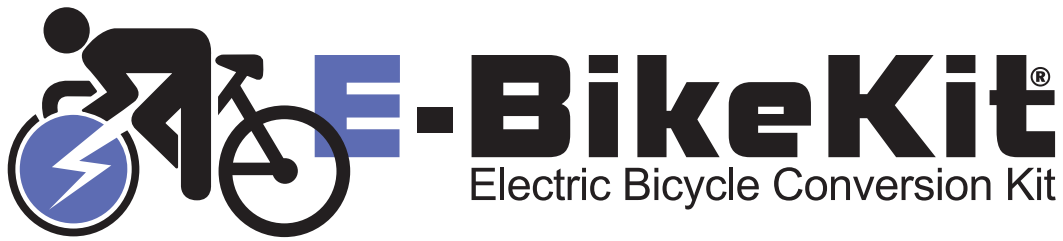


# WARNING!

Serious injury or damage can occur with using this product.  
Read and understand this E-BikeKit Owner's Manual before any use.



## OWNER'S MANUAL



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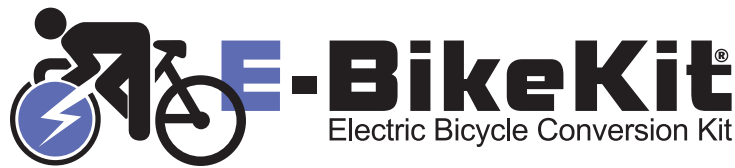
# **WARNING!**

**SERIOUS INJURY OR DAMAGE CAN  
OCCUR WITH USING THIS PRODUCT.**

**ACCESS AND READ THE INSTRUCTIONS  
AND WARNING MANUAL FOR THIS  
PRODUCT BEFORE ASSEMBLY AND USE!**

**DO NOT ASSEMBLE AND USE YOUR  
E-BIKE/TRIKEKIT WITHOUT FIRST READING  
AND UNDERSTANDING THE MANUAL.**

*Failure to read and understand the E-BikeKit Owner's Manual  
and its warnings specific to this product could result in dangerous  
situations, accidents, damage to the electric bicycle and or  
tricycle, damage to property, injury to you and others, or death.*



## THANK YOU FOR PURCHASING AN E-BIKEKIT!

The E-BikeKit family caters to a diverse group of riders, spanning different age groups. It offers more than just an electric bicycle or tricycle. It has the power to transform lives by promoting an active and independent lifestyle. Owners have expressed joy in rediscovering their freedom, reliving their childhood, and having an incredible amount of fun. Are you ready for a life-changing experience?

To stay connected with us and fellow E-BikeKit riders, we invite you to join our Facebook, Instagram, and Twitter pages. These platforms are brimming with E-BikeKit enthusiasts who love sharing their experiences, photos, and valuable information. Remember, for trustworthy and reliable information, always rely on E-BikeKit.

We also have a collection of helpful videos available to assist you in troubleshooting your E-BikeKit. You can find them here: <https://www.ebikekit.com/pages/ebikekit-helpful-videos>.

If you have any questions or technical issues, our service desk is here to help. You can reach us by sending text messages, images, or videos to 215-586-4522 for a quick response.

For easy access, here are the links to our social media pages:

**Facebook:** Join the E-BikeKit Owners Group at <https://www.facebook.com/groups/ebikekit>

**Instagram:** Follow us at <https://www.instagram.com/theebikekit>

**Twitter:** Connect with us on Twitter at <https://twitter.com/EBikeKit>

Thank you once again for choosing E-BikeKit. We look forward to being a part of your e-biking journey!

**Customers, users, and bike shops are responsible for ensuring compliance with all local, state, and federal laws and regulations regarding the installation and operation of electric bicycle conversion kits.**

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# TERMS AND CONDITIONS

E-BikeKit is a subsidiary brand of EBIKEKIT LLC. Users must follow the instructions & warnings found in this manual as well as the online materials & videos provided for safety. Do not attempt to operate your electric bicycle, tricycle, or conversions system from EBIKEKIT LLC until you have adequate knowledge of its control and operation. Damage caused by failing to follow instructions is not covered under warranty. Failure to read and understand instructions and warnings specific to this product could result in dangerous situations, accidents, damage to the electric bicycle and/or tricycle, damage to property, injury to you and others, or death. If you have any questions about operation, contact the E-BikeKit dealer for Instructions.

It is impossible to anticipate every situation or condition that can occur while riding; EBIKEKIT LLC makes no representations about the safe use of electric bicycles and/or tricycles under all conditions. There are risks associated with the use of any electric bicycle and/or tricycle that cannot be predicted or avoided and are the sole responsibility of the rider. You and any user assume such risks.

## RETURNS AND REFUNDS

Buyers may return any undamaged and unused kit and or batteries plus all contents of the kit and or batteries to the E-BikeKit dealer **within 30 days of delivery** for a full refund minus a 15% restocking fee per kit and/or battery. All refund processes will vary depending on the E-BikeKit dealers policies. It's your (rider) priority to ask the E-BikeKit dealer, what is their refund policy.

All returns for repair or replacement should be preceded by contacting E-BikeKit dealer for approval. Upon approval, a ticket will be opened to track and communicate the progress of the claim.

Please note all shipping charges related to returns or repairs covered under warranty are the buyer's responsibility.

# WARRANTY

## LIMITED WARRANTY

E-BikeKit products are warranted to the original retail purchaser when purchased directly from an authorized E-BikeKit dealer to be complete and free from defects in materials and workmanship. All E-BikeKit product warranties are effective from the date of delivery by the end-user provided the product is purchased in NEW condition. Products purchased from 3rd party sellers not affiliated with EBIKEKIT LLC are not covered under warranty from EBIKEKIT LLC.

**The drive unit (including the motor assembly, housing cover, internal gears, motor control unit assembly and battery) kit, parts, and battery charger will be warranted for a period of one year.**

**This warranty excludes Normal deterioration, including the gradual decrease of battery capacity over the one year warranty period as long as the battery capacity is still 60% or more of the expected capacity before the warranty expiration and the total number of battery charging cycles is 800 or less (whichever comes first).** A charge cycle is a full discharge and recharge. A partial discharge and recharge only counts as such (eg. discharging and charging 25% of capacity four times will count as one full charge cycle).

## DISCLAIMER

Each installation will be different and therefore it is the responsibility of the E-BikeKit dealer to determine the best way to install the kit, on the particular bicycle and or tricycle. The provided instructions should be considered as general guidelines only—every electric bike and or trike conversion will be slightly different. If you do not have the mechanical ability to correctly and safely install the E-BikeKit, you should obtain the services of a professional bicycle shop, a qualified technician and or your E-BikeKit dealer. Installation and use of this e-bike conversion kit will create an electric motor vehicle that has exposed moving parts, electrical connections and high powered batteries. Any or all of these components can be dangerous!

## WHAT ISN'T COVERED BY THE E-BIKEKIT WARRANTY

**SPIN OUT**-This is spinning out the axles inside your dropouts. The torque arm must be installed at all times. When fixing a flat, make sure your mechanic correctly reinstalls the torque arm, or damage can occur.

**OVER VOLTAGE**-Connecting a larger battery, larger than 60 nominal volts can damage the controller, wires, and/or connectors. Damaging any kit component or motor by connecting the wrong battery type is not covered under our warranty. The E-BikeKit controller will work with any 36 volts or 48 volts (60v nominal) battery pack. Using the controller with any battery larger than 60 nominal volts will void the warranty for your controller.

**IMPROPER BATTERY MAINTENANCE** – Is damage to the battery and or battery cells due to improper care and overcharging, undercharging, punctures, dropping the battery, or using a charger that has not been approved for use by EBIKEKIT LLC. Lithium-ion batteries require proper charging cycles to maintain the life and integrity of the cells. Failure to adhere to the **proper care** and **upkeep directions** laid out on **pages 25-27** could potentially fail the battery and cause damage to the cells, which could result in bodily injury or death.

# WARRANTY (CONTD.)

**DAMAGE** – Caused by the weather, exposure to water, dropping, or any collision is not covered under warranty.

**ALTERED PARTS** – The use of unauthorized service, parts, and/or components, or altering of any and all provided parts or components, including battery and/or electric systems.

**OTHER MANUFACTURERS** – Parts from other manufacturers may carry a warranty with their respective manufacturer, and it will be the purchaser's responsibility to pursue such warranties.

**INTERNATIONAL SALES (EXCLUDING CANADA)** – The E-BikeKit warranty does not extend to international customers or domestic customers that have taken the E-BikeKit abroad. Regardless of defects in materials or workmanship, EBIKEKIT LLC will not cover the cost of replacement parts, shipping, or repairs outside of the 48 continental United States.

All sales outside of the contiguous USA are final and not subject to our return policy.

## WHAT ISN'T COVERED BY THE LIMITED E-BIKEKIT WARRANTY

Warranties are limited to the replacement of parts and/or products determined by EBIKEKIT LLC, at its sole discretion, is to be defective.

