



Quingo™

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**HANDBOOK &
SERVICE MANUAL**

QUINGO ULTRA

OCTOBER 2020 ISSUE 1

CE

Owner's Manual and Service Record

Keep this manual in a safe place

This document contains the information required to familiarise yourself with the vehicle

If any information is not clear, contact your authorised distributor immediately

This document must remain with the vehicle throughout its life

This Vehicle was supplied by:

Product Model Number.....

Serial Number.....

Date of Purchase.....

This product is designed and produced by: Advanced Vehicle Concepts Ltd (AVC),
Registered office: Sovereign Court, 230 Upper Fifth Street, Central Milton Keynes, Bucks MK9 2HR England
Quingo is a registered trade mark of AVC. All Quingo products are protected by patents.

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**Please read this manual thoroughly before driving
or operating the vehicle.**



Every mobility scooter or wheelchair operates differently.
Do not assume they are the same.
If you have any doubt about the content of this manual contact your authorised distributor immediately.
Read the instructions contained within this document.
Maintain the vehicle correctly and ensure it is serviced regularly.

Safety Notices

Within this manual there are important safety notices. They are clearly marked on the appropriate pages. Make sure that you understand these notices. If any part is unclear contact your authorised distributor.

Intended use of the Vehicle

Designed solely for use by a disabled person (up to the maximum recommended weight) who requires a mobility scooter with maximum versatility and a safe, comfortable seating position with maximum manoeuvrability. This unit can be transported in the rear of a vehicle but weight and dimensions should be checked before purchase.

The vehicle has been classified according to EN 12184:2014 as a class B mobility product (for indoor and outdoor areas). Speed, range, turning circle, safe climbing ability, maximum obstacle height and permissible operating conditions can be found in "Technical Specifications".

The vehicle is not intended to run in deep water (over 5cm) or muddy areas. The vehicle can be run on hard ground. Avoid sandy or gravel areas as this can seriously affect the range. This product is not intended as an off-road vehicle.

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Read this before driving the vehicle

Whether or not this is your first mobility vehicle, read these guidelines as all vehicles differ. Failure to do this may cause damage to you, a third party or the vehicle.

Caution: Check the weather. Make sure you are wearing suitable clothing, regardless if your journey is long or short. Remember, when it is hot, wear a hat.

Caution: If you are taking medication check with your doctor or physician that your ability to control the vehicle will not be impaired.



Warning: Do not drive under the influence of alcohol or drugs.



Warning: Only use the vehicle for the purpose intended. Do not drive through deep water, transport more than one person, tow other vehicles, drive on rough unpaved ground, soft mud or carry excess weight.



Warning: Do not modify the vehicle as this will render your warranty void.

Caution: Make sure the battery charger is disconnected before driving.

Caution: Make sure you have adjusted the seat as instructed in this manual – get comfortable – set the speed control dial to a low setting.



Warning: If the vehicle should stop, do not tow it under any circumstances as this will damage the vehicle.

Caution: Make sure the road ahead is clear.


Switch on the vehicle. Check the battery level indicator is in the green area. Get comfortable and **ALWAYS** place your feet on the footplates.


- Pull in the right hand accelerator lever slowly. The vehicle will now move off. The more you pull the lever in the faster the vehicle will go.
- To brake, release the lever. If you become unsure or feel unsafe release the lever immediately.
- As you get accustomed to the power you can increase the speed.
- Getting on and off the vehicle: Stop the vehicle on a flat area. Turn off the ignition and remove the key before getting off.


Precautions should be taken to avoid sources of ignition, including flames, cigarettes, alcohol etc.

Warning: Flammable risk can change with use, ageing and/or cleaning.

Warning: Using oxygen to assist with breathing difficulties can increase the flammable risk.

 **Warning: Kerbs and Obstacles:** Do not ride up kerbs or obstructions higher than 2" (5cm). On inclines lean forward, this places more weight over the front making the vehicle more stable.

 **Warning: Hills & Slopes: Lean forward when climbing.** Make sure you have enough speed to make the slope. **Do not stop or turn the vehicle around.** If you have to turn while climbing an incline keep going until you reach a level area. If you have to start on an incline lean forward and apply power slowly – do not start and stop. Always check the battery level is high. If the level drops too low the vehicle will cut out leaving you stranded. **Lean back when going downhill**, turn the speed control dial to low.

 **Warning:** Do not drive across a slope at an angle – always drive straight up and down the slope.

 **WARNING: NEVER REVERSE DOWN A SLOPE**

Caution: Turning: Slow down and look in the direction you are travelling – If it's a blind corner sound the horn.

Caution: Bad Weather: If it's snowing or icy remember that ice, snow and slippery surfaces such as manhole covers, wet grass and drains could affect braking and steering. Use caution at all times.

Caution: In a crowded area: Drive with caution on a paved area such as a shopping area, pavement or car park. Make sure persons and pets are aware of you – remember they cannot always hear you coming!

Frequently asked questions (FAQ)

How do I clean the vehicle & Where to store the scooter.

Only use a damp cloth and gentle detergent. Do not use any abrasive or scouring liquids or high-pressure cleaning devices. Do not allow direct contact with water. Always keep the scooter in a dry area. If you do not have an area to store the scooter, use a waterproof cover.

Disinfection

Spraying or wiping, using a tested and recognised disinfection product is permitted. A list of the current disinfectants is available from the Robert Koch Institute at <http://www.rki.de>. Always wear rubber gloves when using disinfectant and wash your hands thoroughly when finished.

I want to modify my scooter, is this ok?

No, any modification will invalidate your warranty. This is because it changes the specification of the product and the manufacturer has to abide by the CE approval marking.

How long will my batteries last and what range can I expect?

This is a very difficult question and not one that has a straight answer. However by following these simple instructions, your batteries should have a longer life:

- Keep them charged; do not let the batteries run completely flat.
- If they are flat charge them up.

Range can be affected by many things such as:

- Temperature, worn batteries, faulty charger, type of terrain, weight of the person and incorrect tyre pressures. See page 40 for further information.

Life Expectancy of the Product

The life expectancy of the product is 5 years, depending on usage and product care. Please ensure that your product is used in strict accordance with the intended use as set out in this document and all service and maintenance requirements are carried out as recommended.

The estimated life expectancy may be exceeded if the product is used carefully and properly maintained, but it can also be considerably reduced by extreme or incorrect use. Although we estimate the life expectancy for this product it does not constitute an additional warranty.

Information regarding Electromagnetic Interference (EMI)

This section contains information on the possible effects of electromagnetic interference to your vehicle.

EMI refers to the effects electromagnetic energy might have on the control systems of your vehicle. The interference could cause the brakes to release, the vehicle to move by itself or damage the electronics.

There are broadly three types of sources of electromagnetic energy:

1. Hand Held, Short Range Portable Transceivers. Examples include: CB radios, walkie-talkies, security, fire and police transceivers, mobile phones and other devices that transmit a signal even when not in use.
2. Medium Range Mobile Transceivers. Examples include: police, fire, ambulance and taxi transceivers.
3. Long Range Transmitters and Receivers. Examples include: radio and television towers and amateur (HAM) radios.

There is an immunity level that has to be met by law and your scooter has been tested to the required level.



Even though your vehicle meets the requirements it is recommended that you follow certain precautions.

1. Do not operate hand held transceivers such as CB radios or mobile phones while the vehicle is switched on.
2. Be aware of transmitter masts, such as television and radio stations. Avoid getting close to them.

If your vehicle starts to operate by itself switch it off and call your authorised service provider. Report all faults of this type.

Technical Information regarding EMI

Important Technical Information regarding Electromagnetic Interference (EMI)

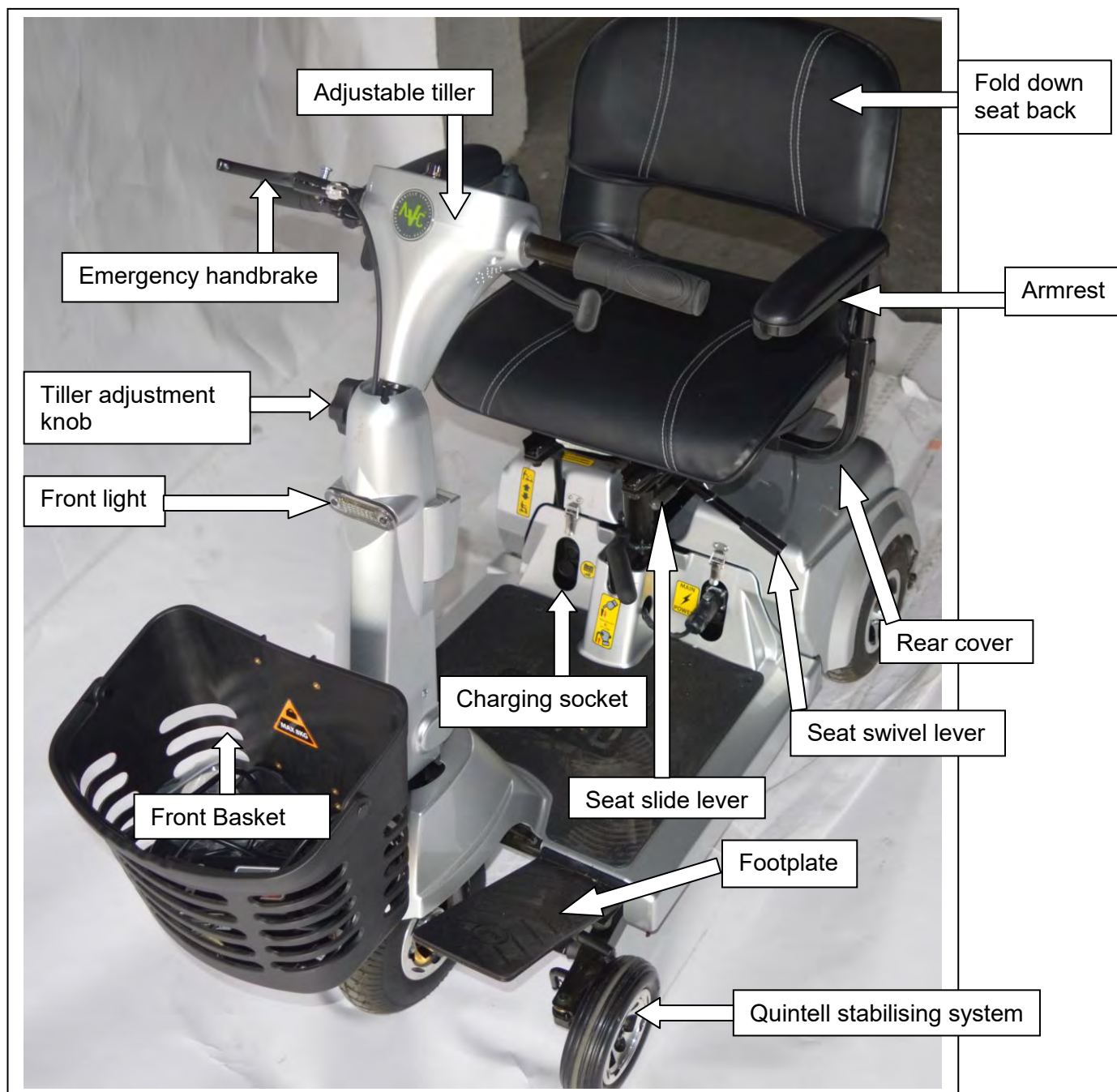
The intensity of interference from electromagnetic energy is measured in volts per metre (v/m), which refers to the strength of the electrical source (voltage) as it relates to the distance away from the object being considered (in metres). Resistance of a scooter/wheelchair to certain EMI intensity is commonly called its 'immunity level'. 20 volts/metre is a generally achievable and useful immunity level against interference from radio wave sources (the higher the immunity level, the greater protection).

