

#### World's best prices on eBikes www.leitner.com.au

Dear Valued Customer,

Congratulations on owning your new Leitner electric bicycle! Up to now electric bikes have been far too expensive for everyday use, except for some hobby enthusiasts - the Leitner electric bike range has changed that. Now everyone can ride an eBike, no license or registration required. The Leitner eBike makes transportation on an electric bike fun, cheap and easy.



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Leitner is one of Australia's fastest growing electric bike brands, investing large amounts of time and resources into service and continual improvement and therefore we highly value Your feedback. Please contact us with any feedback.



Leitner is 100% Australian owned.

Thanks for shopping with Leitner!

Kind Regards,

Ephraem Leitner and the Leitner team

Leitner Pty Ltd ABN 40608178310

ph: 1300 856 725 email: sales@leitner.com.au

#### IMPORTANT NOTICE

Read manual, Instructions and Terms carefully before use. It is the buyer's responsibility to make sure the electric bicycle is safe to ride. If necessary ask for help at any good local bicycle store. Please keep the invoice. By purchasing and using a product from Leitner, the customer accepts the terms and conditions and warranty published at www.leitner.com.au including

www.leitner.com.au/terms-and-conditions/ and www.leitner.com.au/warranty. It is the customers' responsibility to service and maintain the products regularly and to make sure that the product is safe to use before each ride. Contact customer support at sales@leitner.com.au or 1300 856 725 for any questions and in case repairs are needed. Leitner does not accept claims for repairs which were performed without our approval. Leitner does not assume any product liability to the extent permitted by the law.



### **Battery Care & Storage Summary**

Charge battery after every ride. It is not necessary to fully discharge battery before charging. Lithium batteries do not have any memory effect, so you can charge them at any time. Lithium batteries must not be stored if fully discharged. If your battery is fully discharged, charge it as soon as possible. Storing the battery if fully discharged for more than 1 day will damage the battery. It is recommend to store the batteries fully charged and then charge it at least every two months. It is not necessary to leave the charger connected to the battery if stored for long periods. Just top the charge up every two months. If batteries are not charged at least every two months, the battery may be damaged and such damage is unfortunately not covered under manufacturer's fault warranty.



#### Safety Warnings

Riding a bike can result in serious injury or death. It is important to read and understand the printed manual provided in the packaging and this online manual carefully, wear safety equipment, including a helmet and always ride carefully. It is important that you check all nuts, screws, and spokes are tight before each ride and to make sure that the tyres are inflated and that all brakes work. Make sure the front wheel quick release is closed safely so that the front wheel won't detach during riding. Lift the front wheel off the ground and knock it from above using your hand to make sure it won't detach from the fork. If you are not confident about doing this yourself, make sure you get someone competent to do it for you. We do not always tighten parts before we send the bicycle to you. It is your responsibility to make sure that the bike is safe to ride before each ride. Please read the safety warnings in the printed manufacturer manual. Do not ride the bike in the rain and store undercover. Make sure the bike stand is always retracted before riding and clear of obstacles. Do not sit on bike and put weight on stand. Only ride on flat surfaces. Do not ride down curbs or similar obstacles. Hitting the stand against obstacles while riding may cause damage to frame and such damage is not covered by warranty against manufacturer's fault. Minimum recommended rider age 18 years. It is the users responsibility to comply with local road rules.

Switch off pedal assist when you are riding in tight situations, e.g. turns, because pedal assist can turn on suddenly and momentarily accelerate the bike, taking you by surprise.

The PAS (Pedal Activation System) is designed for safety so the motor does not get power until the pedals are turned. However if the throttle is turned on by pressing the red button in on the right side of the handle bar, then the bike will move immediately when the throttle is twisted. So to avoid accidentally twisting the throttle we recommend you turn off the key immediately when you park the bike before you dismount. Protection against rust: Bikes must not be in contact with sea water. Living close to the sea increases risk of corrosion and it is recommended to treat parts like spokes and forks with commercial rust protector available from hardware stores. Do not apply any lubricants to brake parts as it will reduce brake performance.

#### Assembly instructions

If you need any support please contact us on 1300 856 725 or sales@leitner.com.au Please also refer to the detailed assembly guide with pictures below.

We believe eBikes make the world a better place and we believe they should be affordable for everyone. Shipping them directly from our warehouse to you makes it possible for us to offer them at the lowest prices, not like brick and mortar eBike stores which sell similar models for twice the price. Smaller packaging means a lower shipping cost, that is why some parts of Leitner eBikes need assembly. Please use the following instructions and the provided manual and multi-tool to help you assemble the eBike. There may be slight variations between the different models. If you need help contact us or have the eBike assembled at any good local bicycle store.

It is recommended to remove the bike from the box on a rug so the bike will not get scratched. Lay the box down and drag the bike out horizontally. The current packaging consists of the seat, a cardboard box (with manual, charger, and parts) and the eBike. Carefully remove the protective packaging from the bike. The handle bar is attached to the frame by the brake, gear, and electrical cables.

The following parts need assembly:

- 1)Front mudguard & headlight
- 2)Front wheel
- 3)Handle bar
- 4)Rear rack
- 5)Pedals
- 6)Seat
- 1) Front mudguard & headlight. Remove the protector from the front fork where you will later install the front wheel. The front fork is bent towards the bottom which should face forward. Install the headlight and the front mudguard with the same bolt on top of the fork. Arrange headlight bracket on bolt first, then the mudguard, then tighten the bolt.

There are two bolts on the lower part of the fork, one on each side, to fix the support arms of the mudguard to the fork. The electrical connectors to the headlight are delicate.



the red wire connects to the "+" pin, the black to the "-" pin. The "+" and "-" symbols are small and you need to look carefully to identify them. If that does not work try reversing them. If you have a small cable tie, secure the cable to the support bracket so it won't get accidently snagged. You may also use duct tape to help keep the cables in position.

- 2) Install the front wheel. Check for loose spokes, also on the back wheel, and take the wheels to a bike mechanic if they need to be tightened. The quick release axle is usually tied to the spokes. Remove the quick release axle. Remove the nut and one spring and insert the quick release axle through the hole in the center of the wheel. Sometimes there are small plastic parts inside the whole and you need to push them out carefully. Keep a spring on each side of the wheel. The springs are there just to make gaps to make it easier to install the wheel in the forks. Screw the nut on the axle a little and then position the wheel between the forks. Position the wheel so that the disc of the disc brake goes into the slot in the front brake caliper housing. Keep your eye aligned with the brake slot. If you can see a brake pad blocking the disc then use an Allen Key on the tool to screw the pad back out of the way. Be patient, you can do it! Adjust the quick release axle nuts so you can clip it tight with the quick fit lever. NOTE: Brake pads may not be installed on your bike. Check that the brakes work when you have finished installing the wheel(s). If the brakes do not work you must install the pads. The discs may make a noise when passing the brake pads. This is normal and will go away after a few weeks. You may finetune the pad position by correcting the inner and outer brake pads using an allen key. Make sure the brake pads allow the wheel to turn freely.
- **3)Install the handle bar** in the jaw of the stem. Keep your eye out for a small part that will be loose when you open the jaw. Insert the handle bar and align it in the center. Make sure the cables from the handle bar are not tangled up and the steering can be turned to the full extent. Double check every single bolt and screw is tight on the handlebar so nothing can happen when you are riding. Don't over tighten the bolts as it may damage the ball bearings.
- **4)Rear Rack**: The Rear rack has two support arms to fix onto the frame behind the battery. Loosen the nuts of the support arms, one on each side, pull the support arms out and fix them to the bike frame with the nuts and bolts which sit there already. Make sure the rack sits tight before use.
- **5)Pedals**: Have a look at the pedals' threads, there should be a "L" for left and an "R" for right pedal. Lubricate the threads with appropriate bike lube and screw them into the crank. The "L" pedal screws in the opposite direction of normal threads.
- **6)Seat**: insert the seat into the seat bar, make sure the seat is inserted to at least the minimum insertion mark which is marked on the seat post. The seat must not be extended beyond that minimum insertion mark, otherwise it may damage the frame. The minimum insertion mark must not be visible when the seat is installed. Check that the seat is tight. It is recommended to insert the seat post at least 10cm into the frame. Adjust the quick fit mechanimsm by turning the bolt until it's tight.

