

Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

Manuals.plus /

› [BAFANG](#) /

› BAFANG BBS02B 48V 500W Mid Drive Electric Bike Motor Kit Instruction Manual

BAFANG BBS02B 48V 500W

BAFANG BBS02B 48V 500W Mid Drive Electric Bike Motor Kit Instruction Manual

Model: BBS02B 48V 500W

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your BAFANG BBS02B 48V 500W Mid Drive Electric Bike Motor Kit. This kit is designed to convert standard bicycles with a 68-73mm bottom bracket into electric-assisted bicycles, offering both electric and pedal-assisted riding modes. Please read this manual thoroughly before installation and use to ensure proper function and safety.

2. SAFETY INFORMATION

- Always wear a helmet and appropriate safety gear when riding an electric bicycle.
- Ensure all connections are secure and waterproof before riding.
- Regularly inspect your bicycle and motor kit for any signs of wear or damage.
- Do not modify the motor or battery system. Unauthorized modifications can lead to malfunction and void the warranty.
- Be aware of local laws and regulations regarding electric bicycles and motor power limits.
- Avoid long exposure to direct sunlight, especially for the battery and display components.
- Avoid riding in heavy rainstorms to prevent water damage to electrical components.



Avoid prolonged exposure to direct sunlight to protect electronic components.



Do not ride in heavy rain to prevent water damage.

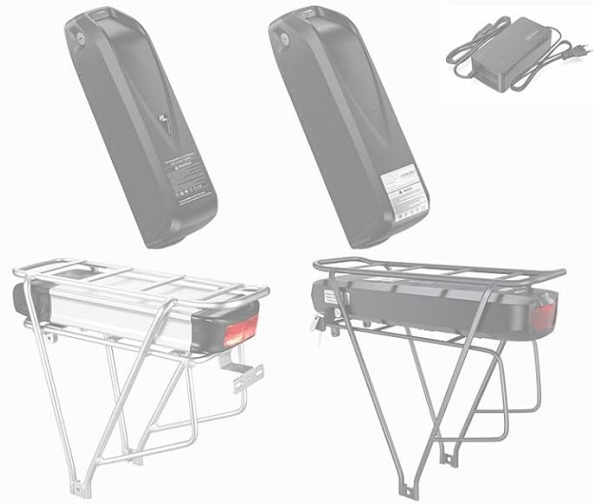
3. PACKAGE CONTENTS

The BAFANG BBS02B 48V 500W Mid Drive Motor Kit includes the following components:

- BAFANG Mid Drive Motor (BBS02B 48V 500W)
- Chainwheel (Optional: 36T, 44T, 46T, 48T, 52T)
- Crank Arms
- Display (Optional, various models available)
- Thumb Throttle
- Brake Levers or Brake Sensors (for hydraulic/mechanical brakes)
- Speed Sensor with Magnet
- E-BUS 1T4 Cable
- Installation Screws and Nuts
- BBS Wrench
- Crank Extractor
- Connection Cable
- Headlight (Optional)
- Battery (Optional, various types available)
- Charger (if battery is included)
- White Gloves
- Sticker
- Cable Ties
- Instruction Manual



Mid Motor



Battery(Optional) with Charger



Display



(US UK FR)Brake Levers (DE IT ES NL SE PL)Hydraulic Brake Sensors



E-BUS 1T4 Cable



Thumb Throttle



Installation Screws



BBS Wrench



White Gloves



Crank Extractor



Connection Cable



Headlight



Crank Arms



Speed Sensor With Magnet



Sticker



Cable Ties or Installation Manual

If you select 44T/46T/48T/52T Chainwheel, you'll get the motor kits without battery.

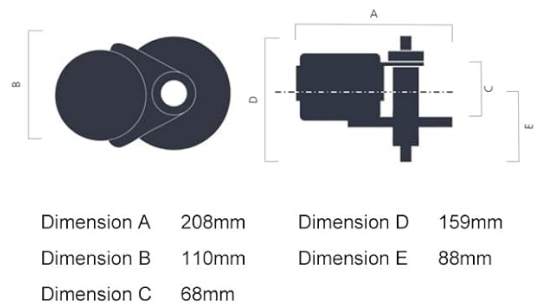
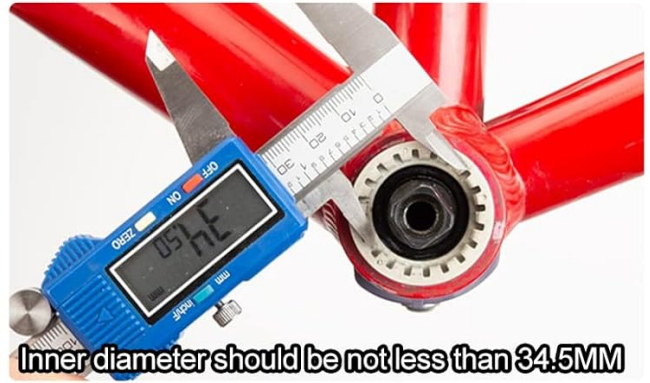
Overview of the BAFANG Mid Drive Motor Kit components. Note that battery and display are optional and may vary.

