp

Working/fault indicator lamp

When the power switch is set to the ON position, some fault indicator lamps will light up for a short time for system self-inspection. If a system fault indicator lamp remains on or flashes after the vehicle is started, please contact the CENNTRO authorized service center immediately for maintenance.

The working indicator lamp is used to remind the driver of the operation status of a certain system of the vehicle, and the corresponding working indicator lamp will light up.

The fault indicator lamp is used to warn the driver that a certain system function of the vehicle is faulty, and the corresponding fault indicator lamp will light up or flash.

READY indicator lamp

READY After the vehicle is started, this indicator lamp will light up to indicate that the vehicle is ready.

Turn signal indicator lamp



When the left turn signal lamp or the right turn signal lamp is turned on, the corresponding turn signal indicator lamp also flashes. When the hazard warning lamp is turned on, the left turn indicator lamp and the right turn indicator lamp flash simultaneously.

Battery charge and discharge indicator lamp/low voltage, low battery power indicator lamp



This indicator lamp is used to display the working status of the charging and discharging system. If this indicator lamp does not light up when the power switch is set to the ON position or this indicator lamp lights up after the vehicle is started, please go to the CENNTRO authorized service center for maintenance as soon as possible.

Rear fog lamp indicator lamp



When the rear fog lamp is turned on, this indicator lamp will light up.

Headlamp low beam indicator lamp



When the low beam lamp is turned on, this indicator lamp will light up.

Headlamp high beam indicator lamp



When the high beam lamp is turned on, this indicator lamp will light up.

Position indicator lamp



Turn on the position lamp, and this indicator lamp will light up.

Daytime running indicator lamp



Turn on the daytime running lamp, and this indicator lamp will light up.

ABS fault indicator lamp



If this indicator lamp lights up during driving, it indicates that ABS system has failed. Please go to the CENNTRO authorized service center for maintenance as soon as possible.

Electric power steering system (EPS) fault indicator lamp



If this indicator lamp is always on during driving, it indicates that EPS system is faulty. At this time, the vehicle can still steer, but it requires considerable force. Please contact CENNTRO authorized service center immediately for maintenance.

Parking brake indicator lamp



When the parking brake is applied, this indicator lamp will light up. When the parking brake is released, this indicator lamp will go out. When a fault occurs, this indicator lamp is yellow.

Airbag fault indicator lamp



This indicator lamp is used to indicate that the airbag is faulty. Please go to the CENNTRO authorized service center for maintenance as soon as possible.

Electronic brake distribution system fault indicator lamp/low brake fluid level fault indicator lamp



This indicator lamp is used to remind the driver that the brake fluid level is low or the electronic brake distribution system is faulty. Please check the brake fluid level or contact the CENNTRO authorized service center for maintenance.

Safety belt unfastened warning lamp



This indicator lamp is used to remind the driver that the front safety belt is not fastened or not fastened in place. Please fasten the safety belt for drive safety.

Abnormal tire pressure fault indicator lamp



This indicator lamp is used to remind the driver that the tire pressure is faulty. Please check whether the tire pressure is too low or the temperature is too high.

Low power battery warning lamp



When the power switch is switched to the ACC position, this warning lamp will light up briefly and then go out, indicating that the power of the power battery is normal. If this lamp does not light up, please contact CENNTRO authorized service center immediately for maintenance. If this warning lamp lights up at other times, it indicates that the power battery is low. Please charge it in time.

Power battery cut-off indicator lamp



When the power battery is cut off, this indicator lamp will light up.

Charging indicator lamp



When the vehicle is charging, this indicator lamp will light up.

Charging cable connection indicator lamp



During charging, this indicator lamp lights up, it indicates that the charging cable is connected. If this indicator lamp does not light up when charging, check whether the connectors of the charging cable are connected reliably.

Motor and controller overheat warning lamp



If this warning lamp lights up during driving, it indicates that the temperature of the motor is too high. Please stop at a safe area as soon as possible to cool the motor.

Electric drive system fault warning lamp



If this warning lamp lights up, it indicates that the electric drive system is faulty. Please contact CENNTRO authorized service center immediately for maintenance.

Power battery fault warning lamp



If this warning lamp lights up, it indicates that the power battery is faulty. Please contact CENNTRO authorized service center immediately for maintenance.

Insulation fault warning lamp



If this warning lamp lights up, it indicates that the vehicle may have electric leakage. Please contact CENNTRO authorized service center immediately for maintenance.

Vehicle system fault warning lamp



If this warning lamp lights up, it indicates that the whole vehicle system is faulty. Please contact CENNTRO authorized service center immediately for maintenance.

Power battery thermal runaway warning lamp



If this warning lamp lights up, it indicates that there is thermal runaway of power battery. Please contact CENNTRO authorized service center immediately for maintenance.

Economy mode indicator lamp



When the driving mode is economy mode, this indicator lamp will light up.

Sports mode indicator lamp

S When the driving mode is sports mode, this indicator lamp will light up.


Long range mode indicator lamp

E+ When the driving mode is long range mode, this indicator lamp will light up.


Vehicle maintenance reminder indicator lamp

 When the vehicle needs maintenance, this indicator lamp will light up.

Power battery maintenance indicator lamp

BATTERY
 When the power battery needs maintenance, this indicator lamp will light up.


Power limit indicator lamp

 If this indicator lamp is always on or flashing, it indicates that there is a fault in the system and the power performance will be limited. Please go to the CENNTRO authorized service center for maintenance as soon as possible.

T-BOX fault warning lamp

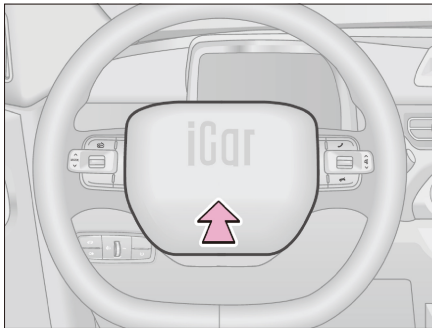
RVM If this warning lamp lights up, it indicates that T-BOX is faulty. Please contact CENNTRO authorized service center for maintenance.

Pedestrian warning system off indicator lamp

 After the pedestrian warning system off indicator lamp turned off, this indicator lamp will light up.

Steering wheel

Horn



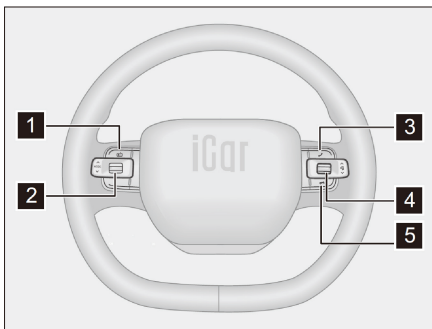
Press the middle part of the steering wheel to sound the horn.

 Reading

- Strictly comply with relevant local regulations on the use of horn.

Steering wheel buttons (if equipped)

Steering wheel buttons (type A)



① Short press to enter the radio mode, and short press again to turn off the radio.

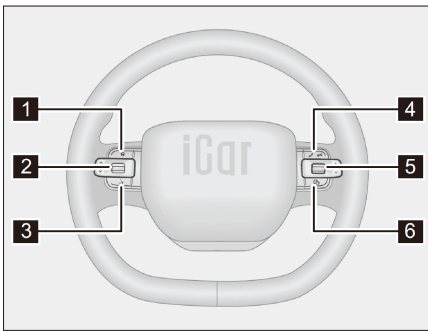
② Mode switchover button

- Press once to cycle among radio AM - radio FM - USB music - Bluetooth music (if equipped).

- When in radio mode, short press up to increase the frequency, and long press up to switch to the previous effective radio station. When USB music/Bluetooth music is playing, short press up to switch to the previous song, and long press up to rewind.
- When in radio mode, short press down to decrease the frequency, and long press down to switch to the next effective radio station. When USB music/Bluetooth music is playing, short press down to switch to the next song, and long press up to fast forward.

- ③ Short press to answer the Bluetooth phone.
- ④ Press to mute/unmute. Short press up to decrease the volume, and long press up to decrease the volume continuously. Short press down to increase the volume, and long press down to increase the volume continuously.
- ⑤ Short press to hang up the Bluetooth phone, long press to hold but mute the incoming call.

Steering wheel buttons (type B)



① Home/return button

- Short press to return to the home page, long press to return to the function. Mode switchover button

② Mode switchover button

- Press once to cycle among radio AM - radio FM - USB music - Bluetooth music.

- Press up to switch to the previous song, and long press to fast forward.
- Press down to switch to the next song, and long press to rewind.

③ Voice button

- Start/exit voice recognition.

④ Answer/hang up

- When Bluetooth is not connected, short press or long press to enter the Bluetooth setting interface, short press to answer, long press to hang up.

⑤ Volume setting

- Press to mute/unmute. Press up to increase the volume and press down to decrease the volume.

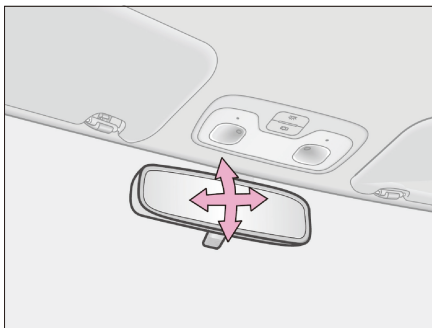
⑥ WeChat

- Short press to open WeChat and answer WeChat calls, long press to close WeChat and hang up WeChat calls.

Rearview mirror

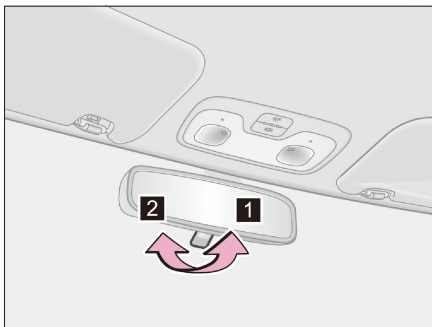
Interior rearview mirror

Adjust the position of the interior rearview mirror



Before driving, manually turn the interior rearview mirror to the appropriate position to ensure that the driver has the best view.

Anti-glare function



By operating the control lever, the reflection of the headlamps of the rear vehicles can be reduced.

Before driving, manually turn the interior rearview mirror to the appropriate position to ensure that the driver has the best view.

① Anti-glare position

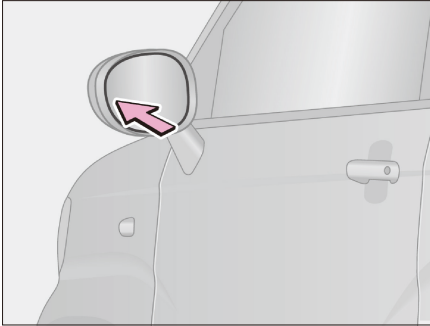
② Normal position

 Warning

- Do not adjust the position of the rearview mirror during driving, otherwise an accident may be caused by misoperation, which may cause serious injury or even death.

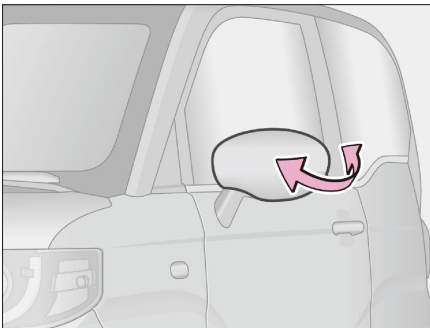
Exterior rearview mirror

Adjust the exterior rearview mirror



Press the edge of the lens by hand and adjust it to the appropriate angle of view.

Fold the exterior rearview mirror



Push the rearview mirror towards the vehicle forwards or backwards to fold the exterior rearview mirror.

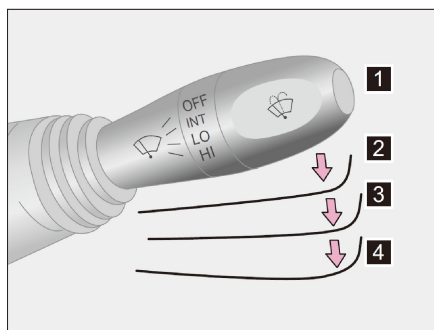
Warning

- Do not adjust the exterior rearview mirror while driving, otherwise it may cause accidents and personal injury or even death
- The exterior rearview mirror must be unfolded and adjusted properly before driving. Do not drive the vehicle with the rearview mirror folded.

Wiper system

Wiper operation

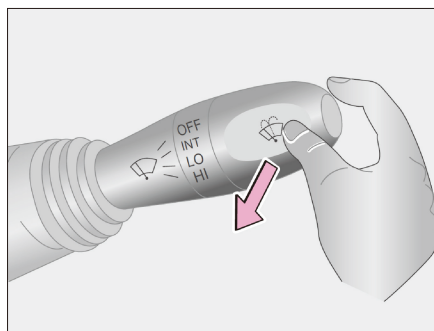
Wiper combination switch



Turn the power switch to the ON position and toggle the wiper combination switch:

- ① OFF: Turn off the windshield wiper
- ② INT: intermittent wiping
- ③ LO: low speed wiping
- ④ HI: high speed wiping

Operation of front cleaner



Turn the power switch to the ON position, and then turn the wiper combination switch to the steering wheel side and hold it. The front cleaner sprays water and the front wiper works at the same time. Release the front cleaner to stop working. The wiper will wipe in the low speed mode for 3 cycles, and then work again after a short delay.

 Warning

- In freezing weather, it is very dangerous to use windshield cleaning fluid without antifreeze protectant. Because it may freeze on the windshield and hinder your vision, thus causing accidents.
- The use of worn or dirty wiper blades will greatly reduce the clarity of the front view and affect driving safety. Therefore, it is necessary to replace the damaged or worn wiper blades that cannot clean the windshield normally.

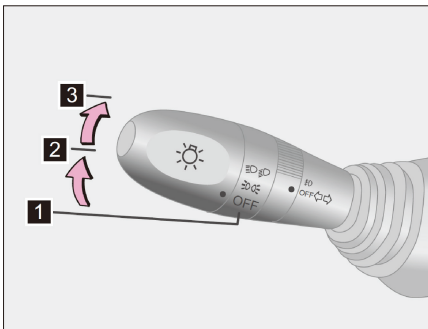
⚠ Caution

- When the windshield is dry, do not use the wiper, otherwise it may damage the windshield and the front wiper.
- If the wiper combination switch is pulled and held for a long time, the cleaning fluid pump may be damaged.
- If the windshield cleaning fluid cannot spray out, check and confirm that the cleaner nozzle is not blocked, and check whether there is cleaning fluid in the windshield cleaning fluid tank.
- When the nozzle is blocked, do not use a needle or other objects to remove foreign matters, otherwise the nozzle will be damaged. Please contact CENNTRO authorized service center for maintenance.



Lighting system

Outdoor lighting

Headlamp combination switch



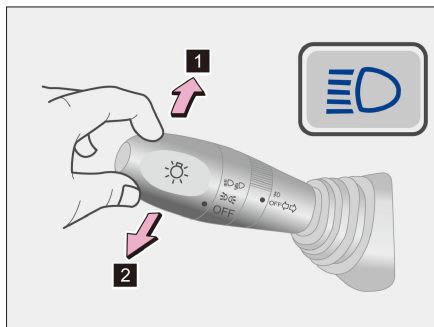
Turn the power switch to the ON position and turn the headlamp combination switch:

- ① OFF: Turn off the headlamp.
- ② : The position lamp, license plate lamp, instrument panel lamp and backlight are on.
- ③ : The low beam lamp and all the above lamps are on.

📖 Reading

- Before parking or leaving the vehicle for a long time, ensure that the headlamp combination switch is turned off to prevent the battery from discharging too much, which will cause the vehicle to fail to start.

Headlamp high beam lamp

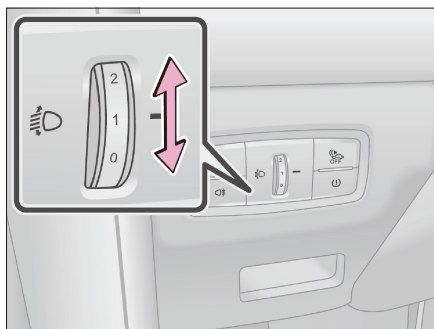


- ① When the low beam lamp is turned on, push the headlamp combination switch forwards to turn on the high beam lamp. Push forwards again or pull the switch back to the original position to turn off the high beam lamp.
- ② Pull and release the control handle backwards to make the high beam lamp flash once.

Warning

- When getting close to the approaching vehicle or the vehicle in front, please switch the high beam lamp to the low beam lamp. The high beam lamp will temporarily blind other drivers, resulting in a crash.

Headlamp beam height adjustment



After the headlamp is turned on, the headlamp beam height (0-3 levels) can be adjusted according to the number of passengers and the load of the vehicle.

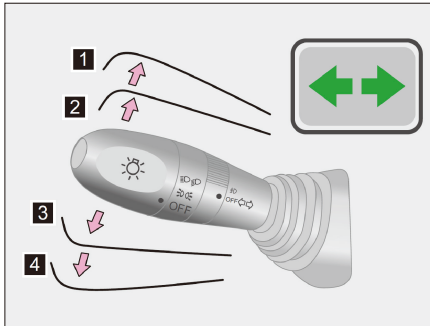
“Accompanying me home” function

On: turn off the power switch, and then turn the headlamp combination switch backwards within 2 minutes, and the “accompanying me home” function will be activated, and the low beam lamp, position lamp and license plate lamp will light up for 30 seconds.

