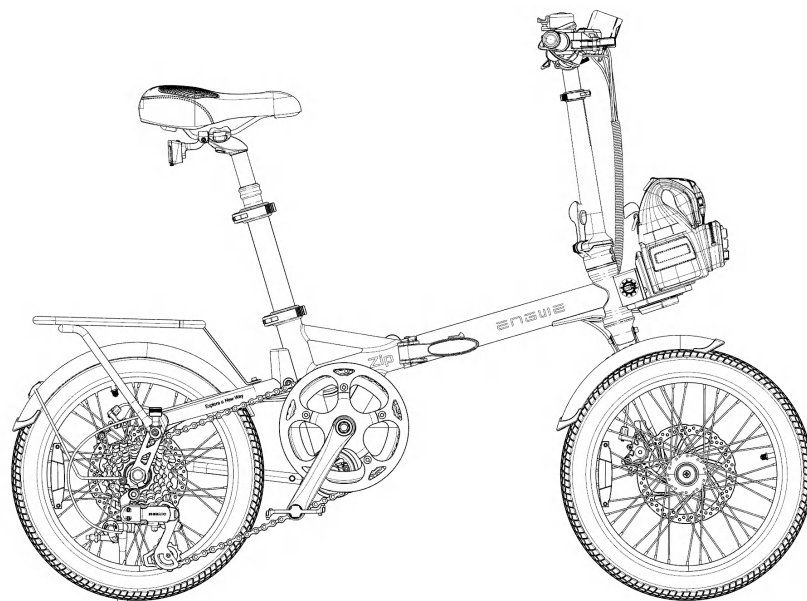




Dear User, before enjoying a smooth ride, please be sure to read this user manual carefully. Familiarize yourself with the relevant usage guidelines and properly store this manual and the product certificate that comes with the bicycle. Do not use the electric assist bicycle before understanding its performance!

Dear users,

The Owner's Manual describes the essential operation and maintenance methods of the electric bike. To enhance your riding experience, please consult this manual to familiarize yourself with the performance, features, safety notes, and maintenance needs of this product. If you have any questions, please contact the official after-sales team or local authorized service station in time. We will offer you diagnostic assistance as soon as possible.

Safety notes

1. Please ensure you comprehend and adhere to the safety notes outlined in this manual to significantly mitigate risk. Upon entering public spaces, please abide by all national and local laws and regulations. Remain vigilant while riding and maintain a safe distance from others and vehicles.
2. The electric bike must be operated according to the guidelines in the manual. The user will be responsible for any loss resulting from failure to follow the manual's guidelines.
3. This product is not designed for off-road biking. Please do not use it as an off-road bike.
4. For your initial ride, choose a private area free of traffic. Once you're comfortable with the product, you can venture onto public roads.
5. Before each ride, please ensure to thoroughly inspect for any loose fasteners or damaged parts. If this product makes abnormal sounds, please stop riding immediately and seek diagnostic support from the official after-sales team.
6. Avoid exceeding the speed limit. Never ride in areas where motor vehicles are present, regardless of the circumstances.
7. For safety reasons, users under the age of 16 are strictly prohibited from using this product. The use of this product is prohibited in the following situations:
 - Individuals under the influence of alcohol or drugs.
 - Individuals unable to participate in strenuous physical activities due to illness.
 - Individuals who are unable to maintain balance or who struggle with balance due to underdeveloped motor skills.
 - Individuals whose weights exceed the limit.
 - Pregnant women.
8. Exercise caution when using this product in bad weather such as snow, rain, slippery roads, and icing.
9. Do not attempt to charge this product if the charger or power supply is wet. When charging this product in a public area, ensure adherence to local safety laws and regulations.
10. For the sake of effective protection and easy use of the bike, always use officially designated parts.
11. If you want to modify your electric bike, please consult the official after-sales team and proceed with caution, ensuring adherence to local laws and regulations. The manufacturer assumes no liability for injuries or bicycle damage resulting from unauthorized modifications.
12. Don't charge the battery when the electric bike is turn on or running, as there is a risk of burns.
13. To minimize the risk of injury, please be sure to read and follow all prompts including "Caution", "Danger" and "Warning" in the Owner's Manual.

- **Danger:** Ignoring this warning could result in personal injury. To minimize harm to yourself and others. This notice specifies the actions you must take or avoid!
- **Warning:** Ignoring this warning could result in damage to the bike and its components. This notice specifies the actions you must take or avoid!
- **Caution:** Ignoring this warning could result in minor damage to the bike or impair its normal operation. This notice specifies the actions you should and should not take.

1. Introduction

- 1.1 Packing list
- 1.2 Components
- 1.3 Functions

2. Quick Guide

- 2.1 Installation guide
- 2.2 How to adjust the height
- 2.3 How to fold
- 2.4 How to remove the battery
- 2.5 How to install the battery
- 2.6 How to charge
- 2.7 Battery information
- 2.8 Battery activation
- 2.9 Quick operation
- 2.10 Bluetooth connection

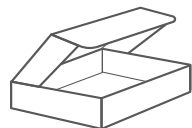
3. Notes For Maintenance

- 3.1 Notes for operation
- 3.2 Maintenance and self-inspection
- 3.3 Troubleshooting
- 3.4 Epac information

4. Service Guide

- 4.1 After-sales service and warranty coverage
- 4.2 Warranty card and repair record
- 4.3 Product parameters

