

SHOPPRIDER®

Heavy Duty Scooters User Manual



Sprinter XL4



Enduro XL3



Enduro XL4

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INTRODUCTION

Congratulations on your purchase of the Shoprider® scooter. Your Shoprider® scooter incorporates the latest innovative designs patented and only available on a Shoprider® scooter. Your scooter may be used in both indoors and outdoors. Direct drive transaxles and electromagnetic brakes give a safe and efficient ride. This Shoprider® scooter is designed for persons with limited mobility.

Please ensure that you read this manual carefully, it is important for your safety that you understand the guidelines and instructions given.

FEATURE GUIDE (FIG. 1-3)

Sprinter XL4 (Figure 1)

1. Tiller control head
2. Head light
3. Anti-Tip wheels
4. Side reflectors
5. Adjustable width armrests
6. Swivel seat
7. Seat height adjustment
8. Fold down seat
9. Foot rest
10. Tiller steering column and steering wheel angle adjustment
11. Front bumper
12. Detachable basket
13. Battery charging inlet



Figure 1

Enduro XL3 (Figure 2)

1. Delta tiller control head
2. Head lights and indicators
3. Rear lights and indicators
4. Side reflectors
5. Adjustable width armrests
6. Swivel and sliding seat
7. Seat height adjustment
8. Reclining captain's seat
9. Foot rest
10. Tiller steering column and steering wheel angle adjustment
11. Detachable basket
12. Battery charging inlet



Figure 2

Enduro XL4 (Figure 3)

1. Delta tiller control head
2. Head lights and indicators
3. Rear lights and indicators
4. Adjustable width armrests
5. Swivel and sliding seat
6. Seat height adjustment
7. Reclining captain's seat
8. Foot rest
9. Tiller steering column and steering wheel angle adjustment
10. Detachable basket
11. Emergency hand brake
12. Front suspension



Figure 3

SAFETY ADVICE

- Do not carry passengers.

- Do not exceed inclines over 8 degrees (14% grade).
- Do not turn on steep inclines.
- Do not turn suddenly at high speeds.
- Do not get on or off the scooter unless the brake is on and the scooter is switched off.
- Do not switch off the scooter while the scooter is moving.
- Do not drive the scooter where you can not safely or legally walk.
- Do not drive scooter on roads, streets, or highways.
- Do not attempt to drive over curbs greater than 2 inches (5cm.) in height. Doing so could cause your scooter to turn over, causing injury or damage to the scooter. For curbs less than 2 inches, always approach them at an angle of 90 degrees and at a low speed.
- Do not drink or use a mobile phone when driving your scooter.
- Do not exceed the suggested user weight limit. Doing so, could cause personal injury and invalidate the warranty.
- Always keep your feet on the scooter when moving.
- Consult your doctor if there is any doubt about your ability to use a scooter safely.
- Always slow down and proceed carefully when traveling over rough or uneven ground.
- For individuals with balance problems, practice getting on the scooter with the assistance of a qualified healthcare professional.
- If equipped, DO NOT operate scooter without anti-tip wheels installed.
- Do not use an escalator to move a scooter between floors. Serious injury could occur.
- Do not drive the scooter on an incline that has oil, water or ice film on it.
- Do not try to lift the scooter by its seat, tiller, rear chassis cover, or any removable parts. Any of these could cause injury to the user or damage to the scooter.
- Do not use parts or accessories that are not authorized by Shoprider® Mobility Products Inc.
- Before sitting in or exiting the scooter, REMOVE the key from the ignition. This will insure the POWER is off and the scooter can not move under its own power.
- As a general precaution, always remove the key from the ignition while the scooter is not in use. This will prevent use by untrained and unauthorized persons.
- Do not connect any medical device to the scooter battery. This could cause failure of the device, the scooter and personal injury.
- Make sure the tiller and seat are properly adjusted to the user or damage and injury could result.
- Shoprider® Mobility Products doesn't recommend that scooter users be transported in a vehicle WHILE they are in the scooter...and will not be responsible for any injury or damage that might result.
- Do not use the scooter in the rain, near a shower or in a damp bathroom, or any other wet environment. Direct exposure to rain or dampness could cause the scooter to electrically malfunction and prematurely rust.

