



# SHOPRIDER®

## Mid-wheel Powerchair USER MANUAL



Model Name :  
**6Runner 14HD (888WNLLHD)**



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## INTRODUCTION

Congratulations on insisting on the best. Shoprider Powerchairs are the ultimate combination of style and comfort. The 6Runner features support easy maneuverability and smooth control for today's active lifestyle.

The innovative design of the 6Runner 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 6Runner. Combine this with the programmable joystick controller, fully adjustable footplate and arm assemblies, flat-free tires, deluxe (reclining) captain seat, easy access batteries and quick-change color shrouds. For a complete powerchair package we know that your 6Runner Powerchair will provide, many years of mobility, and freedom to go out into the world.

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.



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## 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. This 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.**



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## **Powered Chair Electromagnetic Interference (EMI)**

Because EM energy rapidly becomes more intense as one moves closer 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 Powerchair movement and braking. Therefore, the warnings listed below are recommended to prevent possible interference with the control system of the Powerchair.

### **WARNINGS**

1. Do not operate hand-held transceivers (transmitters-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 close contact.
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 Powerchair.**

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



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## Safety Instructions

1. **Do not** drive the Powerchair without reading this manual.
2. **Do not** exceed the safe climbing maximum angle (Fig. 4).
3. **Do not** use the joystick in an erratic manner when going up or down an incline.
4. **Do not** carry passengers or exceed the maximum weight limit (Table 2).
5. **Do not** turn off the joystick controller by switching the On/Off Button when moving at any speed. This will bring the electromagnetic brakes on immediately and could cause damage to the joystick controller.
6. **Do not** drive over uneven and soft terrain (soft dirt, loose gravel, deep grass).
7. **Do not** attempt to mount a curb height above 2 inches.
8. **Do not** mount or dismount the Powerchair unless the electromagnetic brakes are engaged and the joystick controller is off.
9. **Do not** operate the Powerchair if the unit is in freewheel mode.
10. **Do not** use on the road, except when crossing between sidewalks.
11. **Do not** sit on the Powerchair when in a vehicle, but transfer to a vehicle seat.
12. **Do not** exceed any grade over 6 degrees (10%).
13. **Always** stop fully before changing forward or reverse direction.
14. **Always** engage a slow speed when going down gradients (move the joystick slowly towards center position to reduce the speed).
15. **Always** approach and climb over curbs at slow speed.
16. **Always** approach curbs and gradients at 90 degrees.
17. **Always** use the safety belt.
18. **Always** keep feet on the footrest while driving.
19. **Always** make sure the batteries are fully charged before setting out on a journey.
20. **Always** charge the Powerchair in a well ventilated area to prevent any possible risk.



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21. **Always** check that the drive wheels are engaged. Someone may have left the Powerchair in freewheel mode.
22. **Always** reduce your speed when turning sharply.
23. **Avoid** turning sharply on a slope or gradient.
24. To brake in an emergency simply release the joystick.
25. **Always** try to find a “dropped curb” or “curb cutout” whenever possible.
26. **Always** keep your Powerchair properly maintained.
27. **Never** try to use your Powerchair beyond it’s limitations as described in this manual.
28. **Always** put seat in most upright position whenever driving up an incline.

