

OWNER'S MANUAL

PW-F500 series



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To the User

Dear user,

Thank you for purchasing our mobility product designed by individuals who have been using, designing, and manufacturing products for over 25 years. At Karman, we pride ourselves with ingenuity, and strive to create the best all around product for the benefit of the users.

Please read this owner's manual thoroughly prior to using the foldable Tranzit Go Electric Wheelchair. If you do not understand the content, instructions or require assistance, please contact your authorized Karman dealer or our customer service team at 800-80-KARMA.

Introduction

The wheelchair is driven by Electric DC motors, which can be used indoors and outdoors. It is an individual transport for the disabled and the elderly. It is a small-volume, lightweight, foldable and easy to carry electric wheelchair as well as a safe & comfortable electric wheelchair which meets multiple international standards.



Caution



User:

Please don't use and operate the electric wheelchair until you have known this wheelchair, read and understood the whole instructions. If you can't understand this warning and instructions, please contact the dealer for professional technical guidance and help. Otherwise it may cause harm or danger by mis-operation. In addition, you can complete the operation under the professional technical personnel's guidance.

Distributor and professional technical personnel:

Please don't use and operate the electric wheelchair until you have known this wheelchair, read and understood the whole instructions. If you can't understand this warning and instructions, please contact our customer service team at 800-80-KARMA for professional technical guidance and help. Otherwise it may cause danger and harm by mis-operation.

Safety Sign

The signs below can help you identify some warnings, mandatory operation and prohibitive operation of the electric wheelchair.

Identifying and understanding them completely is very important.



Read and follow the guidance of this manual.



The safety warning sign: or a suggestion for a dangerous operation that may hurt you or others.



The second class (auxiliary) equipment



The main application part



When using please don't use mobile phones, interphones, laptops or other radio transmitters.



Easy extrusion/grinding points



Avoid the rain, snow, ice, salt, and placing in the water, it should be maintained in a clean and dry condition.



The product has passed the test of the electromagnetic/RF resistance to 20 V/M.



The battery contains corrosive chemicals.



Explosive





Don't use the battery with different capacity and models at the same time, don't mix up the old and new batteries when replacing, please change it entirely.



Keep tools and other metal objects far away from positive and negative Ends of battery, if exposed to the both ends, it can cause a short circuit and electric shock.



It means this is flammable material, do not expose to flame or spark and so on in the heat source.





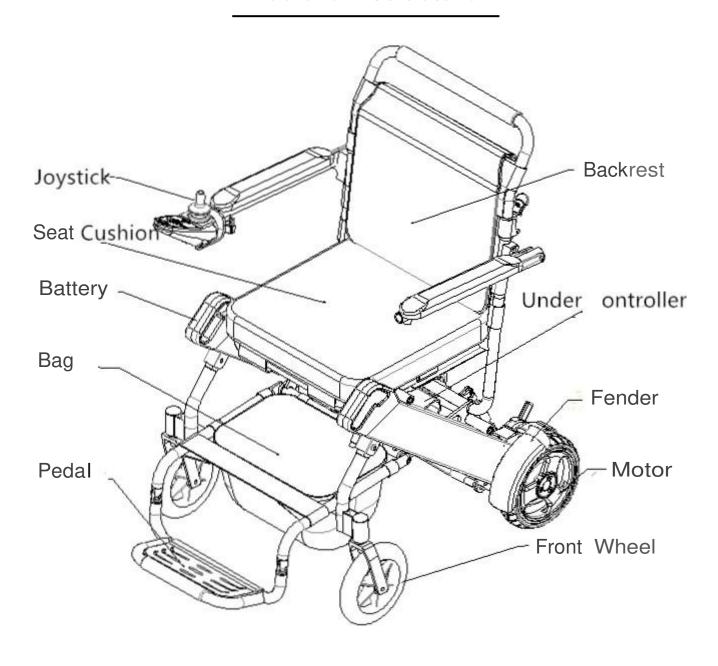
Disposal and recycling--

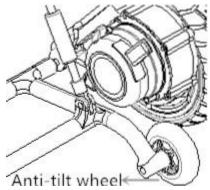
The right to recycle, the company manufacturer authorized will recycle and pack the products after receiving the user's requirements.

