

ENGWE ENGINE X

ENGWE ENGINE X Electric Bicycle User Manual

Your guide to safe and efficient operation of the ENGWE ENGINE X 250W Foldable E-Bike.

1. INTRODUCTION

Thank you for choosing the ENGWE ENGINE X Electric Bicycle. This manual provides essential information for the assembly, operation, maintenance, and troubleshooting of your new e-bike. Please read this manual thoroughly before your first ride to ensure your safety and to achieve the best performance from your bicycle. Keep this manual for future reference.

2. SAFETY INFORMATION

Your safety is paramount. Always wear a helmet and appropriate safety gear when riding. Adhere to all local traffic laws and regulations. Perform a pre-ride inspection before each use, checking brakes, tire pressure, and battery charge. Avoid riding in adverse weather conditions or under the influence of alcohol or drugs. Be aware of your surroundings and ride defensively.

- Always wear a certified helmet.
- Familiarize yourself with local e-bike regulations.
- Perform a pre-ride safety check: brakes, tires, lights, battery.
- Do not ride under the influence of alcohol or drugs.
- Be visible: use lights at night and wear reflective clothing.
- Maintain a safe speed and distance from other vehicles and pedestrians.

3. PRODUCT OVERVIEW AND FEATURES

The ENGWE ENGINE X is a versatile 250W foldable electric bicycle designed for urban commuting and off-road adventures. It combines power, comfort, and portability.



120KM
Per Charge(PAS Mode)



250W
Brushless Motor



7-SPEED
SHIMANO Gears



**Full
Suspension**



20x4.0
Inch Fat Tires



48V 13Ah



Foldable Frame

Image: The ENGWE ENGINE X electric bicycle, showcasing its robust design and fat tires.

