

SHOPRIDER®

Echo 3™

Model # SL73
Portable Scooter
User Manual





Table of Contents

INTRODUCTION/FEATURE GUIDE.....	3
SAFETY ADVICE.....	4
EMI WARNING.....	5-6
ADJUSTMENTS.....	7
SCOOTER TILLER CONTROLS.....	8
DRIVE/FREEWHEEL OPERATION.....	9
BATTERY PACK/ SERIAL NUMBER.....	10
STARTING TO DRIVE YOUR SCOOTER.....	11
EXTRA GUIDELINES IN THE CONTROL OF YOUR SCOOTER.....	12
BATTERIES AND BATTERY CHARGING.....	13
MAINTENANCE/ TROUBLE SHOOTING GUIDE.....	14
NOTES.....	15
TECHNICAL SPECIFICATIONS.....	16
QUARTERLY INSPECTION.....	17
NOTES.....	18-19
WARRANTY AND DISCLAIMER.....	20

SHOPRIDER®

INTRODUCTION

Congratulations on your purchase of the Shoprider® Echo scooter. The Echo is the ultimate combination of style, comfort and portability.

The Echo goes with you wherever you go and can be assembled or disassembled in just seconds. The Echo is super light and compact, and can be stored in small areas such as the trunk or back seat of your car. The compact features support easy transportation of your Echo for today's active lifestyle.

The Echo can be used in confined spaces both indoors and out. Direct drive transaxle and electromagnetic brake give a safe and efficient ride. We know that the Echo portable scooter will provide many years of mobility for you.

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

ECHO FEATURE GUIDE (Fig 1)

1. Tiller control head
2. Detachable seat with fold down Back and optional removable pads
3. Removable flip-up arm rests (optional)
4. Detachable basket
5. Detachable battery-pack
6. Tiller adjustment knob
7. Seat release lever
8. Puncture proof tires
9. Anti-tip wheels



Figure 1



SAFETY ADVICE

- DO NOT carry passengers.
- DO NOT exceed inclines over 6 degrees (10% 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 the scooter on the road, street or highway.
- DO NOT attempt to drive over curbs greater than 2 inches in height. Doing so could cause your scooter to turn over, causing injury or damage to the scooter.
- 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 assistance of a qualified healthcare professional.
- DO NOT operate the 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, 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®.
- Before sitting in or exiting the scooter, turn scooter switch to off position. This will insure the POWER is off and the scooter can not move under its own power.
- As a general precaution, always turn scooter off 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 is properly adjusted to the user or damage and injury could result.
- DO NOT transport in a vehicle WHILE seated on the scooter. Shoprider® will not be responsible for any injury or damage that might result.
- DO NOT use the scooter in the rain or near any other water source where the scooter may get wet. Direct exposure to rain or dampness could cause damage to the scooter electrical components.
- For maximum battery life, make sure to fully charge batteries for up to 12 hours prior to first use.



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.

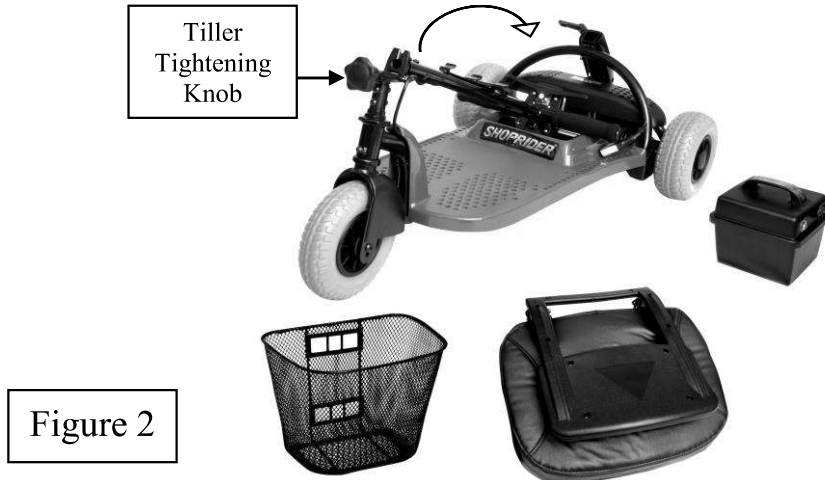
NOTE! There is no easy way to evaluate the overall immunity of the scooter.