Your scooter has been tested and found to meet the required immunity level from Electromagnetic Interference (20v/m): the intensity of interference from electromagnetic energy.



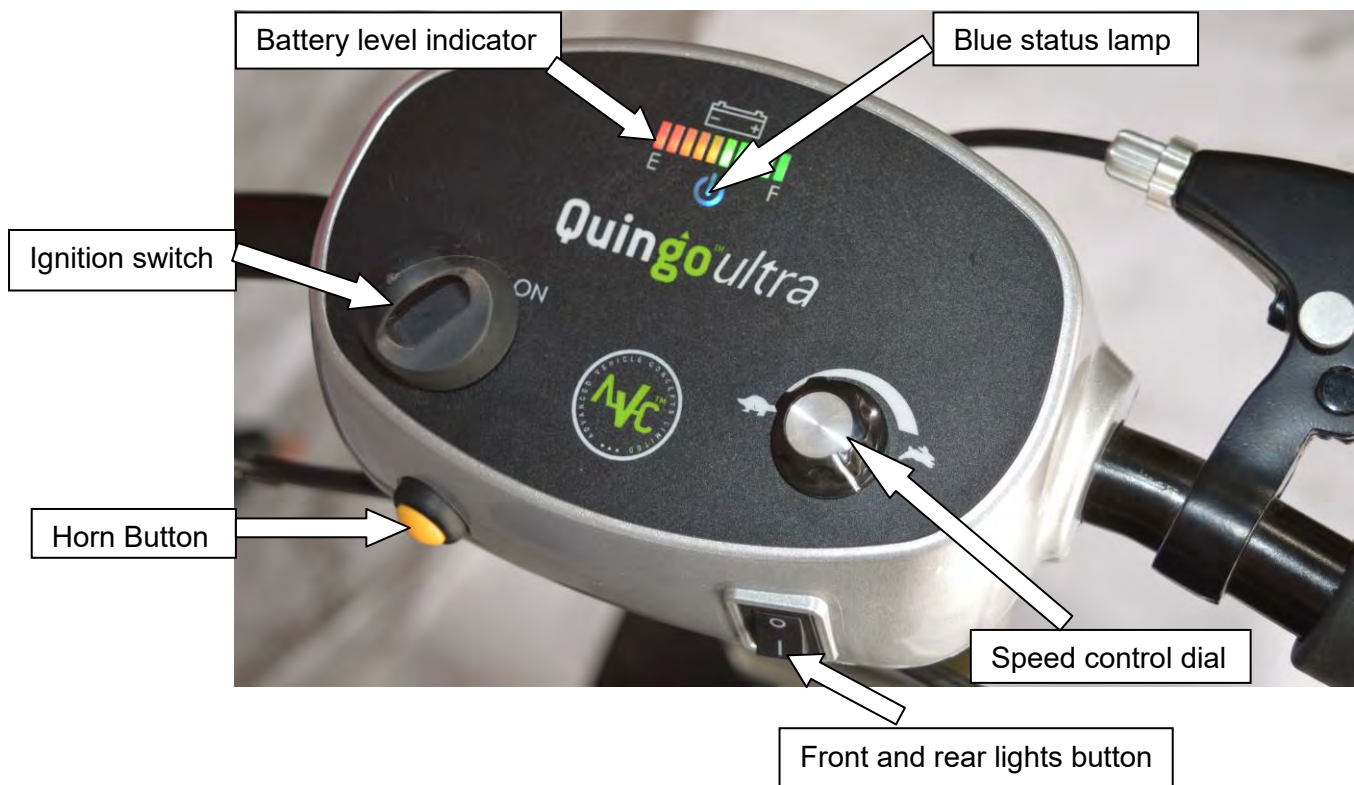
WARNING: Even with the immunity level of 20 volts/metre, certain precautions must be followed to ensure your scooter will not be affected by outside electromagnetic sources. Please refer also to page 5.

Getting to know your Vehicle



Before driving your vehicle it is important to familiarise yourself with the controls. Do not attempt to drive the vehicle before reading the rest of this manual.

It is important you recognise the names of the areas of the dashboard as it helps a service engineer identify any fault when phoning your service provider.



The Blue Status Lamp (Important Notice)

Before we move onto the controls the status lamp needs explanation. This lamp informs the rider of the condition of the vehicle. If something fails it will tell you what is wrong. This is important when phoning your service provider. It works like this:

- Switch the ignition on and the lamp will light a constant blue – this is the normal condition and shows you everything is ok and the vehicle is ready to move off. It should be on as long as the ignition switch is turned on. Switch off the ignition and the lamp will go out.
- If you switch on the ignition and the vehicle will not move check the lamp. If there is a problem, the lamp will flash AND you will hear an audible “beep”. The flash and beep will occur a number of times then stop for a second before starting again. Check the number of flashes/beeps before you phone your service provider. Please make sure you have this information
- The next page shows what the numbers of flashes mean. If you are not sure what they mean just tell your service provider the number of times the lamp flashes. This will help diagnose any problem quickly.

Blue Status Light – when it flashes and beeps indicate:

- 1 flash Battery needs recharging
- 2 flashes Battery voltage too low
- 3 flashes Battery voltage too high
- 4 flashes Current time-out limit
- 5 flashes Brake fault or Freewheel engaged
- 6 flashes Accelerator lever pulled in when ignition switched on
- 7 flashes Speed pot error
- 8 flashes Motor volt error
- 9 flashes Other internal error

Battery Indicator: This instrument shows the level of charge in the batteries. When in the green area, the batteries are fully charged. When in the yellow area the batteries need recharging and when in the red area the batteries *urgently* need recharging. Note: When the vehicle is climbing a steep incline or starting off, the level may drop momentarily; this is normal.



Speed Control Dial: This controls the *top speed* of your scooter. When the dial is turned to the left, this is its slowest speed. When the dial is turned to the right, the speed will increase to a maximum.



It is recommended to start at the lower setting and increase as required once moving.

Accelerator forward/reverse: When sitting on the scooter push the right hand lever and it will move forward. The further the lever is pushed forward the faster the scooter goes. Push the left hand lever and the scooter will reverse. (See pages 3 and 4 “Driving Your Vehicle” for full operation)



WARNING NOTICE (see photo below)

The lever mechanism should be treated with care as it could become damaged if misused. Carry out checks as required.

1. **Do not** pull both levers in at once. This will damage the mechanism.
2. **Carry out daily.** Before using the scooter check the mechanism for full and free movement. With the ignition off and the key removed push the lever in fully on the right hand side then release. The lever should return immediately to the normal position. Push the left hand lever in fully then release. The lever should return immediately to the normal position. If the lever does not return immediately to the normal position (it sticks) contact your service provider/supplier immediately and:

DO NOT ATTEMPT TO OPERATE THE SCOOTER.

3. Never lean or place your body weight on the levers. This will damage the mechanism.
4. If you have a weather proof cover on the scooter take care when removing it especially in the tiller area. Make sure the cover does not snag the levers.
5. Do not hang objects such as bags or attach dog leads to the handlebar or the lever mechanism.

1. Remove ignition key before checking levers

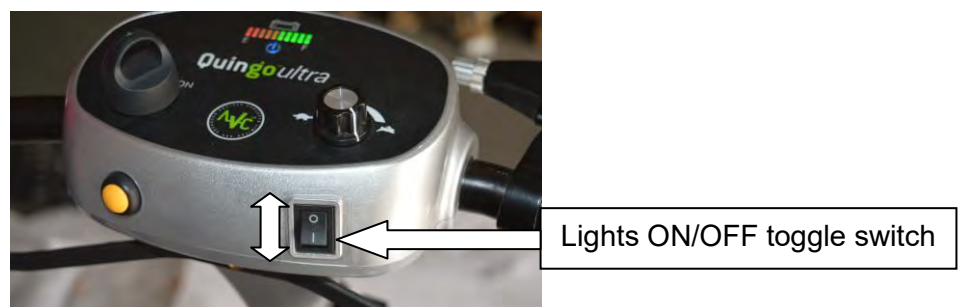


Checking for full & free movement
 2. Push in Right hand lever & release
 3. Push in Left hand lever & release

Horn: Press the button and the horn will sound.



Light Switch: Press the toggle switch down to the "I" position and both front and rear lights will illuminate. Press the switch at the "O" position and the lights will extinguish.



Ignition Switch: Always remember to remove the key **when not in use**. Do not leave the ignition on when not in use especially when **charging the vehicle**.



