

# **SHOPRIDER®**

## **Folding Power Chair**

**PHFW-1118 PHFW-1120**

**PHFW-1018 PHFW-1020**



## **OWNER'S MANUAL**

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## INTRODUCTION

Congratulations on insisting the best. The Shoprider folding power chair is the ultimate combination of style and comfort. The compact folding feature supports easy transportation of your Shoprider power chair for today's active lifestyle. We hope that it will provide many years of mobility for you.

This manual contains important information regarding the safe use of the Shoprider folding power chair. Please read it carefully before using 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 (EMI) 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 power chair.**

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

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

### **WARNINGS**

The following warnings listed below should reduce the chance of unintended brake release or power chair 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 power chair 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 power chair OFF as soon as it is safe.
4. Be aware that adding accessories or components, or modifying the power chair 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 the power chair provider, and note whether there are sources of EMI nearby.

## Safety Instructions

Please do use the folding power chair to enhance your active lifestyle. With increased mobility, please observe a few rules to ensure safe operation of your folding power chair. So please...

1. **Do not** drive the folding power chair 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 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 folding power chair unless the electromagnetic brakes are engaged and the joystick controller is off.
9. **Do not** operate the folding power chair 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 folding power chair when in a vehicle, but transfer to a vehicle seat.
12. **Do not** exceed any grade over 8 degrees (14%).
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.
- 19. Always** make sure the batteries are fully charged before setting out on a journey.
- 20. Always** charge the folding power chair in a well ventilated area to prevent any possible risk.
- 21. Always** check that the drive wheels are engaged. Someone may have left the folding power chair 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 folding power chair properly maintained.
- 27. Never** try to use your folding power chair beyond it’s limitations as described in this manual.

## **Important Notes**

The FPC-11 power chair 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.

1. Do not lift the wheelchair by the armrests
2. Do not lift the wheelchair by the footrest brackets
3. You can program the controller in conjunction with your supplier to fine-tune the wheelchair performance characteristics.

## Feature Guide



Figure 1

1. Armrest (height adjustable and flips up for transferring)
2. Joystick Controller
3. Charging Port
4. Seat
5. Standard Swing Away Leg rest (Elevating Leg Rest Optional)
6. Front Castor (8" flat free tire)
7. Frame Serial Number (13 alphanumeric characters)
8. Rear Drive Wheel (12" flat free tire)
9. Anti-tip Wheel
10. Push Handle (foldable for compact storage and transportation)



## Using the Shoprider Folding Power Chair



Figure 2

### Getting To Know The Joystick Controller (VSI 50)

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 folding 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 folding power chair 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 power chair'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 folding power chair. 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 folding power chair.
8. **Charging Port for Off-Board Charger:** Only plug into this port with the qualified charger certified by the original manufacturer of the folding power chair. This port should not be used as a power supply for any other electrical devices. The behavior against the two statements above will void the warranty of the folding power chair.

The controller can be fitted to suit either right or left-handed users.

### **Drive/Freewheel Mechanism**

The drive/freewheel mechanism is situated to the rear of the chair at the motors. These levers will allow you to disengage the drive mechanism and have the power chair in freewheel mode. Always leave the chair in drive mode, the free wheel facility is there only to allow the chair to be pushed manually when the need arises (i.e., to store or push out of a tight space).