## **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.**

## **First Time Use**

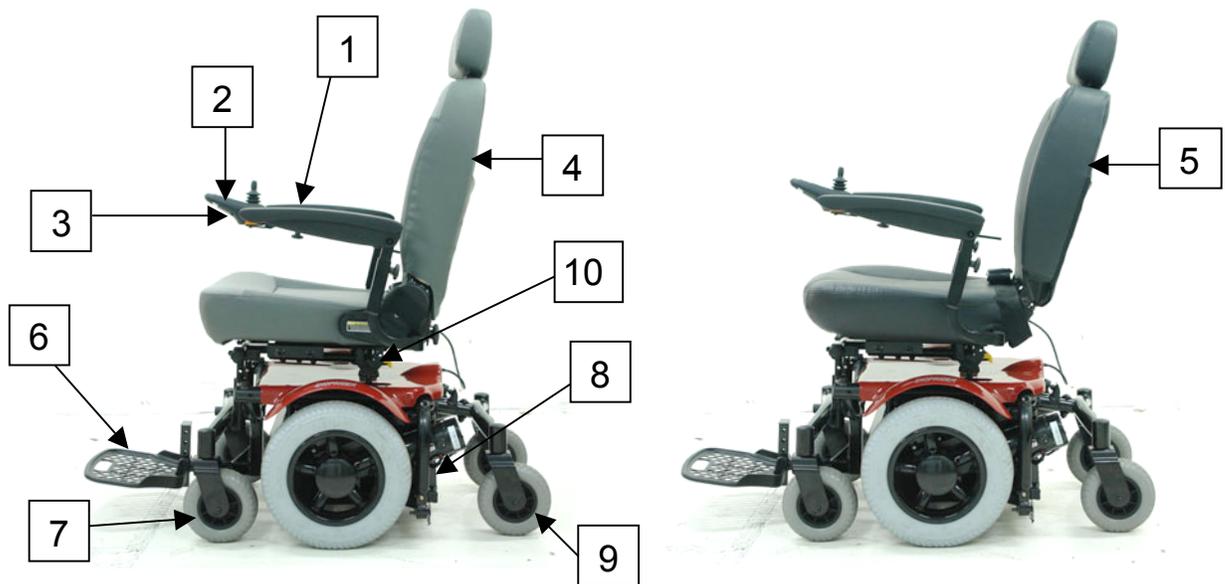
Prior to using your 6Runner Powerchair for the first time, you must charge the batteries fully (refer to Battery Charging Procedures). Charging may take up to 12 hours. Charging the batteries completely prior to first time use will benefit battery efficiency and life of batteries.



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## Feature Guide

**Figure 1**



- (1) Removable Armrests with Width, Height & Angle Adjustment (Flips Up for Easy Sideways Transfer)
- (2) Programmable VR2 Joystick Controller with Adjustable speed & Battery Life Indicator.
- (3) Charging Port
- (4) 21\*21 Deluxe Reclining Captain Seat Deluxe Captain Seat (Option 1)
- (5) 23\*19.5 Deluxe Wider Captain Seat (Option 2)
- (6) Adjustable Length, Height, Angle Foot Plate
- (7) Front Castor Assy (7" flat free tire)
- (8) Frame Serial Number (13 alphanumeric characters)
- (9) Rear Castor Assembly (7" flat free tire)
- (10) Adjustable Seat Height

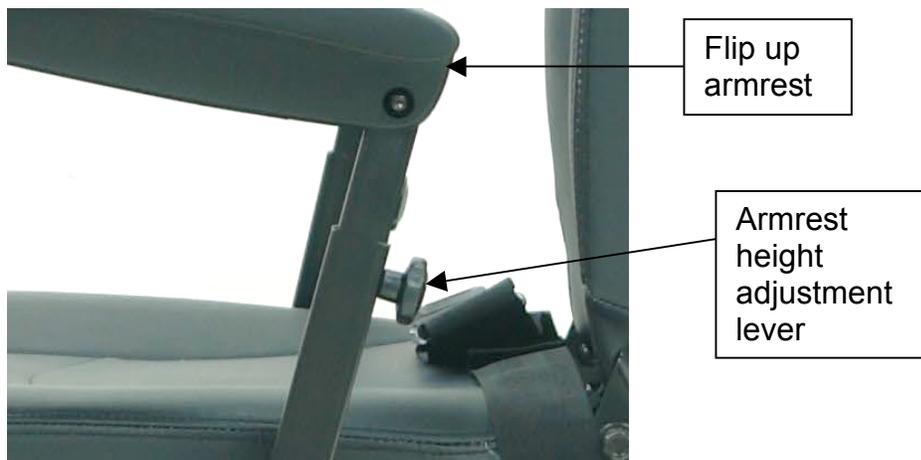


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## Getting to Know Your Shoprider Powerchair

