

# ***Shengmilo***

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## ***Owner's Manual***



### **About Manual**

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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.

# ***WELCOME TO SHENGMILO***

- 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 S900 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 S900 information source.



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



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





## ATTENTION

- 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 S600 require special tools and skills, and it is recommended that this be performed by a trained bicycle mechanic if possible.

# 01 BIKE SPECIFICATION

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BIKE SPECICATION

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## BIKE SPECICATION

# PARAMETER

**Weight**  
35 kg

**Meter**  
Yolin color meter

**Damping**  
Shock absorption

**Assistance mileage**  
80-90 km

**Pure electric range**  
40-50km

**Engine**  
2X1000W Motor

**Torque**  
2X80N·M

**Gradability**  
40 °

**Frame**  
Aluminium alloy

**Brake**  
SOLONG hydraulic brake system

**Battery**  
48X17.5AH SAMSUNG

**Tyre**  
26X3.0

**Charging time**  
7-8H

**Controller**  
Intelligent Brushless Controller

**Transfer**  
Level 7 Shimano

**Speed**  
Up to 45 km/h



## BIKE SPECICATION



- A** Total Length: 185cm/73in
- B** Handlebar Height: 109cm / 43in
- C** Wheelbase: 117cm / 46in
- D** Minimum Seat Height: 83cm / 33in
- E** Maximum Seat Height : 100cm / 39in
- F** Chain Stay Length : 48cm / 19in
- G** Standover Height: 45cm / 18in
- H** Wheel Diameter: 70cm 27.5in
- I** Head Tube Length : 24cm / 9.4in
- J** THandlebar Length: 68cm / 27in



## BIKE SPECICATION

| Battery                   | 48V 17.5Ah SAMSUNG Cells                   | Charger                  | EU plus 2.0 A smart charger            |
|---------------------------|--------------------------------------------|--------------------------|----------------------------------------|
| Range                     | PAS mode: 70—90KM; Trottle mode : 40~50 KM | Controller               | Sine wave brushless motor controller   |
| Motor                     | 2×1000W (Front and rear wheel)             | Display                  | Yolin color display                    |
| Total Payload Capacity    | 400 lbs (180kg)                            | Weight                   | 70.5 lb (32KG)                         |
| Recommended Rider Heights | 5'5" ~ 6'6" (165–200cm)                    | Pedal Assist Intelligent | 0~5 Level pedal assist                 |
| Tires                     | 26" x 3.0 Non-slip fat tires               | Throttle                 | Half twist throttle                    |
| Brake                     | Dual hydraulic oil brakes                  | Front Fork               | Double shoulder fork shock absorber    |
| Horn                      | The horn is integrated in the headlight    | Pedal                    | Wellgo alloy pedals with reflectors    |
| Freewheel                 | Shimano 7-speed gear shift system          | Bike Frame               | 6061 Aluminum frame                    |
| Brake                     | Disc brakes                                | Headlight                | Super bright LED 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*218/Rear wheel 13G*218 |



# 02 BIKE Assembly Guide



| 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 Guide

## PARK:1 REMOVE PACKAGING

### Prompt:

Please read the installation steps before installation, and install according to the installation pictures and texts

 Please go to our YouTube channel "Shengmilo official store" to watch our assembly.



### 01

Unpack the Shengmilo electric bicycle, take out the electric bicycle and accessories



### 02

Check the completeness of the accessories and prepare the assembly tools.



## Assembly Guide

## PARK:2 FRONT WHEEL INSTALLATION

**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.

**01**

Turn the bike over and place it flat on the ground

**02**

Remove the screws on both sides of the front wheel

**03**

Remove the screws on both sides of the front wheel

**04**

Install the front wheel onto the frame and align the snap-fit connectors

**04**

Reinstall the two front wheel screws you just removed

**04**

Tighten the screws with a tool

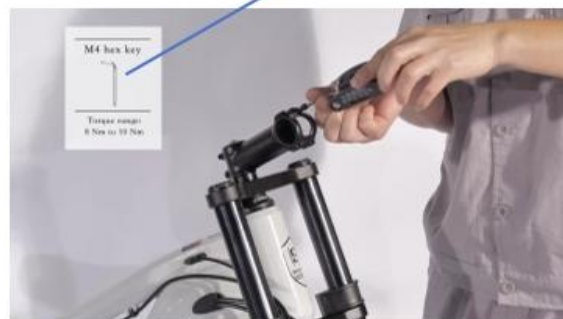
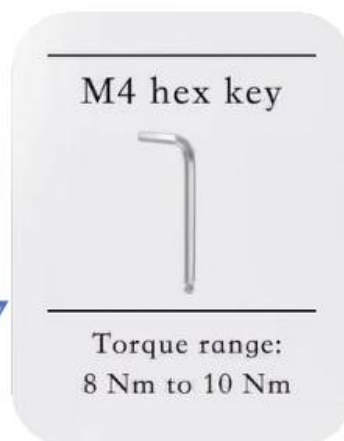
M4 hex key



Install fender:  
8 Nm to 10 Nm

## PARK:3 HANDLEBAR INSTALLATION

**NOTICE:** Before tightening the bolts on the valve stem, pay attention to adjusting the angle and balancing the left and right handles.

