

P424L

P424M

Instruction Manual



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Introduction

Congratulations on the purchase of your Shoprider scooter. Please carefully read this owner's manual before attempting to use your scooter. After reading the manual if you still have any questions or concerns please feel free to contact your local authorized dealer.

| Model: P424M / P424L Serial #: | |
|--------------------------------|--|
| Date Purchased: | |

Dealer Information:

EMI Warning

Electromagnetic Interface (EMI) From Radio Wave Sources

Powered motorized Powerchairs may be susceptible to electromagnetic interference (EMI), which is 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 a powered Powerchair to release its brakes, move by itself or move in unintended directions. It also can permanently damage the powered Powerchair's control system.

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

- 1. **Hand-held portable transceivers** (transmitters-receivers) with an antenna mounted directly on the transmitting unit. Examples include: citizens band (CB) radios, "walkie-talkies", 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 antenna towers) and amateur (HAM) radios. **NOTE: So far as we know, 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, are not likely to cause problems to your powered Powerchair.

Powered Powerchair 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, unintentionally, to bring high levels of EM energy very close to the powered Powerchair's control system while using these devices. This can affect powered Powerchair movement and braking.

Therefore, the warnings listed below are recommended to prevent possible interference with the control system of the powered Powerchair. **Warnings**

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

- 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 powered 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 powered Powerchair OFF as soon as it is safe to do so.
- 4. Be aware that adding accessories or components, or modifying the powered Powerchair, may make it more susceptible to EMI (NOTE: There is no easy way to evaluate the overall immunity of the powered Powerchair.)
- 5. Report all incidents of unintended movement or brake to the powered Powerchair dealer, and note whether there are sources of EMI nearby.

Safety Guidelines

Your Powerchair is a powerful electric device. Please read the following notes carefully to ensure safety at all times. Always make certain your Powerchair is in full working order before use.

- 1. Do not exceed any incline over 6 ° / 10%
- 2. Do not use the joystick in an erratic manner when proceeding uphill or downhill.
- 3. Do not turn off your Powerchair using the ON/OFF button when in motion. This will set the brakes immediately and could cause damage to the controls of the Powerchair.
- 4. Do not ride over deep, soft terrain such as loose dirt/gravel, tall grass etc.
- 5. Do not mount any curb height over 5 cm (2 inches).
- 6. Do not carry passengers.
- 7. Do not mount or dismount your Powerchair unless brakes are engaged and the controls are off.
- 8. Do no operate your Powerchair when in "Freewheel" mode.
- 9. Do not operate your Powerchair on public roads.
- 10. Do not remain seated on your Powerchair when in a vehicle. Transfer to a seat within the vehicle.
- 11. Do not adjust seat height while sitting on your Powerchair!
- 12. Always come to a full stop before making any sharp change of direction.
- 13. Always reduce to a slow speed when approaching and proceeding down gradients. Moving your joystick slowly towards the central position will reduce your speed.
- 14. Always approach curbs and gradients at a slow speeds.

- 15. Always keep your feet on the footplate when in motion.
- 16. Always use your safety belt.
- 17. Always keep your tires at the correct air pressure.
- 18. Always make certain that your batteries are fully charged before setting out on your journey.

19. <u>PLEASE GIVE CONSIDERATION TO PEDISTRIANS WHEN OPERATING</u> <u>YOUR SHOPRIDER POWERCHAIR.</u>

Preparation for Use

Your Powerchair has many features designed to provide you with maximum comfort, and will be ready for immediate use upon assembly and delivery by your dealer. Adjustments may then be made to the following parts:

- 1. Footplate may be lengthened outward from the main frame to four different positions.
- 2. Footplate may be angled from 0° to 60° .
- 3. Armrests may be set at a variety of angles and/or lengths.
- 4. Arms may be increased in height.
- 5. Joystick control may be fitted for either right or left hand use.
- 6. Seat has four posts with adjustment pins.
- 7. Backrest angle may be adjusted from 90 to 102 $^{\circ}$.
- 8. Make sure batteries are connected and charged at least 6-8 hours before first use.

Features

WARNING: Seat adjustments <u>must not</u> be made while seated on your Powerchair.

All other adjustments should be carried out while seated in your Powerchair.

Footrest Adjustment

Length

Pull out connecting pin from the first hole in the footrest slide tube.

Slide out the footrest tube and refit the connecting pin in the appropriate hole when the required length is reached.



Height

Pull out the connecting pin located at the back of the footrest slide tube. Position the footrest at the required height. Three heights available. Refit the connecting pin in the appropriate hole and make sure the connecting pin protrudes through he other side of the tube and is secure.



