

driveTM

ENVOY



US Drive Medical Design & Manufacturing, NY 11050
UK Drive Medical Ltd, HX5 9JP
DE Drive Medical GmbH & Co. KG, D-88316 Isny

CE Part No. ENVOY_IFU (Iss Jan 13)
Illustrations, photographs and specifications
may be subject to change.

The team at Drive Medical develops its products to give our customers the freedom to live independently. This encompasses their daily home life and provides them with the opportunity to enjoy an outing with family and friends. Our goal is to develop a range that will provide individuals with a chance to enjoy every day life.

Envoy Scooter Owner's Handbook

driveTM

QUICK REFERENCE GUIDE

Problem: Scooter will not switch on	
Symptoms:	Remedy:
Batteries not connected	Check batteries connected
Circuit breaker has tripped	Push circuit breaker to reset

Problem: Scooter will switch on but will not run	
Symptoms:	Remedy:
Flat batteries	Recharge battery
Charger plugged in	Unplug charger from scooter
Motor in freewheel mode	Push down freewheel lever

Problem: Scooter appears slow	
Symptoms:	Remedy:
Flat batteries	Recharge battery
Speed setting slow	Turn up speed dial

Problem: Seat moves whilst in use	
Symptoms:	Remedy:
Seat not locked in position	Slowly rotate the seat until it drops in place and is secure.

Problem: Tiller appears loose or will not swivel freely	
Symptoms:	Remedy:
Tiller adjustment knob loose	Tighten tiller adjustment knob

Problem: Horn sounds involuntarily / automatically	
Symptoms:	Remedy:
The scooter has diagnosed a fault	Ensure the wigwag paddle is released and switch the scooter off and on. Recharge batteries if error persists.

If the scooter has diagnosed a fault the battery gauge LED will flash in sequence or a number of LEDs will flash. If this occurs, count the number of flashes and refer to the table below.

1. **Low Battery.** Charge batteries as soon as possible.
2. **Bad Motor Connection.** Check all connections.
3. **Battery Short Circuit.** Check all connections.
6. **Scooter Inhibited.** Remove charger from charging scooter.
7. **Wigwag Paddle.** Release paddle, switch off the scooter and restart without pressing the paddle.
8. **Controller Fault.** Restart scooter with ignition key.
9. **Brake Fault.** Check scooter is not in freewheel mode.
10. **Excessive voltage.** Check the battery connections.

If any other errors are shown contact your dealer.

CONTENTS

1. PREFACE

2. SAFETY NOTICE

2.1 Before Driving

2.2 Whilst Driving

2.3 Labelling

2.4 Electromagnetic Interference

3. PARTS INTRODUCTION

4. OPERATION

4.1 Control Panel

4.2 How to Operate Your Scooter

5. DRIVING ON THE ROAD

6. BATTERY CHARGING AND CARE

7. INSPECTION AND MAINTENANCE

7.1 Checks

7.2 Service Record

7.3 Battery Pack and Tyres

7.4 Cleaning

7.5 Storage

7.6 Moving About

8. TROUBLESHOOTING

9. SPECIFICATION

10. WARRANTY

11. APPENDIX: SERVICE RECORD

1. PREFACE AND INTRODUCTION

- Please carefully read this owner's handbook before using the scooter to ensure that you operate the scooter safely. Improper use of the scooter could result in damage, injury or traffic accidents.
- This handbook also advises how to get the most out of your scooter by giving comprehensive operating, assembly and maintenance instructions for the scooter.
- A repair and maintenance record chart and warranty information is included with this handbook. Please keep it in a safe place or with the scooter.
- If someone else uses the scooter make sure that you provide him or her with this handbook for their consideration.
- As designs change some of the illustrations and pictures in the manual may not correspond to the scooters that you purchased. We reserve the right to make design modifications.
- The Envoy scooter has been designed and manufactured to provide a comfortable and secure yet affordable solution for some mobility requirements. It is suitable for indoor and outdoor use. It can be used indoors and on the pavement where the environment permits and when the scooter is set to the indoor speed setting. As defined the Road Traffic Act 1988, the 4mph Envoy is a class 2 scooter and the 6mph and 8mph Envoys are class 3 scooters.
- There are three models available; a 4mph version suitable for pavement use, and 6mph and 8mph versions suitable for road and pavement use.

