

# LiteRider<sup>™</sup> GOLDEN



**Owner's Manual**  
**MODELS GL110/GL140**

 **GOLDEN**  
technologies  
YOUR LIFE IN MOTION



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Thank you for purchasing your Golden LiteRider™ Scooter. We are honored you have chosen Golden Technologies for your mobility needs.

### LiteRider™ Models GL110/GL140

#### Standard Packing List:

- 1 Owner's Manual
- 1 Consumer Instructional DVD
  - 1 Battery Pack
- 1 Under-the-seat Basket
  - 1 Front Basket
- 1 Seat with Armrests
  - 2 Keys
- Battery Charger
- Seat Post Nut and Bolt

#### DISCLAIMER

We ask that you read this manual completely before operating your new Golden LiteRider™. Golden Technologies, Inc. is not and cannot be held responsible for any damage or injury incurred due to improper or unsafe use of the Golden LiteRider™ scooter. Golden Technologies, Inc. specifically disclaims responsibility for any bodily injury or property damage that may occur during any use that does not comply with applicable federal, state, or local laws or ordinances.

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# I. INTRODUCTION

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Congratulations on the purchase of your new Golden LiteRider™ scooter. The LiteRider combines cutting edge technology with attractive designs that are also highly functional in today's world. We at Golden Technologies, Inc. know that you have chosen a scooter that will give you years of dependable operation and also will enhance the quality of your life by providing you with the mobility to experience an active daily lifestyle.

Even though your new LiteRider is both user-friendly and designed for maximum maneuverability in even the tightest spaces, we ask that you please read, understand and follow all of the instructions and suggestions in this manual before you operate your scooter for the first time. The safe use of your new scooter is very important to us.

Golden Technologies, Inc. cannot be held responsible for personal injury or property damage resulting from the unsafe or the improper use of any of our broad range of health and personal mobility products. Also, Golden Technologies, Inc. cannot be held responsible for personal injury or property damage resulting from attempts to follow instructions, suggestions, and guidelines presented in this owner's manual.

Our Research and Development Department, our Quality Control Department, and our Engineering Department have used the latest product specifications and the latest product design information to manufacture your LiteRider. Golden Technologies, Inc. reserves the right to implement changes into our product lines when those changes become desirable or necessary. If changes are implemented into our product line, there may be minor differences between the product you purchased and the illustrations and instructions in this owner's manual.

# I. INTRODUCTION

## FEATURES AND BENEFITS

Your Golden LiteRider™ scooter has been designed with your comfort in mind. It has also been designed to be a safe method of transportation when safety and operating instructions are followed. Please review the features and benefits of certain components of the LiteRider scooter below.



**Figure 1. LiteRider Features (4-wheel)**

# I. INTRODUCTION

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## **ACCESSORIES FOR THE LITERIDER™ SCOOTER:**

A variety of accessories are available for your Golden LiteRider Scooter. Please contact your Authorized Golden Technologies Dealer for more information or to order.

- Cane Holder Tube
- Cup Holder
- Deluxe Pack N' Go
- Forearm Crutch Holder
- Mirror
- Quad Cane Holder
- Safety Flag
- Scooter Cover
- Touch-up Paint
- Walker Holder
- O2 Holder

\*Some accessories require a mounting bracket or mounting clips. Please check with your dealer to find out if the accessory you would like to order requires a mounting bracket or mounting clips.

## II. SAFETY


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Your Golden LiteRider™ is a battery-operated personal mobility vehicle. Please exercise caution and consideration when you are operating it. Driving your LiteRider carefully and thoughtfully will help ensure your personal safety and the safety of other people.

**NOTE:** Before learning to operate your LiteRider, have your authorized Golden Technologies, Inc. dealer determine if it is advisable for you to practice getting on and off your scooter and operating it in the presence of an attendant.

### BEFORE GETTING ON YOUR LITERIDER

- Check to be certain that the power is turned off. See section V. "Operation" in this manual. This will eliminate the possibility of accidentally activating the paddle controls and causing injury to yourself and/or others.
- Check to be certain that your LiteRider's freewheel lever is in the engaged position. See section V. "Operation" in this manual.
- Flip up the armrest(s).

 **WARNING** When getting on or off your LiteRider, keep your weight toward the middle of the deck. Putting most or all of your weight on the edge of the deck may cause an unstable condition.

### GETTING ON YOUR LITERIDER


- Position the seat for safe and easy mounting. Ensure that the seat is facing forward. See section V. "Operation."
- Return tiller to full upright position if necessary.
- Carefully place one foot on the approximate center of the deck and seat yourself comfortably and securely on the seat.
- Flip down the armrest(s).

### GETTING OFF YOUR LITERIDER

- Make certain that the power is turned off and the key is removed.
- Return tiller to full upright position
- Flip up the armrest(s).
- Carefully place one foot on the ground, transfer your weight to that leg, and slowly come to a standing position.
- Step away from the scooter.

### MAXIMUM WEIGHT

Your LiteRider has been rated to a maximum payload (operator and anything else being carried on the scooter) of 300 pounds. Exceeding the maximum weight rating will void the warranty.

 **WARNING** Exceeding the maximum weight rating may result in injury to yourself and/or others.

## II. SAFETY

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### DRIVING ON INCLINES

- For maximum stability, lean forward in your LiteRider's seat while proceeding up ramps, inclines, curbs, or any low rise. See figure 2.
- Drive with caution when attempting to negotiate any incline, even handicap access ramps.
- Always climb or descend an incline by driving straight up or straight down the face of the slope. See figure 2.
- Do not traverse or drive across the face of an incline in any direction. See figure 3.
- Do not attempt to negotiate an incline that is covered with snow, ice, cut or wet grass, leaves, or any other potentially hazardous material.
- Do not back down an incline.
- Try to keep your LiteRider moving when climbing an incline. If you do come to a stop, restart and accelerate slowly and carefully.
- Do not try to descend or climb a slope whose gradient is greater than recommended.

**\* LiteRider maximum recommend incline is 6°.**



**Figure 2. Going Up an Incline**



**Figure 3. Traversing an Incline**

**⚠ WARNING** If, while you are driving down a slope, your scooter starts to move faster than you feel is safe, release the throttle control lever and allow your Buzzaround XL to come to a stop. When you feel that you again have control of your scooter, push the throttle control lever forward and continue safely down the remainder of the slope.

### DRIVING DOWN A DECLINE

- Lower speed setting.
- Whenever it is safely possible, drive forward down any ramp, low rise, or incline.

Golden Technologies, Inc. does not recommend that you drive your scooter in reverse down any incline, ramp, curb, or low rise. Backing down any slope may create a very hazardous situation. If it is necessary to back down a slope follow one of two procedures.




## II. SAFETY

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**NOTE:** When using either of the following procedures to back down a slope, Golden Technologies, Inc. strongly advises that you have the assistance of another person.

