

e-MOVE

PEDAL ASSIST ELECTRIC BICYCLE

USER MANUAL

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1 SAFETY FIRST

Like any sport, cycling involves risk of injury and/or damage to the bicycle. By choosing to ride an electric bicycle, you assume the responsibility for that risk, so you need to know, and to practice, the rules of safe and responsible riding, and of proper use and maintenance. Proper use and maintenance of your electric bicycle reduces risk of injury.

This Manual contains many warnings and cautions concerning the consequences of failure to maintain or inspect your electric bicycle, and of failure to follow safe cycling practices.

Many of the **Warnings** and **Cautions** say “you may lose control and fall”.

Because any fall can result in serious injury, or even death, we do not always repeat the warning of possible injury or death.

Because it is impossible to anticipate every situation, or condition, which can occur while riding, this manual makes no representation about the safe use of the electric bicycle under all conditions. There are risks associated with the use of any electric bicycle, which cannot be predicted or avoided, and which are the sole responsibility of the rider. It is important for you to understand your new electric bicycle by reading this manual before you go out on your first ride. From this, you will know how to get better performance, comfort, and enjoyment from your new electric bicycle. It is also recommended that your first ride on your new electric bicycle is taken in a controlled environment, away from cars, obstacles and other cyclists etc., to make sure you become familiar with all the controls and features of your new electric bicycle, especially the brake performance. **If you feel anything about the electric bicycle is not as it should be, consult a qualified bicycle mechanic.** From here on in this manual, your electric bicycle may be also be referred to as an e-bike.

IMPORTANT BATTERY SLEEP MODE INSTRUCTIONS

Before you set your battery into SLEEP MODE, please make sure to read about SLEEP MODE preparation in Chapter 7 (page 53) in this user manual.

Please make sure that you fully charge the battery before first use.

Take great care not to allow any water to get near the electric components. This includes rain, water formations such as puddles, streams, rivers, potholes etc., as well as any spillages onto these components.

HELMETS SAVE LIVES!

Always wear a helmet! Safety gear is also available for knees, elbows, back, shoulders and more. It is highly recommended. Protective eye-wear is also recommended.

You should make sure you wear the appropriate clothing that is bright, and visible, and not too loose. Loose clothing can catch in moving parts and cause you to lose control and fall. Be sure to dress in accordance to the weather. Your footwear should be able to grip the pedals and not have loose laces.

Make sure you know all the local traffic laws and obey them. You are sharing the road with others and should always assume they haven't seen you, and exercise maximum caution on busy roads and around large vehicles.

If you are going to ride off-road, conditions may require extra attention and specific skills. Get to know your e-bike well before trying increased speed or difficult terrain.

Be aware that in wet conditions, your brakes stopping power (and those of other road users) is greatly reduced.

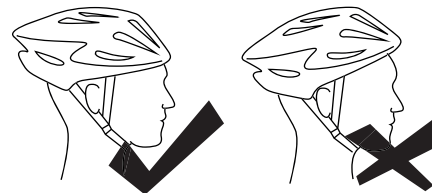
If you are going to ride at night, make sure you obey all laws regarding lighting and clothing, and be aware that cyclists are often hard to spot for drivers and pedestrians alike.

Any form of jump, stunt, wheelies, race/competition or other extreme riding of any kind will invalidate your warranty.

Always wear a cycling helmet which meets the latest certification standards, and is appropriate for the type of riding you do. Always follow the helmet manufacturer's instructions for fit, use, and care of your helmet. A properly fitted helmet should cover the forehead when riding an e-bike. Most serious e-bike injuries involve head injuries, which might have been avoided if the rider had worn an appropriate helmet.

The correct helmet should:

- Be comfortable
- Be lightweight
- Have good ventilation
- Fit correctly
- Cover forehead



FOLLOW THE LAWS

It is your responsibility to familiarise yourself with the local Traffic Laws, and to comply with all applicable laws, including properly equipping yourself, and your e-bike as the law requires. Reflectors are important safety devices which are designed as an integral part of your e-bike. Traffic laws require every bicycle to be equipped with front, rear, front wheel, rear wheel, and pedal reflectors. These reflectors are designed to pick up and reflect street lights and car lights in a way that helps you to be seen and recognized as a moving bicyclist. Check reflectors and their mounting brackets regularly to make sure they are clean, straight, unbroken and securely mounted. Have your dealer replace damaged reflectors and straighten or tighten any that are bent or loose.

Please ensure that if you intend to ride at night time, that you have fitted appropriate lights, and checked they are working properly.

It is illegal for children under the age of 14 to ride an e-Bike.

IMPORTANT – PEDAL ASSEMBLY – READ FIRST

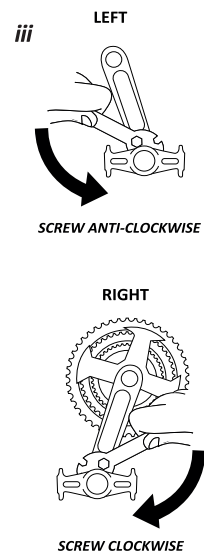
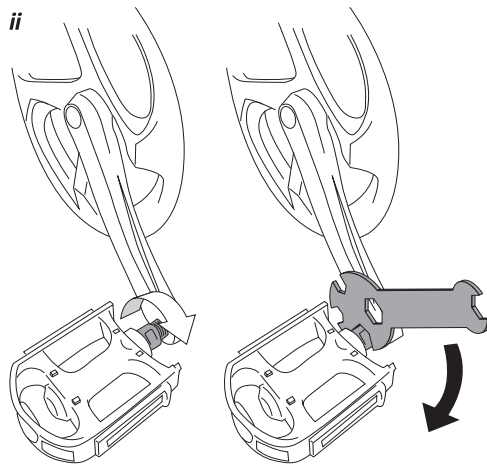
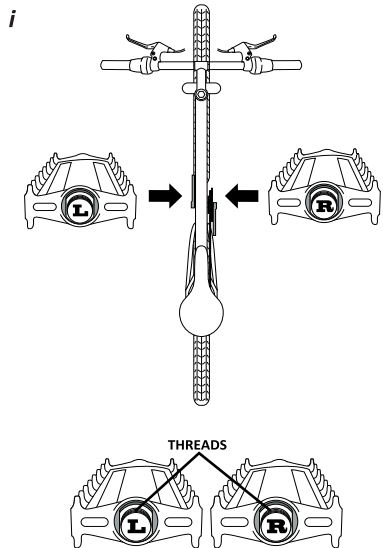
Both standard pedals and folding pedals are marked to show if they are installed on the left or on the right. **It is very important to insert the correct pedal into the correct crank arm. If you don't, you could cross thread them and cause irreparable damage not covered by warranty.**

Stickers indicate the left and right pedal. If these have dropped off, look at the end of the thread where it is imprinted into the metal.

The correct pedal needs to be attached to the matching side of the e-bike crank, i.e. left pedal to left side crank, and right pedal to right side crank.

IMPORTANT! Pedals need screwing in opposite directions so they don't fall off in use.

Left pedal is screwed in anti-clockwise, and the right pedal is screwed in clockwise. Tighten pedals with spanner provided. Check and re-check for tightness.



2 INTRODUCTION

Thank you for your purchase of this electric bicycle (e-bike).

Whether you have purchased an e-bike, or regular bicycle before, please take some time to read the instruction manual carefully before operating this vehicle.

If you do not feel that you can complete the assembly, or any of the routine maintenance of this e-bike, please take to your local bicycle workshop or a suitably qualified bicycle mechanic where they will be able to assist you.

This manual is not intended as a comprehensive use, service, repair or maintenance manual. Please see your dealer for all service, repairs or maintenance. Your dealer may also be able to refer you to classes, clinics or books on bicycle use, service, repair or maintenance.

This e-Bike has an electric pedal assist drive system. In EU countries, it is legally known as PAS cycle, PAS being an acronym for "Pedal Assisted System".

The drive assist system consists of a drive unit, a battery, a controller, and various electronic components (display, harness wires, sensors, and switches). It is important to know that when the system is turned on, the drive unit engages to provide power **ONLY** while you are pedalling. The amount of power provided by the drive unit depends on the assistance mode/level you have set with the handlebar display control. At any time if you stop pedalling, or apply the brake/brakes, the drive assist system will disengage. The drive assist system is also programmed to disengage if the speed limit of 25 km/h (15.5 mph) is reached, as this is a setting in the system required by law. If the speed drops below 25 km/h (15.5 mph), the drive assist system will re-engage, as long as the pedals are still turning.

GENERAL UNPACKING INSTRUCTIONS 3

Remove all packaging materials (we advise that you keep these materials until you are satisfied that the e-bike is setup correctly, and in working order). Please proceed to set all parts aside for assembly.

Whether you have purchased a folding, or non-folding model, some minimal assembly will be required to prepare your e-bike for riding. Please follow the guidelines over the next few chapters for correct assembly instructions.

Tools required include:

8mm, 10mm, 15mm and 14mm multi-spanner.

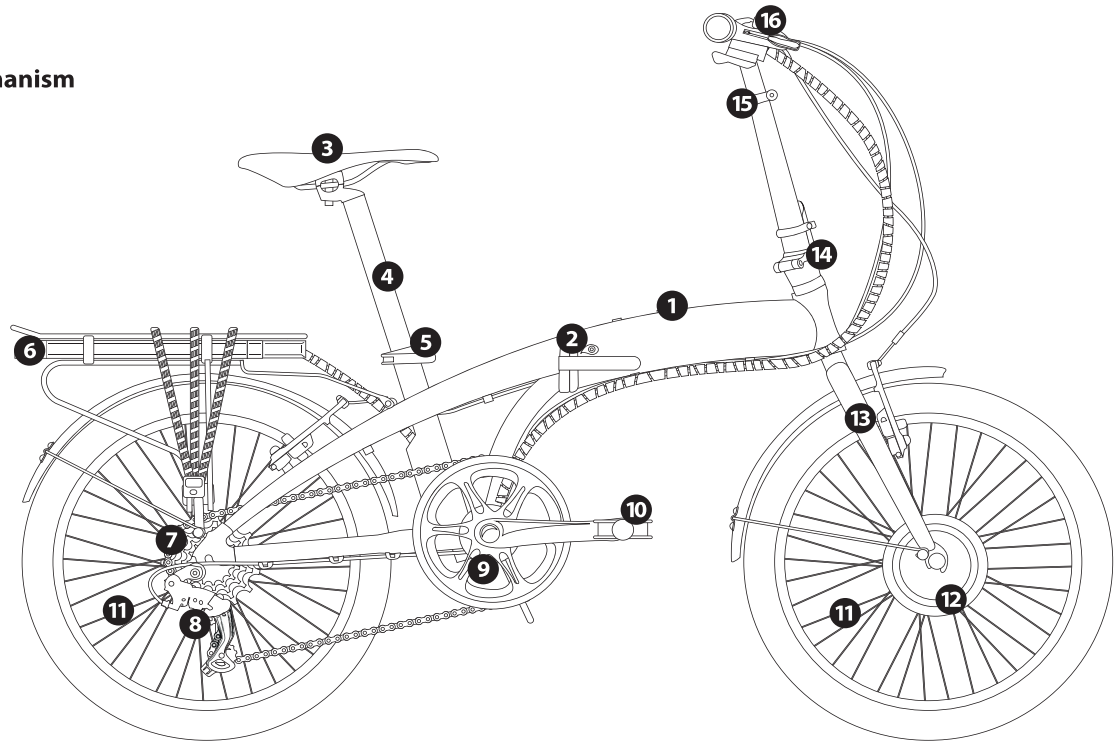
5mm & 6mm Hex (Allen) Keys.

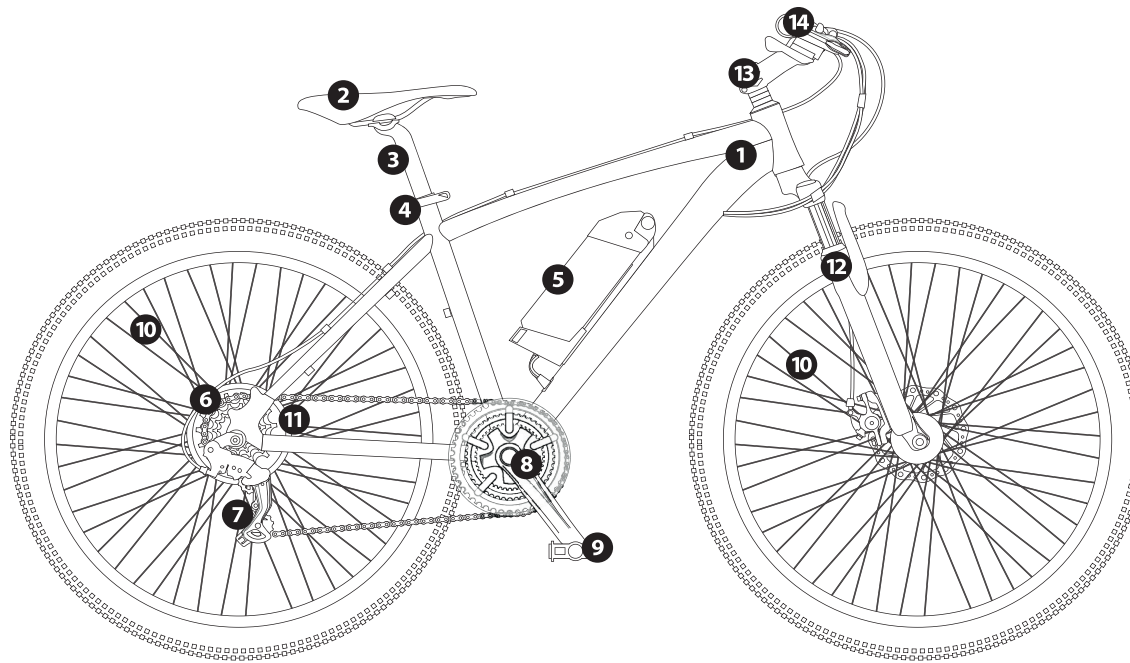
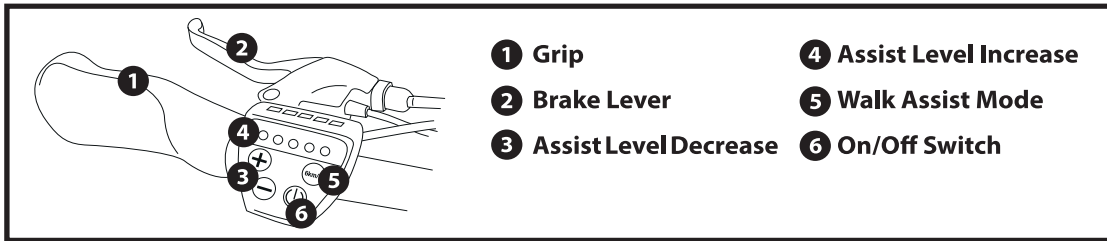
Cross-head Screw Driver.

Also, Cutters/Pliers (not included).

4 PARTS LIST & GUIDE

- 1 Frame
- 2 Frame Folding Mechanism
- 3 Saddle
- 4 Seat Post
- 5 Seat Clamp
- 6 Battery
- 7 Freewheel
- 8 Rear Derailleur
- 9 Bottom Bracket
- 10 Pedal
- 11 Spoke
- 12 Hub Motor
- 13 Forks
- 14 Stem Hinge
- 15 Stem height clamp
- 16 Handlebar





- 1 Frame
- 2 Saddle
- 3 Seat Post
- 4 Seat Clamp
- 5 Battery
- 6 Motor
- 7 Rear Derailleur
- 8 Bottom Bracket
- 9 Pedal
- 10 Spoke
- 11 Hub Motor
- 12 Forks
- 13 Stem
- 14 Handlebar

5 RIDING POSITIONS & GETTING STARTED

It is important that you are able to safely get on and off of your e-bike, and that you can comfortably ride the e-bike, and use its features. Please read the following guideline to help you achieve the perfect riding position.

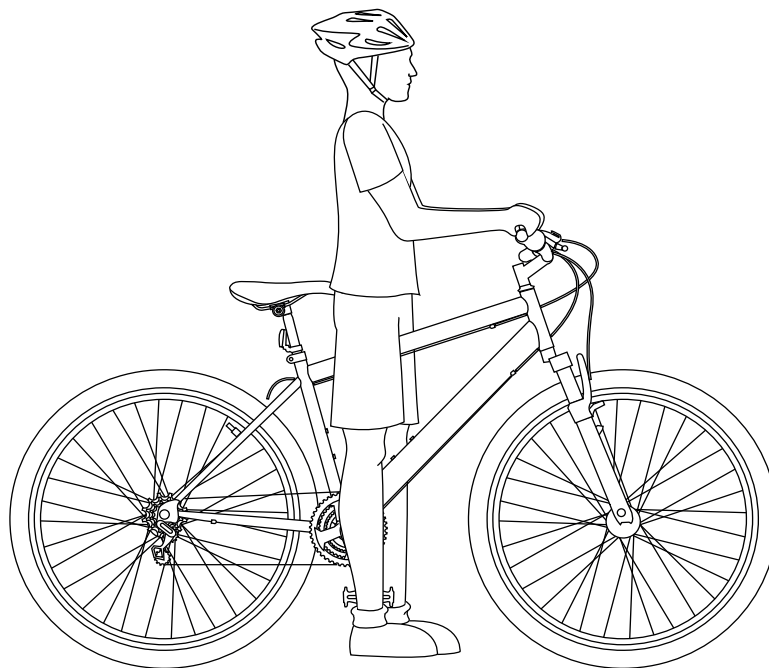
Stand over the bike, in front of the saddle. Depending on what you will use your e-bike for, you should have different levels of minimum clearance:

For use on roads, and paved surfaces: minimum 5cm clearance.

For use on unpaved surfaces, such as canals and tow paths: minimum 7.5cm clearance.

For heavy off-road use: minimum 10cm clearance.

For ladies frames, you should use an imaginary top tube, as even though you might be able to stand over the frame, e-bikes get longer as they get taller.



