# E-BIKE CONVERSION KIT

## User Manual [Revision 1.0 MAY 2020]

## Introduction

Congratulations on purchasing an Electric Bike Conversion Kit. We hope you enjoy years of satisfactory and safe riding.

## Read This Manual Carefully Before Use – Failure To Do So May Result In Injury, Property Damage And May Void Warranty.

This manual is provided to help you to get the best performance, comfort, enjoyment and safety from your riding. The manual describes specific care and maintenance procedures that help protect your warranty and ensure trouble-free use. Please pay attention to the section on battery charging and maintenance. Products covered by this manual may vary in appearance, assembly, inclusions, specifications, description and packaging.

## Read the manual before assembling and riding.

Note that the manual is not intended to be an extensive reference source for servicing, maintenance and/or repairs. For additional assistance, contact an authorised TDRMOTO service centre.

In the interests of your safety and the safety of others, it is highly recommended to have your bicycle assembled and serviced / adjusted by a skilled electric bike mechanic.

## SAFETY

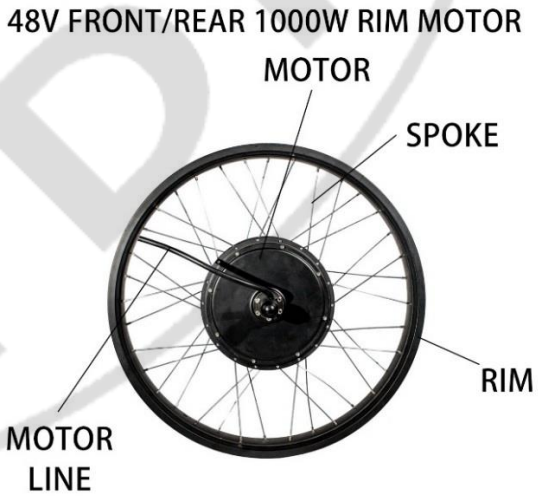
- Riding can be a hazardous activity. Certain conditions may cause the equipment to fail without fault of the manufacturer. The product can and is intended to move, and it is therefore possible to lose control, fall-off and/or get into dangerous situations that no amount of care, instruction or expertise can eliminate. If such things occur, you can be seriously injured or die, even when using safety equipment and other precautions. Ride at your own risk and use common-sense. Failure to use common- sense and heed all before riding on the road, take time riding in an enclosed area to familiarise yourself with the controls and behaviours of an electrically assisted bicycle. Try all settings so you are familiar with the results.
- Before every ride, check bicycle condition and ensure that no fasteners are loose, particularly axles, pedals, seat and handlebars. Ensure that the tyres are inflated to within specification (printed on the tyre sidewall), and that the brakes are operating correctly.
- Understand and obey any local laws or regulations which may affect locations where the product may be used. Ride defensively.
- Before each ride, check to ensure the frame latch, frame latch safety hook, handle post latch and handle post safety hook are all properly secured. When secured, the frame and handle post will be completely rigid.
- This product is manufactured for performance and durability but is not impervious to damage. Stunts or other aggressive riding can over-stress and damage the product, and the rider assumes all risks associated with how the product is looked after.
- Keep fingers and other body parts away from moving components.
- Always wear suitable protective equipment, such as an approved safety helmet (with chin strap securely buckled). A helmet may be legally required by local law or regulation in your area. Wear suitable footwear for bicycle riding and clothing that helps make you visible to others.

## Battery and Charging

- Never modify the electrical system. Alterations could cause a fire resulting in serious injury and could also damage the electrical system.
- Charge with the supplied or recommended charger only. Use of the wrong charger could cause a fire or explosion resulting in serious injury.
- Ensure the voltage and frequency of the charger is compatible with mains electrical supply.
- Use the battery charger in dry locations only.
- Regularly check the charger for damage to the electrical cord, plug, enclosure and other parts. If any damage or malfunction occurs, do NOT use the charger until repaired or replaced.
- Use caution when charging.
- Do not operate the charger or charge batteries near flammable materials.
- Do not clean or perform any maintenance on the product when it is being charged.

## ITEM CHECK LIST

### 1. Motor Rim





### 2. Battery & Charger


## 3. Throttle, Brake Levers, LCD Display & Controller

THUMB THROTTLE

BRAKE LEVERS SET

LCD DISPLAY PANEL

CONTROLLER

## 4. PAS (Pedal Assisted System/Sensor) & Motor Cable

PAS

1 TO 4 CABLE

SOME MOTOR LINES ARE NOT REMOVEABLE AND CONNECTED TO CONTROLLER

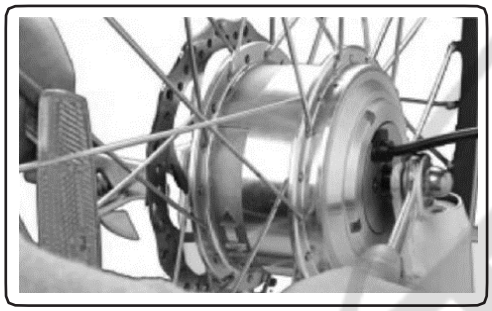
# INSTALL OVERVIEW

## 1. Remove Contents

Take your components out of the box. Remove the protective packaging. Keep track of all the parts that you remove from the box. – Remove the battery and put it on charge.

## 2. Prepare youbike

Make sure you have measured your dropout slots and the clearance between your dropouts (approx. 98mm–102mm for front forks and 133mm-137mm for rear). Remove your current wheel, remove the tyre, tube, rim tape and your handlebar grips, shifters.



## 3 Installation

Once you have your bike ready for installation, the first step (after transferring your rim take, tube and tyre) is to install the wheel and secure the axle nuts. Take note of the order or the washers so that you can replicate this when installing onto the forks. Then move on to the battery cradle or rear rack mount and handlebar controls.

## 4 TidyUp

After you have installed all the components needed to control each part of the kit, it's now time to tidy up the wiring harness and make your conversion look nice and neat.

