

# SHOPPRIDER®

## Trooper USER MANUAL

Model # UL8W36





## Table of Contents

<b>INTRODUCTION</b> .....	<b>3</b>
<b>EMI WARNING</b> .....	<b>4</b>
ELECTROMAGNETIC INTERFERENCE FROM RADIO WAVES .....	4
POWERED CHAIR ELECTROMAGNETIC INTERFERENCE (EMI) .....	5
<b>SAFETY INSTRUCTIONS</b> .....	<b>6-7</b>
<b>FEATURE GUIDE</b> .....	<b>8</b>
<b>GETTING TO KNOW YOUR POWERCHAIR</b> .....	<b>9</b>
THE JOYSTICK CONTROLLER (VSI).....	9
LOCKING / UNLOCKING THE JOY STICK CONTROLLER.....	10
DRIVE/FREEWHEEL MECHANISM .....	11
USER TRANSFERRING.....	12
RECLINING SEAT .....	12
DISASSEMBLING/TRANSPORTING YOUR POWERCHAIR .....	13
<b>DRIVING YOUR POWERCHAIR</b> .....	<b>14</b>
<b>CARING FOR YOUR POWERCHAIR</b> .....	<b>15</b>
<b>BATTERIES AND BATTERY CHARGING</b> .....	<b>16</b>
BATTERY CHARGING PROCEDURES .....	17
<b>TROUBLESHOOTING</b> .....	<b>18</b>
<b>SPECIFICATIONS</b> .....	<b>19</b>
<b>QUARTERLY INSPECTION</b> .....	<b>20</b>
<b>DISCLAIMER</b> .....	<b>21</b>



## **INTRODUCTION**

Congratulations on insisting the best. The Shoprider Trooper Powerchair is the ultimate combination of style, comfort and user friendly. The compact features support easy transportation of your Shoprider Powerchair for today's active lifestyle. We know that your Powerchair will provide many years of mobility for you. Enjoy the freedom of mobility wherever you go!

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

# SHOPRIDER®



Figure 1

## 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.

# SHOPRIDER®

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.



## Safety Instructions

Please use your Powerchair to enhance your active lifestyle. With increased mobility, please observe a few rules to ensure safe operation of your Powerchair. So please...

1. **Do not** drive the Powerchair without reading this manual.
2. **Do not** exceed the safe climbing maximum angle (Table 2).
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 deep 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 the feet on the leg rest while driving.

# SHOPRIDER®

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.
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 Trooper 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 Trooper 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.

# SHOPRIDER®

## Feature Guide



**Figure 2**

- (1) Removable Armrests with Width, Height & Angle Adjustment (Flips Up for Easy Sideways Transfer)
- (2) Programmable VSI Joystick Controller with Adjustable speed & Battery Life Indicator.
- (3) Charging Port located at joystick controller and battery pack  
**(Warning: When charging at the battery pack do not turn on the joystick controller and try to operate the chair)**
- (4) Reclining Deluxe Captain Seat
- (5) Adjustable Length, Height, Angle Foot Plate
- (6) Front Castor Assy (6" flat free tire)
- (7) Frame Serial Number (13 alphanumeric characters)
- (8) Rear Drive Wheel (9" flat free tire)
- (9) Anti-tip Wheel
- (10) Shroud
- (11) Swivel seat lever



## Getting to Know Your Shoprider Powerchair

### The Joystick Controller (VSI)

1. **On-Off Button:** This button turns the joystick controller (hereinafter referred to as VSI) 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 VSI 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 a secondary charging port, in addition to the charging port located on the battery pack. 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.



## Locking/Unlocking the VSI Joystick

**LOCK MODE:** The VSI controller 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 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 beeps.
- Push the joystick in reverse until the controller beeps.
- 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 beeps.
- Push the joystick in reverse until the controller beeps.
- 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.

**Always leave the chair in drive mode.** The freewheel option is there only to allow the chair to be pushed manually when the need arises (i.e., to store or push unit out of a tight space). Following the sticker picture put each lever in the direction of the person sitting down driving the chair.

The Powerchair will not function while the drive mechanism is disengaged (in freewheel). In addition, the VSI-50 will flash a fault

# SHOPRIDER®

code and beep steadily if turned on. Refer to Table 1 for more details.

Both left and right sides must be in drive mode for power chair to operate. Otherwise the Powerchair will flash fault code of 9 lights and will not operate.