Powerful Hub-Motor with 55N.m of torque

500+ PEAK
250W

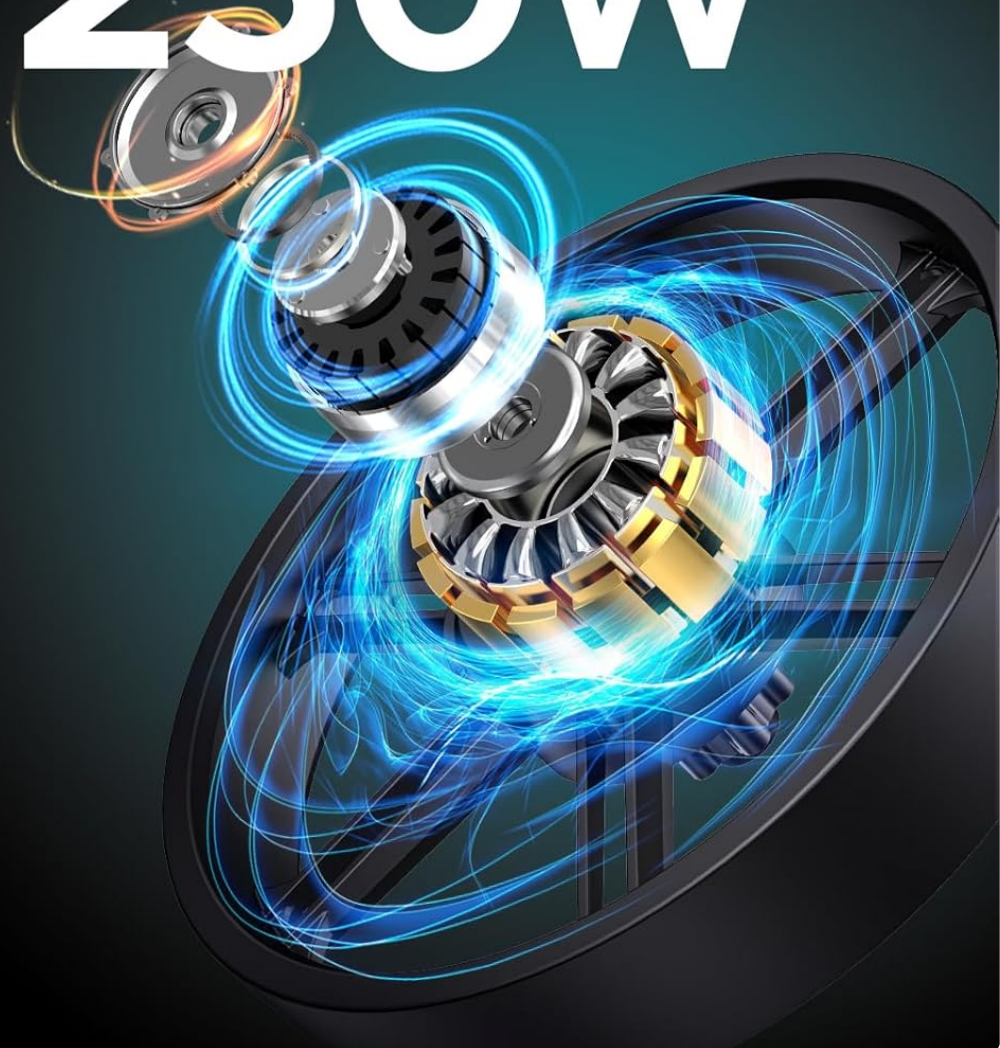


Image: A graphic illustrating key features: 120KM range (PAS mode), 7-speed Shimano gears, 250W brushless motor, full suspension, 20x4.0 inch fat tires, 48V 13Ah battery, and foldable frame.

Key Features:

- **Powerful Motor & Battery:** Equipped with a 250W brushless geared motor and a removable 48V 13AH lithium battery, providing reliable assistance up to 25 km/h and a range of over 50 km (up to 120 km in PAS mode).
- **Full Suspension:** Features a mechanical front suspension fork and rear suspension for a comfortable ride on varied terrains.
- **Fat Tires:** 20 x 4.0 inch aluminum alloy fat tires offer stability and grip on asphalt, gravel, sand, and

snow.

- **Braking System:** Front and rear mechanical disc brakes ensure powerful and reliable stopping performance.
- **7-Speed Gearing:** A 7-speed Shimano system allows for versatile gear selection to suit different riding conditions and preferences.
- **Foldable Design:** The bicycle features a convenient foldable frame for easy transport and storage.
- **User-Friendly Components:** Includes a comfortable leather saddle, intuitive LCD display, bright headlight, and taillight for enhanced safety and visibility.
- **Durable Frame:** Constructed with a lightweight yet robust 6061 aluminum alloy frame.

European Conformity

ENGINE X is certified by passing the SGS Test Standard EN15194, ensuring your safety while riding your ENGINE X.



Image: Illustration of the powerful 250W hub motor with 55N.m of torque, providing efficient assistance.

