
Electric Golf Cart User's Manual



Electric Golf Cart Instruction Manual

Thank you for purchasing our electric golf cart. For safe and optimal use, please read this manual carefully before operation to avoid vehicle damage or personal injury caused by improper operation. Keep this manual in a safe place for future reference after reading.

Important Information:

Particularly important safety and operation information is distinguished by the following notations:

WARNING!

Fail to follow the Warning instructions may result in serious injury to the vehicle's occupants, bystanders, or personnel inspecting or repairing the vehicle.

CAUTION!

Fail to follow the Caution instructions may cause damage to the vehicle and its components.

Special Notices:

1. The protective wrapping film on the seat and backrest may adhere to the vinyl surface, causing fading or staining. Remove the film before the first use of the vehicle!
 2. Remove the seat and backrest wrapping film if the vehicle needs to be stored for a long period of time.
 3. If long-term storage is required, charge the battery to approximately 80% of its capacity (do not fully charge it). Turn off the ignition key and disconnect any connected devices that may draw power from the battery. Your golf cart is equipped with an Electric Parking Brake (EPB); keep the EPB switch in the OFF position during storage, otherwise the EPB will consume battery power and cause over-discharging.
 4. If the vehicle is equipped with a sewn seat cover, avoid standing water on the seat as water may seep into the interior and cause damage.
 5. Your vehicle is fitted with a lithium-ion battery. Partial charging is acceptable for daily use (it is not necessary to fully charge the battery each time), and it is recommended to avoid frequent full charging and deep discharging. For battery calibration, perform a complete charge and discharge cycle once a month.
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Vehicle technical parameters

Model		LS2021K/LS2023K	LS2041K/LS2043K	LS2061K/LS2063K
Passenger Capacity		2	4	6
Dimensions (mm)	length	2450	3200	4010
	width	1210	1210	1210
	height	1900	1950	1950
Loading capacity (kg)		270	370	530
Lithium Battery		73.6V105AH	73.6V105AH	73.6V105AH
Motor		5KW/7.5KW	5KW/7.5KW	5KW/7.5KW
Max. mileage (km)		100	95	90
Max. speed (km/h)		40	40	40
Min. turning radius (m)		3.1	3.5	5
Max. climbing ability (%)		25	25	20
Mini. ground clearance (mm)		180	180	180

Model		LS2021KSZ/LS2023KSZ	LS2041KSZ/LS2043KSZ	LS2061KSZ/LS2063KSZ
Passenger Capacity		4	6	8
Dimensions (mm)	length	3000	3750	4360
	width	1210	1210	1210
	height	1900	1950	1950
Loading capacity (kg)		320	370	480
Lithium Battery		73.6V105AH	73.6V105AH	73.6V105AH
Motor		5KW/7.5KW	5KW/7.5KW	5KW/7.5KW
Max. mileage (km)		95	90	80
Max. speed (km/h)		40	40	40
Min. turning radius (m)		3.1	3.5	5
Max. climbing ability (%)		25	25	20
Min. ground clearance (mm)		180	180	180

Model		LS2021KH/LS2023KH	LS2041KH/LS2043KH	LS2041KHCX/LS2043KHCX
Passenger Capacity		2	4	2
Dimensions (mm)	length	2710	3160	3230
	width	1210	1210	1210
	height	1900	1950	1900
Loading capacity (kg)		350	480	480
Lithium Battery		73.6V105AH	73.6V105AH	73.6V105AH
Motor		5KW/7.5KW	5KW/7.5KW	5KW/7.5KW
Max. mileage (km)		100	95	95
Max. speed (km/h)		40	40	40
Min. turning radius (m)		3.1	3.1	3.5
Max. climbing ability (%)		25	25	25
Min. ground clearance (mm)		180	180	180

Model		LS2021A/LS2023A	LS2041A/LS2043A	LS2061A/LS2063A
Passenger Capacity		2	4	6
Dimensions (mm)	length	2450	3200	4010
	width	1350	1350	1350
	height	2000	2050	2050
Loading capacity (kg)		270	370	530
Lithium Battery		73.6V105AH	73.6V105AH	73.6V105AH
Motor		5KW/7.5KW	5KW/7.5KW	5KW/7.5KW
Max. mileage (km)		100	95	90
Max. speed (km/h)		40	40	40
Min. turning radius (m)		3.1	3.5	5
Max. climbing ability (%)		25	25	20
Mini. ground clearance (mm)		180	180	180

Model		LS2021ASZ/LS2023ASZ	LS2041ASZ/LS2043ASZ	LS2061ASZ/LS2063ASZ
Passenger Capacity		4	6	8
Dimensions (mm)	length	3000	3750	4360
	width	1350	1350	1350
	height	2000	2050	2050
Loading capacity (kg)		320	370	480
Lithium Battery		73.6V105AH	73.6V105AH	73.6V105AH
Motor		5KW/7.5KW	5KW/7.5KW	5KW/7.5KW
Max. mileage (km)		95	90	80
Max. speed (km/h)		40	40	40
Min. turning radius (m)		3.1	3.5	5
Max. climbing ability (%)		25	25	20
Min. ground clearance (mm)		180	180	180

Model		LS2021H/LS2023H	LS2041H/LS2043H	LS2041HCX/LS2043HCX
Passenger Capacity		2	4	2
Dimensions (mm)	length	2710	3160	3230
	width	1350	1350	1350
	height	2000	2050	2000
Loading capacity (kg)		350	480	480
Lithium Battery		73.6V105AH	73.6V105AH	73.6V105AH
Motor		5KW/7.5KW	5KW/7.5KW	5KW/7.5KW
Max. mileage (km)		100	95	95
Max. speed (km/h)		40	40	40
Min. turning radius (m)		3.1	3.1	3.5
Max. climbing ability (%)		25	25	25
Min. ground clearance (mm)		180	180	180

1. Brief Introduction

This electric golf cart is an eco-friendly vehicle, suitable for use as a people mover or utility car in golf courses, vacation villages, villa communities, resort hotels, private residential areas, tourist scenic spots, and other designated areas where such vehicles are permitted.

WARNING!

Before using the vehicle, confirm that there are no driving restrictions in the intended area to avoid safety hazards or legal issues.

2. Important Labels

All safety and operation labels are attached to key positions of the vehicle. Follow the instructions on the labels strictly.

WARNING!

Read all labels carefully before operating the vehicle. Immediately replace any labels that are illegible, damaged, or removed.

2.1 Safety Warning Label

Attached under the rear bucket of the vehicle

CONTENT:



- Before using vehicle, read operating instructions.
- Do not start vehicle until all occupants are seated.
- Keep entire body inside vehicle while moving.
- Drive at a low, steady speed when making turns or operating on inclines.
- Keep vehicle as straight as possible on inclines to avoid sliding or rollover.
- Use brakes to control speed when coasting downhill.
- Never operate under the influence of alcohol or drugs.
- For use by authorized persons in designated areas only.
- Remain seated while moving.
- Operate from driver's side only.
- Never operate on a public road.
- Two (2) persons per seat maximum.
- Never stand in front of or behind vehicle.
- Do not leave children unattended on vehicle.
- When charging, keep water away from all electrical components.
- Key must be in OFF position when charging
- Charge in a well ventilated area to reduce risk of fire or explosion.

2.2 Operating Instructions Label

CONTENT:

Operating Instructions

*Read safety warnings prior to operating.