To size your e-bike, you can start at the wheel, but this is only a basic guide. You must ensure the rider can reach the handlebars and operate the brakes, and gears (if applicable), with the elbows slightly bent.

Saddle height is adjustable, and this gives each e-bike a range of rider heights. This should be determined by the distance from foot to pedal, NOT foot to floor. Your knee should be almost straight when the pedal is the down-most position.

Whilst you may not be able to reach the floor from this position, you may simply move forward of the saddle to mount or dismount.

Riding is much harder with the saddle at lower adjustments than advised, as the legs will be moving in unnatural positions. Juniors will normally prefer to be able to touch the floor from the seated position, as this will make them feel safer. This can be adjusted as they get more confident. If the saddle is too high, and the knees lock whilst the pedal is in the downward most position, or if the pedals cannot be reached at any point, the e-bike cannot be properly controlled, which in turn makes the e-bike dangerous.

The saddle height can be adjusted by releasing the quick release fastener mechanism (refer to page 45 on how to release), and sliding the seat post up or down the seat tube. Please ensure the fastener is tightened back up once the correct position has been found.

Please note: Under no circumstances should the seat post project from the frame beyond its "Minimum Insertion" or "Minimum Extension" mark. If your seat post projects from the frame beyond these markings, the seat post or frame may break, which could cause you to lose control and fall.

To obtain maximum comfort, the rider should not overextend his or her reach when riding.

To adjust this distance, the position of the seat can be altered in relation to the seat post (refer to page 46 on how to adjust the seat clamp).

Maximum comfort is also obtained when the handlebar height is equal to the height of the seat. You may wish to try different heights to find the most comfortable position.

Please note: The stem's "Minimum Insertion" mark must not be visible above the top of the headset. If the stem is extended beyond this mark, the stem may break or damage the fork's steerer tube, which could cause you to lose control and fall.

The e-bike can be ridden with the electric assist system switched on, by connection to a lithium battery power source, or switched off. Using the e-bike with the assist system off simply means the e-bike rides as a conventional bicycle.

As previously mentioned, the power assist drive system has a maximum speed 25 km/h (15.5 mph), and applying the brake/brakes will cut the power to the motor.

To switch on the pedal assist system, turn the key in the battery to the on position, switch on the battery using the on/off switch, and press the power button on the handlebar display.

Now, once you begin to pedal, and the crank is turning, you will feel the motor kick in and your electric system begin to assist you. Whether you are using a 3, 5, 7, or 9 level module, the level of assistance can be selected by using the + and – buttons to increase or decrease required assistance retrospectively. Please be aware that riding constantly in the high level of assist will have a detrimental effect on the range of the battery.

Once riding, if the e-bike is fitted with conventional gears, they can be used to obtain better riding cadence and speed.

This e-bike is also fitted with a “walk assist” function. By depressing (holding down) the “6 km/h” button on the display, the motor will engage at 6 km/h, to help you set off from a standing/sloping start, or even if you just need to help to push the e-bike whilst you are walking. Please note, there is a slight delay from depressing (holding down) the walk assist button, and the motor engaging. This is normal and is there as a safety feature.

Our range of e-bikes are power assisted by various batteries. An overview of these batteries are listed on pages 50-52. Please carefully read the instructions which relate to your model/type of e-bike.

Ensure no other plug is ever connected to the main battery slot other than that supplied with your e-bike.

GENERAL ASSEMBLY INSTRUCTIONS 6

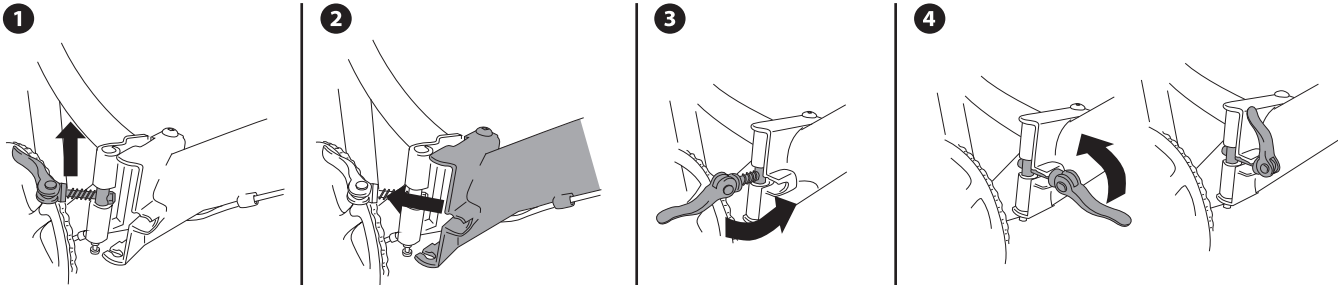
6A. Folding Mechanisms: Frame, Handlebar, Pedals

If you have purchased a folding model e-bike, please unfold the e-bike, and lock the frame hinge into place. We have several different kinds of locking mechanisms, with instructions for use below:

FOLDING FRAMES (where applicable)

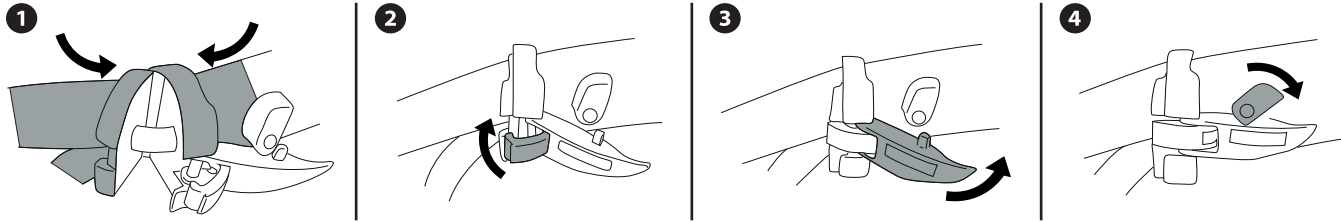
Frame Folding Mechanism Type A:

For this type of mechanism, lift the locking pin, and join the hinge tightly together. Fold the main frame hinge so that the frame comes together at full length. Release the locking pin, so that the pin drops firmly into the hinge assembly. Lift the quick release lever into the "V" slot (as shown), and close. Ensure that the lever is firmly locked down. This is critical to ensure the safe operation of the bicycle. Check and re-check for tightness.



Frame Folding Mechanism Type B:

For this type of mechanism, make sure the moveable lever is open as shown, and fold the main frame hinge so that the frame comes together at full length. Close the locking lever by pressing it towards the frame, and the lever should “click” as it locks into place. Ensure that the lever is firmly locked down. Then rotate the plastic safety hook downwards into place inside the lever. This is critical to ensure the safe operation of the bicycle. Check and re-check for tightness.

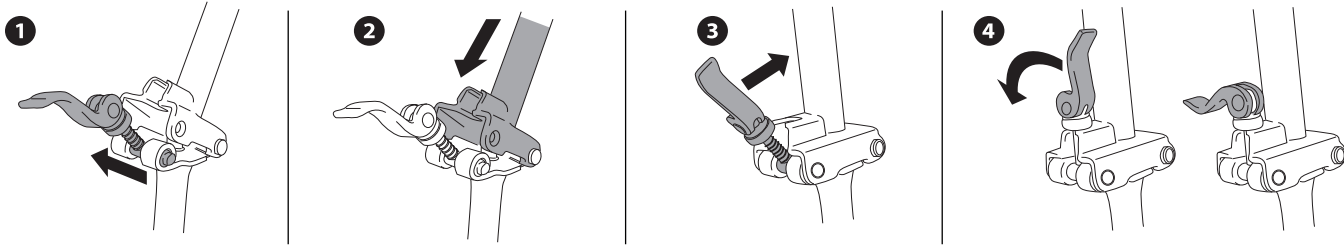


Failure to engage the safety catch correctly for any locking mechanism may result in the mechanism opening and the frame folding while in use.

FOLDING STEMS (where applicable)

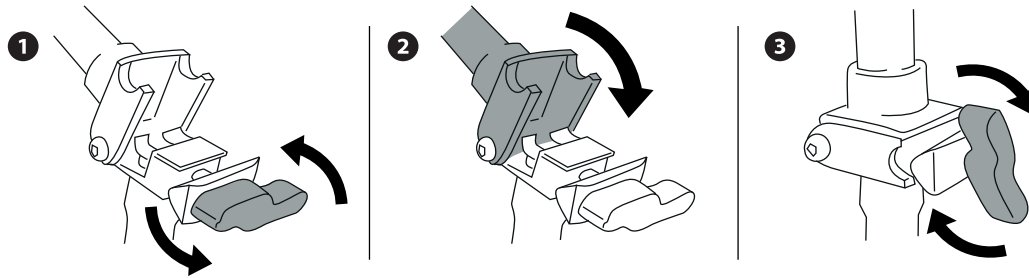
Handlebar Folding Mechanism Type A:

For this type of folding handlebar, swing the stem up into an upright position. To join the folding mechanism you need to push the quick release lever to the left, and join the handlebar stem together. Swing the quick release arm up into the folding bracket, and close the quick release lever as shown, ensuring it folds down towards the rear of the bike. Check and re-check for tightness.



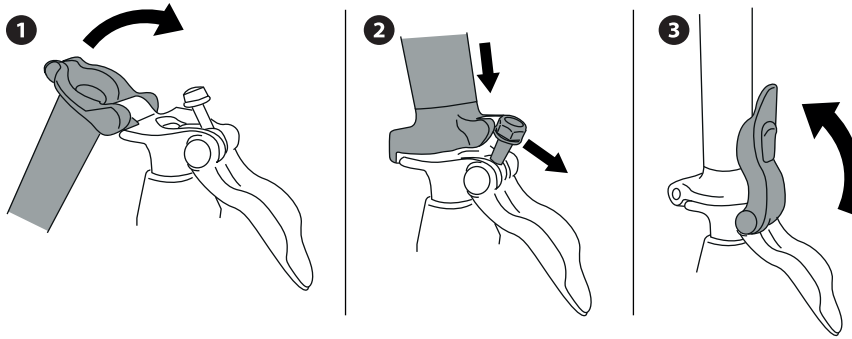
Handlebar Folding Mechanism Type B:

For this type of folding handlebar, make sure that the plastic locking mechanism is in the release position by turning it in an anti-clockwise direction as far as possible. Then swing the stem up into an upright position. Proceed to tighten up the locking mechanism by turning it in a clockwise direction until tight. Check and re-check for tightness.



Handlebar Folding Mechanism Type C:

For this type of folding handlebar, make sure that the locking mechanism lever is in the open position as shown. Then swing the stem up into an upright position. Proceed to lock the mechanism lever into place, making sure the safety catch is locked into an upright position. Check and re-check for tightness.

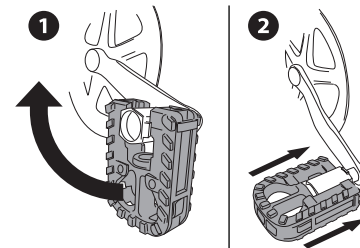


Failure to engage the safety catch correctly for any locking mechanism may result in the mechanism opening and the stem folding while in use.

FOLDING PEDALS (where applicable)

Opening the pedals:

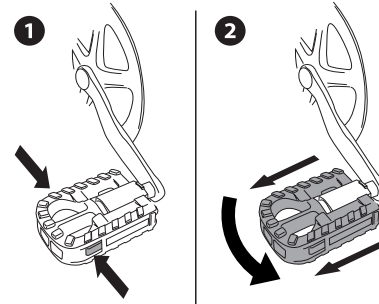
Your folding bike may come with one or two folding pedals. To open these, bring the pedal to a horizontal position, 90 degrees to the pedal arm. Keeping the pedal in this position, push it towards the pedal arm until you hear a click.



Closing the pedals:

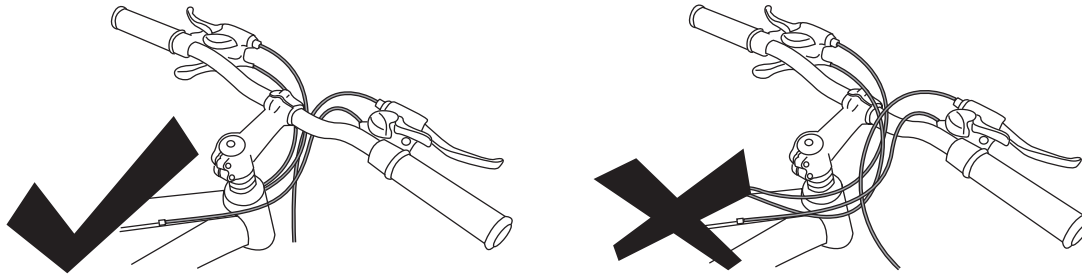
Press the release buttons on either side of the pedal. Whilst holding pull the pedal away from the pedal arm. It will now fold easily.

The release button may also be located inside the pedal housing.



6B. Aligning Handlebars and Stem Assembly

There are two different types of stem. Quill stems and 'A' Head (or threadless) stems. Whichever type you have, make sure that when you install the stem/handlebar, that you don't twist the cables. Also make sure that the front fork is facing the correct way before tightening up the stem.



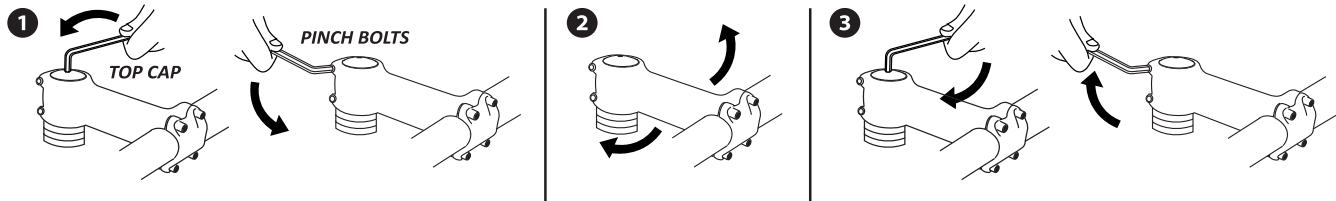
'A' Head (Threadless) Stems

This type of stem is open ended, and wraps around the steerer tube with pinch bolts, and has a top cap also.

To adjust this stem, you need to loosen the top cap, and the pinch bolts by turning the bolts anti-clockwise with an allen key. If you are completely removing the cap to either install or change the stem, be sure to have the fork on the ground, or, that you are holding on to it, as once you release the top cap, the fork is liable to fall through causing you to lose parts of the head set.

Once these bolts are loose, you can adjust the stem and make sure it is in line with the front wheel.

When tightening, you should start with the top cap. Tighten it until the stem and fork are held in place, but the stem will still rotate left to right. Then tighten the pinch bolts evenly with the stem in line with the forks (it may be easier to re-adjust this with the front wheel fitted, so the stem is in line with it). Check and re-check for tightness.



Please Note: Stem height cannot be adjusted with this type of stem. Should you require a height adjustment, you should visit a qualified bicycle mechanic for advice on different types of stem to suit your style of riding.

To install or remove the stem/handlebar, you need to release the clamping bolts on the front of the stem (there are usually either 2 or 4). When re-installing these clamping bolts, make sure to tighten **EACH NUT A LITTLE AT A TIME**, ensuring that the gap between stem and clamping clamp stays even. Also take care to make sure that the handlebar is centre in the stem. Check and re-check for tightness.

If you need to adjust the angle of the handlebar, you can do this by loosening the clamping bolts slightly, turning the handlebar to the desired angle, ensuring it stays centred, and tightening again **EACH NUT A LITTLE AT A TIME**, ensuring that the gap between stem and clamping clamp stays even. Check and re-check for tightness.



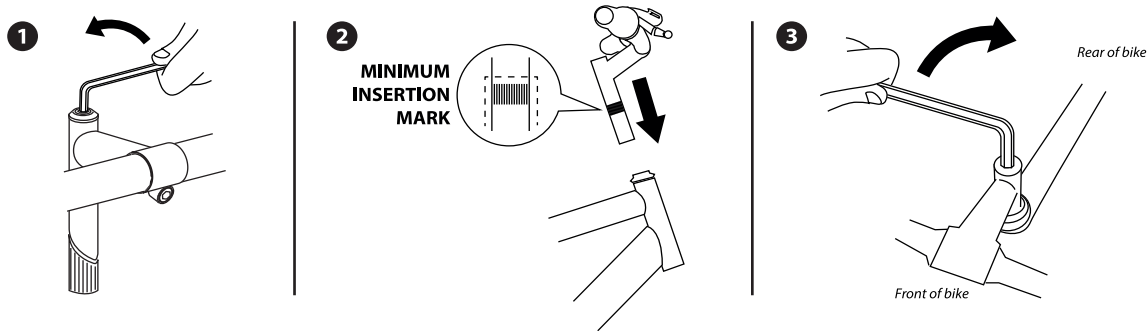
Quill (Threaded) Stems

This type of stem has a wedge on the bottom which fits into the fork steerer tube.

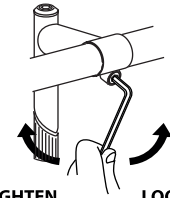
To adjust or install this type of stem, you need to loosen the centre bolt enough so that the stem will fit/become loose, in the steerer tube, by turning it anti-clockwise with an allen key.

You can then insert or adjust the stem. You can rotate it left to right and you can also adjust the height. Once your stem is in place and in line with the forks, tighten it up by turning the centre bolt clockwise (it may be easier to re-adjust this with the front wheel fitted, so the stem is in line with it). Check and re-check for tightness.

Please note: The stem's "Minimum Insertion" mark must not be visible above the top of the headset. If the stem is extended beyond this mark, the stem may break or damage the fork's steerer tube, which could cause you to lose control and fall.