4. SETUP AND INSTALLATION

4.1. Compatibility Check

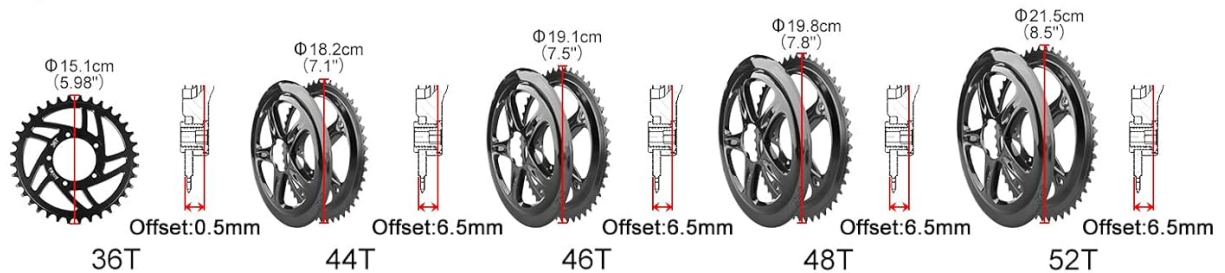
The BAFANG BBS02B motor is designed to fit bicycles with a standard JIS bottom bracket shell measuring 68mm to 73mm in width. It is not recommended for fat tire bikes or bikes with carbon fiber frames, as installation may cause damage to the frame.

HOW DO I KNOW IF THIS MID DRIVE MOTOR FITS FOR MY BIKE?



BBS

Optional 36T without Chain Guard/44T/46T/48T/52T Chain Wheel with Chain Guard



Measure your bike's bottom bracket to ensure compatibility (68-73mm width, inner diameter \geq 34.5mm).

4.2. Motor Mounting

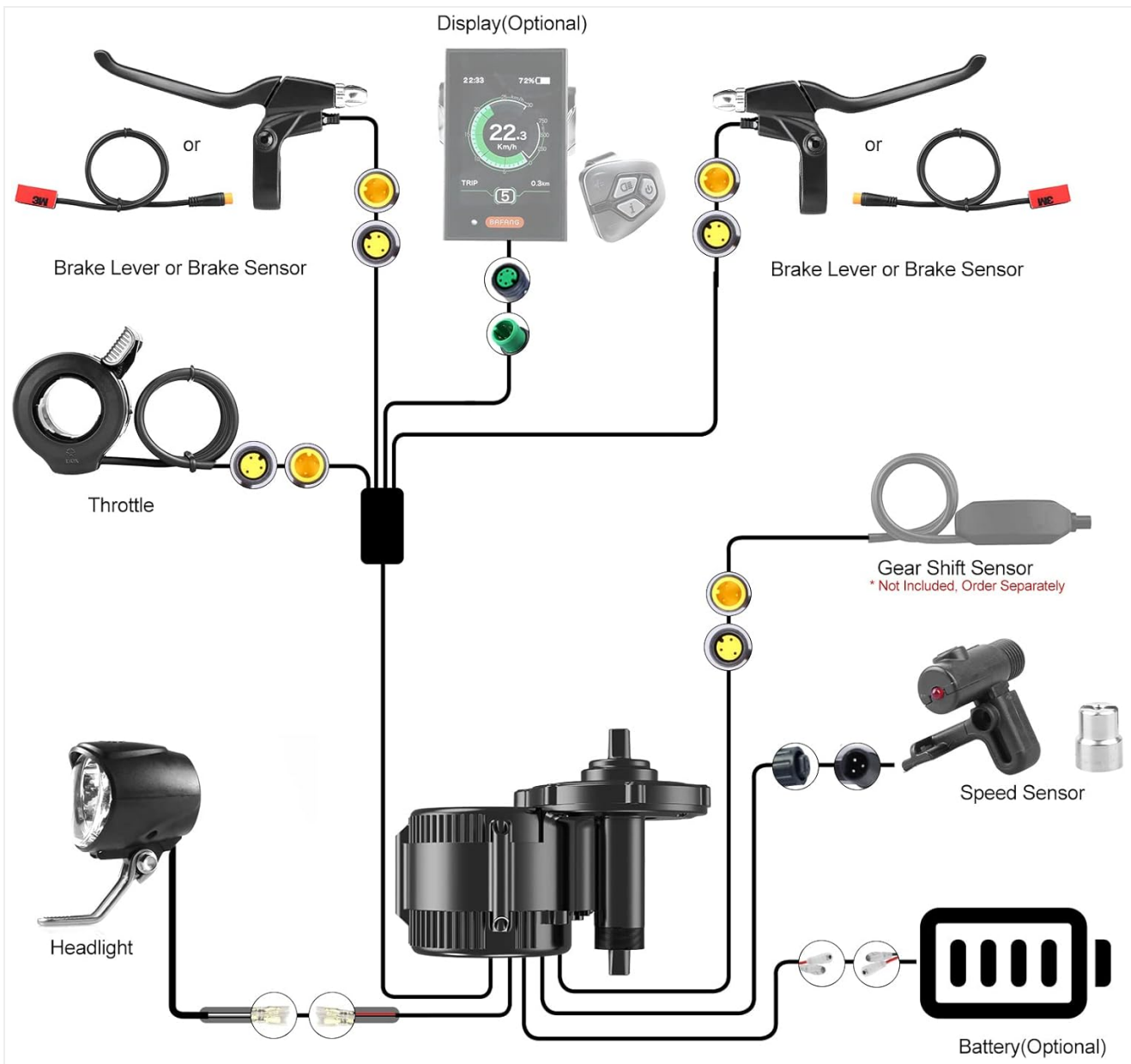
Installation requires basic bicycle tools, including a crankset removal tool and a bottom bracket tool. The motor mounts directly into the bottom bracket shell. Ensure the motor is securely fastened using the provided installation screws and BBS wrench.



