EN

INVADER

The ultimate off-road mobility scooter



USER MANUAL



INVADER

The ultimate off-road mobility scooter

Become Limitless





Learn more about your Invader today...

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1 Welcome

Congratulations on purchasing your Scooterpac Invader. With regular maintenance and proper operation your Invader will give you many years and countless miles of rewarding experiences. This manual contains the information that you and your authorised Scooterpac service centre will need to keep your Invader in good working order.

If you have any questions, please contact the Scooterpac dealer that supplied your Invader and they will be happy to help you.

Please fully charge your scooter, at least once a week to maintain battery life & maximise performance. Even when the scooter isn't in use.

This Invader was originally supplied by:

Dealer Name _____

Address 1 _____

Address 2 _____

Town/City _____

Postcode _____

Phone Number _____

E-mail Address _____

Website _____

2 Essential Product Information

Please ensure that this is read prior to the Invader being used.

This product has been developed solely for disabled use and is designed to achieve 4mph on the pavement, and 8mph on roads. The separate ignition is for off-road use on private land. This scooter is purchased and driven on the condition that this is understood and accepted. The following information relates to the secondary ignition switch to regulate the off-road speed.

HOW TO TELL IF THE SPEED OVERRIDE KEY IGNITION IS TURNED OFF OR ON:



Figure 1 – Speed override switch (ON)



Figure 2 – Speed override switch (OFF)

When the speed override key ignition is turned **ON**, the following will happen on the 3 Speed Switch (see Section 8 – Handlebar Controls Guide):

1. When the above is turned **ON** the override function will be enabled. This will allow the user to achieve speeds of up to 16mph. This speed can be achieved in ALL speed switch modes. This is for **off-road use ONLY**. Our terms and conditions for off-road use can be found in the Product Disclaimer, enclosed in the Welcome Pack.

When the speed override key ignition is turned **OFF**, the user can only achieve a maximum of 8mph. The 3 Speed Switch settings become:

1. **Setting 1 – Pavement speed** – The user will be able to achieve a maximum of 4mph.
2. **Setting 2 – Safety switch** – This switch does not do anything when the speed override ignition is **OFF**, and acts as a safety buffer between the 4mph and 8mph speed modes.
3. **Setting 3 – Road speed** – The user will be able to reach a maximum of 8mph, for on the road use.

***PLEASE NOTE* – When using off-road, to ensure maximum battery performance, we highly recommended the speed override switch is turned on.**

3 Legal

The **Invader** is designed to be operated by a single person, in accordance with the legal requirements for operating a Class 3 invalid carriage in the jurisdiction in which it was sold. Operating the vehicle outside of these limitations may invalidate your warranty.

4 Safety

The Invader should only be operated by a single person, who is not suffering from any condition which impairs vision, hearing, eyesight or the ability to react to sudden changes in surroundings. If you suffer from any of the above, it is recommended that you seek advice from your doctor before operating the Invader.

When operating the Invader please make sure you adhere to the following:

- Always check your mirrors and blind spots when operating through trails.
- Turn on headlights when in need of additional visibility.
- Make sure that your battery power is sufficient before you go out to ride.
- Do not ride with more than 1 occupant.
- Do not over charge the battery by leaving the charger in the charging port.
- Once the battery is fully charged remove the charger immediately.
- Do not try to operate the unit while charging.
- Do not let anyone under the age of 16 years old operate this vehicle.
- To avoid tipping, do not operate this unit up extreme inclines.
- To avoid tipping, do not make sharp / abrupt turns at high speeds.
- Do not operate under the influence of any use of drugs or alcohol.
- Do not operate at excessive speeds.
- Do not completely submerge the unit in water.

4.1 Safe Inclines

The Invader can climb inclines of up to 25˚ without danger. On this 25˚ incline, the Invader can stop, brake and turn. To reduce the possibility of tipping backwards on inclines, lessen the load on the back of the scooter by sliding the seat forward as much as possible and leaning forward.

