



# ZM OWNERS MANUAL

V 1.1 | 2022  
[www.g-forcebike.com](http://www.g-forcebike.com)

# TABLE OF CONTENTS

Table of Contents	2
WARNING	4
Unboxing	6
What's in the Box	6
Frame Number and Motor Number	7
EBike Structure Introduction	7
Installation of Integral Body	8
How to Take Out and Put in the Battery	10
How to Adjust the Suspension Fork	11
How to Charge	11
Instrument Introduction	13
ON/OFF LCD DISPLAY	14
OPERATING THE LCD DISPLAY	14
DISPLAY SETTING	15
Safety Notes	
OPERATING SAFETY	16
Helmets and Local Laws	16
Pre-ride Safety Check and Inspection	16
Riding in Wet Conditions	16
Riding at Night	17
Max Weight	17
PRE-RIDE SAFETY CHECK	17
ERROR CODES	18
WARRANTY	19
Electric Bike Mauntenance	20
Regular cleaning	20
Lubrication	21
Check the bolts	21



Check the bolts .....21

Tire pressure .....21

Brake Pads .....21

Waterproofing .....21

Battery care .....22

**DISCLAIMER** .....22



# WARNING!

Read this entire manual before assembling or using your new electric bike. Do not modify, disassemble, or replace the original electrical components on your bike. Doing so will invalidate your warranty and could put you in danger. Riding any type of bike comes with some risks which can't be predicted or avoided. Taking proper care of bike components can lower the risk of sudden failure of components but cannot prevent it. These sudden failures could cause serious harm, injury, or death to the rider. If you notice abnormalities in any component on the bike, take it to a licensed mechanic to be repaired or replaced immediately.

G-force Inc assumes no liability for harm, injury, or death of the rider. This manual is not intended to function as a detailed service manual.

G-force recommends having your local bike shop mechanic perform a detailed safety check of your bike before your first ride. Ensure your local mechanic is experienced and reputable. The G-Force ZM can withstand most rain showers without sustaining damage. The bike has an IP rating of 65. This means it is dust tight and can withstand jetting water. See the IP code for more details. It does not mean that the bike and its mechanical and electrical components are waterproof. We do not recommend storing or using the bike in excessively wet conditions. The warranty for the G-force ZM does not cover water damage.



# **THANK YOU FOR YOUR PURCHASE!**

We appreciate your purchase and we hope you thoroughly enjoy riding your E-Bike.

If you need any assistance or have any questions please feel free to contact us.

## **CONTACT INFORMATION**

Email: [support@g-forcebike.com](mailto:support@g-forcebike.com)

Website: [www.g-forcebike.com](http://www.g-forcebike.com)


Phone: (909)330-6521



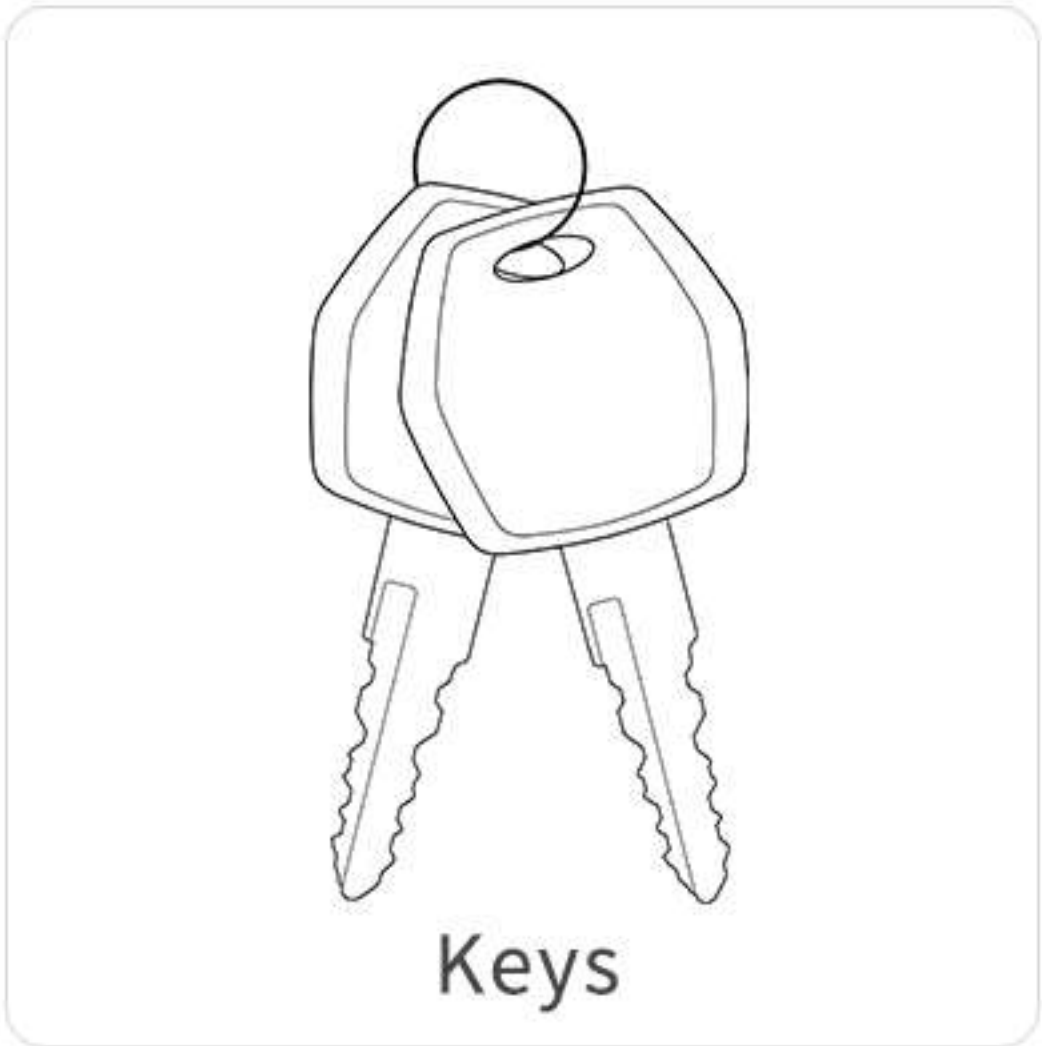
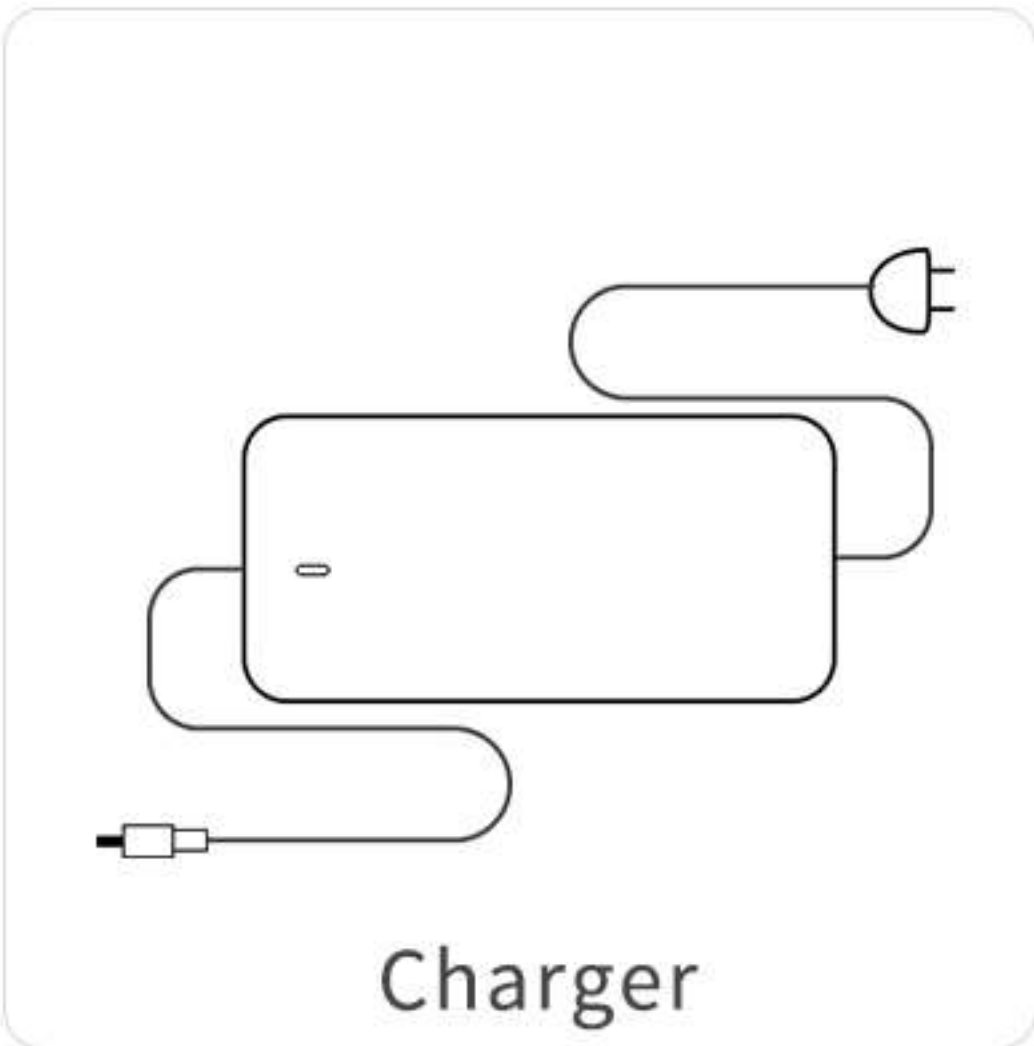
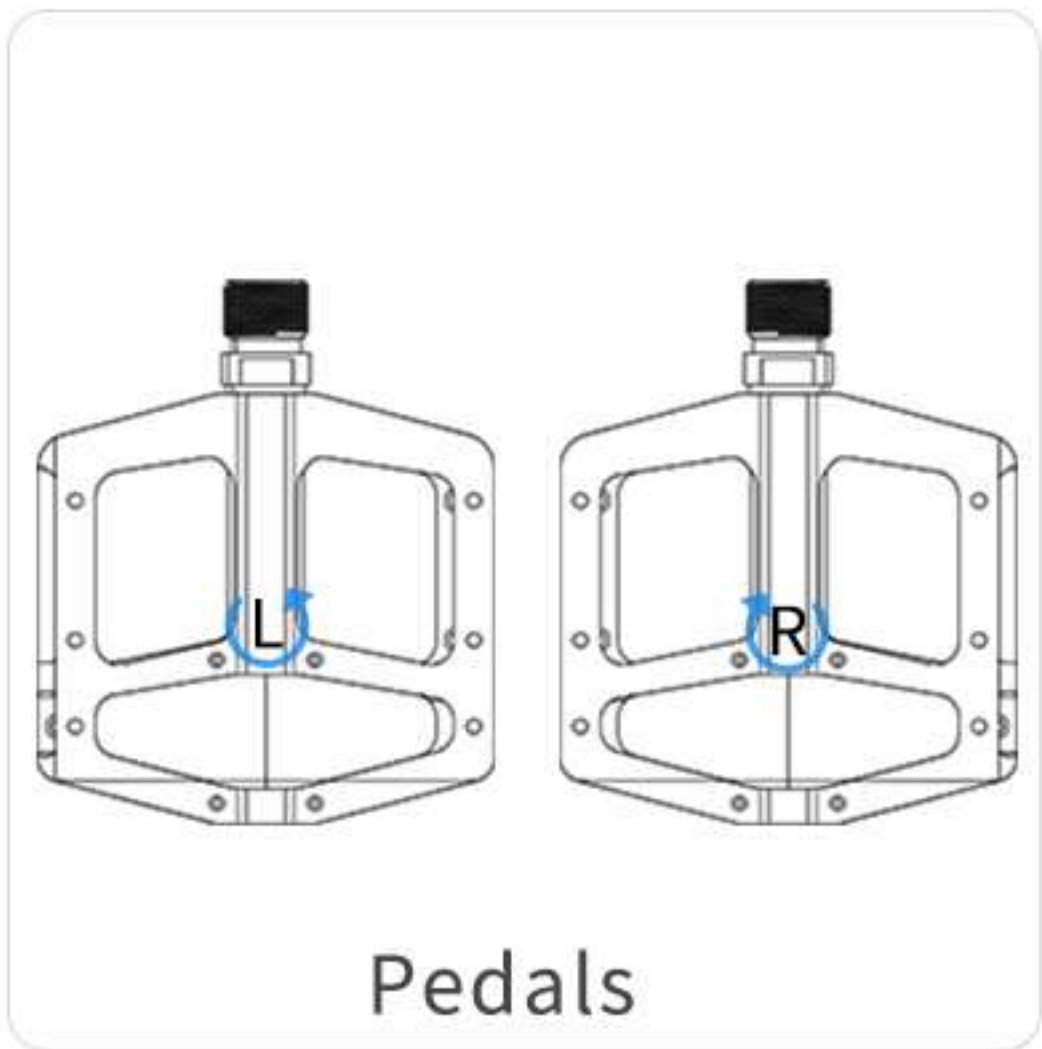
# UNBOXING

Congratulations on your purchase of a new G-Force E-Bike! Your bike and related accessories are inside your box, and the instructions below are meant to show you all the parts inside the box. Before removing the packing foam, please take out all the parts to confirm if there are any missing parts.

If any parts are missing or damaged, please contact G-Force customer service as soon as possible.

 **Note:** If this is your first time riding or the first time you assemble an ebike, we recommend you seek professional help, preferably from a local, certified bike mechanic.

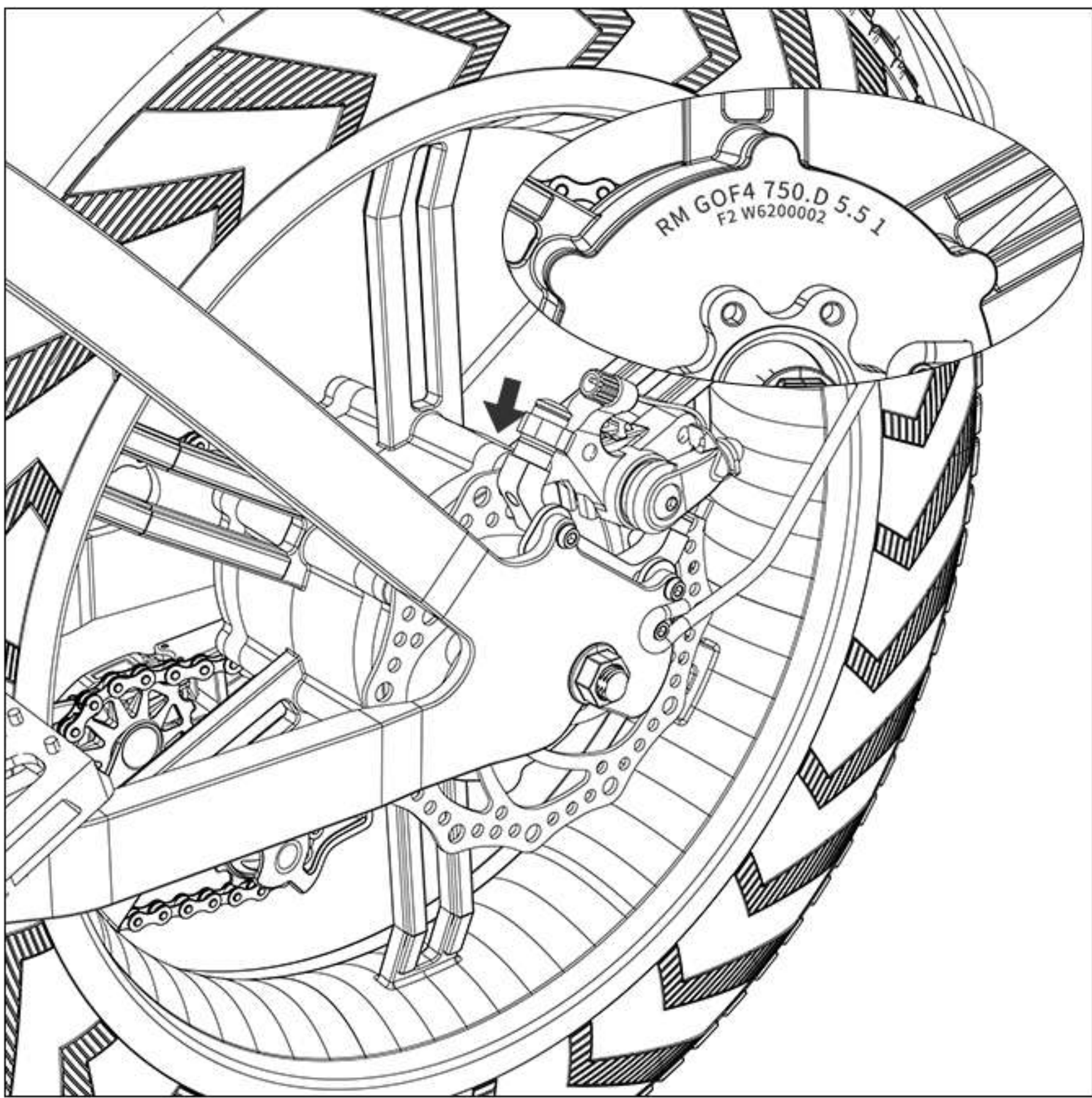
## What's in the box:





## FRAME NUMBER AND MOTOR NUMBER

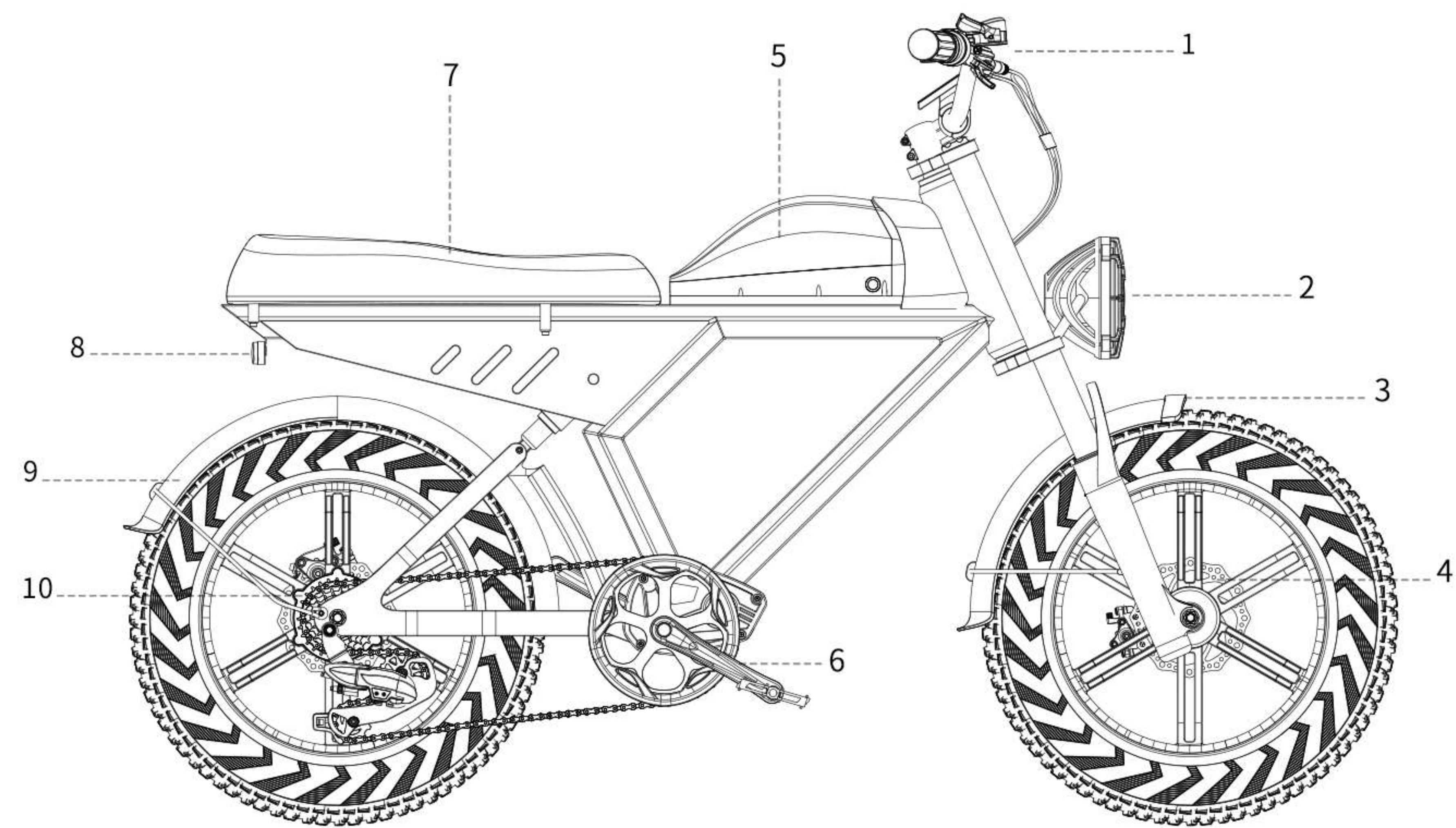
Your bike has two unique serial numbers on the frame and on the motor.  
As shown in the picture



Please find the serial numbers stamped on your bike and keep records yourself.  
The motor number and frame number will be the proof of purchase for G-FORCE  
to honor the warranty.