#### Functions of turning the key on the battery:

All the way clockwise: ON.

Turn it back anti-clockwise: OFF.

Turn it back again anti-clockwise and **push in**: Battery can be removed.

The battery charging socket is on the opposite side of the battery. The socket protector can be flipped sideways to expose socket.



What if the Pedalling Assistance mode doesn't work? The pedalling sensor may not be set up correctly: When using Pedalling Assistance mode, it will use the disc that is about 6 cm in diameter on the right pedal side of the pedals-axle at the bottom of the bike's frame. That disc has several little magnets in it. When the pedals are turned the magnets go past a little sensor which is hanging from the frame under the pedals-axle. The sensor tells the controller (under the battery) how fast you are turning the pedals. The tip of the sensor has to be about 1 mm from the disk. Make sure it is that close by either sliding the disk along the pedals-axle (or bending the sensor bracket towards the disk). The bike [pedal assist] will not go if the sensor is not close enough to the disc!

**Folding bikes** Before riding a folding bike make sure the frame and handle bar quick folding mechanism is closed tightly and it is safe to ride the bike. If the frame makes squeaking noises during riding tighten the nut of the frame quick folding mechanism. How to fold the bike frame: open quick fix lever, turn bolt to the left then push bolt up. It may be necessary to jiggle the bolt while pushing up for the first few times. To close the frame complete the steps in reverse order.

**Tyre pressure** Please check the recommendation on the tyres and inflate accordingly. The current model's pressure recommendation is between 40 and 65 psi. We recommend 50.

**Adjusting the derailleur** Refer to the manual for details. In many cases turning the barrel adjuster corrects shifting issues. Please also check out the video link in the addon.

How to reduce vibration Tighten the screw on the rear light with a Philips screw driver.

**Turning the pedals makes noise** The chainguard may rub on the chain. Observe where the rubbing occurs. If it's the chainguard try to increase the distance of the chainguard from the chain by bending the metal clip which holds the chainguard.

**Fuse specifications** (Fuse is located on battery next to lock) Please check engraving on fuse to confirm.

Finally, perform a safety check on the tightness of all nuts, bolts, spokes, and screws. Ask your local bicycle shop for a chain lubricant.

Enjoy your eBike!

Kind Regards,

Ephraem Leitner and the Leitner team

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#### **Terms and Conditions**

Please refer to our website <a href="www.leitner.com.au">www.leitner.com.au</a> for Terms and Conditions including Warranty <a href="http://www.leitner.com.au/terms-and-conditions/">http://www.leitner.com.au/terms-and-conditions/</a> <a href="http://www.leitner.com.au/warranty/">http://www.leitner.com.au/warranty/</a>





# Manual add-on: Assembly instructions with pictures

Dear Customer,

Please find below an add-on to the assembly instructions with pictures.

It provides additional information about:

- Installation of front wheel, front mudguard, headlights and handlestem
- Adjustment of disc-brakes
- Installation of pedals
- Functions of the battery
- How to fold the seat for battery removal
- How to use the controls (throttle and pedal assist mode)
- How to fold the frame (folding models only)
- Removing and re-installing the rear wheel
- Tuning the rear derailleur of shimano gears (youtube video link)

## If you need any help please don't hesitate to call us on 1300 856 725 or email sales@leitner.com.au

Important Notice: It is the buyers responsibility to make sure the electric bicycle is safe to ride.

If necessary also ask for help at any good local bicycle store.

## Before you start: Check the bike for damage or missing parts

- Please note that eBikes are fragile items. Although we are using first class courier services and the bikes are professionally packed it may happen that they get damaged during transit. Please check the bike for damage upon arrival and let us know immediately. We will then work with you on a solution.
- If there are any missing parts please also let us know immediately and we will send a replacement part as soon as possible.



### **Contents**



eBike

Saddle

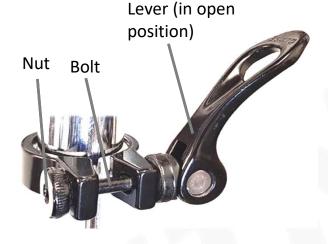
Box with Charger and Parts



#### **QUICK RELEASE LEVERS**



**Figure Q1:** Lever in closed position



**Figure Q2:** Quick release parts on a seat clamp. It is the same concept as quick-release parts on the front wheel.

**WARNING!** Quick release levers must be closed in such a position so that the lever won't be accidentally hit while riding causing it to open. If quick release lever is not closed safely, components of the bike can loosen while riding causing serious injury or death.

### How to operate quick-release levers:

- Step 1: Close Lever (figure Q1). If lever closes very easily (less than 12 pounds or 53 Newton) it indicates that it is loose. If lever is very hard to close completely (more than 45 pounds or 200 Newton), don't force it and go to step two.
- Step 2: Open lever. If lever was too loose, tighten nut clock-wise. If lever was too hard to close, loosen nut anti-clockwise. Close lever again.
- Step 3: Repeat step 2 until lever is firmly closed and can't move. Do NOT turn lever like a wing-nut to close as this will not close it firmly.



# Installation of front wheel, headlights and front mudguard



Remove black protective bar From front fork



Top bolt: first insert
Headlight, then front
Mudguard, then tighten
bolt

(The two sockets with threads pointing forward are not used. They are for installation of V brakes which are not needed since the bike is equipped with front disc brakes.)

Fix mudgurad to fork here
On both sides

This part of fork facing forward.

Brake callipers (need to face left hand side).

Insert front wheel axle here

The disk of the front wheel needs to be on the left hand side and needs to be inserted between the two Brake pads on the left hand side of the fork. If the brake pads are too close together and impair installation of front wheel, the distance between the pads can be increased using allen keys to make it easier to install the front wheel. Please refer to the disk brake guide below.

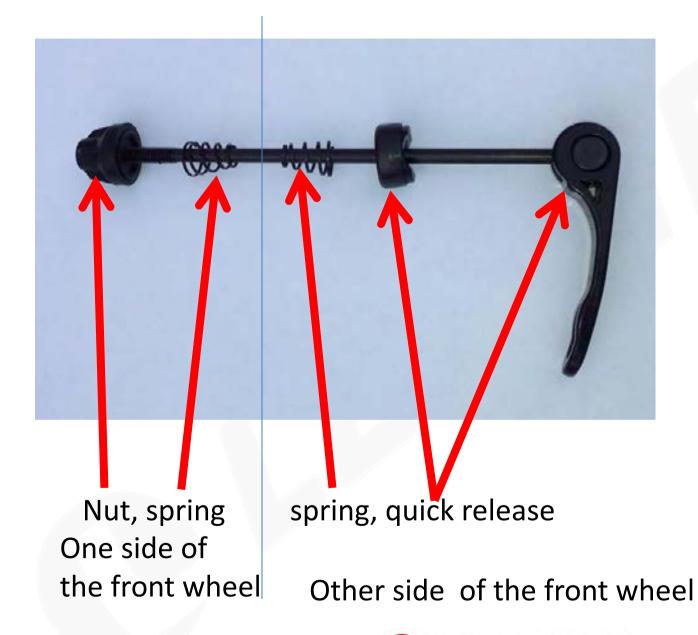


Pull out black protector of threads from front wheel.

