

BAFANG A48V 1000W Fat 26DC P860C-YW5219.2 CA

BAFANG 48V 1000W Rear Hub Motor Electric Bike Conversion Kit User Manual

Model: **A48V 1000W Fat 26DC P860C-YW5219.2 CA**

Brand: **BAFANG**

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of your BAFANG 48V 1000W Rear Hub Motor Electric Bike Conversion Kit. This kit is designed to transform a standard 26-inch fat tire bicycle into a powerful electric bike, featuring a 1000W rear hub motor, LCD display, and Pedal Assist System (PAS). Please read this manual thoroughly before installation and use to ensure safe and optimal performance.



Figure 1.1: Overview of the BAFANG 48V 1000W Rear Hub Motor Electric Bike Conversion Kit, showing the hub motor, display, controller, and other accessories.

2. SAFETY INFORMATION

- Always wear a helmet and appropriate safety gear when riding.
- Ensure all connections are secure and waterproof before riding, especially in wet conditions.
- Regularly inspect brakes, tires, and all electrical components for wear or damage.
- Do not modify the motor or controller. Unauthorized modifications can lead to malfunction, injury, or void the warranty.
- Be aware of local regulations regarding electric bicycles, including speed and power limits.
- Keep the battery and electrical components away from extreme temperatures and direct sunlight.
- Disconnect the battery before performing any maintenance or installation procedures.

3. PACKAGE CONTENTS

Verify that all components listed below are present in your package. If any items are missing or damaged, please contact BAFANG customer support.