Also, electric bike is stolen, you can provide the frame number for law enforcement.

## EBIKE STRUCTURE INTRODUCTION

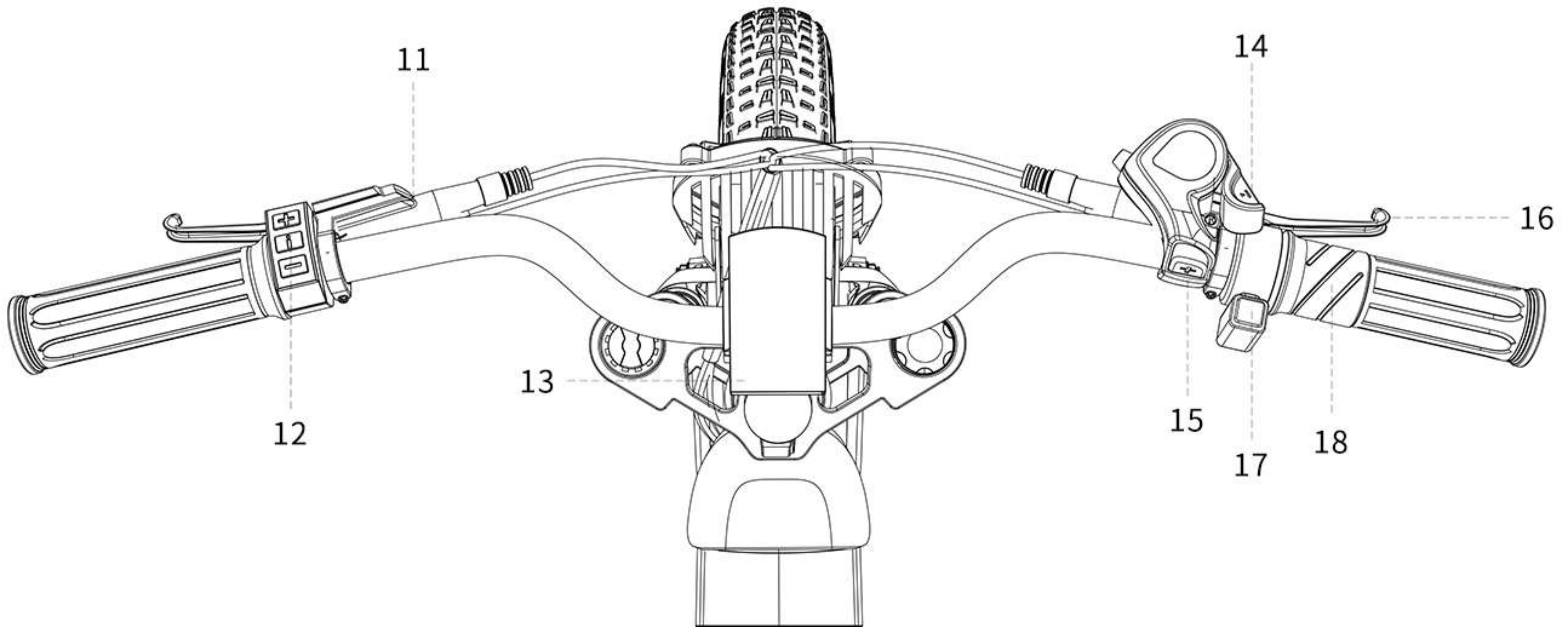




1. Handlebar
4. Brake disc
7. Ebike Seat
10. Motor

2. Headlight
5. Battery
8. Rear light

3. Front fender
6. Crank Shaft
9. Rear fender

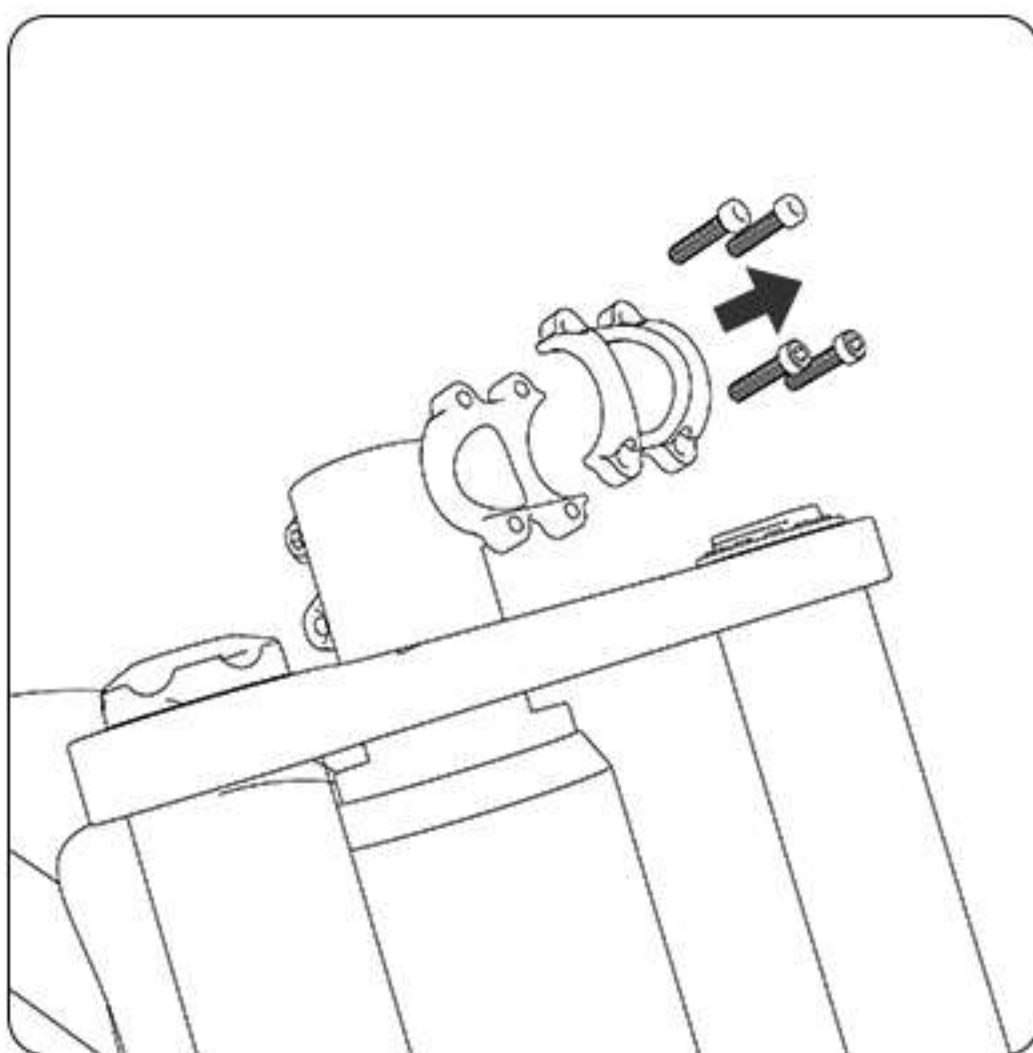


11. Front brake lever
14. Downshifting button
17. Horn button

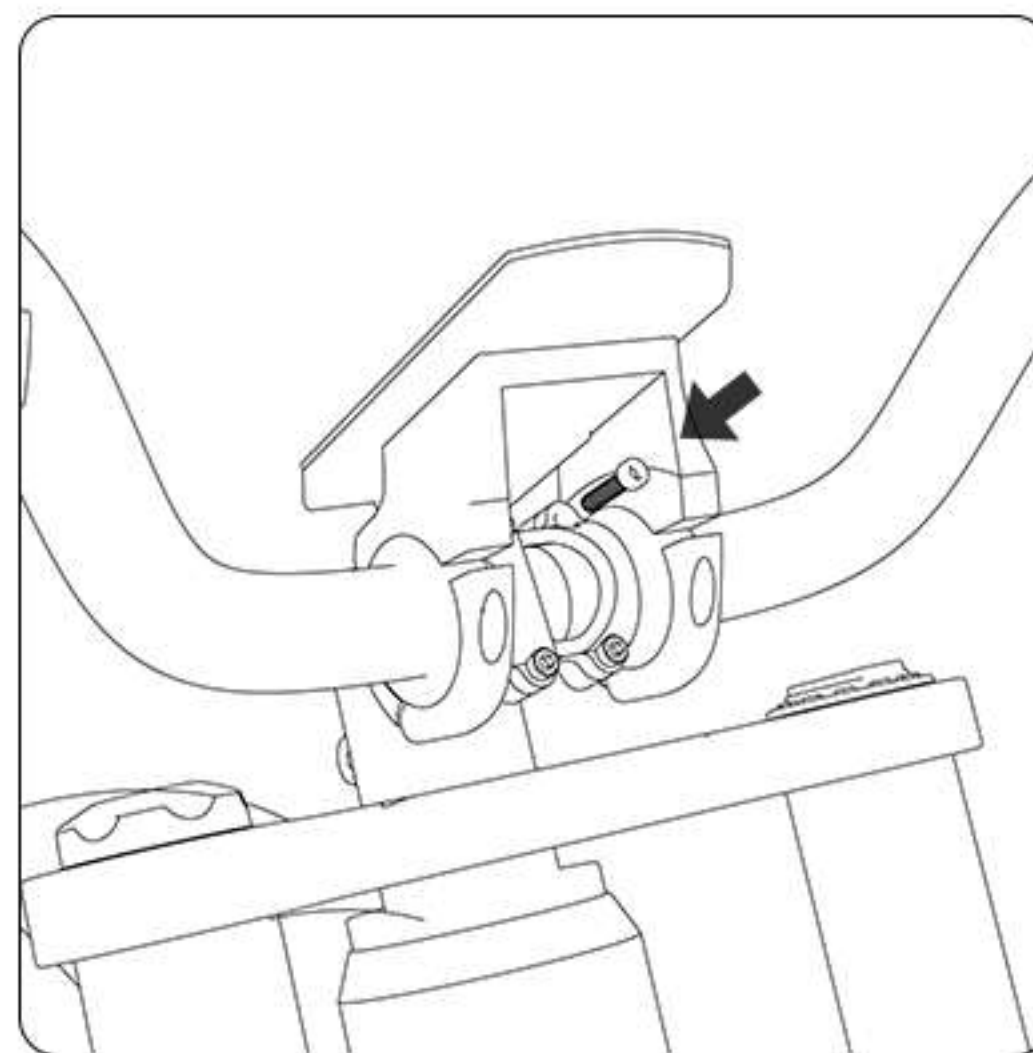
12. On/Off button
15. Upshifting button
18. Half twist throttle

13. Display
16. Rear brake lever

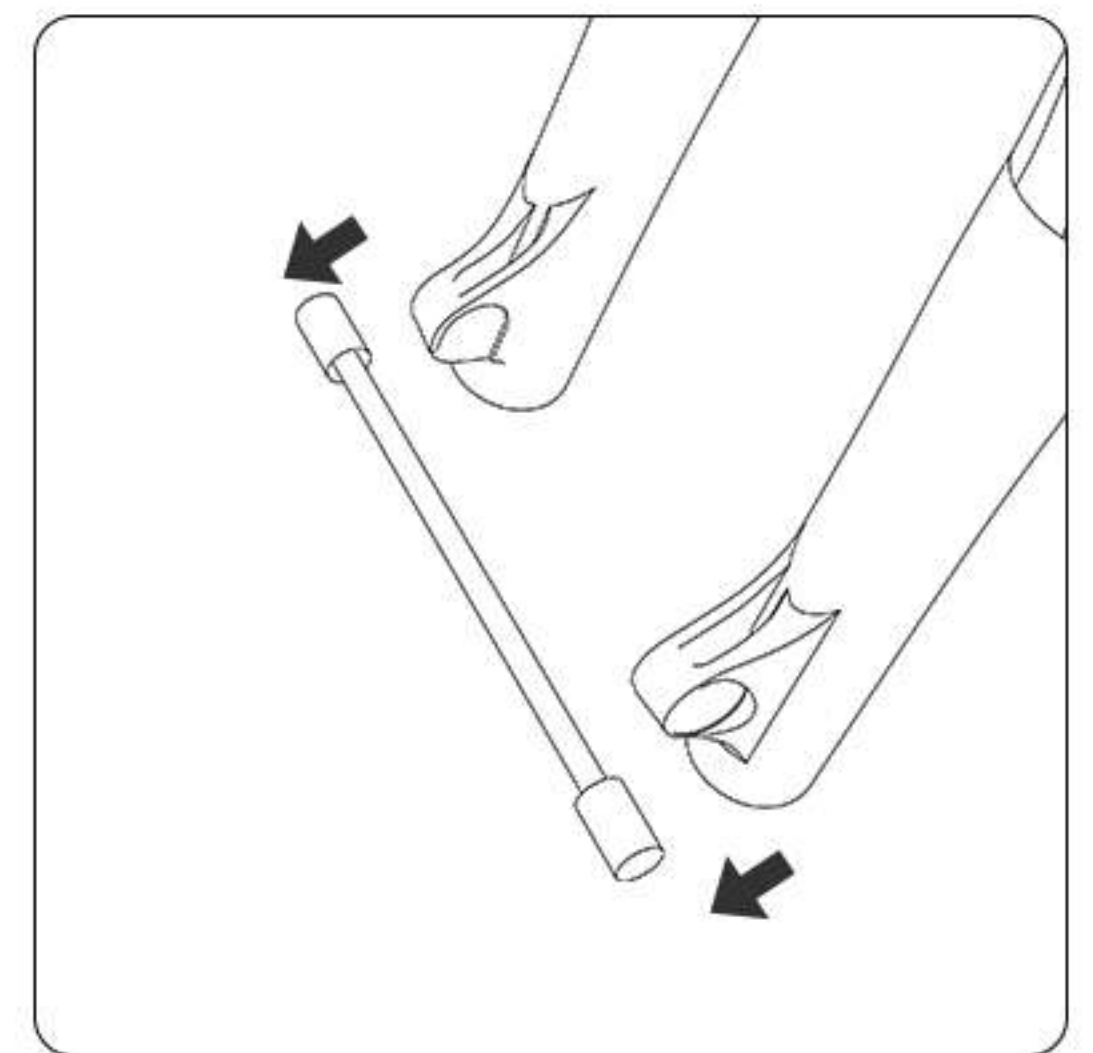
## INSTALLATION OF INTEGRAL BODY



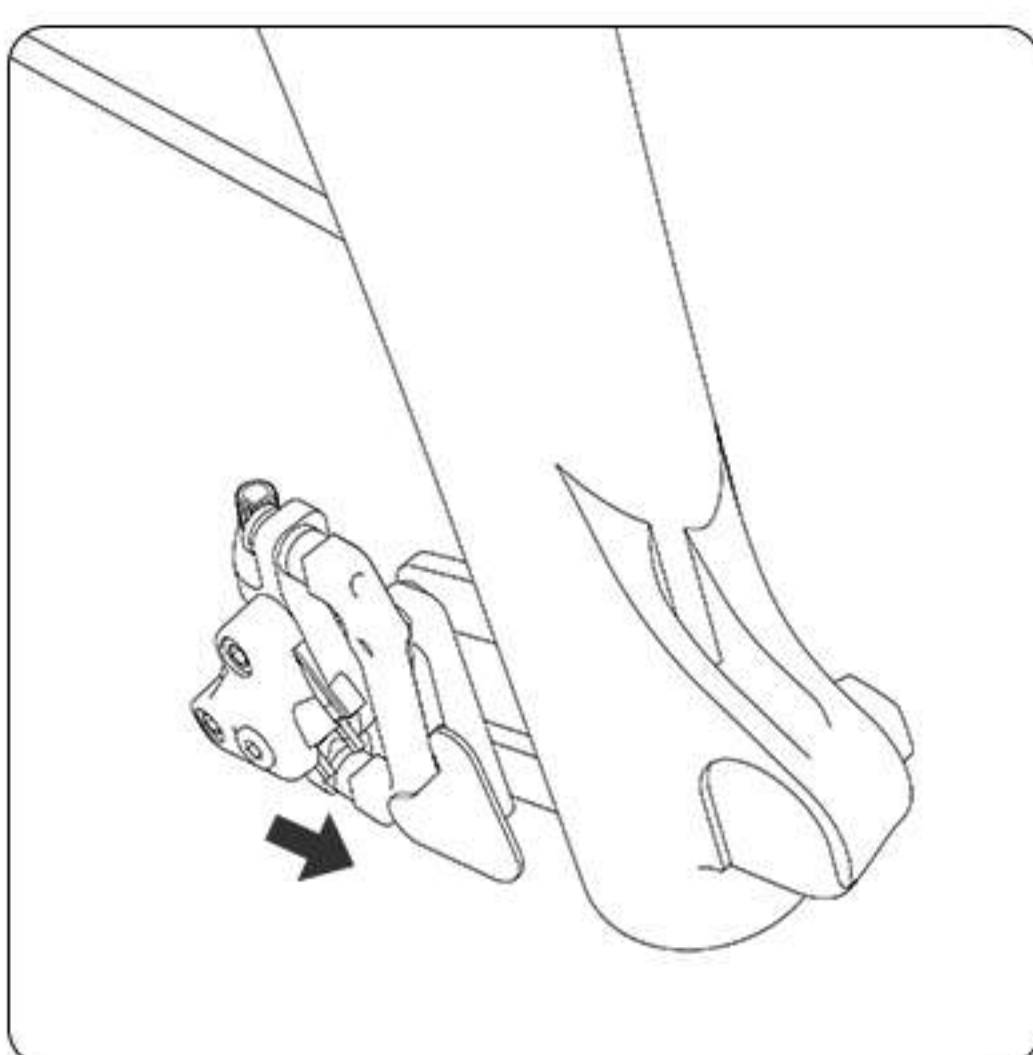
1. Use a 4mm Allen key to remove all bolts.