Please note there may plastic residues inside the axle hole. You may have to push the Residues out carefully when inserting the axle.





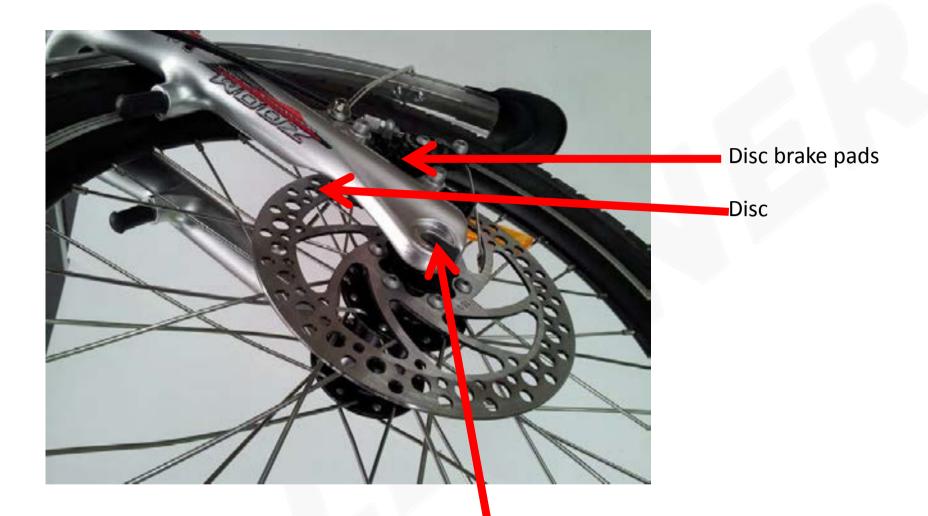






Prepare the quick release axle for installation of front wheel. Remove the spring and the nut.

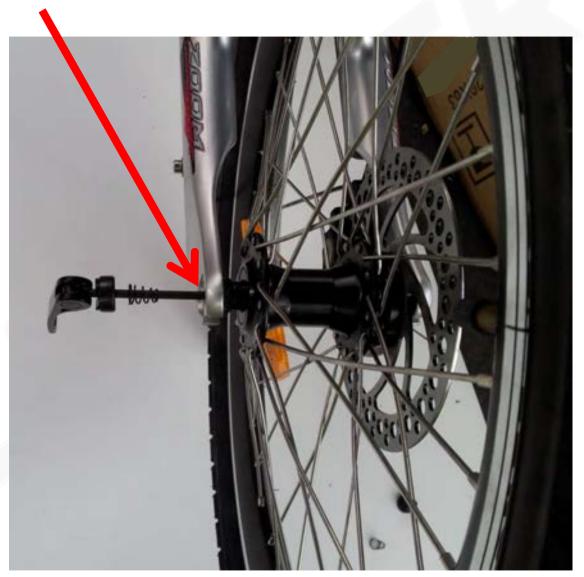




Carefully place front wheel threads into fork. make sure the disc goes between the two break Pads of the disc brake. Refer to disc brake section for further help.



Insert axle. Sometimes there may be plastic residues inside the axle hole which need To be pushed out with the axle. Don't use extreme force.







Insert axle until it's visible from the other side
Insert one spring onto axle threads on this side and fasten nut until the wheel is
securely tightened when you close the quick fit lever on the other side.





Quick release lever in closed postion (arrowhead). WARNING! Before each ride make sure that the front wheel is installed safely using the quick release system. Lift the wheel and hit the wheel from above with your hand to make sure that it won't move and that it is stably installed into the fork. Also try to move the wheel by hand from left to right. It should not move. Refer to guide how to operate quick release levers. Failure to do so may result in serious injury or death. If while riding and braking you feel that the front wheel is pulling to the side it is a sign that the wheel is not installed correctly. stop riding immediately and install wheel correctly. If in doubt contact Leitner customer support at 1300 856 725 or email sales@leitner.com.au

To remove a wheel with a quick release lever first open the lever then loosen the nut by several turns and remove the wheel from the fork.



### Connecting the front light: Model HL 1900







Connect black wire at the "-" pole

Connect red wire at the "+" pole

Mount the light using the bolt and mudguard at the front fork as shown above. (models Libelle, Tirol, Berlin, Venice)



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## Installation of pedals

Attention! Read this guide before installing the pedals!

Don't use force when inserting the pedals into the threads!

The threads on the crank arms will be damaged (stripped) if the pedals are installed incorrectly (using force) and replacement parts need to be purchased at the cost of the customer if that occurs.





 Step 1: Look closely to identify the left and right pedal. They have different threads! It can be a bit tricky to see the "L" or the "R", but it's very important to pick the correct pedal.

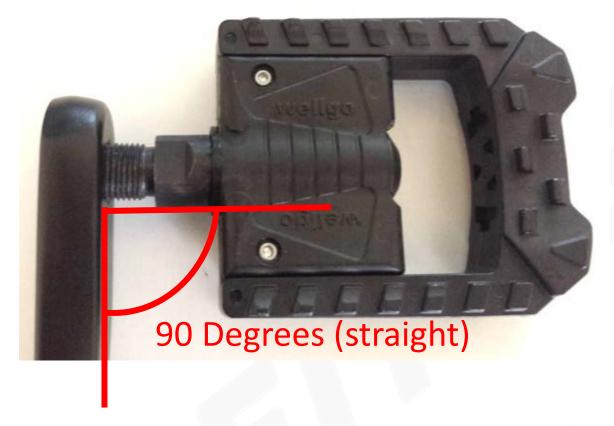
"L " for Left pedal

• "R" for right pedal



Step 2: Lubricate the thread of the pedals with lubricant (available from bike shops)





 Step 3: Carefully position the pedal at a 90 degree angle (straight) to the crank arm. <u>Use your hands</u>. Don't use a tool. <u>Don't use force!</u> The <u>left pedal</u> needs to be turned <u>anti-clockwise</u> into the crank arm on the LEFT side of the bike ,

The <u>right pedal</u> needs to be turned <u>clock-wise</u> into the crank arm on the RIGHT side of the bike

The pedal will screw in <u>without resistance</u> if it's placed correctly into the thread. <u>If you feel resistance</u>, <u>don't continue!</u> Un-screw the pedal and start again.

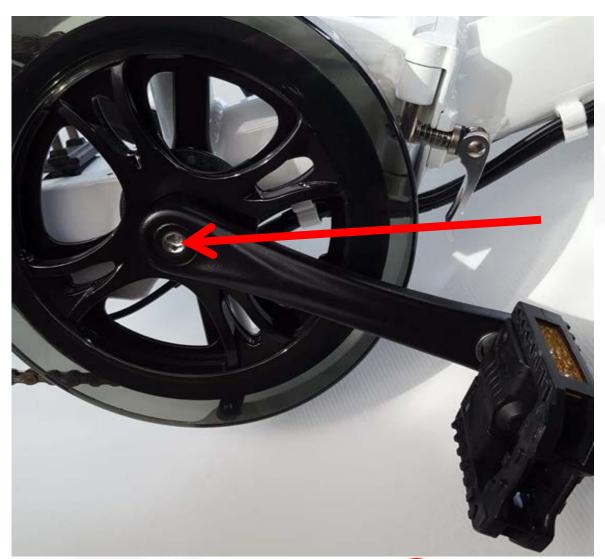




#### Step 4:

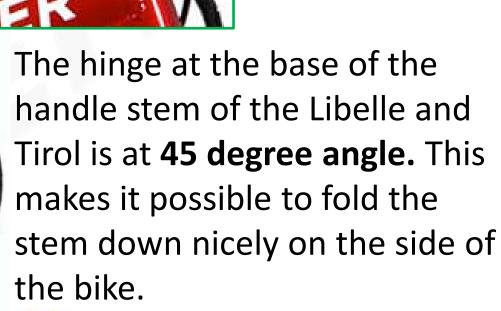
Use your hands to screw the pedal all the way in, so that the thread is not visible anymore. Once it's all the way in, <u>use a spanner (red arrow) and tighten the pedal up</u> **very firmly** so that it won't come off while riding. Remember: clock-wise for the right pedal and anti-clockwise for the left pedal. It is necessary to check that the pedals are tight regularly as they may loosen up over time.