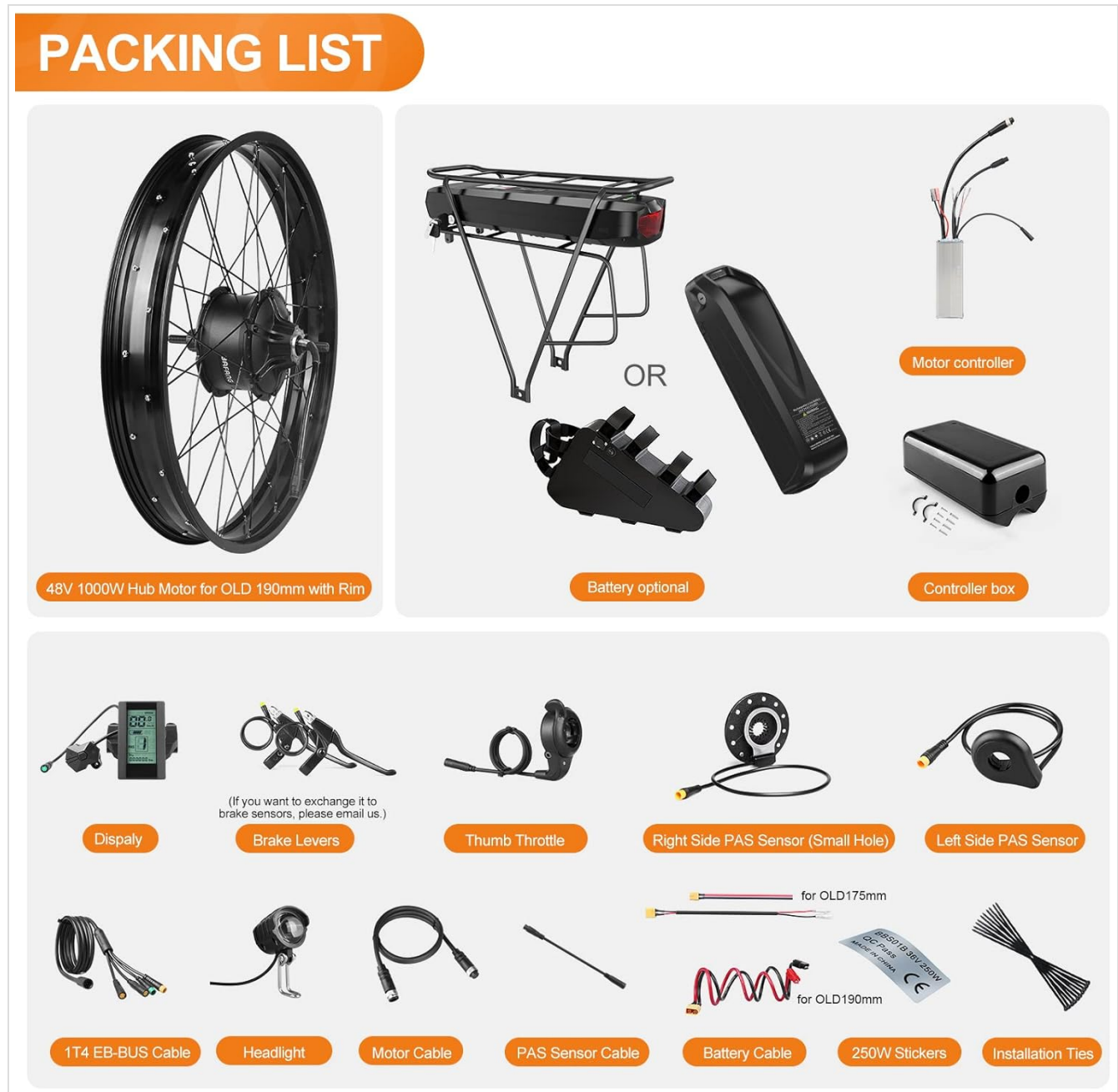


Figure 3.1: Visual representation of the components included in the BAFANG Electric Bike Conversion Kit package.

- 48V 1000W Hub Motor for 175-185mm OLD (with Rim)
- Motor Controller
- Controller Box
- Display (P860c or other selected model)
- Brake Levers (with motor cut-off sensors)
- Thumb Throttle
- Right Side PAS Sensor (Small Hole)
- Left Side PAS Sensor
- 1T4 EB-BUS Cable
- Headlight

- Motor Cable
- PAS Sensor Cable
- Battery Cable
- 250W Stickers
- Installation Ties
- Battery (Optional, if purchased with kit)

4. SPECIFICATIONS

Detailed technical specifications for the BAFANG 48V 1000W Rear Hub Motor and associated components.

4.1 Motor Specifications

MOTOR SPECIFICATION



Installation Width / OLD 175 / 190mm

Fit Cassette Rear Flywheel



Cassette Type



Rated Voltage	48V	Rated Power	1000W
Wheel Diameter	26"	Gear Shift	Fit Cassette Flywheel
n0(Rpm)	390	nT(Rpm)	340
Max Torque	85N.M	Efficiency	≥80%
Installation Widths (mm/OLD)	175 / 190	Spoke Specification	36H*12G
Noise Grade (dB)	<55	Operating Temperature	-20-45°C
Cable Length(mm)	250	Magnetic Steel	6
Max. Housing Diameter	6.24"(158.5mm)	Waterproof	IP65

Figure 4.1: Detailed specifications for the BAFANG 1000W Rear Hub Motor, including voltage, power, torque, and dimensions.

Parameter	Value	Parameter	Value
Rated Voltage	48V	Rated Power	1000W
Wheel Diameter	26"	Gear Shift	Fit Cassette Flywheel
n0 (Rpm)	390	nT (Rpm)	340
Max Torque	85N.M	Efficiency	≥80%
Installation Widths (mm/OLD)	175 / 190	Spoke Specification	36H*12G
Noise Grade (dB)	<55	Operating Temperature	-20-45°C
Cable Length (mm)	250	Magnetic Steel	6
Max. Housing Diameter	6.24" (158.5mm)	Waterproof	IP65