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

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

SHOPRIDER®

ADJUSTMENTS



Adjustments for Transport (Fig 2)

First remove the basket by lifting basket up and off bracket. Next release the seat (Refer to Figure 3). Disconnect the battery back by pushing release button in; the button is located on the side of the round metal connection plug in socket. Release the round plug connector by pulling round plug out of box while depressing button. Remove battery pack off the unit (pack is held down by two Velcro strips on the bottom of battery pack). ***NOTE: The serial number is also located on the frame beneath the battery pack.*** Fold down the tiller by loosening the tiller tightening knob located at the base of the tiller.

Seat Removal & Upgrades (Fig 3)

To remove the seat; there is a tightening knob on the bottom of the seat that needs to be loosened in order to slide the seat off. An available seat upgrade includes adjustable armrests and a back pad. The armrests flip up for easy sideways transfer.



Figure 3

SHOPRIDER®

SCOOTER TILLER CONTROLS (FIG 4)

Speed Controls

The speed control allows you to set a speed between slow (turtle) and fast (rabbit).

Battery Level Indicator Gauge

Where the needle sits, shows the amount of charge in your batteries. The amount of charge will only show at its true level when the scooter is in drive. Always charge the batteries completely before beginning out on any journey.

Caution – Do not allow the gauge needle to go down completely as complete discharge of the batteries could cause irreversible battery damage.

Horn

A yellow button next to power switch on tiller operates the horn.

Hand Lever Controls

The left hand lever controls the reverse and the right hand lever controls the forward motion. The amount of pressure applied to each lever will determine the speed the scooter travels at up to the speed selected. Release the hand lever and the scooter will automatically come to a stop as the electromagnetic brake is applied to the motor.

On/Off Switch

The On/Off switch is located on the tiller. When the unit is in the On position the switch will display a red light and the battery gauge needle will move. There may be a slight delay before the hand lever control can be operated, while the main controller checks the circuits.

Electromagnetic Brake

The brake is automatically operated when the hand control levers are pressed or released. There is a slight delay when the scooter accelerates and decelerates; this allows the scooter to start smoothly and come to a smooth stop.

