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› BAFANG 52V 1000W Mid Drive Kit Ebike Motor with LCD Display Instruction Manual

BAFANG BBSHD 68MM 48V 1000W+750C New+T42

BAFANG 52V 1000W Mid Drive Kit Ebike Motor with LCD Display Instruction Manual

Model: BBSHD 68MM 48V 1000W+750C New+T42

1. PRODUCT OVERVIEW

This manual provides instructions for the installation, operation, and maintenance of your BAFANG 52V 1000W Mid Drive Ebike Motor Conversion Kit. This kit is designed to convert a standard bicycle into an electric bicycle, offering pedal assistance and throttle-controlled power. Please read this manual thoroughly before installation and use to ensure proper function and safety.

BAFANG MID DRIVE SYSTEM



• BBS01B BBS02B



• BBSHD



IPX5 Waterproof



Easy Install

BAFANG

BAFANG Designed



THROTTLE MODE

Rapid Climb



PAS MODE

Save Effort



NORMAL BIKE

Exercise Mode

Image: BAFANG Mid Drive System. This image illustrates the two main types of BAFANG mid-drive motors, BBS01B/BBS02B and BBSHD, installed on a bicycle frame, highlighting their compact design and integration into the bike's bottom bracket area.

2. COMPATIBILITY CHECK

Before proceeding with installation, it is crucial to confirm that the BAFANG mid-drive motor kit is compatible with your bicycle frame. The motor is designed to fit bikes with a standard 68-73mm bottom bracket length and an inner diameter between 34-36mm.

2.1. Bottom Bracket Measurement

Measure the width of your bicycle's bottom bracket shell. The motor is compatible with widths between 68mm and 73mm. Also, measure the inner diameter of the bottom bracket, which should be between 34mm and 36mm.

HOW DO I CONFIRM THE KIT FITS FOR MY BIKE?



More information please refer the below description



Coaster Bike



Carbon Fiber Bike

BBS Chainwheel



BBSHD Chainwheel

Chainwheel for HD motor don't include the guard



Image: Bottom Bracket Compatibility. This diagram illustrates how to measure the bottom bracket shell width (68-73mm) and inner diameter (33.5mm-24TPI, between 34-36mm) to ensure compatibility with the BAFANG mid-drive motor. It also shows incompatible coaster brake and carbon fiber bikes.

2.2. Incompatible Bicycle Types

- **Coaster Brake Bikes:** The BAFANG mid-drive motor is not compatible with bicycles equipped with coaster brakes.
- **Carbon Fiber Bikes:** Due to potential stress on the frame, carbon fiber bicycles are generally not recommended for mid-drive motor conversions.

2.3. Battery Compatibility

If you are purchasing a battery separately, ensure it fits your bike frame. For downtube shark batteries, use a size guide template to check clearance. For rear rack batteries, verify installation screw holes on your rear fork and check the size of your rear fork (typically A: 150-160MM).



Image: Downtube Battery Fitment. This image provides a guide on how to check if a downtube shark battery will fit your bike by downloading and using a cutout template to verify clearance on the frame.



Image: Rear Rack Battery Fitment. This image shows how to check for installation screw holes on the rear fork and measure the rear fork width (A: 150-160mm) to ensure compatibility for a rear rack battery.

3. PACKING LIST

The BAFANG Mid Drive Kit typically includes the following components. Please verify all items are present upon unboxing.

- BBSHD Motor (or BBS Motor, depending on your order)
- Display (Optional, various models available like 750C)
- Brake Type (Levers or Sensors, depending on your order)
- Chainwheel (T42 is standard for 1000W, other sizes optional)
- Thumb Throttle
- 1T4 Cable (Main wiring harness)
- Speed Sensor
- Cranks
- Lock Nuts and mounting hardware
- Tool Kit
- Battery (Optional, not included in all kits)
- Headlight (Optional, may be included as a free gift)

- Rear Lamp (Optional)
- Gear Shift Sensor (Optional)