4.2 Display Specifications



DISPLAY SPECIFICATION						
     						
	• 500C	• 500C-H	• Touch T1	• P860C	• 850C/P850C	• DPC18
Screen	2.2 inch	2.2 inch	Touch Screen 3.5 inch	3.5 inch	3.2 inch	3.5 inch
Battery Indicator	Voltage / Percentage	Voltage / Percentage	Voltage / Percentage	Voltage / Percentage	Voltage / Percentage	Voltage / Percentage
Holder (mm)	22.2mm	31.8mm	31.8mm/25.4mm /22.2mm	31.8mm/25.4mm /22.2mm	31.8mm/25.4mm /22.2mm	31.8mm/25.4mm /22.2mm
Speed Limit	✓	✓	✓	✓	✓	✓
Compatible Voltage	24V/36V/48V/52V	24V/36V/48V/52V	24V/36V/48V/52V	24V/36V/48V/52V	24V/36V/48V/52V	24V/36V/48V
Light Sensation	✗	✗	✓	✓	✗	✓
PAS	3 / 5 / 9	5	3 / 5 / 9	3 / 5 / 9	3 / 5 / 9	5
USB Port	✗	✗	✓	✓	✓	✓
    						
	• DPC181	• DM03	• 750C	• 800S	• C961	
Screen	3.5 inch	1.3 inch	3.2 inch	2.7 inch	3.1 inch	
Battery Indicator	Voltage / Percentage	✗	Voltage / Percentage	✗	✗	
Holder (mm)	31.8mm/25.4mm /22.2mm	22.2mm	31.8mm/25.4mm /22.2mm	31.8mm/25.4mm /22.2mm	31.8mm/25.4mm /22.2mm	
Speed Limit	✓	✓	✓	✓	✓	
Compatible Voltage	MAX 60V	24V/36V/48V/52V	24V/36V/48V/52V	24V/36V/48V/52V	24V/36V/48V/52V	
Light Sensation	✓	✗	✗	✗	✗	
PAS	3 / 5 / 9	5	3 / 5 / 9	3 / 5 / 9	3 / 5 / 9	
USB Port	✓	✗	✗	✗	✗	

Figure 4.2: Comparison of various BAFANG display models, highlighting screen size, battery indicator, holder size, speed limit, compatibility, light sensation, PAS levels, and USB port availability.

The kit typically includes the P860C display. Refer to the image above for detailed specifications of various display models.