EMI Warning

Shoprider® scooters may be susceptible to electromagnetic interference (EMI), which is a kind of interfering electromagnetic energy (EM) emitted from sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two-way radio, and cellular phones. The interference (from radio wave sources) can cause the scooter to release its brakes, move by itself, or move in unintended directions. It can also permanently damage the scooter'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 talkie", 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, and cassette players, and small appliances, such as electric shavers and hair dryers, so far as we know, are not likely to cause problems to the scooter.

Scooter 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 scooter's control system while using these devices. This can affect scooter movement and braking. Therefore, the warnings listed below are recommended to prevent possible interference with the control system of the scooter.

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 scooter 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 scooter OFF as soon as it is safe.
4. Be aware that adding accessories or components, or modifying the scooter may make it more susceptible to EMI.

NOTE! There is no easy way to evaluate the overall immunity of the scooter.

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

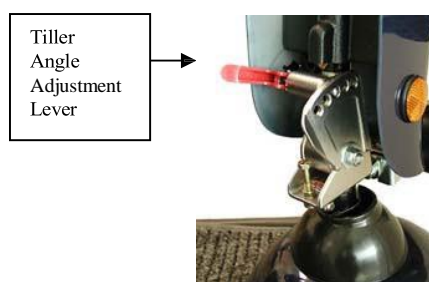
WARNING: Shoprider® Mobility Products is not responsible for damage or injury incurred due to improper and unsafe use of our scooter.

ADJUSTMENTS

Tiller Angle Adjustment (Fig. 4)

On the left hand side at the base of the tiller is a red lever. Push the lever to release the pin and select the desired tiller angle. Refit the pin into one of the five location holes to lock tiller in place.

DO NOT DRIVE SCOOTER IF TILLER IS NOT SECURED.



Seat Slide & Swivel Adjustment (Fig. 5)

Pulling up on the seat black slide lever allows the seat position to be adjusted forward or backward. Release the lever and the seat will lock in that position. Under the right side of the seat there is a spring loaded red lever. Pulling up on the lever allows the seat to swivel, when released the seat will lock into one of four positions.



Figure 5

Seat Removal (Fig. 6)

Fold down the back of the seat. Pull up the red swivel seat adjustment lever (fig. 5) and lift seat off. Remove the hand knob and locking pin that secures the seat adaptor. Lift the seat adaptor out of the seat post.

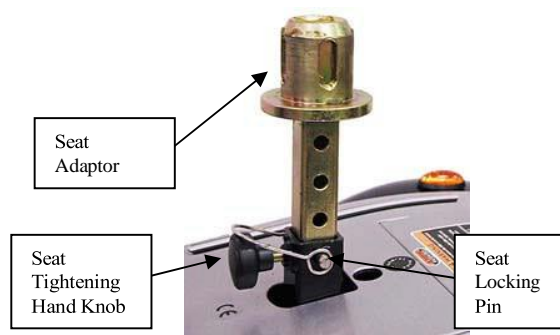


Figure 6

Seat Height Adjustment (Fig. 6)

Remove seat as described above. Loosen the seat tightening hand knob. The seat height can be adjusted to 5 different settings by inserting the steel locking pin in the required hole. Retighten the hand knob and replace the seat.

Armrest Width Adjustments (Fig. 7)

On the underside of the seat there are two hand knobs, one either side. Loosening the hand knob allows the arm rest to be adjusted to the required width, or removed for transportation.

DO NOT USE SCOOTER WITHOUT THE ARM RESTS BEING FITTED & SECURED.



Figure 7

Armrest Angle Adjustment (Fig. 8)

Flip up the armrests to allow access to the adjustment screw and lock nut, unscrew the lock nut and screw the bolt in or out to increase or decrease the angle. Re-tighten the lock-nut.

The armrests are set parallel to the floor at the factory.

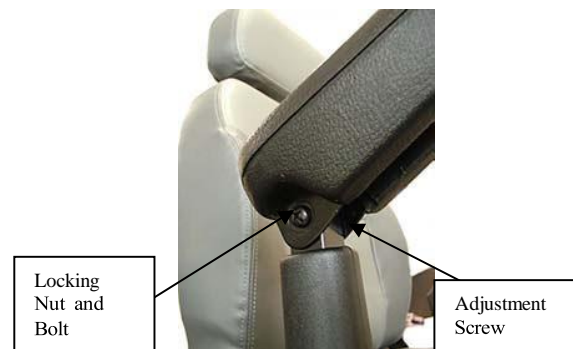


Figure8

Reclining Seat (Fig. 9)

Enduro XL4 & Enduro XL3

The Enduro XL4 and Enduro XL3 come standard with a reclining seat. The reclining seat lever is located on the left side below the armrest. Simply pull the lever up to adjust. This feature also allows the seat to be folded down.