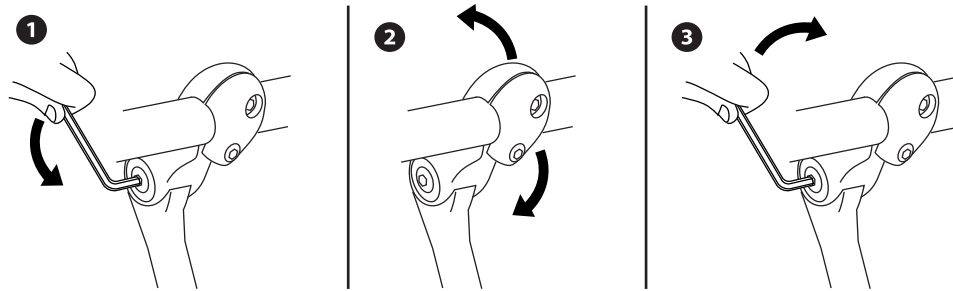


If you need to adjust the angle of your handlebar, you can do this by loosening the clamping nut. The handlebar will then rotate freely in the stem. Adjust to desired angle, ensuring the handlebar is still centred in the stem, and then re-tighten the clamping bolt. Check and re-check for tightness.



Adjustable Angle Stems

Some urban and trekking e-bikes may come with stems where you can adjust the angle. These can be either "A" Head (threadless), or quill stems. In addition to the previous steps, you should set the angle and ensure the adjusting nut is tight. Slightly loosen the adjusting nut by turning anti-clockwise using an allen key. The stem should now move up and down. Set it to your desired angle. Tighten up by turning adjusting nut clockwise. Check and re-check for tightness.



WARNING

You **MUST** make sure the stem & handlebar is inserted beyond the minimum insertion mark. If you don't you may damage the bike or the stem. You may also lose control and fall, which could cause you serious injury. Once you have finished assembling you should test the stem by holding the front wheel between your legs and trying to turn the handlebars. If these turn without turning the front wheel you need to line the handlebar back up and re-tighten.

6C. Tightening Pedals onto the Crank

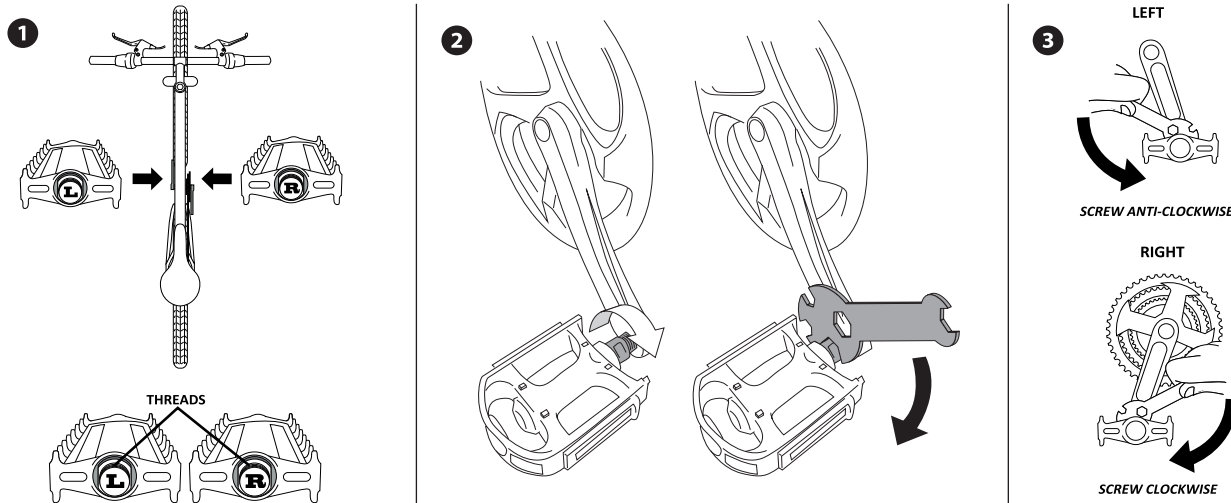
Both standard pedals and folding pedals are marked to show if they are installed on the left or on the right. **It is very important to insert the correct pedal into the correct crank arm. If you don't, you could cross thread them and cause irreparable damage not covered by warranty.**

Stickers indicate the left and right pedal. If these have dropped off, look at the end of the thread where it is imprinted into the metal.

The correct pedal needs to be attached to the matching side of the e-bike crank, i.e. left pedal to left side crank, and right pedal to right side crank.

IMPORTANT! Pedals need screwing in opposite directions so they don't fall off in use.

Left pedal is screwed in anti-clockwise, and the right pedal is screwed in clockwise. Tighten pedals with spanner provided. Check and re-check for tightness.



6D. Gears

If your bike is equipped with gears, it will have either one or two shifters. Before riding your e-bike, make sure your gears are properly adjusted, and that you are happy with how the controls work.

The shifter fitted to the right hand side of the handlebar controls the rear gears. These are where you have a number of cogs on the rear wheel, and the chain is moved across them by way of a derailleur.

The LARGEST cog is the LOWEST gear, and therefore, the most easy to pedal. The SMALLEST cog is the HIGHEST gear, and the hardest to pedal.

The shifter fitted to the left hand side of the handlebar, if you have one, will control the front gears. These gears work the opposite to the rear gears, and the SMALLEST cog is the LOWEST gear.

You should select a lower gear to set off, and a higher gear once you get going. Most gear shifters have a number indicator to show which gear number you are in. Try not to leave it until you are struggling before you change gear, as this will cause you to lose speed and control. Never change gear whilst the e-bike is not moving, or the pedals are not turning, as you could damage your gears.

E-bikes come with the gears set from the factory, but slight adjustment may be needed before you ride the e-bike. In this section, we will detail the different type of gear changers, and we will also explain how to make slight adjustments to these. Gears should change easily and quietly. If they don't, here you will find basic instructions on how to adjust them. You will need to work out from the images which type of gears you have. There are so many brands and models of gears, it is impossible to illustrate them all, but they all have similar functions which you will find in the following pages.

Please Note: If you are unsure, or don't understand any of these steps, please consult a qualified bicycle mechanic. It is recommended you have a bicycle workshop assist you with the adjustment of the gears. Cable tension must be checked to ensure there is no slack in the cable when in the highest (fastest gear). Failure to do this will result in poor gear changes. Lube chain and sprockets regularly with a Teflon based chain lube.



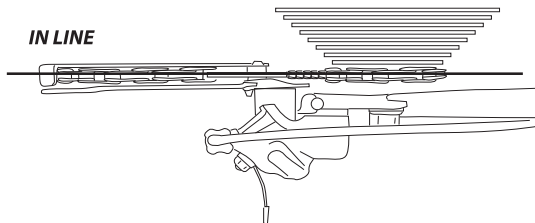
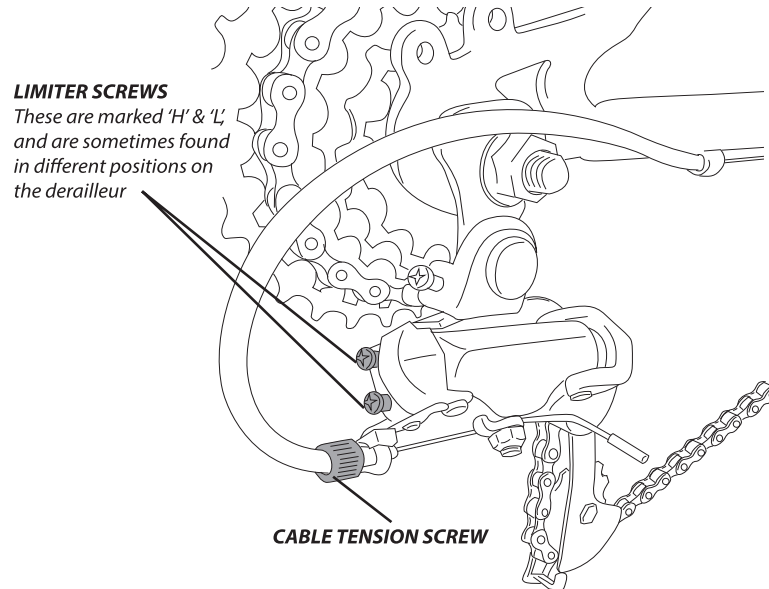
IF YOU HAVE ANY PROBLEMS, OR ARE UNSURE ABOUT ANY OF THESE STEPS, CONSULT A QUALIFIED BICYCLE MECHANIC

Derailleur

Gears are usually controlled by derailleurs, which are the mechanisms that move the chain up and down the cogs. The rear derailleur is controlled by the right hand gear shifter, and the front derailleur by the left shifter.

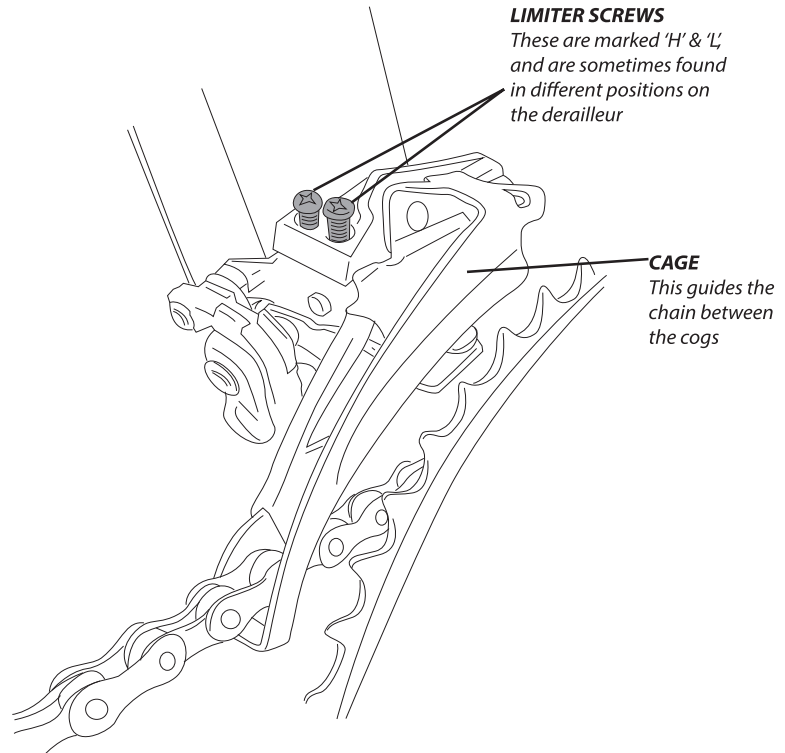
Setting Gears on a Rear Derailleur

- 1 Turn the pedals and shift the gear on the right hand gear shifter to the highest number/lowest cog.
- 2 Look at the derailleur, and the cog, making sure that they are both in line. If this is not the case, then you can adjust the 'L' screw slightly with a cross head screwdriver until they are.
- 3 Change the shifter one position and see if the chain moves up one cog easily. Whilst changing gears, if the chain will either not change cogs, or changes two cogs at a time, you can adjust the cable tension screw. Each derailleur model is different, so we recommend giving it half a turn one way, testing, and then adjusting accordingly until you achieve the desired result.
- 4 Now turn the pedals and change the shifter to the lowest number and largest cog.
- 5 You can now check if the chain and derailleur are in line. If it's not, or if the derailleur has excessive play towards the wheel, adjust the 'H' screw slightly until they are in line with no play.



Setting Gears on a Rear Derailleur

- 1 Turn the pedals and shift the gear on the left hand gear shifter to the lowest gear (smallest cog at the front), and the right hand shifter to the highest gear (smallest cog at the back).
- 2 You should check that the chain is running freely through the cage on the front derailleur without catching. If it catches you can move the cage by slightly adjusting the 'L' screw.
- 3 Leaving the left hand gear shifter where it is, set the right hand shifter to the lowest gear (largest cog) and repeat step 2.
- 4 Change the left hand shifter up one gear. If the gear doesn't change smoothly onto the next cog, you can adjust the cable tension screw. For the front derailleur, this is found on the gear shifter (check which one you have in the following section). Turn slightly, and keep testing until you have achieved the desired result.
- 5 Once the gears are changing correctly, shift the left hand shifter on the highest gear, and check that the chain cannot clear the cage and come off the cog over the top. If it can, you can adjust it by slightly turning the 'H' screw with a cross head screwdriver.

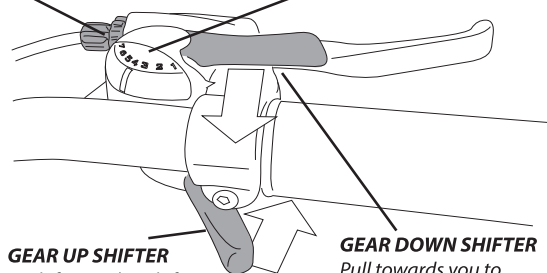


IF YOU HAVE ANY PROBLEMS, OR ARE UNSURE ABOUT ANY OF THESE STEPS, CONSULT A QUALIFIED BICYCLE MECHANIC

EASYFIRE

CABLE TENSION SCREW
Can be turned to add or remove slack to the gear cable

GEAR INDICATOR
Tells you what number gear you are in



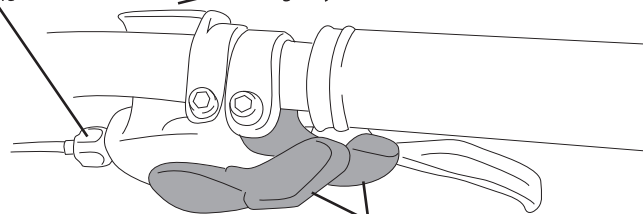
GEAR UP SHIFTER
Push forward to shift to a larger cog

GEAR DOWN SHIFTER
Pull towards you to shift to a smaller cog

EASYFIRE POD

CABLE TENSION SCREW
Can be turned to add or remove slack to the gear cable

GEAR INDICATOR
Tells you what number gear you are in



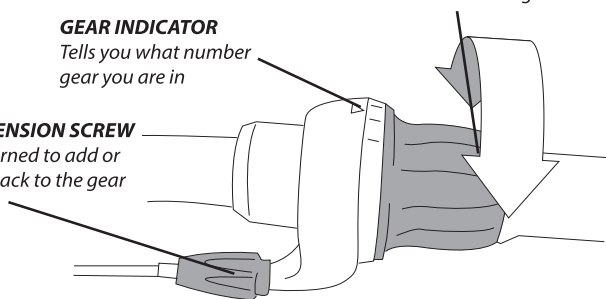
GEAR SHIFTERS
Pull each shifter towards you to either upshift or downshift

TWIST GRIP

GEAR SHIFTER
Rotate to shift gears up and down the cogs

GEAR INDICATOR
Tells you what number gear you are in

CABLE TENSION SCREW
Can be turned to add or remove slack to the gear cable



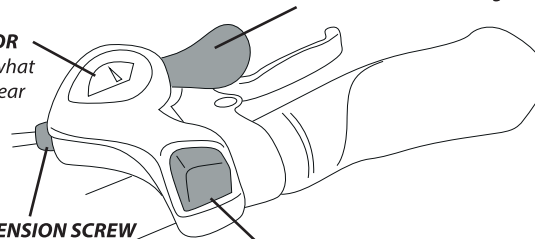
THUMB SHIFTER

GEAR UP SHIFTER
Push forward to shift to a larger cog

GEAR INDICATOR
Tells you what number gear you are in

CABLE TENSION SCREW
Can be turned to add or remove slack to the gear cable

GEAR DOWN SHIFTER
Push to shift to a smaller cog



6E. Brakes

It's very important for your safety that you learn, and remember, which brake lever controls which brake on your e-bike. Traditionally, the left brake lever controls the rear brake, and the right brake lever controls the front brake. To make sure your e-bike's brakes are set up this way, squeeze one brake lever and look to see which brake, front or rear, engages. Now do the same with the other brake lever.

Make sure that your hands can reach and squeeze the brake levers comfortably. If your hands are too small to operate the levers comfortably, consult your local bike shop before riding the e-bike. The lever reach may be adjustable; or you may need a different brake lever design.

How Brakes Work

The braking action of a bicycle, or an e-bike, is a function of the friction between the braking surfaces. To make sure that you have maximum friction available, keep your wheel rims and brake pads free of dirt, lubricants, waxes or polishes.

Brakes are designed to control your speed, not just to stop the bike. Maximum braking force for each wheel occurs at the point just before the wheel "locks up" (stops rotating), and starts to skid. Once the tyre skids, you actually lose most of your stopping force, and all directional control. You need to practice slowing and stopping smoothly without locking up a wheel.

This technique is called progressive brake modulation. Instead of jerking the brake lever to the position where you think you'll generate the appropriate braking force, squeeze the lever progressively, increasing the braking force.

If you feel the wheel begin to lock up, release the pressure just a little to keep the wheel rotating just short of lockup. It's important to develop a feel for the amount of brake lever pressure required for each wheel at different speeds, and on different surfaces. To better understand this, experiment a little by walking your e-bike and applying different amounts of pressure to each brake lever, until the wheel locks.

When you apply one, or both brakes, the bike begins to slow, but your body wants to continue at the speed at which it was going. This causes a transfer of weight to the front wheel, or under heavy braking, around the front wheel hub, which could send you flying over the handlebars.

A wheel with more weight on it will accept greater brake pressure before lockup; a wheel with less weight will lock up with less brake pressure. So, as you apply brakes and your weight is transferred forward, you need to shift your body toward the rear of the bike, to transfer weight back on to the rear wheel; and at the same time, you need to both decrease rear braking and increase front braking force. This is even more important on descents, because descents shift weight forward.

Two keys to effective speed control and safe stopping are controlling wheel lockup and weight transfer. This weight transfer is even more pronounced if your e-bike has a front suspension fork. Front suspension “dips” under braking, increasing the weight transfer. Practice braking and weight transfer techniques where there is no traffic or other hazards and distractions.

Everything changes when you ride on loose surfaces or in wet weather. It will take longer to stop on loose surfaces or in wet weather. Tyre adhesion is reduced, so the wheels have less cornering and braking traction, and can lock up with less brake force. Moisture or dirt on the brake pads reduces their ability to grip. The way to maintain control on loose or wet surfaces is to go more slowly.

