

CASWE E10

Electric Wheelchair User Manual

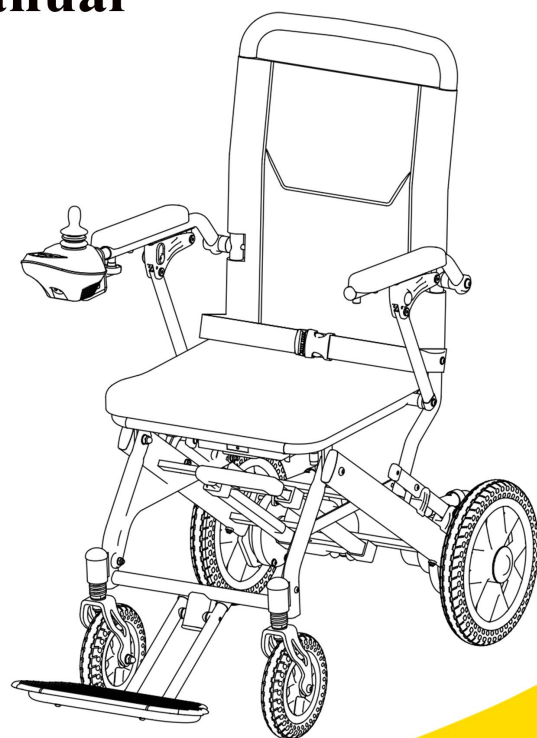


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1. Preface

Thank you for purchasing our product. Before using the electric wheelchair for the first time, please make sure to read the user manual carefully and follow the instructions. If you have any questions or do not understand any part of the manual, you may contact our after-sales service department.

The intended use of the electric wheelchair is for transporting and assisting individuals with mobility impairments. Its common function is for personal mobility, and it can be safely used by patients.

The electric wheelchair is powered by an independent battery, which is considered part of the medical electrical equipment.

This manual is also considered part of the medical electrical equipment.

The following symbols are used throughout this manual to identify warnings and precautions. Please read and follow them carefully.

 **WARNING** Ignoring the warnings in this manual may result in bodily injury.

 **CAUTION** Ignoring the cautions in this manual may result in damage to the electric wheelchair.

The illustrations in this manual are for reference only. Please refer to the actual product during use.

2. Warnings and Safety Instructions

 **WARNING** Ignoring the warnings in this manual may result in bodily injury. Please strictly follow the instructions below.

- Do not operate your electric wheelchair before reading and fully understanding this manual.
- Do not operate your electric wheelchair before assembly and inspection are fully completed.
- Individuals with mental disorders, delayed reactions, or difficulty operating the wheelchair are advised not to use it.
- Do not get on or off the wheelchair when the controller power is on or when the wheelchair is in manual mode without an assistant to stabilize it.
- Do not use the wheelchair without anti-tip wheels installed or if the anti-tip wheels are malfunctioning.
- Do not stand on the footrests to avoid tipping over.

- First-time users are advised to drive at low speeds to prevent accidents due to unfamiliarity.
- When turning, reduce the speed of the wheelchair to below 2 km/h.
- When descending a slope, drive slowly in the lowest gear; when ascending, lean your body slightly forward and proceed at a low speed. Do not turn or change direction on slopes.
- The wheelchair must not be occupied during transport.



CAUTION Ignoring the cautions in this manual may result in damage to the electric wheelchair. Please strictly follow the instructions below.

- Do not modify this equipment without authorization from the manufacturer.
- Do not disassemble, alter, or retrofit the wheelchair, nor replace its parts with non-original components not manufactured by our company.
- Always check that the wheels are securely attached.
- Operate the joystick on the controller gently; do not push it back and forth rapidly.
- The controller is the core component of the wheelchair. Do not leave the wheelchair outdoors for long periods or drive it indoors when it is raining to avoid moisture damage.
- This wheelchair is designed for indoor and courtyard use.
- Do not continue driving when the battery power is only 10%. Charge immediately to avoid being stranded.
- Do not perform maintenance or servicing while the wheelchair is in use.
- Patients with limited mobility should not attempt to service or maintain the wheelchair.
- If not used for a long period, the battery will self-discharge completely. For long-term storage, recharge the battery every 3 months. Before using again, always fully charge (approx. 8 hours). Failure to charge during storage will reduce battery lifespan, and even a full charge before use may result in reduced capacity.
- The patient is the intended operator. The accessible parts for the

