

**Instruction Booklet** 





**Product Code: MS01075** 

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Thank you and congratulations on purchasing your new Abilize Mobility Scooter.

It is designed to provide you with transportation ability indoors and outdoors.

We pride ourselves on providing safe and comfortable products. Our goal is to ensure your complete satisfaction. We sincerely hope you enjoy your Abilize Mobility Scooter.

Please read and observe all warnings and instructions provided in owner's manual before you operate the various functions of this scooter. Also, please retain this booklet for future reference.

## IF YOU HAVE ANY QUESTIONS, YOU CAN CONTACT:

## **UK Authorised Dealer**

CareCo UK Ltd Hubert Road Brentwood Essex CM14 4JE

Tel: (+44) 01277 237001

Email: CS@careco.co.uk

## Information of European Representation

EMERGO EUROPE Prinsessegracht 20 2514 AP, The Hague The Netherlands

- Only one person at a time can ride the Scooter.
- Maximum load is 136 kg / 300 lbs.
- Turn key off before getting on or off.
- Always drive carefully and be aware of others using the same area.
- Always use pedestrian crossings wherever possible. Take extreme care when crossing roads.
- Do not drive on slope exceeding 10 degrees, and take extreme care when turning on a slope.
- Do not use full power when turning on a sharp corner.
- Take great care and drive in a low speed when reversing, riding downhill or on an uneven surface, and climbing curbs.
- Please use the lowest speed when driving through a descending road or uneven terrain. If speed is too fast, leave your hands off the handle bar and let the scooter stop. Make sure you are safe and start again.
- The weight capacity limit can be different depending on ramp degree.
- A slow speed must always be used when ascending, descending or traversing a slope or incline and also on uneven terrain, ramps and soft or loose surfaces, such as gravel or grass.
- To prevent any danger, do not turn around at high speed while ascending or descending a ramp.
- Scooter may not operate well in high humidity.
- Do not leave the powered scooter in a rain storm of any kind.
- Direct exposure to rain or dampness will cause the scooter to malfunction electrically and mechanically; may cause the powered scooter to prematurely rust.
- Never put scooter in neutral when driving on slopes.
- Follow traffic laws when riding outside.
- Do not sit on the scooter if taking on moving transport vehicles such as trains.

Before attempting to drive this scooter on your own, it is important that you familiarise yourself with the controls and how to operate them.



Figure 1 - Front View



Figure 2 - Top Control Panel

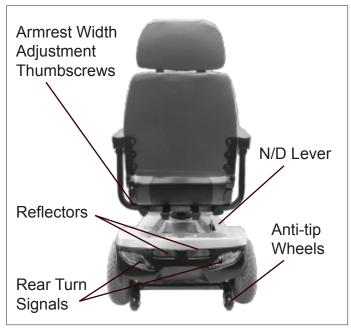
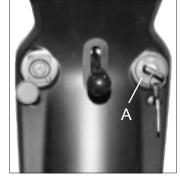


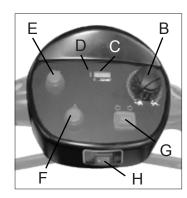
Figure 3 - Back View

## **Function of parts:**

### Main key switch (A)

- Turn the key clockwise to turn the scooter on.
- Turn the key anticlockwise to turn the scooter off.





Turn the key towards to turn the headlight on.

CAUTION: Always ensure that the scooter is switched off before getting on or off the scooter and before removing any items from the scooter.

CAUTION: Turning the scooter OFF whilst driving will bring the scooter to an abrupt stop.

### Speed dial knob (B)

The rabbit icon indicates fast or high speed. The turtle icon indicates slow or low speed. By turning this knob (B) towards chosen icon you can control the overall speed of the scooter.

CAUTION: Before driving the scooter, set the speed to low speed by turning the knob towards turtle icon.

CAUTION: Drive in high speed when you encounter an up slope, and drive in low speed when you encounter a down slope.

#### Battery gauge (C)

The meter represents an approximation of battery capacity. If the meter gauge lights are all on, it indicates sufficient power. The batteries are consuming and should be charged soon. When only red LEDs are lit, charge the batteries immediately.

#### Self-diagnostic warning light (D)

Flashing light indicates there is a problem with the scooter.

### Horn button (E)

Press the horn button (E) once to sound warning tone when necessary.