Brakes are a very important part of your e-bike, and you need to familiarise yourself with which type of brake you have. This part of the manual will cover all types. If you need any slight adjustment to the brakes, try using the barrel adjuster on the levers first (see V Brakes or Expansion Brakes section). **We always advise that if you are unsure about anything to do with your brakes or their functions, you should consult a qualified bicycle mechanic before riding your e-bike.**

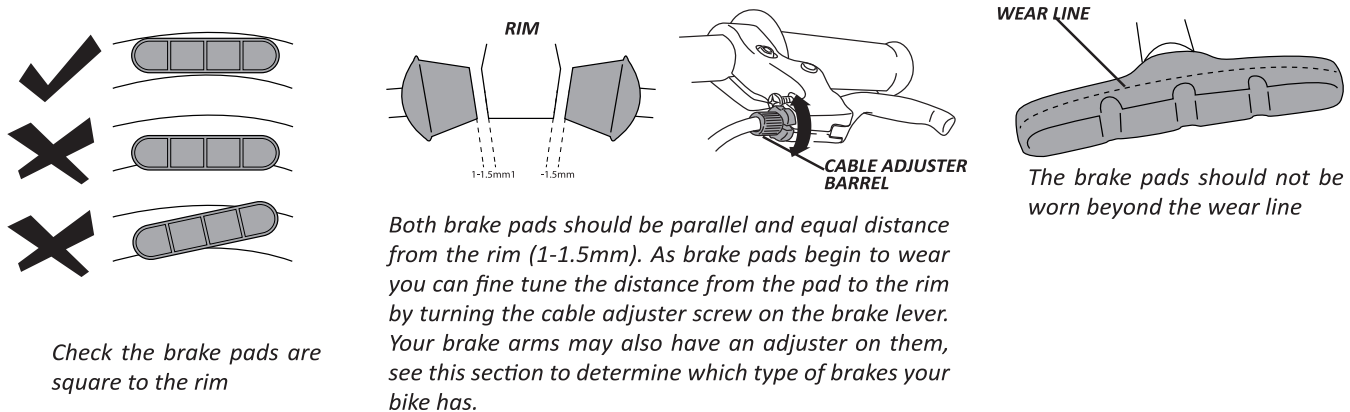


IF YOU HAVE ANY PROBLEMS, OR ARE UNSURE ABOUT ANY OF THESE STEPS, CONSULT A QUALIFIED BICYCLE MECHANIC

Rim Brakes

Rim brakes work by squeezing brake pads (usually made out of rubber) against the rim, in order to slow the wheel down. It is important that you **keep them serviced**. You may need to adjust your brakes, and you may need to release and engage them in order to replace a wheel. In this manual you will find a guide on how to do this, however, **if you are unsure about anything to do with your brakes or their functions, you should consult a qualified bicycle mechanic before riding your e-bike.**

You should regularly check these points and adjust accordingly (these rules do not apply for disc brakes). If you are unsure, consult a qualified bicycle mechanic:



Check the brake pads are square to the rim

Both brake pads should be parallel and equal distance from the rim (1-1.5mm). As brake pads begin to wear you can fine tune the distance from the pad to the rim by turning the cable adjuster screw on the brake lever. Your brake arms may also have an adjuster on them, see this section to determine which type of brakes your bike has.

IMPORTANT

Both brake arms should move the same distance when you squeeze the brake lever.

The rim should run freely through the brake pads with no contact when the brake is open.

The brake pads should touch the rim before the brake lever is 1/3 of the way to the handlebar.

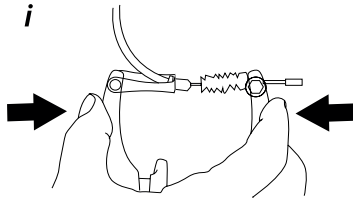
Keep your brakes serviced regularly.

V BRAKES

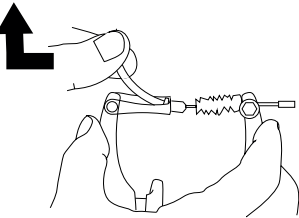
To release your V brakes in order to fit or replace your wheel, pull back the black rubber protector and squeeze the two brake arms together. Whilst holding these you can pull the brake out by the noodle as shown.

To re-engage your brakes once wheel is fitted, you need to squeeze the brake arms together again and reverse step *ii*.

i



ii



CABLE GUIDE PIPE (NOODLE)

Hooks into the left hand arm and connects the two brake arms so that they both move towards the wheel when the brake lever is pulled

BRAKE PAD ADJUSTMENT BOLT

This bolt secures the brake pad to the brake arm and can be released to adjust the angle of the brake pad.

SPRING TENSION SCREW

Adjusts spring strength for each brake arm. Turn clockwise to increase tension and anti-clockwise to decrease.

BRAKE CABLE

Operates the brake arms when the brake lever on the handlebars is pulled

CABLE PINCH BOLT

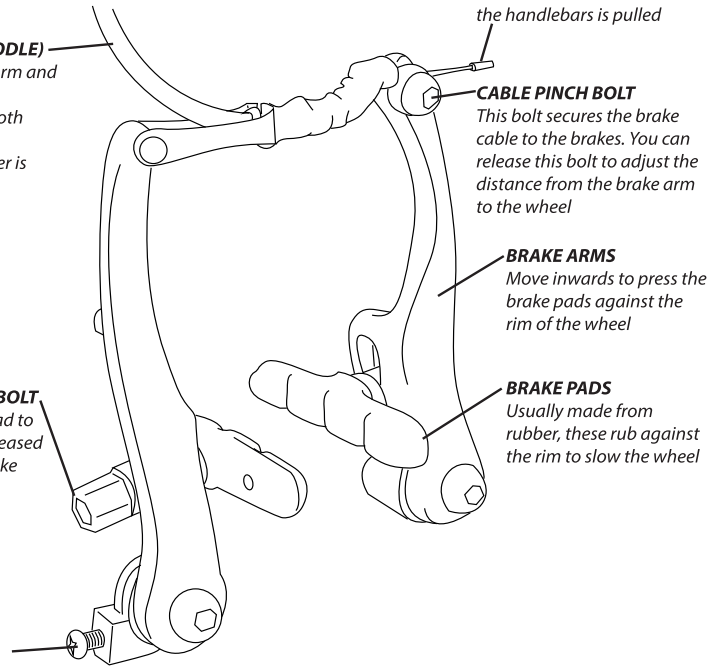
This bolt secures the brake cable to the brakes. You can release this bolt to adjust the distance from the brake arm to the wheel

BRAKE ARMS

Move inwards to press the brake pads against the rim of the wheel

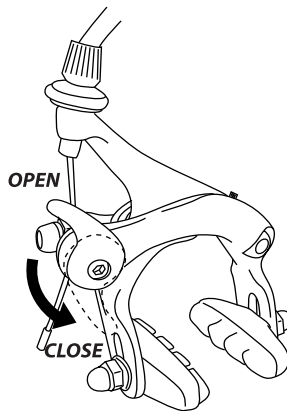
BRAKE PADS

Usually made from rubber, these rub against the rim to slow the wheel



CALIPER BRAKES

To release the brakes in order to install or remove a wheel you need to move the quick opener lever to the open position.



Once your wheel is in place you can re-engage your brakes by bringing the lever back down to the lower-most position.

QUICK OPENER LEVER
This lever engages and disengages the brakes for easy wheel removal

CABLE PINCH BOLT
This bolt secures the brake cable to the brakes. You can release this bolt to adjust the distance from the brake arm to the wheel

BRAKE CABLE
Operates the brake arms when the brake lever on the handlebars is pulled

BREAK PAD ADJUSTMENT BOLT
This bolt secures the brake pad to the brake arm and can be released to move the brake pad up and down in order to align with the rim

CABLE TENSION SCREW
Turn anti-clockwise to fine tune the distance from the brake arms to the wheel when brake pads begin to wear. Once adjusted, tighten locking nut below.

CALIPER ALIGNMENT SCREW
Should one brake pad be closer to the rim than the other, turn this to centre the brake.

FIXING BOLT
This bolt holds the brakes together

BRAKE ARMS
Move inwards to press the brake pads against the rim of the wheel

BRAKE PADS
Usually made from rubber, these rub against the rim to slow the wheel

DISC BRAKES

Disc brakes work by squeezing brake pads against a disc in order to slow the wheel down. It is important that you **keep these serviced**. You may need to adjust these brakes from time to time. **If you are unsure about anything to do with your brakes or their functions, you should consult a qualified bicycle mechanic before riding your e-bike.**

IMPORTANT:

The wheel should run freely through the brake with no contact with the brake pads when the brake is open.

The disc should be centred in the slot between the brake pads as shown.

Worn brake pads should be replaced immediately.

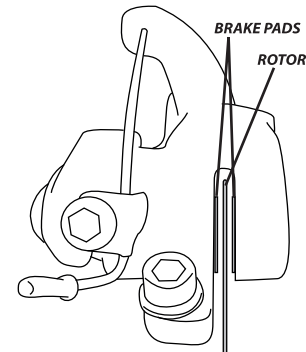
The brake pads should touch the rotor before the brake lever is 1/3 of the way to the handlebar.

Keep your brakes serviced regularly.

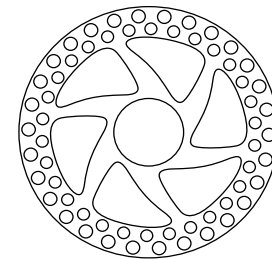
Be aware that disc brakes will get hot after use. You could severely injure yourself through contact with a hot disc, so mind your legs as well as your hands! They also have sharp parts. If you make contact with any part of the brakes whilst the wheel is turning, you could also injure yourself.

Before you first ride your e-bike with disc brakes, give them a clean using rubbing alcohol. **NEVER USE OIL TO CLEAN YOUR DISC BRAKES.** Your first ride performance with disc brakes may be less than perfect. We recommend riding the bike gently for around 13 - 15 miles to break the disc brakes in before riding down hills/slopes etc.

FRONT VIEW



ROTOR



CABLE TENSION SCREW

Turn clockwise to fine tune the distance from the front brake pad to the rotor

BRAKE CABLE

Brings the brake pads to the rotor when the lever on handlebar is pulled

CABLE PINCH BOLT

This bolt secures the brake cable to the brake. You can release this bolt to adjust the distance from the front pad to the rotor.

LOCATION BOLTS

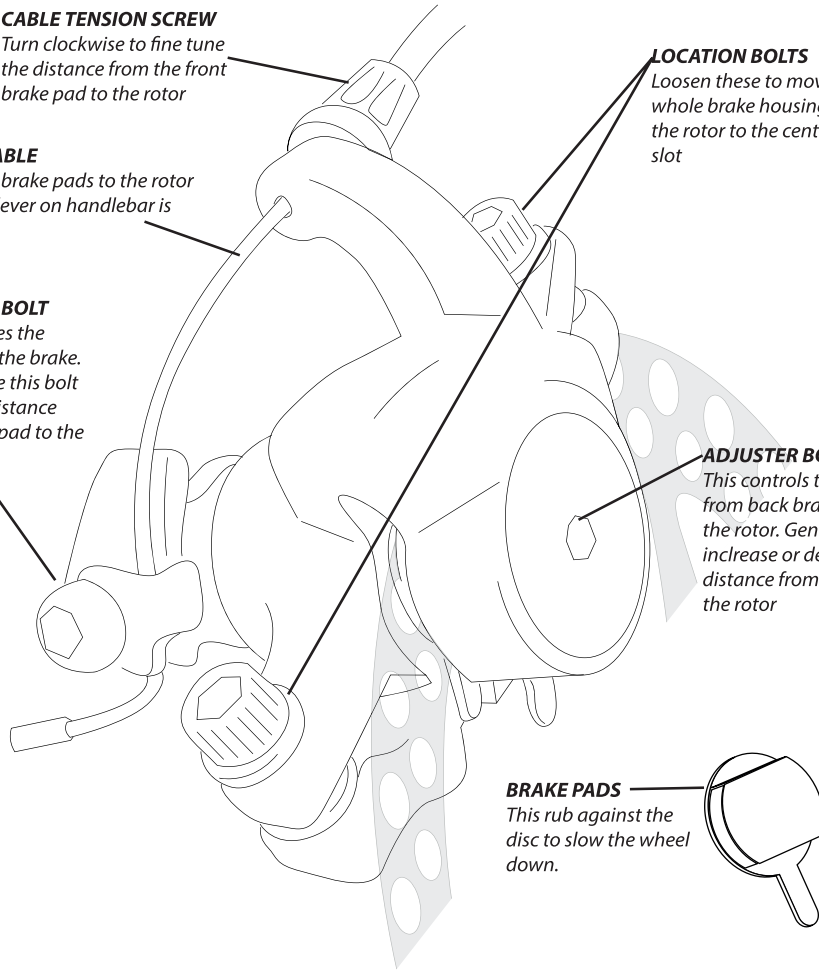
Loosen these to move the whole brake housing to align the rotor to the centre of the slot

ADJUSTER BOLT

This controls the distance from back brake pad to the rotor. Gently turn to increase or decrease the distance from the pad to the rotor

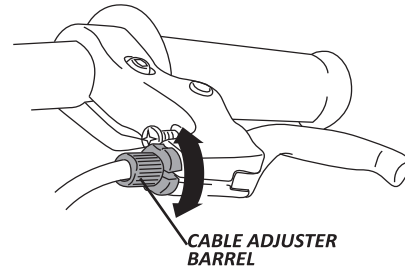
BRAKE PADS

This rub against the disc to slow the wheel down.

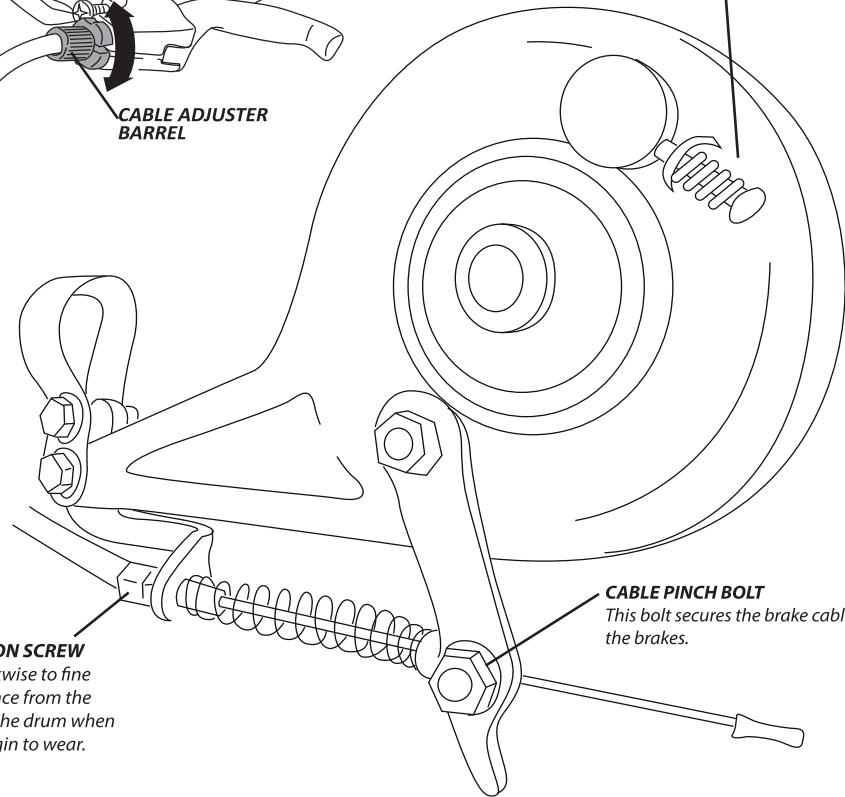


EXPANSION BRAKES

Some e-bikes use a rear expansion (drum) brake. The brake is cable operated and can be adjusted by turning the adjuster screw shown below. The screw pushes against a small cam, which in turn opens and shuts the brake shoes inside the drum. Turning the screw clockwise opens the shoes and tightens the brake. Turning the screw anti-clockwise shuts the shoes and releases the brake. Fine adjustment can be made in the conventional manner using the brake lever barrel adjuster. **If you are unsure about anything to do with your brakes or their functions, you should consult a qualified bicycle mechanic before riding your e-bike. NEVER USE OIL TO CLEAN YOUR EXPANSION BRAKE**



CABLE ADJUSTER BARREL



SPRING TENSION SCREW

Turn clockwise to increase tension and anti-clockwise to decrease.

CABLE TENSION SCREW

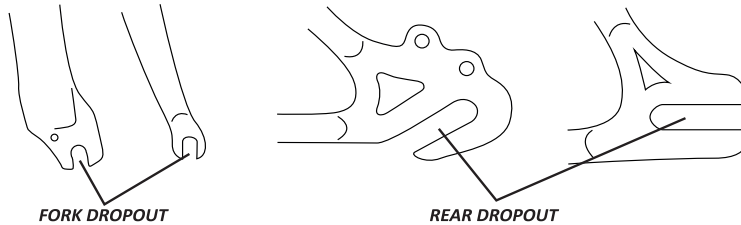
Turn anti-clockwise to fine tune the distance from the brake pads to the drum when brake pads begin to wear.

CABLE PINCH BOLT

This bolt secures the brake cable to the brakes.

6F. Wheels, Tyres & Inner Tubes

The wheel axles are inserted into slots, called “dropouts”, in the fork and frame. Examples below:

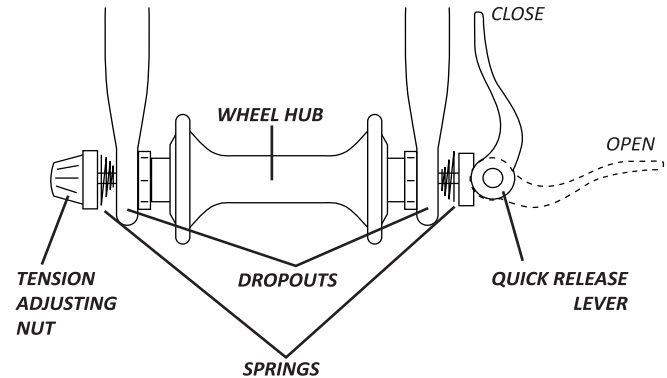


Dropouts come in way too many different shapes and sizes to be able to illustrate them all here, but these examples should guide you to identifying where your dropouts are.

