









HANDBOOK & SERVICE MANUAL

QUINGO CLASSIC-PLUS-SPORT

MAY 2016 - ISSUE 15



Owners Manual and Service Record

Keep this Manual in a safe place

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

Complete all the information within this document

If any information is not clear contact your service provider immediately

This Document must remain with the vehicle throughout its life

This Vehicle was supplied by:		
Product Model Number		
Serial Number		
Date of Purchase		

NOTICE

The contents of this document regarding photographs and text may change because of specification upgrades. AVC Ltd retains the right to change specification of its products without prior notice.

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Read this manual thoroughly before driving or operating the vehicle.

Every mobility scooter operates differently. Do not assume they are the same. If you have any doubt about the content of this manual phone your service provider immediately. Read the instructions contained within this document, they apply for the Quingo Classic, Quingo Plus and Quingo Sport. The photographs in this document depict the Quingo Classic and Quingo Plus. Differences for the Sport are explained on page 7. 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 phone your service provider.

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 Quingo Classic and Quingo Plus are intended for indoor/outdoor use, the Sport for outdoor use only. The Quingo Classic is rated 4mph for pavement use and has been classified according to EN 12184:2014 as 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". All vehicles are not intended to run in deep water (over 2"/5cm) or muddy areas.

Important note for Quingo Plus & Sport.

The law requires that class 3 products must be registered with the DVLC. Contact the DVLC for further information or contact your supplier. The vehicles can be run on hard ground. Avoid sandy or gravel areas as this can seriously affect the range. These vehicles are not intended as off road vehicles.

Use by another person or Insurant

The vehicle can be used by additional persons other than the owner/driver.

Before usage the following checks should be carried out:

- Seat height is comfortable
- Angle of footrests is correct
- · Armrests are adjusted correctly
- · Seat is adjusted forward or rearward to suit the driver
- All functions should be explained
- Free wheel device should be demonstrated
- Operation of the handlebar emergency brake
- A demonstration of the capabilities of the product
- Charging procedure
- The driver to be given a copy of the handbook

Before the additional driver is allowed on their own check they are capable physically and mentally to drive the vehicle safely.

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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. For a full technical explanation see Page 31 in this document.

WARNING

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 service provider. Report all faults of this type.

Life Expectancy of the Product

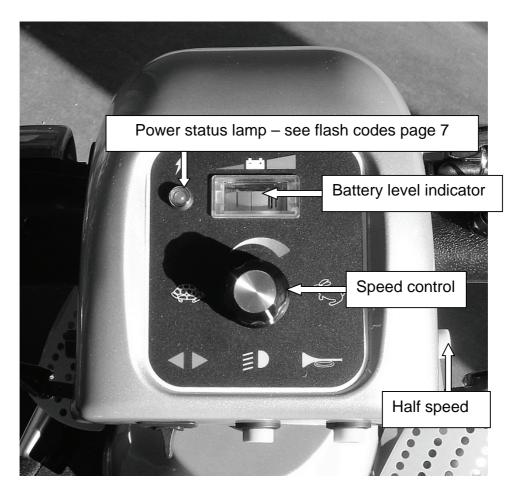
The life expectancy of the product is 5 years, depending on usage and product care, so please ensure that your product is used in strict accordance with the intended use as set out in this document and all service and maintenance requirements are carried out as recommended.

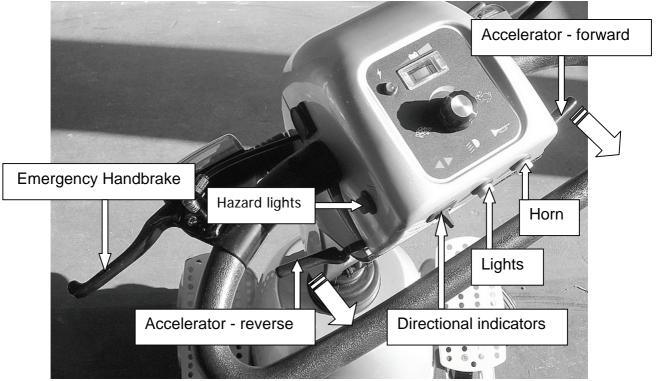
The estimated life expectancy may be exceeded if the product is used carefully and properly maintained, but it can also be considerably reduced by extreme or incorrect use. Although we estimate the life expectancy for this product it does not constitute an additional warranty.

Quick Reference Page 5



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 Handbook.





See photographs on page 6

Power Status lamp: For normal use when the ignition is switched on this lamp will light green. It stays constant unless a fault arises. If this should happen make a note of the number of flashes as this indicates the problem with the vehicle. Report this information to the service department when requesting an engineer.

1 flash Battery needs recharging 2 flashes Battery voltage too low 3 flashes Battery voltage too high 4 flashes Current time limit out 5 flashes Brake fault or freewheel engaged Accelerator lever pulled in when ignition switched on 6 flashes 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.

When checking the level- CAUTION: Choose a large flat hard standing area.

Drive the vehicle on a flat concrete area at full speed and take a reading.