1. Introduction



Change-over Plug



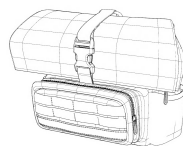
Magnet



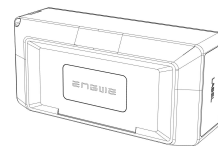
Manual



Pd 100w Charger



Bag



Battery



8-10 18-19

Wrench



Phillips
Screwdriver



Flat-head
Screwdriver



M3 M4 M5 M6

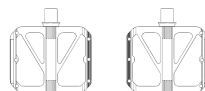
Screwdrivers



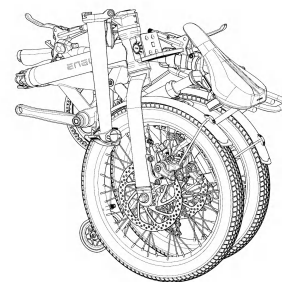
Pump



Wheel Reflector

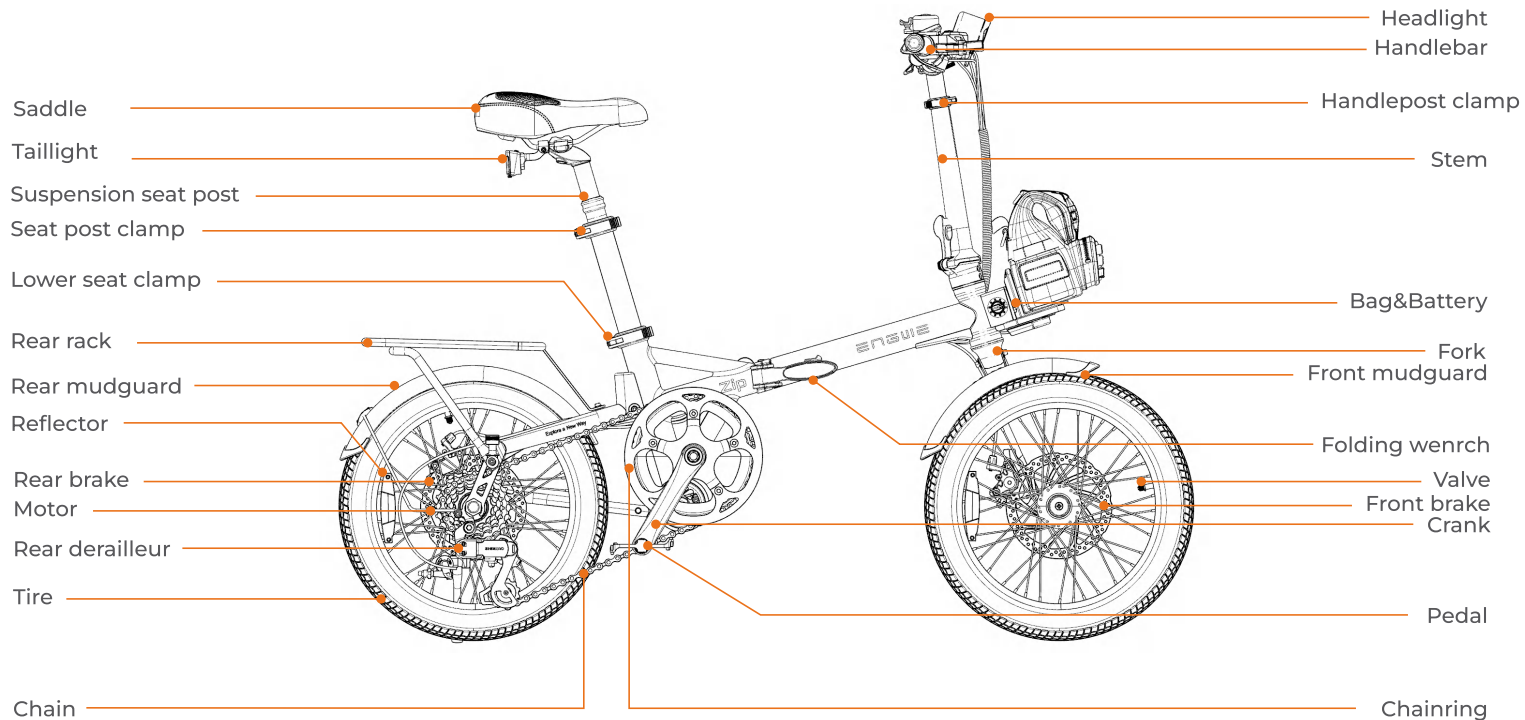


Quick Release-pedal X2

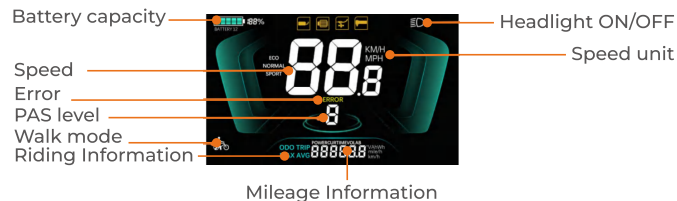
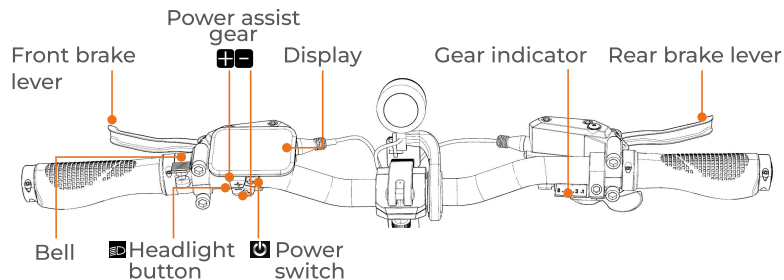


Complete Bike

1.1 Packing list

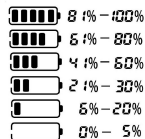


1.Product Introduction



Common function descriptions

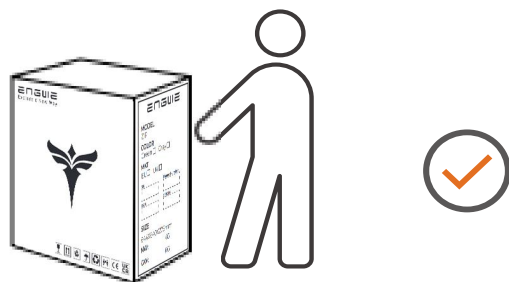
- 1.Power On/Off: press the button for 2 second to turn on, press the button for 2 seconds to turn off.
- 2.Assist gear adjustment: press the and buttons to adjust the PAS level.
- 3.Walk assist: press and hold the button to enter the assist mode. The speed is 5KM/H, and the screen display the assist icon . Release the button , then the assist mode stops immediately, and the assist mode icon disappear.
- 4.Display interface switching: when the display is powered on, it will show the Current Speed (km/h) and Odometer (km) by default. Short press button to switched cyclically between Odometer (km), Trip Odometer (km), Maximum Speed (km/h), and Average Speed (km/h).
- 5.Headlight switch: press button about 2s, the light turn on, and the headlight indicator icon will appear on the display interface; Press the button again, then the lights are turn off and the headlight indicator icon will disappear.
- 6.Battery capacity: battery power five-stage display, when the battery voltage is high, the five-stage LCD is bright, when the battery is under voltage, only the outer border of the battery is displayed, indicating the need to charge immediately.



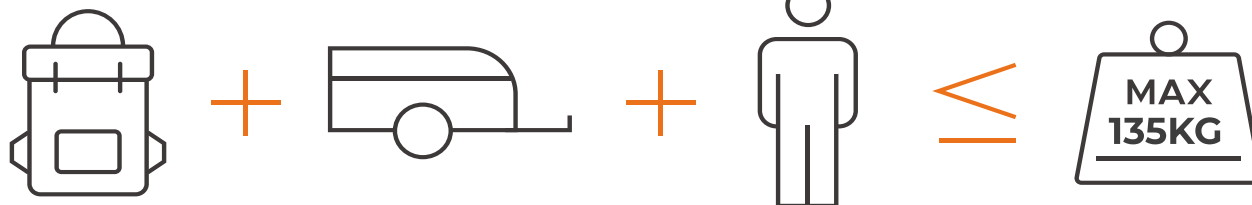
- 6.Error code display: if there is a malfunction in the electric assist bicycle's control system, the display will automatically show an error code. For detailed error code definitions, refer to section 3.3, error code explanation.

1.3 Functions

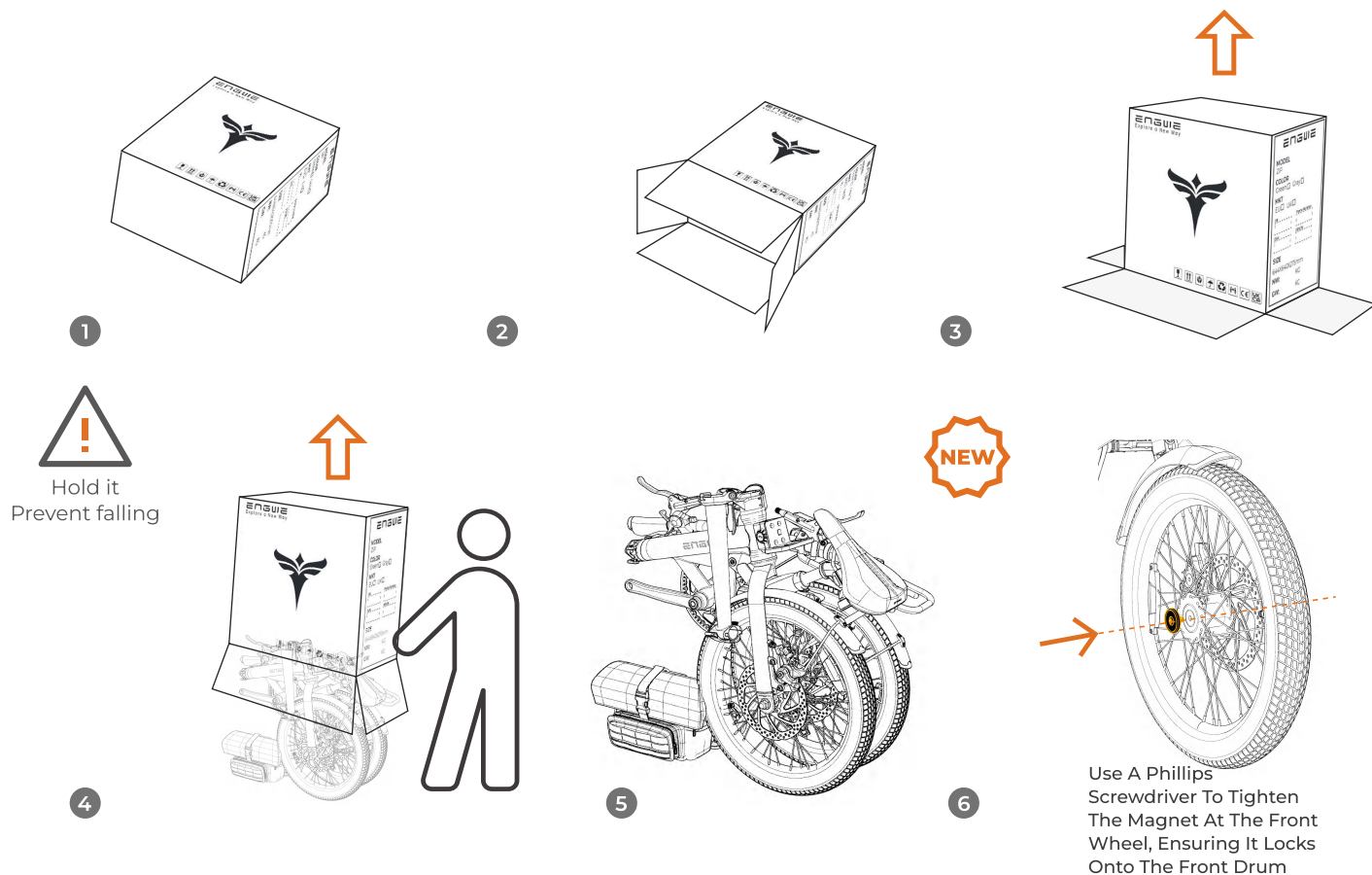
- Warning: The bike shall be disassembled and assembled by two individuals. Before assembling, make sure that the power system is turned off and will not be turned on accidentally.