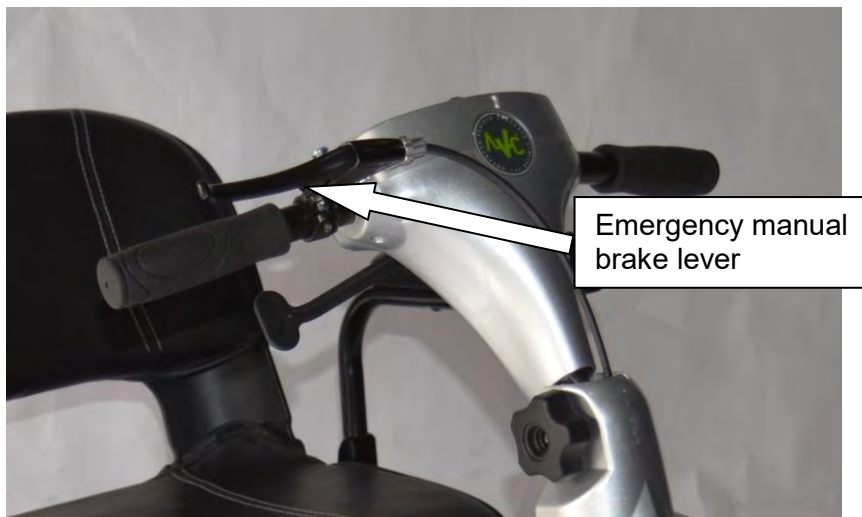
Important Safety Notice – Read all of this notice

A Brief Explanation Of How The Brakes Work On Your Scooter.

The first is the electromagnetic brake or automatic handbrake. When you move off, the brake releases automatically. When the scooter comes to a halt it engages automatically and stops the scooter rolling forward or backward.

The second is the regenerative brake. This works when you release the accelerator lever. The faster you release the lever the faster the vehicle slows down. When it slows enough the automatic brake engages.

The third system is the emergency manual parking brake. This can be applied to stop the vehicle in the unlikely event that the automatic braking system does not work. It can also be used to stop the vehicle when manoeuvring in freewheel.



Emergency manual
brake lever

The Freewheel.

The freewheel device allows the vehicle to be moved without power. When the lever is pulled up the automatic brakes are released. This means there is no braking. Follow the instructions on page 13 and if you are in any doubt contact your service provider immediately.



Freewheel lever



DO NOT engage
Freewheel mode when
on a slope

Using the Freewheel device




Place the vehicle on level ground.

Remove the ignition key.

DO NOT let anyone sit on the vehicle at any time.

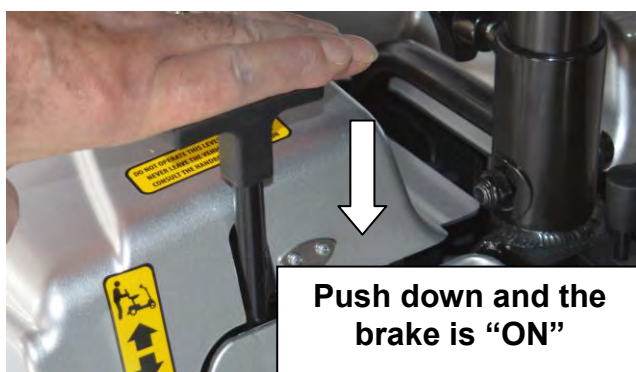
First locate the lever. It is under the seat on the right hand side.

Pull the lever up with your hand until you feel a 'click'. The brake is now released and the vehicle can be moved.

 **DO NOT** sit on the vehicle when the brake is disengaged.

To engage the brake: Push the lever down until you feel a 'click'. The brake is now engaged. Push the vehicle gently back & forth to make sure the brake is locked!

The vehicle is now in the normal driving configuration and ready to use.



The scooter WILL NOT drive under power when in freewheel.

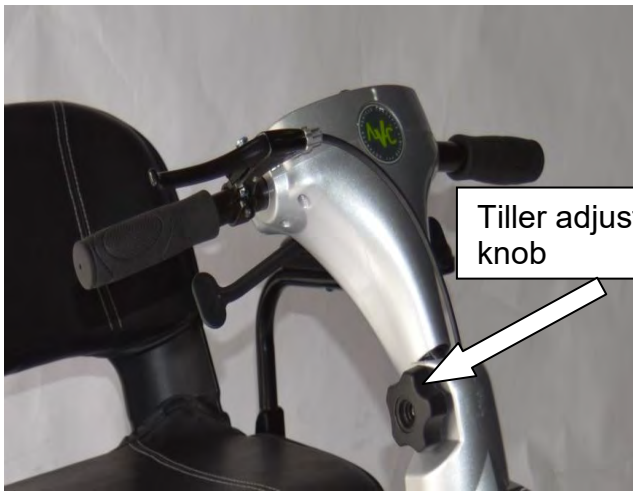
Your Quingo Ultra is unique as it has many adjustment combinations. The general rule is to keep the footrests as far forward as possible. Keep the seat as low as possible and adjust the seat and tiller to suit. This places the weight forward, which aids comfort to the rider and enhances stability especially when climbing hills. This position is generally agreed to be the most comfortable when seated on the vehicle as it promotes blood flow and supports the back, arms and legs.

The photograph below shows the adjustable settings on the Quingo Ultra so each user can adjust the scooter to the correct seated position for maximum comfort.

1. Seat- Swivel to allow easy access on/ off the scooter
2. Seat- Adjust the height (requires tools)
3. Armrests- Adjust the width and angle
4. Tiller- Move the steering In and out
5. Seat- Adjust the seat slide forward and backward
6. Footplates- adjust forward and backward (Note: tools are required for this adjustment – see page 15).



The tiller angle can be adjusted forward or backward for a comfortable driving position or to suit your preferred seating position. The adjusting knob is situated on the right hand side of the tiller. Untighten the adjusting knob to loosen the tiller joint. Move the tiller to the preferred position and **retighten the adjusting knob**.



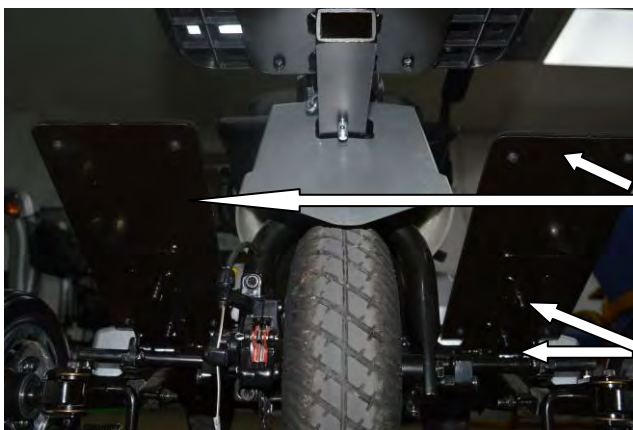
Tiller adjustment knob

 **NEVER ADJUST THE TILLER WHEN DRIVING**



Loosen knob to adjust the angle of the tiller and **fully tighten before driving**

The footrests can be adjusted back and forth. We recommend an engineer carry this out as it requires a spanner to adjust the plates and fasten. Under normal conditions the standard setting will be sufficient.



Footplates

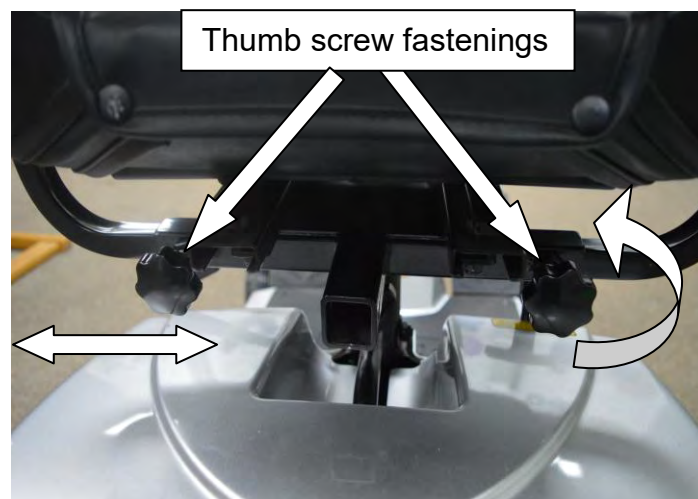
Loosen nuts on each footplate, adjust position and retighten nuts

The seat can be adjusted up and down. There are 3 positions on the seat stem. We recommend an engineer carry this out. To adjust, release nut and remove bolt, move seat post into the desired position and retighten.

 Always re-tighten before use.



The armrest width can be adjusted and the armrests can be removed for storage. Each armrest is fixed into position by turning the thumb screw to locate a pin inside the arm rest arm. To adjust the width, turn the thumbscrew anti-clockwise to release the pin; you will now be able to slide the arm rests in or out to the desired width. Retighten the thumbscrew. To remove the armrests, turn the thumbscrew anti-clockwise to release the pin and remove the armrests for storage.





Seat Slide:

Allows the seat to be adjusted forward or backward. If you use this feature to ease access when getting on or off, make sure you have the seat correctly adjusted for driving. Pull the lever upwards and adjust to suit. Release the lever and move the seat slightly back and forth until you hear the seat lock. Always keep the seat as far forward as possible as this aids stability of the scooter. When locked, the seat will not be able to be moved.