2. SAFETY

Before Driving

- The user needs to be familiar with the use and operation of this scooter before driving.
- The 6mph and 8mph versions may only be driven on the pavement or pedestrian areas at speeds up to 4mph (6.4kph). Use the High / Low button on the lower setting to ensure you do not exceed this speed. The 6mph and 8mph versions may be driven on single carriage roads with the button set to High. This will allow speeds up to 8mph (12.8kph).
- The 4mph version may be driven indoors or outdoors on pavements and pedestrian areas. It may be driven on the road where no pavement exists or to cross the road.
- Be aware of traffic and other road users when crossing or using roads.
- Never ride on motorways or dual carriageways.
- Use extreme caution when driving your scooter in busy areas such as shopping malls.
- Do not drive the scooter under the influence of drink or drugs, or when you are tired. Driving under the influence of alcohol or drugs may be an offence under the Road Traffic Act.
- Be careful when using the scooter in low light.
- Before using the scooter in busy or hazardous environments, familiarise yourself with the operation of the scooter. Practice in an open and safe area which is free from hazards and other people. Reduce your speed to a minimum for your initial practice.
- Practice operating your vehicle

Before using the scooter in busy or potentially dangerous areas, familiarize yourself with the operation of your scooter. Please practice in a wide and open area like a park. In order to avoid accidents with your scooter whilst driving, bear in mind driving motions such as accelerating, braking, turning, reversing and gradients.

1. Reduce your speed to a minimum for your initial practice
2. For safety, ensure somebody accompanies you when driving on the road for the first time

- 3. Only use the higher speed setting when you are confident that you can easily operate and control your scooter
- The Envoy scooter can only be used by one person at a time. Do not carry passengers on your scooter (including children)
- Maximum user mass (weight capacity)
 - The maximum weight that can be carried is 160kg / 25 stone (including occupant and any goods). Nithsdale Wheelchairs
 - Do not use the scooter to carry or haul goods.

Whilst Driving

Do not move your body out of the vehicle whilst moving

- Such action may cause you to lose your balance and risk injury from falling
- Pay attention that your clothing and other garments do not get tangled or caught in the wheels

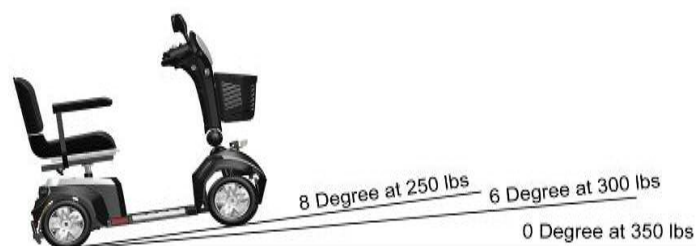
Do not use your vehicle in the following environments

- On roads with heavy traffic or roads that are muddy, gravelly, bumpy, narrow, snowed over or icy.
- Places where you might get the wheels stuck.
- On canal towpaths which are not guarded by any fence or hedge.
- Do not drive at night or if it is raining heavily, snowing, misty or windy.
- Do not drive your vehicle in an 'S' pattern or make erratic turnings.
- Do not take the scooter onto escalators.
- Under no circumstances should the scooter be used as a seat in a motor vehicle (e.g. cars, buses, trains, etc)

Gradients and Drops

- Do not drive on roads with large drops or potholes. Such drops or potholes may cause damage and/or injury.
- Do not cross wide water gutters where there is a risk of getting the wheels stuck.

- Always use a low speed setting when ascending or descending a gradient.
- Do not drive on gradients steeper than those stated on the diagram below:



Warning



Do not set in freewheel mode when driving on a gradient.

Always re-engage the anti-freewheel device before use. Failure to do so may result in injury.

- To protect your safety, the power will automatically cut off and the electromagnetic (EM) brake will activate while you are driving down gradients over 15°. This will limit the speed to a safe level. Switch the power off and on again to restart your scooter.

Step and Obstacle Climbing

- The ground clearance of the scooter is 65mm (2.5") to its lowest point. The ground clearance in the centre of the scooter is 80mm (3").
- To climb an obstacle when moving, start moving at least 50cm (20") from the obstacle and mount the obstacle head on (not at an angle). However, this method is not recommended as this may cause damage and/or injury.

Warning



Mounting an obstacle at speed will cause a jolt to the scooter which may cause discomfort or injury to the user. If you are in any doubt, do not mount the obstacle whilst moving.

Labelling

- Please carefully read all labels applied to the scooter before driving. For future reference, do not remove them from the scooter. The labels are also shown below:

CAUTION

- To adjust tiller angle, press the paddle and pull the tiller.
- Do not adjust the tiller angle, whilst the scooter is moving
- Always check the tiller is locked in the correct position before using
- Do not lean on the tiller whilst mounting or dismounting from the scooter

Located on tiller

CARELESSNESS CAUSES FIRE

DRIVE MEDICAL HX5 9JP

To comply with the Furniture and Furnishings (Fire) (Safety) Regulations: This article does not include a Schedule 3 interliner.

All foams, fillings and composites have been tested to ensure compliance with the relevant ignitability test. All covers and fillings have been tested to ensure that they are cigarette resistant. All covers have been tested to ensure that they are match resistant.

Further details are available
From your retailer.