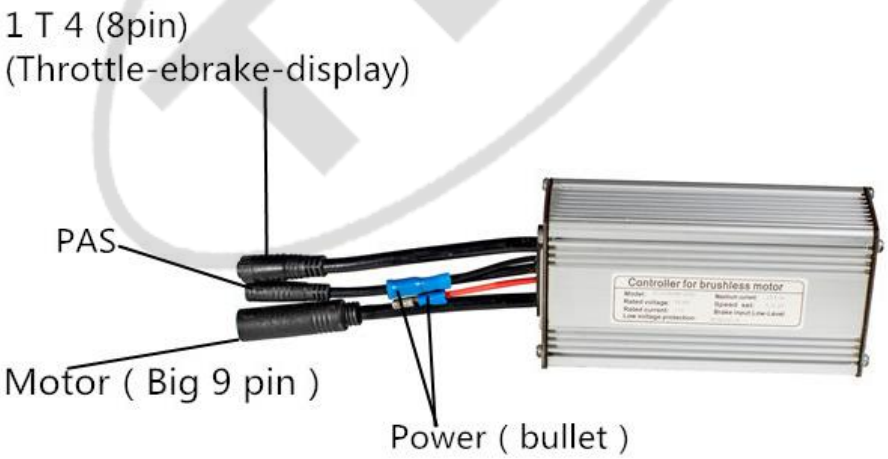
## 5 Ride!

Once the battery is fully charged, lock it into its cradle, turn it on and you're now ready to go!

# INSTALLATION PROCESS

## Controller cable Introduction


**Type A**




**Type B**

## Tools Require (Not Included)

1 Allen key

2 Screwdrivers

3 Crank puller

4 **Bottom bracket remover**

5 **Adjustable wrench**

6 **Plier**

7 Scissors & straps

8 **Spanner Set**

## Preparation

Before beginning your conversion, there are a couple things you can do that will make the installation more efficient. Remove your handlebar controls such as your brakes, shifters and grips. Remove your wheel and install your existing tube, tyre and rim tap (recommended) onto the new electric wheel.

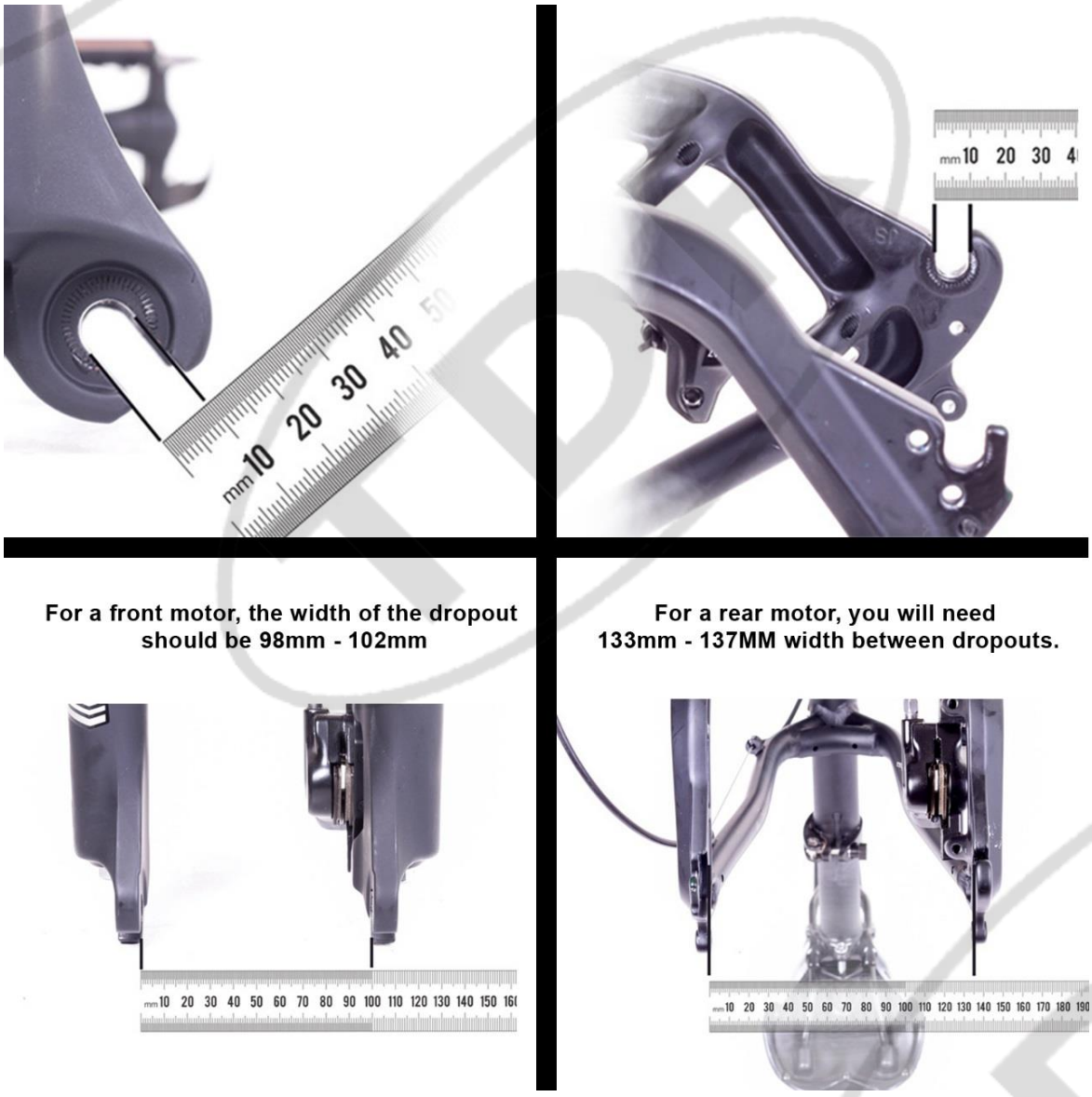
The first step in any conversion is installing the wheel. The easiest way to take off your wheel is to turn your bike upside down so that your bike rests on the handlebars, and the seat. Your seat height may need to be adjusted to ensure the bike will be stable, when upside down.