Warranties do not apply to normal wear and tear; any damage, failure and/or loss caused by accident, shipping, misuse, neglect, abuse, and/or failure to follow instructions or warnings as stated on the product or in the applicable owner's manual or other printed materials provided with the product; damage, failure, and/or loss caused by the use of the product for stunt riding, ramp jumping, competition, off-road use, acrobatics, trick riding or other similar activities, or use in any other manner for which such products were not specifically designed.

**Rentals, Commercial Use, and Non-Authorized or 3rd Party Sellers.** The E-BikeKit limited warranty does not cover or apply to any replacement, maintenance, or accessory parts not sold directly by E-BikeKit to the original retail purchaser (the E-BikeKit dealer).

## WARRANTY CLAIMS

Those parts and/or products that are determined by EBIKEKIT LLC, to be defective and to qualify for warranty replacement will be provided free of charge only after a valid warranty claim is processed by EBIKEKIT LLC. Warranty claims must be made by the original purchaser (the E-BikeKit dealer) by contacting the EBIKEKIT LLC customer service within the warranty period (stated above). Shipping and handling fees will be paid by EBIKEKIT LLC.

**EBIKEKIT LLC, at its Sole Discretion, has the Option of Replacing it with a New Part or Factory Re-Certified Part.** The limited warranty stated herein is in lieu of and expressly excludes all other warranties not expressly set forth herein, whether expressed or implied by law or otherwise, including, but not limited to, any warranties for merchantability and/or fitness for any particular purpose. EBIKEKIT LLC shall in no event be liable or responsible for incidental or consequential losses, damages, or expenses in connection with their products. The liability of EBIKEKIT LLC hereunder is expressly limited to the replacement of goods complying with this warranty or, at the sole discretion of EBIKEKIT LLC, to the repayment of an amount equivalent to the purchase price of the product in question.





# SYMBOLS AND WARNINGS

Like any sport, cycling involves the risk of injury and damage. By choosing to ride an electric bicycle and or tricycle, you assume the responsibility for that risk, so you need to know and practice the rules of safety, responsible riding, proper use, and maintenance. The appropriate use and maintenance of the E-BikeKit will significantly reduce the risk of an injury.

It's impossible to anticipate every situation or condition which can occur while cycling, this E-BikeKit Owner's manual makes no representation about the safe use of the electric bike and or trike under all conditions. There are risks associated with the use of any electric bike and or trike and the E-BikeKit Owner's manual makes no representation about the safe use of an electric bike and or trike which cannot be predicted or avoided and which are the sole responsibility of the rider.

When reading this E-BikeKit Owner's manual, you will note various important symbols and warnings will be located just under the title of the page. Please read the Warnings, Cautions, Tech Tip or Notes first before reading the rest of the page. Below are the symbols and warnings explanations.


 **WARNING!** The combination of this symbol and words indicates a potentially hazardous situation that, if not avoided, could result in serious injuries or death. Many of the warnings say, "you may lose control and fall." Because any fall can result in serious injuries or even death, we do not always repeat the warning of possible injury or death.

 **CAUTION:** The combination of this safety alert symbol and the word **CAUTION** indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury or is an alert against unsafe practices. The word **CAUTION** used without a safety alert symbol indicates a situation that, if not avoided, could result in severe damage to the electric bicycle/tricycle or the voiding of your warranty.

 **TECH TIP:** This symbol offers helpful tips and tricks regarding installation and use.

 **NOTE:** This symbol alerts the reader to information that is particularly important and useful.

# FOR THE PARENTS

 **WARNING!** Ensure that your child and or adult always wears an approved bicycle helmet and closed-toe shoes when riding. It's also important that your child understands that a bicycle helmet is for bicycling only and must be removed when not riding. Failure to follow this warning could result in severe injury or death.

It's essential to understand the basics of riding an electric bike and or trike but it's equally important to exercise common sense when cycling. Cycling is a dynamic sport and requires reacting to varying situations. Like any sport, cycling involves risk of injury, damage to yourself, others, properties, and death. By choosing to ride the electric bike and or trike, you are assuming responsibility for those risks.

If you purchase (or received it as a gift) the E-BikeKit for a minor, it's essential that a responsible adult/parent thoroughly review and read the E-BikeKit Owner's manual to the minor.

As the parent or guardian, you must read this manual and review its warnings and the E-BikeKit functions and operating procedures with your child, and make sure the child understands and can implement them, before letting your child ride the electric bicycle and or tricycle. You should be there and assist your child while learning to ride. Children need to be able to use the electric bicycle and or tricycle and control it in any and all situations, including hills, slopes, and varied surfaces. All minor riding and use of the electric bicycle and or tricycle should be done under and with adult supervision.


In addition to specifics as to this product and the electric bicycle and or tricycle's riding, you also need to use common sense and teach your child about bicycle and tricycle traffic laws and signs, and riding in shared urban areas.

The electric bicycle and or tricycle is not made or intended to be ridden by more than one person at a time. It is not intended to carry multiple people or minors.

As the parent or guardian, you must read this manual and review its warnings and the E-Bike/TrikeKit functions and operating procedures with your child before letting your child ride the electric bicycle and or tricycle.

This manual will answer many of your questions but if you encounter any problems or still have a question, contact your E-BikeKit dealer.

# RIDER RESPONSIBILITIES

 **WARNING!** Potential for Injury! Read and understand this manual before assembly and use! It would be best to practice riding your electric bicycle and or tricycle by starting slowly and improving your skills.

- The operator (rider) is solely responsible for obeying all federal, state, and local traffic laws and any other law related to electric bicycles, tricycles or other vehicles. EBIKEKIT LLC assumes no legal responsibility for the operation of its products on public or private property.
- EBIKEKIT LLC cannot offer any legal advice pertaining to the operation of the electric bicycle and or tricycle in a particular area and does not guarantee that the electric bicycle and or tricycle are legal for you to operate.
- The electric bicycle and or tricycle may be restricted in speed or power output in your area. As the operator (rider), it is your responsibility to research, understand, and obey all applicable laws.
- Always wear a helmet and closed-toe shoes. Obey all rules of the road and all local traffic laws.
- Please only ride within your ability. Do not exceed safe speeds, corner quickly, or attempt to ride over uneven terrain. Failure to ride safely may result in severe injury or death.
- Do not operate your electric bicycle and or tricycle when weather, road conditions, or traffic make it unsafe to do so.
- EBIKEKIT LLC disclaims that the customer agrees to assume any responsibility and liability for injury, damage, or other consequences arising from the use of the E-Bike/TrikeKit.
- Maintain your electric bicycle and or tricycle and service all parts regularly and scrutinize them before operation. DO NOT ride your electric bicycle and or tricycle if any of the components are cracked, loose, broken, or misadjusted. Return to your E-BikeKit dealer to perform repairs or a tune-up.
- Riding an electric bicycle and or tricycle can result in severe injury or death.

# BICYCLE & TRICYCLE SAFETY

1. Obey all rules of the road and all local traffic laws.
2. An electric tricycle is wider than a traditional bicycle and the rider should be aware of the surrounding space.
3. Always wear a helmet and closed-toe shoes while riding.
4. You are sharing the road or the path with others, including motorists, pedestrians, and other cyclists. Be mindful of their space and respect their rights.
5. Ride in designated bike lanes, on designated bike paths or as close to the edge of the road as possible, in the direction of traffic flow or as directed by local governing laws.
6. Ride defensively. Always assume that others do not see you.
7. Look ahead, and be ready to avoid:
  - Vehicles slowing or turning, entering the road or your lane ahead of you, or coming up behind you.
  - Parked car doors opening.
  - Pedestrians stepping out.
  - Children or pets playing near the road.
  - Pot holes, sewer grating, railroad tracks, expansion joints, road or sidewalk construction, debris and other obstructions that could cause you to swerve into traffic, catch your wheel or otherwise cause you to lose control and have an accident.
  - The many other hazards and distractions which can occur on a bicycle ride.
8. Stop at stop signs and traffic lights; slow down and look both ways at street intersections. Remember that an electric bicycle or tricycle will always lose in a collision with a motor vehicle, so be prepared to yield even if you have the right of way. Don't assume what others will do.
9. Use approved hand signals for turning and stopping.
10. Never ride with headphones. They mask traffic sounds and emergency vehicle sirens, distract you from concentrating on what's going on around you, and their wires can tangle in the moving parts of the bicycle, causing you to lose control.
11. Never carry a passenger, unless it is a small child wearing an approved helmet and secured in a correctly mounted child carrier or a child-carrying trailer.
12. Never carry anything which obstructs your vision or your complete control of the bicycle, or which could become entangled in the moving parts of the electric trike.
13. Never hitch a ride by holding on to another vehicle.
14. Don't do stunts, wheelies or jumps. Think to take the large risks that go with this kind of riding.
15. Don't weave through traffic or make any moves that may surprise people with whom you are sharing the road.
16. Observe and yield the right of way.
17. Never ride your electric tricycle while under the influence of alcohol or drugs.
18. If possible, avoid riding in bad weather, when visibility is obscured, at dawn, dusk or in the dark, or when extremely tired. Each of these conditions will increase the risk of accident and damage to the electric trike.

