Electric bicycle instruction manual

Use safety tips

Dear users, for your safety and to prevent safety accidents, please be sure to read and follow the following tips:

一、When using electric bicycles, traffic laws should be observed, and driving safety should be paid attention to.

（1）It is strictly forbidden for people under the age of 16 to drive electric bicycles on the road;

（2）Electric bicycles should drive in non-motorized lanes, and the maximum speed should not exceed 15km/h;

On roads without non-motorized lanes, you should drive on the right side of the roadway;

（3）Do not lend electric bicycles to people who cannot maneuver to drive to avoid injury;

（4）Electric bicycles shall carry people or items in accordance with laws and regulations;

（5）It is recommended to wear a helmet while riding;

（6）Riding in rain and snow, the braking distance will be extended, pay attention to slow down; Heavy rain and other bad weather, try to avoid travel.

二、Please note that electric bicycles are safe to use.

（1）Electric bicycles should not be parked in building foyers, evacuation stairs, walkways and safety exits;

（2）Electric bicycles should not be charged and parked in residential buildings, and should be kept away from combustible materials when charging, and the charging time should not be too long;

（3）The correct use and maintenance of the battery;

- Please charge the battery for 24 hours for the first time after purchase or long-term storage, and for normal use, charge it every two months for 24 hours;
- It is strictly forbidden to short-circuit the positive and negative electrodes of the input and output terminals of the battery pack;
- Keep away from children, away from fire, heat sources, and it is strictly forbidden to throw the battery pack into the fire;
- Violent vibration, shock and extrusion of the battery are strictly prohibited;
- Pay attention to waterproofing and prevent the battery pack from encountering water and flooding;
- The battery pack should be charged with use, and when not used for a long time, be sure to remove it from the vehicle for storage;
- The battery pack should be stored in a clean, dry and ventilated place, should avoid contact with corrosive substances, and stay away from fire and heat sources;
- Battery pack storage conditions: ambient temperature -20~35 °C; Ambient humidity≤ 65%RH.

Danger: Waste batteries should not be disassembled without authorization, and waste batteries should not be discarded at will, so as not to pollute the environment; The waste battery of this product shall be recycled by the enterprise, distributors, and government-designated outlets.

(4) Safe use of the charger;

- It is strictly forbidden to place any items on the charger;
- It is strictly forbidden to put any liquid or metal objects into the charger;
- It is strictly forbidden to disassemble and modify the charger;
- When charging, first insert the output end of the charger into the charging port of the battery pack, and then insert the AC power plug of the charger into the power outlet;
- It is strictly forbidden to plug and unplug the power plug with wet hands;
- Do not use the charger during thunder and lightning;
- It is strictly forbidden to play with the charger and battery pack when charging, and it is strictly forbidden to charge for a long time at night and indoors;
- Do not use the charger in unstable environments, excessive fumes and dust, and excessive humidity;
- Maintain good ventilation and heat dissipation conditions when charging work, and avoid using the charger in direct sunlight;
- When the output end of the charger is not connected to the battery pack, do not connect the charger to the mains for a long time;
- During charging, the indicator light of the charger is red, and when the indicator turns green, it means that the battery pack is fully charged.

Note: The replacement charger should match the battery model; The dedicated charger provided by the company must be used, and the battery pack must not be charged with other chargers.

(5) Precautions about washing:

- When washing the car, do not directly splash water on the brake drum, motor and front and rear axles to prevent water from affecting the performance and life;
- When washing the car, do not use steam or high pressure water pipes;
- Pay special attention to the working condition of the brake after cleaning the vehicle or driving in water, after cleaning or driving in water,The braking effect may be reduced, so you should drive slowly to pay attention to safety.

(6) Handlebar and saddle adjustments (if applicable):

- When adjusting the handlebars and saddle, care should be taken not to expose the safety line marks of the stem and saddle;
- After adjusting the horizontal pipe, handle riser, saddle and saddle tube, attention should be paid to tightening, and the recommended force distance is 18N.m.

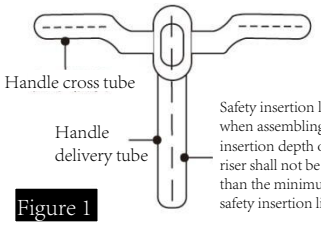


Figure 1

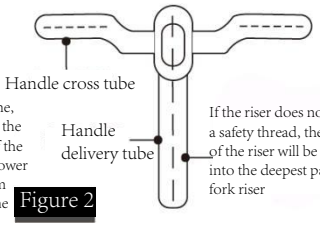


Figure 2

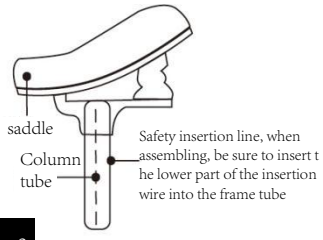


Figure 3

Precautions before riding

Dear users, for your safety and to prevent safety accidents, please do the following inspection before riding, if there is any abnormality, please repair or find a professional repair in time!

