

# zip'r Roo

## Mobility Scooter Operation Manual



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**“Simplicity in Mobility”**

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ZIP'R MOBILITY CONTACT INFORMATION  
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MY AUTHORIZED DEALER: \_\_\_\_\_

DEALER TELEPHONE #: \_\_\_\_\_

PRODUCT SERIAL #: \_\_\_\_\_

# INTRODUCTION

Congratulations on your purchase of the Zip'r Roo travel scooter. Many important safety, operating, and maintenance instructions are included in this operation's manual. We urge you to read the entire manual carefully before you attempt to operate your scooter. These instructions were compiled for your benefit. Your understanding of these instructions is essential for the safe operation of your new scooter.

Zip'r Mobility is not liable for damage to property or personal injury from the failure of any user to properly follow the instructions and recommendations set forth in this manual and/or on the scooter.

Safety words are used throughout this manual to indicate hazards and/or unsafe actions. Please refer to the table below for definitions of the safety words.

<b>SAFETY WORD</b>	<b>DEFINITION</b>
<b>CAUTION</b>	Caution indicates potentially hazardous situation which, if not avoided, could result in product damage or malfunction
<b>DANGER</b>	Danger indicates a probably hazardous situation which, if not avoided, will result in personal injury, product damage, or malfunction.
<b>PROHIBITED</b>	Prohibited indicates that such actions should not be performed at any time. Performing a prohibited action can cause personal injury, product damage, or malfunction.
<b>REQUIRED</b>	Required indicates that these actions should be performed as specified. Failure to perform required actions can cause personal injury, product damage, or malfunction.
<b>WARNING</b>	Warning indicates a potentially hazardous situation which, if not avoided, could result in personal injury, product damage, or malfunction.

## IMPORTANT NOTES

- Please note that the information contained in this document is subject to change without notice. Please see [www.zipr.com](http://www.zipr.com) for updated copies of this manual.
- Failure to follow the instructions, warnings, and notes in this manual and those located on your Zipr PC can result in personal injury, product damage, or malfunction and void Zipr's product warranty.
- It is assumed that an authorized Zipr dealer has properly fit the product to the user and has instructed the user on proper use/operation. If you purchased this product over the internet or from a previous owner and you have questions about the safe use and/or proper maintenance the please refer to our website [www.zipr.com](http://www.zipr.com) or contact Zipr directly at (800)760-9107.

## II. SPECIFICATIONS AND STRUCTURE

SPECIFICATIONS	
DRIVE WHEEL	7.3" (186mm) solid foam filled
FRONT WHEEL	7.16" (182mm) solid foam filled
ANTI-TIP WHEEL	2.2" (56mm) solid
SPEED MAXIMUM	Fwd = 3.5 mph / Reverse = 2.2 mph
BRAKING SYSTEM	Intelligent brake
GROUND CLEARANCE	2" (51mm)
TURNING RADIUS	31.5" (800mm)
DIMENSIONS	37.4" L x 19.5" W x 32.4" H (950 x 495 x 825mm)
SEATING	15" L x 16.5" W x 17.5" H, Folding foam filled
DRIVE SYSTEM	Single motor drive
BATTERIES	12V 12 AH x 2, Sealed, deep cycle
MOTOR POWER	24v 180w
PER CHARGE RANGE	10 miles (16.1 kilometers)
CHARGER	24V 2A portable
WEIGHT CAPACITY	200 lbs (91 kg) maximum
CLIMBING SLOPE	8% maximum
CHARGING TIME	10 hours
WEIGHT (REAR SECTION)	31 lbs (14 kg)
WEIGHT (FRONT SECTION)	21 lbs (9.5 kg)
WEIGHT (SEAT)	22 lbs (10 kg)
WEIGHT (BATTERIES w/CASE)	21 lbs (9.5 kg)

## II. SPECIFICATIONS AND STRUCTURE

Your scooter mainly consists of four parts: The front section, rear section, seat, and battery case. The tiller console, handle bars, and footplate are located on the front section. The motor, brake system and controller are located in the rear section. See Figure 1.



**Figure 1**

## II. SPECIFICATIONS AND STRUCTURE

TILLER CONSOLE (Figure 2)

