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› BAFANG HD 1000W Mid Drive Kit User Manual

BAFANG BBSHD 68MM 48V 1000W+860C+T46

BAFANG HD 1000W Mid Drive Kit User Manual

Model: BBSHD 68MM 48V 1000W+860C+T46

1. INTRODUCTION

This manual provides essential information for the installation, operation, maintenance, and troubleshooting of your BAFANG HD 1000W Mid Drive Ebike Motor Conversion Kit. Please read this manual thoroughly before beginning installation or operation to ensure safe and efficient use of your new ebike system.

The BAFANG HD 1000W Mid Drive Kit is designed to convert standard bicycles into powerful electric bikes, offering enhanced performance for various terrains and riding styles. Its robust design and high torque output make it suitable for both daily commuting and challenging off-road adventures.



Image: Overview of the BAFANG HD 1000W Mid Drive Kit components, including the motor, battery (optional), display, and various accessories.

Your browser does not support the video tag.

Video: An introductory video showcasing the BAFANG BBS motor in various riding scenarios, highlighting its integration and performance.

2. SETUP AND INSTALLATION

Proper installation is crucial for the performance and safety of your BAFANG mid-drive kit. This section outlines key considerations and steps for fitting the motor and associated components to your bicycle.

2.1 Compatibility Check

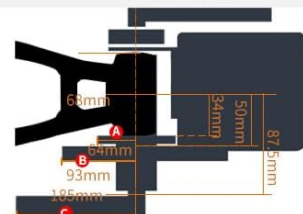
Ensure your bicycle's bottom bracket is compatible with the BAFANG mid-drive motor. The kit is designed to fit standard 68-73mm, 85-105mm, or 105-125mm bottom bracket lengths with an internal diameter of 34-36mm. It is also important to verify that the chainring will not interfere with your bike's chain stay.

HOW DO I CONFIRM THE KIT FITS FOR MY BIKE?



Measure your bike bottom bracket size

Make sure the chainring won't hit the chain stay of your bike



CHOOSE THE SUITABLE BOTTOM BRACKET SIZE



• FOR BB68-73mm bike

• BB68mm motor + spacer



• FOR BB85-105mm bike

• BB100mm motor + spacer



• FOR BB105-125mm bike

• BB120mm motor + spacer



The spacer is not included in default, if you need it, please let us know

Image: Visual guide on how to measure your bike's bottom bracket size and check for chainring clearance to ensure compatibility with the BAFANG mid-drive kit.

WILL THE BAFANG MID DRIVE MOTOR FIT YOUR BIKE?

Fit the bike with standard 68-73mm bottom bracket length and 34-36mm internal diameter

Easy Simple Way:

Use calipers or Ruler to Measure Bottom Bracket Shell Width and Diameter



Three BB Size Optional (BB68MM, BB100MM, BB120MM)



More Accurate Way:

Download the Product guide and documents on the product page, print it scale 100% and follow the instruction

Product guides and documents

Compatibility Guide (PDF)

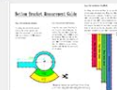


Image: Detailed guide illustrating how to determine if the BAFANG mid-drive motor will fit your bike, including measurements for various bottom bracket sizes.

2.2 Components Overview

The kit includes the BAFANG mid-drive motor, brake levers (or hydraulic brake sensor cables), thumb throttle, chainring wheel, crank arms, LCD display, speed sensor, 1T4 wire, locknuts, wrench, and an ebike headlight (default). Optional batteries are available separately.