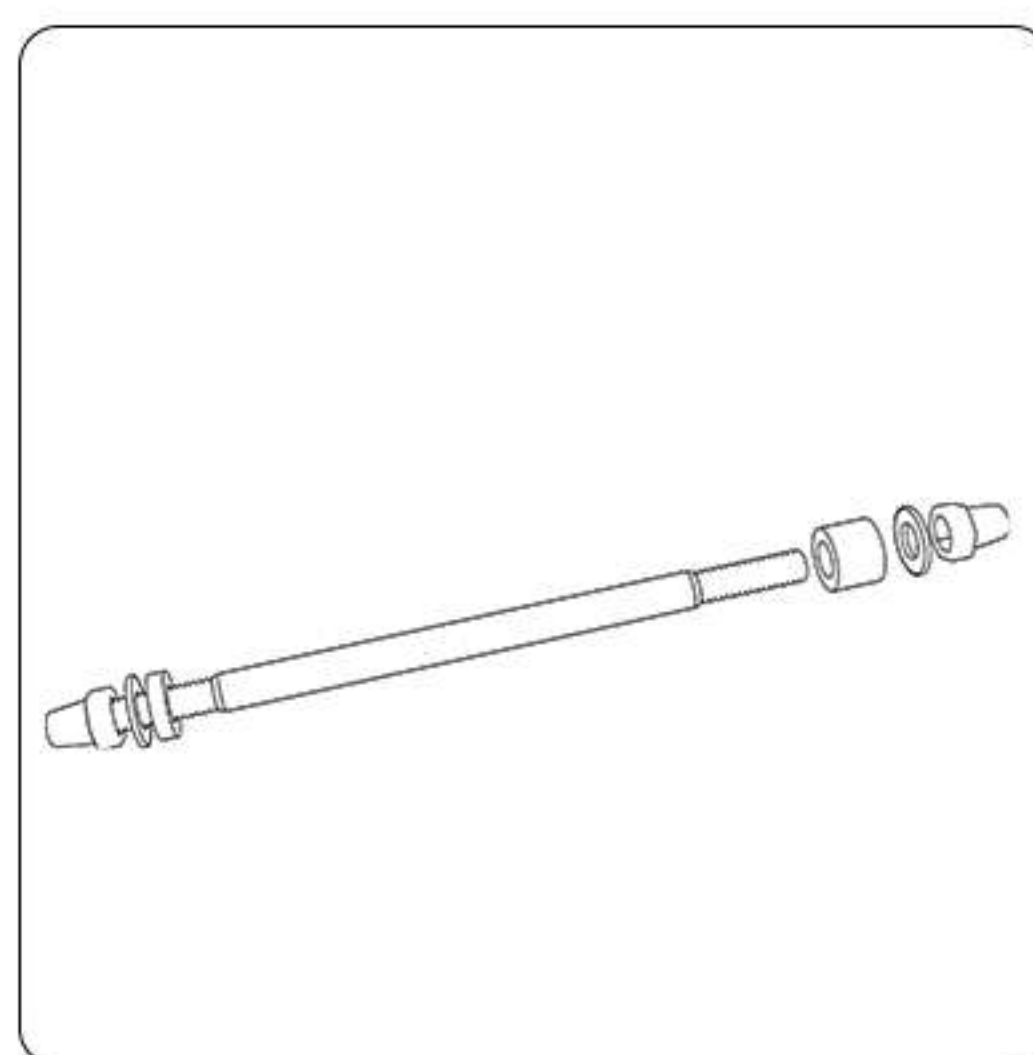
2. Attach the handlebar to the stem connection, and thread in the bolts.



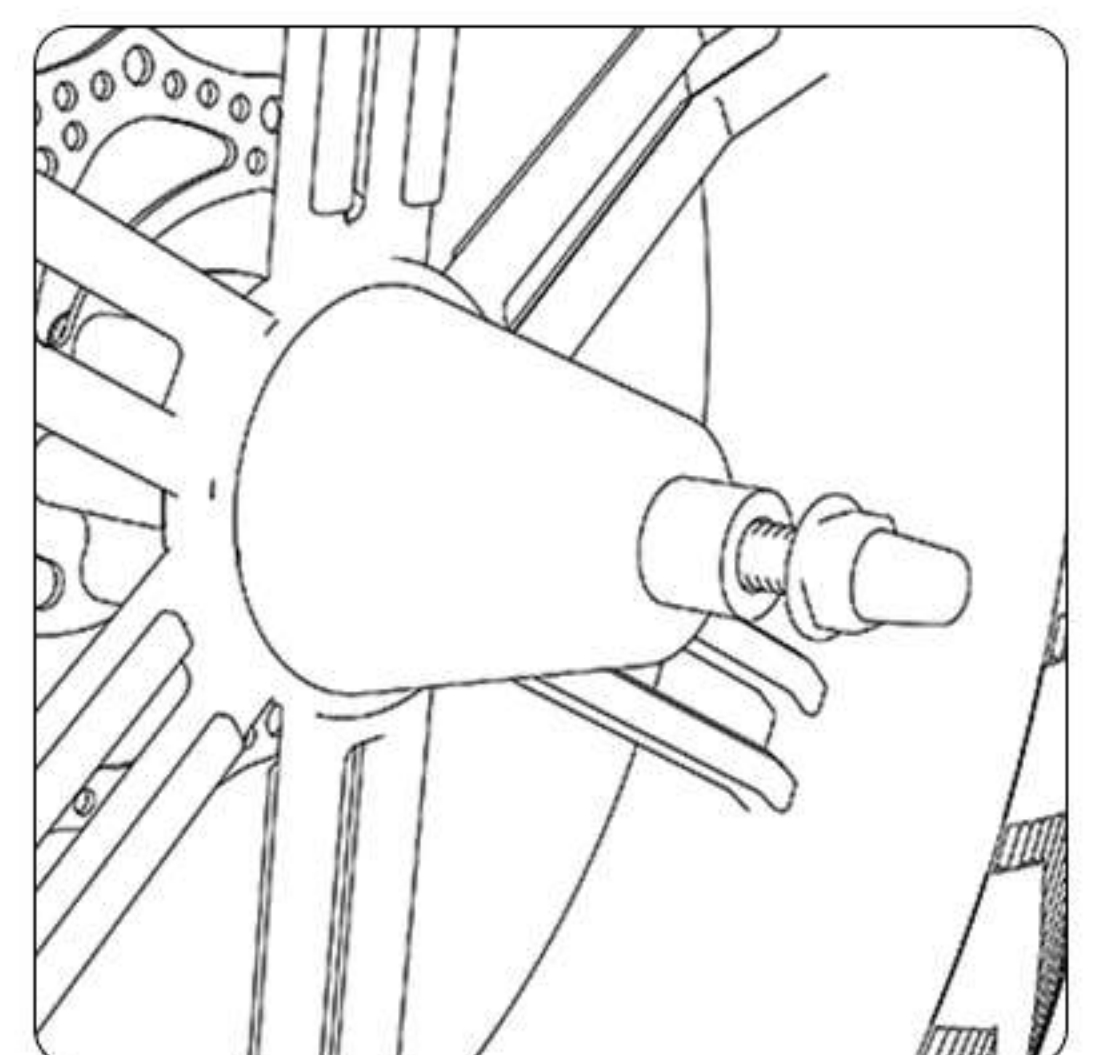
3. Gently take down the fork dropout protector



4. Release the front brake by removing the plastic spacer.



5. Unscrew the axle nut from one side to remove one steel washer and one SMALLER black spacer.

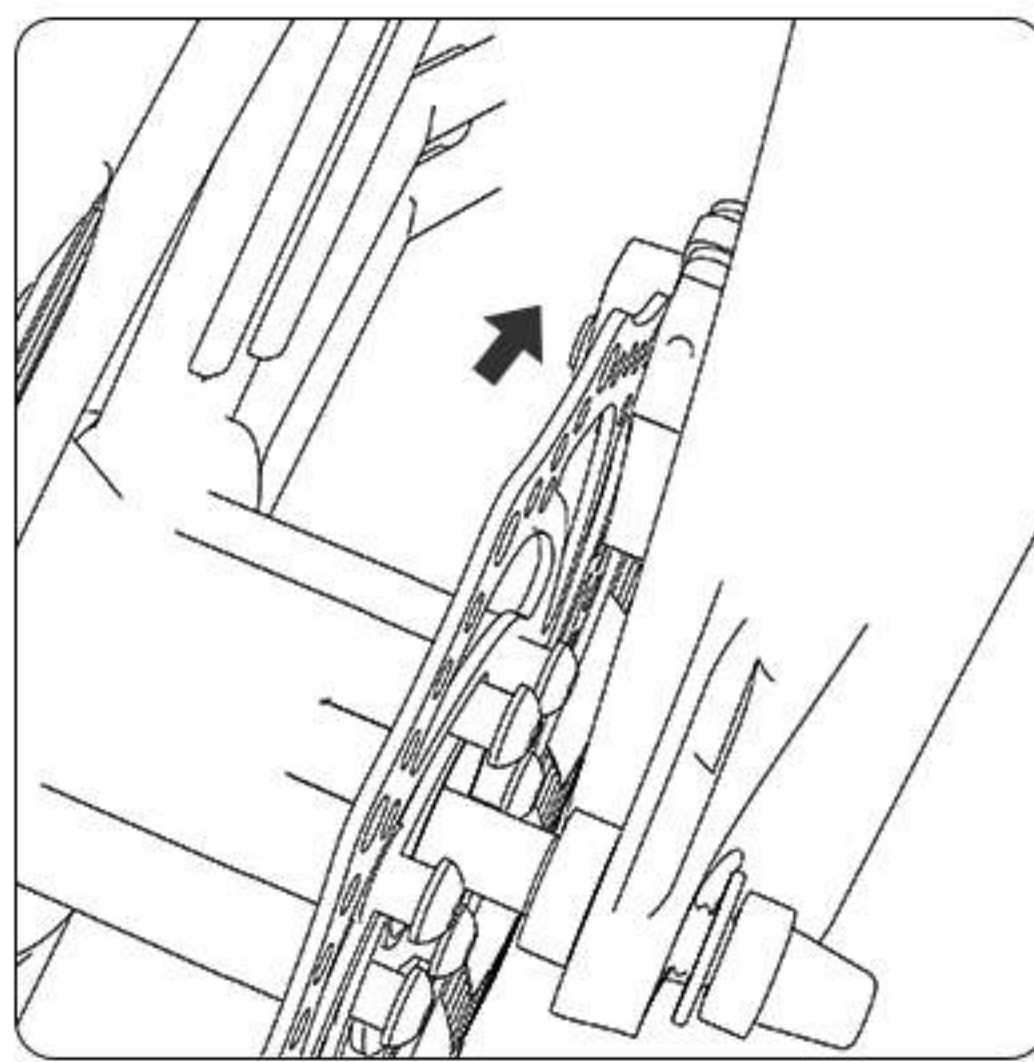


6. To install a nutted hub front wheel, pass the axle through the hub from the opposite side of the brake rotor.

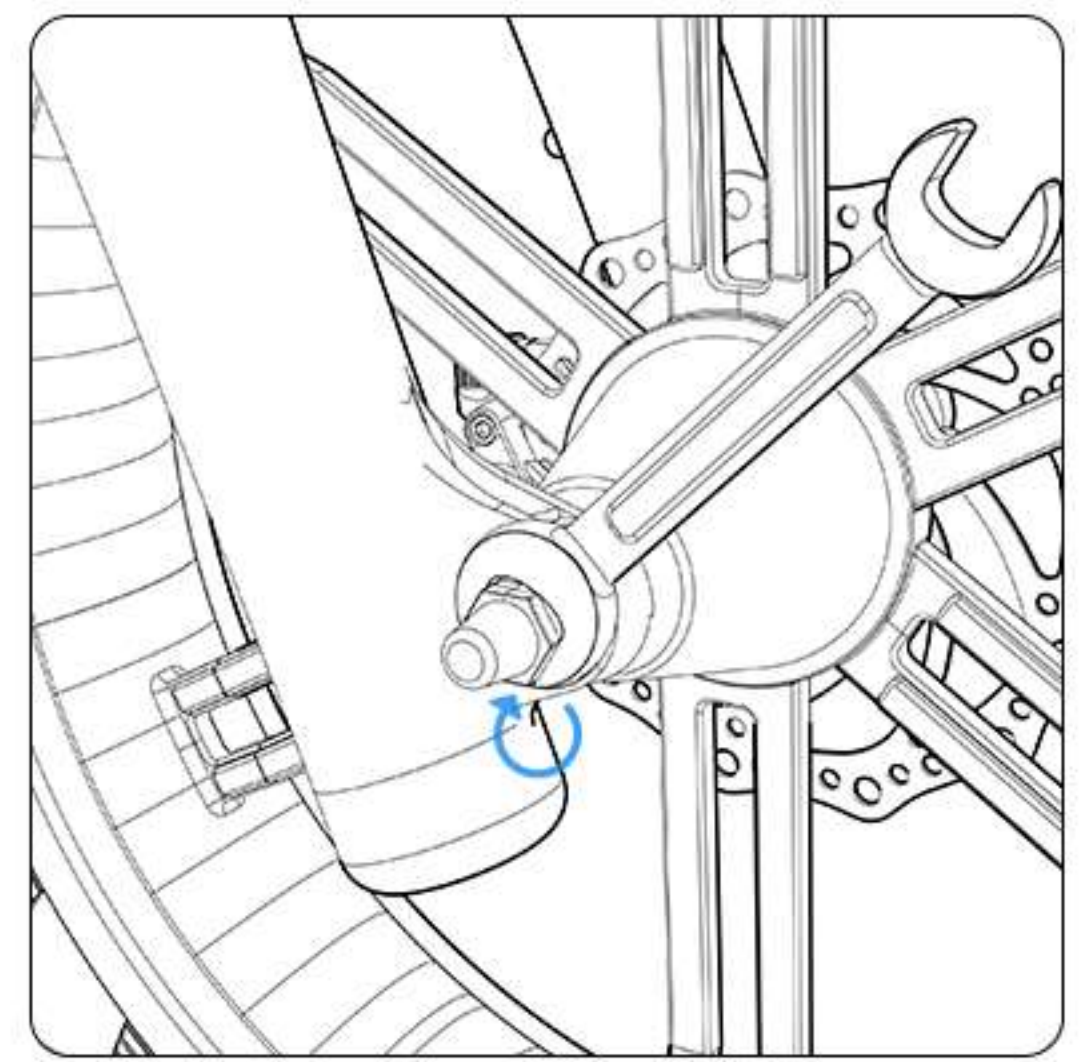




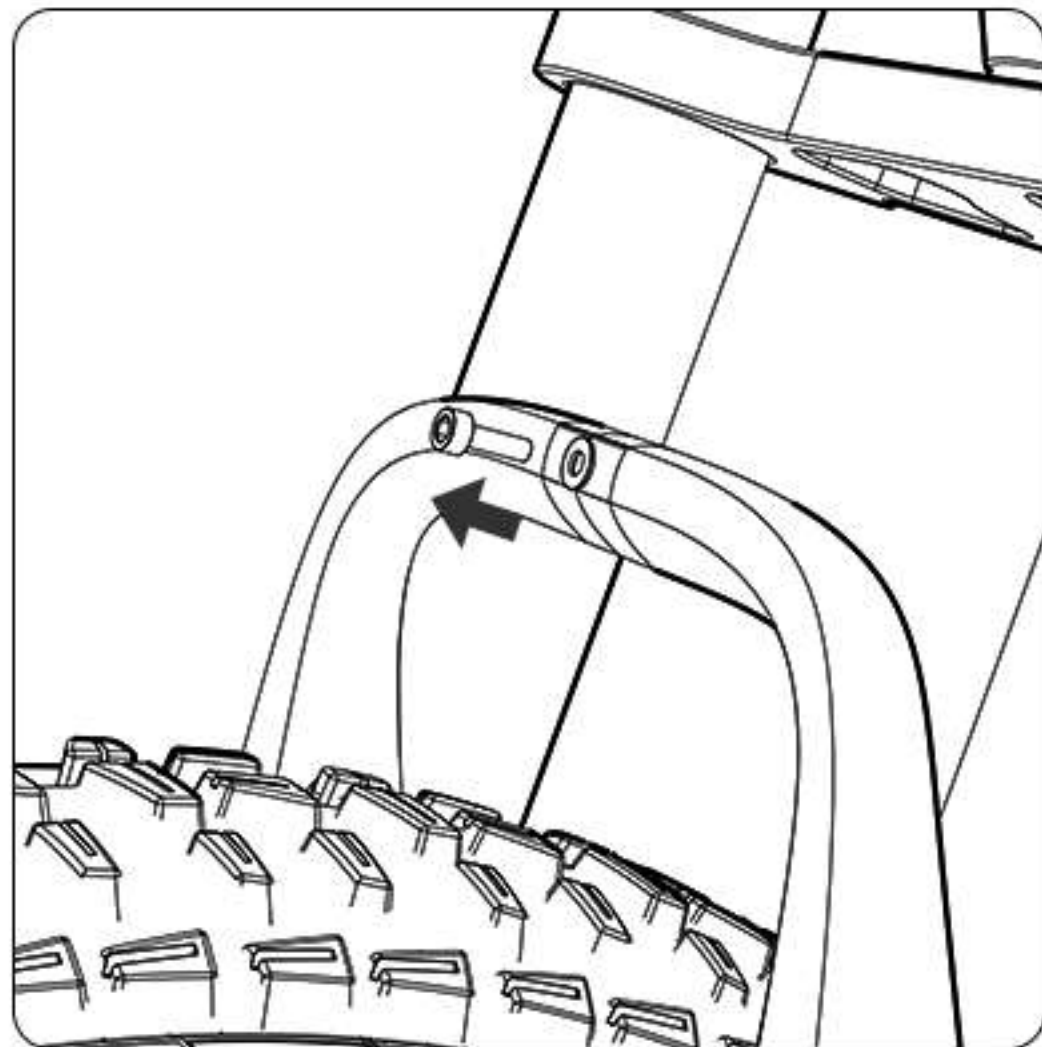
7. Install the front wheel.