**01**

Loosen the bolts on your bike stem

**02**

Center your handlebars and rotate them to align to the marking pointed to in the below image

**03**

Tighten the bolts to the handlebar stem, adjust the angle for more precise alignment, and fully tighten all bolts on the stem after determining the optimal position.

## PARK:5 INSTALL FENDER AND HEADLIGHT

**01**

Use tools to remove the screws

**02**

Install the fender and tighten the screws

**03**

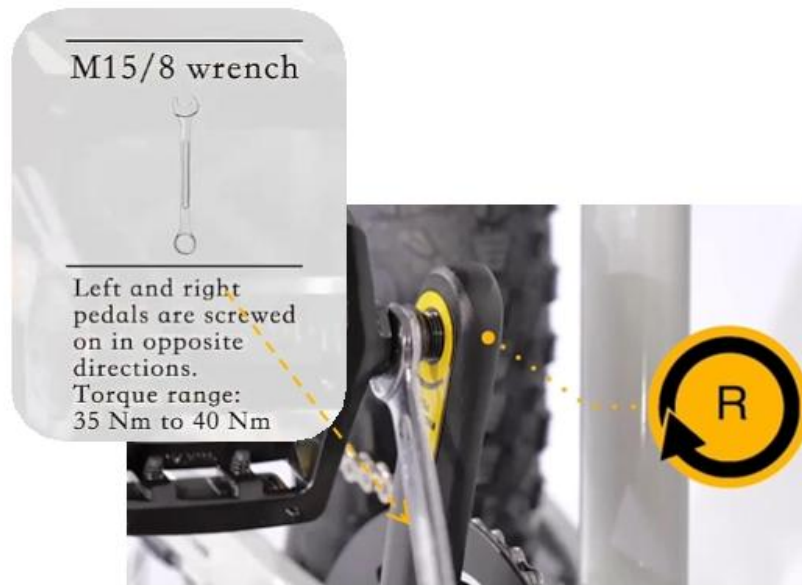
When installing the headlight, make sure to adjust the angle properly before tightening the screws

**NOTICE:** When tightening the screws, do not tighten them directly. Instead, observe whether the position is appropriate while tightening the screws



## PARK:7 PEDAL INSTALLATION

**NOTICE:** 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.



### 01 Right pedal

Use a wrench to tighten clockwise



### 01 Left pedal

Use a wrench to tighten counterclockwise.

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

## Assembly Guide

## PARK:8 TIRE AND START - UP INSPECTION



01

Use an air pump to inflate the tire



01

Power-On Test

**NOTICE:** Do not inflate the tires too high or too low; it is best to keep the pressure within the specified inflation pressure range. Check the condition of the tires before each ride, which is helpful for safe cycling

## PARK:9 CHARGE INSPECTION

### 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.



**01**

When the power indicator is green, it means the device is in standby for charging



**02**

When the power indicator is red, it means it is charging



**02**

You can also remove the battery for 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:

1. Longer-than-expected charge time
  2. Strange smell, smoke, or liquid emanating from battery and/or charger
  3. Overheating battery and/or charger
- Please stop charging and contact [www.shengmilo-bikes.com](http://www.shengmilo-bikes.com) immediately.



# 03 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>                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Cranks 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>                                                                                                                                                                                                                                                                                                                                                                                                        |



