

Carbon*Lite*

User Manual

BE FREE

BE EASY

BE YOUR LIFE



The company reserves the right to make any change and improvement without prior notice.
It reserves and also the property of models and forbids their reproduction, even partial.

TABLE OF CONTENTS

Preface.....	1
Label of the Scooter.....	2
Symbols.....	3
Security Guidance.....	4-5
Major Parts.....	6-7
Contents in Scooter Carton.....	8
Specification.....	9
Main Operational Parts Function.....	10-12
Battery and Charging.....	13-15
Battery Safety and Life Guide.....	16
Instruction of Operation.....	17-19
Trouble Shooting and Maintenance.....	20-25
Guidelines and Manufacturer's statement-Electromagnetic Emission.....	26-27
Guidelines and Manufacturer's Statement-Electromagnetic Immunity.....	28-30
Information Disclosure in Manufacturer's Specification Sheets.....	31-32
Warranty	33
Warranty Statement.....	34

PREFACE

Dear Users,

We thank you very much for your choice of JBH Medical.

The manual is to assist you operating and maintaining the scooter, please go through it with necessary information in mind prior to use the scooter. Any problem which is not cover in here or any confusion of the manual, feel free to communicate with your local dealers or distributors. Alternatively, you can direct contact with JBH Medical as follows:

The manual has the content of characteristics on main parts, key components, function of parts, safety requirements and instructions, battery instructions, point of attention, methods of coping urgent, and maintenance. Symbols are used for reminding matters need to care for, an understand of the manual fully is highly suggested.

This manual is written with current product information and product photo as the follow. It is for the purpose easier understanding for users. The scooter is under continuous improvement and innovation. We reserve the right improved products without notification, any new improvement please feel feel to contact with us any time.

We strongly believe that the scooter would bring you more convenient and reach the goal of free life to you. If you discover a problem, contact your authorized local Dealer or Distributor for assistance, alternatively direct contact with manufacturer with the following Contact Information.

JBH MEDICAL

Anhui JBH Medical Apparatus Co.,Ltd

No.116 qicang Road, Mingguang City, Chuzhou, Anhui, China.



www.lifestyleandmobility.co.uk

Recommendation















Pay a attention to “Warning” in the manual is to protect you from any injury.
Unable to follow “Notification” in this manual may result in damage the scooter.

LABEL OF THE SCOOTER

Label of the scooter



Symbols on the label represent the meaning as below:

	Manufacturer		Attention, see instruction for use
	Consult instructions for use		Product fulfill WEEE directive
	Date of manufacture		Serial number
	Batch number		Type BF applied part
	Use until year & month (Expiration date)		Water proof grade
	CE mark		UKCA mark
	=Radio frequency fields beyond this point may exceed FCC general public exposure limit		Medical device

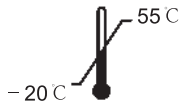
SYMBOLS



Don't use when packing damaged



Humidity limitation



Temperature limitation



Store in clean & dry place protected from rain, snow, ice, salt and water.



Danger of explosion



Protect from heat and radioactive sources



Keep dry



Package Number



Equipotential



Foot Switch



Switch



CF application part



PCTB



Fuse




Disposal and recycling
Only authorized recycling companies can recycle parts of this mobility wheelchair



Volume control

Power 100~240VAC, 50~60 Hz

Frequency 500VA

DC output +29.4V  2.0A

SECURITY GUIDANCE

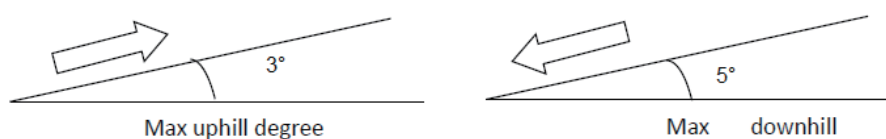
Security Guidance

- ⚠ An authorized Dealer or qualified technician must perform the initial setup of this scooter and must perform all of the procedures in this manual.
- ⚠ This product is suitable for users with age between 18 to 75 years old.
- ⚠ Do not drive on public highway.
- ⚠ No over cross any gap which is over 100 mm in width.
- ⚠ Never try to overpass obstacle which is over 40 mm in height.
- ⚠ Scooter is suitable for both outdoor and indoor use, hospital, senior center, family or similar circumstances use only.
- ⚠ The suitable environment of using electric scooter:
Temperature $-10 \sim +50^{\circ}\text{C}$, Atmospheric Pressure $860 \sim 1060\text{hPa}$, Humidity $10\% \sim 93\%$.
- ⚠ Power Source Condition:
Charging Voltage AC 220V 50Hz, Battery Voltage DC 24V 6Ah, Power of Motor $\geq 270\text{W}$ environmental conditions that might be harmful to the wheelchair (e.g. inclines greater than 9 degrees, rain, snow, ice, etc.), such as temperature and humidity.
- ⚠ Operate scooter after it is under unfolded condition and only allow one person on scooter all time.

Weight Limitations

The scooter is tested with simulation of human model at 120 kgs load capacity. Your scooter is rated for a maximum weight capacity. Please refer to the product specifications table for this limit. Keep in mind that the maximum weight capacity includes the combined weight of the user and any accessories mounted to the scooter. Stay within the specified weight capacity of your scooter. Exceeding the weight capacity voids your warranty. We will not be held responsible for injuries and/or property damage resulting from failure to observe weight limitations.

