

## MOONCOOL E-Trike TK1

# MOONCOOL E-Trike TK1 User Manual

20-inch Folding 3-Wheel Electric Bicycle

[Safety](#)

[Overview](#)

[Setup](#)

[Operation](#)

[Maintenance](#)

[Troubleshooting](#)

[Specifications](#)

[Warranty & Support](#)

## 1. SAFETY INFORMATION

Before operating your MOONCOOL E-Trike TK1, please read and understand all safety instructions. Failure to follow these instructions may result in serious injury or damage to the product.

### General Safety Guidelines

- Always wear a certified helmet when riding.
- Familiarize yourself with local traffic laws and regulations regarding electric bicycles and tricycles.
- Perform a pre-ride inspection before each use, checking brakes, tire pressure, battery charge, and all fasteners.
- Do not exceed the maximum weight recommendation of 350 pounds.
- Exercise caution when turning, especially at higher speeds, as three-wheeled vehicles can be less stable in turns than two-wheeled bicycles. Reduce speed significantly before entering a turn.
- Avoid riding in adverse weather conditions, such as heavy rain, snow, or ice.
- Do not operate the e-trike under the influence of alcohol or drugs.
- Keep both hands on the handlebars while riding.
- Ensure the battery is securely locked in place before riding.

### Battery Safety

- Use only the charger provided by MOONCOOL.
- Do not expose the battery to extreme temperatures or direct sunlight for extended periods.
- Do not attempt to open, modify, or repair the battery pack.
- Charge the battery in a well-ventilated area, away from flammable materials.

## 2. PRODUCT OVERVIEW

The MOONCOOL E-Trike TK1 is a 20-inch folding electric tricycle designed for adults, featuring a robust aluminum frame, a powerful motor, and a removable battery for extended range and convenience.

## Key Components

- **Aluminum Frame:** Lightweight and durable 6061 aluminum construction.
- **Foldable Design:** Allows for compact storage and transport.
- **48V 500W Motor:** Provides reliable power for assistance and throttle.
- **48V 14.5Ah Removable Battery:** Offers an estimated range of up to 70 miles per charge.
- **20-inch Wheels:** Equipped with fat tires for stability and comfort.
- **Front Suspension Fork:** Enhances ride comfort by absorbing shocks.
- **Disc Brakes:** Provides reliable stopping power.
- **LCD Display:** Shows speed, battery level, pedal assist level, and mileage.
- **Front and Rear Baskets:** Offers ample storage capacity.
- **Dual LED Lights:** For improved visibility.

## Product Diagram

Below is an illustration of the MOONCOOL E-Trike TK1 with its main components labeled.



**Figure 2.1:** Overall view of the MOONCOOL E-Trike TK1, showing its main structure, LCD display, and a folded configuration.



Figure 2.2: Detailed view highlighting the front shock fork, aluminum frame, dual LED lights, and the LCD display unit.

### 3. SETUP AND INITIAL ASSEMBLY

The MOONCOOL E-Trike TK1 arrives approximately 95% pre-assembled. Follow these steps to complete the assembly and prepare for your first ride.

#### Unboxing and Inspection

1. Carefully remove the e-trike and all components from the packaging.
2. Inspect for any shipping damage. Contact customer support immediately if any damage is found.
3. Verify all parts are present according to the packing list (not provided in this manual, refer to your product packaging).

#### Assembly Steps

1. **Unfold the Frame:** Release the folding mechanism and carefully unfold the main frame until it locks into place. Ensure all quick-release levers are securely tightened.



2. **Install Handlebars:** Insert the handlebar stem into the fork tube and tighten the clamping bolts. Adjust the handlebar height and angle for comfortable riding.
3. **Install Seat Post:** Insert the seat post into the frame's seat tube. 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.
4. **Attach Pedals:** Identify the left (L) and right (R) pedals. Thread the left pedal counter-clockwise and the right pedal clockwise into the crank arms. Tighten firmly with a wrench.
5. **Install Front Basket:** Secure the front basket to the designated mounting points on the front of the e-trike using the provided hardware.
6. **Install Rear Basket:** Secure the rear basket to the rack over the rear wheels using the provided hardware.

## Battery Installation and Initial Charge

The battery is typically shipped partially charged. For optimal performance and battery longevity, fully charge the battery before its first use.



Figure 3.1: The removable 48V 14.5Ah battery, indicating a full charge time of 7-9 hours and a 3-year battery protection plan.

1. **Insert Battery:** Slide the 48V 14.5Ah removable battery into its compartment on the frame. Ensure it clicks securely into place. Use the key to lock the battery.
2. **Connect Charger:** Plug the charger into a standard wall outlet, then connect the charging cable to the battery's charging port.
3. **Charge Time:** Allow 7-9 hours for a full charge. The charger indicator light will change (e.g., from red to green) when charging is complete.
4. **Disconnect Charger:** Once fully charged, disconnect the charger from the battery and then from the wall outlet.

