



Culver Mobility

OWNER'S MANUAL

POWER WHEELCHAIR

W5213



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EXPIRATION

We carried out the fatigue test for our wheelchair’s controller, batteries, motors, drive and frame. The life time of controller, drive and frame can achieve 10 years averagely , the motor carbon and batteries are replaceable parts, so the expiration date of our company product is up to 7 years.

Wheelchair safety in clinical use, the validity period of use depend not only on the structural strength of the product itself, but also on product users environment and habits, according to whether the periodic care、 maintenance etc. are closely related. Therefore, it is the key to guarantee the expiration date whether the user strictly follow this manual and use it.

WARRANTY

1. Five-years warranty for the cahir-frame.
 2. Within 1 year from the purchase date, for the following parts, we will supply the service of free maintenance and replacing for original customer after the dealer checking and finding any materials and production defect.
 - Electrical control or lever system
 - Motor/Drive System
 - Bearing and shaft sleeve
 3. Six-Months warranty for the batteries.
- Please note the warranty service is provided by your dealer, which will be completed finally by our after-sales department and dealer together.
- Out of warranty
- ABS plastic cover shell and rubber pad
 - Tyre
 - Interior decoration
 - Damage by abuse,wrong operation,accidents and negligence
 - Business use or other abnormal use



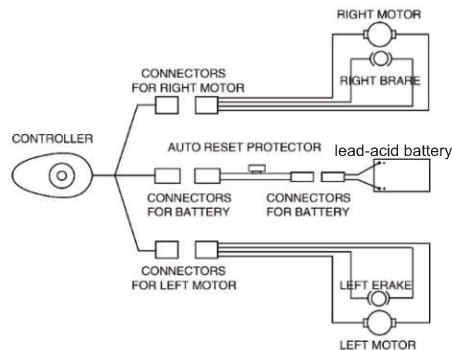
Attention! Under the Care and Maintenance, if you need change batteries、 joystick、 motor/drive、 charger and other serviceable parts, please contact our company directly to change the original same parts.

V. CARE AND MAINTENANCE

Table 3 Routine Checks

Items	Always	Week	Monthly	semiannually
Each part			○	
Turning, Driving, Preset and Disassembly and so on		○		
Brakes	○			
Wiring Harnesses and Cables		○		
Charging of Batteries	○			
Mobility of the Front Wheels		○		
Pneumatic Case of The Rear Wheels		○		
Tire Wear			○	
Tire Damage	○			
Wear of The Push-Handle, Seatback and Seatbase	○			
Motors				○
Controller		○		
Cleanliness	○			

ELECTRICAL DIAGRAM



I. INTRODUCTION

Read and follow all instructions, warnings, and notes in this manual before attempting to operate your power wheelchair for the first time. If there is any information in this manual which you do not understand, or if you require additional assistance for assembly or operation, please contact with your authorized local provider.

Whether to use your product safely is up to whether you follow instructions, cautions and warnings in this manual. We are not liable for any damage and/or injures resulting from individual unsafe operation or failure to follow instructions, cautions and warnings in this manual.

These symbols below in this manual are used to identify warnings and important information. All of them are very important to your safety. It is strongly recommended that you should read and understand them completely.



WARNING! Failure to heed the warnings in the manual may result in personal injury.



ATTENTION! Failure to heed the cautions in the manual may result in damage to the powered wheelchair.

I. Introduction

To your safety, Please be sure to read all the operating instructions of the manual and follow them strictly when you use the power wheelchair for the first time. These instructions are fully for your vital interests. Comprehending the instructions is the basic protection for operating the wheelchair safely.

Once you really comprehend how to operate and maintain the wheelchair, we believe this product will bring you the service without worry and endless fun for year.

The type is W5213. "W" is for power chair used outdoor. "5" is for the code of major products. "213" is for the serial code of this type.

We will be appreciated to hear your suggestions for this manual and the evaluation to the safety, reliability of this product and the dealers authorized of this company.