### The Seat and Arm Assemblies

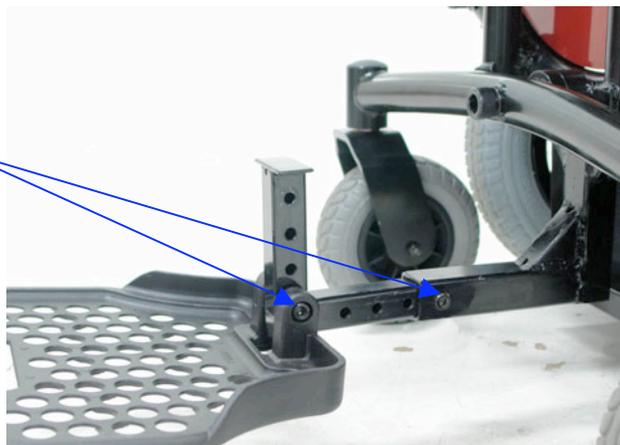
The seat is built for comfort, style, and stability. Your seat comes with a reclining back for comfort. The flip-up arm-rests are especially built for easy side access for getting in and out of your 6Runner, with the greatest of ease. The arm-rests have a built in height adjustment knob, that adjusts the arm pad to a comfortable level for the driver. The seat is covered in a durable long lasting black/grey vinyl for comfort and style.



### Adjustable footplate

The footplate adjusts to fit to the users size and comfort. It adjusts length and height wise to help in comfort and stability for the user. Using hex key wrench and stamped wrench to remove locking bolt and nut from the receiver.

Remove locking bolt and nut and make the adjustments of the length and height of the footplate





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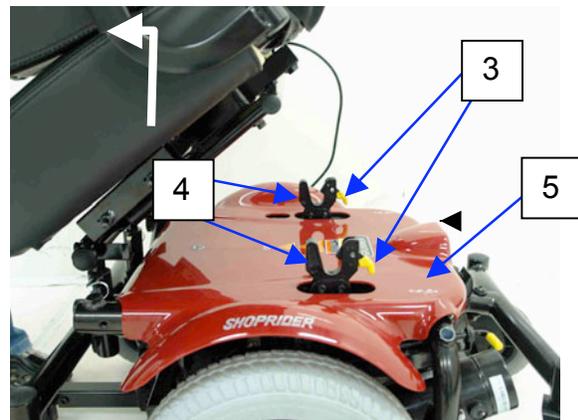
## Seat Height Adjustment And Easy Battery Access

1. Tightening knob that allows for the seat to be removed if needed, if not, there is a pivot point that allows for the seat to move up and away from the base.



2. Adjustment pins that can be used to adjust the height of the seat to fit the user.

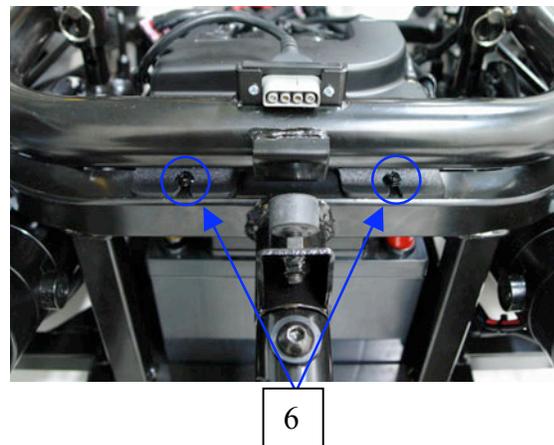
3. Release levers; allow for the rear of the seat to be lifted and moved away from the base for easy battery access, without removing entire seat.



4. U-Hooks hold the seat in place.

5. Bottom shroud is easily popped off, to allow for battery access.

6. Hex head screws that are used to fasten the mounting plate for main controller. Batteries can be easily accessed and changed after the removal of main controller assembly.