（1）Inspection of power circuit and lighting circuit:

- Check whether the power supply circuit, lighting circuit and device are damaged;
- Turn on the power, operate the lighting switch, check whether the headlight and taillight are on, and whether the brightness of the headlight and taillight is normal;
- Check the front and rear brake handles separately to check whether the brake lights are lit and whether the motor is powered off;
- Operate the turn signal switch to see if the turn indicator is working properly.

（2）Check the brake device:

- Check whether the front and rear gates can work normally; Check the braking effect of the front and rear brakes to ensure that the brakes are normal and effective;
- In the case of the vehicle double support ground and the rear wheel off the ground, ensure whether the power off switch is normal;
- Please check the fastening status of each axle to ensure that the front and rear axles and handlebars are tightened reliably。

（3）Check the fastening status of handlebars and front and rear wheels:

- Shake the handlebar up, down, front, rear, left and rear to check for loosening or bumping;
- Shake the front and rear wheels left and right to check for loosening; Whether the rotating wheel is too tight or stuck.

（4）Inspection of tires:

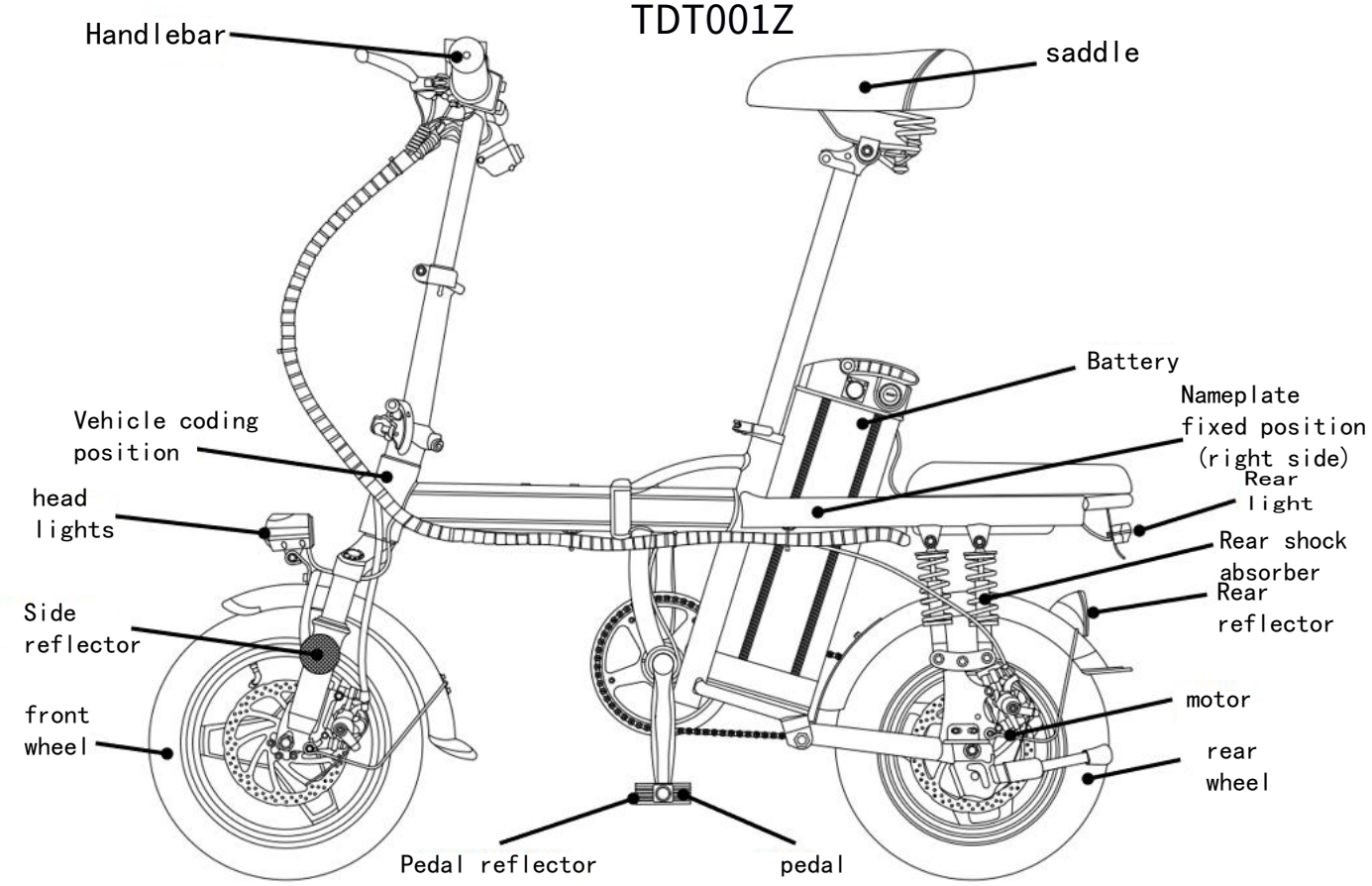
- Check that the tire pressure is normal. According to the depression of the grounded part of the tire, judge whether its air pressure is appropriate.When the air pressure is abnormal, it should be checked with a tire pressure measuring instrument and adjusted to normal air pressure;
- Whether the tire has the embedding of nails, stones and glass;
- When the tire is used to the tread wear mark, the tire should be replaced.