Located on seat

Electromagnetic Interference

- Scooters may be susceptible to electromagnetic interference (EMI) from sources such as mobile phones, walkie-talkies, TV and radio broadcast stations and amateur radio sets. In some cases, there is a risk this interference may cause involuntary movement of the scooter. The scooter has been tested and passed to withstand interference to a level of 20V per metre.
- Be aware that the above sources may cause involuntary movement due to EMI. Exercise caution whilst using the aforementioned devices and avoid close proximity to TV and Radio broadcast stations.
- The addition of components or accessories may effect the EMI susceptibility of the scooter. Do not fit accessories other than Drive Medical authorised accessories.

Product Code: MS050WH
Serial Number:

WARNING:
EMI
REFER TO OPERATORS MANUAL FOR INFORMATION
THIS UNIT HAS ACHIEVED 20 V/m EMI TESTING
MADE IN TAIWAN

Drive Medical Ltd (HX5 9JP)

Maximum User Mass 160kg

Symbol Explanation:



Dispose of as Electronic Waste

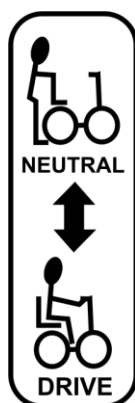


Risk of Electromagnetic Interference (EMI)
Beware of EMI emitting devices such as mobile phones, commercial broadcast radios and radio / TV transmitters



CE Mark showing the device complies with Medical Device Directive EEC/93/42.

Located on rear



Symbol Explanation:

Push the freewheel lever forward in to neutral (to allow the scooter to be manually pushed)

Push the freewheel lever back in to drive (to allow the scooter to be driven by the motor)

Located by freewheel lever

3. PARTS INTRODUCTION



4. OPERATION

4.1 Control Panel



The above control panel is installed on the Envoy 6mph versions. The 4mph version does not include the switches marked with a " * ".



The above panel is installed on the Envoy 8mph version.

4.2 How To Operate Your Scooter

- Key Ignition.** The key ignition acts as the power switch for the scooter. To switch the power on, turn the key clockwise and control panel should illuminate. To switch the power off, turn the key anticlockwise, after which the control panel should switch off and the key can be removed.



Do not turn the ignition off whilst driving as this will lead to an emergency stop and possible risk of damage or injury.

- **Wigwag Paddle.** The scooter is propelled by the user operating the wigwag paddle at the bottom of the control panel. To move the scooter forward, move the right hand side of the paddle towards the user. To reverse the scooter, move the left hand side of the lever. The further the paddle moves, the faster the scooter will travel. To stop the scooter, release the wigwag paddle and the electromagnetic brake will apply automatically.



Warning

Do not push both left and right hand sides of the wigwag simultaneously. You will not be able to control the scooter.

- **Braking.**
- The electromagnetic brake will stop the scooter when the wigwag paddle is released. The brake is also automatically applied when the scooter is switched off.
- The 8mph version has a secondary cable brake which the user can use in an emergency, by operating the cable brake located on the left hand side of the tiller handlebars.



When on a gradient, never set the vehicle to freewheel mode. The brakes will not be applied.

- **Speed Dial (4mph and 6mph versions).** The top speed of the scooter can be increased by turning the dial clockwise, or reduced by turning the dial anticlockwise.
- **Speed Setting (8mph version).** The top speed of the scooter can be adjusted by pressing the Increase Speed and Decrease Speed buttons. The top speed is shown on the Speed Gauge.



Do not adjust the speed setting whilst driving as this could result in loss of control. Do not set the highest speed whilst driving indoors.

- **High / Low Speed Setting.** When the scooter is used indoors or in a pedestrian environment (such as on the pavement or in a shopping mall) the Low speed setting should be engaged. When the scooter is used on the road, the high speed setting may be engaged.

4mph / 6mph versions: To engage the Low Speed Setting, press the right half of the button (marked with a dot) and this will limit the scooter's top speed to 4mph. To engage the High Speed Setting, press the left half of the button (marked without a dot) and this will allow the scooter to have a 6mph or 8mph top speed.

8mph version: Press the Indoor Outdoor Switch so that the 'L' is lit for low speed or the 'H' is lit for high speed.

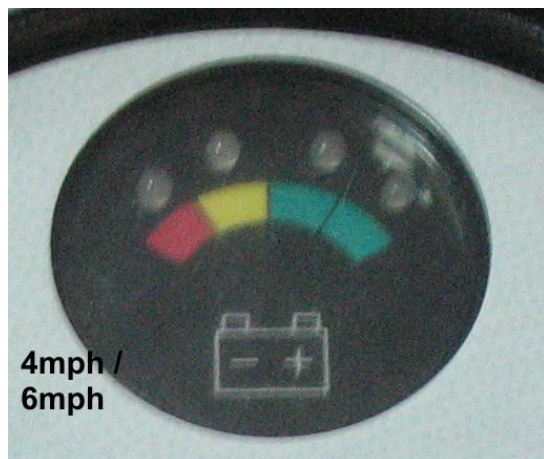


Warning

Always engage the Low Speed setting when travelling indoors or the pavement. This is a legal requirement.

