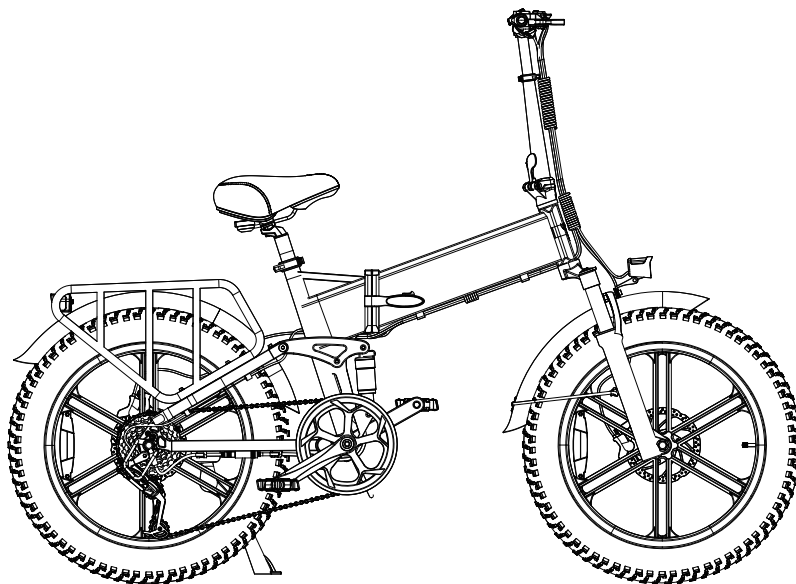




# ENGINE PRO 2.0

## OWNER'S MANUAL



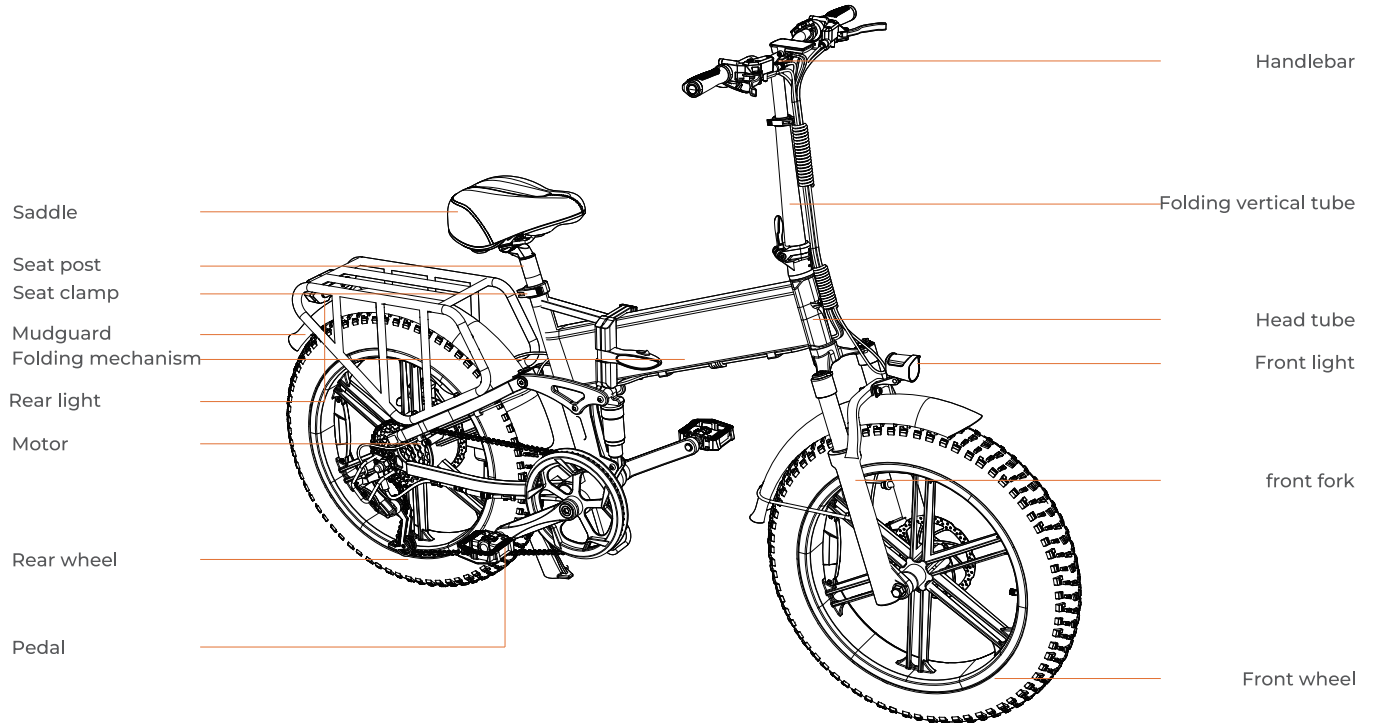
PLEASE READ THIS MANUAL CAREFULLY BEFORE USING YOUR E-BIKE

Thank you for choosing the ENGWE series product. To ensure a quick and safe riding experience, please familiarize yourself with this manual. The company reserves the right to interpret and explain this manual.