Arm Adjustment

Angle

Pull up on ends of armrests, which will flip back to allow easy transfer in and out of your seat. Under your armrests you will find a bolt and lock nut that may be adjusted up or down to alter the angle of your armrests.

Length

Located under the armrest controller, you will find a hand knob. Loose the knob to extend or reset the controller bracket.

Height

Below the armrest on the down supporting tube you will see a button. Pull up on the button to raise or lower your armrest.

Width

Beneath the rear of the Powerchair seat you will locate two hand knobs, one at each side of the seat. Release the hand knobs and slide each armrest tube outward to desired width and retighten hand knobs.

Seat Height Adjustment

Located on the main frame, the tube receiving the seat stem has three height adjustment holes. By fitting of the steel bolt in any one of the holes, three heights can be achieved.

Joystick Controller

Conversion

You can move the joy stock controller so the operator can use it with either their left or right hand. Beneath the armrests there is a hand knob (same know to adjust the armrests). Remove the hand knob completely and slide off the armrests. You can now exchange the joystick control from one side to the other.

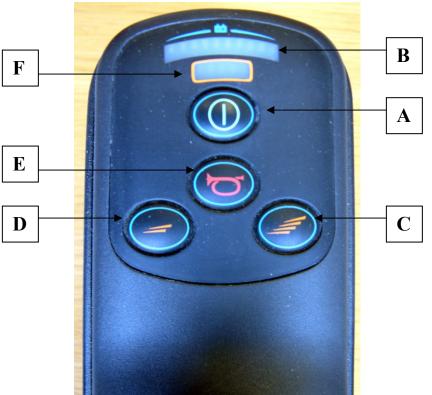
Extension or Retraction

Push the joystick controller outward and backward to store it at the side of the Powerchair Arm. This allows easier access to tables, desks, etc.





Operation



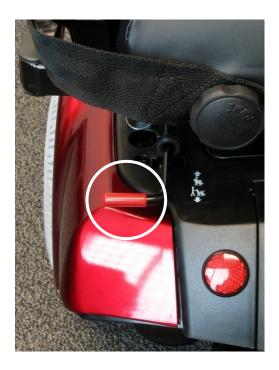
Your Powerchair is fitted with the latest up to date electronic controls. The joystick control box is normally fitted to the right side of the chair. Switch on your Powerchair with the ON/OFF button (A). When the chair is turned on the battery indicator lamplights up. This also can be used as a fault guide. The chair is ready for use if the green battery level indicator bars are illuminated (B). The range of the Powerchair is relative to the number of bars lit.

The joystick controls the speed and direction of the Powerchair. The further the joystick is moved from its central position the faster the Powerchair will move in the direction the joy stick is pushed (i.e. pushing the joystick forward will move the chair forward and vise versa). To slow down, guide the joystick towards its central position. If the joystick is released it will automatically return the central (neutral) position and the electromagnetic brakes will be activated.

The speed control knob allows you to alter the speed: by pressing faster speed button (C) increases the speed and by pressing the slower speed button (D) decreases the speed. When the joystick is pushed as far as it will only reach the set speed selected by the speed control buttons. (E) This button operates the horn. The maximum speed is shown by a 5 segment display (F).

Free Wheel Mode

In the event of a fault or battery failure, the motors/gears may be released allowing the Powerchair to be manually moved.



To switch to "Freewheel" mode, locate levers situated at the front of both motors and behind each front wheel and move both levers outward. Advice indicators are shown at this location. To re-engage motors/brakes, move both levers toward the center.

<u>WARNING: ALWAYS DISENGAGE THE FREEWHEELING DEVICE</u> <u>WHEN NO</u> <u>LONGER REQUIRED. FAILURE TO DO SO MAY RESULT IN INJURY!</u>

Disassembly

DISASSEMBLY INSTRUCTIONS

WARNING:

CAUTION IS ADVISED WHEN DISASSAMBLING AND LIFTING ITEMS. YOU MUST ENSURE THAT THE PERSON UNDERTAKING THIS PROCEDURE IS PHYSICALLY CAPABLE OF LIFTING THE WEIGHT INVOLVED.

