



# MX03

## Owner's Manual



[www.shengmilo-bikes.com](http://www.shengmilo-bikes.com)

## About Manual

This manual contains details of the product, information on its operation and maintenance, and other helpful tips for owners. Read it carefully and familiarize yourself with the Shengmilo MX03 before using it to ensure safe use, reduce the risk of damage and premature wear, and prevent accidents. Be sure to retain this manual as your convenient Shengmilo MX03 information source.

**This manual contains many Warnings and Cautions concerning safe operation, and consequences if proper setup, operation and maintenance guidelines are not followed. All information in this manual should be carefully reviewed.**



The safety grade color of Caution is orange, and if not avoided, may result in moderate or serious injury.

Users should also pay special attention to the information. Marks in this manual beginning with” **NOTICE** ”



The safety grade color of Warning is red, and if not avoided will likely result in serious injury or death.

Because it is impossible to anticipate every situation or condition which can occur while riding, this manual makes no representations about the safe use of our bicycles under all conditions. There are risks associated with the use of any bicycle which cannot be predicted or avoided, and which are the sole responsibility of the rider. You should keep this manual, along with any other documents that were included with your bicycle, for future reference, however all content in this manual is subject to change or withdrawal without notice.

Visit [www.shengmilo-bikes.com](http://www.shengmilo-bikes.com) to download the latest version. Assembly and first adjustment of your Shengmilo MX03 require special tools and skills, and it is recommended that this be performed by a trained bicycle mechanic if possible.

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**Bike Specication**





A - Total Length	73	in
B - Handlebar Height	45	in
C - Wheelbase	46	in
D - Min Seat Height	33	in
E - Max Seat Height	39	in
F - Chain Stay Length	19	in
G - Standover Height	18	in
H - Wheel Diameter	27.5	in
I - Head Tube Length	9.4	in
J - Handlebar Length	27	in

Battery	48V 17.5Ah lithium battery	Charger	48V 2.0 A smart charger
Range	Throttle mode 30-35 KM; 50-60 KM pedal assist mode	Controller	Sine wave brushless motor controller
Motor	500W BAFANG Geared Hub Motor	Display	KING-METER waterproof LCD display
Total Payload Capacity	400 lbs (180kg)	Weight	70.5 lb (32KG)
Recommended Rider Heights	5'5" ~ 6'6" (170-200cm)	Pedal Assist Intelligent	0~5 level pedal assist
Tires	26" x 3" fat tires	Throttle	Half twist throttle
Brake	Disc brakes	Front Fork	Double Shoulder Fork
Horn	Super loud electric horn	Pedal	Wellgo Alloy pedals with reflectors
Freewheel	Shimano 7-speed gear shift system	Bike Frame	6061 Aluminum frame
Brake	Disc brakes	Headlight	Bright motorcycle light
Chain	KMC chain	Saddle	Thick and comfortable leather seat
Stem	Promax MA-400 SSABK	Seatpost	Diameter 30.4mm length 350mm
Crankset	170mm forged alloy	Kickstand	Heavy-duty aluminum
Gearing	Shimano, TX55/7 speed rear puller	Spokes	Front wheel 13G*255/Rear wheel 13G*218

## Bike Assembly Guide

### ◆ Preparation Checklist



Headlight



Quick-release skewer



Charger



Wrench



Bike repair tool



Keys(2x, identical)



Screws



Pedals

Extra tools needed: (1)13mm Wrench (2)15mm Wrench

**NOTICE:** Before assembling your bike, it's recommended to remove the battery for the reasons outlined below:

1. Determine if there's battery drain or damage during shipping.
2. Reduce the weight of the e-bike to make it easier to maneuver the bike while assembling.
3. Avoid battery damage during the assembly process.

👉 Go to page 21 to learn about removing and charging the battery.

\* Please go to our YouTube channel “**Shengmilo Ebike**” to watch our assembly tutorial



## Recommended Torque Values

Hardware Location	Recommended Torque( NM)
Handlebar	12-18
Stem	12-18
Saddle	12-18
Front Wheel(For bikes with bolts on front wheel)	15-22
Rear wheel	30-38
Bottom Bracket Parts	30-50
Pedals	28-33
Disk Mounting Bolts	3-5
Disk Caliper Mount	6-8
Crank Bolts	32-36
Rear Derailleur Cable Pinch	3-5
Front Derailleur Clamp	3-6
Saddle Post Clamp	3-6

**NOTICE:** Using an impact driver to achieve the required torque is not recommended as it might cause damage. We suggest you use the wrench set we provided and extra tools to manually adjust nuts and bolts.