### **Procedure 1 - Under Power**

1. Set the key switch to the “Off” position. See section V. “Operation.”
2. Turn the speed control dial fully counterclockwise to its slowest setting.
3. **Dismount your LiteRider.**
4. Set the key switch to the “On” position. See section V. “Operation.”
5. While standing alongside your scooter, carefully operate the controls at the lowest speed setting. See section V. “Operation.”
6. Slowly and carefully back your scooter down the incline.
7. Carefully remount your LiteRider and resume normal operation.

 **WARNING** When your scooter is in freewheel mode, the park brake is released. The weight of the scooter on a slope may cause you to lose control of the scooter. If you do not feel capable of manually controlling your scooter down the slope, request assistance or do not attempt to use this procedure.

### **Procedure 2 - Emergency (No Power)**

1. Set the key switch to the “Off” position. See section V. “Operation.”
2. **Dismount your LiteRider.**
3. Set the freewheel lever to “Disengaged.”
4. While standing alongside the scooter, carefully manually maneuver it down the slope.
5. When you have reached a level surface at the bottom of the slope, position the freewheel lever in the engaged position. See section V. “Operation.”
6. Carefully remount your LiteRider, and set the key switch to the “On” position to restore power.

### **Motor Braking System**

Your scooter is equipped with a system that uses the motor to aid in braking. This motor brake system is designed to work when the key is in either the on position or the off position.

When the key is in the on position, the freewheel is in the engaged position, and the scooter is under power, the motor will help slow down the scooter as soon as you take your hand off of the throttle lever.

When the key switch is in the off position and the freewheel is in the disengaged position, the motor brake system will keep you from pushing the scooter too fast (i.e. down a slope).


You may notice this when pushing the scooter. The scooter will move freely until you reach a certain speed. You will then encounter some resistance as the motor brake system is activated.

## II. SAFETY

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### MEDICATION

Always check with your physician to determine if any of the medications you are taking may affect your judgment and/or your ability to operate your LiteRider. Also check with your physician concerning your physical ability to operate a scooter.

 **WARNING** Do not connect or allow anyone except an authorized Golden Technologies, Inc. dealer to connect any electrical or mechanical device to your LiteRider. Unauthorized accessories will void the warranty and may cause injury.

**NOTE:** Please remember that while on your Golden LiteRider, you are a motorized pedestrian. You must observe and obey all pedestrian rules and regulations for the locale in which you are riding.

Please use your Golden LiteRider™ scooter often and allow it to expand the horizons of your daily life. The more mobility your Golden LiteRider brings to you, the happier you will be, and the more satisfied we at Golden Technologies, Inc. will be! But as with all things, especially motor operated vehicles, observing a few rules and safety considerations will help ensure safe scooter operation. So please follow the rules below.

### RULES FOR USE AND OTHER SAFETY CONSIDERATIONS

- Read completely and understand this owner's manual before assembling, operating, transporting, or disassembling your Golden LiteRider.
- Always operate your Golden LiteRider with thought, care, and safety.
- Do not attempt to use your LiteRider on an escalator. Always use an elevator.
- Do not carry passengers under any circumstances.
- Do not mount or dismount your Golden LiteRider unless the brake is engaged.
- Always make sure that the key switch is set to "Off" before mounting or dismounting your scooter.
- Do not back your Golden LiteRider down an incline or across an uneven surface.
- Do not turn your scooter suddenly at full speed.
- Always make sure the seat is locked forward before operating your LiteRider.
- Always come to a full stop before changing direction from forward to reverse or from reverse to forward.
- Do not operate your LiteRider where you could not safely or legally walk.
- Do not climb ramps or curbs that exceed your scooter's capacity.
- Always approach curbs and inclines straight on.
- Always be aware of and careful near mechanical pinch points especially when assembling and disassembling your scooter.
- Never sit on your LiteRider when it is being transported.
- Always fasten down your LiteRider securely with an approved tie-down system while transporting your scooter.
- Never operate your vehicle if it is not functioning properly.

## II. SAFETY

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### **RULES FOR USE AND OTHER SAFETY CONSIDERATIONS – continued**

- Always use caution when driving on soft or uneven surfaces such as grass or gravel. Also use caution on decks where there is no railing.
- Never drive on the roadway, except when you must cross the street.
- Always cross streets at intersections and use crosswalks or the most direct route, making sure that your path is clear and that you are visible to motor traffic.
- Never drive your LiteRider up or down a step or curb that is higher than the ground clearance on the spec page.
- Never back up or down a step or curb.
- Do not drive your LiteRider in icy or salted conditions.
- Never operate your LiteRider while you are under the influence of alcohol.


## III. EMI/RFI

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The rapid development of electronics, especially in the area of communications, has saturated our environment with electromagnetic (radio) waves that are emitted by television transmitters, cellular phones, citizen's band radios (CBs), amateur radios (ham radios), wireless computer links, microwave transmitters, paging transmitters, etc. These electromagnetic (EM) waves are invisible and increase in strength the closer one gets to the source of transmission. When these energy waves act upon electrical devices and cause them to malfunction or to function in an erratic or uncontrolled manner, they are referred to as Electromagnetic Interference (EMI) or Radio Frequency Interference (RFI).

### EMI/RFI AND YOUR LITERIDER


All electrically powered vehicles, including scooters are susceptible to Electromagnetic Interference/Radio Frequency Interference (EMI/RFI). This interference could result in abnormal, unintended movement of your Golden LiteRider.

 **WARNING** Unintended movement or brake release could cause an accident or injury.

The FDA has determined that each make and model of scooter can resist EMI/RFI to a certain level. The higher the level of resistance, the greater the degree of protection from EMI/RFI—measured in volts per meter (V/m). The FDA has also determined that current technology is capable of providing 20 V/m of resistance to EMI/RFI, which would provide useful protection against common sources of interference. This product has been tested and has passed an immunity level of 20 V/m.

### EMI/RFI RECOMMENDATIONS

- Do not turn on or use hand-held personal electronic communication devices such as cellular phones, walkie-talkies, and CB radios while your scooter is turned on.
- Be aware of any nearby transmitters (radio, television, microwave, etc.) on your intended route and avoid operating your scooter close to any of those transmitters.
- Turn off the power if your LiteRider is going to be in a stationary position for any length of time.
- Be aware that adding accessories or components or modifying your scooter may make it more susceptible to EMI/RFI.
- If unintended movement or park brake release occurs, turn your scooter off as soon as it is safe to do so.

 **WARNING** Turn off your scooter as soon as it is safely possible if unintended or uncontrollable motion occurs or if unintended park brake release occurs.