Speed Control Dial: This controls the *top speed* of your scooter. When the dial is turned to the left, this is its slowest speed. As the dial is turned to the right the speed will increase to a maximum, which is the highest speed. Set the speed before you move off.

Half speed: When this button is depressed the top speed of the vehicle will be halved. This feature is normally used in a pedestrian area. In some countries this is the law. Check your local authority.

See photographs on page 6

Accelerator forward/reverse: Pull in the right hand lever (when sitting on the scooter) and it will move forward. The further the lever is pulled inwards the faster the scooter goes. Pull in the left hand lever and the scooter will reverse.

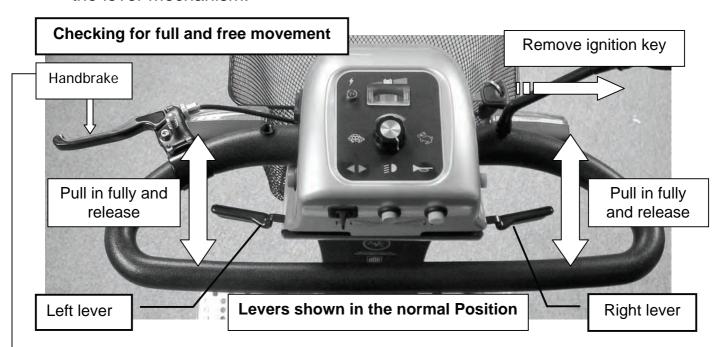
WARNING NOTICE!!

The lever mechanism should be treated with care as it could become damaged if misused. Do not pull both levers in at once, as this will damage the mechanism. Carry out recommended checks.

1. (Carry out daily) Before using the scooter check the mechanism for full and free movement. With the ignition off and the key removed pull the lever in fully on the right hand side then release. The lever should return immediately to the normal position. Pull 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 immediately and

DO NOT ATTEMPT TO OPERATE THE SCOOTER.

- 2. Never lean or place your body weight on the levers. This will damage the mechanism.
- 3. 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.
- 4. Do not hang objects such as bags or attach dog leads to the handlebar or the lever mechanism.



Handbrake: This is for emergency use only. In the unlikely event that the main braking system should fail this can be used to slow the vehicle.

Warning: If the ignition switch is turned off while the vehicle is at speed the vehicle will come to an abrupt stop. If you are in a situation where you need to stop abruptly use the emergency brake. Only switch off the ignition as a last resort.

Controls-Tiller page 9

See photographs on page 6

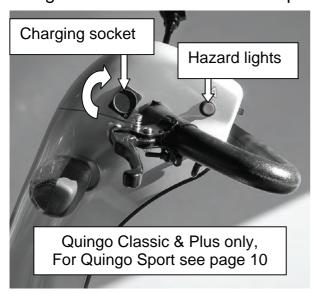
Hazard Lights: These are used when the scooter is placed in a hazardous position. When the button is depressed all indicators will light simultaneously followed by a loud beeping. These are only to be used when the vehicle is stationary.

Directional Indicators: Push the switch to the left when turning left and right when turning right. This is followed with a loud beep. Remember to return the switch to the centre position when the corner has been negotiated.

Lights: When riding at night press this button and the lights will illuminate. Remember to switch the lights off when not in use- Failure to do so may deplete the batteries. The lights automatically switch off when the ignition switch is in the off position.

Horn: Press the button and the horn will sound.

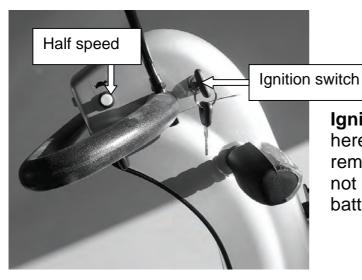
Ignition Switch: Always remember to remove key **when not in use**. Do not leave the ignition on when not in use especially when charging the vehicle.



The photo shows the charging socket for the Quingo Classic & Quingo Plus. For the Quingo Sport see page 10

Charging socket: Slide protective cover round and insert the charging plug. This is the point where the vehicle is charged – see charging (Page 25/26)

When not in use make sure the cover is closed as it helps to keep out water



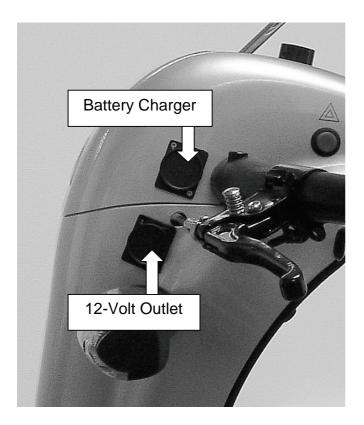
Ignition Switch: Your key is inserted here to activate the scooter. Always remember to remove the key when not using the vehicle or charging the batteries.

The Quingo Sport is a heavy-duty version of the Quingo Plus. It has a high carrying capacity with a high performance motor and is equipped with larger batteries.

Transporting: Because of the high carrying capacity this vehicle does not dismantle for transportation. This does not mean the vehicle cannot be transported but will require a large van or people carrier to do so. Use quality ramps to load the vehicle. This should be carried out by competent person who is familiar with this technique. Ask your service provider for details.

Pages 22 & 23 apply to the Quingo Classic and Quingo Plus. Pages 20 & 21 show the seat and battery removal for the Sport.

These components are very heavy and should only removed or replaced by a competent person



The 12-Volt Outlet

The Sport has a 12-volt outlet. This allows you to plug in various extras such as:

- GPS systems
- Heated grips
- Radios
- Mobile phones
- Cigarette lighter

You will need a car type cigarette lighter adapter. This outlet only works with the ignition switched on. Turn off the ignition and the power is cut.

REMEMBER

The top socket is for the battery charger and the bottom socket the 12-volt outlet

Warning!

Using the 12-volt outlet for extended periods of time may affect the range of the vehicle.



Front Box

The Sport is fitted with a lockable box. The key is attached to the key ring with the ignition key.

To open the box, insert key and turn to open. Always remove the key when locked.

The box has a sealing strip to keep out rainwater but it is recommended that any valuables are wrapped in a waterproof plastic bag as a precaution.

Maximum weight capacity 14lbs (6kg)



The Sport is fitted with the Quintell SAB (shock absorbing bumper). The primary function of this device is to protect the plastic cover. Should the vehicle hit an obstacle the bumper will move backwards onto the front tyre. This will cushion the impact to the rider.

Do not use the bumper to open doors



Important note to all Quingo owners

If you own a Quingo Classic or Plus these items can be fitted to your machine as an extra. Contact your service provider for details.

Important Safety Notice for Models Quingo Classic & Plus

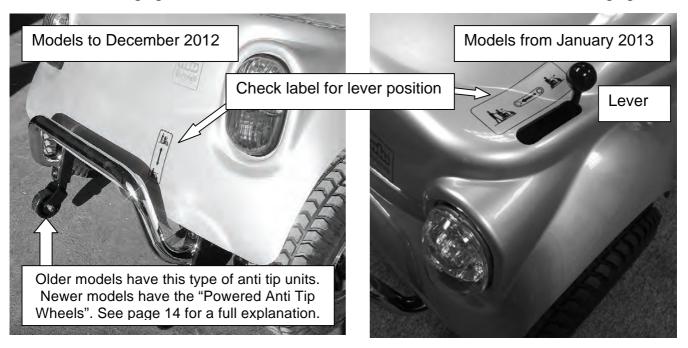
The freewheel device allows the vehicle to be moved without power. When the lever is moved upwards the automatic brakes are released. This means there is no braking except for the emergency handbrake (Page 6). Follow these instructions but if you are in any doubt contact the service advisor immediately.

Points when using the freewheel device.

NEVER release the brake and sit on the scooter NEVER release the brake on a slope. Only on flat ground ALWAYS remove the ignition key

Freewheel Operation

First locate the freewheel lever situated at the rear of the scooter. Photo 1 (Models to December 2012) - Pull the lever upwards and freewheel is engaged so the machine can now be pushed. Push the lever down and the freewheel is disengaged so the scooter cannot be pushed. This is the normal position for driving. Photo 2 (Models from January 2013) — Push the lever backwards to the rear of the scooter and freewheel is engaged. Push the lever forward and the freewheel is disengaged.



Brakes.

Your scooter has 3 braking systems. The first is the emergency handbrake. This is situated on the tiller (See page 6). The second is the electromagnetic brake or Automatic handbrake. When you move off this releases automatically. When the scooter stops it engages automatically and stops the scooter rolling forward or backward.

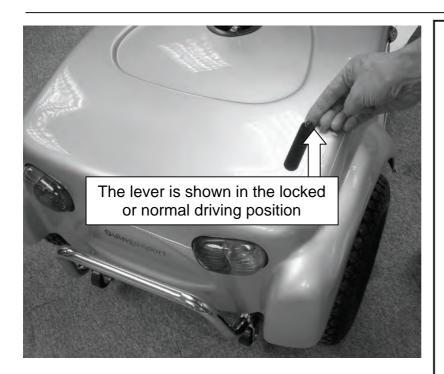
The third is the regenerative brake. This works when you release the accelerator lever. The faster you release the lever the faster the machine slows down. When it slows enough the automatic brake engages.

Important Safety Notice for Model Quingo Sport

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Points when using the freewheel device.

NEVER release the brake and sit on the scooter NEVER release the brake on a slope. Only on flat ground ALWAYS remove the ignition key



Freewheel Operation

First locate the lever. It is situated at the rear cover of the scooter. This is the lever with a black handle.

Pull the lever backwards and freewheel is engaged. The machine can now be pushed.

Push the lever forwards and the freewheel is disengaged. The scooter cannot be pushed. This is the normal position for driving.

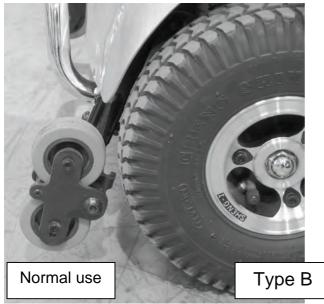
Brakes.

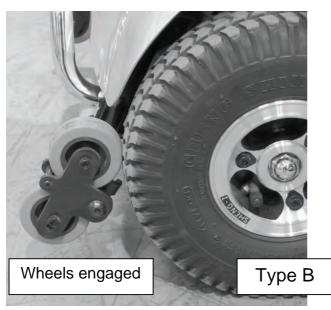
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The third is the regenerative brake. This works when you release the accelerator lever. The faster you release the lever the faster the machine slows down. When it slows enough the automatic brake engages.







The Anti Tip device is fitted to the rear of the vehicle. Its function is to restrict the vehicle tipping backwards in an extreme situation. This only occurs if the machine is misused.

See pages 31 & 32- "Driving the Vehicle"

The Quingo is fitted with 2 types of anti tip devices. Type "A" is the standard unit on older models and type "B" is the "Powered Anti Tip" This works in a completely different way.

TYPE A

If the rider should tip backwards the castor wheels will restrict the angle of the vehicle.

TYPE B

Type B has a patented feature that engages the 2 wheels when descending a slope or kerb. Should the anti tip wheels come to rest on a kerb there is a possibility that the machine will become "stuck". This means the kerb is higher than the distance between the anti tip wheels and the ground. This can leave the rear wheels spinning and the scooter can become disabled. If this should happen the 2 wheels engage. The rider should just drive normally and the vehicle will drive off the obstacle. It is all done automatically.

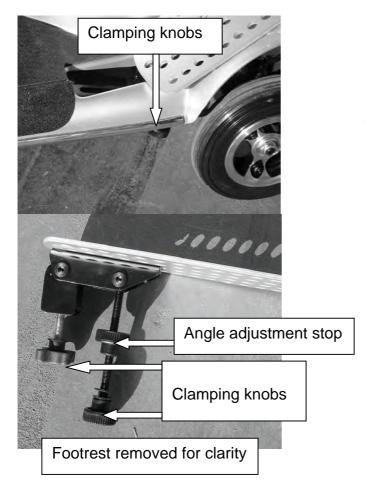
Your Quingo has multiple adjustments to make your driving position comfortable. The general rule is to keep the footrests as far forward as possible. Keep the seat as low as possible and adjust the seat and tiller to suit. This places the weight forward, which aids comfort to the rider and enhances stability especially when going uphill.



The person shown has assumed the correct seating position (as shown in white dotted lines) Feet forward and forearms level with the tiller



The tiller can be adjusted forwards or backwards for easier entry/ exit of the scooter or to suit your preferred seating position. The lever is situated just under the handlebars. Push the lever down and this will allow the tiller to be moved. Release and it automatically locks.



Footrest Adjustment

The footrests can be adjusted for angle and reach. Locate the clamping knobs situation under the bodywork near the front wheels.

Undo both knobs.

Reach

Slide the footrest forward or back until your foot is positioned correctly. Adjust each footrest to suit. Tighten knobs.

Angle

To reduce the angle turn the stop upwards. To increase the angle turn the stop downwards.



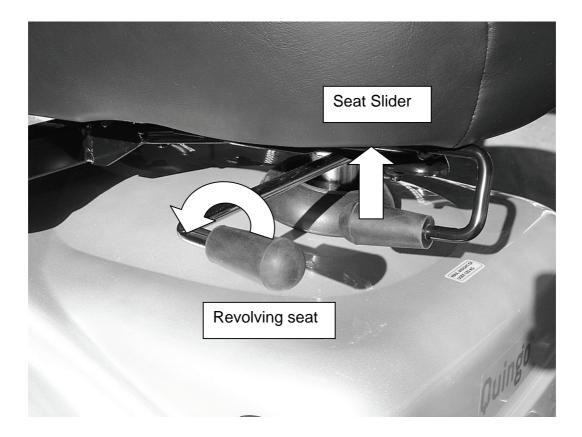
To adjust the headrest push the button as shown and move the headrest to the desired position.



To adjust the height of the armrest undo clamp knob, raise or lower the armrest to suit. Check daily for tightness



To adjust width, undo clamp knob and pull each armrest outwards or inwards to suit width. To remove armrest undo the clamp knob until it can be removed fully by pulling outwards. Check daily for tightness



Seat Slider:

Allows the seat to be adjusted forwards or backwards. 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 posible as this aids stability of the scooter. When locked the seat will not be able to be moved.

Revolving Seat:

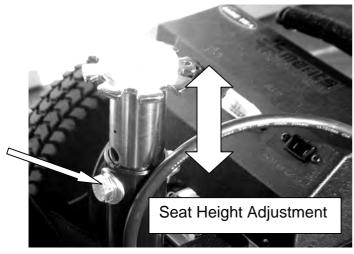
The seat is able to revolve and lock every 45 degrees. This has 2 functions. The first is to allow easy access on and off the scooter. The second is to allow a comfortable seating position when stationary for example when sitting in a café. To operate (when seated) lift the lever and turn the seat to the desired position. When at that position release the lever and turn the seat until you hear it lock.

Important: When returning the seat to the forward or driving position make sure the seat has locked before driving off.



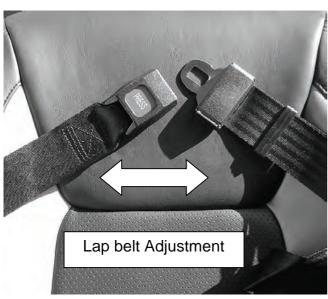
To adjust the backrest pull the lever upwards and gently lay backward to suit. Release the handle and the backrest will lock.

Important: Keep the backrest as upright as is comfortable. This stabilises the scooter. Only make these adjustments when the scooter is on flat and level ground



To adjust the seat height, remove the seat and rear cover. Release the bolt with 2 x 17mm spanners. Remove the bolt and raise or lower the seat to suit. Replace the bolt in the desired hole and tighten.

Important: It is recommended that a service engineer carry out adjustments.



A lap belt is supplied for your safety. This is a standard seat belt type and is adjusted for width by loosening/tightening the right hand clasp to suit. When comfortable, push the clasp and lock together. To release push the red button in the lock marked "Press". This will release the belt.

"We recommend you wear the seat belt at all times"

Important:

- Parts of this scooter are heavy. You may require assistance to carry out this procedure.
- Assemble in reverse order.
- Do not transport the vehicle with the occupant aboard
- NOTE: If you wish to transport your vehicle without dismantling, use a strong pair of ramps and always read the instructions before use. Remove the seat and fold down the tiller. Check the opening of the car is large enough to take the height of the vehicle.



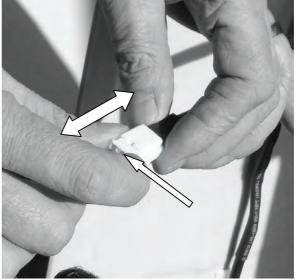
Remove basket pull upwards
This may be slightly stiff



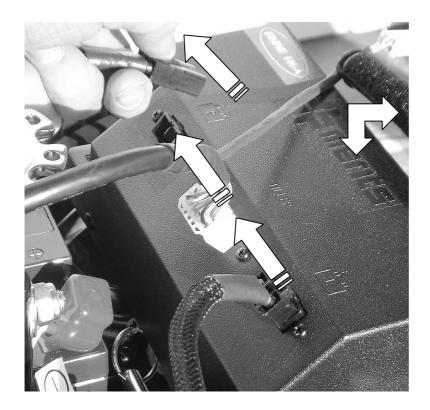
Use the backrest adjustment lever to fold seat as shown



To remove the seat pull the revolving seat lever up, turn the seat & lift. (Caution this is heavy)
Remove the rear cover by lifting upwards. This is attached with Velcro

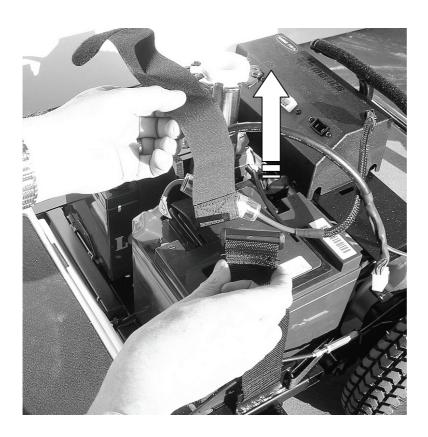


When removing the rear cover the lighting cable must be detached. Press the small plastic locking trigger inwards and separate the cable



Remove the 3 connector cables plugged into the black box marked "Merits". Press the plastic locking trigger inwards and remove the plug. The 2 outer cables are battery and the centre the main cable loom.

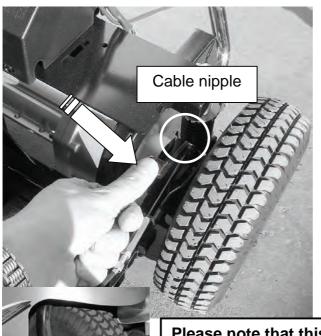
Do not force these cables out. Make sure the trigger is depressed



To remove the batteries release the Velcro straps and separate. Using the battery handles lift out the batteries.

WARNING Batteries are heavy.

Important Safety Notice

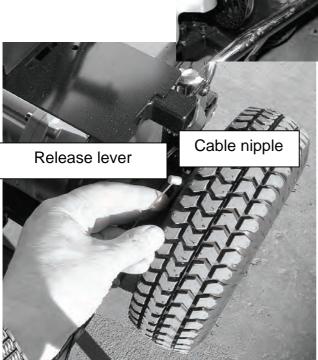


Brake cable release (Rear Brake model only)

To separate the chassis the emergency brake must be disconnected. Press the black lever down as shown and pull out the cable.

Please note that this operation is only relevant if you have the rear drum brake model. The photo shows the front wheel without brake – this is the rear brake model.

If you have the disc brake model this operation is not required. The photo shows the front wheel with disc brake



Pull the cable away from the mounting.

WARNING
When assembling the scooter do not forget to reconnect this component and test before replacing the rear cover.

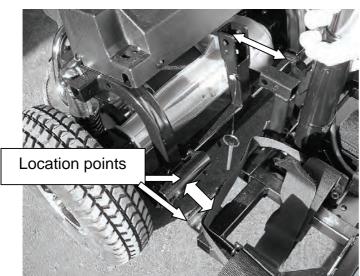
(Rear Brake only)

Important Safety Notice



Remove the chassis locking pin by pulling outwards. This component must be lined up when assembling the frames.