- operator include: seat, backrest, footrests, armrests, and controller.
- Battery replacement must be carried out by qualified service personnel. Self-replacement may lead to energy hazards.
 - **WARNING:** Modification of this equipment is not permitted. Unauthorized alterations may change the wheelchair's performance and, in severe cases, pose life-threatening risks.
 - Contraindications: None.
 - If the wheelchair will not be used for some time, disconnect and remove the battery.
 - Loss of power may cause unacceptable risks; the wheelchair must always be connected to an appropriate power source.
 - The electric wheelchair is intended to draw energy from the charger; the internal power supply is for operating the wheelchair only.
 - Do not place the wheelchair where disconnecting the power supply is difficult.
 - To avoid the risk of strangulation from overly long cords, check soft cables regularly. If loose, secure them immediately.
 - Frequently check screws and small components on the wheelchair to prevent loosening, water absorption, or accidental ingestion.
 - During its expected service life, the assembly of the ME system must comply with the GB9706.1-2020 standard.
 - Stop using the wheelchair immediately if performance changes are observed.
 - Do not touch the battery connectors or charger ports.
 - In the following cases, inexperienced operators or responsible parties should contact the manufacturer or its representative.
 - If assistance is needed with installation, use, or maintenance of ME equipment or ME systems.
 - To report abnormal operation or incidents.

3. Main Structure and Performance

3.1 The electric wheelchair consists of the frame, motor, controller, lithium battery, seat, wheels, armrests, and footrests.

It can be operated either by the user or a caregiver, and is powered by one or more motors, with a seat for support.

A structural diagram is shown below (see Figure 1).

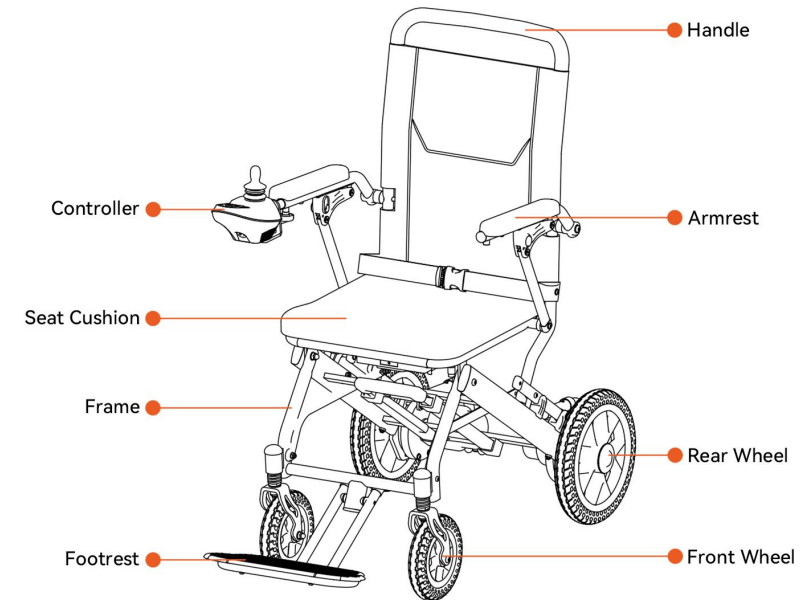


Figure 1

3.2 Structural Features

- Energy-efficient motor with a safe and reliable electromagnetic braking system.
- Foldable frame, easy to assemble and disassemble.
- Intelligent controller: power button, battery indicator, omnidirectional joystick, and horn.
- Flip-back armrests and anti-tip device.
- Shock-absorbing front wheels.
- Two operating modes: self-propelled electric drive mode and assisted push mode.

3.3 Scope of Application

- The electric wheelchair produced by our company is intended for use by individuals with disabilities or impaired walking ability (excluding obesity) as a mobility aid.
- Main functions: electric drive, forward and backward control, steering control, speed adjustment, folding, and storage.
- Normal operating conditions: Ambient temperature: +5°C to +40°C
- Relative humidity: 15% to 90%
- Atmospheric pressure: 70 kPa to 106 kPa