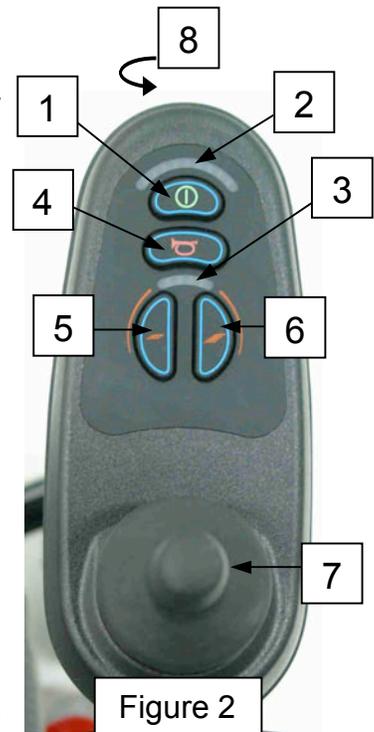




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## The Joystick Controller (VR2)

1. **On-Off Button:** This button turns the joystick controller (hereinafter referred to as VR2) on and off. Do not use this button to stop the power chair, except in an emergency.
2. **Battery Gauge:** This is a 10-segment display, which indicates if the VR2 is switched on and gives the state of charge of the battery. Additionally, any faults in the Powerchair electrical system are also indicated by this display. Refer to Table 1 for more details.
3. **Maximum Speed Indicator:** This is a 5-segment display, which indicates the maximum speed setting selected.
4. **Horn Button:** This button operates the Powerchair's horn.
5. **Speed Decrease Button:** This button decreases the maximum speed.
6. **Speed Increase Button:** This Button Increases the maximum speed.
7. **Joystick:** 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 the brakes and stop the Powerchair.**
8. **Charging Port:** This is the primary charging port for the 6Runner. When using this charging port only plug into this port with the qualified Shoprider charger certified by the original manufacturer of the Powerchair. This port should not be used as a power supply for any other electrical devices. Doing either of these as stated above will void the warranty of the Powerchair.



**Note:** The controller can be fitted to suit either right or left-handed users. Please contact your provider for further assistance.



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## Locking/Unlocking the VR2 Joystick

### \*\*\*\*PLEASE NOTE\*\*\*\*

**LOCK MODE:** The VR2 controller may be programmed to have a lock mode function enabled 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 controller is switched on, depress and hold the on/off button.
- After 1 second the controller will bleep. Now release the on/off button.
- Push the joystick forward until the controller bleeps.
- Push the joystick in reverse until the controller bleeps.
- Release the joystick, there will be a long bleep.
- The Powerchair controller is now locked.

#### To unlock the Powerchair controller:

- Use the on/off button to switch the controller on. The maximum speed/profile indicator will be rippling up and down.
- Push the joystick forward until the controller bleeps.
- Push the joystick in reverse until the controller bleeps.
- Release the joystick, there will be a long bleep.
- The Powerchair is now unlocked.

**SLEEP MODE:** If the controller is left on and not used for more than ten minutes, the controller will automatically “go to sleep”. This is recognized by a slow intermittent flash of the battery indicator lights. Simply turn the controller off and back on to reset.

**function while the drive mechanism is disengaged (in freewheel).**

**Both left and right sides must be in drive mode for power chair to operate. Otherwise the Powerchair motors will spin, but the unit will not move, until both freewheel levers are engaged. Unit will spin in circles if only one side is in drive mode.**

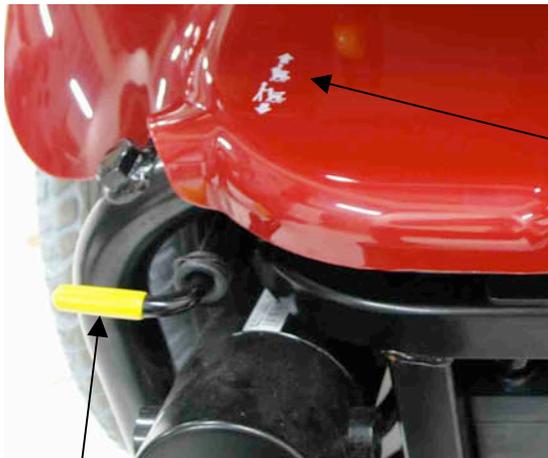
**\*\*\* DO NOT PUT INTO DRIVE MODE WHILE MOTORS ARE SPINNING \*\*\*\***



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The drive/freewheel levers are found toward the rear of the Powerchair (Figure 3). These levers will allow you to disengage the drive mechanism (When the levers are **pulled out** away from the unit) the Powerchair is in freewheel mode. **\*\*\*NOTE\*\*\*** the VR2 will not work in Freewheel mode. When the levers are **pushed in** (towards the inside of the unit) the motors are engaged and the powerchair is in drive mode.

