BAFANG BBS01/BBS02/BBSHD Mid-Drive Motor Kit

BAFANG Mid-Drive Ebike Conversion Kit User Manual

Models: BBS01, BBS02, BBSHD Series (48V 500W, 750W, 52V 1000W)

Brand: BAFANG

1. Product Overview

This manual provides essential information for the installation, operation, and maintenance of your BAFANG Mid-Drive Ebike Conversion Kit. Please read it thoroughly before use to ensure proper function and safety.

1.1 Packing List

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

Image: Detailed packing list for BAFANG mid-drive ebike conversion kit, showing motor, battery, display, chainring, speed sensor, crank, throttle, brake levers, 1T4 cable, nuts, and various gifts like headlights and tools.

- Mid-Drive Motor (48V 500W, 750W, or 52V 1000W)
- Brake Levers or Brake Sensors (1 Pair)
- Thumb Throttle
- Sprocket/Chain Wheel (42T, 44T, 46T, or 52T, optional)
- Crank Arms (1 Pair)
- LCD Display (C965, C18, 750C, or 850C, optional)
- Battery (optional, various AH options)
- Battery Charger (if battery included)
- Speed Sensor and Magnet
- 1T4 Wire Harness
- Nut Accessories
- Additional Gifts: Headlight, Cable Ties, Gloves, Wrenches, Car Bell, Manual, etc.

2. Compatibility and Pre-Installation Checks

Before beginning installation, ensure your bicycle is compatible with the mid-drive motor kit. The kit is designed for standard bottom bracket sizes.

2.1 Bottom Bracket Compatibility

The mid-drive motor kit is compatible with bicycle bottom brackets of 68-73mm, 100mm, or 120mm. Measure your bicycle's bottom bracket length to select the correct motor size.

Image: Diagram illustrating how to measure a bicycle's bottom bracket and showing the compatibility of BAFANG mid-drive motors with 68mm, 100mm, and 120mm bottom bracket sizes.

- **68mm:** Suitable for 68-73mm bottom bracket bikes.
- **100mm:** For 90-100mm bottom bracket bikes, includes a 10mm washer.
- **120mm:** For 110-120mm bottom bracket bikes, includes a 10mm washer.

If your bicycle's bottom bracket is larger than 73mm but smaller than 100mm, or larger than 100mm but smaller than 120mm, spacers may be required. For bottom brackets larger than 73mm, consider a 1000W motor as 500W/750W motors are typically for 68-73mm.

2.2 Chain Wheel Size

Different chain wheel sizes are available depending on your motor model and preference.

Image: Visual representation of chain wheel sizes (44T, 46T for BBS01/BBS02 and 42T, 46T for BBSHD) with their respective dimensions.

3. Installation Guide

Follow these steps carefully to install your BAFANG Mid-Drive Ebike Conversion Kit. For visual guidance, refer to the embedded video.

3.1 Installation Video Tutorial

Video: A comprehensive guide demonstrating the installation process for the ebike conversion kit, including motor, battery, and accessory setup.

3.2 Step-by-Step Installation

1. **Remove Existing Components:** Remove the existing chainring, crank arms, and bottom bracket from your bicycle.
2. **Install Chainring:** Attach the new chainring to the mid-drive motor using the provided M5 bolts.
3. **Install Chain Guard (if applicable):** Secure the chain guard to the motor assembly using the supplied screws.
4. **Mount Motor:** Slide the motor assembly into the bicycle's bottom bracket shell.
5. **Secure Motor:** Use the Y-shaped motor mount bracket on the left side to secure the motor firmly.
6. **Install Crank Arms:** Attach the new crank arms to the motor spindle.
7. **Install Chain:** Route and connect the bicycle chain around the new chainring and rear cassette.

8. **Connect Wiring Harness:** Connect the main wiring harness to the motor assembly.
9. **Connect Accessories:** Connect the front lamp, speed sensor, and gear sensor (if applicable) to the main wiring harness.
10. **Install Brake Levers:** Slide the brake levers onto the handlebar and tighten them securely.
11. **Install Thumb Throttle:** Install the thumb throttle onto the handlebar and secure it.
12. **Install Display:** Mount the LCD display to your handlebars and connect its wiring.
13. **Install Battery Mount:** Secure the battery mount to your bicycle frame.
14. **Install Battery:** Slide the battery onto the installed battery mount and ensure it locks securely.
15. **Power On and Check:** Power on the system and check all functions, including the display, motor assist, and lights.