There are two types of wheel fastening systems, and your bike may have one or another, or in some cases one of each. It is important that you know which type of system/s your bicycle is equipped with, and that you understand how these work.

Quick Release Hubs & how do they work?

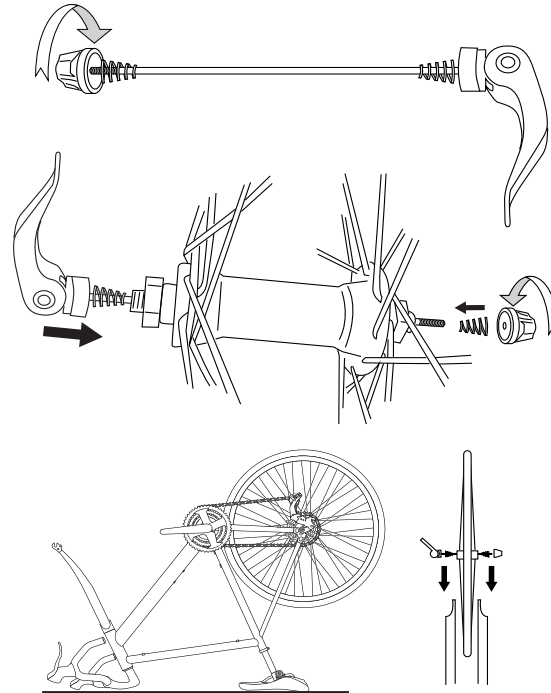
The wheel hub is clamped in place by the force of the quick release lever pushing against one dropout, and pulling the tension adjusting nut against the other dropout. The amount of clamping force is controlled by the tension adjusting nut. Turning the tension adjusting nut clockwise while keeping the cam lever from rotating, and increases clamping force. Turning it anti-clockwise, while keeping the cam lever from rotating, reduces clamping force. Less than half a turn of the tension adjusting nut can make the difference between safe clamping force and unsafe clamping force. You should tighten the tension adjusting nut until it is finger tight before closing the quick release lever.



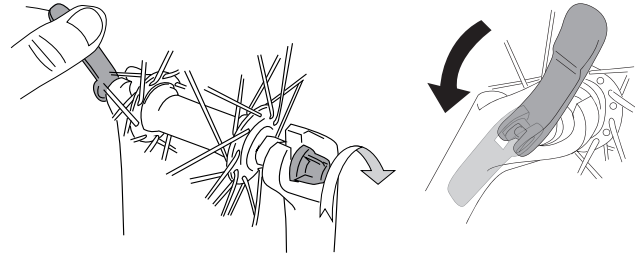
Installing and adjusting a front wheel with a quick release system

If your bike comes with a quick release front wheel, this will usually come separate to the wheel, and will look something like the picture below.

- 1** You need to remove the tension adjusting nut, and one spring from the skewer, by turning it anti-clockwise.
- 2** You should then insert the skewer through the wheel axle, put the spring back in place, always with the narrow end of the spring facing the wheel, and screw the tension adjusting nut back on very loosely. Just a couple of turns should do.
- 3** For this step, as long as your saddle and handlebar are installed, it helps to turn the bike upside down. You should then insert the wheel into the dropouts as shown, ensuring that the springs are to the outside of the dropout. The quick release lever should be on the opposite side to the chain side. You may need to release the brakes to get the wheel through. If this is the case, go to the brakes section of this manual where you will find instructions on how to do this.



- 4 Once the wheel is in place in the dropouts, hold the quick release lever in the open position, and turn the tension adjusting nut in a clockwise direction until it is finger tight. Once it is finger tight, move the quick release lever to the closed position, so that it is parallel with the fork.



Please Note: With a quick release lever, to apply enough clamping force, you should have to wrap your fingers around the bicycle frame for leverage, and the lever should leave a clear imprint in the palm of your hand. If this is not the case, open the quick release lever, turn the tension adjusting nut a quarter turn, and close the lever again. Keep doing this until tight enough.

Should you need to remove your wheel, to replace it or to repair it, simply reverse these steps.

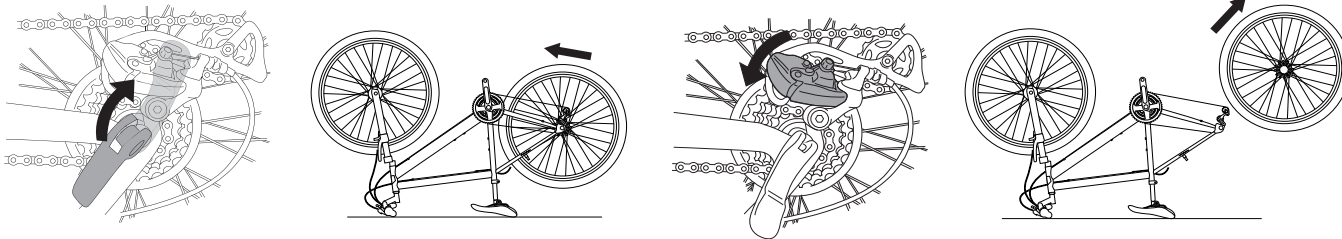


If you disengaged your brake to get the wheel in, it is very important that you now re-engage it. Visit the brakes section of this manual for instructions on how to do this.

Removing or adjusting a rear wheel with a quick release system

This step is easier with the bike upside down, resting on the saddle and the handlebars. For that purpose, the images here show what these steps look like with the bike upside down.

- 1 Should your bike have gears, shift the rear derailleur to high gear (the smallest, outermost rear sprocket).
- 2 You may also need to release the brakes to get enough clearance for the wheel to pass through. Should this be the case, see the brakes section in this manual for instructions on how to do this.
- 3 Open the quick release lever, then push the wheel forward far enough to be able to remove the chain from the rear sprocket.
- 4 Should your bike have gears, pull the derailleur body back with your right hand to release the tension on the chain and hold it there for the next step.
- 5 You can now remove the wheel out of the dropouts.



Should you need to remove your wheel, to replace it or to repair it, simply reverse these steps.

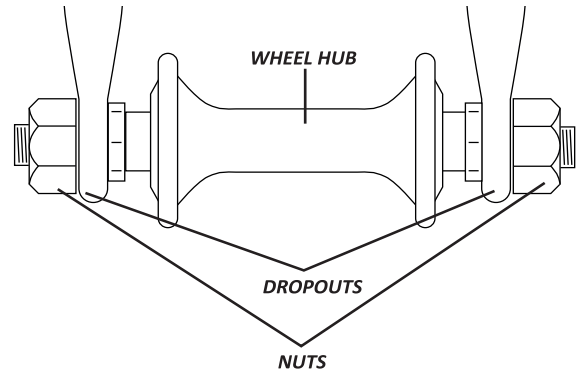


If you disengaged your brake to get the wheel in, it is very important that you now re-engage it. Visit the brakes section of this manual for instructions on how to do this.

Nutted Hubs & how do they work?

The wheel hub is clamped in place by the force of the nuts against the dropouts. The amount of clamping force is controlled by the tightness of the nuts. Turning the nuts clockwise increases clamping force, turning them anti-clockwise reduces clamping force.

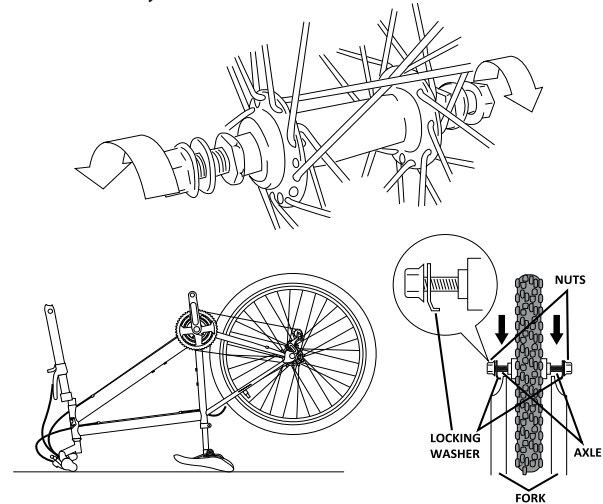
Both nuts need tightening to correct torque, available at the rear of this manual.



Installing and adjusting a front wheel with a nutted system

If your bike comes with a nutted front wheel, the nuts will usually come already on the front wheel.

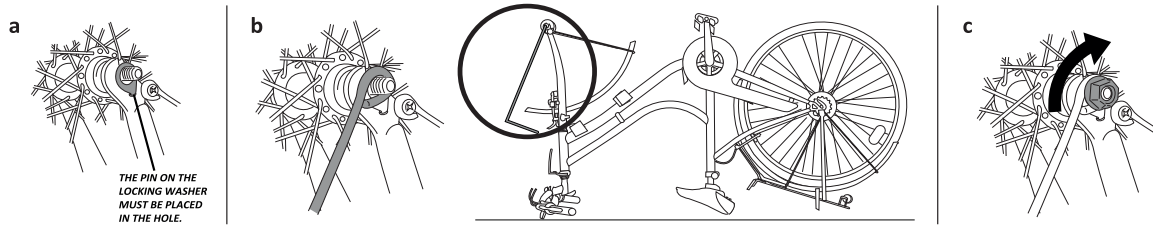
- 1 Make sure the wheel nuts are loosened by turning anti-clockwise, exposing as much of the thread as possible.
- 2 For this step, as long as your saddle and handlebar are installed, it helps to turn the bike upside down. You should then insert the wheel into the dropouts as shown, ensuring that the locking washers are on the outside of the fork as shown. You may need to release the brakes to get the wheel through. If this is the case, go the brakes section of this manual where you will find instructions on how to do this.



What if my e-bike comes with a basket connected to front wheel fixings?

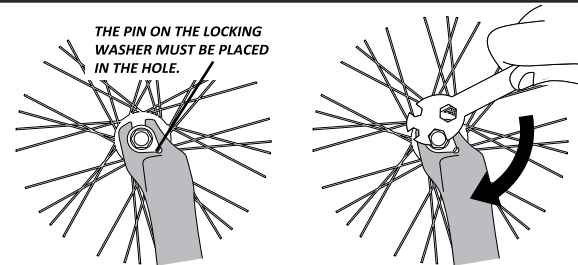
If your bike comes with a traditional basket the bracket for this needs to be installed before we can secure the wheel in place. You will need to remove the nuts completely from the front wheel before sitting the wheel in the front dropouts.

- a With the wheel sat in the fork, insert the locking washers on to the axles, securing the pin in place as shown.
- b Then insert the basket bracket, with the flat part facing towards the bike frame as shown.
- c Finally, screw the nut on clockwise. You should only screw this on finger tight for the time being, and tighten it once the basket is installed.



- 3 Place the pointed side of the locking washer into the hole in the fork as shown, then ensuring the gap between the wheel and the fork is equal on both sides, tighten the nut by turning clockwise using a 15mm spanner. Recommended torques can be found at the back of this manual.

Should you need to remove your wheel, to replace it or to repair it, simply reverse these steps.

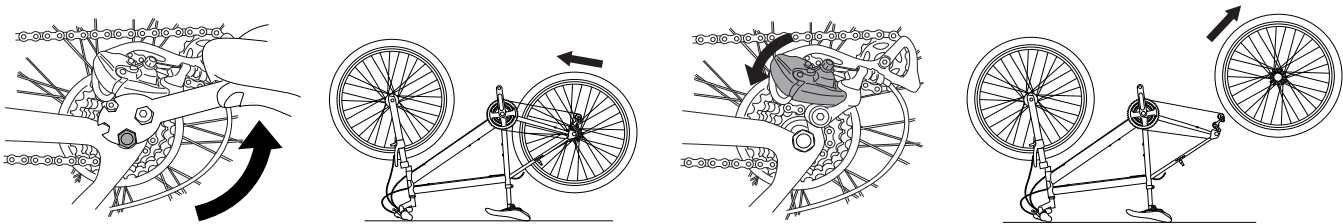


If you disengaged your brake to get the wheel in, it is very important that you now re-engage it. Visit the brakes section of this manual for instructions on how to do this.

Removing or adjusting a rear wheel with a nutted system

This step is easier with the bike upside down, resting on the saddle and the handlebars. For that purpose, the images here show what these steps look like with the bike upside down.

- 1 Should your bike have gears, shift the rear derailleur to high gear (the smallest, outermost rear sprocket).
- 2 You then may need to release the brakes to get enough clearance for the wheel to pass through. Should this be the case, see the brakes section in this manual for instructions on how to do this.
- 3 Loosen the nuts on the wheel, then push the wheel forward far enough to be able to remove the chain from the rear sprocket.
- 4 Should your bike have gears, pull the derailleur body back with your right hand to release the tension on the chain, and hold it there for the next step.
- 5 You can now remove the wheel out of the dropouts.



Should you need to remove your wheel, to replace it or to repair it, simply reverse these steps.



If you disengaged your brake to get the wheel in, it is very important that you now re-engage it. Visit the brakes section of this manual for instructions on how to do this.

Tyre inflation and how to change a tube?

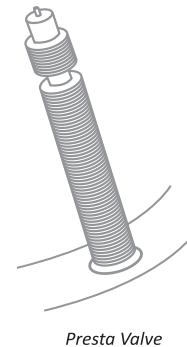
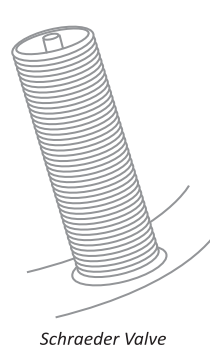
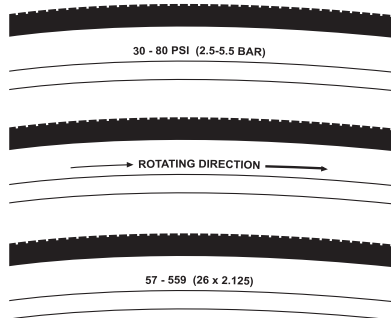
Bicycle tyres come in many designs and specifications for different types of riding. They range from general purpose tyres, to specific tyres for different weather/terrain. Always ensure tyres have enough tread, and have no bulges or excessive wear.

Once you get some riding experience on your new e-bike, you may feel that a different type of tyre may suit your needs better. Any bicycle shop will be able to help you chose the correct type of tyre for your style of riding.

All tyres have the pressure ratings on the sidewall, as well as other bits of information, such as size, and occasionally intended use.

It is very important that you never inflate a tyre beyond the maximum pressure marked on the sidewall. This could cause it to burst and blow off the rim, which could cause serious injury to both yourself and/or bystanders and pedestrians. **It is also not recommended to use garage forecourt or any other type of compressor to pump up your tyres**, as these dispense a very large amount of air very quickly, which can cause your tube/tyre to explode. Always inflate Tyres to the correct PSI (pressure) as specified on side of the tyre, and maintain by checking once per week. Correct tyre pressure is critical to the performance of the bike.

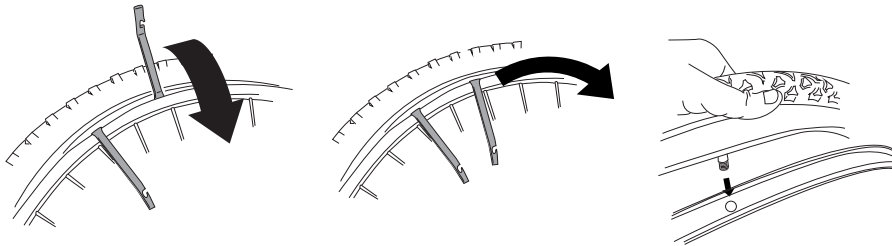
There are mainly 2 types of valves on e-bikes, the Schraeder valve, which is similar to a car tyre, and the Presta valve, which is much thinner. You will need to have the correct pump fitting for the type of valve on your e-bike.



Replacing an inner tube (and also a tyre)

We recommend you always carry a spare inner tube when out on your e-bike. Puncture repairs are ok for an emergency fix, but an improper repair, or too many repairs, may cause the inner tube to fail, resulting in you losing control and falling.

- 1 Remove the wheel from the e-bike (you can follow the wheels section of this manual if you are unsure on how to do this).
- 2 Let all the air out the tube.
- 3 Insert two tyre levers between the rim and the tyre to prise the tyre off the rim.
- 4 Remove the inner tube from inside the tyre.
- 5 Check and clean any dirt or sharp objects from the rim. Check the tyre for the object(s) that caused the initial puncture.
- 6 Pump just enough air into the new tube for it to slightly take shape, and insert it in the tyre. Before putting the tyre back on the rim, ensure the valve goes through the hole in the rim provided.
- 7 Always check that the rim tape is even around the rim, and check the rim for any damage.
- 8 Replace the tyre one side at a time, or it will become very tight. Once it is almost all the way on, you can use your tyre levers to force back in place.
- 9 Remember to pump the wheel up to the recommended pressure setting.

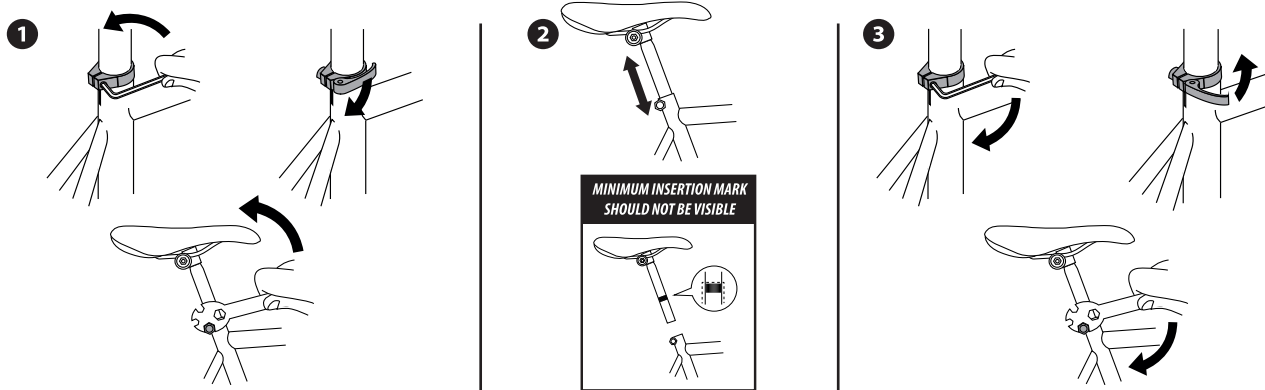


Please Note: Never use screwdrivers in place of tyre levers, as sharp edges may damage the rim.