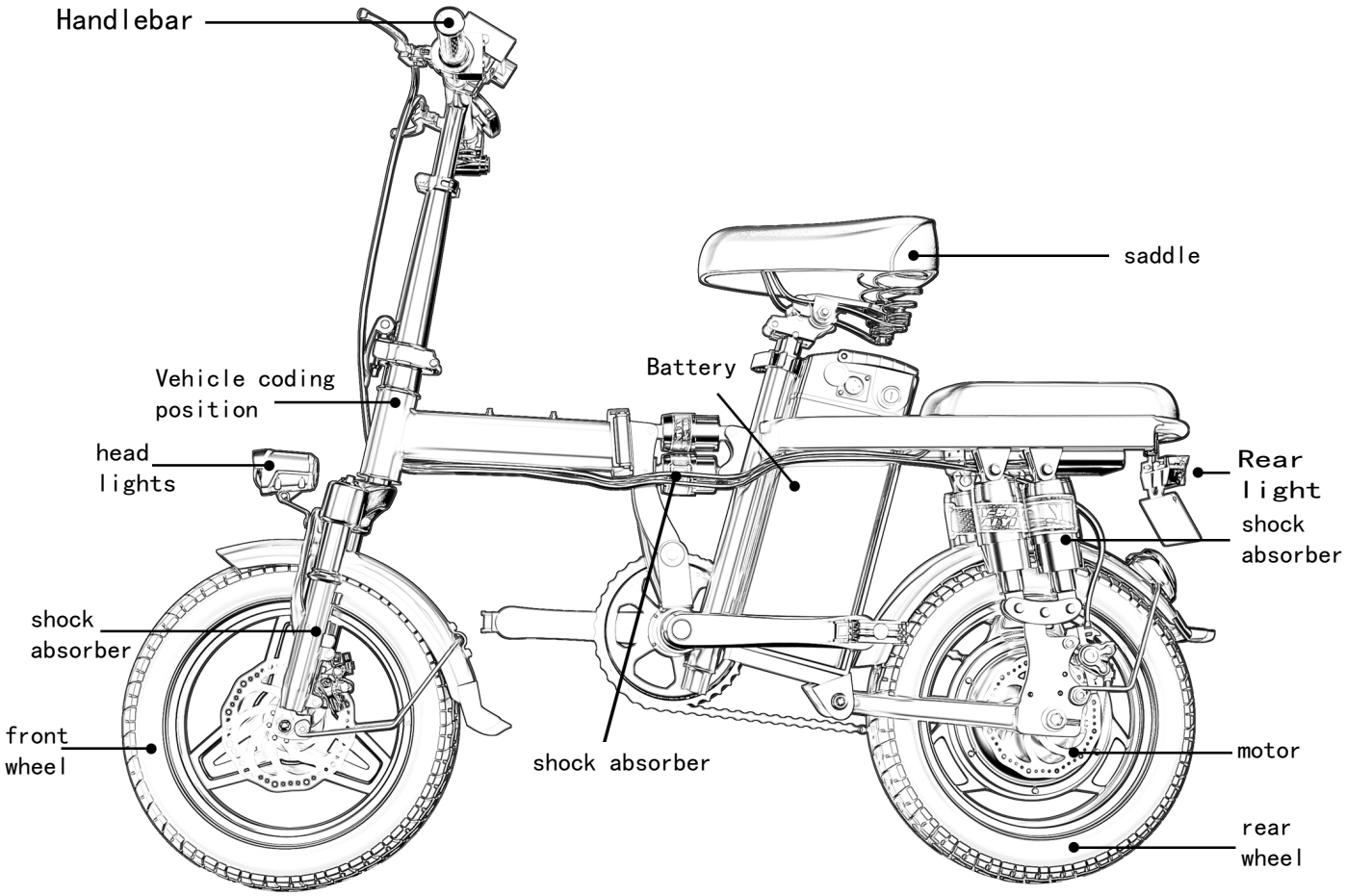
（5）Inspection of reflectors and license plates:

- Check whether the reflector is damaged or contaminated, and clean or replace it in time if any;
- Check whether the license plate is firmly installed, whether the number is clear, whether it is damaged or contaminated, and if there is any, it should be reinforced, cleaned or replaced in time.