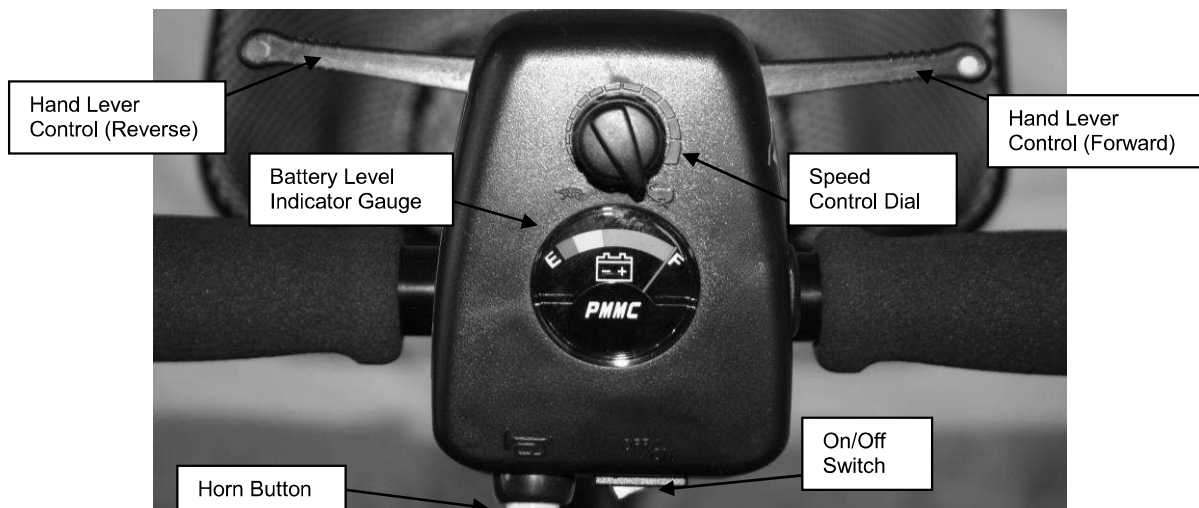


Figure 4

SHOPRIDER®

DRIVE/FREEWHEEL OPERATION (FIG 5)

The drive/freewheel lever (yellow lever) is located at the right rear of unit. This lever allows you to disengage the drive mechanism and push the scooter while in freewheel mode. To disengage the drive mechanism (neutral), push the lever up (the scooter can now be pushed). To re-engage the drive mechanism (drive), push the lever down (now the unit may be driven).

Note: The scooter will not operate while the drive/freewheel lever is in the neutral position (forward). The scooter must be turned off, lever pushed downward (drive position) and then turned on in order to reset the circuits.

WARNING! Always re-engage the free wheeling device after use. Failure to do so may result in injury.

Anti-tip wheels

The anti-tip wheels are located at the rear of the scooter frame (Fig 5). The scooter should not be used unless the anti-tipping wheels are in place.

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

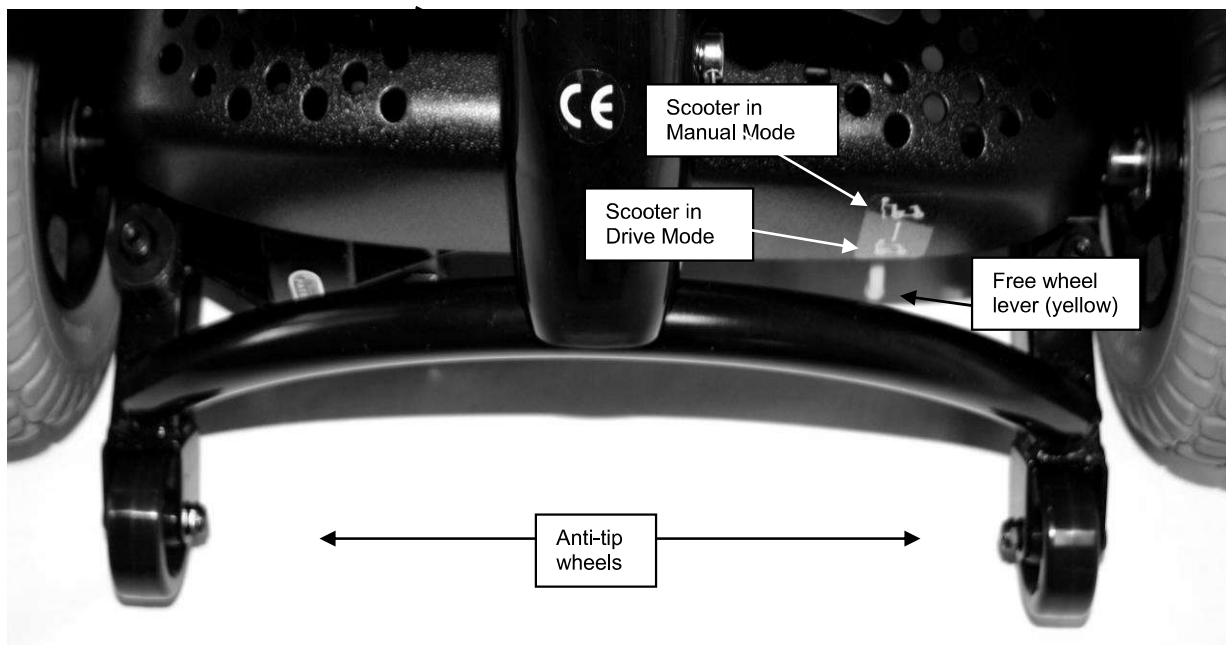


Figure 5

SHOPRIDER®

Battery Pack (Fig. 6)

