

# INSTRUCTIONS

Do not operate your bike before you have read through this user manual thoroughly. The manufacturer will not be held responsible for any damage or incident due to improper use

For your own safety and the safety of those around you please follow all traffic regulations. These electric bicycles are not suitable for children under 14 as well as competition, stunt or any aggressive/off-road riding

The braking length in a dry state is 4 meters at 25km/h, while in a wet state is 15 meters so move slowly, keep a safe distance and brake in advance where necessary while riding downhill and in rain, snow and wet roads.

Do not ride the bike in water where the depth exceeds the control box, the motor center or any other electrical components. Also riding on the beach any seawater will cause problems as the electronics are very salt sensitive.

For safe riding please regularly check your brakes, tyres and your steering

Avoid long periods of exposure to harsh weather conditions such as sun or rain, and exposure to humid places or aggressive gases as it may cause parts to corrode or electrical parts to fail

Your bike contains advanced electrical components so please do not disassemble or modify these parts without contacting us for help and advice.

The performance and mileage of your bike will be varied with battery condition, terrain, wind speed, tyre pressure, rider weight and the correct maintenance etc.

To ensure your safety please use helmets, check brakes, tyres's, handlebars and rims before riding. The braking distance is increased when it is raining and wet brake blocks will make a squealing noise.

The authorized payload of the bike is 130kg with 15kg for the carrier although our bikes will heavier people. Please contact us for advice.

For those with child seats cover the saddle spring in case it pinches the child's finger

Improper use could cause harm, please check the connection on the frame, front fork and suspension periodically. Every mechanical part has friction and pressure, different materials and parts have different frictions and pressures. If a mechanical part has exceeded its service life, resultant damage could hurt the user.

Your electric bike has been designed for use on the road and cycle paths.

It is illegal to cycle on a public road after dark without lights and reflectors. Exactly which lights and reflectors, where to fit them and when to light up, is defined by the road vehicles lighting regulations.

| Frequency        | Component   | Lubricant  | How to lubricate  |
|------------------|---|--|---|
| Weekly           | Chain<br>Derailleur pulleys<br>Derailleurs<br>Brake calipers<br>Brake levers            | Chain lube or light oil<br>Chain lube or light oil<br>Oil<br>Oil<br>Oil  | Brush on or squirt<br>Brush on or squirt<br>Oil can<br>3 drops from oil can<br>2 drops from oil can |
| Monthly          | Shift levers  | Lithium based grease   | Disassemble   |
| Every six months | Freewheel<br>Brake cables   | Oil<br>Lithium based grease  | 2 squirts from oil can<br>Disassemble   |
| Yearly           | Bottom bracket<br>Pedals<br>Derailleur cables<br>Wheel bearings<br>Headset<br>Seat post | Lithium based grease<br>Lithium based grease<br>Lithium based grease<br>Lithium based grease<br>Lithium based grease<br>Lithium based grease | Disassemble<br>Disassemble<br>Disassemble<br>Disassemble<br>Disassemble<br>Disassemble              |

## CHARGING THE BATTERY

To charge your battery:

- à Plug your charger into a power source, please keep in mind if you are using a 12volt source you will need a 600watt inverter. With the power on the light on the charger will be green
- à Swivel open the black plastic cover on the battery (opposite side to your key)
- à Plug the charger into your battery. The charging light will change to red indicating the battery is now receiving charge.
- à When the battery is full the charger will turn green letting you know its done.

As this is a lithium battery caution should be taken when charging. For safety its best to take the battery out of the bike and charge it outside in a well ventilated area.

To keep your battery in the best condition it is always best to charge it up back to full whenever possible. So please remember to charge your battery after every ride.

If you are not able to charge it straight away please leave it no more than 4-6 weeks between charges.

## SAFETY CHARGING

Care of your battery is vital to your safety and to maximize its long-term performance. Battery fault fire or explosion hazard will occur if the instructions are not followed.

We would suggest your always charge your battery outside if possible in a well ventilated area for safety.

Ensure that the charger plugs are dry and securely connected to the charger port of the battery.

Do not cover the battery or charger while charging, do not use the battery charger near flammable articles or in a unventilated place. The ambient temperature should not exceed 40°c.

Keep the battery away from water, to prevent shocks or shorting

Only use the charger provided to charge the battery.

Do not disassemble or modify the battery.

Do not expose the battery to fire or extreme temperatures.

Do not allow impact or force against the battery pack.

Pull out the power plug first and then the charger plug after charging. Connecting the power plug and the power source for a long time while not charging is not recommended.

Should any abnormal conditions occur, like overheating or strange smells, stop charging immediately and contact us for help and advice.

Put the battery and charger in a safe place beyond children's touch.