 Maximum load 135KG



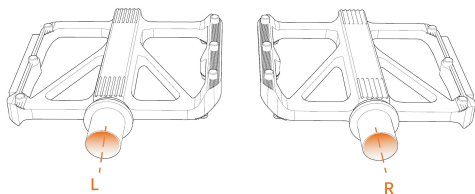
2. Quick guide



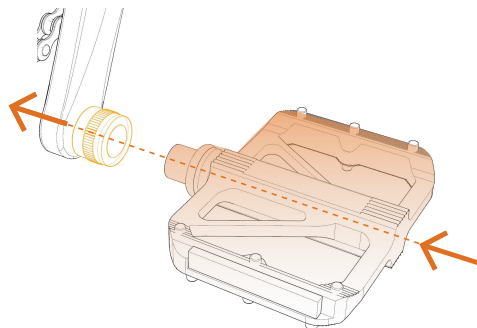
2.1.2 Installation guide - unpacking



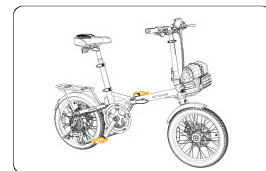
Distinguishing between left and right



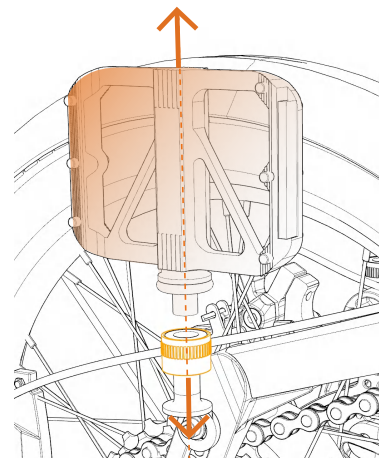
1



2



The pedals are quick-release. When the bike is folded or not being ridden, you can remove the pedals and insert them into the corresponding pedal sockets for storage. Before riding, always check that both pedals are securely installed.

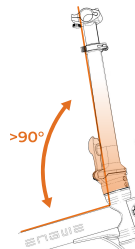


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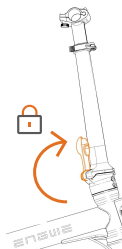
2. Quick guide

Warning: Clockwise direction is to tighten, counterclockwise direction is to loosen.

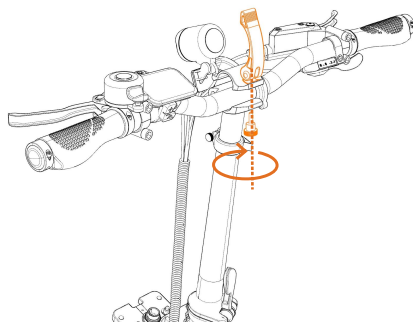
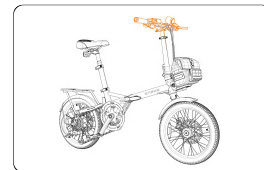
Correct
Installation



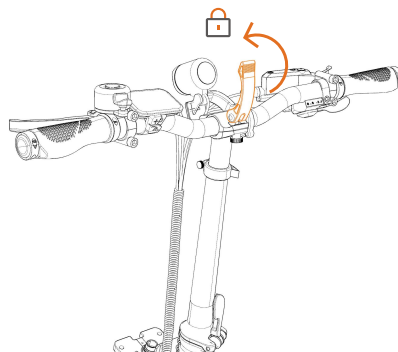
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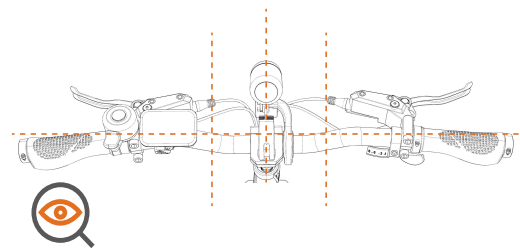
2



3



4

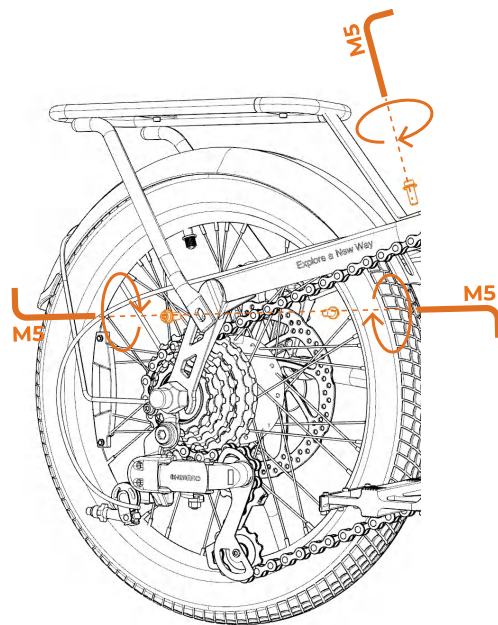
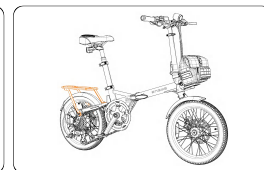


Make sure that the handlebar is centered and perpendicular to the top tube of the frame, Steering may be adversely affected, which could cause you to lose control or fall.

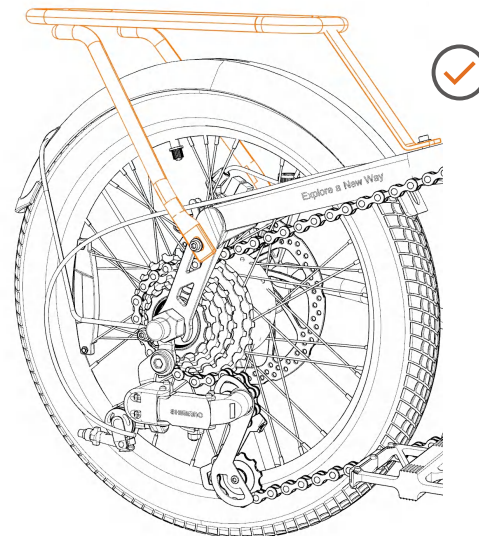
5

Warning: Clockwise direction is to tighten, counterclockwise direction is to loosen.

The rear rack is an optional accessory. If you have purchased the rear rack, please follow the installation instructions below. If you have not purchased this accessory, please disregard this section.