Take off your disk brake caliper from or release your V-brakes. For disk brake users, it's much easier to fit the motor wheel with the caliper removed.

We have designed our kits to fit as broad a range of bikes as possible, and by checking a couple of measurements, you can be positive of a good fit.

Axle slot width are usually standard with the majority of bikes coming with a 10mm width. This is where the motor axle will fit in; if your bike measures up at approximately 10mm then you are ok for this measurement.

Dropout width requirement will differ based on whether you opt for a front or rear motor.
For a front motor, the width of the dropout should be 98mm - 102mm.
For a rear motor, you will need 133mm - 137MM width between dropouts.



Remove the original wheel. Assemble inner tube & tire on motor wheel and pump up.


## For Disk Brake User

The disk brake rotor can be installed onto the side of the motor hub just like a regular hub. You will need to use the existing bolts that are already installed into the side of the hub. Simply loosen them, install your disk rotor and then tighten the bolts as shown.
If you overtightened these bolts, you may risk stripping the hub which is not covered by warranty.
The only other thing that you may need to trial is the use of the white plastic disk brake spacer that each hub comes with. This is rarely needed as your rotor should line up to your caliper quite closely, however it's sometimes needed to achieve the required offset. There will usually be sufficient adjustment in your caliper to line the rotor up correctly.

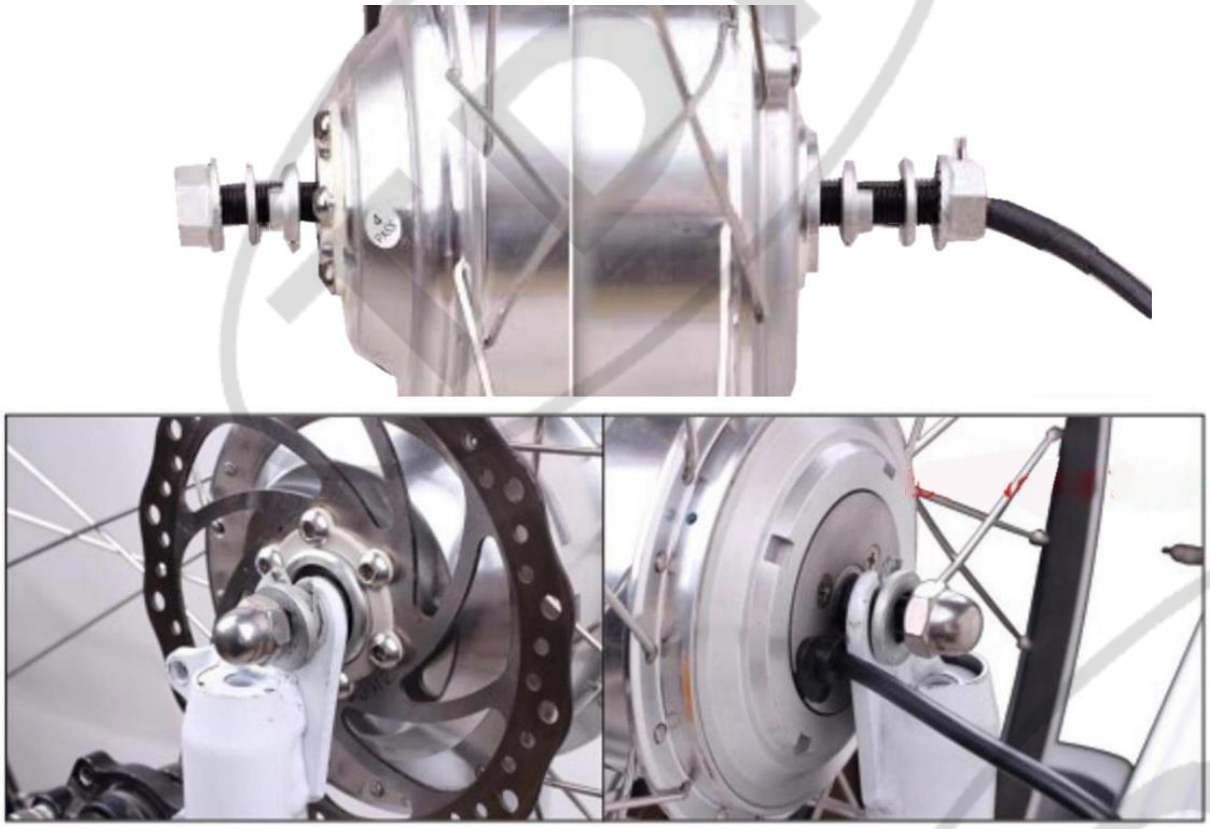
# Front Hub Motor Installation

You will need loosen the axle nuts on your new electric wheel. This will allow the axle to slot into your dropouts. The distance between your dropouts should be around approx. 98mm - 102mm. Your forks will stretch in and out a certain amount without causing any structural issues. The dropout axle slots should be approx. 10mm however you may need to file off a thin layer of paint for the axle to slot in all the way. The axles are designed to be a very tight fit, so don't stress if you need to remove a small amount of material, this is normal.