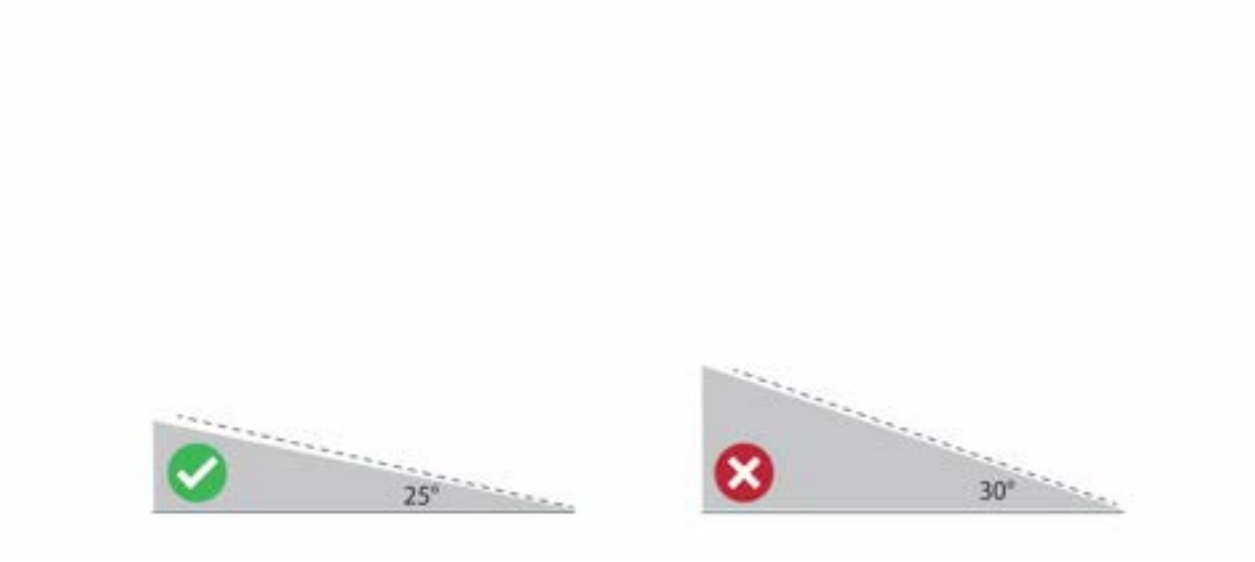


Figure 3 – Recommended inclines

5 Introduction

Your Invader is a high-tech piece of mobility equipment that will give you years of faithful service and enjoyment. This manual introduces you to the operation, maintenance and care of your Invader. If you have any questions, or are unsure of anything, please contact the dealer your originally purchased the Invader from. All maintenance work should be carried out either by an authorised Scooterpac dealer or by a certified mechanic.

6 Your Invader

6.1 Intended Use

The Invader is designed for use off-road including gravel, mud, sand, or snow surfaces as well as on road environments including smooth pavements and roadways, in accordance with local laws. The Invader can be used in wet and windy weather, but discretion should be used when planning a journey in adverse weather conditions. If there is standing water on the pavement, extra care should be taken as the Invader may have reduced ability to grip and steer. Under no circumstances should more than one person operate the vehicle at any one time.

6.2 Unintentional Movement

The Invader should be stationary before use. When the Invader is switched on, it will remain stationary with the manual brake levers engaged and will not move until these are released and the forward or reverse throttle lever is twisted.

Do not attempt to operate from outside the vehicle.

If the vehicle is moving an emergency stop can be performed by letting go of the throttle levers and firmly pulling the hand-operated brake levers located on the left-hand and right-hand side of the handlebar.

