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

VEVOR MY1020D

VEVOR 48V 1800W Brushless DC Motor Kit Instruction Manual

Model: MY1020D

1. Introduction and Overview

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your VEVOR 48V 1800W Brushless DC Motor Kit. This kit is designed for various applications including go-karts, scooters, e-bikes, motorized bicycles, ATVs, mini bikes, and pocket bikes. Please read these instructions thoroughly before use to ensure proper function and longevity of the product.



Image 1.1: Overview of the VEVOR 48V 1800W Brushless DC Motor Kit, showing the motor, controller, throttle grip, and other accessories. This kit is suitable for electric scooters, go-karts, electric bicycles, and motorcycles.

2. Product Features

- **1800W Brushless Motor:** Features a 100% copper core for low noise operation and excellent speed regulation. The high-precision rotor is designed for water resistance and high working efficiency.
- **Sturdy Aluminum Construction:** The motor casing is made from aluminum alloy, providing resistance to heat, cold, and corrosion. This DC electric motor supports both forward and backward rotation.
- **Speed Controller Included:** Comes with a BY12WF02-C controller for precise speed control via a potentiometer. Specifications: Current: 33A, Phase Degree: 120°, Conversion Efficiency: ≥ 85%, Under Voltage Protection: 41V.
- **High Efficiency and Durability:** Brushless design offers superior efficiency, power frugality, low noise, and a long lifespan compared to brushed motors.
- **Wide Application:** Ideal for go-karts, scooters, e-bikes, ATVs, motorized bicycles, mopeds, mini bikes, and pocket bikes.



Image 2.1: Illustration of the motor's high performance, highlighting 100% pure copper windings, 1800W rated power, 4500RPM rated speed, high efficiency, low noise, and long life.



Image 2.2: Details on the motor's high speed (Rated: 4500 RPM, Max: 5600 RPM) and dual-direction operation (forward and reverse rotation). Also shows the T8F-9 teeth sprocket and high hardness shaft.

3. Setup and Installation

Proper installation is crucial for the safe and optimal performance of your motor kit. Always ensure the power source is disconnected before beginning any installation work.

3.1 Mounting the Motor

1. Identify a stable and secure mounting location on your vehicle (go-kart, scooter, etc.).
2. Ensure the mounting surface is flat and strong enough to support the motor's weight and torque.
3. Use appropriate bolts and washers to firmly attach the motor's bracket to the mounting surface. Ensure all fasteners are tightened securely.

3.2 Wiring the Speed Controller and Components

The speed controller manages the motor's power and speed. Follow the wiring diagram carefully to connect all components.