Off: When the power switch is switched to the ACC or ON position or the headlamp combination switch is turned to backwards and held for more than 2 seconds, the “accompanying me home” function will be turned off manually; when the

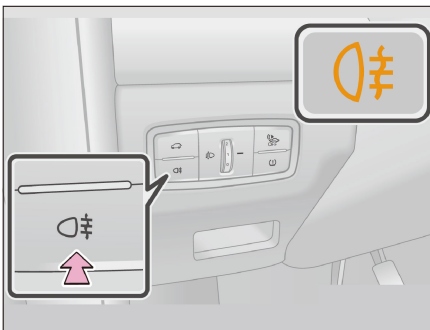
set working time is reached, the “accompanying me home” function will be automatically turned off, and the low beam lamp, position lamp and license plate lamp will go out immediately.

Turn signal lamp



- ① Turn right
- ② Change lanes to the right (move the control lever to the midway position and then release it)
- ③ Change lanes to the left (move the control lever to the midway position and then release it)
- ④ Turn left

Rear fog lamp



When the headlamp is in the low beam state, press the rear fog lamp switch on the left side of the instrument panel to turn on the rear fog lamp, and the rear fog lamp indicator lamp on the combination instrument will light up.

Press the rear fog lamp switch again to turn off the rear fog lamp, and the rear fog lamp indicator lamp on the combination instrument will go out.

 Reading

- When the low beam lamp is turned off, the rear fog lamp is also turned off.
- Strictly comply with relevant local regulations on the use of fog lamp.

Daytime running lamp

When the vehicle is in READY state, the daytime running lamp will light up. When the position lamp or low beam lamp is turned on, the daytime running lamp will go out.

Brake lamp

When the brake pedal is pressed, the brake lamp and high brake lamp will light up.

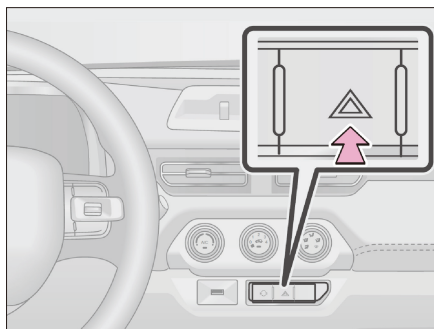
Emergency braking warning function

When the vehicle speed exceeds 50 km/h (31 mph) and emergency braking is implemented, the hazard warning lamp flashes more than three times to remind the vehicles behind to avoid collision to prevent rear-end collision; release the brake pedal, press the hazard warning lamp switch, press the accelerator pedal or turn off the power switch, and the hazard warning lamp and turn signal indicator lamp on the combination instrument will stop flashing.

Reversing lamp

When the power switch is in the ON position and the gear is switched to the R position, the reversing lamp will light up.

Hazard warning lamp



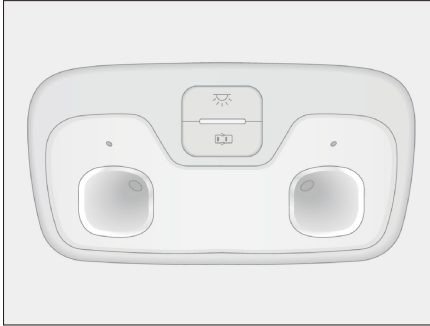
Press the hazard warning lamp switch, the turn signal lamp will flash, and the turn signal indicator lamp of the combination instrument will also flash; press this switch again, and the turn signal lamp and turn signal indicator lamp will go out.

If the vehicle breaks down or encounters a traffic accident, please turn on the hazard warning lamp to

remind other vehicles to avoid a secondary accident.

Indoor lighting

Front interior lamp



Press the “ ☀ ” switch and the lighting lamp will light up.

Press the “ 🚪 ” switch, when any door is opened and remains open, and the lighting lamp will light up.

 Caution

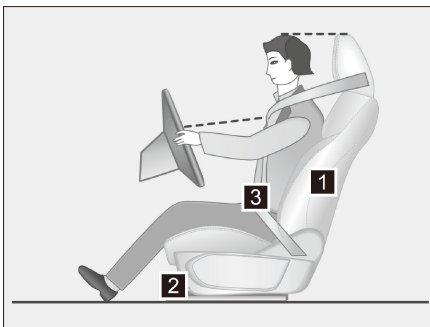
- When driving at night or in a dark environment, avoid using the front interior lamp. The bright passenger compartment will reduce the visibility of the outside environment, thus causing accidents.

 Reading

- When unlocking the vehicle, the front interior lamp will be on for 15 seconds.

Seat

Correct sitting posture



Seats, headrests, safety belts and airbags all help protect passengers, which can provide you with more protection.

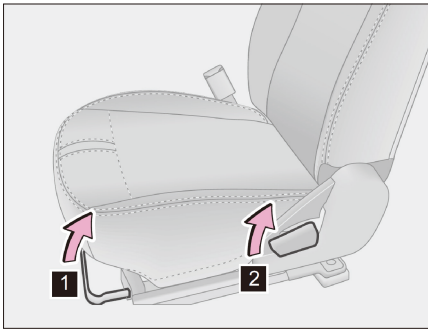
- ① Adjust the seat backrest so that you can sit up straight and operate the steering wheel without leaning forwards.

- ② Adjust the seat position so that the pedal can be completely pressed down and the elbow can be slightly bent when holding the steering wheel.
- ③ Wear the safety belt correctly.

 Warning

- Before driving, adjust the seat and rearview mirror to the proper position to ensure safe driving.

Front seat



- ① Seat fore and aft adjustment lever
- ② Seat backrest inclination adjustment lever

The front seat is designed to slide 170 mm (7 in.) forwards and 30 mm backwards, with a backrest angle of 25°.

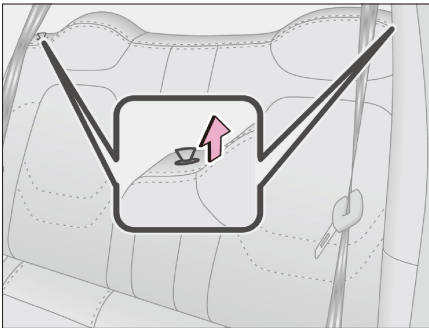
 Warning

- During driving, do not tilt the seat too much to prevent the body from slipping out of the waist safety belt. If the seat is excessively tilted, the waist safety belt may slide over the hip and directly hold the abdomen or make the shoulder safety belt touch the neck, which will increase the possibility of serious injury or even death in the event of an accident.
- Please ensure that all adjusting parts of the seat are locked in place. It is very dangerous to not lock the adjustable seat and backrest safely. In case of emergency braking or collision, the seat or backrest will move unexpectedly, resulting in personal injury. Try sliding the seat fore and aft and shake the backrest to make sure it is locked in place.
- Be careful when adjusting the seat position to ensure that other passengers will not be injured when moving the seat.

 Warning

- Do not allow children to adjust the seat. It is very dangerous to let children adjust the seat. If children's hands or feet are jammed, serious injury may be caused.
- It is forbidden to adjust the seat during driving, otherwise the seat may move unexpectedly, causing the driver to lose control of the vehicle.
- If the seat is damaged, it is very dangerous to drive the vehicle at this time.
- Do not place a cushion between the driver or passenger and the seat backrest. Cushion is not conducive to maintaining correct sitting posture and will reduce the effectiveness of safety belt.

Rear seat (Avantier α)



Pull up the unlocking handles on both sides of the rear seat backrest, and fold it by turning down the rear seat backrest.

 Warning

- Please observe the following precautions. Otherwise, serious injury or even death may occur.
 - » Do not fold the seat backrest while driving.
 - » When folding the backrest of the rear seat, be careful not to get your hands stuck.
 - » Adjust the position of the front seat before folding the rear seat backrest to prevent the front seat from obstructing the rear seat backrest when folding the rear seat backrest.
 - » Do not allow anyone to sit on the folded seat backrest during driving.

 Warning

- » After resetting the seat backrest to the vertical position, check that the safety belt is not twisted or stuck between the seat backrest and the inside of the vehicle.
- » After resetting the seat backrest to the vertical position, slightly shake the seat backrest back and forth to ensure that it is firmly locked in place.

Rear Cargo Area (Avantier C)



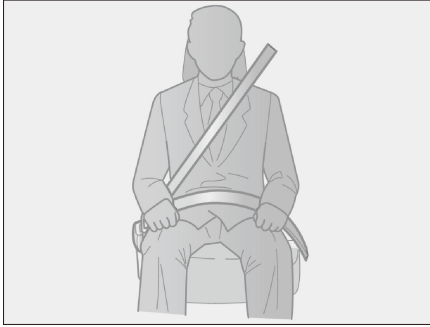
Maximum load carrying capacity of rear cargo area: 200 kg (440 lbs.).

 Caution

- Avoid placing sharp heavy metal objects in the rear cargo box. Otherwise, the inner panel of the rear cargo box may be damaged.

Safety belt of the seat

Wear the safety belt correctly



Before driving the vehicle, make sure that the driver and all passengers in the vehicle have fastened their safety belts.

- Stretch the shoulder safety belt so that it crosses the whole shoulder obliquely, but shall not touch the neck or slip from the shoulder.
- The waist safety belt shall cross the hips as low as possible.

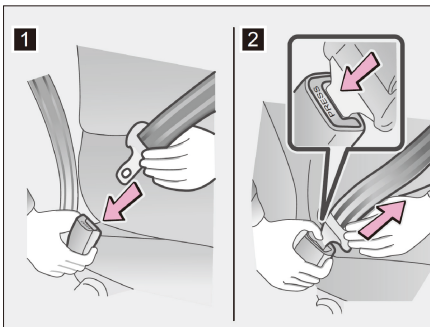
- Adjust the position of the seat backrest. Sit straight and lean on the seat backrest.
- Do not twist the safety belt.

Methods for children to wear safety belt

The safety belt on the vehicle is mainly designed according to the body shape of adults.

- Children should use appropriate child protection devices until their body size is large enough to use the safety belt on the vehicle.
- When children grow up to fit the safety belt on the vehicle, they should follow the instructions for wearing the safety belt.

Fasten and unfasten the safety belt



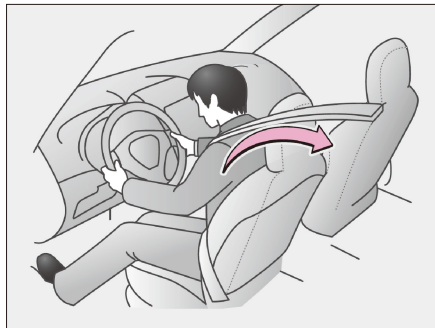
① Fasten the safety belt

- Insert the latch into the buckle until it clicks.

② Unfasten the safety belt

- Press the release button.

Safety belt tensioner (if equipped)



When the vehicle is in serious frontal collision, the tensioner will automatically retract.

It can tighten the safety belt to quickly tighten the driver and passenger's body.

Warning

- After any collision, please immediately contact the CENNTRO authorized service center to check the driver's safety belt tensioner and airbag. Like airbag, safety belt tensioner and load limiter can only be used once, and must be replaced after collision. If it is not replaced, the risk of serious injury to driver and passengers will be increased in case of another collision.

Precautions for safety belt

When the children are in the vehicle

Do not let children play with the safety belt. If the safety belt is wrapped around the child's neck, it may cause suffocation or other serious injuries that may cause death. If this happens and the buckle cannot be released, cut the safety belt with scissors.

Do not let children stand up or kneel on the front or rear seats. Don't let children sit on the adults' legs. Holding children in their arms can't provide enough protection.

Pregnant woman

Please follow the doctor's advice and wear the safety belt correctly.

Like other passengers, pregnant woman should also put their waist safety belt across her hips as low as possible. The shoulder safety belt should be stretched diagonally along the shoulder and avoid the belt touching the raised abdomen.

If the safety belt is not fastened properly, the pregnant woman and fetus may be seriously injured or even killed in case of emergency braking or collision.

Damage and wear of safety belt

Make sure the safety belt and latch are locked and the safety belt is not twisted.

Do not allow the door to clamp the safety belt, lock or buckle, otherwise the safety belt may be damaged.

Check the safety belt regularly. Check the parts of the safety belt for cuts, wear and looseness. Do not use the damaged safety belt, replace it. Damaged safety belts cannot protect the driver and passengers from serious injury or even death.

If a serious accident occurs to the vehicle, even if the safety belt is not obviously damaged, contact the CENNTRO authorized service center for maintenance.

It is forbidden to install, dismount, refit, disassemble or discard the safety belt without authorization. Please contact CENNTRO authorized service center for maintenance. Improper handling may lead to incorrect operation.

Key information

Key

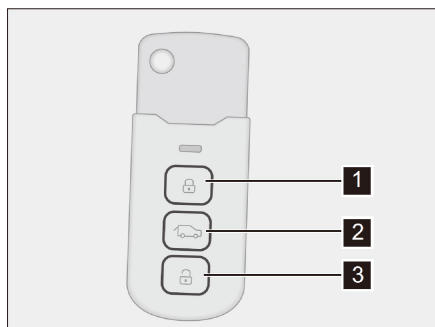


- ① Straight key
- ② Remote control key

Each new vehicle is equipped with two keys. Please keep one as a spare.

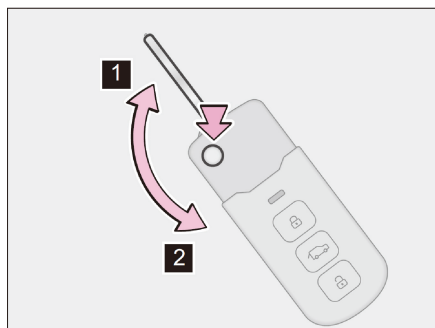
For safety, please keep the number plate of the key in a safe place to prevent others from illegally preparing the key.

Wireless remote control



- ① Lock button
- ② Tailgate opening button
- ③ Unlock button

Use mechanical key



- ① Release
 - Press the button to release the key.
- ② Fold
 - Press and hold the button to fold the key into the holder.

Functional limitation

Even if the remote control key is idle, the battery power may be exhausted. The following symptoms indicate that the remote control key battery is low or may be exhausted. If necessary, replace it with a new battery.

- The wireless remote control function does not work.
- The LED indicator lamp on the key surface is not on.
- The range of operating the wireless remote control function may become smaller.

Prevent damage to the key

- Do not disassemble the key.
- Do not drop the key to avoid strong impact or bending.
- Do not expose the key to high temperature for a long time.
- Do not stick stickers or other items on the surface of the key.
- Do not wet the key or clean it in equipment such as ultrasonic cleaner.
- Do not attach metal or magnetic substances to the key, or place the key near such substances.

The wireless remote control function may not work properly under the following circumstances:

- When the wireless remote control key battery is exhausted.
- Near TV tower, power plant, gas station, radio station, large display, airport or other facilities that generate strong radio waves or electrical noise interference.
- When carrying portable radio, mobile phone or other wireless communication equipment.
- When there are multiple wireless remote control keys nearby.
- When a metal object contacts or covers the wireless remote control key.
- When other wireless remote control keys (transmitting radio waves) are in use near the vehicle.

- When the wireless remote control key is placed near the electrical equipment (such as personal computer).
- When there is a window film or metal object with metal components attached to the window.

Replace key battery

There is a lithium battery in the remote controller of the key, which can be used for 2 years. When the remote control distance is gradually shortened (the remote control must be closer to the vehicle to succeed), it indicates that the battery power is low. The battery in the key cannot be charged. When the battery runs out, it is recommended to replace it at the CENNTRO authorized service center.

Warning

- Please keep the new battery and removed battery out of reach of children.
- Do not swallow the battery. Otherwise, chemical burns may be caused.
- If you accidentally swallow the battery or it enters the body, please see a doctor immediately.

Caution

- Ensure that the positive and negative poles of the battery are installed correctly.
- When installing the battery, be careful not to bend the electrode and terminal.
- Please ensure that your hands are dry and away from water when replacing the battery.
- Only use the battery model recommended by CENNTRO (3V-CR2032 lithium battery).
- Do not touch the new battery with greasy fingers, which may cause the battery to be corroded.
- Do not touch or move any components in the smart key, otherwise the normal function will be affected.
- Do not forcibly remove the battery cover, otherwise the battery cover will be damaged.

**Environmental protection**

- Waste lithium batteries cannot be treated as general household garbage. Please dispose of waste batteries according to local environmental protection laws and regulations.

Vehicle anti-theft system

When the system detects a forced entry, it will send a warning and make the hazard warning lamp flash continuously.

After all passengers get off the vehicle, close all doors and tailgate and lock all doors through the lock button on the key. At this time, the body anti-theft system is activated.

Warning

Warning can be triggered under the following conditions:

- The locked door or tailgate is opened.
- Turn the power switch to the ACC or ON position.
- The tailgate is opened unauthorized.

Release or stop the warning

Perform one of the following actions to release or stop the warning:

- Use the wireless remote control to unlock or lock the door.
- The warning will automatically terminate after about 30 seconds and re-enter the anti-theft mode.

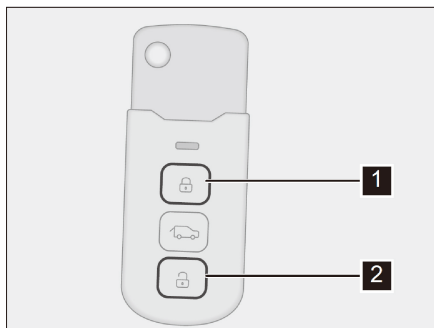
**Caution**

- Do not modify or disassemble the system. If the system is modified or disassembled, the normal operation of the system will not be guaranteed.

Door

Unlock and lock the door from the outside

Wireless remote control



① Lock the door

When the power switch is turned off and all doors, front cabin cover and tailgate are closed, press this button to lock all doors. Check and confirm that the door is firmly locked.

When any door or tailgate is not closed, press this button the vehicle cannot be locked.

② Unlock the door

Mechanical key



① Unlock the door

② Lock the door

Reading

- When all the doors and tailgate are closed, there will be a horn arming tone when locking the vehicle. If any door or tailgate is not closed, there is no horn arming tone when locking the vehicle.
- After locking the vehicle with the door mechanical switch, please check whether each door is locked. If it cannot be locked, please contact the CENTTRO authorized service center immediately.