*Study and understand controls.

TO OPERATE:

*Turn wheels to desired direction and ensure the path is clear.

*Turn key to ON position.

* Press Forward/Reverse to desired position.

*Press accelerator pedal to release parking brake.

*Slowly press accelerator pedal to increase speed.

*To stop, release accelerator pedal and press brake pedal.

TO PARK:

*Press parking brake until it locks and holds vehicle.

*Place Forward/Reverse switch in Neutral.

*Turn key OFF and remove from vehicle.

MOTOR BRAKING:

*Apply brakes to control vehicle speed as required.

*System is activated only when switch is in Forward position.

TOWING:

*When towing, Forward/Reverse switch must be in Neutral position.

2.3 Vehicle Information (Name Plate)

Fixed to the rear body as below picture, including vehicle model, serial number, battery parameters, motor power and other core information.



2.4 Chassis number

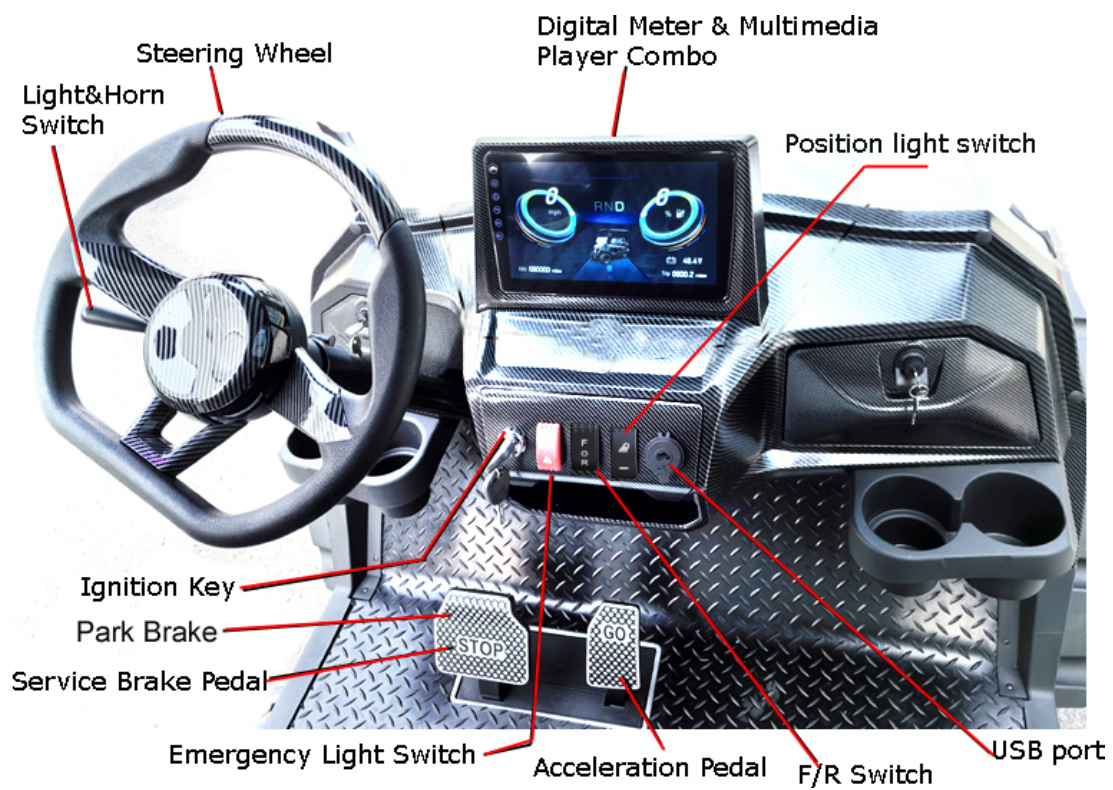
Located on the front left side of the chassis frame as showed as below picture. Record the chassis number for future after-sales service



This is where the chassis number located

3. Operating System

3.1 Operating System Diagram



3.2 Digital Meter & Multimedia Player Combo



Integrated with a digital meter and a multimedia player; the digital meter screen is the default display when the ignition is turned on.

3.2.1 Digital Meter

The meter screen displays the following key indicators, with real-time data for vehicle status monitoring:

1. **Battery Power Meter:** Displays the remaining battery capacity, with 10 indicator bars (4 green, 3 yellow, 2 red). The bars decrease from top to bottom as the battery discharges.
Recommendation: Charge the battery when the indicator reaches the yellow bar section.
2. **Voltmeter:** Displays the real-time battery voltage. The voltage fluctuates with output power and current during driving, and reflects the actual battery capacity when the vehicle is stationary. For the 73.6V battery system:
 - Fully charged voltage: ~83V
 - Recommended charging voltage: ~70V
 - Low voltage protection: $\leq 63V$ (single cell $\leq 3.0V$), the vehicle will automatically stop to prevent battery over-discharging.
3. **Total Trip Mileage:** Displays the accumulated driving distance of the vehicle, switchable between km and mile.
4. **Single Trip Mileage:** Displays the driving distance since the last ignition, resets to 0 when the ignition is turned off and on again, switchable between km and mile.
5. **Speedometer:** Displays the real-time driving speed, switchable between km/h and mph.
6. **Gear Position Indicator:** Displays the F/N/R switch position (F/Neutral/R). The reverse camera activates when the switch is in R position, and the R indicator is synchronized with the camera display.
7. **Fault Code (DTC):** Displays vehicle fault codes when a malfunction occurs; refer to the Troubleshooting section for solutions.

CAUTION!

Turn on the vehicle lights when driving at night or in low-light conditions to avoid accidents.

3.2.2 Multimedia Player

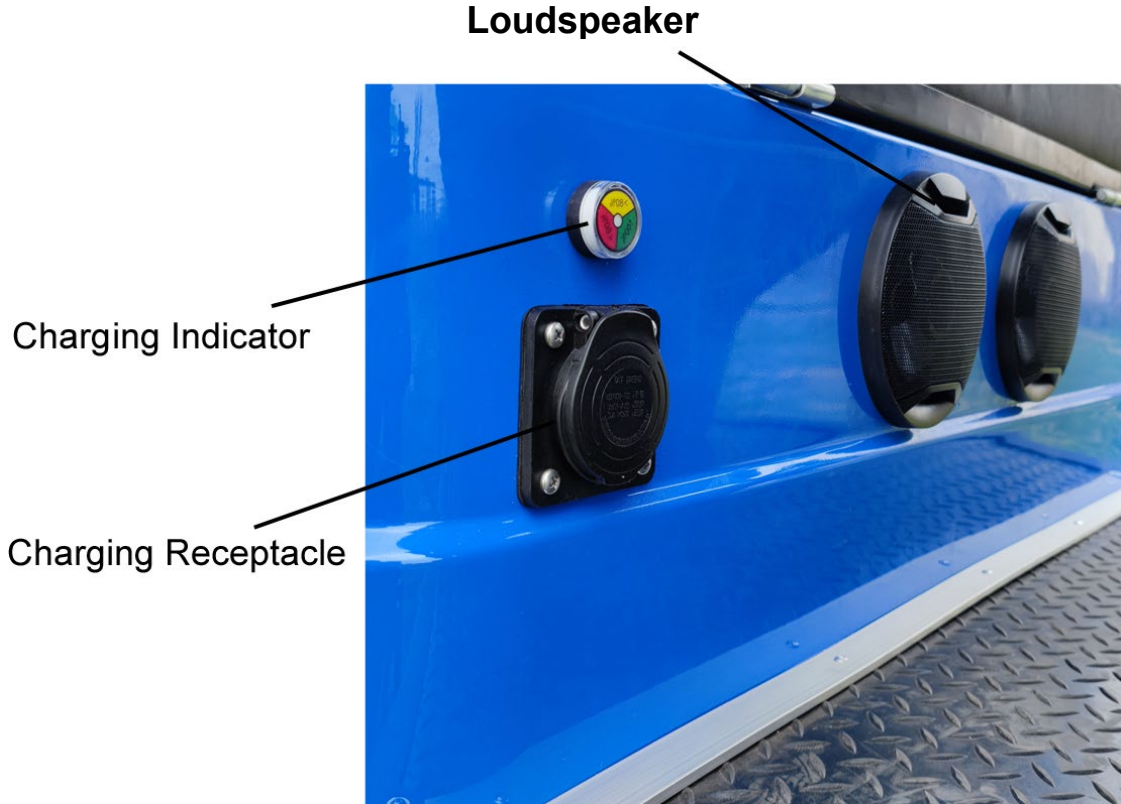
Includes Radio Player, Bluetooth Music Player, and USB Music Player; supports Bluetooth hands-free calling with mobile phones.