- ⚠ **Warning !** We are not responsible for any damage and inquiry cause due to over weight.
- ⚠ **Warning !** Not to drive on dangerous slopes.
- ⚠ **Warning !** Not to drive backwards when going up and down a hill. Max grad ability is uphill 3° , downhill 5°



SECURITY GUIDANCE

Statement

Indications for use:

It is a motor driven, indoor and outdoor transportation vehicle with the intended use to provide mobility to a disabled or elderly person limited to a seated position.

The Scooter (Models: FBC01) has a base with Carbon Fiber frame, two front wheels, two rear wheels, two anti-tip wheels, a seat, an adjustable steering column, a tiller console, an electric motor, an electromagnetic brake, 2 rechargeable Lithium-Ion Batteries with an off-board charger. The movement of the scooter is controlled by the rider who operates the throttle lever, speed control dial and handle on the tiller console. The device is installed with an electromagnetic brake that will engage automatically when the scooter is not in use and the brake cannot be used manually. The Scooter only can be operated on the flat road.



Please read the following statement.



Please, read this manual carefully and understand everything clearly before using the Electric wheelchair for the first time.



Please, do not use the scooter in any unclear cases, otherwise, the product may be damaged or people may get hurt. If you have questions, please contact us.



Please, pay attention to the warning and cautions in this manual. We are not responsible for any injury and damage caused by wrong use of this product and neglect of the warnings and cautions.



Instructions:



Warning ! Improper use will cause death or serious injury ;



Notice ! Improper use will cause damage of scooter ;



Advise ! Comply with the manual to keep scooter in good condition.



Warning ! DO NOT make sharp turns at high speed or on inclines or reverse direction abruptly.



Warning ! DO NOT utilize brake release / freewheeling option on any incline without assistance to control motion.