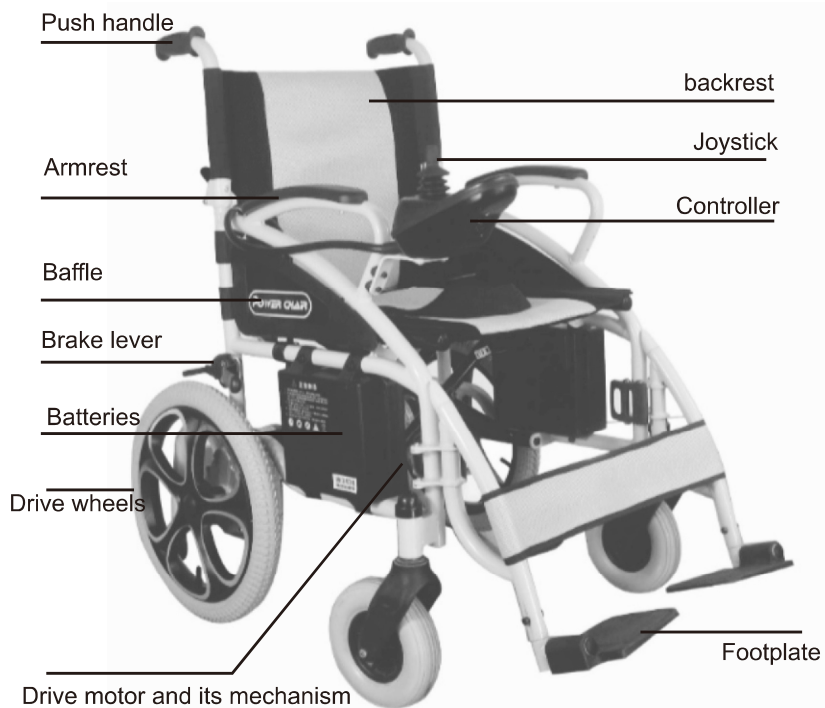
II. STRUCTURE AND PERFORMANCE

Your power chair wheelchair consists of several parts mainly (figure 1):
 Chair-Frame: It consists of a foldable component, which can be folded from the seatbase's middle in order to store or transport conveniently.

Operating system: It consists of a controller, a battery well, two motors, a set of drive mechanism and drive wheels.

The battery well is located under the seatbase, in which there are a pair of batteries of 12 Volts and 20AH and their overload protectors. The charger socket for batteries is on the back end of the controller.

This power wheelchair has two manual freewheel levers on the drive mechanism. Adjusting the levers can keep your power wheelchair stopped.



V. CARE AND MAINTENANCE

1. Care and Maintenance After Using

- ① Shut down the power (Unplug all wiring connections is the best).
- ② Inhibit children and unconscious persons to touch the wheelchair.
- ③ Your wheelchair should be stored at normal temperature to prevent its reformation in order to keep its normal performances for longer.
- ④ Use a clean and soft cloth to scrub, and then dry the wheelchair frame.

2. Routine Checks

You should perform some checks to your wheelchair before each driving in order to keep it always in the better status. Moreover, you should perform the wheelchair's check once each week, each month and each half a year in accordance with items in Table 2.

3. Troubleshooting

This wheelchair is equipped with a malfunction autoalarm. If the wheelchair is out of order, the LED lights on the controller will turn on and buzzer will sound some alarms that you can find out the fault according to items in Table 3.

Please consult your authorized agent for service if any faults still occur after your troubleshooting.

Table 2 Basic Troubleshooting

Number of Alarm	LED display	Diagnosis
1	1 LED lamp lights	Battery capacity is of low
2	2 LED lamp lights	The left motor failure
3	3 LED lamp lights	The left brake failure
4	4 LED lamp lights	The right motor failure
5	5 LED lamp lights	The right brake failure
6	6 LED lamp lights	Overload of the controller
7	7 LED lamp lights	Failure of the joystick
8	8 LED lamp lights	Failure of the controller itself
9	9 LED lamp lights	Failure of the controller

IV. OPERATION

11. Folding and Storing of Wheelchair

Please fold and store your wheelchair for transport and store as follows.

