



Tel: 083 284 2973

Fax: 086 232 5223

Email: [rosslyn@adpwheelchairs.co.za](mailto:rosslyn@adpwheelchairs.co.za) OR [sales1@adpwheelchairs.co.za](mailto:sales1@adpwheelchairs.co.za)

Web: [www.cheapest-wheelchairs.co.za](http://www.cheapest-wheelchairs.co.za) OR [www.adpwheelchairs.co.za](http://www.adpwheelchairs.co.za)

## OWNERS MANUAL FOR THE 3 - WHEEL DETACHABLE SCOOTER



## TABLE OF CONTENTS

I.	INTRODUCTION.....	3
II.	SPECIFICATIONS AND STRUCTURE.....	4-6
III.	INITIAL ASSEMBLE.....	7
IV.	DISASSEMBLY.....	8
V.	COMFORT ADJUSTING.....	9
VI.	OPERATION.....	10-11
VII.	BATTERY AND CHARGING.....	12-14
VIII.	CARE AND MAINTENACE.....	15-16

# I. INTRODUCTION

This scooter combines the most advanced state-of-the-art components with attractive modern styling. We are certain that the best performance, safety, comfort and trouble-free operation of your scooter will add convenience to your daily living.

Many important safety, operation and maintenance instructions are included in this Owner's Manual. We urge you to read the entire manual carefully before you attempt to operate your scooter for the first time. These instructions were compiled for your benefit. Your understanding of these instructions is essential for the safe operation of your new scooter.

ADP Designs is not liable for damage to property or personal injury resulting in the failure of a person and/or user to follow the instructions and recommendations set forth in this manual or any other demands contained on the scooter itself.

If you experience any problems with your scooter, which you are not able to solve, or if you do not feel capable of safely following any of the instructions and/or recommendations contained in this manual, please do not hesitate to contact us for assistance.

Once you understand how to operate and take care of your scooter, we are sure that it will give you years of trouble-free service and enjoyment.

## II. STRUCTURE AND SPECIFICATION

Your scooter mainly consists of four parts:

1. A front section
2. A rear section
3. A seat unit
4. A battery



## Tiller console



## Specifications

Drive Wheels	X2 7.3 inch solid wheel
Front wheel	7.1 x1.96 inch solid wheel
Anti-tip wheel	2.2 x 0.94 inch solid plastic wheel
Speed limit	Forward speed: 3.7mph Reverse speed: 2.2mph
Braking system	Intelligent regenerative electromagnetic brake
Distance between ground and footplate	3.5 inch
Turning radius	31.5 inch
Dimensions	37 x 19.7 x 32.5 inch
Seat unit	Standard light backrest with folding sponge seat
Drive system	Single motor drive
Batteries	12V/12Ah
Motor power	24V/180W
Travel Ranging	10.5 miles
Charger	24V/2A portable
Weight capacity	Maximum of 100kg
Climbing slope	Maximum of 12 degrees
Charging time	10 – 12hours
Component weight	Main frame: 53lb Seat unit: 22lb Batteries: 20lb

### III. INITIAL ASSEMBLY

For your convenience of transportation and reduction of possible damage, the batteries and the seat unit are separately packaged. So you need to assemble them onto the main frame of your scooter.

#### OPENING THE PACKING BOX

Open the packaging box of your new scooter, and take off all the protective lining, then take out the folded scooter from the box.

#### ADJUSTING ANGLE OF TILLER

- Loosen the lock-nut
- Lift the tiller up until at a proper angle for yourself
- Tighten the lock-nuts to fix the tiller

#### ASSEMBLE THE SEAT SUPPORT

- Insert the seat support into the seat tube located on the rare section
- Align the bolt hole
- Insert the bolt into the hole



#### ASSEMBLE BATTERY UNIT

Align electrode terminal on battery

#### ASSEMBLE SEAT UNIT

- Put the seat onto the seat support
- Pull out the seat lock lever, adjust seat to desired position. The seat will lock automatically.
- Insert left and right armrests into square tubes separately.
- Adjust to the desired position and lock the nuts.

#### ASSEMBLE BASKET

- Take off the two screws located on the front of the tiller
  - Assemble the fixing part of net basket on the front of the tiller
  - Insert the net basket into the fixing part.



## IV. DISASSEMBLY

For convenience to transport and store, your scooter is designed to be disassembled easily

- Shut off the power and pull the lock lever under the seat base to unlock the seat.
- Lift the seat up and off the scooter.
- Loosen the nuts on the plug of the front and rear power connector, then remove it.
- Pull the nylon rope on the lock hook and move forward to detach it.



