Shengmilo MX05

Shengmilo MX05 Electric Mountain Bike User Manual

Model: MX05 (S700) | Brand: Shengmilo

1. Introduction and Overview

Welcome to the Shengmilo MX05 Electric Mountain Bike user manual. This guide provides essential information for the safe and efficient operation, assembly, and maintenance of your new electric bicycle. The Shengmilo MX05 is a 26-inch fat tire e-bike designed for adults, featuring a powerful BAFANG motor, a removable 48V LG battery, dual shock absorbers, and a super bright headlight, making it suitable for various terrains and riding conditions.



Figure 1: Shengmilo MX05 Electric Mountain Bike. This image shows the full profile of the Shengmilo MX05 electric mountain bike, highlighting its robust frame, fat tires, and integrated battery design.

The MX05 is engineered for versatility and performance, offering three distinct riding modes and robust components for a comfortable and secure riding experience.

2. Setup and Assembly

Your Shengmilo MX05 electric bike arrives 98% pre-assembled, significantly reducing the time and effort required for setup. You will primarily need to complete the assembly of the main components.

2.1 Unpacking and Initial Inspection

- Carefully remove the bike and all components from the packaging.
- Inspect for any shipping damage. Report any damage immediately to the retailer.
- Ensure all included accessories are present: charger, assembly tools, aluminum alloy pedals, SAMSUNG lithium-ion battery, LCD display, 7-speed Shimano Acera derailleur, luggage rack, and retro brightness headlights.

2.2 Assembly Steps

Follow the provided video guide for detailed assembly instructions. Key steps typically include:

1. Attach the front wheel and secure the front fender.
2. Install the handlebars and adjust their position.
3. Attach the pedals (note: left and right pedals are distinct).
4. Install the seat post and saddle, adjusting to a comfortable height.
5. Ensure all bolts and quick releases are securely tightened before riding.

2.3 Battery Installation and Initial Charge

The MX05 is equipped with a hidden, removable 48V 15Ah LG battery. Before your first ride, fully charge the battery.

- To install the battery, slide it into the frame's downtube until it clicks into place. Use the key to lock it securely.
- To charge, connect the intelligent lithium battery charger to the bike's charging port or directly to the removed battery.
- Charging typically takes 6-8 hours for a full charge. The charger will indicate when charging is complete.



Figure 2: 48V 17.5Ah Large Capacity Battery. This image illustrates the internal structure of the 48V 17.5Ah LG battery, highlighting its integration within the bike's frame and its removable design.

3. Operating Your E-Bike

The Shengmilo MX05 offers a versatile riding experience with three distinct modes to suit your preferences and terrain.

3.1 Riding Modes

- **Pedal Assist Mode (PAS)**: The motor provides a moderate amount of power as you pedal. The LCD display shows 1-5 gears; a higher gear provides more assistance and requires less effort. This mode is ideal for extending range and reducing fatigue on longer rides or inclines.
- **Full Electric Mode**: Engage the throttle to power the bike solely with the motor, without pedaling. This mode offers a battery range of 30-40 km (18-25 miles) and is perfect for quick bursts of speed or when you need a break from pedaling.
- **Pedal Mode**: With the power mode disengaged, the MX05 functions like a traditional bicycle, allowing you to ride using only your physical effort. This mode is useful for exercise or when the battery is depleted.

3.2 Controls and Display

The LCD display provides essential information such as speed, battery level, riding mode, and distance. Familiarize yourself with the controls for power, mode selection, and headlight operation before riding.



Figure 3: Powerful BAFANG Motor. This image highlights the powerful BAFANG brushless geared motor, illustrating its integration with the bike's drivetrain and emphasizing its torque, top speed, and 7-speed Shimano gearing capabilities.



Figure 4: 26"x3.0" All-Terrain Fat Tire. This image showcases the robust 26-inch by 3.0-inch fat tires, demonstrating their suitability for various terrains including snow, beach, flat roads, and gravel roads.

4. Maintenance

Regular maintenance ensures the longevity and optimal performance of your Shengmilo MX05 e-bike.

4.1 Battery Care

- Charge the battery regularly, even if not in use, to maintain its health.
- Avoid completely draining the battery before recharging.
- Store the battery in a cool, dry place, away from direct sunlight and extreme temperatures.
- Do not expose the battery to water or excessive moisture, despite its IPX5 waterproof rating.

4.2 Brake System

The MX05 features dual hydraulic disc brakes for effective stopping power.