4.3 Battery Specifications (Optional)

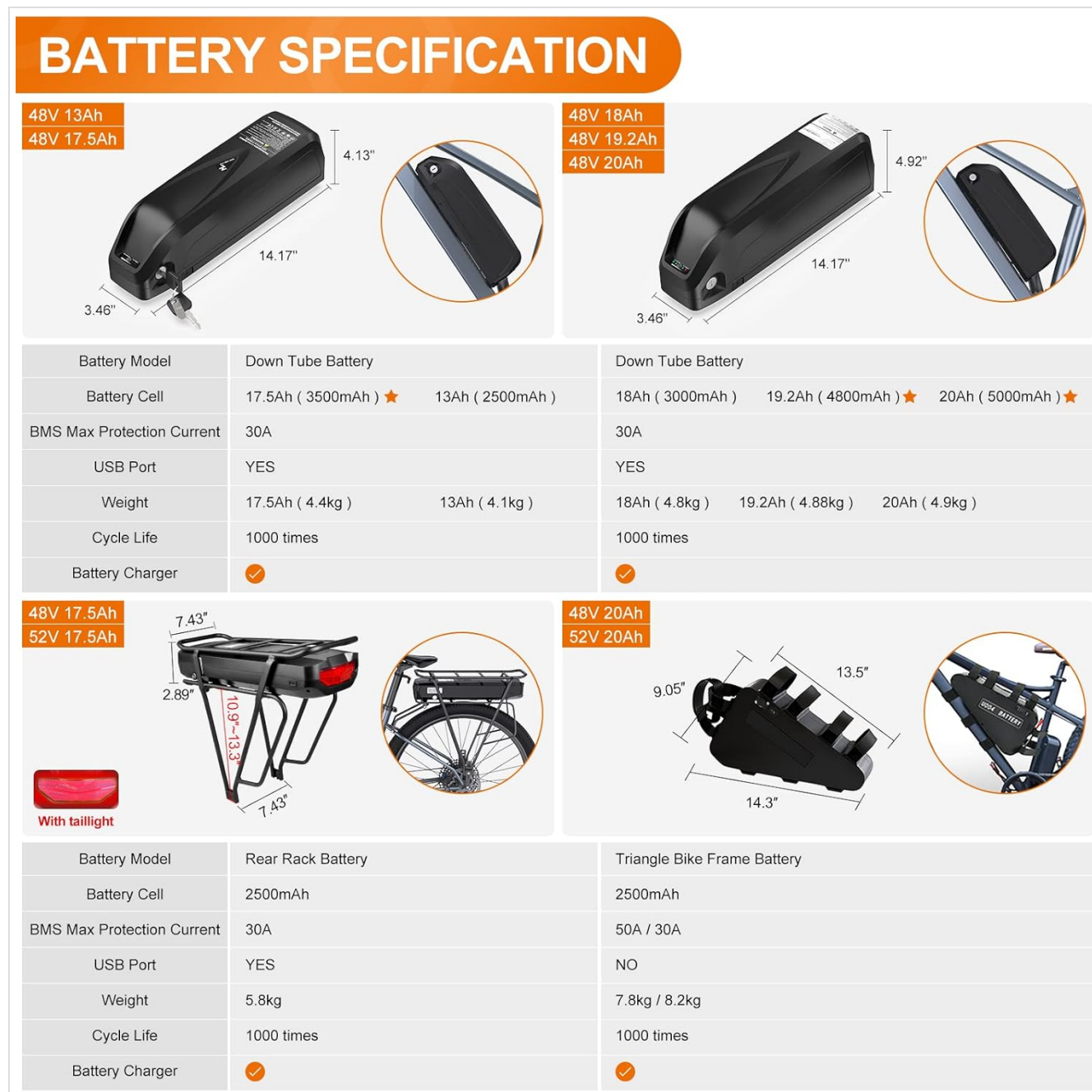


Figure 4.3: Specifications for optional BAFANG batteries, including capacity, USB port, weight, and cycle life for various models like Down Tube and Rear Rack batteries.

If your kit included a battery, refer to the image above for its specific details, including capacity, weight, and cycle life.

