

Rascal Vippi Scooter

Owner's Manual & Service Record



RASCAL
MOBILITY

Electric Mobility Euro Limited, Canal Way, Ilminster, Somerset TA19 9DL
Telephone: 01460 258100 www.electricmobility.co.uk

READ all safety warnings,
instructions, illustrations &
specifications provided with
this product **BEFORE** use.



CE

E. and O.E. Issue 1 07/2021



Rascal Vippi Scooter

Electric Mobility Euro Ltd. offers this robust, manoeuvrable scooter for convenient indoor and outdoor use. The Vippi scooter can easily be dismantled for transport in cars, MPVs and vans.

Provided that the scooter is maintained and operated in accordance with the instructions within this manual it should last for many years providing you with freedom and independence.

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

Notice

All Electric Mobility Scooters are sold through authorised dealers. Make sure the 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 & Layout	4
Safety Information	5
Intended Use of the Scooter	5
Safety Information	6
Controls	8
Freewheel Device	9
Brakes	9
Armrest Adjustment	10
Seat Back Folding	10
Swivel Seat	10
Tiller Folding & Tiller Transport Lock	11
Transferring In & Out of the Scooter	11
Operation	12
Driving the Scooter	12
Driving the Scooter - Hazards	13
Transporting & Disassembling the Scooter	14
Assembling the Scooter after Transporting	16
Air Travel	17
Battery Charging	17
User Maintenance	19
Servicing & Maintenance	19
Scooter Diagnostic Functions	20
Troubleshooting Guide	21
Additional Safety Information	22
Disposal	22
Frequently Asked Questions (FAQ)	22
Engineer's Checklist	23
Additional Information	24
Technical Information regarding EMI	24
Technical Specifications	25
Service Log	26
Notes	27

Dealer Information

This is the contact number
for service and support
Dealer Stamp

Telephone:
Email:

Product Model

Serial Number

Date of Purchase

Owner

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

**ELECTRIC
MOBILITY**

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

Features & Layout

Photo shows the Rascal Vippi scooter. See the
Technical Specification for full details

1. Delta-bar tiller
2. Swivel seat
3. Fold down backrest
4. Fold up / adjustable armrests
5. Removable battery pack
6. Safety cut-out device

7. Finger control lever
8. Removable basket
9. Tiller transport lock
10. Tiller adjustment
11. Puncture proof solid tyres
12. Freewheel lever



Safety Information

Read this manual thoroughly before driving or operating the scooter.

If you have any doubt about the content of this manual then contact the dealer to resolve any problem. Please read this manual thoroughly, and ensure the scooter is maintained 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 the dealer.



Book symbol: This symbol appears on the product. Please read this owner's 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 the scooter.

© 2021 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.

Authorised Representative - EME DisabilityAids Ltd	ELECTRIC MOBILITY
Century House Harold's Cross Road Dublin D6w P993 Republic of Ireland	
Tel: +353 1 695 0067	
Email: support@emedisabilityaids.eu	
Web: www.emedisabilityaids.eu	

Intended Use of the Scooter

The Rascal Vippi scooter is designed for use by adults with a disability (up to the maximum recommended weight (see **Technical Specification** section of this manual) who require a robust daily use scooter that is ideal for both indoor and outdoor use.

The scooter is 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 as specified in the **Technical Specification** section.

Users could endanger themselves and or others if they are not capable of driving the scooter safely. Dealers will advise on the most suitable scooter from the Electric Mobility Rascal range, but it is the user's responsibility to ensure that they have the manual dexterity to drive the scooter, 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 then consult a healthcare professional and the nearest dealer for advice on the most suitable scooter for the particular condition. Users should also regularly assess their ability to operate their scooter safely.

The Rascal Vippi scooter should not be used on slippery surfaces such as grass, muddy paths or on loose gravel.



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 scooter 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 Vippi scooter has been designed and tested for drivers with weights up to those in the Technical Specification Sheets. These weights should never be exceeded.

