

# Milan

## Assembly Instructions

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**Powacycle**<sup>TM</sup>  
*Electrically Assisted Pedal Bikes*

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## Introduction

Thank you for buying the PowaCycle Milan electric bike. We hope it brings you many hours of enjoyment.

For safe and compact shipping, we despatch the PowaCycle Milan part assembled. This minimises any risk of damage during transit, so that the bike reaches you in good condition. It therefore requires some assembly work before you can begin riding.

Please follow these instructions carefully. Before

starting assembly of the Milan, arrange for a second person to be on hand. Help is required in supporting the bike, when attaching the front wheel and mudguard. If you do not feel confident in carrying out the assembly, we recommend that you contact your local cycle shop for professional assistance.

Open the box and remove the contents. Remove the protective packaging, keeping tools clear of cables and paintwork.

## Contents

Before beginning assembly, please check that all the parts are included.

*Note that some nuts and bolts and other parts come attached to the frame by the packing.*

*Your PowaCycle comes with a spare set of keys. The spare key needs to be kept in a safe place, as replacements cannot be obtained.*

Main Frame



Pedals (L&R)



Basket



Front Wheel



Keys x 2



Basket Support bracket



Battery Charger



Mudguards



Basket/Mudguard fixings



# Assembly Instructions

## 1. Charging the Battery

Before assembling your PowaCycle, you should charge the battery. This will allow you to test the electrical connections during assembly. Remove the battery and charge it indoors. It normally takes 8 hours to fully charge the battery, however the first charge can take longer. Once charged, the LED turns from red to green. Please note; the battery will deteriorate, if it is left discharged for a prolonged period.



To release the battery turn the key in the barrel on the vertical tube.



Use the handle to lift the battery free of the frame. The Milan battery can be charged, while in place on the bike, however charging should always be performed indoors away from any risk of contact with water.



Generally the battery should be removed to ensure safety when charging. When charging is complete the light changes from red to green.

## 2. Fitting the Pedals



The pedals are each marked with an L and R, which correspond to Left and Right when the cycle is facing forward. These can be screwed into position on the respective sides of the bike. It is best to hand tighten these and then use a spanner to secure them.

They are then tightened using a 15mm spanner from the PowaCycle toolkit. Each pedal should rotate freely after tightening – if it does not turn freely, it is too tight.

The pedals have a reverse thread and therefore need to be turned in the opposite direction of the normal pedal turn.

## 2. Fitting the Handlebars



The handlebars are already attached to the frame via cables.

They now need to be inserted into the frame as shown.



Using an Allen key in the toolkit, lock the handlebars into place. Do not over-tighten as they will require further adjustment once the wheel is attached.

Carefully turn to reposition the light unit back into place. Finally, use the Allen key supplied or hexagonal tool to tighten the handlebars in place.

*Note:*

*We recommend that you make a final adjustment of the handlebars once the bike is fully assembled.*

## 3. Fitting the Front Mudguard



Rest the main bike section onto the floor with the back wheel and the front forks on the floor (keep the forks straight).

A second person will be needed to support the bike while fitting the mudguard and front wheel.

The Front brake cable and brake cradle clip should be disconnected giving clearance for the mudguard and wheel to be attached.



Remove top mudguard fitting screw from the frame (if attached). Position the mudguard by sliding the mudguard through the wheel arch.

Refit the nut and bolt.



Loosen the small screws on the wheel fork. Attach the mudguard support arm and retighten these screws.

## 4. Fitting the Front Wheel



Undo the nuts on the wheel and put the washer lock locators to one side.

One person needs to support the bicycle frame, whilst the other places the wheel into the forks, keeping clear of the washers.



The lock in locator points are then placed in their respective holes and the nuts tightened. After tightening ensure that the wheel turns freely. With the front wheel attached, the bike can be supported by its stand, however care should be taken to avoid knocking the bike over as assembly work is continued.