4.4 General Dimensions

SIZE SPECIFICATION

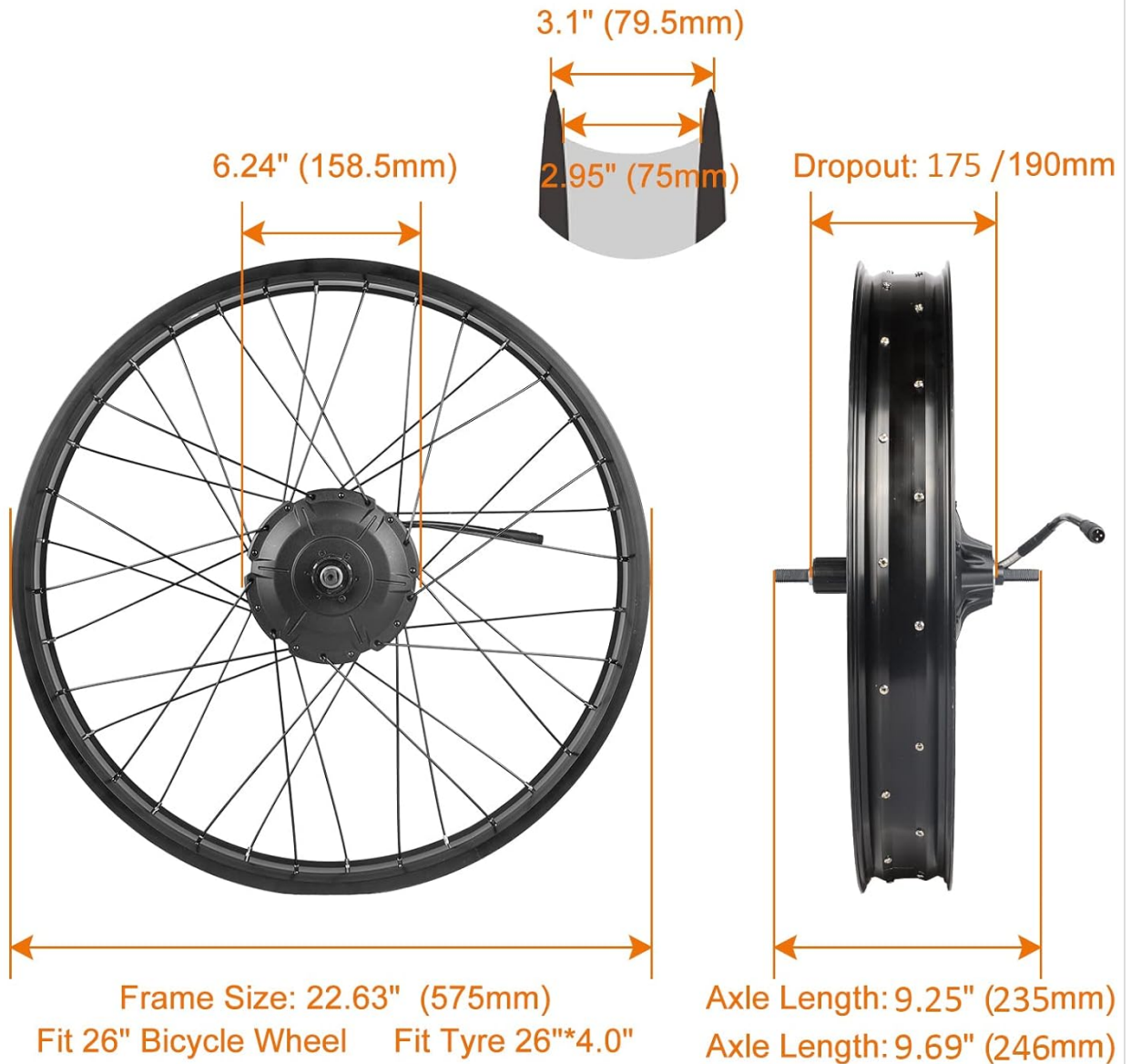


Figure 4.4: Key dimensions for the BAFANG conversion kit, including frame size, tire fitment, and axle length, crucial for compatibility with your bicycle frame.

- Frame Size: 22.63" (575mm)
- Fit 26" Bicycle Wheel
- Fit Tyre 26"*4.0"
- Dropout: 175mm / 190mm
- Axle Length: 9.25" (235mm)
- Axle Length: 9.69" (246mm)

5. SETUP AND INSTALLATION

This section outlines the general steps for installing the BAFANG electric bike conversion kit. Professional installation is recommended if you are not familiar with bicycle mechanics or electrical systems. Ensure the bicycle is stable and powered off before beginning installation.

5.1 Pre-Installation Checks

- Confirm your bicycle's rear dropout width is either 175mm or 190mm to match the motor.
- Ensure your bicycle has disc brakes, as the kit is designed for this type.
- Gather necessary tools: bicycle repair stand, wrenches, hex keys, cable ties, and electrical tape.

5.2 Motor Wheel Installation

1. Remove your bicycle's existing rear wheel.
2. Install the BAFANG hub motor wheel into the rear dropouts. Ensure the axle is fully seated.
3. Secure the axle nuts firmly. Torque arms are highly recommended to prevent axle rotation, especially with high-power motors.
4. Install your cassette onto the motor's freehub body.
5. Reinstall the disc brake rotor onto the motor hub if it was removed, or ensure proper alignment with the brake caliper.