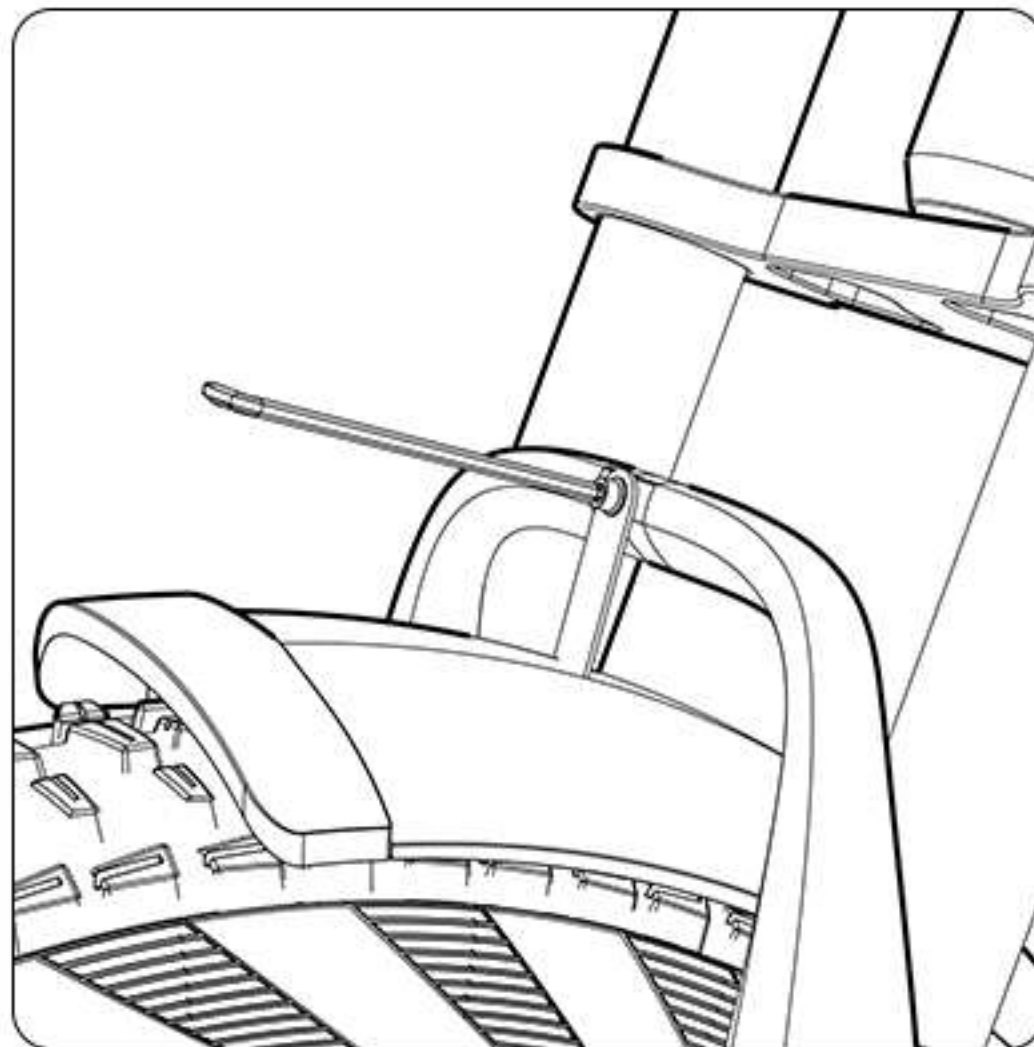
8. Make sure the rotor slides through in between the brake pads inside the caliper.



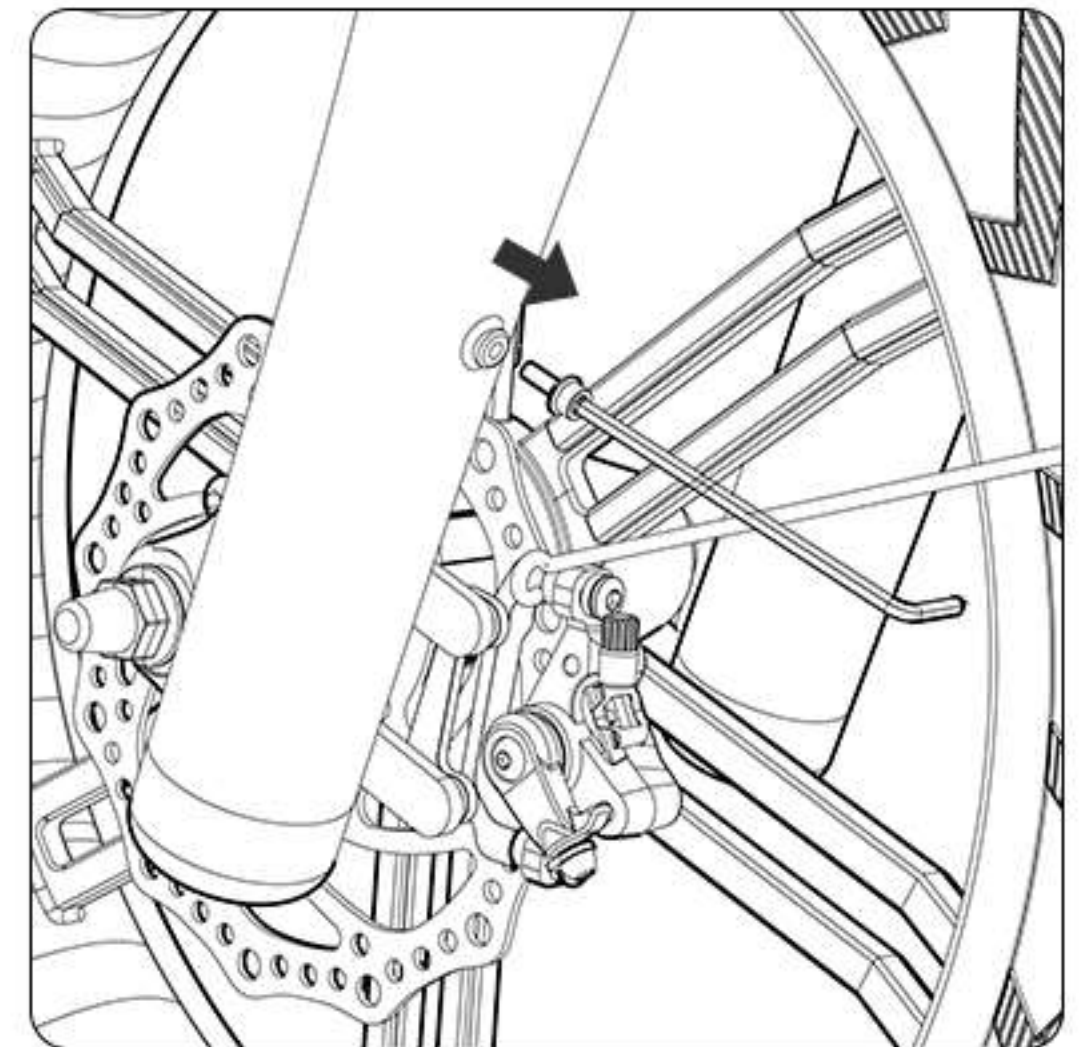
9. Use a 15mm open-end wrench to fully secure axle nuts.



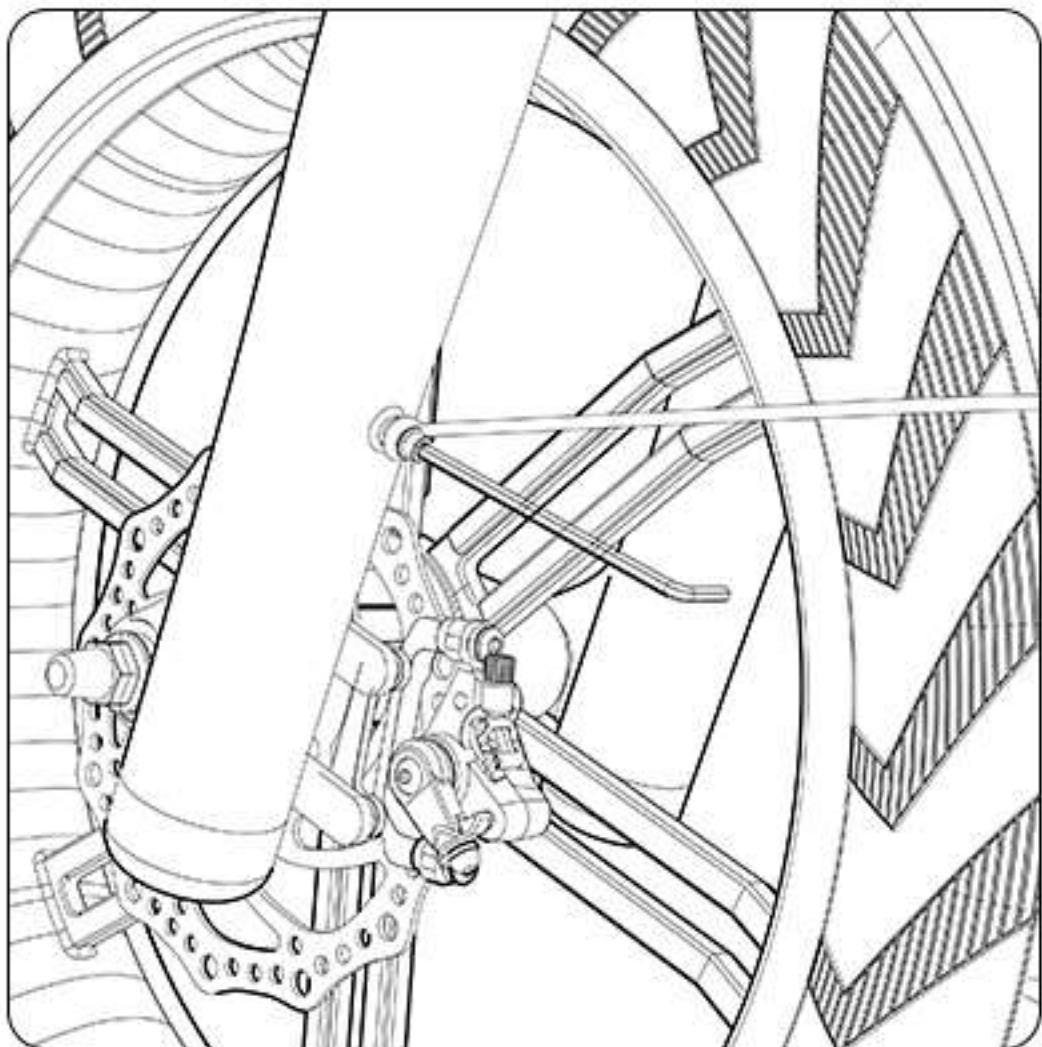
10. Remove the mounting hardware from the arch of the fork.



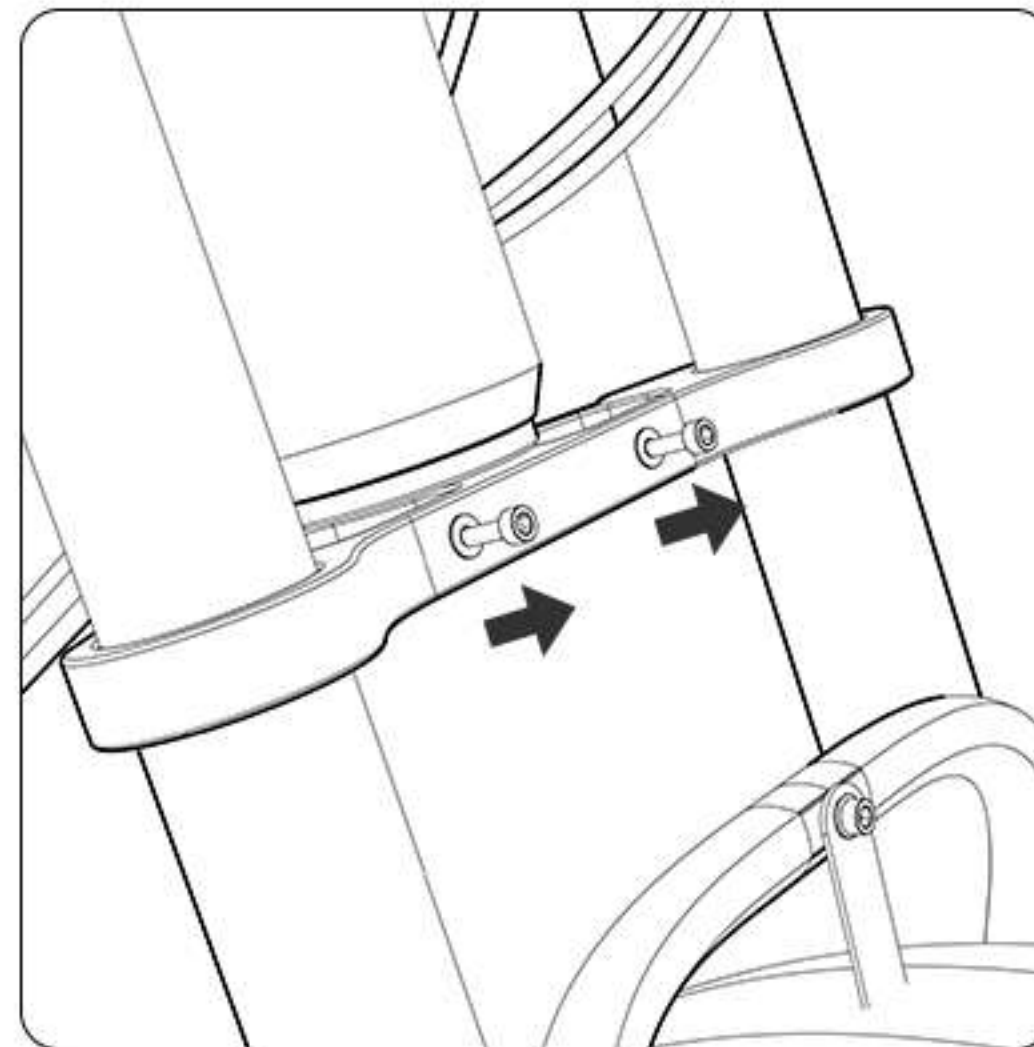
11. Fully tighten the nut by using a 5mm Allen key.



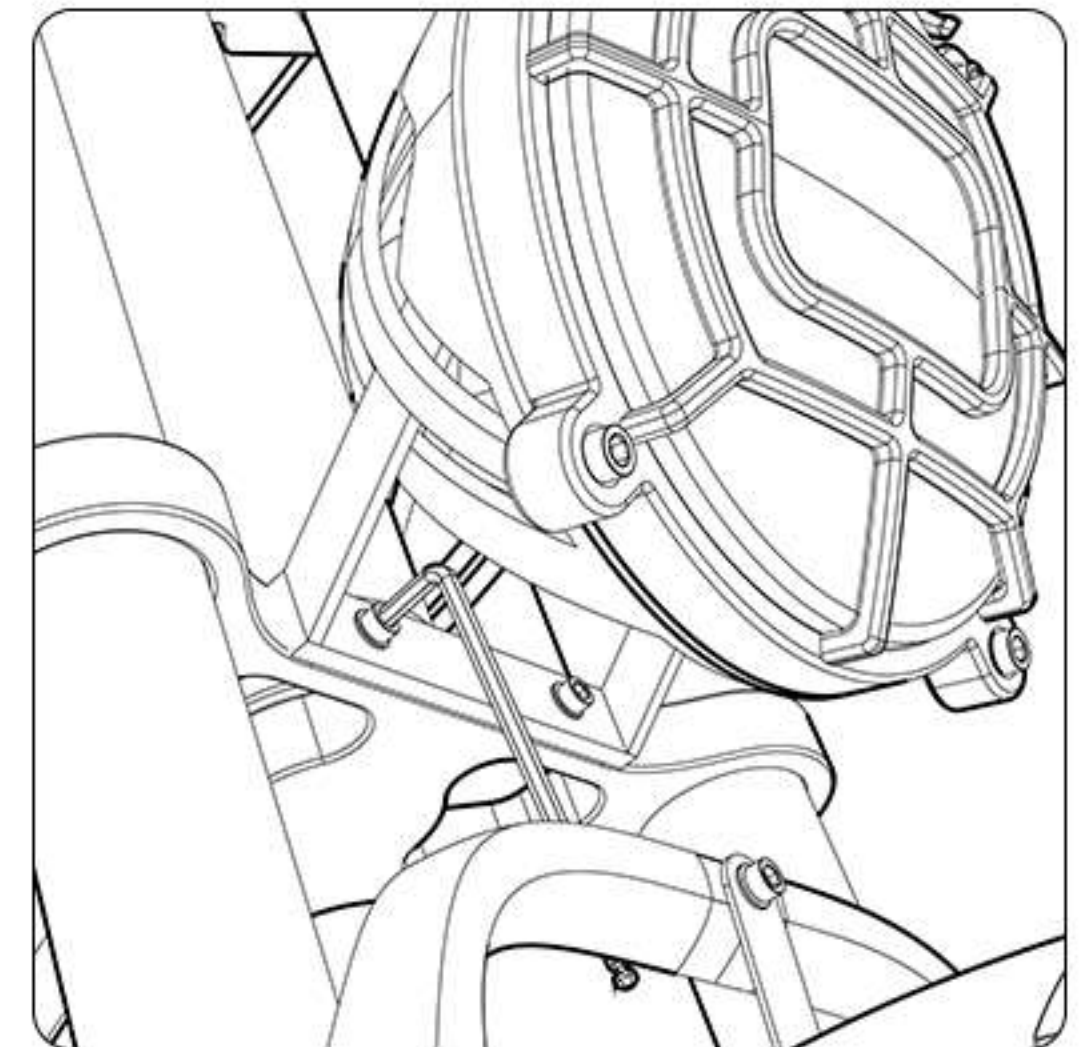
12. Remove the fender brace mounting hardware from the legs of the front fork.