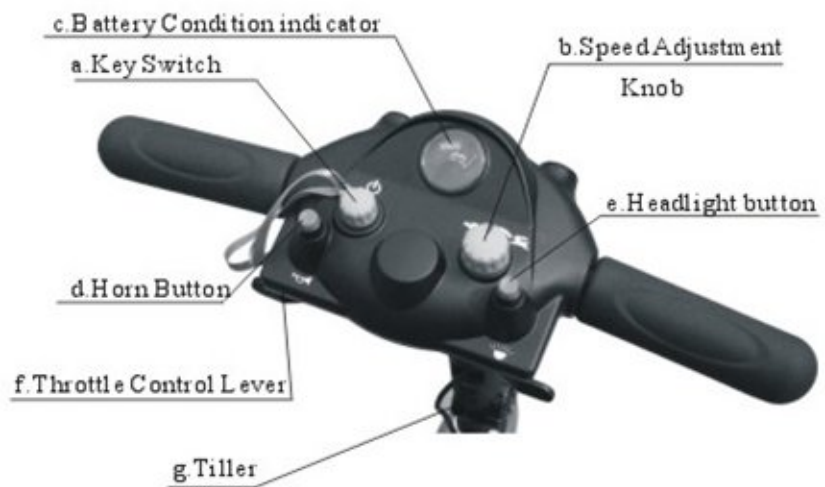


Figure 2

CHARGING SYSTEM (Figure 3)

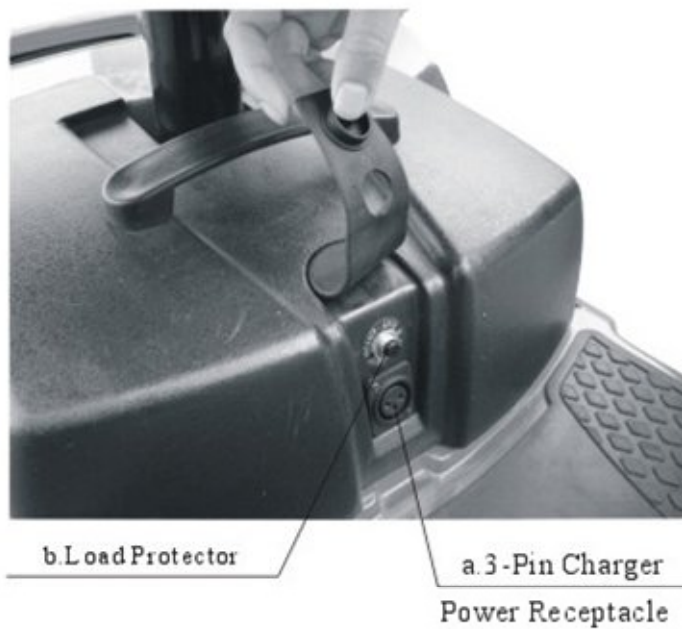


Figure 3

### III. INITIAL ASSEMBLY

In order to avoid shipping damage, the batteries and the seat unit are not separately packaged, so you will need to assemble them onto the main frame of your scooter.

#### OPENING THE PACKING BOX

Open the packing box of your new scooter and remove all of the protective materials, then carefully remove the scooter and separated components from the box.

#### ADJUSTING ANGLE OF TILLER (Figure 4.)

- Loosen the tiller adjustment knob located at the base of the tiller
- Lift the tiller up to a proper angle for yourself
- Tighten the tiller adjustment knob

#### ASSEMBLING THE SEAT POST (Figure 5.)

- Insert the chrome seat post into the seat post frame located on the rear section
- Align the adjustment pin hole
- Insert the adjustment pin into the aligned holes and out through the opposite side



Figure 4



Figure 5

### III. INITIAL ASSEMBLY

#### ASSEMBLING BATTERY UNIT (Figure 6. & 6.1)

- Lower the battery case into the trough and ensure that the electrode terminals are aligned.
- Loosen safety locking knob located directly behind the black seat post, turn the locking cap such that it is centered over each side of the battery case, and then retighten the locking knob.

#### **CAUTION!**

*Please always keep the battery case metal contacts (electrodes) clean. Dirty contacts can lead to the malfunction of the batteries.*

#### ASSEMBLING SEAT UNIT (Figure 7.)

- Lower the seat onto the chrome seat post
- Pull up on the seat-lock lever (located under the seat), adjust seat to the position, and release then release the lever. The seat will lock into position.
- Insert the armrests into seat frame and tighten the armrest locking knobs located under the seat.

#### INSTALLING BASKET (Figure 8.)

- Lower the basket frame onto the basket bracket (pre-installed on the front of the tiller).



Figure 6



Figure 6.1



Figure 7



Figure 8

## IV. DISASSEMBLY

Your Zip'r Roo scooter has been designed to easily disassemble and transport. You can easily disassemble the scooter into four pieces, the front section, the rear section, the seat unit and the battery case (Figure 9).

### DISASSEMBLY

- Lift the seat off of the scooter seat post.
- Loosen the battery case safety lock cap (Figure 6.1) and remove battery case from scooter (Figure 6.).
- Remove the front to rear wire harness connection (Figure 10.)
- Lift up on the yellow plastic ring latch until the scooter is sitting on its rear end (Figure 11.)
- With both hands remove the front section of the scooter from the rear section (Figure 12.)
- Loosen the tiller adjustment knob, lower the tiller, and retighten the tiller adjustment knob.
- You can now transport the four sections (front, rear, seat, and battery case).