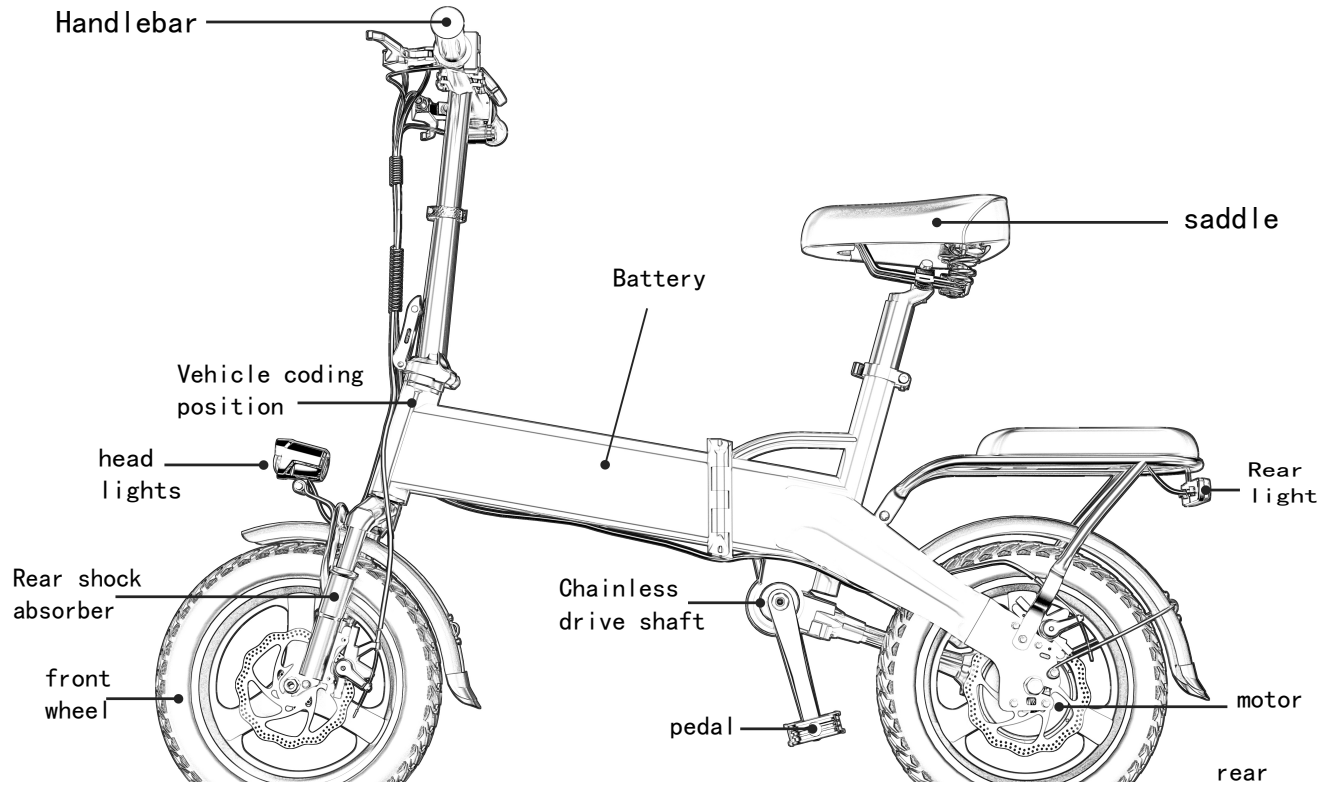
ame of electric bicycle product model and main components