- ①Put your wheelchair on the ground. Shut down the power.
- ②Turn up the footplates and rotate outward 90°(see figure 17).
- ③Outward the leg lever holder, rotate to 90°, then pull out the leg lever.(see figure 18)
- ④Pinch both folding-levels on both sides of the push-handle, and flip down the push-handle(see figure 19).
- ⑤To pull the seatbase up from its middle and then fold the wheelchair(see figure 20)

fig:17



fig:18

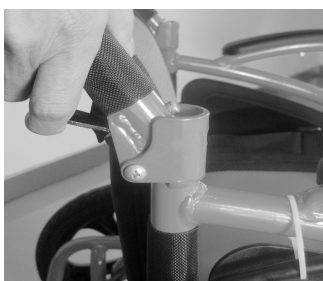


fig:19



fig:20

II. STRUCTURE AND PERFORMANCE

SPECIFICATIONS

Overall size(L*W*H)	1005*670*960mm
Seat height	520mm
Seat width	410mm
Seat depth	450mm
Armrest height	200mm
Backrest height	800mm
Battery weight	12.5kg
Wheelchair Weight With Batterie	43kg
Maximum Speed	6km/h
Braking Distance at 6km/h	≤1500mm
Max.Turning Radius	≤1200mm
Payload Capacity	100kg
Theoretical Range Per Charge	20km
Static Stability	≥9°
Dynamic Stability	≥6°
Climbing ability	6°
Motor Specification	24V/250W*2
Battery Specification	12V/20Ah*2
Maximum Current Output of Controller	50A
Current Output of Batteries	2A
Front Wheel	Inflate-Free tires, outside diameter of 190mm
Rear Wheel	Pneumatic tires, outside diameter of 406mm

III. ASSEMBLY

III. ASSEMBLY

1. Take out your wheelchair from the packing box and put it on the ground. Push the chair-frame apart to left and right, and press two tubes on both sides of the seatbase down into the grooves on both sides of the chair-frame. (see figure 2)

2. Upward the handle, and lock the folding device. (see figure 3)

3. Connect the wiring harness plug of the battery with the wiring harness socket from the frame.

4. Unscrew the bolts and gaskets from the controller stem, then put on the controller, and mat into the plastic gaskets, put on the bolt, and tighten by screwdriver. (see figure 5), then fixed the wire harness on the frame by plastic cable ties. (see figure 6)

fig:2



fig:3



fig:4



fig:5

IV. OPERATION

8. Precautions

Make sure that the controller has been reliably installed and the joystick is vertical upward at its central position.

Sit firmly, fasten your safety belt, learn your body against the backrest and raise your head to prevent your injury on the way.

After turn on the power, check firstly whether a maximum speed indicated by the speed light on the controller is right for you. If not, please adjust it with the speed up button or speed down button on the controller. For your security, suggest using a slower speed at first and then adjusting to faster step by step.

If the wheelchair moves toward an unexpected direction, please release the joystick at once that will have the wheelchair stopped in any case.



Notice: Keep your feet within the footplates, don't extend them out of it.
Notice: Don't extend your arms out of the armrests during your driving.
Notice: Ensure the wheelchair not to be in freewheel mode before you use of leave it.

9. Hazards

Do not use the wheelchair in the following cases:

(1) Cases prohibited in this user's manual such as the maximum incline, too high barriers, highways, motor vehicle lanes etc.

(2) In some places or on surfaces such as a wet grassy slope where the wheelchair may skid.

(3) If the control system or other crucial components need to be repaired.

10. Electromagnetic Interference

Your wheelchair may be traveling in the areas affected by electromagnetic interference from some radio transmitters such as radio, wireless intercom, mobile phones and radars etc. In these cases, your wheelchair's driving may be affected by them.



WARNING! Electronic equipment can be affected by Electromagnetic Interference (EMI). Such interference may be from radio stations, TV stations, mobile phones and other radio transmitters. If the wheelchair has abnormal situations due to electromagnetic interference, please shut down the power and consult your service agent. For any loss caused by failure to comply with this condition, the company does not undertake any legal responsibility.

IV. OPERATION

5. Charging Batteries

The separate battery charger is a main part of the wheelchair. Your batteries can be charged quickly and easily with it that make your wheelchair at the best.

! WARNING! You must charge your wheelchair's batteries with the charger supplied by us. Do not use those battery charges such as that for automobiles.

