



USER MANUAL Mini Pro



Warning!

In order to ensure your safety and to get the most out of your eBike, please read this user manual carefully before the first use.

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Warning!

Cycling can be a hazardous activity even under the best of circumstances. Proper maintenance of your bicycle is your responsibility as it helps reduce the risk of injury.

Warning!

When using your e-bike at the first - time, ride it in a controlled environment away from cars, obstacles, and other distractions.

Warning!

Parental supervision is advised for use under the age of 16

Warning!

User must be aware to all traffic laws & regulations prior to using the product.

Warning!

your e-bike is exposed to wear and tear as well as high pressure. Various materials and components may react differently to fatigue, wear or pressure. In case the life expectancy of a certain component has expired, it may fail unexpectedly and even cause injury to the user. Any form of cracking, scratching, discoloration in high pressure areas are indications that the component's integrity has expired, and it must be replaced!

Warning!

Make sure that your e-bike's brakes are well tuned and perfectly work before each ride. Check the brakes' pads before each ride. Brakes' tuning and maintaining must be performed in a bike store, by qualified mechanic.

Warning!

Accidents and falls may cause severe injuries and in extreme cases even death! Read this user manual responsibly, with care and judiciousness! Also, always make sure that your e-bike is well assembled, well maintained, and in a good condition according to this user manual prior to riding!

Warning!

Braking distance is influenced by the road / trail condition as well as weather condition, speed of riding & weight of rider.

Warning!

This model is equipped with motor shut-off system which controlled by the brakes. Make sure that the system is well operating before each ride. In case the system failed, do not use the e-bike and have it fixed at a certified bike store.

Warning!

Cycling can be a hazardous activity even under the best of circumstances. Always use protective gear such as a helmet and other shields as well as closed shoes, even for a short ride!

Warning!

Avoid Storing the battery in extreme hot / cold temperature. Extremely low temperature may cause corrosion and extremely high temperature may cause battery swell, which will make the battery dangerous, and even can cause battery explosion! The recommended storage temperature for the battery is between 50°-80°F.

Warning!

Do not leave the battery unattended in a closed vehicle! The vehicle may warm up by the sun and reach extremely high temperature!

Warning!

Avoid exposing the battery to extreme temperatures (104°F or higher) for prolonged period!

Warning!

The battery charger should be checked for physical damage before each charge. Make sure that the charger wire is not torn or exposed and that its electrical plug is not damaged! If you notice any problem with the charger, DO NOT CHARGE the battery with the charger. The charger must be replaced!

Warning!

DO NOT charge the battery without supervision! DO NOT charge the battery overnight while all people are sleeping in the house!

Warning!

Improper assembly of the bike is dangerous, can cause bike / component failure, resulting in injury to the rider!

It's your duty to contact us for explanation if any of the instructions in this booklet are not clear to you or if you have any question. It is always recommended to have a professional bike shop for assembling your bike.

Warning!

This model designed for road and trails ride only. do not use it for down-hills ride, jumps or decline stairs.

Warning!

this model designed for a single grown rider only. It is forbidden to use this bike by two users or more together at the same ride. You may install a child seat on its back-rack, make sure that your child weight not exceed 55 lbs. and that you use the child seat according to its manufacturer's instructions.

Warning!

Do not use the bike carrying over 270 lbs. in total weight (rider & belongings).

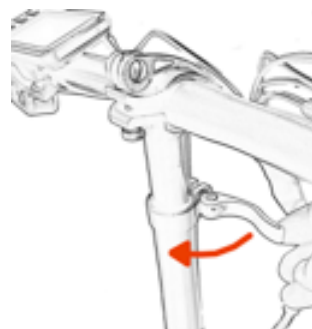
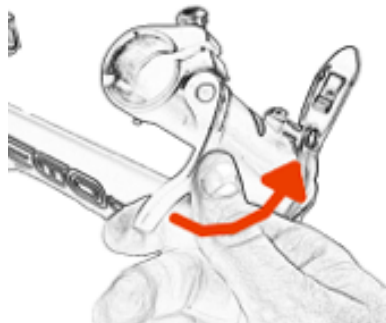
Definitions:

- **PAS** - Pedal Assist Support - a sensor that is located on the bottom bracket, recognizes the pedals movement and operates the motor accordingly to the PAS level which set on the display .
- **TAG** - Twist And Go - a throttle that located on the handlebar activate the motor while it twisted.