- 1) Ensure that the area in which the Powerchair is to be dismantled is spacious enough to accommodate all the components.
- 2) Remove the plug at the end of the controller located at the back of the powerchair by pulling on the ring provided. <u>CAUTION: Lay plug down</u> <u>carefully to avoid damaging chassis cover!</u>
- 3) The arms may be removed to make the seat lighter to lift. At the rear of the seat you will find two hand knobs. Release both by turning clockwise and slide out arms from each side.
- 4) Fold seatback forward.
- 5) Pull up on the 2 red tabs located under the front of the seat and the seat will lift up towards the rear of chair.
- 6) Lift seat off.
- 7) Open battery cover door.
- 8) Unclip red and black battery plugs. Undo the Velcro carrying straps, and lift batteries by their handles.

<u>TO RE-ASSEMBLE YOUR POWERCHAIR SIMPLY REVERSE</u> <u>THE ABOVE DESCRIBED PROCEDURES.</u>

Batteries and Battery Charging

BATTERY CHARGING: Your Powerchair has a lot of power, so keeping it working to its maximum potential means that its two batteries must be maintained with full power. An active user will need to charge the batteries after using approx. 30% of the battery capacity. An inactive user (once a week to every other day), the recharge point would be 50%. Nightly recharging, after use, will help you give the batteries a longer life and will ensure your Powerchair is always ready to go when you are. The batteries are located under the seat in the center of the chair. The duration of the batteries can be affected by temperature, terrain and weight of the user. On the joystick controller there is a battery gauge, which indicates how much charge is remaining in the batteries.

BATTERIES: Your Powerchair batteries are virtually maintenance-free, because the electrolyte is immobilized in a special form and will not leak out, even if the battery is accidentally overturned.

Because your Powerchair batteries are sealed, they are most likely to be accepted for transport on all aircraft. Please consult your carrier prior to departure, as they will need advance warning that you wish them to carry batteries.

PLEASE NOTE: Each carrier reserves the right to carry what may be termed "HAZARDOUS CARGO" Shoprider cannot be responsible for their final decision.

BATTERY CHARGER: The battery charger supplied is special to your Powerchair, and may not be suitable for any other power mobility products. Use only the charger supplied with your Powerchair; other makes of chargers may permanently damage your Powerchair batteries, and would void the warranty.

CHARGING THE BATTERIES: Your Powerchair batteries will need to be recharged when the battery state indicator located on the joy stick controller is reading in the RED bar position. NOTE: The batteries will have a longer life if you do not use up all of the battery's power, and recharge as soon as the battery gauge reaches the red bars. The bars represents time to recharge.

Charging Your Powerchair's Batteries

The battery charger has an auto shut off when the batteries are completely charged.

- 1. Press the off button of your Powerchair.
- 2. Pull the AC power cable out of the rear of your powerchair and plug into a 110 volt wall outlet.
- 3. There is a charging indicator light that will turn yellow when charging has started.
- 4. When the batteries have been fully charged the indicator light will change to green and the battery charger will automatically stop.
- 5. When the charging is complete, remove the AC power cord from wall outlet and gently pull on the cord to retract it back into place.



You will find that the distance your Powerchair can travel will gradually increase over the first few weeks of use, as the batteries reach their optimum efficiency after approximately 12 cycles of full discharge and full recharge.

FAILURE TO OBSERVE THESE INSTRUCTIONS CAN RESULT IN OVERCHARGING THE BATTERIES.

A Guide to Safe and Lasting Batteries

- 1. For longest life your batteries should be recharged after use, preferably overnight.
- 2. If your PowerChair is not used for a period of time, a refreshing charge should be given every month. Never leave your batteries in a discharged condition. This is particularly important to sealed batteries such as the ones in your Powerchair.
- 3. If you PowerChair has been stored away for some time, recharge your batteries before re-using it.
- 4. Every six months, check the connections on the batteries, making sure they are tight and clean.

Inspection & Maintenance

Your Powerchair, like any other electro-mechanical machine, will benefit from regular servicing by your Shoprider dealer. You, too, can help keep your Powerchair in tiptop condition by following simple guide to home maintenance.

CAUTION: Only qualified technical people should carry out service work.

SEAT UPHOLSTERY: A damp cloth and a mild soap will keep your seat and backrest looking good. Do not use abrasive cleaners, as this will damage the coating. Chemical cleaners can damage upholstery.

Ultra-violet light can also reduce the life of the upholstery coating material. This is a normal ageing process, and cannot be guaranteed (see exclusion in the Warranty terms section).

BODYWORK: The bodywork on your Powerchair can be lightly washed with mild soap and water. Auto polish can be used to keep the paint in pristine condition. Do not use abrasive cleaners or strong detergents, as this will fade the color.