1. Before using this product, ensure the rider has read the manual.
2. It is your responsibility to be aware of and comply with the laws in your area.
3. Before riding, thoroughly check that all components are in good condition to ensure safety. If you find any problems, please contact us in a timely manner.
4. Ensure the rider wears a helmet and other protective gear.
5. Minors need to use this product legally in accordance with local regulations
6. Minors must have parental approval and supervision to use this product.
7. Riders must not be under the influence of alcohol or drugs.
8. Do not operate the bike if the rider is unable to engage in strenuous activities due to illness.
9. Avoid riding in extreme weather conditions or when excessively fatigued.
10. While the bike is suitable for rain or snow, avoid water contact near the motor center to prevent damage to the internal circuitry.
11. Do not charge or park the bike indoors. Keep charging away from flammable materials, and avoid excessively long charging times.
12. Do not touch battery discharge components with hands. Avoid metal contact with battery electrodes and the bike circuit to prevent short circuits.
13. Use the original charger for battery charging. Do not use the bike's battery for other devices to prevent damage.
14. Avoid using non-original parts. Unauthorized disassembly, cracking, or modification of the product and its components is prohibited, and any resulting damage or loss is your responsibility.
15. Regularly maintain brakes, tires, and other moving parts for proper bike functionality.
16. Services outside the warranty scope may require payment for maintenance and related services.

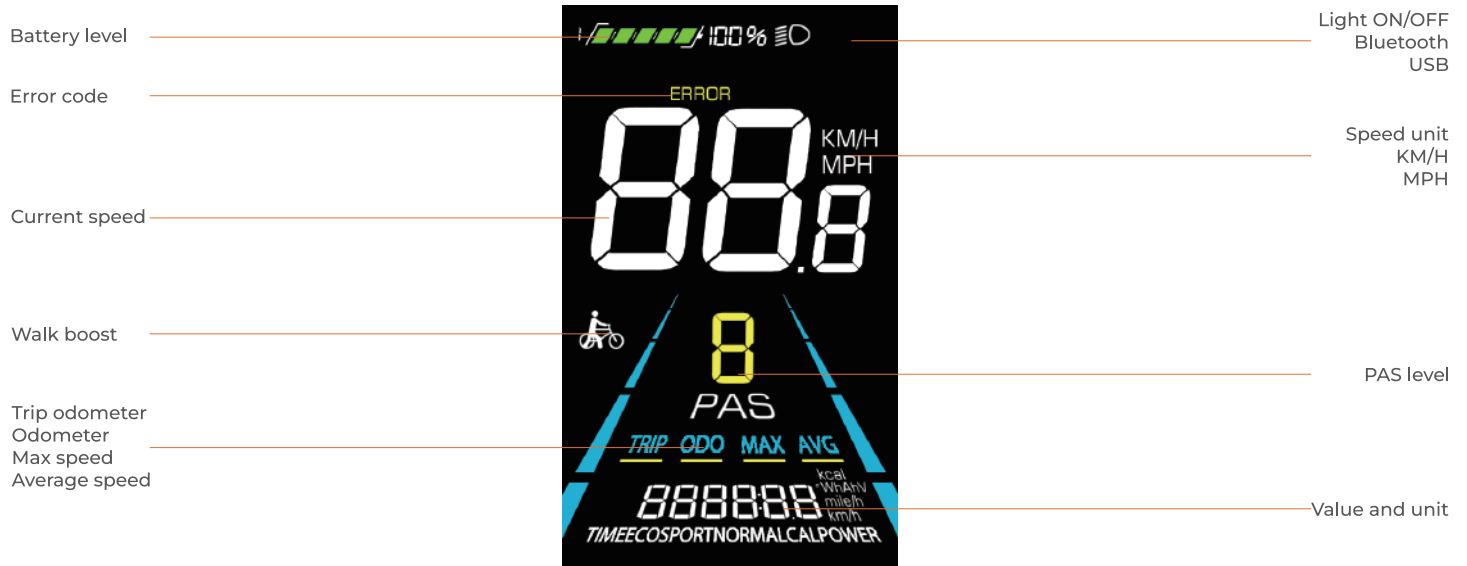
Thank you again for choosing and trusting our product.