Figure 9



Figure 10



Figure 11



Figure 12

## V. COMFORT ADJUSTMENTS

Before operating the scooter, you may find the need to make some adjustments to increase your comfort, such as the seat height, armrest width, and tiller angle.

### **WARNING!**

*Remove the key from the key switch before adjustments. Never attempt to do adjustments while the scooter is in motion.*

### SEAT HEIGHT ADJUSTMENT

- Lift up on the seat lock lever and pull the seat off of the seat post.
- Remove the seat post adjustment pin.
- Choose the appropriate seat height and re-insert the seat post adjustment pin.
- Re-install the seat.

### SEAT ROTATION (Figure 13.)

- Pull up on the seat lock lever.
- Rotate the seat to the desired position.
- Release the lock lever in place.

### ARMREST WIDTH ADJUSTMENT (Figure 14.)

- Loosen the armrest adjustment knobs located beneath the seat frame.
- Move the armrests to the desired position.
- Tighten the armrest adjustment knobs.



Figure 13



Figure 14

## VI. OPERATION

### TILLER CONSOLE

The tiller console houses all of the tools needed to operate your scooter, including the key switch, the speed adjustment knob, throttle control lever, battery condition indicator, horn button and the headlight button.

### KEY SWITCH (Figure 2.)

- Plug the key into the key switch opening
- The battery indicator gauge will illuminate when the key switch has been engaged.
- Removing the key will power down the scooter.

### **WARNING!**

*Do not remove the key while the scooter is moving.*

### **WARNING!**

*In order to avoid accidental movement, remove your key when remaining stationary for a long period.*

### SPEED ADJUSTMENT KNOB (Figure 2.)

This knob allows you to preset and limit your scooter's top speed. Top speed is represented by a rabbit and the slowest speed is represented by a turtle.

### **CAUTION!**

*Before you master the operation of your scooter, you should preset the speed adjustment knob to the lowest position (turtle).*

### THROTTLE CONTROL LEVER (Figure 2.)

This lever allows you to control the forward speed and the reverse speed of your scooter up to the maximum speed you preset with the speed adjustment knob.

- Press the right lever to go forward and press the left lever to go in reverse.
- Release the lever to engage the brake and bring your scooter to a stop.

### **WARNING!**

*If your scooter should fail to come to a stop after releasing the throttle lever then immediately stop using your scooter and call your authorized dealer to inform them of the malfunction.*

### BATTERY CONDITION INDICATOR (Figure 2.)

When your scooter is powered up, this indicator shows the remaining capacity of the batteries.

- When pointing to green, this indicates that the batteries are fully charged.
- When pointing to yellow, just half capacity of the batteries remains and it needs to be recharged.
- When pointing to red, the batteries have been fully discharged, and need to be charged immediately.

### HORN AND HEADLIGHT BUTTONS (Figure 2.)

These buttons activate the warning horn and safety headlights.

## VI. OPERATION

### OFF-BOARD CHARGER (see fig. 3)

Lift the cover on the battery case, so that you can use the off-board charger to charge your batteries through a 3-pin charger power receptacle in the middle of the scooter.(see VII, Batteries and Charging)

### LOAD PROTECTOR (see fig. 3)

The load protector is a safety device. When the overload occurs, this protector automatically trips to protect the motor and other electric devices.

When the protector trips, your scooter must be powered immediately. Wait a few minutes before you press the button on the load protector, which is located under the cover at the rear section of the scooter. After that you can power up and drive normally.

### MANUAL FREEWHEEL LEVER (Figure 15.)

The freewheel lever located at the rear of your scooter engages the motor and can be released to manually push the scooter.

- Push the lever to the rear position to engage the drive motor and operate the scooter. **Important Note: The scooter will not operate if the key is inserted while adjusting the lever. Remove the key, push the lever to the rear position, and re-insert the key to resolve this issue.**
- Push the lever forward to disable the motor and change to freewheel mode.



Figure 15

### **CAUTION!**

*When your scooter is in freewheel mode, the brake system is disabled.*

### **CAUTION!**

*Never use your scooter in freewheel mode without an attendant. Failure to do so may cause personal injury.*

### **CAUTION!**

*Never put your scooter in freewheel mode on any incline. Failure to do so may cause personal injury.*

### **WARNING!**

*Your scooter will not operate in Freewheel mode.*

## VII. BATTERY AND CHARGING

Your scooter uses two long lasting, 12-volt deep cycle batteries. These batteries are sealed and maintenance free. Since they are sealed, there is no need to check the electrolyte (fluid) level. Deep cycle batteries are designed to handle a longer and deeper discharge. Though they are similar in appearance to automotive batteries, they are not interchangeable. Automotive batteries are not designed to handle a long, deep discharge, and also are unsafe for use in your scooter.

### **WARNING!**

Battery posts, terminals, and related accessories contain lead and lead compounds. Wash your hands after handling.