PACKING LIST

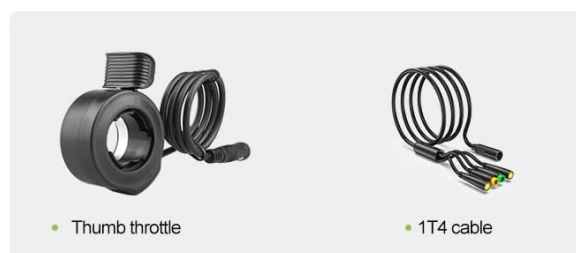
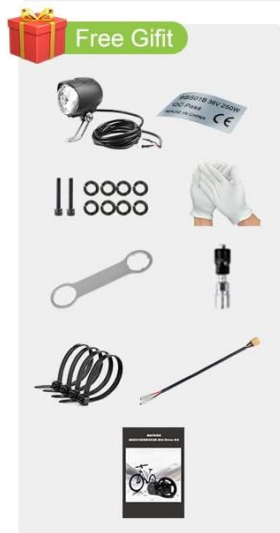
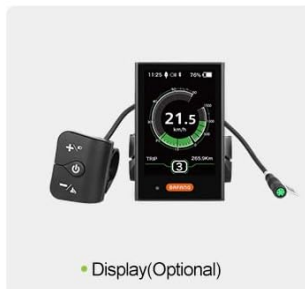


Image: Packing List. This image displays the various components included in the BAFANG mid-drive motor kit, such as the motor, display, brake levers/sensors, chainwheel, throttle, wiring, speed sensor, cranks, and optional battery and accessories.

4. SETUP AND INSTALLATION

The BAFANG mid-drive kit is designed for straightforward installation. Follow these general steps. For detailed, step-by-step instructions, refer to the specific installation guide provided with your kit or available online.

4.1. Motor Installation

1. Remove the existing bottom bracket and crankset from your bicycle.
2. Insert the BAFANG mid-drive motor into the bottom bracket shell.
3. Secure the motor using the provided lock nuts and mounting plates.
4. Install the chainwheel and cranks onto the motor spindle.

4.2. Component Wiring

Connect all peripheral components to the main 1T4 cable harness. The system uses waterproof connectors for durability.

- Connect the display to its designated port.
- Attach the throttle to its connector.
- Install and connect the brake levers or brake sensors. If your bike cannot use the default brake levers, contact support for brake sensors.
- Mount and connect the speed sensor to the rear wheel.
- Connect the battery to the motor's power cable. Ensure the battery is securely mounted.
- Optional accessories like headlights, taillights, and gear shift sensors should also be connected to their respective ports on the 1T4 cable.



Image: Easy Installation Wiring Diagram. This diagram illustrates the connections for the BAFANG mid-drive motor kit, including the motor, display, brake levers/sensors, throttle, speed sensor, and optional battery and lights. It emphasizes the waterproof wiring.

4.3. Brake Lever or Brake Sensor

The kit typically comes with brake levers that integrate a motor cut-off switch. If your bicycle's existing brake system (e.g., hydraulic disc brakes or integrated shift/brake handles) is not compatible with the provided levers, you may need brake sensors. These sensors attach to your existing brake cables and provide the motor cut-off function.