## Assembly Instructions

### ◆ Handlebar Installation ( 4mm Hex Wrench )

**Step 1:** Loosen the bolts on your bike stem.

**Step 2:** Center your handlebars and rotate them to align to the marking pointed to in the below image.



**Step 3::** Tighten bolts to handlebar stem, but don't tighten completely as you may want to further adjust the angle later to align more precisely. After determining the best position, completely tighten all the bolts on the stem.



## ◆ Front Wheel Installation

**Step 1:** Prepare your quick-release skewer for the next step by removing the thumb nut and one of the cone spring.



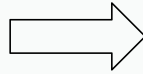
**Step 2:** Install the quick-release skewer starting from the brake rotor side of the wheel, inserting the quick-release skewer through the hub and then replacing the second cone spring on the other side. Ensure both springs are pointed narrow-side-in towards the wheel hub.



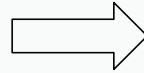
**Step 3 :** Tighten the thumb.



**Step 4 :** Align the fork dropouts with the axle of the wheel hub, making sure the dropouts are securely positioned on the axle. Also ensure the brake rotor is properly inserted into the caliper.



**Step 5 :** Tighten the thumb nut until the quick-release lever is held in line with the axle, and then use your palm of your hand to close the quick-release lever.



**Step 6 :** Rotate the front wheel. Make sure the quick release skewer lever on the front wheel is fully closed, and check the wheel balance in Pedal-Only Mode. If you notice the riding is imbalanced or the rotation of the front wheel makes noise, it means the bolts were not completely tightened or not aligned horizontally.

### ◆ **Headlight & Front Fender Installation**

The headlights are attached with a bolt, and you'll need a 4mm wrench to tighten its nut

**Step 1 :** Loosen the bolts on the headlight. Align the headlight bolt holes with the holes on the fork bracket, then re-thread the bolts through all holes and tighten the bolts with a 4mm wrench extractor retaining nut.



1. Loosen the bolts on the headlights with a PH1 wrench



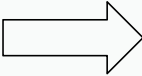
2. Align the headlight bolt holes with the holes on the fork bracket



3. Set the nut to tighten the bolt

**NOTICE:** The bolt extractors can be found in the Shengmilo folding hex key set.

**Step 2 :** Loosen the bolts on the front fender holder. Align the front fender bolt holes with the holes in the holder, then re-thread the bolts through all holes and tighten the bolts with 6mm wrench retaining nuts.

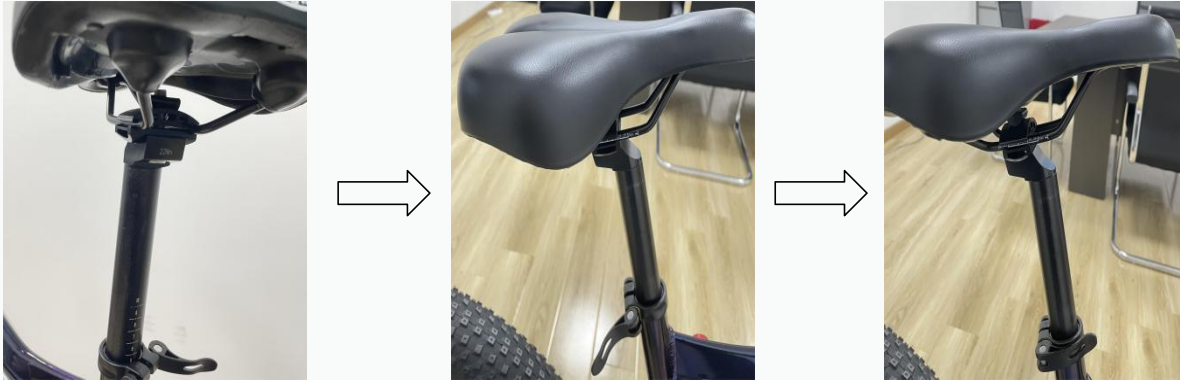


1. Loosen the bolts on the front fender holder with a 6mm hex wrench.

2. Tighten the bolts with 6mm wrench retaining nuts.

### Adjust the Seat Height:

Open the seatpost quick release lever. Adjust the seatpost height by sliding the seatpost up or down to a height appropriate for your leg length and preferred riding position. Do not extend the seatpost beyond the minimum insertion marking etched onto the seatpost.