Warning: Do not exceed the specification; do not modify this scooter or use it other than as a scooter.

Warning: Passengers, including children and animals, 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 scooter is switched on.
- Avoid getting close to transmitter masts, such as television and radio stations.

If the scooter ever starts to operate by itself switch it off, cease using and report this incident to the 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 the Scooter** section in this manual.

Warning: Ambient Operating Temperature Range. Do not use the scooter in temperatures outside the range stated in the specifications section of this manual. Driving in very hot, very cold or icy conditions, as can make driving more hazardous.

Warning: Freewheel Device/Mode. Before getting on the 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 the scooter will not function. Extra care should be taken with the scooter when it is in freewheel mode as it could move without warning. Never sit on or try to ride the 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 the 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 the feet are safely on the footrest areas. If you drive forward with the 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. Never drive without armrests fitted.

Warning: Seat. Always drive the scooter with the seat-back in upright position.

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. **DO NOT** operate the scooter with depleted batteries.



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 the Scooter – Hazards** for more advice.

Warning: Kerbs. 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** section. When in a situation to climb or descend a low kerb, then always tackle it straight on. See **Driving the Scooter – 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. The stopping distances on slopes can be significantly greater than on level ground.

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 the Rascal Vippi 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. Consider wearing a high visibility jacket to warn others of the 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 scooter in the shade.

Warning: Seats in Motor Vehicles. This scooter is **not suitable** for use as a seat for an occupant when in a motor vehicle.

Controls



Before driving the scooter it is important to familiarise yourself with the controls. Do not attempt to drive the scooter before reading the rest of the Owner's Manual.

Dashboard Description

1. Battery Indicator: 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.

The slow flashing may indicate up to a maximum of 1.5 miles (2.4) km) of range depending on the performance of the batteries.

NOTE: When the scooter is climbing a steep incline or starting off, the level may drop momentarily; this is normal.

2. Speed Control: This controls the pre-set top speed of the scooter. When the adjustment ring is turned fully anticlockwise, this is the slowest speed setting, marked by a tortoise 🐢. As the ring 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 when the scooter is moving.

3. Power-On Indicator / Status LED: This red indicator shows the status of the scooter – either Power ON or OFF.

NOTE. The scooter controller has a diagnostic mode:- If the LED display flashes, this indicates that the controller has detected an error or fault. If this happens refer to **Scooter Diagnostic Functions** section within this manual for a solution or contact the dealer.

Tip: One of the most common "faults" is that the Ignition Key has been switched ON with the freewheel function enabled – Just turn the Ignition 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 scooter power to ON or OFF. Remember to remove the Ignition Key when not in use. Do not leave the ignition ON when not in use, especially when charging the scooter batteries (see **Battery Charging** section).

6. Finger control: To operate, turn the Ignition Key to the ON or "I" position. 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.

NOTE. The controls can be changed for customers with a left-hand bias. Please contact the local dealer for information.

Charging Point: The charging point is situated on the battery case (see **Battery Charging** section of this manual for further details).

Freewheel Device



When the scooter 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 scooter without power. To do this there is a Freewheel device fitted.

The Freewheel device allows the scooter 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 scooter (Fig.6).

- Make sure the Ignition key is in the OFF position. When standing at the back of the scooter, move the lever **UP** towards you (see the label) - the scooter can now be pushed in **Freewheel**.
- Move the lever **DOWN** (away from you) to engage drive. The scooter is now braked. This is the normal operating position.

IF YOU ARE NOT COMPLETELY SURE OF THIS FEATURE THEN CONTACT THE 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.



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 the scooter starts moving then the brake will automatically disengage. If the battery should run out, the brakes automatically engage.

NOTE: 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.

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 wheel knobs at the rear of the seat (Fig.7). Slide the armrests in or out to suit. Tighten both wheel 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.

Seat Back Folding

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 (Fig.8).



Swivel Seat

This allows easy access.

- 1. To operate**, locate the release lever under the seat (Fig.9).
- 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 scooter is on a slope. Always check the seat is locked in the forward position before driving the scooter.