## 4. OPERATING INSTRUCTIONS

---

This section details how to operate your MOONCOOL E-Trike TK1, including power functions, pedal assist, and throttle use.

### Powering On/Off

- **To Power On:** Press and hold the power button on the LCD display unit. The display will illuminate.
- **To Power Off:** Press and hold the power button again until the display turns off.

### LCD Display Functions

The LCD display provides essential riding information:

- **Battery Level:** Indicates the remaining battery charge.
- **Speed:** Shows current riding speed.
- **Pedal Assist Level (PAS):** Displays the current level of motor assistance (typically 0-5).
- **Mileage:** Tracks trip distance or total odometer.

### Riding Modes: Pedal Assist and Throttle

Your e-trike offers two ways to engage the electric motor:

- **Pedal Assist System (PAS):** As you pedal, the motor provides assistance. Use the '+' and '-' buttons on the display to adjust the level of assistance. Higher levels provide more power.
- **Throttle:** The twist throttle allows you to engage the motor without pedaling. Twist the throttle gently to accelerate. Be aware that the throttle can be quite responsive; apply it gradually to maintain control.

### Folding the E-Trike

To fold your MOONCOOL E-Trike TK1 for storage or transport:

1. Ensure the e-trike is powered off.
2. Locate and release the main frame folding mechanism.
3. Carefully fold the frame until it is compact.
4. Lower the handlebar stem and seat post for maximum compactness.

# 95% PRE-ASSEMBLED & FULL SUPPORT

RECOMMENDED HEIGHT  
**5'0"-6'3"**

LOAD CAPACITY  
**450LBS**



Lifetime  
Aluminum Frame



1-YEAR FOR  
DEFECTIVE PARTS



3-YEAR PROTECTION  
FOR BATTERY



Figure 4.1: The MOONCOOL E-Trike TK1 showing its dimensions and folded state, highlighting its compact design.

## 5. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your MOONCOOL E-Trike TK1.

### Battery Care

- **Regular Charging:** Charge the battery regularly, even if the e-trike is not used frequently. Avoid letting the battery fully discharge for extended periods.
- **Storage:** If storing the e-trike for a long time, charge the battery to 50-70% and store it in a cool, dry place. Recharge every 1-2 months.
- **Cleaning:** Keep battery contacts clean and dry.

### General Cleaning

- Wipe down the frame and components with a damp cloth. Avoid using high-pressure washers directly on electrical



components.

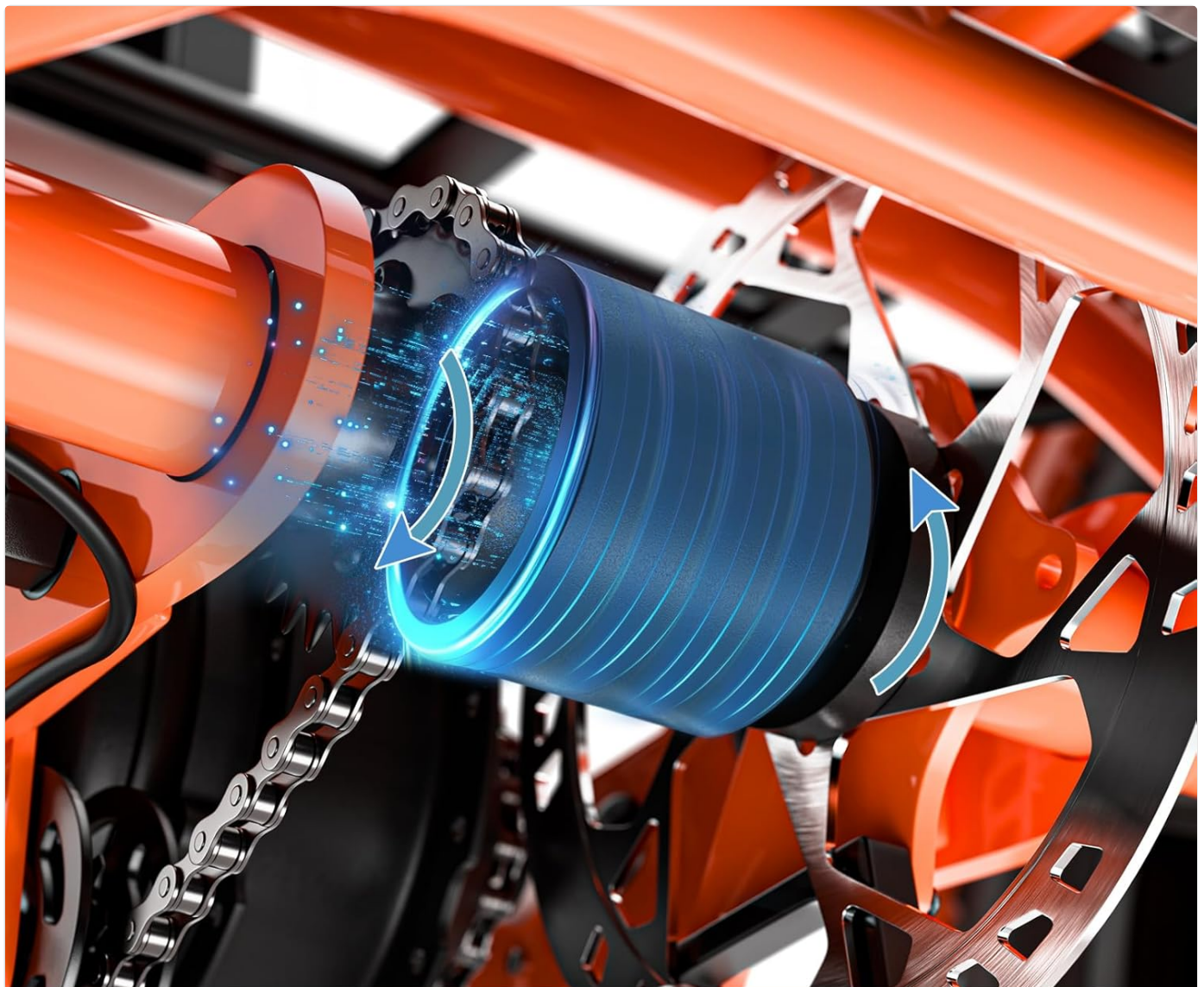
- Clean the chain and lubricate it regularly to ensure smooth operation.