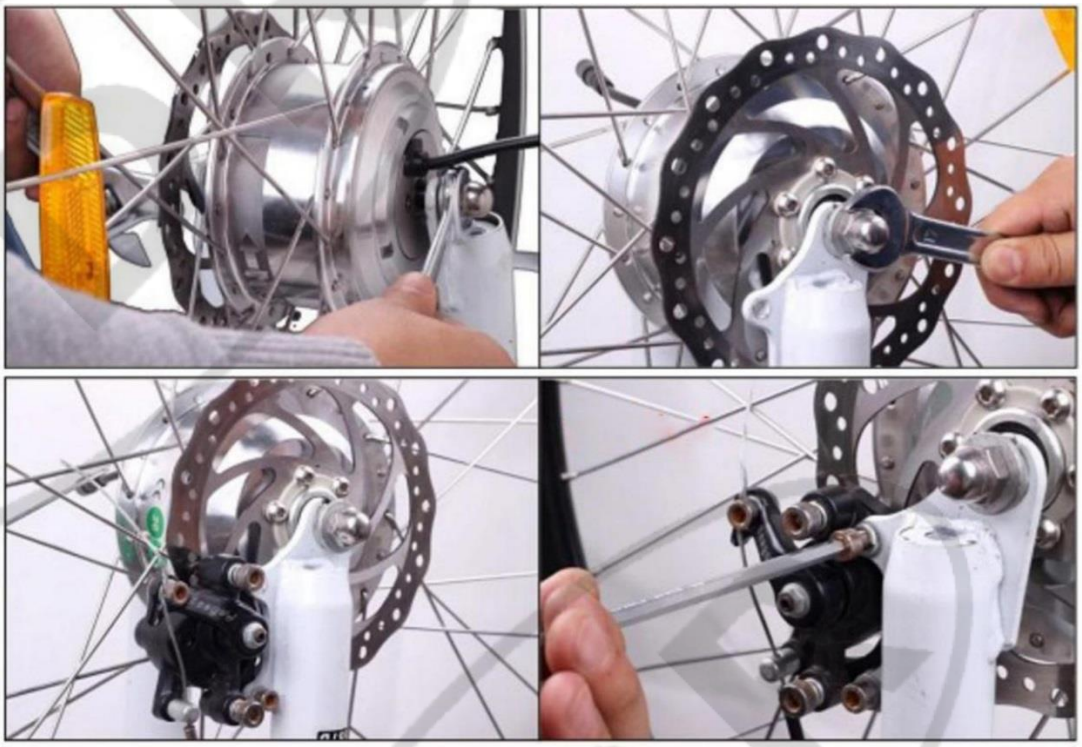
The cable that exists the hub should sit on the right side of your bike, (when sitting on your bike). Otherwise you're going to go backwards!

With your bike upside down, your wheel should be pushed all the way down into the dropouts to make sure it's a nice and tight fit.

One torque washer should be fitted against the hub, on the side of the forks (on each side) and then one flat washer on the outside. Adjustment and additional washers may needed.



With these in place you can then tighten the axle nuts using a spanner or adjustable wrench. Make sure you have the right size as to protect the nuts from being stripped. Tighten to approx. 30-40Nm (250 - 350 in lbs). Adjust disc brake caliper (if applicable) to suitable location and tighten the bolts.



# Rear Hub Motor Installation

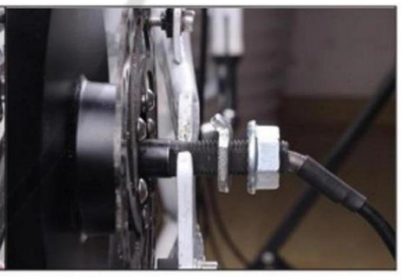
You will need loosen the axle nuts on your new electric wheel. This will allow the axle to slot into your dropouts.

Install the brake disc (if applicable) and freewheel on the motor, when tightening the screws on the disc, tighten them diagonally. The motor rim requests a thread-on type freewheel cassette which not included. You can use your original one if your original is thread-on type.

The distance between your dropouts should be around approx. 133mm - 137MM. Your frame will stretch in and out a certain amount without causing any structural issues. The dropout axle slots should be approx. 10mm however you may need to file off a thin layer of paint for the axle to slot in all the way.

The axles are designed to be a very tight fit, so don't stress if you need to remove a small amount of material, this is normal. The cable that exists the hub should sit on the left side of your bike, (when sitting on your bike). Otherwise you're going to go backwards!





# Downtube / Battery Cradle Installation

The battery installation starts with mounting the battery cradle. This is what your battery will attach to and it's also where the controller is housed.

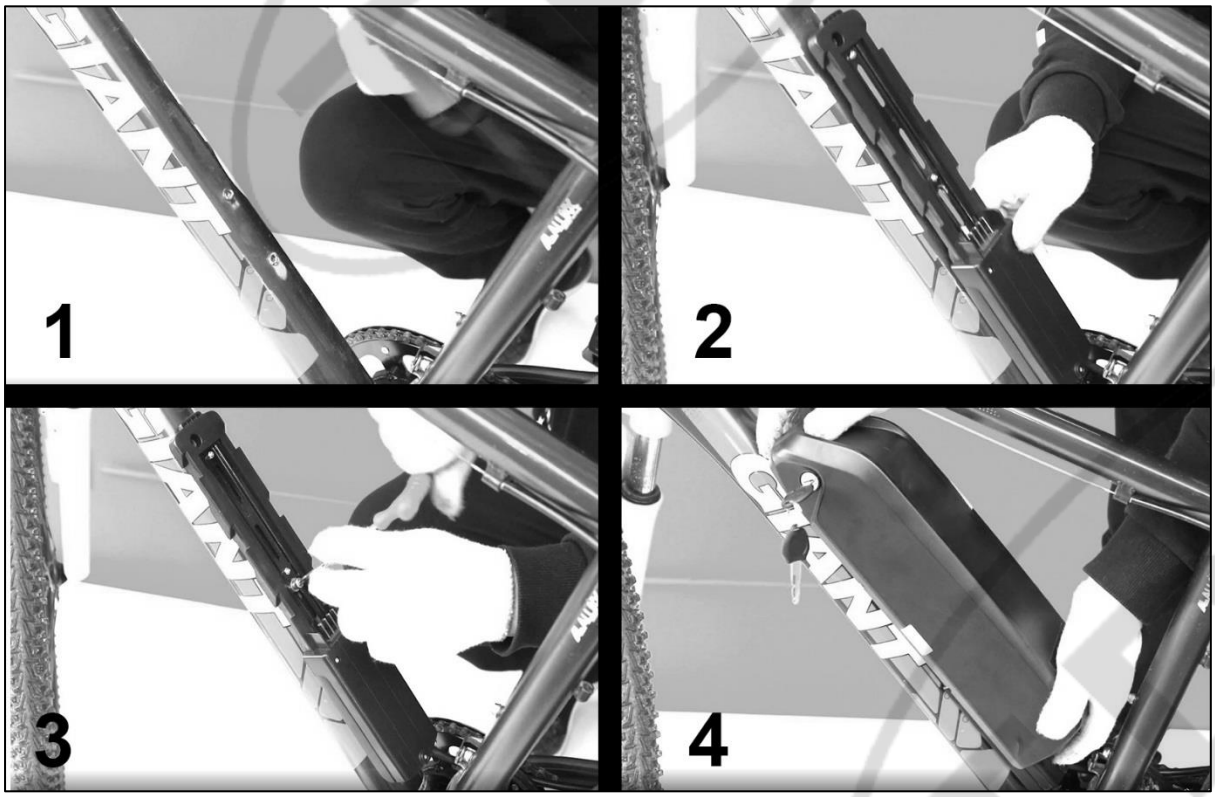
The most common way to install the battery is by using the drink bottle holder mounts on your frame. Simply remove your drink bottle holder, (if you have one) and you're ready to install the battery cradle.