|  |    |
|--|----|
| Vehicle Information                      | 1  |
| Package Contents                         | 5  |
| Assemble vehicle                         | 6  |
| Frequently asked questions and solutions | 10 |
| Batteries and chargers                   | 12 |
| Vehicle Cleaning and Maintenance         | 14 |
| Warranty Service                         | 16 |
| DISCLAIMER                               | 19 |

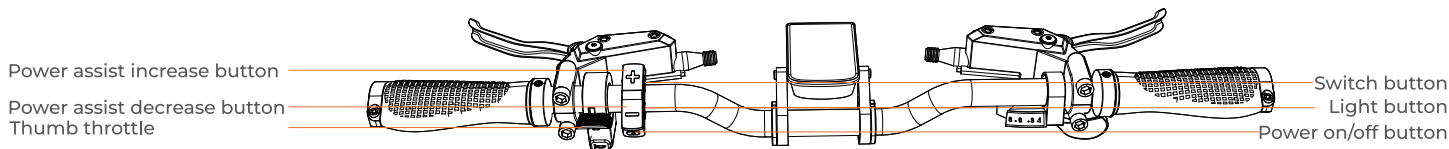




| Module                        | Product Name               | EU                   | US                   | UK                   |
|-------------------------------|----------------------------|----------------------|----------------------|----------------------|
| Basic Information             | Brand                      | ENGWE                | ENGWE                | ENGWE                |
|                               | Model                      | ENGIN PRO 2.0        | ENGIN PRO 2.0        | ENGIN PRO 2.0        |
|                               | Dimensions                 | 1750×570×1230mm      | 1750×570×1230mm      | 1750×570×1230mm      |
|                               | Curb Weight (with battery) | 31.6KG               | 31.6KG               | 31.6KG               |
| Main Parameters of the E-Bike | Rated Load                 | 150KG                | 150KG                | 150KG                |
|                               | Brake Type                 | Hydraulic disc brake | Hydraulic disc brake | Hydraulic disc brake |
|                               | Tire Specs                 | 20×4.0inch           | 20×4.0inch           | 20×4.0inch           |
|                               | Recommended Tire Pressure  | 20 PSI               | 20 PSI               | 20 PSI               |
|                               | Transmission               | Chain Drive          | Chain Drive          | Chain Drive          |
|                               | Max Speed                  | 25KM/H               | 32KM/H               | 25KM/H               |
|                               | Range(power assist mode)   | 110KM                | 110KM                | 110KM                |
|                               | Battery Type               | Lithium, 1 pc        | Lithium, 1 pc        | Lithium, 1 pc        |
|                               | Battery Expand             | None                 | None                 | None                 |
|                               | Rated Power                | 250W                 | 750W                 | 750W                 |
|                               | Rated output torque        | 75N.M                | 75N.M                | 75N.M                |
|                               | Battery voltage            | 52V                  | 52V                  | 52V                  |
| Battery Capacity              | 16AH                       | 16AH                 | 16AH                 |                      |
| Light Configuration           | Front Light                | LED                  | LED                  | LED                  |
|                               | Rear Light                 | LED                  | LED                  | LED                  |
| Charger                       | Charge Current             | 3A                   | 3A                   | 3A                   |
|                               | Charge Duration            | 5-8H                 | 5-8H                 | 5-8H                 |

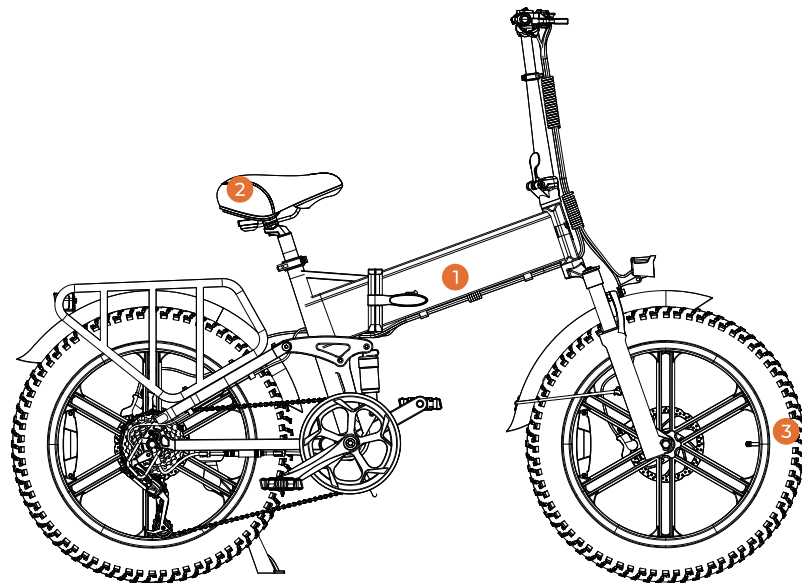


When the display is powered on, it will show the Current Speed (km/h) and Trip Odometer (km) by default. Short press The switch button to switch between Trip Odometer(km), Odometer (km), Maximum Speed (km/h), and Average Speed (km/h).