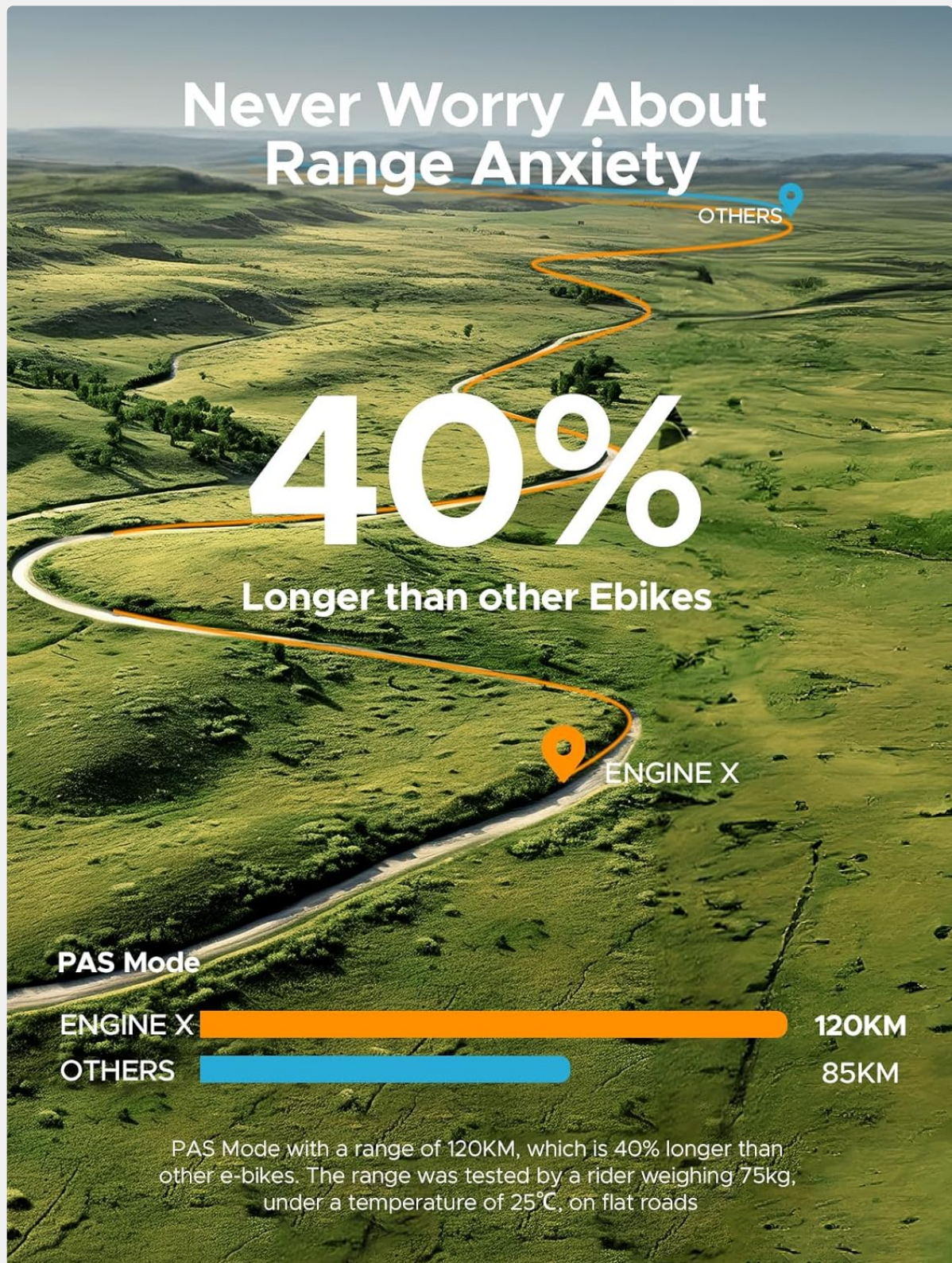


Image: A graphic demonstrating the extended range of 120KM in Pedal Assist System (PAS) mode, highlighting its efficiency compared to other e-bikes.

Full Suspension for Extreme Comfort and Traction

ENGINE X is equipped with full suspension, providing a ride that is both comfortable and offers excellent traction



Image: The ENGWE ENGINE X electric bicycle, highlighting its full suspension system for enhanced comfort and traction.



Image: A verification of conformity certificate, indicating the ENGWE ENGINE X meets European standards (EN15194).



Image: The ENGWE ENGINE X with its 20x4.0 inch fat tires, shown on various terrains including road, gravel, and sand, illustrating its versatility.



Image: A composite image showing the foldable frame mechanism, the bright LED headlight and taillight, and the 7-speed Shimano gear shifter.

4. SETUP AND ASSEMBLY

The ENGWE ENGINE X electric bicycle arrives 85% pre-assembled. The remaining assembly steps are straightforward and can be completed with the included tool kit. Please follow these general guidelines:

1. **Unpacking:** Carefully remove the bicycle and all components from the packaging.
2. **Handlebar Installation:** Attach and secure the handlebar to the stem. Ensure all bolts are tightened to the manufacturer's specifications.
3. **Pedal Installation:** Identify the left (L) and right (R) pedals. Thread them into the crank arms carefully. Note that the left pedal is reverse-threaded.
4. **Seat Post Adjustment:** Insert the seat post and adjust the saddle height for a comfortable riding position. Secure the quick-release lever firmly.
5. **Tire Inflation:** Inflate tires to the recommended pressure indicated on the tire sidewall.
6. **Initial Battery Charge:** Fully charge the battery before your first ride. Refer to the charging instructions in the Operating section.
7. **Brake Check:** Verify that both front and rear brakes are functioning correctly and that the levers are easily accessible.

If you encounter any difficulties during assembly, please refer to the detailed assembly instructions provided in the separate manual included with your purchase or contact customer support.

5. OPERATING INSTRUCTIONS

5.1 Battery Charging

- Ensure the e-bike is turned off before charging.

- Connect the charger to the charging port on the battery (or remove the battery to charge separately).
- Plug the charger into a standard wall outlet.
- The indicator light on the charger will show the charging status (typically red for charging, green for fully charged).
- Do not overcharge the battery. Disconnect the charger once fully charged.

5.2 Powering On/Off and Display

- To power on the e-bike, press and hold the power button on the LCD display.
- The LCD display will show information such as speed, battery level, pedal assist level, and distance traveled.
- Use the control buttons on the display to adjust pedal assist levels (PAS mode) or to cycle through display information.
- To power off, press and hold the power button again.