- Regularly check brake pads for wear and replace them when necessary.
- Ensure brake levers provide firm and consistent pressure. If they feel spongy, the hydraulic system may need bleeding or adjustment by a qualified technician.
- Keep brake rotors clean and free from oil or grease.



Figure 5: Hydraulic Oil Brake System. This image provides a close-up view of the hydraulic disc brake system, emphasizing its multiple hollow designs for weight reduction and its electroplating and polishing process for durability and aesthetics.

4.3 Tires and Suspension

The 26" x 3.0" fat tires and dual suspension system contribute to a smooth ride.

- Maintain proper tire pressure as indicated on the tire sidewall for optimal performance and safety.
- Inspect tires regularly for punctures, cuts, or excessive wear.
- While the suspension is designed for durability, periodically check the front and rear suspension components for any signs of damage or excessive play.



Figure 6: 2-Layer Shock Absorption. This image illustrates the dual shock absorption system, highlighting both the front suspension forks and the effect of the 26" x 3" fat tires in absorbing impacts for a smoother ride.

4.4 General Care

- Keep the bike clean, especially after riding in muddy or wet conditions. Use a damp cloth and mild soap.
- Lubricate the chain regularly to ensure smooth gear changes and prevent rust.
- Periodically check all nuts, bolts, and quick releases for tightness.

5. Troubleshooting

This section addresses common issues you might encounter with your Shengmilo MX05 e-bike.

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
Bike does not power on.	Battery not charged, battery not properly seated, power cable loose, display issue.	Ensure battery is fully charged. Check if battery is securely locked in place. Verify all electrical connections are firm. Consult the display manual for error codes.
Motor not assisting.	Pedal assist level too low, throttle not engaged (if in full electric mode), brake levers engaged, motor connection issue.	Increase pedal assist level on the display. Ensure throttle is fully twisted. Check that brake levers are not being squeezed. Inspect motor cable connections.
Short battery range.	Under-inflated tires, riding in high assist levels, frequent stops/starts, cold weather, battery degradation.	Check tire pressure. Use lower assist levels when possible. Plan routes to minimize frequent acceleration. Battery performance can be reduced in cold weather. Consider battery replacement if degradation is significant.
Brakes squealing or ineffective.	Contaminated brake pads/rotors, worn brake pads, loose caliper.	Clean rotors with disc brake cleaner. Replace worn brake pads. Ensure brake calipers are securely mounted. If hydraulic, bleeding may be required by a professional.

For issues not covered here, please contact Shengmilo customer support or a certified e-bike technician.

6. Specifications

Detailed technical specifications for the Shengmilo MX05 Electric Mountain Bike.

Feature	Specification
Model	MX05 (S700)
Bike Type	Electric Mountain Bike
Age Range	Adult
Frame Material	Aluminum (6061 Aluminum)
Wheel Size	26 Inch
Tire Size	26" x 3.0" Fat Tires
Motor	BAFANG Brushless Geared Motor
Battery	48V 15Ah LG Lithium-ion (Removable)
Charging Time	6-8 hours
Max Range (Full Electric)	30-40 km (18-25 miles)
Max Range (Pedal Assist)	Up to 90 km (56 miles)
Brake Type	Dual Hydraulic Disc Brakes (Front & Rear)

Feature	Specification
Suspension	Dual (Front Fork & Rear)
Number of Speeds	7 (Shimano Acera Derailleur)
Payload Capacity	Up to 400 lbs (approx. 181 kg)
Bike Weight	32 kg (70.5 lbs)
Product Dimensions	187 x 70 x 110 cm (73.6 x 27.6 x 43.3 inches)
Waterproof Rating	IPX5



Figure 7: Dual Motor 6061 Aluminum Frame. This image highlights the bike's 6061 aluminum frame, its new color, and key specifications such as 400 lbs payload capacity, baking paint precision, step-over style, and 39kg bike weight.*Note: While this image mentions "Dual Motor", the Shengmilo MX05 (S700) model typically features a single BAFANG rear hub motor as per product specifications. The image also states 39kg bike weight, but the product specifications list 32kg. Please refer to the detailed specifications table for the most accurate information.*