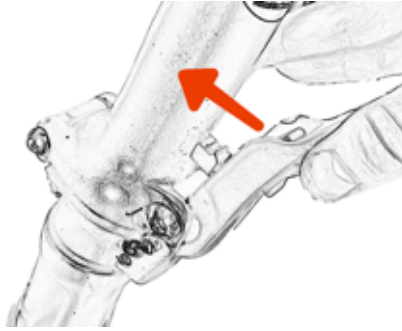
Assembly instructions:

Handlebar:

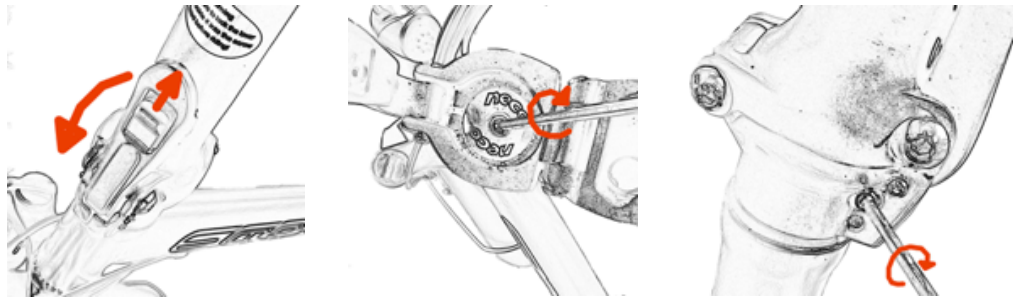
- Prepare the handlebar stem by opening its top hoop.
- Slide-in the handlebar into the stem and lock back its hoop.



- Straight up the stem and locked it into its place, by locking-up the handlebar folding mechanism. (click in its lever into the stem).

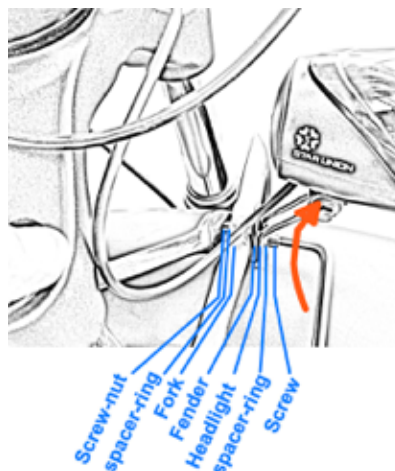


- Adjust the handlebar so it will be aligned with the bike's fork, re-open the handlebar folding mechanism, tight- up the stem's central screw, re-locked the handlebar folding mechanism, and then tight-up both of the stem's sides screws.

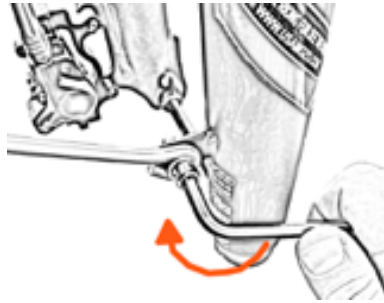


2. Headlight & Front fender:

- Assemble the headlight and the top hook of the fender to the forks bow.

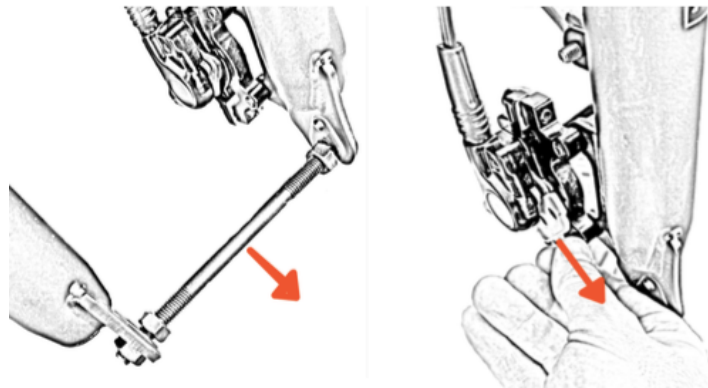


- Assemble the fender's support pipes into the bottom of the fork (from both sides).

