

Fafrees Fafrees F20 Mate

Fafrees F20 Mate Folding 3-Wheel Electric Bicycle User Manual

Model: F20 Mate | Brand: Fafrees

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your Fafrees F20 Mate Folding 3-Wheel Electric Bicycle. Please read this manual thoroughly before using the product to ensure proper assembly and usage.

The Fafrees F20 Mate is an electric cargo tricycle designed for stability and convenience, featuring a powerful motor, long-range battery, and hydraulic disc brakes for a secure riding experience.

2. SAFETY INSTRUCTIONS

- Always wear a helmet and appropriate safety gear when riding.
- Familiarize yourself with local traffic laws and regulations.
- Perform a pre-ride inspection before each use, checking brakes, tires, and battery level.
- Do not exceed the maximum load capacity of 180 kg (rider + cargo). Front basket max: 20 kg, Rear basket max: 45 kg.
- Avoid riding in extreme weather conditions or on slippery surfaces.
- Ensure the folding mechanisms are securely locked before riding.
- Keep hands and feet clear of moving parts.

3. PRODUCT OVERVIEW

3.1 Key Components

- **Frame:** Aluminum alloy folding frame.
- **Motor:** Rear hub motor with differential, 65 N.m max torque.
- **Battery:** Removable 48V 18.2Ah (873.6 Wh) Lithium-ion battery.
- **Brakes:** Hydraulic disc brakes (180mm/2.3T brake discs).
- **Tires:** 20 x 3.0 inch pneumatic fat tires.
- **Display:** Full-screen LCD display.
- **Suspension:** Front shock-absorbing fork (35mm travel) and rear seat tube shock absorber (15mm travel).
- **Lighting:** Headlight, taillight, front and rear turn signals, reflectors.
- **Accessories:** Rear basket (48 x 36 x 16 cm), electric horn, rearview mirrors.

3.2 Dimensions and Weight

Measurement	Value
Unfolded Dimensions (L x W x H)	174 x 74 x 116 cm
Folded Dimensions (L x W x H)	100 x 74 x 82 cm
Adjustable Handlebar Height	98-116 cm
Adjustable Seat Height	82-106 cm
Tire Size	20 x 3.0 inches
Rear Basket Dimensions	48 x 36 x 16 cm
Net Weight	40 kg
Battery Weight	5 kg
Maximum Load Capacity	180 kg
Recommended Rider Height	160-200 cm

3.3 Performance Specifications

- **Max Speed:** 25 km/h
- **Max Range (Pedal Assist Mode):** 85-110 km
- **Max Range (Pure Electric Mode):** 55-75 km
- **Max Climbing Capacity:** 15°
- **Charging Time:** 6-7 hours
- **Waterproof Level:** IPX5
- **Operating Temperature:** -20°C to 40°C

4. SETUP AND ASSEMBLY

Your Fafrees F20 Mate electric tricycle comes partially assembled. Follow these steps for final assembly:

1. **Unpacking:** Carefully remove all components from the packaging. Verify all parts listed in the "Package Contents" section are present.
2. **Unfolding the Frame:** Locate the main folding latch on the frame. Release the latch and carefully unfold the frame until it locks into place. Ensure the mechanism is fully engaged and secure.
3. **Handlebar Installation:** Insert the handlebar stem into the fork tube. Adjust the height to your preference and tighten the quick-release lever or bolts securely. Ensure the handlebars are aligned with the front wheel.
4. **Seat Post Installation:** Insert the seat post into the frame's seat tube. Adjust the seat height for comfortable pedaling, ensuring your feet can touch the ground when stopped. Secure the quick-release clamp.
5. **Pedal Attachment:** Identify the left (L) and right (R) pedals. The left pedal threads counter-clockwise, and the right pedal threads clockwise. Apply a small amount of grease to the threads and tighten them firmly with a wrench.
6. **Battery Installation:** Insert the fully charged battery into its compartment. Ensure it clicks securely into place.
7. **Pre-Ride Check:** Before your first ride, double-check all bolts, quick releases, and connections. Test the brakes, lights, and horn. Ensure tires are inflated to the recommended pressure.