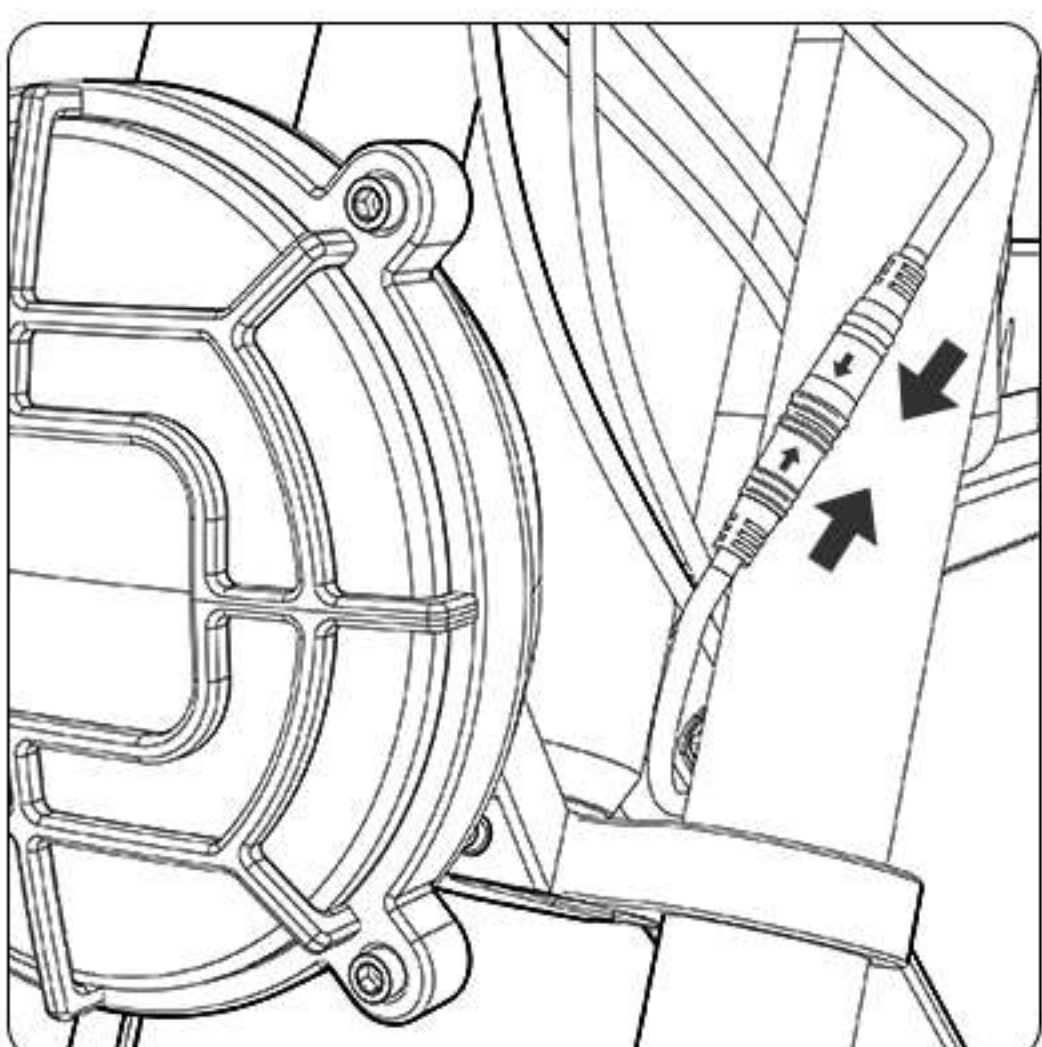
13. Pass the bolts through the steel spacer, then fender arm eyelets. Use a 4mm Allen key to tighten the bolts.



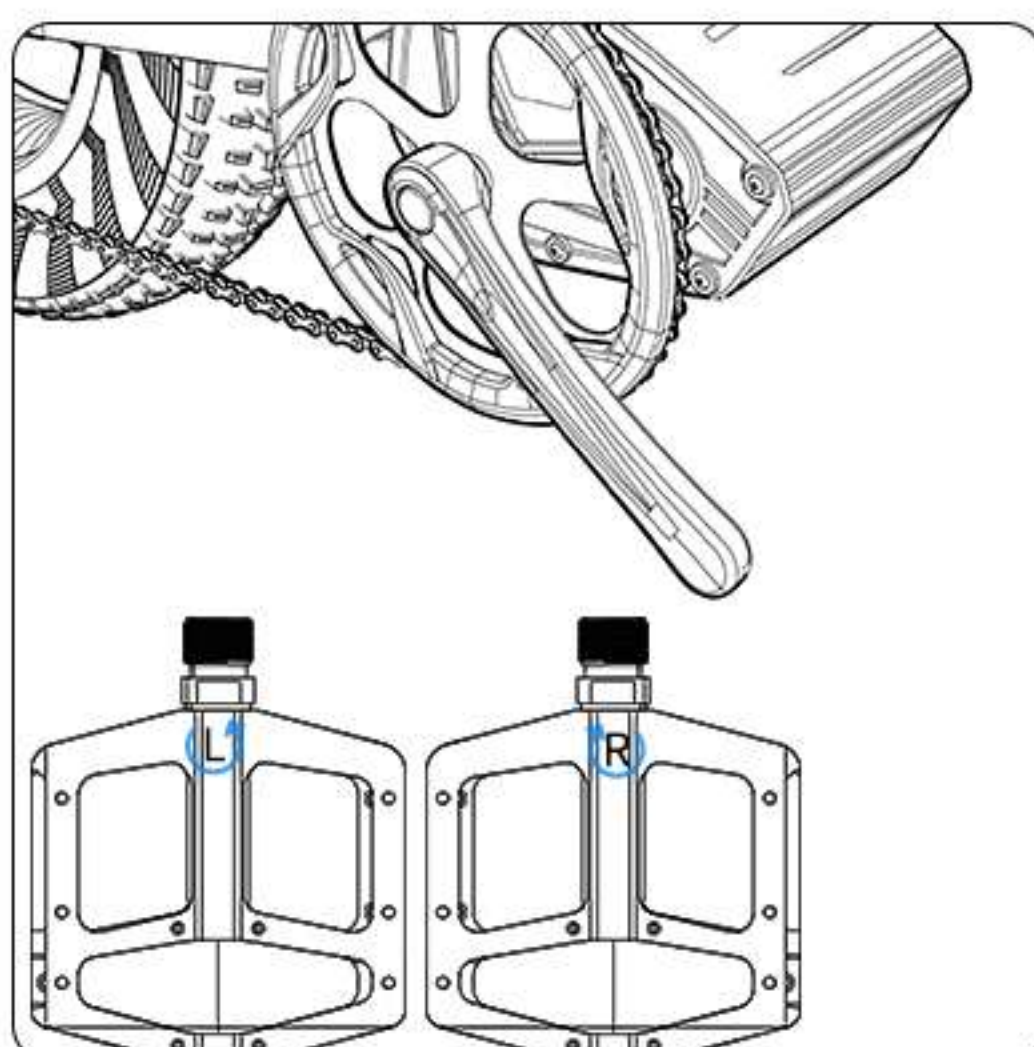
14. Remove the headlight mounting hardware from the crown of the fork.



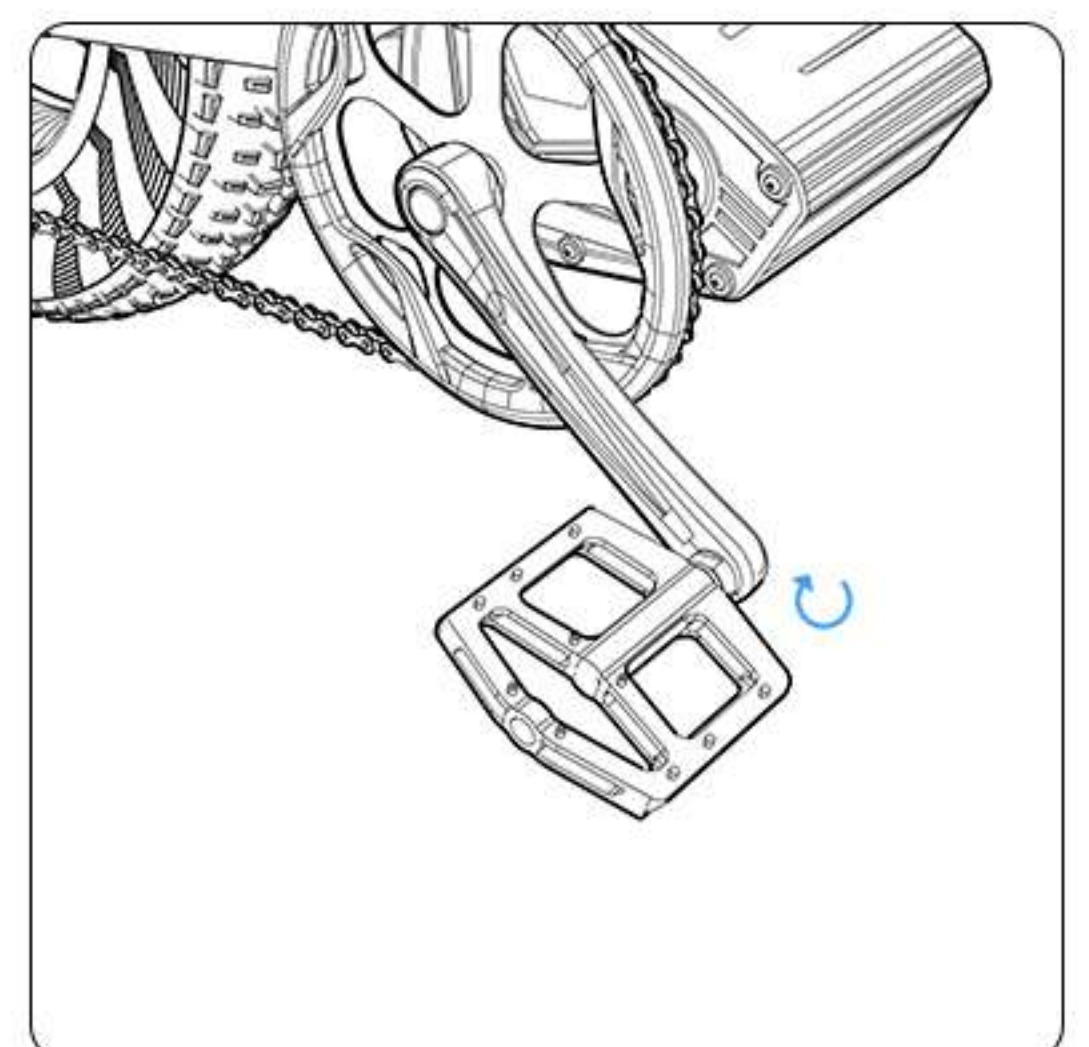
15. Attach the headlight to the front fork. Tighten the bolts with a 4mm Allen key.



16. Plug in the headlight connector as per the directed arrow on it.

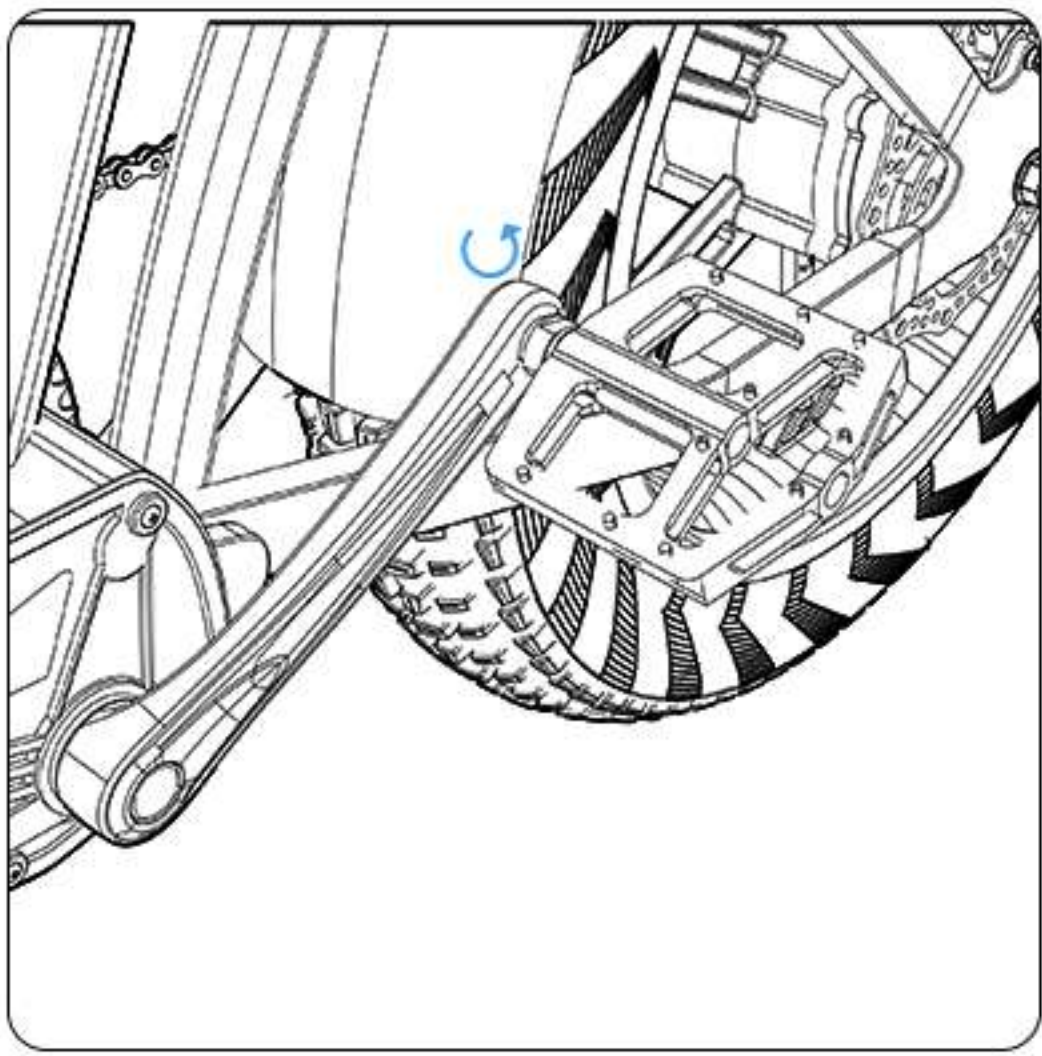


17. Identify the left (L) and right (R) pedals the left and the right pedals are marked on both ends.



18. Install the right pedal by tightening the pedal in clockwise direction.



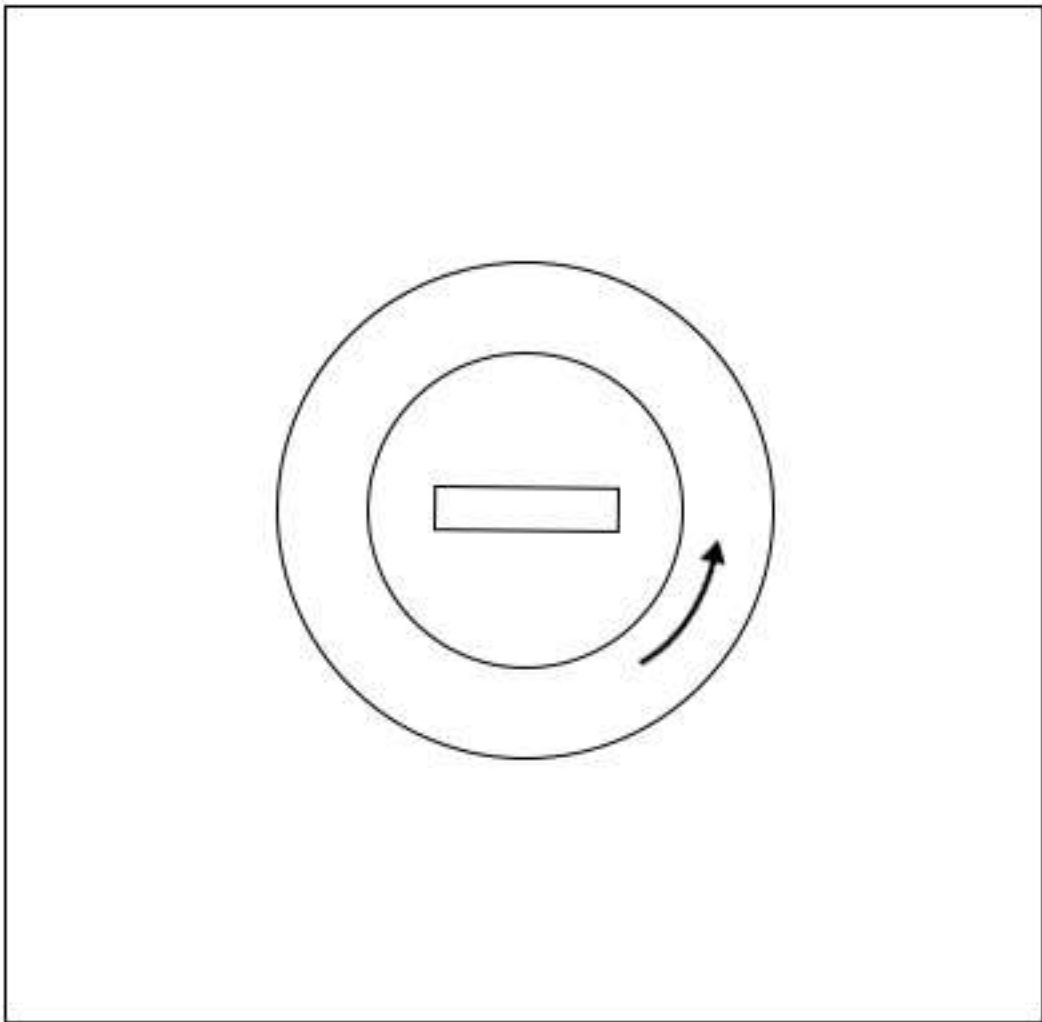


19. Install the left pedal by tightening the pedal in a counterclockwise direction.

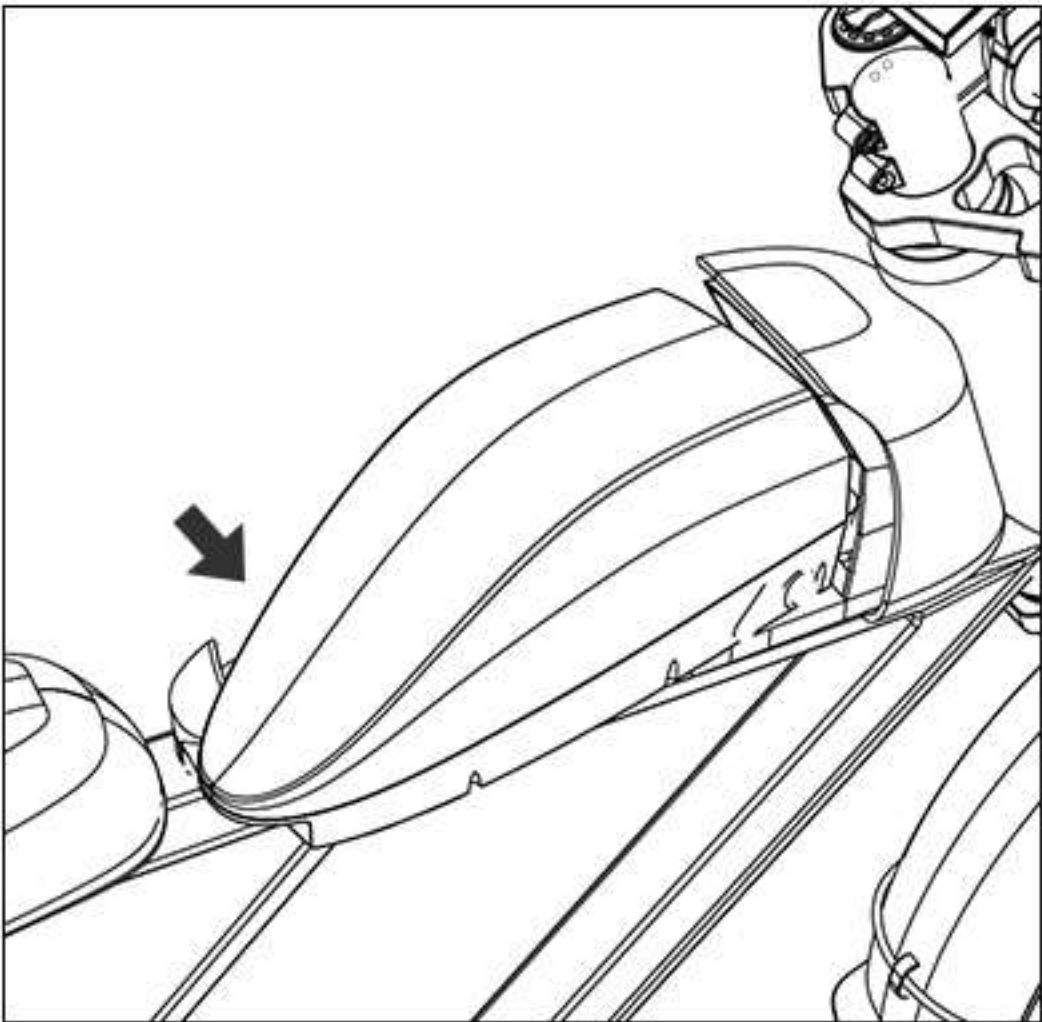


Note: The recommended tire pressure range is 20-28PSI, with a peak pressure of 30PSI. you can choose the right tire pressure based on weight, terrain, and other factors.

