MOONCOOL ZT-E20-QL

MOONCOOL Electric Tricycle ZT-E20-QL User Manual

Model: ZT-E20-QL

1. Introduction

This user manual provides essential information for the safe and efficient operation of your MOONCOOL Electric Tricycle, Model ZT-E20-QL. Please read this manual thoroughly before assembly and first use to ensure proper function and to prevent injury or damage. This electric tricycle is designed for adult use and features a 20-inch fat tire, a 48V 500W motor, and a large basket for convenience.



Image 1.1: The MOONCOOL Electric Tricycle ZT-E20-QL in Apple Teal, featuring its integrated digital display.

2. Safety Information

Your safety is paramount. Always observe the following safety guidelines:

- Always wear a helmet that meets safety standards.
- Perform a pre-ride inspection before each use, checking brakes, tire pressure, and battery charge.
- Understand and practice using all controls, including the throttle, pedal assist, and brakes, in a safe, open area before riding in traffic.
- Be aware that tricycles handle differently than two-wheeled bicycles, especially when turning. Practice turning at low speeds.
- Do not operate the tricycle under the influence of alcohol or drugs.
- Adhere to all local traffic laws and regulations.
- Keep hands and feet clear of moving parts.
- Do not overload the tricycle or the baskets beyond the specified weight capacity.

3. Product Components

Familiarize yourself with the main components of your electric tricycle:

- **Frame:** Constructed from 6061 aluminum for strength and longevity.
- **Motor:** 48V 500W motor providing up to 1000W peak power.
- **Battery:** Removable 48V 14.5Ah lithium battery.
- **Tires:** Sturdy 20" x 4" puncture-resistant fat tires.
- **Brakes:** Front and rear disc brakes for reliable stopping power.
- **Derailleur:** 7-speed gear system for varied terrain.
- **Display:** LCD display showing speed, battery level, and assist mode.
- **Baskets:** Large front and rear baskets for storage.
- **Headlight:** Integrated LED headlight for improved visibility.