1

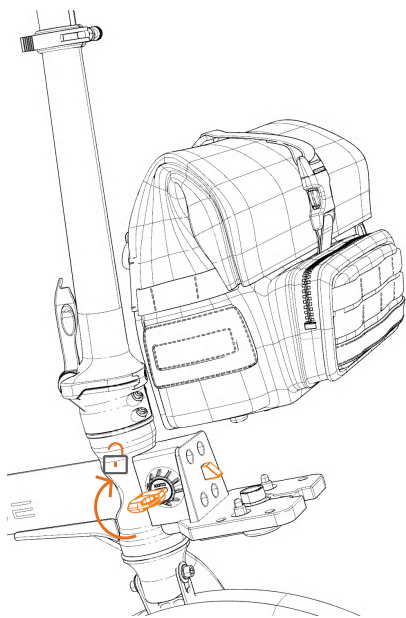


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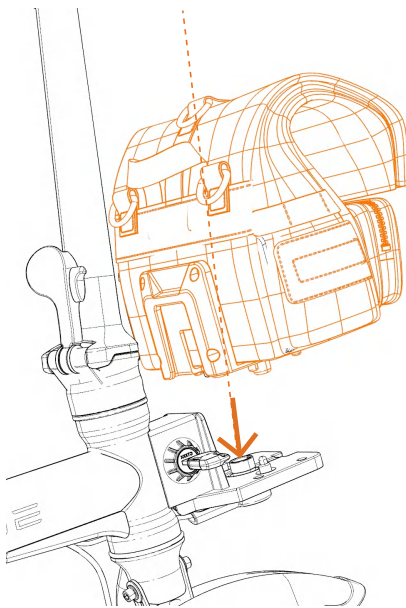
2. Quick guide



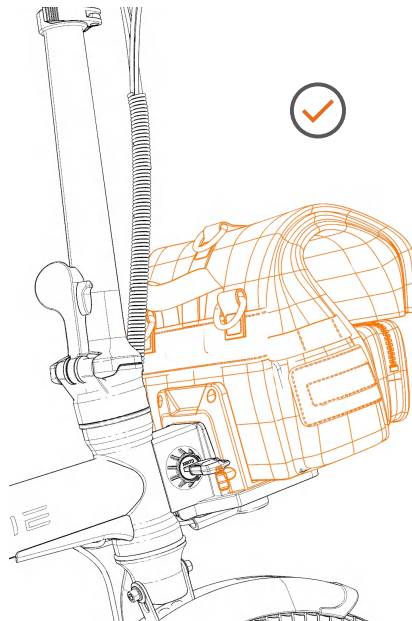
Step For Installing The Bike Bag And Battery



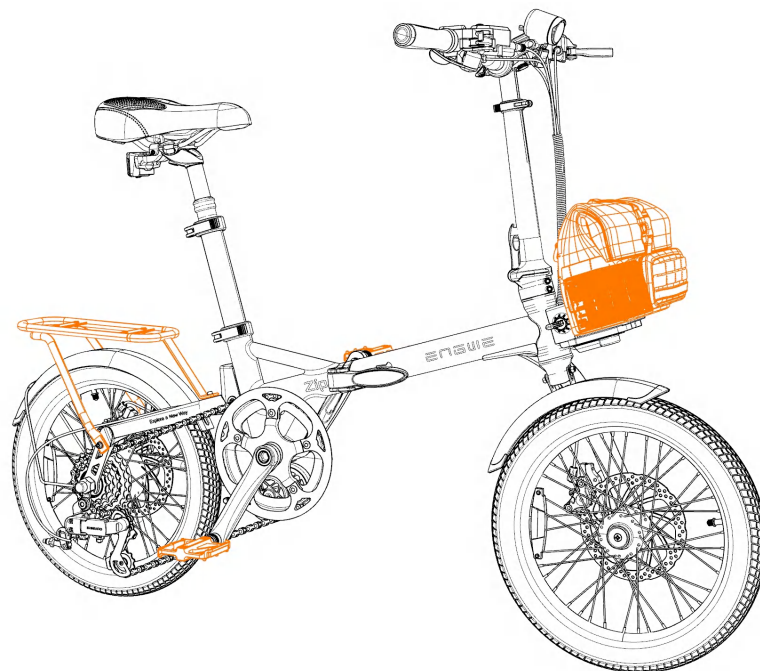
1



2 Open The Waterproof Cover On The Base



3



Congratulations!
Your bike has been assembled
successfully!

2. Quick guide

Seatpost Height Adjustment

1. Adjusting the saddle height

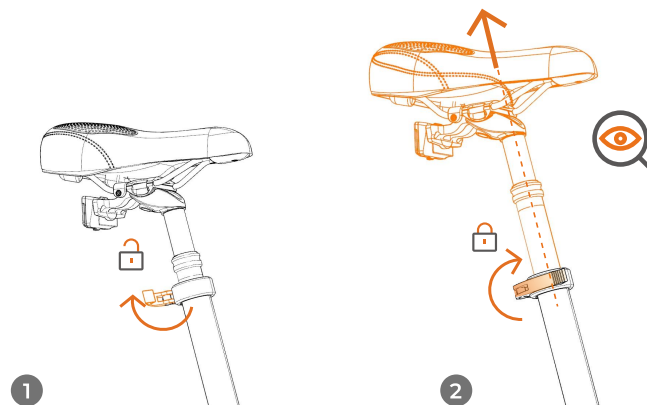
- For everyday use, simply open the upper seatpost clamp to adjust the height of the seatpost and saddle.
- After you have set a comfortable height, fully close and tighten the upper seatpost clamp.

2. Lower seatpost clamp

- The lower seatpost clamp is used only in combination with folding the bike. It does not need to be opened when adjusting saddle height for normal riding.

3. Safety notice

- Before each ride, please check that both the upper and lower seatpost clamps are fully closed and securely tightened.
- If the seatpost clamps are not properly tightened, the seatpost may slowly slip or suddenly drop while riding, which can affect your riding position and safety. Always make sure the clamps are firmly secured.