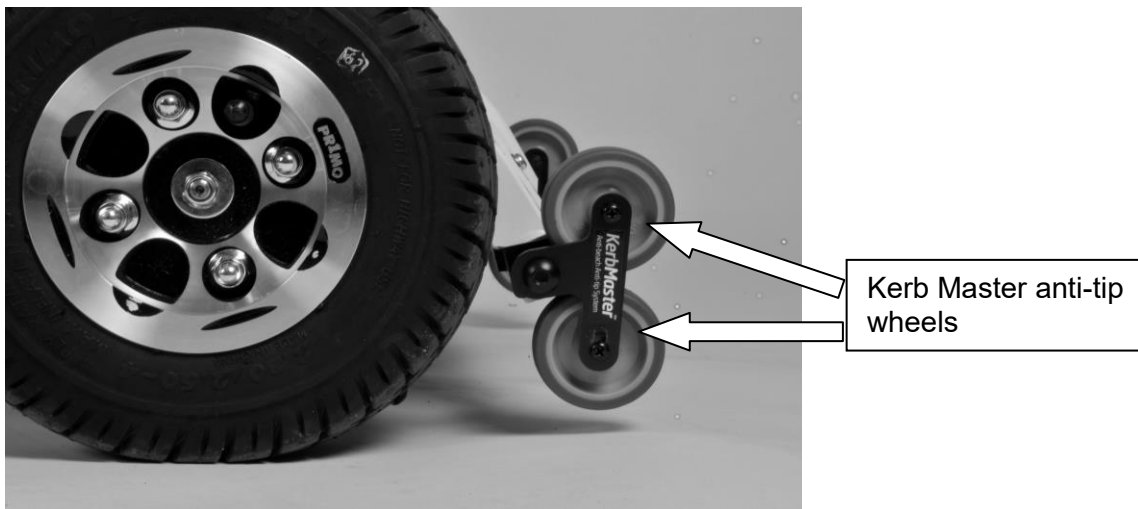
Revolving Seat:

The seat is able to revolve and lock every 45°. This has two functions. The first is to allow easy access on and off the scooter. The second is to allow a comfortable seating position when stationary; for example when sitting in a café. To operate (when seated on a flat surface) lift the lever and turn the seat to the desired position. When at that position release the lever and turn the seat until you hear it lock.

⚠ Warning: When returning the seat to the forward or driving position make sure the seat has locked before driving off. Never unlock the seat while in motion

⚠ Warning: Before operating the Seat Slide or Revolving Seat levers always make sure the vehicle is stationary and the ignition switched off.

Kerb Master Anti-tip Wheels



Kerb Master anti-tip wheels

This patented device is unique to the Quingo range of scooters and has a dual purpose. First, the anti-tip wheels are fitted to help stop the vehicle tipping backward in extreme circumstance. Second and if negotiating a deep kerb, the kerb-master wheels engage with both rear drive wheels of your scooter, enabling the vehicle to drive off the obstruction without “beaching” occurring.

If this situation arises, all you have to do is pull the throttle in and the vehicle will push itself off the obstruction, allowing you to continue your journey without interruption.

⚠ WARNING: The anti-tip devices MUST remain on the scooter at all times. Removal of anti-tip devices will increase the risk of the scooter tipping over.

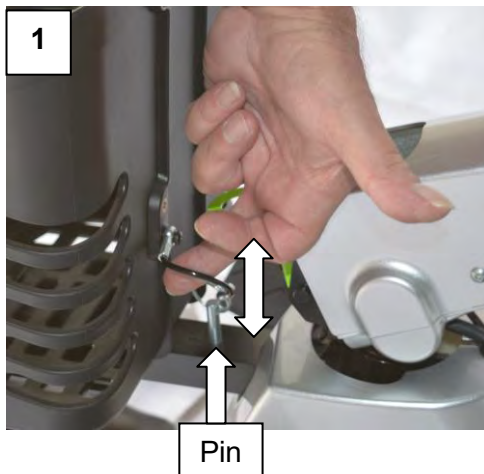
Seat Pocket (storage)

This Quingo Ultra seat has a built in storage bag with Velcro fastening. The maximum weight capacity should not exceed 2Kg (4.4lbs)



⚠ Important:
Make sure the vehicle is on flat ground and
REMOVE THE IGNITION KEY.

Parts of this scooter are heavy. You may require assistance to carry out this procedure. Assemble in reverse order.



Remove the basket by releasing the pin and pulling the basket in the direction of the arrow (see figures 1 and 2). Make sure the basket is empty.



Fold the seat back down. Although you can leave the armrests in the normal down position, it is recommended that they be removed (see figures 3 and 4). Remove the seat by releasing the rotating seat lever, turning the seat and pulling upwards gently (see figures 5 and 6 on page 21).



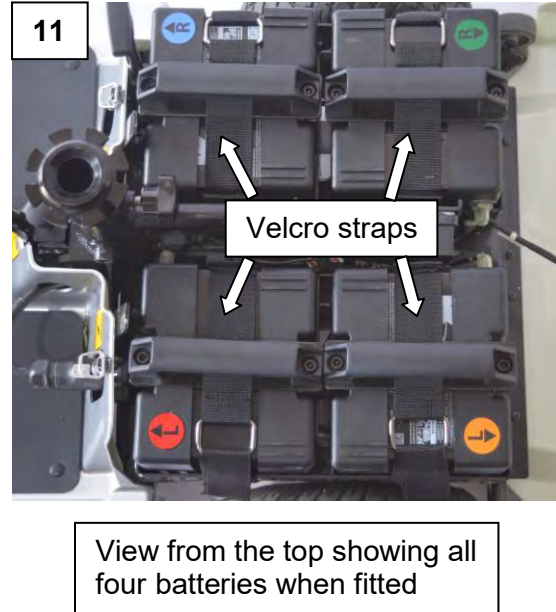
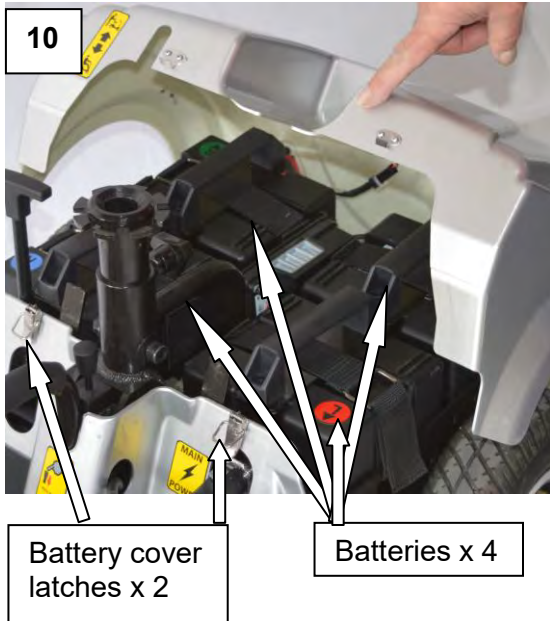
Your scooter should now look like this:



Fold the tiller by pushing the green lever down and allow the tiller to fold flat. Make sure the front wheels are pointing forward. Take care not to damage the tiller when folded.



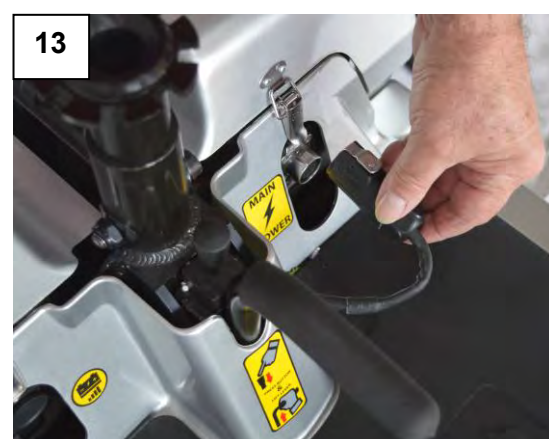
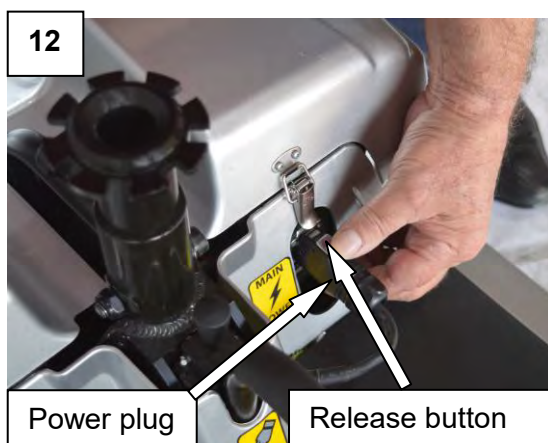
Removing the batteries



To remove the batteries, open the release latches on the front of the rear battery cover and lift up the hinged bodywork (see figure 10). Remove the batteries by releasing the Velcro holding straps (see figure 11), then lift the batteries out one by one. You can remove the batteries in any order. Replace the rear cover when all the batteries are removed and close the latches.

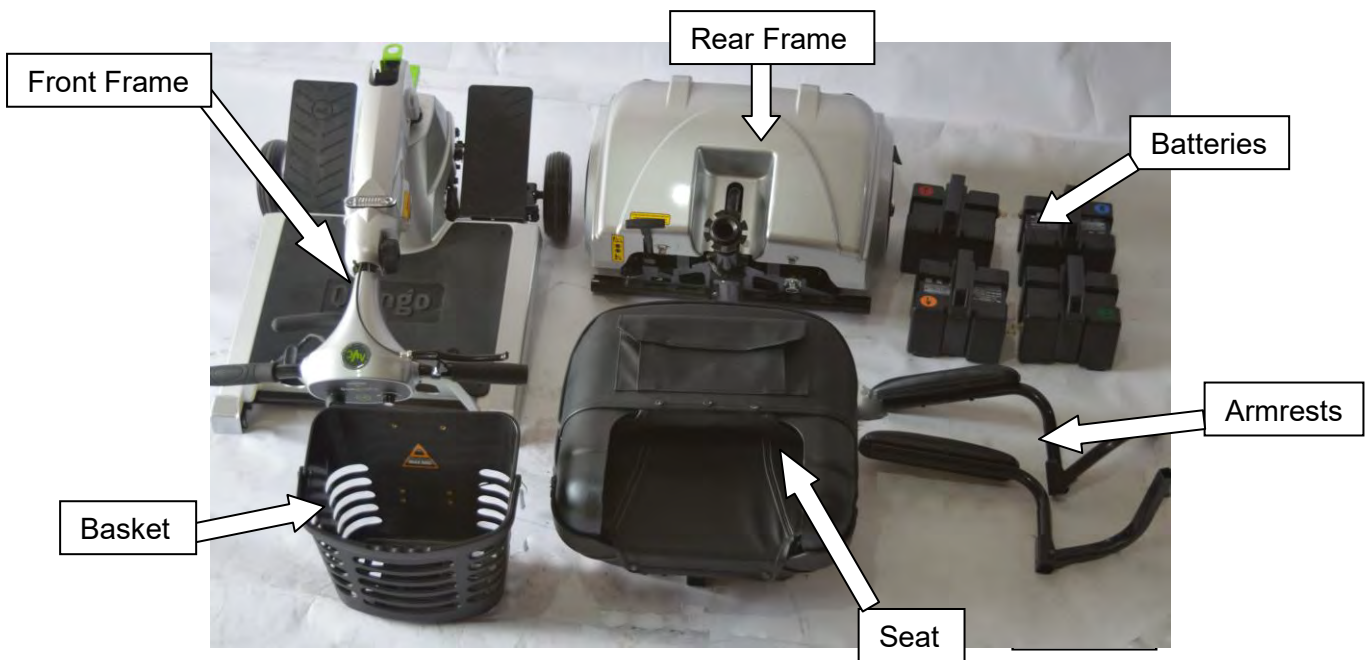
Once all the batteries are removed, disconnect the power plug by pushing down the release button on the top of the plug (see figure 12) and at the same time, pull the plug out of its socket (see figure 13). NOTE: this will be stiff and you may require help to complete this action.