MAJOR PARTS

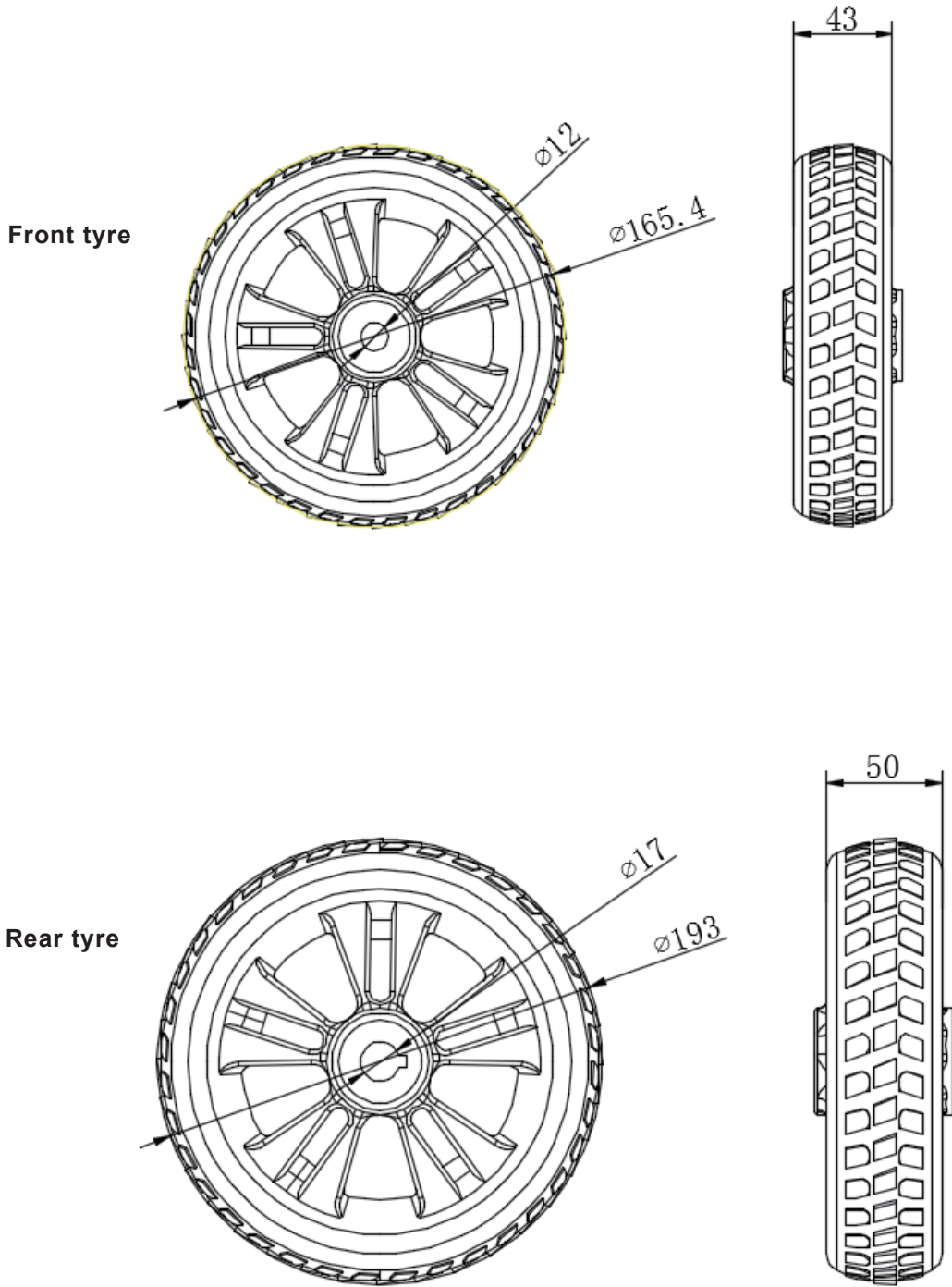


- | | |
|--|---------------------------------|
| 1 Control panel Front Decorating Cover | 13 Battery |
| 2 Top Steering Post | 14 Rear Wheel |
| 3 Middle Steering Post | 15 Transaxel |
| 4 Bottom Steering Post Rear Cover | 16 Rear Cover |
| 5 Bottom Steering Post Front Cover | 17 Seat Supporting Frame |
| 6 Bottom Steering Post | 18 Anti-tilt wheel |
| 7 Front Wheel | 19 Armrest Fixing Pipe Assembly |
| 8 Front Bumper Assembly | 20 Seat Base Plate |
| 9 Steering Axel | 21 Seat Assembly |
| 10 Front Frame Coupling | 22 Top control panel assembly |
| 11 Foot Rest Assembly | 23 LCD Display |
| 12 Frame locking Lever | |

Photo 1. Major Parts Name

MAJOR PARTS

The scooter is using Solid Tire which does not require for any punching all time.



CONTENTS IN SCOOTER CARTON

Upon receipt of the scooter, please open carton packing and check if the followings are included:



Safety belt 1 PC



Hex Wrenches 2 PCS



Four-hole wrench 1 PC



Power transfer connection 1 PC



User's Manual 1 PC



Battery 2 PCS



Charger

Photo 2. Scooter Carton Content

SPECIFICATION

Unfold Size	L 890 W 480 H 800 mm
Fold Size	L 400 W 480 H 680 mm
Packing Size	L 480 W 560 H 780 mm
Front wheel	6.5" × 2" PU wheel
Rear wheel	7.5" × 2.15" PU wheel
Maximum speed	3.7 mph (0-6 km)
Gradient	6° ± 1°
Turning Radius	1200 mm
Weight with battery	21.5 kgs
Weight without battery	19 kgs
Brake System	Intelligent, Regenerative and Electromagnetic
Endurance Range	18 km for single charging
Drive system	S-drive 45 A, PG
Trench crossing ability	40 mm
Max load capacity	140 kgs
Ground Clearance	50 mm
Seat Height	560 mm from ground
Motor	24 V 180 W
Battery Charger	24 V 6 Ah Off Board



Photo 3. Unfolding size



Photo 4. Folding size

MAIN OPERATIONAL PARTS FUNCTION

Handle Bar Set

The handle bar set including Control Panel, Key Switch, Speed Setting Knob and Handle, Directional Control Lever. The major operational functions are set.



Photo 5. Handle Bar Set

Control Panel



Photo 6. Control Panel



Notice

Humidity of ambient environment significantly affect on the operational function main parts. Stay in low moisture surrounding before operating or during operating is strongly recommended.

Power Switch

- Power is on after key switch turned clockwise, scooter is ready to go.
- Power is off if key is turned anti-clockwise, scooter cannot be operated. Turn the power off through key if driving is terminated.



Warning

Sudden immediately stop of scooter occurs when power is switched off during operation through electromagnetic braking system control.



Photo 7. Power Switch

Speed Controller



Photo 8. Speed Controller

The adjustment of driving speed through speed control knob by finger range from 0 km/h to 6 km/h at your choice. Turn the knob to very left for speed like turtle while turn very right rabbit like speed.

Warning Always keep lower speed level during turning or backward for keeping safe.

MAIN OPERATIONAL PARTS FUNCTION

Display

Battery Power is shown on display while power is turned on.



Photo 9. Display

Direction Control Lever



Forward



Backward

Forward and backward control is under Control Lever.

- a. Gently hold handle with both hands.
- b. Scooter go forward by pulling lever on the right with fingers.
- c. Go backward by pulling lever on the left with fingers.
- d. Beep sound goes on during backward.
- e. The Control Lever automatically to center position while released and brake is on at the same moment.

Photo 10. Direction Control Lever

Horn

Beep sound will be on by keep- ingressing the horn button. Sound the horn in time under any necessary condition during driving.



Photo 11. Horn

Telescopic Handle

Pull up plastic clipper for ad- justing to length of handle, push back the clipper at de- sired length.



Photo 12. Telescopic Handle

MAIN OPERATIONAL PARTS FUNCTION

Controller

Located under rear cover which transfer the signal from control panel to motor, brake and hub.



Notice

Keep controller under low moisture environment and make sure it is in dry condition before operation.

Electric / Manual Mode Switch Lever

Hand Brake on and off can be done by switching the lever for manual or electric control.

Electric Control Mode

Push down hand brake lever for electric control mode.

Manual Control Mode

Pull up hand brake lever for manual push mode control.



Photo 13.

Electric and manual mode switching Lever

BATTERY AND CHARGING



The scooter is designed for maintenance free with long usage of Lithium Ion Battery. It is suitable to be Charged with 24V 6 Ah charger.

- Fully charge the battery 5 hours is good for battery usage. At least charge once in every 3 month.
- Charge battery to full level and take apart battery from scooter if not going to use your scooter for long period of time.

Steps of charging battery

1. Power off the scooter. Open the cover of charging port cap, then insert the charging plug in charge port of scooter.



Photo 14.
Close the ship type switch or key switch



Photo 15.
Then open the rear charging socket and insert the plug



Caution

Do not charge continuously over 6 hours through charging port of controller to prevent over charging while two batteries are inserted. Never charge over 3 hours when it is only one battery.

