



Mid-wheel Powerchair

USER MANUAL

ATTENTION

Please read your
owner's manual
before driving your
Powerchair.



888WNLLHD



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INTRODUCTION

Congratulations on insisting on the best. Shoprider Powerchairs are the ultimate combination of style and comfort. The 888WNLLHD features support easy maneuverability and smooth control for today's active lifestyle.

The innovative design of the 888WNLLHD includes articulating double frames that move in any direction. This intelligent feature keeps all 6 wheels on the ground at all times, even when driving on uneven terrain, hence the name 888WNLLHD. Combine this with the programmable joystick controller, adjustable arm assemblies, flat-free tires, deluxe reclining captain seat, easy access to batteries and quick-change color shrouds for a complete Powerchair package. We know that your 888WNLLHD Powerchair will provide many years of dignified independent mobility.

This manual contains important information regarding the safe use of your Shoprider Powerchair. Please read this manual carefully and thoroughly before using your Powerchair and make sure you understand all the instructions.



EMI WARNING

Electromagnetic Interference (EMI) from Radio Wave Sources

Powered electric chairs may be susceptible to electromagnetic interference, which is a kind of interfering electromagnetic energy (EM) emitted from sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios and cellular phones. The interference (from radio wave sources) can cause the power chairs to release its brakes, move by itself or move in unintended directions. It can also permanently damage the powered chair's control system.

The sources of radiated EMI can be broadly classified into three types:

1. Hand-held portable transceivers (transmitters-receivers) with the antenna mounted directly on the transmitting unit. Examples include: citizens band (CB) radios, "walkie talkies", security, fire and police transceivers, cellular telephones and other personal communication devices

NOTE: Some cellular telephones and similar devices transmit signals while they are ON, even when not being used.

2. Medium-Range mobile transceivers, such as those used in police cars, fire trucks, ambulances and taxis. These usually have the antenna mounted on the outside of the vehicle.
3. Long-Range transmitters and transceivers, such as commercial broadcast transmitters (radio and TV broadcast antenna towers) and amateur (HAM) radios.

NOTE: Other types of hand-held devices, such as cordless phones, laptop computers, AM/FM radios, TV sets, CD players, cassette players and small appliances such as electric shavers and hair dryers, so far, as we know, are not likely to cause problems to your Powerchair.



Powered Chair Electromagnetic Interference (EMI)

Because EM energy rapidly becomes more intense the closer one moves to the transmitting antenna (source), the EM fields from hand-held radio sources (transceivers) are of special concern. It is possible to unintentionally bring high levels of EM energy very close to the Powerchair's control system while using these devices. This can affect the Powerchair's movement and braking. Therefore, the warnings listed below are recommended to prevent possible interference with the control system of the Powerchair.

WARNINGS

The following warnings listed below should reduce the chance of unintended brake release or Powerchair movement, which could result in serious injury.

1. Do not operate hand-held transceivers (transmitter-receivers), such as citizens band (CB) radios, or turn ON personal communication devices, such as cellular phones, while the Powerchair is turned ON.
2. Be aware of nearby transmitters, such as radio or TV stations, and try to avoid coming close to them.
3. If unintended movement or brake release occurs, turn the Powerchair OFF as soon as it is safe.
4. Be aware that adding accessories or components, or modifying the Powerchair may make it more susceptible to EMI.

NOTE: There is no easy way to evaluate the overall immunity of the powered chair.

Report all incidents of unintended movement or brake to your Powerchair provider, and note whether there are sources of EMI nearby.

NOTE: The Shark controller EMI rating is FDA Regulated and conforms to federal regulations.



Safety Instructions

Please use your Powerchair often and let it expand your horizons. The more mobility your Powerchair brings, the happier you will be! But, with all things, observing a few rules will ensure safe maneuvering. So please...

