**Saved from manuals.plus.**
**Open the live page for links to other documents and user manuals.**



**BAFANG BBSHD, BBS02B**

# BAFANG BBSHD/BBS02B Electric Bike Conversion Kit User Manual

Models: BBSHD, BBS02B

## 1. Product Overview

The BAFANG BBSHD and BBS02B Electric Bike Conversion Kits are designed to transform a standard bicycle into an electric bicycle. These mid-drive motor kits replace the bicycle's bottom bracket, providing powerful assistance for various riding conditions. The kit includes the motor, display, throttle, sensors, and other necessary components for a complete conversion.




Image: BAFANG Electric Bike Conversion Kit components, showing the mid-drive motor, an optional battery, an LCD display, and various other parts.

## 2. Safety Information

Before operating your electric bicycle, please read and understand all safety instructions. Failure to follow these instructions may result in injury or damage to the product.

- **Wear a Helmet:** Always wear an approved bicycle helmet when riding.
- **Obey Traffic Laws:** Follow all local traffic laws and regulations for bicycles.
- **Pre-Ride Check:** Before each ride, check brakes, tire pressure, battery charge, and ensure all connections are secure.
- **Weather Conditions:** Exercise caution when riding in wet conditions, low light, or on uneven terrain.
- **Battery Safety:** The battery is equipped with a Battery Management System (BMS) for protection against overheating, low voltage, overcharging, overdischarge, overload, and short circuits. Do not attempt to bypass or modify the BMS. Use only the provided charger.

- **Water Exposure:** Avoid submerging the motor or battery in water. While components are designed to be water-resistant, excessive water exposure can cause damage.
- **Children:** This product is not intended for use by children without adult supervision.

## 3. Package Contents

The BAFANG Electric Bike Conversion Kit typically includes the following components. Specific items may vary based on the chosen configuration (e.g., motor wattage, display type, battery option).




Image: Detailed diagram illustrating the various components included in the conversion kit package.

- Mid-Drive Motor (BBSHD or BBS02B)
- LCD Display (DP-C18, C965, 850C, or 750C)
- Thumb Throttle
- Brake Levers or Hydraulic Brake Sensors (one of two options)
- Sprocket (Chainring) and Chain Guard (44T/46T for 500W/750W; 42T/46T for 1000W)
- Crank Arms
- Speed Sensor and Magnet
- 1T4 Wire Harness
- Mounting Nuts and Bolts
- Optional Lithium-Ion Battery (if purchased with kit)
- Installation Tools (e.g., wrench, bottom bracket puller)
- Additional Accessories (e.g., winding tubes, headlight, bell)

## 4. Compatibility

Ensure your bicycle is compatible with the BAFANG mid-drive motor kit before installation. Key compatibility factors include the bottom bracket dimensions and frame clearance.

## 4.1 Bottom Bracket Compatibility

The BAFANG mid-drive motor kits are designed for specific bottom bracket shell widths and inner diameters:

- **BBS01B/BBS02B (500W/750W):** Suitable for bottom brackets with a shell width of 68-73mm and an inner diameter of 34-36mm.
- **BBSHD (1000W):** Suitable for bottom brackets with a shell width of 68-120mm. This includes 68-73mm, 90mm, 100mm, and 120mm bottom brackets.

For non-standard bottom bracket widths (e.g., 90mm or 110mm), additional washers may be required to ensure proper fitment and chainline. Measure your bicycle's bottom bracket shell width accurately before purchasing.




Image: Visual guide for determining if the mid-drive motor fits your bike's bottom bracket, showing measurements for 68-73mm, 100mm, and 120mm bottom bracket sizes.

## 4.2 Chainring Compatibility

The kit includes specific chainring sizes based on the motor wattage:

- **BBS01B/BBS02B (500W/750W):** Typically includes a 44T or 46T chainring.
- **BBSHD (1000W):** Typically includes a 42T or 46T chainring.

Consider your bicycle's chainline and rear cassette when selecting a chainring size to ensure smooth shifting and prevent chain rub.