### Warning light (F)

Press down button \( \textstyle \) to activate warning light.

#### Indicators (G)

- Press down on the left side to indicate left.
- Press down on the right side to indicate right.

#### Hi/Lo (H)

The High & low speed switch allows the speed to be halved for pavement use.

#### Hand Brake (I)

Hold hand brake when immediate stop is required.

CAUTION: If you have to brake in an emergency, release the throttle and hold the hand brake - this will bring you to a halt.

## Throttle (J) (K)

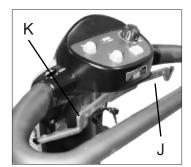
To move forward pull the right side of the throttle (J). To move backward pull the left side of the throttle (K). (The movement directions can be reversed by local dealers if required.) Release the throttle to engage automatic brake. This is also your accelerator. The further you pull it, the faster you go. (Subject to the position of the rabbit/turtle control).

CAUTION: Releasing the throttle engages the automatic brake, but will taxi for a short buffering distance. Please keep a safe distance when stopping to prevent any danger.

#### Tiller angle adjustment:

• Pull the tiller adjuster (L) downwards to adjust the angle of the tiller. Release to lock the tiller in the desired position.

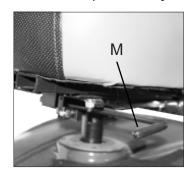


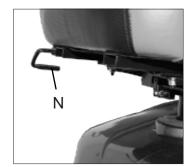




#### **Seat rotation adjustment:**

- Set the seat at a comfortable angle by pulling lever (M) upwards to rotate seat (a) left and right.
- Set the seat to a comfortable position by lifting lever (N) upwards to adjust the seat.





Batteries must be charged before using the scooter for the first time and should be recharged after every use.

CAUTION: Each country may supply a different charger. The charging procedure may be different from below. If you require more details, please contact your authorised dealer.

**CAUTION:** Be sure the scooter key is in the OFF position

- Insert battery charger cord into the charger connector on the charger output. Refer to above picture for correct position. Plug other end of power cable into a standard electrical wall outlet.
- Turn the power on. Normally the LED (Power) light will turn on when switched on.
- LED Indication
   LED (Power) RED light on : Power on LED (charge) ORANGE light on : Charging
   GREEN light on : Fully charged
- Allow batteries to charge until charging indicator turns green. For optimum performance a first initial charge of 24 hours is recommended and 12 hour charge after every use.
- After indicator turns green, unplug battery charger from scooter and wall outlet.

## **Charger troubleshooting:**

## 1. If LED (Power) light is off:

- Check the input voltage is the same as the output.
- If the light is still off, please check and repair the battery charge.

## 2. If LED (Charge) light is off:

- Check the connections are correct.
- The battery may be fully charged.
- If the light is still off, the battery may be defective.

## 3. If ORANGE light won't turn to GREEN:

- The battery is not charged - please check and replace it.

## 4. If ORANGE light turns green immediately:

- Check to see if the battery is fully charged, if not, it may be defective and need replacing.

CAUTION: The time needed to recharge will vary depending on the depletion of the batteries. Charging for longer than necessary will not harm the batteries. They can not be overcharged.

## 1. Disassembling the basket:

Lift the basket upwards and away from the scooter.

#### 2. Seat disassembling:

Remove seat by lifting the lever (M) and lift up away from scooter.

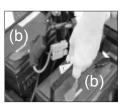
#### 3. Rear compartment cover:

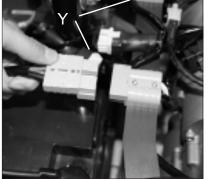
Open in the direction of the arrow.

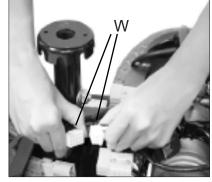
#### 4. Battery pack disassembling:

Disconnect front and rear wire harness (W), then tear off battery straps (X)

and battery connector (Y) to remove the batteries (b).









CAUTION: Be careful when removing batteries as they are heavy. Avoid contact with metals.

CAUTION: Re-assemble your scooter by reversing the above disassembling procedures.