Automatic locking

When all doors are closed and the vehicle speed exceeds 15 km/h (9 mph), the vehicle will be automatically locked. When receiving a valid collision signal, the vehicle unlocks and turns on the turn signal lamp.

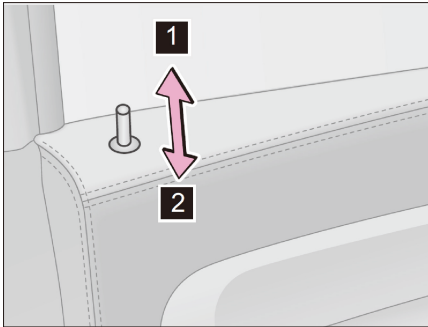
Security function

If the door or tailgate is not opened within 30 seconds after unlocking the door using the wireless remote control, the security function will automatically lock the vehicle again.

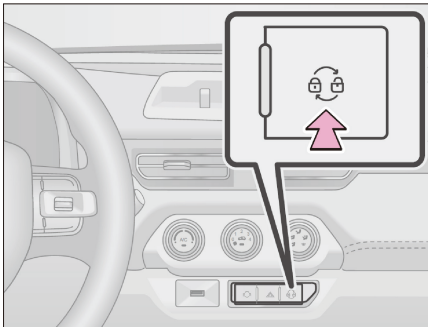
Automatic unlocking function

When the vehicle is locked, if the power switch is turned off, the door will automatically unlock.

Unlock and lock the door from the inside



- ① Unlock the door
- ② Lock the door



When the vehicle is locked, press the switch to unlock the vehicle.

When the vehicle is unlocked, press the switch to lock the vehicle.

 Warning

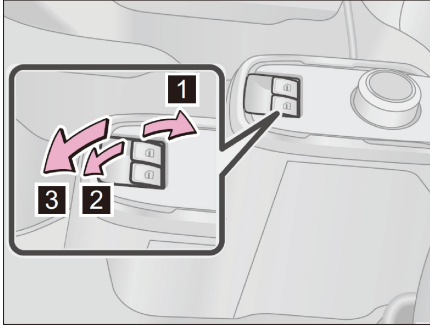
- The following precautions should be observed during driving the vehicle, otherwise the passengers in the vehicle may be thrown out of the vehicle due to the accidental opening of the door, resulting in serious personal injury or even death.
 - » Wear the safety belt correctly.
 - » Lock all doors.
 - » Ensure that all doors are closed correctly.
 - » When leaving the vehicle and there is no one in the vehicle, please take out the key, close all windows and sunroof and lock all doors to prevent others from entering or the vehicle from being stolen.
 - » It is dangerous to leave children alone in the unlocked vehicle when leaving the vehicle. Children may lock themselves in a hot vehicle, which may lead to death.
 - » Before opening the door, make sure that it is safe around the vehicle. It is very dangerous to open the door suddenly, and may crash into passing vehicles or pedestrians and cause accidents.
 - » After closing the door, make sure it is closed tightly. It is very dangerous to leave the door unclosed. If you drive the vehicle with the door unclosed, the door may open accidentally, causing an accident.

 Caution

- When leaving the unattended vehicle, you must lock all doors and take away the key. If the door is unlocked, it will cause the vehicle to be stolen.

Window

Power window



Turn the power switch to the ON position and operate the power window switch:

- ① Manual closing
- ② Manual opening
- ③ Automatic opening*1

*1: During the automatic opening process, operate the switch upward to stop the automatic lowering.

Remote window lowering function

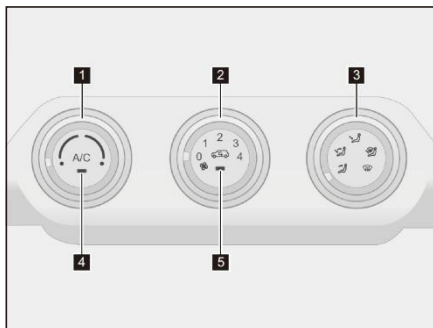
Turn off the power switch, and all doors will be closed. In the effective area, long press the unlock button on the remote key to open all windows. When the unlock button is released or any door is opened during the window opening process, the window stops moving.

Warning

- When operating the window, check and make sure that no part of the passenger's body is stuck.
- The driver shall be responsible for the operation of all power windows, including the operation of passengers. To prevent accidental operation (especially children), do not let children operate the power window. Power window may catch the body parts of children and other passengers.
- When leaving the vehicle, please turn off the power switch, carry the key and get off with the children. Due to children's naughty behavior, accidents may occur due to accidental operation.

Air conditioning system

Air conditioning control panel



- ① Temperature adjustment knob
- ② Air volume adjustment knob
- ③ Air outlet mode selection knob
- ④ A/C button
- ⑤ Internal and external circulation switchover button



Warning

- When the vehicle is not in READY state, do not use the air conditioning system for a long time without any reason to prevent the 12V battery from being exhausted, which will cause the vehicle to fail to start.



Caution

- When using the air conditioning system, if the power battery is too low, the air conditioning will be automatically turned off. Please charge the vehicle in time.
- When the vehicle is in READY state, the air conditioning system can conduct cooling or heating, otherwise the wind blown out is the natural wind.
- If the air conditioning system is turned on when the vehicle is powered off, the air conditioning system will turn on automatically the next time the vehicle is started

Air conditioning operation

Air volume adjustment

Turn the air volume adjustment knob clockwise to increase the air volume. Turn counterclockwise to reduce the air volume.

Temperature adjustment

The temperature adjustment knob has 6 gears in total, which are rotated clockwise from the bottom left (the lowest part of the blue area), and they are 1-2-3-4-5-6 gears in sequence. 1-2-3 gears (blue area) are for cooling, 4-5-6 gears (red area) are for heating.

A/C button

When the vehicle is in READY state, the battery power is not less than 15%, and the air volume of the air conditioner is in non-zero gear, press the A/C button, and the indicator lamp on the button will light up to turn on the air conditioning cooling function. Press again, the indicator lamp on the button will go out, and the air conditioning cooling function will be turned off.

Caution

- Unless the A/C is manually turned off, the A/C works regardless of whether the temperature knob is in the cooling position (blue zone) or in the heating position (red zone).
- The PTC operates when the temperature knob is in the heating position (red zone).
- Under normal conditions, it is recommended that you do not activate the A/C and PTC at the same time to save power.

PTC heating

When the vehicle is in READY state, the battery power is not less than 15%, and the air volume of the air conditioner is in non-zero gear, rotate the temperature adjustment knob to the red area, and the PTC heating function will automatically start.

PTC heating has three gears. When the temperature adjustment knob is turned to the fourth gear, PTC heating is in the first gear; when the temperature adjustment knob is turned to the fifth gear, PTC heating is in the second gear; when the temperature adjustment knob is turned to the sixth gear, the PTC heating is in the third gear.

Internal and external circulation switchover

Press the internal and external circulation switchover button, and the indicator lamp on the button will light up to enter the internal circulation mode. Press again, the indicator lamp on the button will go out, and enter the external circulation mode.

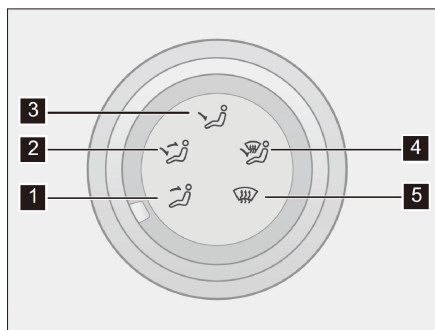
 Warning

- Do not drive in the internal circulation mode for a long time, otherwise you may feel sleepy.
- Do not use the internal circulation mode in cold or rainy weather, otherwise it will cause fog on the window, and your vision will be blocked, which may cause serious accidents.

 Reading

- When driving on dusty roads such as tunnels or congested roads, use the internal circulation mode. This can effectively prevent external air from entering the vehicle. During refrigeration operation, the use of internal circulation mode will also effectively reduce the temperature in the vehicle.

Air outlet mode selection



Turn the power switch to the ON position, turn the air outlet mode selection knob to the desired mode, and then the corresponding mode of air outlet can be carried out.

- ① The air is blowing to the upper body.
- ② The air is blowing to the upper body and feet.
- ③ The air is blowing to the feet.
- ④ The airflow blows to the feet and the windshield demister works.
- ⑤ Windshield demister works.

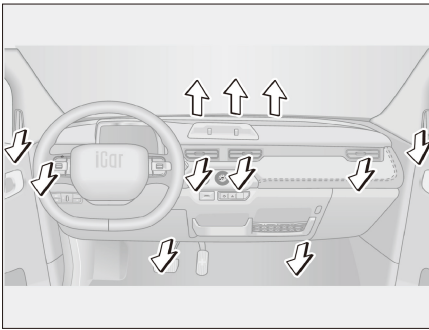
After selecting the windshield defrost mode, the A/C function will be automatically turned on, and the indicator lamp on the A/C button will be on. The circulation mode is switched to the external circulation mode.

 Warning

- When the weather is extremely wet, do not use the windshield defrosting mode during refrigeration operation. The temperature difference between the outside air and the front windshield may cause fog on the outside surface of the front windshield, thus hindering your vision.
- Do not put anything that may cover the air outlet on the instrument panel, otherwise it may block the air flow and thus prevent the windshield from defrosting.

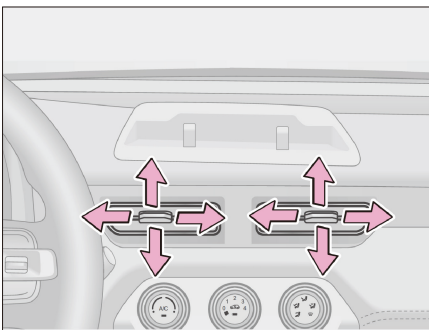
Air outlet

Location of air outlet



The air outlet and air volume change according to the selected air flow mode.

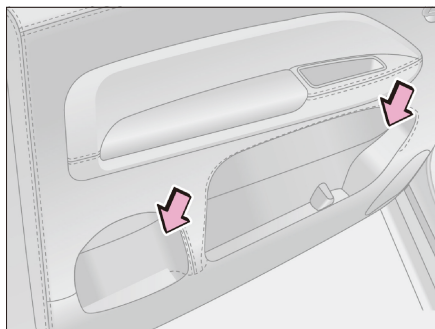
Adjust the air outlet



Guide the air flow to the left or right, upper or lower side.

Storage space

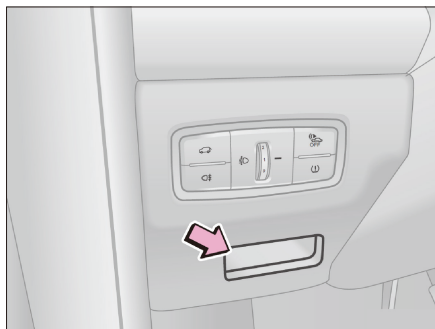
Storage space

Storage box on the door

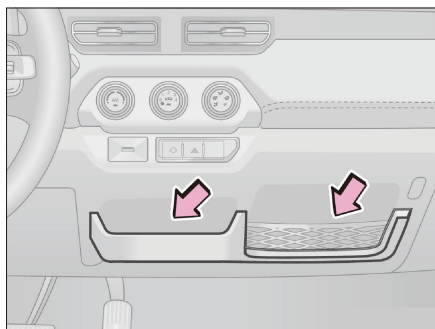
The left and right doors are equipped with storage box. It can be used to place sundries such as bottles or rags.

Please tighten the cap when storing bottles. Bottles may not be stored due to their size or shape.

Interior functions

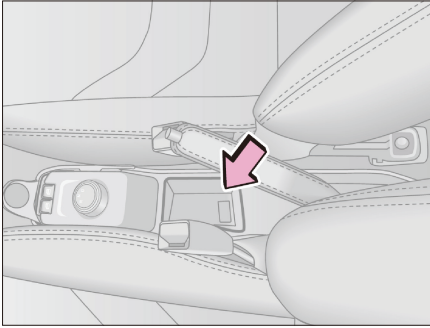
Storage box on the left side of the instrument panel

The storage box on the left side of the instrument panel can store some small items.

Storage box in the middle of the instrument panel

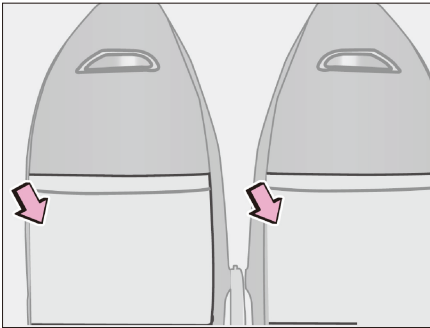
The storage box in the middle of the instrument panel can store some small items.

Auxiliary instrument panel storage box



The middle of the auxiliary instrument panel is equipped with storage box.

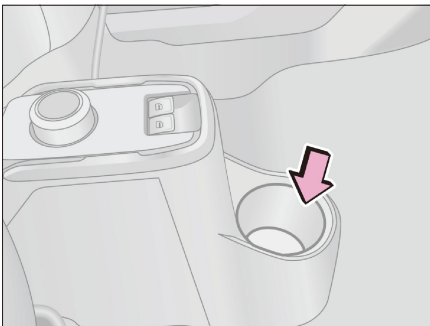
Seat backrest pocket



The backrest pocket is located under the rear of the front seat backrest.

It is used to store articles such as newspapers and magazines.

Cup holder



The cup holder is located at the front lower part of the auxiliary instrument panel.

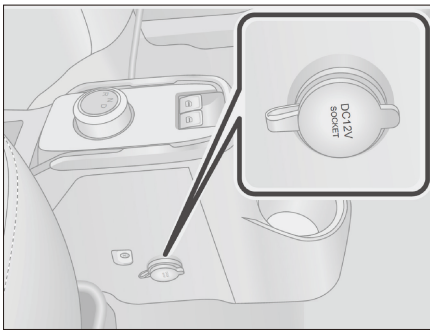
 Warning

- Please tighten the cap when storing bottle in the cup holder.
- When the vehicle is running, it is very dangerous to put a cup containing hot liquid in the storage box. If the liquid in the cup spills, it may cause burns.
- Do not put some sharp objects in the storage box. In case of emergency stop or accident, these objects may pop up and cause serious personal injury or even death.
- Do not store the lighter or spray can in the storage space, otherwise the lighter or spray can may explode when the temperature of the compartment rises. In case of contact with other stored items, the lighter may catch fire or the spray can may release gas, thus causing a fire.

Power supply socket

Power supply socket

Front



The front power supply socket is located under the left baffle of the auxiliary instrument panel. This socket can be used to power 12V electrical equipment.

It can be used when the power switch is switched to the ON position.

Rear (if equipped)

The rear power supply socket is located on the left side of the rear compartment. This socket can be used to power 12V electrical equipment.

It can be used when the power switch is switched to the ON position.

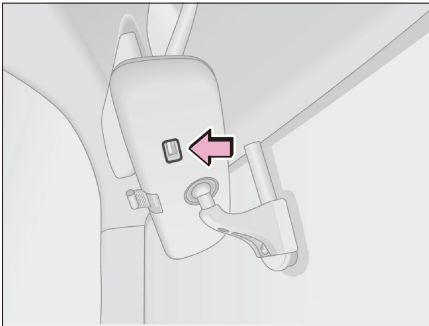
 Warning

- Do not let children touch the power supply socket.
- Keep the power supply socket free of dust and foreign matters. In addition, make sure to clean the power supply socket regularly.
- Do not use accessories with rated voltage exceeding 12V, otherwise the vehicle or electrical equipment may be damaged, and even fire or explosion accidents may occur.
- Do not leave the vehicle when the vehicle is in READY state and the equipment is connected to the power supply socket.

USB interface

USB interface

Interior rearview mirror fixing base



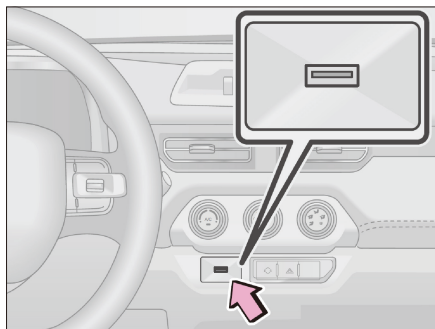
The rear of the interior rearview mirror is equipped with a USB interface.

This interface is a driving recorder interface. This interface can not charge the mobile phone.

If connected to the mobile phone, turn off the power switch before connecting to the driving recorder, otherwise the driving recorder cannot be powered on.

 Caution

- The standard output voltage of the interior rearview mirror USB interface is 5V, and the standard output current is 1A. Please select the appropriate equipment according to this standard, otherwise the equipment will not be used or the interior rearview mirror USB charging module will be damaged, and the resulting fault is not within the scope of quality warranty.

Front

The front USB interface is located under the air conditioning control panel. It can be used when the power switch is switched to the ON position.

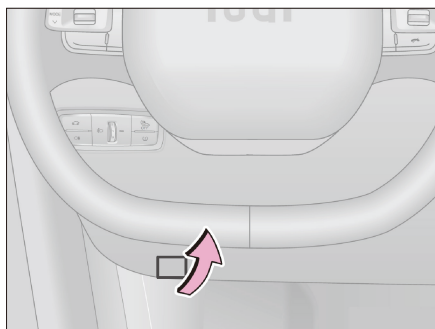
For some vehicle models, this interface can charge the mobile phone.

For some vehicle models, USB flash disk can be inserted into this interface, and this interface can also charge the

mobile phone.

 Caution

- USB charging efficiency is very low. It can only keep the battery of the phone from dropping.