### CHARGING YOUR BATTERIES

The battery charger is essential in providing a long full life for your scooter's batteries. This charger can charge your scooter's batteries safely, quickly, and easily.

### **WARNING!**

*You must charge your scooter's battery with the supplied off-board battery charger. Do not use an automotive-type battery charger.*

### CHARGING YOUR BATTERIES WITH THE OFF-BOARD CHARGER

- Position your scooter near a standard wall outlet.
- Ensure that the scooter is powered off.
- Lift the charging port cover on the battery case.
- Plug the output connector of the off-board charger into the 3-pin charger power receptacle.
- Plug the input connector of the off-board charger into the wall outlet.
- The red light on the charger turns on to indicate the charger is on.
- When charging is complete, the light turns green.
- It is recommended that you charge your batteries for 10-12 hours.
- When the batteries are fully charged, unplug the off-board charger from the wall outlet and then from the 3-pin charger power receptacle.
- The batteries can also be charged with the battery case removed from the scooter.

### **WARNING!**

*The battery case should be stored on a clean, dry, flat, and in-conductive surface to avoid a fire danger.*

### NEW BATTERY'S USAGE

To break in new batteries for maximum efficiency, please follow the instructions below:

- Fully recharge any new battery prior to its initial use. This brings the battery up to about 90% of its peak performance level.
- Do not stray too far until becoming accustomed to your scooter's distance capability.
- Give the batteries another full charge of 10 to 12 hours. The batteries will now be fully operational.
- After 4 or 5 charging cycles, the batteries will top off at 100% charge and last for an extended period.

## VII. BATTERY AND CHARGING

### FREQUENTLY ASKED QUESTIONS (FAQs)

QUESTION: Why is my charger warm?

ANSWER: The battery charger takes the standard wall outlet voltage(alternating current) and converts it to 12V DC(direct current). This scooter's batteries use direct current to run your scooter. When the battery voltage is low, the charger sends more current to the batteries so that the charger has a higher temperature, this is normal. When the batteries are fully charged, the current sent to them is at nearly zero. Therefore when the charger is plugged in, it does not overcharge the batteries.

QUESTION: Can a different charger be used?

ANSWER: You should use the off-board charger supplied with your scooter. It is the safest, most efficient tool to charge the batteries. We do not recommend using other types of chargers. (e.g. an automotive battery charger).

QUESTION: How often must the batteries be charged?

ANSWER: You can charge the batteries as soon as you are finished using your scooter. This is for the benefit of prolonging the life of the batteries. If you use your scooter infrequently (once a week or less), then you should charge the batteries at least once per week for 10-12 hours.

QUESTION: How can I get maximum range per charge?

ANSWER: Rarely do you have an ideal driving situation such as smooth, flat, hard terrain with no hills or curves. More often you are presented with hills, sidewalk cracks, uneven and loosely packed surfaces, and curves. All of these factors will affect the running distance or running time per battery charge. Below are a few suggestions for obtaining the maximum range per charge.

- Always charge the batteries fully prior to your trip.
- Plan your trip in advance to avoid inclines if possible.
- Limit baggage weight to essential items.

### **CAUTION!**

*Keep the batteries in a dry place and avoid deeply discharging your batteries. Do not charge the batteries for more than 24 hours at a charging cycle.*

WHAT TYPE OF BATTERIES SHOULD I USE?

We recommend deep-cycle batteries that are sealed and maintenance free. Both SLA and Gel-Cell are deep-cycle batteries that are similar in performance. Refer to the following specifications to reorder deep-cycle batteries. Always replace both batteries, not just one.

Type: (2) Deep-cycle sealed lead-acid or gel cell  
Size 6" x 3.9" x 3.75" (152 x 99 x 96mm)  
Voltage 12 Volts each & 12 AH each

## VII. BATTERY AND CHARGING

Deep-cycle batteries employ a much different chemical technology than that used in car batteries, nickel-cadmium, or in other common battery types. Deep-cycle batteries are specifically designed to provide power, drain down their charge, and then accept a relatively quick recharge. AGM and gel-cell batteries should be charged as often as possible. They do not have a “memory” like nickel-cadmium batteries. We work closely with our battery manufacturer to provide a battery that best suits your scooter’s specific demands. Fresh batteries are promptly shipped with a full charge. During shipping, the batteries encounter temperature extremes that may influence initial performance. Heat robs the charge from the batteries, and cold slows the power available and extends the time needed to recharge the batteries (just as with a car battery). It might take a few days for the temperature of the battery to stabilize and adjust to its new ambient temperature. More importantly it will take a few “recharging cycles” (a partial drain-then a full recharge) to establish the critical chemical balance that is essential to the battery’s peak performance and long life. It will be worthwhile to take some time to break in your batteries properly.

QUESTION: How can I ensure maximum battery life?