Tiller Folding & Tiller Transport Lock

The tiller can be folded down for transport 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 "Tiller Transport Lock" - see **Tiller Transport Lock** section of this manual for further details.

Tiller Folding:

Rotate the wheel anti-clockwise sufficiently for the retaining serrations to allow the tiller to move and stow with the tiller lowered (Fig.10 & 12).

Lower the tiller so that it is in its lowest position. **Rotate the wheel** 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.



Tiller Transport Lock:

To lock the tiller (steering) during transport and loading/unloading from a vehicle:

Make sure tiller is in a straight drive position, with wheels facing directly forwards.



Lift up on the yellow knob and then turn to the central position and release (Fig.11) to lock the steering.

To unlock the steering/tiller, reverse the above procedure.



Transferring In & Out of the Scooter

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

Transferring into the Scooter

1. **Make sure that the scooter is on a level surface,** and it is not in Freewheel mode.
2. **Make sure the brakes are engaged** - try to push the scooter a little to verify that the brakes are working.
3. **Ensure that the Ignition Key is turned to OFF.** (The red LED on the dashboard will not be lit or flashing).
4. **Ensure that the handlebar/tiller adjustment and seat adjustments are fully tightened** and that any accessories are properly fitted and secured.
5. **The seat should be facing forwards.**
6. **Adjust the handlebars/tiller** so that the front wheels are facing forward.
7. **Raise one armrest to make access easier.**

8. 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 the 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:

1. 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.

2. 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).



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 !

Operation

Before using the scooter 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.**
- **Accessories are properly attached.**
- **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.

Driving the Scooter

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



1. Before you set out, do check the weather forecast. We suggest that you make sure you are wearing suitable clothing, whether the journey is long or short.

2. Range. The scooter has a limited range. Always ensure that the planned journey does not exceed the maximum range in the **Technical Specification** section and that the battery is fully charged.

3. If you are taking medication check with the doctor or physician that the ability to control the scooter will not be impaired and do not drink alcohol and drive.

4. Only use the scooter 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 scooters 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 armrest adjustment knobs are locked in correct position.

8. Check that you are properly seated.

9. Check the seat backrest is upright / correctly adjusted and locked in position.

10. Make sure that the shopping basket is not overloaded see **Technical Specification** section.

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 scooter will now move off. The further you push the paddle (either forward or reverse) the faster the scooter 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 the 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 the batteries and prevent the scooter accidentally moving, always switch off the power when the Scooter is not in use. (On/Off or ignition key).

Tip: *If you do leave the 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 Scooter - Hazards

Warning! Before driving the scooter you should be aware that, under certain circumstances it could become unstable and tip over. The 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 as specified in the **Technical Specifications** section.



1. Getting on and off the scooter: When getting on make sure that the scooter 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 the seat. Make sure you get off the scooter 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: Driving Uphill. Lean forward when going up. Make sure you have enough speed to climb the slope. **Do not stop or turn the scooter around whilst on a slope.** If you turn while climbing an incline, keep going until you reach a level area.

If you 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 sufficient. Driving uphill takes a lot of energy and if the level drops too low the scooter will cut out leaving you stranded.

5. Hills & Slopes: Going Down Hill. Lean back 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 make sharp turns on slopes or back down a slope.**

6. Terrain: Do not drive the scooter across deep, soft or slippery terrain (for example, soft dirt, sand, deep water, snow or loose gravel). You could get stuck. Also avoid rutted, bumpy ground and try to stay on well prepared hard 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 the 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 raining heavily, 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. **DRIVE WITH CAUTION AT ALL TIMES.**

10. Tyres: The scooter is fitted with solid tyres. Should they become damaged they should be replaced by the dealer. Do not attempt to replace them yourself.

11. Pavements: In the United Kingdom it is illegal to drive at more than 4 m.p.h. on the pavement. The 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 the scooter into a shower or steam room, and never hose or jet-wash it down. The 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 & Disassembling the 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 the dealer for advice on how best to transport the scooter in the 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! The Rascal Vippi 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.