# E-BIKE/TRIKEKIT CONTENT

**⚠ CAUTION:** Since your E-Bike/TrikeKit has been already been installed on your bicycle and/or trike, it's still important to read this manual entirely to understand and learn how to operate the E-Bike/TrikeKit correctly. It's best to start slowly and practice to a point where you are comfortable operating your electric bike and/or trike.

Federal Law mandates that no person under the age of 16 shall operate a motorized bicycle. Always wear a helmet, ride responsibly and observe all federal, state, and local laws.

## E-BIKEKIT CONTENTS

---

Hand-Built Wheel with Disc Compatible Hub Motor

---

48v 22Ah Brushless Motor Controller

---

LCD Display

---

One Thumb or One Split-Twist Throttle

---

One Left and One Right E-Brake Levers

---

Extension Wire for the Motor

---

4-to-1 Wire for Throttle, E-Brake, LCD

---

PAS Sensor

---

12-Magnet Split-Disc PAS Ring

## INCLUDED ACCESSORIES

---

Universal Torque Arm

---

Freewheel (For rear kits only)

---

Fourteen Zip Ties

---

Two C-Washers

---

Battery Wire Harness Kit (without battery only)

## E-TRIKEKIT CONTENTS

---

Hand-Built Wheel with Disc Compatible Hub Motor

---

48v 22Ah Brushless Motor Controller

---

LCD Display

---

Split-Twist with Reverse Throttle

---

One Left and One Right E-Brake Levers

---

Extension Wire for the Motor

---

3-to-1 Wire for Throttle, E-Brakes, LCD

---

4-to-1 Wire for Two E-Brakes (by request only)

---

PAS Sensor

---

12-Magnet Split-Disc PAS Ring

## INCLUDED ACCESSORIES

---

Universal Torque Arm

---

Freewheel (For rear kits only)

---

Fourteen Zip Ties

---

Two C-Washers

---

Battery Wire Harness Kit (without battery only)

## TOOLS NEEDED BUT NOT PROVIDED

A 2.5, 3, 4, and 5mm Allen keys, a Phillip and a Flathead Screwdriver, two Tire Levers, and one Metal File.


## NEED HELP? VIEW OUR E-BIKEKIT HELPFUL VIDEOS

These videos are here to help you learn how to fix your E-BikeKit. It is recommended that you follow these instructions first and then test the electric bike and or trike to see if it worked. If you have additional questions, please contact your E-BikeKit dealer.

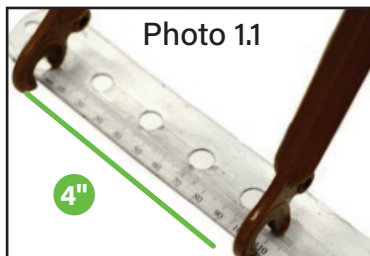
Copy this link into your web browser, to view our Helpful Videos page.

<https://www.ebikekit.com/pages/ebikekit-helpful-videos>

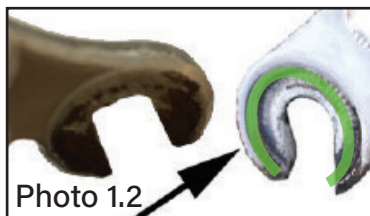
# COMPATIBILITY

 **NOTE:** Our E-BikeKits will fit most bikes. To see if your bike is compatible, follow the instructions below.

## FRONT CONVERSION



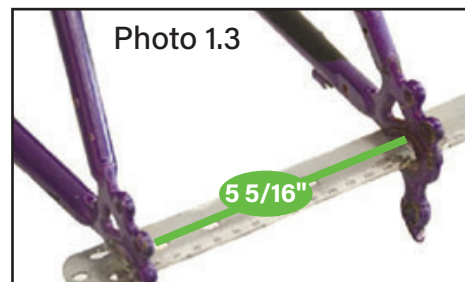
Standard front fork dropouts are 100mm (or 4") of space between the front fork dropouts (photo 1.1).



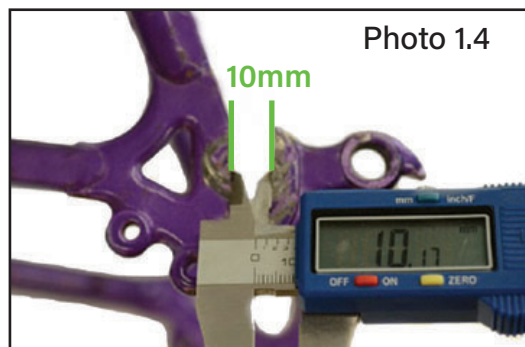
Quick-Release tabs are located in the fork tips. They are an indent where quick-release levers sit. The quick-release axles require a c-washer to fill in the indentations (photo 1.2).

## REAR CONVERSION

Standard rear frame dropouts are 135mm (or 5 5/16") of the space between the rear dropouts (photo 1.3).



## FRONT AND REAR CONVERSION

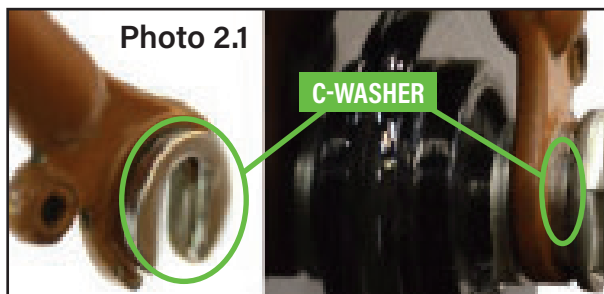


The rear frame dropouts need to be 10mm (or 13/23") of clearance. If everything else fits but the axles don't, then carefully remove the paint from the inside of the dropouts with a metal file (photo 1.4).

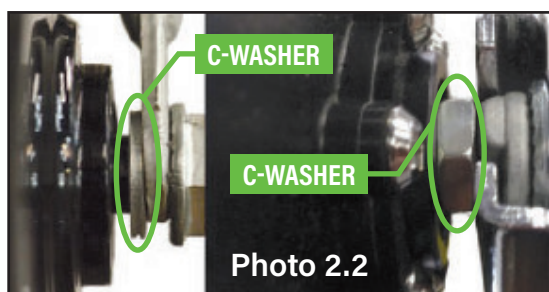


# WHEEL INSTALL

Remove your tire and tube off your bicycle or tricycle, the original wheel and re-install your tube and tire on the E-Bike/TrikeKit wheel.

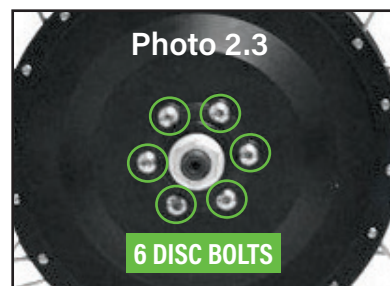


The c-washers will be needed for dropouts that have an quick-release indents. If there are no indents, in the dropouts, then you don't need a c-washer (photo 2.1).



Motors that use tabbed washers should have the tab at the bottom of the dropout. The washer will be facing the dropouts on either the inside or the outside. All motors need a washer or locknut on the inside of the dropouts (photo 2.2).

The 6 bolts that are used to secure the disc onto the motor should be on the non-drivetrain side of the bike/trike. This is the correct way to install the wheel (photo 2.3).



The torque arm will go on the wire side or the non-wired side of the hub. It can face the front or back of the bike. Some bikes will need one or two c-washers to keep it clear from the frame. Fully tighten the hose clamp, it should deform and match the shape of your fork. Tighten the bolt on the torque arm (photo 2.4).

Tighten the axle nuts once the axle is straight in the dropouts. Use the torque wrench to tighten the nuts to 35 ft-lbs. (or nominal force with a 10" wrench).

# ASSEMBLY

**TECH TIP:** You don't have to use our E-brake levers but for safety reasons, they are great! Our E-brake levers will cut the power to the motor as soon as you squeeze the brake levers. The kit will work without the brake, as long as you don't install it.

**NOTE FOR E-TRIKEKITS ONLY:** Most trikes only have a right or left brake lever but our kits include both. Choose the one that fits on your trike. An accessory cable for connecting the two brakes are available by request only.

## INSTALLING THE GRIPS AND THE E-BRAKES

To remove your old grips from your handlebar, carefully lift the edge of the grip with a screwdriver and squirt a little bit of WD40 under the grips. Twist and pull the grips off. Remove your old brake levers and slip the new e-brakes on your handlebar. Tighten the clamp with a 5mm Allen key and insert the brake cable into the brake lever.

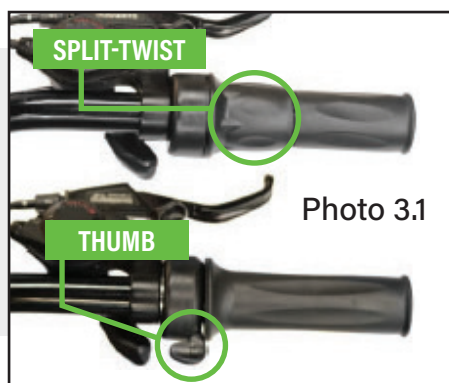


Photo 3.1

### WHICH THROTTLE SHOULD I USE?

- If you are using grip shifters, you will need to use a **Thumb Throttle** (photo 3.1).
- If you are using trigger or thumb shifters, you will need to use a **Split-Twist Throttle** (photo 3.1).