7 Exterior Guide



Figure 4 – Exterior guide

1. Mirrors
2. Brake Handle
3. Turn Signals
4. Headlight
5. Shocks
6. Tires
7. Footrests
8. Charging Port
9. Motor
10. Seat Adjust
11. Trunk
12. Charging Port
13. Seat
14. Throttle
15. Ignition

8 Handlebar Controls Guide



Figure 5 – Left Handlebar



Figure 6 – Right Handlebar

Left Handlebar

1. **High Beam / Low Beam** - Toggle this switch to choose between a low or high angle of the headlights. (The headlight must be on for this to have an effect)
2. **Turn Signals** - Push this to the left to indicate turning to the left and back into the middle once your done. Push this to the right if you are turning to the right.
3. **Reverse Switch** - Press and hold this while engaging the throttle to go in reverse.
   ***PLEASE NOTE* Always be aware of your surroundings when operating this in reverse and use it at your own discretion.**
4. **Horn** - Push this to operate the horn.

Right Handlebar

1. **Front Brake** - Pull this lever to engage the front brake. (Use the rear brake first located on the left handlebar.)
2. **Throttle** - Slowly rotate this towards you to engage the motor.
   ***PLEASE NOTE* Always be sitting on the unit before turning the throttle.**
3. **All Wheel Drive Selection Switch** – In the right position this switch will enable AWD mode (both front and rear motors). In the left position this switch will enable RWD mode (rear motor driving).
4. **Lights** - Push this to the left most position to turn on dipped beam. Push this to the middle position to have the side lights on. Push the switch all the way to the right to turn off all lights.
5. **3 Speed Switch** – Use this switch to choose between 4mph (Pavement) and 8mph (Road). Position 1 equals 4mph and position 3 equals is 8mph. Please note – position 2 is not in use.
   If switched to this position, power to the motor will be disabled.
   Please see Section 2 'Essential Information' for off-road settings.

9 Operating Your Invader

9.1 Getting Started

Before use, ensure that the Invader is stationary on smooth, level ground. Only operate when you are safely and comfortably seated.

9.2 Keys & Fobs

The Invader is delivered with several keys which operate various functions:



Figure 7 – Ignite Keys

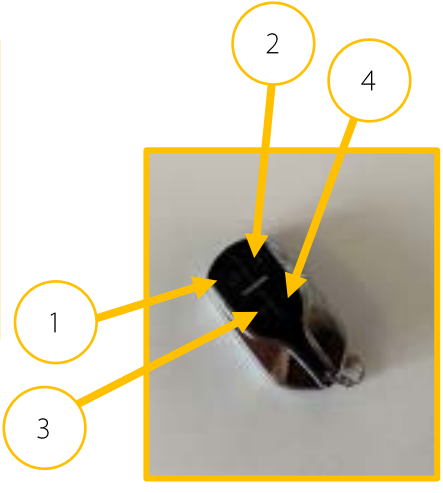


Figure 8 – Alarm Fob

Alarm Fob Guide

1. **Lock Button** - Press this button to arm the alarm. The alarm will not engage until 5 seconds after you arm it. Press this button once you have finished riding it.
2. **Unlock Button** - Press this button to disable the alarm. Press this before riding your Invader.
3. **Panic Button** - Press this button to set off the alarm. Use this in case of emergencies or to locate your vehicle.
4. **Remote Start** - Press this twice to start the Invader without using the keys. Press the unlock alarm button (2) to disengage the remote start.

9.3 Seat Adjustments

It is important to adjust the seat into a good position that allows you to comfortably operate all the vehicle controls.

Forward/Backwards

To move the seat forwards or backwards, grasp the black lever on the right-hand side underneath the seat whilst sitting down.



Figure 9
Seating position adjustment handle

9.4 Footrests

The Invader is fitted with extendable footrests so you can choose your riding style.

Using your feet push the footrests towards the Invader and they will pop out.

Reversing this process will fold them back into the sides of the Invader.







9.5 Ignition

9.5.1 Turning on

Below the front display you will find the ignition barrel.

1. Turn the key to position 1 to turn the Invader on. The key cannot be removed while it is in the on position.
2. Turn the key to position 2 to turn the unit off.
3. Turn the key to position 3 to engage the steering lock. For more information on how to engage the steering lock please read below.

