

# Rascal Veo, Veo X & Veo Sport Scooters

Owner's Manual & Service Record

Rascal Veo Sport



**RASCAL**  
MOBILITY

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Rascal Veo Sport

Electric Mobility Euro Ltd offers these robust, manoeuvrable scooters for convenient indoor and outdoor use. The Veo series of scooters can easily be dismantled for transport in cars, MPVs and vans. The three different models of Veo Scooter differ from each other in terms of specification - for information see the Specifications section of this manual. 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 that you may not be able to control your scooter safely, do not drive it, and consult your dealer for a solution. If you think the 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 this 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.

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## 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 and / or as attached to the scooter chassis.

### 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 Veo Sport scooter. See the technical specification for full details.



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# 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.

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## Intended use of the vehicle/s

The Rascal Veo series of scooters are designed for use by adults with a disability (up to the maximum recommended weight (see Technical Specification sheet) who require a robust daily use scooter that is ideal for both indoor and outdoor use.

These scooters are intended for use both outdoors and indoors on hard /smooth surfaces. Kerbs should be avoided, but the scooters can mount kerbs and small obstacles up to that specified in the Technical Specification sheet.

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 up to users 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 Veo series of scooters should not be used on potholed, 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 Veo range of scooters has been designed and tested for drivers with weights up to those in the Technical Specification Sheets. These weights should **never** be exceeded.
- Warning !** Tiller Mounted Basket. The basket mounted on the tiller has a weight limit as shown in the Technical specification. Do not exceed this as it could affect stability and performance. Do not carry or attach anything to the handlebars or controls as this could affect driving safety.
- Warning !** Do not exceed the specification; do not modify this 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 this 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 areas. 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 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.

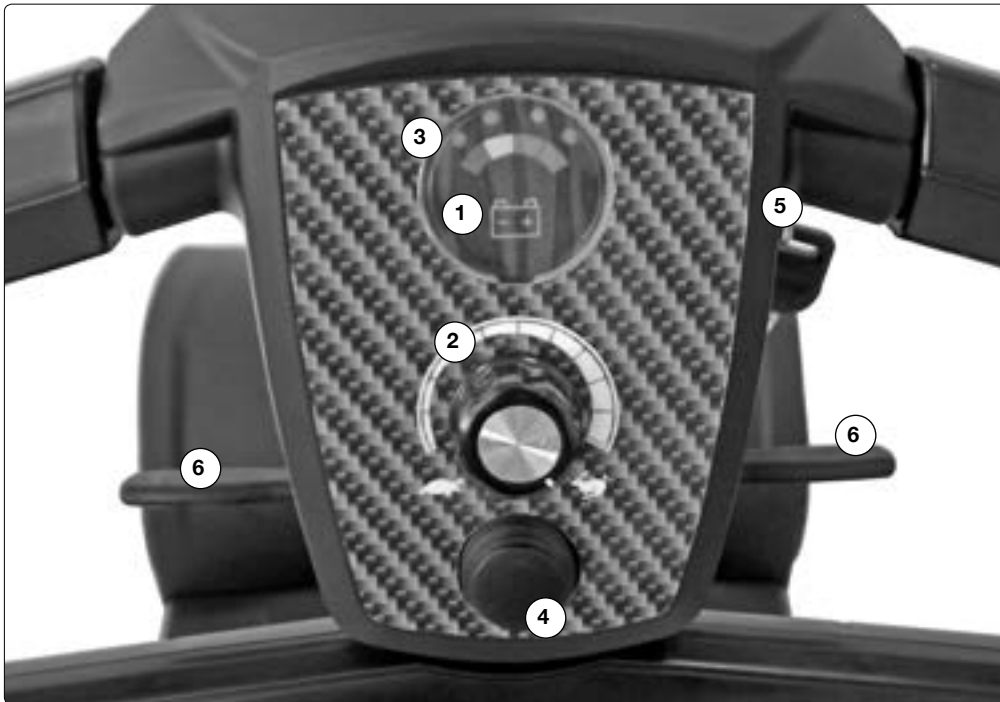


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- Warning ! Entanglement.** Do not wear clothing or carry items on the scooter that could become entangled in wheels or other moving parts whilst operating the scooter. Severe injury may result.
- Warning ! Battery Charge Level.** Before driving off, 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.** This scooter is not designed or approved for use on public roads, apart from crossing roads at designated places.
- Warning ! Driving in Poor Visibility.** Scooters are not easily seen. Your scooter is not intended for use in darkness or in poor visibility.
- 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.** This scooter is not suitable for use as a seat for an occupant when in a motor vehicle.