## INSTALLING THE THROTTLE



Photo 3.2

Before you begin, make sure that your old grips have been removed from the handlebar and the e-brake levers are already installed. If not see the directions, at the top of this page.

Slide your throttle onto the handlebar and make sure the supplied plastic buffer is in place. Proceed to tighten the clamp with a 3mm Allen key.

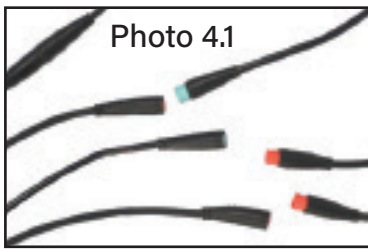
## REINSTALLING THE GRIPS

To install new or the original grips onto your handlebar, you'll first need clean the handlebar with soapy sponge. Dry the handlebar with a clean rag and spray the inside of the grip(s) with hairspray or rubbing alcohol. Push and twist the grip as you work it onto the handlebar.



# ASSEMBLY (CONTD.)

## RE-CONNECTING THE WIRES

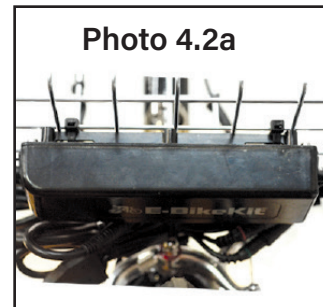


Pair up each wire of the same color and then line up the arrows before carefully pushing them together (photo 4.1).

## WAYS TO MOUNT THE CONTROLLER

The controller can be securely mounted different ways:

- **Under the rack or basket** using the zip ties (photo 4.2a).
- **On the bike and or the trike frame** using the band clamps or zip ties (photo 4.2b).



## WIRE CONNECTIONS

Line up the arrows on the connectors and carefully push them together. Be careful not to bend the pins when pushing the connectors together. Connect these wire connections:

- 4-to-1 (or a 3-to-1 for E-TrikeKit) wire to the controller.
- One end of the motor extension wire to the motor.
- The motor extension wire to the controller.
- The battery to the controller.

Tuck the cables into the flex route, and secure the zip ties. Be sure you have enough slack to move the handlebars freely (photo 4.3).



## FINAL ADJUSTMENTS

Don't forget to setup your LCD before riding (see instruction on pages 19-21). Double check that the brakes are adjusted and working correctly. Then lift the wheel off the ground and push the throttle, to watch the wheel spin and test the e-brake (if installed). Inspect the kit to be sure that the wheel is secure and hasn't moved.

# WHAT'S THE PAS?

The Pedal Assist Sensor (PAS) will sense how quickly you are pedaling (cadence) and use that to run the motor. It's compatible with the throttle. You'll be able to use the throttle at any time while using the PAS and vise-versa.

## COMPATIBILITY OVERVIEW

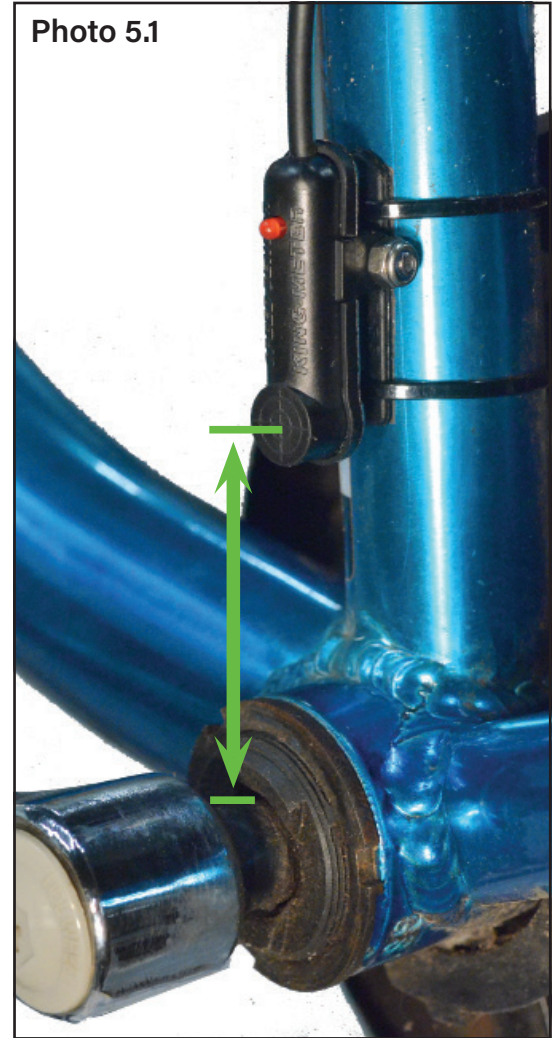
The magnet ring is a split-ring, meant for the installation, without removing the cranks or bottom bracket. It will fit on a square taper spindle, 3-piece cranks with an 8mm or more of the exposed spindle. It also fits on some American (one-piece cranks). The magnet ring will not fit external bearing, press-fit, or internally geared bottom brackets.

The PAS sensor is to be zip-tied onto the center of the seat tube of the bike (photo 5.1) and aligned with the center of the bottom bracket spindle. For mounting the sensor on trikes or unusual bikes, you may need a bracket to mount it into the place of the seat tube.

The sensor in the kit is meant to mount only on the left side (the non-drivetrain side) of the bike. It will not fit on all bikes, particularly bikes with narrow bottom bracket spindles. The fit on some spindles, maybe loose, a dab of hot glue or epoxy will keep it in place.

If the sensor cannot fit on the left side of your bike, you'll need to buy a right side sensor.\* (photo 5.2) With many bikes there might not be enough space for the right side mounting or the small chainring (< 26t) interferes. The magnet will not fit on the right side of American (Ashtabula one-piece cranks) without modification.

Photo 5.1



## PAS SENSOR - RIGHT SIDE MOUNT

\*A PAS sensor for the right hand mounting with a DIN push-in connector. To view the right side PAS sensor, copy this link into your browser: <https://www.ebikekit.com/products/pas-sensor-right>

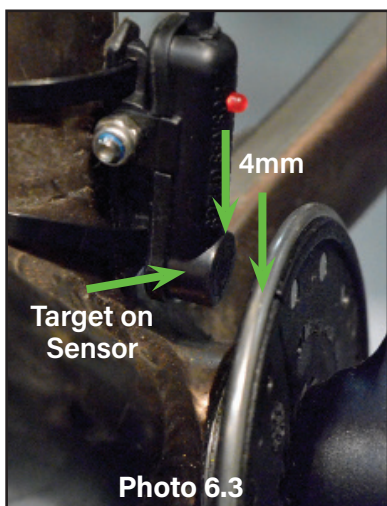
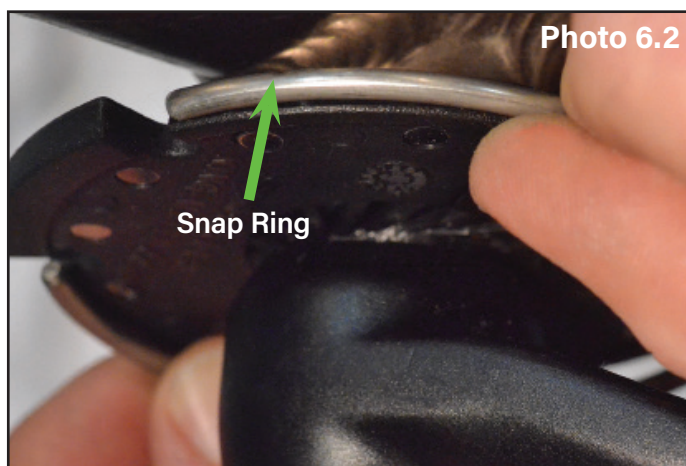
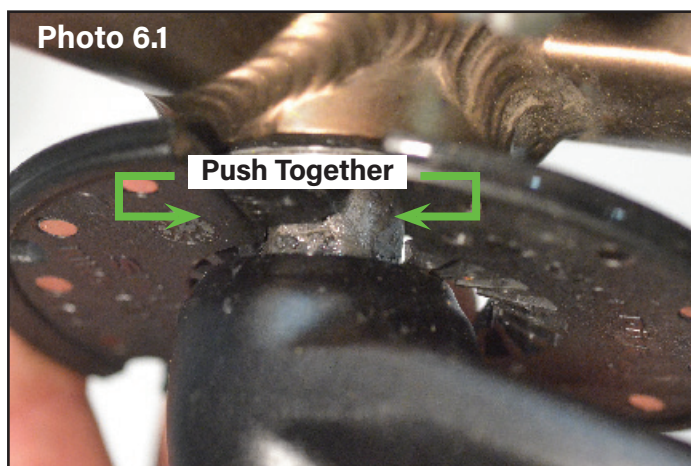
Photo 5.2



# INSTALLING THE PAS


**NOTE:** This installation is for the left side only. The magnet ring is directional, the side that faces the sensor is labeled, "working surface."