The battery pack is specially designed for easy access and transportability. The reset button is located on the battery pack. This reset button is designed to protect the electronics on your scooter. If this button pops the scooter will not turn on, nor operate, simply push button to reset. The 3-pin plug-in port is on the battery pack and serves two purposes; connecting batteries to scooter and charging the battery pack. The plug-in port also has a release button; that prevents the connections from coming apart. The 3-pin round plug is removed by gently pressing the release button while pulling plug out. The battery pack is held onto the unit by Velcro straps lining the bottom of the battery pack and unit.

Scooter serial number (Fig. 7)

The scooter serial number is located under the battery pack. It is an alphanumeric combination of 13 numbers and letters. Shoprider recommends that you write the serial number down on the back of this manual for future reference. The battery pack is easily removed (refer to Fig. 6). Pull up firmly to release pack from unit.

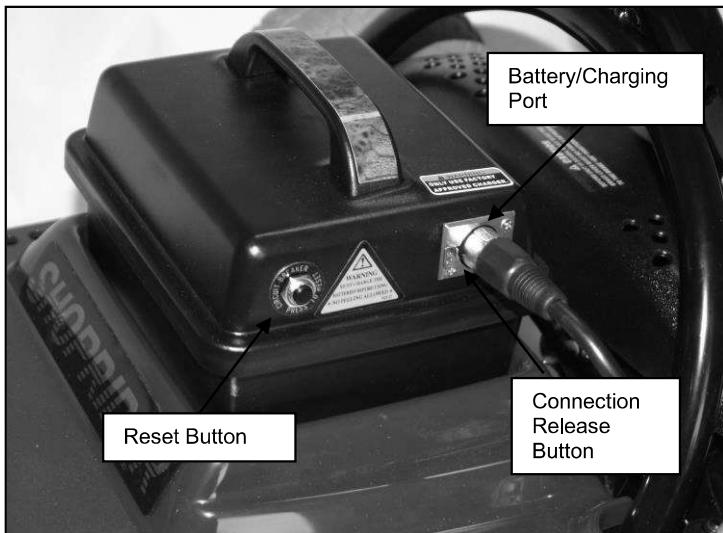


Figure 6

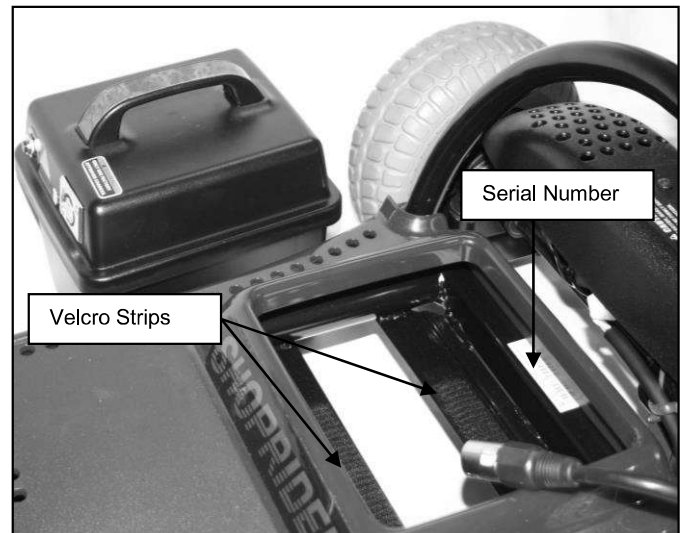


Figure 7

SHOPRIDER®

STARTING TO DRIVE YOUR SCOOTER

First Time Use

Prior to using your Echo 3 Portable scooter 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. Failure to do so may cause permanent damage.