WARNING
Make sure this pin is fully inserted after assembly



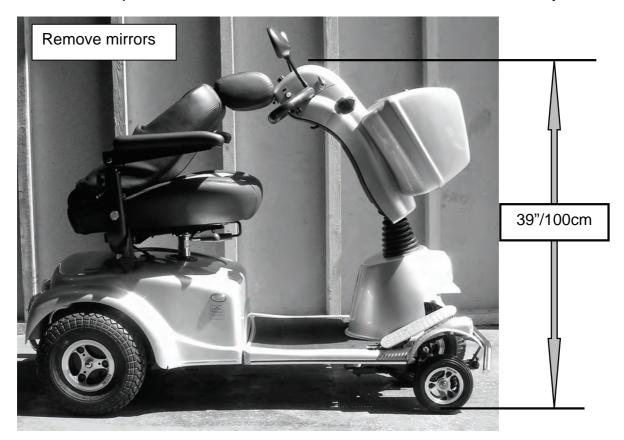
To separate the frames hold the seat stem with one hand and push the rear frame back. Lift the front frame from the location points.



The parts are ready for transportation.

WARNING
These parts are heavy. You may need assistance to lift them into the vehicle.

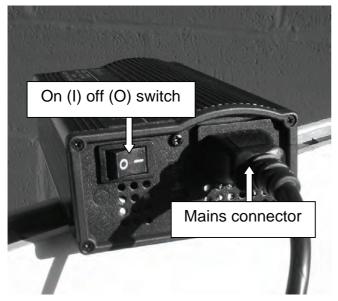
The Quingo Sport can be transported but not fully dismantled. Caution should be taken when loading any vehicle using an approved set of vehicle ramps. Ask your service provider for details and how to load the vehicle safely.

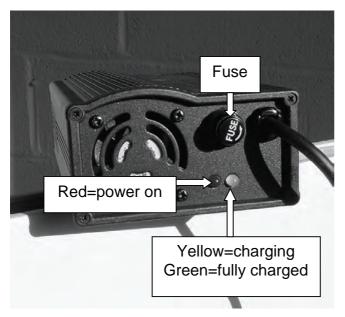




Caution: Always reduce the speed to low when loading (Speed control page 6)







Connection Instructions

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

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

The vehicle should be switched off and the key removed.

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

Connect the charger to the battery. Top socket on Sport

Once the charger is connected, switch on the mains.

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

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

Correct Charging prolongs battery life

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

Charging your Batteries:-

- 1. Always use Gel/AGM type batteries as replacements. NEVER use car lead acid batteries. If in doubt ask your Quingo Service Advisor.
- 2. Always use the correct charger. <u>Never</u> 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.
- 3. When storing, <u>fully</u> charge the batteries every week <u>never</u> let them run low.
- 4. Do not leave the ignition on during charging
- 5. Do <u>not</u> leave the charger switched off with the plug connected to the vehicle. This will discharge the batteries to zero.
- 6. Charge the batteries in a well ventilated area.
- 7. Do <u>not</u> charge the batteries in the open air. The battery charger is not waterproof.
- 8. Always charge the batteries fully after use (Normally over night/ 8-12 hours). Do not part charge even after short journeys.
- 9. As the batteries age they will lose their electrical capacity so the range will decrease.
- 10. Hilly areas have a great affect on the range. As the motors heat up, they lose their efficiency, increasing demand on the batteries and decreasing the range.
- 11. If a faulty battery is found it is recommended to change both batteries.
- 12. 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.
- 13. If the batteries have been discharged for a long period, do <u>not</u> attempt to charge. Contact your service provider for advice.



Does it fit into your garage?

Height: 62" (158cm) Length: 53" (135cm) Width: 28" (71cm)

Points to remember about the canopy

Make sure the canopy is fitted correctly.

- The frame is stable
- The side curtains are tied up correctly
- The windscreen is clean
- The mirrors are adjusted correctly

Carry out the check daily

Clean the canopy with warm water and a soft cloth or sponge. Do not use abrasive or chemical cleaning agents.

Do not use the frame without the canopy fitted

WARNING!! Do not use the canopy in high wind conditions. Very high winds may cause the vehicle to become unstable. If you are caught outside and the weather changes to strong winds roll up the side curtains until you get home. This will reduce the wind pressure on the side of the vehicle.

Never ride the vehicle in exposed areas on a windy day.

Flashing Beacon

When riding on a dual carriageway the law demands a flashing amber beacon. We do not recommend the vehicle is used on this type of road but if it is essential the beacon must be fitted. Ask your service provider for details.

This is not a requirement for other roads or pavements.

Maintenance should be carried out by a qualified engineer.
Unfortunately they cannot be there at all times. Items you should check on a daily/weekly basis:

Your daily checklist

- 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. Throttle has full and free movement.
- 4. Check the steering moves freely.
- 5. Tiller clamp is locked and does not move forward or backwards.
- 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.
- 10. Accelerates and brakes correctly.