### Crank arms

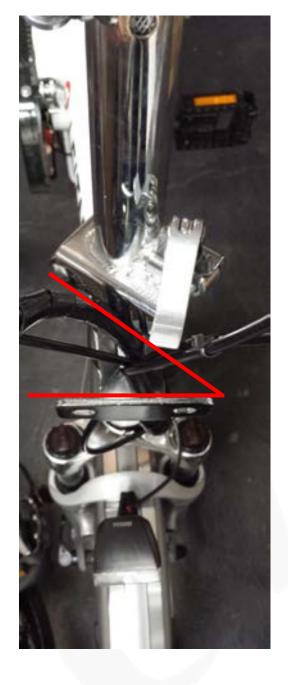


Check the allen bolt at the centre of both crank arms, left and right hand side. (right arm shown in picture). If the arms are loose, tighten the bolt with a large allen key (key not supplied). Don't overtighten. It is necessary to check the crank arms regularly as they may get loose over time.

## Handle stem hinge on Libelle and Tirol







# Handle Stem for Tirol and Libelle Folding bikes

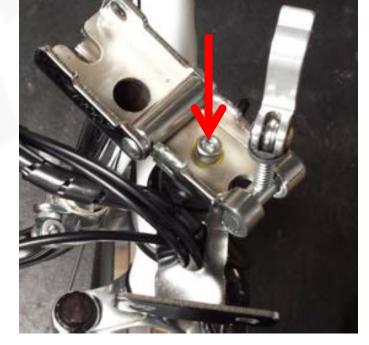
The base of the handle stem of the folding bikes Tirol and Libelle is at an angle (red lines) of about 45 degrees. This is normal. It makes it possible to fold the handle-stem towards the side of the bike (see next page).





Open the quick-release of the folding handle-stem and fold the handlebars to the side of the bike.

Make sure that the bolt (red arrow) in the centre of the handle-stem is tight, and that the bike is safe to ride, however don't overtighten it.



Magnification of handle-stem base when folded.



# Leitner SuperT Dual-suspension folding bike





# Leitner SuperT Distance of seat pole from centre suspension



oforo riding the CuperT make gure that there is sufficient reason he

Before riding the SuperT make sure that there is sufficient room between the seat pole (P) and the centre suspension (S). The seat pole MUST NOT TOUCH the centre suspension. A distance of at least 5mm is recommended. If the seat pole is lowered too much it may touch the suspension. Raise it and make sure that it won't touch the suspension when riding.





Before riding the SuperT make sure that the handle-stem is installed properly and that It's safe for riding. The quick-release must be closed and hold the handle-stem hinge in place safely. **The loop of the quick release must be secured by the black round clip** and held in place in an upright-position. First, close the quick-release, move the loop into an upright position, then turn the black round clip and use it to secure the loop.



### **Zoom Handle-stem on Cruisers Models**





Attention! Make sure the handle stem & handle bar are installed safely before riding the bike. If unsure feel free to contact us or ask for help at a local bicycle store.





Insert the handle-stem into the frame. Tighten the bolt (red arrow) securely with the large hex key. Don't over tighten.

Top-view, tighten the bolt (red arrow)







**Top-view** 

**Bottom-view** 

To change the position of the handle-bar, first loosen the bolts (red arrows) on the top (left picture). To change the position of the handle-STEM <u>loosen the bolt on the bottom (right picture)</u> with an allen key.



Once the handle-stem and handle-bar are in the desired position, tighten up all bolts.

Put the front wheel between your knees and test if the handle-stem moves when turning the handlebar. It should not move easily and it needs to be stable when riding the bike. It is ok for the handle-bar to move when you are using force.

Don't over tighten.



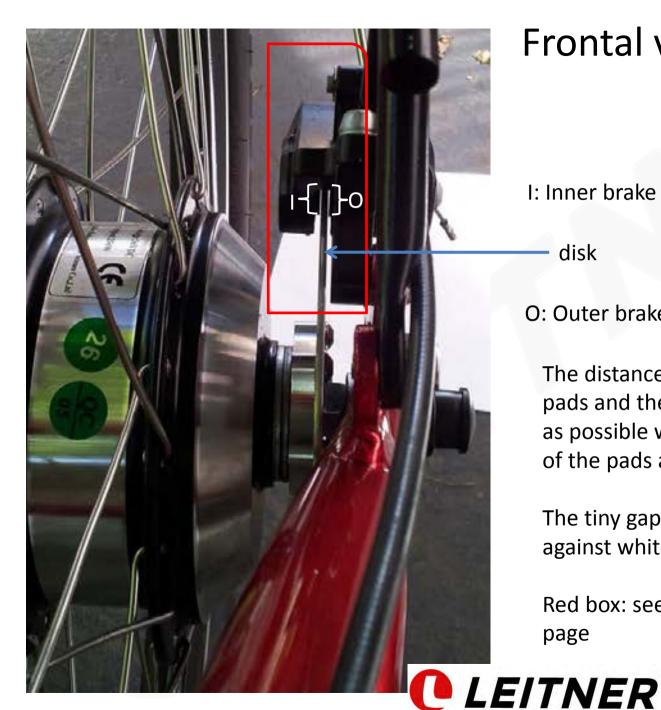
## Important information about disc brakes

Disc brakes are considered to perform better than standard v-brakes, especially in wet conditions. Please note that brand new disc brakes need "braking in". This means it may take a few weeks until they perform optimally. Ride your bike very carefully and allow plenty of time for braking. Please find below a guide on how to adjust the disc-brakes. You may have to re-adjust them several times during the brake-in period. Brakes need to be re-adjusted regularly, also after the brake-in period. This is normal as brake pads will wear down. Before each ride, make sure that both front and rear brakes work well and follow the guide below to maintain the brakes. If you need any help, please contact us on 1300 856 725 or ask your local bike shop for help. It is your responsibility to make sure the brakes are maintained correctly before each ride and that the bike is safe to use. **LEITNER** © Leitner

## Adjusting the disk brakes

- Simply put, a disc brake consists of a disc which is between two brake pads (inner and outer brake pad). See picture below.
- Pushing the brake lever will push the outer pad against the disk and the inner pad. The friction will cause the bike to slow down.
- The pads need to be adjusted to be as close to the disc as possible without rubbing much. Slight rubbing is normal initially and will get better after the break-in phase.





### Frontal view of disk brake

I: Inner brake pad

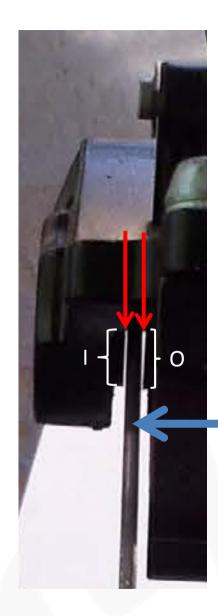
disk

O: Outer brake pad

The distance between the brake pads and the disk should be as small as possible without causing rubbing of the pads against the disk.

The tiny gap can be best seen against white background

Red box: see magnification on next page



## Magnification

I: Inner brake pad

O: Outer brake pad

Red arrows: point at tiny gap between pads

and disk

Disk: blue arrow

Adjust to make the gap as small as possible without

rubbing

To check if the brakes are rubbing lift the wheel, spin it and listen for rubbing sound. Brake pads can be moved very close to the disc for best performance. This may cause slight rubbing which is normal. If there is a lot of rubbing and the wheel is slowed down without braking, increase the brake pad distance.



