

Cycle Assembly and Maintenance

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1.

Introduction

This guide will take you through the assembly procedure and maintenance of your new PowaCycle to ensure it is ready for the road, safe, and to help prevent early wear on parts.

The cycle is partially assembled and set up but requires final assembly and checks. These are straightforward and able to be completed by anybody with some mechanical knowledge.

Tools Required for Assembly

You will need: 5mm and 6mm Allen keys, 13mm, 15mm, 17mm spanners, 14mm socket, Phillips screwdriver.

2.

Assembly

First, remove the battery to lighten the bike.

Make sure 2 people lift the cycle out of the box as it is a heavy load to lift.

Remove the packaging from the cycle and insert the front wheel if it is packaged separately. The cycle will now stand up by itself with the kickstand down.

Insert the handlebars and stem into the frame, align with the front wheel and tighten the top Allen bolt with the 6mm Allen key, making sure that the cables are not caught and have some slack in them.

At this point, check the Allen bolts are tight at the front of the stem (5 or 6mm), the brake levers (5mm) and the screws of the gear shifter and light if fitted.

Insert the saddle and seatpost if packaged separately and tighten the quick release.

Insert the pedals, making sure you check for left and right fitment by looking on the end of the pedal spindle. Pay particular attention to the left pedal as it has a reverse thread and needs to be tightened anti-clockwise. Tighten the pedals with the 15mm spanner.

Check the pedal arms (cranks) are tight by prising off the plastic cap on the arm and use a 14mm socket to check the nuts, then replace the cap. Check the wheel nuts on the rear and front (if the cycle came with the front wheel already inserted) are tight. You may need either the 15mm or the 17mm spanners.

Check and inflate the tyres to around 40-50PSI. Your cycle may have either a Schrader large valve or a Presta/Woods small valve. Make sure you have the correct valve adaptor, which can be purchased from any cycle shop.

This is the assembly complete.

Although they are set up from the factory, a few small adjustments may need to be made to the brakes and gears to make sure they are working efficiently as cable stretch and movement in transit can take them slightly out of tune. If you are not confident with this, please see your local cycle shop who will be able to set the cycle up for you.

Brakes

Check the travel in the brake lever – pulling with normal force, it should not be able to pull far enough so as to touch the handlebars. If it does, unscrew the barrel adjuster where the brake cable enters the brake lever a few turns until there is reasonable travel in the brake lever, then lock the barrel adjuster by tightening up the lockring against the brake lever.

With assistance, lift the front and rear of the cycle in turn and spin the wheels to make sure the brakes are not catching enough to slow the wheels down, which will also cause wear on the brake pads. If the brakes catch, look closely to determine which side of the wheel rim the brake is catching. On the side that is catching, you need to pull the brake arm out slightly by screwing in the Phillips screw at the bottom of the brake arm a couple of turns. Each turn should move the brake arm out slightly (and the opposite arm inwards) until the brake no longer catches.

If the brake catches on both sides, you will need to loosen off the brake slightly.

You can now take your cycle for a test ride. Feel for anything unusual (clicking, clunking, etc.) and run through the gears.

Gears

If the gears are not shifting smoothly up, from 6th to 5th to 4th etc. unscrew the barrel adjuster, where the gear cable enters the rear gear mechanism, a couple of turns until gears shift as they should. If the gears are not shifting positively down, from 1st to 2nd to 3rd etc. then screw in the barrel adjuster slightly. Normally the gears only need minimal adjustment, if any.

If all is running smoothly, you are ready to ride.

3.

Storage

If possible, try not to store your PowaCycle outside. If you do, it is worthwhile investing in a bicycle cover to keep it protected and out of the rain.

Check the tyres occasionally and keep them at the correct pressure. This helps stop the tyres perishing.

Refer to the battery maintenance information for a guide on good care of the battery.

4.

Maintenance

A little bit of maintenance here and there goes a long way towards keeping your PowaCycle running as it should and will stop parts failing prematurely.

Cleaning

If you take your PowaCycle out in the rain or if it gets dusty, clean it off after the ride by spraying down with a hose or with a bucket and thick sponge. Take care not to spray any pressure directly at bearing parts.

Dry off as best you can and leave to dry completely, preferably before putting the cycle away.

It may be worth buying a bicycle cleaning kit, which will include everything you need for easy cleaning.

Put a light amount of cycle oil on the chain, gear mechanisms and any accessible part of the brake and gear cables.

Regular Maintenance

At least once a month or so if you ride regularly, you should do some maintenance and checks to your PowaCycle to make sure you prevent, and catch any problems early, should they arise.

Oiling your chain is good, but cleaning it before putting fresh oil on is better! Ideally, use degreaser and a rag or buy a chain cleaning kit, and thoroughly clean the chain of any excess oil and dirt. This also keeps the rest of the gear system clean.

You can then put some fresh, clean oil onto the chain and gear system.

Doing this regularly considerably extends the life of the chain and gear system as a whole.

Check the brakes and gears are working as they should and if necessary, revert to the brake and gear setup as above to adjust.

Check all nuts and bolts are tight.

Check for play in the bearing systems. Do all these checks with the cycle on the ground.

To check the wheels, grab the top of each wheel/tyre and wobble from side to side. If there is play, the wheel cones are loose.

To check the bottom bracket, grab both pedals at once and wobble side to side. If there is play, the bottom bracket is loose.

To check the headset, turn the front wheel at right angles to the frame, hold the front brake and rock the handlebars backwards and forwards.

If you find any of these parts are loose, it is best to get them checked out by your local cycle shop.

If you use your PowaCycle regularly, it is recommended to have it serviced by a cycle workshop around once a year.

During this service, ask for your chain and cables to be replaced, as these start to deteriorate after this period of regular riding, and this will also prevent other parts from premature wear.

None of the parts of the electric power system are user-serviceable, so just make sure all parts are kept clean externally and should any problems arise with any parts, please contact PowaCycle for support.