| Button Names  | Operating Instructions   |
|---|--|
| Power On/Off Button   | 1)Long-press the power button to turn on or off.   |
| Power assist increase button  | 1)Short press the increase button to increase the power assist level.  |
| Power assist decrease button  | 1)Short press the decrease button to decrease the power assist level.<br>2)Press and hold the reduce button to enter power-assisted push mode, release the reduce button to exit power-assisted push mode.   |
| Press the increase and decrease button simultaneously for 2 seconds | When the display is ON and the speed shows 0<br>1)Press the increase button/the decrease button to toggle between the personalized parameter setting interface, and press the switch button to enter the parameter changing state.Press the increase button /the decrease button to select the parameter, long pres the increase button for addition operation, long press the decrease button2 for subtraction operation. Press the switch button to save the parameter settings and return to the personalized parameter setting interface.Long Press the switch button to save the parameter settings and exit the personalized parameter setting interface.<br>2)The following options are available on the personalized parameter setting interface:Backlight luminance diameter setting/Number of speed sensor magnets setting/Start-up setting/Drive mode setting/Pedal assist sensitivity setting/Pedal assist strength setting/Number of pedal assist sensor magnets setting/Controller Current Limit Setting/Battery under voltage value setting/ODO resets setting/ 6km/h walk boost setting. |
| Long press the increase and light button                            | When the main interface speed is 0, you can enter the factory default parameter restoration interface.   |
| Long press the decrease and switch button                           | When the speed of the main interface is 0, a single mileage clearing can be performed. During the clearing process, the main interface will flash.   |
| Light button  | Turn on and off the headlights   |
| Thumb throttle  | Push the throttle to supply power.   |

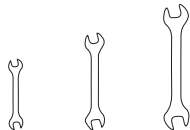
- 1 Main frame
- 2 Saddle/Seat post
- 3 Front wheel
- 4 Tool box



### Tool box list



OWNER'S MANUAL



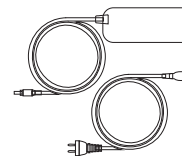
8-10mm/13-15mm/14-15mm  
Wrench



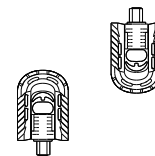
Phillips screwdriver



4mm/5mm/6mm  
Hex key



Adapter/Charger



Bicycle Pedals

Please carefully inspect the items inside the box to ensure they are intact. If there are any missing or damaged items, please contact customer service promptly.



### Step 1 :

Removal of casing insert the folding stem into the frame's head tube.



### Step 2 :

Open the folding stem and, using the designated tool, tighten the screws inside the folding stem to secure it. Check the stability of the connection between the frame and the folding stem.



### Step 3 :

Use the designated tool to loosen the screws as shown in the diagram. Secure the handlebar in the latch, rotate it to the desired angle, then tighten the screws as shown in the diagram. Check the stability of the connection between the handlebar and the folding stem.



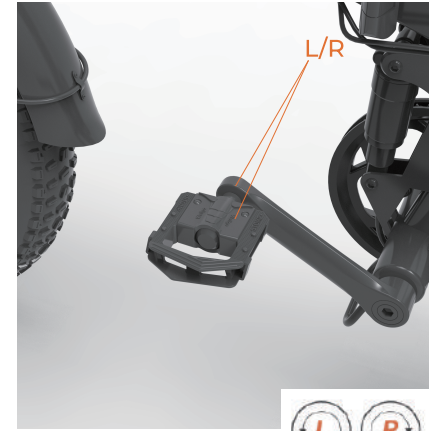
#### Step 4 :

Use the designated tool to tighten the screws, headlight and front fender as shown. Secure them onto the front fork, and check the stability of the connection between the front light and Fender with the front fork.



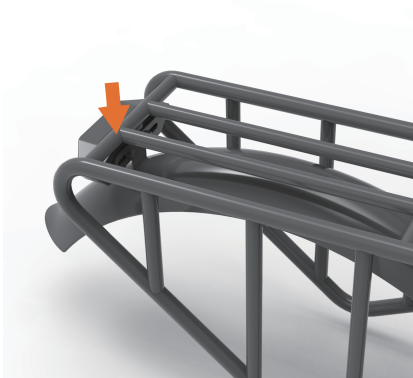
#### Step 5 :

Using the designated tool, remove the Shipping Axle, and secure the front wheel in the position shown in the diagram. Ensure that the disc brake and brake are on the same side. Use the specified tool to tighten the screws as shown in the diagram and check the stability of the connection between the front wheel and the front fork.