**NOTICE:** The seat angle has been preadjusted to factory safety standards. Please make note of original settings, and only adjust if necessary.



## ◆ Pedals Installation (15mm wrench)

Make sure your pedals are installed on the correct side, as installing on the wrong side will damage the threads. Indicators for the right pedal (R) and the left pedal (L) can be found in two places: the stickers on the plastic cover, and the bottom of the pedal threads.



Before you install the pedals, apply a small amount of waterproof grease onto the spindle. Start threading the pedal on by hand to ensure the pedal is going in perfectly straight, rotating in the direction of the pointer shown on the crank. If it is not spinning smoothly, make doubly sure that you have the correct left or right pedal. After initial hand-tightening, finish tightening the pedals with a standard 15mm wrench .



## Safety Checklist

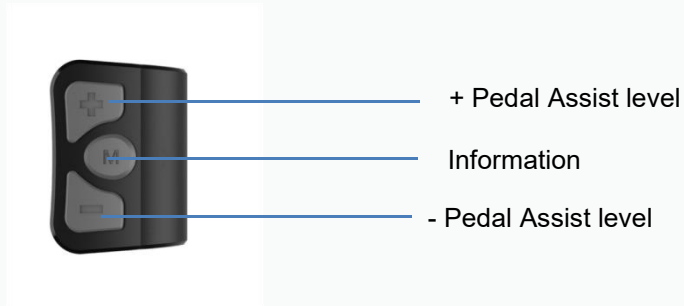
Safety Check	Basic Steps
Brakes	<ul style="list-style-type: none"> <li>o Test front and rear brakes for proper function.</li> <li>o Ensure brake pads are not overworn and are correctly positioned in relation to rims.</li> <li>o Make sure brake control cables are lubricated, correctly adjusted and display no obvious wear.</li> <li>o Check that brake control levers are lubricated and tightly secured to handlebars.</li> </ul>
Wheels and Tires	<ul style="list-style-type: none"> <li>o Inflate tires to within recommended limits displayed on sidewalls.</li> <li>o Check for bulges or signs of excessive wear.</li> <li>o Clean tires to ensure tread is exposed.</li> <li>o Ensure rims run true and have no obvious wobbles or kinks.</li> <li>o Check that all wheel spokes are tight and not broken.</li> <li>o Check the wheel balance in Pedal Only Mode. If you notice the riding is imbalanced or the rotation of the front wheel makes noise, it means the bolts were not completely tightened or not aligned horizontally.</li> </ul>
Chain	<ul style="list-style-type: none"> <li>o Check that chain is oiled, clean and runs smoothly.</li> <li>o Use extra care in wet or dusty conditions.</li> </ul>
Crank and Pedals	<ul style="list-style-type: none"> <li>o Securely tighten pedals to cranks.</li> <li>o Ensure cranks are securely tightened and are not bent.</li> </ul>
Derailleurs	<ul style="list-style-type: none"> <li>o Check that derailleur(s) are adjusted and functioning properly.</li> <li>o Ensure shift and brake levers are attached to handlebar securely.</li> <li>o Check all brake and shift cables for proper lubrication..</li> </ul>
Motor Drive	<ul style="list-style-type: none"> <li>o Ensure hub motor is spinning smoothly and motor bearings are in good working order.</li> <li>o Check that all power cables running to hub motor are secured and undamaged.</li> <li>o Make sure hub motor axle bolts are secured and all torque arms and torque washers are in place.</li> </ul>
Battery Pack	<ul style="list-style-type: none"> <li>o Ensure battery is charged before use.</li> <li>o Check for any visible damage to battery pack.</li> <li>o Lock battery securely to frame.</li> </ul>