## Tires and Brakes

- **Tire Pressure:** Check tire pressure before each ride and inflate to the recommended PSI (usually found on the tire sidewall).
- **Brake Inspection:** Regularly check brake levers for proper tension and ensure brake pads are not excessively worn. Adjust or replace as needed.

## Fasteners and Connections

- Periodically check all bolts, nuts, and quick-release levers to ensure they are securely tightened.
- Ensure all electrical connections are clean and free from corrosion.



# **BUILT FOR SAFETY**

Advanced differential, reinforced by aluminum frame

**Figure 5.1:** Illustration of the advanced differential system and reinforced aluminum frame, contributing to the e-trike's safety and durability.





**Figure 5.2:** Detailed view of the 500W motor, capable of 1000W peak power, providing 43Nm of torque and supporting speeds up to 16 MPH and inclines up to 35 degrees.

## 6. TROUBLESHOOTING

This section addresses common issues you might encounter with your MOONCOOL E-Trike TK1.

### Common Issues and Solutions

- **E-Trike does not power on:**
  - Ensure the battery is fully charged and securely installed.
  - Check that the battery is locked into place with the key.
  - Verify all electrical connections are firm.
- **Motor is not assisting or engaging:**
  - Check the battery charge level on the LCD display.



- Ensure the pedal assist level (PAS) is set above '0'.
- If using the throttle, ensure it is twisted gradually and not stuck.
- Confirm all motor cables are securely connected.

- **Brakes feel weak or make noise:**

- Inspect brake pads for wear and replace if necessary.
- Check brake cable tension and adjust if levers feel too loose or too tight.
- Clean brake rotors if they are contaminated with oil or dirt.

- **Unusual noises during operation:**

- Check for loose components or fasteners.
- Inspect the chain for proper lubrication and tension.
- If the noise persists or is severe, discontinue use and contact customer support.

For issues not covered here, please refer to the [Warranty and Support](#) section for contact information.

## 7. SPECIFICATIONS

---

Model Name	E-Trike TK1 (P1600161-TK120432OR)
Bike Type	Electric Bike / Tricycle
Age Range	Adult
Brand	MOONCOOL
Motor	48V 500W Helical Motor (1000W Peak Power)
Battery	48V 14.5Ah Removable Lithium Battery (696 Watt Hours)
Estimated Range	Up to 70 miles per charge (depending on conditions)
Frame Material	6061 Aluminum
Wheel Size	20 Inches
Suspension Type	Front
Brake Style	Disc Brakes
Number of Speeds	1 (with multiple pedal assist levels)
Maximum Weight Recommendation	350 Pounds
Recommended Rider Height	5'0" - 6'3"
Special Features	Foldable, Removable Battery, Front & Rear Baskets, LCD Display, Dual LED Lights
Assembly Required	No (95% pre-assembled)

## 8. WARRANTY AND SUPPORT

---

MOONCOOL is committed to providing quality products and customer satisfaction.

# Warranty Information

- **Lifetime Warranty:** Aluminum Frame
- **3-Year Warranty:** Battery Pack
- **1-Year Warranty:** Defective Parts

This warranty covers manufacturing defects and faulty components. It does not cover damage due to misuse, accidents, or normal wear and tear. Please retain your proof of purchase for warranty claims.

# Customer Support

For technical assistance, warranty claims, or any questions regarding your MOONCOOL E-Trike TK1 , please contact our customer support team. Refer to your product packaging or the MOONCOOL official website for the most current contact information. When contacting support, please have your model name (E-Trike TK1) and purchase details ready to expedite service.