## IV. YOUR GOLDEN LiteRider™

<b>Specification</b>	<b>GL-110</b>	<b>GL-140</b>
Medicare Code	K0800	K0800
Weight capacity	300 lbs.	300 lbs.
Drive Wheels	Rear	Rear
Maximum speed	5 mph	5 mph
Operating Range <sup>1</sup> (using 2 12-volt, 18AH batteries at 200 lbs.)	9.5 miles	8 miles
Ground Clearance to center deck	3.75 in.	3.75 in.
Ground Clearance to transaxle/motor	2.5 in.	2.5 in.
Turning Radius	39 in.	48 in.
Type Batteries	2-18 AH	2-18 AH
Colors	Red, Blue	Red, Blue
Freewheel Mode	Yes	Yes
Electronic Speed Control	Yes	Yes
Electro-Mechanical Brakes	Yes	Yes
Charger	Off-board	Off-board
Controller	90 Amp Dynamic R Series	90 Amp Dynamic R Series
Length	41.5 in.	43.25 in.
Width	22 in.	22 in.
Height (ground to top of back of seat)	37 - 39 in.	37 - 39 in.
Ground to top of Seat	23.5 - 25.5 in.	23.5 - 25.5 in.
Ground to top of Deck	6 in.	6 in.
Deck to top of Seat	18-20 in.	18-20 in.
Number of Seat Height Adjustments	3	3
Size of Increments	1.0 in.	1.0 in.
Front axle to Rear axle	30 in.	30 in.
<b>Weight of Unit: (assembled)</b>	121 lbs.	132.4 lbs.
Front Half	44 lbs.	51.8 lbs.
Rear Half	28 lbs.	28 lbs.
Seat with Arms	22 lbs.	22 lbs.
Battery pack weight	25 lbs	25 lbs
<b>Tires:</b>	Solid, low profile	Solid, low profile
Front	9 in.	9 in.
Rear	9 in.	9 in.
Rear Anti-Tip Wheels	2 in.	2 in.

## IV. YOUR GOLDEN LiteRider™

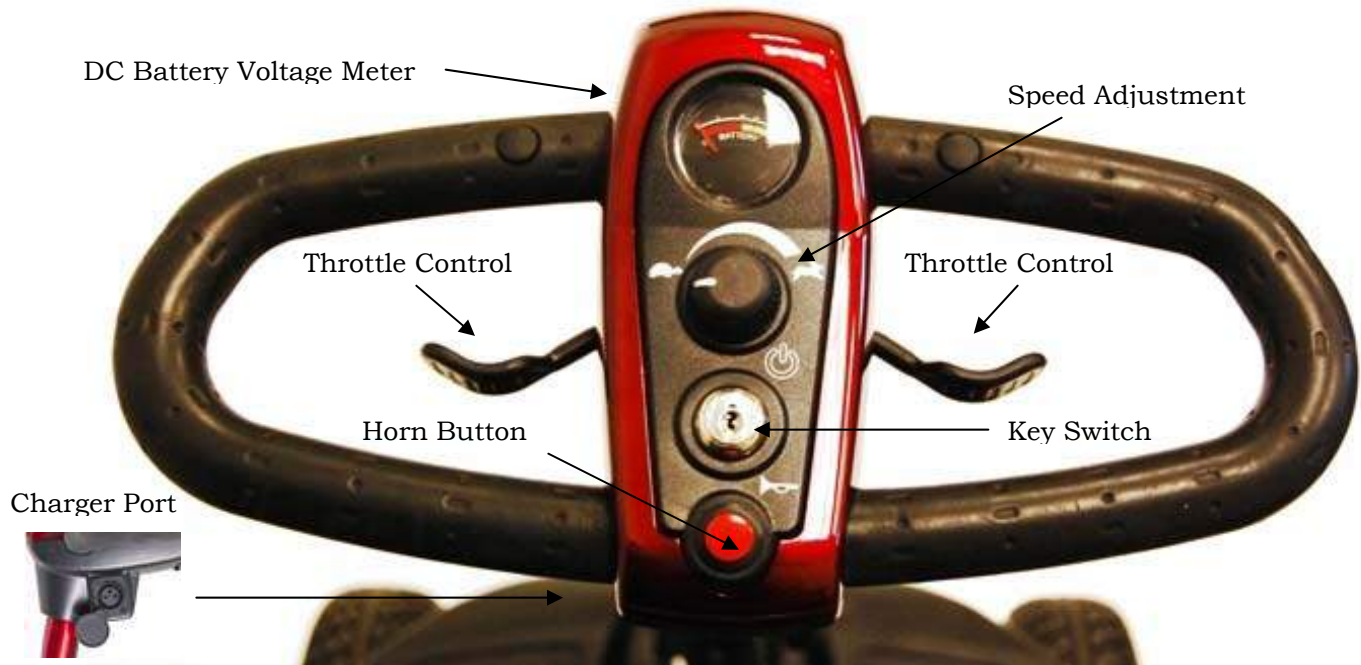
<b>Specifications</b>	<b>GL-110</b>	<b>GL-140</b>
<b>Standard Seat:</b>	Stadium Style	Stadium Style
Seat Back Height (no headrest)	16.0 in.	16.0 in.
Width x Depth	17" x 16"	17" x 16"
Color	Black Vinyl	Black Vinyl
<b>Optional Seat:</b>	Stadium Style	Stadium Style
Seat Back Height (no headrest)	17.5 in.	17.5 in.
Width x Depth	18" x 16"	18" x 16"
Color	Charcoal Vinyl	Charcoal Vinyl
<b>Warranty:</b>		
Frame	Lifetime Warranty	Lifetime Warranty
Drive Train	2 Year Warranty	2 Year Warranty
Electronics <sup>2</sup>	2 Year Warranty	2 Year Warranty

**\* Notes:**

1. Battery range will vary due to rider weight, drive surface, and terrain.
2. Electronics warranty excludes batteries.

Literature is current at the time of printing. Golden Technologies reserves the right to make changes to the product or literature at any time.

## V. OPERATION



**Figure 5. LiteRider™ Delta Tiller Control Panel**

### CONTROL PANEL

#### Speed Adjustment Dial

- The speed adjustment dial allows you to preselect the maximum top speed of your Golden LiteRider. See figure 5.
- Turn the dial counterclockwise to operate your scooter at the lowest speed level.
- Turn the dial clockwise to increase the operational speed of your scooter.
- We recommend that you select a speed setting at which you feel comfortable, safe, and in control of your LiteRider.

#### Key Switch

This switch turns the power on and off to your LiteRider. See figure 5.

- Insert the key into the key switch.
- Turn the key 90 degrees clockwise to turn on your scooter's power. Your scooter will beep once, the DC Battery Voltage Meter will light up, and the needle will move to indicate that power is on.
- Turn the key back to the vertical position to turn off your scooter's power.

**NOTE:** Always make certain that the key is removed from the key switch before getting on or off your Golden LiteRider or before lowering the tiller completely.

#### Horn Button

Press this button to sound the horn. See figure 5.

## V. OPERATION

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### DC Battery Voltage Meter

This meter (see figure 5 on page 16) shows the amount of voltage in your LiteRider's batteries.

- Green indicates a full charge on the batteries.
- Yellow indicates caution and approximately a one-half charge of the batteries.
- Red indicates that the batteries have less than one-half of a charge remaining. See section X. "Care and Maintenance" for instruction concerning charging the batteries.