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# Controls

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.



## Dashboard Description

- 1. Battery Indicator:** This indicator 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.
- 2. Speed Control:** This controls the top speed of your scooter. When the knob is turned fully to the left, this is the slowest speed setting, 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 / Status LED:** This indicator (first LED on the battery indicator) shows the status of the scooter – either on or off. **Note.** The controller has a diagnostic mode: If the red LED flashes, this indicates that the controller has detected an error or fault. If this happens refer to the diagnostic table at the back of this manual for a solution.



**Tip:** One of the most common “faults” is that the scooter has been switched on with the free-wheel function enabled– Just turn the power on/off key to the off position, position the freewheel lever in drive and turn the ignition key back to the ON position.

- 4. Horn:** Press the button and the horn will sound. Release and the horn will cease.
- 5. Ignition Key:** Dependent on the model of scooter, the ignition key may have to be pushed in before you can turn the vehicle on or off. Remember to remove the key **when not in use**. Do not leave the ignition on when not in use, especially when charging the vehicle.



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**6. Finger control:** To operate, turn the key to the “on” or “I” position 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.

**Charging Point:** The charging point is situated on the front face of the removable battery pack. (see Battery Charging section for further instructions).

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## 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 automatically 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 Illustration.

- Make sure the On/Off (ignition) key is in the off position.
- Move the lever **UP** The vehicle can now be pushed in Freewheel.
- Move the lever **DOWN** 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. Pull the lever **UPWARDS** to engage freewheel mode (no brakes - caution). Push 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.



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## Brakes

There are 2 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 brake will engage. This will stop the vehicle rolling forward or backward. When you start the brake will automatically disengage. If the battery should run out, the brakes automatically engage. Note that even when freewheel is selected, a secondary braking system is applied automatically to limit the maximum speed. You may notice this system causing drag when moving the scooter in freewheel mode

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

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## Armrest adjustment

When getting seated on the scooter lift the armrest up. When riding always have the armrest in the down position. Avoid pinching fingers as you lower the armrest.



If you require more room in the width of the seat undo the knobs at the rear of the seat. Slide the armrests in or out to suit. Tighten both knobs to clamp. 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.

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## Seat Back Adjustment

The angle of the seat back is fixed, however it can be folded to allow easy storage and handling. To fold the seat, hold it by the top edge and push forward.



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## Swivel seat

This allows easy access

- 1. To operate**, locate the release lever under the seat.
- 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.



**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.

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## Tiller Folding and Tiller Transport Lock

The tiller can be folded down for transporting and storage. Take care when lowering the tiller not to pinch your fingers at the base of the tiller. Once in the folded position, the tiller can be locked in place to avoid tiller movement during transport and / or storage using the “transport lock” - See “Transporting your scooter” section of this manual for further details.

- **Rotate the knurled knob anti-clockwise** sufficiently for the retaining serrations to allow the tiller to move.
- **Lower the tiller** so that it is in its lowest position.
- **Rotate the knurled knob clockwise** and ensure that it is tight and the retaining serrations are fully engaged.

**Tip:** The tiller can be adjusted to achieve a comfortable driving position.

- **Rotate the knurled knob anti-clockwise** sufficiently for the retaining serrations to allow the tiller to move. Adjust the tiller so that your driving position is safe and comfortable.

- **Rotate the knurled knob clockwise** and ensure that it is tight and the retaining serrations are fully engaged

- **Adjust the tiller to suit your driving position**, ensuring the tiller is firmly locked in place before driving off.



**Warning!** Before driving, always check that the tiller is securely in the upright position and that the tiller transport lock is disengaged. Safe steering will 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 that 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 red LED / lamp on the dashboard will not be on or flashing)
- **Ensure that the handlebar / tiller adjustment is fully tightened** and that any accessories are properly fitted and secured.
- **Ensure that the transport tiller lock is not engaged** by checking that the steering is free to operate.
- **The seat should be facing forwards** with the seat back in the upright position.
- **Adjust the handlebars / tiller** so that the front wheels are facing forward.