Front cabin cover**Open the front cabin cover**

1. Pull the opening handle of the front cabin cover on the lower left side of the instrument panel, and the front cabin cover will spring up slightly.
2. extend your hand below the front edge of the front cabin cover, pull up the unlocking handle and fully open the front cabin cover.
3. Insert the support rod firmly into the support rod seat to keep the front cabin cover open.

Close the front cabin cover

1. Check the area under the front cabin cover to ensure that the covers of all containers are in place and that scattered objects (such as tools, etc.) have been removed.
2. Fix the support rod in the clip.
3. Lower the front cabin cover with slight force, check and confirm that the front cabin cover is fully closed and locked.

Warning

- Before driving, check and confirm that the front cabin cover is fully closed and locked. If the front cabin cover is not locked correctly, it may be opened during driving and cause an accident, which may cause serious personal injury.
- After installing the support rod to the support rod seat, ensure that the support rod firmly supports the front cabin cover to prevent it from falling and hurting your head or body.

Caution

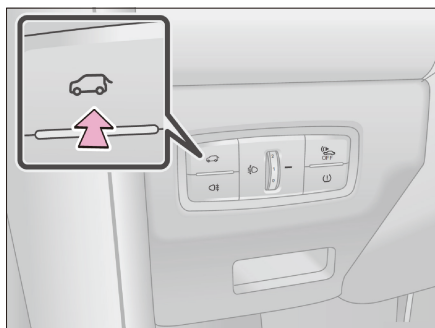
- Before closing the front cabin cover, make sure there are no tools or articles left in the front cabin.
- When closing the front cabin cover, do not apply excessive force, otherwise the front cabin cover may be damaged.
- Before closing the front cabin cover, be sure to put the support rod back into its clip, otherwise the front cabin cover may be bent.

Tailgate

Open/close the tailgate



Long press the tailgate open button on the remote key for 2 seconds to unlock the tailgate.



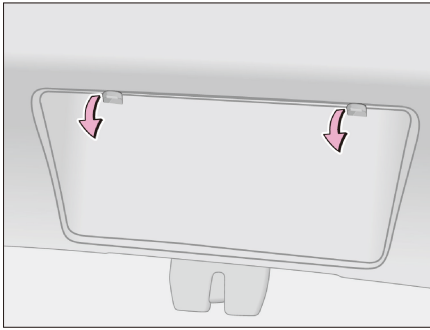
When the vehicle is unlocked, press the tailgate open switch on the left side of the instrument panel to open the tailgate.

To close the tailgate, press the tailgate from outside the vehicle to make sure it is fully closed.

 Warning

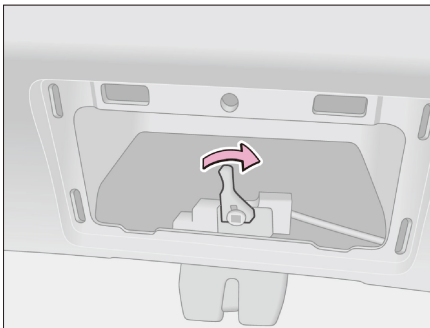
- Ensure that the tailgate is fully closed. If the tailgate is not fully closed, it may be accidentally opened and collided with nearby objects during driving, thus causing an accident.
- When opening or closing the tailgate, check thoroughly to ensure the safety of the surrounding area.
- If there are people nearby, ensure their safety and inform them that the trunk is about to open or close.
- When closing the tailgate, take special care to avoid pinching fingers and other parts.
- Be careful when opening or closing the tailgate in windy weather, because the tailgate may move suddenly in strong wind.
- Do not allow children to open or close the tailgate. Otherwise, it may cause the tailgate to open accidentally, or cause the tailgate being closed to clamp children's hands, head or neck.
- When closing the trunk cover, take special care to avoid pinching fingers and other parts.
- Before opening the trunk cover, remove the heavy load on the trunk cover, such as snow and ice. Otherwise, the trunk cover may be opened and suddenly closed again.
- Before driving, make sure the tailgate is fully closed. If the tailgate is not fully closed, it may be accidentally opened and collided with nearby objects during driving, or the luggage in the trunk may be thrown out accidentally, causing an accident.

Emergency opening of tailgate



If the tailgate cannot be opened from outside the vehicle, the tailgate emergency device switch can be used to open the tailgate.

1. Fold the rear seats so that you can enter the tailgate from the inside of the vehicle.



2. Remove the interior trim cover of the tailgate inner guard.
3. Push the emergency device switch to the right to open the tailgate.





High voltage safety

High voltage safety

High voltage system components mainly include power battery, charging DC power distribution three-in-one, high voltage harness, motor control unit, drive motor, electric compressor, and high voltage electric heater.

- The orange cable on the vehicle is the harness and connector of high voltage components. It is forbidden to touch the exposed or damaged orange high voltage cable, otherwise there is a risk of electric shock.
- High voltage warning labels are pasted on the high voltage components. Please pay attention to the relevant warnings. In order to avoid electric shock, it is forbidden to touch the high voltage components, high voltage cables and their connectors.

Meaning of high voltage identification

Identification	Meaning
	High voltage hazard
	Keep away for safety
	Electric shock
	Read the Operation Instruction

Precautions for use of electric vehicle

Precautions for use of electric vehicle

This vehicle is a battery electric vehicle. In order to ensure your safety and better understand and use battery electric vehicles, please follow the following suggestions during use:

- When washing the vehicle or in rainy days, close the door, front cabin cover and tailgate tightly to avoid direct wetting of the high voltage system and power battery by water, so as to avoid short circuit of the high voltage system.
- Under the high temperature weather conditions in summer, it is recommended not to expose the vehicle to the sun at high temperature for a long time. It is better to park it in a cool place with good ventilation.
- In winter, the charging efficiency of the power battery will be reduced. It is recommended that the vehicle should be charged as soon as possible after use in winter to avoid battery temperature reduction, which will lead to long charging time and affect the use.
- With the increase of service life, charging times and the influence of personal driving habits, road conditions, environment and other factors, the capacity of the power battery may be reduced to a certain extent, resulting in a decline in the driving mileage, which is normal.
- When the vehicle is driven in a low temperature environment, the battery discharge will be reduced, and the vehicle power and driving mileage will be reduced. It can be recovered after the temperature rises.
- The service life of the power battery is related to the depth of discharge, so avoid the deep discharge of the power battery. Therefore, when the vehicle prompts charging or the vehicle is out of use, the vehicle should be charged in time, which help to protect the cycle life of the power battery.
- When the vehicle is running, rapid acceleration will sharply increase the discharge capacity of the power battery, which is not conducive to the use of the power battery. It is recommended to maintain slow acceleration as possible, which can significantly improve the driving mileage and service life.
- It is recommended that the vehicle should be fully charged with slow charge for the first time, and then be fully charged with slow charge at least once every half month, which will help to correct the remaining battery power/ driving mileage and improve the service life of the power battery.
- If the vehicle is parked for a long time, please keep the power of the power

battery at 50% - 70%, and disconnect the negative connecting wire of the 12V battery.

- In case of unexpected conditions such as power battery bottoming, collision, soaking in water, etc., serious fault warning (such as power battery overtemperature, insulation warning, etc.) of combination instrument, and serious deformation or crack of power battery shell and plug-in, please contact CENNTRO authorized service center immediately for maintenance.

Vehicle charging

Charging information

When the vehicle needs to be charged

When the vehicle is running, if the low battery warning lamp is on, it indicates that the power battery is low and needs to be charged as soon as possible.

When the battery power meter shows that the remaining power is low, or the driving mileage can not meet the travel demand, it must be charged.

Caution

- If conditions permit, charge the vehicle when it is parked. Shallow charging and discharging of the battery is beneficial to extending the battery life. Do not charge the power battery after it has run out of power, which may be harmful to the next trip and the battery service life.

Precautions for charging

Please pay attention to the following safety precautions during vehicle charging or at the end of charging to avoid high voltage electric shock or more serious injury.

- If you have implanted a cardiac pacemaker or cardiovascular defibrillator, please do not stay in the vehicle for a long time when charging, otherwise it may affect the function of the electronic medical device and cause personal injury or death.
- Please choose to charge in a ventilated environment away from liquids and ignition sources. The ambient temperature for vehicle charging is recommended to be between 0~35 °C (32~95 °F) to avoid charging in low temperature or high temperature environment (it is recommended to charge at noon in winter and in the morning and evening in summer).
- Before charging, make sure to wipe the rain and dirt near the charging port of the

vehicle body dry before opening the charging port for charging. Special attention shall be paid to the charging socket and its surrounding area to avoid water stains.

- Please make sure that the charging interface and plug are free of water or other sundries, rust or corrosion. If there is water or corrosion on the charging interface or charging plug, please do not charge, so as to prevent short circuit or electric shock, or even cause personal injury or death.
- Before charging, please check and confirm that the power supply socket is in good condition, the internal grounding wire is grounded normally, and the contact copper strip of the live wire, null wire and grounding wire is free of ablation, looseness or poor contact. Otherwise, it may cause charging fault of the whole vehicle.
- Before charging, please check whether the skin and shell of the charging cable are damaged. If the above conditions occur, please contact the CENNTRO authorized service center for repair or replacement. It is forbidden to use the damaged charging cable.
- Before preparing to charge, confirm that the vehicle has applied the parking brake to ensure that the vehicle will not move.
- During charging, it is forbidden to touch the metal part of the charging interface and charging socket. If there is electric spark on the vehicle or on-board charger, it is forbidden to touch the vehicle and any device, otherwise it may be subject to electric shock, causing personal injury or death.
- During charging, make sure that the charging cable is in a natural state and do not hang in the air.
- If special smell or smoke is found on the vehicle, please cut off the power supply immediately and safely and contact the CENNTRO authorized service center in time.
- In case of rainstorm, lightning, snow, hail and other weather conditions, please do not touch the charging port during the charging process and at the end of the charging process to avoid personal injury caused by electric shock.
- After charging, when unplugging the charging plug, please hold the insulated part of the plug and do not drag or pull the charging cable directly.
- After charging, make sure to close the protective cover of the charging interface and charging port cover. Before starting the vehicle, make sure that the charging plug has been pulled out of the charging port.

 Warning

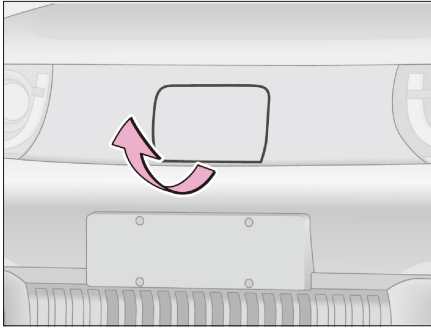
- Please only use the charging equipment approved by CENNTRO or conforming to local regulations/standards for charging.
- When using household power supply for charging, it must be confirmed that the selected power supply or cable has a carrying current of 16 A (4 mm²) or more and has been reliably grounded, otherwise it may cause fire or electric shock, and there is a risk of fatal injury.
- If the charging cable is used for charging, please only use the charging cable provided with the vehicle or specified by the manufacturer for this vehicle.
- It is strictly forbidden to use the damaged charging cables. If the charging cable or power supply is abnormally hot, please stop charging and go to the CENNTRO authorized service center for inspection.
- It is forbidden to use multiple adapter plugs and extension cables for charging, and it is also forbidden to extend or modify the charging cables or plugs without permission, otherwise it will be dangerous.
- Children are not allowed to charge. The charging plug is a high voltage electrical equipment, and children are not allowed to use it.
- Do not dismantle or modify the charging port without permission.
- It is strictly forbidden to dismantle the high voltage cables and parts connected with high voltage cables in the vehicle without permission, otherwise it may cause serious vehicle damage and cause electric shock injury.
- During charging, it is forbidden to squeeze the charging cable to avoid electric shock or fire.
- During charging, it is forbidden to put the charging cable in the vehicle.

Charging method

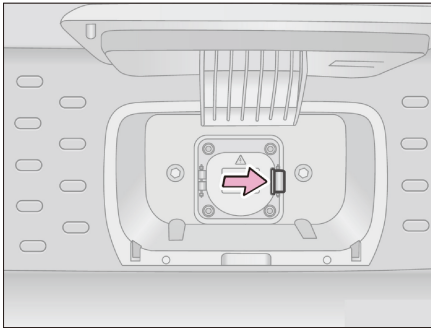
Use household power supply to charge

Begin to charge

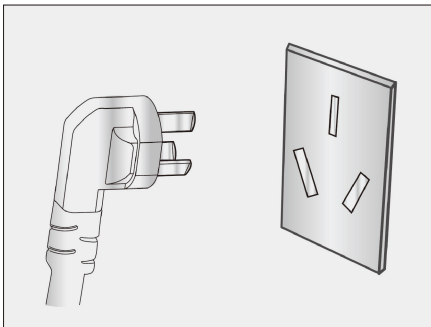
1. park the vehicle in the AC charging area, turn off the power switch, pull out the key, and apply the parking brake.
2. Take out the charging cable and check whether the cable is intact.



3. Pull the lower edge of the charging port cover and open the charging port cover.



4. Push the switch to the right to open the protective cover of the charging socket.



5. Insert the power plug to the power socket.
6. Press the release button and remove the vehicle plug protection cover. Step.
7. Insert the vehicle plug to the vehicle socket until you hear a "click" to lock the vehicle plug.

Stop charging

1. Press the release button and pull out the vehicle plug.
2. Close the protective cover of the charging socket, and then close the charging port cover.
3. Unplug the power plug from the power socket and keep the charging cable properly.



Warning

- When using household power supply for charging, it must be confirmed that the selected power supply or cable has a carrying current of 16A (4 mm²) or more and has been reliably grounded, otherwise it may cause fire or electric shock, and there is a risk of fatal injury.
- Household 16 A power supply socket conforming to the standard shall be used, and other sockets are prohibited.
- Do not touch the metal parts of the plug and other connectors during charging to prevent electric shock and damage.
- During charging, do not touch the charging cable and plug with wet hands, and do not charge the vehicle in a wet place, otherwise electric shock may occur.



Reading

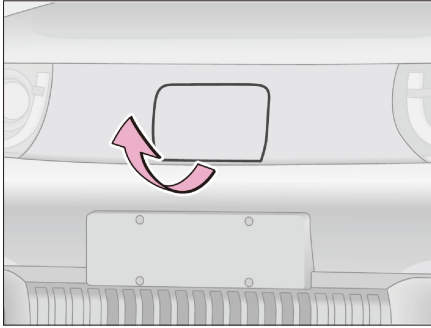
- Under different ambient temperature, power and other conditions, the full charge time may have a certain deviation, which is normal. When the ambient temperature is low, the charging efficiency will be reduced and the charging time will be longer.

Description of indicator lamp on control box

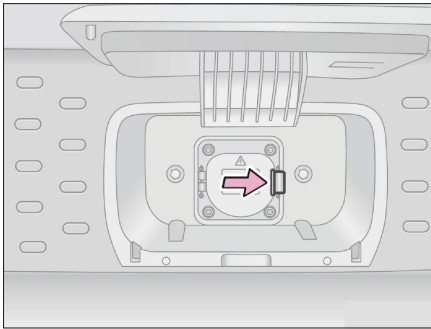
Working status	Indicator lamp status			
	Power lamp (blue)	Connection lamp (yellow)	Charging lamp (green)	Fault lamp (red)
Initial mode	Always on	Go out	Go out	Go out
Waiting for charging	Always on	Always on	Go out	Go out
Charging now charging	Always on	Go out	Always on	Go out
Charging is over	Always on	Always on	Go out	Go out
Ungrounded fault	Always on	Go out	Go out	Flash once and go out for 2s
Leakage current fault	Always on	Go out	Go out	Flash twice and go out for 2s
Overcurrent fault	Always on	Go out	Go out	Flash three times and go out for 2s
Overvoltage and undervoltage	Always on	Go out	Go out	Flash four times and go out for 2s
CP voltage fault	Always on	Go out	Go out	Flash five times and go out for 2s
Overtemperature fault	Always on	Go out	Go out	Flash six times and go out for 2s

Charging with AC charging pile

1. After the vehicle is parked safely and stably and the parking brake is applied, turn off the power supply of the whole vehicle.



2. Pull the lower edge of the charging port cover and open the charging port cover.



3. Push the switch to the right to open the protective cover of the charging socket.
4. Remove the charging gun from the charging pile and plug it into the AC charging port. Please check whether the charging gun is plugged in place.

5. Start charging after payment according to the operation instructions on the charging pile, and confirm whether the vehicle is charging normally.
6. After charging, correctly pull out the charging gun, and cover the charging base protective cover and charging port cover.
7. Insert the charging gun into the charging pile correctly.

Power battery

Power battery

The power battery is located under the vehicle chassis to provide driving power for the vehicle. In winter, the discharge performance of the power battery will decrease with the decrease of temperature, and the change of this performance can be recovered with the increase of temperature. It is recommended that you avoid rapid acceleration and high speed driving for a long time when driving at low temperature in winter, reasonably arrange the use of air conditioning and heating, and timely charge the vehicle.

If you need to replace the power battery, please be sure to send the old battery to the designated recycling service center for recycling. Discarding the power battery at will will pollute the environment and even cause personal injury. Relevant laws and regulations also require this kind of waste to be recycled.

- If the power battery is improperly handled, it may cause serious accidents, causing damage to the power battery or personal injury. In order to avoid accidents, the following items should be noted:
 - » Do not expose the vehicle in an environment above 45 °C (113 °F) for more than 24 hours, and place the vehicle in a cool environment in time.
 - » Do not place the vehicle in an environment of -25 °C (-13 °F) for more than 7 days, and place the vehicle in a warm environment in time. If the vehicle is in a low temperature (below -25 °C (-13 °F)) environment for a long time, the internal part of the power battery may freeze, resulting in the inability to charge and provide driving power to the vehicle, which is very dangerous.