Image: Diagram illustrating different chainring sizes (44T, 46T, 48T for BBS01B/BBS02B and 42T, 46T for BBSHD) and their approximate diameters.

## 5. Setup and Installation

The installation process involves replacing your bicycle's bottom bracket and crankset with the BAFANG mid-drive motor and its associated components. While the kit is designed for DIY installation, professional assistance is recommended if you are unfamiliar with bicycle mechanics.

### 5.1 Required Tools

The kit includes essential tools such as a wrench and bottom bracket puller. You may also need standard bicycle tools like hex keys, a chain whip, and a cassette tool depending on your bike's setup.

### 5.2 Installation Steps (General Guide)

1. **Remove Existing Components:** Remove your bicycle's existing crankset, bottom bracket, and front derailleur (if applicable).
2. **Install Motor:** Insert the BAFANG mid-drive motor into the bottom bracket shell. Secure it with the provided locking nuts. Ensure proper alignment and tightness. For some frames, spacers may be needed to achieve optimal fit and chainline.
3. **Install Chainring and Cranks:** Attach the chainring to the motor and then install the crank arms.
4. **Mount Display and Controls:** Mount the LCD display, thumb throttle, and brake levers/sensors on the handlebars.
5. **Connect Wiring:** Connect all components to the motor using the 1T4 wire harness. Ensure all connections are secure and properly routed to avoid interference with moving parts. Refer to the wiring diagram for correct connections.
6. **Install Speed Sensor:** Mount the speed sensor on the rear chainstay and attach the magnet to a spoke on the rear wheel, ensuring proper alignment and gap.
7. **Install Battery:** Securely mount the battery to your bicycle frame (if included).
8. **Cable Management:** Use winding tubes and cable ties to neatly manage all wires, preventing snagging or damage.
9. **Final Checks:** Perform a thorough check of all installed components, ensuring they are tight, correctly aligned, and do not interfere with bicycle operation. Test brakes and shifting.




Image: Comprehensive wiring diagram showing connections for the mid-drive motor, battery, display, throttle, brake sensors, speed sensor, and optional accessories like headlights and gear sensors.

## 6. Operating Instructions

Once installed, operating your BAFANG electric bike conversion kit is straightforward. Familiarize yourself with the display functions and power assistance levels.

### 6.1 Powering On/Off

Typically, the system is powered on by pressing and holding the power button on the LCD display. To power off, press and hold the same button.

### 6.2 LCD Display Functions

Your kit may come with one of several LCD display models (DP-C18, C965, 850C, 750C), each offering various features and information. Common functions include:

- **Speed Indication:** Current, average, and max speed.
- **Battery Level:** Real-time battery charge indicator.
- **Assistance Level (PAS):** Select from multiple levels of pedal assistance (e.g., 0-3, 0-5, 0-9). Level 0 typically means no assistance.
- **Trip Information:** Trip distance, total odometer, riding time.
- **Error Codes:** Display system errors for troubleshooting.
- **Headlight Indicator:** For optional headlights.
- **USB Port:** Some displays (e.g., C18, 750C) include a USB port for charging mobile devices.



Image: Comparative table detailing features such as voltage, password, PAS levels, USB functionality, brightness, headlight indicator, and speed limit for BAFANG 750C, C18, C965, and 850C displays.

### 6.3 Pedal Assist System (PAS) and Throttle

The PAS provides motor assistance based on your pedaling input. The throttle allows for power delivery without pedaling. Use these features responsibly and according to local regulations.

### 6.4 Battery Charging

Charge the battery fully before first use and after each ride. Connect the charger to the battery and then to a power outlet. The charger typically has an indicator light to show charging status (e.g., red for charging, green for fully charged).

## 7. Maintenance

Regular maintenance ensures the longevity and optimal performance of your BAFANG electric bike conversion kit.