⊘ Do not attempt to disconnect the plug by pulling the lead. To do so may cause damage to your vehicle.



You are now ready to separate the frames of your vehicle. To separate the frames, push with your thumb and keep pressed in, the locking release button. At the same time, grasp the front frame lifting handle (this can be rotated to either the left or right hand side).

With your other hand, grasp the rear lifting handle and gently pull up BOTH lifting handles simultaneously. The frames will separate. Lift the rear frame away from the main (front) part of the scooter.



Your vehicle should now be in 10 parts (including armrests and batteries). Dismantling the vehicle will reduce the weight that has to be lifted. Although we have endeavoured to make the vehicle as light as possible you may find some parts are too heavy to lift on your own. Ask for assistance when loading into a car or van.

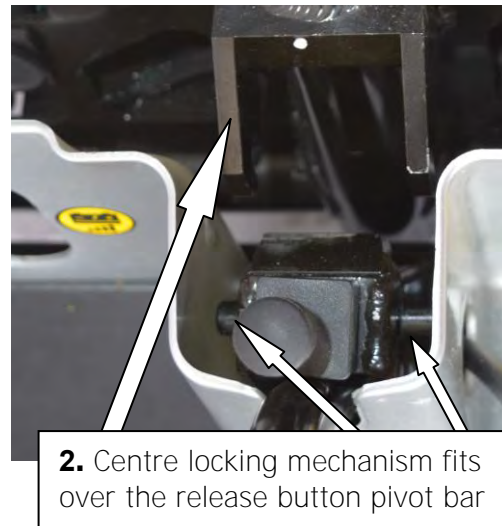
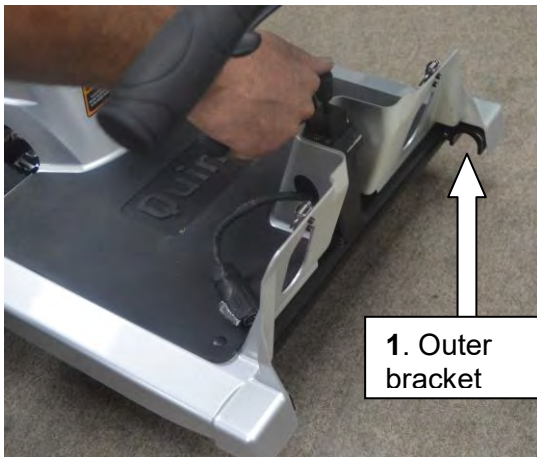
Please Note: Practice the dismantling and assembly of your vehicle.



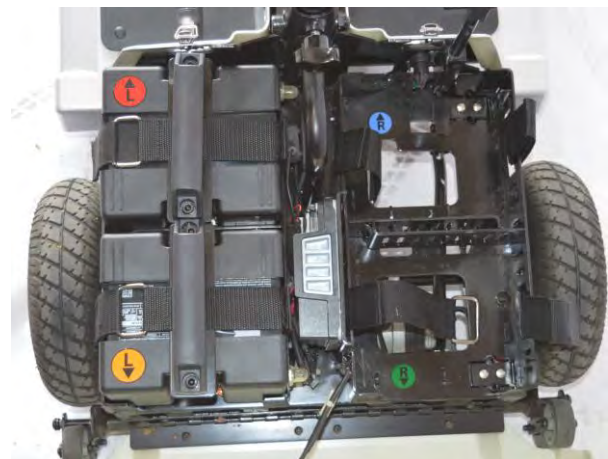
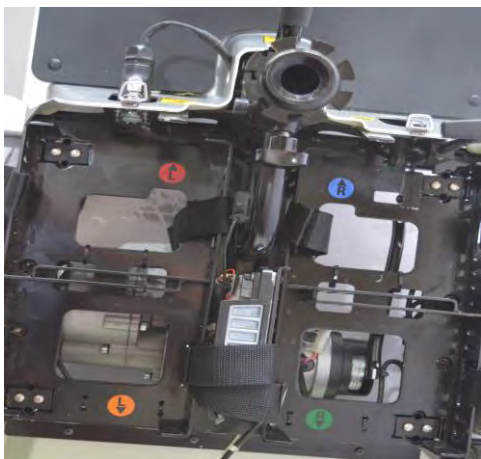
Under no circumstances should this scooter be used as a seat in a motor vehicle. This vehicle does not meet ISO 7176-19 standards for occupied transport in a motor vehicle.

There are two important areas you should be aware of when assembling the front and rear sections of the vehicle.

When connecting the frames, locate the outer brackets as shown (1) and line up the centre locking mechanism (2). When located, apply pressure downward and the frame will lock. You will hear a click. To check, pull the two handles upwards and the frames should stay locked.



If you should experience a problem with the frames locking (especially when the vehicle is new) press down at (1) on each side simultaneously and the frames will “click” shut.



To insert the batteries, place each battery in its colour coordinated holder. Thread the holding straps over the batteries, making sure the straps pass under the battery handles. Fasten the Velcro holding straps tightly around each battery.



Please make sure you use the colour codes on each battery to locate in to the correct section in the rear chassis and that the Velcro straps are fastened tightly.

IF THE VEHICLE DOES NOT OPERATE CHECK THESE FOUR AREAS BEFORE PHONING YOUR SUPPLIER

User Guide for the battery charger.

The batteries and battery charger are essential components for your mobility scooter. Your scooter is equipped with maintenance free, sealed lead acid batteries. The batteries require no maintenance other than ensuring they are correctly charged.

Warning: Charge your scooter batteries fully prior to using it for the first time. Keep the batteries fully charged to keep your scooter running smoothly.

Safety Warnings:-

- Please read the instructions in this manual and in the manual supplied with the battery charger before attempting to use the battery charger.
- The battery charger is intended for indoor use and is not to be exposed to rain or other sources of moisture.
- During charging, the battery charger and batteries **MUST** be kept away from heat sources such as radiators, heaters and flames and should be carried out in a well-ventilated area/room.
- Only batteries of the specified type and capacity are to be charged (see specification below).

Charger Specifications:-

Type	2amp Off-Board Charger
Rated Input Voltage Range	100-240V ac, 50-60Hz, 2A
Rated D.C. output voltage	24V DC
Rated D.C. output current	4amp
Operating Temperature Range	0°C to +40°C
Type of Battery to be charged	12V Lead acid rechargeable battery
Rated Capacity of Batteries	15Ahr
Environment protection rating	Class II, rating IP1
Charging connector pins	Pin1: Battery positive Pin 2: Battery negative Pin 3: Inhibit

Battery Charger function indicator (LED Lights):-

Red: Power On, **Red:** Charging, **Green:** Fully Charged

What if my scooters batteries won't charge?

- Ensure both ends of the charger power cord are fully inserted.
- Make sure all batteries are located in the correct part of the rear frame (use the colour codes to check) and the Velcro straps are fully tightened.

Please see page 26 for further information on the battery charger, how to connect and disconnect the battery charger and information on batteries. If you have any questions or do not understand any of the information included in this user guide please contact your authorised distributor.

GENERAL NOTES REGARDING THE BATTERY CHARGER

Battery chargers are subject to regular upgrades. For full instructions read the leaflet supplied with the charger, which can be found in the Battery Charger box.

IMPORTANT

Batteries have a limited guarantee; if they have not been charged correctly and they fail, they will not be replaced under the guarantee. An engineer will be able to detect "misuse or neglect", so follow the correct charging procedures to prolong their life.