The Vippi Scooter has been designed to be dismantled and stowed in the typical car boot. Contact the dealer for advice on how best to transport the scooter in the motor vehicle. To transport the Scooter you may need to disassemble. 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 whilst handling and assembling the Scooter.

Disassembly:

Turn the power off. (Turn Ignition 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.13 Pg.15).

Fold the seat arms down & the seat-back forward on itself for easy storage.

- **Remove the battery pack** by carefully lifting clear of the scooter chassis (Fig.14).
- **Warning, these parts are heavy!**

- **Remove the shopping basket** by lifting / sliding up (Fig.15).

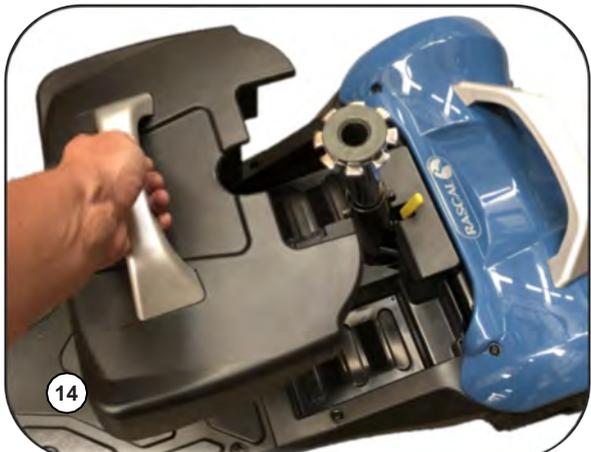
Lock the steering position by lifting up the yellow knob and then turn to the central position and release (Fig.16). Lock the steering with the wheels pointing straight forwards. See **Tiller Folding & Tiller Lock** section.

- **Fold the tiller unit down** by first loosening the tiller wheel (rotate anti-clockwise). Lower the tiller to the desired position and then re-tighten the wheel (clockwise). See **Tiller Folding & Tiller Lock** section.

- **Separating the Chassis.** The two halves of the chassis can also be split apart to make transportation easier. To do this, squeeze the Release Lever (yellow) as shown 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.18).

Avoid pinching your fingers between the two halves of the chassis.

- **Safely stow the component parts** securely and safely within the vehicle.



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** section.

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



Assembling the Scooter after Transporting



Warning! Assembling the scooter involves lifting and handling heavy parts. The dealer should advise you on the best way to assemble the 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 the scooter on sloping or uneven ground. It could run down the slope cause harm and injure someone.

Unfold the tiller unit up by first loosening the tiller wheel (rotate anti-clockwise). Raise the tiller to the desired position and then re-tighten the wheel (clockwise). See Tiller Folding & Tiller Lock section (Fig.19).

Re-connect the front and rear chassis sections by reversing the procedure in the previous section. (Fig.18 Pg.15). Align the front & rear section attachments points - U-section on the rear chassis marked with red labels (Fig.20). When located then pull up on rear handle to lock mechanism. The Release Lever will engage and move forward when secured (Fig.21). If in doubt or having difficulty with this feature then contact the dealer for assistance.

Unlock the steering position by lifting up the yellow knob and then turn to right position and release (Fig.22). See Tiller Folding & Tiller Lock section.

Lift the battery pack into position (Fig.14 Pg.15).

Replace the seat by squeezing the seat swivel lever (Fig.13 Pg.15) and lifting the seat into position on the seat post, the seat will 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.

Fold the seat-back into the vertical position and ensure that the armrests are correctly adjusted and secured.

Fit the basket and lock in position by pushing down on the top edge gently (Fig.15 Pg.15).



Air Travel

Airlines and other transportation providers may request information on how to isolate the batteries fully from the Scooter. This can be done by removing the battery pack and placing on an insulating surface. e.g. placing in a plastic container. Alternatively, insulating tape may be applied over the battery contacts on the underside of each removable pack.