CAUTION!

Do not operate the multimedia player while driving to avoid distracted driving and accidents.

NOTE: For detailed operation of the multimedia player, refer to the separate manual of the Digital Meter & Multimedia Player Combo.

3.3 Loudspeaker&Charging Receptacle



3.3.1 Loudspeaker

The loudspeaker is integrated with the multimedia player system, providing audio output for functions such as radio playback, Bluetooth music streaming, and USB media playback. It delivers clear sound for in-vehicle entertainment and communication.

3.3.2 Charging Indicator

The charging indicator displays the real-time status of the battery charging process:

- **Flashing red:** Indicates normal charging is in progress.
- **Solid green:** Indicates the battery has reached full charge (charging is complete).
- **Flashing yellow:** Indicates a charging fault has been detected. Stop charging immediately and refer to the troubleshooting section to diagnose and resolve the issue.

3.3.3 Charging Receptacle

This receptacle is used to connect the vehicle to the dedicated charging connector for battery recharging. Ensure the ignition is turned to the OFF position before connecting the charging connector, and confirm a secure, tight connection to avoid arcing or damage to the port.

CAUTION!

Keep the charging receptacle clean and dry; cover the protective cap when not in use to prevent dust, water or foreign matter from entering.

3.4 Functional Operation of Key Components

3.4.1 Ignition Key

Controls the vehicle's electrical system and Motor Controller (MCU):

1. Turn the key clockwise to the ON position: Activates all electrical systems (including headlights, turn signals, taillights, brake lights, horn) and initializes the Motor Controller, enabling the vehicle's driving function.
2. Turn the key counterclockwise to the OFF position: Shuts off all electrical systems and the Motor Controller completely. The key can only be removed when in this position.



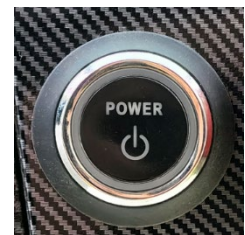
CAUTION!

The ignition key cannot be removed when it is in the ON position. Do not attempt to pull out the key in these positions to avoid damage to the ignition switch.

3.4.2 Keyless Push To Start Button (Optional)

On some vehicles, the ignition key is replaced by keyless push to start button as right picture.

1. Press the button once to activate the ACC system, press it again to start the MCU (ON position).
2. Press the button for 2 seconds to turn off all electrical systems (OFF position)

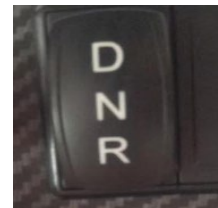


NOTE: Keep the remote controller aside while operating the vehicle. Keep the remote controller in a safe place and avoid loss.

3.4.3 F/R (DNR) Switch

A three-position switch for controlling the vehicle's driving direction:

1. Upper D position: Forward driving
2. Middle N position: Neutral (no power output, for parking/towing)
3. Lower R position: Reverse driving (the vehicle buzzer beeps automatically to warn surrounding personnel)



WARNING!

Push the switch fully into the desired position; incomplete engagement may damage the electrical system and motor.

CAUTION!

Always place the F/N/R switch in the Neutral (N) position when stopping the vehicle and turning off the ignition.

3.4.4 Accelerator Pedal

Controls the vehicle's driving speed:

Slowly press the pedal to increase speed; the vehicle accelerates gradually and reaches full speed when the pedal is fully depressed.

Release the pedal to slow down the vehicle; the regenerative braking system activates when the pedal is released, and the EPB engages automatically when the vehicle comes to a complete stop.



3.4.5 Brake Pedal

Integrated with service brake (lower section) and parking brake (upper section), with clear force and travel specifications:

1. Service Brake (Lower Section): Used to slow down or stop the vehicle; the normal operating force is 20-30 kgf (kilogram-force), and the effective travel shall not exceed 2/3 of the total pedal travel.

2. Parking Brake (Upper Section): Used for parking the vehicle; the effective locking force is approximately 200N (20 kgf), and the parking function is released when the pedal returns to its free position.



How to Engage/Disengage the Parking Brake

- **Engage:** Press the service brake pedal fully with the ball of your foot, then press down the parking brake pedal with the top of your foot until it locks into place. NOTE: If the parking brake fails to lock, repeat the above steps until it is securely locked.
- **Disengage:** Press the service brake pedal fully to unlock the parking brake pedal, or slowly press the accelerator pedal (the parking brake releases automatically).

NOTE: If the park brake pedal fails to be locked in the lock position, please repeat above procedure until it is locked.

WARNING!

- The parking brake releases automatically when the accelerator pedal is pressed. If the ignition is in the ON position, the vehicle may move suddenly—ensure the driving path is clear before pressing the accelerator.
- Fully release the parking brake before driving the vehicle to avoid brake system damage and excessive battery consumption.
- Do not press the brake pedal and accelerator pedal at the same time; this will cause severe damage to the motor and controller.

3.4.6 Electromagnetic Parking brake(EPB)

Equipped with automatic mode and manual unlock mode, for parking and towing use respectively:

1. **Electromagnetic Parking Brake (EPB):** The EPB engages automatically when the vehicle is stationary, and unlocks automatically when the accelerator pedal is pressed—for daily driving and normal parking.

2. **EPB Switch (EPB Switch OFF, Default):** Only for vehicle towing; turn the EPB switch to ON position, and the EPB is forced to unlock, and the vehicle can be towed freely.

WARNING! Manual forced unlock is for temporary towing only. Switch the EPB back to OFF immediately after towing is completed; otherwise, the EPB will continuously consume battery power and cause over-discharging.



1) Electromagnetic parking brake(EPB)



2) EPB Switch

3.4.7 Steering wheel

Controls the vehicle's driving direction; the steering system is designed for low-speed operation.

CAUTION!

Avoid sudden and sharp turns when driving to prevent rollover or loss of control, especially on inclines or uneven roads.