Getting Started

- Select a level area with plenty of space.
- Mount the scooter by pushing the arm (if installed) upward out of the way and sliding onto the seat. Use the arm rest for support if necessary. **DO NOT use the seat back or tiller for support.**
- Adjust the seat height as previously described.

Starting Scooter Movement

- Ensure that you are seated in a comfortable position.
- Turn the switch to the on position. The switch will light up red when on.
- Your speed setting should be on or near the turtle (slow).
- Squeeze your right hand lever (yellow dot) and the scooter will move forward slowly. The harder you squeeze, 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 automatically engages.

Steering

Steering the scooter is light and easy. When starting off ensure that 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 (turtle) before you move in reverse. Squeeze your left hand lever (red dot), and steer wide of all corners and obstacles.

Dismounting

Before dismounting ensure that the Scooter switch is turned to the off position (red light off). Dismount the scooter by pushing the arm upward out of the way (if installed) and slide off the seat. Use the arm rest for support if necessary. **Do Not use the seat back or tiller for support.**

CAUTION: Please ensure that care is exercised when mounting or dismounting the scooter and that the tiller and foot rest is not used for support.

SHOPRIDER®

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 where ever possible avoid making turns. When going down a ramp or slope keep the speed settings on slow. This will ensure there is a safe controlled descent. When the hand levers are released the scooter will slowly stop.

Safe Climbing Angle

Always follow the guidelines of the safe climbing angle as shown in figure 8.

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

Grass and Gravel

Please follow the guidelines given previously 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. This may cause the motor to short out or cause other irreversible damage.

NOTE: To preserve battery charge, your scooter may go into sleep mode after being idle for a few minutes. To reset, switch unit off and turn back on again.

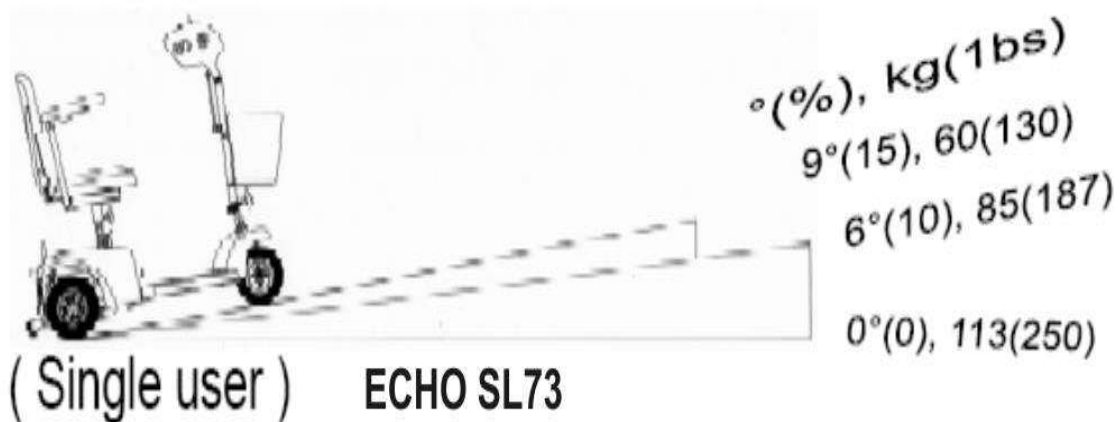


Figure 8



BATTERIES AND BATTERY CHARGING

Batteries

The Shopprider® Echo 3 Portable scooter is supplied with maintenance-free, sealed lead acid batteries. For easy handling, the batteries are contained within a battery pack. Battery life and performance may be affected by temperature, terrain, condition of battery, the weight of the user, and care of batteries. The battery needle gauge is only a guide and is most effective when the scooter is moving, only then is the true discharge level displayed.