- (1) **Do not** drive the Powerchair without reading this instruction manual.
- (2) **Do not** use the joystick in an erratic manner when going up or down an incline.
- (3) **Do not** carry passengers or exceed the maximum user weight (Table 2).
- (4) **Do not** turn off the joystick controller by switching the On / Off Button when moving at speed. This will bring the electromagnetic brakes on immediately and could cause damage to the joystick controller.
- (5) **Do not** drive over uneven or soft terrain.
- (6) **Do not** mount or dismount the Powerchair unless the electromagnetic brakes are engaged and the joystick controller is off.
- (7) **Do not** operate the Powerchair if the unit is in freewheel mode.
- (8) **Do not** use on the road, except when crossing between sidewalks.
- (9) **Do not** sit on the Powerchair when in a vehicle, but transfer to a vehicle seat.
- (10) **Do not** exceed any grade over 12 degrees (20%).
- (11) **Always** stop fully before changing forward or reverse direction.
- (12) **Always** engage a slow speed when going down gradients (move the joystick slowly towards center position to reduce the speed).
- (13) **Always** approach and climb over curbs at slow speed.
- (14) **Always** use the safety belt.
- (15) **Always** keep feet on the footrest while driving.
- (16) **Always** make sure the batteries are fully charged before setting out on a journey.
- (17) **Always** make sure the Allen bolt and the red tightening levers are tightened before driving the Powerchair.
- (18) **Always** charge the Powerchair in a well ventilated area.
- (19) Whenever a center bolt of the wheel assembly has been loosened, please replace with a specified new bolt from authorized providers and secure with a torque of 240 ± 5 kg-cm together with Loc-tite 271 adhesive (or equivalent).



- (20) Whenever a center bolt of the wheel assembly has been loosened, please replace with a specified new bolt from authorized providers and secure with a torque of 240 ± 5 kg-cm together with Loc-tite 271 adhesive (or equivalent).
- (21) When proceeding up any incline, please move the seat to the most forward position or if you have the deluxe seat, make sure that it is in the 90 degree (upright) position.
- (22) Do not adjust the programmer or modify the controller and cables without prior written approval from the manufacturer. Otherwise injury and/or damage to the Powerchair or surrounding property may occur.
- (23) Do not modify any parts on the unit without manufacturer's written approval, or your warranty will be voided and you will be responsible for the modification.
- (24) Regularly check on your Battery Charge. Always Charge the unit daily after use.
- (25) Battery cables must be securely fastened onto battery terminals by the authorized dealer before using the unit. Batteries must be tied down correctly and securely.
- (26) Use caution and reduce speed when turning.
- (27) Avoid using the Powerchair in wet conditions.
- (28) Always make sure the seat post tightening levers have been tightened before driving the Powerchair.
- (29) Do not use the Powerchair as a seat in any vehicle.
- (30) Avoid driving close to shoulder of the road.
- (31) Always use low speed on downhill.
- (32) Do not cross the railway cross.
- (33) Be sure to be well trained with full practice before using the mobility products on road.

Remember! Give consideration to pedestrians whenever using the Powerchair. You are a motorized pedestrian and must observe all rules and regulations of other pedestrians wherever possible.

Important Notes

The Shoprider Powerchair is designed to assist in your individual mobility needs. Any usage outside of the guidelines in this manual may result in damage to the chair or injury to the user or third party.

Please do not lift the wheelchair by the armrests.

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Feature Guide (888WNLLHD)

Fig. 1



- (1) Armrests
- (2) Joystick Controller
- (3) Charging Port
- (4) Deluxe Reclining Captain Seat
- (5) LED Headlight
- (6) Indicator Light
- (7) Footplate
- (8) Front Castor
- (9) Drive Wheel
- (10) Rear Castor
- (11) Taillight

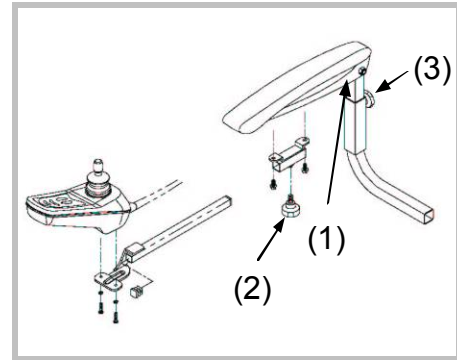


Getting to Know Your Shoprider Powerchair

The Seat and Arm Assemblies

ANGLE

Pull up on the end of the armrests and they will flip back up allowing easy transfer in and out of the seat. Under the armrest, there is a bolt and lock nut (1) that can be adjusted up or down to change the angle of the armrest.



LENGTH (Adjustable Controller Bracket)

Located under the armrest controller bracket is a hand knob (2). By turning counter-clockwise to release, the controller bracket can be extended and reset in position by re-tightening the hand knob.