- Push the two halves of magnetic rings together (photo 6.1).
- Install the snap ring onto the magnetic ring (photo 6.2.)
- Loosely attach the sensor with the zip-ties, do not zip completely. Align the sensor within 4mm of the magnetic ring (photo 6.3).
- Align the target on the sensor, with the center of a magnet (photo 6.3).
- Remove the adhesive backing and tighten the zip-ties.
- You must line the magnet disc up, so it spins straight.
- A right-side sensor is available separately (page 18). The right side sensor will not fit on all bikes, except some triple chainrings, or American (Ashtabula one-piece cranks) without modification.
- The fit on some spindles, maybe loose, a dab of hot glue or epoxy will keep it in place.





# LITHIUM-ION BATTERY SAFETY

 **WARNING!** Failure to follow the instructions and guidelines in this section may damage electrical components on the electric Fat Trike and will void your warranty. More importantly, failure to follow the instructions may result in a fire, explosion, property damage, injury, or death.

**DO NOT** use the battery if your battery has been damaged, punctured, burned, been smoking, or has been on fire, and do not use the battery or charger. Immediately, call your E-BikeKit dealer and advise them of your situation. Take pictures of the damaged battery and or charger. Email those pictures to your dealer and [support@ebikekit.com](mailto:support@ebikekit.com) with a detailed description of what happened and your contact information. After receiving the images, someone from customer service will contact you.

The following can help to alleviate any risks associated with handling lithium-ion batteries. To minimize the risk of fire, explosion, or personal injury, please follow these guidelines:

- ▶ **ALWAYS** follow the manufacturer's instructions for charging and storage. Only use the original manufacturer's battery, cord and power equipment to charge the lithium-ion battery.
- ▶ **ALWAYS** plug the lithium-ion battery directly into a wall outlet. Never use power strips, or extension cords to charge your lithium-ion batteries. **DO NOT** stack or cluster the lithium-ion batteries together while charging or storing. Charging multiple batteries with inadequate electrical support is a major safety hazard.
- ▶ **ALWAYS** charge the lithium-ion battery at room temperature. If the battery is still warm from usage, allow time for the battery to cool before charging. **DO NOT** charge the lithium-ion battery at temperatures below 32°F (0°C) or above 105°F (40°C).
  - After riding in cold weather, bring the battery indoors to warm up for two hours at room temperature before charging.
- ▶ **ALWAYS** store your lithium-ion battery in a well-ventilated area that has a fire detection system. Avoid excessive sun exposure, water, humidity, and/or condensation. Keep the lithium-ion battery away from any heat source or anything flammable materials, such as paper, under or on a pillow, bed or a couch.
- ▶ **ALWAYS** monitor the battery and charger when charging, **NEVER** leave it unattended or overnight. **DO NOT** keep charging the lithium-ion battery after it is fully charged.
- ▶ **DO NOT** use the battery or charger if your battery has been damaged, punctured, burned, been smoking, or has been on fire. Inspect the battery and charger before and after each use.
- ▶ **NEVER** block your exit from your home or a room with a charging lithium-ion battery. Always make sure that there's a safe way to exit your home in the event that there's an issue with an lithium-ion battery.
- ▶ **NEVER** try to modify or service your e-bike and/or trike's battery system. Batteries are part of a larger system with the e-bike and/or trike. It's not just the battery but also the sensors, motor, controller, and other components. Altering a component within the system can impact the safety of the system, which can result in severe injury and/or death.

# LITHIUM-ION BATTERY SAFETY (CONT'D.)

- ▶ **NEVER** use a battery if it shows signs of physical or mechanical damage such as change of shape, discoloration of the battery's shell, leaking, odor, sign of corrosion, odd noises, loose or damaged wires, and/or known conditions of use or misuse.
- ▶ **NEVER** place a lithium-ion battery in the trash or in a recycling bin, it is illegal. **DO NOT** put discarded batteries into piles. To properly dispose of lithium-ion batteries, take them to a battery recycling location or contact your local waste management service provider for disposal instructions.

## TRANSPORT

- ▶ When transporting an electric bike and/or trike's battery, it **SHOULD NOT** be left on the trike. The battery must be removed and placed inside your vehicle. It's also important not to leave the battery inside a hot vehicle. These temperatures and weather conditions can result in poor charging ability and possibly cause a fire, explosion, injury, or death.

## FIRES AND EMERGENCIES

- ▶ Fire extinguishers do not work on lithium-ion batteries fires. If you observe a lithium-ion battery fire, leave the area, **CLOSE** the door, and call 911 immediately.
- ▶ Damaged or unstable batteries and improper charging, storage or disposal can cause the batteries to overheat, leading to an explosive, aggressive fire that spreads rapidly, can reignite and is challenging to extinguish.
- ▶ Lithium-ion battery fires are very dangerous. Water may not prevent a battery from burning and spreading. Battery cells are known to explode and quickly spread to another battery. It can spread to other devices.
- ▶ These batteries may continue to generate heat even when there is no visible sign of fire. Once heat reaches a certain level fire may reignite on the battery and surrounding area.
- ▶ Reignition of lithium-ion batteries is common. Lithium-ion batteries are known to unexpectedly reignite (without warning) minutes, hours and even days after all visible fire has been put out.
- ▶ Lithium-ion batteries can enter an uncontrollable, self-heating state. This can result in the release of gas, cause fire and possible explosion.



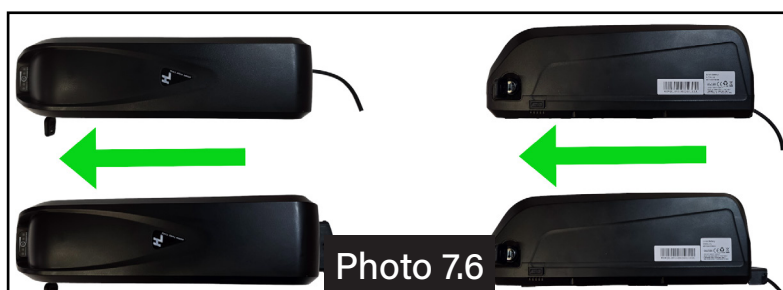
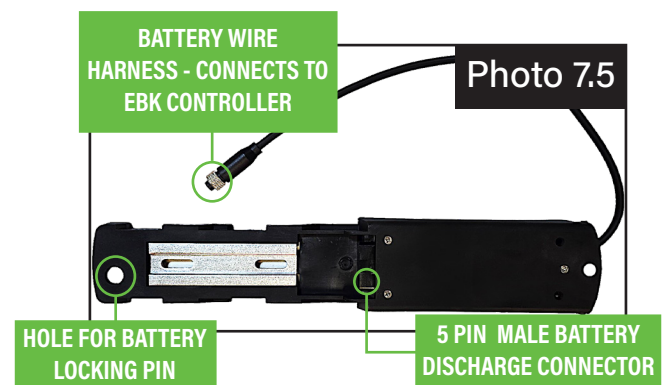
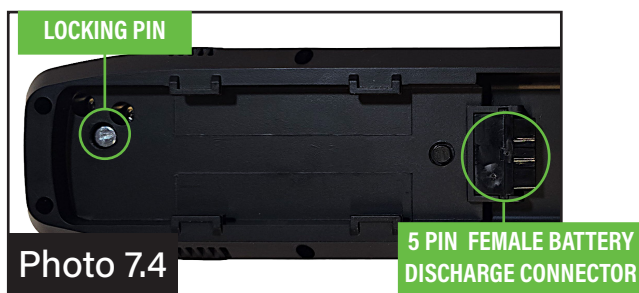
Watch Our Video on **Lithium-ion Battery Safety Tips**

Click or copy this link: <https://youtu.be/xdMwU8cnR0Q>

# BATTERY & CHARGER

**⚠ WARNING!** Failure to adhere to the instructions and guidelines in this section may damage the electrical components of your electric bike or trike and will void your warranty. More importantly, failure to follow these instructions may result in fire, explosion, injury, or death. **DO NOT** use the battery if it has been damaged, punctured, burned, has smoked, or has been on fire. Immediately contact your E-BikeKit dealer for assistance. You will be required to send pictures of the damaged battery or charger, along with a detailed description of the incident and your contact information, to the dealer and to [support@EbikeKit.com](mailto:support@EbikeKit.com). Customer service will contact you after receiving your images to discuss your options. You can charge your battery on or off the bike or trike. However, in either case, it is crucial not to leave the battery and/or charger unattended while charging. Failure to monitor the battery and/or charger may result in fire, explosion, injury, or death.