## Shengmilo E- Bike Use and Care

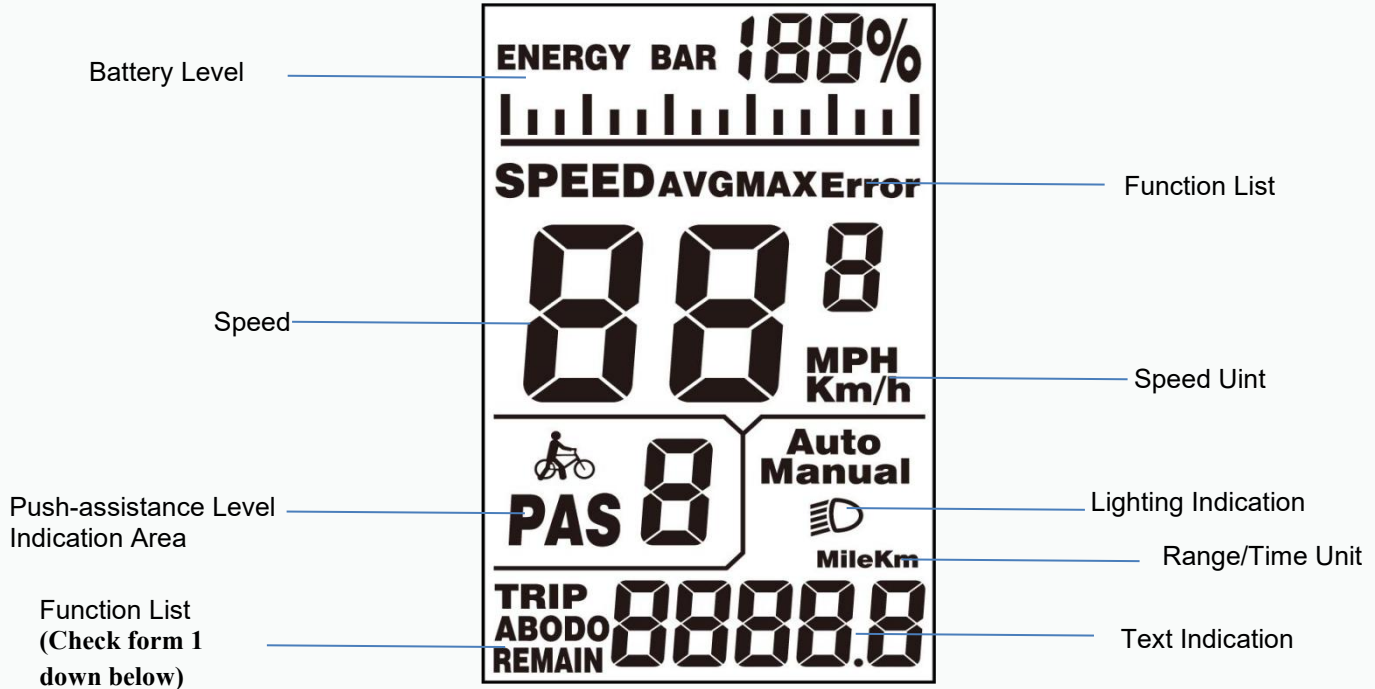
The following table of contents provides general guidance on Shengmilo e-bike variable power assist settings and their effects on both range and performance. This content will apply broadly to most riders, but multiple factors will affect individual results including rider fitness and weight, terrain, proper maintenance, etc. While Shengmilo hopes and believes you will thoroughly enjoy your e-bike, no guarantees of universal performance characteristics for all owners can be given.

### Basic Display Settings

#### ◆ Control Panel



◆ Display Screen



<b>TRIP</b>	Single mileage (km)	<b>2 1</b>	Current Abnormality
<b>ODO</b>	Total mileage (km)	<b>2 2</b>	Throttle Abnormality
<b>RIDETM</b>	Trip time indication	<b>2 3</b>	Motor Abnormality
<b>ERROR</b>	Error code indication	<b>2 4</b>	Motor Hall Signal Abnormality
<b>MAX.SPD</b>	Maximum speed (km/h)	<b>2 5</b>	Brake Abnormality
<b>AVG.SPD</b>	Average speed	<b>3 0</b>	Communication Abnormality
<b>WALK</b>	Walk Mode	<b>3 1</b>	Power Button Abnormality

**F o r m 1**

### ◆ Display Operation

\*Go look on our website: [www.shengmilo-bikes.com](http://www.shengmilo-bikes.com) ➡ Owner's Manual ➡ Shengmilo MX03 LCD Display User Manual

### Battery Charging

#### ◆ Charging Procedure for Off-bike Charging

**Step 1:** Find the keys located on the handlebar and remove them. If you cut them from the handlebars, be careful not to damage any of the wires.