Charge the batteries using the separate charger supplied by this wheelchair:

- Be certain that the controller is turned off and the wheelchair is not in freewheel mode.
- Connect the 3-pin metal plug of the charger into the 3-hole charger socket on the controller (see figure 15).
- Insert the input-plug of the charger into the wall electrical outlet.
- Lighting of the red LED on the charger shows that the charging is in progress. The green LED on the charger lights when the batteries are fully charged.
- Suggest 8-12 hours per charge.
- After charging finished, unplug the input-plug of the charger from the wall outlet firstly, and then the output-connector from the socket on the controller. Place the charger with cables and plugs together into the bag on the rear of seatback.

6. Overload Protector

When motors overload, the overload protector will shut down the power to protect motors and their electrical elements. And it needs relevant professionals to recovery protector function, unscrew the bolts on the battery box, change the factory spare fuse instead of damaged fuse, cover the battery lid again, and finally screw the bolt.

7. Safety Belt

For your safety on the way, you have to fasten the safety belt whenever you seat on the wheelchair.

fig:15



fig:16

III. ASSEMBLY

5. Connect the wiring harness plug of the controller with the socket harness socket from the batteries. (see figure 7)

6. Install the footplate tray on the upper tube of the left or right of the frame. (see figure 8). And then rotate the footplates forward so they can be automatically locked, then unfold the footplates. (see figure 9)

7. Package the leg strap on the right and left upper tube, then use the nylon tape.

8. Adjust the height of footplate, unload the safety nut on either side of the footplate, pull out the bolts, (see figure 11), slide up and down telescopic tube, position the comfortable height, then insert the bolts, and lock the nut.



fig:6



fig:7



fig:8



fig:9



fig:10



fig:11

IV. OPERATION

1. Controller

The controller is a key component for your wheelchair. All electrical elements to operate the wheelchair are housed in this controller(see figure 12).

The controller consists of the following parts:

- 1.Joystick
- 2.Battery Gauge
- 3.On/Off Button
- 4.Speed Light
- 5.Speed Up Button
- 6.Speed Down Button
- 7.Horn Button
- 8.Charger Socket

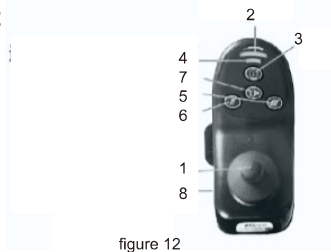


figure 12

The controller is usually housed on one of armrests and connected to the batteries together with the motors.

Button On Controller (refer to figure 12)

On/Off button

The On/Off-Button controls the power to the controller electronics, and then to power the motors through the latter, Don't use On/Off-Button to stop the wheelchair unless some emergency occurs, Otherwise the operating life of the drive components may be shortened.

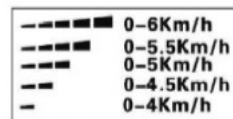
Joystick

The joystick is mainly used to control the speed and direction of the wheelchair. The farther you push the joystick from its central position, the faster the wheelchair moves. Whenever you release the joystick, it will automatically go back to the central position and the brake will be automatically operative.

WARNING! If your wheelchair moves accidentally, please immediately release the joystick so that the wheelchair will stop moving automatically unless the joystick is out of order.

Horn Button

The horn will sound if you press this button.



Speed Up/Down Buttons

After turning on the power, the speed light will indicate a maximum speed of your wheelchair now. The maximum speed range showed by the number of light cells can be adjusted by users. Each time the Speed Up Button(or Speed Down Button) is pressed, the speed will increase (or decrease) a light cell.

IV. OPERATION

3. Brake lever

When your power wheelchair without driving, pull the brake lever back, make the lever press the wheels, then it will be stopped.

When your power wheelchair is driving, (whether automatic or manual), it should push forward the brake lever to make sure the lever is out of wheels. See figure 13



fig:13



ATTENTION: When it does not require driving on the slope, the brake lever must be pushed forward, otherwise the wheelchair will lose control and result in personal injury.

4. Safety Belt

For your safety on the way, you have to fasten the safety belt whenever you seat on the wheelchair.

Snap the belt buckle so to hear a click (see figure 14)



fig:14