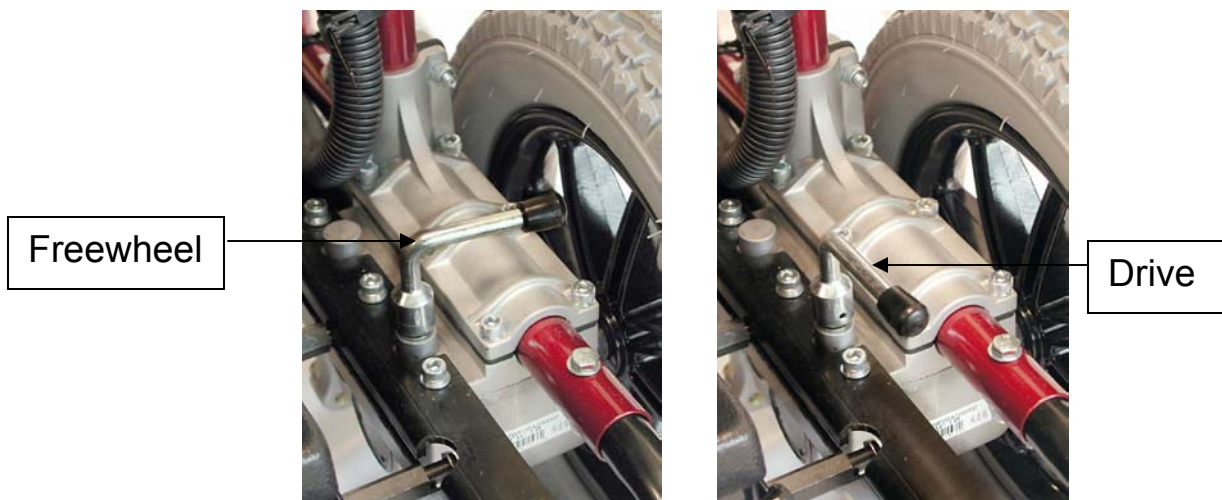


Figure 3

Figure 4

## Transferring

You can transfer either forward, left or right from the chair. The armrests are hinged in the back and can swing up out of the way for transfers. Press “buttons” at front of armrest bar (on either side) to release armrest (see figures 5 and 6).

Assisted transfer; for a wheelchair user who cannot bear any weight on their legs, and cannot transfer independently, the use of an appropriate hoist is recommended.

Any carrier who assists in physically transferring the wheelchair user must be properly trained in modern moving and handling techniques.



## **Folding the Wheelchair**

To fold the wheelchair, it is necessary to remove certain components. Follow these simple guidelines:

1. Park the chair on a level surface.
2. Ensure the wheels are in drive mode.
3. Fold up footplates and/or remove the entire leg rest assemblies (see Figures 8, 10 and 11).
4. Disconnect the black and red connectors situated under the seat (Figure 7).
5. Carefully pull out the first rear battery out of the basket by using the lifting strap (battery is heavy). Then pull out the battery basket by lifting up.
6. Slide second battery forward and follow the same steps as 5. to pull out the second battery and basket
7. Remove seat cushion, carefully place hands under the seat bottom and give a sharp pull upward. This will pull the entire frame together (Figure 8).

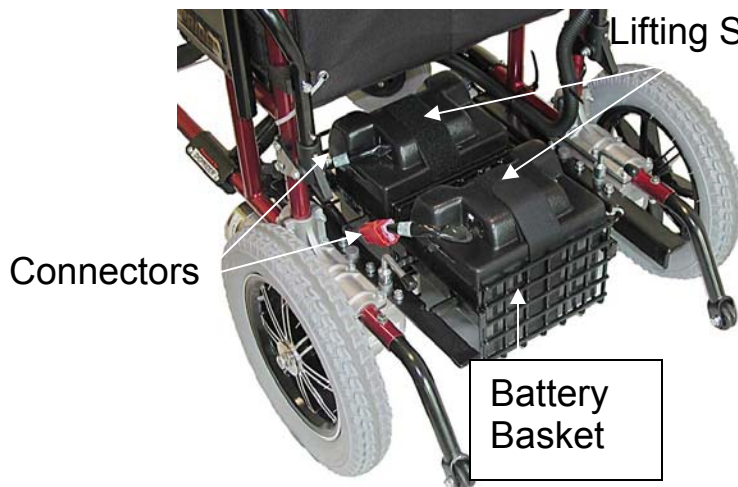


Figure 7



Figure 8

### **Armrests**

The armrests are height adjustable and can flip up out of the way for side transfers. To adjust the height, simply pull the knob outward and lift armrest up or down to your comfort. The adjustments are in 1 ½” increments.

