

**Fafrees F20 Mate**

# Fafrees F20 Mate Adult Electric Tricycle User Manual

Model: F20 Mate | Brand: Fafrees

## 1. INTRODUCTION AND PRODUCT OVERVIEW

The Fafrees F20 Mate is an advanced adult electric tricycle designed for comfort, safety, and utility. This updated model features significant enhancements including an increased battery capacity, improved braking system, and added safety features. Its robust aluminum alloy frame and fat tires ensure stability and durability across various terrains, while the folding design offers convenient storage and transport.

Key upgrades in the F20 Mate include:

- Upgraded from double front and rear brakes to a triple front and rear braking system.
- Battery capacity increased to 21 Ah (1008 Wh) for extended range.
- Addition of front and rear turn signals, a double turn signal function, horn, and rearview mirrors for enhanced safety.
- Other detailed modifications for E-Mark certification compliance.



This image shows the Fafrees F20 Mate electric tricycle from a front-side angle, highlighting its robust frame, 20-inch fat tires, and the integrated front and large rear cargo baskets. A chain lock is also visible in the top left corner.

## 2. SETUP AND ASSEMBLY

The Fafrees F20 Mate features a foldable frame for easier transport and storage. Some initial setup and adjustments are required before your first ride.

### 2.1 Unfolding the Tricycle

1. Carefully remove the tricycle from its packaging.
2. Unfold the main frame by releasing the folding mechanism. Ensure it locks securely into place.
3. Unfold the handlebar stem and secure it.
4. Attach the pedals by screwing them into the crank arms. Note that pedals are typically marked 'L' for left and 'R' for right.
5. Install the rearview mirrors into their designated slots on the handlebars.

## 2.2 Initial Battery Charging

Before first use, fully charge the battery. The battery is removable for convenient charging indoors.

- Locate the charging port on the battery.
- Connect the charger to the battery, then plug the charger into a standard power outlet.
- The charging indicator on the charger will show the charging status. A full charge typically takes 7-8 hours.
- Once fully charged, disconnect the charger.



This graphic provides information about the Fafrees F20 Mate's 48V 21Ah (1008 Wh) Li-ion battery. It shows the battery's capacity, typical charging time of 7-8 hours, and its impressive range of 65-115 km. The image also highlights the battery's removable design and IPX5 waterproof rating.

## 2.3 Adjustments

- **Handlebar Height:** Adjust the handlebar height (109-116 cm) to a comfortable riding position using the quick-release lever.
- **Seat Height:** Adjust the seat height (82-106 cm) to ensure your feet can comfortably reach the ground when stopped.

- **Tire Pressure:** Ensure tires are inflated to the recommended pressure for optimal performance and safety.

## 3. OPERATING THE TRICYCLE

The Fafrees F20 Mate offers multiple riding modes and advanced features for a versatile riding experience.

### 3.1 Riding Modes

- **Human Mode:** Ride the tricycle like a traditional bicycle, using pedal power only.
- **Assisted Mode (PAS):** The motor provides assistance as you pedal. The LCD display allows you to select from 5 preset PAS (Pedal Assist System) levels, controlling the amount of motor assistance.
- **Pure Electric Mode:** Use the throttle to engage the motor and ride without pedaling.

### 3.2 LCD Display Functions

The high-resolution LCD color display provides essential riding information:

- Current Speed
- Battery Level
- Mileage (Trip/Total)
- PAS Level (0-5)

### 3.3 Braking System

The F20 Mate is equipped with a triple braking system for superior stopping power and safety.

- **Hydraulic Disc Brakes:** Provide strong and consistent braking performance in various conditions.
- **Triple Rear Brakes:** Enhanced braking on the rear wheels for increased stability and control, especially when carrying loads.
- **Parking Brake Lever:** Ensures the tricycle remains stationary when parked, preventing accidental rolling.