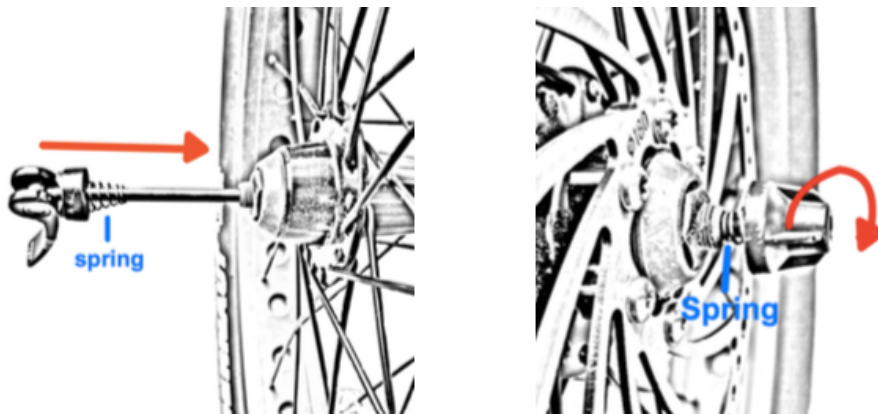


3. Front wheel:

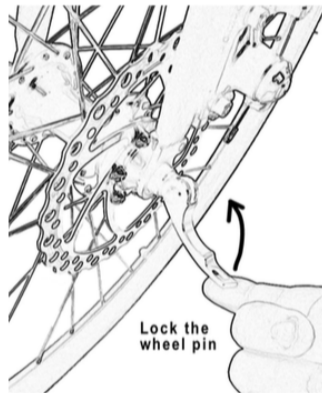
- Unscrew the fork support rod from the bottom of the fork, and pull out the plastic spacer from the brake caliper.



- Slide in the lock rod of the wheel into its place in the wheel's hub and close it with its screw nut from the other side.



- Insert and lock the wheel into its place in the fork by closing the lock rod lever.



Warning!

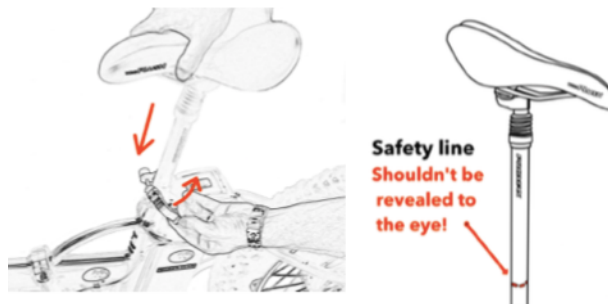
The fork must hold the wheel in a way that the wheel does not move to its sides or can be removed without opening the lock's lever.

Warning!

Make sure that the front fork turns easily sideways and not jammed while you steering the handlebar. Make sure that the bike's wires and brake tube are not jammed or stretched during steering.

4. **Saddle:**

- Open the saddle's hoop that located on the bike's frame, slide-in the saddle into its place in the frame, and lock-back the hoop. Make sure that the saddle cannot turn to the sides or move up & down after you are locking it into the frame.



Warning!