HEIGHT

The vertical square tube connected with the armrest can be reset to the desired position by re-tightening the hand knob (3) for armrest height adjustment.

WIDTH

Beneath the rear of the seat there are two hand knobs, one on each side. Release the hand knob and slide each arm assembly outward. Re-tighten the hand knob when in the desired position.

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The Joystick Controller (Shark)

On / Off Button (1)

This button turns the joystick controller (hereinafter referred to as Shark joystick) on and off. Do not use this button to stop the Powerchair, except in an emergency.

Speed Decrease Button (2)

This button decreases the maximum speed.

Speed Increase Button (3)

This button increases the maximum speed.

Horn Button (4)

This button operates the Powerchair's horn.

Battery Gauge (5)

This is a 8-segment display, which indicates if the Shark joystick is switched on and gives the state of charge of the battery.

Maximum Speed Indicator (6)

This is a 5-segment display, which indicates the maximum speed setting selected.

Attendant Control LED (7)

When the Attendant Remote is activated, the ACU LED will light up and remain lit until the attendant switches back to user mode.

Service Indicator LED (8)

The amber Service Indicator LED is dedicated to displaying joystick Flash Codes. For a list of Flash Codes and what faults they indicate. Refer to Table 1 for more details.

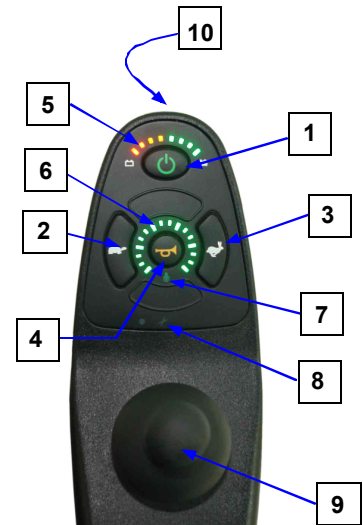
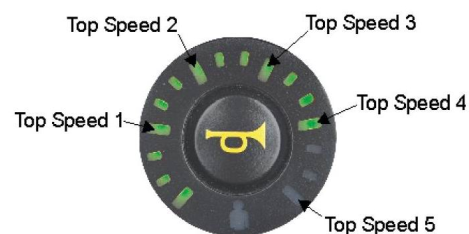


Fig. 2



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Joystick (9)

This controls the speed and direction of the Powerchair. Push the joystick in the direction you want to go. The further you push it, the faster the speed will be. Releasing the joystick will automatically engage brakes and stop the Powerchair.

Charging Port (10) for Off-Board Charger

Only plug a Shoprider certified charger into this port. This port should not be used as a power supply for any other electrical devices. Disregarding this will void the warranty of the Powerchair.

Light Switch Panel

(1) Hazard Warning Switch

A red button operates all indicators flashing.

(2) Headlight Switch

A blue colored button operates the headlights & taillight

(3) Indicator Switch

Operates turn indicator lights.





Getting Ready to Drive

STEP 1 Press the On / Off Button, then the joystick will turn on after the Battery Gauge blinks for about a second.

STEP 2 Press the Speed Increase / Decrease Button to set up a suitable level that you can maneuver the Powerchair easily.

NOTE! The Powerchair will not move and the Battery Gauge will blink if you push the joystick before or right after you turn the joystick on. To restore the normal operating status, you have to release the joystick immediately back to its center position. If you do not release the joystick within five seconds, the Battery Gauge will flash rapidly. The Powerchair must be powered off and then turned back on again.

STEP 3 Push the joystick to control the speed and direction of the Powerchair.

NOTE! Choose an area with plenty of space to ride the Powerchair. Select the low level of the maximum speed setting until you are familiar with the controls. In a short time you will be in total control and can then increase the speed in steps.

STEP 4 Release the joystick whenever you want to stop the Powerchair.



Locking/Unlocking the Shark Joystick

LOCK MODE: The Shark joystick can be locked to prevent unauthorized use. The locking method is achieved through a sequence of key presses and joystick movements, as detailed below.

To lock Powerchair controller:

- While the power is ON, press and hold the Power button for 4 seconds.
- This display will turn off immediately.
- After 4 seconds all LED's will flash briefly and the horn will sound a short beep.
- The Powerchair will then turn off.