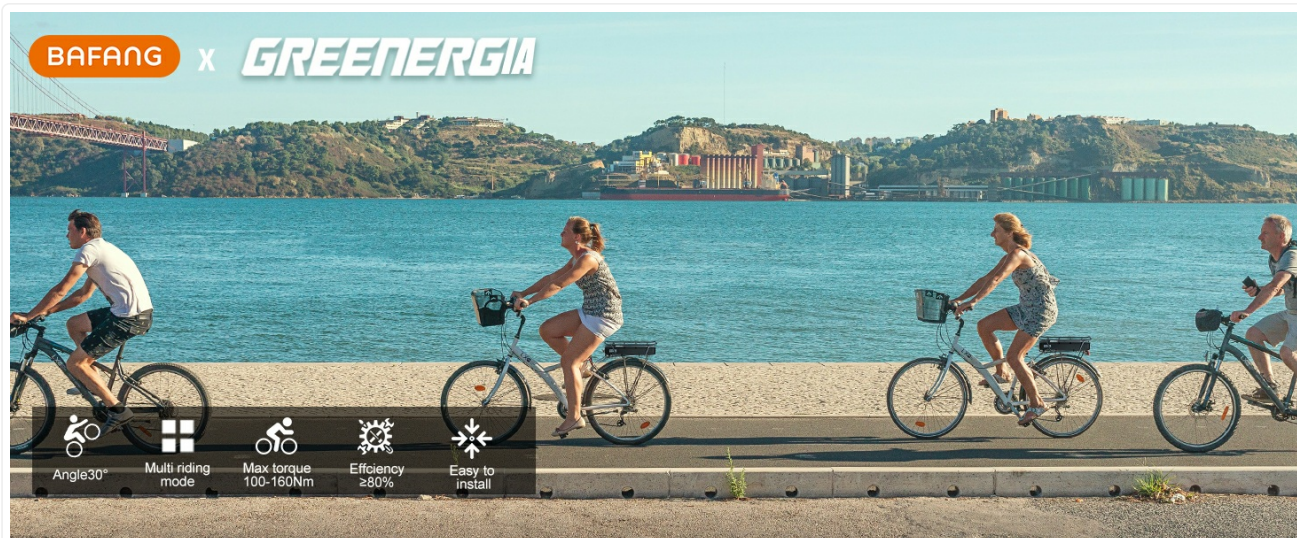


Image: Brake Compatibility. This image shows examples of mechanical disc brakes and rim V-brakes as compatible, while shift-integrated brake handles and hydraulic disc brakes are typically incompatible with the standard brake levers, requiring brake sensors.

5. OPERATING INSTRUCTIONS

Once installed, your BAFANG ebike kit offers various modes of operation to enhance your riding experience.

5.1. Display Operation (750C Display)

The 750C display provides essential riding information and allows you to control the motor's assistance levels. It features a 3.2-inch IPS screen, a USB port for charging devices, and Bluetooth functionality.

- **Power On/Off:** Press and hold the power button to turn the system on or off.
- **PAS Level Adjustment:** Use the up/down buttons to select your desired Pedal Assist System (PAS) level (typically 0-9). Level 0 provides no assistance, while higher levels offer more motor power.
- **Information Display:** The screen shows speed, battery level, trip distance, and other metrics.
- **USB Port:** Use the integrated USB port to charge your mobile phone or other small electronic devices while riding.
- **Bluetooth Function:** The 750C display includes Bluetooth for connectivity with compatible apps or devices.



B750C DISPLAY



Screen
3.2" IPS



USB Port
⊗



Applicable voltage
24V/36V/48V/52V



Bluetooth
⊙



PAS Level
3, 5, 9, UBE(6)



Holder Size
φ31.8mm/25.4mm/22.2mm



Language
English Version



Image: B750C Display. This image showcases the BAFANG B750C display, highlighting its 3.2-inch IPS screen, USB port, Bluetooth capability, PAS level settings, and holder size compatibility.

5.2. Riding Modes

The BAFANG mid-drive system supports multiple riding modes:

- **Throttle Mode (Rapid Climb):** Engages the motor directly via the thumb throttle, providing power without pedaling. Ideal for quick acceleration or climbing steep inclines.
- **Pedal Assist System (PAS Mode - Save Effort):** The motor provides assistance proportional to your pedaling effort. You can adjust the level of assistance via the display.
- **Normal Bike Mode (Exercise Mode):** The motor is off, and the bicycle functions as a standard pedal bike.



CITY

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URBAN

Perfect to accompany your day. Whether to work, shopping or on the way to the gym.



TRAVEL

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GRAVEL

Combine the best of road and mountain bikes, providing a versatile and exhilarating riding experience on various terrains.



MOUNTAIN

To rock trails. Perfect to explore your home trails as well as unknown terrain, without any compromise.



CARGO

Practical urban transportation solution. Make commuting easy, even with heavy loads.

Image: Different Riding Modes. This image visually represents the three primary riding modes: Throttle Mode for rapid climbing, PAS Mode for saving effort, and Normal Bike Mode for exercise, demonstrating the versatility of the BAFANG system.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your BAFANG mid-drive kit.

