

## SENDERPICK SENDERPICK-XXXXXX

# SENDERPICK 20-inch 48V 1000W Electric Bicycle Rear Wheel Conversion Kit User Manual

Model: SENDERPICK-XXXXXX

## 1. INTRODUCTION

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Thank you for choosing the SENDERPICK 20-inch 48V 1000W Electric Bicycle Rear Wheel Conversion Kit. This kit is designed to transform your standard bicycle into a powerful electric bike, offering enhanced performance and an enjoyable riding experience. Please read this manual thoroughly before installation and operation to ensure proper use and safety.

This kit features a high-quality 48V 1000W hub motor, designed for quiet operation and long service life. It is IP54 waterproof, providing reliable performance in various weather conditions. The kit includes all necessary accessories for a straightforward conversion.

## 2. SAFETY INFORMATION

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- Always wear a helmet and appropriate safety gear when riding an electric bicycle.
- Ensure all connections are secure and waterproofed (where applicable) before riding.
- Regularly inspect your bicycle and the conversion kit components for any signs of wear or damage.
- Do not operate the kit if any components are damaged or malfunctioning.
- Be aware of local regulations regarding electric bicycle power and speed limits.
- Avoid riding in heavy rain or extreme conditions, despite the IP54 rating, to prolong product life.
- Keep children and pets away from the bicycle during installation and operation.

### 3. PACKAGE CONTENTS

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



**Motorized Rear Wheel:** A 20-inch rear wheel with a pre-installed 48V 1000W brushless gearless hub motor and a multi-speed cassette.



**Motor Wiring:** Integrated wiring extending from the hub motor for connection to the controller.



**Controller Unit:** The electronic control unit for the motor. Includes brake levers with motor cut-off sensors and a thumb throttle.



**Cable Wrap:** Spiral cable wrap for organizing and protecting wires on your bicycle frame.



**Mounting Hardware:** Includes torque arm, washers, and nuts for secure axle installation.



**Terminal Block:** For making secure electrical connections.



**Cable Ties:** For securing cables and maintaining a tidy setup.



**Handlebar Grips:** A pair of grips for comfortable handling.

## 4. SETUP AND INSTALLATION

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This section provides general guidelines for installing your SENDERPICK electric bicycle conversion kit. Professional installation is recommended if you are unfamiliar with bicycle mechanics or electrical systems.

### 4.1. Prepare Your Bicycle

1. Ensure your bicycle is compatible with a 20-inch rear wheel and has sufficient space for the motor and controller.
2. Remove your existing rear wheel.
3. Clean the area where the new components will be installed.

### 4.2. Install the Motorized Rear Wheel

Carefully install the new motorized rear wheel into your bicycle's dropouts. Ensure the axle is properly seated and the motor cable exits without obstruction.

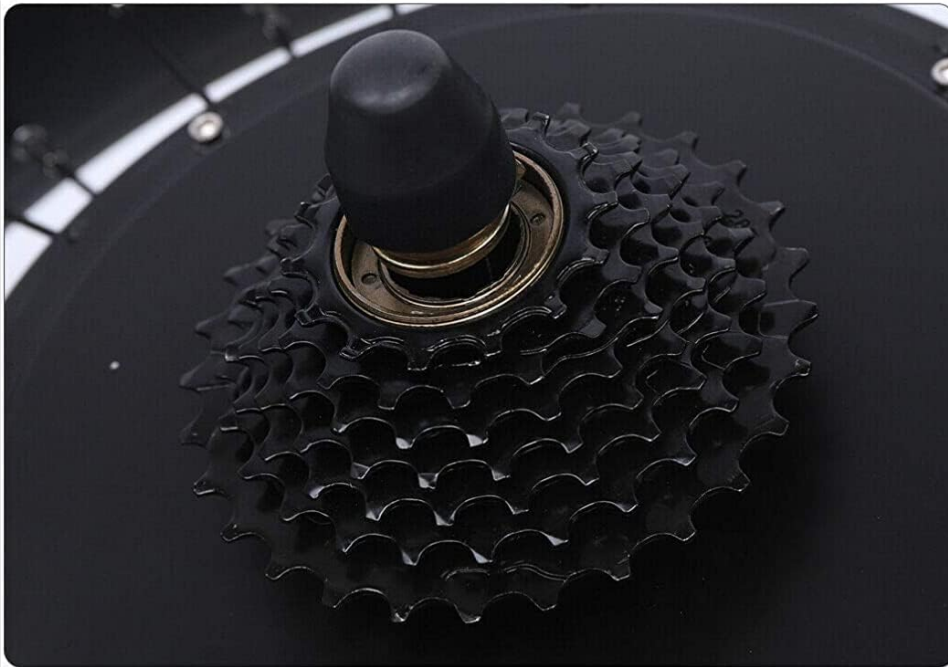


Image: The 20-inch motorized rear wheel ready for installation.