Reassembly and connection should only be performed when the Scooter has reached the destination airport.

This operation should only be performed by the approved airport personnel!



The battery pack **IS COMPLIANT** with air transport regulations for passenger aircraft and hence is permitted for transportation in passenger aircraft based on the current IATA requirements (subject to Airline Regulations).

Battery Charging

NOTE: The battery pack is not user-serviceable. The dealer will replace batteries when they are exhausted and dispose of them in line with environmental regulations applicable at the time.



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

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

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

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

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 or battery pack appears damaged in any way then do not use and contact your dealer.

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 the charging location then either purchase a plug in RCD or consult a qualified electrician to verify that the charging location mains sockets are protected.

Warning! Do not attempt to open the battery box/enclosures, 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! 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 of the Battery Pack (Fig.23 Pg.18). Rotate the protective cover and push in the plug. When the Battery Pack 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.



Warning! Never connect any other accessory apart from the approved charger into the charging (XLR) port/socket on the scooter battery pack (Fig.23 Pg.18).





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 initially receive the scooter the batteries are only partially charged – always fully charge prior to use for a 12-14 hour period.

1. **Place the scooter or battery pack in an area that is dry and well ventilated.** Make sure a power point is nearby.
2. **Check the scooter is switched off and the key removed.**
3. **Check the mains switch is off.** Never connect or disconnect the charger with the mains switched on.

4. **Connect the charger to the charging point on the battery pack.**

5. **Connect the mains plug and switch on.**

6. **The lamp illuminates green when the charger is powered up,** (Fig.24) then red when it is charging. The charger lamp changes to green when the battery pack 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 the battery.

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

Guidelines to Prolong Battery Life

1. **After using the scooter always charge it at the end of the day** even after a short journey.
2. **If you plan not to use the scooter for a prolonged amount of time, place it on charge once a week,** for a 12 to 14 hour period.
3. **Always use the correct charger with the correct batteries** as recommended by the dealer.
4. **If the batteries have been flat for a long time** (about 2 months) it is recommended you contact the dealer before charging.
5. **Do not charge the Scooter / Battery Pack in the open / out of doors** – it may rain and the battery charger is not waterproof.
6. **Keep the scooter 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 the scooter or battery pack 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 and charge weekly when not in use.

User Maintenance

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

1. **Visually check the scooter for damage.**
2. **Visually check the tyres for inflation / 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 pack should be fully charged.**



Tip: Keep the scooter clean by using a damp cloth and soapy water – never use an excessive amount of water, a hose or jet wash to clean the scooter.



Warning! Important – Possible faults

After a short time operating the scooter will become familiar to the user.

If a function of the scooter changes and does not operate or function well, for instance the scooter does not accelerate or brake smoothly; the brakes are not holding on a slope or the steering feels different, then stop using the scooter and contact the dealer immediately. Explain to the engineer exactly the problem or concern.

Storage Conditions

We recommend storing the mobility scooter at a temperature range of 15°C (59°F) to 19°C (66°F) ensure a long service life of the product and batteries. The allowable temperature range to store the mobility scooter is -40°C(-40°F) up to 65°C (149°F). The allowable temperature range to store batteries is -15°C (-5°F) up to 40°C (104°F).

Servicing & Maintenance

1. The Rascal Vippi scooter is designed for minimal maintenance. It is recommended that the scooter is serviced at least once a year, by an approved Electric Mobility Dealer. If the scooter is used constantly then we recommend a twice yearly maintenance.

2. Ensure the engineer stamps the Service Log (see Page 26) on completion of all servicing. Keep all receipts for servicing and repairs with this handbook. This may add value when selling the scooter.

3. When the scooter is due for an 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 scooter 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 excessive 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 scooter 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

The Scooter Controller provides diagnostic information in the form of flash codes displayed on the red power LED on the dash battery gauge. The LED will flash a given number of flashes and then repeat the sequence after a pause. Upon switching on, the controller conducts a diagnostic test. This is quite normal. Provided that no fault is detected the LED will then be on constantly. If there is a fault, then the LED will continue to flash the pattern corresponding to the numbers below. e.g. if a repeating pattern of 2 flashes appears, then a motor fault would be expected as per the list below.