To unlock the Powerchair controller:

- While the Shark joystick is locked, press the Power button to turn Shark joystick on.
- All LED's will flash briefly. The Battery Gauge LED's will then perform a slow right-to-left chase.
- Press the Horn button twice before the countdown is completed (approximately 10 seconds).
- This current state-of-charge will then be displayed and Shark joystick may be operated normally.

SLEEP MODE: After a certain amount of time with no joystick movement, the joystick will automatically turn itself off. Sleep mode will not be entered while programming. When Wakeup style has been set to "Joystick and Button", pressing ANY button ONLY will bring the system out of sleep mode.

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Engaged/Disengaged Mode

The free wheel release lever (yellow handle) is located inside the right / left rear wheel. To disengage the motor, lift up the lever (the Powerchair can now be pushed). To re-engage the motor push down on the lever.

***WARNING! Always re-engage the free wheeling device after use.
Failure to do so may result in injury.***

Anti-tip wheels

The anti-tip wheels are located at the rear of the Powerchair frame. The Powerchair should not be used unless the anti-tipping wheels are in place.

The original manufacturer and the importer of the Powerchair is not responsible for damage or injury incurred due to improper or misuse of the Powerchair.

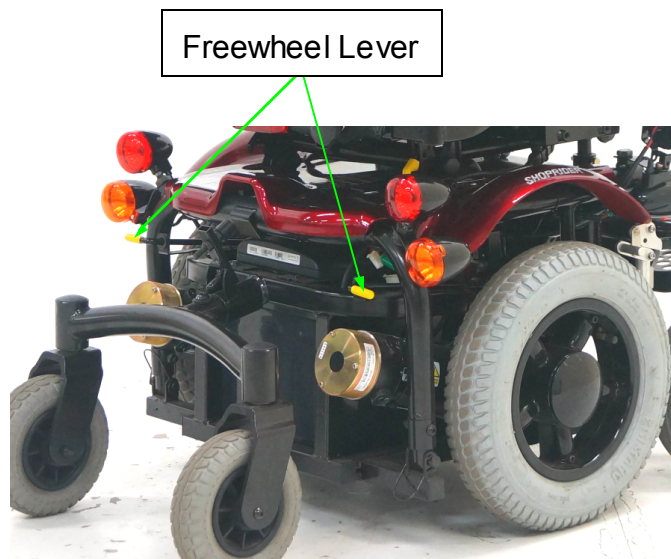


Fig. 3

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Driving Your Powerchair

Ramps, Slopes and Cambers

The indoor/outdoor Powerchair has the ability to negotiate ramps, slopes and cambers of a low to medium gradient. It is of the utmost importance that the following points are observed:

1. **Never** attempt to go up or down an incline which has a rough, wet or slippery surface (loose gravel, tree roots, wet grass, polished floor, etc.)
2. **Always** approach an incline head on, not at an angle
3. **Always** travel at a speed that you are comfortable with and that you feel in complete control
4. **Avoid** sudden or erratic action with the joystick
5. **Always** have the reclining seat in the most upright position when driving up an incline
6. When riding along in a straight line you may experience “veering to one side”. This is due to the natural camber in the construction of the pavement. To correct this you simply have to steer slightly against it, as you continue to move forward

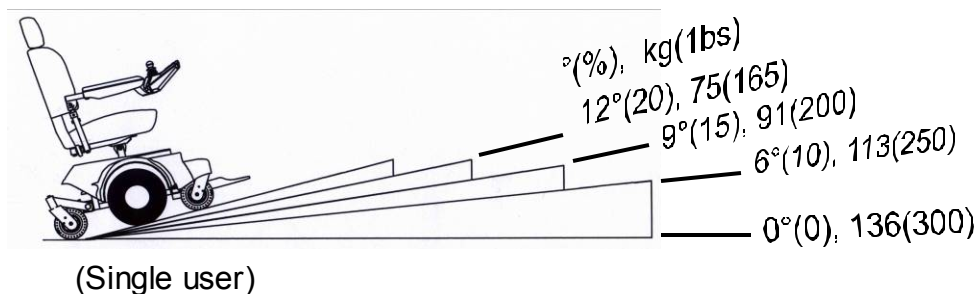


Fig. 4



Caring for Your Powerchair

First Time Use

Prior to using your Powerchair for the first time, you must charge the batteries fully (refer to Battery Charging Procedures). Charging may take up to 12 hours. Charging the batteries completely prior to first time use will benefit battery efficiency and battery life.