- **Horn Button.** Press the horn button to sound the horn, Release the button to stop the horn.
- **Indicator Buttons.** Use the relevant indicators when making a turn to show your direction of travel. Push the Indicator button in the direction of travel required once to operate the relevant indicators. Repeat to stop the indicators.
- **Lights Button.** Press the Lights button once to switch on the lights. Press the button again to switch off the lights.
- **Hazard Warning Button.** Press the Hazard Warning button once to switch on the warning function. Press the button again to switch off the function. When operating the Hazard Warning will flash all of the indicators and sound the horn.

- **Battery Gauges**



The top battery gauge is fitted to the 4mph and 6mph versions, and bottom battery gauge is fitted to the 8mph version.

The battery gauges (shown above) on the control panel lights light LEDs to show remaining power:

Green - 40% - 100% capacity

Yellow - draining charge (10% - 30%)

Red - immediate recharge is necessary.

The remaining power indicated by the battery gauge will vary by the driving time incurred and how you drive. Repeated starting, stopping and climbing will consume power more quickly.

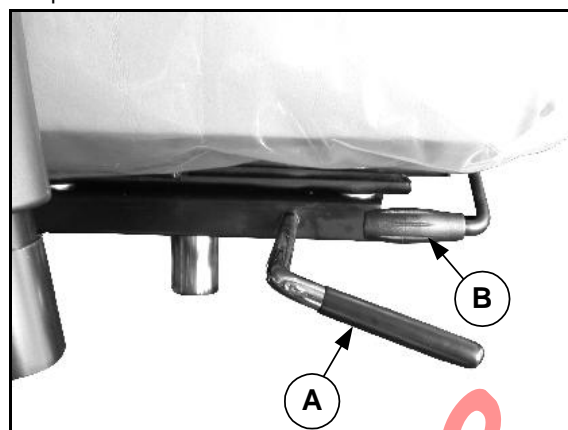
4mph / 6mph version. If the leftmost LED is flashing, this means the scooter has encountered a problem. The LED will flash a number of times then pause. If this occurs, switch off the scooter and restart ensuring that the wigwag paddle is released and the freewheel lever is engaged to DRIVE. If this does not solve the problem try recharging the batteries. If the problem still persists, contact your dealer.

8mph version. If a number of LEDs are flashing, this means the scooter has encountered a problem. If this occurs, switch off the scooter and restart ensuring that the wigwag paddle is released and the freewheel lever is engaged to DRIVE. If this does not solve the

problem try recharging the batteries. If the problem still persists, contact your dealer.

- **Seat.**

The seat can rotate 360° and locks in 45° settings. To rotate, lift up the lever (A) located underneath the right hand side of the seat and swivel seat. Release the lever and carry on swivelling the seat until it locks in position.



- You can adjust the amount of legroom on the scooter by sliding the seat back and forth. To slide the seat, lift up the seat sliding handle (B). Then adjust the seat to correct position, release the handle and continue sliding the seat until it locks in position.

Attention.



Return the seat to the forward position before driving.

- **Armrest Adjustment.**

To adjust the angle of the armrest, flip up the armrest and alter the position of the jam nut showing, using a spanner.

To adjust the armrest width, first slacken off the knobs shown below. Then adjust the armrests to the required width and retighten.



- **Circuit Breaker.** The circuit breaker may trip when the scooter is under excessive load or when travelling on steep inclines. It will be more prone to tripping when the scooter is low on battery charge. Under normal conditions the circuit breaker button will protrude by 2mm – 3mm. If the circuit breaker has tripped the button will protrude by 7mm. To reset the circuit breaker, push the button in and the scooter should operate as normal.



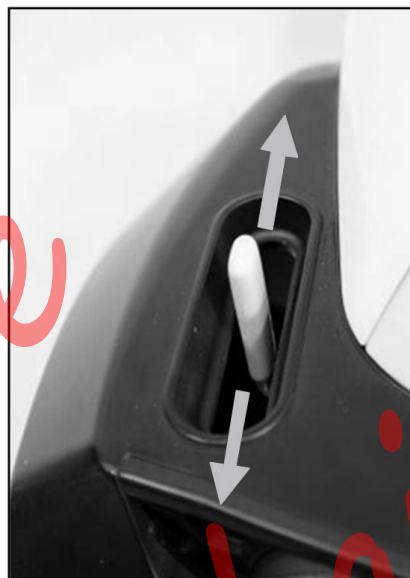
- **Tiller Adjustment (4mph / 6mph version)**
Turn the tiller adjustment knob anticlockwise (towards the scooter seat) to slacken off the tiller. Move the tiller to the required position and retighten the knob by turning clockwise (towards the front of the scooter).
- **Tiller Adjustment (8mph version)**
Push or pull the lever (as shown below) on the tiller whilst adjusting the angle of the tiller. Release the lever to lock the tiller in position.