**NOTICE:** Please keep your key and its spare in a safe place. Once lost, they are difficult to copy.



**Step 2:** Use the key to unlock the battery. While holding the battery with one hand, detach the battery by turning the release switch located on the underside of the frame.



### Step 3 : Safest way to charge your battery

① Start by plugging the charger into the battery charging port. With the battery inside the bike, place the charger on a flat, safe place and connect the charger's DC output plug (barrel connector (2)) to the charging port (1) on the side of the battery.

② Plug the charger into an electrical outlet. Connect the charger input plug (3) (110-240 volt plug) to an electrical outlet. Charging should begin and the LED charging status light on the charger will show **red**.

③ Unplug the charger from the outlet, then from the charging port. When fully charged, the charging indicator light changes from **red to green**, first unplug the charger from the wall outlet, then unplug the charger output plug from the battery charging port.



**NOTICE:** This order helps extend the battery life and effectively reduces battery damage caused by improper charging.

### ◆ After Charging

1. Please unplug the main power supply first by removing the plug from the power socket, then remove the DC port from the battery.

You can then check the battery status on the display screen.

2. Insert the battery with caution, making sure that the slots at the bottom of the battery align with the pins on the bike frame, and slide in carefully to avoid damaging the interior circuitry.

3. Lock the battery when finished to prevent theft.

**NOTICE:** If your battery displays abnormal charging behavior, such as:

- Longer-than-expected charge time
- Strange smell, smoke, or liquid emanating from battery and/or charger
- Overheating battery and/or charger

Please stop charging and contact [www.shengmilo-bikes.com](http://www.shengmilo-bikes.com) immediately..

### ◆ Charging Tips

- The battery can be recharged on or off the bike.
- A new battery may take longer to be fully charged when depleted.
- The charger will automatically stop charging once the battery pack is fully charged.
- You can recharge the battery after short rides as it does not have a memory effect.



## ◆ Precautions

- While charging, please keep your battery away from direct sunlight, liquid, dirt or debris, and metal objects. Do not allow the battery to be charged in environments under 14° Fahrenheit (-10° Celsius) and over 104° Fahrenheit (40° Celsius).
- Do not cover the charger when charging.
- Keep the battery away from children while charging.
- Make sure to only use an approved Shengmilo bike charger purchased directly from [www.shengmilo-bikes.com](http://www.shengmilo-bikes.com) for your specific bike serial number.

### ◆ Before Riding

Ensure that the battery has been properly secured to the bike before each use by grasping the battery pack and pulling upwards, testing the security of the pack.

### ◆ Battery Maintenance (48 V 17.5 A H Shengmilo Lithium battery)

- Do not fully drain your battery. Turn off the power when the battery charge is low.
- Fully charge the battery after each use, no matter how much power is used. This will prolong the battery life. If battery power is not used for a long time, store the battery with a full charge and charge it once a month.
- The Shengmilo bike can be safely ridden in light rain. However, riding through very heavy downpours or through flooded streets is not recommended, as the crank and/or motor can get wet, which may cause damage.
- Keep the battery away from open flame and other high-temperature heat sources. Do not expose the battery to direct sunlight or recharge immediately after use in high-temperature weather.

**NOTICE:** It is not recommended to make any modifications to the battery or the motor. If the battery is tampered with, and there are any problems with the altered battery or motor, it will not be covered under Shengmilo's warranty.

## ◆ **Charger Care Information**

1. **Check the charger, charger cables, and battery for damage** before beginning each charge.
2. **Always charge in a safe area** that is cool, dry, indoors, away from direct sunlight, dirt, or debris, in a clear area away from potential trip on the charging cords, or for damage to occur to the bike, battery, or charging equipment while parked and/or charging.