Warning Make sure charger plug is fully plug in the charging port of scooter.

2. Connect the A/C power plug of charger to House power source. Check the light on charger, orange color light means charging is in progress while green light shows power if full.
3. Turn off power charger when battery is fully charged. Disconnect AC power source before disconnect the DC charging plug.

Warning Disconnect AC power source after fully charge of battery will keep the life of Lithium Ion Battery longer.

4. Charger red light is off while power source and power of charger is on. Please check if the power connection is set properly.
5. Full charge time is around 5 hours duration.

BATTERY AND CHARGING

Charge battery directly

The battery can be charged directly with house power source, simply connect the terminal of battery with power source, charging can be started.



Caution

Keep charging time of single battery in 3 hours when it comes to off board charging to avoid over charging.

Photo 16. Charge battery directly



Caution

Immediately unplug charger from power source as soon as indicating light on charger turns green.



Caution

No operation of scooter allowed while it is in the process of charging battery. It is required to unplug charger from power source prior to operate scooter.

Charging cycles is 800 times for single battery life extend.

BATTERY AND CHARGING

Some knowledge on how charger charge battery



Large input of current from charger to battery at low voltage level, small current given from charger when battery is close to full. Almost zero or little current given to battery, continuously charging would not cause over charge, however, it is suggested charge duration not over 8 hours. The battery will continuous be charged under charger connected situation.

The indication of charger lights



Two LED lights are on charger, red stands for power connection, the other is charging status indication which shows charging with orange color and turns green on fully charged. Red light may continue after power source disconnection, there maybe something wrong. Normally red light will be off in a few seconds if disconnected to power source, it is normal for red light to snuff out while battery voltage is up to level.

Other type of charger



The charger is designed for battery of the scooter. Strongly suggest do not use other type of charger from original manufacturer.

Frequency of Charging

The frequency of charging is based on the following conditions

- A. All day long driving of scooter
- B. Occasional driving scooter

Safe and reliable battery charging



A. Do not charge continuously over 6 hours through charging port of controller to prevent over charging while two batteries are inserted. Never charge over 3 hours when it is only one battery.



B. Keep charging time of single battery in 3 hours when it comes to off board charging to avoid over charging.



C. Immediately unplug charger from power source as soon as indicating light on charger turns green.

D. Charge scooter once a week when the use frequency is once in a week. Fully charge takes 6 hours.

E. Keep battery at full power.

How to reach maximum driving distance

- A. Make sure full charge before driving
- B. Keep away from go up hills, macadam and soft terrain.
- C. Carry necessities, reduce load of scooter.
- D. Drive smoothly without intermittent.



Suitable specification of battery
Lithium Ion battery with specification listed.

Warning Do not take apart battery on your own. No need to add water for the battery. Miss use of battery cause damage are excluded in warranty.

BATTERY SAFETY AND LIFE GUIDE

The reason of weak on new battery



The scooter use deep-cycle battery under special chemical technology that allow battery quick to be charged with longer time use after full charge. Battery along with scooter packing is charged full, however, the performance of initial power will be reduced in the process of transportation, such as temperature variation.

High temperature causes battery power loss while low temperature lead to longer charging hours. It takes a few days for adapting to ambient environment then turn to normal after transportation. It takes a few days for returning to stable performance after several charging and discharging cycles.

Steps of improving battery performance

- A . Always charge to full when battery is new to ensure battery has 88% at least.
- B . Always charge battery to full after use and keep on driving scooter is safe and familiar locations. Stay low speed if you are first time user.
- C. Charge battery to full after second time driving, it will increase the battery reach 90% capacity performance.
- D . After 4~5 times of driving with full charging, the performance of scooter will reach 100% level.

Ensure battery life

Full charge of battery keep good performance and life longer, while over charge and seldom charge of battery damage.

Storage of scooter and Battery

Long time for not using scooter, please following the instruction for storage of scooter

- A. Charge full battery
- B. Disconnect battery
- C. Keep scooter under dry and suitable temperature
- D. Avoid dramatically temperature variation during storage

Warning Keep in warm condition a few days when battery get frozen



Long time storage of scooter is preferred lay a plate under foot rest panel for supporting and it will avoid stain on tires after long time pressure to the ground.

INSTRUCTION OF OPERATION

Before operating instruction

- A. Make sure battery is fully charged.
- B. Familiar with the route condition including crowd, animal and potential obstacles.
- C. Always keep away from uneven and sloppy terrain.
- D. Check if is fully inserted and the brake lever switch is pushed.
- E. Steering with both hands rest on handle bar.
- F. Sound the horn to check if it works.

Driving

Upon driving the scooter, please follow the following steps:

- A. Unfold scooter fully.
- B. Check if the seat at right position and adjust tiller to comfortable position. (Refer to photo12, P12)
- C. Turn on power after making seat properly with hands on handle bar. (Refer to photo 7, P11)
- D. Gently push directional control lever with right thumb. (Refer to photo 10, P12)
- E. Brake release automatically and scooter move forward. Do not push control lever to much in a sudden for the speed would be rapidly pick up.
- F. Turn handle bar to left for turning left.
- G. Right turning of handle bar to make right turn.
- H. Scooter move straight forward by keeping handle in center position.
- I. Brake is automatically on when control level in center position and once scooter stop going.