#### Step 6 :

First, distinguish the installation position of the left/right pedal according to the marked position in the picture, use the designated tools to tighten and fix the left/right pedal in the corresponding position, and check the stability of the connection between the pedal and the frame.



### Step 7 :

Use the designated tools to fix the taillights, rear rack and fenders with screws as shown, and check their stability.



### Step 8 :

Fix the fixed components with screws using designated tools as shown in the figure, and check their stability.



### Step 9 :

Open the seat post clamp handle, insert the seat post into the seat tube, adjust it to the appropriate saddle height, close the seat post clamp handle, and secure the seat post.



### Step 10 :

Finally, check that the handlebar is perpendicular to the direction of riding. If there is any deviation, open the folding stem fixing screws and adjust the handlebar direction accordingly.



| common problem   | problem analysis  | Troubleshooting   |
|--|---|---|
| The E-bike is will not power up  | <ol style="list-style-type: none"> <li>1. The Key is not turned on;</li> <li>2. The battery is not in place;</li> <li>3. Power switch wiring is loose and disconnected;</li> <li>4. The battery does not power up;</li> </ol> | <ol style="list-style-type: none"> <li>1. Twist Key OFF and ON again;</li> <li>2. Install the battery;</li> <li>3. remove the frame electrical component mounting box and connect the wiring;</li> <li>4. Contact your retailer for resolution;</li> </ol>                  |
| Twisting the speed control lever after powering on the E-bike does not move. | <ol style="list-style-type: none"> <li>1. Check that the power assist seeting is set to level 1-5, if 0, the moter will not output power.</li> <li>2. The speed control handle wiring is loose and disconnected;</li> </ol>   | <ol style="list-style-type: none"> <li>1. Please Please set level between 1-5 before using the throttle assist or pedal to activate the power assistance.</li> <li>2. Connect the speed control handle wiring;</li> <li>3. Contact your retailer for resolution;</li> </ol> |
| The E-bike operates normally, but the speed is notdisplayed on the dashboard | <ol style="list-style-type: none"> <li>1. The white speed wire at the controller end is loose and detached;</li> <li>2. Meter malfunction;</li> </ol>   | <ol style="list-style-type: none"> <li>1. Simply remove the frame electrical component mounting box and connect the white speedo wire;</li> <li>2. Contact your retailer for resolution;</li> </ol>   |
| Front/rear lights don't light up   | <ol style="list-style-type: none"> <li>1. Front/rear light wires are loose and detached;</li> <li>2. Faulty front/rear lights;</li> </ol>   | <ol style="list-style-type: none"> <li>1. Just remove the frame electrical parts mounting box and connect the front/rear light wires;</li> <li>2. Contact your retailer for resolution;</li> </ol>  |
| Shifting unsmoothly  | <ol style="list-style-type: none"> <li>1. Derailleur adjust needed;</li> <li>2. Deformation of the rear extraction protector;</li> <li>3. Shift cable loose;</li> </ol>   | <ol style="list-style-type: none"> <li>1. Use tool to correct derailleur operation;</li> <li>2. Adjust the shifter cable;</li> </ol>  |

| Error Code | Fault Problem             |
|------------|---------------------------|
| E001       | Controller malfunction    |
| E002/E030  | Communication Malfunction |
| E003/E024  | Hall sensor malfunction   |
| E004/E022  | Throttle malfunction      |

| Error Code | Fault Problem           |
|------------|-------------------------|
| E005/E025  | Brake lever malfunction |
| E006/E023  | Motor phase loss        |
| E021       | Abnormal Current        |
|            |                         |

If you find the above problems, you can scan the QR code to find the corresponding detection method and make a video of your detection process and send it to the service email so that we can quickly solve the problem for you.

Official website : <https://engwe-bikes-eu.com>  
<https://engwe-bikes.com>  
<https://engwe-bikes.de/>

Please email us at [service@engwe-bikes.com](mailto:service@engwe-bikes.com). We usually reply within 1 working day.

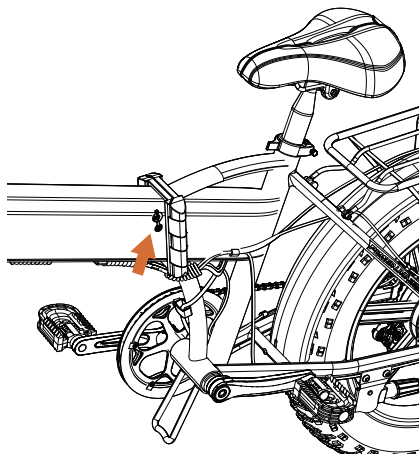


In order to transport safety battery in the factory will guarantee 30-40% of the power, this power will decline with the transport time length. If you receive the goods, please charge the battery in time;

|                              |             |
|------------------------------|-------------|
| Battery capacity(AH)         | 16          |
| Electricity (WH)             | 832         |
| Rated voltage (V)            | 52          |
| Maximum charging voltage (V) | 58.8        |
| Maximum charging current (A) | 3           |
| Battery Type                 | Li-ion      |
| Ambient working temperature  | -5 to 45 ℃  |
| Cycle life                   | ≧ 500 times |
| Charging temperature         | 0 to 45 ℃   |
| Waterproof rating            | IPX4        |