You will be able to tell where your cradle will fit best by simply holding the cradle up against your frame. You will have a few different height options however keep in mind you need room above the cradle to maneuver the battery in and out. You can secure the cradle by using your existing bolts/screws and tighten as shown.

Be careful not to over tighten your bolts/screws as drink bottle mounts and threads are only 'nutserts'. If installed correctly the battery and cradle should feel very secure and not bounce over bumps.

If drink bottle mounts aren't an option, you can drill through holes in your frame and use high tensile steel bolts and lock nuts to attach the cradle. If done correctly, this is a very solid but you need to get some fasteners from local bolt shop.

**Please note that the cradle should always be secure and rigid to avoid any vibrations or movement of the battery.**



# Rear Battery Carrier Rack Installation

The rear rack with a custom-built aluminum slide that interfaces with the battery case and allows you to securely lock the battery into place. In some instances, it also looks best to mount the controller on the stem of the rear rack.

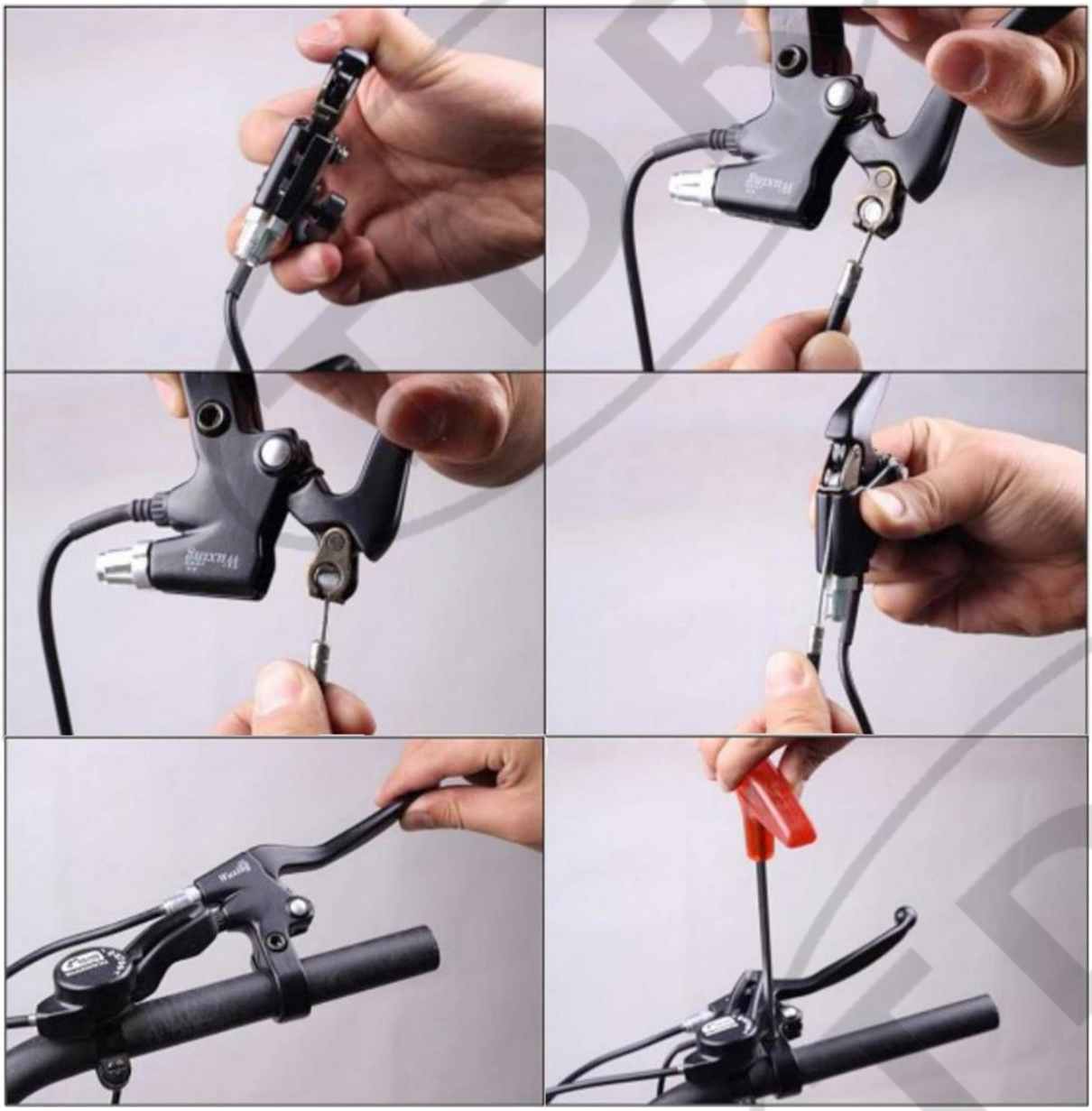
Unfasten the rear rack seat post cam latch almost all the way, so that you can unlatch the seat post and place it over the seat post. Clamp in back into position and tighten the latch all the way by screwing it and then tightened the cam latch. This should be very tight.

## E-Brake Levers Installation

This kit comes standard with e-brake handles. The use of these isn't compulsory, but it's suggested as an added safety. When you pull the lever, it will automatically cut the power to the motor.