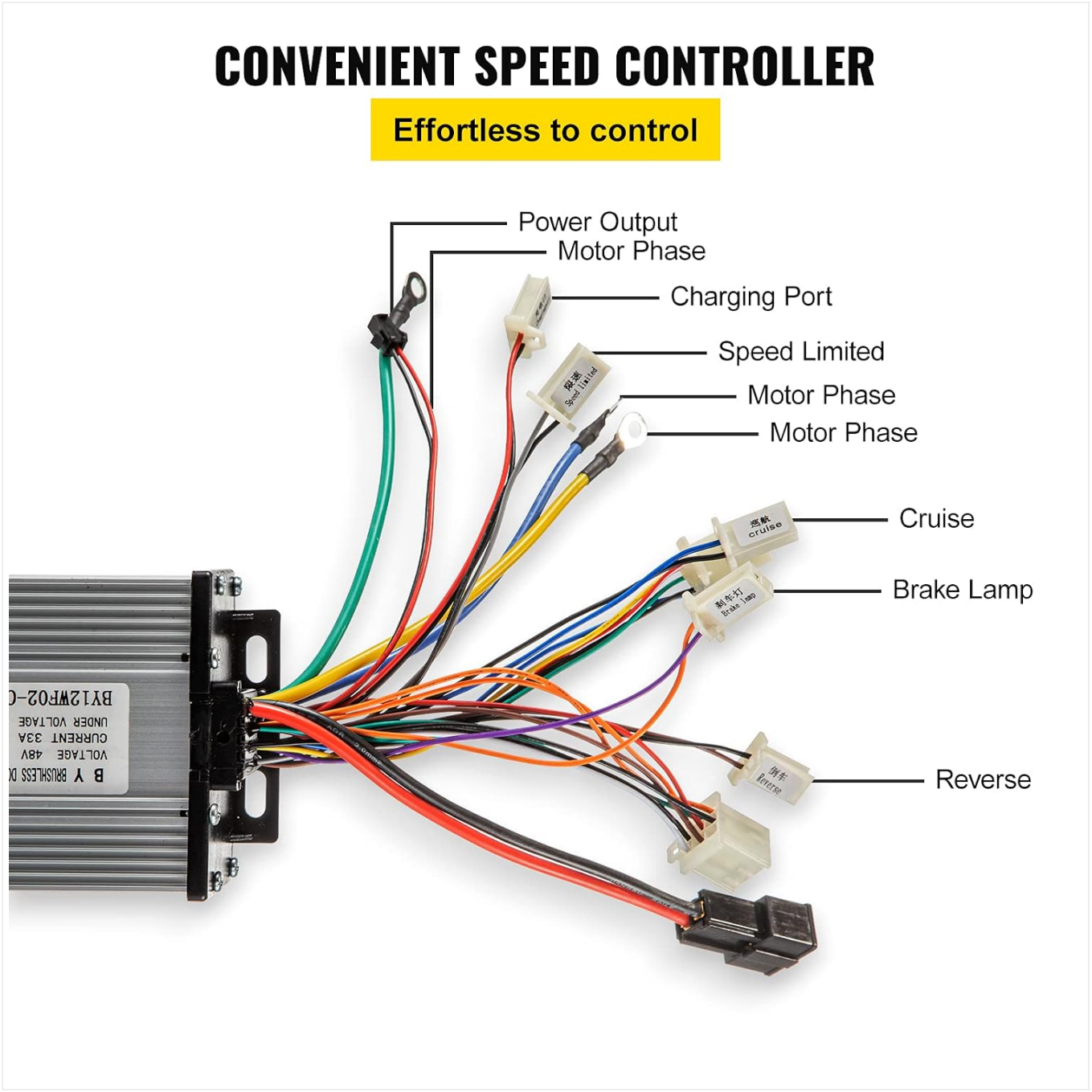

Image 3.1: Detailed wiring connections for the speed controller, including power output, motor phase, charging port, speed limit, cruise, brake lamp, and reverse functions.

- **Motor Connection:** Connect the three motor phase wires (usually green, yellow, blue) from the motor to the corresponding phase wires on the controller.
- **Power Input:** Connect the battery's positive and negative terminals to the controller's power input. Ensure correct polarity.
- **Throttle Grip/Pedal:** Connect the throttle grip or pedal to the designated throttle input on the controller.
- **Ignition Key:** Connect the ignition key switch to the controller's ignition input to enable/disable power to the system.
- **Other Connections:** Connect any additional components such as brake lamps, cruise control, or reverse switches as indicated in the wiring diagram.

After all connections are made, double-check them for security and correct polarity before applying power.

4. Operating Instructions

Once the motor kit is correctly installed and wired, you can proceed with operation.

4.1 Initial Start-up

1. Ensure the vehicle is on a stable surface and clear of any obstacles.
2. Turn the ignition key to the 'ON' position.
3. Slowly apply the throttle. The motor should begin to rotate smoothly.

4.2 Speed Control

The speed is controlled by the throttle grip or pedal. Apply gentle pressure for gradual acceleration and release to decelerate. The controller allows for precise speed adjustment.

4.3 Forward and Reverse Operation

If your system includes a reverse switch, activate it to change the motor's direction of rotation. Always ensure the vehicle is stationary before switching between forward and reverse.

4.4 Safety Precautions During Operation

- Always wear appropriate safety gear when operating vehicles equipped with this motor.
- Do not operate the motor if you notice any unusual noises, vibrations, or smells.
- Avoid operating the motor in excessively wet or dusty conditions unless the system is specifically designed and sealed for such environments.
- Do not exceed the maximum load capacity of your vehicle.

5. Maintenance

Regular maintenance ensures the longevity and reliable performance of your VEVOR motor kit.

5.1 Cleaning

- Keep the motor and controller free from dirt, dust, and debris. Use a soft, dry cloth for cleaning.
- Avoid using water or harsh chemicals directly on electrical components.

5.2 Inspection

- Periodically inspect all wiring for signs of wear, fraying, or damage. Replace any damaged wires immediately.
- Check all connections to ensure they are tight and secure. Loose connections can lead to intermittent power or component damage.
- Inspect the motor mounting bolts for tightness. Vibrations can cause them to loosen over time.
- Examine the sprocket and chain (if applicable) for wear or damage. Ensure the chain tension is correct.

5.3 Storage

When not in use for extended periods, store the motor kit in a dry, cool environment, away from direct sunlight and extreme temperatures.

6. Troubleshooting

This section provides solutions to common issues you might encounter.

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
Motor does not start or operate.	No power, loose connections, faulty ignition switch, controller issue.	Check battery charge. Verify all wiring connections are secure. Test ignition switch. Consult a professional if controller is suspected faulty.
Motor runs intermittently.	Loose wiring, poor contact in throttle/pedal, overheating.	Inspect all connections for tightness. Check throttle/pedal wiring. Allow motor to cool down if overheating.
Motor lacks power or speed.	Low battery charge, incorrect controller settings, motor overload.	Charge battery fully. Ensure controller settings are appropriate for the motor. Reduce load on the motor.
Unusual noise or vibration.	Loose mounting, damaged bearings, foreign object in motor.	Check motor mounting bolts. Inspect motor for any obstructions. If noise persists, professional inspection may be required.