Note: A tool kit is included for assembly. Refer to the included user manual for detailed diagrams and instructions.



Image: The Fafrees F20 Mate electric tricycle in its unfolded state, ready for use. It features a blue frame, fat tires, a rear cargo basket, and front and rear lighting.

Größe & Passform

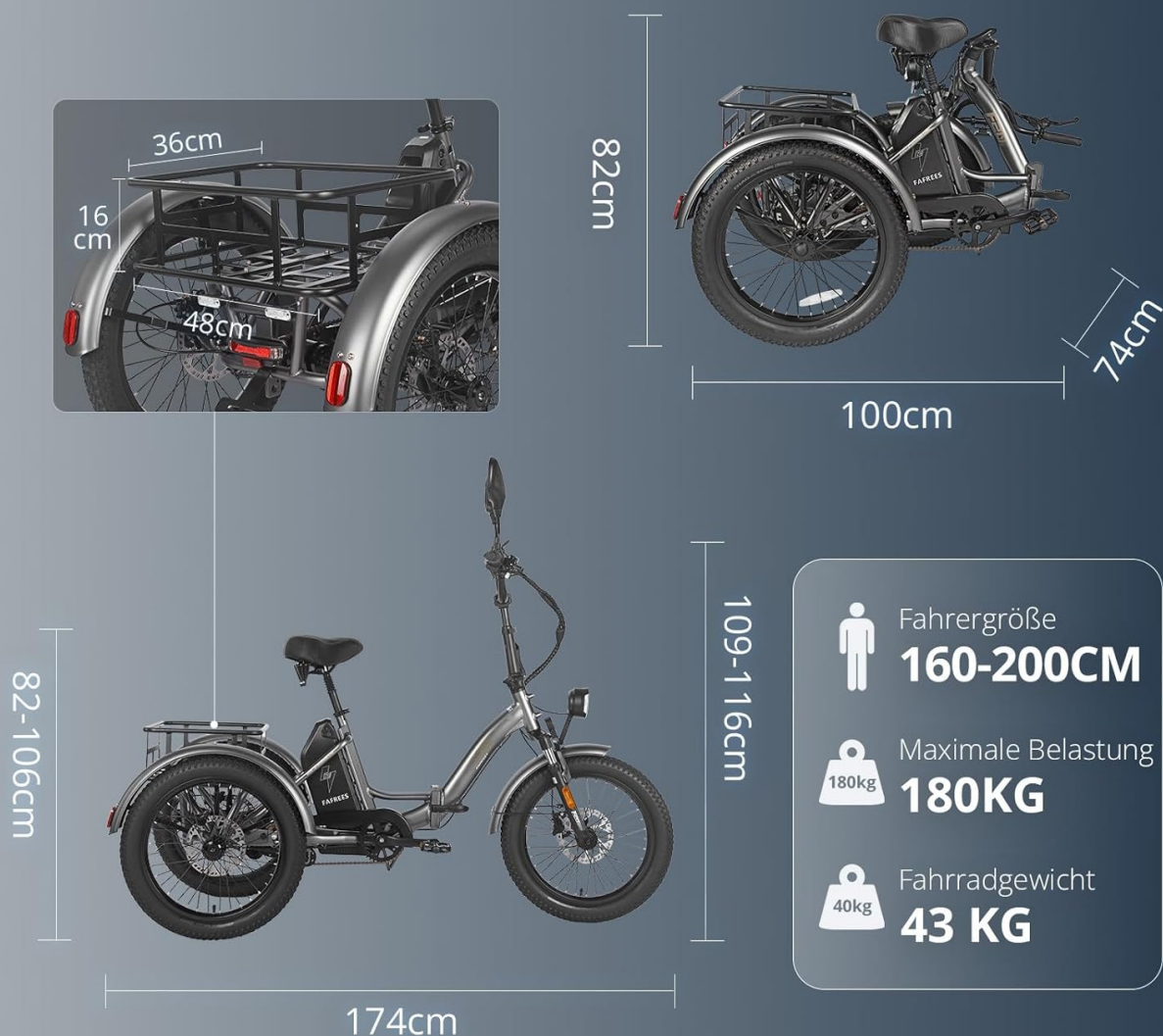


Image: A diagram illustrating the key dimensions of the Fafrees F20 Mate electric tricycle, including unfolded and folded sizes, handlebar and seat height ranges, and basket dimensions. Recommended rider height and maximum load capacity are also shown.