- **Freewheel Lever**

The freewheel lever allows the automatic brake to be disengaged so the scooter can be manually pushed and/or manoeuvred. When in freewheel mode the brakes are not applied so it should not be used when:

1. Somebody is sat on the scooter
2. If the scooter is left unattended
3. When the scooter is on a gradient



Engaged (Drive) Mode:

Push the lever UP completely and the scooter can be driven by the motor.

Freewheel Mode: Pull the lever DOWN and switch the scooter off. The scooter can now be pushed / moved manually.



Warning

The lever should only be set to FREEWHEEL when on flat ground and unoccupied by the user. Otherwise, there is a risk of damage or injury.

5. DRIVING ON THE ROAD

• Starting and Driving

1. Ensure the seat is installed correctly and in the forwards position.
2. Ensure the tiller and seat are adjusted for a comfortable driving position.
3. Fold down the armrests so you can place your arms on them.
4. Switch the ignition on. If necessary, switch on the headlights.
5. Check the battery indicator to see if there is enough power for your trip. If you have any doubt about the remaining power, please recharge the batteries before departure.
6. Set the speed dial to a setting you are safe and comfortable with.
7. Check the wigwag paddle works correctly.
8. Check the electromagnetic brake works correctly.
9. Ensure it is safe around you before you drive on the street or road. Engage the low speed setting if you are driving on the pavement or indoors.



Attention

1. Do not push both sides of the wigwag paddle simultaneously. This may leave you unable to control your scooter, and could cause damage or injury.
2. Do not switch the ignition off while driving as this will lead to an emergency stop and possible risk of damage or injury.
3. Do not set to the highest speed setting whilst driving indoors.
4. Do not adjust the speed setting whilst driving. A sudden change in speed may cause danger to yourself and others, and may cause damage to your scooter.
5. Do not place magnetic devices near the scooter's electrical parts as this could affect the safe operation of the scooter.
6. Be careful while driving in heavy traffic or in crowded areas.
7. Whilst reversing the vehicle, beware of people or objects behind you. When reversing, the scooter will sound an audible warning alarm.

6. BATTERY CHARGING AND CARE

Follow the procedure below:

1. Switch the ignition off.
2. Connect the charger power cord in to the mains socket.
3. Open the charging socket cap on the scooter tiller. Then connect the charger round plug in to the scooter charging socket located on the left hand side of the tiller.
4. Switch the charger on at the mains.
5. Both the charger's red and orange LEDs will be lit when charging commences. The charging duration will be around 12 hours. To ensure optimum performance an 18 hour charge is recommended. We do not recommend the scooter be charged for longer than 24 hours.
6. Both the charger's LEDs will be lit during the charging process. The orange LED will turn green when bulk charging is complete after which the charger trickle charges the batteries. Trickle charging optimises the batteries and is necessary to maintain or improve battery performance.
7. Switch off the charger, disconnect the power cord and round plug from the charger socket on the scooter.

The charging socket on the tiller is shown below



ATTENTION

- If only a red LED is lit on the charger, then the scooter is not connected.
- If no LEDs are lit on the charger, then the charger is not connected to the power or it is defective.
- Please only use a charger supplied with the scooter. You may damage the battery and / or scooter if you use an incorrect charger.
- Always charge the battery to its full capacity every time.
- Do not charge in temperatures below -10°C or above $+50^{\circ}\text{C}$ as the charger may not work efficiently and the batteries may become damaged.



WARNING

- Keep away from flammable objects while charging as it may lead to fire or battery explosion.
- Do not smoke while charging as the battery may release hydrogen gas. Always charge the batteries in a well ventilated environment which is not in direct sunlight. Do not charge in surroundings where it is humid, wet or damp.
- Do not handle the charger, scooter or mains socket with wet hands, as this could lead to electric shock.

Battery Care

1. You should recharge the batteries after each time the scooter is used to ensure maximum battery range. The batteries should be charged at least once a week even if the scooter is not used.
2. After charging or replacing a new battery, drive the scooter for a short period to ensure battery capacity is sufficient.
3. In cold environments, the battery may respond more slowly and range will be reduced.
4. When driving on gradients, the battery gauge will fluctuate. This is a normal occurrence.
5. Battery range is reduced when driving up gradients or on rough terrain, as the scooter uses more power.