ANSWER: A fully charged deep-cycle battery will provide a reliable performance and extended battery life. Keep your scooter’s batteries fully charged whenever possible. Batteries that are regularly and deeply discharged, infrequently charged, or stored without a full charge may be permanently damaged, causing unreliable operation and limited battery life.

QUESTION: How should I store my scooter and batteries?

ANSWER: If you do not use your scooter regularly, we recommend maintaining battery life by charging the batteries at least once per week. If you do not plan on using your scooter for an extended period, fully charge the batteries prior to storage. Disconnect the battery harnesses and store the scooter in a warm, dry environment. Avoid temperature extremes, such as freezing and excessively hot conditions, and never attempt to charge a frozen battery. A cold or frozen battery should be warmed for several days prior to recharging.

QUESTION: What about transportation?

ANSWER: AMG and gel-cell batteries are designed for application in a scooter and other mobility vehicles. These batteries are allowed for safe transportation on aircraft, buses, and trains, as there is no danger of spillage or leakage. We suggest you contact the carrier’s company in advance to determine that carrier’s specific requirements.

### **CAUTION!**

*The useful life of a battery is quite often a reflection of the care it receives.*

### **WARNING!**

*Do not attempt to charge a cold or frozen battery. You should warm them up for several days prior to charging.*

## VIII. CARE AND MAINTENANCE

Your scooter, like any motorized vehicle requires a routine maintenance check. Preventative maintenance is very important. You can perform some of these regular checks by yourself. If you follow the maintenance checks in this section as scheduled, you can help ensure that your scooter gives you years of trouble-free operation.

### MOISTURE

You should avoid positioning your scooter in damp areas of any kind. Direct exposure to water or dampness could cause your scooter to malfunction electronically and mechanically. Moisture can cause electrical components to corrode and the scooter's frame to rust.

Should your scooter come in contact with water:

- Dry your scooter as thoroughly as possible with a towel
- Make safety checks of all of the operations before using your scooter
- If any inconsistencies are found, contact an authorized Zip'r Mobility provider

### TEMPERATURE

- In extreme cold temperature, the batteries may freeze. The temperature at which they may freeze depends on a number of factors, such as battery charge, usage and composition of batteries (e.g. AGM or Gel-cell).
- Temperatures above 100 degrees may cause your scooter to operate at a reduced speed. This reduced speed is a safety feature built into the controls that helps prevent damage to the motor and other electrical components.

### GENERAL GUIDELINES

- Avoid knocking or bumping the console and console components.
- Keep the tiller console clean.
- Check all connectors to ensure that they are tight and secured properly.
- Check all electrical connectors including the charger's connectors. Make sure they are all tight and are not corroded. Batteries must sit flat and flush in the battery case.
- A yellow light turns on that indicates a half capacity of the battery has been consumed, and they need to be charged, but the scooter can be used, but the battery is close to full discharge.
- When the red light is on, that indicates that the batteries have been fully discharged, and they need to be charged immediately.
- You can apply a light coat of car wax to help it retain the scooter's high gloss appearance.
- All wheel bearings are pre-lubricated and sealed. They require no subsequent lubrication.

### **CAUTION!**

*If you do not use the scooter for a long period, its recommended that you block up your scooter so that the tires do not touch the ground. This prevents flat spots from forming on the tire.*

## VIII. CARE AND MAINTENANCE

### DAILY CHECK

- With the power off, check the throttle control lever. Make sure it returns to the primary position when you release it.
- Check the right/left lock-nuts on the low end of the tiller. Make sure it is fastened to the tiller. Make sure the battery lock knob is engaged.

### WEEKLY CHECK

- Check all electrical connectors. Make sure they are not loose or corroded.
- Check the body joint bolt. Make sure the bolt is tightened.
- Test the brakes operation. This test should be carried out on an even surface with at least three feet of clearance around your scooter.

### MONTHLY CHECK

- Check the anti-tip wheels. Make sure they do not touch the ground under normal operation.
- Check the drive wheels for wear. If tread is minimally visible then replace the tires.
- Keep your scooter clean and free of foreign material, such as hair, food, drink, dust and mud, etc.

### YEARLY CHECK

- Take your scooter to an authorized Zipr Mobility provider for yearly maintenance. This helps ensure that your scooter is functioning properly and helps prevent future complications.

### STORAGE

Your scooter should be stored in a dry place, free from temperature extremes. Otherwise, the frame, the connections, and the electronics may rust and incur damage. During storage, disconnect the batteries from the scooter.

### CLEANING

- Never use a hose on your scooter or place it in direct contact with water.
- Your scooter has an ABS plastic body shroud that allows it to be easily wiped clean with a damp cloth.
- Never use any chemicals to clean the seat, as they may cause the seat to become slippery or dry out and crack. Clean with a damp cloth and dry the seat thoroughly.