3.4 Electric Wheelchair Performance Parameters Table

Product type: Indoor type		Maximum speed: ≤ 2.8 mph (4.5 km/h)
Braking performance:	Horizontal braking distance: ≤ 3.3 ft (1.0 m)	Slope holding performance: $\geq 6^\circ$
	Maximum safe slope braking distance: ≤ 5.2 ft (1.6 m, 3° slope)	Static stability: $\geq 6^\circ$
Dynamic stability: $\geq 3^\circ$		Obstacle-climbing height: ≥ 1.0 in (25 mm)
Gap-crossing width: ≥ 3.9 in (100 mm)		Climbing ability: $\geq 3^\circ$
Minimum turning radius: ≤ 2.95 ft (0.9 m)		Driving range: ≥ 6.2 miles (10 km)
Load capacity: ≤ 220 lbs (100 kg)		Seat plane angle: 4°
Front armrest position: 13.4 in (340 mm)		Internal power supply: DC 24V ± 5
Effective seat width: 16.1 in (410 mm)		Noise level: < 65 dB
Dimensions (L×W×H): 42.1 × 21.3 × 39.4 in (1070 × 540 × 1000 mm)		Motor power: 250 W each (left & right)

Footrest-to-seat surface angle: 145°	Front seat height: 20.9 in (530 mm)
Net weight: 48.5 lbs (22 kg)	Effective seat depth: 16.1 in (410 mm)
Heaviest component weight: 41.9 lbs (19 kg)	Footrest-to-seat distance: 20.9 in (530 mm)
Backrest angle: 15°	Backrest height: 17.7 in (450 mm)
Seat height: 20.9 in (530 mm)	Ingress protection rating: IP22
Folded dimensions (W×L×H): 14.2 × 21.3 × 33.5 in (360 × 540 × 850 mm)	Battery: Lithium battery DC 24V 12Ah
Front wheel size: 7 inches	Rear wheel size: 11 inches
The above parameters may vary depending on the user's weight, environment, and battery condition.	
Classification by electric shock protection: Internally powered equipment/Degree of protection against electric shock: Type BF applied part (does not operate while charging; during normal operation functions as internally powered equipment)	
Operating mode classification: Continuous operation/Electromagnetic compatibility: Group 1, Class B	
Our company reserves the right to make technical or appearance changes to this product without prior notice. Thank you for your understanding!	

4. Operating Instructions

Open the packaging box, take out the electric wheelchair, remove the footrest assembly and charger, and check against the packing list to ensure no parts are missing or damaged.

4.1 Installation

4.1.1 Remove the electric wheelchair from the box and place it on a flat floor. Cut all zip ties securing the wheelchair. First, flip the footrest down into position. Hold the handle with one hand and the seat frame with the other, then push outward to unfold the wheelchair until the folding frame locks into the groove of the limiter. Secure both side latches, place the soft seat cushion on the seat, and fasten it with Velcro (see Figures 2, 3, and 4).

⚠ Do not insert your fingers into the back folding mechanism to avoid injury!
Do not grip the seat tube with your hand to avoid pinching when pressing down on the seat cushion!

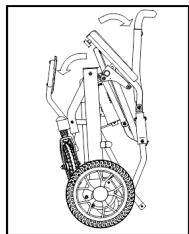


Figure 2

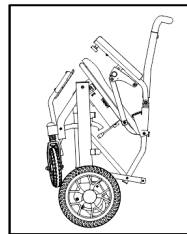


Figure 3

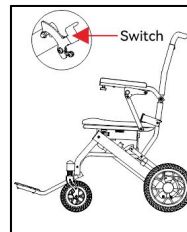


Figure 4

4.1.2 Installing the Anti-Tip Wheels

First, pull out the locking pin on the frame. Then align the anti-tip wheel assembly with the frame tube and insert it. Make sure the holes on the anti-tip wheel tube and the frame are aligned, then reinsert the locking pin. Both sides of the frame must be fitted with anti-tip wheels. (See Fig. 5)

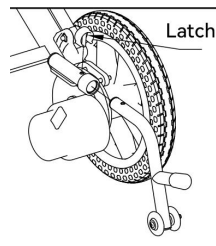


Figure 5

4.1.3 Installing and Adjusting the Controller

Loosen the quick-release handle on the armrest tube, then insert the controller adjustment rod into the armrest tube. Sit in the power wheelchair, slide the controller mounting rod forward or backward to a comfortable position, and then lock the quick-release handle. (If the controller is installed on the left side, the adjustment method is the same.) (See Fig. 6)