3.4.8 Light & Horn Switch

Integrated switch for controlling the lighting system and horn, with the following functions:



1. Rotate the knob forward to turn on the headlights, backward to turn them off.
2. Push the lever forward to activate the right turn signal, pull back to activate the left turn signal (the signal resets automatically when the steering wheel is returned to the center).
3. Lift the lever up to activate the high beam headlights.
4. Press the top of the lever to activate the horn (press and hold for continuous sound).

4. Operation process

4.1 Start the Vehicle

Follow the safe operation sequence below to start the vehicle to avoid sudden movement:

1. Check the DNR switch and ensure it is in the Neutral (N) position; adjust it to N if necessary.
2. Insert the ignition key and turn it to the ON position (or press the keyless start button twice) until the digital meter turns on, the voltmeter displays a stable reading, and a "CLICK" sound is heard from the vehicle (Motor Controller activation).

WARNING!

Do not press the accelerator pedal when turning on the ignition; the vehicle may move suddenly and cause an accident.

3. Check the vehicle's surrounding environment and confirm the driving path is clear of obstacles.
4. Push the DNR switch to the desired position (D for forward, R for reverse)

CAUTION!

Do not shift the F/N/R switch from F to R (or R to F) while the vehicle is in motion—this will damage the motor and controller.

5. Slowly press the accelerator pedal to release the parking brake and start driving the vehicle at a low speed..

4.2 Stopping the Vehicle

1. Release the accelerator pedal and press the service brake pedal firmly to slow the vehicle down to a complete stop.
2. Push the DNR switch back to the Neutral (N) position.
3. Turn off all vehicle lights (headlights, turn signals, etc.).
4. Turn the ignition key to the OFF position and remove it (or press the keyless start button for 2 seconds).
5. Engage the mechanical parking brake and EPB (automatic mode) to secure the vehicle.

CAUTION:

Do not use the accelerator pedal to hold the vehicle stationary on an incline; use the parking brake and service brake to prevent motor damage and vehicle slip.

5. Charging Process:

The vehicle is equipped with built-in on-board charger mostly. In some cases, external charger may be equipped. Follow the steps below for safe charging; read the separate charger manual for detailed charger operation.

IMPORTANT NOTICES BEFORE CHARGING

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1. Charge the battery in a well-ventilated, dry area to facilitate heat dissipation and avoid charger overheating or failure.
 2. Do not charge the battery in rainy, snowy, or dusty environments; keep water and flammable materials away from the charging area.
 3. Only use the **original matching charger** for the battery; using an incompatible charger will cause battery damage or fire.
 4. The vehicle **cannot be moved or operated** during charging; unplug the charger first if the vehicle needs to be moved.
 5. Do not open the charger housing; only qualified electricians are authorized to inspect or repair the charger

5.1 Standard Charging Steps

Follow the correct connection sequence to avoid electric arc and component damage:

1. Turn off the vehicle ignition and ensure the key is in the OFF position (disconnect all electrical loads).
2. Connect the charger's power cord to a standard AC power source (confirm the power supply is stable).
3. Insert the charging connector into the vehicle's battery charging receptacle and shake it slightly to ensure it is fully inserted and secured.
4. Check the charger's indicator light: intermittent red flashing indicates charging is in progress.
5. After charging is completed: the indicator light turns to solid green (battery reaches the set capacity).
6. Disconnect the charger from the AC power source first, then pull the charging connector out of the vehicle's charging receptacle.
7. Cover the charging receptacle with the protective cap to keep it clean.

WARNING!

Do not disconnect the charging connector directly from the vehicle receptacle while the charger is connected to the power source—this will generate an electric arc, cause instantaneous current instability, and damage the battery and charger.

CAUTION!

If the charging indicator light does not flash red after connection, check the power supply, charging connector and receptacle for poor contact; stop charging immediately if an abnormal smell or smoke is detected from the charger.

6. Safety Operation Specifications

The driver must be familiar with the vehicle's operating system and comply with the following safety specifications to ensure personal and vehicle safety. **Unauthorized personnel are prohibited from operating the vehicle.**

WARNING!

1. Do not drive the vehicle on public roads unless explicitly permitted by local regulations.
2. Do not overload the vehicle (exceed the rated loading capacity); overloading will damage the motor, reduce braking performance, cause loss of control, and shorten the vehicle's service life.
3. Only trained and authorized personnel can operate the vehicle; children, the elderly, and people with physical or mental disabilities are not allowed to drive the vehicle.

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4. Operate the vehicle only within the **rated climbing ability (full load)**; do not drive on steep inclines beyond the rated value to avoid rollover or motor burnout.
 5. Do not overtake other vehicles or obstacles at intersections, blind spots, narrow roads, or other dangerous areas.
 6. Keep your entire body inside the vehicle and remain seated at all times while driving; do not stand, lean out of the window, or sit on the vehicle's edge.
 7. Do not start the vehicle until all occupants are securely seated and their body parts are inside the vehicle; ensure the seat backrest is in the upright position.
 8. Keep both hands on the steering wheel and your eyes on the driving path; avoid distracted driving (e.g., using a mobile phone, operating the multimedia player).
 9. Always reverse the vehicle at a low speed; check the rear view and surrounding environment, and pay attention to the rear of the vehicle to avoid collisions.
 10. Avoid sudden starts, sudden acceleration, and sudden braking; this will damage the battery, motor and brake system, and may cause loss of control.
 11. Do not make sharp turns at high speed; reduce the speed to ≤ 10 km/h before turning to prevent rollover.
 12. Drive up and down inclines at a low, steady speed (≤ 15 km/h); keep the vehicle straight on inclines and do not turn around on steep slopes.
 13. Do not modify or add any components to the vehicle (e.g., change the motor, battery, or brake system) that may affect its performance or safety; any modification will void the after-sales warranty.
 14. Children are not permitted to play in or on the vehicle; when the vehicle is in motion, children must sit between adults and be held securely to prevent falls.
 15. Do not carry flammable, explosive, or corrosive materials on the vehicle; this will cause fire or explosion hazards.

7. Maintenance and Care

Regular and correct maintenance is critical to ensuring the vehicle's performance, safety and service life. Perform maintenance in accordance with the requirements below; all maintenance operations must be carried out with the ignition OFF and the parking brake engaged. If you are not familiar with vehicle maintenance, contact our after-sales service personnel or authorized dealers.

7.1 Lithium Battery Maintenance

The lithium-ion battery is the core power source of the vehicle (like the "heart" of the electric golf cart); follow the maintenance requirements strictly to avoid battery damage (lithium-ion batteries have no memory effect, and improper maintenance will cause irreversible capacity loss).

7.1.1 General Notes

1. This maintenance instruction applies to the original 73.6V 105Ah lithium-ion power battery custom-made for this vehicle; do not replace it with other non-matching batteries.
2. Contact our after-sales service personnel immediately if the battery has any faults (e.g., abnormal heating, swelling, leakage); do not disassemble or repair the battery by yourself—this will cause fire, explosion or electrolyte leakage.
3. The battery maintenance is only for customers (daily use and basic inspection) and qualified personnel (professional maintenance, with electrical professional knowledge and qualification certificates).

7.1.2 Environmental Protection Requirements

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1. Comply with the environmental protection regulations of the country/region where the vehicle is used for battery recycling and disposal.
 2. Do not discard the battery at will; hand over the waste battery to local **state-approved recycling and disposal companies** to avoid environmental pollution.