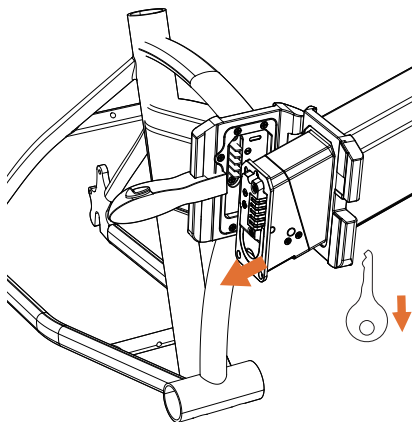
Your bike is powered by a lithium-ion (Li-Ion) battery. Always follow the instructions below when operating, charging, and using:

- 1.Vehicle batteries are for use in this vehicle only. It is strictly prohibited to connect the battery to other electronic devices, which may cause a risk of battery damage.
- 2.Be sure to turn off the battery lock before installing and removing the battery.
- 3.Do not modify, open or disassemble the battery pack. Modifying or disassembling the battery may cause a short circuit, fire or malfunction.
- 4.Batteries are heavy, please hold them carefully to avoid dropping them.
- 5.Do not allow any sharp or metal objects to touch the battery electrodes and charging jack, there is a risk of short-circuiting the battery and fire.
- 6.Do not overheat the battery and avoid overexposure to the sun.
- 7.Do not expose the battery to heat from an open flame or radiator.
- 8.Do not immerse the battery in water.
- 9.Turn off the power and unplug the charger or battery before carrying out, for example, installation, maintenance, cleaning or repair. Touching the contacts while the bike is on may cause electric shock or injury.
- 10.If the bike is not used for a long time, please remove the battery and put it in a dry, well-ventilated place and make sure the storage environment temperature is 25-35°C (Celsius/Fahrenheit). Also make sure to charge the battery at least once every three months so that the bike battery shows at least 3 cells (40-50%), which will effectively prolong the life of the battery.
- 11.Used batteries must not be disposed of in your household waste when they are unusable! All batteries and chargers must be disposed of in an environmentally friendly manner in accordance with the battery disposal regulations of your country or region.



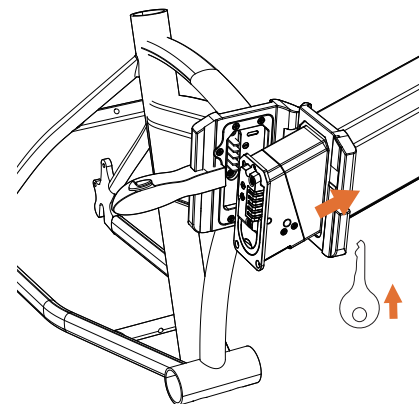
### Battery charging :

First, connect the DC end of the charger to the battery charging port, then plug the AC end of the charger into the AC wall outlet. At this point, the charger indicator light will be red, indicating that the charging has started. Wait until the charger indicator light turns green, signaling that the battery charging is complete. First, unplug the AC end and then the DC end of the charger in order.



### Remove the battery :

While the bike is folded, rotate the key clockwise fully to disengage the lock core from its position. Now, slide the battery out to remove it.



### Install the battery :

While bike is folded, insert battery into frame. Ensure correct orientation. Turn the key clockwise to the right; the first turn locks the battery box, and the second turn powers on the E-bike.

**Cleaning:**

Before cleaning the vehicle, please turn off and remove key. Use clean water and neutral detergent for washing, and do not use high-pressure water jets. After cleaning, use a soft cloth or sponge; strictly avoid using metal brushes, sandpaper, etc., to prevent scratching the surface of components. After cleaning, wipe the vehicle dry with a soft cloth.

**Storage:**

Park the vehicle in a dry and cool indoor environment, avoiding direct sunlight and rain to prevent rusting of components and shorten the lifespan. When storing for an extended period, please turn off the Key (disconnect the lithium battery) to prevent over-discharge.

**Note:** If you encounter any abnormalities during maintenance, please contact after-sales support or designated authorized service centers.