5. OPERATING INSTRUCTIONS

5.1 Powering On/Off

To power on the tricycle, press and hold the power button on the LCD display. To power off, press and hold the power button again until the display turns off.

5.2 Riding Modes

The F20 Mate offers three riding modes:

- **Human Mode:** Ride the tricycle like a traditional bicycle using pedal power only.
- **Pedal Assist Mode (PAS):** The motor provides assistance as you pedal. Use the '+' and '-' buttons on the display to adjust the assist level from 0 (no assist) to 5 (maximum assist). This mode offers a range of

85-110 km.

- **Pure Electric Mode:** Use the throttle to engage the motor without pedaling. This mode offers a range of 55-75 km.

5.3 LCD Display Functions

The full-screen LCD display provides real-time information:

- **Speed:** Current riding speed.
- **Battery Level:** Indicates remaining battery charge.
- **Mileage:** Displays trip distance and total odometer.
- **PAS Level:** Shows the current pedal assist level (0-5).
- **Error Codes:** Alerts for system malfunctions.
- **6 km/h Walk Mode:** Activates a low-speed assist for walking alongside the tricycle.
- **Cruise Control:** Maintains a set speed without throttle input.



Image: Close-up view of the Fafrees F20 Mate's full-screen LCD display, showing various indicators such as speed, battery level, PAS level, and error codes. The image also highlights the left and right turn signals and warning blinkers.

5.4 Braking System

The F20 Mate is equipped with hydraulic disc brakes for reliable stopping power. Both front and rear brakes are controlled by levers on the handlebars. The tricycle also features parking brake levers to secure it when stationary.



Dreifach-Bremssystem
Unvergleichliche Bremskraft

Feststellbremshebel
Sicherer Stand auf jedem Hang, kein Wegrollen mehr

Hydraulische Scheibenbremsen
30% kürzerer Bremsweg

**180mm/2,3T
Bremsscheiben**

Image: Detailed view of the hydraulic disc brake system on the Fafrees F20 Mate, showing the brake lever on the handlebar and the disc brake caliper on the wheel. The image emphasizes the 180mm/2.3T brake discs and the parking brake feature.

5.5 Safety Features

- **Headlight and Taillight:** Ensure these are on when riding in low light conditions.
- **Turn Signals:** Use front and rear turn signals to indicate your direction.
- **Reflectors:** Located on the rear fenders for enhanced visibility.
- **Electric Horn:** Use to alert pedestrians or other riders.
- **Rearview Mirrors:** Provide visibility of traffic behind you.