- Lift the front and rear section through the middle, remove the lock hook from the body
- Loosen the knob on the end of the tiller

## V. COMFORT ADJUSTMENT

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

Before operating the scooter, you may find the need to make some adjustments to increase your comfort.

### **Seat height adjustment**

You can choose the different holes to change the seat height

- Pull the seat lock lever back to unlock the seat
- Lift the seat up and off the scooter
- Hitch the pin loop and pull out of the pin
- Slide the seat post up or down to change the height of the seat
- Re-insert the pin again
- Re-install the seat again

### **Seat rotation**

- You can rotate the to adjust its direction
- Pull up the seat lock lever to unlock the seat
- Rotate the seat to the desired position
- Release the seat lock lever and it will lock the seat automatically.

### **Armrest width adjustment**

You can move the armrest inward or outward to adjust the seat width.

- Loosen the screw on the armrest
- Move the armrests inward or outward to the desired position
  - Tighten the screw



### **Tiller angle adjustment**

You can adjust the position of the tiller forwards or backwards from the footplate

- Loosen the lock nuts on the lower end of the tiller
- Move the tiller forward or backward to a comfortable position
- Tighten the lock nuts



## VI. OPERATION

### Tiller console

The tiller console houses all of the controls needed to drive your scooter.

### Power switch

- Plug the key into the key slot
- Indicator on the gauge will illuminate
- When you plug out the key, the power indicator switches off

**Do not use the key switch to stop the scooter unless under urgent circumstances.**



completely.

**If your scooter has stopped for a long period, power down to prevent unintended motion.**

### Throttle control lever

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

- Use your thumb to push the lever forward to disengage the brake and start moving
- The greater the rotating angle of the level is, the faster the speed of the scooter.
- When you release the lever completely, it automatically returns to its primary position by engaging your scooter's brakes to slow the scooter down until it stops

**If your scooter moves unintentionally, please release the throttle control lever immediately. The scooter should automatically stop.**

### Speed adjustment knob

The knob allows you to preset and limit your scooter's top speed

**Before you master operating your scooter, please preset the speed adjustment knob to the lowest position.**

### Battery

When your scooter is powered up, this indicator shows the remaining capacity of the batteries by 3 colour ranges

- Green range indicates that the batteries are fully charged
- Yellow range indicates half of the batter’s capacity remains and that it needs to be charged
- Red range indicates that the batteries have nearly been consumed and need to be charged immediately

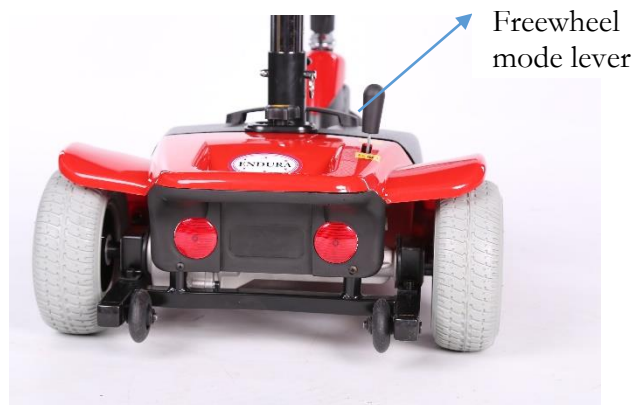
### Load protector

The load protector is a safety device. When an overload occurs, the protector automatically trips to protect the motor and other electric devices. When the protector trips, your scooter must be powered down immediately. You should then wait at least a minute before you press the button on the load protector, which is under the cover at the rear section of the scooter, to resume. Thereafter, you can power up and drive normally.

### Manual freewheel mode lever

There is a freewheel mode lever at the lower right of the seat base. Whenever you do not want to move your scooter by motor, you can put it in freewheel mode.

- Pull the manual freewheel lever forward to disable the drive motor
- Push the manual freewheel lever backward to reengage the drive motor.



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

**Never use your scooter in freewheel mode without assistance. Doing so can result in personal injury**

**Never climb onto your scooter while it is in freewheel mode**

**Never put your scooter in freewheel mode on any incline**

**When your scooter is in powered on, your scooter must be in drive mode to guarantee that the brake system works normally.**

## VII. BATTERY AND CHARGING

Your scooter uses two long-lasting, 12 Volt, deep cycle batteries. These batteries are sealed and are 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 are also unsafe to use on a scooter.

**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 long life for your scooter batteries. This charger can charge your scooter batteries safely, quickly and easily.