## How to adjust the outer brake pads



- 1) Before adjusting the brakes, push and release the brake lever 10 times. This tightens the brake cables. They may loosen up again in time and you may have to repeat this step.
- 3) Turn here to fine tune cable tension

Brake cable

2) Loosen this allen bolt, adjust cable tension, then tighten bolt. The more tension on the cable, the smaller the distance between the brake pad and the disc.



## How to adjust the inner brake pads



Adjust inner brake pads:

Turn clockwise: reduce distance of brake

pad to disk

Turn anti-clockwise: increase distance of

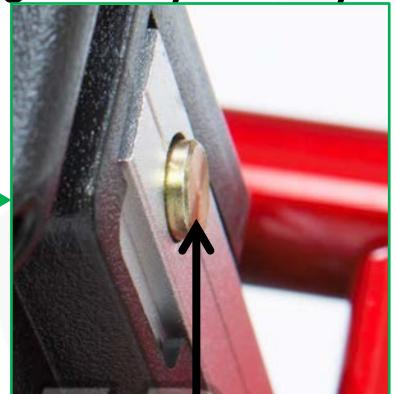
brake pad to disk



Before you turn the keys: Align Battery correctly







The round metal bolt (black arrow) of the battery lock needs to be aligned correctly with the opening in the silver metal bar.

Push the battery down or lift the battery up to align the bolt with the opening. If it's not aligned correctly, the bolt will hit the silver metal bar and you can't turn the key and the bolt won't come through the hole.

## Functions of battery & lock (insert key and turn)



Attention! Always handle the battery lock with care. Never use force!
Battery needs to be in the "ON" position when pushing the white button on top to check battery charge (2 green lights, full, 1 green light, battery discharging, red light only: charge battery soon).

- 1) 1) Off, battery can be
- 2) removed (push key in
- 3) when turning towards
  2) Off, battery locked into frame (push in when turning to "1")
  3) ON battery locked into
  - 3) ON, battery locked into frame

Attention. PUSH THE KEY
INTO THE LOCK GENTLY
when turning between
positions 1 and 2! When
turning between 2) and 3)
DON't push the key into the
lock, just turn normally.

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## Aluminium rail which holds battery



The silver aluminium rail which holds the battery is attached to the frame with a screw. Use a Phillips screw driver to tighten the screw.

The battery should be inserted along the aluminium rail with care. Don't use force. Don't bend the aluminium rail.



## **Charging the battery**

EITNER



Leitner Electric Bikes are equipped with quality Lithium batteries. Lithium batteries are a modern technology which is not suffering from memory effects like some older battery types, which means that Lithium batteries can be charged anytime, also e.g. if they were only half discharged. This will not reduce the battery life. To charge the battery, move the Cover (C) gently to the side, connect the charger to the battery and lastly connect charger to a power point.

## **Charging the battery**

The chargers are smart chargers, which means they will automatically stop charging when the battery is full. There are two charger types.

**Charger Type A)** Has ONE LIGHT on the charger. If it's **RED**, it means it's **charging** the battery. If it's **GREEN**, it means the battery is **fully charged**.

**Charger Type B)** Has **TWO LIGHTS** on the charger. If **BOTH** LIGHTS are **RED**, it means it's **charging** the battery. If **ONE** LIGHT is **GREEN** and **ONE** LIGHT is **RED**, it means the battery is **fully charged**.

ATTENTION: the charger can get very hot while charging. Always keep it away from material which can catch fire.



## Charging the battery

The battery takes about 5 hours to charge if It's completely discharged. If it's not fully discharged it will take less time to charge. It is recommended to switch the battery OFF while charging. The battery can be charged on or off the bike. Disconnect charger from power supply and battery after battery has charged.

Charging temperature between 10  $^{\circ}$ C (50  $^{\circ}$ F ) and 30 $^{\circ}$ C (86  $^{\circ}$ F).

During charging the temperature may increase to about 50  $^{\circ}$ C (122  $^{\circ}$ F). Stop charging battery if it gets unusually hot and contact customer service. Charge undercover in dry, well ventilated area. Do not charge inside a container which prevents ventilation.

Only use original supplied charger to avoid overheating, bursting or ignition. The chargers are smart chargers, which means they will automatically stop charging when the battery is full.

The battery takes about 5-7 hours to charge if It's completely discharged. At first charge, it can take longer since battery pack is balancing.

If battery does not fully charge within 8 hours, disconnect charger and contact customer service. Keep charger away from children and pets.

If it's not fully discharged it will take less time to charge.

It is recommended to switch the battery OFF while charging.

Disconnect charger after charging. Unplug charger from electricity grid if not in use.

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## Checking the battery charge



In order to check the battery charge, you need to switch the battery ON with the key. Please refer to the section "functions of battery". Once the battery is switched ON, there are two ways to check the battery charge: 1) firmly push the white **button** on top of the battery and hold it down.

If the battery is fully charged, there will be two green lights and one red light on the display (D) on top of the battery. If the battery discharges, one green light will disappear, then the second green light will disappear and if the red light disappears, the battery is fully discharged.

## **Voltage Display**



2) The battery Voltage is displayed on the on the left hand side of the handle bar.

There are 4 red lights ranging from L (low) to H (high, refer to arrow)

The more red lights are lit, the higher the voltage. Please note the voltage may drop when bike is being ridden and the voltage may be lower as the battery is discharging. Voltage may not drop in a linear fashion and it is only an estimate of remaining battery charge. To check battery charge, please refer to previous page.



## **Battery Care & Storage**

Charge battery after every ride. It is not necessary to fully discharge battery before charging. Lithium batteries do not have any memory effect, so you can charge them at any time. Lithium batteries must not be stored if fully discharged. If your battery is fully discharged, charge it as soon as possible. Storing the battery if fully discharged for longer than 1 day will damage the battery. It is recommend to store the batteries fully charged and then charge it at least every two months. It is not necessary to leave the charger connected to the battery if stored for long periods. Just top the charge up every two months. Disconnect charger from battery and power supply after battery has been fully charged. If batteries are not charged at least every two months, the battery may be damaged and such damage is unfortunately not covered under manufacturer's fault warranty.

**WARNING!** Lithium-ion batteries may leak, ignite and burst if not handled properly! Always keep away from any material which can catch fire.

Store battery between 10  $^{\circ}$ C (50  $^{\circ}$ F) and 30  $^{\circ}$ C (86  $^{\circ}$ F) in a clean, dry place away from sunlight. Do not store with hazardous, corrosive or flammable materials. Do not expose batteries to heat or fire. Store batteries in fire-proof environment. Operating temperature range during discharge is 5  $^{\circ}$ C (41  $^{\circ}$ F) to 50  $^{\circ}$ C (122  $^{\circ}$ F). Do not leave the battery inside car, in direct sunlight or any other hot places. If battery is charged at temperatures lower than 5  $^{\circ}$ C (41  $^{\circ}$ F), the range of battery will be reduced.

Do not disassemble, deform or modify battery. Do not connect the + and – terminals of battery with metallic or conductive objects. Do not store with conductive objects such as hairpins or necklaces as short circuits and burns may occur. Do not short circuit battery. Only use original charger.

Do not place into water, salt water and moisture. Do not throw battery or subject it to strong shocks. Inspect battery and terminals carefully every month for leakage, discoloration, cracks, damage, bloating, signs of melting or corrosion. If fluid leaks from the battery and gets into contact with your eyes or skin, wash affected area with clean water without rubbing your eyes or skin and visit a doctor immediately to reduce damage to eyes or skin. Never handle battery or charger if parts are wet. Dry it thoroughly before usage to avoid electric shock. Store out of reach of pets and children. Battery capacity naturally declines over time and is warranted to be at least 80% capacity within 1 year of purchase.