Number of Flashes	Indicated fault and Corrective Action
1	Battery needs recharging or bad connection with batteries. Check connections, and recharge batteries.
2	Bad motor connection. Request assistance from dealer who will check all connections between controller and motor.
3	Short circuit between motor and battery connection. Contact dealer.
4 & 5	Not used.
6	Key switch or associated circuit interruption. If fault continues contact dealer.
7	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	Controller fault. Inform dealer who will check connections & controller.
9	Scooter left in freewheel or has a bad parking brake connection. Engage drive, and switch scooter off and on. If this fails to cure the problem, check parking brake and ensure it stops the scooter. Inform dealer who will check brake and motor connections.
10	Excessive voltage detected at controller. Check battery connections.



Tip: If in doubt switch off and switch on – if this does not cure the fault contact the dealer. The 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 sequence appearing on the LED indicator; this will help the engineer to identify the problem before he calls to fix it. The dealer is there to assist you.

Troubleshooting Guide

This table is a guide to fault finding. The fault may be a simple fix. If you have any doubts phone the 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?• Freewheel has been selected while power is on? Ensure freewheel is not selected; switch off and on again.
<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">• Scooter 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 scooter 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

Battery Level: Ensure the scooter is fully charged before you start out on a journey and monitor the charge level indicated.

Handlebars: Do not carry or attach anything to the handlebars/ tiller. Anything attached to the handlebars will affect the control of the scooter and may adversely affect stability.

Floor Area : Do not use the floor area to carry items which could fall off or obstruct the movement of the scooter.

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 recommended by the dealer.

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 scooter. **Do not carry children as passengers.** The product is designed for single adult use only. Keep all packaging well away from children. They could be harmed.

Disposal



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

Frequently Asked Questions (FAQ)

I want to transport my scooter in a car.

You may need to use hoists and / or ramps to load and unload the Rascal Vippi scooter into and out of a car or similar vehicle. The dealer can advise you on the correct equipment to be used depending on the scooter and the physical capabilities. Please remember that the Rascal Vippi scooter is heavy and will require a large car, MPV or van to enable transportation.

Can I fit weatherproofing such as a canopy?

Please contact the dealer to discuss the various options available.

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 charged, and do not let the battery run completely flat.*
- *Ensure the batteries are fully charged at the end of the charging cycle.*
- *Batteries may not perform as well in very cold or very hot weather.*

Ask your dealer to test and replace the 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 operate to specification and degrade in performance.

What range can I expect?

The generally '*up to*' maximum theoretical range is recorded in the **Technical Specification** section. Remember, range can be affected by many things such as:

- Temperature - Cold/Hot weather can reduce the output of the batteries and scooter motor.
- Frequent stopping and starting.
- Type of terrain - Climbing hills and inclines takes more energy than driving on the flat.
- Weight of the person and objects carried.
- Tyre condition.
- The condition and state of charge of the batteries.
- Faulty or old batteries, or a faulty charger.

Always use the correct charger with the correct batteries and ensure the scooter is fully charged before using.

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

We estimate a service life of five years for this product (excluding batteries and tyres) provided it is used in strict accordance with the intended use as set out in this document and all maintenance and service requirements are met. The estimated service life can be exceeded if the product is carefully used and properly maintained and provided technical and scientific advances do not result in technical limitations. The service life can also be considerably reduced by extreme or incorrect usage. The fact that we estimate a service life for this product does not constitute an additional warranty.

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

Engineer's Checklist

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 control works correctly.
- Wear or damage to tyres and/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.
- 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 and regen brake system - Check adjustment and function.
- 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 scooter is roadworthy.
- Final road test.
- Clean the scooter.
- 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 Euro Ltd

Tel. 01460 258100

Email. sales@electricmobility.co.uk

If there are any incidents or component failures prior or during use that may compromise the safe operation of the scooter then report to Electric Mobility Euro Ltd.