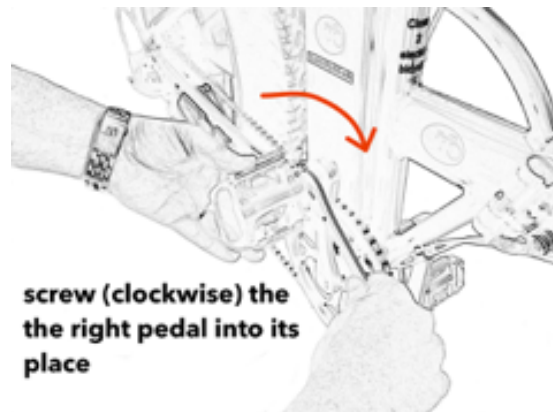
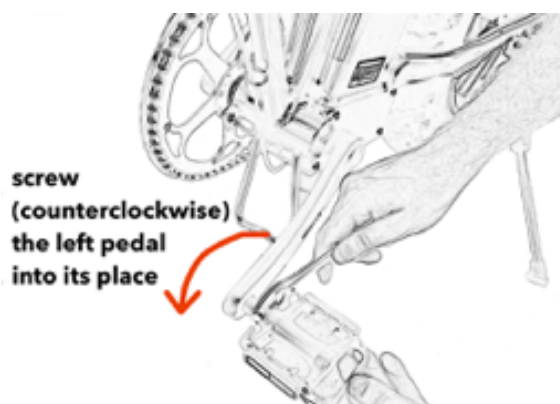
In order to avoid damage to frame that can lead for frame sudden breaking, always make sure that the safety line that marked on the saddle's tube is hidden from the eye while locking the saddle into its place.

Notice!

For safe and comfortable riding, there should be clearance of no less than 1-2 inches between the rider and the top tube of the bicycle frame, while the rider straddles the bicycle with both feet on the ground.

5. Pedals:

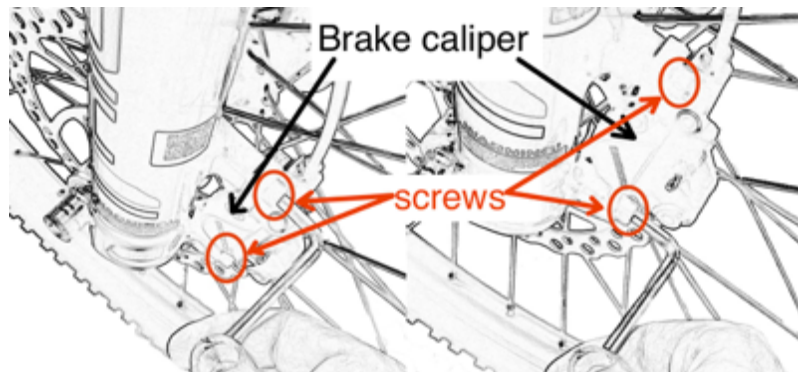
- Assemble both pedals to the bike by screwing them to the Crank & pedals leg.



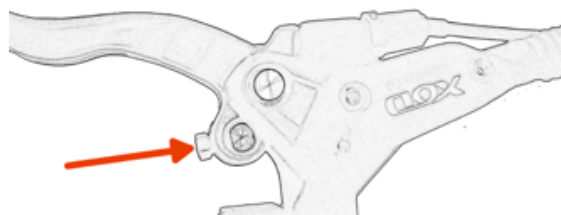
Brake-sets adjustment

Make sure that the brake pads are not rubbing or locking the front / rear disc, while you're not pressing the brake-levers.

- In case in which the disc rubs / locked into the brake pads. Release a bit both of the caliper screws (the screws that connect the caliper to the fork), tightly press on the brake - lever and re-screw back the screws into their place while continuously pressing on the lever.



- you can adjust the brake sensitivity by tightening / releasing of the small Helen screw which located between the brake lever and the handlebar.



Warning!

It is highly recommended that the brakes will be adjust and maintained by professional bike store!

Warning!

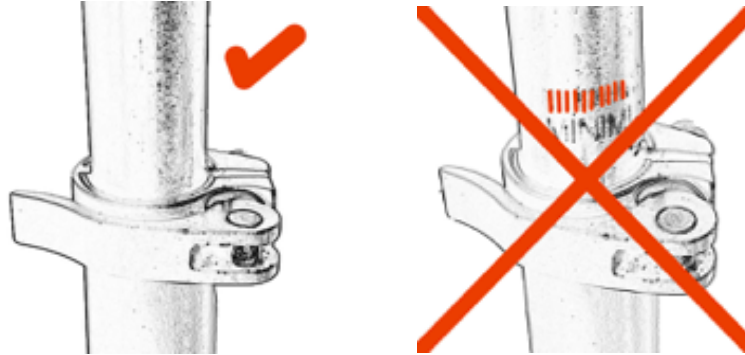
Always check the brakes before using your bike and make sure they are well operating.