If you encounter issues not listed here or if the suggested solutions do not resolve the problem, please contact VEVOR customer support or a qualified technician.

7. Specifications

Detailed technical specifications for the VEVOR 48V 1800W Brushless DC Motor Kit.

Parameter	Value
Model	MY1020D
Input Voltage	48V DC
Output Power	1800W
Rated Current	≤ 33A
Rated Speed	4500 RPM
Maximum Speed	5600 RPM
Sprocket	T8F-9 Teeth
Horsepower	2.45 HP
Rated Torque	3.7 N.m / 523.96 oz.in
Maximum Current	39A
No-load Current	≤ 4.2A
Peak Efficiency	≥ 80%
Working Temperature	< 120 °C / 248 °F
Motor Size (L x W x H)	6.7 x 4.2 x 4.3 inches / 169 x 107 x 110 mm
Motor Net Weight	9.48 lbs / 4.3 kg

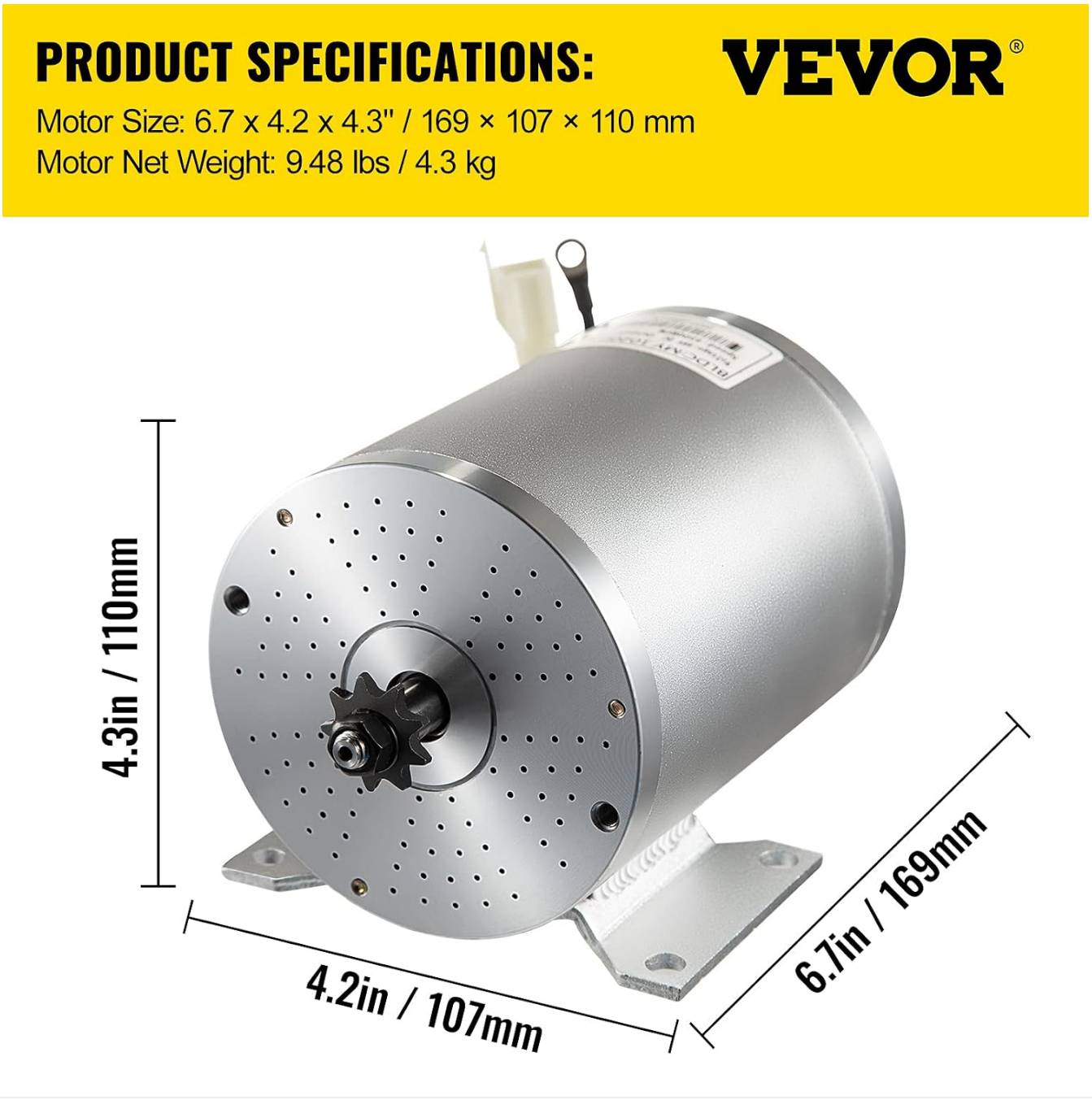

Image 7.1: Visual representation of the motor's dimensions (6.7in / 169mm length, 4.2in / 107mm width, 4.3in / 110mm height).