Mounting parameters for different bottom bracket widths. Carefully measure your chainstay dimensions.

4.3. Electrical Connections

Connect the various components (display, throttle, brake sensors, speed sensor, headlight, and battery) to the main motor unit using the E-BUS 1T4 cable and other provided wiring. Ensure all connections are firm and correctly oriented to prevent electrical issues.



Wiring diagram for the BAFANG mid-drive motor kit. Ensure all components are connected correctly.

4.4. Chainwheel Installation

Select the appropriate chainwheel (36T, 44T, 46T, 48T, or 52T) based on your riding preference and bike's chainline. Install the chainwheel onto the motor spindle, ensuring proper offset for optimal chain alignment.

BBS Chaining Optional



5. OPERATING INSTRUCTIONS

5.1. Riding Modes

The BAFANG BBS02B motor supports two primary riding modes:

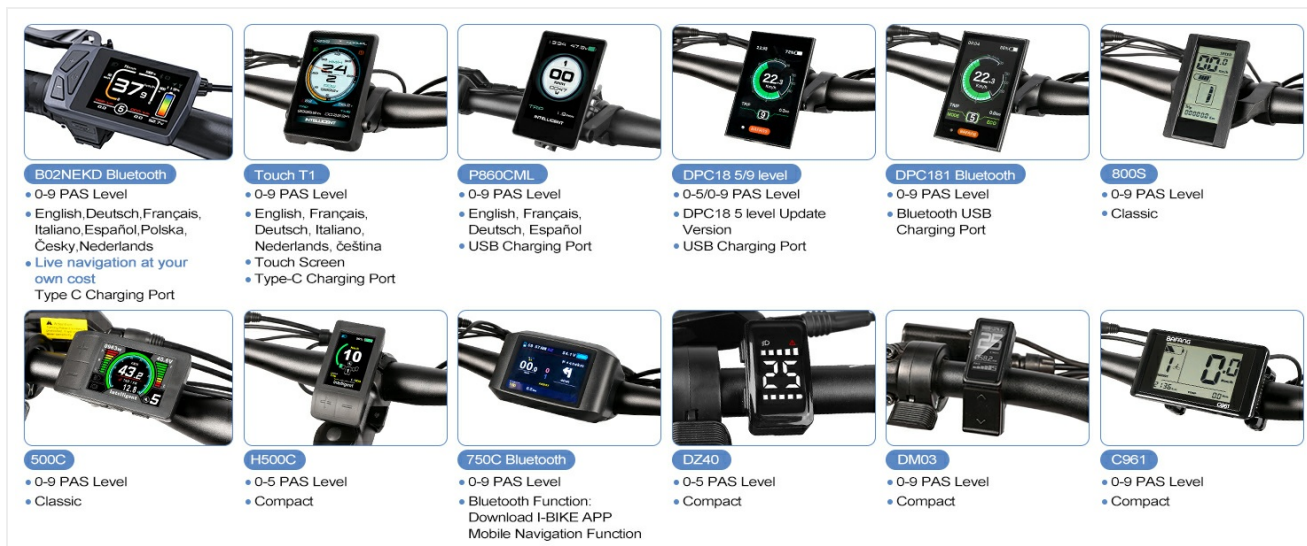
- **Electric Bike Mode:** Provides power assistance via the throttle, allowing for motor-only propulsion.
- **Pedal Assist Mode (PAS):** The motor provides assistance based on your pedaling input, with adjustable assistance levels (typically 0-9 levels depending on the display).