Recovery of power battery

When the power battery needs to be repaired or replaced, the vehicle should be sent to the after-sales service organization with corresponding capabilities. When the vehicle meets the scrapping requirements, it should be sent to the scrapped vehicle recycling and dismantling enterprise, and the used power battery should be handed over to the recycling service center. If the waste power battery is handed over to other units or individuals, and the power battery is dismantled or disassembled without permission, the environmental pollution or safety accident caused by the above operations shall be borne by such units or individuals.

 Warning

- It is forbidden to dismantle or disassemble the power battery without permission. When dealing with accidents, relevant professionals should not cut or hit the power battery box to prevent leakage or deformation of the power battery, thus causing personal injury.

 Caution

- Do not use the power battery pack on the vehicle for other purposes.
- In order to prolong the service life of the power battery and ensure driving safety, try to avoid driving with the battery power less than 10%.
- After purchasing the vehicle and before the vehicle power is lower than 30%, please fully charge the power battery to 100% before use, so as to maintain the power battery.

 Reading

- The power battery should be properly used and maintained. Daily full charging and slow charging are critical to its performance maintenance. At the same time, due to chemical characteristics, the battery capacity has natural fading. If the vehicle driving mileage is reduced, it is recommended to contact the CENNTRO authorized service center for inspection. If there is no fault, the driving mileage reduction is due to the normal fading of battery capacity.

Inspection before driving

For the safety of yourself, all passengers and other road users, the following items should be checked before driving each time:

Inspection before entering the vehicle

Check and remove the snow and fallen leaves on the vehicle body.

Check whether the tire is excessively worn, whether the tire pressure is normal, and whether foreign matters are embedded in the tire tread.

Check whether the front cabin cover and charging port cover are closed and locked.

Check whether all windows and rearview mirrors are clean.

Check whether there are obstructions around the vehicle.

Inspection after entering the vehicle

Check whether all doors are fully closed.

Check and clean the unfixed sundries on the instrument panel.

Adjust the seat position and confirm that the seat is locked.

Check and confirm that all passengers have fastened their safety belts. If the passengers include children, please confirm whether the child protection system is in place.

Check whether the visual field of each angle is clear and good (front view, side door view and rearview mirror view).

Inspection after vehicle startup

Check whether the vehicle lighting, turn signal lamp, brake lamp and other functions are normal.

Check the remaining power of the power battery and the driving mileage to ensure that the vehicle can reach the destination.

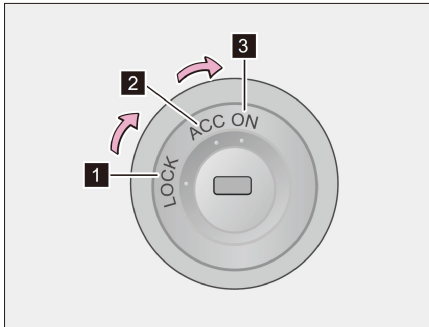
Check whether each pedal can be pressed smoothly. If you need to lay the foot mat, please use the foot mat suitable for your vehicle. If the foot mat is improperly shaped, laid in the wrong position or laid in double layers, it will affect the treading operation of the pedal, and may cause difficulty in shifting, inability to shift and other accidents.

Check whether the fault lamp on the instrument is always on. If the fault lamp is always on after the vehicle is started and you are unable to determine whether it will affect the driving safety of the vehicle, you can call the CENNTRO authorized service center.

Vehicle power mode

Power switch

Insert the key into the power switch and turn it to switch the power switch position.



① LOCK

- The steering wheel is locked and the key can be removed.
- To lock the steering wheel, remove the key and turn the steering wheel until it locks.
- If the key cannot turn when unlocking the steering wheel, turn the key while turning the steering wheel slightly left and right.

② ACC

- Some electrical components can be used.

③ ON

- Without stepping on the brake pedal, switch the power switch to this position, and then the low voltage electrical equipment of the whole vehicle can work normally.
- Press the brake pedal and switch the power switch to the ON position at the same time, or press the brake pedal when it is in the ON position, the vehicle enters the READY state, the high voltage working circuit is connected, and the drive motor is ready.

Caution

- Do not keep the key in the ACC or ON position for a long time, otherwise the 12V battery may be exhausted.
- Do not remove or rotate the key while driving. Otherwise, the steering wheel may be locked, the driver may lose control of the vehicle, and the brake assist will also disappear, resulting in vehicle damage and casualties.

Startup and operation

Normal startup and shutdown

Start the vehicle

1. Check and confirm that the parking brake has been applied.
2. Check and confirm that the gear is in N gear.
3. Insert the key, switch the power switch to the ON position, and press the brake pedal until the READY indicator lamp on the combination instrument lights up.

Shut down the EV system

1. completely stop the vehicle.
2. Set the gear to N gear.
3. Apply the parking brake.
4. Turn off the power switch to turn off the EV system.

If you cannot enter READY state:

If the READY indicator lamp on the combination instrument does not light up, it means that the vehicle has not entered the READY state. Please check whether the power switch is in the ON position and whether the brake pedal has been pressed.

If the combination instrument does not display anything when the power switch is in the ACC or ON position, it may be that the 12V battery is low and needs to be charged. It is recommended that you contact the CENNTRO authorized service center.

Parking

Before leaving the vehicle, put the power switch in the LOCK position and pull out the key. Turn the steering wheel until the steering wheel is locked.

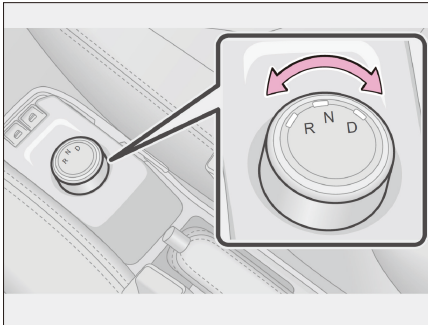
When parking on a ramp, fully apply the parking brake. Before leaving the vehicle, check again and make sure that the doors and windows are fully closed.

 Warning

- Do not leave children or people with limited mobility in the vehicle.
- When parking the vehicle, do not park on the road with water or on the low-lying road where water is easy to accumulate, especially in the rainy season, to prevent some parts (such as power battery) from being damaged by water.
- When the vehicle is flooded, soaked, or submerged, please do not start the vehicle to avoid electric shock caused by leakage of high voltage components such as motor and power battery. Please contact CENNTRO authorized service center for treatment.

Gear shift control

Gear shift control



Turn the gear shift knob slightly to switch to the desired gear. The gear on the combination instrument is displayed as the current gear. The corresponding gear indicator lamp on the knob will also light up.

When the vehicle is in READY state and the vehicle is stationary, press the brake pedal to turn the gear shift knob to D or R gear.

When the vehicle is in READY state and the power switch is switched from ON position to ACC position, if the gear is in N position, it will remain in N position; if the gear is in R or D, it will switch to N gear.

Gear	Function
R gear	This position is reverse gear. When reversing, switch to R gear. Please stop the vehicle completely and press the brake pedal.

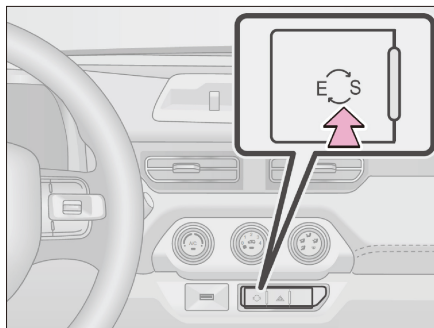
Gear	Function
N gear	This position is neutral gear, and the vehicle neither moves forward nor backward. Switch to N gear when the vehicle is parked. When the power switch is turned on, the gear is in N by default.
D gear	This position is drive gear. When switching to D gear, press the brake pedal first.

Warning

- Do not let children operate the gear shift knob to avoid accidental movement of the vehicle.

Driving mode

Driving mode



The driving mode selection switch is located at the lower part of the air conditioning panel.

Short press to switch between economic mode and sports mode; in the economic mode/sports mode, long press to enter the long endurance mode, and then long press again or short press to return to the economic mode.

Pedestrian reminder system

Pedestrian reminder system

Because the noise of battery electric vehicles is relatively low when driving at low speed, it is difficult for pedestrians around to perceive. In order to improve the driving safety, the pedestrian reminder system can emit a warning sound when the vehicle speed is lower than 20 km/h (12 mph), so that the surrounding pedestrians can better perceive.



The headlamp adjustment switch is equipped with a pedestrian reminder system switch. Press this switch to turn off the pedestrian reminder system. After the vehicle is powered off and powered on again, the pedestrian reminder system returns to the working state.

Warning

- The pedestrian reminder system can only be turned off when there are no pedestrians in a short distance and the surrounding environment obviously does not need a warning tone!

Braking energy recovery

Braking energy recovery

When the vehicle is running and reaches the specified speed, release the accelerator pedal or press the brake pedal. When the system judges that the conditions for energy recovery are met, the vehicle will recover energy. Convert the mechanical energy during driving into electrical energy and store it in the power battery to increase the driving mileage.

In case of any of the following conditions, energy recovery cannot be carried out:

- When the power battery is 100%.
- When the outside temperature is below 0 °C (32 °F).

- When ABS is faulty.
- In sports mode, when the vehicle speed is less than 5 km/h (3 mph).
- In economic mode, when the vehicle speed is less than 8 km/h (5 mph).

Note: In addition to the above conditions, the energy recovery indicator lamp on the combination instrument may not light up under some working conditions, but there is still energy recovery. At this time, the energy recovery power is small.

Steering system

Electric power steering (EPS) system

Electric power steering system provides power steering for vehicles. The system does not need power steering fluid, which brings great convenience to the daily maintenance of vehicles. When the power switch is turned on, the EPS fault indicator lamp lights up briefly. If the EPS fault indicator lamp does not go out or lights up during driving, it indicates that EPS system is faulty. Please contact CENNTRO authorized service center immediately for inspection.

Under extreme conditions of long-time and high-load operation of the electric power steering system (for example, the steering wheel is fully turned and kept for a long time or the vehicle is repeatedly moved at a low speed and in a large angle), the heating protection function may be triggered due to the high temperature of the electrical components.

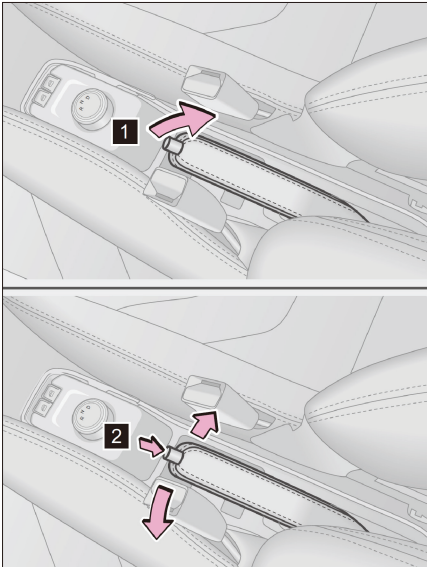
After entering the heating protection state, the system will reduce the assistance. At this time, you need to use greater force to turn the steering wheel. To restore normal assistance, turn the steering wheel at a small angle or increase the speed, and restart the vehicle if necessary.

Warning

- The illumination of the EPS fault indicator lamp may indicate that the electric power steering column is not working properly. If the steering column is not kept in good working condition, it may cause collision accidents, personal injury and damage to your vehicle or other property.

 Caution

- Electric power steering system will adjust the power assistance according to the vehicle speed. Therefore, the steering wheel is relatively light at low speed and relatively stable at high speed.

Brake system**Parking brake system****Operation method**

① Apply the parking brake

- Press the brake pedal and fully pull up the parking brake lever while confirming that the vehicle is stationary.

② Release the parking brake

- Step down the brake pedal, press the lock button and slightly lift and then fully lower the parking brake lever.

 Warning

- If the parking brake is not properly engaged, the vehicle may move itself out of control and cause danger under certain circumstances (such as parking on a ramp). If necessary, please contact CENNTRO authorized service center for adjustment.

 Caution

- Release the parking brake before driving. When the parking brake is not released, driving the vehicle will cause the brake components to overheat, which will affect the brake performance and aggravate the brake wear.

Service braking

The braking system is designed for braking performance under a wide range of driving conditions. The braking process is to reduce the vehicle speed through the brake friction and the friction between the tire and the ground. The slight friction sound during braking and the friction sound between the tire and the ground are normal, which do not need special treatment; the occasional squeal when braking is also normal. Because there may be other substances adhering to the friction surface during the use of the vehicle, the squeal may be caused if the vehicle is not used for a long time or the friction surface rusts after rain. As long as the squeal frequency is not high, no special treatment is needed.

If the brake temporarily loses its braking capacity due to overheating, park the vehicle in a safe area and wait for the brake to cool down.

If the brake temporarily loses its braking capacity due to wet components, restore its normal performance as follows:

1. Check whether there are vehicles behind.
2. Maintain a safe driving speed and ensure that there is sufficient space at the rear and both sides of your vehicle.
3. Carefully press down the brake until normal performance is restored.

 Warning

- Please check whether the brake lamp is normal before driving. After starting, drive at low speed and check the braking efficiency, especially after the vehicle has just been washed.
- Wet brakes can cause accidents. When the brake is wet, it can not play a good role in braking, and may cause the vehicle to sideslip and lose control. Therefore, after wading or washing the vehicle, drive the vehicle at low speed and gently step on the brake pedal intermittently to dry the brake.

 Caution

- To avoid affecting pedal travel, do not lay thick carpet in the brake pedal area.
- When the vehicle is running at high altitude, continuous braking may cause the brake pedal force to increase.
- If the brake pedal does not return or the brake pedal travel becomes longer, it indicates that the brake system may be faulty. Please contact the CENNTRO authorized service center to check the vehicle.
- If the vacuum pump fault indicator lamp lights up abnormally, it indicates that the brake vacuum pump is faulty, and the brake pedal may become hard. Please contact CENNTRO authorized service center immediately for vehicle inspection.
- If a certain oil circuit is faulty, it will take more effort to press the brake pedal and the braking distance will increase. It is strongly recommended that you immediately contact the CENNTRO authorized service center to check and repair the brake system.
- In order to run in the friction plate and brake disc and ensure the performance and service life, it is best to avoid emergency braking or long-term braking within 200 km (124 miles) after the purchase and installation of new friction plates.

Anti-lock braking system (ABS)

Anti-lock braking system (ABS)

The anti-lock braking system helps prevent the vehicle from slipping and losing control, and provides maximum braking capacity on slippery roads.

When the power switch is turned on, the ABS fault indicator lamp lights up briefly. If the ABS fault indicator lamp does not go out or lights up during driving, it indicates that ABS is faulty. Please contact CENNTRO authorized service center immediately. During braking, the ABS system will monitor the speed of each wheel. If one wheel tends to lock, the system will control the brakes of the two front wheels and the rear wheels respectively. When ABS is working, the brake pedal usually vibrates slightly with noise.

 Warning

- Please drive carefully and slow down when turning.
- When the anti-lock braking system is faulty, please go to the CENNTRO authorized service center for maintenance.
- Although anti-lock braking system can ensure the best braking efficiency, the braking distance will vary greatly depending on the road conditions.
- When driving in rainy days, please control the vehicle speed reasonably. If the wheels spin or slip, the anti-lock braking system will not control the vehicle.
- The anti-lock braking system cannot eliminate the danger caused by too close to the vehicle in front, wading, turning too fast or poor road surface, nor can it prevent accidents caused by negligence and incorrect driving.
- The anti-lock braking system helps to control the vehicle, but it is necessary to drive carefully, maintain the proper speed, and keep a safe distance from the vehicle in front. Even if the anti-lock braking system works, the stability of the vehicle and the operating efficiency of the steering wheel are also limited.
- The anti-lock braking system cannot guarantee that the braking distance can be shortened under any circumstances. The braking distance of vehicles equipped with anti-lock braking system may be longer than that of vehicles not equipped with anti-lock braking system on the tire snow chains, sand or snow.

 Caution

- If the anti-lock braking system is faulty, it may not work, the wheels may lock up during emergency braking, and the vehicle can not turn or suddenly turn.
- ABS will neither change the time required for brake engagement nor shorten the braking distance. Even if ABS is equipped, enough braking distance must be reserved.

Electronic brake distribution (EBD) system

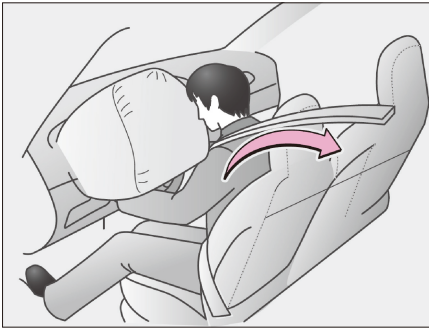
EBD uses a high speed computer to sense and calculate the different ground on which the four tires are attached at the moment of vehicle braking, and obtain different friction values, so that the four tires can brake in different ways and forces according to different conditions, and constantly adjust at high speed during movement, thus ensuring the stability and safety of the vehicle.

Airbag

Driver airbag.

When the vehicle is hit by some serious impact that may cause serious injury to the driver, the driver airbag will deploy. The airbag and safety belt work together to reduce the risk of serious injury or even death of driver and passengers in the vehicle.

Correct use of airbag



In the event of a serious frontal collision, the driver airbag and safety belt work at the same time to help protect the driver's head and chest from the impact of interior components.

The airbag and safety belt jointly protect the driver's safety, but they cannot replace the safety belt. In addition, the airbag will only deploy when the vehicle collision degree reaches the design condition. In some collision accidents, the safety belt is


the only protective device. Wearing the safety belt in the collision accident can help reduce the risk of hitting objects in the vehicle or being thrown out of the vehicle, and can effectively protect the driver. Therefore, all personnel in the vehicle should wear the safety belt correctly. The airbag and safety belt can only provide protection for adults, not designed to protect infants.