Dreifaches Federungssystem

Mehr Komfort, weniger Erschütterung

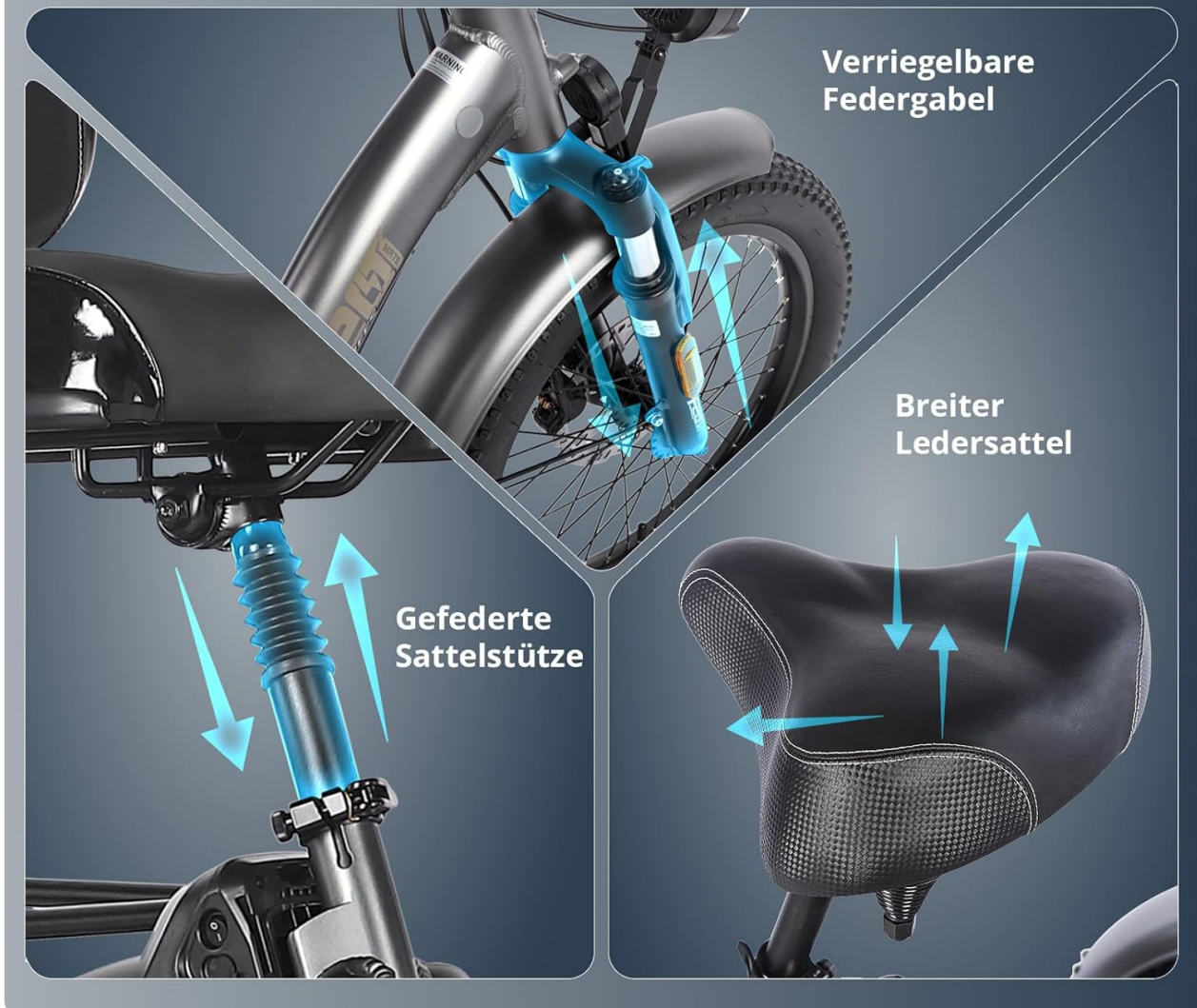


Image: An overview of the Fafrees F20 Mate highlighting its comprehensive safety features, including the headlight, taillight, front and rear turn signals, electric horn, reflectors, and rearview mirrors, designed for day and night visibility.

6. BATTERY CHARGING AND CARE

6.1 Charging the Battery

The 48V 18.2Ah lithium-ion battery can be charged on or off the tricycle. Use only the original Fafrees charger provided (Input: 180-240V, Output: 54.6V, 3A). Charging time is approximately 6-7 hours.

1. Connect the charger to the battery's charging port.
2. Plug the charger into a standard wall outlet.
3. The charger indicator light will show charging status (typically red for charging, green for fully charged).
4. Disconnect the charger once charging is complete.

48V 21Ah Li-Ionen-Akku

Mehr Kilometer, weniger Laden



Rein elektr. Reichweite 65–85KM



Tretunterstützte Reichweite 90–115KM

F20 Mate Akku

Reichweite: 65–85KM



Andere Akkus

Reichweite: 40–50KM

Batteriereichweite



Image: Illustration of the Fafrees F20 Mate's 48V 18.2Ah lithium-ion battery, showing its removable design and the charging process. The image also highlights the IPX5 waterproof rating and the 7-8 hour fast charging capability.