6.1. General Care

- Keep the motor and electrical components clean and free from dirt and debris.
- Regularly check all bolts and fasteners for tightness, especially those securing the motor and battery.
- Inspect wiring for any signs of damage or wear.
- Ensure the chain is clean, lubricated, and properly tensioned.

6.2. Waterproof Design

The BAFANG kit features IP65 waterproof wiring, designed to protect against dust and low-pressure water jets. While this provides good protection against splashes and light rain, avoid submerging the motor or riding in heavy downpours for extended periods.

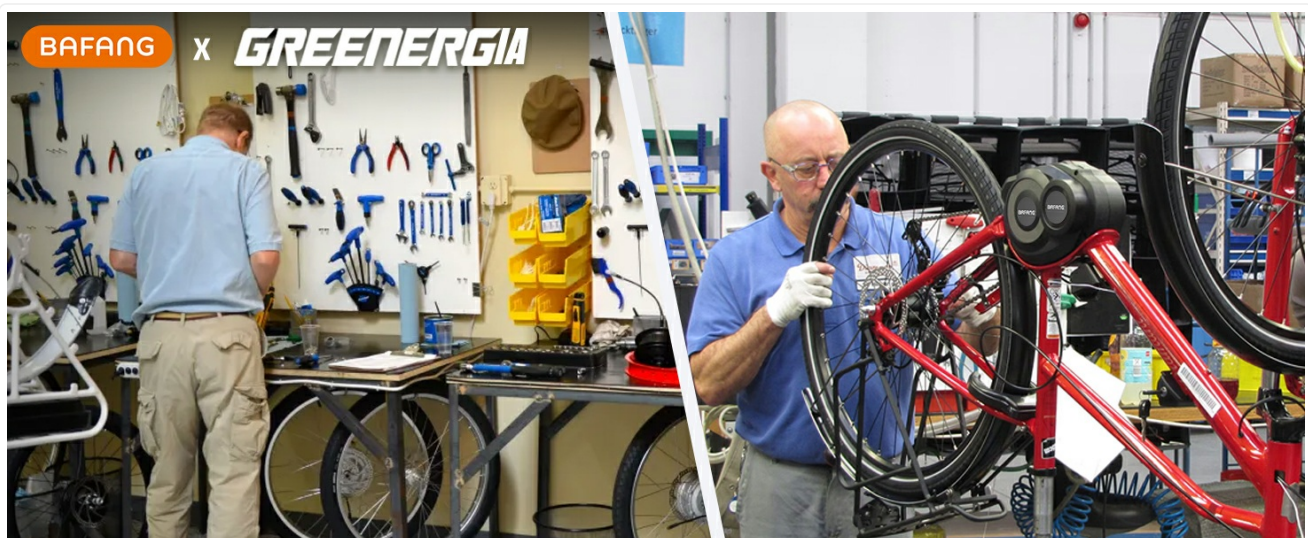


Image: IP65 Waterproof Wiring. This image highlights the waterproof design of the BAFANG ebike kit's wiring, showing sealed connectors that prevent water ingress and improve durability.

6.3. Battery Care

- Charge the battery regularly, even when not in use, to maintain its health.
- Store the battery in a cool, dry place, away from direct sunlight and extreme temperatures.
- Use only the charger provided or approved by BAFANG.

7. TROUBLESHOOTING

This section addresses common issues you might encounter. For more complex problems, contact customer support.

7.1. Motor Not Powering On

- **Check Battery Connection:** Ensure the battery is fully charged and securely connected to the motor.
- **Check Display Connection:** Verify the display is properly connected to the main harness.
- **Inspect Wiring:** Look for any loose or damaged cables.

7.2. No Pedal Assist

- **Check PAS Level:** Ensure the PAS level on the display is set to a value greater than 0.
- **Speed Sensor:** Verify the speed sensor is correctly installed and functioning. It should be positioned to detect the wheel magnet.

7.3. Error Codes on Display

Refer to your display's specific manual for a list of error codes and their corresponding troubleshooting steps. Common issues include sensor malfunctions or communication errors.