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

### CHARGING YOUR BATTERIES

- Position your scooter next to a standard wall socket
- Open the flap on the battery case
- Ensure that the scooter is powered off
- Plug the input connector of the off-board charger into the 3-pin charger receptacle
- Plug the input connector of the off-board charger into the wall outlet
- The red light on the charger turns on to indicate that it is charging
- When it is almost done charging, the green light will turn on. You should continue to charge the batteries for some time
- It is recommended that you charge your batteries for 10 – 12 hours
- When the batteries are fully charged, unplug the off-board from the wall socket and then from the 3-pin charger receptacle
- Put the charger with its cord into the back bag of your scooter
- The battery can also be charged while detached from the scooter.



**The battery should be stored on a clean, dry and nonconductive surface, otherwise the battery will cause a fire hazard**

## NEW BATTERY'S USAGE

To break in new batteries for maximum efficiency:

- Fully recharge any new battery prior to its initial use. This brings the battery up to about 90% of its optimum performance level
- Operate your scooter around the house and yard. Move slowly at first, and do not stray too far until you become accustomed to your scooter and know how to control the driving distance from the battery condition indicator
- Give the batteries another full charge of 10 – 12 hours and operate your scooter again. The batteries will now perform at over 90% of their potential
- After four or five charging cycles, the batteries will top off at 100% charge and last for an extended period



## FREQUENTLYASKED QUESTIONS

### HOW DOES THE CHARGER WORK?

The battery charger takes the standard wall outlet voltage (alternating current) and converts it into 12VDC (direct current). This scooter's battery uses direct current to run your scooter. When the battery voltage is low, the charger sends more current to the battery. When the battery is fully charged, the current sent to them, from the charger, is nearly at zero. Therefore, when the charger is plugged in, it does not overcharge the battery.

### HOW OFTEN MUST THE BATTERIES BE CHARGED?

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 battery.

- **Infrequent use:**  
If you use your scooter infrequently (once a week or less), you should charge the battery at least once a week for 10 – 12 hours



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

### HOW CAN I GET MAXIMUM RANGE PER CHARGE?

Rarely do you have an ideal driving situation such smooth, hard terrain with no hills or curves. More often you are presented with hills, side walk cracks, uneven and loosely packed surfaces and curves. All of these factors will affect

the running distance or running time on the battery charge. Below are a few suggestions for obtaining the maximum range per charge.

- Always charge battery prior to your trip
- Plan your trip in advance to avoid inclines, if possible
- Limit baggage weight to essential items

### **WHY DOES MY NEW BATTERY SEEM WEAK?**

Deep-cycle batteries employ a much different chemical technology than that used in car batteries – nickel cadmium or other common battery types. Deep-cycle batteries are specifically designed to provide power, drain 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 encounter temperature extremes that may influence initial performance. Heat the charge from the batteries, and the 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” to establish the critical chemical balance that is essential to the battery’s peak performance and long life.

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

### **WHAT ABOUT TRANSPORTATION?**

AMG and Gel-cell batteries are designed for the application in scooters and other mobility devices. These batteries allow 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 their specific requirements.



## VIII. CARE AND MAINTENANCE



### **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. Water can cause electrical components to corrode and the scooter's frame to rust. Should your scooter come into contact with water:

- Dry your scooter as thoroughly as possible with a towel
- Allow your scooter to sit in a warm dry place to get unseen water to evaporate
- Make safe checks of all operations before using your scooter
- If any inconsistencies are found, please contact us

### **Temperature**

- Some parts of the scooter are susceptible to extreme changes in temperature. Always keep your scooter in proper range of temperature.
- In extremely cold temperature, the battery may be frozen.
- Temperature above 45°C may cause the scooter to operate at a reduced speed

## **Sleep timer**

Shut off the power after each use in order to prolong the battery service time. Your scooter has the specially designed function to save energy. The scooter will shut off the power automatically if it is not operating for 20min. In this case, if you want to use it, please unplug the key and restart it.

For a safe use and an extended useful life, your scooter requires a routine maintenance check. Preventative maintenance is very important. You can perform some of these regular checks yourself:

### **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 nut on the low end of the tiller. Make sure that it is fastened to the tiller

### **Weekly check**

- Check all the electrical connectors. Make sure that they are not loosened or corroded.
- Check the body joint bolt. Make sure this bolt is tightened
- Check the brakes. This test should be carried out on an even surface with at least one meter of clearance around your scooter

### **Monthly checks**

- Check the anti-tip wheel. Make sure it doesn't touch the ground and that it's not seriously worn. If the anti-tip wheels need to be replaced, please contact us.
- Keep your scooter clean and free of foreign material, such as food, drinks, dust, mud etc.

### **Yearly check**

- Bring your scooter to us for annual maintenance. This helps ensure that your scooter is functioning properly and helps prevent future complications