FIGURE 3



Sticker will also help indicate in which position the brakes are locked or unlocked.

Freewheel lever **\*\*NOTE\*\*** There is a lever on opposite side



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## **Driving Your Shoprider 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

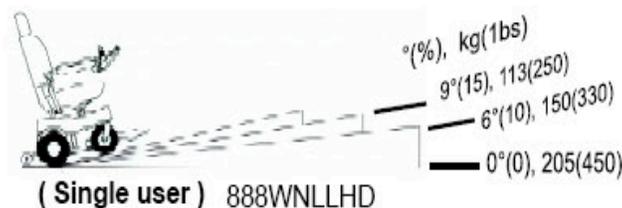


FIGURE 4



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## **Caring for Your Shoprider 6Runner 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.



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## **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 6Runner'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

### Batteries

The Shoprider 6Runner Powerchairs are designed to operate on two 12 volt / 50Ah or 75Ah sealed lead acid aka SLA (AGM or gel-cell type) maintenance free batteries. The life of the batteries may be affected by temperature, terrain, weight of user, driving methods, and care of batteries. The active user will need to charge the batteries after using approximately 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 (Refer to Figure 5). For extended battery life, it is highly recommended that these guidelines be followed. You cannot over charge the batteries.

- Active users: Charge daily
- Occasional users: Charge your battery before any outing and always after active use.

### **\*Keeping the batteries charged extends the life of the batteries\***

SLA batteries should be kept fully charged at all times. They must not be left in a discharged state if the unit is not being used for some time or the batteries will be permanently damaged and will no longer hold a charge. The SLA batteries should be checked once a month and kept charged as needed. Typically SLA batteries have up to about 400 charging cycles.

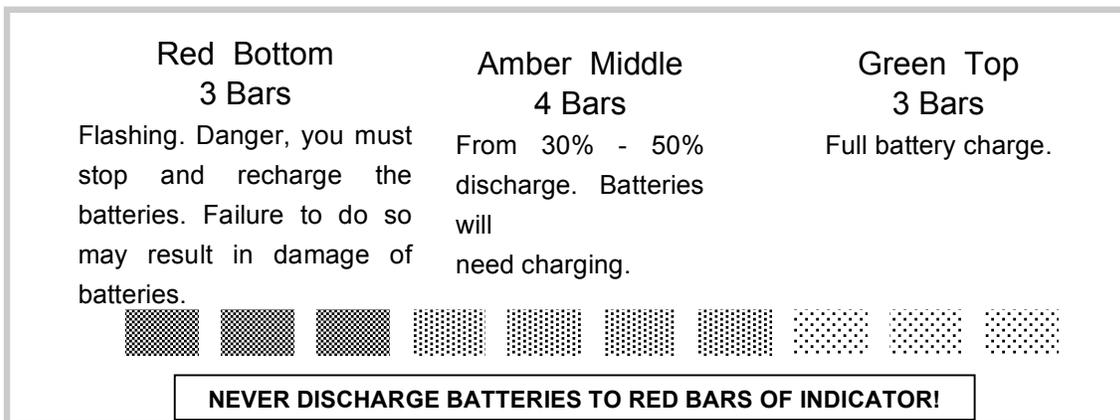


Figure 5



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## Batteries & Battery Charging

### BATTERY CHARGING (UNITS EQUIPPED WITH OFF-BOARD CHARGER)

Familiarize yourself with the safety information below prior to using the battery charger.