Parameters

Madal	DW E500	
Model	PW-F500	
Folded Size	61cm*26cm*77cm (24x11x30 inches)	
Weight Capacity	120 kg / 264 lbs	
Motor		
Type	brushless DC motor	
Rated Power	180 W*2pcs	
Input Power	DC 24V	
Brake System	intelligent electromagnetic brake	
Battery		
Type	lithium battery	
Capacity	10 Ah/per; 20AH/ 2 pcs	
Output voltage	DC 24V	
PCS	Standard with one; the other is optional	
Controller		
Type/Plug Type	assist type/European standard, 2 core	
Input Power	AC 100-220 V, 50-60Hz	
Output Voltage/current	DC 24V, 2A	
Front Wheel		
Outer Diameter/Tire Width	7" × 1.5"(180 mm x 32 mm)	
Туре	solid tire	
Material	PU	
PCS	2 PCS	
Rear Wheel		
Outer Diameter/Tire Width	8" × 2"(200 mm x 50 mm)	
Type	Solid tire	
Material	PU	
Number	2 PCS	
Weight		
Without Battery	19 kg / 42 lbs	
With one Standard Battery	21kg / 46 lbs	
With two batteries	23kg / 51 lbs	
Maximum Gradient/slope	12°	
Driving Range	20km/ one battery; 40km/ two batteries	
Max Speed	6 km/h (3.75 mph)	
Turning Radius	800 mm (31.5")	
Highest Barrier Height	30 mm (1.20")	
<u> </u>	ı	

Wheelchair Structure





Electromagnetic Interference Information



Electromagnetic interference may cause impact on the electric wheelchair, thus reading and understanding the owner's manual is very important.

This chapter will state the problems caused by the electromagnetic interference, so as to help the users to understand and take corresponding protective measures to avoid or minimize the risk. Some contents are about the accidents involved in some particular environment or conditions.

·Electromagnetic interference from radio waves

Electric wheelchair is susceptible to electromagnetic interference, the electromagnetic energy usually is emitted from radio, television, radio transmitters, two-way radios, and mobile devices. This electromagnetic interference may cause the brakes out of control, and move itself, losing control; also it could bring the control system of electric wheelchair permanent damage. So the ability of one product to resist electromagnetic interference is particularly important. Our electric wheelchair has passed the resistance strength of 20 V/m electromagnetic interference test, so it has high anti-interference ability, and can resist some common radiation electromagnetic interference in the daily life.



Caution

Although this electric wheelchair with anti-interference ability, the users should still abide by the following rules when using: when power supply is connected, do not operate the radio such as transmitter, a receiver, citizens band (CB), and better not turn on the personal communication devices such as mobile phone, etc.

- 2. Try to avoid getting close to the radio source, such as radio, television, etc.
- 3. If in the event of uncontrolled movement or stop, the user should turn off the power supply immediately, then contact the manufacturer. Do not change any part of this electric wheelchair, including increasing or decreasing any accessories, in case of reducing its anti-jamming ability.

Safety Guidelines





Caution



Before using this electric wheelchair, you should keep tools and other metal objects from the positive or negative of the battery, if exposed to both ends, it will cause a short circuit and electric shock.

- 1. Health nursing staff should have been trained and have obtained the professional guidance of using.
- 2. Before you use this electric wheelchair, please make sure you have learnt how to operate it.
- 3. Practice some operations with the help of nursing staff, such as turning, surmounting obstacles, and brake, until you are independent and skilled in performing these operations.
- 4. Please don't try new moves when you are not able to confirm the safety.
- 5. See to it that you know the area where you are going, and check whether there is danger or not, and master the method to avoid any potential risk.





- 1. You need to cooperate with user, and listen to the opinions of user's doctors, nurses, or physical therapists, and make a plan which is most suitable for user's ability.
- 2. When push the electric wheelchair with hands, you have to shut the electromagnetic brake switch, so that ensure the wheelchair has been put in a manual state.
- 3. When push this wheelchair, you must use the push handle in the back. It can provide a safe and reliable force to prevent the wheelchair from overturning backwards when pushing.
- 4. Check the push handle, make it sure that the push handle could not rotate or slide when the user is going over the obstacles.
- 4.1 To prevent injuring the user's back, you should ensure the user is in the correct status which is accorded with human body dynamics. When you lift or support the user or the tilt electric wheelchair, you can bend your knees a little, keep your back vertical.
- 4.2 Before each movement, you had better tell the user what you would like to do, and explain the reason, and tell him what you want him to do at the same time. This will let the user make

preparations and reduce the risk of accidental injury.

- 4.3 When go straight up and straight down along the steps or stairs near the road, if you are in an angle bend, climb up or down, there may be a risk of falling and turning over.
 - 4.4 When you are going to back tilting, you should remind the user to close the back.
- 5. The electric wheelchair should go downstairs slowly, in case of causing the damage to the user as well as the electric wheelchair.

Notes when using joystick



Caution

You need to set the controller as picture in order to reduce the risk of collision, drop or all.