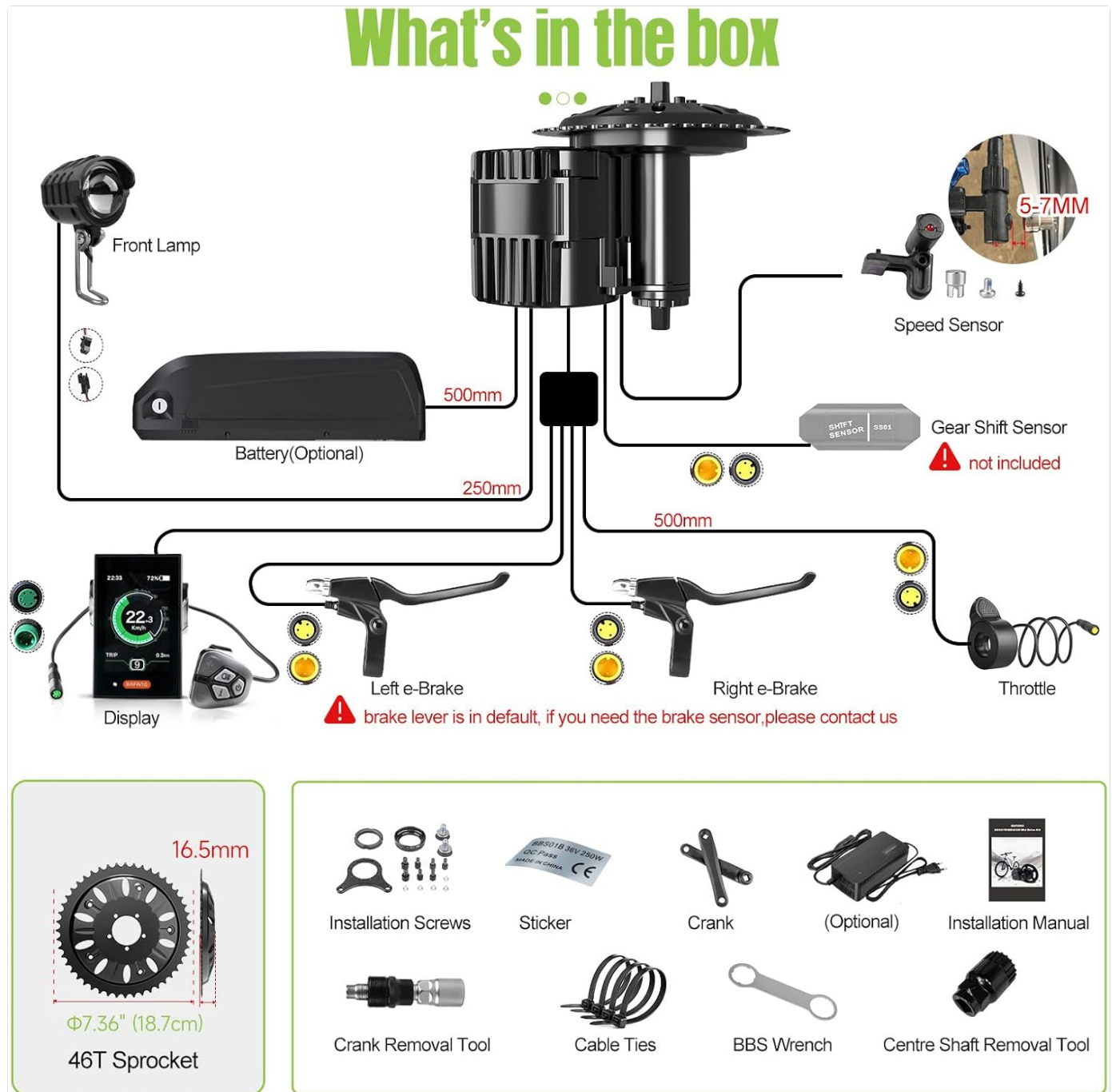
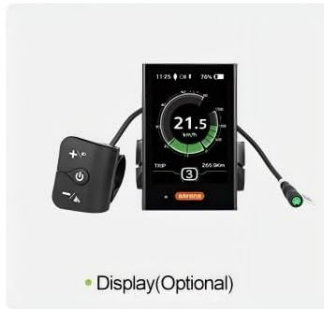


Image: A diagram showing the various components included in the BAFANG mid-drive kit and their typical wiring connections.