CAUTION: Do not hose down your Powerchair. Water could be forced into the electronics and cause permanent damage.

DO NOT store your Powerchair in damp conditions. This may affect the electronics if left for very long periods of time.

ELECTRONICS: Servicing of the drive electronics and charger should only be carried out by your local Shoprider service dealer. These units are sealed and should not be opened. **BROKEN SEALS WILL VOID YOUR WARRANTY.**

You will find that the distance that your Powerchair can travel will gradually increase over the first few weeks of use, as the batteries reach their optimum efficiency after approximately 12 cycles of discharge and recharge.

WARNING

- 1. Do not smoke or use an open flame while your batteries are being charged.
- 2. Do no use an extension cord unless absolutely necessary. Use of an improper extension cord could result in a risk of fire and electric shock.

- 3. Do not use the charger if it has received a sharp blow, been dropped or otherwise misused in any way. Take it to a qualified technician.
- 4. Do not dismantle the charger. This will void the warranty.
- 5. Do not switch off, unplug or interrupt the recharge cycle until the charging cycle has completed. Make sure that the charger indicator light is green before you unplug your charger.

FAILURE TO OBSERVE THIS INSTRUCTION CAN RESULT IN OVERCHARGING THE BATTERIES.

DO NOT operate your Powerchair in extreme weather conditions, i.e. very heavy rain or snow.

DO NOT drive through deep water. This could damage the main electronic controller.

MOTOR BRAKES – If the motor brakes are functioning correctly, you will not be able to push your machine when it is switched off or switched on with the speed control throttle in the neutral position.

If your Powerchair can be pushed as described above, the motor brake(s) may be faulty. **Please do not use the Powerchair and contact your Shoprider dealer immediately.**

SAFETY NOTE: For your own safety, we recommend that you check the function of your Powerchair brakes prior to a journey.

DRIVING BRAKE – When you drive your Powerchair and let go of the speed joy stock control, your Powerchair should reduce speed very quickly. If you notice a change in the normal driving/slowing condition and your Powerchair does not slow down quickly, please do not use your Powerchair and contact your Shoprider dealer.

TIRES – Your Powerchair comes with air filled rear tires. Check the condition of your tires regularly. Look for signs of wear, cuts and foreign objects lodged in the tread. Max tire pressure is 25 PSI.

BATTERIES – Keep your batteries well charged (see Battery Charging section). Keep batteries clean and in a dry frost-proof place. Keep battery terminals tight.

IMPORTANT: It is not possible to predict the life expectancy of your batteries. This is mainly due to different workloads to which a battery may be subjected. Some Powerchair users will use their Powerchair every day, and for long periods of time. Their batteries will receive a near total discharge, and the life of their batteries will be short (12 months or less in some cases). Other Powerchair users will use their vehicles less frequently, putting their batteries through a less demanding discharge lifestyle. These batteries will probably have a longer life (12 to 24 months or longer).

When you need to replace the batteries, always insist on the model fitted as standard equipment to your Powerchair. If in doubt, consult your local Shoprider authorized dealer.

Trouble Shooting

If you're Powerchair will not start:

Make sure that the on/off button is turned on. If it is, the battery condition gauge will be operating.

Battery charger indicator light will not come on:

- a. Check to see if the charger has been plugged into a wall outlet.
- b. If the light is still off check all other connections to see if they are secure
- c. If light is still off contact your local provider as soon as possible

If the battery condition gauge fails to operate when the button is in the "on" position, check the following:

Make sure the battery charger is not plugged into the wall outlet. This will prevent drive.

If your Powerchair does not slow down, or the variable speed control does not work:

Turn off the power "on/off" button and inform your authorized Shoprider dealer.

CAUTION: If you find for any reason that your Powerchair doesn't reduce speed when you let go of the joy stock control, switch your Powerchair "off" with the on/off button. The parking brake will activate immediately and stop your Powerchair. Be aware that the Powerchair will stop very suddenly, so brace yourself with the handlebars, seatbelt and sit back on your seat.

If you feel for any reason that your Powerchair is not driving correctly, or is making an unusual noise, stop using the Powerchair. Be **SAFE**, contact your Shoprider dealer, who will be able to advise you.

GENERAL DESCRIPTION: The Powerchair controller system incorporates a sophisticated microprocessor design. The Powerchair controller continually monitors the Powerchair system, and ensures safe and reliable operation.

SAFETY CONDITIONS MONITORED INCLUDE

- Speed control system integrity
- Internal voltages and circuits

- Motor voltages and circuits
- Safety isolate relay
- Battery voltage

To ensure safety, the controller will not operate if the joystick controller is in the neutral position.