1. Check and adjust the Settings every six months. (If necessary, you can often check and adjust)



- 2. If you find any setting that has changed some functions, please contact the supplier.
 - Control joystick
 - Keep your body upright
 - Avoid hitting the object during the operation

Notes of Using in Stationary State



- 1. When the wheelchair stops, even in a short period time, please ensure that the power is off. This can prevent:
 - You or others touch joystick accidentally to cause unexpected movement.
 - Affected by the unexpected source of electromagnetic interference, which will influence the normal use of electric wheelchair.
- 2. Please ensure that others, including someone helping you (For example, the shop assistant) know how to use the joystick, and know that the electric wheelchair should not be mal-handled.



Operating Environment



Caution

This wheelchair cannot be used and placed in heavy rain, snow or ice conditions.

1. Contact with water or excessive moisture can cause electrical failure. Frame, motor and other electric wheelchair parts are not waterproof-designed, it may rust or corrosion from the internal.

In order to prevent the malfunction of electric wheelchair, the following operations are strictly prohibited.

- Try to avoid being hit by water (such as heavy rain) or placed and used in much environment or use this kind of electric wheelchair.
- Please don't use this kind of electric wheelchair in the bath, sauna and during swimming.
- Please don't use the electric wheelchair beside the water (such as rivers, lakes or ocean).
- Please make sure that the battery cover is closed
- If the joystick is broken, please replace it as soon as you can
- Make sure that all the electrical connection joint is safe and fixed.
- Rinsing the electric wheelchair is prohibited. If electric wheelchair has been wet, please take out the battery as soon as possible and try to dry the electric wheelchair, and make sure that the battery is dry when used again.
- 2. If you must use it on wet or slippery surface, please take care and move forward slowly.
 - You must make sure that it is safe to do so.
 - If one or two main wheels lose traction, you must stop immediately in case that the wheelchair is out of control.
 - If there is snow, ice, water or oil on the slope or ramp, please don't try to get over.
 - When you don't know whether it is safe to move or not, please ask for help.
- 3. Please turn off power supply when not using, put it in a dry and clean place after fully charged.

Applicable Road



- 1. The electric wheelchair is only suitable for concrete, asphalt and indoor floor surface.
- 2. Don't use in the sand, or coarse dirt rugged terrain, in case of damage to wheels, bearings, shaft or motor parts, as well as the loose fasteners may occur.

Road Driving



Caution

In most countries and regions, power wheelchair on public roads is illegal.

The user must realize that driving wheelchair on the road or in the parking lot is dangerous. Please comply with any and all federal, state, and local laws. Consult with your local city.

1. For easy recognization in the night, a reflective article is pasted on the electric wheelchair (figure A3). The user also can wear the reflective function clothes.



A3

2. When confronting with other vehicles, please ensure that the driver has noticed you. Before you continue to operate, make eye contact with the driver, and let the driver know your intention until you are sure that it is safe.

The Motorized Vehicle Safety



- 1. Don't try to drive the electric wheelchair when you are on transport vehicles, like bus, subway, trains, planes, ships, etc.
- 2. When drive electric wheelchair on public vehicles, you should be accompanied by someone, look for a reliable location to park, fasten your seat belt, turn off the power supply.
- 3. If the user use the electric wheelchair alone in public vehicles, he should look for a place where the wheelchair or the wheels can be fixed to, so as to avoid harm that caused by the vehicle's suddenly brake or traffic accident.

- 4. Don't place the electric wheelchair in the front of other vehicles, so as not to interfere with the other drivers.
- 5. When getting on or off, if you need to raise up the user with the wheelchair, please grip the edge of the seat frame, do not hold the handrail or back of chair to lift.

Balance of Driving



Caution

When driving, the electric wheelchair should be kept in balance and stable of the center of gravity, in order to avoid being keeled over in the forward and backward process.

The factors that influence the balance of the gravity center

- 1. The height and angle of the seat.
- 2. The position and posture of the user's, or the change weight distribution.
- 3. The ramp or slope gradient.
- 4. Whether use a backpack or other items to change the total weight of the wheelchair and weight distribution.
- 5. If you need to modify or adjust the electric wheelchair, please consult your suppliers in advance, and must have the authorization of the producer. The modified wheelchair may need to be adjusted to correct the focus. Using a modified wheelchair, should be much more cautious until you are familiar with the balance of electric wheelchair, and master the method to avoid fall or tip over.

Attentions When Getting on/off the Wheelchair



Caution

The user need to be more careful to move onto the electric wheelchair, and it requires good balance and flexibility. Please note that when moving every time, you must have a strong point that is not below the wheelchair cushion which you are about to sit on.

Avoid falling:

When you are ready to seat yourself on the electric wheelchair, you must turn off the power supply. Otherwise, when you touch the joystick, it may lead to the unexpected movement. Ensure that the motor is locked, and the wheelchair won't move on its own.