### Delta Tiller Throttle Control Lever

The Delta Tiller enables you to use only one hand (either the right or left) to operate both the speed and the direction of the LiteRider. This self-centering lever system controls your LiteRider's speed (up to the maximum speed set by the speed adjustment dial) and its forward and reverse direction. See figure 5 on page 16.

#### To drive forward use either of the following:

- Use your right hand fingers to pull back on the right side of the throttle control lever.
- Use your left thumb to push the left side of the throttle control lever.

**NOTE:** Always bring your LiteRider to a full stop before changing direction from forward to reverse, or from reverse to forward.

#### To drive in reverse use either of the following:

- Use your left hand fingers to pull back on the left side of the throttle control lever.
- Use your right thumb to push the right side of the throttle control lever.

When the throttle control lever is completely released, it automatically returns to the center "stop" position and engages your scooter's brakes, bringing you to a complete stop. You will hear a "click" when the park brake engages.

### Control Options

Golden Technologies, Inc. has made provision for the individual needs and abilities of the operators of the Golden LiteRider.

Your authorized Golden Technologies, Inc. dealer can reverse the throttle control lever controls so that when you pull on the left side of the lever, your scooter will move in the forward direction, and when you pull on the right side of the lever your scooter will move in the reverse direction.

### DELTA TILLER ADJUSTMENT

The tiller on your LiteRider scooter employs an adjustment knob to provide you with infinite tiller angle settings. To set the tiller to your liking, follow these directions.

1. Use one hand to grasp a handgrip.
2. Use your other hand to loosen the tiller adjustment knob. See figure 4 on page 13.
3. Position the tiller to a comfortable driving position.
4. Tighten the tiller adjustment knob.



## V. OPERATION

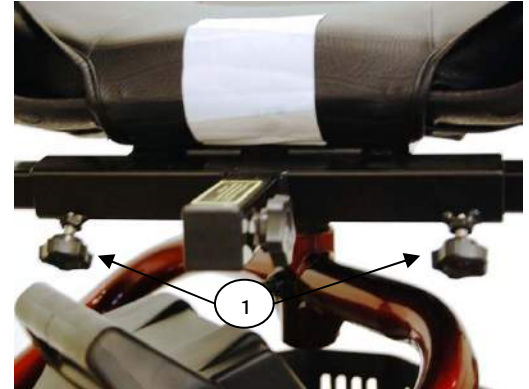
### SEATING

#### Armrest Width Adjustment

To adjust the armrest width:

1. Loosen the adjustment knobs at the rear of the seat. See #1 on figure 6.
2. Slide the armrests in or out to the desired width.
3. Tighten the adjustment knobs.

**⚠ WARNING** Be sure adjustments knobs are securely tightened against the inserted armrest tube. Do not exceed the maximum armrest width of 24 in.



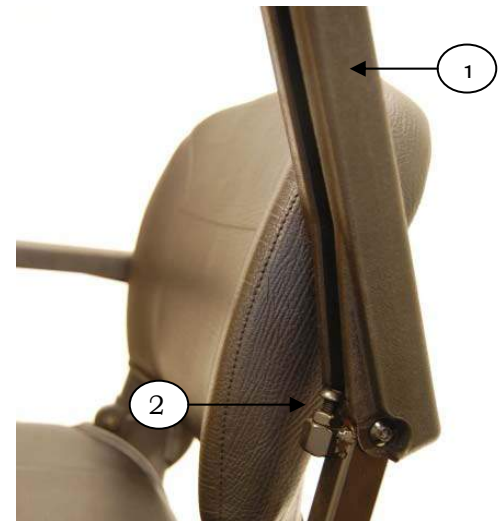
**Figure 6. Armrest Width Adjustment**

#### Flip-up Armrests

Pull up on the end of either armrest to flip it up for easy transfer on and off your Golden LiteRider™. See #1 on figure 7.

#### Armrest Angle

To increase the armrest angle, turn the armrest angle screw counterclockwise. See #2 on figure 7. To decrease the armrest angle, turn the armrest angle screw clockwise.



**Figure 7. Flip-up/Angle Adjustment**

#### Seat Rotation Lever

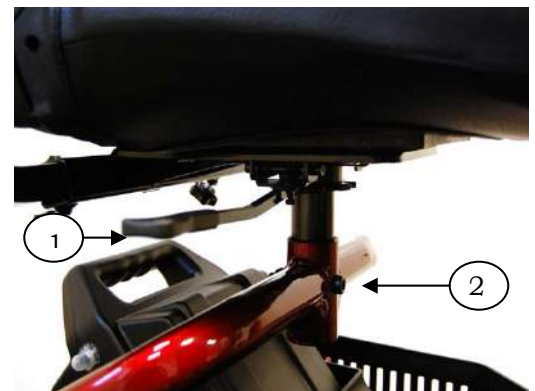
The seat can be rotated through 360° and locked at any 45° position.

1. Push down on the seat rotation lever and rotate the seat to the desired position. See #1 on figure 8.
2. Release the handle to lock the seat at any 45° position.

#### Seat Height Adjustment

To adjust the seat height:

1. Lift the seat up and off of the seat pedestal.
2. Remove the nut and bolt that holds the seat post in the seat pedestal. See #2 on figure 8.
3. Position the seat post at the desired height while aligning the holes in the seat post and the seat pedestal.
4. Reinstall the nut and bolt.
5. Replace the seat back onto the seat pedestal.



**Figure 8. Seat Height/Rotation Adjustment**

## V. OPERATION

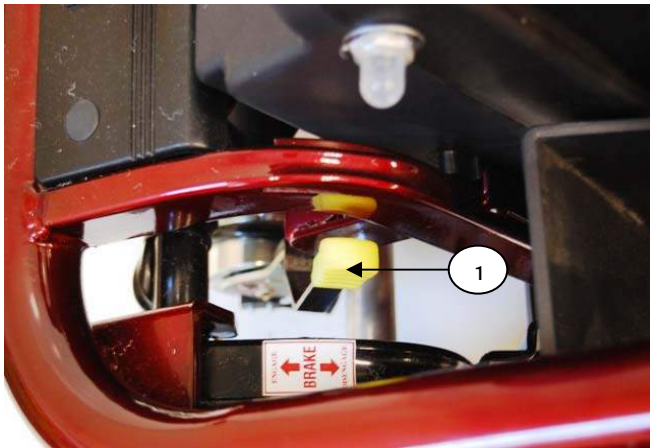
### **FREEWHEEL MODE**

Your Golden LiteRider™ is equipped with a freewheel lever that can set your scooter in or out of freewheel mode. The freewheel lever engages your park brake.