Figure 9

SCOOTER TILLER CONTROLS (FIG. 10A & 10B)

Speed Controls

The speed control dial allows you to set a speed between 1 (minimum) and 10 (maximum). The Enduro XL3 and Enduro XL4 are also equipped with a speed high/low switch.

Battery Level Indicator/Gauge

The number of LED bars lit/where the needle rests, shows the amount of charge left in your batteries. The amount of charge will only show at its true level when the scooter is in drive.

CAUTION – Do not allow the LED bars/gauge needle go out/down completely as complete discharge of the batteries could cause irreversible damage.

Lights

A blue button located at tiller controls operates lights.

Horn

A yellow button located at the tiller controls operates the horn.

Thumb/Finger Accelerator Lever Controls

The right thumb/finger accelerator lever controls the forward motion and the left thumb/finger accelerator lever controls the reverse motion. The amount of pressure applied to each lever will determine the speed the scooter travels at. Release the lever and the scooter will slowly come to a stop.

On/Off Key Switch

Insert the key in the right side of the tiller. Turn the key and the LED bars will light up/needle gauge will move to the right. There is a delay before the thumb/finger lever accelerator control can be operated, while the controller checks the circuits.

Indicator Switch

Enduro XL3 & Enduro XL4

Operates turn indicator lights.

Hazard Warning Switch

Enduro XL3 & Enduro XL4

A red button operates all hazard flashers.

Electromagnetic Brake

The brake is automatically operated when the thumb/finger accelerator control levers are released. There is a slight delay when the scooter decelerates; this allows the scooter to come to

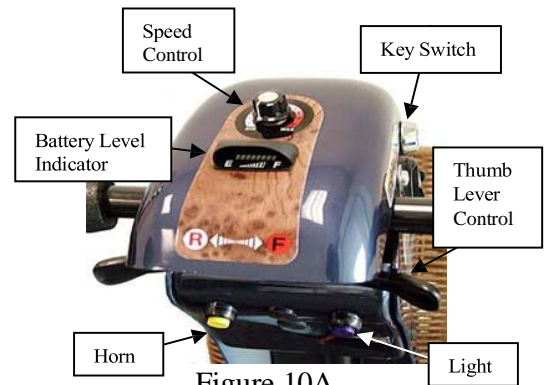


Figure 10A

Sprinter XL4

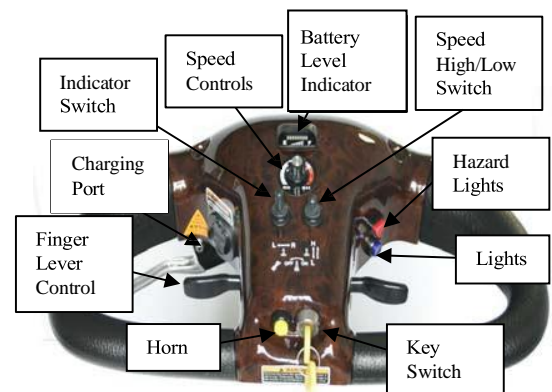


Figure 10B

Enduro XL3 & Enduro XL4

a smooth stop.

FREE WHEEL OPERATION (FIG. 11A & 11B)

The free wheel lever allows you to put the scooter in neutral and push it. The free wheel release lever is located toward the inside of the rear wheel (Fig. 11A & 11B). To push the scooter (neutral), push the free wheel lever down. To put the scooter in gear (drive), lift the lever up. The scooter will not operate when the lever is down (neutral).

WARNING! For safety, always put the scooter into gear (lever up) after pushing or rolling scooter. Failure to do so may result in injury.

Anti-tip Wheels

The anti-tip wheels are located at the rear of the scooter frame (Sprinter XL4) (Fig. 11B). The scooter should not be used unless the anti-tipping wheels are in place.

Shoprider® Mobility Products is not responsible for damage or injury incurred due to improper or misuse of the scooter.