**The battery can be charged on or off the bike.**

3. **The battery should be recharged after each use**, so it is ready to go the full range per charge next ride. There is no memory effect, so charging the battery after short rides will not cause damage.
4. **Charging the battery normally takes 6-7 hours.**
5. **The charge indicator lights** will show a red light while the battery charges. When charging is complete, one indicator light will turn green. Ensure the lights face upward when charging.
6. **Remove the charger from the battery within one hour of the green light indicating a complete charge.**
7. **Never charge a battery for more than 12 hours at a time. Do not leave a charging battery unattended**

## **Riding Modes**

### **◆ Pedal-assist**

Pedal-Assist is an operating mode on e-bikes designed to engage the motor to assist, but not replace, your own pedaling effort. When you are operating your bike in the pedal-assist mode, you can adjust the setting according to your preference. Shengmilo has five pedal assist settings - ranging from 1 to 5.

- Higher pedal settings (L4/5) would be most helpful for those who want to ride faster with minimum effort. These settings are perfect for people who want to arrive fresh and timely at work, without being sweaty and exhausted.
- Lower pedal settings (L1/2) are popular for Shengmilo riders to use after work, or when leisurely exercise is preferred. These are best to use on the way home from work, to refresh yourself and relieve stress accumulated throughout the entire workday. Moreover, lower settings can extend the usable range for longer rides, maximizing enjoyment while minimizing physical stress and fatigue.

### **◆ Throttle-only**

The throttle mode is similar to how a motorcycle or scooter operates, alleviating the need to pedal or providing an additional boost simply by twisting the throttle.

Shengmilo MX03 can reach speeds of up to 25 miles per hour with throttle mode, which not only allows you to travel faster but also reassures riders with extra power whenever needed, depending on traffic conditions and rider energy levels. If you are an adventurer who chases after speed and distance without compromising comfort or safety, the throttle-assisted Shengmilo would be your perfect companion.

### ◆ Pedal-only

In this mode, the Shengmilo will perform like a normal bike, as you'll be riding without any assistance from the motor. This mode is especially useful if you run out of battery, or are looking for more intensive resistance training.

We suggest that you select a lower assistance level when you first ride your Shengmilo MX03. After becoming more comfortable with the riding characteristics of our e-bike, and more familiar with the varying range requirements of your most common destinations and commuting routes, you can then make any needed adjustments to pedal-assist settings, as well as the throttle use frequency, riding position, etc.

### ◆ Riding Limitations

Following are some limitations needing riders' careful attention to ensure the hub motor does not overheat or become damaged from excessive loading:

- Do not attempt to ride up hills steeper than 15% grade.
- Use the pedals to assist the motor when climbing hills and accelerating from a stop.
- Avoid sudden starts and stops.
- Generally accelerate at a moderate pace, rather than aggressively

## **Maintenance**

### ◆ **Battery Maintenance** (48V 17.5AH Shengmilo battery)

1. Don't fully drain your battery. Turn off the power when the battery charge is low.
2. Fully charge the battery after each use, no matter how much power is used. This will prolong the battery life. If the battery is not used for a long time, store the battery with a full charge and charge it once a month.
3. Shengmilo MX03 can be safely ridden in light rain. However, riding through very heavy downpours or through flooded streets is not recommended, as the crank and/or motor can get wet, which may cause problems.
4. Keep the battery away from an open flame or a high-temperature heat source. Do not expose the battery to direct sunlight or recharge immediately after use in high-temperature weather.

### ◆ **Motor Maintenance** (500W BAFANG Geared Hub Motor with 80 Nm of torque)

1. Please check your motor frequently and tighten any loose screws or nuts, to prevent the vehicle from breaking down due to disconnected wires.
2. The brushless motors are not waterproof, so avoid riding through water deeper than the lower edge of the electric wheel hub to avoid motor failure.

### ◆ Chain Maintenance

1. We recommend cleaning the chain after each ride, especially in rainy and humid environments. Use a dry cloth to wipe the chain and its accessories clean. Use a brush to remove sand and dirt stuck in the chain, along with use warm soapy water if needed. Do not use strong acidic or alkaline cleaning agents (such as rust remover), because these chemicals can damage the chain.
2. Apply lubricating oil after cleaning to avoid rust. First, make sure the chain is dry, and then apply the lubricating oil to the bearings.
3. To prevent unnecessary chain wear, try to maintain a vertical chain position when shifting gears (do not use the smallest gear with the smallest flywheel, or the largest gear with the largest flywheel, etc.).