8. SPECIFICATIONS

Key technical specifications for the BAFANG 52V 1000W Mid Drive Kit.

Feature	Specification
Motor Model	BBSHD 68MM 48V 1000W
Rated Power	1000W
Voltage Compatibility	52V (also compatible with 48V systems)
Max Torque	160 N.m
Efficiency	>80%
Max Speed	53 km/h
Net Motor Weight	Approximately 6.0 kg
Bottom Bracket Length	68mm (compatible with 68-73mm)
Display	750C New version with Bluetooth function
Display Screen Size	3.2 inch IPS
Display Holder Size	φ31.8mm/25.4mm/22.2mm
UPC	020064362357
Package Weight	9.39 Kilograms

Feature	Specification
Package Dimensions	20.4 x 10 x 10 inches

8.1. Battery Specifications (Optional)

Various battery options are available, each with different capacities and form factors. The following table outlines common specifications:

Parameter	Shark Battery (48V 13Ah)	Shark Battery (48V 17.5Ah)	G80 Shark (48V 20Ah)	Max Shark (52V 20Ah)	Rear Rack (48V 17.5Ah)
Watt-hours	624Wh	840Wh	960Wh	1040Wh	840Wh
Battery Cell	18650 2600mah	Sam'sung L*G Pana'sonic 18650 3500mah	L*G Sam'sung 21700 5000mah	Sam'sung 21700 5000mah	18650 2500mah
BMS	30A	30A	30A	30A	30A
Weight	4.25KG	4KG	5.0KG	5.15KG	7.23KG
Cycle Life	1000 times	1000 times	1000 times	1000 times	1000 times

BATTERY SPECIFICATION

• 48V 13Ah | Shark Battery • 48V 17.5Ah



Parameter	48V 13Ah
Watt	624Wh
Battery Cell	18650 2600mah
BMS	30A
Weight	4.25KG
Cycle Life	1000 times

• 48V 20Ah | G80 Shark



Parameter	48V 17.5Ah	48V 20Ah
Watt	840Wh	960Wh
Battery Cell	Sam*/sung L**G Pana*/sonic 18650 3500mah	L**G Sam*/sung 21700 5000mah
BMS	30A	30A
Weight	4.25KG	5.0KG
Cycle Life	1000 times	1000 times

• 52V20Ah | Max Shark



Parameter	52V 20Ah
Watt	1040Wh
Battery Cell	Sam*/sung 21700 5000mah
BMS	30A
Weight	5.15KG
Cycle Life	1000 times

• 48V 17.5Ah | Rear Rack



Parameter	48V/ 17.5Ah
Watt	840Wh
Battery Cell	18650 2500mah
BMS	30A
Weight	7.23KG
Cycle Life	1000 times

Image: Battery Specifications. This image provides a comprehensive table detailing the parameters for different BAFANG battery types, including voltage, capacity, cell type, BMS, weight, and cycle life.

9. SAFETY INFORMATION

- Always wear a helmet and appropriate safety gear when riding your ebike.
- Obey all local traffic laws and regulations.
- Perform pre-ride checks, including brakes, tire pressure, and battery level.
- Do not ride in conditions beyond your skill level or the bike's capabilities.
- Avoid riding in heavy rain or through deep water to prevent damage to electrical components.



Image: Avoid Riding in Rain. This image serves as a visual reminder to avoid riding the ebike in heavy rain or adverse weather conditions to protect the electrical components.

10. WARRANTY AND SUPPORT

BAFANG products are designed for reliability and performance. For any issues or inquiries, please contact customer support.

- **Customer Service:** The seller provides supportive customer service. For assistance with installation, troubleshooting, or parts, please reach out to the vendor.
- **Service Points:** BAFANG has cooperative service points in various countries. Contact customer support to locate a service point near you.
- **Genuine Products:** Ensure you purchase genuine BAFANG products from authorized sellers to receive full support and warranty benefits.



Image: Customer Support. This image represents the availability of customer service for inquiries and assistance with the BAFANG mid-drive kit.