#### You are now ready to get in:

- Approach the seat from the side and step over the centre part of the scooter with one foot. You should now be straddling the scooter facing forwards and with the seat behind you. With your back to the seat, you can steady yourself using the armrests and then lower yourself gently into the seat.
- Lift each of your feet onto the footrest platform.

#### 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 handlebars so that the front wheels are facing directly forwards.
- Lift your feet off the footrest platform and stand up using the armrests to provide you with additional stability if required. (Do not put your full weight on the armrests)

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## Operation

Before using the scooter you should make sure that:

- The battery is fully charged. (indicating green on the battery indicator)
- There is no sign of damage to the scooter. All adjustment thumb-wheels are fully tightened. Any 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. Remember not to use the scooter in poor light or darkness.

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## 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 injury/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 Sheets 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 with your feet on the footrest platform.**
8. **Check the backrest is upright.**
9. **Check that none of the items in your shopping basket are likely to fall out or become entangled in the scooter wheels or other mechanisms.**
10. **Make sure that your shopping basket is not overloaded** (See Technical Specification Sheets)
11. **Ensure your feet are securely on the footrest areas.**
12. **Check that the tiller transport lock is disengaged** (The tiller will have a full range of movement).
13. **Check you have adjusted the seat as instructed in this manual.**
14. **Make sure the way ahead is clear.**

- 
15. **Switch on the power.** Check the battery level indicator is in the green area.
  16. **Speed Control.** Set the speed control to a low setting.
  17. **Gently actuate the finger controls (either forward or reverse) and steer in the direction required.**  
The vehicle will now move off. The further you push the paddle (either forward or reverse) the faster the vehicle will go.
  18. **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.
  19. **As you get accustomed to the power you can increase the speed.**
  20. **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.*



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## 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 paved, even surfaces and should not be used on 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. Note that the anti-tip rollers at the rear of the scooter may contact the kerb as you descend; this is normal.
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!**

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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 keep to well 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 solid tyres. Should they become damaged 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. Your scooter is limited to that maximum speed but 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 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.
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## 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. 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, splitting the front and rear parts of the chassis or rotating/handling the front wheels when dismantling or during re-assembly for transportation in a car or similar.

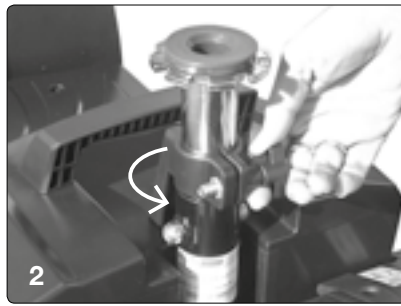
**Warning!** Your scooter is not suitable for use as a seat for an occupant in a motor vehicle.

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

Your Scooter has been designed to be dismantled and stowed in the average car boot. Contact your dealer for advice on how best to transport your scooter in your vehicle. To transport your Scooter you may need to dismantle it. Follow these instructions. The component weights are recorded in the Technical Specification section of this manual. Do not attempt to undertake dismantling or lifting without assistance. You are advised to wear gloves.

## Disassembly:

- **Turn the power off.** (Turn key to the off position and remove from the scooter).
- **Remove the seat by squeezing the seat swivel lever** and lifting the seat off the seat post. (Fig 1)
- **Fold the seat arms down & the seat-back forward on itself** for easy storage.
- **Remove the battery pack by loosening the battery securing clamp** (Fig 2), and rotate it so that the clamp no longer holds the battery in position. Now lift the battery clear. - Warning, these parts are heavy!
- **Remove the shopping basket by lifting /sliding up.** (Fig 3)
- **Lock the steering position by pulling and then twisting the transport tiller lock knob** with the wheels pointing straight forwards. (Fig 4)
- **Fold the tiller unit down by first loosening the tiller securing thumb-wheel,** lower the tiller to the desired position and re-tighten the thumb-wheel (Fig 5).
- **Separating the chassis** The two halves of the chassis can also be split apart to make transportation more easy. To do this, raise the transaxle release handle with one hand. With the other hand grasp the handle at the rear of the scooter and pull which will separate the front and rear halves. (Fig 6)  
Be careful not to pinch your fingers between the two halves of the chassis
- **Safely stow the component parts in the boot of the car.**