7.1.3 Battery Temperature Requirements

The battery has strict temperature limits for working and storage—exceeding the limits will cause permanent damage:

1. **Working Temperature:** Charging 0℃~50℃, Discharging -20℃~55℃
2. **Storage Temperature:**
 - 1 month storage: 0℃~45℃ (SOC 70%~80%)
 - 6 months storage: 0℃~35℃ (SOC 50%~60%) **CAUTION!** Do not store or use the battery in high-temperature environments (e.g., direct sunlight, near fire sources) for a long time.

7.1.4 Pre-driving Battery Check

Perform the following checks before each use to ensure the battery is in normal condition:

1. Check the battery compartment for no foreign matter, water or dust; ensure the compartment is dry and clean.
2. Check the digital meter for no battery alarm codes (DTC); confirm the battery power meter and voltmeter display normal values.
3. **SOC (State of Charge) Limit:**
 - SOC < 15%: The controller limits battery output, and the vehicle can only run at low speed (≤20 km/h)—charge the battery as soon as possible.
 - SOC < 5%: The controller cuts off battery output automatically, and the vehicle cannot run—to prevent over-discharging.

7.1.5 Normal Operation Requirements

1. Charge the battery immediately when the remaining power is **below 20%**; partial charging is acceptable for daily use (no need to fully charge).
2. Perform a **complete charge and discharge cycle once a month** (charge to 100% and discharge to 15%~20%) for battery capacity calibration.
3. **Battery Sleep Mode:** The lithium battery enters sleep mode automatically if:
 - SOC < 20% and the vehicle is unused for 3 days, or
 - SOC ≥ 20% and the vehicle is unused for 15 days. **Solution:** Press the battery restart button (located in the battery compartment) to wake up the battery before use.



7.1.6 Battery Transportation and Handling Requirements

1. Avoid severe vibration, impact, falling, rolling, inversion and extrusion during loading, unloading and transportation of the battery/vehicle.
2. Prevent the battery from getting wet during transportation; cover the vehicle/battery with a waterproof cover in rainy weather.
3. Turn off the battery power switch and ensure no charging/discharging is in progress before transportation.

7.1.7 Key Battery Maintenance Taboos

WARNING!

1. The lithium-ion battery is **hermetically sealed**—do not open the battery casing or add any liquids (including distilled water, battery additives, mineral water, tap water) to the battery under any circumstances.
2. Do not short-circuit the battery's positive and negative terminals (e.g., place metal objects on the battery); this will cause a short circuit, sparks, fire or explosion.
3. Do not charge the battery for a long time (over 24 hours) after it is fully charged; this will cause overcharging and battery swelling.
4. Do not discharge the battery below 5% of its capacity; over-discharging will cause irreversible damage to the battery cells and reduce capacity.

7.1.8 Routine Battery Inspection

1. **Weekly Check:** Tighten the battery cable nuts and terminals to prevent loose connections and sparks; check the battery cables for damage (cracks, fraying)—replace damaged cables immediately.
2. **Weekly Check:** Clean the battery surface with a dry cloth to remove dust and dirt; keep the battery compartment well-ventilated.
3. **Daily Check:** Monitor the battery power meter and voltmeter for abnormal readings (e.g., sudden voltage drop)—stop using the vehicle and inspect the battery if abnormalities are found.
4. **Open Circuit Voltage Test:** For accurate voltage measurement, the battery must be in idle state (no charging/discharging) for at least 6 hours (preferably 24 hours). Disconnect all loads, use a DC voltmeter to measure the voltage, and check the charging status—charge the battery if the voltage is below 70V.

7.1.9 Battery Installation Requirements

1. Only qualified electricians can install or replace the battery.
2. Tighten the battery cables to the battery terminals with a torque of **95-105 in-lbs (10.7-11.9 N·m)**—do not over-tighten to avoid terminal damage.

WARNING!

Do not place wrenches or other metal objects on the battery terminals during installation; this will generate an electric arc and cause battery explosion or personal injury.

7.2 Maintenance of traction motor

The traction motor is a sealed brushless motor, designed for low-speed and low-load operation; follow the maintenance requirements below to avoid motor damage:

1. The motor is suitable for use at altitudes ≤ 1500 meters and temperatures $-25^{\circ}\text{C} \sim 40^{\circ}\text{C}$; do not use it in high-altitude or extreme temperature environments for a long time.
2. The motor works normally with the rated voltage (73.6V) from the lithium battery; do not connect the motor to an incompatible power supply.
3. Avoid long-term overload operation: Do not drive the vehicle on a 25% incline with full load for more than 5 minutes—this will cause the motor to overheat and burn out.
4. The working environment must be free of explosive gas, heavy dust and corrosive gas to avoid motor internal damage.
5. Weekly Check: Remove dirt, sand and other debris from the motor surface and cooling vents regularly to ensure good heat dissipation.
6. Daily Check: Check the motor for abnormal noise, excessive heating (hot to the touch) or water seepage—stop the vehicle immediately and let the motor cool down if abnormalities are found.
7. Monthly Check: Tighten the motor's U/V/W cable terminals to prevent loose connections and poor power transmission.
8. Weekly Check: Test the EPB's lock and unlock function to ensure it is working normally (no jamming or failure).

7.3 Motor Controller Maintenance

The vehicle motor controller is an imported high-precision component, adopting high-frequency MOS technology for smooth speed, torque and braking control (energy-saving and low-noise). The controller has built-in multiple protection functions (HPD/SRO) to prevent vehicle runaway and component damage.

7.3.1 Built-in Protection Functions

1. **HPD Protection:** When the vehicle starts, the controller checks the accelerator pedal signal; if the signal exceeds 20% (pedal pressed too hard), the HPD disables the controller output to prevent sudden acceleration.
2. **SRO Protection:** Activates when the vehicle starts to monitor the motor and electrical system; cuts off output immediately if an abnormality is detected.
3. **Self-check Function:** The controller performs real-time self-check during operation; stops the vehicle automatically to protect the driver and vehicle if a fault is detected.

7.3.2 Routine Maintenance (Quarterly)

Perform the following maintenance with the ignition OFF and battery disconnected (release the controller's filter capacitor first):

1. Check the contactor contacts for good contact, no jamming or mechanical stuck—clean the contacts with dry cloth if necessary.
2. Check the accelerator pedal micro-switch for normal opening and closing—replace the switch if it is faulty.

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3. Check the turn signal switch for normal connection and disconnection—ensure the switch is not loose or stuck.
 4. Check all connections between the motor, battery and controller for tightness and no corrosion—tighten loose connections and clean corroded parts with a dry brush.
 5. Clean the controller surface with a damp rag (no water directly on the controller); dry it completely before reconnecting the battery.
 6. Do not rinse the controller with a water hose or power washer; remove dust with a soft brush or low-pressure air.

NOTE: The controller's filter capacitor retains residual power after the ignition is turned off—wait for 5 minutes for discharge before maintenance to avoid electric shock.

7.3.3 Annual Inspection

Check the solenoid valve for normal operation (no abnormal noise or jamming); inspect the valve contacts for wear—replace the solenoid valve if necessary.

7.4 Brake System Maintenance

The brake system is the core safety component of the vehicle; perform regular inspection and maintenance to ensure braking performance (no failure or deviation).