Use the provided washers and nuts to secure the wheel. It is crucial to install the torque arm (if included and applicable) to prevent the axle from spinning out under motor power. Tighten all nuts to the manufacturer's recommended torque specifications for your bicycle frame.



Image: Torque arm and washers for secure axle mounting.

### 4.3. Mount the Controller and Handlebar Components

1. Mount the controller unit in a secure, protected location on your bicycle frame, away from direct impact or water spray.
2. Install the brake levers and throttle onto your handlebars. Ensure they are positioned comfortably and do not interfere with other controls.



Image: Controller, brake levers, and throttle ready for mounting.

### 4.4. Electrical Connections

Connect the motor, controller, throttle, and brake levers according to the wiring diagram (not provided in this manual, refer to specific product documentation if available). Ensure all connections are firm and correctly matched. Use the terminal block for any necessary wire extensions or junctions.



Image: Terminal block for secure electrical connections.

Once all connections are made, use the cable wrap and cable ties to neatly organize and secure all wires along the bicycle frame. This prevents snagging and protects the wiring from damage.



Image: Cable wrap for neat wire management.

#### **4.5. Battery Connection (Battery not included)**

Connect your 48V battery (not included) to the controller's power input. Ensure the polarity is correct (+ to + and - to -). Secure the battery firmly to your bicycle frame.

## **5. OPERATING INSTRUCTIONS**

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### **5.1. Pre-Ride Check**

- Check tire pressure.
- Verify brake functionality.
- Ensure all electrical connections are secure.
- Confirm battery is charged and properly mounted.

### **5.2. Starting the System**

Turn on the battery power switch. The system should now be active.

### **5.3. Using the Throttle**

Gently apply the thumb throttle to engage the motor. The motor will provide assistance based on the

throttle input. Release the throttle to stop motor assistance.

## 5.4. Using the Brake Levers

The brake levers are equipped with motor cut-off sensors. Engaging either brake lever will immediately cut power to the motor, ensuring safe stopping.

## 5.5. Riding Tips

- Start in a low gear for easier acceleration.
- Use pedal assistance to extend battery range and reduce strain on the motor.
- Be mindful of your speed, especially in crowded areas.

# 6. MAINTENANCE

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

- **Cleaning:** Wipe down the motor, controller, and other components with a damp cloth. Avoid high-pressure washing directly on electrical parts.
- **Connections:** Periodically check all electrical connections for tightness and corrosion.
- **Cables:** Inspect cables for fraying, cuts, or damage. Replace damaged cables immediately.
- **Motor:** The hub motor is generally maintenance-free. Do not attempt to open the motor casing.
- **Battery:** Follow the battery manufacturer's guidelines for charging, storage, and maintenance.
- **General Bicycle Maintenance:** Continue to perform regular maintenance on your bicycle's mechanical components (brakes, chain, gears, tires).

# 7. TROUBLESHOOTING

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This section addresses common issues you might encounter. For problems not listed here, please contact customer support.

Problem	Possible Cause	Solution
Motor not engaging	Battery low or off Loose electrical connection Brake lever engaged Throttle malfunction	Check battery charge and power switch Inspect all connections, secure them Ensure brake levers are fully released Test throttle, replace if faulty

Problem	Possible Cause	Solution
Loss of power during ride	Battery depleted Overheating (motor/controller) Loose connection	Recharge battery Allow components to cool down Check and secure connections
Unusual noise from motor	Loose spokes Foreign object Internal motor issue	Check spoke tension Inspect for debris Contact customer support
Brakes not cutting motor power	Brake sensor disconnected or faulty	Check brake lever sensor wiring Replace brake lever if sensor is faulty

## 8. SPECIFICATIONS

Feature	Specification
Brand	SENDERPICK
Model Number	SENDERPICK-XXXXXX
Wheel Size	20 inches
Motor Type	Brushless Gearless Hub Motor
Motor Voltage	48V
Motor Power	1000W
Waterproof Rating	IP54
Compatible Vehicle Type	Road Bike (with 20-inch rear wheel)
GTIN / UPC	768788581530

## 9. WARRANTY AND SUPPORT

SENDERPICK products are designed for quality and reliability. For warranty information, please refer to the terms and conditions provided at the time of purchase or visit the official SENDERPICK website. If you encounter any issues or require technical assistance, please contact SENDERPICK customer support with your product model number and purchase details.

For further assistance, please visit our support page or contact us directly:

- **Online Support:** [www.senderpick.com/support](http://www.senderpick.com/support) (Example Link)
- **Email:** [support@senderpick.com](mailto:support@senderpick.com) (Example Email)

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