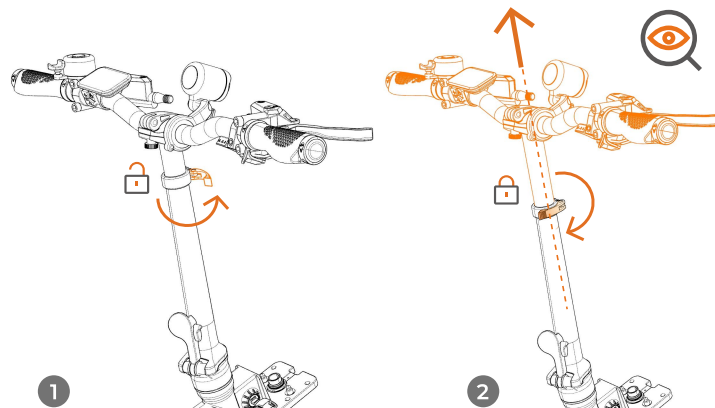
Handlepost Height Adjustment

1. Adjusting the Handle height

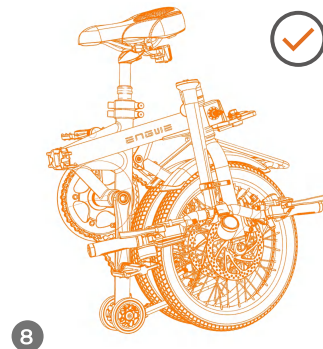
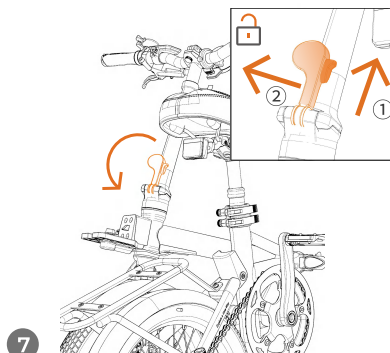
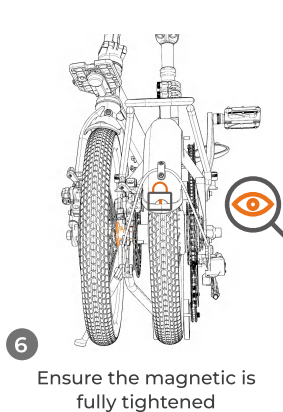
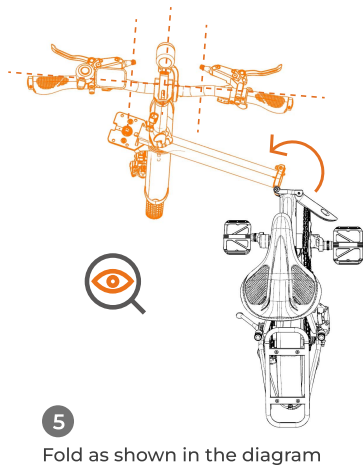
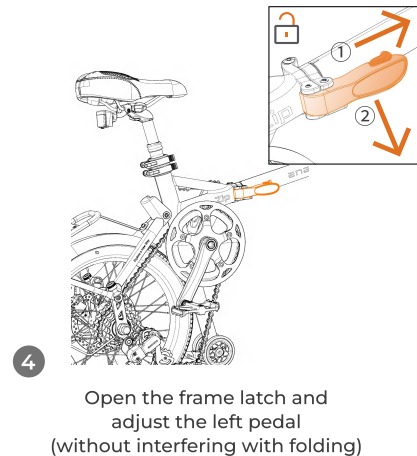
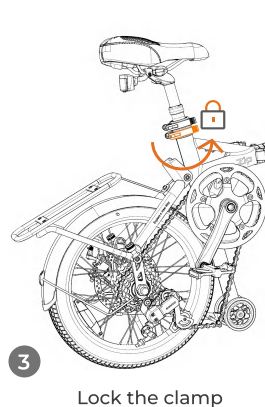
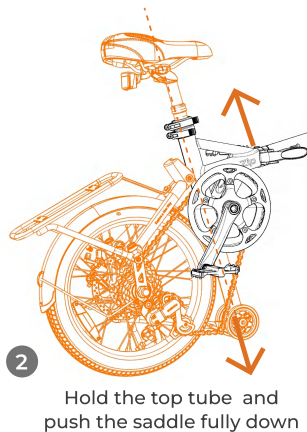
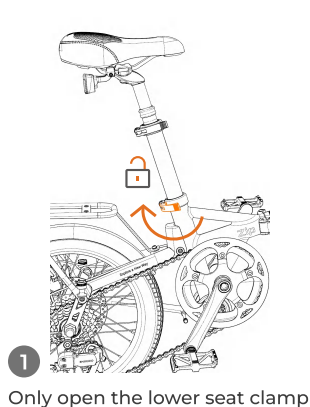
- For open the handlepost clamp (quick release) and slide the handlepost up or down to a comfortable height.
- After adjustment, make sure the handlepost is aligned with the front wheel, then fully close and tighten the handlepost clamp.

2. Safety notice

- If the handlepost clamp is not securely tightened, the handlepost may move or slip while riding, which can affect steering stability and safety.
- Before each ride, please check that the handlepost clamp is fully closed, securely tightened, and that there is no play or movement.

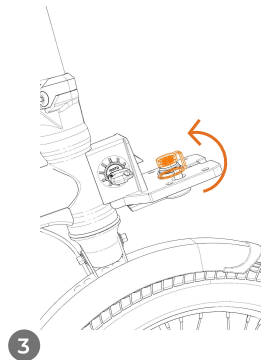
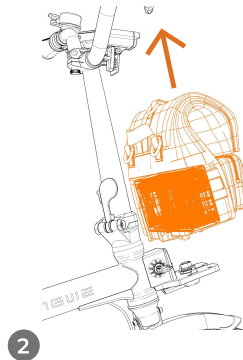
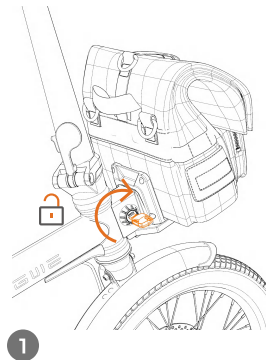


2.2 How to adjust height



2. Quick guide

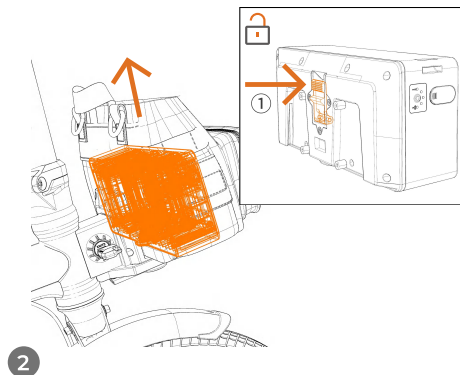
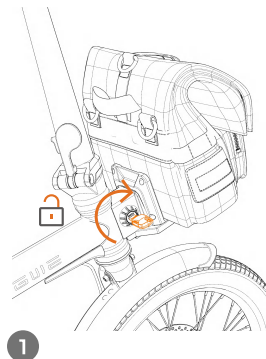
Method ① : Take The Bike Bag&battery As A Whole



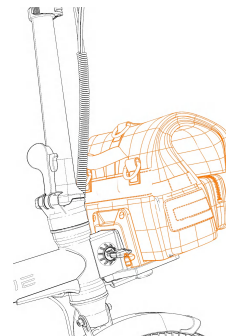
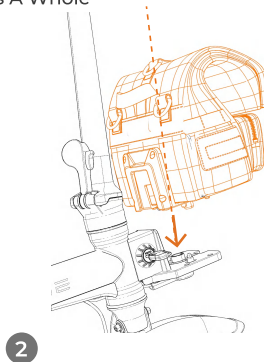
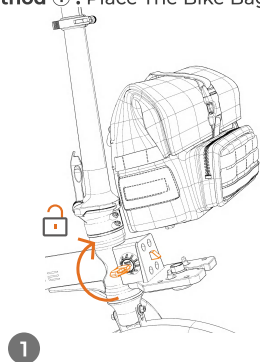
Notes:

- (1) After Removing The Battery, Close And Secure The Waterproof Cover On The Battery Mount
- (2) When Parking In Rain Or Humid Conditions, Always Check That The Waterproof Cover Is Fully Closed.

Method ② : Only Take The Battery

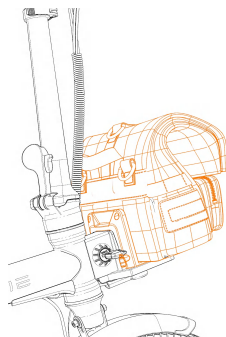
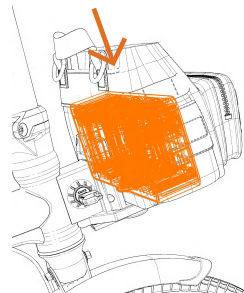
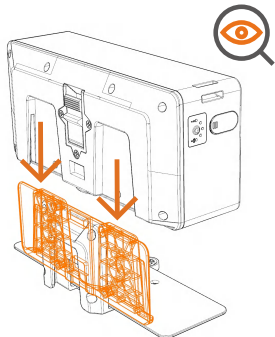


2.4 How to remove the battery

Method ① : Place The Bike Bag&battery As A Whole**Notes:**

(1) When you hear a clear "click" from the lock, the battery is fully engaged.

(2) Before each ride, gently shake the battery bag to make sure the battery is firmly secured to the mount. Additionally, you can reach into the bag and check whether the spring lock switch on the battery can be toggled normally. If it moves freely, the battery is considered locked in place. If the spring lock is stuck or unable to move, it indicates that the battery is not securely fastened.

Method ② : Only Place The Battery

1 Align The Battery With The Guide Rails In The Bag.

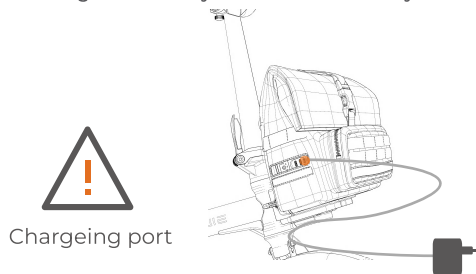
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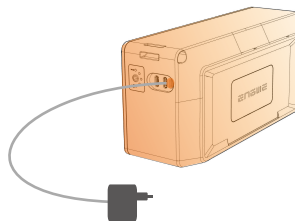
2. Quick guide

Two Charging Methods

① Charge the battery on the frame directly



② Remove the battery for charging (see 2.4 for the removal method of the battery)



- Note: The battery remains a small amount of electricity when the product leaves the factory. Before the product is used for the first time, please charge it fully. Please make sure to use the manufacturer's original charger that comes with the bicycle to charge the bicycle battery. Non-original chargers may cause battery damage.