Handlebar height adjustment

- Open the stem's top hoop lever, adjust the height of the handlebar to the desired position and lock it back into its place by re-closing the lever.

Warning!

In order to avoid damage to stem that can lead for a sudden breaking, always make sure that the safety line that marked on the handlebar's tube is hidden from the eye while locking it into its place.



- You can change the angle of the handlebar by open and lock the stem's top lever. make sure to re-lock the lever before using the bike.

Warning!

After adjusting the handlebar height and before riding the bike, make sure that the handlebar is well-locked in its new position, by strongly pushing it down to the ground and turn it to the sides.

Mounting & dismounting of battery

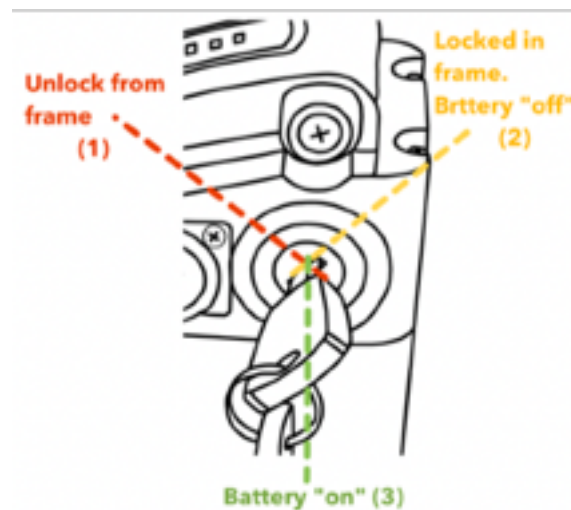
The battery switch has three modes:

(1) A mode in which the battery is shut off and it's unlocked to the frame (in this mode you can pull out the battery from the bike or placed it into the bike).

(2) A mode in which the battery is locked into the bike, and it powered off.

(3) A mode in which the battery is locked into the bike, and it powered on and ready for use.

- In order to switch the key from mode (2) to mode (1) the key should be pushed into the battery



Warning!

Make sure that while mounting the battery back into the frame, the battery is sliding on its allocated rail, if the battery is misplaced it may get stuck.

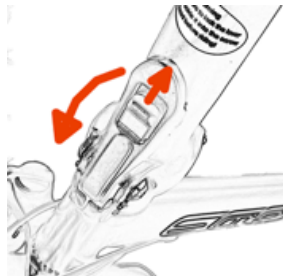
Folding the bike

Folding the handlebar:

- (1) Lower the handlebar to its lower position and lock it.
- (2) Pull-up the folding mechanism lock.
- (3) Fold down the mechanism's lever.
- (4) Fold down the handlebar itself.

Raising the handlebar:

- (1) Straighten the handlebar.
- (2) Lock the folding lever by locking it into the stem.

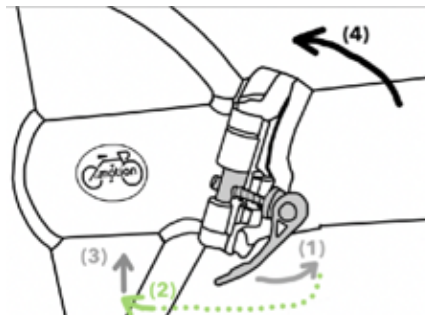


Folding the frame:

- (1) Unlock the folding mechanism lever.
- (2) Open the lever towards the rear side of the bicycle.
- (3) Lift up the lever until a click is heard (double lock mechanism).
- (4) Folding up the bike frame

Return the frame to a riding position:

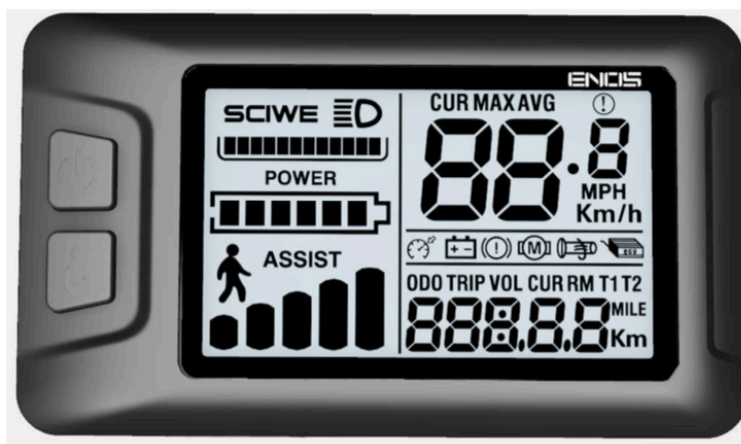
- (3) Lift up the folding mechanism lever.
- (4) Return the frame to its unfolded position
- (2) Close back the lever.
- (1) Lock the lever to its place.













Bike inspection prior riding:

- Check that the wheels are well connected to the frame / fork, and that they are rotated freely.
- Check that the handlebar aligned with the front wheel, and all the screws are tight.
- Check that there are no loose or missing spokes in the wheels.
- Check that all the bearings of the bike are rotating freely and not damaged
- Check that the brakes are properly functioning, and that their pads are not overly worn.
- Check that tires' air-pressure is same as the one that written on them
- Check that the tires are not overly worn, worn tires will have no proper road grip
- Check that the wheel rims are not broken or cracked.
- Check that the lights & horn systems are well functioning.
- Check that all components of the bike are well set in their place.
- Check that there are no pressure marks / cracks / discoloration marks on the bike frame and on the front fork.
- Check that there is no visual damage on the bike's battery.
- Check that the battery is properly mounted, and that it locked in the bike's frame.
- Check that the TAG / PAS systems are properly functioning.

The display:



- Turn on / off the display power by long press on the  button. (make sure that the battery is on before turning on the display).
- You can switch PAS speed levels by short presses on the  button PAS level "0" - without support, PAS level "5"- strongest support.
- Short press the  button will change the display's shown info
- Long press on  will activate the walking mode (the button must be hold pressed, the walking mode will be terminated when leaving the button).
- Long press on both  &  buttons will lead to the settings screen options. Short presses on  button browse between the settings. Short presses on  button change the setting's info. In order to leave the settings screen long press both  &  buttons.

Display settings:

P01: Screen backlight level (1-3)

P02: 0 - Km/h 1- MPH

P03: Battery Voltage (24V/36V/48V)

P04: Sleeping time (minutes for display automatically shuts - off)

P05: PAS levels in use (5 bars / 3 bars)

P06: Wheel diameter

P07: Motor speed sensors (1 for current motor)

P08: Speed limit (input data in Km/h unites)

P09: 0 – TAG works immediately, 1- TAG works only after PAS in use.

P10: 0- Bike works with PAS only, 1- TAG only, 2- TAG & PAS


P11: PAS sensitivity

P12: Not in use

P13: PAS magnets (12 PAS magnets used in this bike, default)

P14: Controller A (15)

P15: Battery current voltage

P16: ODO reset (long press on  will reset the ODO)

P17: Not in use

P18: TAG speed levels (1-5)

