

Fafrees Fafrees F20 Mate

Fafrees F20 Mate Tricycle User Manual

Model: F20 Mate

1. IMPORTANT SAFETY INFORMATION

Your safety is paramount. Please read and understand all instructions before operating the Fafrees F20 Mate Tricycle.

- This F20 Mate E-Bike tricycle meets all EU road standards and has a valid COC (Certificate of Conformity). After registration, it is recommended to use it on frequented paths in accordance with local regulations.
- Always wear a certified helmet for maximum safety and comfort.
- Familiarize yourself with the triple braking system before riding, especially when carrying heavy loads.
- Ensure all lights, turn signals, and the horn are functional before each ride.

Complete Safety Gear

Day & Night



Figure 1: Complete Safety Gear Overview

The F20 Mate is equipped with integrated LED headlights, front and rear turn signals, an electric horn, a taillight with brake light function, rearview mirrors, and reflectors to ensure 24-hour safety and visibility.

2. PRODUCT OVERVIEW AND FEATURES

The Fafrees F20 Mate is a robust and versatile electric tricycle designed for comfort and performance. Key features include:

2.1 Enhanced Durability and Stability

The F20 Mate features a reinforced frame and handlebars, significantly improving its durability and stability, especially when carrying heavy loads. This upgrade ensures a more secure and reliable riding experience.

2.2 Powerful Brushless Motor

At the core of the F20 Mate is a powerful 500W rear hub motor, providing smooth and instant acceleration even under full load. With a maximum speed of 30 km/h and 65 Nm of torque, you will experience powerful assistance with every pedal

stroke.

2.3 Long-Range Battery

The high-performance 48V 21Ah / 1008Wh battery allows for up to 115 km of pedal assistance per charge, depending on the riding mode. The improved fast charging system reduces charging time to just 7-8 hours.

2.4 Smart Full-Screen LCD Display

Monitor all important data clearly on the Full HD touchscreen display. This includes real-time speed, battery level, turn signal status, error codes, cruise control, and 5 levels of pedal assistance.



Figure 2: Full-Screen LCD Display

2.5 High-Quality Aluminum Alloy Differential

The lightweight aluminum differential ensures precise turning and optimal weight distribution on uneven surfaces. With a lifespan of over 50,000 km, it effectively prevents tilting and sliding, crucial for safe load management.