Reconnect the front brake cable and brake cradle clip

## 5. Brake Assembly (Front & Back)

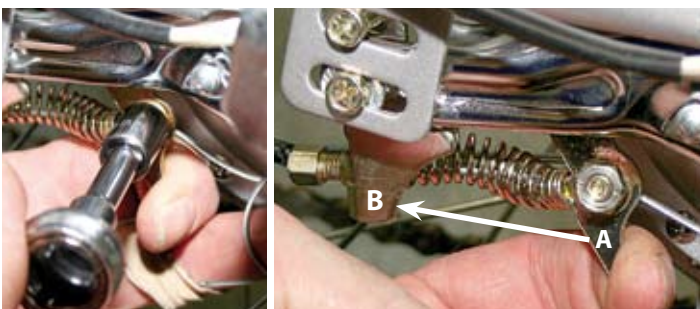


### Front:

Pinch in the callipers to slacken off the brake cable. Pull the cable tight through the brake lever locking nut a little at a time and tighten. Test the brakes to ensure effective functionality and adjust accordingly. The brake will need to be re-adjusted again after 2-4 weeks to compensate for the normal stretching of the new brake cable.

### Back:

This brake is found on the left hand side of the bike, next to the wheel. In order to get the handle bars on, or take them off, this cable must be loose. (Note, if handle bars are ever removed this process needs to be reversed).



### Process: Tightening the brake cable

- i) Loosen the nut under the wheel hub until slack.
- ii) **See photo, arrow A → B**  
Push the brake arm toward the front of the bike – note small, finger lever.
- iii) Re-tighten the nut.
- iv) Pull the brake lever.



It is important that the brake is sufficiently tight, but over tightening can also cause problems so try adjusting a little at a time – testing the back brake each time until you are totally satisfied.

Fine adjustments to brakes are made at the hand lever end, via a twist wheel where the cable meets the hand lever.

*It is imperative that bike brakes are adjusted correctly. If you are not sure that the brakes are functioning effectively then do not use the bike – seek help from a professional bike shop.*

## 6. Fit the Basket



The basket is fixed to a support bracket which is then attached to the bike.



Turn bolt outward from the inside of the basket, attaching the basket to the bracket with the nut to lock the basket in place.



Attach the basket to the bike using the bracket screws to the front of the bike, below the handlebars and above the forks.

## 7. Saddle Height & Suspension



Once set up, the height of the saddle can be adjusted without tools.

Tighten or loosen the bolt opposing the lever, if necessary to ensure the lever applies sufficient grip.

Loosen the lever at the top of the frame below the saddle to raise or lower the saddle. Once the saddle is at the required height, secure it by tightening the lever.



The saddle also has a tension spring underneath (black). This acts as the rear suspension. Anti-clockwise slackens it off and clockwise tightens.

***Congratulations, your completed PowaCycle is now ready to ride. Before mounting please check that:***

- The battery is fully charged
- Tyres are inflated to the correct pressure
- Brakes are operating effectively
- Handlebars are correctly adjusted and secure
- The seat is at the correct height for the user
- Lights are working
- All nuts and bolts are secure, including those pre-assembled

# Operation of the Milan PowaCycle

The Milan PowaCycle is an electrically assisted bicycle that operates like a standard bicycle, with the assistance of a motor and battery. The power provided supports the rider's own efforts, giving increased performance with less effort. As soon as the rider begins to pedal, the motor supplies energy to support the rider's efforts. A throttle also supplies power and works independently of pedalling. If the rider prefers to cycle without the assistance of the motor, he or she can leave the ignition off.

## Battery Charging, Care & Safety

*Care of the battery is vital to maximise its long-term performance.*

- The battery should ideally be removed from the bike for charging.
- **Regular Use** – If you are commuting significant distances, it is advisable to recharge the battery before the return journey.
- **Occasional Use** – Recharge the battery at least once a week, even if the cycle is unused.
- Always recharge the battery after longer and power draining hilly journeys.
- Always charge the battery indoors.
- Keep the battery away from water, to prevent shocks or short circuiting.
- Do not cover the battery or charger.
- Do not leave the battery permanently charging from the mains supply.
- Only use the charger provided to charge the battery.
- Do not use the battery to power anything other than the Milan PowaCycle.
- Do not disassemble or modify the battery.
- Do not expose the battery to fire or extreme temperatures.
- Do not short circuit the battery.
- Avoid impact or force against the battery pack.
- Dispose of the battery in a dedicated waste facility.