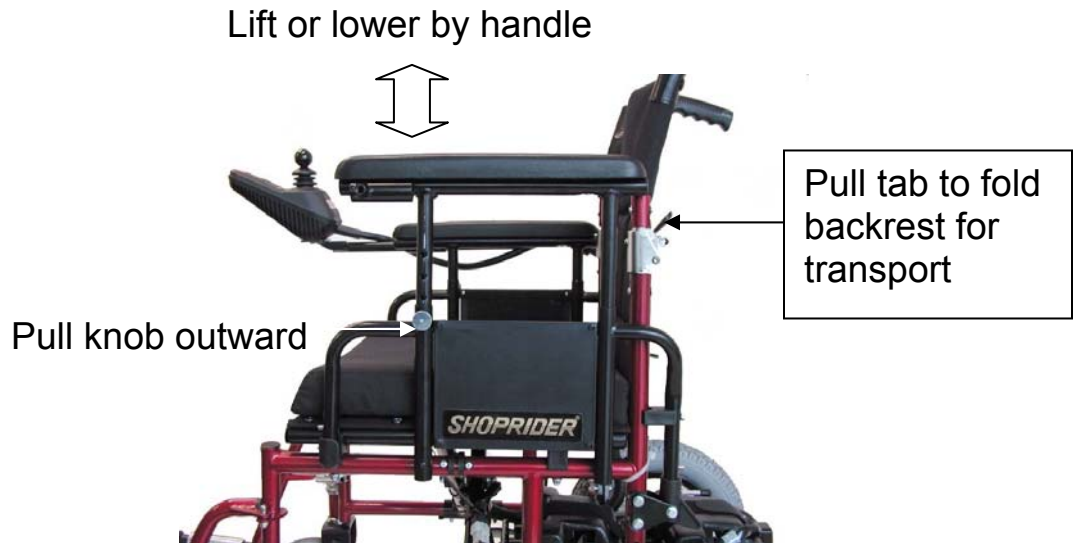


Figure 9

### **Swing-Away, Detachable Leg Rests**

The swing away leg rests are detachable. To remove the leg rest, remove the Velcro strap, push silver lever inward, swing leg rest outward and lift up.



Figure 10

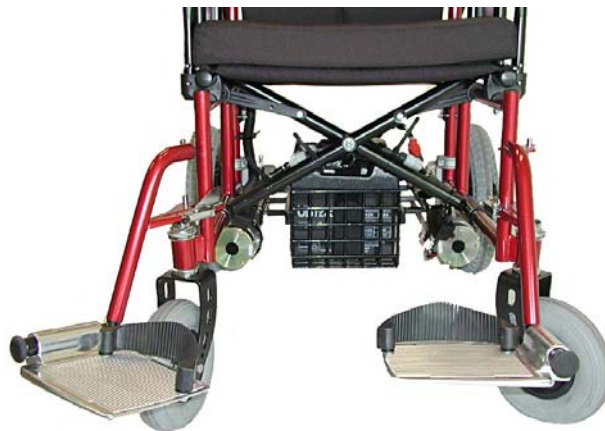


Figure 11

## Negotiating Obstacles

### Ramps, Slopes and Cambers

The FPC-11 indoor/outdoor power chair 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. 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.

## **Looking After Your Power Chair**

### **Tires**

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

### **Upholstery**

All upholstery can be washed with warm water and mild soap. Some car upholstery cleaners produce excellent results as well.

Occasionally check the seat and back for sagging, cuts and tears. Replace if necessary. To avoid mildew and rapid deterioration of upholstery parts, do not store your chair in damp conditions.

### **Lubrication and General Maintenance**

All moving mechanisms will benefit from simple lubrication and inspection. Lubricate using petroleum jelly or light oil. Do not use too much oil, drips may stain or damage carpets, furnishing, etc. Always carry out a general inspection of all nuts and bolts for location and tightness.

## **Batteries & Battery Charging**

The Shoprider folding power chair is designed to operate on two U1 (2 x 33/34/36 Ah) gel, or sealed lead acid, maintenance free batteries. For easy handling, Velcro or plastic carrying straps are provided to assist in fitting or removal. 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.

In only using for short distance each day, it is advisable to charge at the end of each week.

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.

### **Battery Charging Procedure**

To recharge the folding power chair, connect the charger to the Charging Port at the front of the VSI referred to as (8) in Figure 2. Switch on the charger.

Do not leave the charger plugged into the Charging Port if the charger is not charging. This charger is for indoor use only. Do not expose it to rain or water spray. Do not cover the battery charging vent.

One example of indicator light on the charger gives advice as follows:

Red - Power on  
Amber - Battery charging  
Green - Charging complete

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



## 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 power chair.

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

**Table 1**

<b>BATTERY GAUGE</b>	<b>POSSIBLE FAULT</b>
10 Bars flash	Battery voltage is too high, Check the battery connections.
9 Bars flash	Solenoid brake fault
8 Bars flash	Possible joystick controller fault
7 Bars flash	Possible joystick fault
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

**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 beep.
- 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.

## Specification

**Table 2**

Overall Dimensions: L <sup>1</sup> x W x H	43.3 x 24.4 x 37	In
Number, Size of Front Tires	2, 8 inches	
Number, Size of Rear Tires	2, 12 inches	
Total Weight (w/o batteries)	95	Lb
Battery Capacity	12V 28-36Ah x 2	_V_Ah x _pcs
Charger	Off Board, 4 amp	
Maximum Speed	3.75	Mph
Safe Climbing angle (based on user weight of 200 lbs/90 kgs)	8 (14)	Degrees (%)
Range <sup>2</sup>	19	Mile
Turning Radius	24"	

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>Including the Anti-Tip wheel.