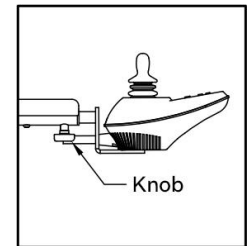


Figure 6

4.1.4 Flipping the Armrest

Press the armrest button to release the latch from the armrest, then flip the armrest back to facilitate getting on and off the wheelchair. (See Fig. 7)

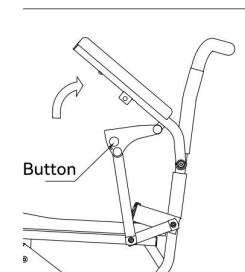


Figure 7

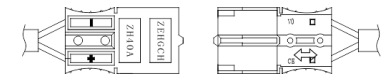


Figure 8

4.1.6 Battery Removal and Installation

Hold the battery and press the orange side button to remove it. To install, align the battery pack with the corresponding slot, gently push it in until you hear a “click,” indicating it is securely in place. (See Fig. 9)

4.1.7 Folding Operation

Turn off the controller power, remove the anti-tip wheels, press the switch with one hand and push the handle downward with the other to fold the wheelchair to its most compact size. (See Fig. 10)

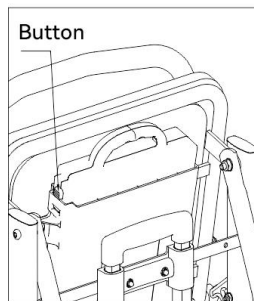


Figure 9

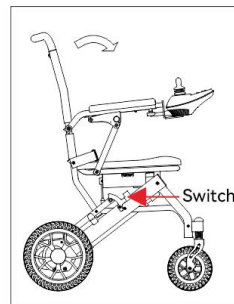


Figure 10

4.1.8 Switching Between Electric Driving and Manual Pushing

This power wheelchair uses a brushless motor with an electromagnetic braking system. In electric mode, releasing the joystick immediately stops the wheelchair, ensuring safe driving. On the motor, there is an electric/manual switch label: when the lever is set to “Electric,” the wheelchair is in electric mode; when the lever is set to “Manual,” the wheelchair is in manual mode, allowing it to be pushed. When using electric mode, make sure the lever is switched to “Electric” before turning on the power; otherwise, the controller will display an error alarm. (See Fig.11)

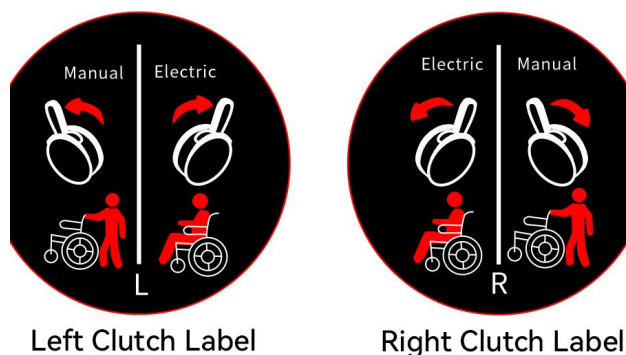


Figure 11

4.2 Operation of the Power Wheelchair

4.2.1 Controller Function Description (See Fig. 12)

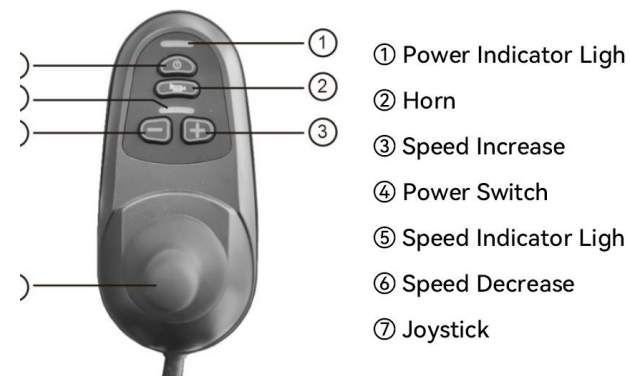


Figure 12

- Joystick: Push the joystick to control the wheelchair's direction and speed.
- Power Switch: Press to turn on the power; a “beep” confirms startup. Long press for 3 seconds to turn off; a long beep confirms shutdown.
- Speed Limit Buttons: Press the minus button to lower the maximum speed; press the plus button to increase it.
- Horn: Press to sound the horn; release to stop.