6G. Saddle Installation & Adjustment

As mentioned earlier, saddle height is very important in order to make your cycling experience more enjoyable, and of course safer. The correct saddle height should not cause your knee to lock out with your foot on the pedal in the downward most position, however your knee should only be slightly bent.

- 1 To insert the saddle, or to adjust the saddle height, you need to release the seat clamp. This will require either a spanner, an allen key, or in some cases, may be a quick release mechanism, which can be released by hand.
- 2 Once the seat clamp is released, the seat post will become loose and you will be able to move the saddle up and down.
- 3 Once your saddle is at the desired height, tighten up the seat clamp again as shown.



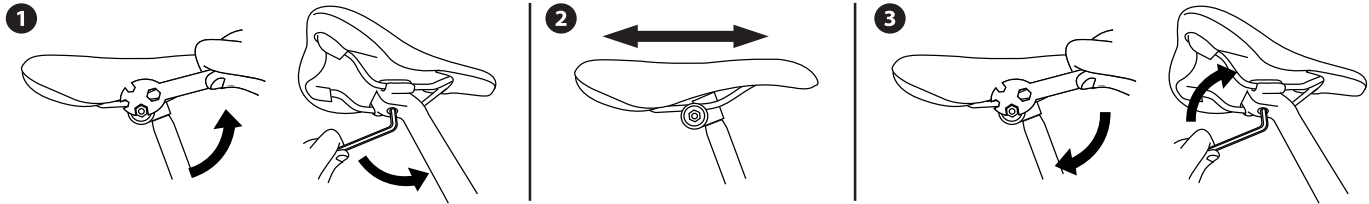
Please Note: With a quick release lever, to apply enough clamping force, you should have to wrap your fingers around the bicycle frame for leverage, and the lever should leave a clear imprint in the palm of your hand.

When adjusting the saddle, always be aware of the “minimum insertion” mark, and always make sure this is not visible above the frame, or you risk damaging your bicycle, or losing control and causing yourself serious injury or worse.

Saddle "fore" and "aft" adjustments

Your saddle can also be moved backwards and forwards. For an optimal riding position, you should be able to comfortably reach the handlebars and use the breaks and gears whilst riding, with your arms slightly bent at the elbows.

- 1 To adjust your saddle, just unfasten the nut under the saddle using either a spanner or an allen key, by turning anti-clockwise.
- 2 You can then adjust your saddle backwards and forwards, ensuring that only the flat part of the saddle rail is in the clamp.
- 3 Tighten the nut under the saddle back up by turning clockwise.



6H. Baskets, Mudguards & Carrier

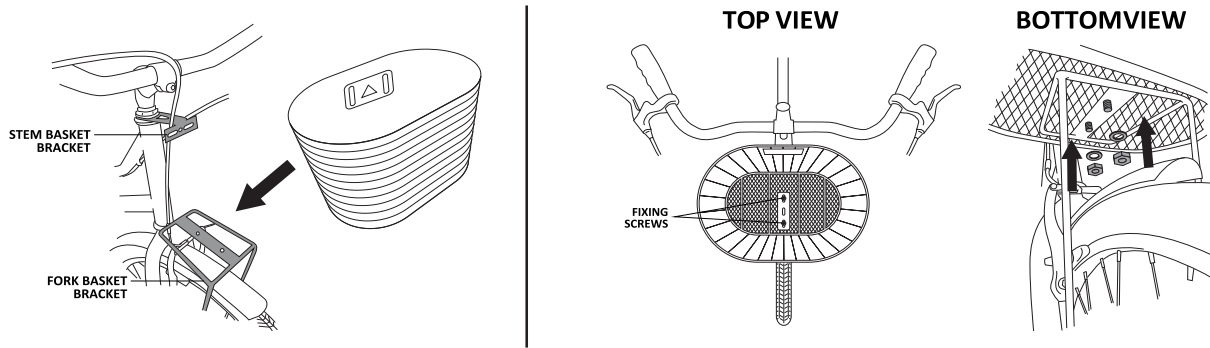
Basket installation (if applicable)

If your bike is either a heritage or trekking style e-bike, it may have come with a basket. There are two main types of basket, traditional and quick release.

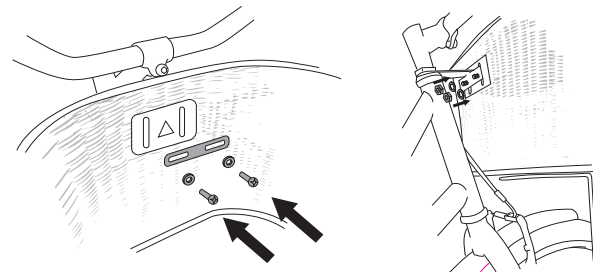
Traditional basket


If you have a traditional wicker, or faux wicker basket, first you will need to fit the basket bracket on the wheel axle. This is explained in the wheel section of this manual. If your wheel is already installed, you may need to loosen the nuts to get the bracket in place. Once you have done this, follow these steps to install the basket.

- 1 Make sure the stem basket bracket is facing the front, and that the fork basket bracket is above the wheel in the horizontal position as shown. Sit the basket on the fork bracket with the fixing plate towards the stem bracket, making sure the cables don't get in the way.
- 2 Line the base plate on the bracket up with the holes on the basket bracket, and drop 2 fixing screws with washers in the holes as shown. Place two washers and screw on the two nuts from underneath as shown, turning clockwise until finger tight.



- 3 Line the holes in the basket plate and the frame bracket up, and insert the screws/washers/fixing plate as shown. Then from behind the frame bracket, place the washers on the screws and screw the nuts on clockwise finger tight.

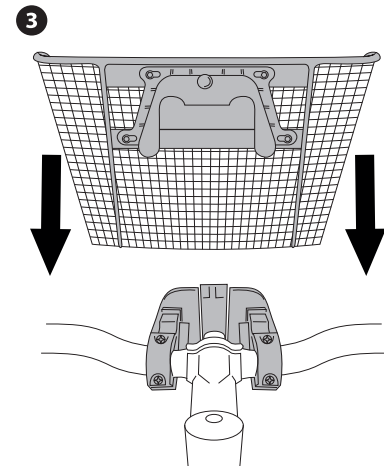
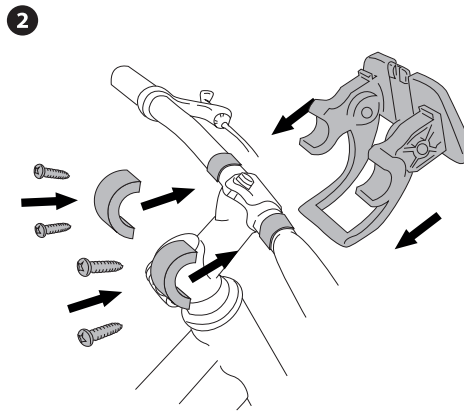
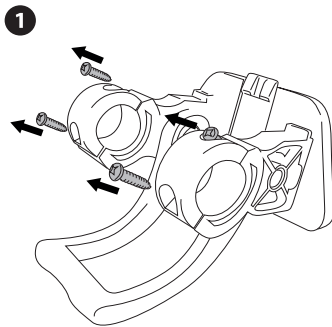


 **Once basket is fitted, do not forget to tighten wheel nuts if you loosened them to fit the basket in place.**

Quick release basket

Some of the more contemporary/modern style e-bikes will come with a metal quick release basket. If you have one of these, please follow these steps to install.

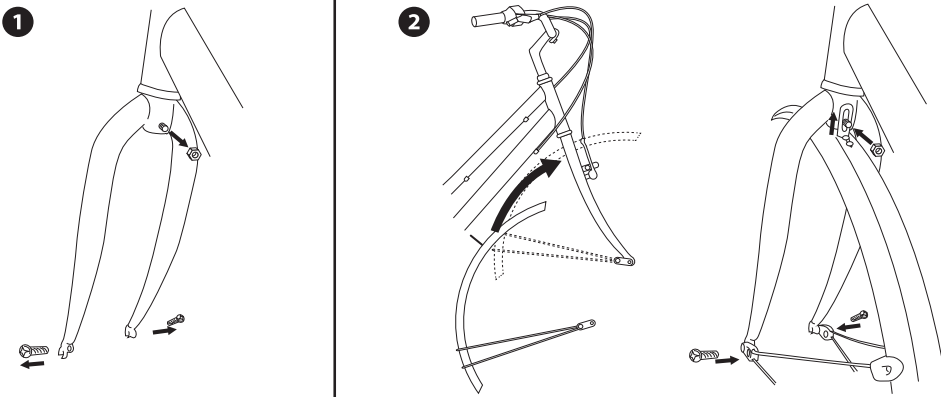
- 1 First we need to dismantle the bracket by removing the four clamping screws shown here. Using a cross head screwdriver, turn these anti-clockwise to remove.
- 2 You may find two rubber straps in with your basket. If so, wrap these around the handlebars to the same width as the basket bracket arms to stop this from slipping once in place. You can then assemble the bracket around the handlebar as shown, tightening the four screws by turning clockwise with a cross head screwdriver.
- 3 Once the bracket is in place, you can then slot the basket in as shown. To remove the basket simply press the release button (usually red) and lift upwards.



Mudguard installation (if applicable)

Your e-bike may have come equipped with mudguards, especially if a trekking or heritage model. If this is the case, the front mudguard will usually come separate in the box and will need fitting.

- 1 First, remove the nut from the bolt in the top of the fork using the spanner provided, leaving the bolt in place through the fork. Then remove the two screws from the feet of the fork using a cross head screwdriver.
- 2 You can then locate the mudguard in place. First feed the mudguard through the back of the fork as shown. Locate the mudguard on the bolt you left in the fork as shown, and screw the nut on clockwise until it is finger tight. You can then screw the mudguard to the feet of the fork by replacing screws through the mudguard brackets and into the fork, tightening them by turning clockwise with a cross head screwdriver. Tighten the nut on the top of the fork, turning clockwise using the spanner provided.



Rear Carrier Information (if applicable)

Your e-bike may be installed with a rear carrier. **Please Note: Maximum weight to be loaded onto the rear carrier is 25Kgs. The rear carrier is NOT intended for passenger use.**

7 BATTERY INFORMATION & DISTANCE RANGE

Your battery will be packed partially charged. We strongly advise that you give the battery a full charge first before use. This will help maintain the life of the battery. For optimal battery performance, complete three full discharge and three complete recharge cycles. If the e-bike is not to be used for a long period, it is suggested to close the power of battery pack, and charge-discharge the battery once one month (unless your battery has sleep mode function, ask your dealer if unsure).

The battery is turned on by using the switch located on the battery casing. Power indication lights are used in the battery shell, and on the handlebar display. On the battery shell, green LED lights indicate battery life, red lights indicate that the battery is almost empty, and needs charging. The handlebar display generally uses only red LED lights, with a full battery showing all lights lit, and an empty battery showing just one light lit. **Please ensure that only the charger supplied is used to charge the battery.**

To prevent the battery from working loose, ensure that the battery is locked into position with the keys provided. When you operating around the battery, do not insert metal objects (such as lead wire, key etc.) into the charging socket, or put them on the positive and negative contact points of battery cell, as this will cause the battery to short-circuit, or endanger your own personal safety, including risk of fire.

Please note: Any figures quoted for battery performance, or distance, that can be obtained from a single charge, are based on standard test/riding/rider conditions. Diverse terrain, and/or rider weight, will of course produce varying results from those stated.

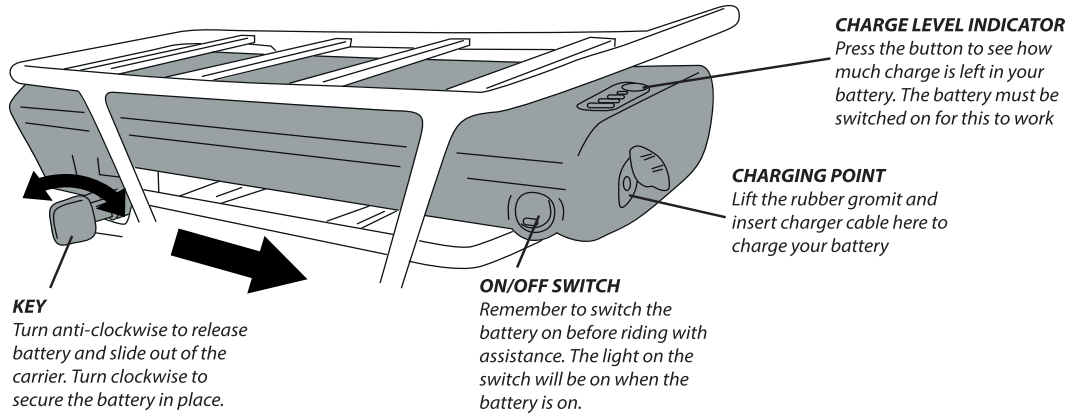


Do not keep the battery close to open flames, and avoid being near to inflammable, explosive, or corrosive gas. Do not disassemble the battery, or tear up the decal on the battery case, or you will lose your warranty cover.

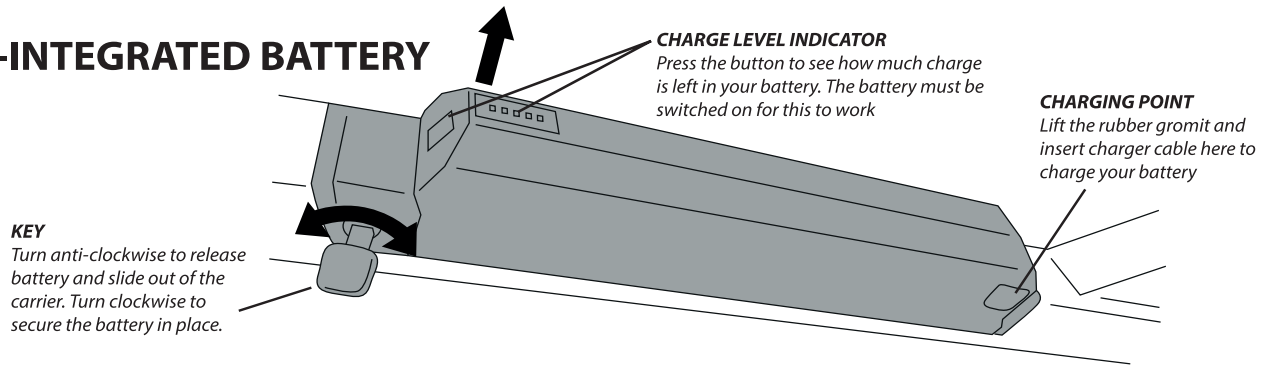
Our Battery Styles

There are many battery styles and it would be impossible to list them all, but the following diagrams should help you familiarise yourself with your battery and its different functions.

REAR CARRIER BATTERY



SEMI-INTEGRATED BATTERY



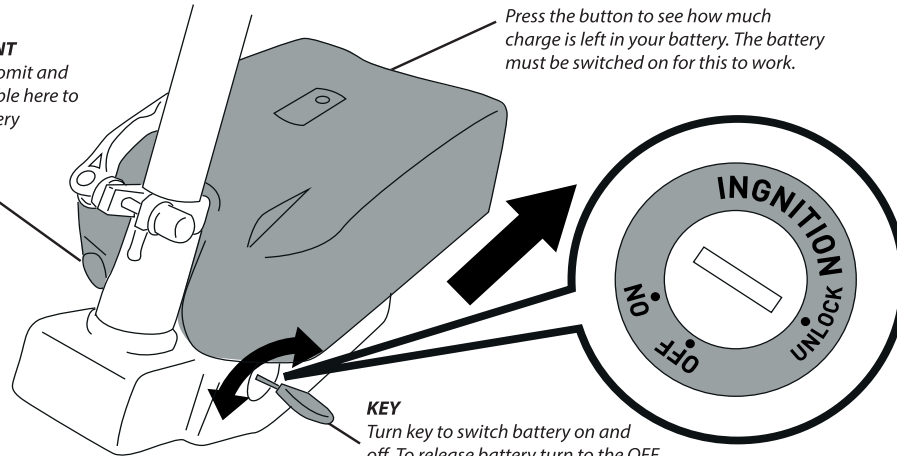
SEAT POST BATTERY

CHARGING POINT

Lift the rubber gromit and insert charger cable here to charge your battery

CHARGE LEVEL INDICATOR

Press the button to see how much charge is left in your battery. The battery must be switched on for this to work.



KEY

Turn key to switch battery on and off. To release battery turn to the OFF position then push and turn to the unlock position before sliding the battery off

DOWN TUBE BATTERY

CHARGE LEVEL INDICATOR

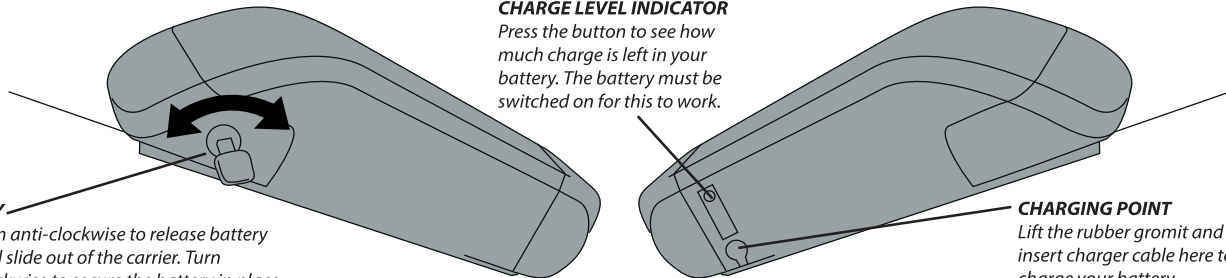
Press the button to see how much charge is left in your battery. The battery must be switched on for this to work.