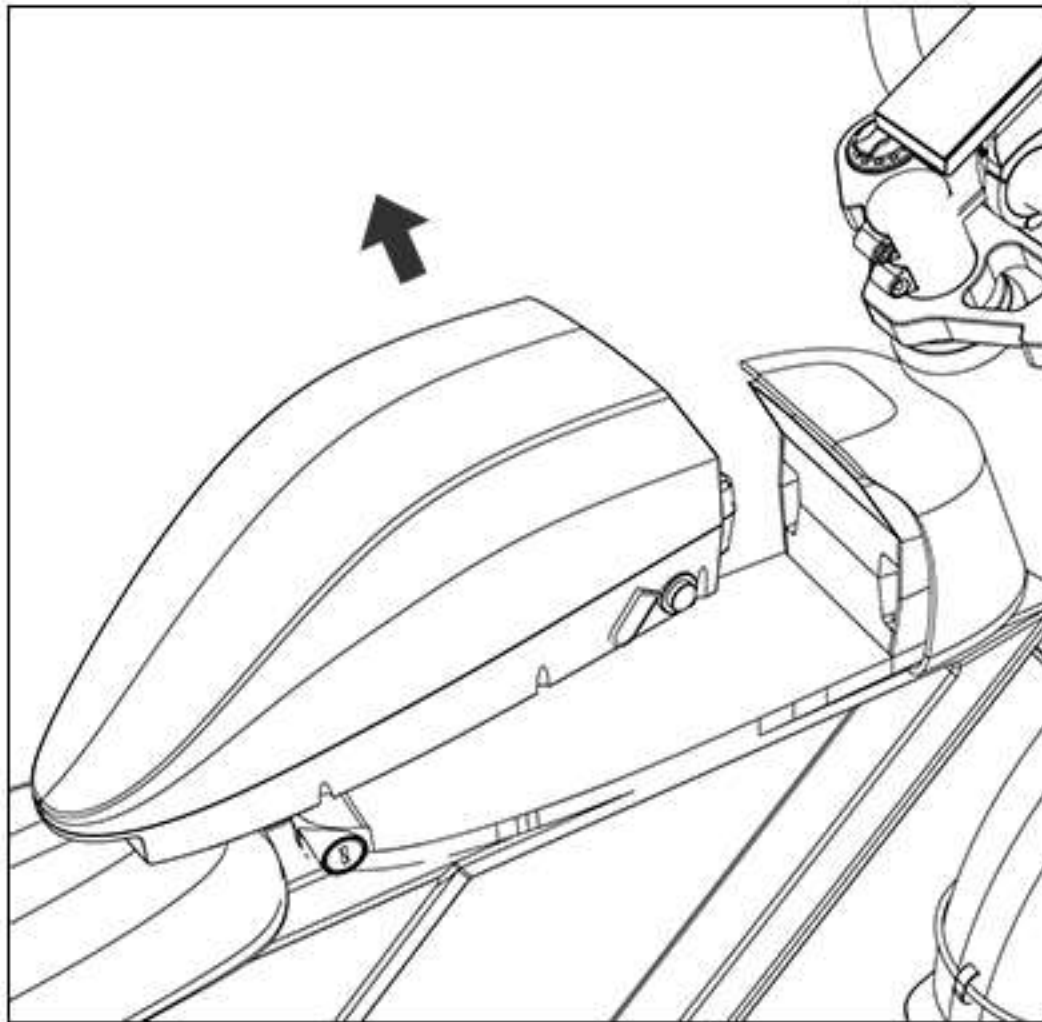
## REMOVE THE BATTERY



1. Insert the key, turning the key to the "unlock" position.

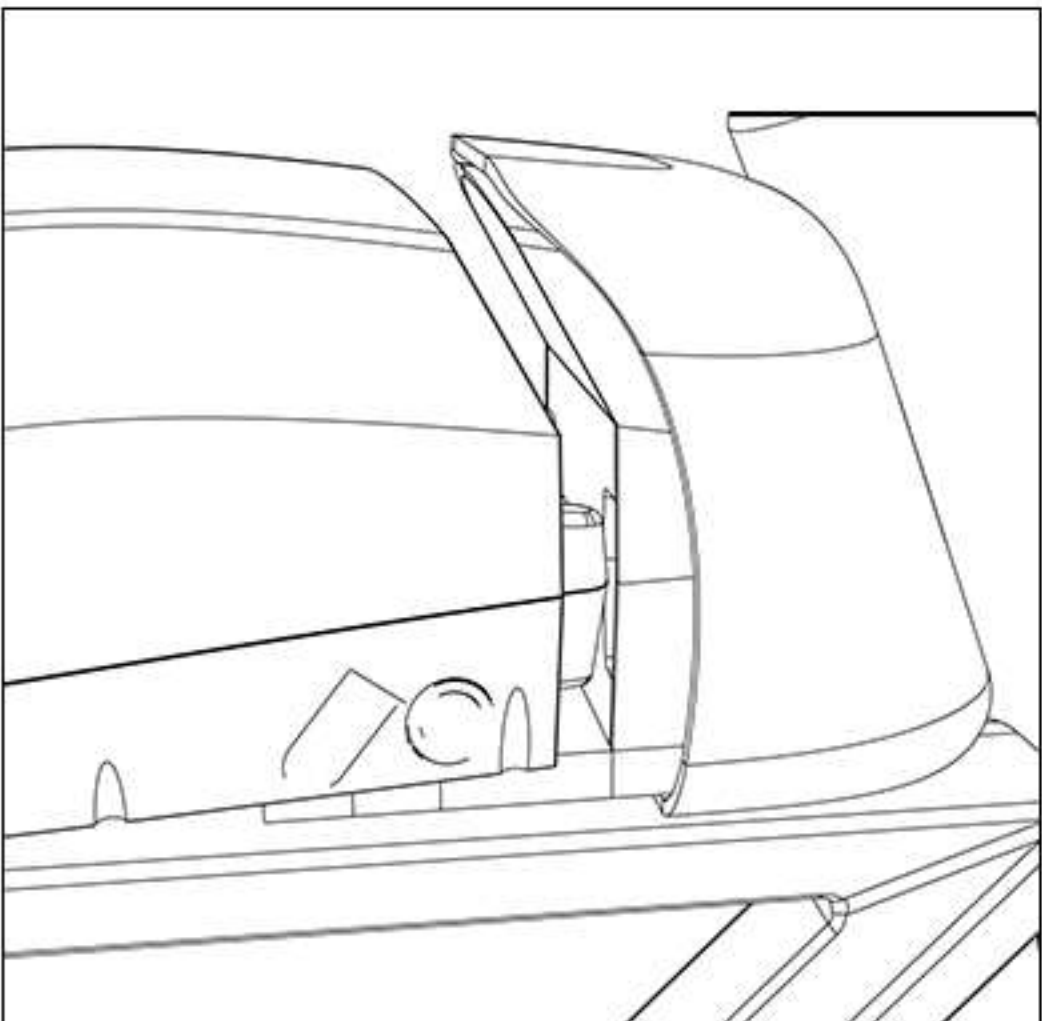


2. Push the battery outward horizontally to remove it from the mounting tray.

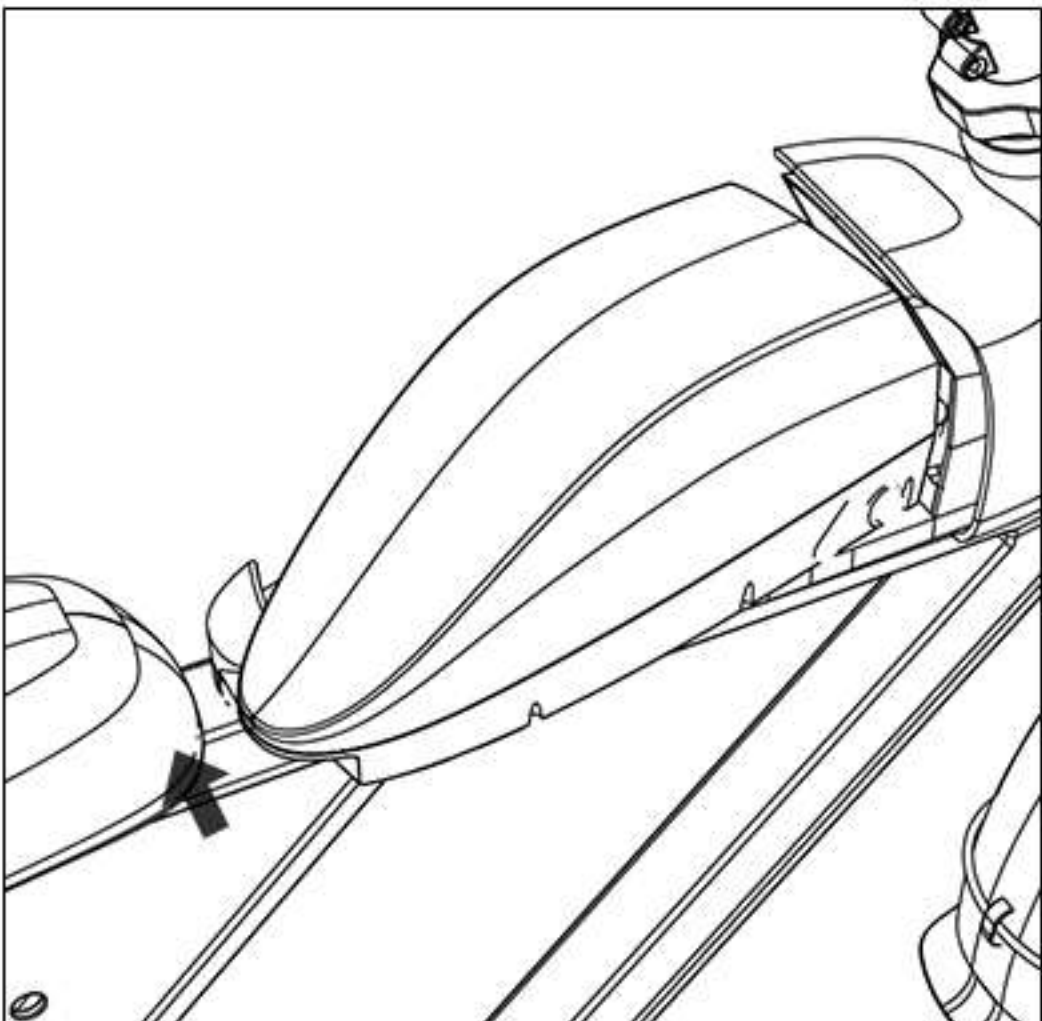


3. Remove your battery.

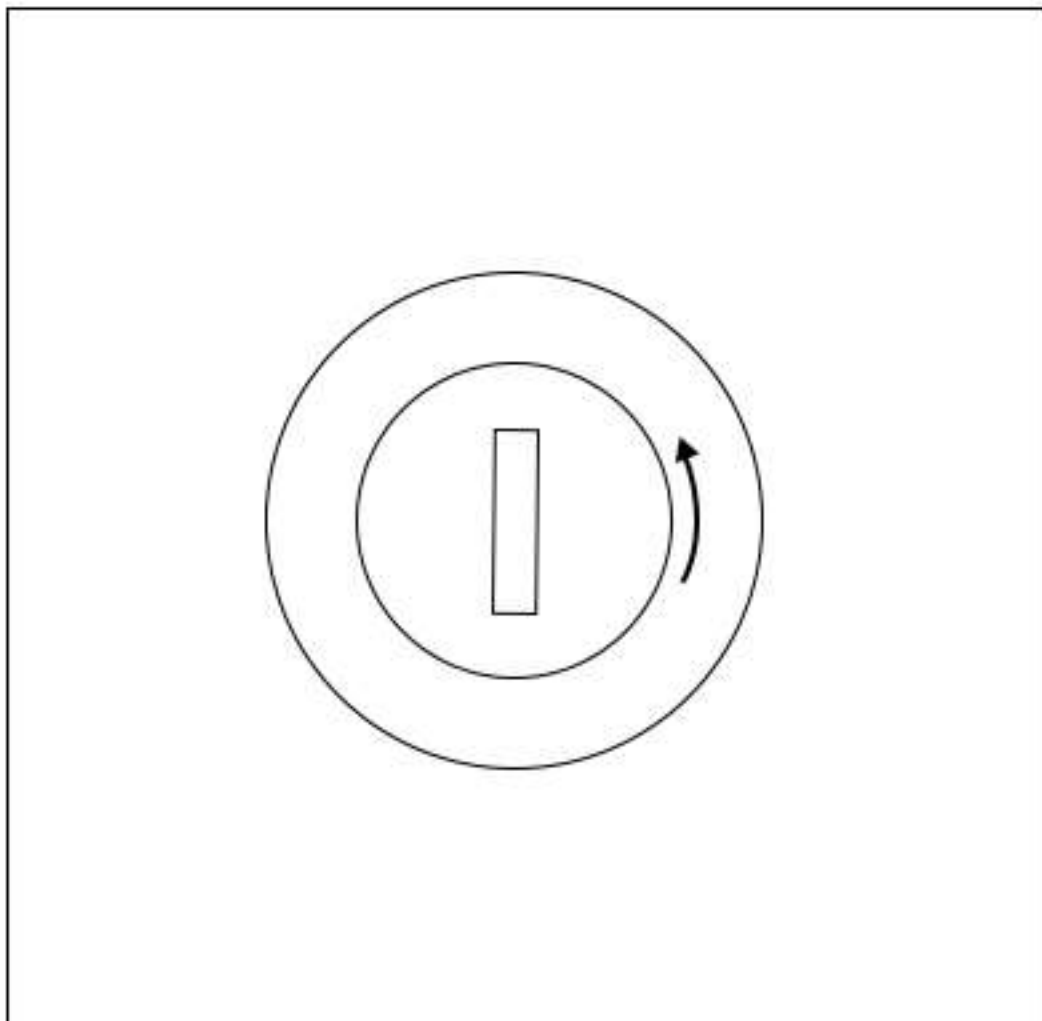
## INSTALLED BATTERIES



1. Install the battery with the contacts side forward.

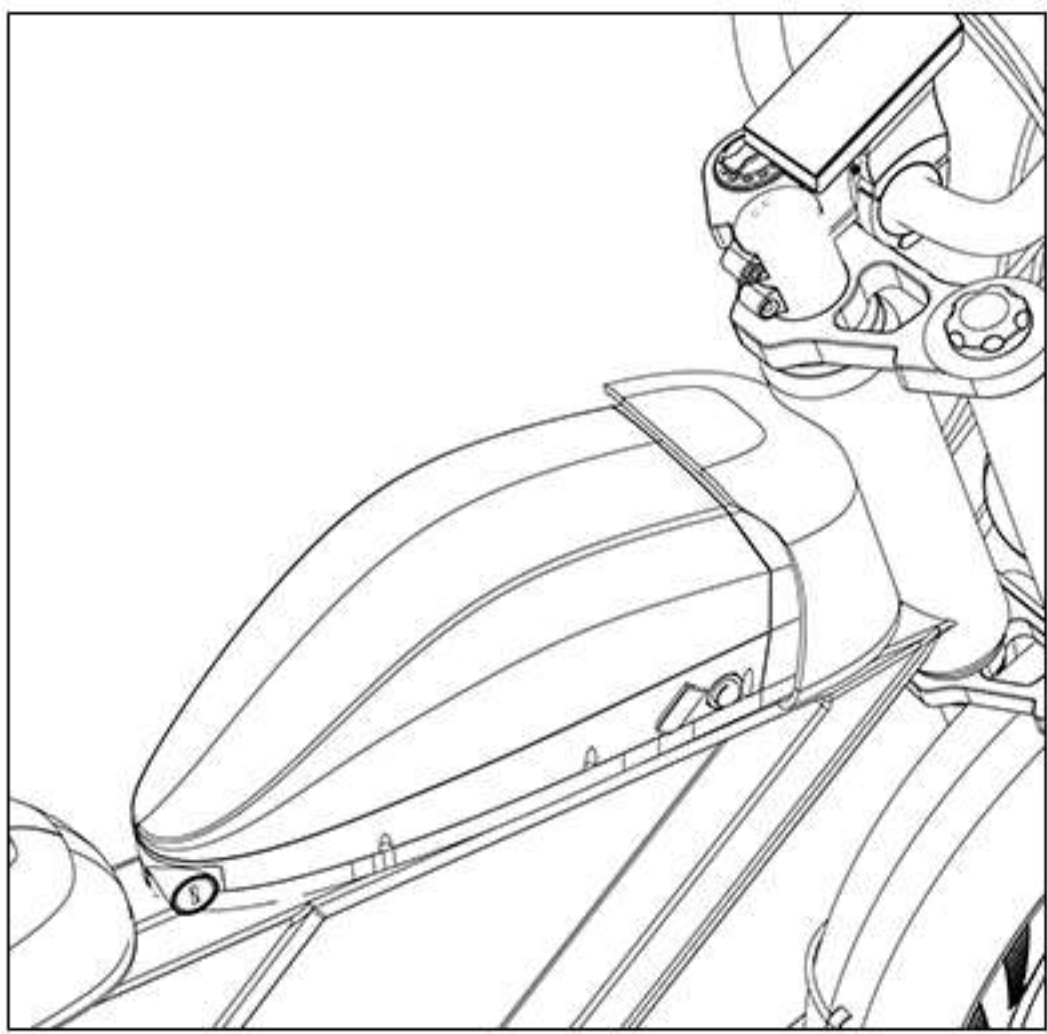


2. Attach the battery jack to the pins (mounting tray terminal contacts).



3. Turning the key to the "unlock" position.

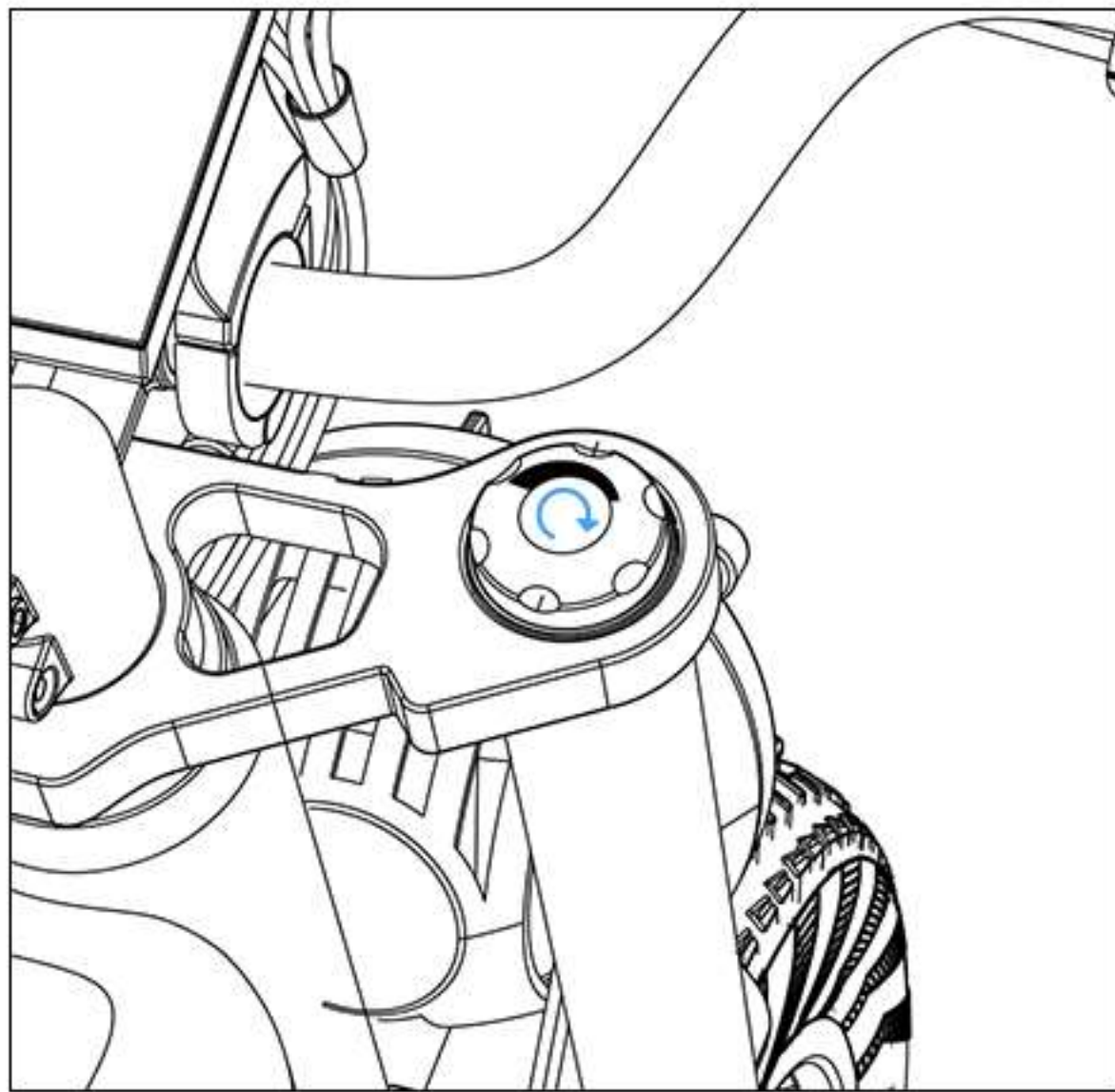
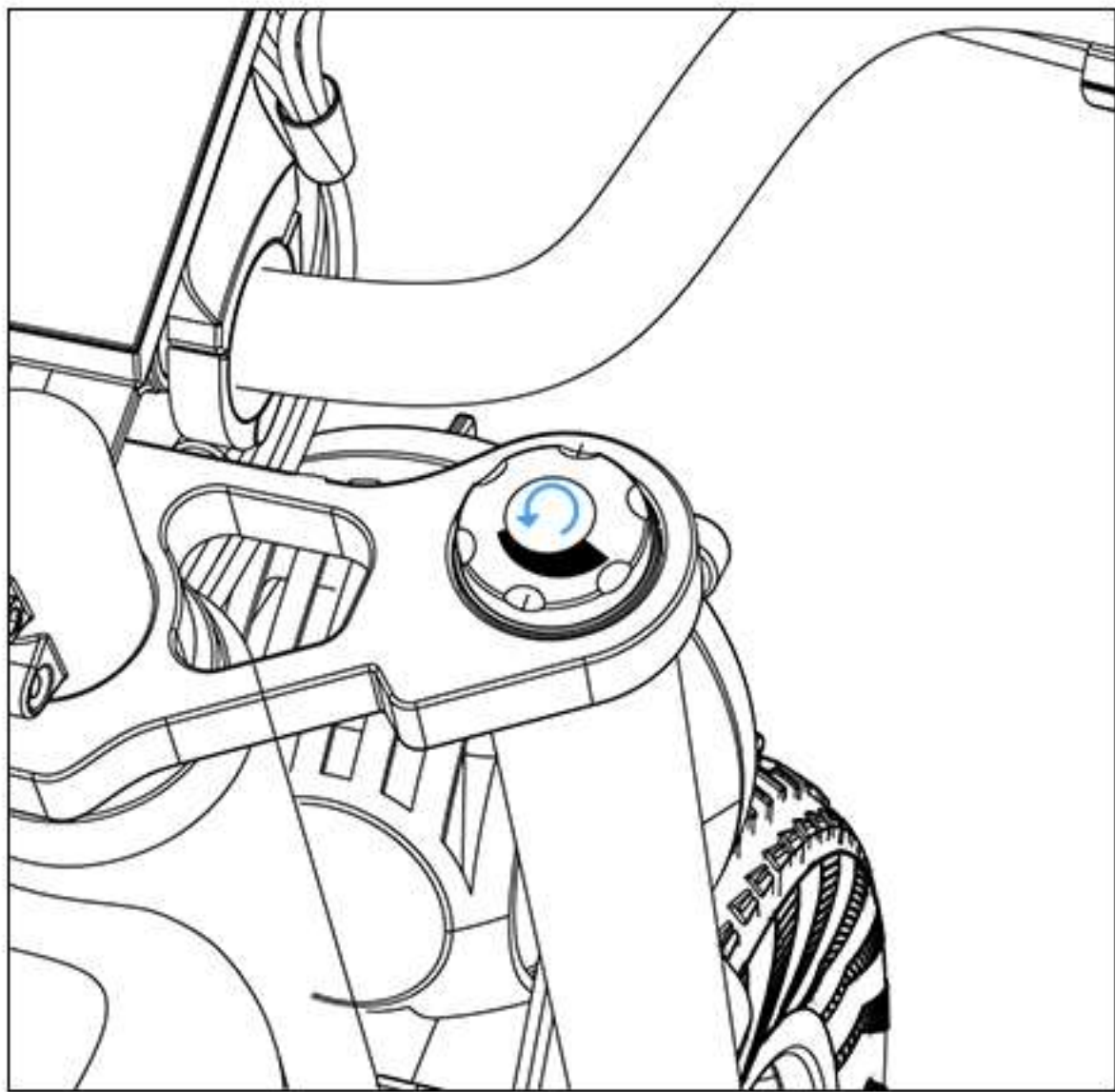




4. Push the battery inward horizontally to secure the battery into place.

## HOW TO ADJUST THE SUSPENSION FORK

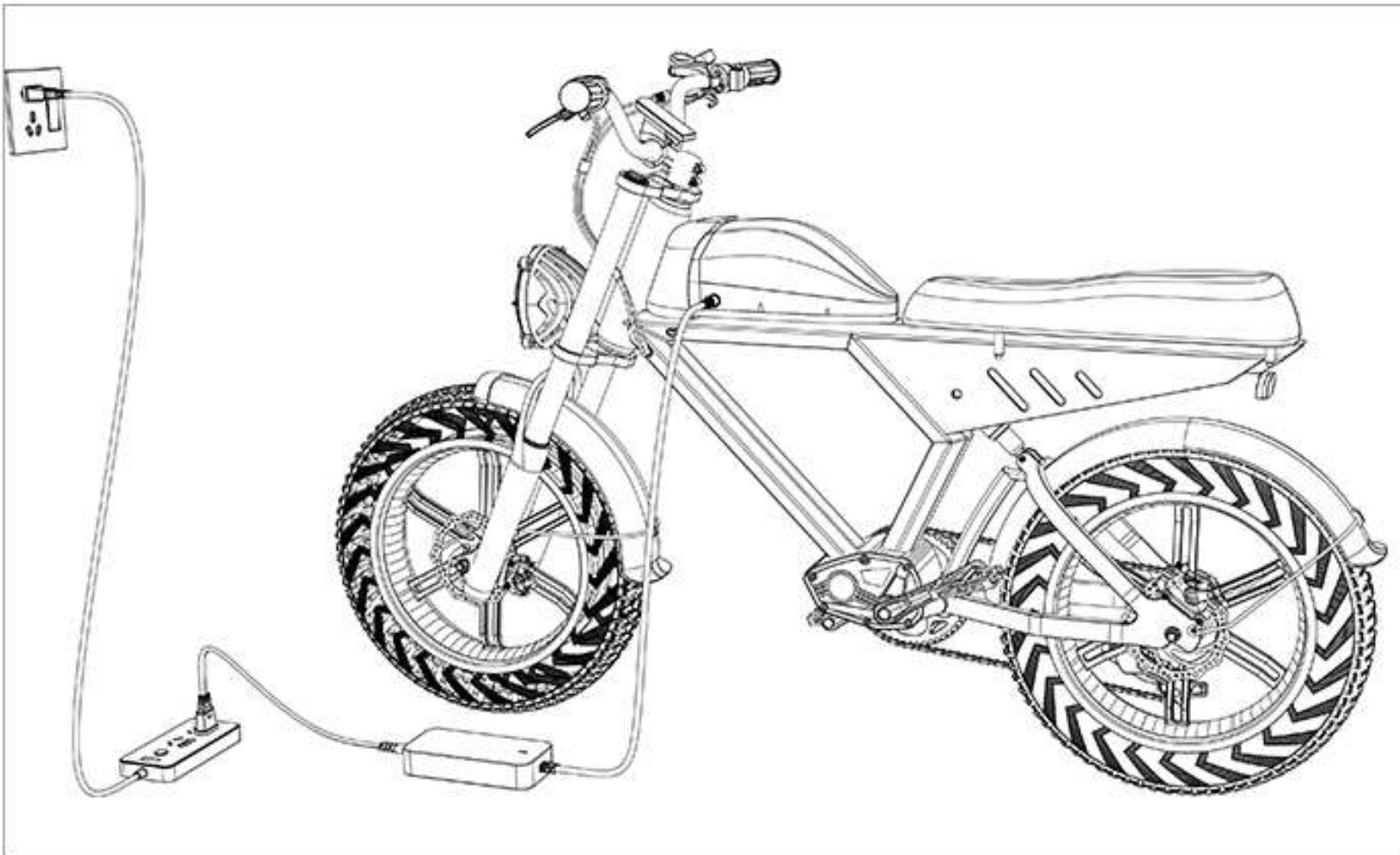
Twist the adjustment button clockwise to make your suspension fork stiffer, and turn it counterclockwise to make your suspension fork softer, so you can adjust the softness of the suspension fork according to your weight. If you weigh more than 265 pounds, you should lock the suspension fork before riding.



Note: do not sit on the bike when you are turning the knob.

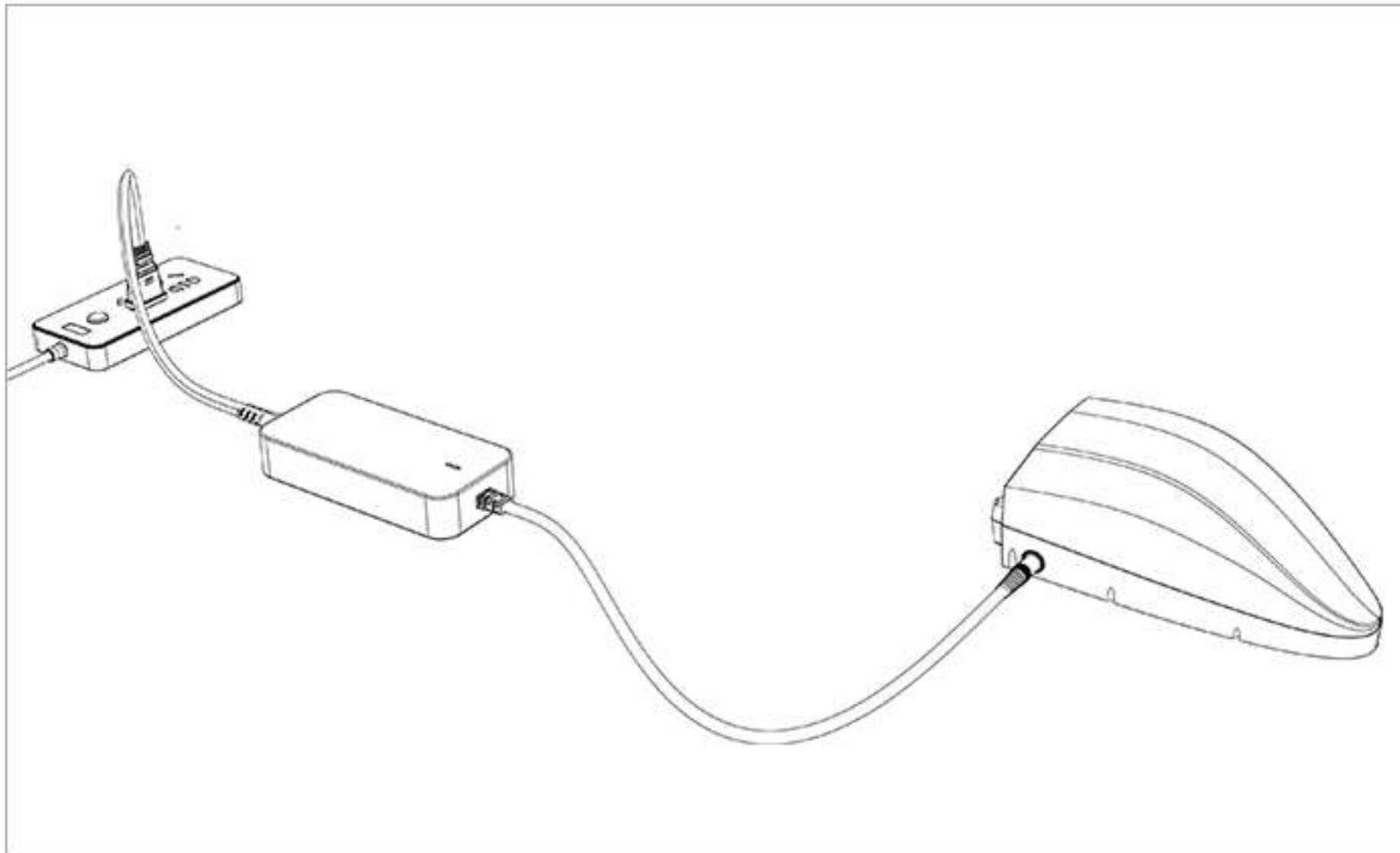
## HOW TO CHARGE

G-Force provides you with both whole bike charging and external battery charging for your convenience to choose.



### Whole bike charging mode:

You can plug the charging plug into the body charging port and charge the EBIke directly.