Tires

Since your tires are flat free tires, there is no need to ever worry about tire air-pressure. When tread is worn, it is highly recommended to replace tires.

General Maintenance and Lubrication

- Inspection for loose wheel bolts, seat and arm tightening bolts, castor nuts and other nuts and bolts is recommended on a regular basis.
- Most lubricated components on the Powerchair are designed to be maintenance free and are sealed. Therefore, lubrication is not required for these components. However, the driving wheel axles and seat post should always have a very light coat of multi-purpose grease. ****NOTE**** Never put grease or oil in the breather cap located on the top of each worm gear.

DO NOT USE TOO MUCH GREASE!

Drips may stain or damage carpets, furnishings, etc.


- It is recommended that the driving axles (inside the drive wheel assembly) and castor assemblies be checked and cleaned occasionally for hair and debris build-up, which will hinder the performance of the unit.
- Check the 888WNLLHD's batteries on a regular basis. For extended battery life, it is highly recommended that the batteries be fully charged after each use. If the batteries are weak, severely discharged or old, a variety of problems may occur with the unit including charging problems, reduced speed, loss of range, loss of charge capacity and others. Please contact your provider for battery replacement and proper disposal. **Note:** Charging your batteries daily will enhance the life of your batteries. If the batteries are left unattended for extended periods of time, it is recommended that they be left in a fully charged state. Leaving your batteries in a discharged state, or not charging them regularly will diminish the life of your batteries and cause irreversible damage to your batteries.



Batteries & Battery Charging

The Powerchair is supplied with 12 Volt 50Ah x 2 sealed lead acid, maintenance free batteries. These are located under the seat in the center of the Powerchair. For easy handling, Velcro or plastic carrying straps may be provided to assist in installation or removal of the batteries. The duration of the batteries can be affected by temperature, terrain and weight of the user. The Battery Gauge is a guide on the remaining charge in the batteries.

The active user will need to charge the batteries after using approximately more than 30% of battery capacity. As an inactive user, only using from once a week to every other day, the recharge point would be at 50% of discharge.

 A semi-circular battery gauge with a black face. It features a green power button icon in the center. Around the perimeter are several colored LEDs: green, yellow, and red. On the left and right sides of the gauge are small battery icon symbols.	<p>The Battery Gauge is used to indicate power on and provides an estimate of the remaining battery capacity.</p> <p>Any green LEDs lit indicate well charged batteries.</p> <p>If only amber and red LEDs are lit, the batteries are moderately charged. Recharge before undertaking a long trip.</p> <p>If only red LEDs are lit, the batteries are running out of charge. Recharge as soon as possible</p>
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Batteries should be kept fully charged at all times. They must not be left in a discharged state if not using the unit for some time. The batteries should be checked once a month and recharged as needed.

Warning!

- Batteries contain acid and can explode. Always wear eye protection when working near batteries.
- Always keep battery terminals and clamps clean and free of corrosion.
- Never alter battery wiring or battery box.
- Never allow tools to make contact across terminals.
- Never use batteries or clamps with wing nut terminals, or clamps that exceed terminal post height.
- Do not smoke or use open flames when battery box lid is open.
- Only deep cycle, sealed case construction batteries should be used in this device.



Batteries & Battery Charging

How to Charge Your Unit

1. Make sure that the main switch on the charger is in the off position.
2. Connect the charger to the charging port at the front of the Shark (item 10 in Fig.2)
3. Plug the charger into the wall outlet.
4. Turn the main switch on the charger to the on position.

Battery Charger

The battery charger supplied is special to your Powerchair, and may not be suitable for any other power mobility product. Use only the charger supplied with your Powerchair; other marks of chargers may permanently damage your Powerchair batteries, and would void the warranty. All the information of battery charger and its operation instruction shall be referred to the user manual attached with the charger in its packaging paper box.