PACKING LIST



Free Gift

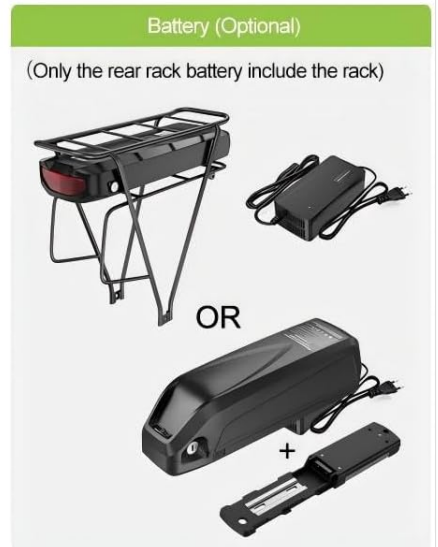
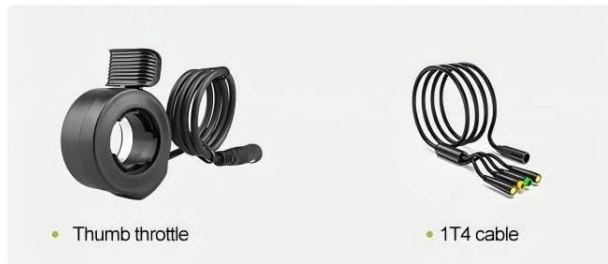
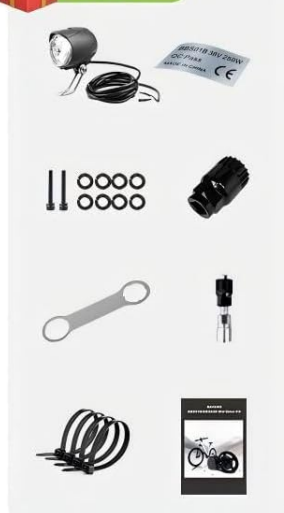


Image: Detailed packing list for the BAFANG BBSHD motor kit, illustrating all included parts.

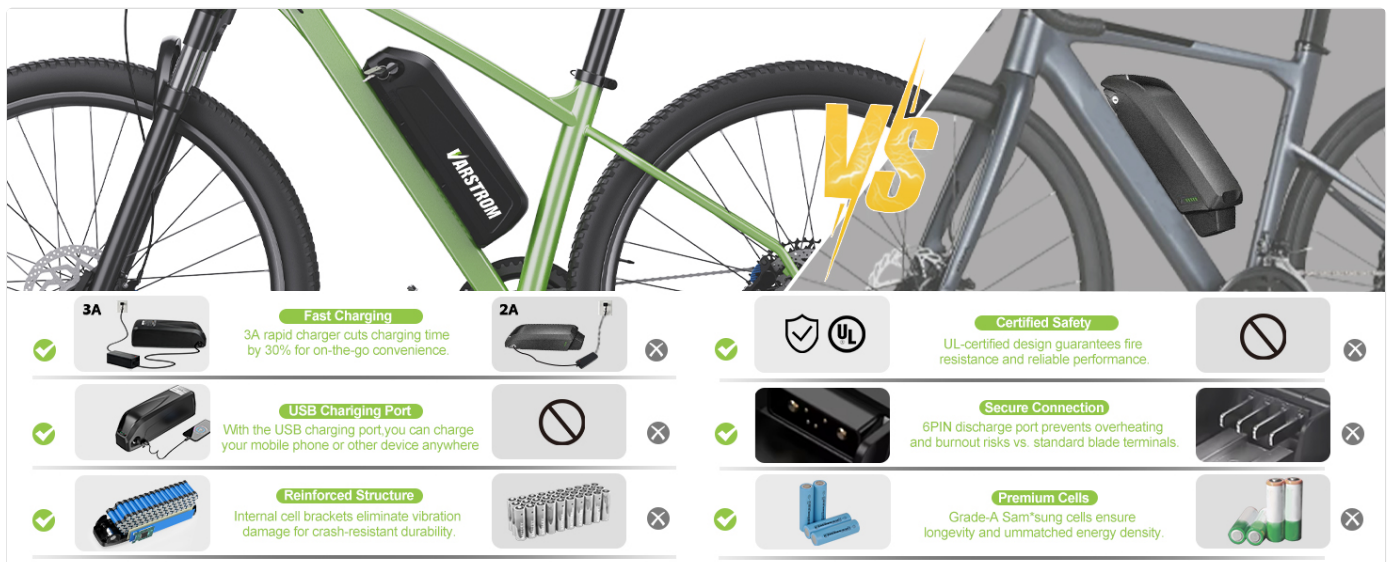


Image: Diagram illustrating the IP65 waterproof wiring system of the BAFANG ebike kit, showing how components connect securely.