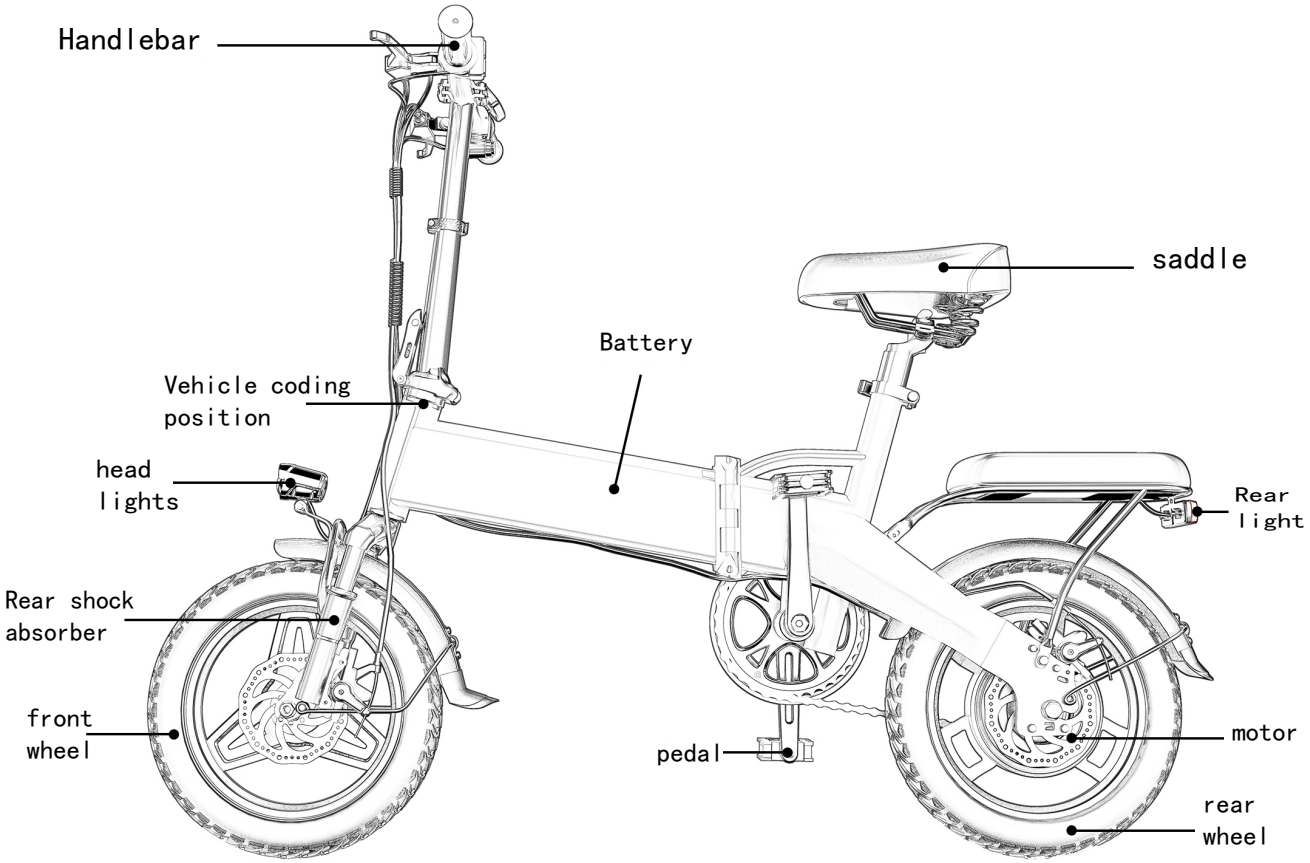
TDT001Z





Name of electric bicycle product model and main components
TDT002Z





Installation and adjustment methods for each part

一. Handlebar adjustment (see Figure 1) (if applicable)

1. Loosen the core screw (1) and adjust the speed handlebar to an appropriate height (the safety scale line shall not be exposed outside the car).

2. Adjust the handlebars perpendicular to the front wheels of the frame and tighten the handlebar core screw. (Recommended force distance is not less than 18N.m) Note: When raising the handlebar, the plug of the electrical component cannot be pulled loose.

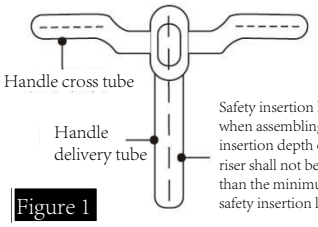


Figure 1

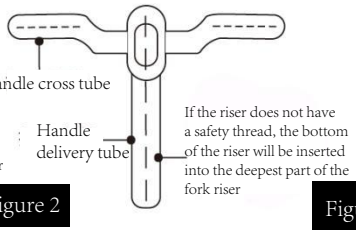


Figure 2

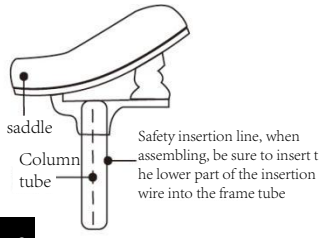


Figure 3

二. Saddle adjustment (see Figure 3) (if applicable)

1. Loosen the clamping screw of the saddle and adjust the saddle to the appropriate height (the safety scale line shall not be exposed outside the car).