P19: TAG speed limitation: 0 – to the speed limit of the bike (P08) 1- 6mph

Error symbols



- Low voltage protection



- Controller failure



- Brake failure

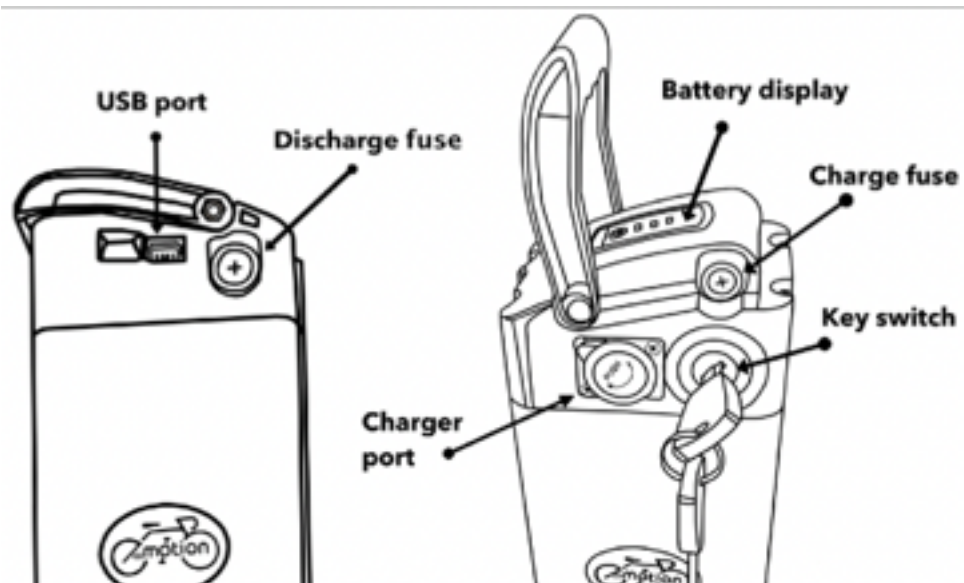


- Throttle failure



- Motor failure

The battery & charger:



Warning!

- Do not perforated or dropped the battery;
- Do not placed the battery near to fire or another heat dispersing element;
- Do not soaked the battery in water;
- Do not placed / use the battery at the vicinity of strong electromagnetic or electrostatic fields;
- Do not crushed or disassembled the battery.

Warning!

Use the battery for its intended purpose. Do not use it for other purposes. such use might be dangerous! Do not crushed or

Warning!

Keep away the battery and the charger from the reach of children.

Important!

The distance range of the bicycle in electric mode varies according to rider's weight, road conditions, battery power etc. The battery power diminishes with age (and with usage).

Important!

In case that the electric system is left on, while the bike is not in use for a long time, the battery may reach a state where it is no longer chargeable.

Important!

Proper maintenance of batteries, according to this guide will maximize their lifespan and capacity.

Charging of the battery:

- Make sure that the battery is powered-off
- Plug the charger to the outlet first and then plug it to the battery.
- The charger red indicator light shows that the battery is in charging process. When the red light turns into green, the battery is fully charged.
- In order to disconnect the charger from the battery, unplug the charger from the outlet first, and then unplug it from the battery.

Warning!

Charge the battery with the original charger only. Using an different charger is forbidden and dangerous!

Warning!

Do not cover the battery and the charger during charging process.

Warning!

Terminate the battery charging process immediately in case in which the battery overheats during charging.

In such case you must consult us at contact@ecomotionbikes.com or +1(323) 825 - 2518

Warning!

Do not place the battery and / or the charger near flammable substances.

Important!

It's recommended to charge the battery in full, prior to the first use of the bike.

Important!

Batteries work better when they are fully charged. It is recommended to begin riding when battery is fully charged.

Preserving of battery's lifespan:

- make sure you charge the battery in full at least once in every 20 charging cycles
- Do not leave the battery uncharged for more than 24 hours. Battery that was left uncharged for a long time, may reach a state in which it won't be chargeable
- In case in which the battery won't be in use for a significant time, there is need to disassemble it from the bike and store it in a cool & dry location. Make sure that the storage period won't exceed 45 days without recharging the battery again.
- Average battery lifespan depends on its use and on its conditions. Even with proper care, rechargeable batteries do not last forever. This battery model will last between 700-1000 charging cycles. A partial charge/discharge counts fractionally against those numbers. Running the battery down halfway and then recharging it completely, uses up to one half of a charge cycle.

Important!

Turn off the bike's electric system when you're not riding the bike.

Important!

The battery cells are discharged autonomously, once the battery is left unused for a prolonged period. In cases battery cells are left low charged for a long period of time, their charge cycles and capacity will diminish, and the quality of the battery will be damaged. The battery should be left fully charged if it is not to be used for a prolonged period.

Please!

Be friendly to the environment! Batteries contain toxic materials, be sure to recycle your old batteries at a local battery-recycling center. Do not throw them into the garbage.