4.2.2 Using the Controller

- (1) After the operator is seated securely, turn on the controller. A beep indicates the wheelchair is powered on. The system has a safety start protocol; ensure the joystick is centered at startup, otherwise a system fault will prevent power-on.
- (2) The wheelchair's speed is adjusted using the speed buttons on the controller. There are five levels; beginners should start at low speed. Do not change speed levels while driving.
- (3) Gently push the joystick to start. Push forward to move forward, left to turn left, right to turn right, backward to reverse. After practice, the wheelchair can be operated smoothly.

- (4) To sound the horn, press the button marked with the horn symbol.
- (5) When fully charged, the battery displays 100%. When the battery is low, a 10% indicator shows remaining power—please recharge promptly to ensure sufficient power.
- (6) To power off, long-press the power switch until a beep confirms shutdown.

4.3 Using the Charger

4.3.1 Only use the dedicated charger supplied with this wheelchair to ensure safety. Connect the three-prong metal plug of the charger to the three-hole interface on the controller, observing correct orientation. For convenience, the battery pack can be removed and charged separately. (See Fig. 13, Fig. 14)

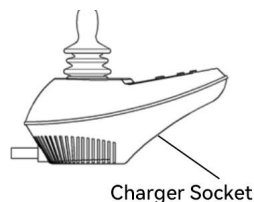


Figure 13

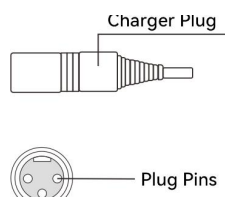


Figure 14

4.3.2 Plug the other end of the charger into a standard wall outlet.

4.3.3 During charging, the charger indicator light is orange. When it turns green, the battery is fully charged. After charging, unplug both the power plug and the output plug, and store the charger safely. When not using the wheelchair, turn off the controller to conserve battery. (Charging time depends on the remaining battery power; a new battery typically takes 10 - 12 hours for a full charge.)

4.3.4 The wheelchair will not respond during charging. After unplugging the charger, turn the controller back on for normal operation.

4.3.5 When the battery reaches the end of its life, purchase a replacement battery according to the specifications and install it. Dispose of the old battery properly via qualified recycling services or return it to the dealer, as improper disposal can cause environmental pollution.

5. Product Transportation and Storage Conditions

5.1 Transportation

During transportation, handle the product with care. Do not throw, roll, or apply heavy pressure to it.

5.2 Storage

Store the product in a dry, ventilated area. Avoid placing it in environments with high temperatures or rapid temperature changes. Keep the product away from chemically corrosive substances such as acids or bases.

5.3 Environmental Limits for Transportation and Storage

Ambient temperature range: $-25^{\circ}\text{C} \sim +55^{\circ}\text{C}$

Relative humidity: $\leq 90\%$

Atmospheric pressure: $70 \text{ kPa} \sim 106 \text{ kPa}$

6. Troubleshooting and Fault Handling

Most power wheelchair malfunctions are related to the battery, motor, and controller. If the battery indicator flashes rapidly while the joystick is not moved, the controller has detected a fault in the wheelchair's electrical system. Follow these steps:

1. Turn off the controller power.
2. Confirm all connectors on the wheelchair are properly connected to the controller.
3. Check the battery status.
4. If no issue is found, refer to the self-diagnosis table to identify possible causes.
5. Turn the power back on and try operating the wheelchair. If the fault persists, turn off the controller immediately and do not operate the wheelchair. Contact your service provider immediately.

I. Motor Connection Alarms

1. Left Motor Alarm

Fault Type	Display	Solution
Motor phase wire disconnected	Speed 1 flashing	Check connector connection
Electromagnetic brake wire disconnected	Speed 1 flashing	Check connector connection

2. Right Motor Alarm

Fault Type	Display	Solution
Motor phase wire disconnected	Speed 2 flashing	Check connector connection
Electromagnetic brake wire disconnected	Speed 2 flashing	Check connector connection

II. Joystick Fault Alarm

Fault Type	Display	Solution
Joystick not centered	Speed 3 flashing	Move joystick gently to ensure no obstruction, then restart
Joystick detached	Speed 3 flashing	Contact us

III. Main Control Board Fault Alarm

Fault Type	Display	Solution
Abnormal current sampling	Speed 4 flashing	Contact us
Drive tube breakdown	Speed 4 flashing	Contact us
Control board short circuit	Speed 4 flashing	Contact us

IV. Voltage Abnormality Alarm

Fault Type	Display	Solution
Battery voltage low	Battery 1 flashing	Battery low, prompt user to charge
Battery voltage high	Battery 1-5 all flashing	Battery voltage too high (above national standard 32V)

Note:

1. The controller undervoltage protection value can be adjusted via handheld programmer according to different battery types. The controller only provides a charging bridge between charger and battery. If repeated charging does not increase the battery level, check the charger and battery.