## **Armrest Adjustment Thumbscrews:**

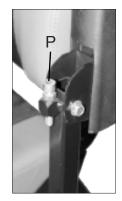
- 1. Loosen the two thumbscrews (O) to adjust arm width. Tighten again to lock in desired position.
- 2. Adjust the attached screw (P)'s height, to control armrest's angle.

## Anti-tip wheels:

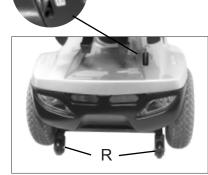
Stop the scooter from tipping over. (R)

#### Free-Wheeling Lever:

When lever is in N (Neutral) position, scooter can be moved manually without power. (Q) When lever is in D (Drive) position, scooter can be driven. Normal position is D.(Q)







#### **CARE AND MAINTENANCE**

## **Cleaning your Scooter:**

If your scooter is dirty, use a damp or lightly soapy cloth to wipe it down. Do not use running water to wash or rinse scooter in order to protect electrical parts. Polish with an automotive liquid polish.

#### **Maintaining your Scooter:**

All maintenance and repair of scooter should be done by an authorized dealer. The following areas require periodic inspection:

- Tire pressure between 35-40 psi
- All electrical connections are firmly attached

#### **Storing your Scooter:**

Between uses, your scooter is best stored in a dry location.

#### **OPERATING YOUR SCOOTER**

You could make the following adjustments to increase your comfort when driving.

- Adjust seat position.
- Adjust armrest width to comfortable position.
- Adjust tiller's angle.
- Before operating your scooter, check the following: Free-wheeling lever in D.
   Speed dial knob is at turtle picture.
- 2. Sit on scooter and turn on key, Battery Gauge meter should be indicate at Full. The Self-Diagnostic Warning Light should not be blinking.

3. When your hands rest comfortably on handlebars, the Throttle should be within easy reach. The right lever moves scooter forward, the left one moves it backward. When you release both levers, scooter will stop.

CAUTION: This scooter has automatic braking system. Release the Throttle and brake will stop scooter.

- 4. Steer scooter by turning tiller toward the way you want to go.
- 5. Practice driving where there are no obstacles. Start at the slowest speed and drive forward and backward; make some turns. As you get more comfortable, you can increase speed by turning speed dial toward picture of rabbit.
- 6. If Battery Gauge indicates E, you should plan to recharge batteries very soon.
- 7. When you are finished riding, turn off the key before getting off.
- 8. If you are finished riding for the day, immediately recharge batteries. See CHARGING THE BATTERIES page.

#### OTHER OPERATING INFORMATION

#### Hill Climbing:

You may need to use a higher speed. Turn to lower speed before going downhill.

NOTE: If Self-Diagnostic Warning Light starts to blink, identify problem from the chart and take action. If the scooter breaks down and must be moved, get off scooter, engage Free-Wheeling Lever to N, push scooter slowly to a safe location, and push lever back to D.

CAUTION: In unlikely event of a panel display error, you need to re-set the display system by the on/off main switch. The display is independent of the motor control system. A display console error does not affect scooter speed control.

Flash	Description	Meaning
1	Battery low or low battery fault	The batteries are running low.  • Recharge the batteries for a minimum of 12 hours.
2	High battery fault	<ul> <li>Battery voltage is too high. This may occur if overcharged &amp;/or travelling down a long slope.</li> <li>If travelling down a slope, reduce your speed to minimise the amount of regenerative charging.</li> <li>Check the battery and associated connections and wiring.</li> </ul>
3	Current limit time-out	<ul> <li>The motor has been exceeding its maximum current rating for too long. This may be due to a faulty motor.</li> <li>Check the motor and associated connections and wiring.</li> <li>Turn the controller off, leave for a few minutes and turn back on again.</li> </ul>
4	Park brake fluid	<ul> <li>Either a park brake release switch is active or the park brake is faulty.</li> <li>Check the park brake and associated connections and wiring.</li> <li>Ensure any associated switches are in their correct positions.</li> </ul>
5	Drive Inhibit	<ul> <li>The throttle is out of neutral when turning the controller on.</li> <li>Ensure the throttle is in neutral when turning the controller on.</li> <li>The throttle may require re-calibration.</li> </ul>
6	Speed pot fault	<ul> <li>The throttle, speed limit pot or their associated wiring may be faulty.</li> <li>Check the throttle and speed pot and associated connections and wiring.</li> </ul>
7	Motor voltage fault	<ul> <li>The motor or its associated wiring is faulty.</li> <li>Check the motor and associated connections and wiring.</li> </ul>
8	Other error	The controller may have an internal fault.  • Check all connections & wiring.