End of Driving

- A. Make sure scooter is fully stopped.
- B. Turn off Power with Key or turn the rocker switch to "Off" position. (Refer to photo 14, P14)
- C. Carefully get off the scooter.
- D. Fold scooter with manual. (Refer to photo 17, P19)

INSTRUCTION OF OPERATION

The Folding and Unfolding

Folding Steps:

1. Push down the frame locking lever on low middle of frame. The frame will be unlocked.
2. Push down from back of seat with one hand, the other hand hold the middle of steering post pushing toward the center at the same time for manual closing the scooter.
3. The scooter will be fully folded once hearing a click sound.



Photo 17. Manual Fold

Unfolding Steps:

1. Push down the frame locking lever on low middle of frame, it would be on top at folding position.. The frame will be unlocked.
2. Push up from back of seat with one hand, the other hand hold the middle of steering post pushing outward the center at the same time for manual opening the scooter.
3. The scooter will be fully unfolded. Make sure the scooter is fully extended to open condition by checking the lever if it locks.



Photo 18. Manual UnFold

INSTRUCTION OF OPERATION

Steps of mouting and Distmounting scooter

Mounting steps

1. Open one side of armrest to the top.
2. Mount on scooter from the side.
- 3 Both feet step on footrest properly then lower down the armrest.
4. Both hand rest on Buffalo handle bar properly.



Photo 19. Steps of Mounting on Scooter

Dismounting step

1. Turn the key to off position.
2. Open one side of armrest to the top.
3. Dismount on scooter from the side.
4. Then lower down the armrest.



Photo 20. Steps of Dismounting Scooter

TROUBLE SHOOTING AND MAINTENANCE



Photo 21. Top control panel and handle bar set

The controller contains programs for identifying problem points and troubleshooting.

When the diagnostics detects problems and errors. The LED lights shine continuously in the form of a flash until the fault is eliminated. Example: The number of flashes is "1-9" . Users can try to solve the problem as follows.

If the problem persists, please contact us or our agent.

Number of flashes	Fault description	Possible reason
1	Low battery voltage or battery connection problem	Check the battery connection. If there is no problem with the connection, try charging the battery.
2	There is a problem with the motor connection	Check all connections between the motor and the controller
7	Directional control lever failure	Before turning on the power of the scooter, make sure the directional control levers is in the parking position.
9	Brake lever failure	Check the connection between the brake lever and the motor to ensure that the controller is securely connected.

TROUBLE SHOOTING AND MAINTENANCE

Insufficient capacity of battery or dropped on performance

The decline issue of battery capacity or performance mostly can be sorted out as follows:

- A. Inspect whether key is fully inserted and at ON position.
- B. Make sure battery is fully charged.
- C. Increase the charging cycle and time while battery capacity is dropped.
- D. After going through above steps without any improvement, a capacity test on battery is required.

Though the scooter is designed service free, the followings have to be checked and maintained.

Connection of Battery

- A. Check if there is any corrosion and connection is sound.
- B. Make sure battery is kept flat inside battery holder.
- C. Any damage occurred of connections must be repaired or change new parts.

Plastic Cover

Never apply oil or chemical substances for cleaning plastic cover of scooter and wash scooter with water avoid damaging electric components.

Bearing, Motor and Transmission

- A. These component were lubricated and sealed during manufacturing process, not require for further lubrication after purchasing.
- B. Always keep electric component in dry condition, especially control panel, battery charger and all electric components.
- C. Dry any components which get moist before driving the scooter.



Cleaning method:

Wipe with clean and soft paper or cloth. Do not need to wash with water, do not wipe with corrosive liquid.

TROUBLE SHOOTING AND MAINTENANCE

1. The battery of electric scooter is an extremely important part, the battery life determines the service life of the scooter. Try to keep the battery saturated after each use, to develop such a habit, it is recommended to conduct a deep discharge every month! If you don't use an electric scooter for a long time, place it in a place to avoid bumps and pull out the battery to reduce discharge. It is also best not to overload in the process of use, which has direct harm to the battery, so it is not recommended to overload and avoid directly affecting the service life of the battery.



Photo 22.
Conduct a deep discharge every month



Photo 23. Check the screw loosening

2. After the electric scooter is used for a period of time, it is necessary to check the screw loosening of the electric scooter to ensure the connection and operation between the parts and components, and to avoid accidents.

3. After being wet by Rain Water. Electric walking vehicle should be wiped with dry rag in time, especially the part containing electrical circuit, so that the electric walking vehicle can keep dry and clean.



Photo 24. Wiped with dry rag in time



Photo 25. Clean in time

4. If the electric scooter is on the beach, gravel or wet road, if there is sand, mud or gravel on the tire, it should be cleaned in time to prevent some parts from rusting or the tire running badly, which will affect the beauty and driving comfort and safety.

TROUBLE SHOOTING AND MAINTENANCE

5. Electric scooters should avoid scratching seat leather and PU handrails and plastic ornaments with sharp objects, thus affecting the beauty of the whole vehicle.



Photo 26. Avoid scratching seat leather and PU handrails and plastic ornaments



Photo 27. Avoid direct sunlight

6. Electric walking vehicle should be placed in a place where the sun can not shine, please avoid sunlight, otherwise it is not only harmful to the battery, but also has a direct impact on the service life of plastic parts and stickers of electric walking vehicles.