Learn the safest way of moving the body from your professional health nursing staff, and know how to locate your body, and how to support yourself in the process of transportation.

Let others help you until you ensure that you can up and down the wheelchair safely by yourself.

- 1. Move your electric wheelchair as close as possible to the place where you can seat yourself stably.
- 2. Rotate the front wheels that make them as front as possible.
- 3. Be careful of the pedal, and fold it up as far as possible (as shown in figure B2)



B1



B2

- Don't stand on the pedal, otherwise it will be damaged..
- Ensure your feet are not stumbled or nipped between the gap of the pedal.
- 4. Ensure that the armrest and the footrest will not influence the user up and down the wheelchair(B1)
- 5. You should sit down quickly, which will reduce the risk of falling down.

Attentions When Body Reclines and Stretches



Caution

Stretching out hands or reclining body will affect the center of gravity balance of the electric wheelchair, if the operation method is not correct, it may cause you to fall or tip over. several points below can reduce the risk of injury or the damage to the electric wheelchair.

- 1. If you must change your body's center of gravity, for example, raising the body or leave the seat, please do not tilt your body out of the wheelchair cushion.
- 2. If you have to move forward off your seat, please do not tilt too much (as shown in figure C1), and need to keep your back in contact with your hip.
- 3. Don't use your hand to reach distant objects reluctantly, in case of being out of balance or falling.

- 4. Don't try to pick up the goods between you knees or in front of your body in any cases.(as shown in figure C2)
- 5. When extending your body, please do not exert pressure, in case of electric wheelchair being overturned and causing serious hurt.
- 6. Don't lean on the top of the seat back, to prevent falling and damaging the back of a chair.
- 7. If you must extend or tilt (not recommended, and must avoid), proceed at your own risk. Remember:
- 1. Move your electric wheelchair as close as possible to the object you want to reach.
- 2. Rotate the front castor as forward as possible, which will make the electric wheelchair more stable.





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C2

Attention: When performing this action, do so in the closest distance from the target and ensure casters are facing backwards. This ensures a more stable foundation.

3. Once you are the closesy physical distance from the target, and casters are faced backwards, turn off the power.

Attentions When Dress in the Wheelchair



Caution

Attention: when you sit in the electric wheelchair wearing clothes, your body will turn.

In order to make the electric wheelchair more stable, you should adjust the rotating castor to the forward position.

Through the Obstacles



Caution

You need to overcome some obstacles in daily use, including threshold, elevator, ramp, pits and broken pavement, etc.

1. Attention: threshold is very dangerous or become stuck, and can cause	. Even a small height change may cause the caster to freeze, lock

the electric wheelchair to tilt or rollover. Recommended Precautionary Measures:

- •Dismantling the doorsill or covering the doorsill to allow a smoother transition over obstruction.
- •Install a door with a ramp.
- 2. When you move the electric wheelchair, please look around the area carefully where you will go through.
- 3. Ensure that when you use this electric wheelchair, you can go over the obstacles with the gradient smoothly and safely.
- 4. You can adjust your center of gravity like this:
 - When you are going over an obstacle, lean forward your upper body slightly.
 - When you are going over a road which is from the high to the low, you should lean back your upper body.

Driving Back



Caution

When you drive the electric wheelchair backwards, you need to be more careful. If the rear wheel hit an object, you will lose control or fall down.

- 1. When driving, you should slow down.
- 2. Stop and check frequently to ensure that there have no dangerous obstacles on the road you will go through.

Cant/Slope/Hill Driving



Caution

On the slope, the balance of the gravity of your electric wheelchair will change.

Attention: "slope" may be a ramp or hillside. If you are not sure the safety when the electric wheelchair used on the slope, please use it under others' help, do not use it alone.

Attentions:

- 1. When the gradient is more than 10°, please do not use wheelchair.
- 2. When on the slippery slope (such as snow, ice, water or oil), please do not use.
- 3. When the slope is ups and downs (undulate, convex or concave), please do not use.
- 4. If the bottom of the slope with small pits, please do not use.

Load Capacity



Caution

- 1. The maximum load of this electric wheelchair is 120 kg (264 pounds). When using it, the load should not exceed the maximum bearing.
- 2. The backrest's load capacity is less than 75 kg, please do not press or raised up the backrest.
- 3. In any case, please don't do any weight training on this wheelchair, and make sure the loader total weight is below the wheelchair maximum load capacity.
- 4. When the load exceeds the maximum load capacity, damages will be caused to the seat, frame, fasteners, folding, etc., even may cause severe harm to the user himself, or make the wheelchair fall apart.
- 5. Problems caused by overloading are not covered under the manufacturer's warranty.