<sup>2</sup>The actual driving range varies with the factors shown below:

1. the weight of the occupant
2. ground surface condition
3. battery condition
4. type of charger
5. ambient temperature
6. driving style
7. Etc.

## QUARTERLY INSPECTION

For your own safety, quarterly inspection and service on the product has to be performed and signed by an authorized dealer. 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 is 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 #:** \_\_\_\_\_

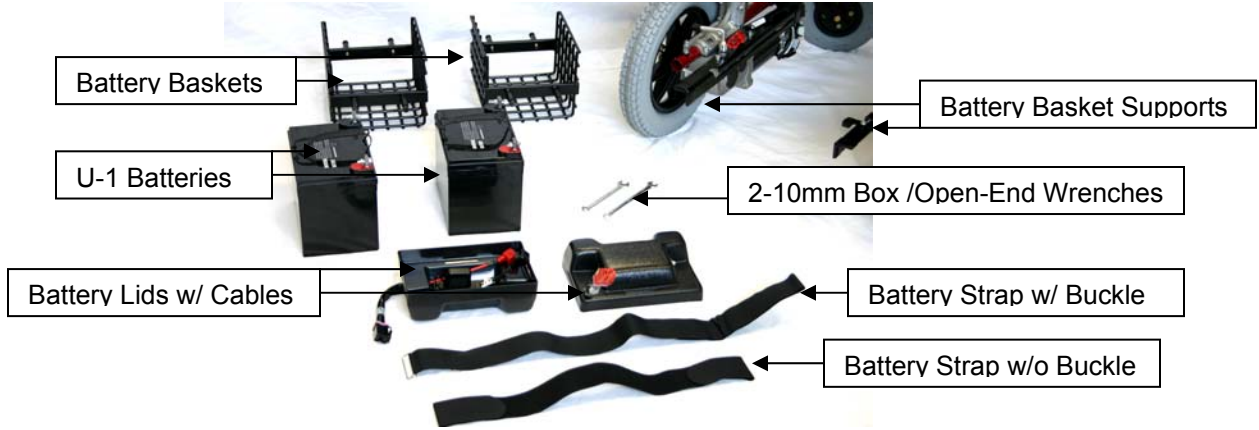
**Dealer Unit Was Purchased From:** \_\_\_\_\_

<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>
<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>
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# SHOPRIDER®

## FPC-11 BATTERY INSTALLATION (PHFW-1118/PHFW-1120)



Using the two 10mm wrenches, bolt the battery cables to battery terminals. **\*MATCH COLORS ACCORDINGLY!\***



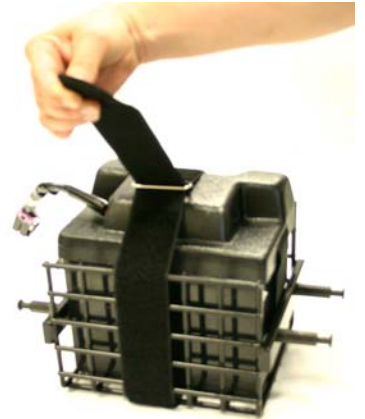
Once all batteries cables are attached securely...



...Secure each lid using the strap w/o the buckle.



Place each assembled battery into each battery basket. Secure the battery to the basket using the battery strap w/ the buckle and tighten securely.



- 1) Be sure the Powerchair is fully open. From the front of the unit push down on the right and left seat edges. If necessary, from the back of the unit finish opening the unit by pushing the battery basket supports outwards until the gap is wide enough for the battery baskets to slide into the supports. You can see that the unit is fully open by looking at the drive wheels, verifying that they are perfectly vertical (straight up and down) and not slanted.
- 2) Slide the battery basket with the black connector in first and connect the black battery connector to the black connector secured to the left front part of the frame. Next, slide the battery basket with the red connector in and connect to the red connector secured to the left rear part of the frame.
- 3) Make sure to charge battery fully for 6-8 hours before first initial use

## Notes

## Notes



## Disclaimer

Congratulations on your purchase of the Shoprider Folding Power Chair.

This power chair is not intended to be used by individuals with physical limitations that could prevent the user from operating the power chair 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 power chair, 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 are intended to assist you in the safe operation of this power chair. If you should have any questions about the correct operation of the power chair, please contact your authorized Shoprider provider.

Provider Stamp

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

Shoprider Mobility Products, Inc.

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