2、The adjustment saddle is that the saddle is not skewed and the clamping screws are fastened (recommended force distance is not less than 18N.m).

三、Chain adjustment (applicable to chain terms)

1. Loosen the left and right fastening nuts of the rear shaft, adjust the chain adjuster, move the rear wheel back and forth, tighten the chain tightness, so that the sagging in the middle of the chain is 10-15mm, at this time the chain should be tightened and tested to run flexibly and without abnormal sound.

2. Keep the center surface of the rear wheel basically in the center surface of the frame, and tighten the left and right fastening nuts of the rear axle. (Recommended force distance is not less than 30N.m).

四. Disassembly of the front wheel

1. Loosen the left and right fastening nuts of the front axle, remove the nuts and hooks, and disassemble them in the direction of the opening.

2. When assembling, the front axle should be snapped into the fork foot joint mouth, and after keeping the center of the front wheel symmetrical with the fork, the left and right fastening nuts of the front axle should be tightened clockwise. After installation, rotate the front wheel, there must be no jamming and loosening phenomenon. (Recommended force distance is not less than 18N.m)

五. Disassembly of the rear wheel

1. Open the controller cover, unplug the motor wire from the connector, flip the body position (note: do not touch the handlebar, hood, and toolbox parts), loosen the rear axle nut and rear brake positioning nut and brake line in a counterclockwise direction, and then disassemble the chain connector, and then remove the rear wheel in the direction of the opening.

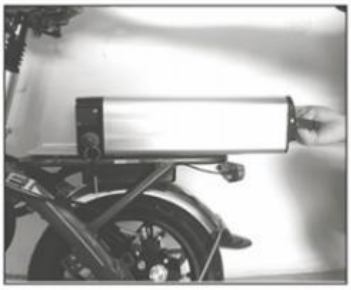
六、Battery installation

Lithium batteries are mainly composed of two major blocks, battery cells and protection board PCM (power batteries are generally called battery management system BMS), the battery cells are equivalent to the heart of the lithium battery, and the management system is equivalent to the brain of the lithium battery.

The battery cell is mainly composed of positive electrode material, negative electrode material, electrolyte, separator and shell, while the protection board is mainly composed of protection chip (or management chip), MOS tube, resistor, capacitor and PCB board.

Use the key to open the fixed lock, unplug the power plug, remove the battery, instead insert the battery, insert the power plug, lock the battery lock, and confirm that it is safe and firm before riding. (L12 for concealed batteries)

Rear battery



Shelf Pull-Back Battery

Hidden battery

Hidden battery

Skateboard battery

Electric bicycle fault inspection and troubleshooting methods

number	Fault phenomenon description	Failure cause analysis	Troubleshooting method
1	Debugging failure or speed below 10km/h	1. The battery voltage is too low 2. Speed regulation to put the fault 3. Transmission group failure	1. Fully charge the battery 2. Send it to the maintenance station for repair
2	Motor hub does not work after power is turned on	1. The battery wiring is loose 2. The motor wiring plug is loose/off 3. Speed regulation failure	1. Take out the battery box and reinstall it 2. Tighten the wiring plug 3. Send to the maintenance station for repair
3	Insufficient mileage after charging	1. Insufficient tire pressure 2. Insufficient charging or charger failure 3. The battery is aging or damaged 4. There are many uphills/headwinds/ heavy loads/poor road surfaces/low temperatures	1. Sufficient gas 2. Fully charged or check the charger 3. Replace the battery 4. It is recommended to use pedal assistance
4	The charger is not charging	1. The plug is not plugged in 2. The charger fuse is blown 3. The battery pack fuse is blown	1. Tighten the socket 2. Send to the maintenance station for replacement 3. Replace the fuse
5	The battery is full but no voltage shows that the electric wheel hub is difficult to start	1. The voltage is lower than 30V when starting the electric hub 2. The battery switch wire falls off 3. The monitor connector is loose 4. Controller failure	1. Replace the battery with a new one 2. Reconnect/fasten 3. Send to the maintenance station for repair
6	After opening the electric door lock, it was found that the signal part was normal and the driving part was abnormal	1. Battery undervoltage 2. The left and right brake handles are damaged 3. The controller or motor is damaged 4. The line is abnormal 5. The speed control handle is damaged or the line is abnormal	1. Replace the speed control handle and repair the line 2. Charge in time 3. Replace the left and right brake handles 4. Replace the controller or motor
7	Abnormal zero start mode (switch left and right positions)	1. The start mode switch or speed control handle is damaged 2. The line is abnormal	Replace damaged parts/ service lines
8	Non-zero start mode exception (switch in middle)	1. The start mode switch is selected incorrectly or the booster is damaged 2. The line is abnormal	Check switch position/replace booster/repair circuit

Note: When encountering faults that cannot be eliminated by yourself or faults that cannot be determined, the motor, controller, charger, battery pack are damaged inside, etc., please send the vehicle to the place of purchase or the company's special maintenance station for inspection and repair, during the warranty period, please do not open important parts without authorization, otherwise the company will not provide warranty.