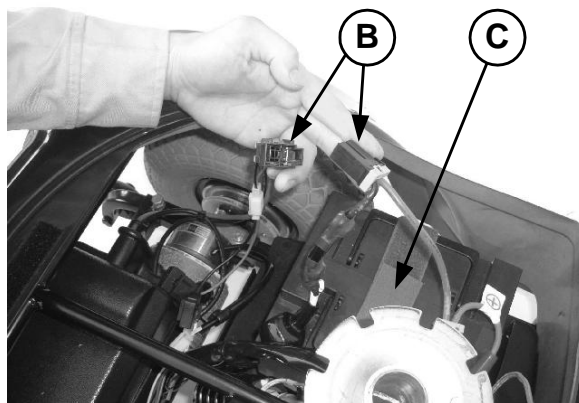
6. The batteries should not be charged for more than 24 hours.
7. The batteries are sealed, and so do not need topping up with water.
8. The batteries should be checked periodically for cleanliness. Please refer to the section later in the handbook.

Battery Replacement

It is natural for the battery capacity to reduce with time, even if the battery is charged as directed above. When the battery range is about half of its peak performance we recommend that the batteries are changed. Continuing to use an old battery will result in a rapid reduction in the range of the scooter and can cause excessive wear and tear on other parts of the scooter. It is recommended that batteries are replaced in pairs, and that these are fitted by your dealer.

Removing the Batteries

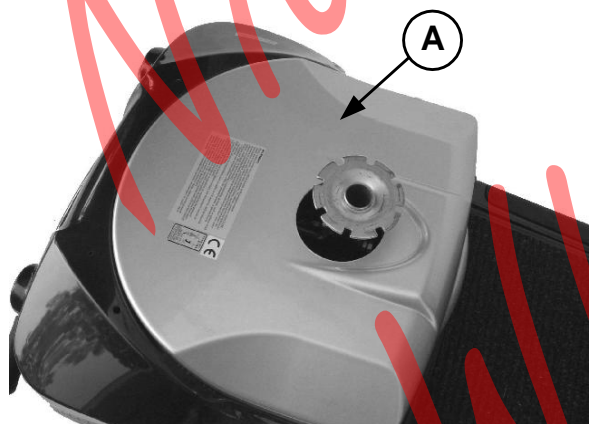
1. Switch off the scooter at the ignition and remove the seat.
2. Lift up the battery cover (A)
3. Disconnect the black battery connectors (B) and red battery connectors.
4. Remove the velcro straps (C) from the battery and pull the battery out.



Cleaning the Battery

If the batteries are contaminated by water, battery acid, dust or other substances, they will discharge quickly. The batteries supplied with the scooter are sealed and as such are maintenance free with no risk of battery leakage. Please follow the steps below to clean the battery:

1. Remove the batteries following the procedure above.
2. Clean the battery with a clean cloth. If the terminal is covered by white powder, wipe it cleaning using warm water.



7. INSPECTION AND MAINTENANCE

7.1 Checks and Maintenance

Your power scooter is designed for minimal maintenance. However, like any motorized vehicle it requires routine maintenance. To keep your **scooter** for years of trouble-free operation, we recommend you follow the following maintenance checks as scheduled.

Weekly Checking

Check the following items weekly or before driving. If you find anything abnormal contact your Drive Medical Dealer for further inspection or advice.

- **Tiller.** Ensure it is not loose and can turn smoothly.
- **Speed control dial.** Ensure it adjusts freely.
- **Wigwag paddle.** Ensure scooter moves when lever is pressed, and stops when lever released.
- **Motor.** Check for any abnormal noise and electromagnetic brakes work correctly.
- **Freewheel Lever.** Ensure it works correctly.
- **Seat.** Ensure it swivels and locks easily.
- **Tyres.** Check tyre tread depth and for any signs of damage such as cracking.

Monthly Checks

- Visually inspect the controller harnesses. Make sure that they are not frayed, cut or have any exposed wires.
- Make sure you keep the controller clean whilst protecting it from rain or water. Never hose off your scooter or place it in direct contact with water.
- Keep wheels free from lint, hair, sand and carpet fibres.
- Visually inspect the tyre tread. If less than 1mm (1/32"), please have your tyres replaced by your local dealer.
- All upholstery can be washed with warm water and mild soap. Occasionally check the seat and back for sagging, cuts and tears. Replace if necessary. Do not store your scooter in damp or humid conditions as this will lead to mildew and rapid deterioration of the upholstery parts.

- All moving mechanisms will benefit from simple lubrication and inspection. Lubricate using petroleum jelly or light oil. Do not use too much oil, otherwise small drips could stain and damage carpets and furnishings etc. Always perform a general inspection of the tightness of all nuts and bolts.