Start by sliding them onto your handlebars. Once in position you can tighten the handles using the bolt (under each lever). The e-brake handles accept your normal cable brakes, which fasten inside the lever section in the same way as most other cable brake levers. Pull tight the brake lever all the way and you will see the same mechanism that relinquished the end of your brake cable when you removed it from your existing levers.

Please note that E-brake sensors (not included) are required for the bike with combined shifters and brakes or hydraulic brakes. E-brake sensors purchasing are available from TDRMOTO.



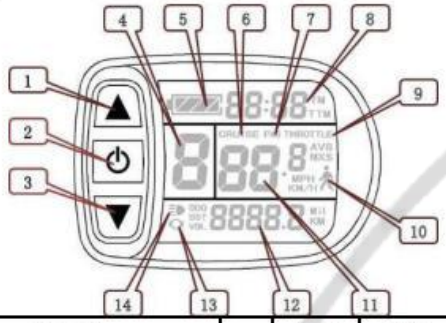
## Throttle Installation

Start by sliding the twist grip throttle onto your handlebars, (usually the right side). Move the throttle so it butts up against the brake lever and tighten in place.

Once you have the throttle secured, make sure the cable is not fouling the brake lever, otherwise re-adjust. Slide the both grips handle onto the handlebars.

# LCD Display User Manual

## Functions and Display




| | | | | | |
|---|---|---|---|---|---|
| 1 | ▲ | UP Button | 11 | Km/H | Riding speed( metric) |
| 2 | ⏻ | SW Button | | MPH | Riding speed ( imperial) |
| 3 | ▼ | DOWN Button | | MXS | MAX speed |
| 4 | ASSIST | Pas level | | AVS | Average speed |
| 5 | | Battery capacity indicator | 12 | Km | Distance( metric ) |
| 6 | CRUISE | Cruise function | | Mil | Distance ( imperial, |
| 7 | PAS | Power-assisted function | | DST | Trip distance |
| 8 | TM | Single trip time | | ODO | Total distance |
| | TTM | Total trip time | | VOL | Battery voltage |
| 9 | THROTTLE | Throttle display | 13 | | The brake display |
| 10 | | 6Km/H push power assist | 14 | | Backlight and headlights |

## Operation

1. ON/OFF

Hold ⏻ button long to turn on the power, and hold ⏻ long for a second time to turn off the power. When the motor stops driving and when the e-bike is not used for a consecutive 5 minutes, it will automatically shut down and turn off the motor power supply.

2. Display 1

Hold ⏻ button to start up and enter display 1.

2.1 Turn on backlight and headlights

Hold ▲ long to turn on backlight and headlights (the controller should have headlight drive output function); hold ▲ long again to turn off the backlight and headlights.

2.2 Assist ratio gear (ASSIST) switch

Hold ▲ or ▼ shortly to switch 1-5 file gear. Gear 1 is for the minimum power, gear 5 is for the highest power. Each startup will automatically restore the gear shutdown last time(the user can set randomly). Gear 0 is without booster function.

2.3 THROTTLE display

Turn on throttle, THROTTLE display.

2.4 Cruise function

After the cruise function is turned on, the trip riding speed is greater than 7 km/ h, hold ▼ long and enter cruise, the CRUISE lit. Brake or hold any button to cancel.

2.5 Display and delete of single Data

After power on for 5 seconds, hold ▲ and ▼ at the same time, single trip riding time (TM) and single trip distance (DST) flash, hold ⏻ button shortly, the content of both is cleared. If failed holding the button within 5 seconds, it will automatically return the display interface after 5 seconds, original content is preserved.

3. Display 2

Hold ⏻ button shortly in display 1 to enter display 2. In the riding mode after 5 seconds, display 2 automatically returns to display 1.

4. Display 3

Hold ⏻ button shortly in display 2 to enter display 3. In the riding condition, five seconds later, a single maximum speed (MXS) display automatically returns to the real riding speed (Km/H).

5. In display 3, hold ⏻ button shortly (SW),and the display will re-enter display 1.

6. Hold ⏻ button to turn off the display and the power supply of controller.

7. Automatically prompt interface

7.1 Error Code Display

| Error Code | Definition |
|---|---|
| 01__info | Throttle Abnormality |
| 03__info | Motor hall signal Abnormality |
| 06__info | Motor or controller has short circuit Abnormality |

Electronic control system failure will display (flashing) fault code. Once the fault was removed, it automatically exits from the fault code display interface.

## General Project Setting

1. Set maximum riding speed

After power on for 5 seconds, hold ▲ and ▼ at the same time, maximum riding speed Km/H and MXS flash, hold ▲ or ▼ shortly to set the maximum riding speed (default 25Km/H). ⏻ button shortly and Hold go to the next parameter settings.

**DO NOT SET ABOVE LOCAL SPEED LIMIT FOR THIS DEVICE.**

2. Wheel diameter setting

The wheel diameter will be set after finishing setting the maximum riding speed, wheel diameter specifications flashes. Hold ▲ or ▼ shortly to set the specifications of wheel diameter. Select the range 6,8,10,12,14,16,18,20,22, 24,26,700c and 28 inches. Hold ⏻ button shortly and go to the next parameter settings. **FIREFLY WHEEL IS SET FOR 12" WHEEL DIAMETER.**

3. Set the metric units

The metric units will be set after finishing setting wheel diameter, Km/H and Km flash. Hold ▲ or ▼ shortly and select the three metric units of speed, mileage, and ambient temperature in synchronization.

| Display | Metric | Imperial |
|---|---|---|
| Riding speed | Km/H | MPH |
| Total distance | Km | Mil |

4. Km/H and Km stop flash after metric unit setting is completed. Hold ⏻ button shortly again to re-enter the maximum riding speed setting interface; or hold ⏻ button long to exit from setting environment of routine projects and save the setting values, returning to display 1.

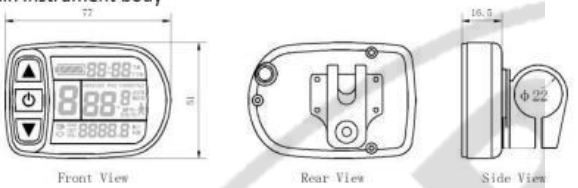
5. Exit from routine project setting

All three routine project settings can exit from the setting environment and return to the display if hold ⏻ button long after each setting is completed, meanwhile the setting values are saved.