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 use

The manufacturer will not be responsible for any damage or injury due to improper or unsafe use of the battery charger.

To get the best mileage and to keep your bike running smoothly we suggest that:

- 1) Your battery is a lithium battery and over time we have discovered that the battery is best kept full. To maintain this we advise after every ride out that you top the battery back up to full.
- 2) Always check your tyre pressure and keep maintained to around 50 lb. If the tyre tread becomes excessively worn out it will need to be replaced. Insufficient tyre pressure will cause tyre sidewall damage which will cause punctures and even sudden blowouts.
- 3) Your brake shoes are fitted on a v brake system. These will need to be adjusted from time to time to ensure correct mileage and safety. The brake arms are independently sprung. Check when you release the brake lever that both arms spring back together. If not they will need to be adjusted. When the brake shoes start to show excessive wear they will need to be replaced.
- 4) Your gear chain must be regularly (especially after riding in the rain) lubricated with a standard chain caring product. Your chain tension will stretch through use and need to be adjusted which is explained further in the manual.

## STARTING OUT

Before you set off there are a few adjustments that can be made to make your ride more comfortable.

The handlebar stem height can be slightly adjusted. You can adjust this by folding the bars and inside the stem is a 6mm Allen key that can be undone. The stem can then be raised or lowered to suit without exceeding the mark carved into the stem. If you require more adjustment we stock a range of handlebar stems that offer you more height options. Also on the handlebars you can adjust the bar itself to rotate the bars towards or away from you. This is done by undoing the 6mm allen key in the middle of the handlebars on the handlebar stem. Please be aware that if you do this the throttle will need to be moved to stay in a downward position as it is one of the few water ingress points on the bike. (see operating the bike) The seat height must be set so that your leg is stretched out when the corresponding pedal is in the lowest position.

To adjust the saddle to suit your height rotate the black bolt clamp anticlockwise. Set the seat height to where you like it and tighten the clamp back up clockwise. Please note that you should never exceed the mark carved into the seat tube. If you require a longer or shorter seat post please contact us as we have a large supply of different sizes. If you loosen the saddle with a spanner, this will also move backwards and forwards as well as at an angle, to find your most comfortable position.

## REMOVING THE BATTERY

The battery is fitted with a ignition switch/lock. When you want to remove or insert the battery you need to first make sure the battery is in the unlocked position.

You have three key positions on your battery. These are on, off and unlock.

When the key is turned all the way to the right the battery is on and there will be a light indicator on the top showing three green L.E.D'S.

If you turn the key once to the left the battery will now be off but it is still locked into the frame. You can take the key with you if you are leaving the bike and the battery should be safe. Please remember when locking your bike up that the seat is easily removable and will need to be secured additionally to the bike.

To unlock the battery the key will need to be pushed in from the off position and then turned further to the left. This draws the locking pin into the battery and allows you to remove it from the frame.

## MAINTENANCE:

Regular maintenance guarantees you a longer durability and roadworthy state of your bike. Maintenance includes cleaning, lubricating and ride-setting adjustment. Moreover, regular maintenance work is a requirement for the sustainability of your warranty. This applies to special corrossions (surface rust) and other damages which by non –observance would not be undertaken by us. Please note that under certain environmental conditions (e.g by the seaside) the bike should be cleaned more often to reduce chance of rusting.

Please only use gentle cleaning materials to clean your electric bike. In no case should you ever use a high pressure washer or vapor cleaning device for dirt removing. Clean your electric bike regularly with a sponge or a cloth and apply bike caring products after cleaning. If you have the bikes on a bike rack and are using a bag to cover it please be aware that as you travel the dirt and salt from the road gets sucked into the bag and onto the bike. You will need to spray the bike with a lubricant such as WD40 to stop rust and tide marks appearing on your bike. Be careful to avoid the tyres/brakes when applying WD40. Also please be careful when loading onto a bike rack as you can damage your spokes if done incorrectly. If you require any spares please only use parts purchased from ourselves or a reputable cycle shop. It is always recommend that you take your bike to a cycle shop for servicing at least every 6 months. While we ourselves are here for any electric maintenance or problems although we do not carry out routine servicing. The chain must be regularly (especially after riding in the rain) lubricated with a standard chain—caring product.

If you want any help with the chain tension please feel free to contact us.

The recommened tightening torque of the main fasteners (unit: N.m)

Front wheel: 18-20

Rear wheel: 30-35

Saddle & saddle tube: 18-20

Handlebar clamp nut: 17-19

Head stem expander nut: 17-19

Tyre pressures are 50LB and it is a standard car valve so you can use your foot pump or compressor. If you have a bike pump with the wrong connection, pop along to a cycle shop and ask for a flexible end which is called a Schrader. If your tyre pressures are very low you will not get the mileage and the battery will be put under more strain. The sidewalls of your tyres will also be damaged causing tyre failure. Under inflation is one of the main reasons for spokes breaking as they are put under much more strain. If a spoke breaks after replacing you wheel need to check the tension of all your spokes is equal as it can begin a chain reaction. The headstock bearings and the wheel bearings are adjustable and replacement cup and cone. All nuts are metric.