7. Electric scooters are relatively simple to operate, avoid driving by children or adults without experience in electric scooters. Drivers should avoid unnecessary large-scale body movements or sleep on electric scooters, which may lead to accidental danger. In order to avoid this situation, it is best to unplug the power switch key when not in use. It also avoids the risk of theft.



Photo 28. avoid driving by children or adults without experience.

Maintenance tool Simple tool kit is accompanied with scooter in scooter packing, while dry soft fabric and so on are handy and easy to get in the market are not included. The period of maintenance is vary depending on the real use frequency and situation, there is no specific rule.

TROUBLE SHOOTING AND MAINTENANCE

Maintenance Frequency

1. Daily check

Turn off the controller, check the lever, make sure the lever is not bent and broken, and be sure to return to it when you release it. Check the nibber base of the lever for damage. Just check the base and do not repair it. If you have any questions, please contact your dealer.

2. Weekly check

Disconnect the controller connector and charger connector from the battery compartment. Check the connection and for corrosion. If necessary, please contact the dealer.

Make sure that all parts of the controller are tightly connected to the product, do not screw the screws too tightly.

Check the brakes. This inspection must be carried out on a level surface and there must be enough open space around.

Check the brakes:

1. Turn on the controller. After one second, check the battery indicator to make sure the battery is powered.
2. Slowly push the lever forward to guide you to hear the "beep" of the brakes, and immediately release the lever. You must hear the brake operation sound after each lever is pushed for a few seconds:
3. Repeat the operation three times to push the controller to the rear, left and right sides for inspection.

3. Monthly check

1. Check the anti-roll wheel for excessive wear and replace the wheel if necessary.
2. Check the wear of the front wheels and drive wheels. If maintenance is required, please contact your dealer.
3. Check the front fork for wear and looseness, which may indicate that adjustment is needed or the bearing needs to be replaced. Please contact the dealer for repair, or replacement.
4. Keep the product clean and do not leave debris, such as hair, food, beverages, residues, etc.

4. Storage



This product should be stored in a cool and dry environment. Do not store it at the extreme temperature. If it cannot be stored under the above conditions, it may cause rusting of the wheelchain, and damage to the electrical system. Storage conditions: temperature: -40 ~ +65 degree C; Relative humidity: $W80\%$; Atmospheric pressure: 86kPa ~ 106kPa.

TROUBLE SHOOTING AND MAINTENANCE

If you discover a problem, require for parts supply (Such as battery, tire, chareger and son on) contact your authorized local Dealer or Distributor for assistance, alternatively direct contact with manufacturer with the following Contact Information.

JBH MEDICAL

Anhui JBH Medical Apparatus Co.,Ltd

No.116 qicang Road, Mingguang City, Chuzhou, Anhui, China.

www.jbhmedical.com

Hightly suggest that use oringinal parts from supplier to avoid any potential issues or failure of function of scooter, please always consult with authorized local Dealer or Distributor first.

GUIDELINES AND MANUFACTURER'S STATEMENT-ELECTROMAGNETIC EMISSION



Labeling explain for Electromagnetic compatibility



Note !

- FBC01 electric scooter meets the electromagnetic compatibility requirements of IEC60601 standards.
- The user shall install and use according to the EMC information provided in the attached documents.
- The portable and mobile RF communication equipment may affect the performance of electric wheelchair and avoid strong electromagnetic interference when using, such as close to mobile phones, microwave ovens, etc.
- The guide and the manufacturer's statement are detailed in the annex.



Warning !

- FBC01 electric scooter should not be used close to or stacked with other equipment. If it must be used close to or stacked, it should be observed and verified that it can operate normally under the configuration used.
- In addition to the cables sold by FBC01 electric scooter manufacturers as spare parts of internal components, the use of accessories and cables other than those specified may result in increased emission or reduced immunity of FBC01 electric scooter.

NO.	Project	Cablelength (m)	Whether or not shielded	Remark
1	POWER CORD	1.3	NO	/
2	CHARGER OUTPUT LINE	1.1	NO	/

GUIDELINES AND MANUFACTURER'S STATEMENT-ELECTROMAGNETIC EMISSION



Attachment

Guidelines and manufacturer's statement-Electromagnetic Emission		
<p>FBC01 electric scooter is expected to be used in the electromagnetic environment specified below, and the buyer or user of the electric wheelchair vehicle shall ensure that it is used in this electromagnetic environment :</p>		
Launch test	Compliance	Electromagnetic environment-Guidelines
IEC60601 RFLaunch	1	FBC01 electric scooter only uses RF energy for its internal functions. Therefore, its RF emission is very low and may not cause any interference to the nearby electronic equipment
IEC60601 RFLaunch	B	FBC01 electric scooter is suitable for domestic use and all facilities directly connected to the public low-voltage powersupply network for domestic use.
IEC60601 Harmonic emission	A	
IEC60601 Voltage fluctuation/ flicker emission	FIT	