7.4.1 Routine Brake Check

1. **Daily Check:** Press the parking brake pedal to check its locking and release function—ensure it locks securely and releases smoothly (no jamming).
2. **Daily Check:** Test the service brake pedal for normal travel and operating force (20-30 kgf)—if the pedal is soft or the travel exceeds 2/3, check the brake system for air or fluid leakage immediately.
3. **Monthly Check:** Check the brake fluid tank for sufficient brake fluid (at the MIN-MAX mark); add brake fluid if the level is below MIN.
4. **Monthly Check:** Inspect the brake hoses and tubes for fluid leakage, cracks or damage—replace damaged parts immediately.
5. **Quarterly Check:** Check the brake drum and brake shoe for wear—replace the brake shoe if the thickness is less than the rated value (refer to the brake component manual).
6. **Quarterly Check:** Add lubricating oil to the brake bearings and rotating parts to ensure smooth operation.

7.4.2 Brake Component Specifications

1. **Brake Fluid:** Use DOT 3 or DOT 4 automotive brake fluid (no other fluid is allowed).
2. **Parking Brake:** The parking brake handle locks into the ratchet gear with a force of ~20 kgf; the braking function stops when the handle is fully released.
3. **Brake Shoe:** The brake shoe's action is self-adjusting—no manual adjustment is required (replace worn brake shoes only).

WARNING!

If the brake system has any faults (e.g., brake failure, deviation, abnormal noise), stop using the vehicle immediately and contact after-sales service for repair—do not drive the vehicle with a faulty brake system.

7.5 Vehicle Lubrication

Regular lubrication of the vehicle's moving parts ensures smooth operation and reduces wear; use the **specified lubricating oil** (no alternative oil is allowed) and lubricate the following points at the specified intervals:

7.5.1 Lubricant Specifications

1. **Brake Fluid:** DOT 3 / DOT 4 automotive brake fluid (unlimited capacity, fill to the MIN-MAX mark).
2. **Gearbox Oil:** 1L 85W/90 GL-4 gear oil (replace every 6 months or 1000 km).

3. Rear Axle Oil: 1L 85W/90 GL-5 hypoid gear oil (replace every 6 months or 1000 km).

7.5.2 Key Lubrication Points (Quarterly)

Add lubricating grease to the following parts to ensure smooth operation:

1. Steering gear
2. Tie rod end
3. Steering ball joint
4. Wheel hub bearing
5. Suspension connecting parts

CAUTION!

Do not mix different types of lubricating oil/grease; this will reduce lubrication performance and cause component wear.

7.6 New Vehicle Running-in Requirements

The electric golf cart has no long-term running-in period for the motor (brushless motor), but the mechanical components (brake pads, gears, bearings) need a short running-in period to ensure performance. **Follow the running-in requirements for the first 50 km** of new vehicle use:

1. Before running-in, check the oil (gearbox/rear axle), brake fluid and tire pressure carefully—fill or adjust to the specified value if insufficient.
2. Tire air pressure: 1.4Mpa (check and adjust before each use).
3. Speed Limit: ≤ 20 km/h during running-in; avoid high speed, sudden acceleration and sudden braking.
4. Load Limit: Do not exceed 80% of the rated loading capacity during running-in.
5. Road Condition: Avoid driving on rough, uneven or steep roads during running-in to reduce wear on mechanical components.
6. Regular Check: Tighten the fasteners at all connection points (chassis, body, suspension) during running-in to prevent loose connections.

CAUTION!

Release the parking brake to its free position before starting the vehicle to avoid damage to the brake pads and discs.

7.7 Regular maintenance chart

Perform regular maintenance in accordance with the following chart for optimal vehicle performance and safety. All maintenance operations must be carried out with the ignition OFF and parking brake engaged.

Abbreviations: 1D=Daily, 1W=Weekly, 1M=Monthly, 1Q=Quarterly, 1Y=Yearly, Y=Required

Item	Description	1D	1W	1M	1Q	1Y
Lithium Battery	1. Charge the battery when SOC<20%	Y				
	2. Tighten the nuts on the battery cables		Y			
	3. Check for over-discharging (power meter flashing)	Y				
	4. Perform a complete charge and discharge cycle (calibration)			Y		
	5. Clean the battery surface and compartment		Y			

charger	6. Observe charging status; check if the charger plug is overheating	Y				
	7. Clean the charger surface (no water entry)		Y			
Motor Controller	8. Check all terminals for tightness (power OFF first)				Y	
	9. Clean the controller surface (no direct water)				Y	
	10. Check solenoid valve operation and contact points					Y
Traction Motor	11. Check for abnormal noise, overheating or water seepage	Y				
	12. Tighten U/V/W cable terminals			Y		
	13. Check EPB lock/unlock function		Y			
Accelerator Pedal	14. Check for normal operation (smooth press/release)				Y	
Brake Pedal	15. Check parking brake release and service brake operation	Y				
Brake System	16. Check brake disc and brake shoe for wear (replace if needed)				Y	
	17. Check brake hoses/tubes for fluid leakage			Y		
	18. Check brake fluid level (fill to MIN-MAX mark)			Y		
Tires & Wheels	19. Check tire pressure, tread wear and wheel nut tightness		Y			
Suspension	20. Check shock absorber for oil leakage, flatness or abnormal noise			Y		
Gearbox/Rear Axle	21. Check for oil leakage (gearbox/rear axle)		Y			
Lubrication	22. Add lubricant to wheel hub and steering system.				Y	
Steering System	23. Adjust the front end toe-in (if deviation occurs)				Y	
Body&Seats	24. Clean the vehicle body and seats (no standing water on seats)				Y	

NOTE: After completing each maintenance, test-drive the vehicle at a low speed to check if all systems are working normally (no abnormal noise, braking failure or deviation).

8. Storage

If the vehicle needs to be stored for a long period of time (more than 7 days), follow the steps below to store it to avoid damage to the battery, motor and other components. Store the vehicle in a dry, well-ventilated, and rainproof place (indoor storage is recommended).

8.1 Standard Storage Steps

1. Battery Preparation: Check the battery SOC and charge it to 70%-80% (short-term storage: 1-3 months) or 50%-60% (long-term storage: 3-6 months).

WARNING!

If the vehicle is stored for more than 1 month, supplement the battery charge to the specified SOC once a month to prevent over-discharging and irreversible damage.

2. Electrical System: Turn the ignition key to the OFF position and remove it; store the key in a safe place (keep the keyless remote controller with the key).

3. Parking Brake: Engage the mechanical parking brake and keep the EPB in automatic mode (OFF) to secure the vehicle (prevent slip).

4. Power Disconnection: Disconnect all external devices connected to the vehicle (e.g., USB chargers, speakers) that may draw power from the battery.

5. Tire Preparation: Check the tire pressure and inflate it to the rated value (1.5 kgf/cm²); adjust the pressure if it is too low to avoid tire flat spots.

6. Cleaning & Rust Prevention: Clean the vehicle's exterior and interior (remove dust, dirt and water); apply rust inhibitor to the metal parts (chassis, wheel hubs) to prevent rust.

7. Covers: Cover the vehicle with a breathable non-woven cover to prevent dust, sunlight and water from damaging the vehicle (do not use airtight plastic covers—this will cause mold).

8. Position: Park the vehicle on a flat, hard surface; do not store it on soft ground (e.g., mud, grass) or steep inclines.