# **Dreifach-Bremssystem**

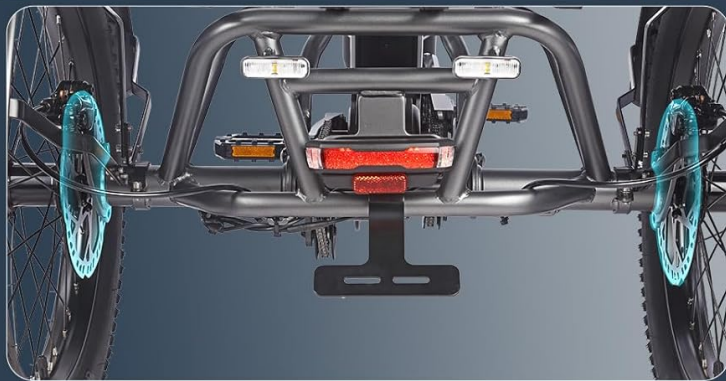
## **Unvergleichliche Bremskraft**



### **Feststellbremshebel**

Sicherer Stand auf jedem Hang, kein Wegrollen mehr

**Hydraulische Scheibenbremsen**  
**30% kürzerer Bremsweg**



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

This image illustrates the advanced triple braking system of the Fafrees F20 Mate. It highlights the hydraulic disc brakes on the front wheel and the rear wheels, along with the parking brake lever for secure stopping. The system ensures powerful and reliable braking performance.

### **3.4 Cargo Capacity and Weight Limits**

The F20 Mate is designed to carry significant loads with its front and large rear cargo baskets. Adhere to the following weight guidelines:

- Maximum rider weight: 150 kg (330 lbs)
- Maximum front basket weight: 20 kg (44 lbs)
- Maximum rear basket weight: 45 kg (99 lbs)
- Total payload (rider + cargo): Not to exceed 180 kg (397 lbs)

### **3.5 Safety Features**

- **Turn Signals:** Use the front and rear turn signals to indicate your direction to other road users.
- **Horn:** Alert pedestrians or other vehicles to your presence.
- **Rearview Mirrors:** Provide visibility of traffic behind you.
- **Headlight & Taillight:** Ensure visibility during low-light conditions.

## 4. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Fafrees F20 Mate electric tricycle.

### 4.1 Battery Care

- Charge the battery regularly, even if not in frequent use, to maintain its health.
- Avoid completely draining the battery before recharging.
- Store the battery in a cool, dry place when not in use.
- The battery has an IPX5 waterproof rating, but avoid submerging it in water.

### 4.2 Tire Maintenance

The 20x3.0 inch fat tires are designed for durability and puncture resistance.

- Regularly check tire pressure and inflate to the recommended PSI.
- Inspect tires for any signs of wear, cuts, or punctures.



# Geländereifen

## Stabil auf jedem Untergrund



This image showcases the Fafrees F20 Mate's 20x3.0 inch fat tires, emphasizing their design for stability across diverse terrains. It highlights their puncture-resistant properties and the increased ground contact area (30% more) for superior grip on rough and uneven surfaces.