# **04 Shengmilo E-Bike Use and Care**



## Use and Care

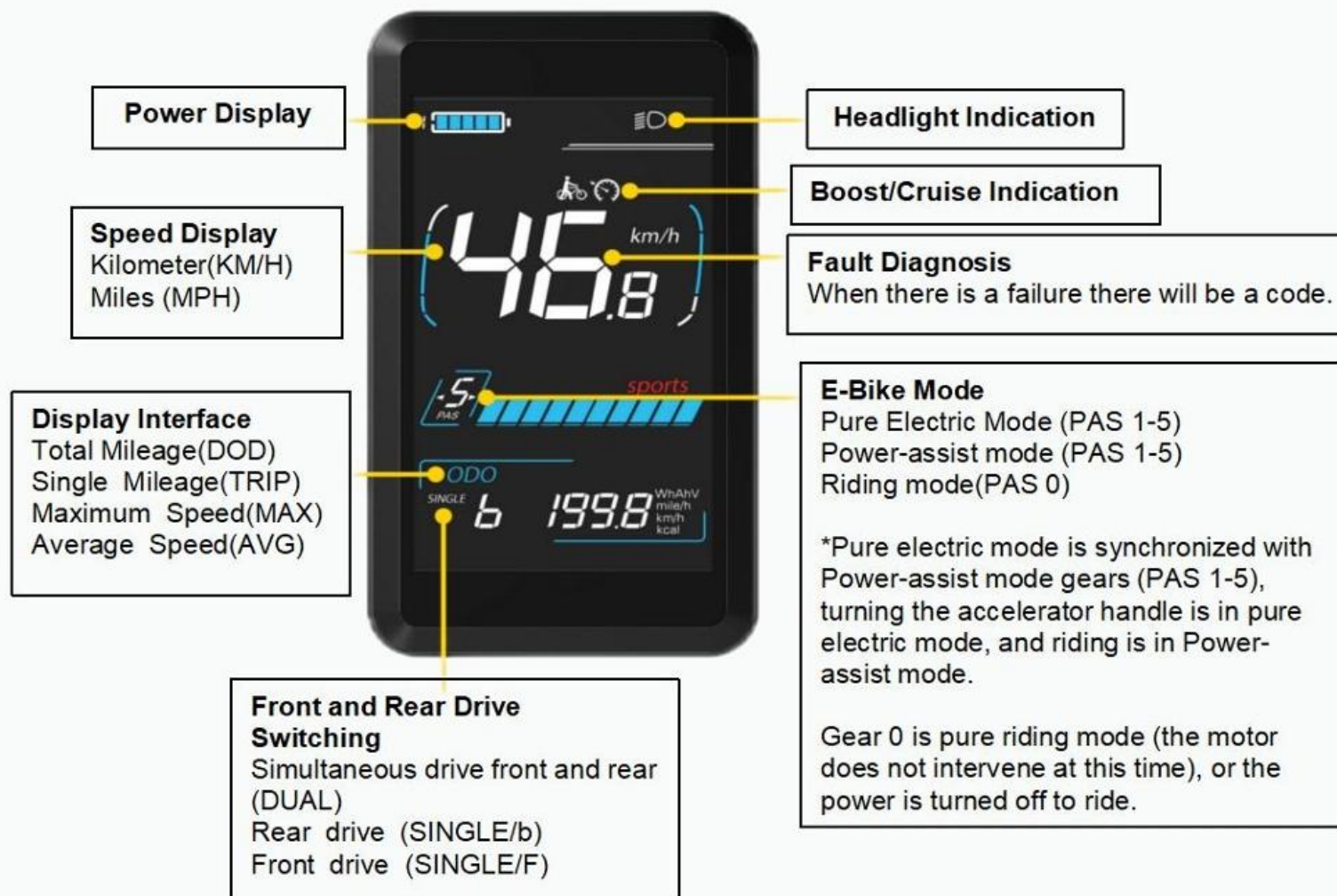
**PARK:1 BASIC DISPLAY SETTINGS****♦CONTROL PANEL**

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.



## PARK:1 BASIC DISPLAY SETTINGS

### ◆LCD METER FUNCTIONAL AREA DISTRIBUTION



## PARK:1 BASIC DISPLAY SETTINGS

### ◆LCD METER KEY GUIDE

Key operations include short press, long press, and long press key combinations. Details are as follows:

1. Long press the  key to power on/off the E-bike

\*If the electric bike is not used for more than 10 minutes, the LCD meter will automatically shutdown

2. After power on, the LCD meter displays real-time speed (km/h) and total mileage (DOD) by default. Short press the  key to display the information to switch between total mileage (DOD), single mileage (TRIP), maximum speed(MAX), and average speed(AVG).

3. Short press the  key or the  key to switch the power level (PAS). The proportional output is shown in the following table:

| PAS    | 1  | 2   | 3   | 4   | 5   |
|--------|----|-----|-----|-----|-----|
| Output | 0% | 50% | 73% | 85% | 96% |



4. Press the  button to turn on the headlights, Pressing off again, the LCD instrument backlight dims when the headlights are turned on, and returns to brightness when the headlights are turned off.