Always handle carefully with 2 hands. If errors occur, stop using battery, consult manual or contact customer service. Discard batteries according to your local battery disposal guidelines.

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#### How to use the controls

Attention! When going around corners it is recommended NOT to use the electric motor as it may cause you to fall due to the sudden acceleration. It is recommended NOT to use the throttle and NOT to pedal if the pedal assist mode (PAS) is on, when going around corners.

The motor of the bike can be activated with the controls of the bike.

The throttle is located at the right hand side of the handlebar. Twisting the throttle accelerates the bike. The current models' top speed using the throttle is 6km/h (walking speed). The throttle only provides a small "push" at take-off. To achieve higher speeds, please use the Pedal Assist Mode and RELEASE THE THROTTLE. The throttle overrides the PAS, which means if you keep the throttle twisted all the way down, the bike won't go faster than 6km/h. The throttle can be upgraded to go 25km/h whithout pedalling (off-road use only). Please refer to the end of this manual for instructions around page 80.

The Pedal Assist Mode controls are located at the left hand side of the handle bar. It will activate the motor when you are pedalling. The current models' top speed using pedal assist mode is 25 km/h.

In order to use the bike as a push bike, push the "-" button until there won't be any lights on the Pedal Assist Display.

Please find more details on the following pages



## Left hand: Pedal Assist control and voltage display

Battery Voltage Display L:Low H:High

Battery Voltage varies during a ride, e.g. it is lower uphill. It can be used to read the battery charge on flat terrain using pedal assist mode. An easy way to check the battery charge is to push the button on top of the battery (The key must be in the "ON" position). 2 green lights: full. 1 green light: medium charge. red light: low charge: connect battery to





Pedal Assistance display

One light: low motor assistance

Two lights: medium motor assistance
Three lights: high motor assistance

No lights: no motor assistance (push bike mode)

Push "+" and "-" buttons to change level of motor assistance



ON/OFF button

## Right hand: throttle





#### **Maximum Seat Height**

Make sure you never exceed the minimum insertion point on the seat post when you adjust the seat height. There is a line with "Minimum" engraved on the seat post as

per picture.

It is recommended to insert seat post at least 12cm into frame The minimum insertion mark must not be visible when the seat is installed.



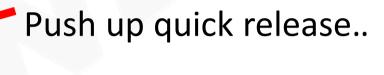
Magnification of Seat Post with engraved writing



## How to fold up the seat for battery removal

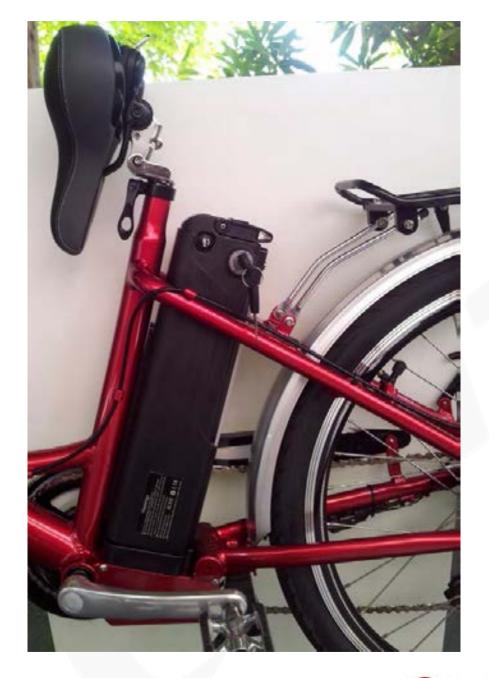
(different seat model shown) (SuperT does NOT

have folding sesat.)









... Fold seat up

Note: The battery on the SuperT folding bike can be removed by opening the seat quick-release and twisting the seat. There is no folding seat post on the SuperT model.



## Lowering the seat

 The seat can be lowered by changing the way it's attached to the seat post and also by cutting the seat tube (frame). Only lower the seat if you are comfortable with these instructions and always make sure that the seat is mounted safely in order to avoid injury. If necessary ask for help at a local bike shop.



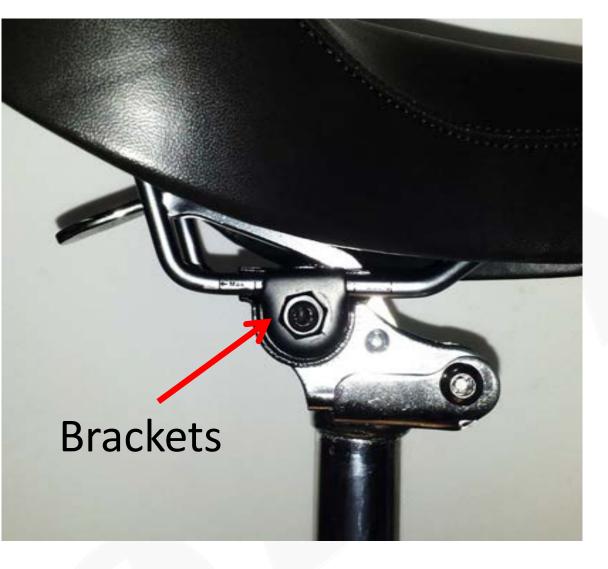
## Lowering the seat attachment



Tools needed: wrench (1/2 imperial or adjustable wrench)

Loosen the nuts (one on each side) with a wrench





Carefully remove one nut and remove the bolt slowly to release the brackets. There are two brackets on each side of the seat. The seat can now be taken off the seat post.





Turn the brackets upside down (180 degrees) and mount the seat to the seat post by inserting the bolt and tightening up both nuts. The seat is now lower. The seat can be tilted (forward and backward) by loosening the nuts and re-tightening them. Test if the seat can still be folded up easily. If there are any issues move the slide seat forward or backwards till it folds up easily.







## Cutting the seat tube



The seat tube (red) can be cut by about 2 cm to lower the seat, using e.g. a hacksaw to cut the aluminium alloy. Remove the black quick release ring before cutting. It is recommended not to cut off more than 2cm as the seat tube will lose flexibility and it may not be possible to tighten the black quick release ring in order to keep the seat in position when the seat is raised. Use a file to soften any sharp edges to avoid injury. Use a bit of lubricant to protect the fresh cut from corrosion.

Please note that any damage caused by cutting the seat tube is not covered by the warranty of the frame.



## Installing the rear rack



Install the rear rack as shown in the picture above. You may have to loosen the nut (or allen bolt), red arrow, to move the support arms. Make sure the rack is stable and safe before using it.



## Folding the frame (folding models only)



Fold your eBike in seconds: 1) open the quick-release. 2) turn left. 3) push up and wiggle until you hear the "click". Fold the frame.





Fold the frame and fold the handlebar. Folding bikes fit into most car boots. The handle-stem folds towards the RIGHT side of the bike. **LEITNER** 

### Tuning of the gears (rear derailleur)



## **SHIMANO**

If the gears don't switch smoothly, they need adjustment. It is recommended to lubricate the chain to insure optimal performance. The gears can be adjusted in most cases by turning the barrel (red circle) by hand anti-clockwise in half turns until the gears switch smoothly. If that doesn't help, it may be necessary to turn it clock wise. If that doesn't help please refer to the detailed tuning video below.



## **Tuning of rear derailleur**

Follow below link for an excellent youtube video about rear derailleur adjustment

http://www.youtube.com/watch?v=wQncKmddahk

# Servicing the bike and regular maintenance

Have the bike serviced by your local bike shop after assembling it to make sure it's safe to ride and tension and true all spokes before starting to ride the bike. It is necessary to service the bike regularly and have all parts including the spokes, brakes and gears adjusted regularly. The electric parts don't need to be serviced, therefore servicing can be done at a push-bike shop.