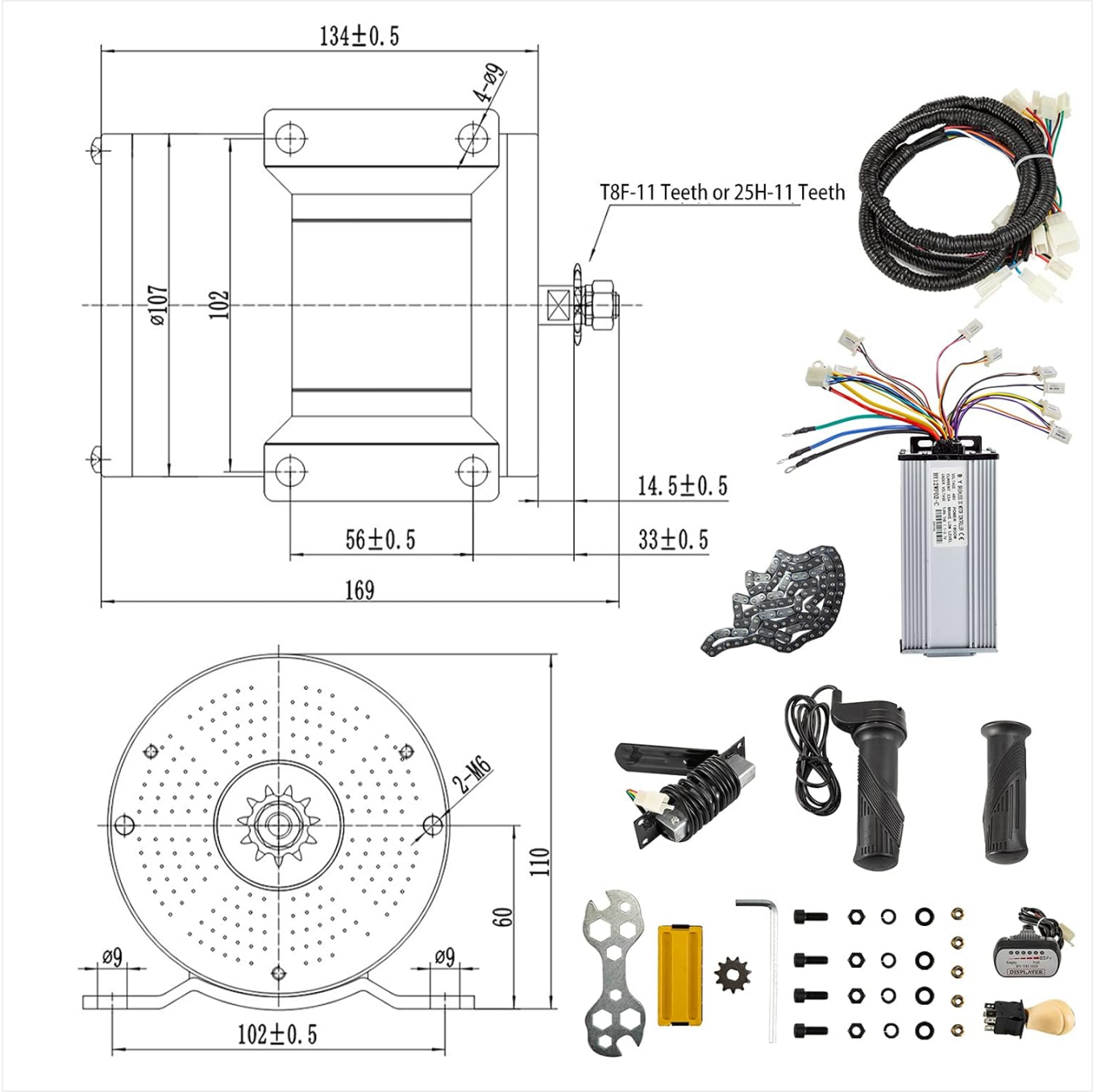

Image 7.2: Technical drawing showing detailed measurements and a complete view of the kit components including the motor, controller, throttle, pedal, chain, and tools.

8. Warranty and Support

For warranty information, product registration, or technical support, please refer to the official VEVOR website or contact their customer service department. Keep your purchase receipt as proof of purchase for any warranty claims.

VEVOR Official Website: www.vevor.com

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/B0BTSMHVJL

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