The powerchair shuts off after 10 minutes:

The controller will automatically go into a "Sleep Mode" after being left on for more then 10 minutes. Turn the controller off and turn back on.

The controller powers on but nothing happens:

The controller can be locked to prevent unauthorized use.

<u>To Lock:</u>

- 1. With the controller on, press and hold the on/off button for 1 sec until you hear a beep. Release the on/off button.
- 2. Push the joystick forward until you hear a beep
- 3. Push the joystick in reverse until you hear a beep
- 4. Release the joystick and you will hear a long beep
- 5. The controller is now locked

To Unlock:

- 1. Turn the controller on. You will see the speed indicator moving up & down.
- 2. Push the joystick forward until you hear a beep
- 3. Push the joystick in reverse until you hear a beep
- 4. Release the joystick and you will hear a long beep
- 5. The controller is now unlocked

Warranty

5 YEAR LIMITED WARRANTY

This warranty is extended to the original purchaser only. Your original receipt will be necessary as proof of purchase before any warranty performance is rendered.

This warranty only covers failures due to defects in materials or workmanship which occurs during normal use and does not cover damage that occurs in shipment or failures which are caused by products not supplied by *Eclipse Medical Inc*. or failures resulting from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, modification, commercial use, or by anyone other than an authorized dealer, or damage that is attributable to acts of God.

This warranty does to cover neglect or abuse, use of parts or changes not authorized by *Eclipse Medical Inc.*, or exceeding weight limit specifications as outlined in your Product User Manual.

This warranty does not include labour charges.

This warranty does not include shipping charges incurred by the purchaser when returning defective parts for repair/replacement.

Warranty service must be performed by an authorized *Eclipse Medical Inc. Dealer*.

Do not return faulty/defective parts without written authorization.

This warranty applies to product purchased within Canada.

This warranty is void if the original serial number tag is removed from the product or altered in any manner.

| 5 YEARS | FRAME |
|----------|---|
| 2 YEARS | MOTOR, TRANSAXLE, BRAKE |
| 1 YEAR | WIRING, CONTROLLER, ELECTRONICS |
| 6 MONTHS | ALL OTHER ORIGINAL COMPONENTS SUCH AS WHEELS, UPHOLSTERY, PLASTICS, RUBBER PARTS, PAINTED SURFACES, MOTOR BRUSHES AND LIGHTBULBS. |

Specifications P424M

| Shoprider P424M | | | | |
|---------------------------|-------------|-----------------------------|--|--|
| Dimensions: L x W x H | cm (in) | 92 (36) x 62 (24) x | | |
| Total Weight w/ Batteries | kg (lb) | 100 (220) | | |
| Battery | _V_Ah x Pcs | 12V50Ah x 2 | | |
| Charger | Off Board | 4 Amp | | |
| Tires | Front | 2 x 6" | | |
| | Middle | 2 x 10" | | |
| | Rear | 2 x 5" | | |
| Motors | hp | .8 x 2 | | |
| Max. Speed | km/hr (mph) | 8 (5) | | |
| Driving Distance* | km (mile) | 32 (20) | | |
| Weight Capacity | kg (lb) | 136 (300) | | |
| Suspension | | Yes | | |
| Controller | | P & G Joystick Programmable | | |

Specifications P424L

| Shoprider P424L | | | | |
|---------------------------|-------------|-----------------------------|--|--|
| Dimensions: L x W x H | cm (in) | 99 (39) x 69 (27) x | | |
| Total Weight w/ Batteries | kg (lb) | 137 (302) | | |
| Battery | _V_Ah x Pcs | 12V75Ah x 2 | | |
| Charger | Off Board | 8 Amp | | |
| Tires | Front | 2 x 6" | | |
| | Middle | 2 x 14" | | |
| | Rear | 2 x 5" | | |
| Motors | hp | 1.3 x 2 | | |
| Max. Speed | km/hr (mph) | 9.6 (6) | | |
| Driving Distance* | km (mile) | 55 (34) | | |
| Weight Capacity | kg (lb) | 136 (300) | | |
| Suspension | | Yes | | |
| Controller | | P & G Joystick Programmable | | |

Options

- CNP-01 Scooter Canopy Colors available - Black and Grey
- **CNP-RR** Scooter Canopy Weather Shield Option
- CANE1 Single Cane Holder
- CANE2 Dual Cane Holder
- **OXYHOLDER** Oxygen Holder
- WALKHOLD Walker Holder



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