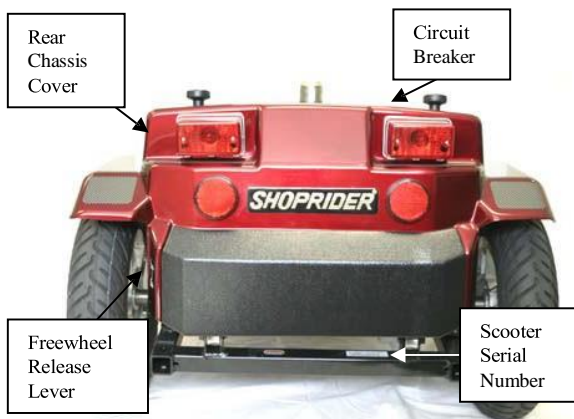


Figure 11A
Sprinter Jumbo XL

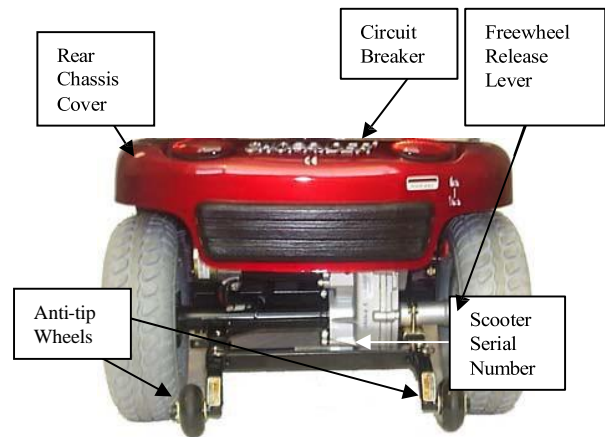


Figure 11B
Sprinter XL4

STARTING TO DRIVE YOUR SCOOTER

Getting Started

- You must charge your scooter completely before first time use (8-12 hours).
- Select a level area with plenty of space.
- Mount the scooter, either by lifting the arm and sliding onto the seat or rotate the seat outwards, mount and then rotate the seat back to face the tiller.
- Adjust the tiller and seat as previously described.

Starting Scooter Movement

- Ensure that you are seated in a comfortable position.
- Turn the key to the ON position.
- Your speed setting should be on 1 or 2. If equipped, set the speed high/low switch to low.
- Pull/press your right hand finger/thumb lever, the scooter will move forward slowly. The further you pull/press the faster the scooter goes but will only reach the speed level that has been selected.
- Release the lever and the scooter will slowly come to a stop as the magnetic brake is automatically applied.

Steering

Steering the scooter is light and easy. Ensure when starting off you give a wide clearance when turning so that the rear wheels clear any obstacle that you are passing. When steering through limited spaces such as a doorway or when turning around, turn the tiller handles where you want to go and apply power gently. The scooter will turn very tightly, but will still move with complete stability as long as the speed is not too high.

Reversing

Before reversing ensure that the area behind is free from any hazards or obstructions. Adjust your speed setting to a low setting before you reverse. Pull/press the left finger/thumb lever, and steer wide of all corners and obstacles.

Dismounting

Before dismounting ensure that the key is turned to the off position. Raise the arm rest to slide off the seat or turn the swivel seat outward.

CAUTION: Please ensure that care is exercised when mounting or dismounting the scooter and that the tiller, seat back and foot rest are not used for support. For support, use the arm rests.

EXTRA GUIDELINES IN THE CONTROL OF YOUR SCOOTER

Ramps

The stability of your scooter is governed by several factors such as the seating position, the angle of the slope and your height and weight. When approaching an incline, do so directly and not at an angle and whenever possible avoid making turns. When going down a ramp or slope keep the speed settings to slow. This will ensure there is a safe controlled descent. When the thumb/finger levers are released the scooter will slowly come to a stop.

Caution - Do not turn the key off while the unit is in motion.

Grass and Gravel

Please follow the guidelines previously given and your scooter will perform admirably over many surfaces. Avoid long grass, loose gravel and sand.

NOTE: You should not operate your scooter in wet weather or on wet surfaces.

BATTERIES AND BATTERY CHARGER

All Shoprider® Heavy Duty scooters require two maintenance free, sealed lead acid batteries or gel batteries. Battery performance can be affected by temperature, terrain, condition of battery, the weight of the user, etc. The battery level indicator/gauge is only a guide and is most effective when the scooter is in drive, only then is the true battery discharge level displayed.

- When the scooter stops the battery level indicator may indicate full (no load on batteries).
- An active user can use up to 30% of battery capacity or more per day.
- Inactive users may only use 50% of battery capacity in a week.
- In both these instances the batteries should be put on charge over night.