**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.



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

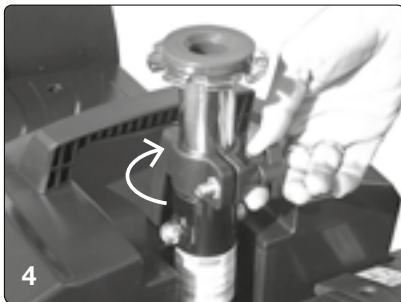
## Assembling your Scooter following Transportation



**Warning!** Assembling the scooter involves lifting and handling heavy parts. 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.



- 1. Loosen the tiller thumb-wheel and raise the tiller to the desired position** - now re-tighten the thumb-wheel to lock the tiller in position (Fig 1).
- 2. Pull and twist the tiller transit lock to allow for normal steering**, unlocked, it will allow steering to fully move (Fig 2)
- 3. Re-connect the front and rear chassis sections** by reversing the procedure in the previous section. (Fig 3).
- 4. Rotate the battery securing clamp** so it will not foul the battery.
- 5. Lift the battery pack into position**
- 6. Rotate the battery securing clamp so that it is pushing down on the top of the battery pack casing**, tighten the battery securing clamp in position (Fig 4).
- 7. Replace the seat by squeezing the seat swivel lever and lifting the seat into position on the seat post**, (Fig 5) the seat should drop into position. Release the swivel lever and rotate the seat until it locks in position. The seat should now only swivel if the lever is compressed / squeezed. Repeat this procedure if the seat fails to lock on the first attempt. - Never drive the scooter unless the seat is properly installed and locked against swivelling!
- 8. Fold the seat-back into the vertical position** and ensure that the armrests are correctly adjusted and secured.
- 9. Fit the basket and lock in position** by pushing down on the top edge gently (Fig 6).



# 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. Always make sure that the battery pack is not damaged. Never charge the scooter battery pack 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 m/A 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 pack can simply be removed from the scooter.

**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 front face of the removable battery pack. Rotate the protective cover and push in the plug. When the vehicle is charged remove the plug, and refit the protective cover to help protect against dust and moisture ingress.

**Tip:** The battery pack can be removed or left on the scooter for charging

The battery charger has a small indicating lamp. When the charger is connected to the mains supply and switched on the lamp will show green. When the battery is being charged it shows red and when the battery is fully charged the lamp will change to green. 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 with the mains on.
4. **Connect the charger to the charging point on the front of the battery pack.**
5. **Connect the mains plug and switch on.**
6. **The lamp illuminates green when the charger is powered up,** then red when it is charging. The charger lamp changes to green when the battery is fully charged.
7. **Switch off the mains and remove the plug from the battery pack when fully charged.** Do not leave the charger plugged in with the power off. This will gradually discharge your battery.



**Tip:** You can charge your battery pack either installed or uninstalled from the scooter using exactly the same method.

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 with the correct batteries** as recommended by Electric Mobility (Euro) Ltd
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 the 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 battery pack/s is/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.

It may be necessary for some carriers such as airlines to physically disconnect the battery packs. The battery pack can simply be removed from the scooter to achieve disconnection.

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## 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 front and rear chassis halves are properly attached to each other.**
6. **Check that the seat is located correctly.**
7. **Check the armrests are secure.**
8. **The battery should be fully charged.**
9. **Keep your vehicle clean by using a damp cloth and soapy water** – never use a hose.

### 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.

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## Servicing and Maintenance

1. **This vehicle is designed for minimum maintenance.** However 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 on the battery indicator flashes to indicate a problem has been detected. On switching on, the controller conducts a diagnostic test. If there is a fault, the first lamp/LED in the battery indicator will flash a sequence of flashes to indicate what the fault is. There will be two groups of flashes separated by a 2 to 3 second pause. Count the number of flashes in each group and decode the fault using the table below.