### External charging mode:

Remove the battery and you can plug the charging plug into the battery charging port for external charging.





## CHARGING SAFETY

- Do not use a charger other than G-Force to charge the E-Bike.
- When you receive the E-Bike, please charge the battery for the first time in time to ensure that the battery is fully charged when you ride it for the first time.
- Do not leave the battery unattended while charging.
- Avoid charging the battery at too high a temperature.
- Make sure there are no flammable objects around when charging.

### Battery Safety:

- ⊘ If you find the battery is damaged, leaking, discolored, etc., please do not charge the battery.
- ⊘ When storing the battery, be sure to keep it away from heat sources and avoid direct sunlight.
- ⊘ Do not immerse the battery in any liquid.
- ⊘ Do not force the battery to remove, follow the instruction manual into the removal of the battery.
- ⊘ Battery charging time may increase depending on the time of use.
- ⊘ If the battery fails to charge, stop charging immediately.

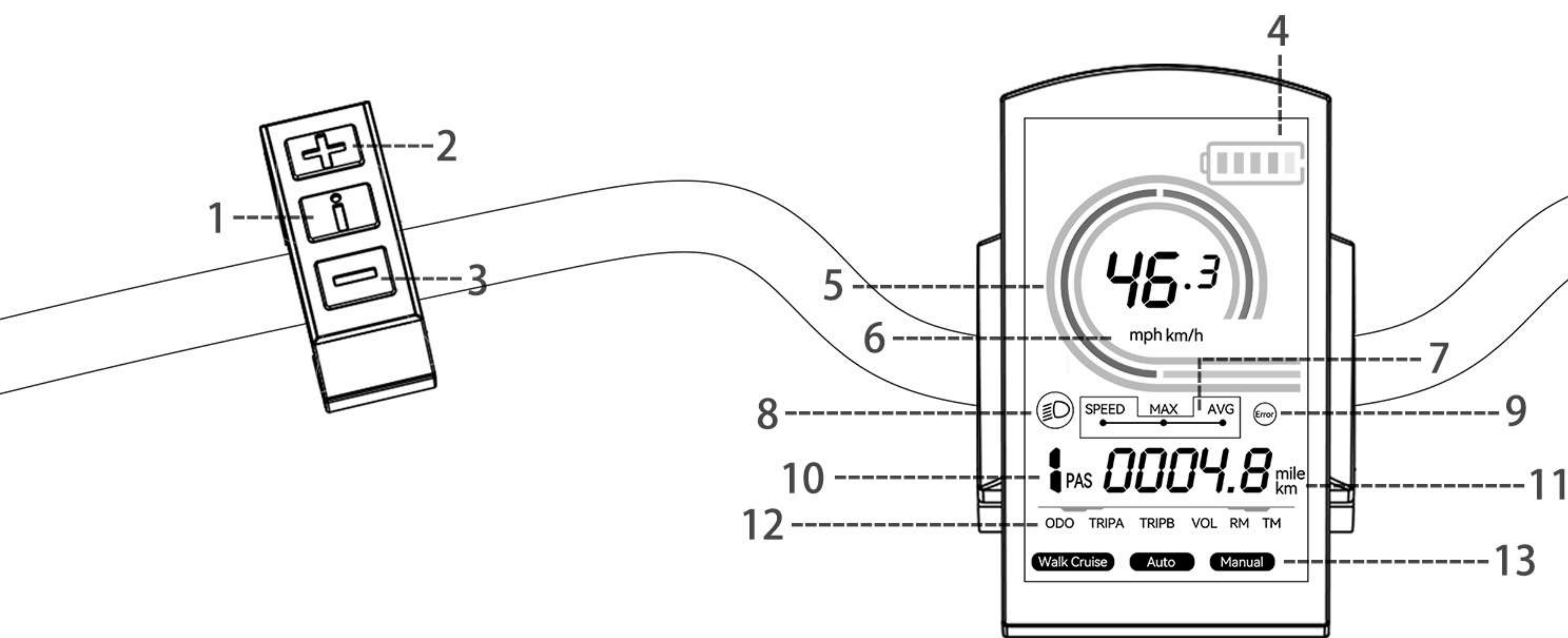
### Caution:

Be careful when charging, misuse will lead to property damage and personal injury

When your batteries are no longer in use, dispose of your batteries according to your local state regulations. Disposal regulations for lithium batteries vary from state to state, so it is important to know your local government's regulations. Lithium batteries should not be placed with regular trash.