## IX. SAFETY

### PRE-RIDE SAFETY CHECK

A safety check is recommended before each use to make sure your scooter operates smoothly and safely. Perform the following procedures prior to using your scooter:

- Check all electrical connections. Make sure they are tight and not corroded.
- Check all connections to the battery box. Make sure they are secured properly.
- Check the brakes. See VIII "CARE AND MAINTENANCE".
- Check the battery charge. See VII. "Batteries and charging".

### WEIGHT LIMITATIONS

Your scooter is rated for a 200 lb. weight capacity.

### **WARNING!**

*Exceeding the weight limit voids your warranty and may result in personal injury and damage to your scooter.*

### INCLINE INFORMATION

Many buildings have ramps with specified degrees of inclination, designed for easy and safe access. Some ramps may have turning switchbacks (180 degree turns) that require you to have good cornering skills on your scooter. When climbing an incline, try to keep your scooter moving. If you must stop to start up again, you should accelerate slowly and cautiously. When driving down an incline, do so by setting the speed to the slowest position and pushing the forward throttle control lever. If your scooter starts to move down the incline faster than you anticipated or desired, allow it to come to a complete stop by releasing the throttle control lever. Then rotate down the speed adjustment knob and then push the throttle control lever down slightly to ensure a safely controlled descent.

### **WARNING!**

*When climbing an incline, do not zigzag or drive at an angle up the face of the incline. Drive your scooter straight up the incline. This greatly reduces the possibility of a tip or a fall. Always exercise extreme caution when negotiating an incline.*

### **WARNING!**

*Don't drive up or down a potentially hazardous incline (i.e. Areas covered with snow, ice, cut grass, or wet leaves).*

### **WARNING!**

*Never drive down an incline backwards. This could cause personal injury.*

## IX. SAFETY

The maximum safe incline angle is 8 degrees for your scooter. If a slope is less than this angle, it is safe for your scooter to climb or descend.

### BRAKING INFORMATION

Your scooter is equipped with two powerful brake systems

- Electronic brake system: This system can gradually slow and stop your scooter only when you release the throttle control lever to let it return to the top/stop position during driving.
- Motor brake system: After the electric brake system slows your scooter to a near stop, a damper in the motor brake system will automatically engage to make your scooter stop completely.

### OUTDOOR DRIVING SURFACES

Your scooter is designed to provide optimum stability under normal driving conditions, dry, level surfaces composed of concrete or asphalt. But you should avoid driving on the following surfaces:

- A surface that you feel unsure about, like gravel or dirt.
- Tall grass that can become tangled in the motor.
- Loosely packed gravel and sand.

### FREE-WHEEL MODE

Your scooter is equipped with a manual free-wheel lever that allows the scooter to be manually pushed by an attendant. For more information, see VI. "OPERATION".

#### **WARNING!**

*Any attempt to climb or descend a slope steeper than 8 degrees may put your scooter in an unstable position, and cause it to tip, resulting in personal injury and/or damage to your scooter.*

#### **WARNING!**

*When your scooter is traveling, the free-wheel lever should be in a downward position, i.e. in powered mode. If not, the brake system disengage, and a dangerous situation may be caused.*

#### **WARNING!**

*Do not use your scooter free-wheel mode without an attendant present. Failure to do so may cause personal injury.*

#### **WARNING!**

*Do not attempt to place your scooter in free-wheel mode while seated on it. Personal injury may result. Please ask an attendant for assistance if necessary.*

#### **WARNING!**

*Do not place your scooter in free-wheel mode while on an incline. The scooter could roll uncontrollably down on its own, causing personal injury.*

## IX. SAFETY

### DOOR OBSTACLE

- Determine in advance if the door opens towards or away from you.
- Use your hand to turn the knob or push/pull the door open.
- Drive your scooter gently and slowly forward to push the door open. Or drive your scooter gently and slowly backward to pull the door open. It is always a better choice to walk your scooter through a door entrance/exit.

### UP OR DOWN STAIRS OR ESCALATORS

Your scooter is not designed to travel up or down stairs or escalators. Always use an elevator.

#### **WARNING!**

*Never use your scooter to negotiate steps or elevators. You may cause injury to yourself and others and damage your scooter.*

### IN OR OUT OF ELEVATORS

Modern elevators have a door edge safety mechanism that when you push, reopens the elevator door. If you are in the doorway of an elevator when the doors begin to close, push on the rubber door edge or allow the rubber door edge to contact the scooter and the door will reopen. Take care that pocketbooks, packages, or scooter accessories do not become caught in elevator doors.

### ELECTROMAGNETIC INTERFERENCE

Radio waves from mobile phones, radio receivers or other transmitters such as radio and TV stations could affect your scooter's performance if your scooter is in the range of their influence. See section X "ELECTROMAGNETIC INTERFERENCE" for details.