Steps

- 1. Before charging:** Please ensure that the charging environment has normal air circulation and is dry; check that the charger plug and socket are dry and free of foreign objects; avoid charging in direct sunlight; avoid charging in an environment with a temperature below 5 degrees Celsius and above 30 degrees Celsius; ensure that there is no accumulation of flammable materials at the charging area
- 2. Start of charging:** Fully insert the charger connector into the battery's charging port, and then fully insert the charger's power plug into the power socket.
- 3. Status indication:** During charging, the battery level LEDs will flash one at a time in sequence, indicating normal charging. When all five LEDs turn solid green (no flashing), the battery is fully charged. If the charger is plugged in but the green LEDs stay solid and do not flash, charging may not have started. Unplug and reconnect the charger, and make sure the connector is fully seated.
- 4. Charging time:** about 6.5 hours
- 5. End of charging:** Unplug the power plug first, and then remove the charger connector from the battery. To charge by the method indicated in ①, just close the battery's dust plug. To charge by the method indicated in ②, you must insert the battery into the frame and secure it, and then close the battery's dust plug.

- Note: The charger contains a high-voltage device. Unauthorized repairs are strictly prohibited due to the risk of danger. The battery and the charger must be placed in a safe, well-ventilated, and dry area, beyond the reach of children, and away from any flammable, explosive, or hazardous items (such as saddles, sofas, etc.). Additionally, charging may not be conducted outdoors to prevent accidents like electrical short circuits and fires due to rain or similar elements.
- Warning: If you detect an unusual odor or if the battery or charger becomes excessively hot during charging, stop charging immediately and contact the after-sales team.

2.6 How to charge

Battery Information and Interface Description

1. Battery Power On / Off:

Power on/off: press the power button for 2 second to turn on, press the power button for 2 seconds to turn off.

2. Type-C Ports:

This battery is equipped with two Type-C ports. Both ports can be used for:

- (1)Charging the battery (by connecting a Type-C charger).
- (2)Supplying power to external devices (such as smartphones, tablets, lights, etc.).

The system automatically detects whether it is in charging or power supply (output) mode.No manual switching is required.

3. Type-C Power Output (Supplying Power to External Devices):

When the battery is not being charged, the Type-C ports can be used to power external devices (such as smartphones, tablets, etc.). The system will automatically recognize the connected device and provide the required power. No manual settings are needed.

How to use:

- (1)Make sure the battery is not connected to the charger.
- (2)Use a Type-C cable to connect the battery's Type-C port to the external device. Power output will start automatically.
- (3)After use, unplug the cable and close the dust cap on the port (if equipped).

Note:

Charging speed may vary between different devices.

4. Important Safety Notice: No Charging and Discharging at the Same Time

This battery does not support pass-through operation (charging and discharging at the same time).

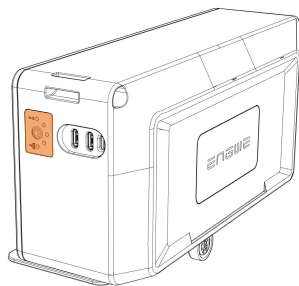
- (1)When the battery is being charged, all Type-C ports function only as charging inputs and will not supply power to external devices.
- (2)During charging, do not use the Type-C ports to power smartphones, tablets, or other external devices. Doing so may cause the battery and internal circuits to operate under high load for an extended period, which can increase heat generation and shorten battery lifespan.
- (3)If you need to power external devices, please wait until charging is complete and the charger is unplugged, then use the Type-C ports for power output.

2. Quick guide

1. Before First Use: Activating the Battery

Before using the bike for the first time, please charge and activate the battery:

1. Connect the charger to the battery according to the charging instructions in section 2.6.
2. Press and hold the power button for about 2 seconds. When the battery indicator light turns solid green (not flashing) and remains on, the battery has been successfully activated.
3. Note: Because this is the first use, it is recommended to charge the battery for about 30 minutes first to ensure a longer riding time on your first ride.



Why do you need to activate the battery:

We use a more advanced BMS(Battery manage system) to better protect the battery cells and extend the battery life. Therefore, during transportation or when not in use for a period, the BMS(Battery manage system) will automatically enter the sleep mode of the battery.

The judgment conditions for sleep are as follows:

When the battery is in a non discharging and non communicating state, it will automatically enter sleep mode according to the battery level

Battery capacity<30%, enter sleep mode after 1 hours

Battery capacity<50%, enter sleep mode after 2 hours

Battery capacity<80%, enter sleep mode after 48 hours

More than 80% does not automatically enter sleep mode

So if you find that you cannot turn it on after not using it for a long time, please connect the charger to activate the battery first.

2.8 Battery Activation

Before using the product, please follow the installation guide for proper assembly of the corresponding components, verify that all fastening parts are secure, confirm the battery is fully charged, and take appropriate protective measures for riding.

Step 1: Adjust the handlebar and saddle

Please adjust the handlebar and saddle to the appropriate heights for the rider, and make sure that the seat post quick-release hoop and the stem quick-release hoop are securely fastened.

- Note: For optimal comfort, adjust the handlebar to a height that suits your riding style. The saddle should be set at your pelvic height and must not exceed the maximum safety scale.

Step 2: Power on and adjust the headlight/taillight

1. Turn on the battery's power supply
2. Press the power button for about 2 s; the screen will light up.
3. Press the  for about 2 s to turn the lights on, Adjust the headlight to illuminate the area 10 m ahead.
4. To turn on the taillight, switch on the taillight switch above the rear light.



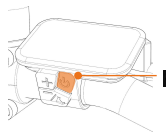
Turn the key and remove the battery

1



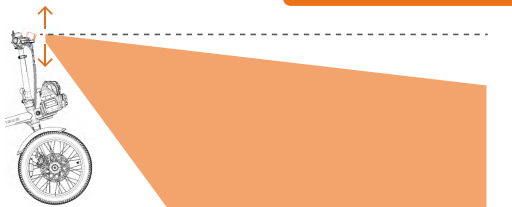
Turn on the switch, turn on the battery, and put it back

2



Press for 2 s to power on, and hold for 2 s to power off

3



4

Step 3: Pas Level shift

Adjust the ride mode according to road conditions and personal needs. The bike is designed with 3 PAS level. Click the power "+" and "-" buttons to shift between level. The 1st level is suitable for riding on relatively flat roads. As the incline of the road increases, you can shift to a higher gear accordingly. Note: When the bike is in PAS mode and the battery is low, you can still ride it like a regular bike.

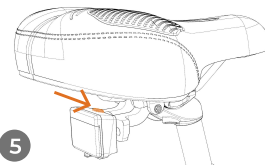
Step 4: Ride on the road

Please put on a helmet before riding on the road.

Step 5: Brake

The left brake is intended for the front wheel, while the right brake is intended for the rear wheel. To brake, first engage the right brake, followed by the left, to slow down the bike until it comes to a complete stop.

- Warning: Avoid abruptly applying the front wheel brake on its own, as this can easily destabilize the bike's center of gravity and lead to a fall.
- Statement: The A-weighted emission sound pressure level at the driver's ear is less than 70 dB(A).

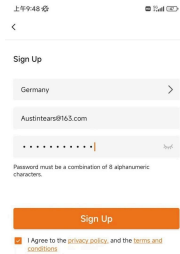


5

2. Bluetooth Connection Steps

Step 1 : download the engwe app, search for the engwe app in the app store and click to download;

Step 2 : after download, then register your account information, fill in the registration country, enter your email address and password, and click: sign up:



Sign Up

Germany

Austintears@163.com

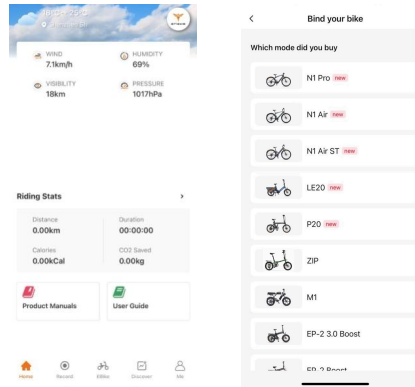
.....

Password must be a combination of 8 alphanumeric characters.