Tips for proper use:

- Be aware that the right brake lever controls the rear brake, while the left brake lever controls the front brake.
- Avoid braking using front brake only, as doing so may cause the rider to be thrown forward from the bike. Always use both of the brakes when you're braking.
- Be aware that the brake range of the bicycle may prolong under certain circumstances (e.g. wet/moist surface, sand, etc.)
- Do not ride your bike in water, puddles, rain, streams, etc.,
- Never immerse the bike in water, as the electrical system may get damaged.
- Learn all relevant state laws as well all traffic regulations prior to riding your bike and comply them.
- Always start your ride by pedaling and in low PAS level. In this way you'll control better the bike.
- Assist the motor by pedaling in uphill climbs.

Bike maintenance:

- Do not oil the battery or the motor.
- Oil the bike chain and the metal parts (which are not aluminum) on a regular basis. The frequency of oiling your bike parts should be more frequent in a humid / wet area.
- Use only original parts. Do not use substitutes parts unless they permitted by Ecomotion Bike. please consult with us about substitutes parts at contact@ecomotionbikes.com. Using substitutes parts without consulting may void warranty.
- The bike should be cleaned using a moist rag only, DO NOT pour / spray water directly onto the bike. After cleaning the bike, all metal parts, should be oiled.

- All of bikes moving components and all bearings, should be cleaned on a regular basis.
- The Bike's brakes and their pads needs to be inspected in bicycle store on a regular basis.
- Inspect the electrical wiring occasionally to make sure no wires torn or damaged, and that all connectors are well connected to each other.

Important!

Using the bike near to beach exposes it to salt & humidity. The bike ought to be cleaned and oiled more frequently if used in such areas.

For more information regarding our policies including warranty & Liability, please visit us on:

www.ecomotionbikes.com

In case of product malfunction that you cannot solve by yourself according to this manual guide,

please contact us at:

contact@ecomotionbikes.com

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<u>Problem</u>	<u>Possible cause</u>	<u>Solution</u>
Speed / range reduce	Low tire air pressure	Inflate tires to recommended pressure
	Brake pads rubbing against their discs	Adjust brakes and / or caliper
	PAS magnets away from sensor	Attached the magnets to the sensor
	Low battery	Charge the battery full charge
	Battery lifetime is over / shortened	Replace the battery
	Ridding conditions (headwind, climbing, etc.)	Reduce range to be expected
No power (display doesn't work)	Burnt fuse	Replace the fuse
	Loos connector	Check all connectors
	Rupture wire	Inspect all wires for damage
	Faulty switch	Replace switch and retest
	Faulty controller	Replace controller and retest
	Battery lifetime is over / battery not charged.	Replace / charge the battery and retest
	Faulty display	Replace the display and retest
PAS system doesn't work	Motor shutdown system operated	Make sure that brake handles in their place
	PAS magnets away from sensor	Attached the magnets to the sensor and retest
	Faulty PAS sensor	Replace the sensor and retest
	Faulty controller	Replace controller and retest
	Display rupture wire	Replace the display and retest

<u>Problem</u>	<u>Possible cause</u>	<u>Solution</u>
Motor runs without using TAG / PAS systems	Faulty PAS sensor	Replace sensor and retest
	Faulty throttle	Replace throttle and retest
	Wire short	Replace main cord and throttle cord and retest
	Faulty controller	Replace controller and retest
TAG system doesn't work	Motor shutdown system operated	Make sure that bake handles in their place
	Faulty throttle	Replace the throttle and retest
	Faulty controller	Replace controller and retest
	Throttle button not pressed in	press in the shutdown button
	Display rupture wire	Replace the display and test
Motor make a “drilling” noise and reduce power / shuts off	Low battery	Charge the battery full charge
	Motor gear damaged	Replace motor gears
Charger doesn't charge the battery	Burnt fuse	Replace the fuse
	Faulty charger	Replace the charger
	Outlet has no power	Check a different outlet
Charger shows s full charge in an unusually short amount of time	Faulty charger	Replace the charger
	Battery lifetime is over / shortened	Replace the battery
Charger indicator light flashes and not change into red (not charging)	Faulty charger	Replace the charger
Bicycle has intermittent power	Loose connector	Check all connectors
	Loose fuse	Check fuse connector
	Damaged wires	Inspect all wires

- Error symbols specified on page 17