## Enjoy your eBike ©

If you need any help please don't hesitate to call us on 1300 856 725 or email sales@leitner.com.au



## Removing and re-installing the rear wheel

#### Summary:

Removing the rear wheel

- 1)Switch the bike off and remove the battery
- 2)Remove cable ties and disconnect motor cable
- 3) Remove black caps on both side of axle and loosen bolts with wrench

Putting the rear wheel back on

- 1) Fit axle back into openings making sure that the tooth of the washer is at the opening and making sure that the disc of the disc brakes is between the disc brake calipers
- 2) Tighten up bolts until the rear wheel is securely fit and put black caps back on
- 3) re-connect the motor wire to the female connector, making sure both arrows point at each other. Use cable ties to secure cable to frame



## Removing and re-installing the rear wheel

Switch the bike off and remove the battery



Remove cable ties using scissors Or a paper knife





1) Hold on to the male and female end of the cable and pull them apart into the direction of the red arrows.



2) The rear wheel motor cable is now disconnected









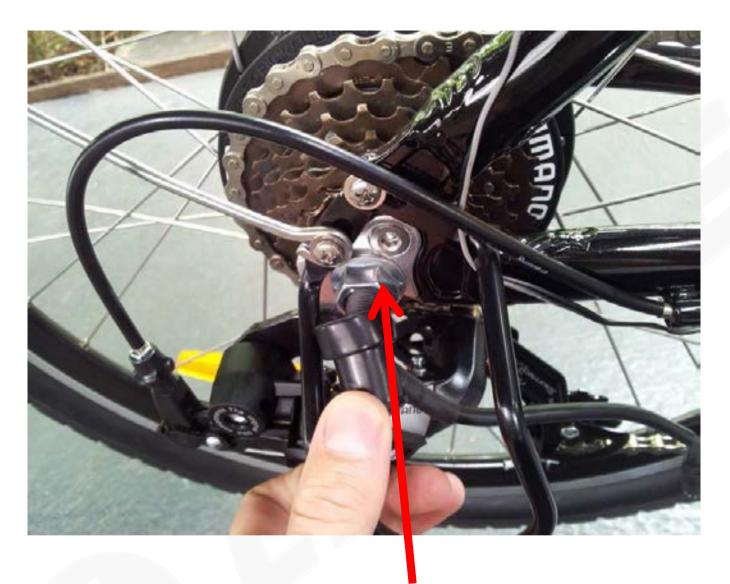
Remove cable from the clip (push back, Bring forward through the middle of the clip)



Loosen black cap and expose nut

If you can't access the nut with a wrench remove the two screws holding the rear mud-guard and derailleur protector.





Use a wrench to loosen the nut (anti-clock wise).





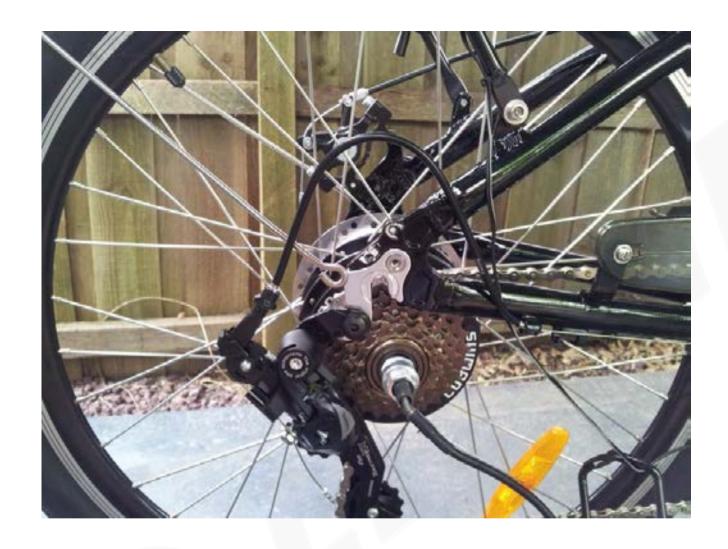
Do the same on the other side: remove black cap, expose nut





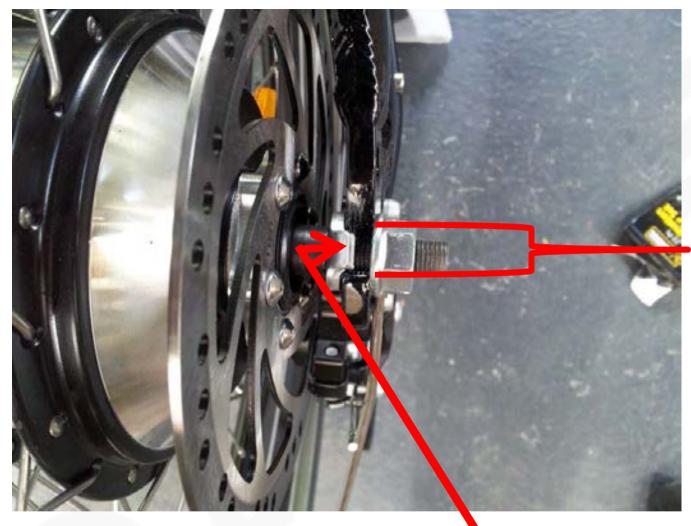
Use wrench and loosen nut(anti-clockwise)





The wheel can now be removed





Opening for wheel axle insertion

When putting the wheel back, make sure the tooth of the metal washer is in the opening where the wheel axle is inserted. This is true for both sides of the wheel. Make sure the disc of the disc brake goes in between the brake callipers. This view is from the bottom of the bike.





Bottom-up view at the other nut. Note the tooth of the washer is in the opening for the axle.





Tighten up both nuts until the wheel is safely installed, cover with black caps, re-install the derailleur protector and reconnect the motor wire to the female end: both arrows need to point to each other (see inside red box). Use cable-ties to secure the cable to the frame. Cable ties are available at your local hardware store, e.g. Masters or Bunnings.

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## Activating the 25km/h throttle



#### Important legal note!

Leitner electric bikes are built to comply with Australian road rules. For 250 watt bikes, this means that the throttle speed is limited to "walking speed", under 6km/h in the factory setting, in order to comply with the norm called EN15194. It is the European Ebike Norm which was adapted by Australia. Please find more info here: <a href="http://www.bicycles.net.au/2012/05/australian-">http://www.bicycles.net.au/2012/05/australian-</a>

government-clarifies-ebike-import-laws/

Many customers were asking for a throttle which allows the bike to go 25km/h without pedalling. We have now included a feature in Leitner electric bike models from December 2014 onwards to unlock the throttle. It involves opening the controller box under the battery and unclipping the grey wires (see instructions below).

Please note that after unlocking the throttle your eBike will no longer comply with the EN15194 standard and may be illegal in your state for use on roads. Therefore the bike should NOT be used on public roads if the throttle is unlocked to go 25km/h. The bikes should only be used on private property or other OFF ROAD locations where it is legal to ride such a bike.

If you ride a 250w bike with the unlocked throttle on public roads you may receive heavy fines for riding "a motorbike without registration and license". We would like you to be aware of this and Leitner Electric Bikes does under no circumstances take any liability for any issues involving riding a 25km/h throttle bike illegaly.



### The controller

The controller of the eBike is the "brain" of the bike. All wires are connected to it and it controls all functions of the bike including the speed limits. Leitner eBike models from Dec 2014 onwards have a grey wire loop which can be unclipped in order to activate the 25 km/h throttle. It takes less then 5 minutes. Models before December 2014 can be upgraded to 25km/h throttles by replacing the controller.

Before you access the controller, switch the bike OFF and remove the battery.