Charging your Batteries:-

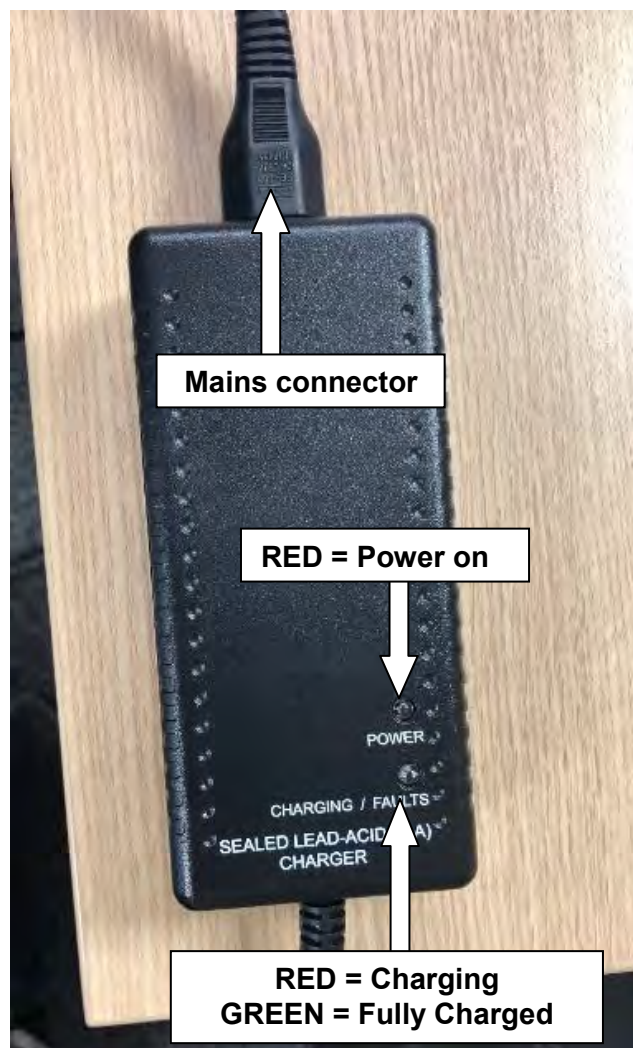
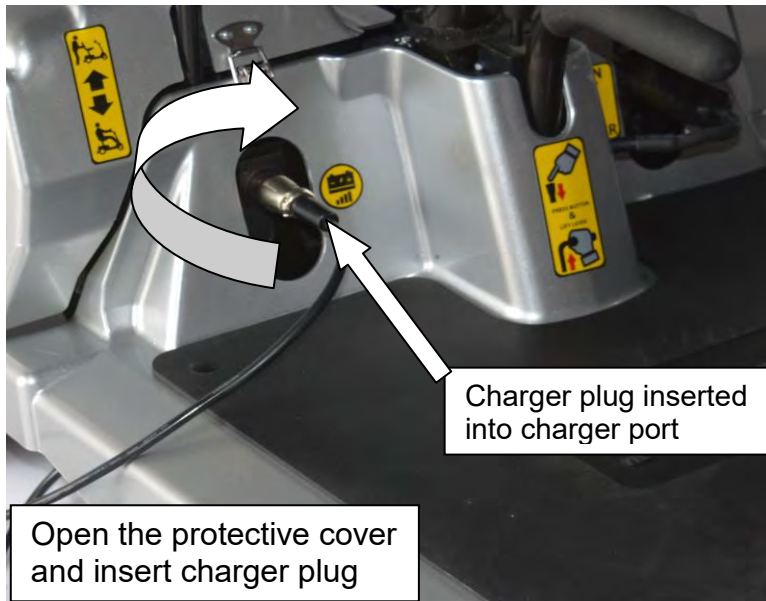
- Always use the correct charger. Never use a lead acid (Car type) charger. If the fully charged light does not come on (normally green, varies with charger type) you may have a battery or charger problem.
- When storing, fully charge the batteries weekly - never let them run low.
- Do not leave the vehicle ignition on during charging
- Do not leave the charger switched off with the plug connected to the vehicle. This will discharge the batteries to zero.
- Charge the batteries in a well-ventilated area; this will prevent the risk of fire.
- Do not charge the batteries in the open air. The charger is not waterproof.
- Always charge the batteries fully after use (Normally over night/ 8-12 hours). Do not part charge even after short journeys.
- As batteries age they lose their electrical capacity; range will decrease.
- The terrain driven on will have a great effect on the range. As the motor heats up, it loses its efficiency, increasing demand on the batteries and decreasing the range.
- If the charger is left on for a long period it will not affect the batteries. The charger is fully automatic and will switch off when the batteries are full. However, if the vehicle is not being used for a long period it is recommended that the charger should be used every week to top up and then disconnect.
- If the batteries have been discharged for a long period, do not attempt to charge. Contact your service provider for advice.
- Factors that can change the performance of the batteries - ambient temperature, weather, age and use, weight of the user, terrain the scooter is used on, tyre pressures.

How do I change a battery in my scooter?

Battery posts, terminals and related accessories contain lead and lead compounds. Always use batteries of the exact same type, chemistry and amp-hour (Ah) capacity. Refer to the specification on page 39 in this manual.

- Contact your supplier if you have any questions regarding the batteries in your scooter.
- Do not replace the batteries while the scooter is in use.
- Do not mix old and new batteries. Always replace batteries in pairs.

We always recommend that your authorised distributor and service provider supplies and fits replacement batteries.



Connection Instructions

When you receive your scooter the batteries are partially charged. Fully charge for 12 hours before use.

Place your scooter in an area that is dry and well ventilated. Make sure a power point is nearby.

The scooter should be switched off and the key removed.

Turn off the mains wall switch. Never connect or disconnect the charger with the mains on.

Connect the charger to the battery connector. Make sure the pins are lined up – do not force.

Once the charger is connected, switch on the mains.

The power-on lamp illuminates red when switched on. The charger lamp starts red, changing to green when charged (charge for the full duration 8-12 hours).

When charging the batteries, charging from fully discharged may take up to 15 hours.

Switch off the mains and remove the plug from the battery connector when fully charged. Do not leave the charger plugged in with the power off. This will discharge your batteries.

Correct charging prolongs battery life

⚠ WARNING: Do not operate the vehicle while charging.

The Quingo Ultra has an optional off-vehicle charging box feature. This will allow you to charge a pair of batteries away from the vehicle. It is important that you place the batteries in the correct way so that they charge. Each battery is colour coded as is the off-vehicle charging box. It states the location for each battery by referencing its code.



Optional Off-Vehicle Charging Box showing battery colour coding



Off-Vehicle Charging Box with 2 x 15 Amp batteries installed for charging

The Off-Vehicle charging box is ideal for battery storage or when taking the Quingo Ultra on holiday.



Charging socket

Always use the off-vehicle charging box in a well ventilated area and keep away from sources of heat and ignition.

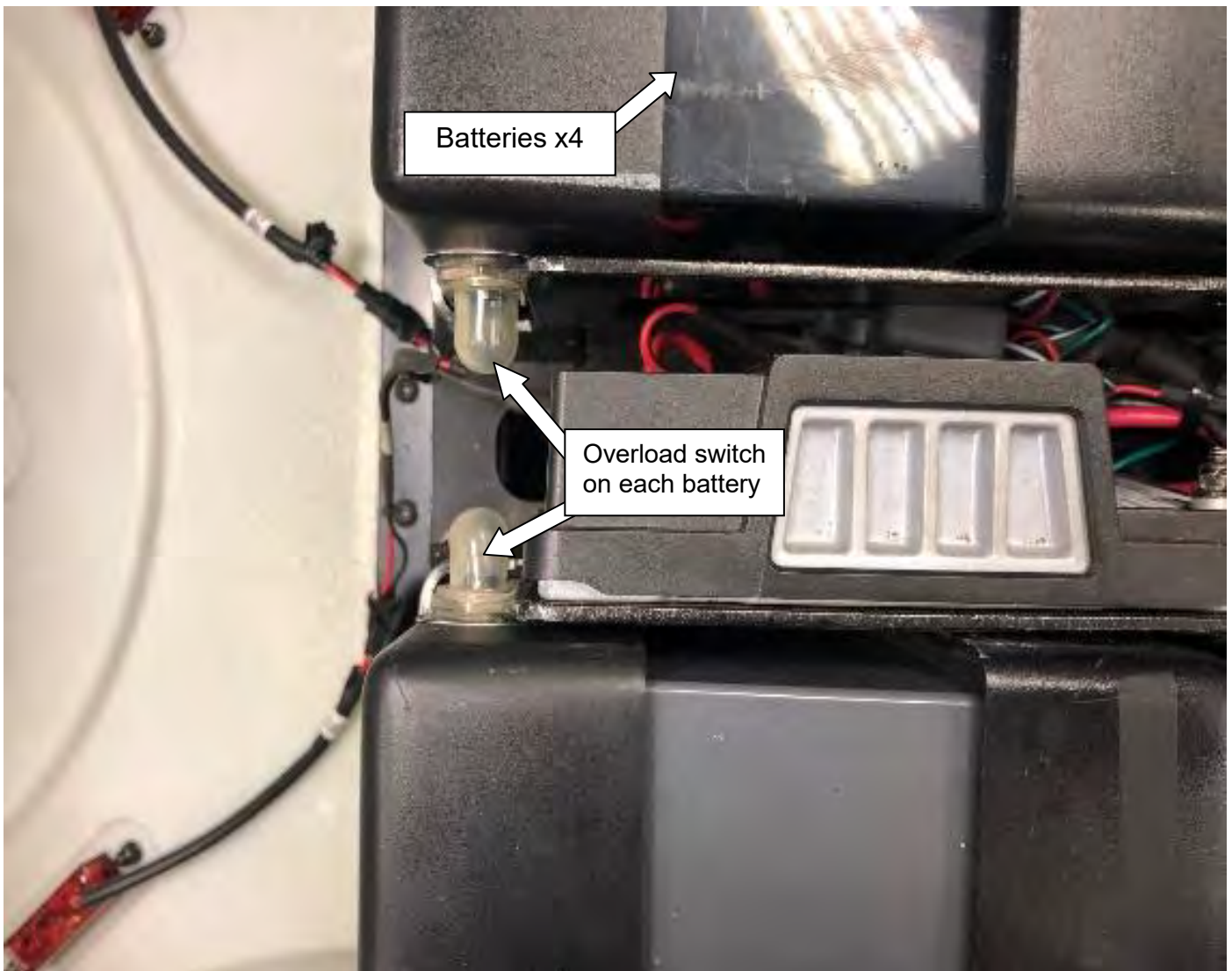
Do not mix AGM and Gel-Cell batteries. Always use batteries of the same type and chemistry.

Do not use batteries with different AMP-Hour (Ah) capacities. Do not mix old and new batteries. Always replace batteries in pairs.