## OPERATING THE BIKE:

On your bike is a LED display which controls your power modes. Your left brake lever controls the rear brake. For the safest braking always apply your front brake slightly before your rear brake.

Your throttle is on the right hand side of the handlebars.

When the battery is turned on the lights will show on the indicator how much battery you have left. You can then select your power using the (+) and (-)

You are able to have 3 levels of pedal assist as follows:

Press (+) once and you will have the low power assist and your speed will be around 9mph(15km/h)

Press (+) again and the second light will appear and you now have medium power assist with a speed approx. 12mph(20km/h)

Press (+) for the third time and your third light will appear showing you have high power assist with a speed approx. 15mph(25km/h)

If you press (+) once more all three lights will be illuminated and this means you have throttle pedal assist . This works by giving you infinite levels of pedal assistance depending on how much you open the throttle. You must keep pedaling for this to work but as soon as you close the throttle it goes back to being a normal bike.

To go back to pedal assistance or to turn power off press (-) until all the lights are turned off.

If you press the 6km/h button your bicycle will drive at 3.5mph(6km/h) however as soon as you let go it will turn off.



When we fold the bikes we normally fold the pedals first, then the handlebars and finally the middle clamp. This will explain how.



To fold the pedals: Place your thumb inside the hole in the pedal, depress the metal slide and fold the pedal up or down. When folding the bike the pedals should be placed at the same angle as the picture on the left. If you need to remove the pedals please remember the left hand pedal is left hand thread.



To fold the bars:

Undo the black v-block anti clockwise until the v-block clears the clamp. The bars will then drop. It is always a good idea to tighten the v-block back up to prevent damage whilst travelling



To open the frame:

open the cam lever and swivel 90 degrees away from the frame. Put your fingers on the underside of this lever and lift up, this raises a pin allowing the frame to undo. To close, lift the pin first before closing the frame. Release and check its locked. Then swivel the pin through the frame and depress the cam lever through 90 degrees to fully close.

It is a double locking mechanism for safety, should this need adjustment increase or decrease the pressure on the locknut with a 10mm spanner.



Over time the brake shoes which are fixed on the v-brake wear out causing a wider gap between the brakes and the wheel rim. This will be indicated in the leeway of the brake when applied. The left lever controls the rear brake and the right lever controls the front brake. You may also find as cables stretch the brake shoe on one arm will be moving more than the other. This will affect the safety of braking so will also need to be adjusted.

On each arm bracket there will be an adjustment screw and you simply tighten or loosen each side until the brakes are centred. If you tighten the screw the brake will increase in tension and anticlockwise will decrease the tension. Correct adjustment is achieved when both arms move about the same. Always squeeze the brake after each adjustment to test it. The brake blocks can also be moved around using a 5mm Allen key.

If there is not enough tension overall then you may need to pull more cable through the brake. Do this by gripping the cable where its held on the right bracket with a pair of pliers. This will stop it slipping back. Undo the Allen key holding the cable until you can pull some more through. A very small amount is all that's needed in most situations. Tighten the Allen key back up and test the brake until your happy with the tension. You may need to adjust the brake shoe tension again to match.



If you struggle any cycle shop should be able to assist you as they are standard.

## ADJUSTING THE GEARS

Your electric bikes are fitted with a Shimano gear system the same as any good quality pushbike, at some point the gear cable will stretch and the gears will need adjusting. To do this change the gear to the 6th gear (smallest cog) . Locate where the gear cable enters the derailleur and at that point there is a thumbscrew to adjust tension. Rotate this thumbscrew anti clockwise a turn, test the gears and repeat until the gears are functioning correctly. If you run out of thumbscrew adjustment rotate the thumbscrew clockwise fully into the derailleur until it will not turn. Then if you look underneath the derailleur you will see a locknut that secures the cable. Undo this locknut anticlockwise, pull through the slack cable and retighten the nut clockwise, then repeat the first adjustment. If your chain is coming off you have two mechanical stops that will need to be adjusted. These are found on the side of your derailleur with a small H and L symbol next to them. The H screw will affect the chain on the biggest cog and the L will affect it from coming off the smallest cog. Put the chain on the cog below or above the cog you want to change. Give the correct screw half a turn clockwise and test. You should see the teeth of the gear block centered in the chain when its correct.

Please keep in mind an over-tightened chain can click during riding.

If you are in trouble give us a shout for any help and advice and any pushbike shop can adjust gears.