KEY

Turn anti-clockwise to release battery and slide out of the carrier. Turn clockwise to secure the battery in place.

CHARGING POINT

Lift the rubber gromit and insert charger cable here to charge your battery



Sleep Mode Function

Should your battery be fitted with a sleep mode function (check with your dealer), your battery is fitted with a smart Battery Management System (BMS). This allows the battery to hibernate for up to 6 months without charge. We recommend you use this function only if necessary. Please make sure that the battery is stored in dry, room temperature conditions. **Make sure your battery is at 50% charge BEFORE letting it hibernate for long periods of time.**

Frequently Asked Battery Questions

Q: Do I need to charge the battery before using it?

A: Yes, you should charge the battery fully before first use of it.

Q: Do I need to “brake-in” my battery?

A: Yes, the battery will need to have a “break-in” cycle consisting of three discharge/charge cycles before they will reach optimum performance. This involves three complete discharge and three complete recharges. After this initial “break-in” cycle, the batteries will have maximum possible performance, and less line voltage fluctuations under load.

Q: How long will the battery hold its charge?

A: All batteries will self-discharge when not in use. The self-discharging rate depends on the temperature at which batteries are stored. Always store a battery at room temperature.

Q: If my battery does not have a sleep mode function, why should I recharge my Lithium-Ion battery at least every 90 days when I’m not using them?

A: Batteries naturally lose their charge over time. To keep the batteries in optimal condition, and extend their life, it’s recommended that a top-off recharge be performed at least every 90 days.

Q: What happens if leave the power switch on longer the 5 minutes?

A: If you have left the power switch on, or your product has not been charged for a long period of time, the battery may reach a stage at which it will no longer hold a charge.

Q: Will I get more performance from my e-bike if I leave the batteries to charge longer?

A: No, once the battery is fully charged (as indicated by the light on the charger), it is best to unplug them from the charge (even if your e-bike is fitted with a smart charger with auto cut-off). Leaving the batteries charging longer than necessary is called “overcharging”, and will not increase performance. Most chargers are designed to avoid over-charging a battery, but we still recommend that you always unplug a charger after the unit is fully charged to avoid the possibility of unanticipated circumstances, such as an unexpected power surge from a lightning strike, or other power line anomalies potentially causing damage. Please ensure that only the charger supplied is used to charge the battery.

Q: Is it normal that the battery gets warm when recharging?

A: Yes, it is normal that the battery will become warm to the touch during the recharging process. This is because the increase of internal resistance, and less energy conversion efficiency from electric energy to chemical energy.

Q: How long will my batteries last before needing replacement?

A: Average battery life depends on use and conditions. Even with proper care, rechargeable batteries do not last forever.

How to maximize the distance range of your e-bike

Rider Input - The more the rider pedals, the further the distance traveled. Continuous riding, as opposed to frequent stopping and starting, will yield the greatest range possible.

Elevation Gain - The flatter the road, the further the distance traveled.

Weather - Cold weather can adversely affect the battery capacity. Traveling with a tailwind will also increase distance traveled, whereas traveling into a headwind will decrease the distance traveled.

Terrain – The smoother the terrain (tarmac roadways etc.), the further the distance.

Rider & Load Weight - The lighter the rider, the less drain on the battery, and therefore the further the distance. The standard load weight of this e-bike is 75Kg (including the cyclist). Overloading may cause the travel mileage to decrease, or cause the parts and components of whole e-bike problems, resulting in damage, and reduced working life of the battery.

E-Bike Maintenance - A properly maintained e-bike will yield the greatest possible distance. This includes properly inflated tyres, which will have less rolling resistance, and will be easier to pedal.

The Battery - Properly charged and maintained batteries will yield the greatest range possible. Batteries stored in cold areas (below 50 degrees Fahrenheit/10 degrees Celsius) will show reduced range. Never allow batteries to freeze (below 32 degrees Fahrenheit), as this will result in permanent damage to them.

Braking - Frequent braking, or stop/starting, will consume larger electricity, thus influencing the travel mileage. Try to decrease the frequency of braking and starting as is safe.

BATTERY CHARGING 8

Develop a habit of charging regularly. When the power of the battery pack shows a red light, please charge to maintain the battery pack to have a longer service. If the e-bike is not to be used for a long period, it is suggested to close the power of battery pack, and charge-discharge the battery once one month (unless your battery has sleep mode function, ask your dealer if unsure). **Ensure only the charger supplied is used to charge the battery. Make sure battery is set to "off" before charging, and plug the charger into the electric socket first, before connecting to the battery.**



Do not keep the charger close to open flames, and avoid being near to inflammable, explosive, or corrosive gas. Do not disassemble the charger, or tear up the decal on the charger case, or you will lose your warranty cover. While charging, do not place any objects on the charger, or on the battery case. Make sure the charger is well ventilated whilst charging.

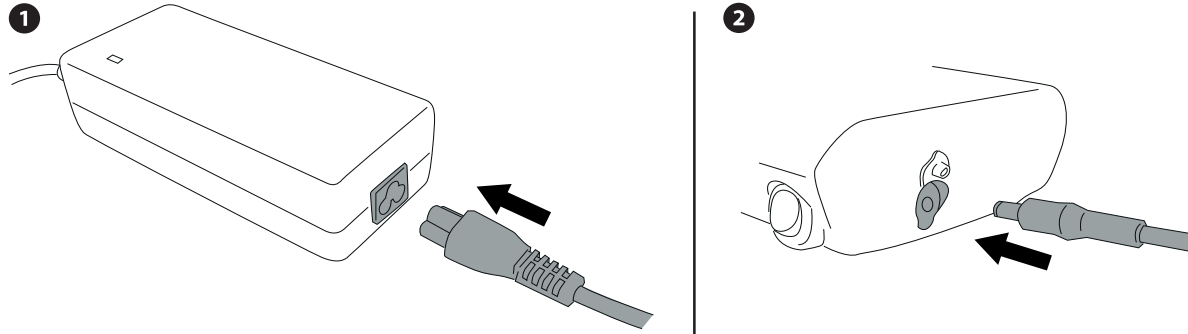


Battery fault fire or explosion hazard will occur if the instructions are not followed:

- Ensure that the charger plugs are dry and securely connected to the charger port of battery case.
- Do not cover the battery or charger while charging, do not use the battery charger near flammable articles or in unventilated places. The ambient temperature should not exceed 40°C.
- Keep the battery and charger away from water, to prevent shocks or shorting.
- Only use the charger provided to charge the battery.
- Do not disassemble or modify the battery or charger.
- Do not expose the battery or charger to fire or extreme temperatures.
- Do not drop, or allow impact or force against the battery pack or charger.
- 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 peculiar smells, stop charging immediately and contact your authorised dealer for help.
- Put the battery and charger in a safe place beyond children's reach.
- If you are commuting significant distances, it is advisable to recharge the battery before the return journey.
- For occasional use, discharge and recharge the battery at least once a month, even if the cycle is unused.
- Always recharge the battery after use. Remember that charging the e-bike after every use will ensure longer life of the battery.
- The manufacturer will not be responsible for any damage or injury due to improper or unsafe use of the battery charger.
- Check the AC voltage is set to 220/240v. Never use on 110v setting.

Connecting your charger

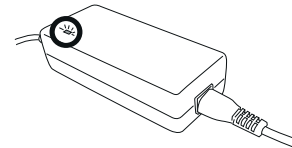
- 1 Insert the power lead into the charger
- 2 Plug your charger into the plug socket first and then insert the charger into the charging port on the battery. To find where your charging port is you will need to check what type of battery you have on pages 51 and 52.



Charger LED Indication

When plugged in the charger LED will illuminate green. When connected to the battery the LED will switch to red. Once the charging is complete the LED will change back to green. It is recommended to switch off charger once charged.

1. Green LED - Power on (when not connected to the batteries).
2. Red LED - Charging
3. Green LED - Fully charged (when connected to the batteries).



After charging is complete and the charger is disconnected, make sure the rubber waterproof gromit is securely fastened into the charging point on the battery. See page 51 / 52 to find yours.

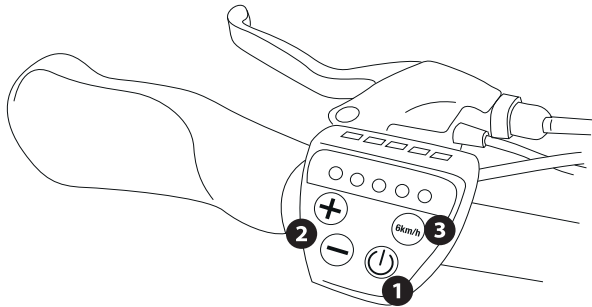
9 DISPLAYS & BLUETOOTH FUNCTIONS

The LED display is located on the handlebars of the e-bike. To switch the display on, simply press the power button.

To switch the display off, press and hold down the power button.

To change the level of assistance, you can press either the MODE button, or the +/- buttons, depending on the model of the display. Insert images

This e-bike is also fitted with a “walk assist” function. By depressing (holding down) the “6 km/h” button on the display, the motor will engage at 6 km/h, to help you set off from a standing/sloping start, or even if you just need to help to push the e-bike whilst you are walking. Please note, there is a slight delay from depressing (holding down) the walk assist button, and the motor engaging. This is normal and is there as a safety feature.



- ① On/Off button
- ② Assist level
- ③ Walk assist mode

Bluetooth Function

If your e-bike has a controller capable of Bluetooth function (if unsure ask your dealer), then you can download the relevant mobile phone APP to use with your e-bike.

Download the relevant APP via your relevant APP store, switch on the Bluetooth facility on your mobile phone, and connect to the controller. Further details of the relevant APP will be added separately to this manual if applicable to your model.

FINAL INSPECTION - BEFORE YOU RIDE 10

We strongly urge you to read this Manual in its entirety before your first ride. At the very least, read and make sure that you understand each point in this section, and refer to the cited sections on any issue which you don't completely understand.

- Ensure you have assembled the e-bike and fitted all loose parts that came in the box.
- Check the chain is lubricated.
- Make sure all wheel fixings are tight and fitted correctly.
- Check trueness of wheels and the tyre pressures.
- Make sure your saddle is at the correct riding height/position, and not beyond the "minimum insertion mark". Check that all fixings are tight.
- Make sure you have adjusted the handlebar height and angle (where applicable) to your riding position, and that it is not beyond the "minimum insertion mark". Check all nuts are tight.
- Any extras or accessories must be correctly fitted and tight.
- Check brake functionality. Adjust if necessary. Right hand lever should operate the front brake, and left hand lever should operate the rear brake. Make sure you can reach the brake levers and operate the brakes comfortably from your riding position.
- Make sure your gears change cleanly, and that you can operate the gear levers comfortably from your riding position.
- Check that all chainwheel and crank bolts are tight.

11 TORQUE SPECIFICATIONS

Correct tightening torque of threaded fasteners is very important for your safety. Always tighten fasteners to the correct torque. In case of a conflict between the instructions in this manual, and information provided by a component manufacturer, consult with a qualified bicycle mechanic, or the manufacturer's customer service representative for clarification. Bolts that are too tight can stretch and deform. Bolts that are too loose can move and fatigue.

Either mistake can lead to a sudden failure of the bolt. Always use a correctly calibrated torque wrench to tighten critical fasteners on your bike. Carefully follow the torque wrench manufacturer's instructions showing the correct way to set, and use, the torque wrench for accurate results.

Threaded Headset Locknut	16-24 Nm (142-212in-lb)
Stem Expander Bolt (quill type)	17-22 Nm (150-195in-lb)
Handlebar Binder Bolt (quill type)	17-22 Nm (150-195in-lb)
Stem Binder Bolt (threadless)	13.5-16 Nm (120-144in-lb)
Compression Cap	2-3 Nm (20-26in-lb)
Stem Faceplate Bolts	13.5-19 Nm (120-168in-lb)
Pedal	34.5-40 Nm (307-354in-lb)
Crank Arm	45-50Nm (398-442in-lb)
Axle Nut	30-42 Nm (260-372in-lb)
Seat Post Binder	4-6.5 Nm (36-60in-lb)
Seat Rail Binder	18-34 Nm (160-300in-lb)
Shift Lever	6-8 Nm (53-70in-lb)
Rear Derailleur Mounting Bolt	8-10 Nm (70-86in-lb)
Rear Derailleur Cable Pinch Bolt	4-5 Nm (35-45in-lb)
Rear Derailleur Pulley Wheel Bolt	3-4 Nm (27-36in-lb)

Disc Brake Rotor To Hub	4-7 Nm (36-60in-lb)
Disc Brake Caliper Mount	6-9 Nm (52-84in-lb)
Brake Caliper Mount to Frame (side/dual)	8-9.5 Nm (70-85in-lb)
Brake Caliper Mount to Braze-on Linear Pull/Cantilever	5-7 Nm (44-60in-lb)
Brake Pad (Threaded Stud, Dual Pivot/Sidepull)	5-7 Nm (44-60in-lb)
Brake Pad (Smooth Stud,)	8-9 Nm (70-78in-lb)
Brake Cable Pinch Bolt (Linear Pull)	6-8 Nm (53-69in-lb)
Brake Cable Pinch Bolt (Sidepull/ Dual Pivot)	6-8 Nm (53-69in-lb)
Brake Caliper Arm Pivot (Dual Pivot)	8-9.5 Nm (70-85in-lb)
Sidepull/Dual Pivot Brake Pad Bolt	5-7 Nm (44-60in-lb)
Cantilever Straddle Wire Pinch 5 x 0.8 Thread	4-5 Nm (35-43in-lb)
Brake Caliper Wire Pinch Linear Pull	5.5-8.5 Nm (50-75in-lb)
Brake Lever (MTB type)	6-8 Nm (53-69in-lb)
Brake Lever (Drop Bar Type)	6-8 Nm (53-69in-lb)
Mudguard Bolts 6-9 Nm (53-78in-lb)	6-9 Nm (53-78in-lb)
Mudguard Bracket Bolts 2.5-4 Nm (25-35in-lb)	2.5-4 Nm (25-35in-lb)
Base Clip Bolts	2.5-4 Nm (25-35ft-lb)
Mount Bracket Bolts	2.5-4 Nm (25-35ft-lb)
Strut Bolts	2.5-4 Nm (25-35ft-lb)

The following procedures will help you maintain your e-bike for years of enjoyable riding.

Do not ride your e-bike in water (damp roads, puddles, rain, streams etc.), and never immerse it in water as the electrical system will incur damage. Store your e-bike under shelter, and avoid leaving it in the rain, or exposed to corrosive materials. Riding on the beach, or in coastal areas, exposes your e-bike to salt, which is very corrosive. Wash your e-bike frequently, and wipe or spray all unpainted parts with an anti-rust treatment. Make sure wheel rims are dry, so braking performance is not affected. After rain, dry your e-bike and apply anti-rust treatment. If paint has become scratched or chipped to the metal, use touch up paint to prevent rust. Clear nail polish can also be used as a preventative measure.

Cleaning & Lubrication

It is important in order to keep your bike in good and safe working order to make sure it is clean and lubricated. Always wash off any excess dirt and dry well, before lubricating moving parts. Below is a guide that may help you with your maintenance schedule, but this will depend on how and where you ride, and also on how often you ride.

Do not over lubricate, and ALWAYS wipe off any excess lubrication, especially if you get it on the brakes, brake pads or rims, as this may decrease brake functionality, and increase stopping distances. If you have any doubts about any of these parts, please consult a qualified bicycle mechanic.

Break-in Period

Your e-bike will last longer and work better if you break it in before riding it hard. Control cables and wheel spokes may stretch, or “seat”, when a new e-bike is first used, and may require readjustment. This manual will help you identify some things that need readjustment. But even if everything seems fine to you, it is often best to take your e-bike to your local mechanic for a checkup. Dealers typically suggest you bring the e-bike in for a 30 day checkup. Another way to judge when it's time for the first checkup is to take the e-bike in after three to five hours of hard off-road use, or about 10 to 15 hours of on-road, or more casual off-road use. But if you think something is wrong with the e-bike, take it to your mechanic before riding it again.

Before every ride: See Chapter 10 – Final inspection before you ride

After every long or hard ride, if the e-bike has been exposed to water or grit (or at least every 100 miles), clean the e-bike, and lightly lubricate the chain's rollers with a good quality bicycle chain lubricant. Wipe off excess lubricant with a lint free cloth. Lubrication is a function of climate. Talk to your local mechanic about the best lubricants and the recommended lubrication frequency for your area. (See below for help with lubrication areas). Do not over lubricate, and ALWAYS wipe off any excess lubrication, especially if you get it on the brakes, brake pads or rims, as this may decrease brake functionality, and increase stopping distances. If you have any doubts about any of these parts, please consult a qualified bicycle mechanic.