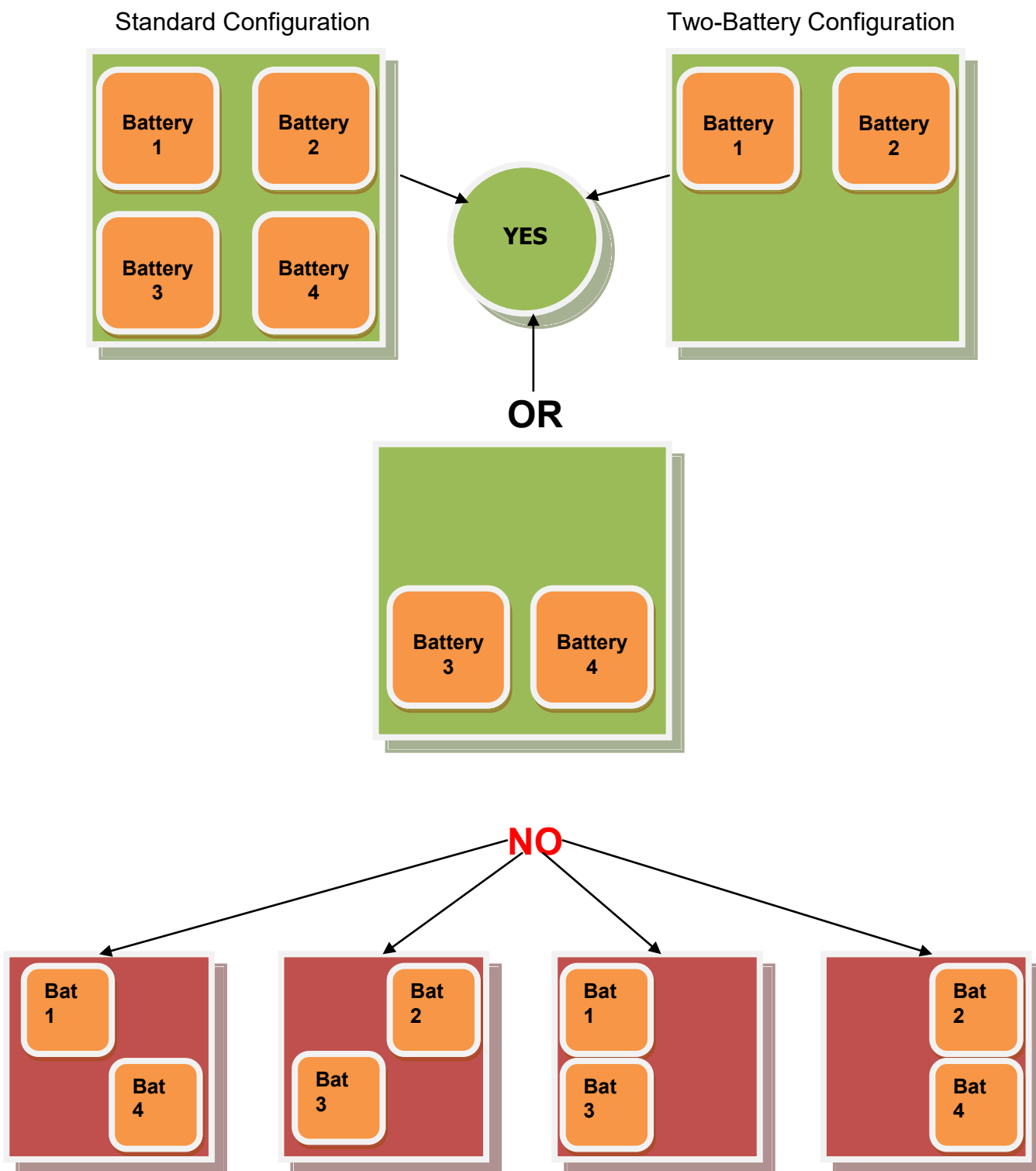
Each battery is fitted with an overload switch. The switches are there for your safety to stop the electronics or batteries overloading the system.

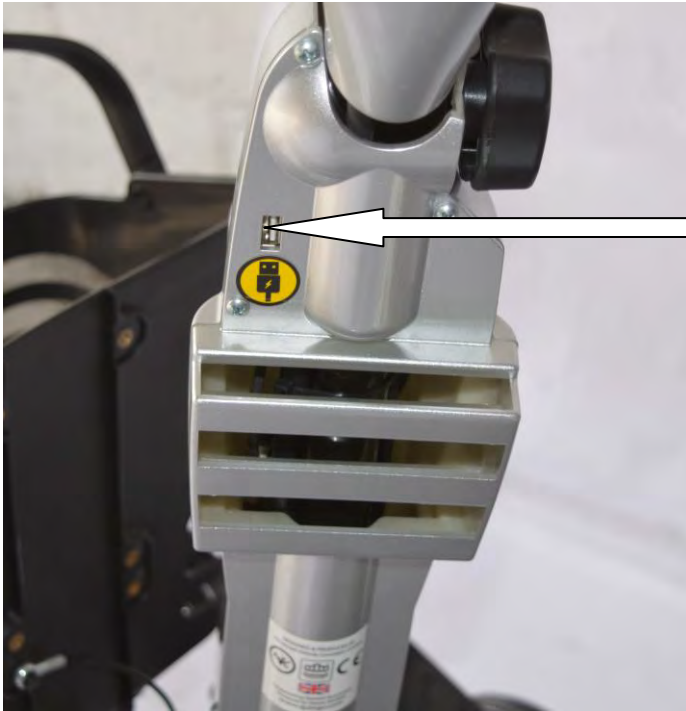
If you are using the vehicle to its maximum carrying capacity going up a steep incline this could cause the overload switches to operate. If this happens the vehicle will automatically brake and the power will switch off. Before calling your service provider switch off the ignition, push in the switches on **ALL** the batteries, turn on the ignition and apply power. If, after resetting all overload switches, the problem persists, then please contact your service provider.

This is a rare event but could indicate a problem with the vehicle.



Your Quingo Ultra scooter is supplied with 4 x 15Ah lead acid batteries as standard, thereby giving you the opportunity to travel longer distances (see page 40 for further details). However there may be times when you wish to use your scooter for a short journey. In that case, your scooter has been designed to operate safely and reliably on two batteries only, in either of the following configurations:





The Quingo Ultra is fitted as standard with a USB port, ideal for charging a mobile phone or a similar device.



The Quingo Ultra also comes complete with a mobile phone holder, which can hold most phones and it can be charged at the same time via the USB port.



Do not switch on or use a cell phone, walkie/talkie, laptop or other radio transmitter while operating the vehicle.

Maintenance should only be carried out by a qualified engineer authorised by your distributor.

Items you should check on a daily/weekly basis:

1. Visually check the machine for damage.
2. Visually check the tyres for damage. If your tyres are pneumatic check tyre pressures (30psi). If your tyres are maintenance free they will not need inflating. The front outer tyres are solid and do not need attention.
3. Accelerator lever has full and free movement.
4. Check the steering moves freely.
5. Tiller adjusting knob is tight and does not allow forward or backward movement of the tiller.
6. Seat is located correctly and locked.
7. Check the armrests are tight in the width adjustment.
8. Batteries should be fully charged.
9. Front basket is secure.

Important

Possible faults & reporting them to your authorised service provider

As you get used to your vehicle you will get a feel for how it behaves. If something feels **unusual, for instance the vehicle does not accelerate or brake smoothly; the brakes are not** holding on a slope or the steering feels different, contact your service provider immediately.

If the vehicle will not move with the ignition switched on, your service provider will ask “how many times does the blue light on the dashboard flash and beep”. Look at the blue status lamp shown on page 8 and count how many times it flashes. It will flash from one flash to nine flashes then stop then start flashing the sequence again. This tells the engineer the problem and will save time fixing the vehicle.

When reporting a fault make sure you have as much information as possible for the service provider.

**This table is a guide to fault finding. The fault may be a simple fix.
If you have any doubts phone your service provider.**

Symptom	Solution
<ul style="list-style-type: none"> Vehicle does not move. <p>Check: Does the battery level indicator work when the ignition is switched on?</p>	<ul style="list-style-type: none"> Check the ignition key is switched on. Freewheel is engaged. Batteries flat – check indicator level, recharge if flat. Check the batteries are fully located in the correct sequence (see page 24)
<ul style="list-style-type: none"> Steering is loose or wobbly when driven. <p>Check: Have you hit a kerb or obstacle hard? Are the handlebars straight when riding in a straight line?</p>	<ul style="list-style-type: none"> Check for tyre damage. If present, contact your service provider Damaged steering - contact your service provider. Check tiller adjustment knob is secure (see page 15)
<ul style="list-style-type: none"> Vehicle behaves erratically when driven. <p>Check: Does the vehicle judder or cut-out.</p>	<ul style="list-style-type: none"> Possible electronic problems - contact your service provider.
<ul style="list-style-type: none"> Short Range 	<ul style="list-style-type: none"> Check for binding outer wheels. Binding centre front wheel, check the emergency front brake is not binding. Binding rear wheel - Emergency brake. Switch into freewheel and the vehicle should move easily. If not contact your service provider. Check tyre pressures – should be 30psi all round (Not small outer wheels) Replace Batteries and/ or Battery Charger- contact service provider.
<p>Check: If the red charging lamp stays on after all night charging it may be a defective or worn out battery.</p> <p>Or</p> <p>Incorrect charging procedure.</p>	

Carrying Weight on the Vehicle

- Front Basket - The basket mounted on the front has a weight limit of 10lbs (4.5kgs).
- Do not exceed these weights
- Handlebars/control lever - Do not carry or attach anything to the handlebars. Anything attached to the handlebars will affect the control of the vehicle and damage the steering.
- Floor Area - Do not use the floor area to carry shopping, pets, children etc. Keep this area clear.
- Rear Seat Pocket Storage - Maximum weight capacity 4.4lbs (2kgs)
- Other Items - Only fit approved products or accessories.

Child Safety

This product is designed to be operated by adults. Children should not be allowed to tamper with the controls or play on the vehicle.



Do not carry children as passengers.

The product is designed for single person use only.

Keep all packaging well away from children.



Do not allow unsupervised children to play near the scooter while batteries are charging

Warranty Statement

The period of warranty is 1 year. Please refer to your purchase order from your authorised provider for full details. In accordance with the warranty conditions for new vehicles the warranty is as follows active from the date of delivery:-

1. Should any part of the vehicle require repair or replacement as a result of a specific manufacturing or material defect within the warranty period from the date on which possession of the vehicle was transferred to the original purchaser and subject to it remaining within that ownership. The part or parts will be repaired or replaced free of charge if the vehicle is returned to the seller.
2. Any repaired or replaced part will benefit from any arrangements for the balance of the warranty period remaining.
3. Items of a consumable nature, tyres, tubes, motor brushes, bulbs, batteries, upholstery will not be covered during the warranty period, unless such items have clearly suffered undue wear as a direct result of an original manufacturing defect.
4. Batteries are covered against a specific manufacturing or material defect. Batteries are consumable items and any battery requiring replacement during the warranty period due to normal use will not be considered defective and therefore not replaced free of charge. Batteries found to be damaged due to incorrect charging or maintenance will not be covered by the warranty.
5. To apply the warranty conditions should your vehicle require attention, under these arrangements, notify Quingo's authorised supplier immediately, giving full information about the nature of the defect. The supplier will arrange for work under the warranty conditions to be carried out by an authorised engineer.
6. No responsibility will be accepted for repairs or replacements arising as a result of:
 - a. The vehicle or part not being maintained in accordance with the manufacturer's recommendations
 - b. The vehicle or part having been damaged by neglect, accident, overloading, misuse or the vehicle being used in a manner which exceeds the designed parameters.
 - c. The vehicle or parts having been altered from the manufacturer's specification, or repairs carried out by an unauthorised repairer.
 - d. The vehicle or part fitted with unauthorised extras or alterations to the design.
 - e. Any repairs or servicing carried out by unauthorised engineers

The vehicle should be serviced at least once over a 12 month period. If you are a hard user we recommend a twice yearly service. If your authorised distributor has provided a warranty that is greater than one year, a once-yearly service is mandatory.