Aluminum Alloy Differential

Smoother & Safer Turns

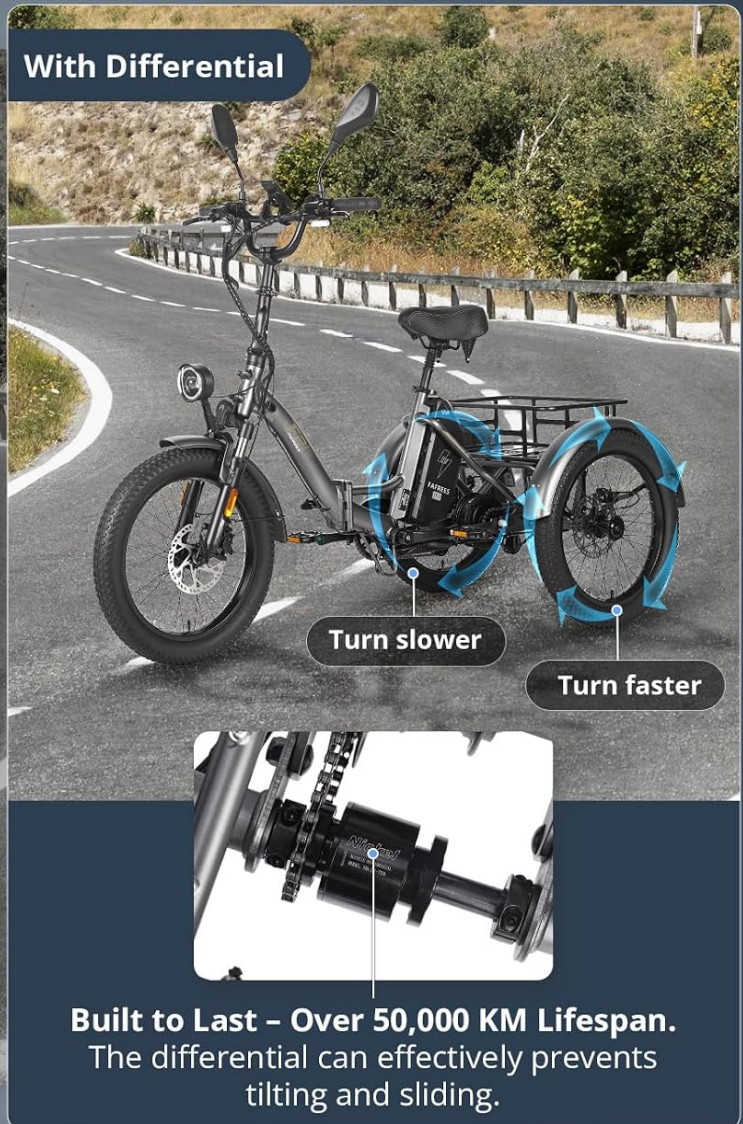


Figure 3: Aluminum Alloy Differential for Smoother Turns

2.6 Triple Braking System with Parking Function

The F20 Mate combines hydraulic disc brakes on both front and rear wheels with separate parking brake levers. This premium setup reduces braking distance by 30%, provides precise braking performance in all weather conditions, and prevents unwanted rolling with the lockable parking brake.

Triple Braking System

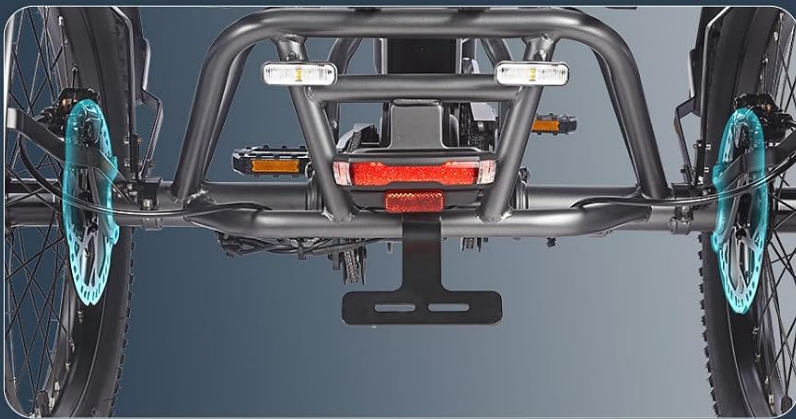
Unmatched Stopping Power



Parking Brake Lever

Stay Put on Any Slope, No More Rolling Away

Hydraulic Disc Brakes
30% Shorter Braking Distance



**180mm/2.3T
Rotors**

Figure 4: Triple Braking System

2.7 Triple Damping Comfort

Experience fatigue-free riding on all surfaces thanks to the adjustable suspension fork, spring seat post, and orthopedic leather saddle system, which optimally absorb shocks.

Triple Suspension System

More Comfort, Less Shock.



Figure 5: Triple Suspension System

2.8 All-Terrain Fat Tires

Special 20 x 3.0-inch tires offer 50% higher puncture resistance and a 30% larger contact area, ensuring superior traction and control on asphalt, forest paths, and other varied terrains.

All-Terrain Tires

Stable on Any Road.



Figure 6: All-Terrain Tires for Stable Riding

2.9 Accessible and Comfortable Design

The F20 Mate features a step-thru frame for easy on and off, making it accessible for riders of all ages. Its foldable design allows for convenient storage in limited spaces.

Accessible & Comfortable for Every Rider

Designed for All Ages.



Figure 7: Accessible Design and Foldable Feature

3. SETUP AND ASSEMBLY

The Fafrees F20 Mate Tricycle requires some assembly upon arrival. Please ensure all components are present before beginning assembly.

3.1 Included Components

Your F20 Mate package should contain the following items:

- 1 x F20 Mate Electric Bike
- 1 x Charger
- 1 x User Manual
- 2 x Pedals
- 2 x Rearview Mirrors
- 1 x Gift Box (includes 2 brake pads, 1 inner tube, 2 valve caps, 2 reflectors, 1 multi-tool, 1 13/15 wrench, and 1

keychain)

- Assembly Tool (included in gift box)

Refer to the detailed assembly instructions provided in the included user manual for step-by-step guidance. Ensure all bolts and fasteners are securely tightened before your first ride.



Figure 8: Fafrees F20 Mate Tricycle and Included Accessories

4. OPERATING INSTRUCTIONS

4.1 Riding Modes

The F20 Mate offers three riding modes:

- **Human Mode:** Ride like a traditional bicycle, using only pedal power.
- **Assisted Mode (PAS):** The motor provides assistance as you pedal. There are 5 levels of pedal assistance (PAS) that can be selected via the LCD display.
- **Pure Electric Mode:** Use the throttle for motor power without pedaling.