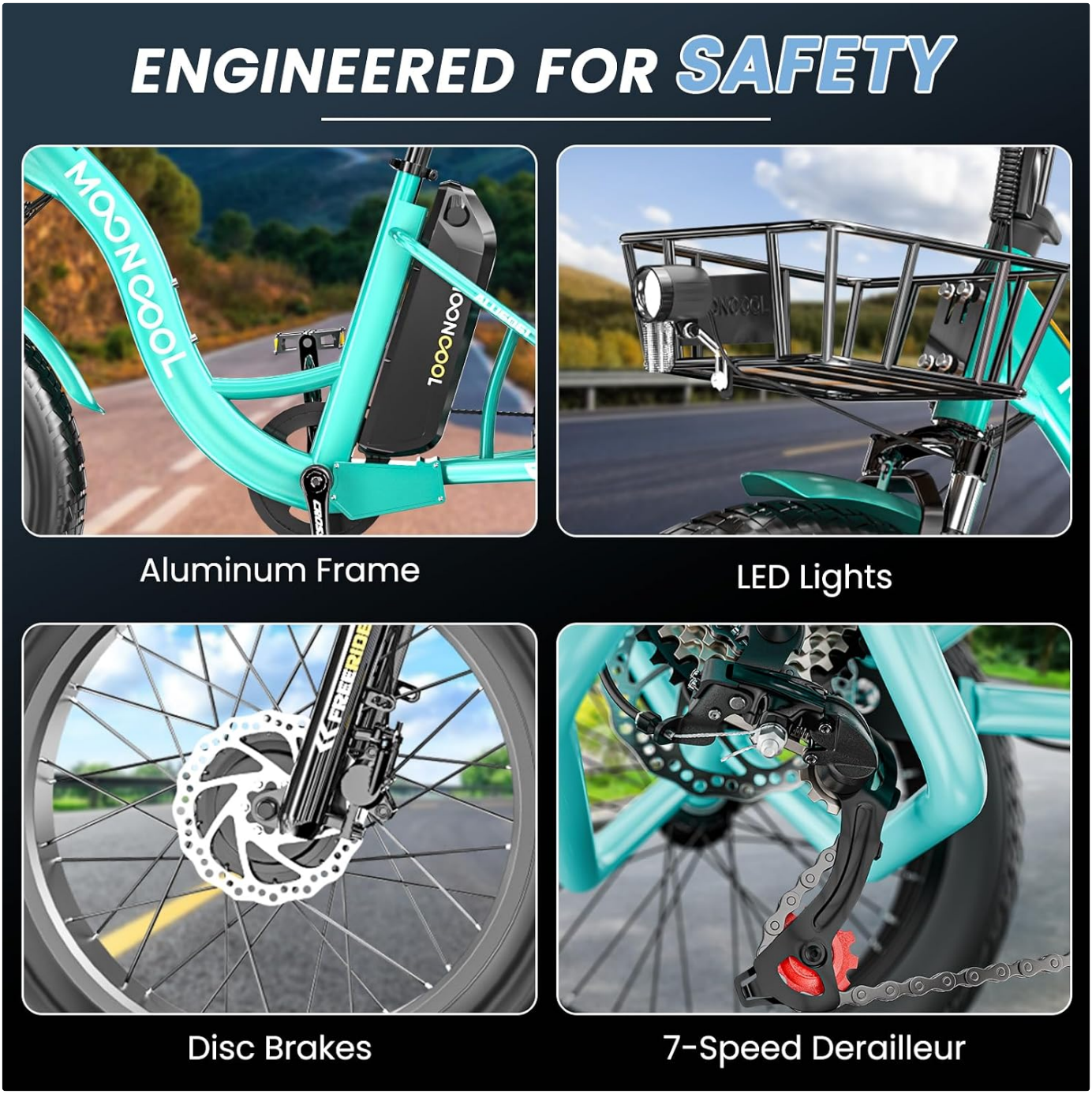


Image 3.1: Key safety and functional components including the aluminum frame, LED lights, disc brakes, and 7-speed derailleur.

4. Assembly Instructions

Your MOONCOOL Electric Tricycle arrives approximately 65% pre-assembled. The remaining assembly steps are crucial for safe operation. If you are unsure about any step, it is recommended to seek professional assistance.

4.1. Unpacking

1. Carefully remove all components from the packaging.
2. Inspect all parts for any signs of damage during transit. Contact support immediately if damage is found.
3. Ensure all listed components are present before proceeding.

4.2. Handlebar Installation

Attach the handlebars to the stem, ensuring they are centered and tightened securely. Adjust the angle for comfortable riding posture.

4.3. Seat Installation

Insert the seat post into the frame and adjust the seat height to allow for a slight bend in your knee when the pedal is at its lowest point. Secure the quick-release lever or bolt.

4.4. Pedal Installation

Identify the left (L) and right (R) pedals. The left pedal tightens counter-clockwise, and the right pedal tightens clockwise. Ensure they are fully threaded and tightened.

4.5. Basket Attachment

Securely attach the front and rear baskets using the provided hardware. Ensure they are stable and do not interfere with steering or wheel movement.

4.6. Pre-Ride Checks

- **Tires:** Inflate tires to the recommended pressure indicated on the tire sidewall.
- **Brakes:** Test both front and rear brakes to ensure they engage properly and stop the tricycle effectively.
- **Gears:** Verify that the 7-speed derailleur shifts smoothly through all gears. Adjust if necessary. Pay particular attention to the chain rail mechanism, as this may require fine-tuning.
- **Fasteners:** Double-check all bolts and quick-release levers for tightness.