Do not turn the unit on until you are properly seated on the Invader.



Figure 10 – Ignition barrel

9.5.2 Steering Lock

As an added level of protection, the Invader comes with a steering column lock that prevents the wheel from turning to prevent theft. To engage the steering lock you must do the following:

1. Turn the handlebars so they are pointing to the left (as if you were sitting on the machine)
2. Put the key into the position 2 (see fig. 10) and push down while turning counterclockwise.
3. Once it is in position 3 (see fig. 10) remove the key and reverse this process to disengage the steering lock.

9.6 Acceleration & Braking

9.6.1 Accelerating

On the right handlebar is a throttle that must be rotated towards you (bring the back of your hand towards your body) The throttle is very sensitive so be sure to turn it slowly. Make sure that you are on the unit and can easily turn on the brakes (fig. 11).



Figure 11 – Throttle lever

9.6.1.1 Braking

The acceleration is controlled by the throttle lever and deacceleration is controlled by a front and rear hydraulic disc braking system that allows you to stop effectively.
To activate the brakes, pull the left brake handle which controls the rear brakes and the right handle which controls the front brakes.

***PLEASE NOTE* Always use the rear braking first before applying the front brake to avoid injury.**

To slow down, release the throttle lever and the Invader will decrease speed. The hydraulic disc braking system can be activated by pulling the brake levers located on the left and right side of the handlebars.



Figure 12 – Brake lever

9.6.2 Engaging the Brake Lock

The Invader has a brake lock that will prevent it from rolling even when parking the unit on a hill. To engage the brake lock follow the below:

1. Pull the brake lever on the left-hand side towards you as much as you can.
2. Take the latch with your other hand or other finger and pull it into the grooves of the brake lever.
3. Release brake lever and make sure the brakes are stuck in a pressed position.

To disengage the brake lock, just pull the brake lever towards you slightly more and the brake lock latch will pop out. Release the brake lever and you are ready to go!



Figure 13 – Brake lock



Figure 14 – Brake lock



Figure 15 – Brake lock

9.6.3 Reversing

Hold down the green button on the left handlebar (see fig. 5) whilst gently twisting the throttle lever (see fig. 11). This will engage the reversing mode.

To engage reverse mode, ensure that the Invader is stationary on even ground. Before moving, check that the area is clear of obstructions and your planned path is of adequate size. Check the wing mirrors prior to manoeuvres.

The wing mirrors fitted to the Invader are large, giving improved visibility and safety. They can be adjusted by gently twisting the housing.