More professional services Welcome to your local store for consultation.

Main technical parameters of electric bicycles			
Model	TDT001Z		
Main technical parameters of the vehicle	Dimensions (L x W x H)	mm	1290×506×1045
	Front and rear wheel center distance	mm	890
	Vehicle weight (without battery)	kg	25
	Maximum design speed	km/h	25
	Continuing mileage	km	The size of the battery
	100 kilometers of electricity consumption	kW· h/100km	1.0
	load capacity	kg	75
Main technical parameters of the battery	Battery type	lithium battery	
	capacity	Ah	15
	Nominal voltage	V	48
Main technical parameters of the motor	Motor type	permanent magnet	
	Rated speed	r/min	270
	Nominal power	W	400
	rated voltage	V	48
Main technical parameters of the controller	Undervoltage protection value	V	41±2
	Overcurrent protection value	A	16±2

All information, pictures and technical parameters in this manual are the latest products, due to product changes will lead to changes in technical parameters and performance improvement, if this happens, there will be no further notice, please understand.

Main technical parameters of electric bicycles

Model	TDT002Z		
Main technical parameters of the vehicle	Dimensions (L x W x H)	mm	1380×210×720
	Front and rear wheel center distance	mm	890
	Vehicle weight (without battery)	kg	21
	Maximum design speed	km/h	25
	Continuing mileage	km	The size of the battery
	100 kilometers of electricity consumption	kW· h/100km	1.0
	load capacity	kg	120
Main technical parameters of the battery	Battery type	lithium battery	
	capacity	Ah	8-25
	Nominal voltage	V	48
Main technical parameters of the motor	Motor type	permanent magnet	
	Rated speed	r/min	270
	Nominal power	W	400
	rated voltage	V	48
Main technical parameters of the controller	Undervoltage protection value	V	41±2
	Overcurrent protection value	A	16±2

All information, pictures and technical parameters in this manual are the latest products, due to product changes will lead to changes in technical parameters and performance improvement, if this happens, there will be no further notice, please understand.

Maintenance and Repair

Daily maintenance:

1. The vehicle should be kept clean and clean, and the car should be wiped with a dry cloth in time after being rained to avoid rust of parts and short circuit of electrical components. 2. Frequently check the air storage capacity of the tire to keep it in normal use.
3. The main transmission parts such as front axle, rear axle, middle shaft, fork and flywheel and electric hub should be checked and adjusted frequently, so that the transmission parts remain flexible and there is no impact sound and noise; Check the screws and nuts of the whole car, and find that the looseness should be tightened in time to avoid aggravating wear or causing greater damage and fracture of the parts due to loosening.

Note: The tightening force distance of the front wheel, handlebar core screw, saddle pipe clamping bolt and saddle clamping bolt is not less than 18N.m; the tightening force distance of the rear wheel, center shaft bowl and center shaft bowl lock mother should not be less than 30N.m.

4. The brake part should be checked and adjusted frequently to make it in a flexible state, such as the gap between the brake skin and the brake center should not be too large.
5. Frequently check whether the control parts and cables are flexible, should ensure no lag, no jamming phenomenon, appropriate from one end of the hose slowly drip lubricating oil, while pulling the wire rope, feel the wire rope sliding lightly in the hose.
6. Electric bicycle moving parts should be frequently injected with a small amount of lubricating oil to reduce wear and keep riding light, as shown in the following table:

Lubricated parts	lubricant	Lubrication cycle
Front, center and rear axle bearings	3 #calcium-based lubricating oil	Half a year to one year
Front fork bowl set	3 #calcium-based lubricating oil	Half a year
Pedal bearing	3 #calcium-based lubricating oil	Half a year
chain	30 #mechanical oil	Half a month
Double support lock plate, side support and its transmission part	30 #mechanical oil	Half a month

name	Put the horizontal pipe	Put the riser	saddle	saddle tube	Front axle	Rear axle	Center shaft nut
Rotational torque	18N.m	18N.m	18N.m	18N.m	18N.m	30N.m	30N.m