2. According to national standards, a fully charged 24V lead-acid battery is approximately 28.3V, and a fully charged 24V lithium battery is approximately 29.6V. Abnormal charger or lithium battery protection board may cause voltage to exceed these values, triggering a controller alarm.

V. Charging Indicator

Indicator Type	Display	
Wheelchair charging	Battery 1-5 incrementally flashing	

Note:

1.The controller has a charging suppression function, but the charger XLR pins 2 and 3 must be shorted.

2.Maximum charging current of the controller is 6A; there is no overvoltage protection.

7. Cleaning and Disinfection

Note: This product is not suitable for cleaning with “jet” washers, high-pressure, or steam cleaners. Do not pour water directly onto wheelchair components during cleaning.

Wheelchair Cleaning:

- 1.To clean thoroughly and facilitate inspection afterward, unfold the wheelchair before cleaning.
- 2.Use a cloth dampened with diluted neutral detergent, wring it out, and wipe the wheelchair. Then use a cloth dampened with clean water, wring it out, and remove any remaining detergent residue. Finally, wipe dry with a clean, dry cloth.
- 3.Do not use volatile substances such as thinners, solvents, or gasoline, as they may cause discoloration or degradation of materials.

Wheelchair Disinfection:

- 1.When using disinfectants, dilute according to the following recommended concentrations:
 - 0.05 – 0.2% ammonium chloride disinfectant
 - 0.05 – 0.2% phenyl chloride disinfectant
 - 0.05% dichlorophenyl guanidine ethane solution
 - 2.Different disinfectants may cause corrosion of metal parts or discoloration, degradation, or cracking of plastic parts, so use only the recommended disinfectants above.
 - 3.Always confirm the disinfectant’s ingredients before use.
 - 4.After disinfection, wipe off any residual disinfectant.
- Do not use ozone or autoclaves as disinfecting devices.

8. After-Sales Service

The electric wheelchair produced by this company is an active, non-sterile, reusable product, containing no chemical substances. The safety and effective service life of the wheelchair depends not only on the structural integrity of the product itself but also on the user’s usage, the environment, user habits, and whether periodic maintenance is performed.

To use the wheelchair safely, regular safety inspections are required. It is recommended to perform a full inspection every six months to ensure that all connections are secure and operations are functioning properly.

Replacement of Wear Parts (if replacement is difficult, contact us for replacement):

- Warning: Replacing components may pose risks such as electric shock, leakage, explosion, and mechanical damage.
- Front Wheel Replacement: Use a wrench to loosen the screws, remove the front wheel, install a new front wheel, tighten the screws, adjust the tension, and ensure the wheel rotates freely.
- Rear Wheel Replacement: Use a socket wrench to remove the rear wheel fixing screws, replace with a new rear wheel, or contact the manufacturer.
- Seat (Back) Cushion: Use a screwdriver to remove screws, take off the seat/back cushion, fit a new cushion, and secure it with screws using a screwdriver.
- Armrest Replacement: Use a wrench to loosen screws, remove the armrest, attach a new armrest, and tighten the screws with a wrench.
- Battery: Regularly check the remaining battery capacity. If the battery has reached the end of its life and needs replacement, contact the manufacturer to purchase a battery of the same specification.

Battery specifications are as follows:

Item	Battery Specification
Rated Capacity	12Ah
Nominal Voltage	24V
Maximum Charging Voltage	29.4V
Charging Method	Constant current, constant voltage
Operating Temperature	Charging: 32 – 113°F (0 – 45°C) Discharging: –13 – 131°F (–25 – 55°C)

- Wires: Check electrical components and connecting wires for damage or wear. If found, contact the manufacturer or a qualified professional. Do not attempt self-repair.
- Frame: Clean the frame surface regularly with a soft cloth. Do not use lubricants for maintenance. If cracks are found, contact the manufacturer.
- Controller Maintenance: Clean the controller and joystick with a cloth

dampened with diluted neutral detergent. Be careful with the joystick; do not use abrasive materials or alcohol-based cleaners. Protect the controller during transport. Ensure the controller is powered off before inspection. Check if the joystick is deformed or damaged. Test the joystick to confirm it returns to the center position when released. Contact your dealer if issues are found.