Battery Information

1. Make sure to use two batteries of the exact same chemistry, amp hours, and capacity.
2. Fully recharge new batteries prior to initial use.
3. It is recommended that the batteries be charged for 8 to 14 hours after daily use.
4. If the power chair is used infrequently (Once a week or less) the batteries will need to be charged once a week for 12 to 14 hours.
5. Do not charge the batteries for more than 24 hours at a charging cycle.
6. Batteries that go below a minimum voltage due to not being charged will be unable to be re-charged.
7. If you do not plan on using your power chair for an extended period it is recommended that you fully charge the batteries and then disconnect the battery harness prior to storage. Store the power chair in a warm dry environment. Never store the batteries where extreme temperatures are possible. Never attempt to charge a frozen battery. A cold or frozen battery should be warmed for several days prior to charging.

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Troubleshooting



The Self-Help Guide (Table 1) is intended to assist in the location of a fault that may occur in a certain part of the Powerchair. Flash codes indicate the nature of an abnormal condition directly from the Shark joystick Information Gauge. Without the use of any servicing tools, the condition can be simply diagnosed.

If after checking out the fault from the table below and the fault is still showing, do not use the Powerchair. Turn off the power and consult your provider immediately.

Table 1

Flash Code	Description	
1	User Fault	Possible stall timeout or user error. Release the joystick to neutral and try again.
2	Battery Fault	Check the batteries and cabling. Try charging the batteries. Batteries may require replacing.
3	Left Motor Fault	Check the left motor connections and cabling.
4	Right Motor Fault	Check the right motor connections and cabling.
5	Left Park Brake Fault	Check the park brake connections and cabling.
6	Right Park Brake Fault	Check the park brake connections and cabling.
7	Shark Remote Fault	Check the Shark Communications Cable. Replace the Remote.
8	Shark Power Module Fault	Check the Shark joystick connections and wiring. Replace the Power Module.
9	Shark Communications Fault	Check for possible low battery. Check the Shark joystick connections and wiring. Check for worn motor brushes. Replace the Remote.
10	Unknown Fault	Check all connections and wiring. Consult a service agent.
11	Incompatible Remote	Wrong type of Remote connected.



Specifications

Table 2

Model Name	888WNLLHD	
Overall Dimensions: L ¹ x W x H	mm(in)	1114(44) x 670(26) x 1195(47)
Front Caster	pcs x in	2 x 9
Drive Wheel	pcs x in	2 x 14
Rear Caster	pcs x in	2 x 7
Suggested User Weight (on the Level Road)	Kg(lb)	136(300)
Total Weight (w/ Batteries, Basket, Seat)	Kg(lb)	114(251)
Battery Capacity	_V_Ah x Pcs	12V 50Ah x 2
Charger	V_Amp	Off Board, 8A
Rated Power of 4-pole Motor (Reference Only)	W(Hp)	Max. 700(0.9) x 2
Max. Speed ²	Kph(mph)	11~12(6.9~7.5)
Safe Climbing Angle	Degree(%)	Fig. 4
Range ³ per charge (Battery Capacity)	Km(mile)	26~28(16~18)

As a part of our ongoing product improvement initiative, Shoprider reserves the right to change specifications and design without prior notice. All specifications and dimensions are approximate.

¹Includes the anti-tip wheel.

²The actual driving range varies with the factors shown below:

1. The weight of the user
2. Ground surface condition
3. Battery condition
4. Type of charger
5. Ambient temperature
6. Driving style
7. Terrain
8. After battery and mechanical moving parts have broken in

Proceed up any incline with seat in upright position



Notes



Disclaimer

Congratulations on receiving the Powerchair.

This Powerchair is not intended to be used by individuals with physical limitations that could prevent the user from operating the Powerchair safely. *SHOPRIDER*® disclaims all responsibility for any personal injury or property damage, which may occur as a result of improper or unsafe use of its products. Mechanical or electrical defects will be dealt with on a contingency liability basis.

Warranty is only valid when genuine *SHOPRIDER*® parts are used. All modifications on the Powerchair, unless approved and authorized by *SHOPRIDER*® will automatically invalidate the warranties. Standard warranty does not extend to consumable items and parties other than the original user.

The preceding guidelines are intended to assist you in the safe operation of this Powerchair. If you should have any questions about the correct operation of the Powerchair, please contact your authorized *SHOPRIDER*® provider.

Provider Stamp

Serial No.: