

Rascal Vantage and Vantage X Scooters

Owner's Manual & Service Record



Image shows
Vantage X model





Rascal Vantage and
Vantage X Scooters

Electric Mobility Euro Ltd has designed these two durable scooters for outdoor short to medium range use. The Vantage and Vantage X scooters are of fixed frame construction and not designed to be fully dismantled for transportation, however they are compact enough to fit into some larger cars, MPVs and vans. Provided that your scooter is maintained and operated in accordance with this manual it should last for many years, and provide you with freedom and independence.

Please read this manual thoroughly before using your scooter. If you have any doubts about warnings or instructions, ask your dealer for an explanation. If at any time you feel you may not be able to control your scooter safely, do not drive it, and consult your dealer for a solution. If you think your scooter may be damaged, do not drive it and contact your dealer for advice.

We suggest that you keep this owner's manual in a safe place as it contains essential safety, operation and maintenance information for your scooter.

Notice

All Electric Mobility Vehicles are sold through authorised dealers. Make sure your dealer demonstrates all the features of the product prior to, or when, it is delivered.



Warning!

This manual contains important safety notices. Please take time to read and understand them. Ignoring them may endanger you or others.

Contents

Dealer information	4
Features and layout	4
Safety information	5
Intended use	5
Safety Information	6
Controls	8
Freewheel Device	10
Brakes	10
Armrest adjustment	11
Swivel seat	11
Captain's seat	11
Tiller folding	12
Transferring in and out of your scooter.	13
Operation	13
Driving the vehicle	14
Driving the vehicle - hazards	15
Transporting your scooter	16
Assembling your scooter following transportation	18
Battery charging	19
User maintenance	21
Servicing & maintenance	21
Scooter Diagnostic Functions	22
Troubleshooting guide	23
Additional safety information	23
Additional information	24
Frequently asked questions	24
Engineers checklist	25
Guarantees	26
Technical information regarding EMI	27
Technical specification	28
Service log	30
Brochure request	31
Dealer information - Guarantee Card	31
Notes	33

Dealer Information

**This is your contact number
for service and support**

Dealer Stamp

Telephone:

Email:

Product Model Number

Serial Number

Date of Purchase

Owner

For product information see serial number plate on the seat post under the seat.

Manufacturer

**ELECTRIC
MOBILITY**

Electric Mobility Euro Limited
Canal Way, Ilminster, Somerset TA19 9DL
Company Registration in England No. 2419231

Features and Layout

Photo shows the Rascal Vantage X scooter. See the Technical Specifications section of this manual for detailed information.



Safety Information



Read this manual thoroughly before driving or operating the vehicle.

If you have any doubt about the content of this manual please contact your dealer to resolve the problem. Please read this manual, and ensure your scooter is serviced regularly.



Within this manual there are important safety notices. They are clearly marked with the sign (left) Make sure that you understand all these notices. If you have any doubt, contact your dealer.



Book symbol: This symbol appears on the product. Please read this product manual before assembling or operating the scooter.



Pinchpoint symbol: Wherever you see this sign there is a nearby risk of injury owing to a pinch or crushing point.



Tip symbol: This sign indicates advice on how to get the most from your scooter.

© 2015 Electric Mobility Euro Ltd.

No liability is assumed with respect to the use of any information contained in this publication. While every precaution has been taken in the preparation of this publication Electric Mobility Euro Ltd. assumes no responsibility for errors or omissions nor is any liability assumed for damages resulting from the use of information contained in this publication. This publication, as well as the operational details described herein, is subject to change without notice.

Intended use of the vehicle/s

The Vantage and Vantage X scooters are designed for use by adults with a disability (up to the maximum recommended weight - see Technical Specification Sheet) who require a robust, comfortable scooter that is ideal for shopping and other visits. The Rascal Vantage X is a medium range 6mph scooter which is suited for travel on public roads when this is required. The Rascal Vantage is similar to the Vantage X, however it is not suitable for use on public roads and is limited to 4 MPH by design. When driven on pavements and other pedestrian areas, your scooter should be set on the low preset speed setting (max 4 mph - see controls section of this manual). The Rascal Vantage and Vantage X scooters have lighting to enable them to operate in the dark. Both models of scooter are designed to operate on pavements and other hard surfaces and can mount kerbs and other obstacles as defined in the Technical Specifications section of this manual. - high kerbs should be avoided.

Users could endanger themselves and others if they are not capable of driving their scooter safely. Dealers will advise on the most suitable vehicle from the Electric Mobility range, but it is the user's responsibility to ensure that they have the manual dexterity to drive the vehicle, adequate sight and hearing to perceive danger in time, and can at all times operate the scooter safely in the expected conditions. If in doubt we suggest you consult a healthcare professional and your nearest dealer for advice on the most suitable scooter for your particular condition. Users should also regularly assess their ability to operate their vehicle safely.

The Rascal Vantage and Vantage X scooters should not be used on loose, heavily rutted or slippery surfaces such as grass.



Safety Information

General Warnings

- Warning !** The operation of scooters can endanger the life of the driver or third parties. Any driver should always be fully capable of operating this vehicle safely.
- Warning !** Sitting for long periods may increase the chance of thromboses or pressure sores. Users prone to such conditions are advised to take medical advice.
- Warning !** The Rascal Vantage and Vantage X scooters have been designed and tested for drivers with weights up to those in the Technical Specification section of this manual. These weights should **never** be exceeded.
- Warning !** Do not exceed the specification; do not modify your scooter or use it other than as a scooter.
- Warning !** Passengers, including children, should never be carried.
- Warning !** Electromagnetic interference may affect the driving of your scooter:
- Do not operate devices such as CB radios or mobile phones while the vehicle is switched on.
 - Avoid getting close to transmitter masts, such as television and radio stations.
- If your vehicle ever starts to operate by itself switch it off and report this to your Dealer.
- Warning !** The operation of any scooter may affect sensitive electronic circuits such as alarm systems or automatic doors in shops.

Driving

Before driving, refer to "Driving Your Vehicle" ... later in this manual



- Warning ! Ambient Operating Temperature Range.** Do not use your scooter in temperatures outside the range stated in the specifications section of this manual. Driving in very hot or very cold conditions can make driving more hazardous.
- Warning ! Freewheel Device/Mode.** Before getting on your scooter always check that the freewheel lever is in the Drive position. When the freewheel lever is in the freewheel position, the main brakes on your scooter will not function. Extra care should be taken with your scooter when it is in freewheel mode as it could move without warning. You must never sit on or try to ride your scooter when it is in freewheel mode as serious injury or death may result.
- NEVER SIT ON THE SCOOTER WHEN IN FREEWHEEL MODE.**
- Warning ! Transferring On and Off.** Do not attempt to get on or off your scooter unless it is switched off, at rest, and on a stable, level surface. Never get on or off on a hill.
- Warning ! Damage.** Before driving off, check the scooter for damage, particularly that which could affect the controls, wheels, freewheel function and/or drive motor.
- Warning ! Footrest.** Before switching on the scooter, always make sure that your feet are safely on the footrest area. If you drive forward with your feet still on the ground, they could become trapped under the scooter and serious injury may result.
- Warning ! Armrests.** Do not use the armrests as a support for your entire weight when getting in or out of the scooter. Make sure the armrests are lowered and secure before you start off otherwise you may fall out.
- Warning ! Entanglement.** Do not wear clothing or carry items on the scooter that could become entangled in wheels or other moving parts whilst operating the scooter. Severe injury may result.



-
- Warning ! Battery Charge Level.** Before driving off, always check the battery indicator. If you are in any doubt, ensure all the batteries are fully charged before starting on a journey.
- Warning ! Castoring.** Be aware that, if you set off when the front wheels are not straight, the initial movement could be partially sideways.
- Warning ! Power.** Unless there is an emergency, do not switch the power off when moving. The Scooter may stop very suddenly. Release the forward / reverse control and the scooter will come to a controlled stop.
- Warning ! Slopes.** On steep slopes the scooter could topple over. Always try to avoid crossing a slope. If you have to cross a slope, take great care to avoid tipping. Never make sharp turns on slopes. Never drive on slippery or icy slopes. - If you are not comfortable with the hill gradient, consider an alternative route. See “Driving Your Vehicle” – Hazards for more advice.
- Warning ! Kerbs.** You should always try to avoid driving up or down kerbs as this may cause the scooter to topple. Use access ramps wherever possible. Never attempt to climb or descend kerbs greater than that noted in the Technical Specification. If you have to climb or descend a low kerb, always tackle it straight on. See “Driving Your Vehicle” – Hazards for more advice.
- Warning ! Speed.** Turning at maximum speed might cause the scooter to topple over. Always slow down for turns. Always slow down when amongst pedestrians and ensure you do not run into them.
- Warning ! Stopping.** If the scooter stops suddenly when turning, it might topple. Try not to brake when turning. Always take particular care when turning.
- Warning ! Reversing.** Always take particular care when reversing the scooter as injury to other people may occur if safe distances are not maintained.
- Warning ! Leaning Over.** Do not lean sideways, as this could cause the scooter to topple.
- Warning ! Escalators.** Never drive the scooter onto an escalator as this could cause the scooter to topple and result in severe injury.
- Warning ! Roads.** In the United Kingdom, Mobility scooters are not permitted on dual carriageways without an additional amber warning beacon being fitted. Never take your scooter on a Motorway. For more information please refer to the Highway code.
- Warning ! Driving in Poor Visibility.** Scooters are not easily seen. Always turn your lights on in poor visibility or when travelling on roads. Consider wearing a high visibility jacket to warn others of your presence.
- Warning ! Carrying Items.** Do not carry or attach anything to the handlebars or controls as this could affect the driving safety.
- Warning ! Hot Surfaces.** If the scooter is left out in the sun, surfaces could become extremely hot. Always try to park the vehicle in the shade.
- Warning ! Seats in Vehicles.** These scooters are not suitable for use as a seat for an occupant when in a motor vehicle.

Controls Rascal Vantage X shown.

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 Owner's Manual.



Dashboard Description

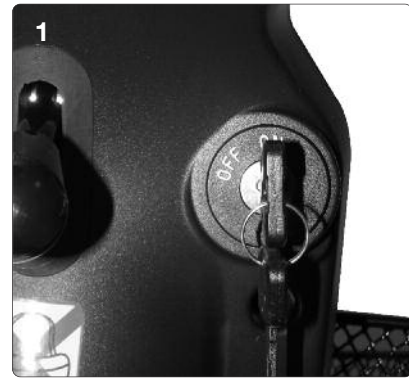
- 1. Battery Indicator:** This indicator shows the level of charge in the batteries. When all segments are shown the batteries are full. As the charge level of the batteries depletes, so the number of lit segments will drop. Note: When the vehicle is climbing a steep incline or starting off, the level may drop momentarily; this is normal.
- 2. Speed Control:** This controls the preset top speed of your scooter. When the knob is turned anticlockwise to the left, this is its slowest speed, marked by a tortoise. As the knob is turned to the right the speed will increase to a maximum, marked by a hare. Set the speed before you move off. Do not adjust the speed control dial when the vehicle is moving.
- 3. Power On Indicator:** When the ignition key is inserted into the scooter and turned to the "on" or "I" position, the LED array will illuminate.



Tip: If an LED flashes, and persists, this may indicate a fault. A key to the fault codes can be found in the "Scooter diagnostic functions" section of this manual. A common "fault" is that the scooter has been left in freewheel mode. Turn the key to the "0" or off position, disengage the free-wheel mode and turn the key back to the on or "I" position.

- 4. Horn:** Press the button and the horn will sound.

5. Ignition Key: Remember to remove the key **when not in use**. Do not leave the ignition on when not in use, especially when charging the vehicle (Fig.1). **Note:** You may need to press the ignition key gently inwards before it will allow itself to be turned.



6. Finger control: To operate, turn on the ignition. Pull the right hand lever towards you and the machine moves forward. The more you pull the lever the faster the scooter goes. To brake, release the lever. Again the faster the lever is released the quicker you will stop. To reverse, pull the left lever towards you. Do not pull both levers at once. Note: The controls can be changed for customers with a left-hand bias. Please contact your local dealer for information.

7. Lighting control: To switch on the scooter front and rear lighting press the lighting switch once, to turn it off, press the switch a second time.

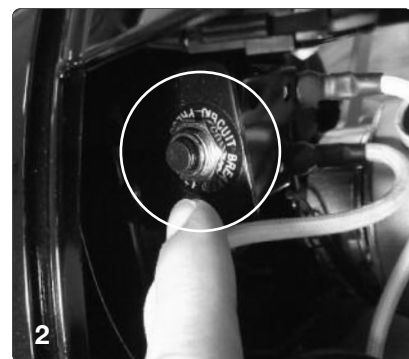
8. Hazard lights: In an emergency or during a break-down, the hazard lights should be switched on. Press the hazard light button once to switch on - All turn indicators will flash together. Press the button for a second time to switch the hazard lights off.

9. Indicator (left turn): Press the left hand side of the indicator button once to start the left turn indicator flashing, to switch off, re-center the switch.

10. Half speed switch: This button is marked with a tortoise. When travelling in pedestrian areas (not on the road) this switch can be pressed to limit the maximum scooter speed to 50% of the value pre-selected by the speed control (2) knob. This means that the scooter will not be able to travel at more than 4mph. To turn this function off, press the switch for a second time. Only featured on Vantage X model.

11. Indicator (right turn): Press the right hand side of the indicator button once to start the left turn indicator flashing, to switch off, re-center the switch.

12. Battery cut-out: Your scooter is equipped with a battery cut-out (Fig.2) that is designed to operate in the unlikely event of an electrical or electromechanical overload and is located beneath the rear removable "boot" panel of the scooter (Fig.3). If this activates, all power will be cut from the batteries to the scooter. This device can be re-set by pressing the button shown in the illustration. Should it activate for a second time please seek advice from your dealer.



Charging Point: The charging point is situated on the left hand side of the scooter tiller. See the Charging section for further instructions.

Note: The Rascal Vantage does not have all of the features shown above.





Freewheel Device

When the vehicle is switched off the brakes are automatically engaged. This is called “Failsafe Braking”. Also, if the batteries are flat, the brakes are applied. There may be occasions where you may wish to move the vehicle without power. To do this there is a Freewheel Device fitted.

The Freewheel device allows the vehicle to be pushed without power. To activate, first locate the lever. When standing behind the scooter, it is located on the right hand side of the rear of the vehicle (see Fig.4)



- Make sure the On/Off (ignition) key is in the off position.
- Move the lever **UPWARDS** The vehicle can now be pushed in Freewheel.
- Move the lever **DOWNWARDS** to engage drive. The vehicle is now braked. This is the normal operating position.
- **IF YOU ARE NOT COMPLETELY SURE OF THIS FEATURE CONTACT YOUR DEALER BEFORE OPERATING THE SCOOTER.**

NOTE: To avoid excessive strain on the tiller / handlebar assembly, never push or pull the scooter in freewheel mode if a user is on-board. Push the lever **UPWARDS** to engage freewheel mode. Pull the lever **DOWNWARDS** to engage Drive mode.

Warning! If the freewheel device is in “freewheel” mode the braking is disabled. Never select the freewheel mode if the Scooter is on a slope or could be pushed onto a slope.

Brakes

There are 3 braking systems. The first works with the finger controls. When the finger control is released the scooter will automatically brake and bring the scooter to a stop. When the scooter stops the automatic parking brake will engage. This will stop the vehicle rolling forward or backward. When you start the brake will automatically disengage. If the battery should go flat the brakes automatically engage. Note that even when freewheel is selected, a secondary regenerative braking system is applied automatically to limit the maximum speed. You may notice this system causing drag when moving the scooter in freewheel mode.

The third braking system is a twin rear drum brake that can be used in emergencies. This braking system is controlled by pulling/compressing the lever on the right hand side of the handle bars/ tiller (see Fig.5). The more pressure you apply to the lever the heavier the braking effect will be. This braking system applies even braking to both back wheels making it one of the safest designs on the market.



Warning! Do not use the emergency brake for normal driving.

Warning! Never attempt to disassemble or adjust the braking system. Any maintenance must be carried out by your authorised dealer.



Armrest adjustment

When preparing to sit on the scooter, first lift one armrest to enable easy access (Fig.6). When riding always have the armrests in the down position. Avoid pinching fingers as you lower the armrest. If you require more room in the width of the seat, slacken the set-screws at the rear of the seat (Fig.7). Slide the armrests in or out to suit. Tighten both set-screws to lock the armrest width adjustment in place. To ensure that the user is sitting centrally, the armrests should always be adjusted to be equidistant from the centre of the seat.



Warning! Never drive with the armrest up or with the armrest knob loose.



Swivel seat

This allows easy access

- 1. To operate,** locate the release lever under the seat (Fig.8).
- 2. Pull the lever up** and the seat will release allowing it to rotate.
- 3. Release the lever** and the seat should lock automatically, but always check it has.



Captain's seat

Some models feature a Captain's Seat. This type of seat features an integral headrest that can be adjusted in height. To adjust the headrest height, squeeze the button as shown (Fig.8a). This will release the headrest lock. Move the headrest up or down to the next available position and release.



Warning! Do not use this device if the vehicle is on a slope. Always check the seat is locked in the forward position before driving the vehicle.



Tiller Folding



The tiller can be folded down for transporting and storage. Take care when lowering the tiller not to pinch your fingers.

- **Push the tiller release lever downwards as shown** - this will allow the tiller to be put in the desired position. (Fig.9)
- **Lower the tiller** so that it is in its lowest position (Fig.10).
- **Release the tiller lever** and the tiller will be set in that position.



Tip: *The tiller can be adjusted in the same way to achieve a comfortable driving position.*



Warning! Before driving, always check that the tiller is securely in the comfortable upright driving position. Safe steering may be impossible if you do not !



Transferring In And Out Of The Scooter

If you feel at all uncertain about getting in or out of the scooter seek assistance.

Transferring into the Scooter from the Front

Before getting in:

- **Make sure that the scooter is on a level surface**, and it is not in Freewheel mode.
- **Make sure the brakes are engaged** - try to push the scooter a little to verify that the brakes are working.
- **Ensure that the ignition key is turned off.** (The LED display on the dashboard will not be lit or flashing)
- **Ensure that the handlebar/tiller adjustment and seat adjustments are fully tightened** and that any accessories are properly fitted and secured.
- **The seat should be facing forwards.**
- **Adjust the handlebars/tiller** so that the front wheels are facing forward.
- **Raise one armrest to make access easy.** (Fig.11)



You are now ready to get in:

- Approach the seat from the side and step on to the footrest area of the scooter. you should now be standing on the scooter platform facing forwards and with the seat behind you. With your back to the seat, you can steady yourself using the other armrest and then lower yourself gently into the seat.
- Now lower the armrest back into position.

Getting out of the Scooter:

- Before getting out of the scooter, be sure that it is on a level surface and the power key is switched to the off position. - If you feel uncertain about getting out, seek assistance. Move the handlebar/tiller so that the front wheels are facing directly forwards.
- Raise one armrest.
- Raise yourself out of the seat to a standing position using the armrest to provide you with additional stability if required. (Do not put your full weight on the armrests).

Tip: You may find it easier to swivel the seat to get in and out of the scooter. If so please refer to "Swivel Seat" section of the manual. Using this method, you can stabilise yourself using both armrests.



Operation

Before using the scooter you should make sure that:

- The battery is fully charged. (The battery level indicator will show all segments lit)
- There is no sign of damage to the scooter. All adjustment thumb-wheels are fully tightened.
- All accessories are properly attached.
- That you are capable of controlling the scooter at all times.

Kerbs and Obstacles: Try to avoid taking the scooter over obstacles or kerbs. Tackle obstacles head on.

Bad Weather: We suggest that it is better to stay at home in bad weather. Remember that you can become wet and cold. Suitable clothes should always be worn. A high visibility jacket should be considered if you are in poor visibility conditions or intending to drive on the road. Remember not to use the scooter in poor light or darkness.

Driving the Vehicle



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

1. **Before you set out**, do check the weather forecast. We suggest that you make sure you are wearing suitable clothing, whether your journey is long or short.
2. **Range.** Your scooter has a limited range. Always ensure that your planned journey does not exceed the maximum range in the Technical Specification Sheet and that your battery is fully charged.
3. **If you are taking medication** check with your doctor or physician that your ability to control the vehicle will not be impaired and do not drink alcohol and drive.
4. **Only use the vehicle for the purpose its intended for.** Do not drive through water or on slippery surfaces; do not transport more than one person; do not tow other vehicles or carry excess weight.
5. **Check that the freewheel lever is not in the freewheel position / mode.**
6. **Check the battery charger is disconnected.**
7. **Check that you are properly seated.**
8. **Check the backrest is correctly adjusted and locked in position.**
9. **Check that none of the items in your storage compartment are likely to fall out or become entangled in the scooter wheels or other mechanisms.**
10. **Ensure your feet are securely on the footrest areas.**
11. **Check you have adjusted the seat as instructed in this manual.**
12. **Make sure the way ahead is clear.**
13. **Switch on the power.** Check the battery level indicator is showing a high charge level.
14. **Speed Control.** Set the speed control to a low setting.
15. **Gently actuate the finger controls (either forward or reverse) and steer in the direction required.**
The vehicle will now move off. The further you pull the paddle (either forward or reverse) the faster the vehicle will go.
16. **To brake, return the paddles to the starting/neutral position. If you become unsure or feel unsafe release the paddles immediately.**
Note: Never push or pull both paddles at the same time as you may damage your scooter's control system and cause it to behave erratically.
17. **As you get accustomed to the power you can increase the speed.**

18. Switch off when not in use. To conserve your batteries and prevent the vehicle accidentally moving, always switch off the power when your Scooter is not in use. (On/Off or ignition key).

Tip: *If you do leave your scooter switched on for a prolonged period of time without using it, it will enter a sleep mode to conserve power. To reactivate the scooter, the On/Off key will need to be turned to the "Off" position and then back to the "On" position.*



Driving the vehicle - hazards

Warning! Before driving the scooter you should be aware that, under certain circumstances it could become unstable and tip over. Your scooter has been designed to operate on hard, even surfaces and should not be used on very rough or rutted terrain. Do not exceed the maximum safe slope recorded in the Technical Specifications.



- 1. Getting on and off the vehicle:** When getting on make sure that the vehicle is on level ground, and not in freewheel mode. Ensure that the armrests are secure. When getting off, park on level ground, turn off the ignition and remove the key before leaving your seat. Make sure you get off the vehicle in a safe area.
- 2. Tiller Position:** Drive with the tiller in an upright position that feels comfortable with the controls in easy reach.
- 3. Kerbs and Obstacles:** Try to avoid kerbs and obstacles. Never ride up or down kerbs or obstructions higher than that in the Technical Specification Sheets. Always tackle obstacles head on. Use ramps wherever possible and ensure that all wheels will fit on the ramp. Always try to avoid crossing a slope. If you have to cross a slope, take great care to avoid tipping. Never make sharp turns on slopes or back down a slope.
- 4. Hills & Slopes: Going Up Hill. Lean forward when going up.** Make sure you have enough speed to climb 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. If you are not comfortable about tackling a gradient, consider an alternative route. Note: Always check that the battery level is high; going up hill takes a lot of energy. If the level drops too low the vehicle will cut out leaving you stranded.
- 5. Hills & Slopes: Going Down Hill. Lean back in the seat when going down,** and turn the speed control dial to low. If you are not comfortable about tackling a gradient, consider an alternative route.
Try to avoid crossing slopes – always drive straight up or down the slope.
NEVER BACK DOWN A SLOPE!
- 6. Terrain:** Do not drive your vehicle across deep, soft or slippery terrain (for example, soft dirt, sand, or loose gravel). You could get stuck. Also avoid rutted, bumpy ground and try to keep to well prepared surfaces.
- 7. Turning:** Always **slow down** before a turn; turning at speed can cause the scooter to topple. Look in the direction you are travelling – If there is a blind corner sound the horn.

-
8. **Turning Circle:** Practice manoeuvring your scooter so you can judge the turning circle. This is important to avoid tipping off kerbs or for negotiating tight spaces.
 9. **Bad Weather:** If it is snowing or icy stay at home! 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.
 10. **Tyres:** Your vehicle is fitted with pneumatic tyres. Should they become damaged or punctured they should be replaced by your dealer. Do not attempt to replace them yourself.
 11. **Pavements:** It is illegal to drive at more than 4 m.p.h. on the pavement. When driving on pavements and in pedestrian areas, make sure you press the "tortoise button" on the dashboard - this will automatically limit the scooter to the maximum legal limit of 4mph. Always slow down in crowded areas and take care not to collide with pedestrians.
 12. **Shower Rooms or Washing:** Never take your scooter into a shower or steam room, and never hose or jet-wash it down. Its sensitive electronics could malfunction if they get wet or damp.
 13. **Immersion:** Never enter large puddles or areas of water where the depth and/or current is unknown. Immersion or partial immersion of the scooter may damage it and could leave you stranded.
-

Transporting your Scooter



Warning! Dismantling the scooter involves lifting and handling heavy parts. Weights are given in the Technical Specification; consider if you need help in handling parts before you try to lift them. Your scooter is not designed for unassisted loading into and out of a car or similar vehicle. Specialist ramps and hoists are available for transferring the scooter into and out of a vehicle. Contact your dealer for advice on how best to transport your scooter in your particular vehicle.



Warning! Pinching or Crushing. Be careful to avoid being pinched or having your hands crushed when lifting or handling parts. Wear gloves whenever possible. Special attention should be paid when raising and lowering armrests or rotating/handling the front wheels when dismantling or during re-assembly for transportation in a vehicle.

Warning! This vehicle is not suitable for use as a seat for an occupant in a motor vehicle.

Warning! Do not stand the scooter up on its ends or sides as it may become unstable and topple causing an injury.

To transport your scooter you may need specialist lifting equipment and / or ramps. Your dealer will be able to advise you on the best solution for your particular needs. It is possible to fold the tiller down and either fold the seat forwards or remove it completely for storage or to assist in loading into a vehicle using ramps or a hoist.

To remove the seat:

1. **Fold the seat-back flat and grasp the seat as shown** (Fig.12) and lift it away from the scooter frame.



Tip: Removing the seat may be easier if you first use the seat swivel function to rotate the seat so it is at 90° to the scooter before lifting.

To fold the tiller:

- 1. Push the tiller release lever downwards** as shown - this will allow the tiller to be put in the desired position. Release the tiller lever and the tiller will be set in that position. (Fig.13)

Tip: *Alternatively the seat and tiller can be folded towards each other to reduce overall height and facilitate easier storage of the scooter (Fig.14)*



Warning! Do not attempt to lift any of the scooter components unless you are capable of doing so. The weight for each component is shown in the Technical Specification (page 27)



Warning! Do not attempt to lift the chassis un-assisted - back or other injury may result!

Assembling your Scooter following Transportation



Warning! Assembling the scooter involves lifting and handling heavy parts. Your scooter is not designed for unassisted loading into and out of a car or similar vehicle. Specialist ramps and hoists are available for transferring the scooter into and out of a vehicle. Your dealer should advise you on the best way to assemble your scooter.

Warning! Pinching or Crushing. Be careful to avoid being pinched or having your hands crushed when lifting or handling parts. Wear gloves whenever possible.

Warning! Never unload your scooter on sloping or uneven ground. It could run down the slope and injure someone.



After removing your scooter from a vehicle and placing it on level ground, check it is undamaged before starting to assemble it as follows:

1. **Push the tiller release lever downwards** as shown - this will allow the tiller to be put in the desired position. Release the tiller lever and the tiller will be set in that position. (Fig.15)
2. **Grasp the seat on both sides and insert the seat post into the seat-post tube in the chassis** (Fig.16).
3. **Fold the seat-back into the vertical position** (Fig.17).
4. **Refit the basket and lock in position** by pushing down on the top edge gently (Fig.18).



Finally check the scooter is not damaged and it is properly assembled, checking that the battery indicator shows the battery is charged, the freewheel lever is in the drive position, the seat is locked in place and the finger controls operate correctly. You are now ready to drive the scooter away.

Battery Charging



Warning! When charging batteries NEVER smoke or charge batteries in a place where there are naked flames such as gas-fired heaters as, under exceptional circumstances, batteries may give off gases that could ignite and explode. If the scooter has been damaged, it is possible that the batteries have been affected. In this case do not charge the scooter and refer to your dealer for assistance. Never charge the scooter outside as the charger is not designed to get wet. If the charger appears damaged in any way do not use it and contact your dealer for a replacement.

Warning! Always charge in a dry, well ventilated area.

Warning! It is strongly recommended that the mains socket used for charging the scooter is protected by a 30 mA RCD (residual current device). Many buildings have sockets protected by a system based RCD. If you are in doubt as to the level of protection in your charging location then either purchase a plug in RCD or consult a qualified electrician to verify that your charging location mains sockets are protected.

Warning! If batteries are damaged or frozen they could heat up during charging and in an extreme case, explode.

Warning! Do not attempt to open the battery box/enclosure, there are no user serviceable parts inside. It may be necessary for some carriers such as airlines to physically disconnect the batteries for transit. If this is the case the battery cover can be removed without the use of tools once the seat has been removed. This should only be done by appropriately skilled/qualified personnel.

Warning! Never use a different battery charger to that supplied by your dealer. Damage or injury may occur if you do!

Warning! When charging batteries NEVER connect or disconnect the charger from the scooter while it is still connected to the mains. - Remove the charger mains plug from the wall socket having first switched the mains socket off if a switch is provided.

The charging socket is located on the upper left-hand side of the tiller. Rotate the protective cover and push in the plug. When the vehicle is charged remove the plug, and reposition the protective cover to keep the water out (Fig 20).



The battery charger has coloured charge status indicating LEDs / lamps (Fig 21). When the charger is connected and switched on the first lamp will illuminate green. If no mains power is present, no lamps will be lit. When the battery is being charged the second lamp will illuminate orange and when this lamp changes to green, the batteries are fully charged. Always ensure that the lamp shows green before switching off and disconnecting the charger at the mains.



Connection Instructions

When you receive your vehicle the batteries are only partially charged – always fully charge them before use, preferably over-night.

- 1. Place your machine in an area that is dry and well ventilated.**
Make sure a power point is nearby.
- 2. Check the vehicle is switched off and the key removed.**

-
3. **Check the mains switch is off.** Never connect or disconnect the charger from the scooter with the mains on.
 4. **Connect the charger to the charging point on the tiller of the scooter as above.**
 5. **Connect the mains plug and switch on.**
 6. **The first lamp illuminates green when the charger is powered up,** then the second LED/lamp illuminates orange during charging and then changes to green when the batteries are fully charged.
 7. **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 gradually discharge your batteries.

The batteries are the lifeblood of your vehicle. Their characteristics can change depending on charging, temperature, usage and other factors. Listed below are guidelines to prolong battery life.

1. **After using your vehicle always charge it at the end of the day** even after a short journey.
2. **If you do not use your vehicle for a prolonged period, place it on charge once a week, overnight.**
3. **Always use the correct charger as supplied with your scooter.**
4. **If the batteries have been flat for a long time** (about 2 months) it is recommended you contact your dealer before charging.
5. **Do not charge the vehicle in the open / out of doors** – it may rain and the battery charger is not waterproof.
6. **Keep the vehicle in a well-ventilated area and away from any naked flame.**
7. **Do not part charge the batteries.** Allow the charger to complete its cycle.

Note: Avoid storing your scooter in cold/damp places. This will shorten battery life and may cause deterioration in their structure. Batteries are expensive to replace – it is wise to look after them.



Warning! Never disconnect a battery or the charger while the charger is connected to the mains

Warning! If one or both batteries are damaged they could heat up when charging and, in an extreme case, explode.

Notice Your batteries are built-into the scooter and are not user-serviceable. Your dealer will replace them when they are exhausted and dispose of them in line with environmental regulations applicable at the time.

User Maintenance

It is important for safety that you carry out the following checks before use.

1. **Visually check the machine** for damage.
2. **Visually check the tyres** for damage.
3. **Check the steering moves freely.**
4. **Check that the tiller is secure and that the tiller thumb-wheel is tight.**
5. **Check that the seat is located correctly.**
6. **Check the armrests are secure**
7. **The battery should be fully charged.**
8. **Check that all lighting functions properly, including indicators, brake, sidelights and front lights.**

Tip: *Keep your vehicle clean by using a damp cloth and soapy water – never use a hose or jet wash.*



Warning! Important – Possible faults 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, stop using the scooter, contact your dealer immediately and explain to the engineer exactly what the problem is.

Disposal

Contact your dealer for advice before you consider disposing of your scooter. They will be aware of the environmental regulations in force at the time and will assist you to meet the applicable environmental legislation.

Servicing and Maintenance

1. **This vehicle is designed for minimal maintenance.** It is recommended that your vehicle is serviced at least once a year, by an approved Electric Mobility Dealer. If the vehicle is used constantly we recommend a twice yearly maintenance.
2. **Ensure the engineer stamps the Service Log** (page 28) on completion of all servicing. Keep all receipts for servicing and repairs with this handbook. This may add value when selling the vehicle.
3. **When the vehicle is due for its annual service make sure you report any concerns you have,** preferably when you book the service (See points to look out for below).
4. **On completion of the service, always test the vehicle** before the engineer leaves and make sure you are satisfied with the work carried out.

Points to look out for:

- Are there any strange noises from the wheels or does the frame creak when going over rough ground?
- Is the battery charged up correctly – is the “full” charge green light on after charging?
- Is the steering tight or is it loose when turning? Is there any play in the steering?
- Are the brakes effective ?
- Is there any damage to spigots or parts related to disassembly ?
- Has anything come loose?
- Does the vehicle perform as well as it did when it was new?
- Are there noises or rattles that were not there before?
- Are there any signs of damage, corrosion or cracking?

Scooter Diagnostic Functions

Your Scooter Controller provides diagnostic information in the form of flash-codes. The first LED / Lamp on the battery indicator flashes to indicate a problem has been detected. On switching on, the controller conducts a diagnostic test. While this test is in progress the lamp will flash and, if no fault is detected it will remain on. If there is a fault, the lamp will flash a sequence of flashes to indicate what the fault is. So for instance if the lamp flashes twice in short succession and then again twice in short succession, this indicates a bad motor connection. If the lamp flashes 8 times there is a problem with the controller.

Number of Flashes	Indicated fault and Corrective Action
1	<ul style="list-style-type: none">• Battery needs recharging or bad connection with batteries. Check connections, and recharge batteries. An audible beeping will also be heard when the batteries need recharging.
2	<ul style="list-style-type: none">• Bad motor connection. Request assistance from dealer who will check all connections between controller and motor.
3	<ul style="list-style-type: none">• Short circuit between motor and battery connection. Contact dealer.
4 & 5	<ul style="list-style-type: none">• Not used
6	<ul style="list-style-type: none">• Controller inhibited from operation. Disconnect battery charger and check if this resolves the problem. Otherwise contact dealer.
7	<ul style="list-style-type: none">• Throttle fault. Finger control levers must be in neutral (centred) position before key is turned on. Switch scooter off, centre levers, and switch back on. If fault persists, contact dealer.
8	<ul style="list-style-type: none">• Controller fault. Inform dealer who will check connections & controller.
9	<ul style="list-style-type: none">• Scooter left in freewheel or has a bad parking brake connection. Engage drive, and switch scooter of and on. If this fails to cure the problem, check parking brake and ensure it stops the vehicle. Inform dealer who will check brake and motor connections.
10	<ul style="list-style-type: none">• Excessive voltage detected at controller. Check battery connections.

Notice If the Lamp continues to flash then the controller has entered the Sleep mode and needs to be woken up. Turn key off and then back to the on position to reset.



Tip: *If in doubt switch off and switch on – if this does not cure the fault contact your dealer. Your dealer is there to help you but they can only do this if you give them as much information as possible. Remember correct information will get the problem fixed quicker and save you money. Phone the dealer and explain exactly what the problem is, recounting as much detail as possible. Tell them about the flash code; this will help the engineer to identify the problem before he calls to fix it. Your dealer is there to help you.*

Troubleshooting Guide

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

Symptom	Solution
<ul style="list-style-type: none">• Scooter does not move. when power is switched on.	<ul style="list-style-type: none">• Batteries flat - check level.• Is the charger connected?• Is Freewheel engaged?• Battery cut-out activated? Press the battery cut-out to reset - see "controls" section.• Freewheel has been selected while power is on Ensure freewheel is not selected; switch off and on NB the power indicator may flash indicating that freewheel has been selected.
<ul style="list-style-type: none">• Steering is loose or wobbly when driven.	<ul style="list-style-type: none">• Check for tyre damage or punctures.• Damaged steering - contact dealer.• Loose seat - contact dealer.
<ul style="list-style-type: none">• Vehicle behaves erratically when driven. or judders or cuts out ?	<ul style="list-style-type: none">• Possible electronic problems - contact dealer.
<ul style="list-style-type: none">• Short Range	<ul style="list-style-type: none">• Check tyres for damage.• Check batteries are fully charging.• Check vehicle moves easily in Freewheel

Tip: To save the batteries, the scooter controller has a sleep mode, which is activated if the scooter is not used but left switched on for some time. To reset, switch the scooter off and then on again.



Additional Safety Information

Carrying Weight on the Vehicle

- Handlebars** Do not carry or attach anything to the handlebars. Anything attached to the handlebars will affect the control of the vehicle.
- Floor Area** Do not use the floor area to carry things. Loose items may fall off and/or obstruct your movement.

Other Precautions

- Modifications** Unauthorised modifications could result in injury or permanent damage. Such modifications will invalidate any guarantees.
- Other Items** Only fit approved products or accessories. Contact your dealer for further information.

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. They could be harmed.

Additional Information

Owners Manual: Replacement copies are available from: Electric Mobility Euro Ltd. Canal Way, Ilminster, Somerset, TA19 9DL Telephone: 01460 258100.

If you are visually impaired, please contact the Company to discuss your requirements. However, you should not drive a vehicle in a public place if you cannot see well enough to ensure your own, and other's safety. Each vehicle comes with a copy of the BHTA Highway Code. Please make sure you read it. Telephone BHTA on 02077 022 141 for a new copy.

Important note on the BHTA Highway Code: On page 3 of the Code under "Consider Investing in a mobile phone" Read the section of this manual under "Safety Information". If in doubt contact your dealer. For Information regarding other Electric Mobility products contact your dealer or log on to the Electric Mobility Website www.electricmobility.co.uk

Frequently Asked Questions

I want to transport my scooter in a car.

You may need to use hoists and / or ramps to load and unload your scooter into and out of a car or similar vehicle. Your dealer can advise you on the correct equipment to be used depending on your vehicle and your physical capabilities.

Can I fit weatherproofing such as a canopy ?

We do not recommend the use of canopies on this model of scooter as they can cause stability issues on small to medium size machines.

How long will my batteries last ?

This is a difficult question as it depends on many factors. The life of a battery depends upon the number of cycles the battery goes through, the peak loads and on the conditions of use. Some general advice about battery care:

- Keep it charged, and do not let the battery run completely flat.
- Ensure the scooter is fully charged at the end of the charging cycle
- Batteries may not perform as well in very cold weather.
- Ask you dealer to test and change your batteries if they have reached the end of their useful life.

Care can prolong the life of the batteries but remember that, in time, all batteries will fail to perform to specification.

What range can I expect ?

The generally expected range is recorded in the Technical Specification Sheet. Remember, range can be affected by many things such as:

- Temperature. Cold weather can reduce the output of the batteries.
- Type of terrain. Obviously climbing hills takes more energy than driving on the flat.
- Weight of the person.
- The condition and charge of the batteries.
- Faulty or old batteries or a faulty charger.

NB. Always use the correct charger with the correct batteries and ensure the scooter is fully charged before you start out.

How long should I keep my vehicle before I change it?

It is important that the vehicle you have suits your needs and abilities. Your scooter should serve you well for many years but change it if at any time you feel it no longer meets your needs. Consult your dealer on the condition of your vehicle and remember vehicles of any type become more expensive to maintain the older they get.

Engineer's Checklist for the Rascal Vantage and Vantage X scooters

Obtain all comments from the customer on the condition and serviceability of the scooter and then complete an Initial diagnostic road test. Record all defects to be corrected. Now check, test and complete the following:

- Wheel bearings wear and lubricate.
- Wheel alignment and tracking.
- Pre-set speed knob works correctly.
- Wear or damage to tyres or wheels.
- Bodywork fixtures for damage, or cracking.
- Throttle play and adjustment.
- Built-in batteries and internal electrical connections for condition and corrosion.
- Check all cables for damage, abrasion, corrosion and that screening is intact. Replace as necessary.
- Lighting - check all lighting works.
- Steering bearing (adjust as required).
- Tiller adjustment - functioning, wear and damage.
- All assembly spigots and hooks for wear or damage.
- Seat mounting for wear or damage.
- Seat mechanisms locate and operate correctly and spring lever engages. Lubricate as necessary.
- Handlebar alignment.
- Check motor and gearbox for unusual noise or vibration; investigate as necessary.
- Electromagnetic brake operation – does the scooter slow when the hand control is released? Does the brake engage when the scooter is pushed when in freewheel?
- Emergency brake system. Correctly adjusted and working?
- Freewheel operation.
- Frame for damage or cracks.
- General check for corrosion, repair or protect as necessary.
- All operational controls work correctly.
- Battery condition and charger operation.
- Tighten all nuts & bolts.
- Correct all defects found and determine if the vehicle is roadworthy.
- Final road test.
- Clean the vehicle.
- Customer road test.

Important Note for the Engineer

Enquire if the customer is satisfied with the product. Please report all points good or bad directly to: Electric Mobility 01460 258100 If you have any comments please include them.

Guarantees

12 Month Guarantee

Electric Mobility Euro Limited (the 'Company') guarantees its products against defects in materials and workmanship under normal use for a period of one year from the date of purchase by the original retail purchaser (the 'Guarantee Period'). If a defect arises and a valid claim is received within the Guarantee Period, at its option, the Company may either (1) repair the defect at no charge, using new or replacement parts; (2) replace the defective part with a new part or a part that is either the same as, or functionally equivalent to, the original part; (3) replace the product with a new product which is the same as, or at least functionally equivalent to, the original product; or (4) refund the purchase price of the product.

A replacement product or part assumes the time remaining on the Guarantee Period of the original product or 30 days from the date of replacement or repair, whichever provides longer coverage. When a product or part is exchanged, any replacement item becomes the property of the consumer and the replaced item becomes the Company's property. When a refund is given, the product for which the refund is provided must be returned to the company and becomes the Company's property.

Lifetime Frame Guarantee

The Company guarantees the frame of its products against defects in materials and workmanship under normal use for the lifetime of the product. If a defect arises and a valid claim is received under the Lifetime Frame Guarantee, at its option, the Company will repair the defect at no charge, using new or replacement parts or will replace the frame.

When a frame is exchanged, the replacement frame becomes the consumer's property and the replaced frame becomes the Company's property.

The Lifetime Frame Guarantee covers the cost of parts and materials only. Services performed by the Company in replacing the parts or materials or the frame may be subject to additional charges for labour and transportation.

Exclusions and Limitations

The 12 Month Guarantee and the Lifetime Frame Guarantee (the 'Guarantees') apply provided only that the guarantee card has been correctly filled out and returned to the Company within 15 days from delivery of the product to the original consumer.

The Guarantees do not apply to the following: (1) damage caused by accident, abuse, misuse, flood, fire, earthquake or other external cause; (2) damage caused by operating the product outside the permitted or normal use of the product; (3) damage caused to products that were not operated, maintained or serviced in accordance with the Owner's Manual; (4) to a product or part that has been modified or repaired otherwise than in accordance with the Owner's Manual or with the express written authority of the Company; or (5) to normal wear or tear, normal maintenance, service or periodic adjustments necessitated by normal use.

In addition to the above, the Company shall be under no liability in respect of any defect arising from wilful damage, negligence, or misuse.

The Guarantees only apply to the original purchaser and are non-transferable. Except in respect of death or personal injury caused by the Company's negligence, the Company shall not be liable by reason of any representation (unless fraudulent), or any implied warranty, condition or other term, or any duty at common law or under the terms of the Guarantees, for any indirect, special or consequential loss or damage (whether for loss of profit or otherwise), costs, expenses or other claims for compensation whatsoever (whether caused by the negligence of the Company or its employees or otherwise) which arise out of or in connection with the supply of the product(s) or their use or resale, and the entire liability of the Company under or in connection with the products and the Guarantees shall not exceed the price paid for the products.

Any descriptions, specifications, samples, models, bulletins or similar materials used in connection with the sale of products by the Company are only for information and should not be construed as warranties. The consumer's statutory rights are not affected by the Guarantees.

Technical Information Regarding EMI

Important Technical Information regarding Electromagnetic Interference (EMI)

The intensity of interference from electromagnetic energy is measured in volts per meter (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 meters). Resistance of a scooter/wheelchair to certain EMI intensity is commonly called its "immunity level". 20 volts/meter 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 recommended density of interference from electromagnetic energy.

Warning! Even with the immunity level of 20 volts/meter, certain precautions must be followed to ensure your scooter/wheelchair will not be affected by outside electromagnetic sources.



- Do not operate devices such as CB radios or mobile phones while the vehicle is switched on.
 - Avoid getting close to transmitter masts, such as television and radio masts.
 - Note you may experience interference when close to ambulance or fire stations.
- If your vehicle starts to operate by itself switch it off and report this to your Dealer.

Technical Specification - Rascal Vantage Scooter

Wheelchair type Class	Class A, B or C	Class B
Department of Transport Class	Class 1 2 or 3	Class 2
Overall dimensions fully assembled	length x width x height mm (in)	1200 (47.24) x 585 (23.03) x 955 (37.59)
Dimensions seat and tiller folded	length x width x height mm (in)	1200 (47.24) x 585 (23.03) x 755 (29.72)
Maximum carrying capacity @ 7° incline	kg (lbs)	149.7 (330)
Mass (weight) including 33 Ah batteries	kg (lbs)	77.4 (170.6)
Mass (weight) including 50 Ah batteries	kg (lbs)	85.8 (189.15)
Mass (weight) of chassis (heaviest part) w/33 Ah batteries	kg (lbs)	64.2 (141.5)
Mass (weight) of chassis (heaviest part) w/50 Ah batteries	kg (lbs)	71.6 (158.3)
Standard battery voltage and capacity	volts and ampere hours	12V / 33Ah x 2
Upgraded battery voltage and capacity.	volts and ampere hours	12v / 50Ah x 2
Type of seat	Swivel seat with folding backrest and adjustable arms	
Mass (weight) of swivel seat	kg (lbs)	12.6 (27.7)
Wheel/tyre dimensions	front mm (in)	71 x 63.5 - 101 (2.8 x 2.5 - 4)
Wheel/tyre dimensions	rear mm (in)	76.2 x 76.2 - 101 (3 x 3 - 4)
Type of tyres	type	Pneumatic
Maximum speed	km/h (m.p.h.)	6.44 (4)
Minimum braking distance from maximum speed	m (ft)	1.3 (4.26)
*Range with standard battery option	km (miles)	Up to 30 (19)
*Range with upgraded battery option	km (miles)	Up to 42 (26)
The turn-around width	m (ft)	1.4 (4.59)
The maximum safe slope	degrees of slope	7° See carrying capacity! Do not exceed the scooter may topple
The maximum climbing ability facing upwards	degrees of slope	7° See carrying capacity!
Ground clearance	mm (in)	65 (2.6)
Maximum obstacle climbing ability	mm (in)	76 (3)
Maximum safe descendable kerb height	mm (in)	76 (3)
Force to operate Accelerator control	Newtons (lbs)	2 (0.45)
Force to operate Freewheel lever	Newtons (lbs)	45 (10.1)
Force to operate Emergency brake lever	Newtons (lbs)	60 (13.5)
Ambient operating temperature range	°C (°F)	2 (35.6) to 40 (104)

This scooter meets the relevant requirements of ISO 7176:14 2008 *Range on full charge and flat ground. Due to a policy of continual improvement, Electric Mobility reserves the right to change specifications without prior notice.

Technical Specification - Rascal Vantage X Scooter

Wheelchair type Class	Class A, B or C	Class C
Department of Transport Class	Class 1 2 or 3	Class 3
Overall dimensions fully assembled	length x width x height mm (in)	1200 (47.24) x 585 (23.03) x 1160 (45.7)
Dimensions seat and tiller folded	length x width x height mm (in)	1200 (47.24) x 585 (23.03) x 755 (29.72)
Maximum carrying capacity@ 7° incline*	kg (lbs)	149.7(330)
Maximum carrying capacity @ 10° incline*	kg (lbs)	113.4 (250)
Mass (weight) including 50 Ah batteries	kg (lbs)	87.8 (193.57)
Mass (weight) of chassis (heaviest part) w/50 Ah batteries	kg (lbs)	72.6 (160.05)
Standard battery voltage and capacity	volts and ampere hours	12V / 50Ah x 2
Type of seat	Captain's Seat with adjustable headrest, folding backrest and adjustable arms.	
Mass (weight) of seat	kg (lbs)	14.6 (32.2)
Wheel/tyre dimensions	front mm (in)	71 x 63.5 - 101 (2.8 x 2.5 - 4)
Wheel/tyre dimensions	rear mm (in)	76.2 x 76.2 - 101 (3 x 3 - 4)
Maximum speed	km/h (m.p.h.)	9.65 (6)
Minimum braking distance from maximum speed	m (ft)	1.4 (4.59)
*Range with standard battery option	km (miles)	Up to 42 (26)
The turn-around width	m (ft)	1.4 (4.59)
The maximum safe slope	degrees of slope	10 / 7° * See carrying capacity! Do not exceed the scooter may topple!
The maximum climbing ability facing upwards	degrees of slope	10 / 7° * See carrying capacity! Do not exceed the scooter may topple!
Ground clearance	mm (in)	65 (2.6)
Maximum obstacle climbing ability	mm (in)	76 (3)
Maximum safe descendable kerb height	mm (in)	76 (3)
Force to operate Accelerator control	Newtons (lbs)	2 (0.45)
Force to operate Freewheel lever	Newtons (lbs)	45 (10.1)
Force to operate Emergency brake lever	Newtons (lbs)	60 (13.5)
Ambient operating temperature range	°C (°F)	2 (35.6) to 40 (104)

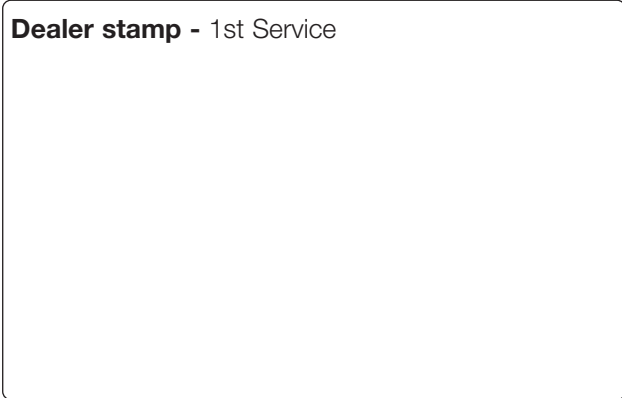
This scooter meets the relevant requirements of ISO 7176:14 2008 *Range on full charge and flat ground. Due to a policy of continual improvement, Electric Mobility reserves the right to change specifications without prior notice.