GUIDELINES AND MANUFACTURER'S STATEMENT-ELECTROMAGNETIC IMMUNITY




Guidelines and manufacturer's statement-Electromagnetic Immunity			
FBC01 electric scooter is expected to be used in the electromagnetic environment specified below, and the buyer or user of the electric wheelchair vehicle shall ensure that it is used in this electromagnetic environment.			
Anti-interference measurement	IEC60601 Test Level	Coincidence level	Electromagnetic environment-Guidelines
Electrostatic discharge (ESD) ISO7176 IEC60601	±6 kV Contact discharge ±8 kV Air discharge	±6 kV Contact discharge ±8 kV Air discharge	The floor should be wood, concrete or ceramic tile, and if the floor is covered with synthetic materials, the relative humidity should be at least 30%.
Electrical fast transient burst ISO7176 IEC60601	±1kV To the power cord	±1kV To the power cord	The power supply in the hospital or in the commercial environment should be of typical quality.
Surge ISO7176 IEC60601	±1 kV Differential-mode voltage ±1 kV Common mode voltage	±1 kV Differential-mode voltage	The power supply in the hospital or in the commercial environment should be of typical quality.
Voltage sag, short interruption and voltage variation on power input line ISO7176 IEC60601	–0% U_T , Last for 0.5 circuits (on U_T , 100% sag) –0% U_T , Last for 1 circuit (on U_T , 100% sag) 70 % U_T , Last for 25 circuits (on U_T , 30% sag) 0% U_T , Last for 5 seconds (on U_T , 100% sag)	0% U_T , Last for 0.5 circuits (on U_T , >95% sag) – 0% U_T , Last for 1 circuit (on U_T , 100% sag) 70 % U_T , Last for 25 circuits (on U_T , 30% sag) – 0% U_T , Last for 5 seconds (on U_T , 100% sag)	The power supply in the hospital or in the commercial environment should be of typical quality. If the users of electric wheelchair need continuous operation during power interruption, uninterruptible power supply or battery power supply is recommended.
Power frequency magnetic field (50/60Hz) ISO7176 IEC60601	30 A/m	30 A/m 50/60 Hz	The power frequency magnetic field should have the horizontal characteristics of power frequency magnetic field in typical commercial or hospital environment.
Note: U_T refers to the AC network voltage before the test voltage is applied			

GUIDELINES AND MANUFACTURER'S STATEMENT-ELECTROMAGNETIC IMMUNITY



FBC01 electric scooter is expected to be used in the following specified electromagnetic environment, and the purchasers or users of NPL001、NPL002、NPL003 electric wheelchairs) shall ensure that it is used in this electromagnetic environment :

Anti-interference measurement	IEC60601 Test Level	Coincidence level	Electromagnetic environment-Guidelines
RFconduction ISO7176 IEC60601	3 Vrms 150 kHz to 80 MHz	3 Vrms	Portable and mobile RF communication equipment shall not be used closer to any part of the electric wheelchair, including cables, than the recommended isolation distance. The distance shall be calculated by the formula corresponding to the transmitter frequency. Recommended isolation distance $d = 1.2 \sqrt{P}$
RF radiation (charger) ISO7176 IEC60601	3 V/m 80 MHz to 1.0 GHz	3 V/m	$d = 1.2 \sqrt{P}$ 80 MHz to 800 MHz $d = 2.3 \sqrt{P}$ 800 MHz to 1.0GHz $d = 0.2 \sqrt{P}$ 26 MHz to 800 MHz $d = 0.4 \sqrt{P}$ 800 MHz to 2.5 GHz
RF radiation (wheelchair) ISO7176 IEC60601	20 V/m 26 MHz to 2.5 GHz	20 V/m	Where P is the maximum output rated power of the transmitter provided by the transmitter manufacturer, in watts (W), and d is the recommended isolation distance in meters (m). ^B The field strength of the fixed RF-transmitter is determined by surveying the electromagnetic field A. in each frequency range, B should be lower than the coincidence level. Interference may occur near equipment marked with the following symbols. 

Note 1: at the frequency of 80MHz and 800MHz, the formula of higher frequency band is adopted.

Note 2: these guidelines may not be suitable for all cases where electromagnetic propagation is affected by absorption and reflection of buildings, objects and human bodies.

GUIDELINES AND MANUFACTURER'S STATEMENT-ELECTROMAGNETIC IMMUNITY



- a If the fixed transmitting airport is strong, such as the base station of wireless (cellular / cordless) telephone and ground mobile radio, amateur radio, am (amplitude modulation) and FM (frequency modulation) radio broadcast and television broadcast, and the field strength of the place where NPL001、NPL002、NPL003 electric wheelchairs are located is higher than the RF coincidence level of the above application, then the electric wheelchair should be observed to verify It can operate normally. If abnormal performance is observed, supplementary measures may be necessary, such as reorientation or repositioning of the electric wheelchair.
- b The field strength should be less than 3 V / m in the whole frequency range of 150 kHz to 80 MHz.

Recommended separation distance between portable and mobile RF communication equipment and electric wheelchair.

FDB01 electric scooter is expected to be used in an electromagnetic environment where radiated RF disturbances are controlled. According to the maximum output power of communication equipment, the buyer or user of electric wheelchair can prevent electromagnetic interference by maintaining the minimum distance between portable and mobile RF communication equipment (transmitter) and electric wheelchair.

Rated maximum output power of transmitter/W	Isolation distance corresponding to different frequencies of transmitter/m				
	150 kHz ~ 80 MHz – $d= 1.2 \sqrt{P}$	80MHz ~ 800 MH (Charger) $d= 1.2 \sqrt{P}$	800 MHz ~ 1.0 GHz (Charger) $d= 2.3 \sqrt{P}$	26MHz ~ 800 MHz (Wheelchair) $d= 0.2 \sqrt{P}$	800 MHz ~ 2.5 GHz (Wheelchair) $d= 0.4 \sqrt{P}$
0.01	0.12	0.12	0.23	0.02	0.04
0.1	0.38	0.38	0.73	0.06	0.13
1	1.2	1.2	2.3	0.2	0.4
10	3.8	3.8	7.3	0.63	1.26
100	12	12	23	2	4

For the rated maximum output power of the transmitter not listed in the above table, the recommended isolation distance D, in meters (m), can be determined by the formula in the corresponding transmitter frequency column, where P is the maximum output rated power of the transmitter provided by the transmitter manufacturer, in watt (W).