## **Further issues:**

If the above troubleshooting does not help to resolve the issue please contact the authorised dealer (page 2). Please have your serial no. to hand to provide to the authorised dealer, which can be found on the battery pack.



## **Obstacle climbing:**

- Your scooter can climb obstacles and curbs of up to 50mm / 2" in height. Never attempt to overcome an obstacle when on an uphill or downhill gradient!
- Always approach obstacles straight on! Ensure that the front wheels and rear wheels move over the obstacle in one stroke, do not stop halfway!
- The maximum gap the scooter can drive over is 170mm / 17".
- When driving scooter on a ramp, adjust body centre of gravity accordingly.

#### Other information:

- Charge the batteries after each trip. If the scooter is not used for some time, batteries may lose their charge. Batteries should be charged at least once a month.
- Check the battery gauge before driving to prevent power depletion.
- Batteries will age, and the storage capacity will gradually decrease. If batteries are damaged, please wrap them in a plastic bag and contact your local dealer for proper disposal.
- Do not disassemble the battery or open sealed parts by yourself to prevent electric shock and burns from acid leakage.
- Adjust speed to a slow setting when starting off to prevent sudden acceleration.
- Never attempt to drive downhill backwards.
- Try not to drive scooter at night or in rain or bad weather.
- If storing your scooter for a long time (1 month or more), make sure that batteries are fully charged, then disconnect the plugs, and store the scooter in a dry location.
- The front basket has a weight capacity of 3kgs (6.5lbs).

# CAUTION: It is very important that you read this information regarding the possible effects of electromagnetic interference on your motorised scooter.

Powered wheelchairs and motorised scooters may be susceptible to electromagnetic interference (EMI), which is interfering electromagnetic energy (EM) emitted from sources such a radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios, and mobile phones. The interference (from radio wave sources) can cause the motorised scooter to release its brakes, move by itself, or move in unintended directions. It can also permanently damage the motorised scooter control system. The intensity of the interfering EM energy can be measured in volts per meter (V/m). Each motorised scooter can resist EMI up to certain intensity. This is called its "immunity level." The higher the immunity level, the greater the protection. At this time, current technology is capable of achieving at least a 20 V/m immunity level, which would provide useful protection from the more common sources of radiated EMI. This immunity level of this motorised scooter model is 20 V/m.

There are a number of sources of relatively intense electromagnetic fields in the everyday environment. Some of these sources are obvious and easy to avoid. Others are not apparent and exposure is unavoidable. However, we believe that by following the warnings listed below, your risk to EMI will be minimised.

#### The sources of radiated EMI can be broadly classified into three types:

 Hand-held portable transceivers (transmitters-receivers) with the antenna mounted directly on the transmitting unit. Examples include: citizens band (CB) radios, "walkie talkies," security, fire, and police transceivers, mobile telephones, and other personal communication devices;

# CAUTION: Some mobile telephones and similar devices transmit signals while they are ON, even when not being used.

- Medium-range mobile transceivers, such as those used in police cars, fire trucks, ambulances, and taxis. These usually have the antenna mounted on the outside of the vehicle; and
- Long-range transmitters and transceivers such as commercial broadcast transmitters (radio and TV broadcast antenna towers) and amateur (HAM) radios.

CAUTION: Other types of hand-held devices, such as cordless phones, laptop computers, AM/FM radios, TV sets, CD players, and small appliances, such as electric shavers and hair dryers, so far as we know, are not likely to cause EMI problems to your motorised scooter.

## Motorised scooter electromagnetic interference:

Because EM energy rapidly becomes more intense as one move closer to the transmitting antenna (source), the EM fields from hand-held radio wave sources (transceivers) are of special concern. It is possible to unintentionally bring high levels of EM energy very close to the motorised scooter control system while using these devices. This can affect motorised scooter movement and braking. Therefore, the warnings listed below are recommended to prevent possible interference with the control system of the motorised scooter.

## Warnings:

Electromagnetic interference (EMI) from sources such as radio and TV stations, amateur radio (HAM) transmitters, two-way radios, and mobile phones can affect motorised scooters. Following the warnings listed below should reduce the chance of unintended brake release or motorised scooter movement which could result in serious injury.