Important Possible faults & reporting them to your 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 is the green light flashing on the dashboard". Look at the "green status lamp" shown on page 6 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

- Unit does not move.
 Check: Does the battery level indicator work when the ignition is switched on?
- Steering is loose or wobbly when driven.

Check: Have you hit a kerb or obstacle hard? Are the handlebars straight when riding in a straight line?

Vehicle behaves erratically when driven.

Check: Does the vehicle judder or cut out.

Short Range
 Check: If the red charging lamp
 stays on after all night charging it
 may be a defective or worn out
 battery.

Incorrect charging

Solution

- Freewheel is engaged.
- Batteries flat check level.
- Check for tyre damage.
- Damaged steering contact service provider.
- Loose seat contact service provider.
- Possible electronic problems contact service provider.
- Binding front wheels.
- 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.

Carrying Weight on the Vehicle

Front Basket – The basket mounted on the front has a weight limit of 10lbs (5kgs). The plastic lockable box (Standard on the Sport) - Rated at 13lbs (6kg) Do not exceed these weights as it could effect the steering.

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.

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.

Disposal

- The equipment wrapping is potentially recyclable
- The metal parts should be used for scrap metal recycling
- · Plastic parts should be used for plastic recycling
- Electric components and printed circuit boards to be disposed of as electronic scrap
- Faulty or exhausted batteries can be returned to your supplier for disposal
- All disposals must be carried out in accordance with the respective national legal provisions. Enquire at your city district council of the local waste management companies.

Corrosion

The product is protected from corrosion where all metal parts are exposed to the elements:

- metal parts plated with zinc/cadmium passivate coating
- frame parts high impact powder coating
- plastic covers formed in UV resistant materials

If the product should be damaged it should be reported to your supplier especially in the stressed component areas such as the frame.

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.

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

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

Do not drink alcohol and drive – It's the law!

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

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

Make sure the battery charger is disconnected.

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

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

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 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.

<u>Kerbs and Obstacles:</u> Do not ride up kerbs or obstructions higher than 3" (75mm). On inclines lean forward. This places more weight over the front making the vehicle more stable.

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.

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

NEVER BACK DOWN A SLOPE!

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

<u>Bad Weather</u>: 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.

<u>In a crowded area:</u> Drive with caution – never drive at 8 mph (Quingo Plus/Sport) on a paved area such as a shopping area, pavement or car park. Make sure persons, pets are aware of you – remember they cannot hear you coming!

How do I clean the vehicle?

Only use a damp cloth and gentle detergent. Do not use any abrasive or scouring liquids or high-pressure cleaning devices. Do not allow water near or direct contact with water.

Disinfection

Spray or wipe disinfection using a tested and recognised 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.

Can I fit weatherproofing such as a canopy?

Yes, but fit an authorised product. Remember if you alter the vehicle in any way It will invalidate your warranty. Be aware that enclosed canopies can affect the handling of the vehicle in strong winds. (See page 27)

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. It depends on many things but a rough guide to batteries is:

- Keep them charged, do not let the batteries run completely flat. If they are flat charge them up.
- The life of a battery depends upon the number of cycles the battery goes through.
- If you carry out these simple instructions your batteries will have a longer life.

Range can be affected by many things such as:

Temperature, Age of batteries, Type of terrain, Weight of the Person or incorrect tyre pressures. The important Rule is always use the correct charger with the correct batteries.

Can I leave my scooter outside in the open as I do not have anywhere to store it? How can I guard against Damage or Corrosion?

Always keep the vehicle in a dry area. Do not leave it outside in the elements. If you do not have an area to store the vehicle cover it with a full waterproof cover.

Warranty Statement

The period of warranty varies from country to country ranging from 1 year to 3 years. Please see your purchase order for full details.

In accordance with the warranty conditions for new vehicles the warranty is as follows active from the date of delivery.

- 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 UK service provider Forever Active immediately, giving full information about the nature of the defect. Forever Active will arrange for work under the warranty conditions to be carried out by an authorised Forever Active 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 manufacturers 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 warranty is greater than one year a once yearly service is mandatory.

Failure to service your vehicle annually will invalidate your warranty

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

Breakdown (UK) - Phone 01582 430900

If your vehicle breaks down do not instruct a 3rd party (a dealer, garage or friend) to fix the problem. Phone your provider immediately. Failure to do so will invalidate your warranty.

When phoning the Service Department with a problem

Do:

- Be as clear as possible to explain the problem
- Listen to the Service Operator. They will ask you a series of questions.
 Answer them as precisely as possible. This helps determine the problem so the Service Engineer can bring out the correct parts.

Remember:

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

Servicing (UK) – Phone 01582 430900

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

Make sure the engineer fills in the Handbook on completion for all servicing carried out on this vehicle.