5.2. Display Usage

The optional display unit provides essential information such as speed, battery level, assistance level, and trip distance. Refer to your specific display model's manual for detailed operation instructions. Many displays feature a USB port for charging mobile devices.



Example of a BAFANG display showing 5 assist levels and a USB charging port.



Various optional BAFANG display models and their key features.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your BAFANG motor kit.

- **Cleaning:** Keep the motor and electrical connections clean and free from dirt and debris. Use a damp cloth for cleaning; avoid high-pressure washing directly on electrical components.
- **Lubrication:** Periodically lubricate the bicycle chain and other moving parts as per standard bicycle maintenance.
- **Battery Care:** Follow the battery manufacturer's instructions for charging, storage, and temperature guidelines. Avoid fully discharging the battery.
- **Inspections:** Regularly check all bolts and fasteners for tightness. Inspect cables for any signs of fraying or damage.



Perform daily maintenance to keep your kit in good condition.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your BAFANG mid-drive motor kit.

Problem	Possible Cause	Solution
Motor not providing power	Loose electrical connection, low battery, display error code	Check all cable connections, charge battery, consult display manual for error codes.
Inconsistent pedal assist	Speed sensor misalignment, incorrect PAS level setting	Ensure speed sensor and magnet are correctly aligned and close enough. Adjust PAS level on display.

Problem	Possible Cause	Solution
Unusual noises from motor	Loose chainring, internal motor issue, debris	Check chainring bolts. If noise persists, contact technical support.
Display not turning on	Battery off, loose display cable, faulty display	Ensure battery is turned on. Check display cable connection. If still off, contact support.

8. SPECIFICATIONS

Feature	Specification
Brand	BAFANG
Model	BBS02B
Voltage	48 Volts
Power	500 Watts
Bottom Bracket Compatibility	JIS 68-73mm
Max Torque	100 N.m
Waterproof Rating	IPX5
Motor Weight	4.3 KG
Material (Frame)	Carbon Fiber (Note: Not recommended for carbon fiber bike frames)



Key specifications of the BAFANG BBS02B Mid Drive Motor.

8.1. Optional Battery Specifications

Various battery options are available, including downtube, triangle, and rear rack batteries, with different capacities and cell types.



Type	Downtube Battery	Max Downtube Battery	Yingwu Battery
Battery Cell	13Ah: 2500m-A-h 17.5Ah: Sam-sung/L-G/Pana-sonic Cell 3500mAh <i>Send it randomly</i>	18Ah: 4500m-A-h 20Ah: Sam-sung Cell 5000mAh	L-G Cell 4800m-A-h
Charger	✓	✓	✓
USB port	✓	✓	✗
BMS	30A	30A	30A
Battery Weight	4.1KG / 4.4KG	4.8KG / 4.88KG / 4.9KG	3.9KG



Type	Triangle Battery	Luggage Rack Battery	Rear Rack Battery
Battery Cell	2500m-A-h	2500m-A-h	2500m-A-h
Charger	✓	✓	✓
USB port	✗	✗	✓
BMS	50A	30A	30A
Battery Weight	7.8KG	5.2KG	5.8KG

Specifications for optional BAFANG batteries.

9. WARRANTY AND SUPPORT

BAFANG provides a one-year warranty for the BBS02B Mid Drive Electric Bike Motor Kit. Technical support and after-sales service are available in the US. For warranty claims or technical assistance, please contact BAFANG customer service through their official channels or your point of purchase.

Brake levers can be changed to hydraulic and mechanical brake sensors. Search ASIN B07B8KNTYN for compatible brake sensors if needed.