- **Cleaning:** Clean the motor, battery, and other components with a damp cloth. Avoid high-pressure washing directly on electrical components.
- **Battery Care:** Store the battery in a cool, dry place. If not used for extended periods, charge it to 50-70% every 1-2 months. Avoid fully discharging the battery.
- **Connections:** Periodically check all electrical connections for tightness and corrosion.
- **Mechanical Components:** Regularly inspect the chainring, crank arms, and bottom bracket for wear or damage. Lubricate the chain as needed.
- **Brakes:** Ensure brakes are functioning correctly and brake pads are not excessively worn.
- **Tires:** Maintain correct tire pressure for optimal performance and safety.

## 8. Troubleshooting

This section addresses common issues you might encounter with your BAFANG electric bike conversion kit.

| Problem | Possible Cause | Solution |
| --- | --- | --- |
| Motor not providing assistance | Low battery, loose connections, speed sensor misalignment, error code on display. | Check battery charge, ensure all cables are securely connected, verify speed sensor and magnet alignment, check display for error codes and consult manual. |

| Problem | Possible Cause | Solution |
|---|---|---|
| Display shows inaccurate speed/mileage | Incorrect wheel size setting, speed sensor issue. | Access display settings to verify and correct wheel size. Check speed sensor and magnet for proper alignment and function. |
| Error Code 07 (High Voltage Protected) | Battery overvoltage, controller issue. | Immediately disconnect the battery. Allow the system to cool down. Recheck battery voltage. If the issue persists, contact technical support. |
| Difficulty shifting gears | Chainline issues, gear cable interference. | Adjust chainline using spacers if necessary. Ensure gear cables are routed clear of the motor and do not impede shifting. Consider a gear sensor if not already installed. |
| Battery not charging | Charger not connected, faulty charger/battery. | Ensure charger is properly connected to both battery and power outlet. Check charger indicator light. Test with a known good charger if available. Contact support if issue persists. |

For persistent issues or error codes not listed, please refer to the specific display manual or contact BAFANG technical support.

## 9. Specifications

Key technical specifications for the BAFANG BBSHD/BBS02B Electric Bike Conversion Kits:

- **Motor Type:** Mid-Drive Motor (BBSHD, BBS02B)
- **Rated Power:** 500W, 750W, 1000W (model dependent)
- **Voltage:** 48V, 52V (battery dependent)
- **Bottom Bracket Compatibility:** 68-73mm (BBS01B/BBS02B), 68-120mm (BBSHD)
- **Display Options:** DP-C18, C965, 850C, 750C
- **Battery (Optional):** Lithium-Ion, various capacities (e.g., 48V 13AH, 48V 17.5AH, 48V 20AH, 52V 20AH)
- **Battery Dimensions:**
  - 48V 13AH: 368*90*113mm
  - 48V 17.5AH/48V 20AH: 368*90*123mm
  - 52V 20AH: 368*90*123mm
- **Battery BMS Protection:** Smart BMS with balance charging, overheat cut-off, power voltage cut-off, low voltage cut-off, overcharge, overdischarge, overcurrent, short circuit protection.
- **Chainring Options:** 44T/46T (500W/750W), 42T/46T (1000W)




Image: Table providing detailed specifications for various BAFANG Polly Downtube Battery types, including capacity, weight, size,

temperature ranges, BMS features, and protection functions.

## 10. Warranty and Support

BAFANG is committed to providing quality products and customer satisfaction. If you have any special requirements, requests, or encounter issues with your product, please do not hesitate to contact our technical support team.

- **Technical Support:** For assistance with installation, operation, troubleshooting, or any product-related inquiries, please reach out to the seller or BAFANG customer service.
- **Warranty Information:** Specific warranty terms and conditions may vary. Please refer to your purchase documentation or contact the seller for detailed warranty information.

Your feedback and suggestions are valuable and contribute to our continuous improvement.

© 2023 BAFANG. All rights reserved.


### 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

**Open the live page**

**https://manuals.plus/asin/B0BNMVPG16**

More documents and user manuals: **https://manuals.plus/**