9.7 Display

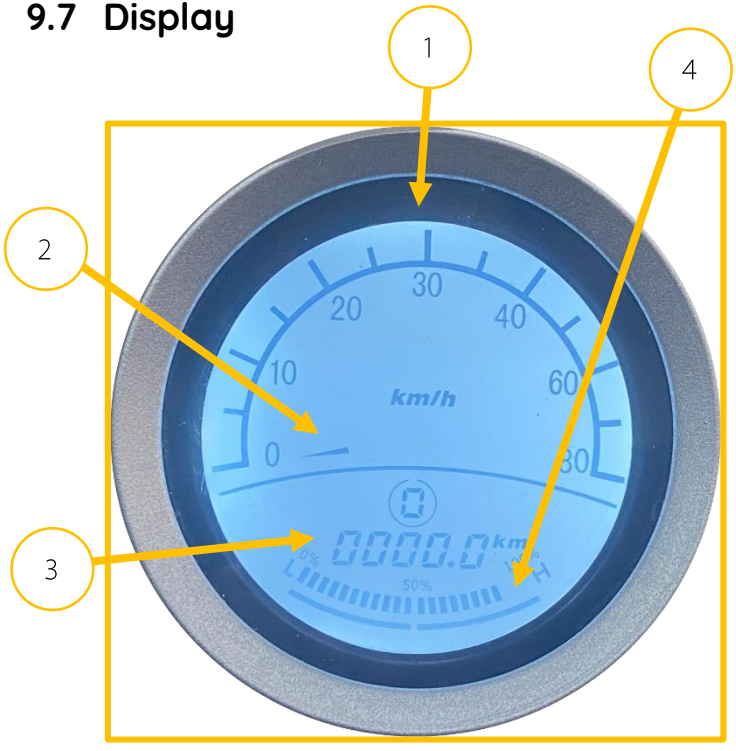


Figure 16 - Digital LCD Display

1. **Display Gauge** - This display shows you how fast you are going in km/h.
2. **Speed** – This needle gauge rises clockwise in correspondence to the numbers, creating a visual representation of how fast you are travelling in km/h.
3. **Odometer/Tripmeter** – On ignition, this shows how many cumulative kilometres you have travelled overall on your Invader for five seconds. After which it changes to a journey tripmeter, measuring the distance travelled since starting. This resets each time you turn the vehicle off.
4. **Battery Meter** - This shows how much power you have left before you need to charge. Once your charge is below 50% we recommending charging.

***PLEASE NOTE* The battery meter will dip down when the Invader is in motion. The metre will return to the previous position when becoming stationary. This is normal.**

9.8 Lights

The Invader is supplied with high quality LED headlights that can be activated from the handlebar controls.

To switch on the lights, see fig. 5. When the ignition is switched on the lights are always active – you have a choice between low beam and high beam. It is advisable to use the headlights whenever the Invader is in motion. This will aid other drivers and pedestrians, ensuring you remain safe and seen.

The Invader is fitted as standard with integrated rear brake lights. These brake lights will illuminate when brake levers are engaged.

9.9 Indicators

The indicators are bright LEDs used for easy visibility, in an orange colour.

To activate your indicators, use the switch on the left handlebar (see fig. 5) before initiating a manoeuvre. Once the turn is complete and it is safe to do so, move the switch back to the central position to turn off the indicator.

9.10 Follow-Me-Home Lights

The Follow-Me-Home Lights are a standard safety feature which help to ensure smooth and safe exit in the dark by increasing visibility around the Invader. They can simply be operated by turning the headlights on and then turning the ignition off, the lights will remain on for 10 seconds and then will automatically turn off.

9.11 Horn

The electric horn is activated by pressing the  button on the left handlebar (fig. 5). The horn should only be used in compliance with the Highway Code. The horn will only sound if the ignition is switched on.

9.12 Charging the Invader

After using your Invader it will need to be recharged. The Invader is supplied with a charger that can be plugged into a regular 3-pin power socket outlet. The charging port on the Invader is located under the seat, between where your legs would rest.

When the charger is plugged in the wall and not into the Invader the light will appear green. To begin charging, plug the charger into the Invader's charging port (see fig 17). The charger LED will turn red.

After the Invader is fully charged the LED on the charger will turn green. You can unplug this from the Invader. You can charge the unit at any point of its usage. The Invader does not need to be fully discharged before charging again. From low voltage to full the Invader can take between 8-10 hours to fully charge.



Figure 17 – Charging port

***PLEASE NOTE* – When using off-road, to ensure maximum battery performance, we highly recommended the speed override switch is turned on.**

***PLEASE NOTE* – Do not leave the charger plugged in for extended periods of time after it is finished as it will ruin the battery life and can possibly become a fire hazard.**

***PLEASE NOTE* – For best practice, please ensure to charge your batteries after each use. Do not overcharge your batteries, the charger should be connected for no more than 12 hours continuously. If there are long periods where you decide not to use your scooter, we recommend that batteries are charged at least once a week. This will ensure they remain healthy and are ready for regular usage.**

10 Maintenance

10.1 Replacing Bulbs

LEDs are energy efficient and long lasting however they may eventually require replacement. LED bulbs can be purchased from the dealer that supplied your Invader. Replacing bulbs should only be completed by a certified Scooterpac dealer, as it involves disassembling units that must be resealed to the original manufacturing specification.