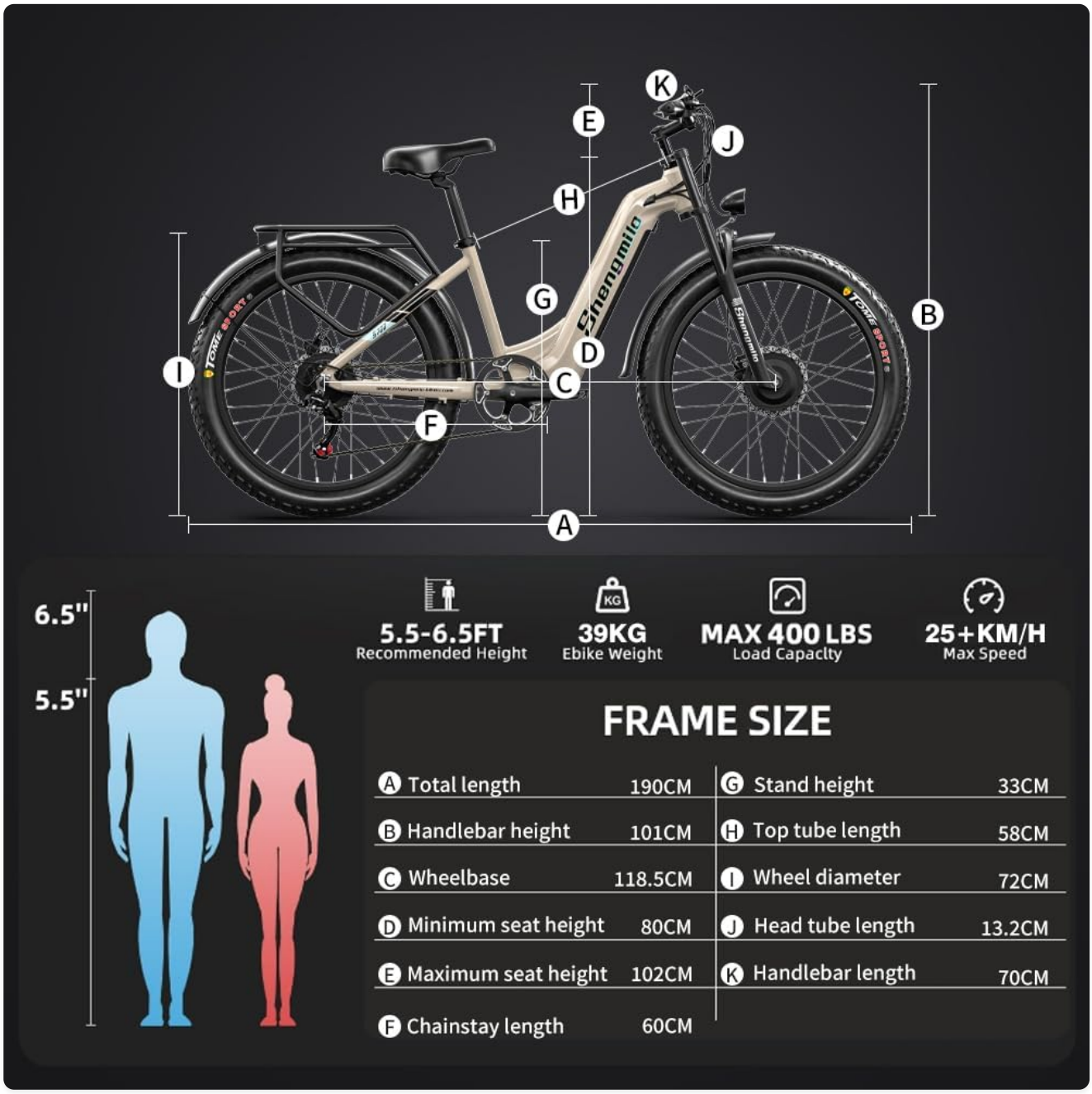


Figure 8: Frame Size and Dimensions. This diagram provides detailed measurements of the Shengmilo MX05 frame, including total length, handlebar height, wheelbase, seat heights, and wheel diameter, along with recommended rider height and maximum load capacity.

7. Warranty and Support

Shengmilo provides comprehensive warranty coverage for your MX05 electric bike.

7.1 Warranty Coverage

- **General Repair & Spare Parts**: 1 year coverage.
- **Electrical Components**:
  - Motors, Controllers, Batteries, Chargers, Electric Throttles, Pedal Assist Sensors: 6 months.
  - Display Instruments: 12 months.
- **Basic Parts**:

- Frame: 12 months.
- Flywheel: 3 months.

7.2 Exclusions

Please note that wear parts are not covered under warranty for repair or replacement. These include, but are not limited to:

- Tires
- Brake Pads
- Other consumable materials

If consumable materials are damaged, they must be purchased separately.

7.3 Customer Support

For any questions, technical assistance, or warranty claims, please contact Shengmilo customer support. Refer to your purchase documentation for specific contact details or visit the official Shengmilo website.

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