Regular maintenance:

location	method	time
central axis	Check the center bowl for looseness/disassemble the center shaft, clean, change the oil, check the parts	Check frequently/once a year
Front and rear wheels	Check whether the wheel swing, spoke tension, spokes, and strip mother are damaged; Adjust the wheels	New car first month/year after
gate line	If the steel wire at the root of the rolling head is broken, a new brake line should be replaced	Once a month.
brake handle	Adjust the installation position and check the reset performance	Once every three months.
chain	Check whether the pin shaft is loose or protruding, and whether the chain extension is too large	Once every six months
Front and rear axle nuts, handlebar core screws, saddle clamping screws	Check if it is loose.	Once every six months

Correct use and maintenance of motor, controller and battery:

1. The motor should be kept clean, no foreign matter and corrosive liquids, gases, etc. should enter the motor, and the motor shell should not be knocked and baked to avoid damage to the motor.
2. All wires should avoid friction and contact with sharp metal, and the wires and frames should be tied firmly.
3. The controller is a high-tech intelligent computer memory program password, if the user opens and repairs the components by himself, the controller fails, please go to the service department to repair.
4. This battery is a special battery for electric bicycles, electric bicycles do not need to be tested for a long time, the battery needs to be stored after sufficient electricity, and regularly replenish electric energy, so as to avoid long-term underpower caused by battery vulcanization.
5. The battery can not be near an open flame or a high temperature heat source, and the battery must not be thrown into the fire, and it is strictly forbidden to be directly exposed to the sun in hot and high temperature weather.

After-sales services and maintenance scope

Dear user: Thank you for using the electric bicycle produced by the company, in order to protect your legitimate rights and interests, please keep this manual properly.

(1) Warranty principle:

1. When you use this vehicle, please inspect, debug, and have the right to require the sales staff to provide correct operation methods and maintenance matters, and provide valid purchase tickets and warranty cards and the address and contact number of the warranty unit.

2. Users should operate and use correctly in accordance with the product manual. Where performance failure is caused by production quality, according to relevant laws and national three-guarantee regulations, the company shall unify the three-guarantee obligation.

3. Faults outside the scope of the three guarantees and the main components after the three guarantees period shall be repaired by the company, and a single fee shall be charged.

4. For battery replacement after the three-pack period, the company will supply according to the exit price, but the battery must be recycled one by one and returned to the battery manufacturer to ensure safety and avoid environmental pollution.

(2) The warranty period of the main

Warranty coverage and duration are obvious

Part name	Warranty Coverage Period	WarrantyPeriod	Service content
Frame, front fork	Natural opening, desoldering and fracture (except human factors)	12 months	Free replacement
Frame, clay board, chain cover, hanger	Paint flakes off (except human factors)	3 months	Free replacement
Handlebar, rim, sprocket, crank, front fork	Plating parts fall off (except human factors)	6 months	Free replacement
Front, rear axle, flywheel and other rotating parts	Damage or fracture of heat-treated parts (except human factors)	3 months	Free replacement
motor	Bearing breakage, casing cracking, winding damage (except human factors)	12 months	Free replacement
Controller, charger	Circuit damage, component damage (except human factors)	12 months	Free replacement
lithium battery	Capacity drop, no voltage discharge, short circuit of protection board, cell punch resistance (except human factors)	12 months	The capacity is not less than 80% of the rated capacity within the first 6 months from the date of shipment, and the capacity is not less than 60% in the next 6 months for free maintenance or replacement
inner tube	Air leakage caused by intrinsic quality problems such as trachoma, will not be replaced after repair	15 days	Free repair or replacement
Paint parts	Large pieces of shedding, visible fading, blistering, cracking (except for human factors)	6 months	Free replacement
Fuses, light bulbs, cables, switches, brake shoes	Vulnerable parts, not covered by warranty		
tire	Cracking within 1 month for replacement (non-human factor)		

Scope and content that does not fall under the three guarantees:

1. The failure caused by the user's failure to use, maintain and adjust in accordance with the provisions of the "Instruction Manual".
2. Failures caused by dismantling and modification by the user, as well as failure to comply with the rules of use.
3. Improper use and storage by the user, or failure caused by accidents.
4. There is no warranty card, the "receipt coupon" has not been sent back to the company, or the card and the goods do not match.
5. Wearing parts and consumables are not guaranteed three guarantees. Including brakes, seat bags, plastic parts, spokes, rims, brake cables, surface scratches, etc.
6. The cost of self-repair without the consent of the special maintenance unit.
7. After the accessories leave the factory, the shell scratches or shell damage are not repaired, and the lead scratched or broken is not repaired.