Note 1: at 80 MHz and 800 MHz frequencies, the formula for the higher frequency range is used.

Note 2: these guidelines may not be suitable for all cases where electromagnetic propagation is affected by absorption and reflection of buildings, objects and human bodies.

INFORMATION DISCLOSURE IN MANUFACTURER'S SPECIFICATION SHEETS

Manufacturer: Anhui JBH Medical Apparatus Co.,Ltd
 Address: No.116 qicang Road, Mingguang City, Chuzhou, Anhui, China.
 Model: FBC01
 Maximum occupant mass: 120KG/264lbs

Disclosure Information (ISO)							
Standard reference		min.	max.	Standard reference		min.	max.
ISO7176-5	Overall length with legrest		890 mm	ISO7176-7	Seat plane angle	.....0	5°
ISO7176-5	Overall width	/	480 mm	ISO7176-7	Effective seat depth	.....mm	400 mm
ISO7176-5	Folded length	/	400mm	ISO7176-7	Effective seat width	.....mm	460 mm
ISO7176-5	Folded width	/	480 mm	ISO7176-7	Seat surface height at front edge	.....mm	570 mm
ISO7176-5	Folded height	.....mm	680 mm	ISO7176-7	Backrest angle	.....0	5°
ISO7176-5	Total mass	.....kg	21.5 kg	ISO7176-7	Backrest height	.....mm	350 mm
ISO7176-5	Mass of the heaviest part	.....kg	4.0 kg	ISO7176-7	Footrest to seat distance	.....mm	420 mm
ISO7176-2	Dynamic stability downhill	/	5°	ISO7176-7	Leg to seat surface angle	.....0	120°
ISO7176-1	Static stability uphill	/	20°	ISO7176-7	Armrest to seat distance	.....mm	240 mm
ISO7176-1	Static stability sideways	/	15°	ISO7176-7	Front location of armrest structure	.....mm	37 mm
ISO7176-4	Energy consumption	/	20 km	ISO7176-7	Handrim diameter	.....mm	30 mm
ISO7176-2	Dynamic stability uphill	/	8°	ISO7176-7	Horizontal location of axle	.....mm	760 mm
ISO7176-10	Obstacle climbing	0 mm	40 mm	ISO7176-5	Minimum turning radius	.....mm	1200 mm
ISO7176-6	Maximum speed forward	0 km/h	6 km/h				
ISO7176-3	Minimum braking distance from max speed	.....mm	1000 mm				

INFORMATION DISCLOSURE IN MANUFACTURER'S SPECIFICATION SHEETS

The wheelchair conforms to the following standards:

- a) Requirements and test methods for static, impact and fatigue strengths (ISO 7176 -8) Yes
- b) Power and control systems for electric wheelchairs - requirements and test methods (ISO 7176-14) Yes
- c) Climatic test in accordance with ISO 7176-9 Yes
- d) Requirements for resistance to ignition in accordance with ISO 7176-16. Yes

WARRANTY

The purchaser of this product is entitled to a limited warranty as offered by our company, and its affiliates on the following components and timeframes:

- ✘ Scooter frame: 3 years
- ✘ Motor: 1 year
- ✘ Controller and CPU system: 1 year
- ✘ Battery: 6 months
- ✘ Wear parts: 3 months

Includes tires, seat and back rest, armrests, and support straps.

This warranty is valid for the replacement of dysfunctional parts only. Any parts under warranty will be replaced and shipped to your door. Any service and labor fees, if applicable, to replace parts under warranty must be paid by the user.

Due to its straightforward design, most parts can be easily exchanged by the end user without a professional service tech required. However, it is always recommended you seek professional help for maintenance and service, to make sure the work is done properly.

The warranty does not cover:

1. Products damaged by user negligence.
2. Products damaged accidentally.
3. Products damaged intentionally.
4. Products that have been subjected to negligence.
5. Products that have been subjected to abuse.
6. Products that have been improperly stored.
7. Products that have been improperly handled.
8. Products that have been improperly operated.
9. Products that have experienced general misuse.

10. Products that have been modified in an unauthorized, unapproved way.

Warranty is non-transferable and only valid for the original wheelchair purchaser.

WARRANTY STATEMENT

JBH MEDICAL

Warranty Registration Card

User Name		ID No.	
Address		Phone No.	
Model	FBC01	Product No.	

Purchasing Date	(Month) (Day) (Year)
Manufacturer	JBH MEDICAL
Distributor	(Stamp or signature)
Distributor (Phone, Address)	

If you discover a problem, contact your authorized local Dealer or Distributor for assistance, alternatively direct contact with manufacturer with the following Contact Information.

JBH MEDICAL

Anhui JBH Medical Apparatus Co.,Ltd

No.116 qicang Road, Mingguang City, Chuzhou, Anhui, China.

www.lifestyleandmobility.co.uk

JBH[®] Carbon*Lite*

www.lifestyleleandmobility.co.uk



020 8159 7070

info@lifestyleandmobility.co.uk

www.lifestyleandmobility.co.uk