Battery Charger

Batteries required for your scooter are specially designed. All Shoprider® scooters require a Shoprider® automatic battery charger. These chargers have an electronic switch that will terminate the charge when the batteries are fully charged. All Shoprider® chargers rely on a specific minimum feed-back voltage signal from the batteries in order to begin the charging cycle. If the batteries are severely discharged, the charger does not receive the required feed-back signal and the charger will not charge the batteries. Please contact your authorized Shoprider® provider for assistance.

The battery charger supplied for the Shoprider® Enduro XL3 and Enduro XL4 scooters are 24 volt 8 amp transformer type off-board chargers. The battery charger supplied for the Shoprider® Sprinter XL4 scooter is a 24 volt 3 amp transformer type off-board charger.

Charging

Charge the batteries completely (8-12 hours) prior to first time use. To charge the batteries connect the plug lead into the battery-charging socket on the scooter tiller and the 3-prong A/C plug into the wall socket and switch on (8 amp charger only). **FOR Sprinter XL:** the battery charger has two lights. The red light when constant shows the battery charger is connected, if the red light flashes; there is a break in the connection. The green light flashes when the batteries are receiving charge and is constant when the charge is complete. **FOR Enduro XL3 and Enduro XL4:** The battery charger has two lights. The red light shows the battery charger is connected and has power (switched on). The second light will show a gold light while charging and a green light when the charge is complete.

CAUTION: Always ensure that the charging lead is in good condition and has not been damaged or stretched.

MAINTENANCE

Lubrication

At six-month intervals you should lubricate the following parts with a multipurpose grease or similar lubricant:

- Seat pivot post.
- Seat release lever pinion.
- Clean and recoat axles lightly.

CAUTION – DO NOT USE WD40 TO LUBRICATE PARTS!! DO NOT LUBRICATE TRANSAXLE GEARS!! In the event of any difficulties please consult your provider.

Wheels and Tires

The wheels of your scooter have split rims. This allows any punctures to be repaired easily.

To change the wheel remove the center 13 mm bolt and slide the wheel off its axle. Ensure that when refitting the wheel the retaining bolt is fitted with a locking washer or the screw threads are treated with lock-tite or a similar adhesive. When changing a tire the inner tube must be deflated. Remove the four bolts from the wheel and split the rim. Tire pressure is recommended to be kept at 30 psi on the rear tires, and 25 psi on the front.

General Scooter Maintenance

Every six months check the tiller base bolts, wheel axle bolts, and arm rest angle adjustment bolts and tighten as necessary. Also check the seat and arm rest tightening knobs and tighten as needed.

TROUBLE SHOOTING GUIDE

Circuit Breaker

Your scooter is fitted with the latest in electronic controls that are programmed to protect the electrical system from abnormal overloads. Fitted for extra protection is a circuit breaker, should there be a situation that your scooter stops for no apparent reason please check that the circuit breaker has not popped out or tripped. The circuit breaker can be found under the rear chassis cover accessible through a port hole under the seat.

Check List

If your scooter fails to operate, please check the following:

- Unit is switched on.
- All plugs and connectors are firmly fixed.
- Battery level shows full charge.
- Freewheeling device is in the drive position (lever down).
- Circuit breaker is reset.
- Battery fuses are not blown.

If the free wheel device has been operated with the scooter switched on, then the scooter will not operate until the ignition key has been switched off and then on again in order to reset the circuits.

Please consult your provider if your scooter does not run after checking these points.

Error Codes

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 scooter. The diagnostic alarm will sound a warning signal to alert the user that a diagnostic alarm pattern is about to be sounded. The signal will be a set of fast beeps lasting two seconds. Without the use of any servicing tools, the condition can be simply diagnosed. If after checking out the fault from the table below and the fault is still showing, do not use the scooter. Turn off the power and consult your provider immediately.