## Drive/Freewheel Mechanism

The drive/freewheel levers are found toward the rear of the Powerchair, both on top left and one on right. These levers will allow you to disengage the drive mechanism and push the Powerchair while in freewheel mode. (FIG. 4)

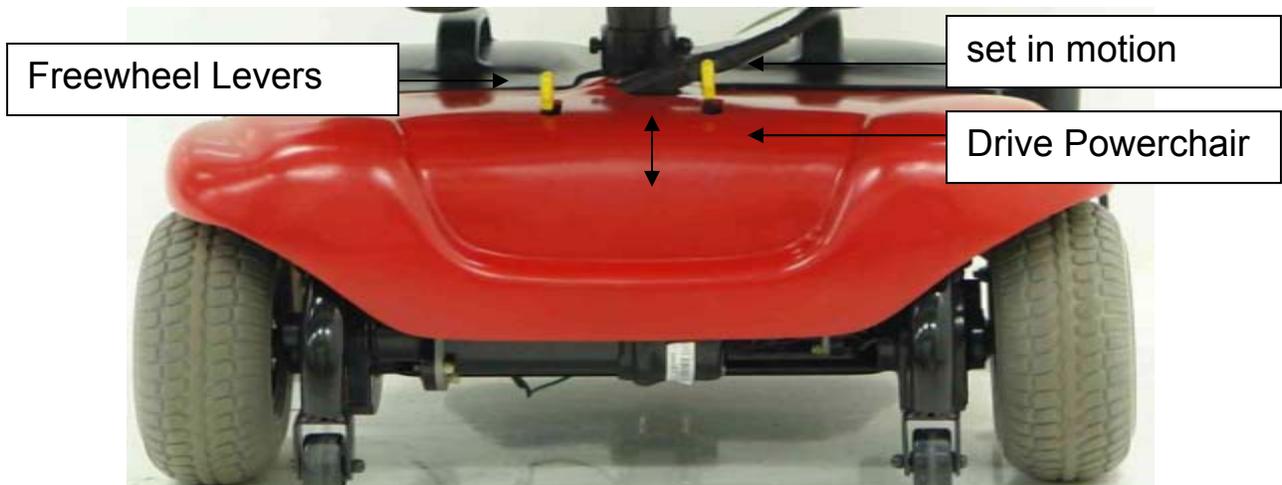


Figure 4

# SHOPRIDER®

## User Transferring

You can transfer either forward, left or right from your Trooper Powerchair. (Figure 5a)

The armrests are hinged and can be pulled up and out of the way for sideways transfer. For support, only use the armrest.

(Figure 5b)

**Do Not** use the seat back as support.



Figure 5a



Figure 5b

## Reclining Seat

The Trooper comes with a reclining seat. The reclining seat lever is located on the left side below the armrest. Simply pull the lever up to adjust.

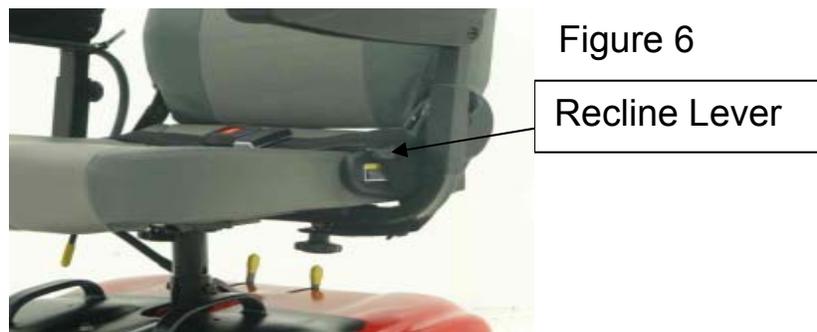


Figure 6

Recline Lever

# SHOPRIDER®

## Disassembling/Transporting the Shoprider Trooper Powerchair



Figure 7

Follow these simple guidelines for disassembly:

1. Park the Powerchair on a level
2. Ensure the wheels are locked in drive mode (Fig 4)
3. Fold up footplate
4. Unplug joystick controller from rear of unit
5. Remove seat by pulling the swivel seat lever up and off
6. Remove the battery pack: (Lift right battery up first and then the left)