Number of Flashes	Indicated fault	Possible cause
4,5	Battery disconnected	<ol style="list-style-type: none"> <li>1. Battery not connected.</li> <li>2. Poor connection to battery terminals.</li> </ol>
4,4	Motor Open	<ol style="list-style-type: none"> <li>1. Incorrect motor wiring.</li> <li>2. Motor defective.</li> </ol>
3,4	Brake Off fault	<ol style="list-style-type: none"> <li>1. Electromagnetic brake driver open.</li> <li>2. Electromagnetic brake coil shorted.</li> </ol>
3,2	Brake On fault	<ol style="list-style-type: none"> <li>1. Electromagnetic brake driver shorted.</li> <li>2. Electromagnetic brake coil open.</li> </ol>
4,1	Current sense out of range	<ol style="list-style-type: none"> <li>1. Short in motor or in motor wiring.</li> <li>2. Controller failure*</li> </ol>
4,3	EEPROM fault	<ol style="list-style-type: none"> <li>1. EEPROM failure or fault.</li> </ol>
4,2	Motor voltage out of range	<ol style="list-style-type: none"> <li>1. Motor voltage does not correspond to throttle request.</li> <li>2. Short in motor or in motor wiring.</li> <li>3. Controller failure*</li> </ol>
3,5	HPD (High Pedal Disable)	<ol style="list-style-type: none"> <li>1. Improper sequence of throttle and KSI, push, or inhibit inputs.</li> <li>2. Misadjusted throttle pot.</li> </ol>
2,3	Main contactor fault	<ol style="list-style-type: none"> <li>1. Main contactor welded or stuck open.</li> <li>2. Main contactor driver fault.</li> </ol>
2,2	Motor stalled	<ol style="list-style-type: none"> <li>1. Motor blocked/stalled.</li> <li>2. Motor defective.</li> </ol>
2,1	Main contactor driver Off fault	<ol style="list-style-type: none"> <li>1. Main contactor driver failed open.</li> </ol>

\* Jack the vehicle and retest to confirm diagnosis. Clean connections, inspect system wiring, and retest.

Number of Flashes	Indicated fault	Possible cause
2,4	Main contactor driver On fault	1. Main contactor driver failed closed.
1,5	Battery voltage too high	1. Battery voltage >31 volts. 2. Vehicle operating with charger attached. 3. Intermittent battery connection.
3,3	Precharge fault	1. Brake driver shorted. 2. Precharge circuit damaged. 3. MOSFET failure.
1,3	Speed limit pot wiper out of range	1. Speed limit pot wire(s) broken or shorted. 2. Broken speed limit pot.
1,1	Over-/under-temperature cutback	1. Temperature >80°C or <-10°C. 2. Excessive load on vehicle. 3. Operation in extreme environments. 4. Electromagnetic brake not releasing.
1,2	PotLow and/or PotWiper out of range	1. Throttle input wire open or shortened. 2. Throttle pot defective. 3. Wrong throttle type selected.
1,4	Battery voltage too low	1. Battery voltage <17 volts. 2. Bad connection at battery or controller.
3,1	HPD fault present >10 sec.	1. Misadjusted throttle. 2. Broken throttle pot of throttle mechanism.

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 more quickly 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"><li>• <b>Scooter does not move.</b> when power is switched on.</li></ul>	<ul style="list-style-type: none"><li>• Batteries flat - check level.</li><li>• Is the charger connected?</li><li>• Is Freewheel engaged?</li><li>• 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.</li><li>• Safety cut-out has operated due to overload? Press the reset button next to the charging port on the battery pack. If the cut-out operates again, contact your service agent for assistance.</li></ul>
<ul style="list-style-type: none"><li>• <b>Steering is loose or wobbly when driven.</b></li></ul>	<ul style="list-style-type: none"><li>• Check for tyre damage or punctures.</li><li>• Damaged steering - contact dealer.</li><li>• Loose seat - contact dealer.</li></ul>
<ul style="list-style-type: none"><li>• <b>Vehicle behaves erratically when driven.</b> or judders or cuts out ?</li></ul>	<ul style="list-style-type: none"><li>• Possible electronic problems - contact dealer.</li></ul>
<ul style="list-style-type: none"><li>• <b>Short Range</b></li></ul>	<ul style="list-style-type: none"><li>• Check tyres for damage.</li><li>• Check batteries are fully charging.</li><li>• Check vehicle moves easily in Freewheel</li></ul>



**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

<b>Tiller Basket</b>	The tiller baskets have maximum weight limits as described in the Technical Specification. Do not exceed the stated limit as it could affect handling.
<b>Handlebars</b>	Do not carry or attach anything to the handlebars. Anything attached to the handlebars will affect the control of the vehicle.
<b>Floor Area</b>	Do not use the floor area to carry things apart from in the under-seat basket. They might fall off, or obstruct your movement.