#### **WARNING!**

*Do not attempt to negotiate a curb that has a height greater than 25mm without an attendant.*

#### **WARNING!**

*Do not attempt to have your scooter proceed backwards down any step, curb, or other obstacle. This may cause your scooter to tip and cause personal injury.*

#### **WARNING!**

*You should not operate your scooter on public streets and roadways. Obey all local pedestrian traffic rules. Wait until your path is clear of traffic, and then proceed with extreme caution.*

## IX. SAFETY

### SCOOTER TRANSPORT

There are no standards approved for tie-down systems in a moving vehicle of any type to transport a person while seated in a scooter. Anyone traveling in a motor vehicle should be properly secured in the motor vehicle with safety belts fastened securely.

#### **WARNING!**

*Do not sit on your scooter while it is in a moving vehicle. Personal injury and property damage may result.*

### GETTING ON OR OFF SCOOTER

Getting onto and off your scooter requires a good sense of balance. Assistance may be required from your attendant when learning to get on or off your scooter. To avoid an injury, please observe the following safety tips when getting on or off your scooter.

- Ensure that the power is turned off; see VI, "OPERATION".
- Ensure that your scooter is not in free-wheel mode.
- The seat armrests are flipped up or moved out to make getting on or off the scooter easier.
- Keep the front wheel facing forward.

#### **WARNING!**

*Always be sure your scooter and its batteries are properly secured while it is being transported. Failure to do so may cause personal injury and/or damage to your scooter.*

#### **WARNING!**

*Do not expose your scooter to any type of moisture at any time (rain, snow, mist or wash). Such exposure can damage your scooter. Never operate your scooter if it has been exposed to moisture until it has dried thoroughly.*

#### **WARNING!**

*Do not operate your scooter on ice or slippery conditions, or on salted surfaces. Doing so may cause you injury and affect the performance of your scooter.*

## IX. SAFETY

### **WARNING!**

Position yourself centered and upright in the scooter seat to prevent the scooter from tipping over and causing injury.

### **WARNING!**

Avoid using your armrests and tiller for weight bearing purposes. Such use may cause your scooter to tip over and cause you injury.

### **WARNING!**

Avoid putting all of your weight on the footplate. Such use may cause your scooter to tip over and cause you injury.

### **BALANCE**

Avoid reaching or bending while driving your scooter. When reaching, bending, or leaning while seated on your scooter, it is important to maintain a stable center of gravity and keep the scooter from tipping.

### **LIMITATION TO MEDICINES AND ALCOHOL**

Scooter users have to exercise care and common sense while operating their scooter. This includes awareness of safety issues while under the influence of medication or alcohol. If the user consumes alcohol, or is taking medication that affects their sense of reactive ability, never use the scooter.

### **WARNING!**

It is strongly suggested for these users to consult their medical professionals before operating their scooter, as some medications will affect their sense of reactive ability, bringing a hidden danger in operating their scooter

### **WARNING!**

Do not operate your scooter while under the influence of alcohol or medication that impairs your ability to drive your scooter safely.

### **WARNING!**

Do not reach, lean, or bend for objects on the floor when seated on your scooter. Movements such as these may change your center of gravity and the weight distribution of the scooter and cause your scooter to tip, possibly resulting in your injury.

### **WARNING!**

Turn off the power if you anticipate being in a stationary position for an extended period of time. This will prevent unexpected motion from inadvertent throttle control lever contact and electromagnetic interference. Failure to do so may result in personal injury.

# X. ELECTROMAGNETIC INTERFERENCE (EMI/RFI)

## EMI/RFI WARNINGS

Radio waves are a form of electromagnetic energy, and can cause unintended motion of electric mobility vehicles. When electromagnetic energy adversely affects the operation of an electrical device, that adverse effect is called “Electromagnetic Interference” or EMI, or “Radio Frequency Interference” or RFI.

### WHERE DO RADIO WAVES COME FROM?

Radio waves are emitted from the antennas of cellular phone, mobile two-way radios (such as walkie-talkies), radio stations, TV stations, amateur radio transmitters, wireless computer links, microwave sources, and paging transmitters. Electromagnetic energy is more intense when closer to transmitting antennas. The greater the transmission strength is, the greater the concern to electric mobility vehicle users.

### CAN I EXPECT MY SCOOTER TO MOVE IF EMI AFFECTS IT?

It is very difficult to predict, the effects of EMI on a scooter depend on a number of factors:

- The strength of the radio waves.
- The construction of your particular scooter.
- The location (whether it is on level ground or on an incline) and direction of the scooter.
- Whether or not your scooter is in motion.

So if the unexpected incidents described below occur with your scooter, you should consider whether or not there is a radio wave source nearby.

- Your scooter may come to a sudden stop in an uncontrolled manner.
- Your scooter may suddenly move in an uncontrolled manner.
- The brakes on your scooter may be released suddenly in an uncontrolled manner.
- The electronic components of control systems may be damaged for no reason at all.

Unfortunately, EMI/RFI may be difficult to recognize, because the signals from radio sources are invisible and may be intermittent.