### ◆ Front Fork Maintenance

1. Always use a clean, oil-free lint-free cloth with plain or soapy water to clean your bike. To prevent water from flowing into the front fork, you can turn the bike upside down. Dry with a lint-free towel after washing. Pay specific attention to the inner tube and the dust seal to reduce wear and prevent thinning of the inner tube, which can lead to significant damage if the aluminum is exposed to air.
2. We recommend using a front fork dust cover to protect the inner tube of your front fork. This prevents dust from entering as well as hard objects from hitting the inner tube.

## **Limited Warranty**

Your bike's warranty and other binding legal terms (e.g., terms of purchase, etc.) are subject to change at any time. To view the current warranty, please go to [www.shengmilo-bikes.com/pages/warranty](http://www.shengmilo-bikes.com/pages/warranty).

### **Warranty Info**

- All Shengmilo e-bikes are covered under our manufacturer's 1 year, 6 months, and three months warranty for the original owner against all manufacturing defects (All free Accessories are not covered by warranty service).
- Only the original owner of bikes purchased from Shengmilo's online store is covered by this Limited Warranty. The Warranty Period begins upon your receipt of the bikes and shall end immediately upon the earlier of the end of the Warranty Period or any sale or transfer of the bike to another person, and under no circumstances shall the Limited Warranty apply to any subsequent owner or other transfers of the bike.
- You must have the initial owner's name & the initial order number to start a warranty claim.
- The Covered Components are warranted to be free of defects in materials and/or workmanship during the Warranty Period.

### **WARRANTY WILL COVER**

Shengmilo will replace any component that is deemed to be defective or damaged

(including damage incurred during shipment) without user error. The warranty covers the listed products and follows the terms below:



## **Frame**

- Shengmilo' frames are covered by a replacement warranty for 12 months.
- This warranty includes a replacement frame only. Labor charges to changeover parts to replacement frames are not included.
- Shengmilo reserves the right to use scratch and dent stock when replacing a frame under this warranty. Frame styles and/or colors not in stock may be replaced with a compatible style and/or color at the discretion of Shengmilo.

## **Batteries**

- Shengmilo' batteries are covered by a 6-month prorated warranty.
- Defective batteries will send accessories to customers for free for self-repair during the 6-month service period.  
The warranty period for repaired batteries is based on the original purchase date.
- After the first 6 months of service — A prorated credit, based on months of service, will be applied toward the purchase of a new battery. Batteries purchased at pro-rated cost will have a new 6 months warranty based on the pro-rated purchase date.
- No cash reimbursement will be made.
- Batteries can be assessed and found defective directly by Shengmilo only.

## **Parts & Components**

- ALL Original Shengmilo bike's parts & components are covered by the warranty.

**This Limited Warranty Does Not Cover:**

- Normal wear and tear of any Covered Component.
- Labor charges to changeover parts to replacement frames are not included.
- Consumables or normal wear and tear parts (including without limitation tires, tubes, brake pads, cables, housing, grips, chain, and spokes).
- Any damage or defects to Covered Components resulting from failure to follow instructions in the e-bike owner's manual, acts of God, accident, misuse, neglect, abuse, commercial use, alterations, modification, improper assembly, installation of parts or accessories not originally intended or compatible with the bike as sold, operator error, water damage, extreme riding, stunt riding, or improper follow-up maintenance.
- For the avoidance of doubt, Shengmilo will not be liable and/or responsible for any damage, failure, or loss caused by any unauthorized service or use of unauthorized parts.
- The Battery is not warranted from damage resulting from power surges, use of an improper charger, improper maintenance, or another such as misuse, normal wear, or water damage.
- Any products sold by Shengmilo that are not an e-bike.

**Link to Assembly Video and Online Resources****Assembly Video**

Please refer to the "COMMUNITY Video" at the Shengmilo website

[www.shengmilo-bikes.com/pages/videos](http://www.shengmilo-bikes.com/pages/videos) to view the official Shengmilo MX03 Assembly Video.

**Online Resources**

For more information on best practices, please visit the Shengmilo official website

[www.shengmilo-bikes.com](http://www.shengmilo-bikes.com) or contact Shengmilo Product

Support with any questions.



**We are here to help!**

If you have questions, please:

Access Shengmilo's official website [www.shengmilo-bikes.com](http://www.shengmilo-bikes.com).

Contact us directly by email at [info@shengmilo-bikes.com](mailto:info@shengmilo-bikes.com).