8.2 Post-Storage Operation

1. Remove the vehicle cover and clean the vehicle surface (remove dust and dirt).

2. Check the battery SOC and charge it to $\geq 50\%$ if necessary.

3. Check the tire pressure, brake fluid level and all connections (tighten loose parts).

4. Turn on the ignition and perform a self-check of the digital meter (no fault codes); test the EPB, brake system and accelerator pedal for normal operation.

5. Test-drive the vehicle at a low speed (≤ 10 km/h) to check if all systems are working normally before formal use.

9. Troubleshooting

This section lists common faults of the electric golf cart, their possible causes and practical solutions. Prior to any troubleshooting, ensure the vehicle is parked on a flat surface, the ignition key is in the OFF position, the parking brake is engaged, and all electrical loads are disconnected. For complex electrical or mechanical faults, contact professional after-sales service personnel or authorized dealers for repair.

NOTE: All fault codes (DTC) displayed on the digital meter can be referenced with this troubleshooting guide for quick fault location.

9.1 The Vehicle Fails to Start/Move (Ignition ON, Accelerator Pressed, No Movement)

Symptom	Possible causes	Solution
Digital meter has no power/ display (no	1. Main circuit fuse blown	Replace the fuse with the same ampere rating

lights, no values)	2. Battery cables loose/disconnected	Tighten battery cable terminals (torque: 10.7-11.9 N • m) or reconnect loose cables
	3. Ignition switch malfunction	Check the ignition switch for poor contact; replace if faulty
	4. Battery over-discharged (voltage $\leq 63V$)	Charge the battery immediately (refer to Chapter 5 Charging Process)
Digital meter is on normally (lights on, values stable), but vehicle does not move	1. Incorrect operation sequence (DNR switch is not at N position before starting the ignition key)	Turn DNF switch to N position, then turn on the ignition key
	2. F/N/R switch not in Forward/Reverse position (stuck in Neutral)	Push the F/N/R switch fully to F/R position (ensure no jamming)
	3. Parking brake (mechanical/EPB) not fully released	Fully release the mechanical parking brake; check EPB is in automatic mode (OFF)
	4. Solenoid valve failure (no power transmission)	Inspect solenoid valve for abnormal noise; test/replace if no power on
	5. Accelerator pedal malfunction or micro-switch failure	Check accelerator pedal for smooth movement; replace the micro-switch if faulty
	6. Motor and/or Motor Controller failure	Replace them
	7.. Motor/controller connection loose (U/V/W cables)	Tighten motor/controller U/V/W cable terminals; clean corrosion if present
	8. Vehicle in overheat protection (motor/controller overheated)	Turn off the ignition and let the vehicle cool for 30-60 minutes; check heat dissipation of motor/controller

9.2 Abnormal Speed Control (Uncontrollable Acceleration/Deceleration, Low Speed)

Symptom	Possible causes	Solution
Vehicle runs at full speed immediately when ignition is ON (no accelerator input)	1. Solenoid valve terminals stuck (continuous power on)	Disassemble and inspect the solenoid valve; replace the valve if terminals are stuck
	2. Controller malfunction (HPD protection failure)	Reset the controller (turn off ignition for 5 minutes, restart); replace the controller if fault persists

	3. Accelerator pedal stuck (cannot return to original position)	Check and release the stuck accelerator pedal; clean foreign matter in the pedal mechanism
Vehicle stops immediately after starting, or only runs at low speed ($\leq 10\text{km/h}$)	1. Battery low power (SOC $<15\%$, controller power limit)	Charge the battery to SOC $\geq 50\%$ before use
	2. Motor internal short circuit	Replace the motor
	3. Brake system drag (brake shoe stuck to brake drum)	Check the brake system for stuck components; release the brake shoe and add lubricant to rotating parts
	4. Motor overload (vehicle overloaded/exceeded climbing capacity)	Reduce load to below rated capacity; avoid steep inclines beyond the rated climbing ability
	5. Controller fault (SRO protection activated)	Replace the controller
	6. Accelerator failure or loose connection	Replace the accelerator or re-plug the accelerator

9.3 Charging System Faults (Cannot Charge, Abnormal Charging Indicator)

Symptom	Possible causes	Solution
Charging indicator no light when charger is connected	1. Charger not connected to AC power (power socket no electricity)	Check the AC power socket; try another functional power source
	2. Charging connector loose/not fully inserted into the charging receptacle	Insert the charging connector fully into the receptacle and shake slightly to ensure a tight connection
	3. Charging receptacle internal contact failure	Inspect the charging receptacle for dust/oxidation; clean or replace the receptacle if faulty
Charging indicator flashes yellow (fault code), charging stops	1. Incompatible charger (not the original matching charger)	Use only the original 73.6V matching charger for the vehicle
	2. Battery overheated (charging temperature $>50^{\circ}\text{C}$)	Stop charging and move the vehicle to a cool place ($0^{\circ}\text{C}-50^{\circ}\text{C}$); charge after the battery cools down
	3. Battery internal fault (short circuit/swelling)	Check the battery for swelling/abnormal heating; contact after-sales service for battery inspection/replacement
	4. Charger overheated (poor heat dissipation)	Place the charger in a well-ventilated area; remove dust from the charger's cooling vents

Charging time is abnormally long (more than 10 hours to full), or battery not fully charged	1. Battery capacity degradation (long-term use)	Perform a complete charge-discharge cycle for battery calibration; replace the battery if capacity is below 60%
	2. Charger output power reduction	Test the charger output voltage/current; replace the charger if faulty
	3. Loose charging cable connections	Tighten all charging cable connections; clean corrosion at terminals
	4. Vehicle electrical system leakage (battery self-discharging)	Contact a qualified electrician to test for electrical leakage and repair the fault
Electric arc occurs when disconnecting the charging connector	1. Disconnected the vehicle connector first (before AC power)	Follow the correct disconnection sequence: unplug AC power first, then the vehicle charging connector
	2. Charger not fully stopped (battery still charging)	Wait for the charger indicator to turn solid green (charging complete) for 5 minutes before disconnection

9.4 Brake System Faults (Brake Failure, Deviation, Abnormal Noise, Drag)

Symptom	Possible causes	Solution
Brake pedal is soft/spongy, long travel, poor braking effect	1. Insufficient brake fluid in the reservoir	Add DOT 3/DOT 4 brake fluid to the MIN-MAX mark of the reservoir
	2. Air in the brake hydraulic pipeline	Bleed the air from the brake pipeline (professional operation recommended)
	3. Brake fluid leakage (hoses/tubes/wheel cylinder)	Inspect brake hoses/tubes for leakage; replace damaged parts and add brake fluid
	4. Brake drum worn/deformed	Check brake drum thickness; replace the drum if worn beyond the rated value
Vehicle deviates to one side when braking	1. Uneven wear of left/right brake shoes	Brake shoe on one side has oil/dust contamination
	2. One side brake cylinder stuck (no oil pressure)	Disassemble and clean the stuck brake cylinder; replace if faulty
	3. Left/right tire pressure inconsistent	Adjust left/right tire pressure to the same rated value (1.5 kgf/cm ²)
	4. Brake shoe on one side has oil/dust	Clean the oil/dust on the brake shoe; check for oil leakage in the rear

	contamination	axle/gearbox
Abnormal noise (squeaking/grinding) when braking	1. Brake shoe worn out (metal base contact with brake disc)	Replace the brake shoes immediately (safety hazard)
	2. Foreign matter (sand/stone) in the brake system	Disassemble the brake system and remove foreign matter
	3. Brake disc surface rough/uneven	Polish the brake disc surface; replace the drum if severely rough
	4. Brake bearing lack of lubrication	Add lubricating grease to the brake bearing
Brake drag (vehicle hard to move, motor overheated, brake drum hot)	1. Brake pedal has no free travel (adjustment failure)	Follow the correct disconnection sequence: unplug AC power first, then the vehicle charging connector
	2. Brake shoe return spring broken/faulty	Replace the broken brake shoe return spring
	3. Parking brake not fully released	Fully release the mechanical parking brake; check EPB for normal unlock
	4. Wheel cylinder piston stuck (cannot return)	Disassemble and clean the wheel cylinder piston; replace if faulty