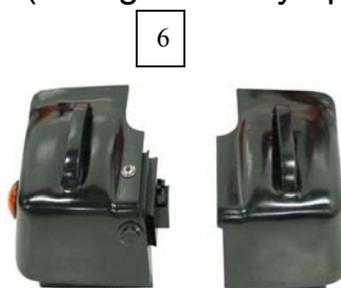


Figure 8

# SHOPRIDER®

## Driving Your Shoprider Powerchair

### Ramps, Slopes and Cambers

The Shoprider Trooper 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

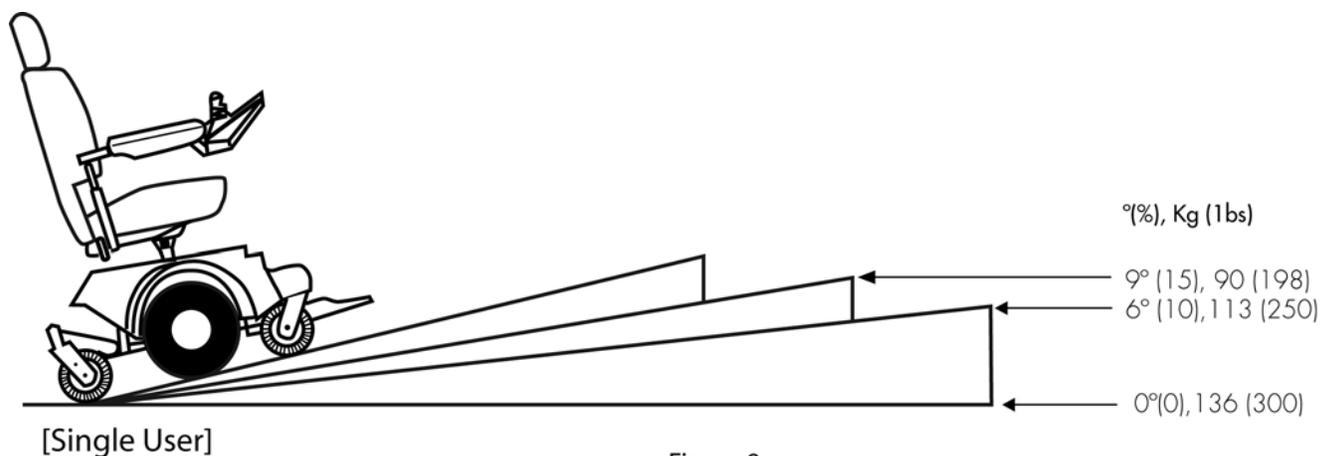


Figure 9



## **Caring for Your Shoprider Trooper Powerchair**

### **First Time Use**

Prior to using your Trooper 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.

### **Tires**

Since your tires are flat free tires, there is no need to ever worry about tire air-pressure.

### **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 Trooper 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.

#### **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 assy) and castor assemblies be checked and cleaned occasionally for hair and debris build-up, which will hinder the performance of the unit.
- Check the batteries on a regular basis. For extended battery life it is highly recommended that the batteries be fully charged after each use and that the battery pack always be turned off when not in 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.
- Active users: Charge daily
- Occasional users: Charge your battery before any outing and always after active use.



## Batteries & Battery Charging

### Batteries

The Shoprider Trooper Powerchair is designed to operate on two 12 volt/36Ah sealed lead acid (AGM or gel-cell type) aka SLA maintenance free batteries. For easy handling, the SLA batteries are contained within a battery-pack. The life of the batteries may be affected by temperature, terrain, weight of user, driving methods, and care of batteries. The battery gauge (Refer to Figure 3) is a guide on the remaining charge of the 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 10). For extended battery life, it is highly recommended that these guidelines be followed. You cannot over charge the batteries.

### **\*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 “charging space” within the batteries will be permanently lost (memory loss). The SLA batteries should be checked once a month and kept charged as needed. Typically SLA batteries have up to about 400 charging cycles.

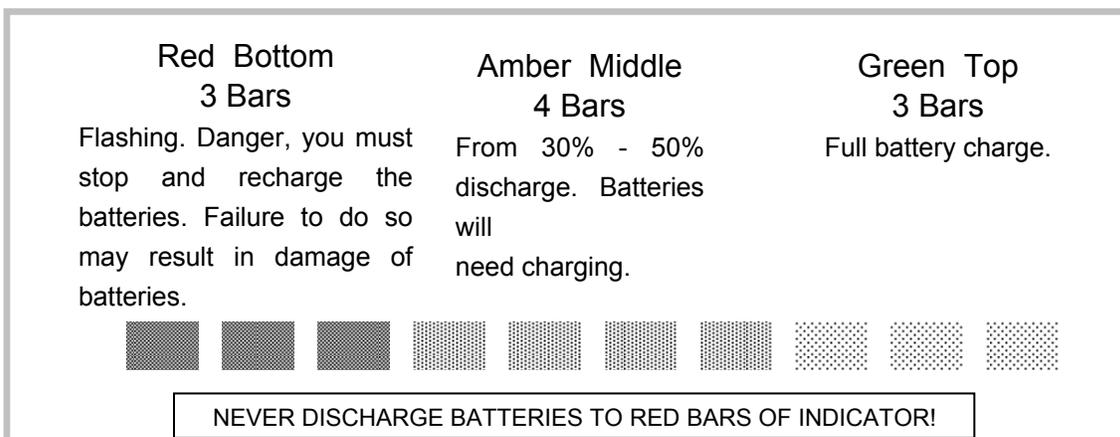


Figure 10



## **Battery Charging Procedure**

There are two ways to charge the Trooper Powerchair

### **Battery on chair charging method**

- 1) Plug the A/C power cord into the wall. Plug the male three-pin charger plug into the female 3-pin receiver located on the bottom of the VSI (Refer to Figure 3, #8).