Wear personal protective equipment like safety glasses. Always take care and never use force. You may brake wires or damage parts. Only access the controllers with the permission of Leitner eBikes otherwise the warranty will be voided.

If you don't feel comfortable to work with the controller or if you need help contact us on <a href="mailto:sales@leitner.com">sales@leitner.com</a> or 1300 856 725 for help or ask a local ebike technician.

#### Tools required:

-Philips screw driver



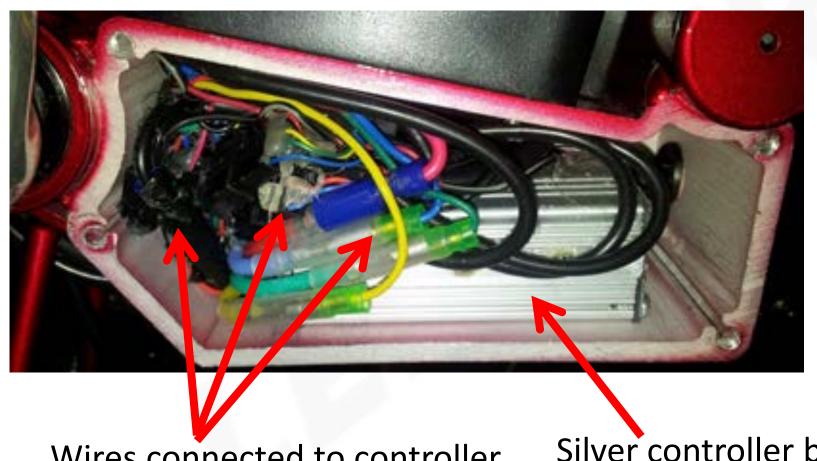
# Accessing the controller

Magnification

Location of controller

Remove 4 screws and remove the cover to access the controller



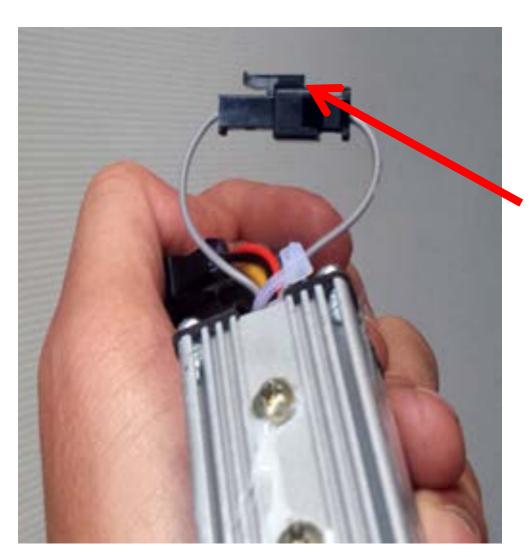


Wires connected to controller

Silver controller box



## The grey wire loop

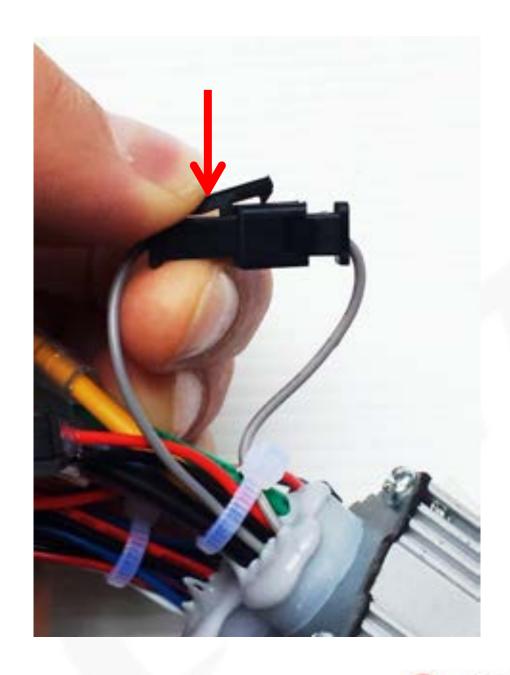


There is a loop of two grey wires connected by two black clips. These clips need to be disconnected in order to activate the 25km/h throttle.



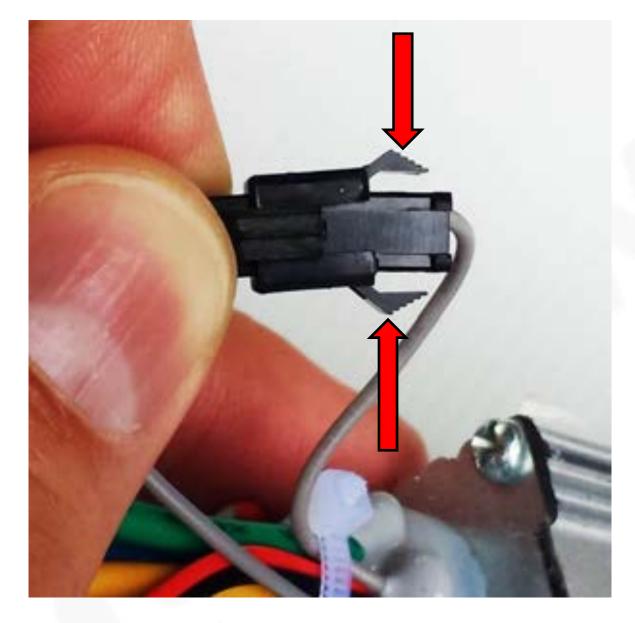
Look for the grey wires. You may have to gently take the controller out of the case a bit to access the grey wires. Don't use force. The controller and wires needs to be put back again later neatly, therefore it's easiest to try to only take the controller out of the case as much as necessary to access the grey wires.





To disconnect the two black clips, push down the top clamp with your left hand and ....

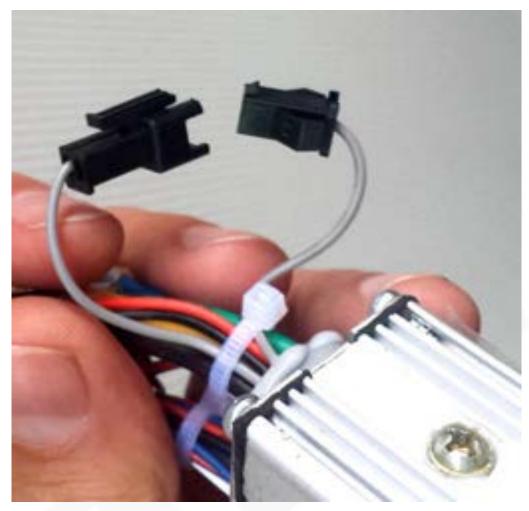




... and push in the two clamps on the other side with the right hand.

Now the two parts should disconnect easily. Don't use force.





Once the grey loop is disconnected, the throttle is able to go 25 km/h without pedalling. Before putting the controller and wires back into the case make sure that there are no metal parts of the wires and connections exposed, which may have happened during moving the controller. If there are any exposed metal parts, insulate them with duct tape. Make sure all connections are tight.



After the controller and wires are put back in the case neatly, put the battery back and switch the bike on. Always protect your eyes in the case of a problem. Check if there is a short circuit. Plastic smell is an indicator. If everything seems fine, carefully test the throttle, the light switch and the PAS mode.





Carefully place the controller and wires back into the frame and close the cover. When screwing the cover back on make sure that the wires are not jammed between the cover and the frame. It may damage the wires.



Carefully test-ride the bike for a few minutes. Check if there is a burning smell coming out of the controller box below the battery. It may indicate a short circuit.

If you have any issues please contact us at <a href="mailto:sales@leitner.com.au">sales@leitner.com.au</a> or call us on 1300 856 725

Enjoy your eBike with the new 25km/h throttle © (OFF-ROAD USE ONLY!)



#### Wiring Diagram of controller in Leitner eBikes