What Part?	How often?	What with?	How?
Chain	Every week	Light oil	Brush or spray
Derailluers	Every week	Oil	Oil can
<hr/>			
Gear Levers	Every month	Lithium based grease	Disassemble
<hr/>			
Freewheel	Every six months	Oil	Oil can
Brake Cables	Every six months	Lithium based grease	Disassemble
<hr/>			
Bottom bracket	Every year	Lithium based grease	Disassemble
Pedals	Every year	Lithium based grease	Disassemble
Gear cables	Every year	Lithium based grease	Disassemble
Wheel bearings	Every year	Lithium based grease	Disassemble
Headset	Every year	Lithium based grease	Disassemble
Seat post	Every year	Lithium based grease	Disassemble

After every long or hard ride, or after every 10 to 20 hours of riding, check the following:

- Squeeze the front brake and rock the bike forward and back. Everything feel solid? If you feel a clunk with each forward or backward movement of the bike, you probably have a loose headset.
- Lift the front wheel off the ground and swing it from side to side. Feel smooth? If you feel any binding or roughness in the steering, you may have a tight headset.
- Grab one pedal and rock it toward and away from the centerline of the bike. Then do the same with the other pedal. Anything feel loose? If so, have a qualified bicycle mechanic check it.
- Take a look at the brake pads. Starting to look worn or not hitting the wheel rim squarely? They may need adjusting or repairing, see the brakes section of this manual.
- Carefully check the control cables and cable housings. Any rust? Kinks? Fraying? If so, have a qualified bicycle mechanic replace them.
- Squeeze each adjoining pair of spokes on either side of each wheel between your thumb and index finger. Do they all feel about the same? If any feel loose, have the wheel checked for tension and trueness.
- Check the tyres for excess wear, cuts or bruises.
- Check the wheel rims for excess wear, dings, dents and scratches. If present, ask a qualified bicycle mechanic if they need replacing.
- Check to make sure that all parts and accessories are still secure, and tighten any which are not.
- Check the frame (particularly in the area around all tube joints), handlebars, stem, and the seat post for any deep scratches, cracks or discoloration. These are signs of stress-caused fatigue, and indicate that a part is at the end of its useful life and needs to be replaced

As required:

- If either brake fails, don't ride the e-bike. Have your local bicycle mechanic check the brakes.
- If the chain won't shift smoothly and quietly from gear to gear, the derailleur is out of adjustment, take it to a qualified bicycle mechanic.

- It is recommended that every 25 (hard off-road) to 50 (on-road) hours of riding, take your e-bike to a qualified bicycle mechanic for a complete checkup.

6 Week Inspection

It is recommended that after this period you should inspect your e-bike, as things will slacken off and need re-tightening.

Every 6 Months

It is recommended that every 6 months you complete a full service on your e-Bike to keep it in excellent working condition.

Periodically check the wiring and connectors to ensure there is no damage, and that the connectors have good continuity.

Caring for your Battery

Properly maintain the batteries by keeping them fully charged when not in use. When stored and not in use, please remove the battery and store in a cool dry place, charging periodically, if your battery is not fitted with SLEEP MODE function, as the battery will discharge over time of none use. It is recommended that the battery is charged AT LEAST once a month while it is not being used.

Failure to do this will result in the battery falling into a dormant state, rendering the battery unrepairable.

Please Note: It is ok to oil the chain and front or rear axle (depending if you have front or rear hub motor), but THE MOTOR SHOULD NOT BE LUBRICATED.

If you have an accident

First, check yourself for injuries, and take care of them as best you can. Seek medical help if necessary.

Next, check your e-bike for damage. After any crash, take your bike to your local mechanic for a thorough check. Carbon composite components, including frames, wheels, handlebars, stems, crank sets, brakes, etc., which have sustained an impact must not be ridden, until they have been disassembled, and thoroughly inspected by a qualified mechanic.

TROUBLESHOOTING 13

FAULT/PROBLEM	CHECK	ACTION
Low Speed from the electric system.	Is the battery power low? Is the tyre pressure low, or flat? Is their too much load on the e-bike?	Charge the battery. Inflate, or repair, the tyre. Don't overload the e-bike.
The motor is not working.	Are all connectors securely connected?	Secure all connectors, if problem persists, please contact your dealer.
Power indicator light does not work.	Are all connectors securely connected?	Secure all connectors, if problem persists, please contact your dealer.
Power indication of the battery is on, but the e-bike doesn't work.	Are all connectors securely connected?	Secure all connectors (especially brake connections), if problem persists, please contact your dealer.
Reduced battery performance.	Is the battery fully charged?	Charge fully, if problem persists, please contact your dealer.
Charger not giving full charge.	Do the lights on the charger remain red during charging period?	If not, replace the charger like for like (see your dealer).
Low battery power.	Check the charger is working correctly?	If yes, replace the battery like for like (see your dealer).

FAULT/PROBLEM

CHECK

ACTION

Battery does not switch on.

Is the power switch turned off?
Does the battery have power?
Has the battery short-circuited?

Is the battery positioned correctly into it's cradle with contact points connected?

Is the switch damaged?

If yes, switch the battery on.
If no, charge the battery.
If yes, replace the fuse, please contact your dealer.
If no, remove the battery, re-insert into the correct position, and lock into place.
If yes, replace the switch, please contact your dealer.

Abnormally long charging time.

Are all connectors securely connected?

If no, secure connections. If yes, battery may need replacing, contact your dealer.

Charger fails to perform its intended function.

Has the charger short-circuited?
Do the lights on the charger remain red during charging period?

If yes, replace the fuse.
If not, replace the charger like for like (see your dealer).

Power is on, but there is no indicator on display

Check the battery power, if the battery power is low, it is possible that the power connectors have failed, or the fuses of the controller are burned out.

Contact your dealer.

Riding with seems to take more effort, or the speed is slower.

Check whether the front and rear brake is locked, the tightness of chain is correct, the air pressure of tyre is correct, and whether the battery power is full.

FAULT/PROBLEM	CHECK	ACTION
Gear shifts not working properly.	<p>Check derailleur cables - sticking/stretched/damaged</p> <p>Are front or rear derailleurs properly adjusted?</p> <p>Is the index shifting adjusted properly?</p>	<p>Lubricate/tighten/replace cables.</p> <p>If no, adjust the derailleurs.</p> <p>If no, adjust the indexing.</p>
Chain is slipping while pedalling.	<p>Is the chainring worn or chipped?</p> <p>Are the teeth on the freewheel sprocket worn or chipped?</p> <p>Is the chain worn or stretched?</p> <p>Is there a stiff link in the chain?</p> <p>Have components been changed making the chain/chainring/freewheel no longer compatible?</p>	<p>If yes, replace.</p> <p>If yes, replace.</p> <p>If yes, replace.</p> <p>Lubricate or replace the link.</p> <p>If yes, contact your dealer.</p>
Chain is jumping off the freewheel sprocket or chainring.	<p>Is the chainring untrue?</p> <p>Is the chainring loose?</p> <p>Are any chainring teeth bent or broken?</p> <p>Are the front or rear derailleur side-to-side travel out of adjustment?</p>	<p>If yes, re-true or replace.</p> <p>If yes, tighten the mounting bolts.</p> <p>If yes, repair or replace.</p> <p>If yes, adjust the derailleur travel.</p>
Constant clicking noises when pedalling.	<p>Is there a stiff chain link?</p> <p>Is a pedal axle, or are the pedal bearings loose?</p> <p>Does the bottom bracket have loose bearings or a loose axle?</p> <p>Is the bottom bracket or pedal axle bent?</p> <p>Is the crankset loose?</p>	<p>If yes, lubricate the chain, or adjust the chain link.</p> <p>If yes, adjust the bearings or axle nut.</p> <p>If yes, adjust the bottom bracket. If yes, replace the faulty axle</p> <p>If yes, tighten the crank bolts.</p>

FAULT/PROBLEM

CHECK

ACTION

There is a grinding noise when pedalling.

Are the pedal bearings too tight?
Are the bottom bracket bearings too tight?
Is the chain fouling the derailleurs?
Is the rear derailleur jockey wheel dirty or binding?

If yes, adjust bearings.
If yes, adjust bearings.
If yes, adjust the chain line.
If yes, lubricate and clean the jockey wheels.

Freewheel is not rotating.

Are the freewheel internal pawl pins jammed?

Lubricate, if problem persists, replace the freewheel.

Brakes are not working effectively.

Are the brake blocks worn down?
Are the brake blocks, or wheel rims greasy, wet, or dirty?
Are the brake cables binding/stretched/damaged?
Are the brake levers binding?
Are the brakes out of adjustment?

Replace brake blocks.

Clean the brake blocks and the rim

Clean/adjust/replace the cables
Adjust the brake levers.
Re-center the brakes.

Brakes squeal/squeek when applied.

Are the brake blocks worn down?
Is the brake block "toe-in" correct?

Are the brake blocks, or wheel rims greasy, wet, or dirty?
Are the brake arms loose?

Replace brake blocks.
Correct the brake block to "toe-in" first when contacting the rim.

Clean the brake blocks and the rim.
Re-tighten the mounting bolts.

FAULT/PROBLEM	CHECK	ACTION
There is a knocking or shuddering when the brakes are applied.	<p>Is there a bulge in the rim, or is the rim out of true? Are the brake mounting bolts loose? Are the brakes out of adjustment?</p> <p>Is the headset tight or binding?</p>	<p>True the wheel, or take to a bike shop for repair. Re-tighten the bolts. Re-center the brakes, or correct the brake block to “toe-in” first when contacting the rim. Re-tighten the headset, or re-grease</p>
The wheel is wobbling.	<p>Is the wheel axle broken? Is the wheel out of true?</p> <p>Has the hub come loose? Is the headset tight or binding? Have the hub bearings collapsed? If applicable, is the quick release mechanism loose?</p>	<p>Replace the axle. True the wheel, or take to a bike shop for repair. Adjust the hub bearings. Re-tighten the headset, or re-grease. Replace the bearings. Adjust the quick release mechanism as instructed in this manual.</p>
Steering is not accurate.	<p>Is the wheel correctly aligned in the frame? Is the headset tight or binding? Is the front fork, or the frame bent?</p>	<p>Align the wheels correctly. Re-tighten the headset, or re-grease. Contact your dealer and refrain from riding the e-bike.</p>
Frequent punctures.	<p>Is the inner tube old or faulty? Is the tyre tread or casing worn? Is the tyre unsuitable for the rim? Was the tyre checked after previous puncture?</p> <p>Is the tyre pressure too low? Is a spoke protruding into the rim?</p>	<p>Replace the inner tube. Replace the tyre. Replace with correct tyre. Remove any sharp objects embedded in the tyre. Use the correct tyre pressure. File the protruding spoke down.</p>

Other faults that can't be solved, or for motor, controller, charger, battery failure - please contact your authorised dealer for help. Any changes to these parts will invalidate your warranty. If unsure on any of these points, or you fail to correct the problem, we would advise you to seek assistance from your local e-Bike specialist.

14 RIDING SAFELY

When riding, obey the same road laws as all other road vehicles, including giving way to pedestrians, and stopping at red lights and stop signs. Ride predictably, and in a straight line. Never ride against traffic. Use correct hand signals to indicate turning or stopping, and ride defensively. Be aware, to other road users, you may be hard to see. Concentrate on the path ahead, and avoid pot holes, gravel, wet road markings, oil, curbs, speed bumps, drain grates and other obstacles. Cross train tracks at a 90 degree angles, or walk your e-bike across. Expect the unexpected, such as, opening car doors, or cars backing out of concealed driveways.

Familiarise yourself with all the e-bike's features. Practice gear shifting, braking, and the use of toe clips and straps (if fitted).

If you are wearing loose pants, use leg clips or elastic bands to prevent them from being caught in the chain or gears. Wear proper riding attire and avoid wearing open toe shoes.

Don't carry packages, or passengers, that will interfere with your visibility or control of the e-bike. Don't use items that may restrict your hearing.

Do not lock up the brakes when braking. Always apply the rear brake first, then the front. The front brake is more powerful, and if it is not correctly applied, you may lose control and fall.

Maintain a comfortable stopping distance from all other riders, vehicles and objects. Safe braking distances, and forces, are subject to the prevailing weather conditions.

IT IS NOT RECOMMENDED TO RIDE IN WET WEATHER

This e-bike is not meant for use in wet conditions (damp roads, puddles, rain, streams, etc.) Never immerse this product in water as the electrical system may be damaged.

Should you find yourself in a situation of wet weather, remember to take extra care. Stopping distances will take up to

6 times further, so be aware to brake earlier. Decrease your riding speed, avoid sudden braking, and take corners with additional caution. Be more visible on the road, wear reflective clothing and use safety lights. Potholes and slippery surfaces, such as line markings and train tracks, all become more hazardous, and more difficult to see, when wet.

IT IS NOT RECOMMENDED RIDE AT NIGHT

If you have to ride at night, slow down, and use familiar roads with street lighting if possible. Ensure your e-bike is equipped with a full set, correctly positioned, clean reflectors. Use a properly functioning lighting set, comprising of a white front lamp, and a red rear lamp. If using battery powered lights, make sure batteries are well charged. Some rear lights are available with flashing features, which enhances visibility. Wear reflective and light colored clothing.

Climbing Hills Technique

Always gear down before a hill climb, and continue gearing down, as required, to maintain pedaling speed. The e-bike system will assist you to climb the hill, as long as you are pedaling. If you reach the lowest gear and are struggling, stand up on your pedals to gain more power from each pedal revolution. On the descent, use the high gears to avoid rapid pedaling. Do not exceed a comfortable speed, always maintain control, and take additional care.

Cornering Technique

Always brake slightly before cornering, and prepare to lean your body into the corner. Maintain the inside pedal at the 12 o'clock position, and slightly point the inside knee in the direction you are turning, keeping the other leg straight. Don't pedal through fast or tight corners. While going through the turn, keep your eyes parallel to the horizon and look as far ahead of you as possible.

Storing

Keep your e-bike in a dry location, away from wet weather and sunlight. Direct sunlight may cause paint, rubber, and plastic parts to crack. Before storing your e-bike for a long period of time, clean and lubricate all components, and wax the frame (Also see Chapter 7, Battery Information & Distance Range, on how to look after your battery during long periods of non-use). Deflate the tyres to half pressure. Don't cover the e-bike with plastic, as "sweating" may result, which may cause rusting, and problems with the electrical system. Please note that your e-bike warranty does not paint damage, resulting in rust, corrosion, dry rot etc..

Security

It is advisable that the following steps be taken to prepare for and help prevent possible theft.

1. Maintain a record of the frame number, usually found stamped underneath the bottom bracket or on the head tube.
2. Register your e-bike with the local police.
3. Invest in a high quality lock, and make sure to lock your e-bike to an immovable object if it is left unattended.

Please note that your e-bike warranty does not cover theft



It is illegal for children under the age of 14 to ride e-Bikes.

WARRANTY INFORMATION 15

Subject to the following provisions, Avocet Sports Limited warrants that the goods will correspond with their specification at the time of purchase, and will be free from defects, in material, and in workmanship.

Avocet Sports Limited offers a 10 year warranty on steel frames and 1 year on aluminium frames for any problems relating to manufacturer workmanship, or arising from the material defects, including breakages, or cracking caused while riding (other than rider misuse).

Avocet Sports Limited offers 12 month warranty on the battery for any problems relating to manufacturers workmanship, or arising from material defects. The warranty does not cover misuse, or failure to follow the manufacturer's operational instructions correctly.

All other components are guaranteed for 12 months, for problems related to manufacturer workmanship, or arising from material defects, with the exception of consumable components, for example: brake blocks, brake pads, tyres, and inner tubes.

Avocet Sports Limited offers this warranty to the original purchaser of the product. This warranty is not transferable to a third party.

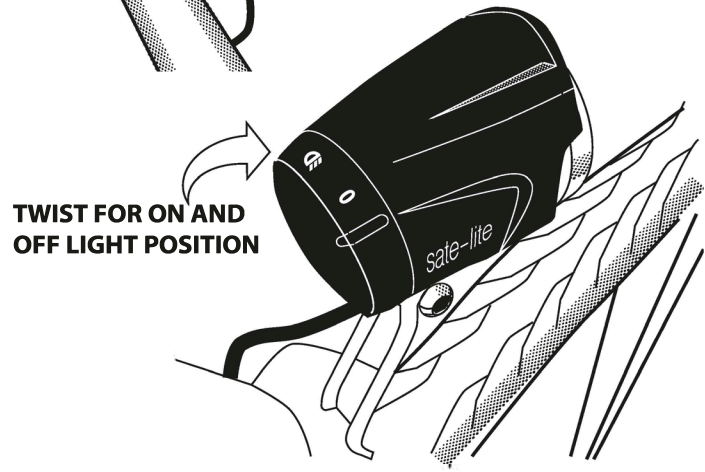
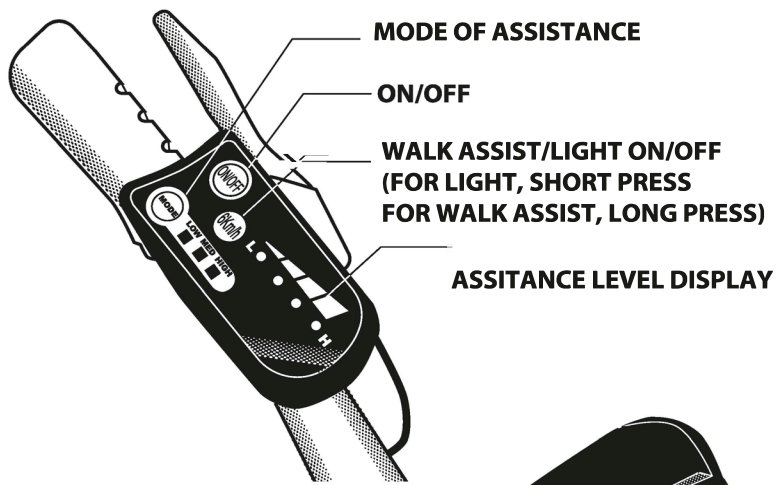
Transport and labour charges in relation to warranty supplied parts are not subject to the terms of this guarantee, and shall be the responsibility of the owner.

The original bill of sale, or proof of purchase must be presented to the approved dealer prior to obtaining warranty services.

The above guarantee is in addition to your statutory rights

Please Note: This guarantee does not cover failure experienced during activities such as any form of jump, stunt, wheelies, race/competition or other extreme riding of any kind, and will invalidate your warranty. If the e-bike has been used for rental use, or the battery pack is used incorrectly or damaged (including improper charging), this will result in invalidating the warranty. Poor maintenance or modifications that no longer comply with regulations or original specifications will also invalidate the warranty.

16 ELECTRICAL OPERATION OF THE BIKE



e-MOVE

CUSTOMER SERVICES NUMBER:

0161-509 4960

Maximum recommended rider weight is 120kgs

e-MOVE

CUSTOMER SERVICES NUMBER:

0161-509 4960