Attentions When Up and Down the Stairs



Caution

This electric wheelchair is not suitable for travel, up and down the stairs, or on the escalator. Pay attention to the following **cautions** when using the elevator.

- Do not use the wheelchair on escalator in order to avoid serious injury.
- The elevator can be used when you are sitting on the wheelchair. Push the wheelchair into the elevator when the door is opened. Make sure that the door is opened during moving the wheelchair.
- 1. When the elevator is not available, the wheelchair needs to be unfolded after the wheelchair is carried to a certain place, please refer to "shipping" chapter.
- 2. If the user wants to move the electric wheelchair between floors by stairs, you should abide by followings to operate.
 - Move the user from the electric wheelchair.
 - Fold electric wheelchair. Before folding, the joystick must be taken off. Please refer to "shipping" chapter.
 - Move the electric wheelchair when moving up and down the stairs, you should pay attention to avoid collision.

Installation instruction

Safety Belt Installation



Caution

The safety belt is used to fix user's body and prevent the user from sliding from the seat. But it can't protect you in the accident.

The safety belt can be adjusted according to the user's need.

The safety belt is used to support the user and to prevent the user from sliding forward.

Installation of the safety belt:

- 1. The user needs to ensure that the safety belt had bound the waist and the bottom part of wheelchair backrest together.
- 2. Adjust the safety belt according to the user's comfort.
 - After sitting down, please insert the plastic card to the other side of the plastic shell, until you hear a clicking sound.
 - Adjust the plastic safety belt to the appropriate length, do not over tighten, which will cause discomfort.

Unfasten the safety belt:

• Press the button of the plastic shell aside, pull out the plastic card.



Caution

Before each use, ensure that the safety belt is fixed in the electric wheelchair correctly and properly, and adjust to the most comfortable state of the user.

Before each use, check whether the safety belt is loose or damaged. If you find there is a problem, Please contact supplier to maintain and repair.

Joystick Installation Instruction

The control panel can be installed on the left or the right arm as requested.



D1



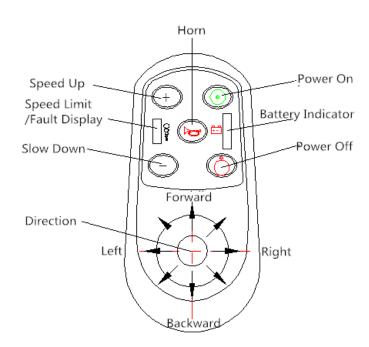
D2

1. As shown in figure D1, insert the joystick into the armrest tube hole, and make sure it has been

inserted in the right place, and then fixed the joystick with rubber-head bolt.

2. As shown in figure of D2, aim at the socket, and insert the four-core plugs into the left sockets. The control panel controls electric wheelchair. It consists of the following sections:

Joystick Instruction



1. Power on/off button:

Press this button, turn on/off the power supply.

2. Speed up button

Press this button to increase speed. The max speed is 6 km/h (3.75 miles per hour)

3. Slow down button:

Press this button to reduce the speed.

4. Horn button:

Press this button, and an audible horn will ring.

5. Battery power indication light:

Show the battery power

6. Direction (joystick):

The joystick controls the direction of the wheelchair, control the joystick to the direction you want to go.

7. Speed/information diagnostic indicator light:

When the light is on, it means it does work, the light shows the meaning of display, there are 10 lights in total.

Light flashes intermittently to provide diagnostic information. About the detail, please refer to the following table:

There are some diagnosis functions, the diagnosis codes showed can reflect the property of problems.

Diagnostic code	Diagnosis Description	Recommended solving methods	
	Hall malfunction of left motor	Check the welding situation of connection device of the left motor or check the internal hall component	
Flash two times slowly	Hall malfunction of right motor	Check the welding situation of connection device of the right motor or check the internal hall component	
Flas three times slowly	Malfunction of battery or charger	Try to charge. May need to replace the battery or the charger. Check if the battery or power cable is loose.	
Flash four times slowly	malfunction of left motor	Check the left motor, connection device and power wire is loose or not.	
Flash five times slowly	malfunction of right motor	Check the right motor, connection device and power wire is loose or not.	
Flash six times slowly	malfunction of left brake	Check the left brake, connection device and power wire is loose or not.	
Flash seven times slowly	malfunction of right brake	Check the right brake, connection device and power wire is loose or not.	
Flicker eight times slowly	Malfunction of controller	Please contact the manufacturer	
Flash nine times slowly	Communication error	Check the electrical coupler, connection and circuit is loose or not.	
Flash four times quickly	Over current of left motor	Releasing the rocker can eliminate the malfunction.	
Flash five times quickly	Over current of right motor	Releasing the rocker can eliminate the malfunction.	