## BATTERY - 48V 15AH

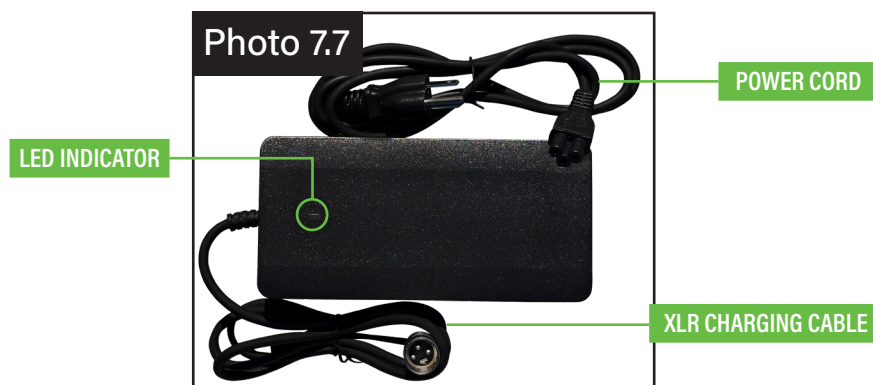


### To Remove the Battery from the Cradle:

- Unlock the Battery (Turn the Key Counterclockwise)
- Slide the Battery Forward
- Lift the Battery Up

# BATTERY & CHARGER (CONT'D.)

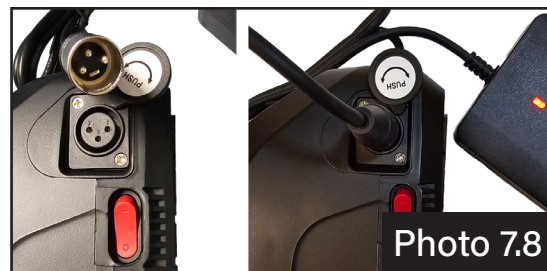
## CHARGER – 54.6V 3A XLR




## CHARGING THE BATTERY

Plug the charger into the wall and then plug the XLR connector from the charger into the XLR charge port on the battery. (photo B)

- **LED is Green** – Charge is complete, or charger isn't connected to the battery.
- **LED is Red** – Battery is charging.

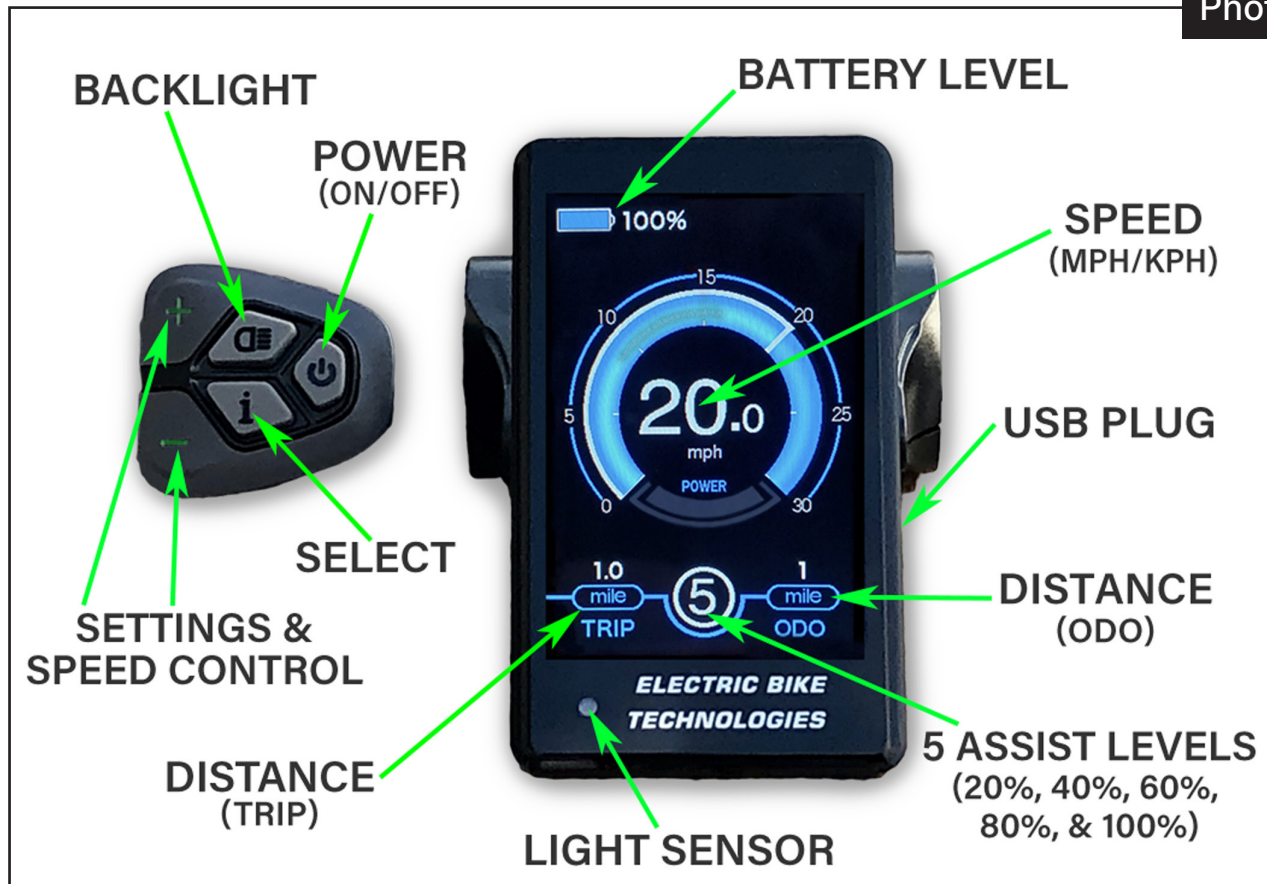


 **TECH TIP:** The E-Bike/TrikeKit battery is “memory free.” You do not need to discharge the battery completely during use, but it is better for the battery not to drain to 0%. After riding in hot or cold weather, bring your battery indoors and allow it to cool or warm to room temperature for two hours before charging. Lithium-ion batteries should not be charged or drawn from when they have just been in hot or freezing conditions. Failure to follow these instructions may result in fire, explosion, injury, or death. When the LCD is off, the electric bike or trike is off and not drawing power from the battery (even if the key is still in the ON position).



# LCD OVERVIEW

Photo A



## ON AND OFF

To power the LCD on or off, press the  for a few seconds.

## ASSIST LEVELS

There are 5 assist levels, of power: 20%, 40%, 60%, 80% and 100% of power, (photo B). The + increases the power and the - decreases the power.



Photo B

## ADDITIONAL NOTES

The LCD is retro-compatible with 2017 or previous models and with the same settings. This LCD model has a memory and will remember what power level you were using, the last time you ridden. On the right side of the LCD, there is a USB port, (5v) that you'll be able to charge your mobile devices (photo C).



Photo C



# LCD SETUP



**MENU** – To access the **user settings menu**, hold the + and - buttons down for two seconds.

**NAVIGATION** – To **scroll up and down** the menu, use the + and - buttons. To scroll up, use the + and to scroll down, use the - button.

**SELECTION** – To make a **selection**, press the i button to confirm your selection.

**UNIT**–Use the + and - to select **Imperial US** or **Metric**. If you are in the U.S. then choose, Imperial US. Use the + and - to select the unit and then the i button to confirm the selection.

*PRESS THE - BUTTON FOR THE NEXT SELECTION.*

**SPEED LIMIT**–By default it's 20 mph. The top speed is determined by the battery voltage, motor type, and wheel size. If you know all those specs, then to change the speed, use the + and - to select the speed and then the i button to confirm the selection.

*PRESS THE - BUTTON FOR THE NEXT SELECTION.*

**WHEEL SIZE**–The default is 26". The choices are **16"**, **20"**, **24"**, **26"**, and **700c**. Use the + and - to select the wheel size and then the i button to confirm the selection.

*PRESS THE - BUTTON FOR THE NEXT SELECTION.*

**MOTOR TYPE**–E-BikeKit sells two types of motors. The **Heavy-Duty motor** is a 500w direct-drive, heavy-duty motor best for heavy riders and cargo. The **Performance motor** is 500w geared motor, best for top speed, and performance. Use the + and - to select the motor type and then the i button to confirm the selection.

*PRESS THE - BUTTON FOR THE NEXT SELECTION.*

**BATTERY**–There are 5 battery choices: **DIY**, **36v SLA**, **48v SLA**, **36v Li-Ion**, and **48v Li-Ion**. DIY is a custom option that has 5 settings, (see the [video](#) at 16:05 for more information). The newer batteries will be the 36v and 48v lithium-ion batteries. Use the + and - to select the battery type and then the i button to confirm the selection.

*PRESS THE - BUTTON FOR THE NEXT SELECTION.*



Watch the Our Video About the **Setup of the Color LCD**

Click or copy this link: <https://youtu.be/h9xSyjUwk4E>

# LCD SETUP (CONT'D.)

**NOTE:** The E-BikeKit DOES NOT have a headlight. The  represents the luminance on the display. This sensor will sense how much or little light is present and it adjusts the display. You have the option to increase or decrease the brightness on the LCD.

**CURRENT LIMIT**—The E-BikeKit has a standard **20 Amp Controller**. This is the only selection, so no change is needed.

*PRESS THE - BUTTON FOR THE NEXT SELECTION.*

**PAS SETTING**—The E-BikeKit has three PAS settings. You can tinker and fine tune the PAS settings to make it custom for your liking.

- **PAS DELAY**—How many magnets pass the crank sensor before the PAS (motor) turns on. The default setting is 3.
- **PAS POWER**—Is how much torque is needed. The default is 5.
- **PAS SENSITIVITY**—Is a blanket power setting. The default is 12.