### Other Precautions

<b>Modifications</b>	Unauthorised modifications could result in injury or permanent damage. Such modifications will invalidate any guarantees.
<b>Other Items</b>	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. They could be harmed.

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## 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 others 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](http://www.electricmobility.co.uk)

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## Frequently Asked Questions

### ***I want to transport my vehicle in a car.***

Your scooter can be dismantled for transportation as described in this manual. 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 ?***

No, the Rascal Veo models are too small to have a canopy as they can adversely affect stability and handling.

### ***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

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## Engineer's Checklist for the Rascal Veo range of 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
- Speed dial works correctly
- Wear or damage to tyres or wheels
- Bodywork fixtures for damage, or cracking
- Throttle play and adjustment
- Battery packs and internal electrical connections for condition and corrosion.
- Check all cables for damage, abrasion, corrosion and that screening is intact. Replace as necessary
- Steering bearing (adjust as required)
- Check suspension components on Veo Sport model.
- Tiller adjustment - functioning, wear and damage
- All assembly spigots and hooks for wear or damage.
- Seat mounting for wear or damage
- Revolving seat mechanism locates correctly and spring lever engages. Lubricate as necessary.
- Handlebar/tiller 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?
- 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.



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# 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.

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## 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 Veo 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)	1080 (42.5) x 505 (19.9) x 883 (34.8)
Dimensions seat back and tiller folded	length x width x height mm (in)	1080 (42.5) x 505 (19.9) x 700 (27.6)
Maximum carrying capacity	kg (lb)	113 (250)
Mass (weight) including 14 Ah batteries	kg (lb)	45.8 (101.9)
Mass (weight) of heaviest part	kg (lb) Front chassis	17.4 (38.3)
Mass (weight) of battery pack	kg (lb)	9.8 (21.7)
Maximum shopping basket load (wire-mesh)	kg (lb)	3.5 (7.7)
Standard battery voltage and capacity	Volts and Ampere hours	12V / 14Ah x 2
Type of seat	Standard seat with folding backrest and adjustable arms	
Mass (weight) of seat	kg (lb)	7.5 (16.5)
Wheel size	front & rear mm (in)	200 (8) x 50 (2.0)
Type of tyres	Solid foam filled	
Suspension	Type	N/A
Maximum speed	km/h (m.p.h.)	6.4 (4)
Minimum braking distance from maximum speed	m (ft)	1.1 (3.60)
Range*	km (miles)	Up to 18.5 (11.5)
The turn-around width	m (ft)	1.40 (4.6)
The maximum safe slope	degrees of slope	8° - Do not exceed the scooter may topple
The maximum climbing ability facing upwards	degrees of slope	8°
Ground clearance	mm (in)	60 (2.36)
Maximum obstacle climbing ability	mm (in)	50 (2)
Maximum safe descendable kerb height	mm (in)	50 (2)
Force to operate Accelerator control	Newtons (lbs)	2.5 (0.55)
Force to operate Freewheel lever	Newtons (lbs)	58.8 (13.2)
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 Veo X 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)	1080 (42.5) x 600 (23.6) x 883 (34.8)
Dimensions seat back and tiller folded	length x width x height mm (in)	1080 (42.5) x 600 (23.6) x 710 (27.9)