6.2 Battery Care

- Avoid completely draining the battery before recharging.
- 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.
- Do not expose the battery to water or moisture beyond its IPX5 rating.

7. MAINTENANCE

7.1 Regular Checks

- **Tires:** Check tire pressure regularly (20 x 3.0 inch fat tires). Ensure they are inflated to the recommended PSI for optimal performance and safety.

- **Brakes:** Inspect brake pads for wear and ensure brake levers provide firm and responsive braking. Adjust as needed.
- **Bolts and Fasteners:** Periodically check and tighten all bolts, nuts, and quick releases, especially on the folding mechanisms, handlebars, and wheels.
- **Chain:** Keep the chain clean and lubricated to ensure smooth pedaling and prevent rust.
- **Electrical Connections:** Ensure all electrical cables and connectors are secure and free from damage.

7.2 Cleaning and Storage

- Clean the tricycle with a damp cloth and mild detergent. Avoid using high-pressure washers directly on electrical components.
- Store the tricycle in a dry, sheltered area to protect it from the elements.
- When folding for storage, ensure all folding mechanisms are properly engaged.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Tricycle does not power on.	Battery not charged or not properly installed. Loose electrical connection.	Ensure battery is fully charged and securely seated. Check all visible electrical connections.
Motor not assisting or no power in pure electric mode.	Low battery. PAS level set to 0. Brake levers engaged. Motor or controller issue.	Charge battery. Increase PAS level. Ensure brake levers are fully released. Check display for error codes.
Brakes feel weak or spongy.	Worn brake pads. Air in hydraulic lines. Misaligned calipers.	Inspect and replace brake pads if worn. Bleed hydraulic brakes (professional service recommended). Adjust caliper alignment.
Unusual noises during riding.	Loose components. Dry chain. Bearing issue.	Check and tighten all fasteners. Lubricate chain. If noise persists, seek professional inspection.
Display not working correctly.	Loose cable connection. Water damage. Software glitch.	Check display cable connection. Ensure no water ingress. Try powering off and on again.

For issues not listed here or if solutions do not resolve the problem, please contact Fafrees customer support.

9. WARRANTY AND SUPPORT

9.1 Warranty Information

Fafrees provides professional customer service. While specific warranty terms are not detailed in the product description, the brand states: "If you have any questions, please do not hesitate to contact us, we will reply

within 24 hours. If you can cooperate with us, we can offer you the effective solution within 2 working days. We also have a bike workshop in Stuttgart, Germany."

Please retain your proof of purchase for any warranty claims.







9.2 Customer Support

For technical assistance, parts, or warranty inquiries, please contact Fafrees customer support through the retailer where you purchased the product or visit the official Fafrees website.

You can also visit the Fafrees store on Amazon:[Fafrees Official Store](#)

For issues requiring visual explanation, it is recommended to provide photos or video links to assist the support team.

Related Documents - Fafrees F20 Mate

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User Manual

F20 Mate Electric Tricycle



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[FAFREES F20 Mate Electric Tricycle User Manual](#)

Comprehensive user manual for the FAFREES F20 Mate electric tricycle, covering assembly, safety, operation, maintenance, specifications, and troubleshooting. Includes multilingual support.

lang:en **score:46** filesize: 8.17 M page_count: 117 document date: 2024-10-24

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Fafrees F20 Mate e Bike Tricycle 20 x 3 0 Inches 48 V 18 2 Ah Battery E Folding 65 N m Motor Wheel Ebike 25 km h Range up to 55 110 Front Basket Small Rear Blue Amazon de Sports Outdoors C1kjlU13VnL media amazon images I |||

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Please find the fra ... ero es el cdigo de identificacin nico de su bicicleta elctrica.

Vielen Dank, dass Sie sich fr das **Fafrees F20 Mate** E-Bike entschieden haben. Wir sind stolz darauf, Ihnen ein Qualittsprodukt anzubiet...

lang:de **score:34** filesize: 6.61 M page_count: 26 document date: 2024-08-29



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User Manual

(Model: F20 Max)

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