Use the **+** and **-** to select the PAS setting and then the **i** button to confirm the selection.

*PRESS THE - BUTTON FOR THE NEXT SELECTION.*

**DRIVE**—The E-BikeKit has three drive settings. The default is P/T Override.

- **P/T OVERRIDE**—Pedal Assist (P) is always on and Throttle (T) overrides. So if you are using pedal assist and then you use the throttle, the throttle will override the pedal assist.
- **THROTTLE ONLY**—Throttle will work but not pedal assist.
- **PAS ONLY**—PAS will work but not throttle.

Use the **+** and **-** to select the drive preference and then the **i** button to confirm the selection.

*PRESS THE - BUTTON FOR THE NEXT SELECTION.*

**LCD LUMINANCE**—The display will become brighter or darker with 100% being the brightest and 10% being the darkest. The default is 100%. Use the **+** and **-** to select the luminance setting and then the **i** button to confirm the selection.

*PRESS THE - BUTTON FOR THE NEXT SELECTION.*

**TRIP RESET**—If you need to clear a trip. Use the **+** and **-** to select the yes or no and then the **i** button to confirm the selection.

*PRESS THE - BUTTON TO GO BACK TO THE MAIN SCREEN.*

# LCD ERROR CODES

## 7 TROUBLESHOOTING ERROR CODES

These error codes will display in the speed section of the LCD.

If you don't see an error code listed, please call 1-866-882-3245 or email us at [support@ebikekit.com](mailto:support@ebikekit.com)



ERROR CODE	PROBLEM	CAUSE
01	Motor Connection/Halls	<ul style="list-style-type: none"><li>▪ Motor cable isn't plugged in all the way.</li><li>▪ Bent pin or damaged wire on the motor cable.</li></ul>
02	Throttle Stock On	<ul style="list-style-type: none"><li>▪ Bent pin on the 4-to-1 (or 3-to-1 E-TrikeKit) wire.</li></ul>
03	Controller Issue	<ul style="list-style-type: none"><li>▪ Bent pin on the 4-to-1 (or 3-to-1 E-TrikeKit) wire.</li></ul>
04	Low Voltage Issue	<ul style="list-style-type: none"><li>▪ Damaged motor cable (short circuit).</li><li>▪ Controller or motor problem.</li></ul>
05	Motor Phase (Power) Issue	<ul style="list-style-type: none"><li>▪ Motor cable is not plugged in all the way.</li><li>▪ Current limit is too low for conditions.</li><li>▪ Bent pin or damaged wire on the motor cable</li></ul>
06	Torque Issue	<ul style="list-style-type: none"><li>▪ Bent pin or damaged wire on the motor cable.</li></ul>
07	Communication Issue	<ul style="list-style-type: none"><li>▪ Controller or motor problem or bent pin.</li><li>▪ 4-to-1 (or 3-to-1 E-TrikeKit) accessory cable or the controller may be damaged.</li></ul>

# TROUBLESHOOTING

**TECH TIP:** Follow these instructions to find out what is wrong with your electric bike and or trike. After each step test ride the electric bike and or trike to see if it's been fixed. If the problem wasn't solved, continue on with the next suggestion and test ride the electric bike and or trike and so on.

## PAS TROUBLESHOOTING

A correctly installed PAS will work when you pedal forward and the red light on the PAS sensor will blink, when a magnet passes it.

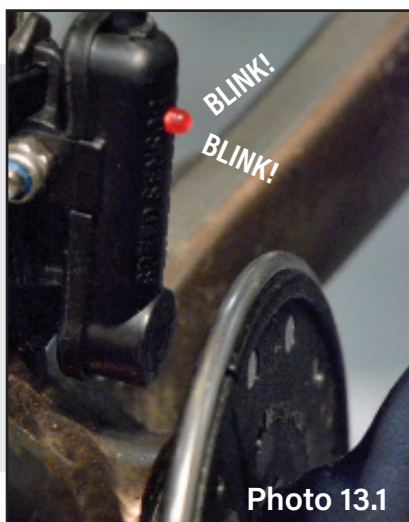


Photo 13.1

### IF THE RED LIGHT DOESN'T BLINK

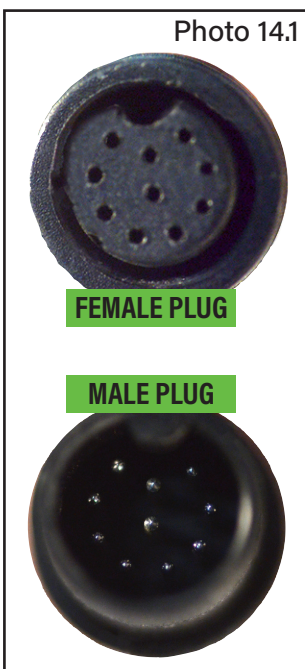
The sensor is not aligned with the center of the bottom bracket (spindle) or it's not aligned with the magnets in the disc.

### IF THE LIGHT ONLY BLINKS, WHILE PEDALING BACKWARDS

The PAS disc or sensor is backwards. The correct mounting is on the left side of the bike/trike with the disc label, "working surface" is facing the sensor. The sensor is pointing at the center of the bottom bracket spindle.

## E-BIKEKIT TROUBLESHOOTING

Photo 14.1



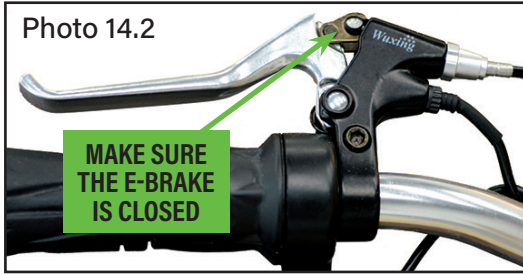
**Unplugged**—Unplug everything, one at a time and re-plug it back in. Sometimes a plug can be loose and casue a error code.

**Bent Pins**—Check for bent pins by shining a flashlight into the plug. Also look for a tell-tale scratch on the female plug showing a pin was not aligned correctly. A bent pin can be hard to spot because it only has to bend a little to be a problem (photo 14.1).

**Broken Wires**—If you can see worn insulation, cuts, or gourges, you may need to replace a wire that has been damaged.

# TROUBLESHOOTING (CONT'D.)

Photo 14.2



**E-Brakes** – If you're using our e-brakes on your bike/trike and the lever gets stuck open, the motor will be shut off (photo 14.2).

Photo 14.3



**Battery Voltage** – Test the battery with a multimeter. Be very careful not to short the red and black wires together. 48v batteries should measure at least 47v (photo 14.3).

Photo 14.4




**Throttle** – Each E-BikeKit has both a thumb and a split-twist throttle. Swap the other one in and see if the E-BikeKit runs. If the E-BikeKit works, then the throttle may be the problem (photo 14.4).

**Disconnect E-Brakes** – A bad switch in the E-Brakes could shut the motor off.


Contact the E-BikeKit Dealer or E-BikeKit customer service if none of these suggestions work. Call us at 1-866-882-3245 and/or email us at [support@ebikekit.com](mailto:support@ebikekit.com)

# MAINTENANCE


 **WARNING!** Be sure that any problems identified in the maintenance section or otherwise are addressed immediately. If these problems exist, **DO NOT** ride your electric bike and or trike! If you continue to ignore loose or damaged components/fasteners. It will damage the electric bike and or trike and possibly result in a fall and/or injury.

Never inflate a tire beyond the maximum pressure that's marked on the tire's sidewall. Exceeding the recommended maximum pressure may blow the tire off the rim, damaging the trike and injuring the rider and bystanders. Although the sidewall on the electric bike and or trike tire recommends a certain pressure, we strongly advise you NOT to inflate or deflate the tires to the 5-11 PSI range. Operating a electric bike and or trike at these low tire pressures can cause loss of control issues, with the potential for accident and injury.

There is a safety risk when using gas station air hoses or air compressors. These machines aren't intended for bicycle tires. They move a large volume of air very quickly and will raise the pressure in the tire very rapidly, which could cause the tube to explode. Use a floor bicycle pump or a hand bicycle pump.

 **CAUTION:** For a electric bike and or trike to remain safe and reliable, a maintenance schedule is required. If you are uncomfortable performing trike maintenance, you should visit a bike shop for help.

 **TECH TIP:** The tire PSI information is located on the sidewall of the tires. Putting more or less PSI will depend on the rider's weight, terrain, and riding preferences.

 **NOTE:** We highly recommend carrying a spare inner tube(s) when riding your electric bike and or trike. Patching a tube is an emergency repair. Suppose you do not apply the patch correctly or apply several patches. In that case, the tube can fail, resulting in you losing control, falling, and possibly being injured. Replace the patched tube as soon as possible.

All bikes/trikes require regular maintenance to ensure safety and performance. Electric bikes and or trikes require more care since they're ridden further and faster than a conventional bikes. This schedule is recommended to ensure that your E-BikeKit remains safe and reliable. If you're uncomfortable performing any maintenance, then you should return to your E-BikeKit dealer for assistance.