9.5 Steering System Faults (Steering Stiff, Shaking, Deviation When Driving)

Symptom	Possible causes	Solution
Steering wheel is stiff/heavy (hard to turn)	1. Front tire pressure too low	Inflate front tires to the rated pressure (1.5 kgf/cm ²)
	2. Steering system lack of lubrication (gear/ball joint/tie rod end)	Add lubricating grease to all steering system moving parts
	3. Brake fluid leakage (hoses/tubes/wheel cylinder)	Loosen the steering gear screws appropriately (professional adjustment)
	4. Brake drum worn/deformed	Calibrate the front wheel toe-in (refer to Chapter 7 Maintenance)
Steering wheel shakes/vibrates when driving (especially at high speed)	1. Front wheel bearing worn/loose	Replace the worn front wheel bearing
	2. Tie rod ball joint worn/loose	Tighten or replace the worn tie rod ball joint
	3. Steering gear rack wear	Inspect the steering gear rack; replace the steering gear if faulty
	4. Front wheel imbalance	Perform front wheel dynamic balancing (professional operation)
Vehicle deviates to	1. Left/right front tire pressure	Adjust left/right front tire pressure to

left/right when driving straight (no steering input)	inconsistent	the same value
	2. Uneven wear of front tires	Replace unevenly worn tires; swap front/rear tires regularly
	3. Abnormal front wheel toe-in/camber	Calibrate front wheel toe-in/camber (professional adjustment)
	4. One side brake drag	Check and repair the drag side brake system (refer to 9.4)

9.6 Electrical System Abnormalities (Lights/Horn/Multimedia Malfunction, Abnormal Indicator)

Symptom	Possible causes	Solution
Headlights/turn signals/horn no power (12V accessory system fault)	1. Accessory system fuse blown	Replace the accessory system fuse with the same rating
	2. Light/horn switch malfunction	Check the switch for poor contact; replace if faulty
	3. Wiring harness loose/disconnected	Tighten the wiring harness connectors; repair broken wires
	4. Bulb burned out (for lights)	Replace the burned-out bulb with the same model
Multimedia player/loudspeaker no sound (power on, no audio output)	1. Loudspeaker wiring loose/disconnected	Tighten the loudspeaker wiring connectors; repair broken wires
	2. Multimedia player volume set to 0 or muted	Adjust the volume to a suitable level and cancel mute
	3. Bluetooth/USB connection failure	Reconnect Bluetooth/USB device; replace the USB cable if faulty
	4. Loudspeaker/multimedia player malfunction	Test and replace the loudspeaker/multimedia player if

		faulty
Digital meter abnormal display (flashing, wrong values, fault code DTC)	1. Meter wiring loose/disconnected	Tighten the digital meter wiring connectors
	2. Battery voltage unstable (fluctuating too much)	Charge the battery to stabilize the voltage; check for battery cell failure
	3. Meter internal fault	Reset the meter (turn off ignition for 5 minutes); replace the meter if faulty
	4. Vehicle system fault (controller/motor error)	Refer to the fault code (DTC) to check the corresponding system (controller/motor)
EPB (Electromagnetic Parking Brake) malfunction (cannot lock/unlock)	1. EPB switch malfunction	Test the EPB switch for power; replace if faulty
	2. EPB wiring loose/disconnected	Tighten the EPB wiring connectors; repair broken wires
	3. Battery voltage too low (insufficient power for EPB)	Charge the battery to SOC $\geq 50\%$ to restore power
	4. EPB mechanical jamming	Check the EPB mechanical structure for jamming; clean and lubricate moving parts

9.7 Abnormal Noise/Vibration (Motor/Chassis/Rear Axle Abnormal Sound When Driving)

Symptom	Possible causes	Solution
Abnormal whirring/grinding noise from the motor/rear axle	1. Lack of gear oil in the rear axle/gearbox	Add 85W/90 GL-5 hypoid gear oil to the rear axle (1L) and 85W/90 GL-4 gear oil to the gearbox (1L)
	2. Rear axle/gearbox gear wear/damage	Inspect the gear wear; replace worn/damaged gears (professional operation)
	3. Motor bearing worn/damaged	Replace the worn motor bearing
	4. Foreign matter in the motor/rear axle	Disassemble and remove foreign matter from the motor/rear axle
Rattling/knocking noise from the chassis/suspension	1. Chassis fasteners loose (suspension/frame/axle)	Tighten all loose chassis fasteners (check regularly)
	2. Shock absorber worn/faulty (oil leakage/abnormal noise)	Replace the shock absorber if oil leakage/abnormal noise is present
	3. Suspension spring broken/lose	Replace the broken suspension spring; re-secure loose springs

	4. Wheel nuts loose	Tighten the wheel nuts to the specified torque (refer to vehicle manual)
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9.8 Tire/Wheel Abnormalities (Flat Tire, Abnormal Wear, Loose Nuts)

Symptom	Possible causes	Solution
Tire slow air leakage/flat tire	1. Tire puncture (nail/sandstone)	Repair the punctured tire (patch or plug); replace the tire if damaged severely
	2. Tire valve stem damaged/leaking	Replace the damaged valve stem; tighten the valve cap
	3. Wheel rim seal failure	Inspect the wheel rim for deformation; replace the rim if seal failure
	4. Tire bead not seated properly	Re-seat the tire bead and inflate to the rated pressure
Tire abnormal wear (one-sided wear/center wear/edge wear)	1. Incorrect front wheel toe-in/camber	Calibrate the front wheel toe-in/camber (professional adjustment)
	2. Tire pressure too high/low	Adjust tire pressure to the rated value (1.5 kgf/cm ²)

	3. Steering system loose (tie rod/ball joint)	Tighten or replace loose steering system parts
	4. Uneven braking force	Adjust the brake system to ensure even braking force on both sides
Wheel wobbles when driving, or wheel nuts feel hot	1. Wheel nuts loose	Tighten the wheel nuts to the specified torque immediately (safety hazard)
	2. Wheel bearing worn/loose	Replace the worn wheel bearing
	3. Wheel rim deformed	Inspect the wheel rim for deformation; replace the rim if faulty

Important Note

If the fault cannot be resolved with the above solutions, or the vehicle shows severe faults (e.g., battery swelling/leakage, motor/controller fire/smoke, brake failure), stop using the vehicle immediately and contact our after-sales service department for professional repair. Do not attempt to disassemble or repair complex components by yourself to avoid personal injury or further vehicle damage.

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Date: March 4, 2026

Version: 2026.03.01