**Component Maintenance****Motor:**

1. When driving through water, ensure the water level does not exceed the rear wheel's midpoint.
2. Regularly check the fastening status around the motor. If nuts are loose, tighten them promptly.
3. After the vehicle stops running, perform simple cleaning and protection to prevent debris from entering the motor and affecting normal use. Avoid directly spraying water during cleaning.
4. Check whether the motor leads are scratched, and if there are unusual noises during motor operation, contact after-sales support or designated authorized service centers in case of abnormalities.

**Controller:**

Regularly check the connected components to ensure they are securely fastened.

**Battery:**

1. In case of abnormal battery behavior, please contact after-sales support or designated authorized service centers.
2. Avoid using the battery until completely depleted. Aim to maintain it above 20%. Charge promptly after use to extend battery life.
3. Never dismantle the battery privately, as it may lead to safety incidents such as electric shock, short-circuit, ignition, or explosion.
4. The battery level indicator fully lit or the charger turning green indicates a fully charged battery.
5. The suitable storage temperature for the battery is between 0°C and 35°C.
6. If the vehicle is not used for an extended period, after fully charging the battery, remove it and place it in a dry and ventilated area. Recharge the battery once every two months using the charger.
7. Do not store the battery in a place with a risk of falling. Falling may damage the battery and cause a short circuit, ignition, or explosion.

**Charger****Before Charging:**

1. The charger should be dedicated to the specific vehicle, strictly forbidden for charging non-rechargeable batteries.
2. Do not carry the charger with the vehicle to prevent vibration from loosening internal electronic components.
3. If damaged wires or loose connections are found, do not use it. Please contact after-sales support or designated authorized service centers.

**During Charging:**

1. When charging, the vehicle should be parked in a safe place, avoiding rain and direct sunlight.
2. When charging, insert the charger plug into the vehicle's charging port first, and then plug in the charger's power plug.

3. During the charging process, if the indicator lights are abnormal, there is an unusual smell, or the charger's casing becomes too hot, immediately disconnect the charging. Please contact after-sales support or designated authorized service centers.

After Charging:

1. After the battery is fully charged, unplug the charger's power plug first, and then unplug the charger's charging plug.
2. Once the charger has cooled down, tidy up the power and charging cables and place them in a safe location.

**Warning:**

1. Sufficient ventilation is required during the charging process, keep away from explosive gases, and guard against the risk of fire.
2. The charger contains high voltage; do not disassemble or replace internal components. In case of any malfunctions, contact after-sales support or designated authorized service centers.
3. Avoid keeping the charger connected to the power source for an extended period, operating without a load, or charging multiple vehicles.
4. Handle the charger with care, avoiding rough handling.

**Warranty terms:**

- 1.The warranty applies only to the original owner of the e-bike purchased through ENGWE online or in a physical shop.
- 2.The warranty period begins when the e-bike is received by the customer and ends immediately upon expiration of the warranty period, sale or transfer to another person. The limited warranty does not apply to any subsequent owner or assignee.
- 3.Replacement parts will be sent free of charge for non-man-made damage during the warranty period. After the warranty period has expired, the customer is responsible for the cost of replacement parts and shipping.
- 4.The bikes we sell are brand new regular products and all parts are identical to the original parts.

**One of the following conditions is not eligible for warranty:**

- 1.Failure caused by the customer's failure to use, maintain and adjust in accordance with the instruction manual.
- 2.Failure caused by the customer's own disassembly, repair, modification, or failure to comply with the rules of use.
- 3.Failure caused by improper use or storage by the customer, or by accident.
- 4.Costs incurred by repairing at other repair shops without our consent.
- 5.Minor scratches or damage to the outer box of the accessory due to logistical problems are not covered by the warranty.
- 6.Please contact us and obtain written approval before sending back any item. No refunds will be given for products returned without acceptance.
- 7.Warranty does not cover normal wear and tear of components.
- 8.Wearable parts (e.g. tires, saddles, plastic parts, brakes, brake rotors, brake pads, brake lines, surface scratches, etc.) are not covered by the warranty.

**How to apply for warranty**

Step 1: Take pictures or videos of the issue.

Step 2: Send a short description of the problem, a picture or video of the problem, the order number, and the purchasing platform to service@engwe-bikes.com.

Step 3: We will diagnose your problem and, if it's clear what the problem is, we'll provide a solution.

Step 4: When encountering a problem that cannot be diagnosed first, we will send you a troubleshooting file, it will require you to test it according to our testing method and provide us with the corresponding video or picture, we will give you a solution after receiving the testing video or picture.

Step 5: We will verify your order information and shipping address and re-issue the appropriate accessories to you.

**4. Contact Us**

1) Tell:

+33 805980036 (EU) Working time: 9am to 6pm (GMT+1), Monday to Friday.

+39 800776809 (EU) Working time: 9am to 6pm (GMT+1), Monday to Friday.