Sign Up

☒ I Agree to the [privacy policy](#), and the [terms and conditions](#)

Step 3 : after registration, enter the interface to click the bottom ,e-bike: option to enter: bind your bike:, find the model :zip: and click it, then select the bike color green or grey;



2.10.1 Bluetooth Connection Steps

Step 4 : after the clicking the purchase way, fill in the bike information, such as the bike frame id at the head of tube, the bike sn id at the bottom of the top tube, the bike receipt picture, the engve online order no., and the order date. finally, click ,complete: to finish.

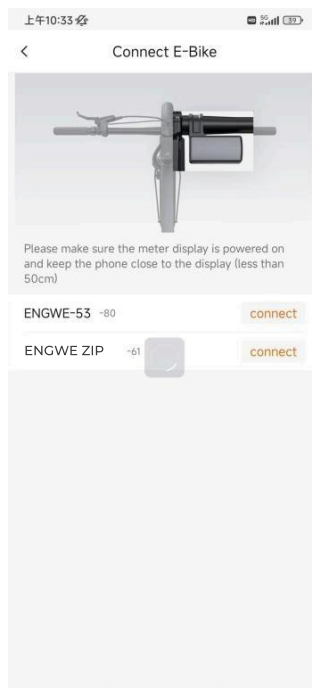
The first screenshot shows the 'Where did you buy this bike?' screen with options: Engve Online, Engve Offline Franchiser, Amazon, Ebay, Other, and 111. The second screenshot shows the 'Bike Information' form with fields for Bike Frame ID, Bike SN ID, Receipt Picture, Engve Online Order No., and Order Date, with a 'Complete' button at the bottom. The third screenshot shows the same form with pre-filled values: Bike Frame ID: Giksnfv, Bike SN ID: M025032P7250006, Receipt Picture: [image], Engve Online Order No.: Tjksaef, Order Date: 2025-03-27, and a 'Complete' button.

Step 5 :

The first screenshot shows the 'Connect bike' dialog box with the text: 'Click the Confirm button to scan the E-Bike, make sure the E-Bike meter display is powered on, and try to keep the phone close to the display.' It has 'Cancel' and 'Confirm' buttons. The second screenshot shows the same dialog box with the 'Confirm' button highlighted, and a 'Binding successful.' message at the bottom.

2. Bluetooth Connection Steps

Step 6 : to find the blue-tooth name , engwe zip:, click , connect: to establish the connection. once the blue-tooth connection is established, you will enter the bike app operation interface, here you can operate the pas mode and the headlight, at the same time, you can obtain the duration, distance , max speed, average speed, etc.



2.10.3 Bluetooth Connection Steps

Safety guidelines for electric bike

1. Do not park the electric bike in the building lobby, evacuation stairs, walkways or safety exits;
2. Do not charge and park the electric bike in the residential building. Keep the bike away from combustibles during charging. The charging time should not be too long, generally not more than 12 h;
3. Prevent water from entering the electrical components. When cleaning the bike, avoid water flow impacting the charging interface, harness connectors and other electrical components;
4. When adjusting the height of the saddle and stem, be careful not to expose the safety scales on the saddle and stem;
5. Users and dealers are prohibited from modifying the bike without authorization. For example: modification of battery configuration, modification of circuit, increase of bulb power, add-on installation of audio devices, etc.;
6. Do not touch the live components of the electric bicycle with wet hands or metal objects. For example: the battery interface, battery charging port, charger connector, etc.;
7. Do not disassemble the electrical components without authorization to prevent liquid and metal filings from entering the components.
8. Do not expose the bike to sunlight/rainstorm for a long time to prevent parts from aging;
9. If the bike needs to be cleaned, please wipe down the frame using water mixed with a neutral detergent. Do not remove and wash the internal parts with water to prevent short circuits.
10. Do not touch hot surfaces after frequent use, such as touching the disc brake after frequent use of the brakes, or touching the motor after a long ride to avoid burns.

• Note: Maintenance by non-professionals is strictly prohibited. In case of failure of the bike, contact the customer service center or go to a designated professional maintenance station for repair.

Ride safely: Always adhere to national and local traffic laws and remain vigilant for your safety while riding.

1. Individuals under the age of 16 are strictly prohibited from operating electric bikes on the road. Do not lend the bike to those who are not proficient in its use to prevent potential hazards.
2. Please ride in the non-motorized lane, with the maximum speed not more than the speed limit in local regulations;
3. The electric bike must carry people or articles in accordance with the laws;
4. Always wear an appropriate safety helmet and secure the chin strap while riding;
5. When riding in rainy and snowy days, the braking distance will be extended, so pay attention to slowing down; Do not ride in bad weather such as rainstorms;
6. Please carefully abide by traffic rules. Do not ride after drinking, or ride with one hand or with both hands off;
7. When riding, try to wear bright color clothes, not tight, without open cuffs and allowing for free movement, and wear low-heeled shoes or sports shoes when possible.

Notes during ride

1. For the safety of yourself and others, please consciously abide by traffic rules;
2. Wear a safety helmet and take other relevant safety precautions before ride;
3. When starting the bike, gradually accelerate to prevent losing control;
4. In rainy and snowy weather, as the braking distance increases, please concentrate on riding slowly and carefully when riding to prevent sideslip and fall;
5. Before stop, please shift down the mechanical gear to facilitate the next ride.

Inspection before ride

1. Turn on the power supply, check whether the indicator lamps on the instrument are normal, and check whether the power of the battery is sufficient;
2. Check whether the front and rear lights are normal and whether the lighting angle of the headlight is normal;
3. Check whether the horn of the electric bike is in good condition;
4. Check whether the handlebar and seat post are adjusted to the proper positions, and confirm that the fastening screws (or quick-release hoop) are fastened;
5. Check the brake levers. the brakes shall be adjusted to be reliable and flexible in resetting. The taillight shall be on during braking;
6. Check whether the tire pressure is normal, whether there is cracking and abnormal wear, and whether there are nails, stones, glass and other sharp objects inserted;
7. Check whether the wheel screws are tightened firmly, and ensure the pedal reflector is not lost, damaged or contaminated.

Notes for push and stop

1. The power switch must be off while pushing to avoid accidents from unexpected activation of the throttle grip.
2. When pushing the bike uphill or carrying heavy objects, the boost mode can be on to assist the push;
3. When stopping the bike, please set the kickstand on the flat ground and power off the bike;
4. Please maintain and clean the bike regularly to keep it in the best condition.

3. Notes for maintenance

Maintenance and self-inspection of bike

1. The electric bike has been adjusted before leaving the factory. If you have any questions, please contact the manufacturer or supplier;
2. Always check the tire pressure to keep it within the normal range;
3. Always check and adjust the main components such as handlebar, foldable riser, saddle, seat post, front and rear axles, bottom bracket, flywheel and chain, front and rear wheels to make sure the transmission parts are flexible and free of abnormalities. The loosened nuts or screws shall be tightened in time;
4. It is recommended that the parts to be lubricated (such as front axle bearing, bottom bracket bearing, rear axle bearing, fork bowl group, pedal bearing, etc.) be filled with 3# calcium-based lubricating oil (grease) every six months during use; Add 30# oil to the chain, derailleur cable, kickstand and other parts about every two months;
5. If it is found that the wearing parts are damaged, such as brake pad, chain and tires, they can be replaced with parts of the same model and specification at a nearby maintenance center .
6. Do not use strong water flow or close-range steam jet to clean your electric bicycle. Please do not wipe the battery and battery interface with a wet towel or wet paper towel.



Maintenance of motor

1. Do not open the motor base and end cover after sealing;
2. The motor shall be kept clean, and no foreign matter, corrosive liquid or gas shall enter the motor. The motor housing shall not be knocked or baked to avoid damage to the motor.
3. The waterproof grade of the motor is IPX5. Do not flush the motor with a water gun or submerge the motor in water. When the water level reaches the center of the motor hub, it may cause an internal short circuit of the bike and damage the electrical components.



Maintenance of battery

1. The lithium battery features a large capacity, long service life and light weight. its service life is closely related to your use method. Do not use the bike till the battery is low. Do not store the bike for a long time. Please develop the habit of frequent charging;
2. Please fully charge the bike for the first time. It is recommended that the bike be charged for 3.5 h each time, not more than 8 h.
3. In the case of no use for a long term, it is necessary to charge the lithium battery for more than 2 h every month. It is strictly forbidden to store the bike with the battery in under-voltage state; Once the battery reaches the under-voltage state, it will be subject to great and irreversible damage.