Semi-Annual Checks

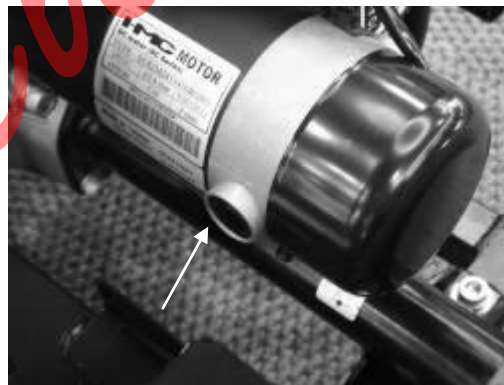
Check the motor brushes. We recommended that your authorized dealer inspects the brushes every six months or sooner if your power scooter is not operating smoothly. If inspection determines excessive wear on the brushes, they must be replaced or motor damage will result.

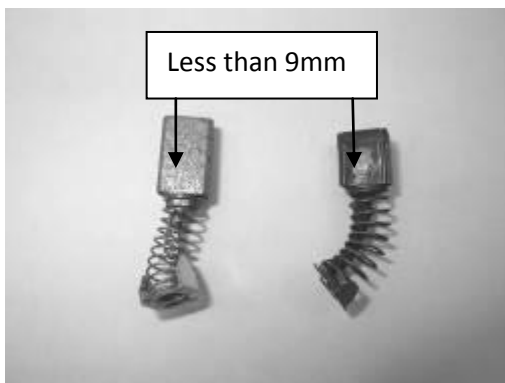
The brushes should be inspected for wear and colour of the braiding inside the spring. If the braiding is dark brown, red, silver, purple or gold then the brush needs replacing.

Warning! Failure to maintain the brushes could void the power scooter warranty.

To inspect or replace the motor brushes:

1. Unscrew the motor brush caps (by using a screwdriver on the caps shown by the white arrow).
2. Remove the brushes.
3. Inspect the brushes for wear (replace if less than 9mm).
4. Replace the brushes if necessary.





- Inspect the state of the battery terminals every six months. Make sure that they are not corroded and the connections are tight. Periodically apply a thin film of petroleum jelly on the surface of terminals to guard against corrosion.

7.2 Service Record

To ensure your scooter is correctly serviced take it to your Drive Medical dealer for regular servicing. We recommend that scooters are serviced at least annually, and your dealer may charge a fee for this.

A copy of the service record is at the back of this handbook. Copies of the servicing schedule are available from Drive Medical to authorised parties on request.



Even if the scooter has not been used, it should still be serviced annually.

7.3 Battery Pack and Tyres

- For information on the battery pack, please read section 6 on Battery Charging and Care.
- Tyre condition will be affected by how you drive the scooter and what terrain it is driven on.
- The 8mph version comes with pneumatic tyres, with a recommended inflation pressure of 26 psi (1.8bar) The tyre pressure should be periodically checked.
- The 4mph and 6mph versions come with puncture proof PU solid tyres. Therefore there is no need to check tyre pressure on these models.

7.4 Cleaning

- The scooter should be cleaned periodically, especially if you tend to drive on sand, gravel or in other adverse environments.
- Use a soft, wrung dry cloth to keep your scooter clean and dust free. Use a damp cloth and mild detergent to clean the scooter.



Warning

- Do not use a hose pipe or splash water directly on to the scooter.
- Do not use petrol, solvents or vaporising solutions as these may damage body panels. Do not use wax
- Ensure the charger is unplugged and the scooter switched off before cleaning the scooter.

7.5 Storage

- Ensure the scooter is stored with the seat set in the forward position, the scooter switched off with the batteries and charger disconnected.



Store the scooter in environments which are free from direct sunlight and water or moisture.

7.6 Moving About

1. Switch off the scooter using the ignition key and dismount from the scooter. We also recommend removing the seat and batteries prior to moving.
2. Lift the scooter by the chassis only.
3. For your safety ask for help if required. You will need two or more people when moving or lifting the scooter as a whole.



Never lift the scooter by the bumpers or body panels, as this can cause injury or damage.

8 TROUBLESHOOTING

- The troubleshooting guide is also featured on page 1 of the Owner's Handbook.

Problem: Scooter will not switch on	
Symptoms:	Remedy:
Batteries not connected	Check batteries connected
Circuit breaker has tripped	Push circuit breaker to reset

Problem: Scooter will switch on but will not run	
Symptoms:	Remedy:
Flat batteries	Recharge battery
Charger plugged in	Unplug charger from scooter
Motor in freewheel mode	Push down freewheel lever

Problem: Scooter appears slow	
Symptoms:	Remedy:
Flat batteries	Recharge battery
Speed setting slow	Turn up speed dial

Problem: Seat moves whilst in use	
Symptoms:	Remedy:
Seat not locked in position	Slowly rotate the seat until it drops in place and is secure.

Problem: Horn sounds involuntarily / automatically	
Symptoms:	Remedy:
The scooter has diagnosed a fault	Ensure the wigwag paddle is released and switch the scooter off and on. Recharge batteries if error persists.

If the scooter has diagnosed a fault the battery gauge LED will flash in sequence or a number of LEDs will flash. If this occurs, count the number of flashes and refer to the table below.