INSTRUMENT INTRODUCTION



- |                          |                        |                            |
|--------------------------|------------------------|----------------------------|
| 1. ON/OFF button         | 2. Up button           | 3. Down button             |
| 4. Battery level display | 5. Speed               | 6. Speed unit              |
| 7. Speed display type    | 8. Headlight Indicator | 9. Error code prompt       |
| 10. Gear display         | 11. Speed unit         | 12. Multi-function display |
| 13. Cruise control       |                        |                            |

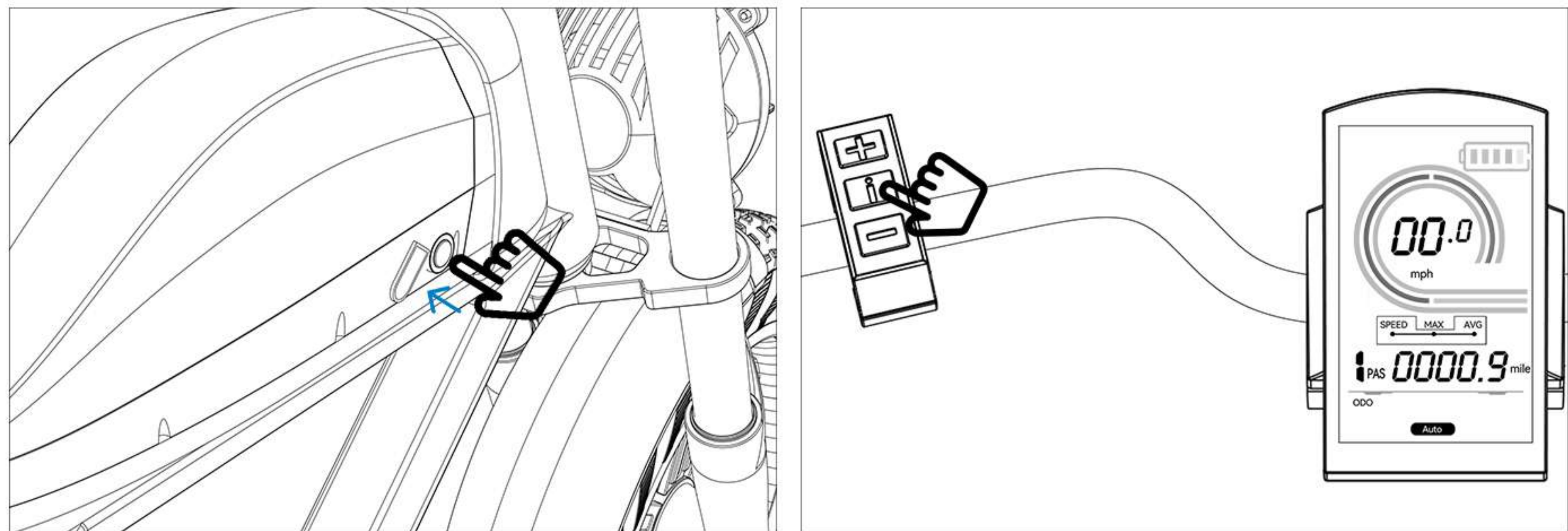
**Caution:**

The meter tries to avoid unnecessary knocks.  
Please do not modify the instrument parameters that are not explained in this manual, otherwise it may not be able to ride properly.

ON/OFF LCD DISPLAY

Turn on the display

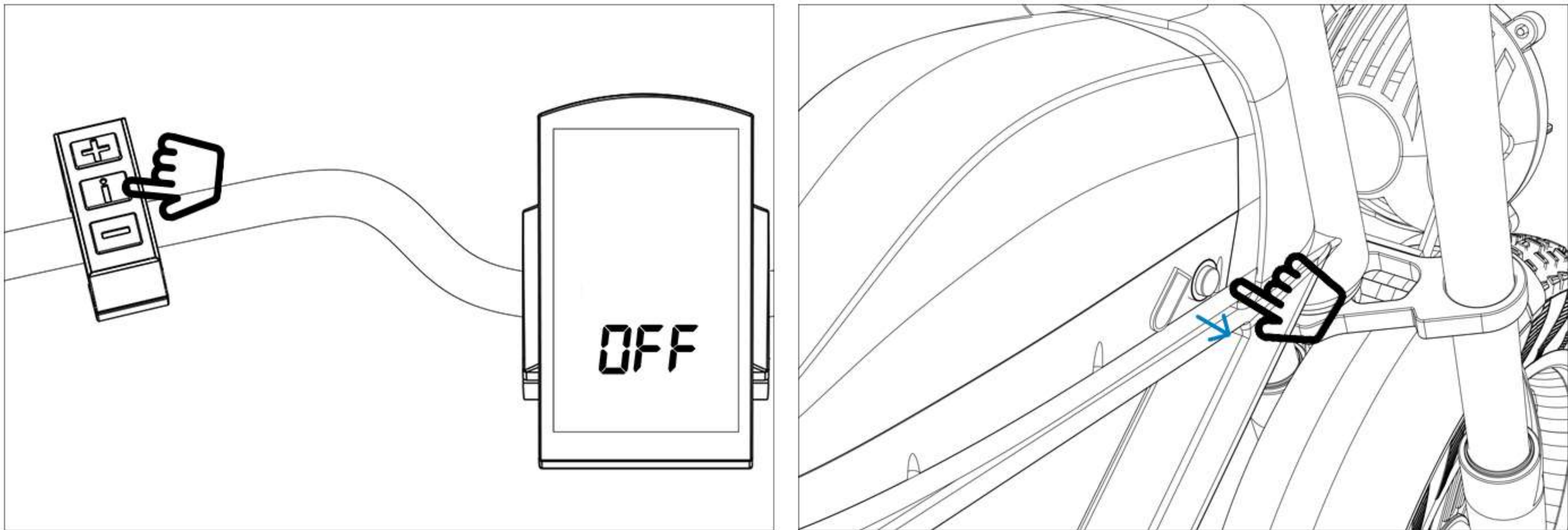
- 1.Press the power button on the battery and it will start powering.
- 2.Press and hold the **i** button for more than 3 seconds, the display and contraoller start to wrok





# Turn off the Display and power off

- 1.Press and hold the **i** button for more than 3 seconds, the display will be closed.
- 2.Press the power button on the battery and it will power off.



## OPERATING THE LCD DISPLAY

Increase Pedal Assist Level

Short-Press **+** button

Decrease Pedal Assist Level

Short-Press **-** button

Turn ON/OFF Headlight

Hold the **+** button for 3 seconds until lights turn on, repeat to turn off.

Toggle Speed, Odometer, TRIP, Trip Timer, VOL, Average Speed, Max Speed.

Press and let go of the **i** button

Cruise Control and Walk mode

Stationary state of ebike, Hold the **-** button for 3 seconds turn on 6KM/h Walk mode.  
Ebike running condition, Hold the **-** button for 3 seconds turn on Cruise Control mode

Notes: The trip meter will reset when the bike is powered off. The maximum and average speed will be calculated for a given trip, and will reset when the bike is powered off. When the bike has not been used for 10 consecutive minutes, the display will automatically shutdown. The pedal assist and throttle features will no longer work when the display is turned off.



## DISPLAY SETTING

To change display settings, hold the **+** and **-** button simultaneously to enter into the advanced settings menu. In this menu, clicking the **i** button will toggle between each numbered setting. To adjust the value of each setting, click the **+** and **-** buttons accordingly.

Setting	Function	Default	Explanation
P01	Brightness	2	Backlight display brightness. The darkest level is 1, the brightest level is 3.
P02	Distance Units	1	0:KM      1:MILE
P04	Sleep	10	LCD Display sleep timer. With the default setting, the display will turn off after it has not been used for 10 minutes.
P08	Speed Limit	100	Speed limit. Range is 0-100. The input data here represents the maximum operating speed of the vehicle: for example, input 25 indicates that the maximum operating speed of the vehicle will not exceed 25km/h; The drive speed is maintained at this set value. The max value allowed is 45. Anything above this will not be recognized. Error: $\pm 3$ km/h If you want to set your e-bike to level 2, which is limited to under 20 MPH, you can set the value to 32.
P09	Throttle Zero Start	000	0: throttle active from standstill 1: throttle active only when already moving
P11	PAS Sensitivity	001	Sensitivity of PAS sensor. When set to higher numbers, it will take more crank rotations for the motor to turn on. On lower numbers, it will take little crank rotation to turn on the motor.
P16	Cruise Control	001	0: Cruise Control mode disabled 1: Cruise Control mode enabled



## **OPERATING SAFETY**

Before riding the bike for the first time, ensure that you have read and understood this manual. Make sure you understand how to turn on and activate the pedal assist and throttle. When first riding the bike, take care to start slowly in a low level of pedal assist. Take your first ride in a safe area away from cars, other bikers, pedestrians, or other potentially dangerous obstacles. Only move up pedal assist levels when you feel comfortable and you have ample experience riding the bike. The higher pedal assist levels will accelerate you to higher speeds more quickly. Take care when riding the bike at any speed. Failure to adhere to warnings and guidelines in this manual can lead to serious harm, injury, or death. Damage sustained by the bike from failing to follow instructions, guidelines, and warnings in this manual is not covered under warranty. Do not lean on the bike when it is parked and the kickstand is in use.

### **Helmets and Local Laws**

Always wear a helmet when riding your eBike. Ensure that the helmet fits your head and is securely tightened down. Before riding, read local laws and comply with all rules relating to cycling and eBiking in your area. If you attach a seat for children to the bike, they must also be wearing a properly fitted helmet at all times.

### **Pre-ride Safety Check and Inspection**

Before each ride, make sure to inspect your eBike to ensure there are no loose fasteners or accessories. Make sure to specifically check that both the front and rear axles are secure. Also make sure both the handlebars and the handlebar stem are not loose. Check the tire pressure of both wheels before riding to ensure the tires are inflated to the recommended pressure printed on the side of the tire walls. Pull the brake levers to make sure your brakes are working properly and adjust if necessary. Ensure both your seatpost and handlebar stem are inserted past their minimum insertions points as indicated by the markings on them. Make

### **Riding in Wet Conditions**

This electric bicycle can withstand light rain and small splashes, but is not designed to be subjected to inclement weather, extremely heavy showers, or submersion in water.



Note: Use caution when riding in wet conditions as it will take longer to use the brakes to slow down, and also when turning as the tires may slip. The electrical components on the bike are not waterproof. The entire bike has an IP rating of 65. Water damage is not covered under warranty.

## Riding at Night

Riding at night comes with more risks than riding during the day due to decreased visibility so riders are encouraged to exercise increased caution. Before riding at night, make sure that reflectors are installed on your eBike. For increased visibility, also ensure the front headlight and rear tail light are turned on and adjusted such that other people on the road can see them clearly. Riders should wear bright colored clothing at

## Max Weight

The bike can safely carry a total weight of 400 lbs. Note range and top speed will be affected by total weight being carried by the bike. If you are over 265 lbs you should lock out the suspension fork before riding.

### PRE-RIDE SAFETY CHECK

Ensure all components are properly secured before riding otherwise serious harm or death could occur. This includes but is not limited to: pedals, handlebars, handlebar clamp, cranks, seat, and seatpost clamp.

- Make sure you can't twist the seat or stem out of alignment by hand.
- Check that your suspension fork is properly adjusted for the terrain and your weight. The suspension fork will affect the handling of the bike, primarily when going over bumps and stopping. In some situations, it may be advantageous to lock out the suspension so it is fully rigid.
- The suspension fork can be locked out so it is rigid, and the tension is adjustable. To adjust the suspension fork use the blue knob. To fully lock the suspension, turn the knob clockwise towards the "lock" direction indicated until it cannot be turned further.



- To increase the stiffness, turn the knob clockwise towards the “lock” direction indicated. To make the suspension softer, turn the knob counterclockwise towards the “open” direction indicated.
- If you are over 265 lbs you should lock out the suspension fork before riding.
- Ensure all cables and connectors at the front of the bike are securely connected or certain components may not work including the front light, the motor inhibitor switches, LCD display, and throttle. The motor inhibitor switches shut the motor off as soon as the rider hits the brakes. If these switches are not operational it will take longer to slow down which in some riding situations could cause injury or death to the rider. If you have installed any accessories make sure they do not interfere with all cables and connectors when turning the handlebars.

## ERROR CODES

Error Code	Meaning	Error Code	Meaning
03	Sensor Fault	06	Battery Undervoltage
07	Motor Fault	08	Throttle Fault
09	Controller Fault	10	Communication Reception Failure
11	Communication Send Failure	12	BMS Communication Fault
13	Headlight Fault		



WARRANTY

All Bikes should be operated in accordance with the G-force owner’s manual provided with the bike. G-force warrants to the original registered purchaser that bikes shall be free from all defects in material and workmanship for a period of 12 months from the date of shipment, when used in accordance with the owner’s manual and for the purpose intended. All other obligations and conditions or liabilities, including obligations for consequential damages, are hereby excluded. The warranty is nontransferrable and only applies to the original owner. This warranty gives you specific rights and purchasers may also have other rights, which may vary by location. Damage caused by failing to adhere to instructions and warnings issued by G-force is not covered under warranty. Warranty parts will only be shipped within the continental United States. The warranty period of parts is as follows.

Warranty time is calculated from the sales date.

	Accessories	Three Packages	Three Guarantees Failure Type
Electrical parts	Motor	12 months	Free repair of failure within two years
	Controller	12 months	Performance failure
	lithium battery	12 months	Can't charge and discharge
	charger	12 months	Performance failure
	meter	12 months	Malfunction
	Turn handle	3 months	Malfunction
	Brake lever	3 months	No power-off function
	Booster	3 months	No induction capability
Structure	Frame	12 months	There are natural welding, desoldering, and fracture phenomena
	Front fork	12 months	
	Riser	12 months	
	handlebar	6 months	
	crank	6 months	

Accessories sold on [www.g-forcebike.com](http://www.g-forcebike.com) are not covered under warranty (except in cases of shipping damages). Stolen bikes are not covered under warranty.

Necessary precautions must be taken to ensure the bike and battery are not exposed to severe weather conditions.

Exposure to very wet, hot, or cold conditions may void the warranty.



We will replace any parts deemed to have been damaged during shipping. Shipping damage must be reported to G-force within 14 days of shipment arrival. This applies to all products including bikes and accessories. You will NOT be refunded as compensation for your time or efforts replacing damaged parts. Replacement parts will not be sent until photographic evidence has been provided to G-force. G-force may request additional documentation (such as video) to assist with accurately diagnosing the problem and processing the warranty claim. Most warranty parts are fulfilled 1-10 business days after the request is put into our system by a customer service representative. Warranty parts are sent using USPS First Class, FedEx Express, or FedEx Ground depending on the size of the part. Warranty parts will not be expedited. Items including the chain, tires, wheels, tubes, battery handle, brake pads, cables and housing, grips, and spokes are considered wear items.

These items wear down with normal use and are not covered under warranty. You are responsible for replacing and maintaining these wear items. Any unauthorized alterations or repairs are not covered and may

void this warranty. For warranty services, please contact G-force online support by email at [support@g-forcebike.com](mailto:support@g-forcebike.com). Bikes or parts returned without proper documentation may result in delayed service or denied warranty coverage. Warranty return shipping costs along with duties and taxes are the responsibility of the claimant.

## ELECTRIC BIKE MAINTENANCE

### Regular cleaning

Cleaning the bike often will help to keep dirt, dust, and debris from getting into the engine and messing with the motor. It also helps to keep all the mechanical parts moving properly without grinding against each other or blocking the chain. E-bikes should be washed once or twice per week.

When you clean your e-bike, do not use a pressurized hose or stream of water. This might compromise the integrity of the seals around electrical equipment and wear them down, eventually leading to exposed and wet electrical systems that will then malfunction. Instead, use a low-pressure water stream or a wet rag and dry the bike off once you're done washing it.



## **Lubrication**

In order to keep all the mechanics in working order, you can apply lubrication on the major moving parts such as the chain. You should use a special cleaning solution to clean off the chain before applying a bike lubricant to it. This should ideally be done at least once a week if you use the bike often.

## **Check the bolts**

Do a quick once-over and check for any loose screws, bolts, nuts, or anything else on the bike. If there is too much play in the bolts, tighten them up a little bit and see if you can identify the cause of the looseness. Don't tighten the bolts too far.

## **Tire pressure**

You can check to see what the current pressure is in the tires by using a simple pressure gauge. If it's too low, or if the tires can visibly sink when you push your finger into them, you should get out your bike pump and inflate them properly to the pressure indicated on the tires.

## **Brake pads**

Take a good look at the brake pads on your bike every few weeks to see how they are holding up. It's essential that you have effective brakes or else you could end up in a serious accident. Brake pads can easily and cheaply be replaced whenever necessary.

## **Waterproofing**

The battery and motor of an ebike are well sealed to prevent any water damage. That doesn't mean it's absolutely impossible for water to get in, but with a certain level of common sense and care, you won't need to worry. Things to avoid with an electric bike include using a jet wash and fully submerging the bike. No lake jumps then, sorry! The motor itself is in a factory-sealed unit and you should never attempt to take it apart for maintenance or to try and fix a problem.



## Battery care

Charge the battery at room temperature in a dry location. To improve the lifespan of your battery, avoid leaving the battery fully charged or fully discharged for long periods of time. When the bike is out of use for an extended period, you can disconnect the battery. It will gradually lose charge, so still top it up every now and again. As we've already said, avoid storing the bike for long periods of time with no charge – maintaining 30 to 60 per cent charge is ideal for long-term storage, according to ebike systems manufacturer Bosch. Extreme heat and cold are the enemies of electric bike batteries. Store your ebike battery in a cool, dry place out of direct sunlight. During winter, and particularly if the temperature is below 0°C, charge and store the battery at room temperature, and re-insert the battery into the bike immediately before riding.

### DISCLAIMER

Riding any kind of bicycle comes with inherent risks and dangers that cannot be predicted or avoided. These dangers could result in a serious accident, injury, or death of the rider. It is the sole responsibility of the rider to become properly educated and prepared to ride safely. Once in possession of the bike, G-force strongly encourages and recommends that all customers have a certified and reputable bicycle mechanic complete a full inspection of each component on the bicycle to ensure it is safe for operation. G-force makes no claims or guarantees that the brakes, battery, frame, motor, motor controller, LCD display, electrical cables, electrical cable housings, fasteners, grips, fork, stem, shifters, headset, seatpost, seatpost clamp, handlebar stem clamp, saddle, wheel hubs, handlebars, spokes, rims, tires, tubes, derailleur, freewheel, cassette, throttle, kickstand, lights, reflectors, hardware, bottom bracket, or any other part or accessory, will be properly secured and adjusted upon arrival. Before every ride fully inspect your bicycle to ensure everything is secured and adjusted properly. Under no circumstances is G-force responsible for any damage resulting from damaged, defective, or improperly secured parts. This includes, but is not limited to, damage to personal property, personal injury, or death.