Under each setting interface, if the button failed holding for more than 1 minute, it will automatically return to display 1, and the setting value is invalid.

## Outline Drawings and Dimensions

1. Dimensions of main instrument body




2. Wiring diagram

## Pedal Assist Sensor Installation

The purpose of the pedal assist sensor is to generate a signal from the rotation of the crank that the controller processes to know that you're pedaling and want some power!

The pedal assist is the primary function of an electric bike and the level of assistance is adjustable on the handlebar LCD. Remove the pedal crank and place the magnetic pedal assist sensor on the bottom bracket. Please keep in mind on the direction of the arrows. The distance between the disk and the sensor should be about 2mm.

## Tidy Up

It's time to tidy up the wires after installed all major component. Use the zip/cable ties to bundle and secure the cables coming from the base of the battery, controller, pedal sensor and anything else leading up to the handlebars.

Make sure the brakes are adjusted, the wheel is secure, screws are tightened, and everything is functioning as expected.

# Battery Operation

The battery used in this conversion kit is very sleek in. The way it attaches to its cradle, (which also houses the controller) is by sliding the battery down onto the cradle and locking it into place. This may take a couple attempts at getting it right however once in place it makes for a very secure fitting that won't rattle around during use (a common problem with other systems).

The battery should never be ridden without being locked into the cradle. It should also never be dropped or treated roughly. If you're battery is returned to us and has signs of being dropped, this will void the warranty. Even with the battery locked in and turned off, the bike should be locked using a high-quality bike lock.

Never modify the electrical system. Alterations may cause a fire, resulting in serious injury and could also damage the electrical system. Charge with the supplied charger only. Use of the wrong charger may cause a fire or explosion, resulting in serious injury. Ensure the voltage and frequency of the charger is compatible with mains electrical supply.

Use the battery charger in dry locations only and the battery must be charged before first use. For maximum battery performance and service life, charge the battery after each use, and charge at temperatures between 0 and 40°C (32 and 104°F).

Battery charging generally takes up to 4 - 8 hours from discharged to fully charged. Do NOT charge the battery continuously for more than 24 hours. If the bicycle has not been used for over 4 weeks, charge the battery before use. Always switch the bicycle OFF after each use. The battery pack can be recharged repeatedly. However, rechargeable batteries eventually need to be replaced. A significantly reduced operating period after charging indicates that the battery is no longer serviceable and should be replaced. Discard old batteries in an environmentally responsible manner.

The battery charger has a charge status LED indicator:

- Red - Battery charging.
- Green - Battery fully charged or disconnected.

**To charge the battery:**

Remove the battery from the bicycle, then plug the charger connector into the battery's charging port.

Connect the charger to a mains electrical supply and switch ON. The indicator LED on the charger illuminates red to show the battery is charging.

When the battery is charged (approximately 4-8 hours), the charger indicator LED illuminates green. Disconnect the charger from the electrical supply, then put the battery back to the bike.

### Battery Storage

When storing the batteries for a long period of time:
Charge the batteries at least every 30 days to avoid capacity loss. Batteries slowly self-discharge when unused over a long period. If the battery cells are left at a critically low charge state, the lifespan and capacity will be permanently reduced.

Always disconnect the charger from the mains electrical supply and battery before storing the battery.

Avoid storing batteries in extreme temperatures, whether hot or cold. The recommended battery storage temperature is between 0 and 25°C (32 to 77°F). Avoid exposing batteries to temperatures at or above 40°C (104°F) for extended periods.

Batteries are best kept in a cool, dry place. Do not allow batteries to accumulate condensation, as this may cause shorting or corrosion.

## Maintenance and Care

Extra maintenance is required over and above a normal bicycle.

One of the main things you may come across is that your spokes need to be tightened more often than a non-electric wheel. A spoke-tightening tool is needed to check the tightness of each spoke after the first 50km and then every 100km.

It is important to do a check on all of your fasteners every few months. It never hurts to go over your bike with tools, tightening and checking everything that can be checked. This will ensure you have a safe and well-serviced bike.

Please keep in mind the usual bike maintenance like tyre pressures, brake pads, etc.

Never use a high-pressure washer or a garden hose to clean the e-bike system. The force of a water jet could damage the electrical components of the propulsion system. Do not use water to clean electric components. Use a wet rag or similar.

The motor in this kit is a sealed unit and requires no maintenance during its design life.

Lastly (just to reiterate) it's important that you charge the battery at least once every month to ensure the battery maintains a safe storage level.

# Troubleshooting

Our troubleshooting advice will take you through a logical way to diagnose any issues that may arise during installation and use.

Before commencing troubleshooting, disconnect all components. Do not short cut this process. There are countless times a loose plug has caused grief. By disconnecting all the plugs and then reconnecting just the crucial components, this will solve any loose plug issue.

Go through one by one plugging in the other components (such as the PAS or the e-brake handles) to see if any of these are the cause of the problem. In this basic state you may discover the culprit quickly.