5.3 Component Mounting

1. Mount the controller box to a suitable location on your bike frame, typically near the bottom bracket or seat tube.
2. Install the display unit on the handlebars in a central, easily viewable position.
3. Replace your existing brake levers with the provided brake levers, which include motor cut-off sensors.
4. Install the thumb throttle on the handlebars, typically on the left side.
5. Install the PAS sensor on the crank arm, ensuring the magnet disc is properly aligned with the sensor.
6. Mount the headlight to the front of the bicycle.
7. If using an optional battery, install it securely according to its mounting type (e.g., down tube, rear rack).

5.4 Wiring Diagram and Connections

Carefully follow the wiring diagrams provided for your specific dropout width (175mm or 190mm). Ensure all connectors are fully seated and secured. Use cable ties to manage and secure all cables, preventing them from interfering with moving parts or getting snagged.

WIRING DIAGRAM

OLD 175mm



Figure 5.1: Wiring diagram for the BAFANG kit with 175mm OLD (Over-Locknut Dimension) dropout, showing connections for motor, controller, display, brake levers, throttle, PAS sensor, and battery.

WIRING DIAGRAM

OLD 190mm

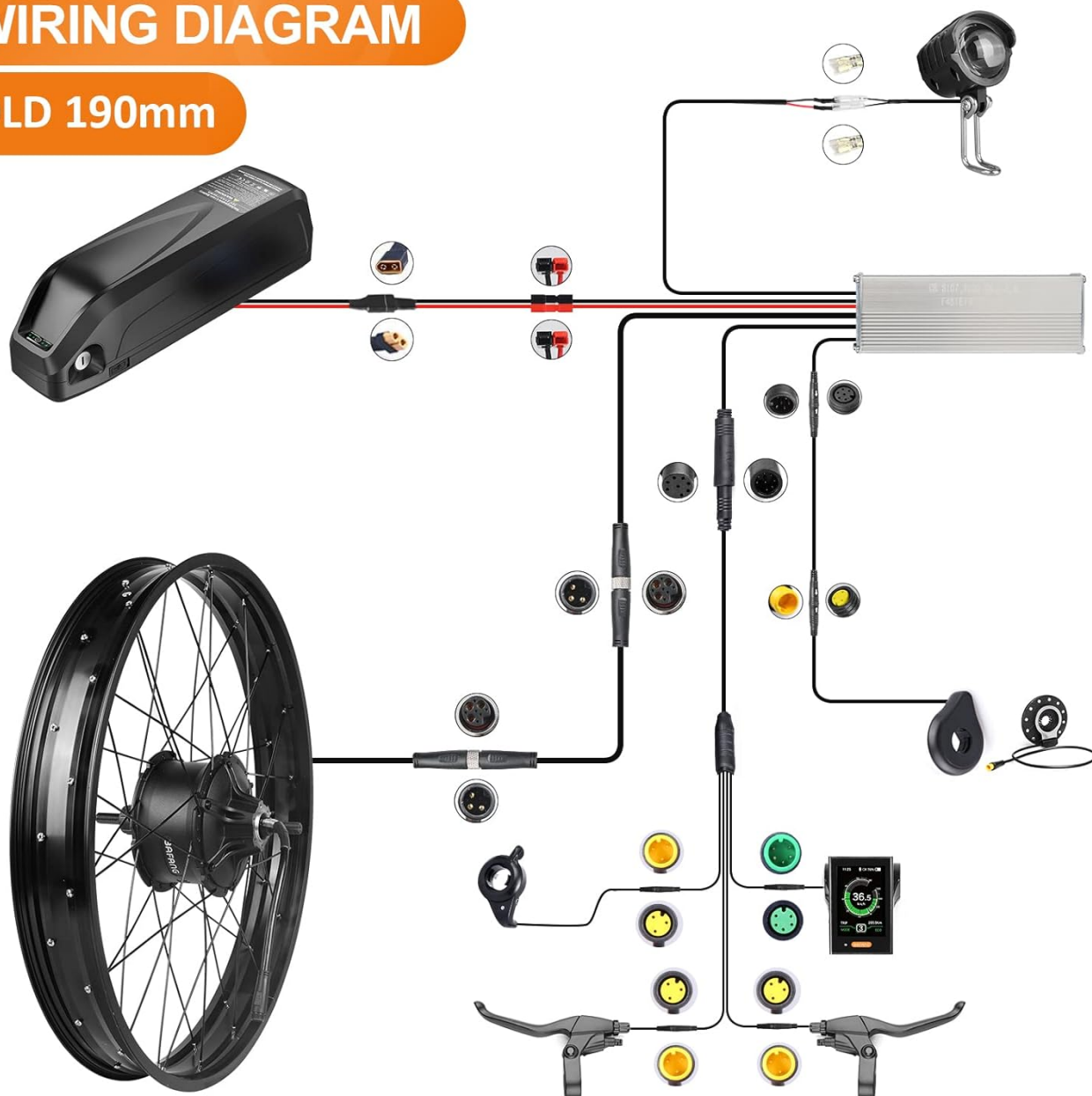


Figure 5.2: Wiring diagram for the BAFANG kit with 190mm OLD dropout, illustrating the electrical connections for all components.

- Connect the motor cable to the controller.
- Connect the display cable to the controller.
- Connect the brake lever cables to the controller.
- Connect the throttle cable to the controller.
- Connect the PAS sensor cable to the controller.
- Connect the headlight cable to the designated port on the controller (if applicable).
- Finally, connect the battery cable to the controller.

6. OPERATION