#### SAFETY INFORMATION

1. Read the battery charger instructions in this manual and in the manual supplied with the charger prior to charging the batteries.
2. Do not remove the grounding prong from the plug. Removal of the grounding prong could result in an electrical hazard.
3. Only plug the charger into a 3-pronged electrical outlet, or an approved 3-pronged adapter for use with a 2 pronged electrical outlet.
4. Make sure that the wall outlet being used is not controlled by a wall switch that can be easily turned off.
5. Do not use an extension cord to plug in the charger.
6. Do not leave the charger plugged into the charger port if the charger is not charging the unit.
7. Use only the off-board charger supplied with this unit. Never use an automotive type battery charger. Contact your supplier if a replacement off-board charger is needed.
8. Inspect the battery charger, wiring and connections for damage prior to each use.
9. Do not open the battery charger case.
10. The battery charger is supplied with cooling slots. Do not insert objects through the slots.
11. Make sure that the charger is not in contact with inflammable materials at any time.
12. The off-board charger is for indoor use only.
13. Explosive gases may be generated while charging the batteries. Keep the power chair and battery charger away from sources of ignition such as flames or sparks and provide adequate ventilation when charging the batteries.
14. Do not allow children to play near the power chair while the batteries are charging. It is also recommended that the batteries not be charged while the power chair is occupied.



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## Batteries & Battery Charging

### CHARGING INSTRUCTIONS

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 VR2 (item 8 in Figure.2)
3. Plug the charger into the wall outlet.
4. Turn the main switch on the charger to the on position.

### CHARGER INDICATION LIGHTS

Blinking Green – Power on at stand-by mode,

Steady Orange – Battery charging,

Steady Green – Charging complete.

Please refer to the LED indicator description based on charging status of the charger.

### 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.



## 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.

If after checking 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**

BATTERY GAUGE	POSSIBLE FAULT
10 Bars flash	An excessive voltage has been applied to the control system. This is usually caused by a poor battery connection.
9 Bars flash	The parking brakes have a bad connection. Check the parking brake and motor connections.
8 Bars flash	A control system fault is indicated. Make sure that all connections are secure.
7 Bars flash	A joystick fault is indicated. Make sure that the joystick is in the center position before switching on the control system.
6 Bars flash	Battery charger connected.
5 Bars flash	Right-hand motor wiring fault.
4 Bars flash	Right-hand motor disconnected.
3 Bars flash	Left-hand motor wiring fault.
2 Bars flash	Left-hand motor disconnected.
1 Bar flashes	Low battery voltage.

### **Battery/ Charging Troubleshooting**

– If the charger indicator light goes to green within a few minutes after being plug in and doesn't charge the batteries the batteries may be over discharged and may require additional service or replacement. Contact your provider for assistance.

If the charger indicator light goes immediately to green when plugged in to charge, the problem is likely a blown fuse, popped circuit breaker (push reset button) or similar. Contact your provider for assistance. If the charger does not come on at all when plugged in, check the charger fuse if applicable, then call your provider.



## Specifications

**Table 2**

	<b>6Runner 14 888WNULLHD</b>
<b>Overall Dimensions: L<sup>1</sup> x W x H</b>	41" x 25" x 46"
<b>Total Weight of Unit With Standard Captain Seat and Batteries</b>	233 Lbs. (w/ 50Ah batteries)
<b>Maximum User Weight</b>	450 Lbs.
<b>Battery Capacity</b>	12v – 50Ah x 2
<b>Charger</b>	Off Board, 5 amp
<b>Maximum Speed</b>	Approx 3.1-3.8 mph
<b>Safe Climbing Angle, Maximum Single User Weight</b>	Refer to figure 4
<b>Range<sup>2</sup></b>	16.3-17.5 Miles
<b>Turning Radius</b>	23.5 Inches
<b>Seat to floor height (Adjustable)</b>	24",25",26"
<b>Ground Clearance</b>	2.75"
<b>Output Power of Motor x2 (Reference Only)</b>	1.34 hpx2

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.

<sup>1</sup>Includes the anti-tip wheel.

<sup>2</sup>The 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\*



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**Note**



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## Disclaimer

Congratulations on your purchase of the Shoprider 6Runner 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.

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 guidance is 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.



# SHOPRIDER®

Model Name- 6Runner 14HD (888WNLLHD)

Provider Stamp

Serial No.: \_\_\_\_\_

Shoprider Mobility Products, Inc.  
800-743-0772

[www.shoprider.com](http://www.shoprider.com)