

24 inch Electric Bicycle User Manual

Model: CS20

TOM  FREE

Activate Warranty



1. Open camera app
2. Scan the QR code
3. Fill in the form

Official website: tomofree.com

Email: support@tomofree.com

Thanks for choosing TOMOFREE, please feel free to contact us if there are any questions.

Specification

Product size	70.9*23.6*42.9in
Packing size	59*9.8*30.3in
N.W	66lbs
G.W	80.5lbs
Max speed	20mph
Electric range	21-28 Miles
Load	≤330lbs

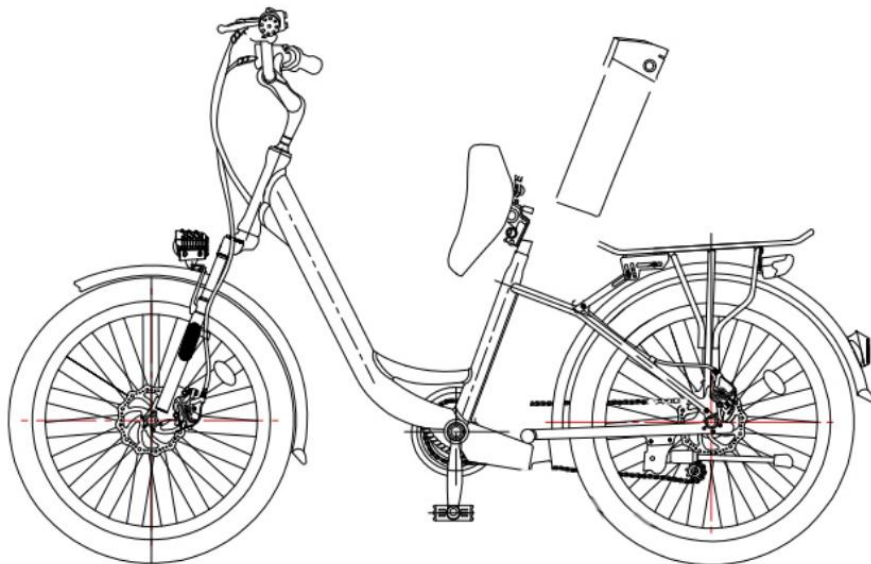
Motor type	Brushless motor
Rated power	500W
Speed class	Shimano 7-Speed
Wheel Size & Tires	24*1.95in

Battery Spec	
Battery type	Lithium ion battery
Capacity	20Ah
Voltage	48V

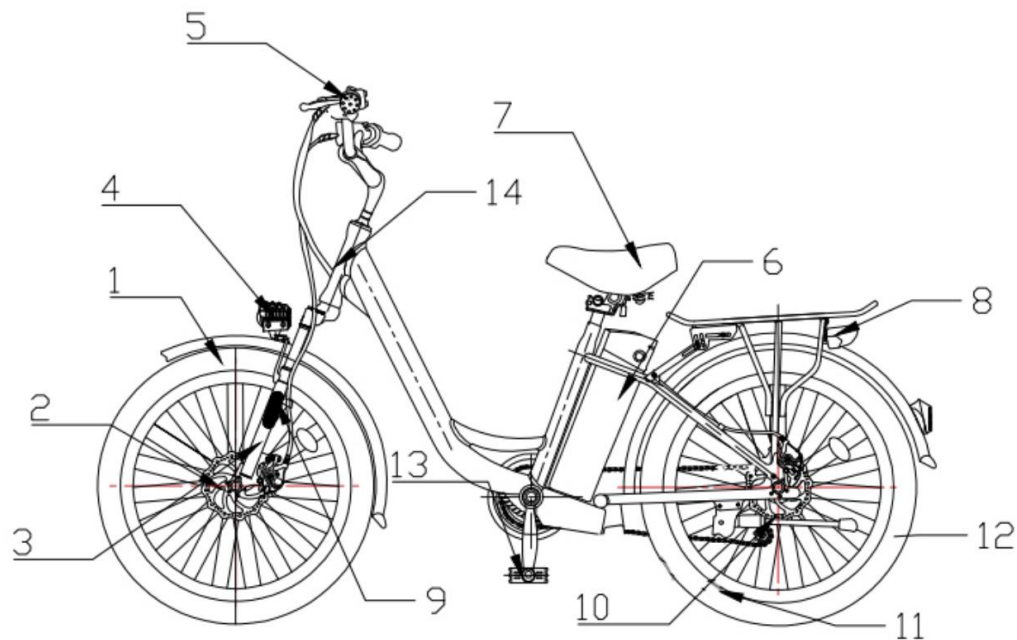
* The actual endurance will be different due to factors such as load, temperature, wind speed, road surface and operating habits.