Maximum carrying capacity	kg (lb)	129.2 (285)
Mass (weight) including 22 Ah batteries	kg (lb)	54.3 (119.71)
Mass (weight) of heaviest part	kg (lb) Front chassis	17.4 (38.3)
Mass (weight) of battery pack	kg (lb)	14.3 (31.5)
Maximum shopping basket load (Plastic)	kg (lb)	4.5 (9.9)
Battery voltage and capacity	Volts and Ampere hours	12V / 22Ah x 2
Type of seat	Upgraded seat with folding backrest and adjustable arms	
Mass (weight) of seat	kg (lb)	10.8 (23.8)
Wheel size	front & rear mm (in)	200 (8) x 50 (2.0)
Type of tyres	Solid foam filled	
Suspension	Type	Enhanced tyre compound
Maximum speed	km/h (m.p.h.)	6.4 (4)
Minimum braking distance from maximum speed	m (ft)	1.1 (3.60)
Range*	km (miles)	Up to 21 (13.5)
The turn-around width	m (ft)	1.40 (4.6)
The maximum safe slope	degrees of slope	8° - Do not exceed the scooter may topple
The maximum climbing ability facing upwards	degrees of slope	8°
Ground clearance	mm (in)	60 (2.36)
Maximum obstacle climbing ability	mm (in)	50 (2)
Maximum safe descendable kerb height	mm (in)	50 (2)
Force to operate Accelerator control	Newtons (lbs)	2.5 (0.55)
Force to operate Freewheel lever	Newtons (lbs)	58.8 (13.2)
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 Veo Sport 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)	1080 (42.5) x 600 (23.6) x 883 (34.8)
Dimensions seat back and tiller folded	length x width x height mm (in)	1080 (42.5) x 600 (23.6) x 710 (27.9)
Maximum carrying capacity	kg (lb)	129.2 (285)
Mass (weight) including 22 Ah batteries	kg (lb)	57.9 (127.6)
Mass (weight) of heaviest part	kg (lb) Front chassis inc. basket	20.2 (44.53)
Mass (weight) of battery pack	kg (lb)	14.3 (31.5)
Mass (weight) of rear chassis	kg (lb)	12.6 (27.77)
Maximum shopping basket load (Plastic)	kg (lb)	4.5 (9.9)
Battery voltage and capacity	Volts and Ampere hours	12V / 22Ah x 2
Type of seat	Upgraded seat with accent stitching, folding backrest and adjustable arms.	
Mass (weight) of seat	kg (lb)	10.8 (23.8)
Wheel size	front & rear mm (in)	200 (8) x 50 (2.0)
Type of tyres	Solid foam filled	
Suspension	Type	Enhanced tyre compound, rear coil & front tilt coil.
Maximum speed	km/h (m.p.h.)	6.4 (4)
Minimum braking distance from maximum speed	m (ft)	1.1 (3.60)
Range*	km (miles)	Up to 21 (13.5)
The turn-around width	m (ft)	1.40 (4.6)
The maximum safe slope	degrees of slope	8° - Do not exceed the scooter may topple
The maximum climbing ability facing upwards	degrees of slope	8°
Ground clearance	mm (in)	60 (2.36)
Maximum obstacle climbing ability	mm (in)	50 (2)
Maximum safe descendable kerb height	mm (in)	50 (2)
Force to operate Accelerator control	Newtons (lbs)	2.5 (0.55)
Force to operate Freewheel lever	Newtons (lbs)	58.8 (13.2)
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.

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# Notes

# 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: \_\_\_\_\_

Please can I have a free no-obligation home demonstration.

Please send me a brochure of the range of products.

My friend's name is: \_\_\_\_\_

My friend's address is: \_\_\_\_\_

\_\_\_\_\_

County: \_\_\_\_\_ Postcode: \_\_\_\_\_

My friend's telephone number is: \_\_\_\_\_

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: \_\_\_\_\_

Product Description: \_\_\_\_\_

Serial No.: \_\_\_\_\_ Invoice No.: \_\_\_\_\_

Customer Name & Address: \_\_\_\_\_

\_\_\_\_\_

County: \_\_\_\_\_ Postcode: \_\_\_\_\_

Telephone No.: \_\_\_\_\_

Date received at Dealers: \_\_\_\_\_

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.,  
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Ilminster,  
Somerset,  
TA19 9ZA**



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# 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**