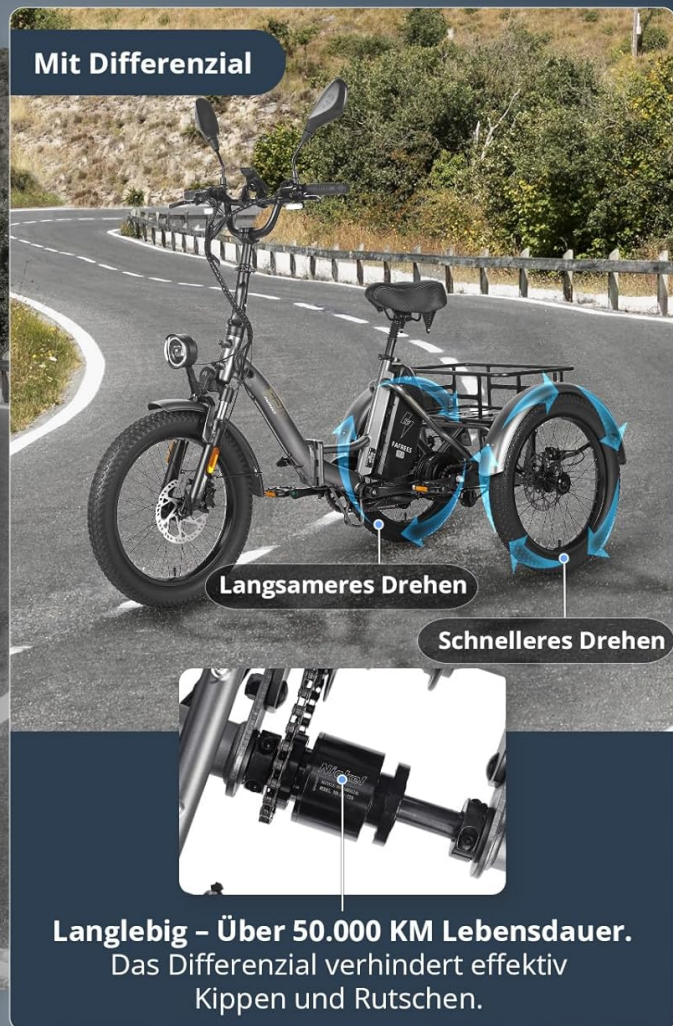
### 4.3 Differential System

The aluminum alloy differential allows independent rotation of the rear wheels, preventing slippage and wear during turns. This system is designed for a long lifespan of over 50,000 km and requires minimal maintenance.



# Aluminiumlegierungs-Differenzial

## Sanftere & sicherere Kurven



This image compares the turning performance of a tricycle with and without an aluminum alloy differential. The differential allows the rear wheels to rotate independently, preventing slippage and wear during turns, leading to smoother and safer cornering. It also notes the differential's long lifespan of over 50,000 km.

### 4.4 General Cleaning and Inspection

- Clean the tricycle regularly with a damp cloth. Avoid using high-pressure water jets directly on electrical components.
- Periodically check all bolts, nuts, and quick-release levers to ensure they are tightened securely.
- Lubricate the chain and other moving parts as needed.

## 5. TROUBLESHOOTING

This section provides general guidance for common issues. For complex problems, please contact customer support.



- **Tricycle not powering on:** Check if the battery is properly inserted and charged. Ensure all electrical connections are secure.
- **Motor not assisting:** Verify the PAS level on the LCD display. Ensure the battery has sufficient charge. Check for any error codes on the display.
- **Brakes not effective:** Inspect brake pads for wear. Check hydraulic fluid levels if applicable. Ensure brake levers are properly adjusted.
- **Unusual noises:** Inspect for loose components, rubbing parts, or issues with the drivetrain.

If you encounter any issues that cannot be resolved with these basic steps, please refer to the detailed troubleshooting guide in the full user manual or contact Fafrees customer service.

## 6. SPECIFICATIONS

Feature	Specification
Model	F20 Mate Update
Unfolded Dimensions (L x W x H)	174 x 74 x 116 cm (68.5 x 29.1 x 45.7 inches)
Folded Dimensions (L x W x H)	100 x 74 x 82 cm (39.4 x 29.1 x 32.3 inches)
Adjustable Handlebar Height	109-116 cm (42.9-45.7 inches)
Adjustable Seat Height	82-106 cm (32.3-41.7 inches)
Tire Size	20 x 3.0 inches
Rear Basket Size	48 x 36 x 16 cm (18.9 x 14.2 x 6.3 inches)
Pedal Ground Clearance	9 cm (3.5 inches)
Recommended Riding Height	160-200 cm (5'3"-6'7")
Net Weight	43 kg (94.8 lbs)
Battery Weight	3.4 kg (7.5 lbs)
Max Load Capacity	180 kg (397 lbs)
Frame Material	Aluminum Alloy
Battery Capacity	21 Ah / 1008 Wh
Range (Electric/Assisted)	65-115 km (40-71 miles)
Charging Time	7-8 hours
Max Incline	15°