- **Motor:** Check for oil leakage or increased noise. If present, contact the supplier or manufacturer.
- **Connector Reliability:** Regularly check that all screws and nuts on the frame are tightened to ensure safe operation.
- **Seat/Back Cushion:** Clean the covers with warm water and diluted soapy water; avoid storing in damp places.
- **Electromagnetic Brake:** To check the driving brake, let the wheelchair move straight at maximum speed on flat asphalt, then release the joystick to allow it to stop automatically. Measure the stopping distance. If the distance increases compared to the original, braking performance has declined. If it exceeds 1m, contact the dealer or manufacturer for repair.
- **Fuse Replacement:** If needed, purchase fuses with the following specifications:

Item	Specification
Voltage	32V dc
Current	50A
Response Time	0.5s
Size	0.75 × 0.59 × 0.20 in (19 × 15 × 5 mm)
Breaking Capacity	1000A

Battery Use, Maintenance, and Care:

- Pay attention to the battery indicator on the controller panel. If the green light is off, please charge the battery as soon as possible. If the red light is on, the battery is critically low and must be charged immediately to prevent the voltage from dropping too low, which could shorten the battery's lifespan.
- The battery has clearly marked positive and negative terminals and secure connectors to ensure proper circuit connection. Non-professionals should not

tamper with the electrical connections.

- The battery is maintenance-free and does not require adding any electrolyte. During charging, the battery temperature may rise but must not exceed 45°C. If the temperature exceeds 45°C, stop charging and resume only when it drops below 35°C. For long-term storage or if the wheelchair is not in use for an extended period, charge the battery at least once per month.
- Batteries have a limited lifespan. After long-term use, if the driving range after a full charge is significantly less than the rated range, the battery should be replaced.
- Keep the battery clean and dry. Do not strike it with hard objects. Store the battery safely, out of reach of children.
- Do not exceed 15% above 4.5 kWh/100 km.
- Avoid over-discharging the battery. Over-discharge can severely deplete the battery and drastically shorten its service life. When only one battery indicator light is on, charge the battery immediately to prevent over-discharge.
- Battery leakage can pose a risk of explosion. If the device will not be used for an extended period, the battery should be removed.

9. Supplementary Information

Warranty Information:

The valid period of this product is 5 years from the date of manufacture (see the inspection certificate and the product's outer packaging for the production date).

If a non-human-caused quality issue occurs within one week from the date of purchase, the company will provide full return, replacement, or repair. Under normal use and storage conditions, if a non-human-caused quality issue occurs within one year from the date of purchase, the company will provide free repair. After one year from the date of purchase, if quality issues occur, the user may bring the invoice and warranty card to the company's after-sales service department, office, or authorized dealer. The company will provide spare parts for repair at a reasonable charge. If the invoice cannot be provided, the warranty period may be recognized as extended by one

month based on the company' s batch number or production date.

Service life: 5 years (excluding consumable/wearable parts).

● Warranty period for major components:

No.	Component	Warranty Period
1	Frame	5 years
2	Controller	1 year
3	Motor	1 year
4	Lithium Battery	1 year

●The following situations are not covered under warranty:

- Wear or puncture of front or rear wheels; damage to seat cushions or armrests.
- Faults caused by unauthorized disassembly, repair, or modification of the product; damage caused by improper use.
- Faults caused by accidental drops during use or transportation.
- Faults caused by incorrect operation not following the user manual.
- Damage caused by unforeseeable natural disasters (e.g., fire, earthquake, flood, etc.).

Electric Wheelchair Packing List:

No.	Name	Quantity	Remarks
1	Electric Wheelchair	1	All tires are solid
2	Battery Pack	1	
3	Soft Seat Cushion	1	
4	User Manual	1	
5	Warranty Card	1	Printed together with manual
6	Certificate of Conformity	1	Already attached to wheelchair
7	Tool Kit	1	
8	Charger	1	

If any accessories are damaged, it is recommended to contact the manufacturer and return them to the factory for repair or replacement.

Circuit Diagram and Component List:

For circuit diagrams, component lists, figure notes, calibration guidelines, or other materials useful for maintenance personnel, please contact us.

Other language versions. Video guidance.



Email: support@easwe.com