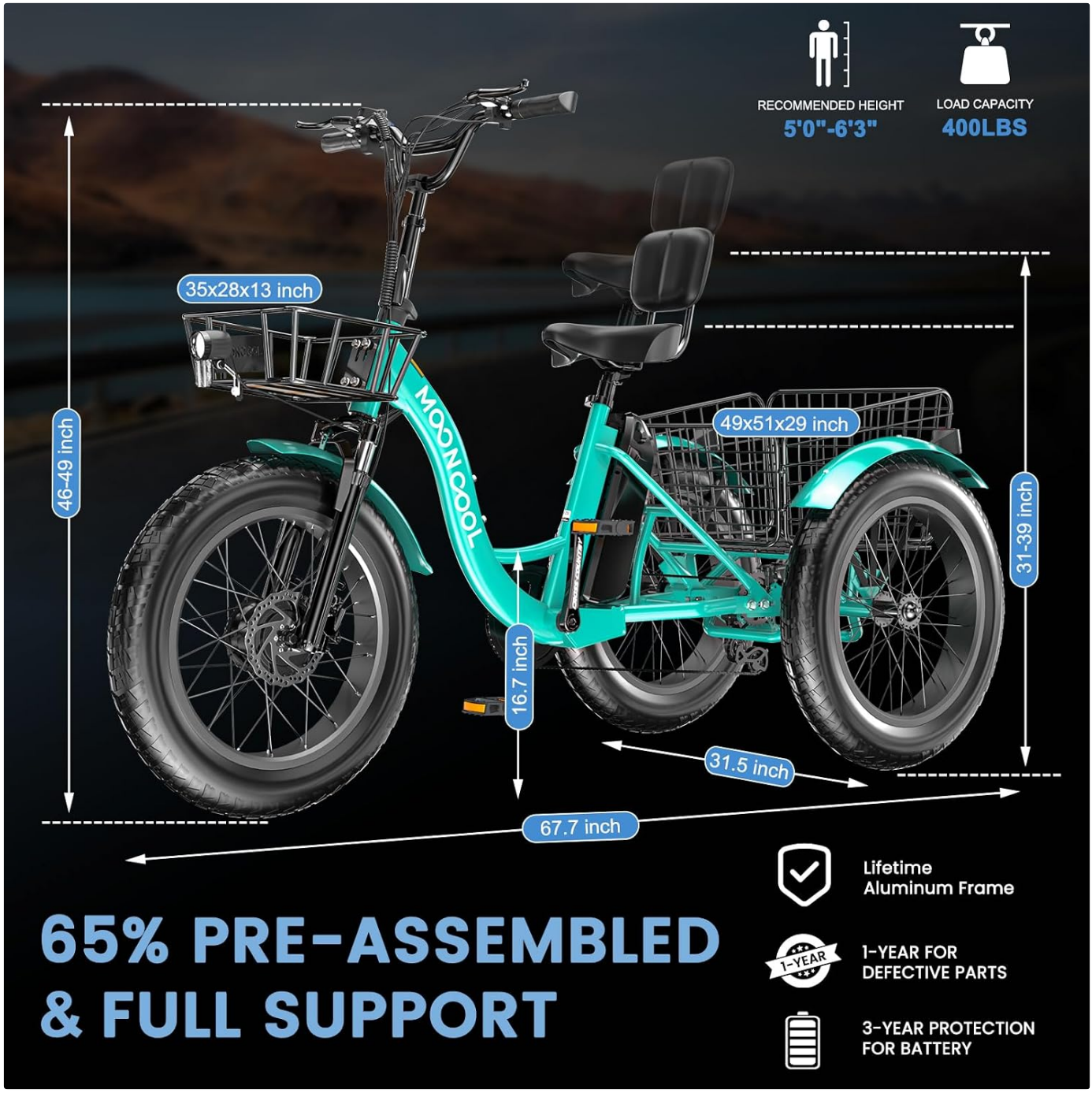


Image 4.1: Dimensions and pre-assembly information for the MOONCOOL Electric Tricycle.

5. Battery and Charging

The tricycle is equipped with a removable 48V 14.5Ah battery. Proper battery care ensures optimal performance and longevity.

5.1. Charging the Battery

1. Connect the charger to a standard wall outlet.
2. Connect the charger to the battery charging port. The battery can be charged while installed on the tricycle or removed.
3. The charging indicator light on the charger will typically show red during charging and turn green when fully charged.

4. A full charge takes approximately 7-9 hours using the provided 54.6V 2A fast charger.
5. Do not overcharge the battery. Disconnect the charger once charging is complete.

5.2. Battery Care

- Store the battery in a cool, dry place away from direct sunlight and extreme temperatures.
- If storing for extended periods, charge the battery to 50-70% every 1-2 months.
- Avoid fully discharging the battery frequently.



Image 5.1: Details of the removable 48V 14.5Ah battery and charging specifications.

6. Operating the Tricycle

Understanding the controls and riding modes will enhance your riding experience.

6.1. Power On/Off

Press and hold the power button on the LCD display to turn the electric system on or off.

6.2. Riding Modes

The MOONCOOL Electric Tricycle offers three riding modes:

- **Electric Tricycle Mode:** Provides full motor power without pedaling (throttle-only).
- **Assisted Tricycle Mode (Pedelec):** The motor provides assistance as you pedal. Use the LCD display to select your desired assist level.
- **Normal Tricycle Mode:** The motor is off, and you pedal the tricycle like a traditional bicycle.