Service Log

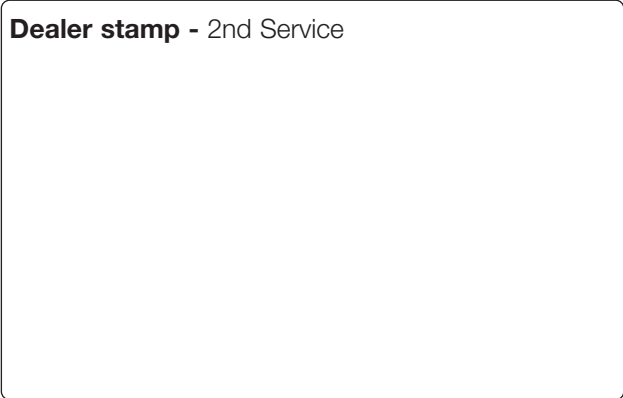
Notice for the Service Engineer.

Please make sure this part is stamped and dated after each service.

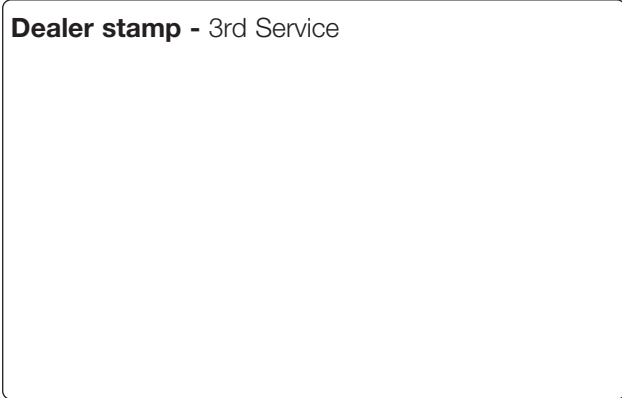
Dealer stamp - 1st Service



Dealer stamp - 2nd Service



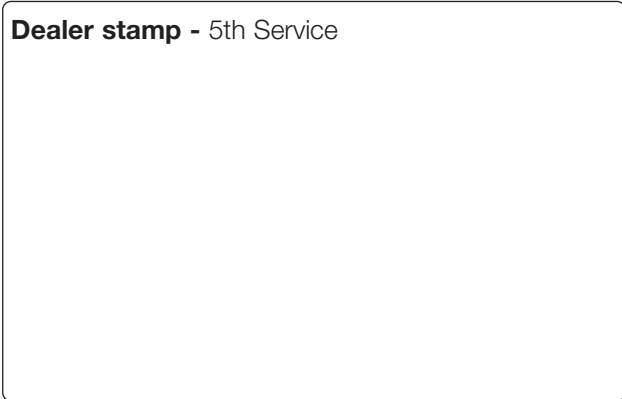
Dealer stamp - 3rd Service



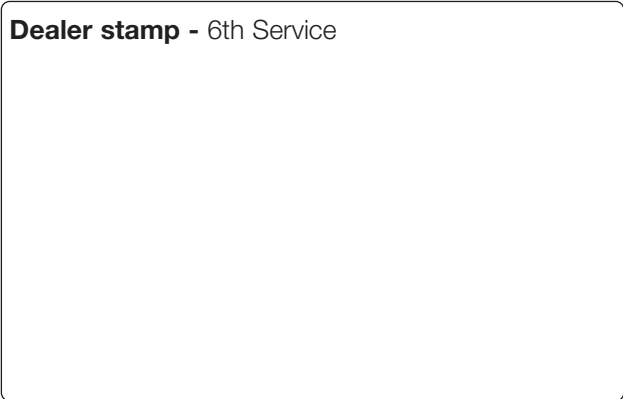
Dealer stamp - 4th Service



Dealer stamp - 5th Service



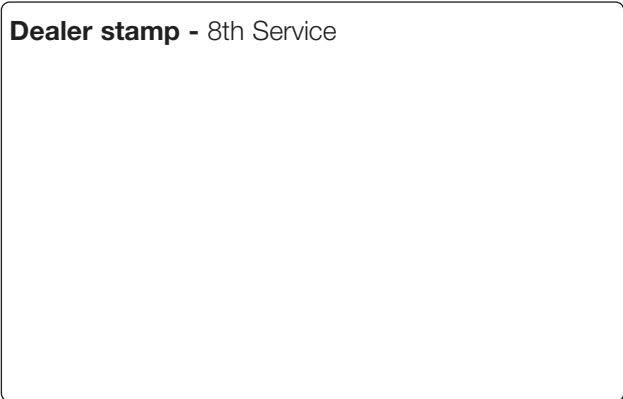
Dealer stamp - 6th Service



Dealer stamp - 7th Service



Dealer stamp - 8th Service



Brochure Request

Do you have a friend or colleague that would be interested in an Electric Mobility product?
If so cut out this coupon and send it to the address shown on the back of the manual.

My Dealer's Company name is:	
<hr/>	
<input type="checkbox"/>	Please can I have a free no-obligation home demonstration.
<input type="checkbox"/>	Please send me a brochure of the range of products.
My friend's name is:	
<hr/>	
My friend's address is:	
<hr/>	
<hr/>	
County:	Postcode:
<hr/>	
My friend's telephone number is:	
<hr/>	

If you are visually impaired, please contact the Company to discuss your requirements. However, you should not drive a vehicle in a public place if you cannot see well enough to ensure your own, and others safety.

Postage will be paid by: Electric Mobility Euro Ltd., FREEPOST (SWBI 1045), Ilminster, Somerset, TA19 9ZA



Dealer Information - Guarantee Card

This section is to be filled out by the Dealer and sent to Electric Mobility Euro Ltd.

Dealer:	
<hr/>	
Product Description:	
<hr/>	
Serial No.:	Invoice No.:
<hr/>	
Customer Name & Address:	
<hr/>	
<hr/>	
County:	Postcode:
<hr/>	
Telephone No.:	
<hr/>	
Email address:	
<hr/>	
Did you buy on the Internet? <input type="checkbox"/> or through a local dealer? <input type="checkbox"/> Please tick the relevant box.	
<hr/>	
Date received at Dealers:	
<hr/>	

Postage will be paid by: Electric Mobility Euro Ltd., FREEPOST (SWBI 1045), Ilminster, Somerset, TA19 9ZA



**Electric Mobility Euro Ltd.,
FREEPOST (SWBI 1045),
Ilminster,
Somerset,
TA19 9ZA**

**Electric Mobility Euro Ltd.,
FREEPOST (SWBI 1045),
Ilminster,
Somerset,
TA19 9ZA**

Notes

Notes

Notes

Rascal Vantage & Vantage X Scooters

Manufactured by