Feature	Specification
Motor Location	Rear-wheel drive
Motor Torque	65 N.m
Fork Type	Suspension Fork
Fork Travel	35 mm
Rear Shock Absorber Type	Seat Shock Absorber Tube
Display	LCD Display
PAS Levels	0-5
Brake Type	Hydraulic Disc Brakes (Triple Front & Rear)
Folding Parts	Foldable Frame, Handlebar
Lights / Cruise Control	Headlight, Taillight, Cruise Control (Yes)
Driving Modes	Human, Assisted, Pure Electric
Waterproof Rating	IPX5

# ***Dreifaches Federungssystem***

***Mehr Komfort, weniger Erschütterung***



This image details the triple suspension system designed for enhanced comfort. It shows the lockable front suspension fork and the spring-loaded seat post, which work together with the wide leather saddle to absorb shocks and provide a smoother ride.

## **7. WARRANTY AND SUPPORT**

Fafrees is committed to providing professional customer service. Your F20 Mate electric tricycle comes with dedicated support to ensure your satisfaction.

### **7.1 Customer Service**

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

Please refer to the contact information provided with your purchase documentation or visit the official Fafrees



website for support details.

## 7.2 Package Contents

Upon delivery, ensure your package contains the following items:

- 1 x F20 Mate Electric Tricycle
- 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)

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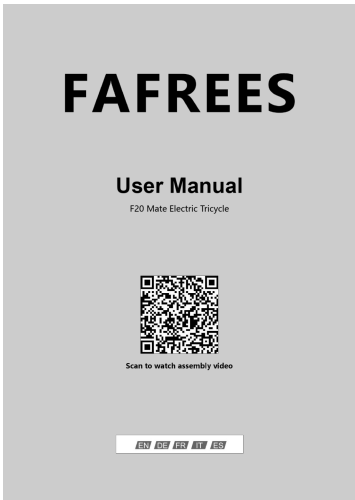
### Documents - Fafrees – F20 Mate



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

This user manual provides comprehensive instructions for the assembly, safe operation, maintenance, and troubleshooting of the FAFREES F20 Mate Electric Tricycle. It covers product specifications, battery charging, storage, and important safety guidelines to ensure a safe and enjoyable riding experience.

lang:en score:52 filesize: 1.15 M page\_count: 23 document date: 2024-11-08



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

Comprehensive user manual for the FAFREES F20 Mate Electric Tricycle, covering assembly, safe operation, maintenance, and safety guidelines. Essential reading for owners to ensure proper use and longevity of their e-tricycle.

lang:en score:43 filesize: 22.85 M page\_count: 117 document date: 2023-12-21



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

Comprehensive user manual for the FAFREES F20 Mate Electric Tricycle, covering assembly, operation, safety guidelines, maintenance, troubleshooting, and warranty information to ensure safe and optimal use.

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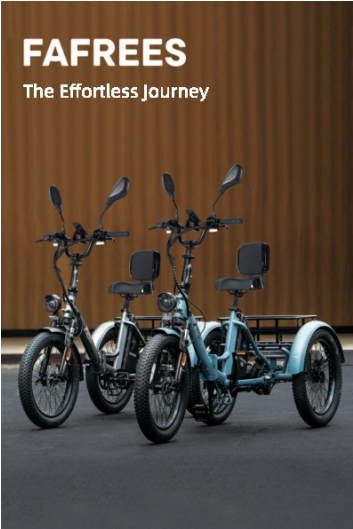


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# FAFREES

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F20 Mate Electric Tricycle



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EVERY BODY GOES AWAY HAPPY

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