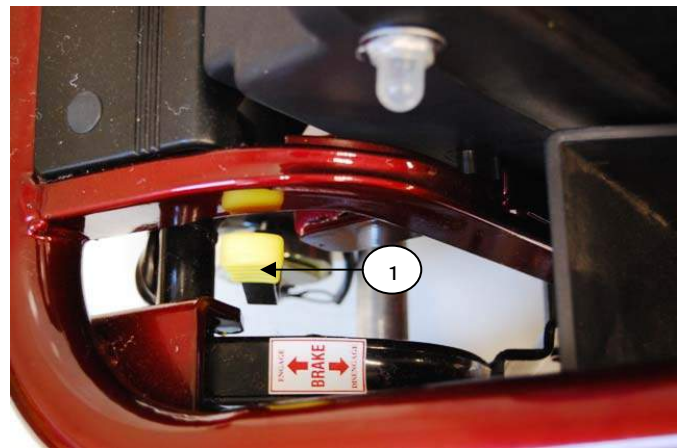
To disengage the park brake and put your scooter in freewheel mode:  
Push the freewheel lever forward. See #1 on figure 9.

To engage the brake and take your scooter out of freewheel mode:  
Push the freewheel lever backward. See #1 on figure 10.

Pushing the scooter too quickly in freewheel will cause the motor to act as a generator causing the scooter to become difficult to push. Freewheel slowly.



**Figure 9. Freewheel Mode (Brake Disengaged)**



**Figure 10. Drive Mode (Brake Engaged)**

**⚠ WARNING** Do not sit in or attempt to move your LiteRider unless the frame and rear carriage are securely engaged. Accidental separation of the frame from the rear carriage may occur and cause injury or damage.

**⚠ WARNING** Never sit on your LiteRider in freewheel mode.

**⚠ WARNING** Never disengage the park brake while you are operating your LiteRider.

**⚠ WARNING** Always make certain that your scooter park brake is engaged before inserting the key into the key switch and turning it to the on position.

## VI. RIDING YOUR LiteRider™


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### MOUNTING

**NOTE:** For your first driving session, make certain that your Golden LiteRider™ starts out on a level surface and that you will continue driving on a level surface.

#### BEFORE GETTING ON YOUR LITERIDER

1. Check to be certain that the power is turned off. See section V. "Operation" in this manual. This will eliminate the possibility of accidentally activating the paddle controls and causing injury to yourself and/or others.
2. Check to be certain that your LiteRider's freewheel lever is in the engaged position. See "Freewheel Mode" on page 19 of section V. "Operation" in this manual.
3. Flip up the armrest(s).

 **WARNING** When getting on or off your LiteRider, keep your weight toward the middle of the deck. Putting most or all of your weight on the edge of the deck may cause an unstable condition.

#### GETTING ON YOUR LITERIDER

1. Position the seat for safe and easy mounting. Ensure that the seat is facing forward. See section V. "Operation."
2. Return tiller to full upright position if necessary.
- 3 Carefully place one foot on the approximate center of the deck and seat yourself comfortably and securely on the seat.
4. Flip down the armrest(s).
5. Place the key into the key switch.
6. Rotate the key to the on position. See #1 on figure 12.



**Figure 11. Key Switch (Off)**



**Figure 12. Key Switch (On)**

## VI. RIDING YOUR LiteRider™

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### BASIC DRIVING

1. Make certain that you are seated safely and properly on your Golden LiteRider.
2. Turn the speed control dial fully counterclockwise to its slowest setting.
3. Insert the key into the key switch—if you have not already done so.
4. Turn the key clockwise to the “On” position. See figure 12 on page 20.
5. Place your hands on the handgrips.
  - If you wish to drive forward, pull back on the right side of the throttle control lever (or push the left side of the throttle control lever forward).
  - If you wish to drive in reverse, pull back the left side of the throttle control lever (or push the right side of the throttle control lever forward).
6. Pull on the throttle control lever to gently move your LiteRider.
7. Release the throttle control lever to allow your LiteRider to come gently to a full stop.
8. Practice these two basic functions until you feel that you have control of your scooter.

### Steering

Steering your Golden LiteRider is easy and logical.

1. With both hands on the handgrips of the tiller (see figure 4 on page 13), turn the tiller to the right to travel to the right.
2. With both hands on the handgrips of the tiller (see figure 4 on page 13), turn the tiller to the left to travel to the left.
3. Make certain to maintain sufficient clearance when turning your scooter so that the rear wheels will clear any obstacle.

 **WARNING** Turning your scooter too sharply at too high of a speed may create a situation where one of the rear wheels will leave the ground and the possibility of tipping the scooter. Avoid this danger at all times by decelerating and steering a wide arc around corners and obstacles.

## VI. RIDING YOUR LiteRider™

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### Steering in a Tight Spot

If you must steer in a tight spot, such as entering a doorway or when turning around:

1. Bring your LiteRider to a full stop.
2. Set speed at the lowest setting.
3. Turn the tiller to the direction in which you wish to drive.

For more information on dealing with obstacles and tight spots, see “Control Through Tight Spots” on the next page.

### Steering in Reverse

Backing up your LiteRider requires attention to what you are doing.

- Use extreme caution when operating your scooter in reverse.
  - Plan your route to avoid getting into a difficult situation.
  - Make sure your proposed route is clear of people, pets, and obstacles.
1. Use your right fingers to push the throttle control lever or use your left fingers to pull back on the throttle control lever. See figure 5 on page 16.
  2. Turn the tiller to the left to drive in reverse to the left.
  3. Turn the tiller to the right to drive in reverse to the right.

**NOTE:** Your LiteRider's speed in reverse is fifty percent of the speed set at the speed control dial.



**WARNING** Prevent injury! Do not drive down an incline in reverse.

## VI. RIDING YOUR LiteRider™

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### CONTROL THROUGH TIGHT SPOTS

As you use your Golden LiteRider to greatly increase your mobility, you will undoubtedly encounter some obstacles that will require practice to negotiate smoothly and safely. Below are some common obstacles that you may meet during the daily use of your scooter. Listed with those obstacles are some driving tips that should help you conquer those obstacles. Learn and follow those tips, and with surprising ease you will soon be in control of your LiteRider as you maneuver it through doors, up and down ramps, up and over curbs, through grass and gravel, and up and down inclines.

### Ramps

#### When proceeding up any ramp, curb, or incline:

- Lean forward in your seat to move your center of gravity forward for maximum stability and safety. If the ramp has a switchback, good cornering ability is required.
- Maneuver your LiteRider so that the front wheels take wide swings around the corners of the ramp.
- Doing this will allow your scooter's back wheels to follow a wide arc around the corner, staying clear of obstacles.

#### If you must stop your LiteRider while driving up a ramp:

- Starting up again simply requires that you apply gentle and steady forward power pressure to the throttle control lever.
- Accelerate gently after stopping on any incline.

#### Driving down a ramp:

- Keep your LiteRider's speed control dial set fully counterclockwise at the slowest speed setting.
- If you must come to a stop, release the throttle control lever slowly and smoothly.