| Fault | Solution |
|---|---|
| **Display turns on, but motor does not Activate** | Check the motor plug from the controller. This is a very stiff connection and will not work unless the plug is all the way in to the indicator line. The twisting of the handlebars can sometimes cause the plug to pull out slightly if there is not enough slack in the motor cable.<br><br>Check the eBrake levers. Make sure the lever is free of locking.<br><br>Check the Pedal Sensor. Make sure Pedal Sensor is installed properly. |
| **Motor runs backwards** | Remove the motor from the forks and switch the direction. |
| **Motor feels like it has something caught inside or some kind of brake on inside** | Remove the disk brake bolts completely and see if this remedies the issue. If the disk brake bolts are too long, they will go too far into the housing and fowl against the internals. |
| **Rim has a buckle or spokes coming loose all the time** | We would recommend a competent wheel builder to fix any major spoke tension issues, however there are some good youtube tutorials on how to adjust spoke tension. |
| **Spokes has snapped or missing** | We stocks spare spokes for very reasonable prices, just check out our spares section online and you can find the right type and length for your kit. |
| **Disk brake bolts foul against the inside of the fork** | If you're not running disk brakes, you don't need the bolts so just remove them. If you are running disk brakes, you will have to use some additional washers to 'space' the motor over to the non-disk brake side to achieve clearance. |
| **Disk brake bolts won't tighten** | You may require some longer bolts, but be careful they are not too long and foul against the internals of the motor. |
| **I have hydraulic brakes, or integrated shifters and brakes** | If the e-brakes provided are not ideal, either you can elect not to use e-brake handles (the kit will still function) or you purchase an e-brake cut-off sensor which can mount to your existing brake handles. |
| **I don't want to use PAS, or don't want to use throttle** | The controller is configured so you can run both the pedal as- sist sensor, and the throttle, or one or the other. |
| **Display won't turn on, unless the battery charger is plugged in** | Check all the connections, make sure the battery is charged. If the display turns on only when the battery charger is plugged in, you will have to submit a service ticked with this information. |
| **Error message on the display** | Please refer to display manual for error code definition and if<br><br>needed, report the error code to TDRMOTO in a service ticket. |
| **My kit looses power over bumps** | Check all connections to make sure all the plugs are all the way connected. Check that the battery is locked to the cradle and not loose. A momentary discontinuity in power will turn the kit off. |

**Some experts believe that the incorrect or prolonged use of almost any product may cause serious injury or death. To help reduce your risk of serious injury or death, refer to the information below.**

- Consult all documentation, packaging and product labelling before use. Note that some products feature documentation available online. It is recommended to print and retain the documentation.
- Before each use, check the product for loose/broken/damaged/missing parts, wear or leaks (if applicable). Never use a product with loose/broken/damaged/missing parts, wear or leaks.
- Products must be inspected and serviced (if applicable) by a qualified technician every 6 months. This is based on average residential use by persons of average size and strength, and on a property of average metropolitan size. Use beyond these recommendations may require more frequent inspections/servicing.
- Ensure that all users of the product have completed a suitable industry recognized training course before being allowed access to the product.
- The product has been supplied by a general merchandise retailer that may not be familiar with your specific application or description of application. Be sure to attain third-party approval from a qualified specialist for your application before use, regardless of any assurances from the retailer or its representatives.
- This product is not intended for use where fail-safe operation is required. As with any product (for example, automobile, computer, toaster), there is the possibility of technical issues that may require the repair or replacement of parts, or the product itself. If the possibility of such failure and the associated time it may take to rectify could in any way inconvenience the user, business or employee, or financially affect the user, business or employee, then the product is not suitable for your requirements. This product is not intended for use where incorrect operation or a failure of any kind, including but not limited to, a condition requiring product return, replacement, parts replacement or service by a technician may cause financial loss, loss of employee time or an inconvenience requiring compensation.
- If this product has been purchased in error when considering the information presented here, contact the retailer directly for details of their returns policy, if required.

If you have any questions regarding any issues with your electric bicycle, please contact our Customer Support team on: 03 9931 1626 or info@tdrmoto.com.au

**12 Month Limited Warranty**

We warrant against possible manufacturing defects providing the following conditions are satisfied:

- Product is completely and correctly assembled
- Product is used under normal condition for its intended purpose
- Product receives all necessary maintenance and adjustments

**What is covered by this Limited Warranty;**
1 Year Warranty on Motor
1 Year Warranty on Battery

**What is not covered by this Limited Warranty:**

- Top Speed is not covered under warranty, if your electric bike does not reach estimated top speeds, this is not covered under warranty.
- If product does not reach the factory estimated distance advertised, which can be vary depending on how you use the product and, total weight carried, road condition etc
- All batteries will and do lose capacity over time, capacity loss is not covered under warranty. (If the battery unit is used incorrectly or seal tampered with, this will void your battery warranty). Others that is not covered under warranty for battery are; If you have not charged your battery regularly, left your battery sitting unused for over more than 3 months, If you damaged your charger or battery by incorrect use.
- Damage due to normal wear and tear and maintenance. Parts that are not covered under warranty under for normal wear and tear include: controller, lcd display unit, brakes, thrum throttle, derailleur and gear adjustments, tightening on all nuts, spokes, bottom bracket, cables, etc.
- Damage due to external causes.
- Any minor scratches, marks or imperfections will not be covered.

**Warranty will be void if the product is ever:**

- Misused, abused or neglected
- Modified in any way
- Rented, installed for commercial use, sold or given away

TDRMOTO will not be liable for incidental or consequential loss or damage due directly or indirectly from use of this product.

**Warranty and Repair Claim**
To claim your warranty, please provide proof of purchase and contact us via email or phone listed below. The cost of sending and returning of your product is at customers expense.
Warranty repair timeframe may take up to 60 days depend on replacement part availability. If there is a delay due to the nature of the repair, or a delay beyond our control, we will inform you and do whatever possible to limit the turnaround time of your product.

**Other Repairs**
Repairs of TDRMOTO products which is not covered by warranty can also be repaired at authorised service centre's at customers cost. We will carry most of the spare parts on our current and past models. Should you wish to purchase any parts, please contact us.

**Contact Information**
Website: www.tdrmoto.com.au email: info@tdrmoto.com.au
Address: 14 Hammer Court Hoppers Crossing VIC 3029 Ph: 03 9931 1626

Our goods and services come with guarantees that cannot be excluded under the Australian Consumer Law. For major failures with the service, you are entitled:

- to cancel your service contract with us; and
- to a refund for the unused portion, or to compensation for its reduced value.

You are also entitled to choose a refund or replacement for major failures with goods. If a failure with the goods or a service does not amount to a major failure, you are entitled to have the failure rectified in a reasonable time. If this is not done you are entitled to a refund for the goods and to cancel the contract for the service and obtain a refund of any unused portion. You are also entitled to be compensated for any other reasonably foreseeable loss or damage from a failure in the goods or service.

| Motor Serial Number | Battery Serial Number | Purchase Date |
|---|---|---|
| | | |