- Low Battery.** Charge batteries as soon as possible.
- Bad Motor Connection.** Check all connections.
- Battery Short Circuit.** Check all connections.
- Scooter Inhibited.** Remove charger from charging scooter.
- Wigwag Paddle.** Release paddle, switch off the scooter and restart without pressing the paddle.
- Controller Fault.** Restart scooter with ignition key.
- Brake Fault.** Check the scooter is not in freewheel mode.
- Excessive voltage.** Check the battery connections.

If any other errors are shown contact your dealer.

9 SPECIFICATION

Model Reference	Envoy
Dimension (L x W x H)	1210 x 600 x 1020mm 47.5" x 23.5" x 40"
Total Weight Without battery	94kg - 100kg (207 - 220lb) 70kg (154lb)
Propulsion motor	350W / 0.47hp (Envoy 4) 470W / 0.63hp (Envoy 6) 500W / 0.67hp (Envoy 8)
Battery	33ah - 50ah 12V x 2
Charger	4A 24V
Controller	PG S-Drive 70A - 120A
Front Suspension	Yes
Rear Suspension	Yes
Front Tyre	260 x 85mm PU tyre
Rear Tyre	10" x 3.5"
Anti-tip Wheel	50mm / 2"
Top Speed (Forward)	4mph / 6.4kph (Envoy 4) 6mph / 9.7kph (Envoy 6) 8mph / 12.8kph (Envoy 8)
Climbing angle	8°
Cruising range (see note)	30 miles
Min. turning radius	1350mm / 53"
Ground clearance	65mm
Kerb climbing ability	65mm
Obstacle climbing ability	65mm
Max. load weight (including goods)	160kg (25 stone)

Remark:

Drive Medical reserves the right to modify the specification if necessary. The final specification is subject to the individual scooter you purchase from your dealer.

Note:

The maximum driving distance is based on an ambient temperature of 20°C, a 100kg driver, a fully charged battery and a constant driving speed at 12.8kph/h with 70% battery power discharged. The surface is flat and even.

10 VIN NUMBER

To ensure the correct after sales service and warranty service support, please write down the scooter serial number. The serial number is located on the back right-hand side of the frame.

VIN Number	
Motor S/No.	
Controller S/No.	

Also, note your Drive Medical dealer below:

Dealer	Nithsdale Wheelchairs
Address	
Postcode	
Telephone	

11 WARRANTY

There is a comprehensive twelve-month warranty from the date on which your new scooter is delivered. The warranty covers the scooter for repairs or replacement during this period. For more detail, please see the Warranty Conditions below.

Warranty Conditions:

1. Any work or replacement part installation must be carried out by an authorized Drive Medical dealer / service agent.
2. To apply the warranty should your scooter require attention please contact the designated service agent listed above.

3. Should any part of the scooter require repair or full or part replacement, as a result of a manufacturing or material defect within twelve months of receiving the scooter, replacement parts will be supplied free of charge.

Note: This guarantee is not transferable

4. Any repaired or replaced parts will be covered by this warranty for the balance of the warranty period on the scooter.
5. Consumable items supplied will not generally be covered during the normal warranty period unless such items require repair or replacement clearly as a direct result of a manufacturing or material defect.

Such items include (among others):

upholstery, tyres and batteries.

6. The above warranty conditions apply to brand new scooter purchased at the full retail price. If you are unsure whether your scooter is covered, check with the service agent.
7. Under normal circumstances, no responsibility will be accepted where the scooter has failed as a direct result of:
 - a) The scooter or part not having been maintained in accordance with the manufacturer's recommendations.
 - b) Failure to use the manufacturer's specified parts
 - c) The scooter or part having been damaged due to neglect, accident or improper use
 - d) The scooter or part having been altered from the manufacturer's specifications or repairs having been attempted before the service agent is notified

Please note your local service agent's contact details in the previous box. In the event of your scooter requiring attention, contact them and give all relevant details so they can act quickly.

The manufacturer reserves the right to alter without notice any weights, measurements or other technical data shown in this manual. All figures, measurements and capacities shown in this manual are approximate and do not constitute specifications.

Appendix A: Service Record

YEAR	1	2	3	4	5	YEAR	1	2	3	4	5
Service Dates						Service Dates					
Controller						Upholstery					
On/off switch						Seat					
Control Lever						Back					
Braking						Armrests					
Recharge point						Electrics					
Batteries						Connections condition					
Levels						Lights					
Connections						Test run					
Discharge test						Forwards					
Wheels and Tyres						Reverse					
Wear						Emergency stop					
Pressure						Left turn					
Bearings						Right turn					
Wheel nuts						Slope test					
Motors						Over obstacles					
Wiring						List Items repaired					
Noise											
Connections											
Brake											
Brushes											
Chassis											
Condition											
Steering											