The deployment of the airbag will produce considerable force at the moment. In order to avoid the injury caused by the deployment of the airbag, the driver must take the correct sitting posture, correctly wear the safety belt and adjust the seat position. Do not cling to the airbag or be too close to the airbag (for example, sitting on the edge of the seat, leaning forward).

 Caution

- Do not touch relevant components immediately after airbag deployment, as they may be very hot.
- If the steering wheel is damaged or broken, please go to the CENNTRO authorized service center for replacement.
- Do not hit the area where the airbag components are located or exert excessive force on them, otherwise the airbag may fail.
- The airbag system can only provide one-time accident protection function. If the airbag system has been triggered, this system must be replaced.
- The airbag is not designed for rear collision, slight frontal collision, or vehicle overturning, and it will not work in case of emergency braking.
- When the airbag is deployed, there will be smoke accompanied by the airbag deployment sound, but it will not cause a fire. If people with respiratory and tracheal diseases such as asthma inhale the gas, they may feel breathing difficulties. At this time, it is safer to escape from the vehicle immediately. If you cannot escape outside the vehicle, open the window or door, inhale fresh air, and seek medical attention if necessary.
- When cleaning the airbag part, you must use soft, dry cloth or cloth wet with water. Avoid liquid immersion in the airbag, otherwise it may seriously affect the normal function of the airbag.

Driver airbag fault indicator lamp

In case of a fault, the “” red indicator lamp of the combination instrument is always on, indicating that the airbag is faulty. Please go to the CENNTRO authorized service center for maintenance as soon as possible.

Airbag working conditions

Whether the airbag is deployed depends not on the driving speed of the vehicle, but on the collision object, the direction of the collision and the deceleration speed of the vehicle caused by the collision. When the impact of the collision is absorbed or dispersed to the vehicle body, the airbag may not deploy. However, according to the different impact conditions during the accident, the airbag will sometimes deploy. Therefore, whether the airbag deploys or not should not be judged according to the damage degree of the vehicle.

- Scenarios in which the airbag may deploy except for collision, If the bottom of the

vehicle is hit, the driver airbag may deploy.

- » Falling into or crossing deep pits
 - » Wheel hard landing or vehicle falling
 - » Hitting kerb, sidewalk edge or hard surface
- Scenarios of possible deployment of airbag in collision Generally, when the vehicle is impacted by the front, the deceleration of the vehicle exceeds the design threshold, and the driver airbag may be deployed.
 - Scenarios that airbag may not deploy possibly in collision
 - » If the vehicle suffers from side impact, rear impact, rollover or low-speed frontal impact, the driver airbag may not deploy.
 - » If the front of the vehicle collides with the electric pole, crashes into the truck underbody or suffers from side impact, the driver airbag may not deploy.

Precautions for airbag

- Do not stick or lean any items on the instrument panel and steering wheel. These items may be ejected when the driver airbag is deployed.
- Do not tie any items to the windshield, A-pillar, etc.
- Do not hit the area where the airbag components are located or exert excessive force on them, otherwise the airbag may fail.

Modification and scrapping of airbag components

Do not scrap the vehicle or make the following modifications before consulting the CENNTRO authorized service center, otherwise the airbag may fail or deploy accidentally, resulting in serious personal injury or even death.

- Modification of vehicle front bumper, etc.
- Installation, removal, disassembly and repair of airbag.
- Repair, modification, removal or replacement of steering wheel and instrument panel.

Event data recording system

Event data recording (EDR) system

This vehicle is equipped with an event data recording system (this function is integrated into the airbag controller). The vehicle data recording system can record the driving speed, braking status and other data information during the vehicle collision event. These data can be used to analyze the working state of vehicle dynamic and safety-related systems when the airbag is deployed or a collision occurs.

The data of the event data recording system can be read by the special diagnostic instrument. If necessary, please contact the CENNTRO authorized service center.



Reading

- EDR records data only in the event of a major vehicle collision. EDR will not record data during normal driving.

Fault protection

Automatic power-off protection for high voltage fault

The vehicle has the function of automatic power-off in case of high voltage failure. In order to protect the personnel on the vehicle, the vehicle will automatically cut off the high voltage power supply in case of failure of high voltage components. When the vehicle combination instrument lights up the following indicator lamps, the vehicle will automatically cut off the high voltage power supply:

- The insulation fault warning lamp and the power battery cut-off indicator lamp light up at the same time, indicating that the vehicle high voltage components have insulation fault, and the vehicle will automatically cut off the high voltage power.
- The power battery fault warning lamp and power battery cut-off indicator lamp light up at the same time, indicating that the vehicle detects that there is a fault in the power battery, and the vehicle will automatically cut off the high voltage power.
- The fault warning lamp of the whole vehicle system and the power battery cut-off indicator lamp light up at the same time, indicating that the whole vehicle system is faulty, and the vehicle will automatically cut off the high voltage power.
- The motor and controller fault warning lamp and the power battery cut-off

indicator lamp light up at the same time, indicating that the electric drive system is faulty, and the vehicle will automatically cut off the high voltage power.

- The warning lamp of abnormal power battery temperature and the power battery cut-off indicator lamp light up at the same time, indicating that the power battery temperature is too high. At this time, the vehicle will automatically cut off the high voltage power, and the vehicle can be started normally after the power battery temperature drops.
- The warning lamp of abnormal power battery temperature and the power battery cut-off indicator lamp light up at the same time, indicating that the power battery temperature is too low. At this time, the vehicle will automatically cut off the high voltage power, and the vehicle can be started normally after the power battery temperature rises.

 Caution

- In case of power failure, please contact CENNTRO authorized service center immediately for maintenance.
- In case of power failure during driving, the vehicle enters the taxiing state. At this time, the hazard warning lamp shall be turned on, and the vehicle shall be driven to the emergency lane or safety zone, and then the CENNTRO authorized service center shall be contacted for maintenance at the first time.
- During or after charging, the vehicle cannot be started without the charging gun pulled out. At this time, the vehicle can be restarted after the charging gun is pulled out.

Collision automatic power-off protection

When the vehicle has a collision accident and the relative speed reaches the set threshold, the vehicle will automatically cut off the high voltage power, and the vehicle system fault warning lamp, power battery cut-off indicator lamp and left and right turn signal indicator lamps on the combination instrument will light up at the same time.

Hill-start assist system

Hill-start assist system

After the vehicle is stationary on the ramp, when it starts, it will be affected by the ramp angle and gravity. When the back slip force is greater than the driving force, the vehicle will slip back (the negative speed of the gear D motor and the positive speed of the gear R motor). At this time, the vehicle control unit can make the vehicle drive upward at less than the creeping speed by adjusting the output torque.

- After activating the hill-start assist system, if you perform any of the following operations, you will automatically exit the hill-start system:
 - » Switch gear to N gear or between D or R gear.
 - » The vehicle speed is greater than the creeping speed on flat ground.
- After quitting the hill-start assist system and the vehicle slides, performing any of the following operations, you will activate the hill-start system again:
 - » When the vehicle is stopped by pressing down the brake pedal or applying the parking brake, release the parking brake and release the brake pedal. After the vehicle slides slightly, the hill-start assist system will be activated again.

Warning

- When the power of the power battery or the ambient temperature is too low, the power of the hill-start assist system decreases the power output or there is no power output. Please drive carefully.
- If the hill-start assist system is used continuously and frequently, and when the instrument indicates that the motor temperature is too high, please cool the vehicle.
- The larger the slope gradient, the longer the slope sliding distance of the hill-start assist system. Overloading may lengthen the slope sliding distance. Please do not overload.
- Do not rely too much on the hill-start assist system. The hill-start assist system cannot replace the brake and parking brake. Please drive carefully. Cenntro is not responsible for the consequences caused by relying on this system.

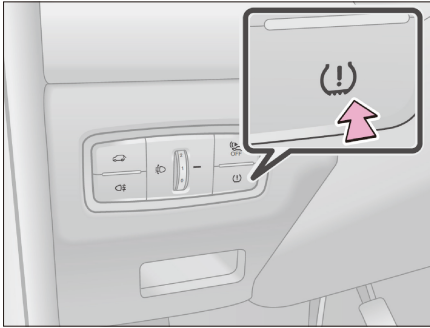
Tire pressure monitoring system (TPMS)

Tire pressure monitoring system (TPMS)

Tire pressure reset

When a new vehicle is delivered to the customer, or when it is serviced at the station, or after adjusting the tire pressure, changing the tire, or changing the ABS, the tire pressure reset must be learned.

1. Adjust the air pressure of all tires to the specified value (refer to the recommended tire pressure nameplate for adjustment) when the vehicle is empty and cold.



2. When the vehicle is stationary, after powering on, press and hold the reset switch on the left side of the instrument panel for more than 3 seconds, and then release it.

For vehicles equipped with LCD screen instruments, after releasing the reset switch, a pop-up window will appear on the instrument interface to prompt the tire pressure reset process, that is, "tire pressure reset in progress" and "tire pressure reset successful".

For vehicles equipped with a segment code screen, the instrument will not have a pop-up prompt, which can be judged by the tire pressure warning lamp. The tire pressure warning lamp will light up for about 3 seconds and then automatically turn off, which means that the tire pressure reset is successful, and then release the reset switch.

Tire pressure warning lamp

When the tire pressure is low, the “ (!) ” indicator lamp on the combination instrument will light up. Please check the appearance and pressure of all tires as soon as possible. If there is any abnormality, please go to the service station for repair in time, adjust all tire pressures to the specified values and conduct reset learning.

When the tire pressure monitoring system is faulty, the “ (!) ” indicator lamp on the combination instrument will flash all the time. Please check at the service station in time.

 Reading

- After purchasing the vehicle, it is recommended that you adjust all wheels to the specified value and conduct a reset learning to ensure that the tire pressure monitoring system works normally.
- Even if the vehicle is equipped with a tire pressure monitoring system, check whether the tire pressure and appearance are normal before driving. If necessary, contact the CENNTRO authorized service center for maintenance.

 Caution

- Adjust the tire pressure of all tires to the specified value before reset learning.
- After changing the wheel, if the reset learning is not performed, the tire pressure monitoring system may give a fault alarm.
- Because the tire pressure will change greatly due to the influence of ambient temperature, it is recommended to adjust all tires to the specified value and conduct a tire pressure reset learning every winter and summer to reduce the impact of ambient temperature change on the tire pressure monitoring system.

Parking assist system

Reversing camera system

The reversing camera system collects the rear image of the vehicle through the rearview camera, and displays the rear image of the vehicle and the auxiliary line on the combination instrument to assist the driver to park safely and easily.

Operation method

Place the gear in R, enter the reversing camera system interface, and display the parking image and auxiliary line.

Warning

- When reversing, make sure that the tailgate is firmly closed.
- Do not distract your attention from the surrounding traffic conditions due to the image displayed on the display screen.
- Due to the limited monitoring range, the bottom and corner of the bumper cannot be seen in the parking camera system.
- The camera may not be able to monitor the children, small animals and objects around, so be careful when reversing.
- Because the rearview camera uses a wide-angle lens, the distance of objects seen in the parking camera system is different from the actual distance.
- Do not knock the camera, otherwise it may cause fault or damage, which may cause fire or electric shock.
- When washing the vehicle body with high-pressure water, do not spray water around the camera, otherwise the water droplets will condense on the lens after entering the camera, causing fault, fire or electric shock.
- The parking camera system provides convenience, but it cannot replace the correct reversing operation. When reversing, be sure to look around and check whether it is safe to do this operation. Reverse slowly.
- The rearview camera lens will enlarge and distort the field of view, making the object image on the display screen different from the real object or unable to accurately reflect the real object, and there is a blind area and a little delay.

Caution

- The distance is only for reference (such as ramp).
- The vehicle width guide line and predicted route are wider than the actual route.
- Do not scratch the lens surface when cleaning the dirt or snow on the camera surface.
- If tires of different sizes are replaced and the predicted driving route displayed is different from the actual route, please use the rearview mirror or check the distance from other objects.

Reversing radar system

The reversing radar system will sound at different frequencies and display on the instrument according to the change of the distance to the obstacle in the detection area. When using the system, be sure to pay attention to the surrounding area.

Turn on the reversing radar system

When the power switch is set to the ON position, the vehicle speed is lower than a certain value and the gear is switched to the R gear, and the reversing radar system is turned on.

Turn off the reversing radar system

When any of the following conditions is met, the reversing radar system will be turned off:

- When the power switch is turned off.
- When switching to a gear other than R.
- When the vehicle speed is higher than a certain value.

Sensor detection range

- Distance from the obstacle ≤ 35 cm (14 in.): if the obstacle is detected within this range, the speaker will sound long to warn the driver.
- 35 cm (14 in.) $<$ distance from the obstacle ≤ 60 cm (24 in.): if the obstacle is detected within this range, the speaker will sound at 4 Hz intervals to warn the driver.
- 60 cm (24 in.) $<$ distance from the obstacle ≤ 90 cm (35 in.): if the obstacle is detected within this range, the speaker will sound at 2 Hz intervals to warn the driver.
- 90 cm (35 in.) $<$ distance from the obstacle ≤ 150 cm (59 in.): if the obstacle is detected within this range, the speaker will sound at 1 Hz intervals to warn the driver.

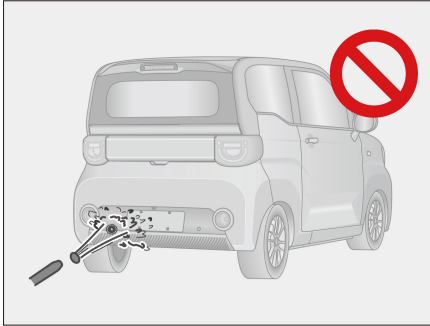
Functional limitation

The reversing radar system may not work properly under the following conditions:

- When the vehicle is on a steep slope.
- When driving in jelly snow or rain.
- Unable to detect low objects such as rocks .
- Unable to detect objects above the bumper.
- Unable to detect wires, fences, ropes and other thin objects.
- When the high-frequency radio or antenna equipped on the vehicle is in use.
- When the radar probe surface freezes.
- The radar probe may not work properly in hot or cold weather.
- When the radar probe is covered with dirt, snow or mud, it may not be able to detect obstacles.
- Unable to detect objects that are easy to absorb ultrasonic waves (such as soft snow, cotton and sponge).
- When the noise near the vehicle is loud (such as the sound of vehicle horn, motorcycle engine, air brake of large vehicles or other strong noises that may produce ultrasonic waves).

Clean the radar probe

When cleaning the vehicle, please use soft cloth or water (low water pressure) to remove the snow, mud, dust and other obstacles on the surface of the radar probe.



High pressure water flow such as water gun or large external force may cause damage to radar probe; do not squeeze or impact the radar probe, otherwise the probe will not work properly.

Warning

- Do not completely rely on the reversing radar system. Please visually confirm the safety around the vehicle while driving. The reversing radar system only provides certain assistance for parking. The radar detection range is limited, so only relying on the reversing radar system may cause accidents. When driving, make sure to visually confirm the safety around the vehicle.

On-board tools

On-board tools

The triangle warning board and towing ring are placed under the trunk carpet.

If the vehicle breaks down or encounters a traffic accident, use the reflective performance of the triangle warning board to remind other vehicles to avoid the secondary accident.

Caution

- On general roads, the driver should set up a warning board 50m (164 ft) away from the direction of coming vehicles.
- On expressways, the driver should set up a warning board 150m (492 ft) away from the direction of coming vehicles.
- If it is raining or at the corner, be sure to set up a warning board 150 m (492 ft) away, so that the vehicles behind can find the warning board as soon as possible.

If the 12 V battery is exhausted

If the 12 V battery is exhausted

Jump start

If you have a set of jumper cables and a vehicle with another 12V battery, you can jump start your vehicle according to the following steps.

1. Open the front cabin cover.
2. Connect the jumper cable as follows:
 - ① Connect the positive clip of the jumper cable to the positive (+) terminal of the vehicle battery.
 - ② Connect the clip at the other end of the positive cable to the positive (+) terminal of the other vehicle battery.

- ③ Connect the negative cable clip to the negative (-) terminal of another vehicle battery.
- ④ Connect the clip at the other end of the negative cable to a solid, fixed, unpainted metal part.
3. Start the engine of another vehicle, slightly increase the engine speed and maintain it for about 5 minutes to charge the battery of this vehicle.
4. Keep the engine of another vehicle running, switch the power switch of this vehicle to the ON position, and then power on the vehicle with high voltage power.
5. Once the vehicle is successfully started, remove the jumper cable in the reverse order of connection.

Note: Once the vehicle is started, please contact CENNTRO authorized service center for maintenance as soon as possible.

 Warning

- Keep children away from the battery.
- Do not smoke, use matches, lighters or light open flames near the battery.
- Do not let the positive clip and negative clip of the jumper cable contact each other.
- Make sure that each jumper cable is connected to the correct terminal and does not accidentally touch other terminals than the correct terminal.
- Be sure to remove the negative (-) terminal first. If the positive (+) terminal is removed in contact with any metal in the surrounding area, sparks may be generated to cause a fire, and electric shock may also be caused, causing serious injury or death.
- When working on the battery, be sure to wear safety goggles, and be careful not to let any battery electrolyte contact the skin, clothes or vehicle body.
- If the battery electrolyte contacts the skin or eyes, wash the contact area with water immediately and go to the hospital. Cover the contact area with a damp sponge or cloth before seeking medical advice.

Caution

- If the battery often loses power, please go to the CENNTRO authorized service center for maintenance as soon as possible.
- The negative pole of the battery of the rescue vehicle should not be directly connected to the negative pole of the battery of the vehicle with low power.
- When connecting and removing the jumper cable, do not wind the jumper cable with the fan, belt, etc.
- Ensure that the jumper cables are connected correctly and keep a certain distance between the terminals to avoid contact between the jumper cables or other metal parts on the vehicle.