Table 1

No. of Beeps	Description
1	The battery needs charging or there is a bad connection to the battery. Check the connections to the battery. If the connections are good, try charging the battery.
2	There is a bad connection to the motor. Check all connections between the motor and the controller.
3	The motor has a short circuit to a battery connection. Contact your service agent.
4	The freewheel switch is activated or the manual brake disengagement mechanism is operated. Check the position of the switch or lever.
5	The motor is stalled. Or, The controller is over temperature or in current foldback.
6	The S-drive is being inhibited from driving. Inhibit 2 is active. This may be because the battery charger is connected or the seat is not in the driving position.
7	A throttle fault is indicated. Make sure that the throttle is in the rest position before switching on the scooter.
8	A controller fault is indicated. Make sure that all connections are secure.
9	The parking brakes have a bad connection. Check the parking brake and motor connections. Make sure the controller connections are secure.
10	An excessive voltage has been applied to the controller. This is usually caused by a poor battery connection. Check the battery connections.

TECHNICAL SPECIFICATIONS

UNIT SPECIFICATIONS		Sprinter XL4	Enduro XL3	Enduro XL4
Overall Dimensions: L ¹ x W x H ¹	in	52 x 23 x 30	51 x 27 x 35	53 x 27 x 34
Number, Size of Tires	Front	2 , 10"	1 , 12"	2 , 12"
	Rear	2 , 10"	2 , 12"	2 , 12"
Suggested User Weight (on the level road)	lb	Max. 350	Max. 500	Max. 500
Weight of Heaviest Part (w/o battery, baskets and seat)	lb	108	104	115
Total Weight (w/ batteries, basket, seat)	lb	181	222	240
Each Battery Module Weight	lb	32	50	50
Maximum Battery Module Capacity	_V_A h x Pcs	12V40Ah x 2	12V75Ah x 2	12V75Ah x 2
Charger		Off Board (3A)	Off Board (8A)	Off Board (8A)
Output Power of Motor	hp(W)	1 (746)	2 (1491)	2 (1491)
Maximum Speed ²	mph	5	5	5
Maximum Climbing Angle (based on user weight of 90kg/200lb)/Safe Climbing Angle	% (°)	14 (8)	14 (8)	14 (8)
Range ³ (per charge w/ STD 33- 36AH Battery / 200 lb User Weight) (After the battery and mechanical moving parts fully break in)	mile	25	25	25
Turning Radius	in	54	40	72
Handle Bar	Type	T-BAR	DELTA	DELTA

ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

1. Length includes the Anti-Tip wheel. Height from floor to seat (variable).
2. Driver weight may exceed weight of the unit; speed must be reduced when turning.
3. The actual driving range varies with the factors shown below:
 - a) the weight of occupant
 - b) ground surface
 - c) battery conditions
 - d) type of charger
 - e) ambient temperature
 - f) the way of driving
 - g) etc.

QUARTERLY INSPECTION

For your own safety, quarterly inspection and service on the product with signature by an authorized dealer is strongly recommended. 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 #:** _____

Provider Unit Was Purchased From: _____

M / D / Y	M / D / Y	M / D / Y	M / D / Y	M / D / Y	M / D / Y
M / D / Y	M / D / Y	M / D / Y	M / D / Y	M / D / Y	M / D / Y
M / D / Y	M / D / Y	M / D / Y	M / D / Y	M / D / Y	M / D / Y
M / D / Y	M / D / Y	M / D / Y	M / D / Y	M / D / Y	M / D / Y
M / D / Y	M / D / Y	M / D / Y	M / D / Y	M / D / Y	M / D / Y

WARRANTY

Please refer to warranty information included with unit.
Serial No.

DISCLAIMER

Congratulations on your purchase of the *Shoprider*®

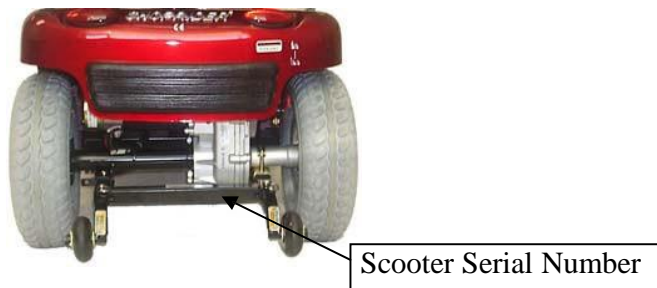
It is not intended to be used by individuals with physical limitations that could prevent the user from operating this unit safely. *Shoprider*® disclaims all responsibility for any personal injury or property damage, which may occur as a result of improper or unsafe use of its products.

Mechanical or electrical defects will be dealt with on a contingency liability basis.

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

Model No.

Serial No.



Notes:

Provider's Stamp

Shoprider® Mobility Products, Inc.
(800) 743-0772
www.shoprider.com