## Additional Lights

As an additional safety feature, we recommend that night users purchase independent front and rear lights that are NOT powered from the cycle battery. After a long journey, there is a risk that the cycle battery could be depleted, so lights relying on the cycle battery could stop working.

## Tyres

Check the tyres regularly to ensure that the correct pressures are maintained (pressure ranges are shown on the sides of the tyres).

Do not over-inflate the tyres.

There are different types of pumps available for cycles. Ask your local cycle shop for the one best suited to your needs (do not use a garage forecourt air hose to inflate your tyres).

## Brakes

Make sure the brakes are adjusted correctly at all times.

Adjustments can be made at the wheel rim/brake mechanism with tools.

Fine tuning of the brakes can be made via adjustable twist screws which are located where the hand pull brake lever joins the cable.

Replace the brake blocks when worn.

- You will need to adjust the brakes after the first 2–4 weeks of use as they may loosen during this time, as the new brake cable stretches.
- Always ensure that you fully loosen the back brake cable if you need to remove the handlebars. Failure to do so is likely to cause damage to the back brake cable.

*continued overleaf*

## Power

Switch on the power by turning the key in the battery. Power is applied via the throttle located on the right-hand handlebar. The use of the throttle applies and regulates the motor power assistance.

## Gears & Chain

Change through the gears one at a time and only use when the bicycle is being pedalled. To maintain performance, ensure that all the mechanical parts of the gears are lightly oiled (avoid getting oil deposits on the wheel rims). If the chain mechanism becomes dislodged, re-engage it on the smallest gear cog.

## Saddle

For maximum comfort and safety, ensure that the saddle is correctly adjusted for the rider.

The height of the saddle can be adjusted without tools. Loosen the lever at the top of the frame below the saddle to raise or lower the saddle. Once the saddle is at the required height, secure it by tightening the lever.

The saddle also has a tension spring underneath (black). This acts as the rear suspension. Turning anti-clockwise slackens it off and clockwise tightens.

## Cycle Helmets

Although there is currently no legal requirement to wear a cycle helmet, in the UK we recommend that you do so for your safety. Wearing a cycle helmet has been proven to reduce the likelihood of head injuries in the event of an accident.

## Professional Maintenance

We recommend that you have your PowaCycle serviced by a professional cycle engineer at least once a year to ensure ongoing safe performance. If you are unsure as to how to carry out an assembly procedure or adjustment, we recommend that you consult your local cycle store.

## Troubleshooting

### 1 – Brakes not working effectively

- Check the distance between the brake blocks and the wheel rim.
- Check that the blocks are parallel with the wheel rim.
- Check for any wear on the brake blocks.

*Fine tuning to the brakes can be performed using adjusters between the brake lever on the handlebars and the brake cable. Major adjustments are made at the brake blocks (you will need the appropriate tools). See brake assembly instructions.*

### 2 – Motor not working

- Check that the ignition is switched on.
- Check that the battery is properly inserted in its housing.
- Check that the battery is charged.
- Check that none of the electrical cables have become dislodged.

### 3 – Light(s) not working

- Check that the wiring is not broken.
- Check that the bulbs are inserted correctly.
- Check that all connections are properly made.

## Warranty

1. The frame has a 2 year warranty.
2. Other main parts have a 1 year warranty.
3. The battery has a 6 month warranty, as battery life will be determined by user care.
4. Bulbs, brake blocks, tyres etc – are regarded as consumables, therefore when replacements are required, these need to be purchased from your local cycle shop or store.

## Warning– PowaCycle Milan

*It is essential to slacken off the back brake significantly should you ever need to remove the handlebars. This is performed at the back wheel end and is the reverse process to that described in the BACK BRAKE section.*