2.3 Battery and Brake Compatibility

When selecting a battery, consider its fitment on your bike frame. The kit supports various battery types, including downtube shark batteries and rear rack batteries. For brake systems, the kit typically comes with brake levers. If your bike uses hydraulic disc brakes or shift-integrated brake handles, you may need to contact support for compatible brake sensors.

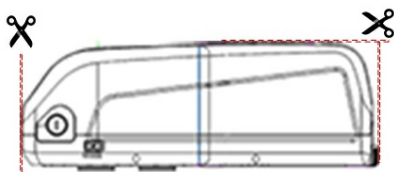
IF THE DOWNTUBE SHARK BATTERY CAN FIT WITH MY BIKE?

- 1 Easy to find this file on the product page, please download it

Product guides and documents

Size Guide(PDF) 

- 2 Cut off testing cutouts



- 3 Use the testing cutouts to check the compatibility.

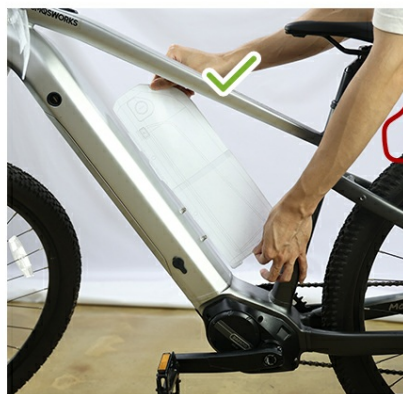
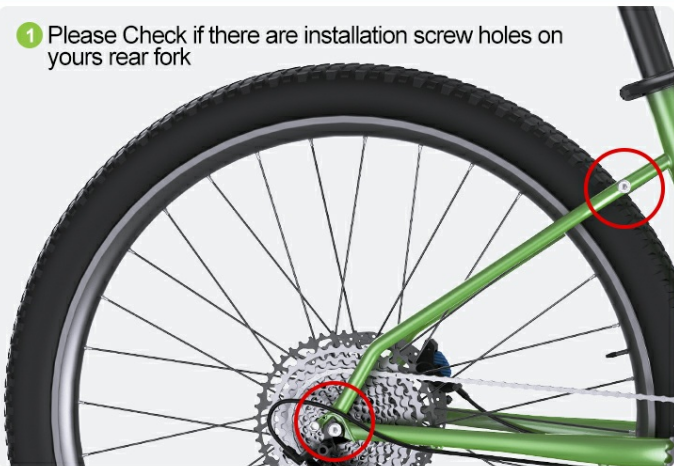


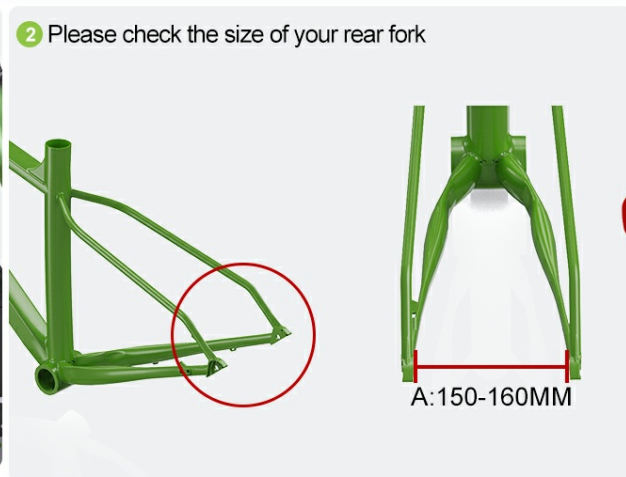
Image: Guide for checking if a downtube shark battery can fit your bike frame using a cutout template.

DOES THE REAR BATTERY FIT MY BIKE?

- 1 Please Check if there are installation screw holes on yours rear fork



- 2 Please check the size of your rear fork



A: 150-160MM

Image: Instructions for checking rear battery fitment, including verifying installation screw holes and rear fork size.

BRAKE LEVER OR BRAKE SENSOR?

i If your bike can't use the default brake lever, please contact us, so we can send the brake sensor to you



✓ Mechanical disc brakes



✓ Rim V brake



✗ Shift integrated brake handle



✗ Hydraulic Disc Brake

Image: Guide explaining the compatibility of different brake types (mechanical disc, rim V-brake, shift-integrated, hydraulic disc) with the kit's brake components.