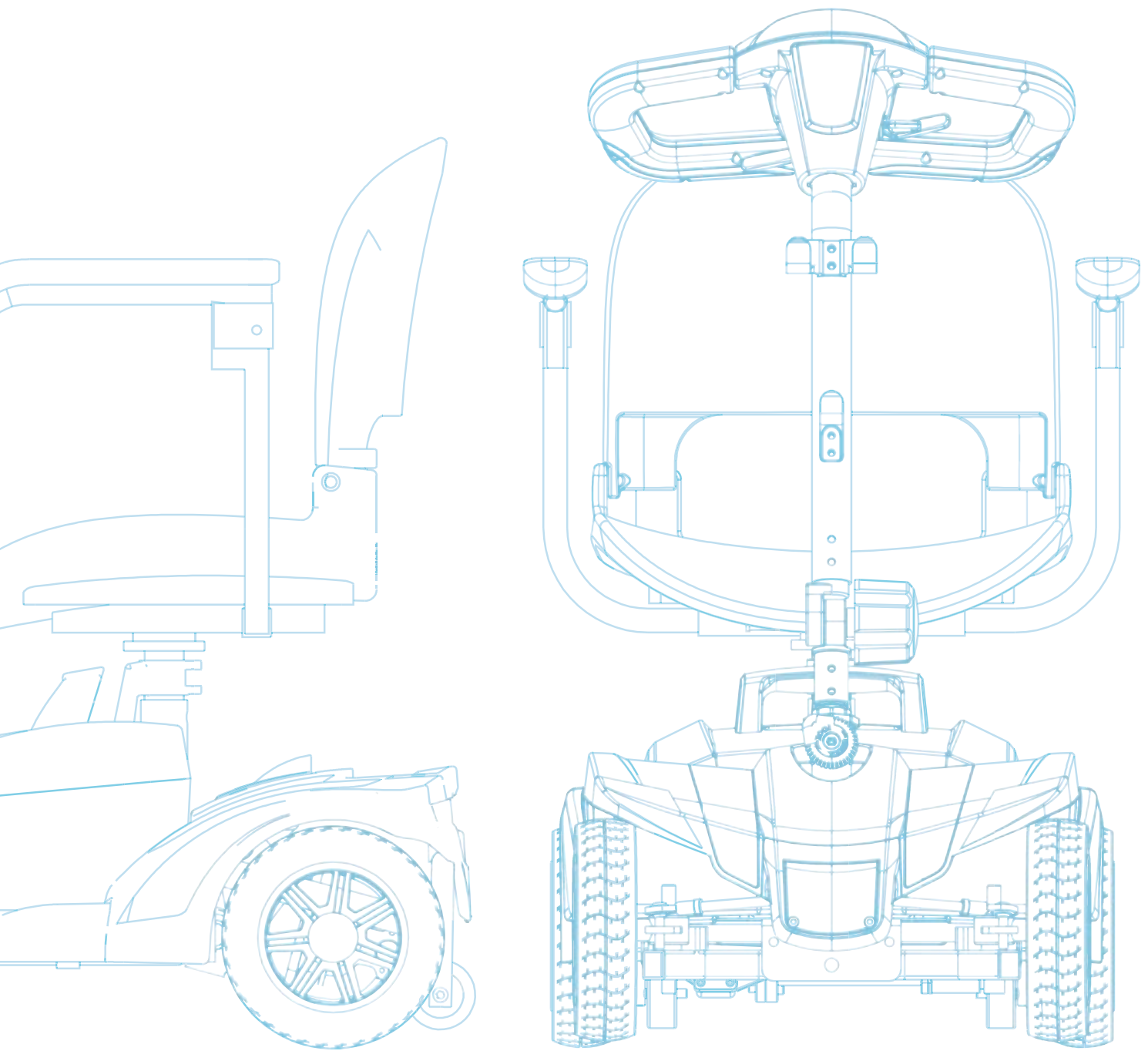
**Dealer stamp - 8th Service**

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# Notes

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## Notes



## Rascal Veo range of Scooters

Manufactured by

**ELECTRIC  
MOBILITY**

A horizontal bar with a color gradient from blue on the left to orange on the right.

**Electric Mobility Euro Limited**, Canal Way, Ilminster, Somerset TA19 9DL  
Telephone: 01460 258100 [www.electricmobility.co.uk](http://www.electricmobility.co.uk)

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