### **Battery off chair charging method**

- 2) Remove the battery-pack from the unit. Plug the A/C power cord into the wall. Located on the battery-pack is a charger port. Slide the charger port cover over to expose the charger female 3-pin receiver. Plug the male three-pin charger plug into the female 3-pin receiver. It is not necessary for the battery-pack to be attached to the Powerchair to charge.

The battery charger's light indicator is as follows:

One light charger (4Amp)

Yellow/Amber - Charging

Green - Charging complete

NOTE: It is very important to check the charger light color. IF there is no light or a different color light on than should be, refer to the charging troubleshooting section in this manual. amount of battery  
Depending on the amount of battery discharge, the charge can take up to 12 hours. The battery charger has an electronic switch that will terminate the charge when the batteries are fully charged. Do not remove the battery charger until the charging cycle is complete. Be sure to unplug the charger from the wall first before unplugging charger from the Powerchair.

**WARNING! Only use the original manufacturer approved charger!**

**This charger is for indoor use only. Do not expose it to rain or water spray.**

**Do not leave the charger plugged into the Charging Port if the charger is not 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**

<b>BATTERY GAUGE FAULT CODE</b>	<b>POSSIBLE VSI-50 FAULT</b>
10 Bars flash	Battery voltage is too high, check the battery connections. <i>Call your Shoprider Provider</i>
9 Bars flash	Solenoid brake fault. <i>Check drive/freewheel levers.</i>
8 Bars flash	Possible controller fault. <i>Check controller connector. Call your Shoprider Provider.</i>
7 Bars flash	Possible joystick fault. <i>Be sure joystick is at center when controller is turned on. Call your Shoprider Provider.</i>
6 Bars flash	Battery charger connected. <i>Unplug charger.</i>
5 Bars flash	Right-hand motor wiring fault. <i>Check connections. Call your Shoprider Provider.</i>
4 Bars flash	Right-hand motor disconnected. <i>Check connections. Call your Shoprider Provider.</i>
3 Bars flash	Left-hand motor wiring fault. <i>Check connections. Call your Shoprider Provider.</i>
2 Bars flash	Left-hand motor disconnected. <i>Check connections. Call your Shoprider Provider.</i>
1 Bar flash	Low battery voltage. <i>Charge batteries immediately. Do not drive Powerchair until batteries are completely charged!</i>

### **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 or similar. Contact your provider for assistance.



## Specifications

**Table 2**

UNIT SPECIFICATIONS	Trooper UL8W36
<b>Overall Dimensions: L x W x H</b>	37" x 24" x 44"
<b>Number, Size of Front Tires</b>	2, 6 Inches
<b>Number, Size of Rear Tires</b>	2, 9 Inches
<b>Total Weight of Unit With Seat and Batteries</b>	160lbs
<b>Maximum User Weight</b>	300 Lbs.
<b>Battery Capacity</b>	12v – 36Ah x 2
<b>Charger</b>	Off Board, 4 amp
<b>Maximum Speed</b>	3.75 mph
<b>Safe Climbing Angle, Maximum Single User Weight</b>	Refer to figure 9
<b>Range 2</b>	13-15 Miles
<b>Turning Radius</b>	32.1 Inches
<b>Seat to floor height (Adjustable)</b>	19.5", 20.5", 22.5"
<b>Ground Clearance</b>	2.25"
<b>Weight of Heaviest Part</b>	60.3 Lbs (Powerbase)
<b>Battery/Battery Pack Weight</b>	30.15 Lbs X 2
<b>Output Power of Motor x2 (Reference Only)</b>	.45 hp

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\*



## QUARTERLY INSPECTION

For your own safety, quarterly inspection and service on the product with signature by an authorized dealer is strongly recommended. There may be a nominal dealer inspection fee for this service not covered by warranty. Maintenance records (below) should be kept at all times. The manufacturer / distributor / vendor will be indemnified from any product liability claim if the above maintenance / service requirement are not met.

**NOTE! Regular (Monthly) inspection is strongly recommended by the manufacturer to ensure ultimate performance of the vehicle.**

Service Record:

Date of Purchase:    /    /

Purchaser: \_\_\_\_\_

Model #: \_\_\_\_\_ Serial #: \_\_\_\_\_

Dealer Unit Was Purchased From: \_\_\_\_\_

<b>M / D / Y</b>					
<b>M / D / Y</b>					
<b>M / D / Y</b>					
<b>M / D / Y</b>					
<b>M / D / Y</b>					
<b>M / D / Y</b>					



## Disclaimer

Congratulations on your purchase of the Shoprider Trooper 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.



Notes:



Model Name- Trooper

Provider Stamp

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

Shoprider Mobility Products, Inc.  
800-743-0772

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

P/N SMP022008