3. OPERATING INSTRUCTIONS

Once installed, your BAFANG ebike kit offers various modes and display functionalities to enhance your riding experience.

3.1 Riding Modes

The BAFANG ebike system supports three primary riding modes:

- **E-bike Mode:** Provides full electric power without pedaling, controlled via the thumb throttle.
- **Pedal Assisted Bicycle (PAS) Mode:** The motor provides assistance as you pedal. The level of assistance can be adjusted via the display.
- **Push Assist Bicycle Mode:** Provides low-speed assistance for walking the bike, useful when pushing it uphill or through difficult terrain.

6 Key Benefits for BAFANG Mid Motor





Enhanced Stamina
Motor assistance balances workout intensity, boosting cardio without exhaustion.



Efficient Commute
Shorten commute time and conquer long distances or rough terrains effortlessly.



Traffic Avoidance
Navigate traffic freely, ensuring punctuality and reducing commute stress.



Fuel Savings
Zero fuel cost for daily rides, cutting long-term commuting/delivery expenses.



Family Bonding
Stable motor support ensures safe rides, creating family outdoor memories.



Cargo Capability
High torque motor handles deliveries or cargo transport with ease.

Image: Visual representation of different riding modes (Rapid Climb, Exercise Mode, Save Effort, Bike Mode) suitable for various terrains.

3.2 Digital Display Functions

The LCD display provides critical information and allows you to customize settings. Features may vary by display model but generally include:

- Real-time speed and power output.
- Battery power indicator and ride range.
- Trip distance and ride time.
- PAS level adjustment (0-9 levels).
- Headlight indicator and automatic headlight function (on some models).
- Error code display for diagnostics.
- USB charging port for external devices.

Model	Screen Size	Holder (mm)	PAS Level	Advanced password	Navigation	Automatic headlight	USB Charger DC 5V 500mA
 EKD01	2.4" TFT	22.2/25.4	3/5/9	2020	✓	✗	Type-C
 DPC010.CB	4" TFT	22.2	0~3 0~5	1919	✓	✓	Type-C
 DPC080.C	1.9" IPS	22.2	5	1919	✓	✓	Type-C
 VD03	1.5" IPS	22.2	3/5/9	/	✗	✗	✗
 VD618	3.5" OLED	22.2	3/5/9	1919	✗	✓	Type-C
 P860ML	3.5" LCD	22.2	3/5/9	1919	✗	✓	USB-A

Image: A comparison table detailing various BAFANG LCD display models, their screen sizes, PAS levels, navigation features, and USB charging capabilities.

WHY CHOOSE BAFANG MID DRIVE MOTOR?

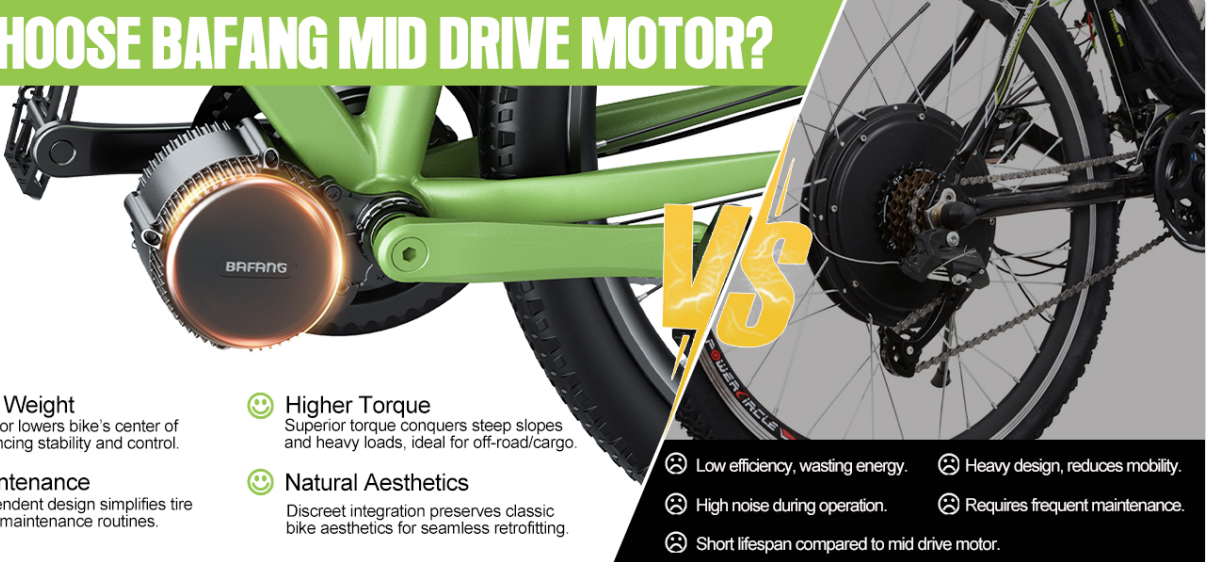
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- The image shows a side-by-side comparison of two bicycle motor types. On the left is a BAFANG mid-drive motor, which is integrated into the crankset of a green bicycle. On the right is a rear hub motor, which is mounted inside the rear wheel. A large yellow 'VS' graphic with a lightning bolt is placed between the two motors. Below each motor are several bullet points describing their features and drawbacks.
- Balanced Weight**
mid drive motor lowers bike's center of gravity, enhancing stability and control.
 - Higher Torque**
Superior torque conquers steep slopes and heavy loads, ideal for off-road/cargo.
 - Easy Maintenance**
Wheel-independent design simplifies tire changes and maintenance routines.
 - Natural Aesthetics**
Discreet integration preserves classic bike aesthetics for seamless retrofitting.
 - Low efficiency, wasting energy.**
 - Heavy design, reduces mobility.**
 - High noise during operation.**
 - Requires frequent maintenance.**
 - Short lifespan compared to mid drive motor.**