3.3 Connection Diagram

Refer to the diagram below for proper wiring connections of all components.

Image: Wiring diagram illustrating how to connect the various components of the ebike conversion kit, including the motor, battery, display, throttle, brake levers, speed sensor, and front light.

4. Operating Instructions

Understand the various operating modes and display options for your ebike kit.

4.1 Multiple Riding Modes

Your BAFANG mid-drive conversion kit offers three distinct riding modes:

- **E-bike Mode:** Full electric power, controlled by the thumb throttle.
- **Pedal-Assisted Mode (PAS):** The motor provides assistance as you pedal, with adjustable assist levels.
- **Electric and Pedal-Assisted Mode:** A combination of both, allowing for throttle use while also receiving pedal assistance.

4.2 LCD Display Options

The kit supports various LCD displays, each offering different features and information. Common display models include 750C, C18, C965, and 850C.

Image: A comparison chart detailing the features of various BAFANG LCD displays, including voltage compatibility, PAS levels, USB charging, brightness, headlight indicator, and speed limit settings.

Each display allows you to monitor speed, battery level, assist level, trip distance, and other ride data. Consult your specific display's manual for detailed operation.

4.3 Brake Levers and Sensors

The kit may come with either mechanical brake levers or brake sensors. Both options are designed to cut off motor power when braking, ensuring safety.

Image: Illustration of two types of brake systems: traditional mechanical brake levers and magnetic brake sensors, both designed to disengage motor power upon activation.

5. Specifications

Detailed specifications for the BAFANG Mid-Drive Ebike Conversion Kit.

Feature	Description
Brand	BAFANG
Motor Type	Mid-Drive Motor (BBS01, BBS02, BBSHD)
Power Options	48V 500W, 48V 750W, 52V 1000W
Max Torque	100-160 N.m (depending on model)
Bottom Bracket Compatibility	68-73mm, 100mm, 120mm
Display Options	750C, C18, C965, 850C (LCD)
Riding Modes	E-bike, Pedal-Assisted (PAS), Electric & Pedal-Assisted
Battery Options (if included)	48V 13AH, 48V 20AH, 52V 20AH
UPC	783779441075

6. Maintenance

Regular maintenance ensures the longevity and optimal performance of your ebike conversion kit.

- **Motor Inspection:** Periodically check the motor for any loose connections, unusual noises, or physical damage. Ensure all mounting bolts are tight.
- **Chain and Drivetrain:** Keep the chain clean and lubricated. Inspect the chainring and cassette for wear and tear.
- **Battery Care:** Store the battery in a cool, dry place. Avoid fully discharging the battery and charge it regularly, even when not in use, to maintain its health.
- **Wiring:** Inspect all wiring for fraying, cuts, or loose connections. Secure any loose cables with cable ties.
- **Brakes:** Regularly check brake lever function and ensure brake sensors (if installed) are working correctly to cut motor power.
- **Display:** Keep the display clean and protected from impact.

7. Troubleshooting

This section addresses common issues you might encounter with your BAFANG Mid-Drive Ebike Conversion Kit.

Problem	Possible Cause	Solution
Motor not providing assist	Loose wiring connection, low battery, brake sensor activated, display error.	Check all cable connections, ensure battery is charged, verify brake levers are not engaged, check display for error codes.
Display not turning on	Battery not connected or discharged, loose display cable.	Ensure battery is properly seated and charged, check display cable connection.
Unusual noise from motor	Loose components, foreign object, internal issue.	Inspect for loose parts or obstructions. If noise persists, contact support.
Speed sensor not working	Magnet misaligned or missing, sensor cable loose.	Ensure the speed sensor magnet is correctly aligned with the sensor on the spoke. Check sensor cable connection.

For persistent issues or complex problems, please contact customer support.

8. Warranty and Support

Your satisfaction is important to us. Our team has extensive industry experience and technical knowledge to provide efficient service.

8.1 Warranty Information

If you encounter any quality problems within one year of purchase, we will assist you in resolving them.

8.2 Customer Support

For any questions regarding installation, operation, or troubleshooting, please do not hesitate to contact our support team. We are committed to providing an unparalleled shopping experience and support.

Image: Customer support representatives ready to assist with inquiries.