**WARNING** Prevent injury! Do not drive down an incline in reverse.

### Curbs

- See specifications for maximum curb height.
- Always use caution when negotiating any curb.
- Go up or down a curb head at a direct 90° angle.
- Approach and negotiate the curb so that both back wheels of your scooter go over the curb at the same time.
- Never negotiate inclines or curbs by traversing them. Doing so may cause the scooter to tip over.
- Go down a curb slowly to avoid a jarring bump. Use as little power as possible.

### Grass and Gravel

Your Golden LiteRider performs admirably on grass, gravel, and hills, but you must follow the operational parameters presented in this manual. Refer to the "Safety" section. If you are unsure about any situation, avoid it. Common sense is your best protection.

- Feel free to use your Golden LiteRider on lawns or in park areas.
- Avoid long or high grass, which may wrap around your scooter's axles.
- Avoid loose gravel.




## VII. DISASSEMBLY

### DISASSEMBLY

Your LiteRider scooter is designed to be disassembled easily in order to be transported. When disassembling your scooter, please be sure to follow these simple instructions.

#### Remove the Seat

1. Place your scooter on a level surface.

 **WARNING** Remove the key from the key switch before you begin to disassemble your LiteRider.

2. (Optional) Loosen the armrest adjustment knobs and remove the arms from the seat. This will reduce the weight of the seat making it easier to lift.

3. Grip the seat on opposite sides and, with a firm grip, pull the seat straight up towards you. See figure 13.



**Figure 13. Removing the Seat**



**Figure 14. Removing the Battery Pack**

#### Remove the Battery Pack

4. Lift the battery pack off the scooter. See figure 14.

#### Remove the Floor Basket

5. Lift the under-the-seat basket up and off of the frame. See #1 on figure 15. Lift the front basket off of the tiller. See #2 on figure 15.

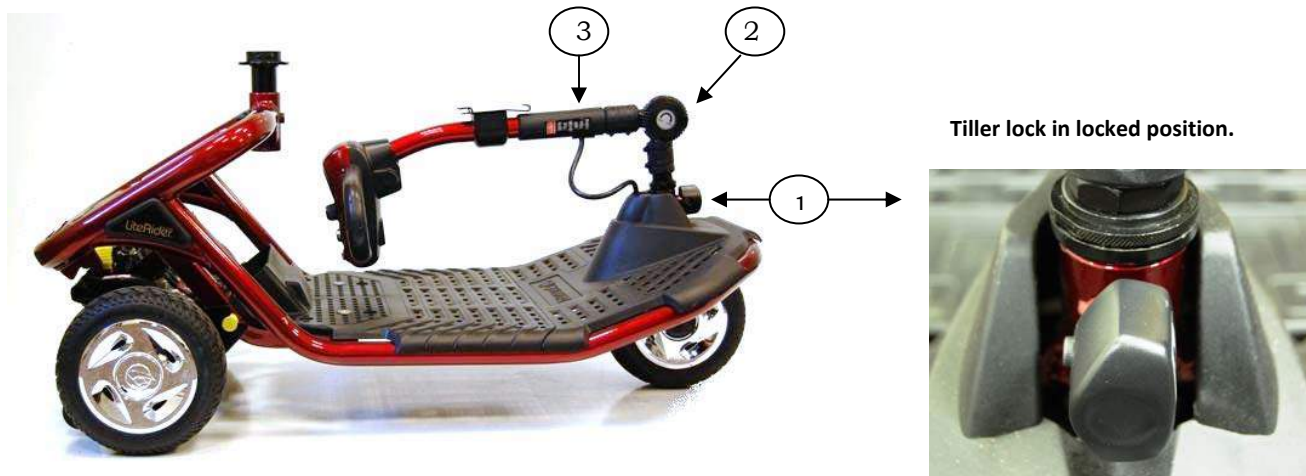


**Figure 15. Removing the Baskets**

## VII. DISASSEMBLY

### Fold Down and Lock the Tiller

6. Push in and turn the tiller lock clockwise 90 degrees. See #1 on figure 16. This will lock the front wheel to keep it from turning side to side to help control while carrying.



**Figure 16. Lowered Tiller**

7. Loosen tiller adjustment knob and fold the tiller down flat. See #2 on figure 16. Then tighten the adjustment knob to secure the tiller in its new position. Once the tiller is lowered and locked, and the scooter is disassembled you may use it as a handle for easy transportation. See #3 on figure 16.

### Separate the Drivetrain from the Frame

**⚠ WARNING** Be careful not to pinch your fingers between the frames. This area is a pinch-point and requires your full attention.

8. Pull up on the drivetrain release lever. See figure 17. Pull the frame up and off of the drivetrain. See figure 18.



**Figure 17. Releasing the Drivetrain**





**Figure 18. Lifting the Frame**





## VIII. ASSEMBLY

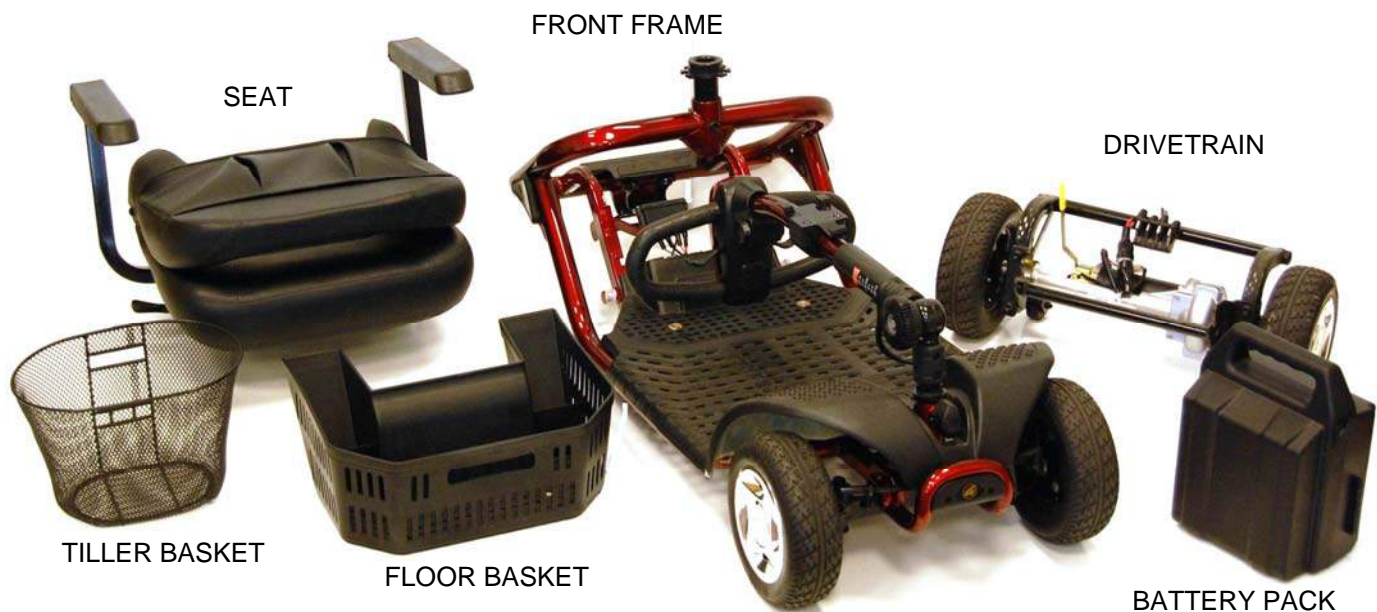
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 **WARNING** Be aware of any possible pinch-points when connecting the rear frame to the front frame. Please note warning labels at pinch-points during assembly.