- Do not operate hand-held transceivers (transmitters-receivers), such as citizens band (CB)
  radios, or turn ON personal communication devices, such as mobile phones, while the
  motorised scooter is turned ON;
- Be aware of nearby transmitters, such as radio or TV stations, and try to avoid coming close to them;
- If unintended movement or brake release occurs, turn the motorised scooter OFF as soon as it is safe;
- Be aware that adding accessories or components, or modifying the motorised scooter, may
  make it more susceptible to EMI; and

## CAUTION: There is no easy way to evaluate their effect on the overall immunity of the motorized scooter.

 Report all incidents of unintended movement or brake release to the distributor listed on the inside front cover of this manual. Note whether there is a source of EMI nearby.

#### Important information:

- 20 volts per meter (V/m) is a generally achievable and useful immunity level against EMI (as of May 1994). The higher the level, the greater the protection.
- The immunity level of this product is 20 V/m.

Specification		
•	4000 / 47 0"	
Overall length	1200 mm / 47.2"	
Overall width	720 mm / 28.4"	
Overall height	1190 mm / 47"	
Front wheels	290 mm / 11"	
Rear wheels	290 mm / 11"	
Weight without batteries	70 kg / 154.3 lbs	
Suspension	Front and Rear	
Max. speed	12 kmph / 7.5 mph	
Weight capacity	136 kg / 300 lbs	
Ground clearance	80 mm / 3.2"	
Grade climbable	10 degree	
Curb climbable	50 mm / 2"	
Turning radius	1500 mm / 59.1"	
Brake	Electro-Mechanical	
Seat type	Swivel Mid-Back W/ Headrest & Seat Sliding Mechanism	
Seat width	455 mm / 18"	
Motor size	700W 4500 r.p.m	
Battery size	12V. 36ah   12V. 50ah	
Battery weight	(36ah) 23 kg / 50.7 lbs   (50ah) 31.3 kg / 69 lbs	
Travel range	(36ah) 31 km / 19.2 Miles   (50ah) 42.5 km / 26.4 Miles	
Battery charger	5A Off Board	
Electronics	On / Off Key Switch, Battery Level Indicator, Speed Control Knob	

<sup>\*</sup> Information is subject to change without notice.

\* Batteries not included with this scooter.

There is a comprehensive twelve-month warranty from the date on which your new scooter is delivered. The warranty covers the scooter for repairs or replacement during this period. For more details, please see the warranty conditions below.

## Warranty conditions:

- Any work or replacement part installation must be carried out by an authorised service agent.
- To apply to warranty should your scooter require repair, please contact the authorised dealer.
- Should any part of the scooter require repair or full or part replacement, as a result of a manufacturing or material defect within warranty period, the work will be carried out free of charge. Warranty period:
  - 1. Frame: 2 year limited warranty.
  - 2. Electronic parts: 12 months limited warranty.
  - 3. Batteries: 6 month limited warranty.
- Any repaired or replaced parts will be covered by this warranty for the balance of the warranty period on the scooter.
- Parts replaced after the original warranty has expired will be covered by a three months warranty.
- Consumable items supplied will not generally be covered during the normal warranty period unless such items require repair or replacement clearly as a direct result of a manufacturing or material defect.
  - Such items include (among others): upholstery, tyres and batteries.
- The above warranty conditions apply to brand new scooters purchased at the full retail price. If you are unsure whether your scooter is covered, check with the authorised dealer.
- Under normal circumstances, no responsibility will be accepted where the scooter has failed as a direct result of:
  - 1. The scooter part not having been maintained in accordance with the manufacturer's recommendations.
  - 2. Failure to use the manufacturer's specified parts.
  - 3. The scooter or part having been damaged due to neglect, accident or improper use.
  - 4. The scooter or part having been altered from the manufacturer's specifications or repairs having been attempted before the service agent is notified.

Please note your authorised dealer contact details on page 2. In the event of your scooter requiring attention, contact them and give all relevant details so they can act quickly.

The manufacturer reserves the right to alter, without notice, any weights, measurements or other technical data shown in this manual. All figures, measurements and capacities shown in this manual are approximate and do not constitute specifications.