Use the Joystick to Control the Wheelchair



When speeding up, please don't do any sharp turn and stop.

If ignoring the warning, it may cause wheelchair tilt, and damage or injury to the user.

The joystick can control direction smoothly. It's equipped with 360° mobility, which is easy to operate. There is spring in the joystick, so it can return to the center of the initial state automatically.

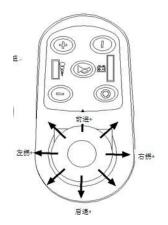
Push the joystick to the direction which you want to go, Joystick has proportional control ability. The speed is limited within 6 km/h (3.75 miles per hour).

If you want to slow down, just release the joystick. The wheelchair will automatically slow down and correct direction in the minimum range.

When first using this wheelchair, you should operate at a slow speed, and push the joystick forwards slightly. This exercise will help you to learn how to control the wheelchair step by step, let you know and be familiar with how to control, and successfully master the methods of driving the electric wheelchair.

Drive the electric wheelchair, please do as the followings:

- 1. Adjust the control panel to the appropriate settings.
- 2. Turn on the power supply. Please refer to the previous section on "press the power on/off button".
- 3. Move the joystick as followings:



Movement	Operate the joystick	
Forward	Move the joystick forward	
Backward	Move the joystick backward	
Right	Move the joystick to the right	
Left	Move the joystick to the left	
Stop	Release the joystick (wheelchair will	
	slow down immediately)	

The use of the horn

Press the horn button, when crossing in the crowd.

Brake Instruction



After any adjustment, repair or maintenance, please make sure all accessories parts are installed tightly before using, otherwise it may cause harm or damage.

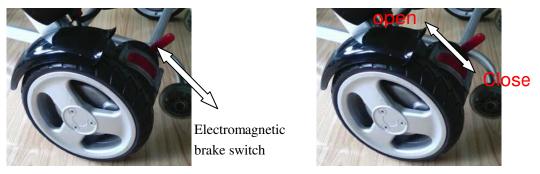
Please do not open or close the electromagnetic brake when the power is on.

Through the operation of the joystick to open the electromagnetic brake (Refers to the electromagnetic brake, lock the free rolling of the wheels) or close (Refers to the electromagnetic brake is released, the wheels are free to roll), the escort can easily push the electric wheelchair when power off.

Close/open the electromagnetic brake

Find the motor electromagnetic brake joystick and do as the following operations:

Open the electromagnetic brake (lock): move backward electromagnetic brake switch.



Close the electromagnetic brake (free): move forward electromagnetic brake switch.

Battery instruction



Don't use the batteries with different capacity, different brands and different types. Replace the battery completely; don't mix up the old and new batteries.



The metal or such kinds of these conductive materials can not be used to connect the positive and negative of the battery, if the connection leads to short circuit, it may get an electric shock causing some accidental damage.



Don't close to flammable materials. Don't get close to or exposed to the heat source, such as fires or sparks, etc. Don't transport the battery with flammable or combustible materials together.



There are some corrosive chemicals in battery box, disassembling the battery is prohibited.



Do not short circuit batteries or throw battery into the fire, so as to avoid explosion accidents.



Caution

- 1. Don't try to use pliers or cable wire to connect the ends of battery directly.
- 2. Don't use wheelchair when it is charging.
- 3. Don't use non-standard power supply (for example: generator or inverter), even the voltage and frequency seams to meet the requirements.
- 4. To prevent the power wire from being trampled, extruded and serious bended, especially in the port. To prevent the power wire is yanked and knotted.
- 5. Keep the children and pets far away from the power wire, don't let them bite and chew it. When pull out the power wire, please hold the plug.
- 6. If the breaker (circuit insurance brake) tripped many times when charging, please unplug chargers immediately and contact the dealer or professional technical personnel.
- 7. In this guide, all the warranty and performance are referring to lithium batteries.
- 8. Don't smoke or ignite near the battery.
- 9. It is forbidden to use battery in hot or cold environment.



- 1. When the new battery packs are first used, they must be fully charged (about 24 hours), make sure the battery is fully activated.
- 2. Before the first using, charging battery will reduce the life of the battery (The battery should be used up at the first time, then start charging, so it can be activated fully.)
- 3. Before using, the user should check if the power supply is enough or not, when the power is shortage, recharge in time. After the first time use, the charging time should be about 5 hours; when the power is run out, charging time should be 6 to 8 hours, until the light on the charger turns from

red to green.