 **WARNING** Pinching and crushing hazard! Increased hazards due to pinching or crushing result due to the component weight (such as batteries) during preparation for transport and maintenance work. Always carry out any work to be done with great care. Always try to get help from a second person, especially when stowing parts for transport.

 **WARNING** **Pinch Point:** A pinch point is an area where you **MUST** consider your fingers to be sure they **DO NOT** become pinched between two metal areas. The greatest chance of pinch points, become possible during the assembly of the LiteRider scooter.

 **WARNING -- INJURY HAZARD DUE TO IMPROPER ASSEMBLY!** Ensure that all components in the scooter have been correctly assembled. During assembly, please check that all connecting/locking devices are holding in place.



**Figure 19. LiteRider Components (4-wheel)**

## VIII. ASSEMBLY

### Reinstall the Drivetrain

1. Line up the two yellow tabs on the frame, with the two grooves on the drivetrain, one on each side of the scooter. See figure 20.

**⚠ WARNING WATCH FINGER PLACEMENT! BE CAREFUL NOT TO PINCH YOUR FINGERS!**

2. Lower the frame onto the drivetrain until the drivetrain release lever engages. You should hear an audible click.



**Figure 20. Drivetrain Alignment**



**Figure 21. Battery Pack Installation**

### Install the Battery Pack

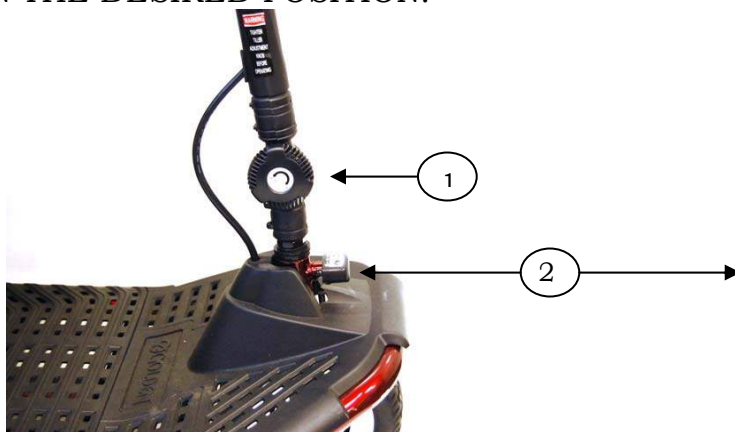
3. Gently lower the battery pack onto the frame. See figure 21.

### Raise the Tiller

4. Loosen the tiller adjustment knob and raise the tiller. See #1 on figure 22.

5. Tighten the tiller adjustment knob at the desired position.

**⚠ WARNING— MAKE SURE YOU TIGHTEN YOUR TILLER KNOB TO BE SURE IT IS SECURED IN THE DESIRED POSITION!**



**Figure 22. Tiller Raised and Unlocked**

Tiller lock in unlocked position.



## VIII. ASSEMBLY

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### Install the Under-the-Seat and Tiller Baskets

6. Place the under-the-seat basket onto the frame. Place the tiller basket onto the tiller. See #1 and #2 on figure 15 on page 24.


### Install the Seat

7. Hold the seat on an angle so you can see the seat swivel post underneath
8. Place the seat swivel post into the seat post as shown in figure 23.
9. Push the seat down. Ensure that the seat is properly engaged by turning the seat slightly left and right.



*Figure 23. Installing the Seat*


 **WARNING Pinch Point!** Keep hands and clothing clear of the seat swivel post and seat post.

 **WARNING** Accident hazard due to non-engaged seat! Ensure that the seat is properly engaged by turning the seat slightly left and right.

### Unlock the Tiller

10. **Turn the tiller lock knob counterclockwise 90 degrees to the unlocked position.** See #2 on figure 22 on page 27.

 **WARNING – IF YOU DON'T UNLOCK YOUR TILLER LOCK KNOB, YOUR TILLER WILL NOT TURN! THIS COULD CAUSE INJURY.**

 **WARNING** Accident hazard due to incorrect seat position! Always turn the seat to face forwards and engage it before driving. If the seat is in any other position, the possibility of tipping is increased. Before turning the seat, always ensure that the scooter is on an even and solid surface.

## IX. TRANSPORTING YOUR LITERIDER™

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**Figure 24. LiteRider Models GL110/140**

**NOTE:** All Golden LiteRider scooters can be equipped with docking devices for loading onto a vehicle by means of a mechanical lift or hoist. Contact your Golden Technologies, Inc. dealer for more information concerning docking devices and scooter lift devices.

### **To Transport Your LiteRider:**

- Disassemble or fold down the seat and tiller (see section VII. “Disassembly”) as close as possible to the loading area of the vehicle to be used for transporting your scooter.
- The degree to which you disassemble your LiteRider or fold the seat and tiller depends on the size and shape of the cargo area of the transporting vehicle.
- Do not lift your LiteRider by its plastic body parts or dash. Breakage of these parts is not covered by the warranty.
- Do not use the tires or wheels to lift the rear carriage. The carriage may rotate and cause injury or damage.
- Moving blankets or other forms of padding may be used to protect your LiteRider during transportation.

 **WARNING** If your scooter and its components are not properly and securely stowed during transportation, the scooter or the components may move or become airborne and cause injury or damage.

 **WARNING** Never sit on your LiteRider when it is being transported. Secure with an approved tie-down system.

## **X. CARE AND MAINTENANCE**

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### **ROUTINE MAINTENANCE**

The Golden LiteRider™ is virtually maintenance free. All of the bearings are permanently lubricated and sealed. No additional lubrication is required. There are, however, several things that you can do to help keep up the appearance and maintain the performance of your scooter.

### **CLEANING YOUR LiteRider**

#### **Tires**

Clean the tires with ordinary kitchen-type cleaners and a damp cloth. Do not use solvents on the tires. Solvents can cause the tire material to break down or become too soft.

#### **Body**

- Clean the body of your scooter with a damp cloth. Do not hose down your scooter! Dry with a clean soft cloth.
- Use cool water mixed with a mild soap to remove dirt and oils.
- Buff by hand with a soft cloth.

#### **Vinyl Seat**

Clean with a mild soap or mild detergent and a damp cloth. A vinyl cleaner may also be used.