4.2 LCD Display Operation

The full-screen LCD display provides real-time information and allows you to control various functions:

- **Power On/Off:** Press and hold the power button to turn the display and bike on or off.
- **PAS Level Adjustment:** Use the '+' and '-' buttons to cycle through the 5 pedal assistance levels.
- **Information Display:** View current speed, battery level, trip distance, total odometer, and error codes.
- **Turn Signals & Hazard Lights:** Activate left/right turn signals and hazard lights via dedicated controls on the handlebars.
- **Cruise Control:** Engage cruise control for consistent speed on flat terrain.

4.3 Braking

The F20 Mate is equipped with a triple hydraulic disc braking system. Apply both front and rear brakes simultaneously for optimal stopping power. Use the parking brake lever to secure the tricycle when stationary, especially on inclines.

4.4 Turning with Differential

The integrated aluminum alloy differential allows for precise and smooth turning. When turning, the differential distributes power optimally between the rear wheels, preventing tilting and ensuring stability.

5. MAINTENANCE

5.1 Battery Care and Charging

To maximize battery life:

- Charge the battery fully before first use.
- Use only the provided Fafrees charger.
- Charging time is approximately 7-8 hours for a full charge.
- Avoid completely draining the battery before recharging.
- Store the battery in a cool, dry place when not in use, and charge it periodically if stored for long periods.

5.2 General Maintenance

- Regularly check tire pressure (20 x 3.0 inches).
- Inspect brake pads and rotors for wear. Replace brake pads as needed (two spare pads included).
- Keep the chain clean and lubricated.
- Check all bolts and fasteners periodically to ensure they are tight.
- Clean the tricycle with a damp cloth. Avoid high-pressure washing directly on electrical components.
- The differential is designed for over 50,000 km lifespan and requires minimal maintenance.

6. TROUBLESHOOTING

6.1 Common Issues and Solutions

If you encounter any issues with your Fafrees F20 Mate Tricycle, please refer to the following guidance:

- **What to do if there is a problem with the bike?**

Please provide a precise description of your problem. If photos or videos are available, it would be preferable for our engineers to offer an effective solution within two working days. You can send us the video link as a photo, as Amazon does not allow sending videos directly.

- **Display Not Turning On:** Check battery connection and ensure the battery is charged.
- **Motor Not Assisting:** Ensure PAS level is not set to 0. Check for error codes on the display.
- **Brakes Squealing:** Clean rotors and pads. If persistent, brake pads may need replacement or adjustment.

7. SPECIFICATIONS

Feature	Specification
Model	F20 Mate
Unfolded Dimensions	174 x 74 x 116 cm
Folded Dimensions	100 x 74 x 82 cm
Adjustable Handlebar Height	109-116 cm
Adjustable Seat Height	82-106 cm
Tire Dimensions	20 x 3.0 inches
Rear Basket Dimensions	48 x 36 x 16 cm
Pedal Ground Clearance	9 cm
Recommended Riding Height	160-200 cm
Net Weight	43 kg
Battery Weight	3.4 kg
Maximum Load	180 kg
Frame Material	Aluminum Alloy
Battery Capacity	48V 21Ah / 1008Wh
Range (Assisted Mode)	65-115 km
Charging Time	7-8 hours
Motor Power	500W
Motor Torque	65 N.m
Max Incline	15°
Motor Location	Rear Traction
Fork Type	Suspension Fork (35mm travel)
Rear Shock Absorber	Seat Shock Absorber Tube
Display Type	LCD Screen

Feature	Specification
PAS Levels	0-5
Brake Type	Hydraulic Disc Brakes
Foldable Parts	Frame, Handlebars
Lights & Cruise Control	Headlight, Taillight, Cruise Control (Yes)
Riding Modes	Human, Assisted, Pure Electric
Waterproof Rating	IPX5



Figure 9: Size and Fit Diagram

8. WARRANTY AND SUPPORT

Fafrees is committed to providing professional customer service. If you have any questions or require assistance with your F20 Mate Tricycle, please do not hesitate to contact us. We aim to respond to all inquiries within 24 hours and provide effective solutions within 2 working days.

For support, please refer to the contact information provided in your purchase documentation or visit the official Fafrees website.

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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