10.2 Battery Care

The battery assembly in your Invader should not require any maintenance on a day-to-day basis, however access may be required. The batteries are located under the floorpan, protected by a black metal chequered plate.

To access the batteries, the floorpan must be removed. This can be done by undoing four bolts holding it down on each corner.

Once the maintenance has been completed, ensure that all four bolts are used to replace the floorpan securely without crushing or bending any wires.

10.3 Circuit Breaker / Fuse

Behind the seat you will find two bolts that lock the seat rest to the machine. Using an Allen Key, unscrew the two bolts seen below and lift the bar up to access the under-seat compartment.

***PLEASE NOTE* This is area is not meant to be used for storage.**

To prevent surges that may damage the unit, the Invader comes with a circuit breaker. This is located underneath the seat just above the controller. The blue switch in the event of a surge will trigger and turn the whole unit off.

If the Invader does not turn on at all (the display does not light at all once the key is in the ignition) it is most likely that the circuit breaker is set to off. Open the seat lock (see previous page for where the lock is located) and switch this switch to on.



Figure 18 – Circuit breaker

Figure 19 – Circuit breakers

10.4 Tyre Pressures

The tyres on the Invader are designed to give a good balance between comfort and grip. Incorrectly inflated tyres may lead to poor handling, reduced range and increased wear. The tyres should always have at least 3mm of tread to provide adequate grip on the road surface. If the tyres become worn, they should be replaced before the Invader is used again.

Front tyre pressure: 15psi
Rear tyre pressure: 15psi

10.5 Troubleshooting

- Whenever you get off your Invader activate the brake lock. This will prevent it from rolling away downhill and will also stop someone from accidentally engaging the motor while off the vehicle.

- When engaging the throttle always start slowly to get a feel of how quickly you may move. When braking, use your rear brakes first, and then your front brakes to ensure complete safety.

- An additional lock is advised when leaving it outside for extended periods of time. Secure a safe lock to the frame to prevent theft.

- If the display does not turn on at all when you put the key in the ignition check the breaker switch underneath the seat to see if it is set to “ON”.

- If the machine turns on (display etc.) however the motor does not run, make sure the brake lock is not on. The motor will not engage as long as any brake is being pressed.

10.6 Maintenance

- Always ensure that your tyre pressure is set to the recommended pressures.
- Check your brakes before operating, making sure they are firm and the Invader does not move while they are being pulled.
- Check that all lights are working; headlights, brake lights and signal lights.
- When storing the Invader outside, use a cover to prevent weather damage. If possible, store inside otherwise. If possible, bring the battery inside.
- Ensure your Invader undergoes a yearly service and safety check at your local Scooterpac dealer.
- Do not overcharge the battery once the battery is fully charged, unplug it as soon as possible.

10.6.1 Cleaning

10.6.1.1 Seat

The seat should be wiped with a soft dry cloth. Do not use abrasive cleaning materials, and do not use bleach. To restore the deep black colour a vinyl cleaning spray may be used.

10.6.1.2 Paintwork

To care for the paint, regularly wash the Invader using soft cloths and a mild automotive detergent.
Apply automotive polish to achieve a high-shine finish. It is highly recommended that polish is applied in areas where the paintwork may be exposed to adverse weather conditions.

TOP TIP – Never use boiling water to clean the Invader.

11 Warranty

The Invader comes with a 12 month manufacturer's warranty when purchased new from an authorised Scooterpac dealer. During the warranty period any part which becomes defective due to faulty workmanship or materials will be repaired by the Scooterpac dealer from which it was purchased. If a repair cannot be completed a replacement part will be fitted.

If a manufacturing defect is found, it must be reported in writing to the Scooterpac dealer from which the Invader was purchased. within 28 days of purchase.

Items considered to have a limited lifespan including batteries, tyres and windscreen wipers will not be covered if they are deemed to have undergone excessive wear and tear or misuse.