Operating your BAFANG electric bike conversion kit is straightforward. Familiarize yourself with the display functions and control mechanisms before your first ride.

6.1 Powering On/Off

- To power on the system, press and hold the power button on the display unit.
- To power off, press and hold the power button again until the display turns off.

6.2 Display Functions (P860C Example)

The P860C display provides essential riding information and allows you to adjust settings.

- **Speed Display:** Shows current speed (KM/H or MPH).
- **Battery Indicator:** Displays remaining battery charge.
- **PAS Level:** Indicates the current Pedal Assist System level (typically 0-5 or 0-9). Use the UP/DOWN buttons to change levels.
- **Trip Distance:** Shows distance traveled for the current trip.
- **Odometer:** Displays total distance traveled.
- **Headlight Control:** Press a dedicated button (if available) or hold the UP button to turn the headlight on/off.
- **Error Codes:** The display will show error codes if a system malfunction is detected. Refer to the troubleshooting section for common codes.

6.3 Pedal Assist System (PAS)

The PAS provides motor assistance as you pedal. The higher the PAS level, the more assistance the motor provides.

- Select your desired PAS level using the UP/DOWN buttons on the display.
- Begin pedaling, and the motor will engage to assist your ride.

6.4 Thumb Throttle

The thumb throttle allows you to engage the motor without pedaling. It provides instant power.

- Gently press the thumb throttle to engage the motor. The more you press, the more power is delivered.
- Release the throttle to disengage the motor.
- Note: The brake levers have cut-off sensors. Applying the brakes will immediately cut power to the motor, even if the throttle is engaged.

7. MAINTENANCE

Regular maintenance is crucial for the longevity and safe operation of your electric bike conversion kit.