- 4. The recommended charging time is about 6 to 8 hours.
- 5. Charge the battery often, as long as the electric wheelchair is used. Please charge the battery after using until it's full. If you do not use the electric wheelchair for a long time, please recharge it every 2 months, each time at about 80% of the electricity. It will damage the battery if there is no electricity for a long time, the battery will not be able to use, and it will damage the electric wheelchair seriously.
- 6. If you use the battery with incorrect specification, voltage and capacity, it will damage your electric wheelchair, and the electric wheelchair cannot play the best performance and effect.

Install/Remove the Battery



Please make sure that this wheelchair power has been shut down before performing this action.

Take out the battery:

Remove the red power plug (As shown in figure F1), then pull the battery handle (As shown in figure F2). Pull the battery from the battery tube.







Install the battery:

Hold the battery handle, insert the other side of the battery into the right side mouth of the battery tube to the end, then insert the red power plug into the bottom hole of the battery tube.

Charge the Battery

- 1. Use available standard alternating current (AC 110-220 V, 50-60 Hz) for charging, the charging mouth is in front of the control panel below.
- 2. Make sure that the power is off before charging.
- 3. Insert the charging port of the charger into the charging port in front of the control panel below.(As

shown in figure G1)

- 4. Insert the other side of the charger into socket. If the red indicator is light, it shows it's charging.
- 5. After the charger indicator light change from red to green, then keep charging for 30 minutes, so as to ensure the full charge. Unplug the external power supply socket of the charger first, then unplug the socket of the control panel.
- 6. It is forbidden to use the battery in the hot or cold environment.

Over Discharge Protection Device

When the battery of the electric wheelchair is run out, the over discharge protection device will protect the charger for excessive discharge. Users should pay attention to, when the over discharge protection device is activated, the maximum speed will reduce.

Over-Current Protection Device

The electric wheelchair is also equipped with a over-current protection device. If the current provided to the motor is over, the electronic fuse will close the current.

If encountered with some malfunction when driving, the over-current protection device will be started, the driving wheels will stop rotating. In this process, the fuse will cut off the current, prevent the motor being damaged by overheating. (See the control panel section)

Clean the Battery Socket



Caution

- 1. Check whether the battery case and the positive and negative of the battery are corroded or not.
- 2. Check whether the plastic battery box has been assembled completely.
- 3. Use battery cleaning tools, medium sandpaper to clean battery port.

Attention: after finish cleaning, the above parts should be light and dry.

- 4. Clean up all the dust of the metal particles carefully.
- 5. Don't touch the battery materials with the skin, clothing or other property. It is a kind of acidic material, and may lead to harmful or destructive burns. If you touched the materials, please immediately wash your skin thoroughly with cold water. Avoid skin and eye contact. Contact a medical technician immediately.

Fold and Unfold



Caution

After any adjustment, repair or maintenance, please make sure that all accessories parts are installed tightly, otherwise it may cause harm or damage.

The weight of the wheelchair (with battery) is 21 KGS (46lbs), please use the right way to lift (lift your legs) to avoid injury. Strongly suggest that when you remove the wheelchair, get off the wheelchair first, and then remove the wheelchair. If want to remove the user and wheelchair together, you must be well prepared to ensure the security and two carriers are required. Please seize the non-removable part to lift the wheelchair.

Step:

- 1. Shut off the power, loose the lever lock knob, remove it from the control panel and put it in the back of the chair pad.
- 2. Rotate both sides of the PU to seat level.
- 3. Take down the seat cushion.
- 4. Pull steel wire under the backrest.
- 5. Push the backrest forward to the tube of all-direction wheel (need pushed in the right place).
- 6. Lift the connecting rod by hand to be parallel with the support bar and the back of motor frame.
- 7. The wheelchair folding is completed.

Fold the Wheelchair











Unfold the Wheelchair









Step:

- 1. One hand holds the scooter backrest frame, the other hand grabs at the battery tube to the outside, and at the same time presses the connecting rod to the largest extent, open the back parts of the electric scooter. (When you press the connecting rod group, make sure that fixed card in stuck range)
- 2. Push the backrest back to the largest extent, at the same time, make sure that if the wire is bounced to the hole location of the backrest frame. (Before use the scooter, the user must make sure that the thread locking pin had bounced the fixed hole location, otherwise, it can cause harm to user)
- 3. Install the seat cushion and make sure that the felt has aligned and mated.
- 4. Adjust the PU to the appropriate angle.
- 5. Install the control panel (see the page of install control panel)

Malfunction and Eliminating Methods

There is a diagnostic indicator in the control panel. When the light is green, it means this wheelchair has no problem. When there is something wrong with it, it will report by Flashing/Flickering.

If the indicator light indicates, there is something wrong, the user should turn off the power supply and then turn on it again.

If after turning on again, the malfunction is not eliminated and the light repeats this error, please refer to the diagnosis information, it can help you find the possible problems and corresponding solutions.