### ARE ALL ELECTRIC MOBILITY VEHICLES SUSCEPTIBLE TO EMI?

Each make and model of electronic mobility vehicle differs in its ability to resist EMI. Each mobility vehicle has a particular level of resistance to EMI. This resistance is measured in volts per meter (v/m).

A higher resistance level offers greater protection against EMI. In other words, an electric mobility vehicle with a high resistance level is less likely to be affected by a strong radio source than is an electric mobility vehicle with a low resistance level.

# XI. TROUBLESHOOTING

Any electromechanical device may require some troubleshooting. However, most of the problems that may arise can usually be solved with a bit of thought and common sense. Many of these problems occur because the batteries are not fully charged or because the batteries are worn down and can no longer hold a charge.

## DIAGNOSTIC BEEPING SYSTEM

Your scooter has been designed with a diagnostic beeping system that will warn the user when a non-operating condition exists. The chart below describes the potential non-operating conditions, the corresponding beeping sound sequences, and the possible solutions. Please note that the symbol ( \* ) represents a short beeping sound and the symbol ( \_\_\_ ) represents a longer beeping sound.

BEEPING SEQUENCE	NON-OPERATING CONDITION	SOLUTION
** _____	Battery voltage is too low to operate the scooter.	Charge the batteries. If batteries do not take a charge then have batteries tested.
** _____ _____	Controller Malfunction	Contact Zipr Mobility or an authorized provider.
** _____ _____ _____	Controller Malfunction	Contact Zipr Mobility or an authorized provider.
** _____ _____ _____ _____	Controller Malfunction	Contact Zipr Mobility or an authorized provider.
** _____ _____ _____ _____ _____	Throttle/ Potentiometer/Consol PCB Fault	Contact Zipr Mobility or an authorized provider.
** _____ _____ _____ _____ _____	Manual freewheel lever/Brake fault	Remove key, push the brake/freewheel lever to the rear position, reinsert key.

## TROUBLESHOOTING GUIDE

#	SYMPTOM	POSSIBLE CAUSE	SOLUTION
1	Scooter has no power	Batteries/Battery Case/ignition	Insert key, check seating of battery case, test batteries, inspect all power source wiring
2	Scooter has power but will not move	Brake/Motor/Throttle/Controller	Remove key, place freewheel lever to rear position, and reinsert key or call authorized provider
3	Batteries do not hold a charge	Batteries	Conduct voltage test/load test, consider replacing batteries
4	Batteries will not take a charge	Batteries/Charger	See #4, conduct voltage test on charger, push circuit breaker reset button
5	Loud noise in rear of scooter	Motor gear/Brake friction plate	Contact authorized provider
6	Noise in front wheel of scooter	Bearing damage	Replace front wheel
7	Power will not shut off after removing key	Key switch damaged	Replace key switch
8	Scooter suddenly stops on incline	Overload self protection system	Remove key, press circuit breaker reset button, re-insert key and resume - do not exceed eight degree incline
9	Scooter suddenly stops going over bump	Battery case not seated securely	Remove key, reseal battery case, re-insert key and resume - ensure battery case is secure

If you are unable to determine the cause of your scooter’s symptom or you are unable to determine a resolution then please contact an authorized provider or Zipr Mobility directly.

## XII. WARRANTY INFORMATION

### THREE MONTH LIMITED WARRANTY

- The batteries are covered by a three month limited warranty.

### WARRANTY EXCLUSIONS

**Transaxle:** In cases where there is an increase in the operational noise level, the warranty does not apply. (The increase in operational noise level usually occurs due to abusive and excessive strain on the scooter).

**Motor:** If damage occurs to the motor commutator as a result of not replacing the motor brushes after heavy wear to the brushes. Motor brushes are wear items and are not warranted.

**Motor brake:** One year warranty for the electrical function of the motor brake. Brake pads are a wear item and are not warranted.

- ABS Plastic shroud & all plastic components other than the controller unit and wire harness covers.
- Brake pads (wear items)
- Motor brushes
- Fuses
- Upholstery and seating
- Tires (wear items)
- Circumstances beyond the control of Zipr Mobility LLC
- Labor, service calls, shipping, and other charges incurred for repair of the product, unless specifically authorized by Zipr Mobility LLC
- Do not return faulty parts to Zipr Mobility LLC without prior written authorization from Zipr Mobility LLC.

### IMPLIED WARRANTIES

Implied warranties, including those of merchantability and fitness for a particular purpose, are limited to one (1) year from the date of purchase and to the extent permitted by law. Any and all implied warranties are excluded. This is the exclusive remedy. Liabilities for consequential damages under any and all warranties are excluded.

Some states do not allow limitations on how long an implied warranty lasts or do not allow the exclusion of limitation incidental or consequential damages. The above limitation or exclusion may not apply to you.

This warranty gives you specific rights, and you may also have other rights which vary from state to state.