- **Cleaning:** Clean the motor, controller, and battery with a damp cloth. Avoid high-pressure washing directly on electrical components.
- **Connections:** Periodically check all electrical connections for tightness and corrosion. Ensure waterproof connectors are properly sealed.
- **Cables:** Inspect cables for any signs of fraying, cuts, or damage. Replace damaged cables immediately.
- **Motor:** The hub motor is largely maintenance-free. Listen for unusual noises during operation.
- **Battery Care:**
 - Charge the battery regularly, even if not in use, to maintain its health.
 - Store the battery in a cool, dry place, away from direct sunlight and extreme temperatures.
 - Do not fully discharge the battery before recharging.
- **General Bicycle Maintenance:** Continue regular maintenance of your bicycle's mechanical components, including brakes, tires, chain, and gears.

8. TROUBLESHOOTING

This section addresses common issues you might encounter with your BAFANG electric bike conversion kit. For problems not listed here, please contact customer support.

Problem	Possible Cause	Solution
No Power / Display Off	Battery not connected, battery discharged, loose power cable, faulty display.	Check battery connection, charge battery, inspect power cables, try turning on/off again.
Motor Not Assisting (PAS)	PAS sensor misaligned/damaged, PAS level set to 0, brake levers engaged.	Check PAS sensor alignment and connection, increase PAS level on display, ensure brake levers are fully released.
Throttle Not Working	Throttle cable loose/damaged, brake levers engaged, motor cut-off active.	Check throttle cable connection, ensure brake levers are fully released.
Error Code 11 (Hall Sensor Error)	Motor Hall sensor issue, loose motor cable connection.	Check motor cable connection to controller. If issue persists, contact support.
Unusual Noises from Motor	Loose spokes, internal motor issue, foreign object.	Inspect spokes for tightness. If noise persists or is severe, discontinue use and contact support.

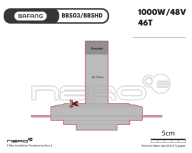
9. WARRANTY AND SUPPORT


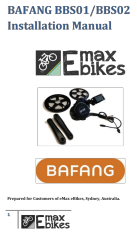



For warranty information, technical support, or replacement parts, please contact BAFANG customer service directly. Keep your purchase receipt and product model number handy when contacting support.

Refer to the official BAFANG website or your purchase platform for the most up-to-date contact information and warranty terms.

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Related Documents - A48V 1000W Fat 26DC P860C-YW5219.2 CA

	<p>Bafang BBS03/BBSHD 1000W/48V 46T E-Bike Motor Installation Template</p> <p>Installation template for Bafang BBS03/BBSHD 1000W/48V 46T e-bike motors, providing dimensions for threaded bottom brackets (68-73mm). Designed by Nero E.</p>
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	<p>BAFANG M510 Mid Motor User Manual and Installation Guide</p> <p>Comprehensive user manual for the BAFANG M510 Mid Motor, covering specifications, installation procedures, maintenance, and troubleshooting for electric bicycles.</p>
	<p>BAFANG BBS01/BBS02 Mid-Drive E-bike Motor Installation Manual eMax eBikes</p> <p>Comprehensive installation manual for the BAFANG BBS01 and BBS02 mid-drive electric bike motor kits. Includes technical specifications, assembly steps, wiring diagrams, and warranty information from eMax eBikes.</p>
	<p>Bafang RM G020.250.DC Technical Specification</p> <p>Detailed technical specifications for the Bafang RM G020.250.DC rear-drive electric bike motor, including performance parameters, dimensions, features, and warranty information.</p>
	<p>BAFANG BBS01/BBS02 Mid-Drive Electric Bike Conversion Kit Installation Manual</p> <p>Detailed installation guide for BAFANG BBS01 and BBS02 mid-drive electric bike conversion kits. Covers system overview, technical specifications, step-by-step assembly, component connections, and warranty information for e-bike DIY enthusiasts.</p>
	<p>Bafang H550 (RM G06A2.750.D) Dealer Manual</p> <p>Dealer manual for the Bafang H550 electric bike motor (RM G06A2.750.D), covering specifications, installation, and maintenance for pedelec applications.</p>