The warranty is offered in addition to and does not detract from the contractible rights you have under statute or common law.

If your vehicle breaks down please do not instruct a 3rd party (a dealer, garage or friend) to fix the problem. Just phone your authorised service provider immediately as failing to do so will invalidate your warranty.

When phoning your authorised service provider with your problem

Please do the following:

- Have your vehicle's serial number and date of purchase ready.
- Be as clear as possible when explaining the problem.
- Listen to the Service Operator. You will be asked a series of questions. Please answer them as precisely as possible as this helps to determine the problem and enables the Service Engineer to bring the correct parts for your model of scooter.

Remember:

- When your vehicle is under guarantee there are certain situations where it will not be covered such as consumables or damage. Please ensure that you are aware of what you are covered for.
- Before you book an engineer for a possible fault could you please make sure that there is a legitimate problem. If the engineer does not find anything wrong you will be charged for a call out.

This vehicle is designed for minimum maintenance but it is essential that a qualified engineer services the vehicle once a year. If the vehicle is used constantly we recommend twice-yearly maintenance.

Make sure that the engineer fills in the Service Log on completion for all servicing carried out on your vehicle.

Keep all receipts for servicing and repairs with the handbook. This may add value when selling the vehicle and may be required in the event of a warranty claim.

On completion of the service, test the vehicle before the engineer leaves and make sure you are satisfied with the work carried out.

CHECKLIST

- Initial diagnostic road test
- Wheel bearings wear and lubricate
- Wheel alignment of the 3 front wheels
- Solenoid lifting mechanism working-left right and reversing
- Steering and tilting mechanism
- Wear or damage to tyres or wheels, check tyre pressures
- Bodywork fixtures
- Throttle play and adjustment
- Bodywork
- Steering bearing for wear
- Seat mounting lubricate
- Transaxle mountings are tight
- Handlebar alignment
- Motor speed check
- Transaxle play
- Electromagnetic brake operation
- Freewheel operation
- Frame for damage or cracks
- General corrosion
- All operational controls work correctly
- Battery condition and charger operation
(if supplied with an Off Vehicle Charging Box, check it is working correctly)
- Battery securing straps wear and tear
- Tighten all nuts & bolts
- Check tie rod bolts
- Check correct operation of manual emergency brake, make sure cables and mechanisms are not binding and operate correctly.
- Check main loom plug connections
- Final road test
- Clean vehicle
- Customer road test

Notice for the Service Engineer.

Please sign and date after each service – enter all additional repair or service work

<p>1st service</p> <p>Service Company Details: _____</p> <p>Date Service Completed: _____</p>	<p>Engineers Name</p> <input data-bbox="1031 327 1366 398" type="text"/> <p>Engineers Signature</p> <input data-bbox="1031 472 1366 544" type="text"/>
<p>2nd service</p> <p>Service Company Details: _____</p> <p>Date Service Completed: _____</p>	<p>Engineers Name</p> <input data-bbox="1031 640 1366 712" type="text"/> <p>Engineers Signature</p> <input data-bbox="1031 786 1366 857" type="text"/>
<p>3rd service</p> <p>Service Company Details: _____</p> <p>Date Service Completed: _____</p>	<p>Engineers Name</p> <input data-bbox="1031 954 1366 1025" type="text"/> <p>Engineers Signature</p> <input data-bbox="1031 1099 1366 1171" type="text"/>
<p>4th service</p> <p>Service Company Details: _____</p> <p>Date Service Completed: _____</p>	<p>Engineers Name</p> <input data-bbox="1031 1267 1366 1339" type="text"/> <p>Engineers Signature</p> <input data-bbox="1031 1413 1366 1485" type="text"/>
<p>5th service</p> <p>Service Company Details: _____</p> <p>Date Service Completed: _____</p>	<p>Engineers Name</p> <input data-bbox="1031 1581 1366 1653" type="text"/> <p>Engineers Signature</p> <input data-bbox="1031 1727 1366 1798" type="text"/>
<p>6th service</p> <p>Service Company Details: _____</p> <p>Date Service Completed: _____</p>	<p>Engineers Name</p> <input data-bbox="1031 1895 1366 1966" type="text"/> <p>Engineers Signature</p> <input data-bbox="1031 2040 1366 2112" type="text"/>

Intended use: To assist any one disabled person (up to the recommended user weight) who requires a mobility vehicle that offers the maximum stability of a vehicle fitted with Quintell Technology coupled with the correct seating position as generally agreed with the medical profession. It is intended for use indoors/outdoors on pavements only and is designed as a light transportable unit.

Type:	5 wheel transportable personal mobility vehicle (PMV)
Class:	Class 2 pavement use only
Speed:	4 mph (6.4 kph)
Maximum User Weight:	22 Stones/140Kg
Maximum Recommended Negotiable slope:	6 degrees with maximum permitted load
Motor:	24volt DC 250watt
Controller:	DR50 18volt to 32volt DC
Battery size:	4 X 15 Amp/Hr (2 x 15 Amp/Hr as an option)
Battery charger:	Automatic off board
Braking:	Automatic regenerating Automatic electromagnetic parking
Controls:	Easy view analogue dash board with switches rated to IP5 Battery meter gauge Variable speed dial Fingertip forward/reverse speed levers Audible warning horn button Security ignition key Front & Rear Light Button Manual Emergency Brake Lever
Steering:	Ergonomically designed 14 degree angled handlebar Adjustable steering column. Quintell stabilising system. USB connector Mobile Phone Holder
Seating:	Deep padded lightweight seat Width adjustable flip-up armrests Seat height adjustable Swivel seat mechanism Seat slider mechanism Fully adjustable posture control fitted with seat belt
Frame:	Fully take apart, lightweight frame of aluminium construction with wide track for maximum stability Hard point mounting system.
Wheels:	Large 9" pneumatic wheels with high strength aluminium centres (Pressure 30psi/2.1bar)
Footrests:	Adjustable foot plates with rubber mats
Storage:	Extra large front basket
Stability system:	Electronic Quintell stability system fitted with 6" steerable anti tip wheels. (Patented) Quintell Kerbmaster anti tip stabilising wheels (Patented)

ISO Disclosure Information:

Overall Length with leg rest: 41.3"/105cm
 Overall Width: 22.8"/58cm
 Total Unladen Weight: 156lbs/71Kg
 Weight of heaviest part: 39lbs/17.8kg
 Static Stability downhill: >9° minimum slope requirement
 Static Stability uphill: >9° minimum slope requirement
 Static Stability sideways: >9° minimum slope requirement
 Dynamic Stability uphill: >6° minimum slope requirement
 Obstacle Climbing: 2"/5cm
 Maximum speed forward: 4.35mph ±5%/7kmh ±5%
 Minimum braking distance from max speed: 50.4"/128cm
 Seat Plane angle: 4°

Effective seat depth: 14.6"/37cm
 Effective seat width: 22.8"/58cm
 Seat surface height at front edge: 16.1"/41cm

Back rest angle 12°
 Backrest Height: 13.78"/35cm
 Footrest to seat distance: 15.7"/40cm
 Leg to seat surface angle: 120°

Further Dimensions: Length: 41.3"/105cm without front basket 47.2"/120cm with front basket
 Length: longest part when dismantled: 27.6"/70cm
 Minimum Turning radius: 40.9"/104cm

Ground clearance from the centre of the frame 1.97"/5cm
 Vehicle Height at the lowest seat setting: 36.6"/93cm
 Wheelbase: 29.5"/75cm
 Seat height from deck: Minimum 15"/38cm Maximum 17.3"/44cm
 Seat height from the ground: Minimum 21.2"/54cm Maximum 23.2"/59cm
 Legroom Hip to Foot: Minimum 34"/86cm Maximum 36"/91cm
 Foot room: 21"/53cm
 Battery weight – each: 10.0lb/4.5kg

Theoretical Range: Up to 10 miles (16km) with a two-battery configuration. The range can be increased up to 18 miles (29km) with the four-battery configuration.

Please Note: - The theoretical range is based on a user mass of 140Kg. This vehicle has a maximum weight bearing capacity of 140Kg; to exceed this limit will substantially reduce range. Caution should be used when planning distances.

The above range figures are theoretical, produced in accordance with ISO 7176-4:2008 which specifies a method for determining the theoretical distance range of electrically powered wheelchairs and scooters by measuring energy consumed over a specified distance. It is applicable to electrically powered wheelchairs and scooters with a maximum speed not greater than 15 km/h, intended to provide indoor and/or outdoor mobility for one disabled person whose mass is within the range presented by ISO 7176-22:2014.

The distance range of an electrically powered wheelchair is affected by energy consumption and battery condition. Energy consumption is affected by a number of factors such as ambient temperature, total weight and weight distribution of the user, topography, surface characteristics, and tyres. Battery condition is affected by factors such as temperature, age, charging history and discharging history. Hence the result obtained from the test specified in this part of ISO 7176-4 cannot be used to derive an accurate range estimate for a particular wheelchair (or scooter) and user. However, it can be used to give a basis for comparison between different wheelchairs or scooters under similar test conditions.

Labelling



Vehicle serial number



Please read this manual. This document contains important information required to familiarise yourself with the vehicle.

Complete all the information within this document. If any information is not clear, contact us immediately. Keep this manual in a safe place; it must remain with the vehicle throughout its life.

AUTHORISED SUPPLIER STAMP



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