Brake Adjustment And Replacement Of Wear Parts

1. Regular inspection and correct adjustment of the brakes are essential for safe riding.
2. If you notice reduced braking power, increased lever travel, rubbing noises or vibration, stop riding and have the brakes checked and adjusted by a qualified bicycle mechanic or dealer.

- **Danger:** Do not disassemble the old battery without authorization. The battery shall be recovered at the location designated by the local government or at the company's authorized maintenance site.
- **Warning:** Always remove the battery during maintenance. Keep the battery away from open flames or high-temperature heat sources. Never throw the battery into a fire. Avoid exposing the battery to direct sunlight in hot and high-temperature conditions.

3.2 Maintenance and self-inspection

Troubleshooting

Symptom	Possible cause	Common solution
The bike fails to work	Low battery Poor connection of electrical parts Incorrect start sequence	Charge the battery Clean and re-tighten the connector Start the bike in the correct sequence (see 2.5)
Insufficient range	Insufficient tire pressure Excessive uphill travel, high wind speeds, frequent braking, and overloading The battery is faulty, damaged or aging	Check whether the tire leaks and inflate the tire adequately Utilize the pedal for assistance while riding or modify your route accordingly Contact the engwe after-sales team for assistance
The battery fails to be charged	Poor connection of charger The charger is damaged the battery is stored for a long time and not charged regularly	Reconnect the charger Replace the charger Contact the engwe after-sales team for assistance
The motor fails to work after power-on	The motor cable is loose or damaged The throttle grip is loose or damaged. The motor is damaged	Reconnect or replace the cable Tighten or replace the throttle grip Contact the engwe after-sales team for assistance
Unusual acceleration or excessively low speed	The throttle grip is loose or damaged, or the battery charge is too low	Tighten or replace the throttle grip and fully charge the battery

Fault code

The engwe electric bike comes with a fault detection system. If the electrical system fails, the instrument will display a fault code. Here are the most common fault codes to assist you with troubleshooting. If a fault code is displayed, please stop operation immediately and contact the after-sales team of engwe.

Fault code	Symptom
E014	Controller Failure
E030	Communication failure
E013	Hall failure
E015	Brake failure
E043	Motor phase failure

EPAC Intended Use and Terrain / Misuse Warning

- (1) This EPAC is designed only for urban and commuter use, on paved roads, cycle paths and other smooth, hard surfaces.
- (2) It is not intended for off-road riding, mountain trails, jumps, stairs, curbs, stunt riding, or any rough or unpaved terrain.
- (3) Using the EPAC outside of these intended conditions may lead to loss of control, damage to the bicycle, serious injury or death, and may void the warranty.

WARNING

1. As with all mechanical components, EPAC is subjected to wear and high stresses. Different materials and components may react to wear or stress fatigue in different ways. If the design life of a component has been exceeded, it may suddenly fail, possibly causing injuries to the rider. Any form of crack, scratches or change of colouring in highly stressed areas indicate that the life of the component has been reached and it should be replaced.

2. Frequent or intensive use can cause fatigue or damage to the bicycle that may not be immediately visible. To ensure your safety, we strongly recommend regularly inspecting: the frame, the front fork and any composite components.

3. Check for cracks, dents, deformation, unusual noises, or changes in the surface finish.

If you notice any of the above, stop riding immediately and have the bicycle inspected by an authorized dealer or qualified bicycle mechanic.

After any crash or severe impact, these parts should also be checked, even if no damage is visible.

- (1) Battery operating temperature range: -10°C ~ 45°C
- (2) Operating Frequency: 2402 MHz to 2480 MHz Maximum EIRP Power: -5.59 dBm
- (3) Do not connect to Bluetooth while the product is charging.

4. Service guide

Warranty principles

- 1. The user shall use the product as described in this manual. For any performance failure caused by the product quality, the company will fulfill its warranty obligations according to the provisions of the consumer protection laws;
- 2. The company is responsible for repairing faults outside the warranty coverage and the main components after the warranty period has expired. However, appropriate charges will apply.
- 3. For the replacement of the battery beyond the warranty period, the company will provide the battery at the factory cost. However, the corresponding battery must be collected and sent back to the manufacturer to ensure safety and prevent environmental pollution.

Warranty coverage and duration

Item	Accessory name	Warranty period	Notes for warranty
Basic parts	Frame	12 months	In cases of natural deformation, cracked welds, loose welds, fractures, and other quality issues resulting from substandard manufacturing, the manufacturer will provide replacements in accordance with the warranty terms. Unauthorized modifications, damage from collisions, etc., are not covered under the warranty.
	Fork, handlebar, foldable riser, seat post	12 months	
	Tire	1 month	Tires punctured by sharp objects, parts damaged due to collision, etc. are not covered under the warranty.
	Saddle, brake, brake disc, brake lever	3 months	
	Crank set, pedal, kickstand, mudguard, seat post quick-release hoop, foldable stem quick-release hoop, hub, thumb shifter, rear derailleur, flywheel, chain, bottom bracket, shock absorber	6 months	Man-made damage, modification without authorization, parts and accessories damaged due to collision, etc. are not covered under the warranty.
Electrical Parts	Control unit, charger, main/auxiliary cables, instrument, throttle grip, torque sensor, battery coxer, poy er-off brake lexe	12 months	The manufacturer will make replacement as per the warranty terms for short circuits, burnout, performance failure caused by poor manufacturing, etc.; Water ingress, cable disconnection, man-made damage, etc. are not covered under the warranty.
	Headlight, taillight	6 months	
Motor	Motor core, Hall element, bearing, clutch	12 months	The manufacturer will make replacement as per the warranty terms for problems such as phase loss, burned Hall elements, demagnetization, and abnormal sound of the bearing; Faults such as cable disconnection and water ingress are not covered under the warranty.
Battery	Battery top coxer, battery bottom coxer, battery case, motor core	12 months	If the battery fails to charge and its capacity is less than 70%, the manufacturer will make replacement as per the warranty terms (the new battery's warranty period will be calculated according to the remaining warranty period, rather than being calculated from the beginning). Faults due to man-made damage are not covered under the warranty.

• Note: The limited warranty does not apply to any subsequent owner or other transferee of the electric bike.

4.1 After-sales service and warranty coverage

Notes for warranty

- 1. The accessories will be covered in the warranty in strict accordance with the warranty period;
- 2. The warranty period starts from the date of purchase;
- 3. The charger, battery and motor disassembled without authorization will not be covered under the warranty;
- 4. Other parts of the bike are only covered under the three-month warranty in case of quality problems;
- 5. When other parts of the bike fail, the maintenance must be carried out at a professional maintenance site. It is not allowed to disassemble and assemble the bike without authorization. The control unit, battery and charger must have intact labels;
- 6. For repair of the bike, the warranty card, invoice, certificate of conformity and other relevant documents must be presented;
- 7. The battery shall be subject to a separate warranty, that is, in case of battery problems, the battery shall be returned to the manufacturer to determine whether it is under the warranty coverage according to the battery test, and then the warranty liability shall be carried out accordingly.



Warranty card

User	Organization			
	Name		Tel	
Address				
Purchase Date			Color	
Bike Model			Invoice Number	
Frame Number			Motor Number	

Repair record

Date	Repair Content	Remarks

Product Parameters

Product model	ZIP
Frame material	Steel
Maximum load	135kg/297lbs. (include bike's weight)
Maximum speed	25km/h
Motor torque	40Nm
Battery capacity	360wh Li-ion
Maximum range	120 km*
Tire size	16 x 1.95" Front / Rear
Tire pressure	Recommended 1.7 bar-3.1 bar, No more than 20 PSI
Charger	PD 100W
Charging time	6.5h
Waterproof rating	IPX5
Bike weight	16.9kg / 37 lbs.
Maximum load capacity of rear rack	15kg / 33lbs.

*The maximum range is measured in 1st gear with full charge and a load of 75 kg on a flat surface at 25°C and a relative humidity of 70%. The actual results may vary due to the differences in gear, temperature, load, wind speed, road conditions and other factors.

operating frequency: 2402 mhz to 2480 mhz
maximum eipr power: -5.59 dbm



Installation video