Battery Installation:

1. Unlock and lift the saddle to the illustrated position.
2. Align the rechargeable battery and insert it into the battery slot until it reaches the bottom.
3. Place the saddle back in its original position and lock it securely.
4. Battery installation is complete.



Structure Diagram:

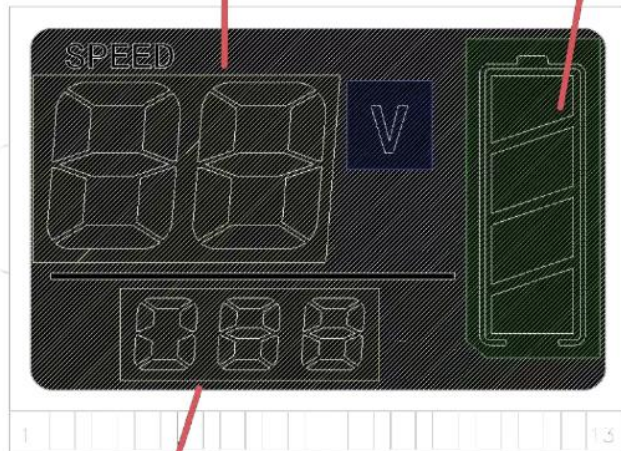


1. Front Wheel 2. Front Brake 3. Front Fork 4. Headlight 5. Handlebar 6. Battery 7. Saddle 8. Rear Light
9. Side Reflector 10. Motor 11. Kickstand 12. Rear Wheel 13. Pedal 14. Vehicle Identification Number (VIN)
Location

Dashboard

Voltage and Speed Display

Battery Level Indicator

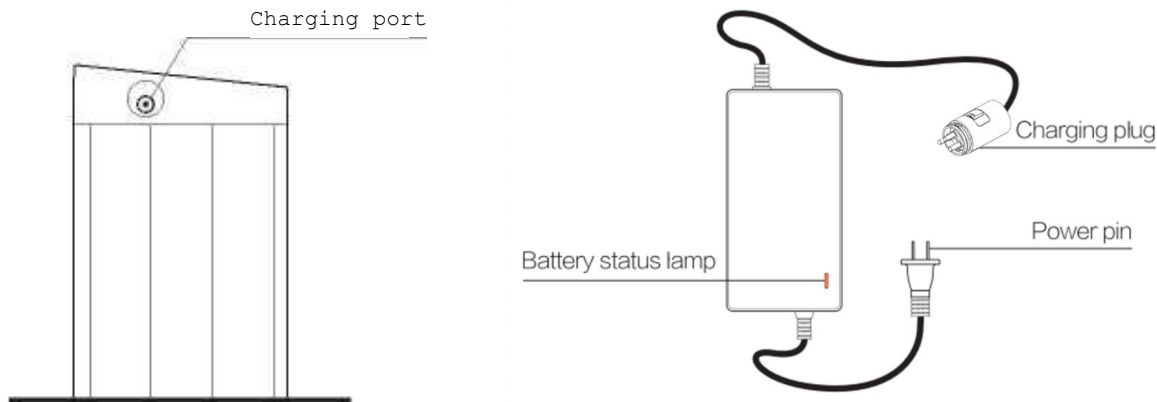


Mileage Display

Battery instructions

The battery

- The power supply pin of the charger is inserted into the charging port of the battery, and the power supply pin of the other end is connected to the power supply
- When charging, the status light of the charger is red
- When the battery is fully charged, the charger is in green and charged
- If the battery is charged in the ebike, turn off the meter



Precautions for use

Compliance with Traffic Regulations and Safety Tips:

- People under the age of 16 are prohibited from riding electric bicycles on the road.
- The maximum speed of an e-bike shall not exceed 9.3MPH in the non-motorized lane. On roads with no non-motorized lanes, you should ride on the right side of the roadway.
- Do not lend the electric bicycle to individuals who are not authorized to operate it to prevent injuries.
- Electric bikes should transport people or goods according to laws and regulations.
- It is recommended to wear a helmet and prioritize driving safety. Do not ride with one or both hands off the handle.
- When riding in rainy and snowy weather, the braking distance will be extended. Slow down and proceed with caution. Avoid traveling in adverse weather conditions such as heavy rain.

Safety tips for electric bicycle use

- Do not park in building foyers, evacuation staircases, walkways, and exits.
- Electric bicycles should not be charged and parked in residential buildings; charging should be done away from combustible materials, and charging time should not be excessively long.
- Ensure proper use and maintenance of batteries; do not dismantle old batteries without authorization; they should be recovered by relevant professional departments.
- Understand the safe use of the charger and warning language; when replacing the charger, it should match the model of the battery.
- Avoid flushing with water to prevent potential accidents caused by wetting internal electronic parts and wiring.
- When adjusting handlebars or saddles, be careful not to expose the safety line marks of the risers and saddles.

Prepare before riding

- Ensure the power supply circuit is functioning properly, and the lighting is in good condition.
- Verify that both the front and rear brakes are operating normally.
- Check if the handlebars and front and rear wheels are securely tightened.
- Confirm that the tire pressure is within the normal range.
- Before cycling, inspect the reflector for any contamination or obstructions.

The battery

Instructions before use of lithium battery

- Before use, confirm that the battery model is the original battery; do not use other-brand batteries.
- Check the appearance of the lithium battery to ensure it is in good condition, with no obvious issues such as damage, liquid leakage, hot spots, or smoke.
- To ensure the safety of transportation, the battery power in the battery plant is approximately 30%. Due to power consumption during transportation and storage, the battery power may be low or depleted during the first use. This is a normal occurrence, so please do not worry.
- Please charge the battery for 24 hours after the first use, especially after purchase or long-term storage.

Using environment

- The optimal usage environment is 10-45°C.
- In low temperatures, the available capacity of the lithium battery will experience varying degrees of attenuation. The specific reference values are as follows:

The available capacity at -10°C is approximately 70%. At 0°C, it is 85%. At 25°C, it is 100%.

If the battery exhibits odor, heat, deformation, or any other abnormal conditions, please immediately cease usage, distance yourself from the battery, and contact the after-sales department.

Warning

The battery is not a component that can be repaired by users. If any abnormal phenomena occur, please contact the after-sales department for maintenance. Unauthorized dismantling of the battery will void the three-pack policy and may result in battery heating, smoking, fire, or explosion.

Charging environment

- Use the battery to support the original factory charger manufacturing line charge; do not use other brands or models of chargers.
- Charge the battery at 0-40°C to ensure that there are no flammable substances around and to maintain good ventilation.
- Charging time description: The battery should not be charged for more than 12 hours. Excessive charging will affect battery life and pose safety risks.
- The battery quantity of the charger rises quickly in the early stage and slows down in the later stage. This is the procedure set for charging safety and is normal.
- Outdoor charging is strictly prohibited in bad weather.
- During the charging process, if the surface temperature of the battery box is found to be very high (higher than 55°C), it indicates that the battery pack is in trouble. Cut off the power supply immediately and send it to the designated repair station for maintenance. It is normal for the surface of the charger box to be slightly heated (no more than 60°C) during the charging process.

Storage environment

- After the battery is placed in the e-bike, it will slowly consume the battery power due to the e-bike's operation. The e-bike can be kept for up to two months. The meter shows that the battery power drops normally.
- When the battery is not used for a long period (more than one month), please be sure to remove it from the e-bike and charge the battery to a half-full and full state (after discharging the battery, use the charger for 1.5-2 hours). Then, store it in a cool and dry room (the ideal temperature is 5°C-25°C) and charge it for 1 hour every three months.
- Batteries and chargers should be stored in a clean, dry, ventilated place, away from contact with corrosive substances, fire, and heat sources (must be at least 2 meters away). Keep them away from flammable substances, and disconnect the charger from the battery.
- The most suitable storage capacity for the battery is 50%. If the battery is below 10% or above 90%, long-term storage will lead to irreversible capacity degradation of the battery.
- Avoid placing the battery in a risky location where a drop could cause uncontrollable damage to the battery, leading to leakage, heat, smoke, fire, or explosion.