5.3 Riding Modes

The ENGWE ENGINE X typically offers multiple riding modes:

- **Pedal Assist System (PAS) Mode:** The motor provides assistance as you pedal. You can select different levels of assistance (e.g., 1-5) via the display controls. This mode offers the longest range (up to 120KM).
- **Electric Mode (Throttle):** (If applicable, check local regulations for throttle use). The motor provides power without pedaling, typically controlled by a thumb or twist throttle.
- **Manual Mode:** Ride the bicycle like a traditional bike without any motor assistance. Use the 7-speed Shimano gears for optimal pedaling efficiency.

5.4 Gear Shifting

The 7-speed Shimano gear system allows you to adapt to various terrains and inclines. Use the shifter on the handlebar to change gears. Shift to lower gears for uphill climbs and higher gears for flat terrain or downhill riding.

5.5 Lights

Activate the bright LED headlight and taillight for improved visibility, especially during low-light conditions or night riding. Refer to your display manual for specific instructions on turning lights on/off.

6. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your ENGWE ENGINE X e-bike.

- **Cleaning:** Clean the bicycle regularly with a damp cloth. Avoid high-pressure washing directly on electrical components.
- **Tires:** Check tire pressure before each ride and inflate to the recommended PSI. Inspect tires for wear and damage.
- **Brakes:** Regularly check brake pads for wear and ensure brake levers provide firm and responsive stopping power. Adjust or replace as needed.
- **Chain:** Keep the chain clean and lubricated to ensure smooth gear changes and prevent wear.
- **Bolts and Fasteners:** Periodically check all bolts, nuts, and quick-release levers for tightness.
- **Battery Care:** Store the battery in a cool, dry place. If storing for extended periods, charge it to 50-70%.

every few months.

- **Professional Service:** For complex repairs or adjustments, consult a qualified bicycle mechanic.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your ENGWE ENGINE X e-bike.

Problem	Possible Cause	Solution
E-bike does not power on.	Battery is dead or not properly seated. Loose connections.	Charge the battery. Ensure the battery is fully inserted and locked. Check all cable connections.
Motor not assisting.	Low battery. PAS level set to zero. Brake levers engaged.	Charge the battery. Increase PAS level on the display. Ensure brake levers are fully released.
Brakes feel weak or noisy.	Worn brake pads. Misaligned calipers. Contaminated rotors.	Inspect and replace brake pads if worn. Adjust brake calipers. Clean rotors with disc brake cleaner.
Gears are not shifting smoothly.	Dirty or unlubricated chain. Derailleur out of adjustment.	Clean and lubricate the chain. Adjust the derailleur (consult a mechanic if unsure).
Reduced battery range.	Under-inflated tires. Riding in high assist modes. Cold weather. Battery aging.	Ensure tires are properly inflated. Use lower PAS levels. Battery performance can decrease in cold weather.

For issues not listed here or if troubleshooting steps do not resolve the problem, please contact ENGWE customer support.

8. SPECIFICATIONS

Detailed technical specifications for the ENGWE ENGINE X Electric Bicycle:

Feature	Detail
Brand	ENGWE
Model	ENGINE X
Motor	250W Brushless Geared Hub Motor
Battery	48V 13AH Removable Lithium Battery
Max Speed	25 km/h (15.5 mph)
Range (PAS Mode)	Up to 120 km (75 miles)
Tires	20 x 4.0 Inch Fat Tires
Suspension	Full Suspension (Front Mechanical Fork, Rear Suspension)
Brakes	Front and Rear Mechanical Disc Brakes

Feature	Detail
Gears	7-Speed Shimano
Frame Material	6061 Aluminum Alloy
Foldable	Yes
Recommended Age	Adults
Dimensions (Unfolded)	175 * 57 * 123 cm
Included Components	Tool Kit

9. WARRANTY AND SUPPORT

ENGWE provides a one-year warranty for the motor, battery, and controller of your ENGINE X electric bicycle, starting from the date of purchase. This warranty covers manufacturing defects under normal use. For any questions, technical assistance, or warranty claims, our professional customer support team is available 24 hours a day, 7 days a week. Please contact us via the official ENGWE website or through your purchase platform.

Contact Information:

- **Website:** www.engwe-bikes.com (or refer to your purchase documentation for specific regional support contacts)
- **Email:** Refer to your warranty card or official website.