- When the scooter stops the battery needle gauge may indicate full.
- An active user can use up to 30% of battery capacity or more per day.
- Inactive users may use 50% of battery capacity in a week.
- In both of these instances the battery should be put on charge over night. If the battery is kept in a discharged state permanent damage to the batteries may result, thereby shortening the battery life and/or the charge capacity.

Keeping the batteries charged will extend the life of the batteries

The Batteries hold a fixed amount of energy, and charging cycles. It is recommended that you get familiar with the range and charging cycles before going on a long journey.

Battery Charger

The battery charger is a 2-amp transformer type off board. The Echo 3 Portable scooter has a built in charger port on the rear side of the battery pack. This special feature allows the batteries within the battery pack to be charged without the scooter.

First Time Use

Prior to using your Echo 3 Portable scooter 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. Failure to do so may cause damage.

Charging

To charge the batteries connect the 3-pin male plug lead into the 3-pin female battery-charging socket located on the battery pack. Plug the A/C cord plug into the wall socket and the other end into the charger (2-pin). The battery charger has two indicator lights. The red light shows the batteries are charging. When the light turns green while connected to the charging port the batteries are fully charged. Once the batteries are completely charged, unplug the A/C cord from the wall then unplug the 3-pin lead from the battery pack.

WARNING: Only use the original Shopprider 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 charger port if the charger is not charging.

SHOPRIDER®

MAINTENANCE

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, and other nuts and bolts is recommended on a regular basis.
- Most lubricated components on the Echo Portable scooter are designed to be maintenance free and are sealed. Therefore lubrication is not required for these components. However, the driving axles and seat post should always have a very light coat of multipurpose 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 assembly) 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. 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, and others. Please contact your local Shoprider® provider for battery replacement.

TROUBLESHOOTING GUIDE

Circuit Breaker (Reset Button)

Your scooter is fitted with the latest in electronic controls that are programmed to protect the electrical system from abnormal overloads. Provided for extra protection is a circuit breaker, located on the battery pack. Should there be a situation where your scooter stops for no apparent reason, please check that the circuit breaker has not popped.

NOTE: To preserve battery charge, your scooter may go into sleep mode after being idle for a few minutes. To remove from sleep mode, turn the scooter switch off and back on again.

Check List

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

- Unit is switched on.
- Drive/Freewheel mechanism is in the drive position.
- All plugs and connectors are clean and firmly connected.
- Battery level shows full charge.

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.

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



TECHNICAL SPECIFICATIONS

UNIT SPECIFICATIONS		ECHO 3
Overall Dimensions: L ¹ x W x H	in	37"x20"x36"
Number, Size of Tires	Front	1,8"
	Rear	2, 8"
Suggested User Weight (on the Level Road)	lb	MAX. 250
Weight of Heaviest Part (Front Chassis Assembly)	lb	35
Total Weight (w/ 12Ah Battery Pack, Basket, Seat)	lb	70
Battery Pack Module Weight	lb	15
Battery Module Capacity	$\frac{V}{x Pcs}$ Ah	12V10Ah x 2
Charger	AMPS	Off Board (2A)
Output Power of Motor	Hp	0.45
Maximum Speed ²	mph	3.8
Maximum Climbing Angle (based on user weight of 100kg/220lb) /Safe Climbing Angle	% (°)	15 (9) 130lbs/ 10(6) 187lbs (Figure 8)
Range ³ (per charge w/ STD 10Ah Battery / 90 kg User Weight) (After the battery and mechanical moving parts fully break in)	mile	8
Turning Radius	in	32"
Ground Clearance	in	1.5
Handle Bar	Type	T-BAR

*****ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE*****

1. Include the Anti-Tip wheel.
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) terrain