Maintenance and repair

Maintenance and cleaning instructions

- Do not flush with water to avoid potential accidents caused by the wetting of internal electronic parts and wiring.
- Please use a neutral cleaner; gently wipe the dirt on the surface of paint or plastic parts with a cloth, and then wipe it clean with a dry cloth.
- Use lubricating oil to clean the metal parts of the e-bike body for maintenance.
- Avoid oiling the brake parts to prevent brake failure and danger.

Regular inspection

- Check whether the fasteners are securely tightened and whether the joints in each part are normal.
- Examine the tread pattern of the outer tire for wear and cracks, verify the appropriate air pressure in the front and rear tires, and ensure the driving system is smooth.
- Ensure the brake system is working normally.

E-bike storage method

- When the product is not used for an extended period, avoid storing it in outdoor environments, bright light, or environments below zero for a long time. Keep the distance from heat sources (heating equipment, etc.) at least 2 meters.
- Store in a dry, clean, well-ventilated indoor environment with a temperature between 10 and 45°C and a relative humidity no higher than 90%.
- If you do not use the e-bike for a long time, pay attention to regular belt charging (generally about every two months) to maintain battery performance.
- This product should not come into contact with corrosive liquids to avoid any mechanical impact and pressure.

Trouble shooting

Issue	Reason	Solution way
Turn on the power No power	■ No power supply for ebikes	■ Whether the power supply is loose or not, and whether the power switch is on or not ■ Battery under voltage, charge the battery
Turn on the power and twist the handle Motor does not start	■ In the braking state ■ Start switch fault	■ Whether the brake handle is in the braking state ■ Contact the after-sales
Insufficient range	■ The battery is undercharged ■ Tire pressure is low ■ Frequent braking ■ Battery aging or normal attenuation ■ Low ambient temperature, battery capacity attenuation	■ Check the charger for any damage ■ Check the tire pressure before each use ■ Develop good driving habits ■ Change the battery ■ It is normal
The battery won't charge	■ The charger is not plugged in properly ■ Battery temperature site ■ Battery temperature is too high ■ Battery under voltage	■ Check whether the power plug is loose ■ Wait for the battery to resume charging temperature ■ Wait for the battery to resume charging temperature ■ Contact customer service

warranty of the electric bicycle is as follows

Product object name	warranty time	warranty scope
battery	12months	The battery shall be guaranteed for a year from the date of receiving the item. The total capacity of the battery shall not be lower than 50% of the original capacity within a year. If the battery is lower than 50%, it can be replaced or maintained free of charge within a year.
Motor	12months	Factory after-sales judgment is a quality problem
controller		
frame		
front fork		
handlebar		
charger		
tires	/	Wearing parts are not covered by the warranty
clay panels		
seat cushion		
switches		
headlinghts		
reflectors		

Warranty Disclaimer

Please note that the following occasions are not covered by the warranty services, and you will be responsible for the cost of maintenance and related services:

1. Recorded mileage is more than 2000 km.
2. Any damage caused by not complying with the instructions or requirements for installing or using the e-bike.
3. Loss or alteration of the e-bike serial number.
4. Damage resulting from accidental factors or improper use, such as mechanical damage, breakage, impact causing serious product oxidation, etc.
5. Damage caused by overload, riding over obstacles (including, but not limited to, bottom steps, drops, etc.), and extreme movements.
6. Damage caused by fire, liquid soaking, freezing, earthquakes, and other non-normal storage conditions or negligence.
7. Loss of wear and tear accessories, including packaging materials and various types of technical materials.
8. Failure or damage caused by other non-productive design technology manufacturing, quality, and other problems.
9. Non-product quality problems, such as dissatisfaction with the color, shape, or appearance after purchase.
10. Lack of order information.