Image: Features of the smart digital display, including color screens, adjustable speed limits, dual interface themes, PAS levels, USB charging, and automatic light sensor.

4. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your BAFANG mid-drive system. Follow these guidelines for proper care:

- **Cleaning:** Keep the motor and components clean. Avoid high-pressure washing directly on electrical parts.
- **Lubrication:** Regularly lubricate the chain and other moving parts of your bicycle.
- **Connections:** Periodically check all electrical connections for tightness and corrosion. The system features IP65 waterproof wiring, but proper sealing is still important.
- **Battery Care:** Store the battery in a cool, dry place. Avoid fully discharging the battery and charge it regularly, even when not in use.
- **Professional Inspection:** It is recommended to have your ebike system inspected by a qualified technician annually.



Image: An illustration advising against riding the ebike in heavy rain to protect electrical components.

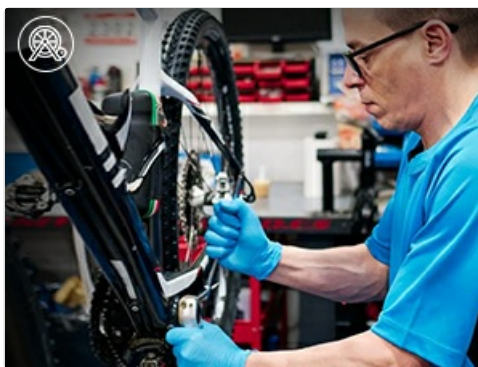


Image: A technician performing maintenance on an ebike, emphasizing the importance of professional service.

5. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your BAFANG mid-drive kit. For complex problems, please contact customer support.

Problem	Possible Cause	Solution
Motor not assisting	Low battery, loose connection, display error code.	Check battery charge, inspect all cables, refer to display for error codes and consult manual.
Display not turning on	Battery off, loose power cable, faulty display.	Ensure battery is on and charged, check power cable connection to display.
Inconsistent power delivery	Speed sensor misalignment, PAS sensor issue.	Verify speed sensor magnet alignment, check PAS sensor for damage or obstruction.

For detailed error codes and advanced troubleshooting, please refer to the comprehensive user guide available for download or contact our service center.