If the above methods still can't help you troubleshoot, please contact your dealer or reseller.

The Diagnosis System

1. Introduction

When maintenance LED light flickers, it means that there is something wrong with the wheelchair. And the alarm may generate from motor, brake, battery, wire connection, or the wheelchair itself. The property of the problems can be classified according to the diagnosis code. According to the times the LED light flickers, pauses, flickers several times again repeatedly. This times that flickered are the diagnosis code. For example, the LED light flickers four times, pause, and flickers four times again, such repeatedly, it means that there is something wrong with the light motor. If it's five times, it means there is something wrong with the right motor.

According to the situation is serious or not, the wheelchair may stop working. Under some situation, the wheelchair is not allowed to use.

2. Flashing Code

Diagnostic code	Diagnosis Description	Recommended solving methods	
Flash one time slowly	Hall malfunction of left motor	Check the welding situation of connection device of the left motor or check the internal hall component	
Flash two times slowly	Hall malfunction of right motor	Check the welding situation of connection device of the right motor or check the internal hall component	
Flash three times slowly	Malfunction of battery or charger	Try to charge. Maybe need to replace the battery or the charger. Check if the battery or power wire is loose.	
Flash four times slowly	malfunction of left motor	Check the left motor, connection device and power wire is loose or not.	
Flash five times slowly	malfunction of right motor	Check the right motor, connection device and power wire is loose or not.	
Flash six times slowly	malfunction of left brake	Check the left brake, connection device and power wire is loose or not.	
Flash seven times slowly	malfunction of right brake	Check the right brake, connection device and power wire is loose or not.	
Flash eight times slowly	Malfunction of controller	Please contact the manufacturer	
Flash nine times slowly	Communication error	Check the electrical coupler, connection and circuit is loose or not.	
Flash four times quickly	Over current of left motor	Releasing the rocker can eliminate the malfunction.	
Flash five times quickly	Over current of right motor	Releasing the rocker can eliminate the malfunction.	

WARRANTY

The Warranty Scope

The warranty instruction:

Guarantee Item	Guarantee period for free	Remark	
Main frame	Three years	Malfunction caused by improper use, man-made destruction of secret conversion, there is no guarantee, or we need charge the maintenance fee.	
Motor wheel	The warranty of reducer and PU tires is one year. Wear and Tear is not covered.	Excess load lead to motor overload or opened without permission lead to damage, no guarantee.	
Battery	One year	Recharge in wrong way, and disconnect the battery withou permission cause damage, no guarantee. The company is no responsible for an accident.	
Controller	One year	Malfunction caused by improper use, man-made destruction of secret conversion, there is no guarantee, or we need charge the maintenance fee.	
Joystick	One year	Malfunction caused by improper use, man-made destruction of secret conversion, there is no guarantee, or we need charge the maintenance fee.	

The Scope of the No Guarantee

- 1. No guarantee:
- a) Back cushion, seat cushion, armrest foam cotton, backrest foam cotton, decorating parts are damaged after use.
 - b) Damage caused by mal-operation, accident, abuse, improper installation and repair.
 - c) Damage caused by refitting the product without the written consent of the manufacturer
 - d) Damage caused by the load capacity exceeding.
- 2. If the serial number of the electric wheelchair is not the original serial number, having been modified or not match with the serial number of the guarantee card, or the serial number of the guarantee card has been revised, no guarantee.
- 3. This warranty card is non-transferable and only for the use of wheelchair buyers.

Within the permissible scope of the law, this warranty will take the place of any other warranty guarantee (e.g., written or oral, express or implied warranty, including merchantability, or suitability for a particular purpose guarantee), are all based on this warranty.

Guarantee Card

The warranty card must be handed over to your reseller/dealer or to our customer service department within 30 days after purchase.

User name		Order/REF number		
Address		Contact number		
Model		Product number		
Purchasing date		Month	Day	Year
Serial Number				
Supplier (Stamp or	signature)			
Supplier phone(ad	dress)			

1. The guarantee statement:

The supply dealer should confirm the problems of scooter first. Under the condition of using incorrect way, if it is the quality problem, the dealer needs to fix or change the parts.

- 2. No guarantee:
- 1) Incorrect operation and maintenance
- 2) Using incompatible replacement part
- 3) Accident or misuse caused by mechanical damage
- 4) Consumable items are not in the warranty scope, such as tire, bearing, bulb, etc.
- 5) Any unauthorized conversion.
- 6) Any questions caused by natural disasters or accidents, such as typhoon, flood and earthquake. This quality warranty does not include the routine maintenance or detection service.
- 7) This quality warranty does not include the routine maintenance or detection service.
- 8) This warranty only applied to the original scooter bought from us, not allowing any transfer.



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