5. Press and hold the  button, and the electric bicycle enters the electric assist push mode.

Electric bikes will travel at an average speed of 6 kilometers per hour. At the same time, the screen displays .

Press and hold the  key again or press the brake to cancel this mode.

\*The push function is recommended to be used when pushing the bike uphill. Do not use this function while riding.

6. Cruise mode: When using pure electric power, reach the speed you are satisfied with, long press the  button to enter the battery life mode. Press and hold the  key again or press the brake to cancel this mode.

\*It is recommended to use this mode when the road surface is flat and there are few people.



7. When the electric control system of the electric bicycle fails the instrument will automatically display the error code.

The detailed error code definition is shown in the following table:

|      |                        |      |                        |
|------|------------------------|------|------------------------|
| E001 | Controller Malfunction | E004 | Turning Handle Failure |
| E002 | Circuit Malfunction    | E005 | Brake Lever Fault      |
| E003 | Hall Fault             | E006 | Motor Phase Loss       |



**When there is an error code on the display page, please contact the dealer in time to help you troubleshoot, the electric bicycle will not be able to run normally when there is a fault.**

## PARK:2 PARAMETER SETTING

### ◆PERSONALIZED PARAMETER SETTING STEPS

Note: In the power-on state, the operation is performed when the display speed of the instrument is 0.

Press and hold the   button for more than 2 seconds at the same time to enter the personalized parameter setting item selection interface

Short press the   key to switch the selection interface of the personalized parameter setting item, short press the  key to enter the state of changing parameters

Short press   key to select parameters, long press  for continuous addition operation, long press  for continuous reduction operation

Short press the  key to save the parameter settings and return to the personalized parameter setting item selection interface

Press and hold the  key to save the parameter settings and exit the personalized parameter setting option interface.

## Use and Care

## PARK:2 PARAMETER SETTING

### ◆PARAMETER SETTINGS

Note: 02P sets options for metric and imperial units, 00 for metric, and 01 for imperial

Short press the **i** key to enter the state of changing parameters, short press the **+** or **-** key to select parameters, short press the **i** key, save the parameter setting, and return to the personalized parameter setting item selection interface



(02P is shown in the picture)  
Metric and Imperial unit setting interface



## PARK:2 PARAMETER SETTING

### ◆PARAMETER SETTINGS

Short press the **i** key to enter the state of changing parameters, short press the **+** or **-** key to select parameters, short press the **i** key, save the parameter setting, and return to the personalized parameter setting list selection interface;  
Adjust the parameter to 50 to remove the speed limit by default.



(05P is shown in the picture)  
Assist gear range setting interface



(06P is shown in the picture)  
Wheel diameter setting interface



(08P is shown in the picture)  
Speed limit setting interface

## PARK:2 PARAMETER SETTING

### ◆PARAMETER SETTINGS

09P is set start options for start up method, 00→zero start, 01→non-zero start.  
10P is set options for drive mode.



(09P is shown in the picture)  
Startup mode setting interface



(10P is shown in the picture)  
Assist mode setting interface

**00→ Power-assisted drive only**

**01→ Electric drive only**

**02→ Power-assisted drive and electric drive coexist**

## PARK:3 PARAMETER SETTING

### ♦FACTORY RESET OPERATION

Note: DEF is the option to restore the factory default parameters, dEF-Y means that the default parameters need to be restored, and dEF-N means that there is no need to restore the default parameters.

When the main interface speed is 0, press and hold the  and  keys simultaneously for more than 2 seconds to enter the factory default parameter restoration interface. By short pressing  or  key to switch, if Y is selected, press the  key briefly to confirm. The meter will display dEF-0 for a period of time and automatically start to restore the factory default settings. After the restoration to default is completed, it will automatically exit and return to the normal display interface



(DEF is shown in the picture)  
Restore default settings interface

### ♦DUAL DRIVE QUICK SWITCHING OPERATION

Press and hold the  button for 3 seconds to switch the motor drive mode to achieve different drive mode experiences.

P1 → Single front-wheel drive mode    P2 → Single rear-wheel drive mode    P3 → Dual drive mode



# 05

## PRECAUTIONS AND MAINTENANCE

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## PARK:1 BATTERY

### ◆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 (48V 17.5AH 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.

## PRECAUTIONS AND MAINTENANCE

**PARK:2 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 to 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.



## PRECAUTIONS AND MAINTENANCE

# PARK:3 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 S700 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 S600. 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



## PRECAUTIONS AND MAINTENANCE

# PARK:4 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 S700 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 (2X1000W Geared Hub Motor with 80 Nm of torque)

1. Please check your motor frequently and tighten any loose screws or nuts, to prevent the bike 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.