## X. CARE AND MAINTENANCE

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### BATTERIES AND CHARGING

Battery maintenance is the most important part of maintaining your scooter. Keeping the batteries fully charged helps to extend battery life. Use the following guidelines to help keep your batteries in optimum condition.

- For daily use, keep batteries fully charged. We recommend that you plug in the off-board charger after each use and charge 6-8 hours.
- If you are not going to use the scooter for more than a week, **fully charge** the batteries and then disconnect them from the scooter. See figure 14 on page 24.

#### To Charge the Batteries:

The charger for all LiteRider models is an off-board charger. To charge the batteries, plug the charger into the charger port on the battery pack or on the side of the console. See figures 25 and 26.



**Figure 25. Charging Batteries**



**Figure 26. Charging Batteries**

#### Battery Maintenance

GEL-cell or AGM and SLA deep-cycle batteries are used for operating Golden LiteRider scooters.

- These batteries are maintenance free.
- There is no danger of spillage or leakage, so these batteries are safely transportable on aircraft, buses, trains, etc.
- By following the procedures set out in this manual, you can expect extended life from your Golden LiteRider's batteries.

## X. CARE AND MAINTENANCE


### IF YOUR LiteRider™ DOES NOT OPERATE

- Make certain that the freewheel lever is set to the engaged position. See page 19.
- Check the main circuit breaker. If necessary, reset the circuit breaker. See #1 on figure 27.
- Make certain that the speed adjustment dial is at the desired setting.
- Make certain that the key switch is set to the “On” position.

If none of the above procedures solve the problem, contact your authorized Golden Technologies, Inc. dealer.

#### MAIN CIRCUIT BREAKER

The main circuit breaker reset button is located on the side of the battery pack. See #1 on figure 27.

 **WARNING** Do not attempt electrical repairs. Consult Golden Technologies, Inc. or your authorized Golden Technologies, Inc. dealer.

If, for no apparent reason, your LiteRider stops operating, the main circuit breaker may have tripped.



**Figure 27. Main Circuit Breaker**

#### Possible causes for the main circuit breaker to trip:

- Driving up a long, steep hill.
- Driving over a curb.
- Run-down batteries.

As you operate your LiteRider, battery voltages go down and battery current must rise to satisfy the demands of the motor and of other electrical devices operating on your scooter. This can cause a heavy current draw that will trip the main circuit breaker.

#### Remedy:

- Recharge your LiteRider's batteries. See “Charger and Batteries” in this section of this manual.
- If the problem continues, have your authorized Golden Technologies, Inc. dealer load test the batteries.
- If the batteries are good, the charger may be the problem. Consult your authorized Golden Technologies, Inc. dealer.

## X. CARE AND MAINTENANCE

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### Resetting the Main Circuit Breaker

1. If the main circuit breaker trips as a result of run-down batteries or because of a temporary overload, reset the circuit breaker:
2. Wait ten minutes or so for the motor control board to return to the normal operating temperature range.
3. Make certain that the key switch is set to the “Off” position.
4. Press in on the main circuit breaker reset button. See figure 27 on page 32.

**NOTE:** If the main circuit breaker continues to trip, there is probably an underlying electrical fault that needs attention.

- Contact your authorized Golden Technologies, Inc. dealer.
- Do not keep resetting the main circuit breaker without correcting the underlying electrical problem.

### DIAGNOSTICS

The diagnostics feature of your Golden LiteRider's microprocessor based motor control board functions as follows:

- Any fault condition with the controller or with an associated system will cause the scooter to beep.
- The beep codes will occur as a series of beeps after one long beep.
- The number of beeps in each series is referred to as the “Beep Code.”
- The beep code indicates the nature of the condition or fault.

### Beep Codes

#### 1 Beep

- Indicates that the battery voltage (with the throttle control lever in the neutral position) is below the required operating voltage of the scooter.
- The batteries need to be charged.
- Your LiteRider will continue to operate at reduced speeds.
- As the voltage drops you will experience a power loss.

**Remedy:** Charge your LiteRider's batteries. See “Batteries and Charging” in this section.

#### 2 Beeps

- Indicates that the battery voltage is too low for the scooter to operate.
- At this voltage your scooter will cease operation.
- If you have charged the batteries and the condition continues, one or both of the scooter's batteries may be at fault.
- The continuance of this condition after you have charged your LiteRider's batteries may also indicate a problem with the battery charger.

#### 3 Beeps

Consult your authorized Golden Technologies, Inc. dealer.



## X. CARE AND MAINTENANCE

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### 4 Beeps

- Indicates that the motor control board is overloaded and overheated.
- An overload can occur if you have been driving your LiteRider for an extended period of time up an incline that is steeper than the recommended grade (see “Driving on Inclines” on page 8).
- An overload can occur if your LiteRider is carrying a payload that is higher than the recommended weight capacity. See “Specifications” on pages 14-15 for your LiteRider model weight capacity.
- Your scooter will not operate until the motor control board cools back to its operational temperature range.

#### **Remedy:**

- Turn off your LiteRider's key switch and allow the scooter to sit for 10 minutes.
- Consult your authorized Golden Technologies, Inc. dealer.

### 5 Beeps

- Indicates a brake problem.
- The freewheel lever may be in the disengaged position. See page 19.
- The brake or the brake wiring may be damaged.
- For safety reasons, your scooter was designed to cease operation until the problem is corrected.

#### **Remedy:**

- Make certain that the freewheel lever is in the engaged position. See page 19.
- Turn the key switch to the "Off" position to stop the beep code.
- Set the freewheel lever to the “engaged” position.
- Turn the key back to the "On" position.
- If the above remedies do not solve the problem, contact your authorized Golden Technologies, Inc. dealer.

### 6 Beeps

- Indicates that the throttle control lever was not in the neutral position when the key switch was turned to the “On” position.
- May indicate that the throttle control lever is out of adjustment.

#### **Remedy:**

- Turn the key switch to the "Off" position.
- Make certain that the throttle control lever is in the neutral position.
- Turn the key switch to the "On" position.
- If the above procedure does not solve the problem, contact your authorized Golden Technologies, Inc. dealer.

## X. CARE AND MAINTENANCE

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### 7 Beeps

- Indicates a problem with the throttle control lever.
- May also indicate a problem with the potentiometer (speed control).
- Your scooter will not operate until the problem is resolved.

#### **Remedy:**

- Make certain that all electrical connections are firmly and correctly joined.
- If the connections are all firmly joined and the problem is not solved, contact your authorized Golden Technologies, Inc. dealer.

### 8 Beeps

- Indicates a motor voltage problem.
- Your scooter will not operate until the problem is corrected.

**Remedy:** Contact your authorized Golden Technologies, Inc. dealer.

### 9 Beeps

- Indicates other internal errors or faults.
- Your scooter will not operate until the problem is corrected.

**Remedy:** Contact your authorized Golden Technologies, Inc. dealer.