+1 8442007117 (U.S.) Working time: 9 a.m. to 6 p.m. (8 p.m. PST), Monday to Friday

2) Email:

Please email us at service@engwe-bikes.com. We usually reply within 1 working day.

| Accessories Warranty Contents |   |                 |   |
|-------------------------------|---|-----------------|---|
|                               | Accessory name  | Warranty length | Warranty content  |
| Basic accessories             | chassis   | 12 months       | Natural deformation, welding defects, and detachment fractures caused by manufacturing issues are eligible for replacement. However, alterations made by the user or damages resulting from collisions are not covered under the warranty.  |
|                               | Fork assembly, handlebar, folding riser, saddle tube,   | 12 months       | No warranty for self-modification or collision damage   |
|                               | tires   | 1 month         | The tire is punctured by a sharp object or damaged due to insufficient tire pressure, speed bumps, potholes, or similar reasons, resulting in tire issues. These situations are not covered under the warranty. Warranty claims are only applicable if the product is received with quality issues. |
|                               | Saddles, plastic parts, brakes, discs, rims, brake cables   | 3 months        | There is no warranty for parts collision damage, etc. There is no warranty for human damage, self-modification, or parts collision damage.  |
|                               | Foot braces, mudguards, rear rack, pedals, handlebar covers, cranks, discs, front hubs, rear hubs, chains, finger pivots, rear pivots, rear pivot covers, flywheels, shock absorbers, bells, horns, lugs, connecting rod pieces | 6 months        |   |



|                  |  |           |  |
|------------------|--|-----------|--|
| Electrical parts | Controller, charger, main/sub cable wires, gauges, front and rear brakes, throttle, brakes, power sensors, | 12 months | Short circuits, burnouts, performance failures due to poor manufacturing are replaceable. Water ingress, broken wires, worn brakes, and human damage are not warranted.  |
|                  | Headlamps, tail lamps  | 6 months  |  |
| Motor parts      | electrical machinery   | 12 months | (Coils missing phase, burnt, magnet demagnetisation, falling off, axle deformation and other quality problems can not be repaired) Due to insufficient tire pressure over speed bumps, potholes and other reasons, resulting in wheel deformation will not be warranted.   |
|                  | Motor Hall, Motor Bearing  | 12 months | Burnt out halls, rattling or cracked bearings  |
| batteries        | Battery Housing, Top Cover, Bottom Cover, Battery  | 12 months | Replacement is available due to faults such as poor contact, disconnection, no power storage, and capacity below 60%. (Note: the battery warranty period will not be recalculated, after the replacement of the battery according to the remaining date of the warranty period) water or man-made damage does not provide warranty replacement services. |

## DISCLAIMER

Please carefully read the following before using this e-bike. This disclaimer outlines the rights, responsibilities, and limitations of your e-bike usage. By using this product, you agree to and accept the following terms and conditions:

1. The company (hereinafter referred to as the "manufacturer") is not liable for any accidents, losses, or damages arising from the use of this e-bike. The user assumes the risks and responsibilities associated with using this product.
2. The user must comply with all local laws and regulations, including but not limited to traffic rules, riding safety standards, and legal restrictions on the use of this e-bike.
3. The manufacturer is not responsible for malfunctions, accidents, or damages resulting from the user's failure to operate, maintain, and adjust the product according to the instruction manual, maintenance manual, or safety guidelines.
4. The user may not dismantle, repair, or modify this product unless expressly authorized in writing by the manufacturer. Unauthorized alterations will void the warranty and increase usage risks.
5. This product may entail certain risks, including but not limited to riding accidents, crashes, accidental collisions, or injuries. Users are responsible for their personal safety and must take appropriate safety measures when using this product.
6. The warranty for this product is limited to faults and defects specified by the manufacturer. Damage, wear and tear, normal fatigue, or problems caused by accidents, improper use, storage, or maintenance not covered by the warranty will not be covered.
7. The manufacturer is not responsible for damage or loss of the product during logistics. Users should check that the packaging is intact upon receiving the product and contact the manufacturer to address any problems.
8. Nothing in this disclaimer shall diminish the rights of the user under any applicable law.

Please read and understand the above disclaimer carefully before using this product. If you do not agree with any of these terms, please refrain from using this e-bike. If you have doubts about any content in this disclaimer, contact the manufacturer for further clarification and guidance.



<https://engwe-bikes-eu.com>  
<https://engwe-bikes.com>  
<https://engwe-bikes.de/>

ENGWE INTELLIGENT TECHNOLOGY CO., LIMITED

Add: 4th floor, Building C, Jinhongde Industry Park, South Xuegang  
Road, Bantian Street, Longgang District, Shenzhen, Guangdong, China  
Zip code: 518129

PLEASE READ THIS MANUAL CAREFULLY BEFORE USING YOUR E-BIKE