Keep all receipts for servicing and repairs with this 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
- Steering and tilting mechanism
- Wear or damage to tyres or wheels
- Tyre pressures
- Bodywork fixtures
- Throttle movement, play and adjustment
- Bodywork
- Steering bearing for wear
- Seat mounting
- Transaxle mountings are tight
- Handlebar alignment
- Motor brush wear
- 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
- Tighten all nuts & bolts
- Check tie rod bolts
- Final road test
- Clean vehicle
- Customer road test

Flash codes for controller

1 flash	Battery needs recharging
2 flashes	Battery voltage too low
3 flashes	Battery voltage too high
4 flashes	Current time limit out
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

Service Log page 37

Notice for the Service Engineer. Please sign and date after each service – enter all additional repair or service work

1 st service	Engineers Name
	Engineers Signature
2 nd service	Engineers Name
	Engineers Signature
3 rd service	Engineers Name
	Engineers Signature
4 th service	Engineers Name
	Engineers Signature
5 th service	Engineers Name
	Engineers Signature
6 th service	Engineers Name
	Engineers Signature

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/wheelchair will not be affected by outside electromagnetic sources.



Caution: Even with the immunity level of 20 volts per metre, certain precautions must be followed to ensure your scooter/ wheelchair will not be affected by outside electromagnetic sources. See page 4 of this manual for additional information

Quingo Plus

Quingo Classic

Class Type Class 3 Pavement 4mph - Road 8mph Class 2 Pavement 4mph

Length/Width 122cm/48" x 64cm/25"

116cm/46" Height-seat at lowest setting Wheelbase 84cm/33"

Seat width 48cm/19" Seat depth 30.5cm/12" measured to ISO 7176.7

Backrest height min/max 61cm/24" to 66cm/26" 41cm/16" to 41cm/16" 45cm/18" to 55cm/22" Seat height from floor min/max

Seat height from ground min/max 60cm/24" to 70cm/28" 75cm/29.5" to 90cm/35.4" ** Legroom min/max Foot room 20" to 23" - 51cm to 58" ****

Total unladen weight 107kg/236lb 100kg/220lb 14.4kg/32lb Weight of each battery 11.2kg/25lb Weight of heaviest component 34kg/74kg

Tyre type/Pressure F&R Pneumatic/pressure 30psi/2.1bar Suspension Front Floating axle with independent outer wheels

Suspension Rear Twin coil spring (Adjustable) Motor 400-watt constant load

Battery Capacity Quingo 12V 50Ah x 2 off Maximum Capacity 159kg/25st/350 lbs Max. Speed 12.8 kph/8 mph

Range 48km/30miles (See notes regarding range)

Ground Clearance c/I of vehicle 127mm/5" 107cm/43" Turning radius Safe climbing angle 12 Degrees 75mm/3" *** Kerb climbing

Measurement taken from the centre of the vehicle.

From the hip joint area to the ball of the foot Measured as a safe maximum kerb height

**** Measured from the rear cover to the end of the footplate

(Differences only)

90cm/36"

46cm/18"

250 watt constant load 12V 35Ah x 2 off

6.4 kph/4 mph

37km/23miles (see notes)

Note on Range:-

The above range figures are theoretical, produced in accordance with ISO 7176-4

ISO 7176-4 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 7176-11.

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.

Factors can change the performance of the batteries such as:

- Ambient temperature / weather
- Age and use
- Weight of the driver
- Terrain it is driven on (Driving on grass / soft ground halves the range)
- Incorrect tyre pressures

Note

Specifications are correct when going to press.

Advanced Vehicle Concepts Ltd retains the right to change specifications without prior notice.

Quingo Sport

Class Type Class 3 Pavement 4mph – Road 8mph

Dimension Length/Width 140cm/55" x 66cm/26"

Seat height at lowest setting 127cm/50" Wheelbase 100cm/40" Seat width 55cm/22"

Seat depth 36cm/14" Measured to ISO 7176.7

Backrest height min/max 67cm/27" to 72cm/29" Seat height from floor min/max 50cm/20" to 58cm/23" Seat height from ground min/max 67cm/27" to 75cm/30"

Total unladen weight 142kg/313lb

Tyre type/Pressure F&R Pneumatic/pressure 30psi

Suspension Front Floating axle with independent outer wheels

Suspension Rear Twin coil spring (Adjustable)
Motor 650 watt constant load
Battery Capacity Quingo 12V 70Ah x 2 off
Maximum Capacity 220kg/35st/485lbs

Max. Speed 12.8 kph/8mph (17kph /10.5mph–export only)
Range 68km/42miles (See note regarding range)

Ground Clearance c/l of vehicle 150mm / 6" *

Legroom min/max 89cm/35" to 100cm/40" **
Foot room 22" to 25" – 56cm to 64cm ****

Turning radius 121cm/48"
Safe climbing angle 12 Degrees
Kerb climbing 10cm / 4" ***

- * Measurement taken from the centre of the vehicle.
- ** From the hip joint area to the ball of the foot
- *** Kerb height is quoted as a safe measurement.
- **** Measured from the rear cover to the end of the foot plate

Note on Range:-

The above range figures are theoretical, produced in accordance with ISO 7176-4

ISO 7176-4 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 7176-11.

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Factors can change the performance of the batteries such as:

- Ambient temperature / weather
- Age and use
- Weight of the driver
- Terrain it is driven on (Driving on grass / soft ground halves the range)
- Incorrect tyre pressures

Note

Specifications are correct when going to press.

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Please read this manual. This document contains the 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 it's life.

DISTRIBUTOR STAMP:



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