6. SPECIFICATIONS

Key technical specifications for the BAFANG HD 1000W Mid Drive Kit and compatible components:

- **Motor Type:** Mid-drive motor
- **Rated Power:** 1000 Watts
- **Rated Voltage:** 48V/52V
- **Max Torque:** Up to 160 N.m
- **Speed:** Up to 55 Kilometers per Hour (35 mph)
- **Bottom Bracket Compatibility:** 68-73mm / 85-105mm / 105-125mm (length), 34-36mm (internal diameter)
- **Material:** Aluminum
- **Item Weight (Motor):** Approximately 6 Kilograms
- **Waterproof Rating:** IP65 (for wiring)

BAFANG**BBS-*HD 52V1000W 68MM**

- FOR BB68-73mm bike
- BB68mm motor + spacer



Rated Voltage

**52V**

Rated Power

**1000W**

Suitable bottom bracket size

**68-73mm**Battery
communication
500mmFront Lamp
250mmSpeed Sensor
400mmBattery
500mmRear Lamp
250mmGear Shift Sensor
250mm1T4
500mm**160N.m**
Max Torque**35-40°**
Max Climbing
angle**50-55DB**
Noise Grade**5.8KG**
Weight**IP65**
Water Proof

Image: Detailed specifications for the BAFANG BBSHD motor, including rated voltage, power, max torque, and suitable bottom bracket size.

6.1 Battery Specifications (Optional)

Various battery options are compatible with the BAFANG HD 1000W kit. Common specifications include:

BATTERY SPECIFICATION

48V 13Ah
48V 17.5Ah



48V 19.2Ah
48V 20Ah



Battery Model	Shark Battery 48V 13Ah	Shark Battery 48V 17.5Ah	G80 Shark Battery 48V 19.2Ah	G80 Shark Battery 48V 20Ah
Battery Cell	18650 2600mAh	L*/G Sam*/sung 18650 3500mAh	L*/G 21700 4800mah	L*/G 21700 5000mAh
BMS Max Protection Current	30A	30A	30A	30A
USB Port	✓	✓	✓	✓
Weight	4.25kg	4.045kg	4.95kg	4.7kg
Cycle Life	1000 times	1000 times	1000 times	1000 times
Battery Charger	✓	✓	✓	✓

48V 20Ah



52V 20Ah



48V 17.5Ah



Battery Model	VoltzX Battery 48V 20Ah	YingWu Battery 52V 20Ah	Rear Rack Battery 48V 17.5Ah
Battery Cell	Sam*/sung 21700 5000mAh	Sam*/sung 21700 5000mAh	18650 2600mah
BMS Max Protection Current	30A	30A	30A
USB Port	✓ USB/TYPE-C	✗	✓
Weight	5.2kg	5kg	6kg
Cycle Life	1000 times	1000 times	1000 times
Battery Charger	✓	✓	✓

Image: A table outlining specifications for various compatible ebike batteries, including voltage, capacity (Ah), cell type, BMS protection current, weight, and cycle life.

VARIOUS DURABLE EBIKE BATTERY



Type	Shark Battery		Max Shark Battery	DowntubeYingwu	Rear Rack Battery	VoltzX Battery
Parameter	48V 13Ah	48V 17.5Ah	48V 19.2 / 20Ah	52V 20Ah	48V 17.5Ah	48V 20Ah
Watt	624Wh	840Wh	921.6 / 960Wh	1040Wh	840Wh	960Wh
Battery Cell	18650 2600mah	Sam*/sung L**G Pana*/sonic 18650 3500mah	L**G Sam*/sung 21700 4800 / 5000mah	Sam*/sung 21700 5000mah	18650 2600mah	Sam*/sung 21700 5000mah
BMS	30A	30A	30A	30A	30A	30A
Weight	4.25KG	4KG	4.95 / 4.7KG	5KG	6KG	5.2KG
Cycle Life	1000 times	1000 times	1000 times	1000 times	1000 times	1000 times

❗ If the option don't shows the style you want, please ema*-il us

✉ ga_sale_service@163.com

Image: Features of BAFANG compatible ebike batteries, such as fast charging, USB charging ports, reinforced structure, and premium cells.

7. WARRANTY AND SUPPORT

BAFANG offers a comprehensive warranty and support for its products. For specific details regarding your purchase, please refer to your sales receipt or the product listing.

- **Warranty:** One month return service. If any quality problem occurs within one year, our North American after-sales service center provides technical support and maintenance.
- **Service Center:** Local warehouses and service centers are available in the US, UK, CA, and EU.
- **Contact:** For technical support or maintenance inquiries, please contact the North American service center.



Image: A customer service representative, symbolizing available support for product inquiries and assistance.

For additional resources, you may refer to the official [User Guide \(PDF\)](#).

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question