Traction

When towing, you must comply with local regulations and requirements related to trailer towing.

Before towing the vehicle, release the parking brake and set the gear in N.

Emergent vehicle traction

When towing the vehicle, if the platform truck can not be used for towing, the vehicle can be temporarily towed by the tow hook. This method of towing can only be used for a short distance at low speed on the hard pavement.

When towing the vehicle with tow hook, the following conditions must be met:

- Turn the power switch to the ON position.
- Shift the gear to N gear.
- Release the parking brake.

The speed of the towing vehicle shall not exceed 30 km/h (19 mph) and the towing distance shall not exceed 50 km (31 miles). Otherwise, there is a risk of damage to the electric drive or high voltage components. If the following conditions occur, the vehicle must be transported away by a flatbed truck:

- The vehicle cannot be driven, and the power switch is set to the ON position, and the warning lamp and indicator lamp are not on.

- Clearly perceive that the whole vehicle has continuously enhanced or pulsating braking effect.
- It has been confirmed that it is a mechanical fault of the transmission system.

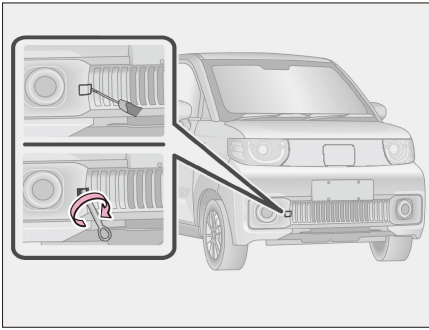
 Warning

- During the towing process, other people except the driver should stay away from the towing vehicle as far as possible, otherwise personal injury may be caused.
- When towing a vehicle, avoid sudden starting and unstable driving operation, otherwise the excessive force will be exerted on the towing ring, trailer cable, trailer chain or trailer bar to make them broken, resulting in vehicle damage and even personal injury.

 Caution

- Do not carry out emergency traction on the vehicle for a long time.
- Fasten the trailer cable, trailer chain or trailer bar to the towing ring of the vehicle.
- Both drivers must be familiar with the characteristics of the traction process, otherwise they can not carry out the traction work.
- Towing along the straight line as far as possible. Do not pull the vehicle from the side, otherwise the vehicle may be damaged.
- If the vehicle is not started, the power system will not work, and braking and steering are more difficult than usual, so it is necessary to operate carefully.
- If the towed vehicle is still unable to move, please do not force the vehicle to avoid secondary damage to the vehicle. CENNTRO strongly recommends that you seek help from professional maintenance personnel or CENNTRO authorized service center.

Installing the towing ring



1. Use a screwdriver wrapped with protective tape to remove the front towing ring hole cover.
2. Install the towing ring into the towing ring hole in a clockwise direction, and then tighten it with a tool.

Warning

- Make sure that the towing ring is firmly installed, otherwise the towing ring may be loosened during the traction process, resulting in serious accidents, serious injuries and even death.

Caution

- Only use the specified towing ring, otherwise the vehicle will be damaged.
- When towing, drive slowly and smoothly. The impact caused by excessive tension may damage the vehicle.
- The towing cable or towing bar can only be installed when the towing ring is installed in place.

Accident handling

Due to the particularity of battery electric vehicles (the whole vehicle is loaded with power battery and high voltage system), the following requirements must be followed in case of vehicle accidents.

Collision accident

After a collision accident occurs, please turn on the hazard warning lamp immediately and set the hazard warning sign board behind the vehicle according to the regulations to avoid subsequent accidents.

1. Please contact CENNTRO authorized service center immediately to confirm the vehicle fault status and handling suggestions, and then contact the insurance company for handling.
2. In case of a serious collision accident (airbag is deployed), the vehicle control system will automatically cut off the high voltage system of the whole vehicle, and the vehicle cannot continue to drive. At this time, the following precautions should be observed:
 - If exposed wires are found inside and outside the vehicle, do not touch them to avoid electric shock. Do not touch the high voltage components, orange high voltage cables and their connectors in the vehicle, or serious injury or electric shock may occur.
 - In case of liquid leakage or liquid flowing into the parts of the vehicle, it is forbidden to touch such liquid, which may be the liquid leaked from the power battery. If the skin or eyes come into contact with the liquid accidentally, immediately wash it with a large amount of water and seek medical advice immediately to avoid causing further injury.
 - If it is impossible to confirm whether the vehicle is damaged or safe, stay away from the vehicle at this time. Be sure to inform the emergency personnel coming to deal with the accident that the vehicle is an electric vehicle at the first time, and no one else is allowed to approach, touch or move the vehicle.
 - In case of vehicle fire caused by the accident, immediately escape to a safe place, call the fire department and contact the CENNTRO authorized service center.

Accident happened in water

When the vehicle is partially or completely submerged in water, turn off the power and escape in time. If there is no bubble or squeak during salvage, salvage operation can be carried out. If bubble or squeak is found, it is necessary to wait until there is no bubble or squeak before operation. When fishing, professional personnel must use professional equipment for operation.

Fire accident

In case of fire, you should leave the vehicle immediately and carry out the following operations conditionally under the condition of ensuring personal safety:

- Call the police according to the site conditions and contact the CENNTRO authorized service center.
- If it can be confirmed that the fire is small and does not involve high voltage system, try to use fire extinguisher special for electrical equipment (water-based

fire extinguisher); otherwise, immediately run away from the vehicle and stand at the upwind direction, and notify promptly the fire fighting personnel . Do not use water to extinguish the fire by yourself to avoid the risk of electric shock.

- If someone accidentally inhales smoke, please transfer him/her and see a doctor as soon as possible.



Warning

- The burning of lithium battery will produce high temperature and harmful gas, so keep away from the vehicle as far as possible.
- Please do not touch any liquid leaked from the power battery. If the skin or eyes accidentally contact with the leaked liquid, please immediately wash it with a large amount of water and seek medical advice in time to avoid causing further injury.
- When firefighters use water to extinguish the fire, please do not touch the water on the ground to avoid the risk of electric shock.
- Due to the possibility of re-ignition of lithium battery, even if the open fire is extinguished, do not approach the vehicle easily, and observe whether the vehicle still has smoke or open flame.

Care and Maintenance

Clean and protect vehicle exterior trim

Perform the following actions to protect and maintain the vehicle in its best condition:

- Flush the vehicle body, wheels and underbody with a large amount of water from top to bottom to remove dirt and dust.
- Use the sponge or soft cloth (such as suede cloth) to scrub the vehicle body.
- For the dirt that is difficult to remove, wash it with washing agent and rinse it thoroughly with water.
- Wipe off the water.
- After the waterproof coating is aged, the vehicle shall be waxed.
 - » If water droplets cannot form on the clean body surface, wax the body after it cools.

Rinse the vehicle

Fold the rearview mirror before rinsing the vehicle. Start rinsing from the front of the vehicle. Deploy the rearview mirror before driving.

The brush used in the automatic cleaning station may scratch the vehicle surface, parts (wheels, etc.) and damage the vehicle paint.



Warning

- When washing the vehicle, do not wash the interior of the front cabin with water, otherwise it may cause fire to electrical components.
- Before washing, be sure to turn off the power switch and inform the vehicle washing personnel that the vehicle is a battery electric vehicle. Do not use a water gun to wash the front cabin, front grille and power battery. Otherwise, it may damage the vehicle or cause electric shock.
- Avoid high pressure of vehicle washing. Water will enter the vehicle and damage the vehicle interior.

Hub and hub trim

Please immediately remove all dirt with mild detergent.

Rinse with water immediately after using detergent.

 Caution

- Make sure to observe the following precautions to protect the paint surface from damage.
 - » Do not use acidic, alkaline or abrasive detergents.
 - » Do not use hard brush.
 - » When the wheels are hot (for example, after driving or parking in hot weather), do not use detergent on the wheels.

Bumper

Do not scrub with abrasive detergents.

Underbody maintenance

Corrosive substances used in deicing, snow melting and dust prevention will gather on the underbody. Failure to remove these substances will accelerate corrosion and rust.

Wash the underbody regularly with clean water. Carefully clean the parts that are easy to collect dirt. Loosen the dirt in the enclosed area before rinsing with water.

Prevent paint aging and corrosion of vehicle body and components (aluminum hub, etc.)

If the paint is peeling or scratched, please repair it immediately.

To prevent wheel corrosion, when storing wheels, remove all dirt and store them in an environment with low humidity.

The vehicle shall be cleaned immediately under the following conditions:

- After driving at the seaside
- After driving on saline-alkali road

- If there is coal tar or tree sap on the paint surface
- If there are dead insects, insect droppings or bird droppings on the paint surface
- After driving in areas polluted by coal ash, oil fume, mineral dust, iron powder or chemical substances
- If the vehicle is heavily dusty or muddy
- If liquids such as benzene and gasoline splash onto the paint surface

Clean and protect vehicle interior trim

- Use a vacuum cleaner to remove dirt and dust. Soak the cloth with lukewarm water and scrub the dirty surface.
- If the dirt cannot be removed, please use a mild detergent with a dilution concentration of about 1% to wet the soft cloth and remove it.
 - » Screw the wet cloth dry, and then thoroughly wipe the residual detergent and water.

Clean the carpet

A variety of commercially available foam detergents can be used. Apply foam with a sponge or brush. Scrub in overlapping circles. Do not use water. Wipe the dirty surface and dry it. Keep the carpet as dry as possible to obtain the best results.

Detergent

Do not use polishing wax or polishing detergent. Otherwise, the paint surface of the instrument panel or other interior parts may be damaged.

Do not use the following types of detergents, otherwise the interior of the vehicle may fade or the paint surface may be mottled or damaged:

- Non-seat parts: organic matter such as benzene or gasoline, alkaline or acidic solution, dye and bleach, colorants and bleaches
- Seat: alkaline or acidic solution, such as diluent, benzene and alcohol

Prevent damage to leather surface

To avoid damage and aging of leather surface, please observe the following precautions:

- Timely wipe the dust or dirt on the leather surface.
- Do not expose the vehicle to direct sunlight for a long time. Please park the vehicle in a cool place, especially in summer.
- Do not place polyethylene, plastic products or waxy items on leather trims, as these items may stick to the leather surface when the temperature in the vehicle rises sharply.

 Warning

- Do not spill liquid into the vehicle, otherwise it may cause electrical components to malfunction or catch fire.
- When cleaning the interior trim (especially the instrument panel), do not use polishing wax or polishing detergent. Otherwise, the instrument panel may be reflected on the windshield, which may hinder the driver's vision and cause accidents, leading to serious injury or even death.

Maintenance

Maintenance instructions

There are two types of maintenance. One is routine maintenance, which can be completed by the owner himself, and the other is regular maintenance, inspection and repair, which should be completed by CENNTRO.

For details of routine maintenance, check and maintenance methods, see Routine Maintenance in this chapter; regular maintenance can help you find and eliminate hidden dangers in time and prevent faults. Regular maintenance of your vehicle is essential. Please maintain your vehicle strictly according to the maintenance plan in this Manual to ensure that your vehicle can maintain the best performance and good running conditions, and effectively extend the service life of the vehicle.

Please use the fluid recommended by CENNTRO, otherwise the vehicle may be damaged.

CENNTRO provides services for you

It is ideal to send the vehicle to the CENNTRO authorized service center for maintenance, inspection and repair.

CENNTRO authorized service center has the advanced maintenance tools, equipment and genuine spare parts required to provide maintenance and service for your vehicle, and all after-sales service personnel have received professional management and technical training to ensure that the maintenance and repair work of your vehicle is completed quickly and efficiently, and that your vehicle always has good technical performance.

The rubber hose used for braking system shall be inspected by professional personnel in strict accordance with the maintenance schedule. The rubber hose deteriorates over time, causing expansion, wear or rupture. Therefore, if the hose shows any signs of deterioration or damage, please contact the CENNTRO authorized service center immediately for replacement.

Does your vehicle needs maintenance?

Be alert to the changes in vehicle performance and sound, as well as visual signs that the vehicle needs maintenance. Here are some important signs:

- Significant loss of power
- Abnormal sound
- There is liquid leakage at the bottom of the vehicle (however, it is normal for the air conditioning system to drip after use.)
- Flat tire, excessive tire noise during turning, uneven tire wear
- The vehicle deviates when driving straight on a flat road
- Abnormal noise related to suspension movement
- Brake fault, brake pedal spongy, pedal almost touching the floor, vehicle deviation when braking

If any of the above signs are found, please send the vehicle to the CENNTRO authorized service center as soon as possible. The vehicle may need to be adjusted or repaired.



Warning

- If the vehicle is not properly maintained, it may cause serious damage to the vehicle, and may cause serious injury or even death.

Routine maintenance

Routine maintenance

Many maintenance items are not complicated. As long as you know a little mechanical knowledge and have some basic car tools, you can complete them by yourself. This section will briefly explain how the user performs simple maintenance.

It should be noted that some maintenance work requires special tools and professional technology. Such work should be done by qualified technicians. Even if you have rich experience in self maintenance, we still recommend that you go to the CENNTRO authorized service center for standard repair and maintenance. They will record the maintenance information of your vehicle, which will help you apply for warranty service.

Caution

- Before closing the front cabin cover, check whether tools, cotton cloth, etc. are left in the cabin.
- Properly add the oil to the proper position. If the oil splashes onto the vehicle body, wipe it clean with a wet cloth to prevent damage to the paint surface of the vehicle body.

Warning

- Please observe the following precautions to avoid serious injury or even death when working in the front cabin.
 - » Keep hands, clothes and tools away from rotating fans.
 - » Do not smoke, cause sparks or expose open flames near the 12V battery. The volatile gas from the 12V battery is flammable.
 - » Be extremely careful when working on 12V battery. The battery contains toxic and corrosive sulfuric acid.
 - » Do not touch, dismantle, disassemble or replace high voltage parts, cables and their connectors. Otherwise, it may cause serious burns or electric shock, leading to serious injury or even death.
 - » Please wear safety goggles to prevent flying or falling objects, sprayed liquid, etc. from entering the eyes.

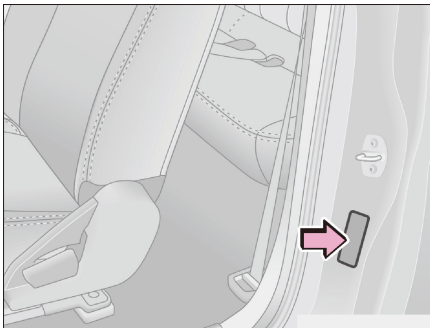
Check the brake fluid level

The brake fluid level should be between the MIN and MAX marking lines. If it is below the MIN marking line, the brake fluid should be added.

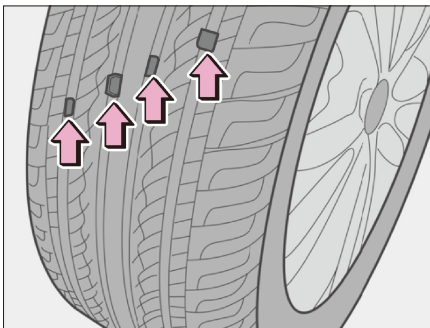
Caution

- The brake fluid has strong water absorption. Do not open the brake fluid reservoir cap for a long time.
- Only the brake fluid recommended by CENNTRO can be used, otherwise the direct or indirect losses incurred shall be borne by the customer.
- If the brake fluid splashes onto the vehicle body paint surface, wipe it with a wet sponge or rinse it with clean water to prevent corrosion of the parts or paint surface.
- Please use DOT4 brake fluid of the same brand and specification, otherwise the fluid may deteriorate.

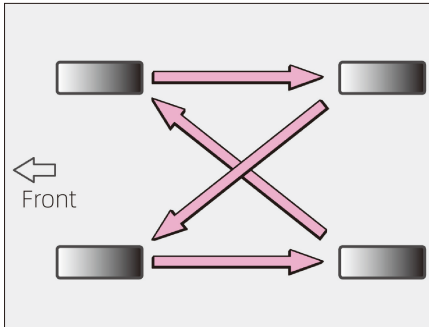
Check the tire



Check the tire condition before driving. Check the tire pressure at least once a month. The tire pressure label is located under the B-column lock pin on the driver side.



Check the tire tread according to the wear mark on the tread. After the tread wear reaches a certain limit, the tread will be in the same plane with the wear belt. At this time, the performance and safety of the tire are greatly reduced, and the tire must be replaced.



In order to make the tires wear evenly and extend their service life, it is recommended that you rotate the tires after every 12 months or 10000km (6200 miles), whichever comes first.

When to replace the tire

Replace the tire under the following conditions:

- The tire shows the casing wear mark.
- The tire often leaks air or cannot be repaired due to the size, position of the cut or other damages.
- When the tire has deep cracks such as cuts, fractures, exposed plies or bulges indicating damage inside the tire.

Warning

- Do not let the brake fluid contact the skin or eyes. If the brake fluid splashes into the skin or eyes, immediately rinse it with a large amount of water. If necessary, immediately seek medical advice.

Please observe the following precautions, otherwise accidents and personal injuries may occur:

- Do not use tires used by other vehicles.
- Do not use tires with significantly different wear levels.
- Do not use tires for which you are not familiar with their use.
- Do not use tires of different manufacturers, models or tread patterns.
- Do not use tires of different structures (such as radial, diagonal or twill ply tires).

Please maintain proper tire pressure, otherwise the following situations may occur and cause accidents and personal injury:

- Excessive wear.
- Poor maneuverability.
- Uneven wear.
- Poor bead seal.
- The wheel is deformed or the tire falls off.
- The tire may burst due to overheating.
- Poor road conditions are more likely to cause tire damage.