Please also include in any written or verbal communications with product type, comments and/or other relevant information.

Additional Information

Owner's 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 the requirements. However, you should not drive a scooter in a public place if you cannot see well enough to ensure your own, and other's safety. Each scooter comes with a copy of the BHTA Highway Code. Please make sure you read it. Telephone BHTA on 020 7702 2141 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 **Safety Information** section of this manual. If in doubt contact the dealer. For Information regarding other Electric Mobility products contact the dealer or log on to the Electric Mobility Website - www.electricmobility.co.uk

Technical Information Regarding EMI

Important Technical Information regarding Electro-Magnetic Interference (EMI). Please read the following section thoroughly.

The intensity of interference from Electro-Magnetic 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 the "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).

The scooter has been tested and found to meet the required immunity level from Electro-Magnetic 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 the scooter will not be affected by outside electro-magnetic sources.



- Do not operate devices such as CB radios or mobile phones while the scooter is switched on.
- Avoid getting close to transmitter masts, such as television or radio masts.
- NOTE: you may experience interference when close to ambulance or fire stations, or other motor driven devices such as E-Bikes and E-Scooters. If the scooter starts to operate by itself switch it off and report this to the dealer.

The operation of any scooter may affect sensitive electronic circuits such as alarm systems or automatic doors in shops.

Technical Specification - Rascal Vippi Scooter

Wheelchair type	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)	1000 (39.4.) x 495 (19.5) x 890 (35.0)
Dimensions seat back and tiller folded	length x width x height mm (in)	1000 (39.4.) x 495 (19.5) x 450 (17.7)
Maximum carrying capacity	Kg (lbs) ((stone))	130 (286) ((20.4))
Mass (weight) including 14Ah batteries	Kg (lbs)	43.6 (96.1)
Mass (weight) of heaviest part	Kg (lbs)	15.4 (33.9)
Mass (weight) of battery pack	Kg (lbs)	9.9 (21.8)
Maximum shopping basket load	Kg (lbs)	4.5 (9.9)
Battery voltage and capacity	Volts and Ampere-hours	12V / 14Ah x 2
Type of seat	Comfort seat with folding backrest and adjustable arms	
Mass (weight) of seat	Kg (lbs)	7.9 (17.4)
Wheel dimensions front	mm (in)	190 (7.5) x 50 (2)
Wheel dimensions rear	mm (in)	200 (7.9) x 50 (2)
Type of tyres	Solid foam filled - puncture proof	
Maximum speed	Km/h (m.p.h.)	6.4 (4)
Minimum braking distance at max. speed	m (ft)	0.94 (3.1)
Range*	Km (miles)	19.1 (11.9)
Turn-around width	m (ft)	1.35 (4.4)
Maximum safe slope	Degrees of slope	6° -Do not exceed scooter may topple
Maximum climbing ability facing forward	Degrees of slope	6°
Ground clearance	mm (in)	35
Maximum obstacle climbing ability	mm (in)	50 (2)
Maximum safe descendable kerb height	mm (in)	50 (2)
Force to operate accelerator control	Newtons (lbf)	3.2 (0.72)
Force to operate freewheel lever	Newtons (lbf)	58.8 (13.2)
Ambient operating temperature range**	°C (°F)	2 (35.6) to 40 (104)

NOTE: This scooter meets the relevant requirements of ISO 7176:14 2008

*Range on full charge and flat ground.

**Do not charge battery outside this temperature range. Doing so can permanently damage battery.

Due to a policy of continual improvement, Electric Mobility Euro Ltd. 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

Notes

Rascal Vippi Scooter

Manufactured by



Electric Mobility Euro Limited, Canal Way, Ilminster, Somerset TA19 9DL
Telephone: 01460 258100 www.electricmobility.co.uk

E.and O.E. Issue 1 07/2021