6.3. LCD Display

The LCD display provides real-time information:

- **Speed:** Current riding speed.
- **Battery Level:** Indicates remaining battery charge.
- **Assist Level:** Shows the current level of pedal assistance (1-5).
- **Odometer/Trip:** Displays total distance traveled or current trip distance.

Use the '+' and '-' buttons on the display to adjust the pedal assist level.

6.4. Gears and Brakes

- **7-Speed Derailleur:** Use the twist grip shifter on the handlebar to change gears. Shift to a lower gear for climbing hills and a higher gear for flat terrain.
- **Disc Brakes:** Squeeze the brake levers on the handlebars to engage the disc brakes. Apply both brakes simultaneously for balanced stopping.

6.5. First Ride Tips

If you are new to riding a tricycle, practice in a safe, open area:

- Tricycles do not lean into turns like bicycles. Turn the handlebars to steer.
- Start at a low speed and gradually increase as you become comfortable.
- Maintain a firm grip on the handlebars, especially over uneven surfaces.



Image 6.1: The MOONCOOL Electric Tricycle is suitable for various terrains due to its fat tires and suspension.

7. Maintenance

Regular maintenance ensures the longevity and safe operation of your electric tricycle.

7.1. Routine Checks

- **Tires:** Check tire pressure weekly and inspect for wear or punctures.
- **Brakes:** Regularly inspect brake pads for wear and brake cables for tension. Adjust or replace as needed.
- **Chain:** Keep the chain clean and lubricated to ensure smooth shifting and prevent rust.
- **Fasteners:** Periodically check all bolts, nuts, and quick-release levers for tightness.
- **Electrical Connections:** Ensure all electrical cables and connectors are secure and free from damage.

7.2. Cleaning

Clean the tricycle with a damp cloth and mild soap. Avoid using high-pressure washers directly on electrical components.

8. Troubleshooting

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

Problem	Possible Cause	Solution
Tricycle does not power on.	Battery not charged, battery not properly seated, loose electrical connection.	Charge the battery, ensure battery is fully inserted, check all visible connections.
Motor not assisting.	Pedal assist level set to zero, motor cable disconnected, sensor issue.	Increase assist level on display, check motor cable connection, contact support.
Brakes are not effective.	Worn brake pads, loose brake cable, air in hydraulic system (if applicable).	Inspect and replace brake pads, adjust cable tension, seek professional service for hydraulic brakes.
Gears not shifting smoothly.	Derailleur out of adjustment, dirty or dry chain, bent hanger.	Adjust derailleur limits and cable tension, clean and lubricate chain, inspect for bent components. Professional adjustment may be required.
Front wheel wobbles.	Bent wheel rim, loose hub bearings, improper tire seating.	Inspect the wheel for damage. If the rim is bent, it may require replacement or professional truing. Ensure tire is seated correctly. Contact support for assistance.

9. Specifications

Feature	Specification
Model Name	ZT-E20-QL
Bike Type	Electric Tricycle
Age Range	Adult
Motor	48V 500W (1000W Peak Power)
Battery	48V 14.5Ah Removable Lithium-ion (696 Watt Hours)
Charging Time	7-9 Hours
Charger	54.6V 2A
Max Speed	15.5 mph (25 km/h)
Range per Charge	30-45 miles (up to 60 miles depending on conditions)

Feature	Specification
Number of Speeds	7
Wheel Size	20 Inches (20" x 4" Fat Tires)
Frame Material	6061 Aluminum
Suspension Type	Front
Brake Style	Disc
Load Capacity	400 lbs
Assembly Required	Partial (65% Pre-assembled)



Image 9.1: Motor specifications and performance metrics.

10. Warranty and Support

MOONCOOL is committed to providing quality products and customer satisfaction.

10.1. Warranty Information

- **Frame:** Lifetime warranty on the aluminum frame.
- **Defective Parts:** 1-year warranty for defective parts.
- **Battery:** 3-year protection for the battery.

Please retain your proof of purchase for warranty claims.

10.2. Returns

Enjoy 30-day returns from the date of purchase.

10.3. Customer Support

For direct assistance, you can reach MOONCOOL U.S. Support Team:

- **Phone:** 681-412-2200 (MOONCOOL)
- **Online:** Message us directly on Amazon for order assistance.

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

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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