 Caution

- It is normal for the tire pressure to rise after the vehicle has been driving for a period of time.
- If the tire needs frequent inflation, please go to the CENNTRO authorized service center for maintenance as soon as possible.
- Use the tire pressure gauge to check the tire pressure when the tire is cold, and visually inspecting the tire surface to determine the tire pressure may be inaccurate.
- If the tire leaks during driving, do not continue driving, even if driving for a short distance, it may cause irreparable damage to the tire.
- Make sure to install the tire valve cover, otherwise dust will enter the valve core and cause blockage. If the valve cover is missing, please install a new valve cover as soon as possible.

 Environmental protection

- Do not discard discarded tires at will, and please dispose of them in accordance with local environmental protection regulations.

Check 12 V battery

Check and ensure that the battery terminals are free of corrosion, the connection parts are not loose, the external parts are free of cracks and the fixing clips are not loose.

Chemicals in battery

The 12 V battery contains toxic and corrosive sulfuric acid and may produce flammable and explosive hydrogen. To reduce the risk of serious injury or even death, please observe the following precautions when working on or near the 12 V battery:

- Do not touch the battery terminals with tools to avoid sparks.
- Do not smoke or light matches near the battery.
- Avoid contact with eyes, skin and clothing.
- Do not inhale or swallow electrolyte.
- Wear safety goggles when working near the battery.
- Keep children away from the battery.

Warning

- Always charge the battery in an open area. Do not charge the battery in a poorly ventilated garage or enclosed room.

Caution

- Do not charge the 12 V battery after the vehicle is started. At the same time, be sure to close all accessories.

Check the air conditioning filter

When the vehicle is driven for a long time, the air conditioning filter can prevent dust from entering the vehicle through the air outlet of the air conditioner. The air conditioning filter may be blocked if it is used for a long time. If the working efficiency of the air conditioner is greatly reduced, please check the air conditioning filter and replace it if necessary.

 Reading

- The replacement of air conditioning filter should be operated by professionals. Please contact CENNTRO authorized service center.
- If the air conditioner is used after removing the air conditioner filter, it may lead to the deterioration of the dust prevention performance and affect the working efficiency of the air conditioner.

Check windshield cleaning liquid

If the cleaner nozzle can not spray cleaning liquid, stop operating the cleaner and check whether it is necessary to add cleaning liquid. If it still cannot work normally after adding cleaning liquid, please go to the CENNTRO authorized service center for maintenance.

 Caution

- Do not add antifreeze to the windshield cleaning liquid, as antifreeze will damage the body paint.
- When the temperature is below zero, do not replace the cleaning liquid with water, otherwise the water will freeze and damage the cleaner.

Check the wiper blade

Slide your finger on the edge of the wiper blade to check its roughness. If it is too rough, it will affect the wiping effect of the wiper blade.

 Caution

- Do not use the wiper blade to defrost or deice the windshield.
- When there are small pits on the windshield that are hit by gravel, the glass should be maintained in time.
- In order to prevent damage to the wiper blade in winter, make sure that the wiper blade is not frozen on the glass before operating the wiper.
- Grease, silicone resin and fuel may make the wiper blades unable to work properly. It is recommended to clean the wiper blades with detergent.

Maintenance of wiper blades

- When washing the vehicle, do not use a high pressure water gun to wash the wiper blade directly, which will cause the wiper blade to deform.
- In order to prevent the formation of schlieren, it is recommended to wash the wiper blades with glass detergent regularly once a week.
- After washing the vehicle on the automatic vehicle washing equipment, rinse the windshield and wiper blade with pure water to remove the residual wax layer.
- Do not operate the wiper on the dry windshield, otherwise it will scratch the glass and cause permanent damage to the wiper blade.
- Do not use fuel, nail polish remover, paint thinner or similar liquids to clean the windshield, as these substances will damage the wiper blades.
- Avoid using glass crystal plating agent and hydrophobic agent on the front windshield glass. The hydrophobic layer will fall off slowly after use, resulting in uneven windshield friction and abnormal noise of wiper vibration.
- When the windshield surface is frosted or there are solid particles such as weathered soil, insect paste, etc., it should be wiped clean with a wet rag in time. It is not allowed to use a dry rag or directly use the wiper blade to brush, otherwise the glass and wiper blade will be damaged.

Use of wiper

- Do not swing the wiper arm manually, or the wiper may be damaged.
- When there is snow, leaves, branches and other debris on the windshield, clean the debris before operating the wiper.
- The cleaning fluid shall be added on time and shall not be replaced by tap water.
- In cold seasons, before using the wiper, please check whether the wiper blade is frozen on the windshield. If it is frozen on the windshield, it must be thawed before use. Please use the air conditioning heating and ventilation device to heat, and do not use hot water to wash the wiper blade directly, otherwise the windshield may burst or the wiper blade may be deformed.

Regular maintenance

First maintenance after running 5000 km (3100 miles)

The first maintenance time is after running 5000 km (3100 miles) or within 6 months after purchase, whichever comes first. Replace the reducer gear oil during the first maintenance.

Regular maintenance

After the first maintenance, the interval between subsequent maintenance is 6 months or 5000 km (3100 miles), whichever comes first.

Maintenance interval (the odometer reading or the number of months, whichever comes first)	Duration (months)	6	12	18	24	30	36	42	48	54	60
	×1,000 km (620 miles)		5	10	15	20	25	30	35	40	45

Replacement and maintenance

Reducer oil*1	R	I	R	I	R	I	R	I	R	I
Lubrication of door lock, hinge and stopper	I	I	I	I	I	I	I	I	I	I
Add lubricating grease to the steering column dust cover	I	I	I	I	I	I	I	I	I	I

Three electrical items inspection

Appearance status of power battery and its guard	I	I	I	I	I	I	I	I	I	I
Connection status of high voltage harness and high voltage parts, low voltage control harness of motor	I	I	I	I	I	I	I	I	I	I
Heat dissipation of charger and DC/DC converter	I	I	I	I	I	I	I	I	I	I
Power battery system	I	I	I	I	I	I	I	I	I	I
Vehicle control system	I	I	I	I	I	I	I	I	I	I

Chassis and brake inspection

Chassis fastener torque	I	I	I	I	I	I	I	I	I	I
Brake system hard pipes, hoses and related components	I	I	I	I	I	I	I	I	I	I

Maintenance interval (the odometer reading or the number of months, whichever comes first)	Duration (months)	6	12	18	24	30	36	42	48	54	60
	×1,000 km (620 miles)	5	10	15	20	25	30	35	40	45	50
Drive shaft, ball pin sheath		I	I	I	I	I	I	I	I	I	I
Inspection of vulnerable and consumable items											
Tire: tread depth, nut torque, tire pressure*2		I	I	I	I	I	I	I	I	I	I
Lighting system, electric horn, wiper		I	I	I	I	I	I	I	I	I	I

Description of symbols in the table:

I: Inspect (inspect, clean, repair, adjust, lubricate, and replace if necessary)

R: Replace

*1: Replace the reducer oil more frequently under severe conditions. The reducer oil shall be replaced every 1 year or 20000 km (12400 miles);

*2: If necessary, carry out wheel alignment or tire dynamic balancing. After checking that the tire pressure is normal, press the tire pressure reset button to check whether the tire pressure monitoring system works normally.

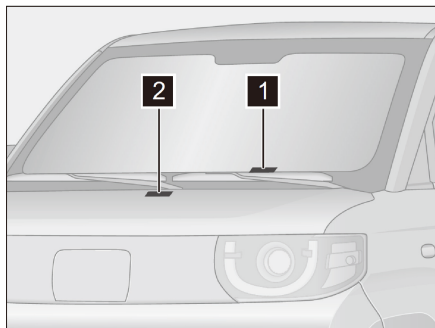
Note: The brake fluid shall be replaced every 24 months or 40000 km (24800 miles), whichever comes first. In severe conditions, it should be replaced more frequently. If the vehicle is under the following severe conditions, the items in the maintenance table should be replaced more frequently than the recommended interval.

- Use the brake frequently and use emergency brake frequently.
- Frequently accelerate, decelerate or drive at high speed.
- Always drive under the condition that the outdoor temperature is below 0 °C (32 °F) or above 35 °C (95 °F).
- Often drive on dusty roads, hills or mountainous areas.
- Vehicles used for special purposes such as police cars, taxis, leasing or other operations.

Nameplate location

Vehicle identification number (VIN)

Find the vehicle identification number (VIN)

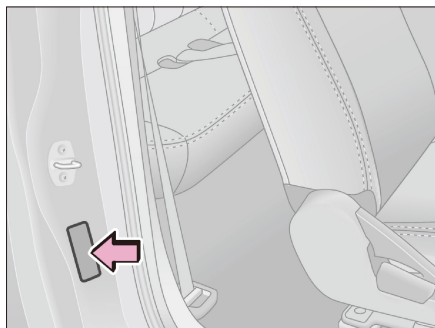


- ① The VIN is located on the upper left of the driver side instrument panel and can be seen from the outside through the front windshield.
- ② The VIN is engraved in the middle of the front cabin gutter trim panel. It can be seen after the front cabin cover is opened.

Caution

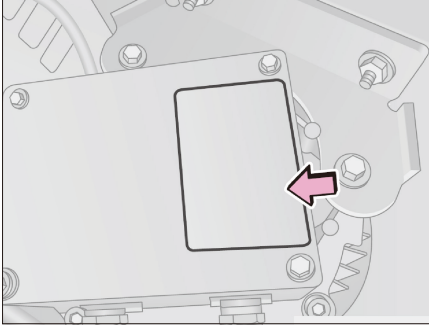
- Do not cover, paint, weld, cut, drill or remove the vehicle identification number (VIN) and its surrounding area.

Manufacturer nameplate

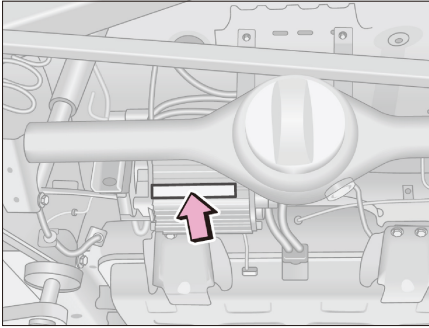


The vehicle nameplate is located on the right side outer panel as shown in the figure.

Motor

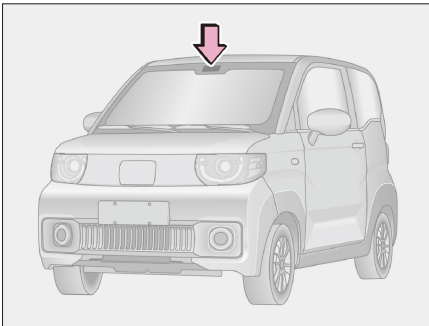


The drive motor nameplate is pasted on the upper surface of the motor control unit.



The model and serial number of the drive motor are engraved on the bottom of the drive motor (visible after the vehicle is lifted).

Microwave window



The microwave window is located on the right side of the rearview mirror inside the front windshield.

Vehicle specification

Vehicle size

Items		Avantier α	Avantier C
Overall dimensions	Length	2980 mm (117 in.)	2980 mm (117 in.)
	Width	1490 mm (59 in.)	1490 mm (59 in.)
	Height	1637 mm (64 in.)	1637 mm (64 in.)
Wheelbase		1960 mm (77 in.)	1960 mm (77 in.)
Wheel tread	Front	1295 mm (51 in.)	1295 mm (51 in.)
	Rear	1295 mm (51 in.)	1295 mm (51 in.)
Suspension length	Front suspension	549 mm (22 in.)	549 mm (22 in.)
	Rear suspension	471 mm (19 in.)	471 mm (19 in.)

Vehicle mass and driving mileage

Items		Avantier α	Avantier C
Curb weight		743 kg (1638 lbs.)	724 kg (1596 lbs.)
Gross Vehicle Weight		1043 kg (2299 lbs.)	1074 kg (2368 lbs.)
Axle load mass at the maximum total mass	Front axle	472 kg (1041 lbs.)	471 kg (1038 lbs.)
	Rear axle	571 kg (1259 lbs.)	603 kg (1329 lbs.)
Driving mileage		170 km (105 miles)	182 km (113 miles)
Number of passengers (including the driver)		4	2

Vehicle performance

Items	Avantier α	Avantier C
Minimum ground clearance	120 mm (5 in.)	120 mm (5 in.)
Minimum turning diameter	8.1 m (27 ft)	8.1 m (27 ft)
Approach angle	26°	26°
Departure angle	33°	33°
Maximum speed	100 km/h (62 mph)	90 km/h (56 mph)
Maximum gradient	25%	25%

Drive type

Items	Specification
Drive type	Rear-engine rear-drive

Motor

Items	Specifications/parameters
Model	TZ160XFDMI3A
Type	Permanent magnet synchronous motor
Cooling mode	Natural air cooling
Rated power	14 kW
Maximum power	20 kW
Rated voltage	96 V
Maximum torque	85 N·m (63 ft·lbs.)
Rated rotation speed	4775 r/min

Power battery

Items	Specifications/parameters
Battery type	Lithium iron phosphate power battery
Cell nominal voltage	3.2 V
Cell capacity	52 Ah
Rated voltage of power battery pack	89.6 V
Total capacity of power battery pack	156 Ah

On-board charger

Items	Specifications/parameters
Input voltage	90 - 264 V AC
Output voltage	65 - 144 V DC
Output power	2 kW
Efficiency	≥ 92% (rated input, full load)
Protection grade	IP67

Suspension system

Items	Specification
Front suspension	Macpherson independent suspension
Rear suspension	Three-link dependent suspension

Brake system

Items	Specifications/parameters
Reasonable range of free travel of brake pedal	Less than 20 mm
Reasonable application range of brake friction pair	The friction material is 7.5 mm thick and needs to be replaced after 5.5 mm wear The initial thickness of the brake disc is 8 mm, and it needs to be replaced after unilateral wear of 1 mm

Fluids

Items	Specification	Capacity
Brake fluid	DOT4	0.61 ± 0.05 L (0.16 ± 0.01 us gal)
Rear axle gear oil	GL-5 85W-90 (normal temperature) GL-5 80W-90 (below -20 °C (-4 °F))	0.8 L (0.21 us gal)
Air conditioning refrigerant	R-134a/R-1234yf	370±15 g (13±0.5 oz)

Wheel positioning

	Items	Specifications/parameters
Front wheel	Front wheel camber angle	$0.33^\circ \pm 45'$
	Kingpin caster angle	$4.2^\circ \pm 45'$
	Kingpin inclination angle	$9^\circ \pm 60'$
	Front wheel toe-in	$0^\circ \pm 5'$
Rear wheel	Rear wheel camber angle	$0^\circ \pm 45'$
	Rear wheel toe-in	$0^\circ \pm 20'$
Sideslip		$\leq \pm 5\text{m/km}$ (26 ft/mile)

Wheel and tire

	Items	Specifications/parameters
	Tire model	145/70 R12
Tire pressure under cold state (full load)	Front wheel	250 kPa (2.5 bar)
	Rear wheel	250 kPa (2.5 bar)
Wheel dynamic balance requirements		Dynamic unbalance < 5 g (0.2 oz)

 Caution

- In order to facilitate you to find the specified inflation pressure value, there is a sticker at the driver door sill with the specified value of tire pressure under cold state.

Battery

Items	Specifications/parameters
Battery specification	12 V 32 Ah

Steering system

Items	Specification
Power steering type	Electric power
Steering gear type	Rack and pinion type

Bulb specification

Bulb name	Light source/model
Headlamp	HB3
Rear fog lamp	P21W
Brake lamp	P21W
Reversing lamp	P21W
Front turn signal lamp	PY21W
Rear turn signal lamp	PY21W
License plate lamp	C5W
Ceiling lamp	C10W

The following parts are not within the measurement range of the external dimensions of the whole vehicle

Components not included in the measurement range of vehicle length

The following devices that do not have the function of carrying goods and do not exceed the front or rear of the vehicle by more than 50 mm, and the radius of the edges and corners is not less than 5 mm:

- Wiper and washer
- External identification, including registered trade mark, manufacturer's name, place of origin, model name and model, drive type and other identification reflecting vehicle characteristics
- Light and light-signaling devices
- Anti-collision rubber block and similar devices
- External sunshade
- Customs sealing device and its protective device
- Device for fastening waterproof cloth and its protective device
- Locking device, hinge, handle, controller, switch
- Entrance and exit steps (or ladders), upper bumper steps and handles for windshield wiping
- Rear sign board contains LOGO
- Detachable vehicle hitch or towing device

Components not included in the measurement range of vehicle width:

- Device for indirect vision
- School bus stop sign in non-working condition

The following devices that do not have the function of carrying goods and whose single side is not more than 50 mm beyond the side of the vehicle, and the radius of the corners and edges is not less than 5 mm:

- External identification, including registered trade mark, manufacturer's name, place of origin, model name and model, drive type and other identification reflecting vehicle characteristics
- Light and light-signaling devices
- Anti-collision rubber block and similar devices
- Customs sealing device and its protective device
- Device for fastening waterproof cloth and its protective device
- Local gutter: refers to the gutter used to guide the rainwater flow above the driver door (or window), above the passenger door and on both sides of the front windshield glass
- Flexible protruding part of splash prevention system
- Retractable steps in the stowed position, access ramps of passenger cars, lifting platforms and similar devices
- Locking device, hinge, handle, controller, switch
- Tire failure signal device
- Tire pressure indicator
- The deformed part of the tire wall directly above the tire grounding point
- Parking assistance devices

Components not included in the measurement range of vehicle height:

- Flexible part of the antenna

Devices that do not have the function of carrying goods:

- Air intake pipe

- Device for indirect vision
- Current collecting device of electric vehicle (including its fixing device)
- Removable or foldable rear vehicle deflector with a deployed length of no more than 2000 mm (79 in.) and a stowed state of no more than 200 mm (8 in.)
- Tail plates, up-and-down ramps and similar devices with a horizontal length of not more than 300 mm (12 in.) in the stowed state
- Rear tail ladder

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