The warranty does not cover damage arising from improper use of the product, after-market modifications or accidental damage. The warranty is non-transferable.

The warranty does not extend to the consequential costs resulting from fault clearance, freight and travel costs, loss of earnings, expenses, etc.

The manufacturer will not accept responsibility for any damage or injury caused by misuse or non-observation of the instructions set out in this user manual.

12 Specifications

12.1 Technical Specification

Motor	Front & Rear Wheel Drive Motors 2 x 500W Rated 1500W Peak	**Batteries**	60V 32Ah SLA
Battery Charger	60V 4amp off-board charger	**Speed** [1]	4mph, 8mph, 16mph
Dashboard	Digital Dashboard Display Speedometer Odometer / Tripmeter	**Locking**	Alarm System Manual Steering Locking
Tyres		Pneumatic	

12.2 Sizes & Weights

Class	3 (Invalid Carriage)
Range [2]	30 miles
Brakes	Dual Hydraulic Disc Brakes
Weight Capacity	150 kg / 24 stone
Ground Clearance [3,4]	170 mm (unloaded)
Height [3]	1150 mm
Length [3]	2000 mm
Width [3]	845 mm
Tyres	Front - 21" x 7" x 10" Rear - 23" x 7" x 10"
Maximum Slope [4]	25 degrees
Seat Back Height	340 mm
Seat Width	475 mm

[1] 16mph mode to be used off-road or on private land only.

[2] Range may vary with battery charge/condition/option, terrain type, tyre condition and vehicle loading.

[3] Due to manufacturing tolerances and continuous product improvement this specification can be subject to variance of +/-3%.

[4] Varies with user weight, terrain type, battery charge, battery condition, tyre condition.

13 Servicing

In order to ensure continued safe operation, the Invader must be serviced every 12 months. We recommend recording the servicing dates and locations on the sheets below. Always have your Invader serviced at an authorised Scooterpac dealer, using original Scooterpac parts.

Year	Service		Next Service Due
Sample	Dealer Name	*Scooter Shop Ltd*	*01.01.2021*
	Technician Name	*Michael Mathdon*	
	Date of service	*01.01.2021*	
	Mileage	*275 miles*	
	Notes	*Tested batteries* *Tested front and rear tyre pressures* *Checked front and rear lights* *Checked electronic switches*	
	Signed	*Michael Mathdon*	

Year	Service		Next Service Due
Year One	Dealer Name		
	Technician Name		
	Date of service		
	Mileage		
	Notes		
	Signed		
Year	**Service**		**Next Service Due**
Year Two	Dealer Name		
	Technician Name		
	Date of service		
	Mileage		
	Notes		
	Signed		

Year	Service		Next Service Due
Year Three	Dealer Name		
	Technician Name		
	Date of service		
	Mileage		
	Notes		
	Signed		
Year	**Service**		**Next Service Due**
Year Four	Dealer Name		
	Technician Name		
	Date of service		
	Mileage		
	Notes		
	Signed		

Year	Service		Next Service Due
Year Five	Dealer Name		
	Technician Name		
	Date of service		
	Mileage		
	Notes		
	Signed		
Year	**Service**		**Next Service Due**
Year Six	Dealer Name		
	Technician Name		
	Date of service		
	Mileage		
	Notes		
	Signed		

14 Notes

The Scooterpac Promise

We stand by our products and services because we follow **The Scooterpac Promise**.

Care

Kindness, consideration and positivity.
Respect and generosity to all.
Focus on the customer and all else will follow.

Dependable

Loyal, flexible and responsible.
Always accountable for our actions.

Excellence

Do our best and exceed expectations.
Surpass ordinary standards.

Innovation

Creating value and driving efficiency.
Pioneers in the marketplace.

Integrity

Everything we do is fair, honest and trustworthy.


Scooterpac
Brighten your day
Tel: 0330 124 1733 E-mail: info@scooterpac.com Web: www.scooterpac.com
SP/IN/M/EN/2023-B