## WHEEL TUNE-UP

- **First 50-100 Miles** – Should be tuned up by your E-BikeKit dealer. The first 50-100 miles of a wheel's life will stretch and settle.
- **Every 3 Months or 400 Miles** – The wheel's should be serviced again by your E-BikeKit dealer.
- **And Beyond** – The wheels will last much longer and break fewer spokes if they are inspected often.



# MAINTENANCE (CONT'D.)

**⚠ WARNING!** The E-BikeKit uses powerful disc brakes, and it is essential to realize that there is presumably a flipping over danger if the front brake is fully applied at high speed. Be cautious when applying the front brake, and gradually use the front and rear brake in unison for a more controlled stop.

**DO NOT** use the electric bike and or trike if you exhibit any corrosion or rust or if the cables or wire connections look burnt. Contact your E-BikeKit dealer for further assistance.

**⚠ CAUTION:** To test the electric bike and or trike with a "slow roll test," wear your helmet and ensure that the area you are using is clear of any objects that can injure you or any objects you can damage.

**Ⓝ NOTE:** How long can you expect the disc brake pads to last will depend on how much riding you do, the type of riding terrain, the weather conditions, and the rider's weight are factors influence how long they last.

## PRIOR TO EACH RIDE

- **Check Your Wheels** – Especially the hub motor. The spokes should be tight and the wheels should not have any side-to-side play.
- **Check the Frame** – The frame dropouts and torque arm should be tight and secure.
- **Inflate the Tires** – To the recommended PSI. Under inflated tires can cause damage to the rims. Don't add more air than what the tire recommends.
- **Check the Cables, Wires and Brakes** – They are all working correctly. Working brakes are crucial, and the brake cables are just as important. Lift the wheel off the ground and run the throttle. Then squeeze the e-brake lever, to make sure it cuts the power.
- **Check the Battery** – Make sure it's fully charged, secured and that the connections are tight.

## AFTER EACH RIDE

- **Turn the LCD Off** – By pressing and holding the red power button.
- **Check for Damages** – Check the tires, wheels, and frame for any damages.
- **Charge the Battery** – Charge the battery fully after every ride.
- **Clean the Bike /Trike** – Don't let the parts get dirty or greasy.

## EVERY WEEK

- **Inspect the Chain** – Clean and oil the chain by using a high quality bicycle chain lube. Dry lube doesn't attract dirt or grime and it's ideal for dry, dusty conditions but holds up fairly well in wet conditions. Wet lube is superior for water resistance and for wet weather riding.
- **Inspect the Bolts** – Check the bolts to make sure nothing has come loose due to vibration. Here's a list of bolts to check: Rear Rack, E-Brake and Brake Levers, Brake Cable Anchors, Brake Centering, Brake Pads, Throttle Clamp, Shift Lever Mounts, and Seatpost Clamp.



Watch Our Video on **Lithium-ion Battery Safety Tips**

Click or copy this link: <https://youtu.be/xdMwU8cnR0Q>

# MAINTENANCE (CONT'D.)

**⚠ WARNING!** Be sure that these problems are addressed immediately. **DO NOT** ride your electric bike and or trike if a problem exists! Call your E-BikeKit dealer and inform them of the issue(s).

Ignoring loose or damaged components/fasteners will damage the electric bike and or trike even further and possibly result in a fall or an injury.

**⚠ CAUTION:** If you do not have the mechanical or physical ability to correctly and safely perform these tasks, then you should obtain the services of your E-BikeKit dealer.

## EVERY THREE MONTHS

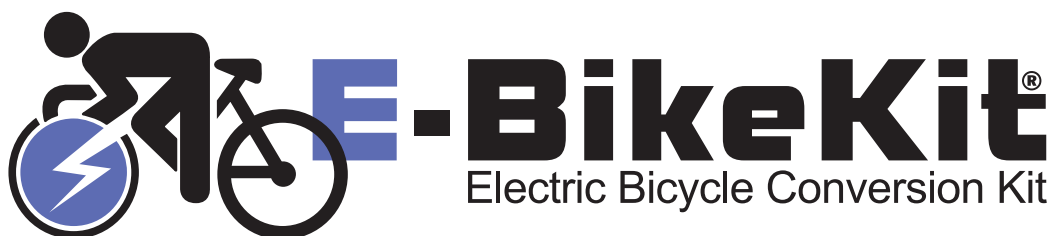
- **Inspect Frame and Fork** – Inspect the frame and fork for paint cracks, blisters, gouges or bulges that might indicate damage to the frame or fork.
- **Inspect Components** – Check the seatpost, rack, seat, stem, handlebars, cranks, and brakes, to make sure that nothing is bent or loose.
- **Inspect the Wiring** – Check the connectors, that they are rust free and don't look burnt or corrosive.

## EVERY SIX MONTHS

- **Inspect the Bearings** – Inspect the bearings in the headset, non-electric hub, pedals, and bottom bracket. These bearings may need to be periodically adjusted, lubricated, and replaced.

Be sure that these items are addressed immediately. Do not ride your bike or trike with a loose fasteners or damaged components.

**TAKE CARE OF YOUR E-BIKEKIT AND IT WILL TAKE CARE OF YOU!**





# E-BIKEKIT SPECS

## LITHIUM BATTERIES

VOLTAGE/AMP-HOUR CAPACITY	48v 9Ah	48v 10Ah	48v 20Ah
RANGE	10-22 miles	12-26 miles	20-44 miles
TOP SPEED Performance, 500w Geared	700c = 26 mph, 26" = 25 mph, 24" = 24 mph, 20" = 23 mph, and 16" = 22 mph		
TOP SPEED Heavy-Duty 500w, Direct-Drive 6x9	700c = 21 mph, 26" = 20 mph, 24" = 19 mph, and 20" = 18 mph		
WEIGHT	5.8 lbs	9.7 lbs	14 lbs
DIMENSIONS	7 3/4" x 5 1/8" x 2 3/4"	15" x 6" x 2.7"	9 1/2" x 7 1/4" x 3 3/8"
CYCLE LIFE	700-1800 Cycles		
TEMPERATURE	Allow 2 hrs to warm up to room temperature before charging.		

## LITHIUM CHARGERS

INPUT VOLTAGE	100-240v 50/60Hz
OUTPUT VOLTAGE	54.6v $\pm$ 0.2v (48v Charger)
OUTPUT CURRENT	3A $\pm$ 0.1A
FULLY CHARGED OUTPUT	0.15A $\pm$ 0.1A
SAFETY FEATURES	Short Circuit Protection, Reverse Polarity Protection, Over-Voltage Protection, and Over-Current Protection
USAGE	Fast-Charge, Not for Continuous Use, and Unplug After Charging
CERTIFICATIONS	TUV-GS, CE, KC, SAA, RoHS

## E-BIKE WHEEL SPEEDS

WHEEL SIZE/MOTOR TYPE	TOP SPEED AT 48V
20"/500w Direct-Drive	18 mph (29 kph)
24"/500w Direct-Drive	19 mph (30 kph)
26"/500w Direct-Drive	20 mph (32 kph)
700c/500w Direct-Drive	21 mph (34 kph)
16"/500w Geared	22 mph (35 kph)
20"/500w Geared	23 mph (37 kph)
24"/500w Geared	24 mph (39 kph)
26"/500w Geared	25 mph (40 kph)
700c/500w Geared	26 mph (42 kph)

# E-TRIKEKIT SPECS

## LITHIUM BATTERIES

VOLTAGE/AMP-HOUR CAPACITY	48v 9Ah	48v 10Ah	48v 20Ah
RANGE	10-22 miles	12-26 miles	20-44 miles
TOP SPEED Performance, 500w Geared	700c = 26 mph, 26" = 25 mph, 24" = 24 mph, 20" = 23 mph, and 16" = 22 mph		
TOP SPEED Heavy-Duty 500w, Direct-Drive 6x9	700c = 21 mph, 26" = 20 mph, 24" = 19 mph, and 20" = 18 mph		
WEIGHT	5.8 lbs	9.7 lbs	14 lbs
DIMENSIONS	7 3/4" x 5 1/8" x 2 3/4"	15" x 6" x 2.7"	9 1/2" x 7 1/4" x 3 3/8"
CYCLE LIFE	700-1800 Cycles		
TEMPERATURE	Allow 2 hrs to warm up to room temperature before charging.		

## LITHIUM CHARGERS

INPUT VOLTAGE	100-240v 50/60Hz
OUTPUT VOLTAGE	54.6v $\pm$ 0.2v (48v Charger)
OUTPUT CURRENT	3A $\pm$ 0.1A
FULLY CHARGED OUTPUT	0.15A $\pm$ 0.1A
SAFETY FEATURES	Short Circuit Protection, Reverse Polarity Protection, Over-Voltage Protection, and Over-Current Protection
USAGE	Fast-Charge, Not for Continuous Use, and Unplug After Charging
CERTIFICATIONS	TUV-GS, CE, KC, SAA, RoHS

## E-TRIKE WHEEL SPEEDS

WHEEL SIZE/MOTOR TYPE	TOP SPEED AT 48V
20"/500w Direct-Drive	18 mph (29 kph)
24"/500w Direct-Drive	19 mph (30 kph)
26"/500w Direct-Drive	20 mph (32 kph)
700c/500w Direct-Drive	21 mph (34 kph)