



Operation and Maintenance Manual

LJ1500DQT-N

Dear Valued User:

Thank you for choosing the Longjia LJ1500DQT two-wheel electric motorcycle. All staff of Ningbo Longjia Power Technology Co., Ltd. extend our sincere welcome and gratitude for your choice. This newly-developed two-wheel electric motorcycle features luxurious appearance, reasonable structure, comfortable ride, sturdiness, high safety reliability and long driving range, bringing you great riding pleasure

This user manual introduces the structure, operation of vehicle and accessories, functions, notes and maintenance methods of the electric motorcycle. Please read it carefully and learn basic operation knowledge for proper and easy handling, so as to ensure safe riding. Wish you a pleasant ride!

To protect your interests and facilitate vehicle use, please contact authorized dealers or service stations for genuine original spare parts if you encounter unsolvable faults or need component replacement. Upon purchasing this product, fill in the warranty card completely. Keep the user-reserved copy properly, and submit the other two copies to our local service station for timely after-sales support

"Your choice marks the start of our service!" From now on, we will whole-heartedly provide you with convenient, prompt and satisfactory service

This product complies with the corporate standard Q/NBLJ 003-2019 《LJ1500DQT Type Two-wheel Light Electric Motorcycle》

The descriptions, illustrations, specifications and data in this manual are compiled based on the latest product information before printing. Our company keeps improving products, so actual vehicles may differ from this manual without prior notice. Terms including "Warning", "Caution" and "Note" are used in this manual to indicate risk levels. Please understand their definitions carefully.

Warning: It refers to personal safety of riders. Ignoring it may cause personal injury

Caution: It refers to vehicle-related operating precautions to prevent motorcycle damage..

Note: It provides special explanations to clarify important instructions for operation.

Reproduction of this User and Maintenance Manual is prohibited without written consent of our company.

1、Read this user manual thoroughly before your first ride. Do not lend the motorcycle to unqualified operators.

2、Many motorcycle accidents occur because car drivers fail to notice motorcyclists, resulting in speeding or wrong-lane driving. Therefore, riders shall observe the following

※Wear brightly-colored clothing

※No lane cutting or reckless overtaking.

※Do not drive too close to other motor vehicles, and avoid riding out of other drivers' sight.

※Obey traffic rules and do not speed

※Slow down at road intersections and parking lot entrances and exits.

3、Ride slowly on slippery roads and avoid sharp braking. Exercise caution in rainy weather. Do not ride in water deeper than the motor central shaft to prevent water ingress into the motor.

4、Do not cover the charger shell during charging to ensure heat dissipation. The charger shall be used indoors and kept away from rain

5、Most severe motorcycle accidents involve head injuries. Riders must wear helmets as well as other protective gear including goggles, boots, gloves and thick tight-fitting outerwear.

6、Do not discard waste batteries arbitrarily. Return scrapped batteries to authorized dealers for paid recycling.

7、Complete the first maintenance at the after-sales service station in the 2nd month after purchase or after 300km mileage. Afterwards, perform regular vehicle maintenance every three months.

8、Check the braking system, lights and horn for normal function before every ride. Inspect bolts, nuts and fasteners for looseness. Tighten loose parts before use to prevent accidents.

9、Do not disassemble or modify vehicle wiring by yourself. In case of abnormality, cut off vehicle power via the main power switch for safety.

Warning: Arbitrary modification or replacement of original components will impair riding safety. Users must strictly comply with vehicle regulations issued by traffic authorities

Main Performance Parameters Table

Item	Specification Parameters	Item	Specification Parameters
Vehicle Brand	LONGJIA	Motor Model	10ZW6053321YA
Vehicle Model	LJ1500DQT-N	Motor Type	Permanent-magnet, DC, Brushless Motor
Overall Dimension(L×W×H) (mm)	1735×660×1055	Rated Voltage(V)	60
Wheelbase(mm)	1255	Rated Rotational Speed(r/min)	530
Minimum Ground Clearance(mm)	180	Rated Power(W)	1200
Curb Mass(kg)	80	Rated Torque(N.m)	21
Rated Passenger Capacity(person)	1	Battery Type	Lithium-ion Battery
Maximum Total Mass(kg)	155	Battery Capacity	26Ah
Brake Type	Front: Disc / Rear: Disc	Controller Undervoltage Protection Value(V)	50±1
Brake Control Type	Front: Hand-operated / Rear: Hand-operated	Controller Over-current Protection Value(A)	35
Tire Specification(Front/Rear)	Front:3.50-10Rear:3.50-10	Charger Input Voltage & Frequency	220V/50HZ
Tire Pressure(Front/Rear) (kPa)	220/250	Headlamp Specification	12V 13.5W/12V 9W
Maximum Speed(km/h)	42	Front Position Lamp Specification	12V/4.56W
Cruising Range(km)	Driving cycle / Constant-speed: 45/55	Turn-signal Lamp Specification	12V/2.4W3.1W
Gradeability(°)	10	Brake Lamp / Rear Position Lamp Specification	12V 3.6W/12V 2.4W
Fuse Rating	15A	Rear License-plate Lamp Specification	12V 0.5W

Equipment and Controls

Names of Main Components



- 1.Front Wheel 2.Front Brake 3.Front Shock Absorber 4.Front Turn-signal Lamp
5.Headlamp / Front Position Lamp 6.Front Panel 7.Rear-view Mirror 8.Rear Brake Lever
9.Seat Cushion 10.Rear Carrier 11.Rear Turn-signal Lamp 12.Rear Wheel
13.Rear Swing Arm 14.Side Stand 15.Foot Board 16.Side Reflector
17.Front Fender 18.Front Wheel Hub

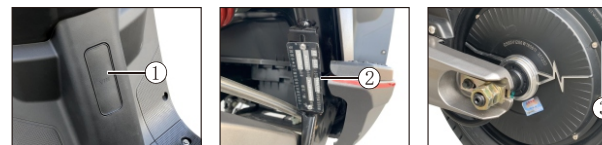


- 19.Rear Wheel 20. Rear Fender 21.Rear License-plate Lamp 22.Rear Reflector
23.Rear Tail Lamp 24.Combined Switch 25.Instrument 26.Throttle Grip
27. Front Brake Lever 28. Ignition Lock 29.Front Storage Box 30.VIN Code
31.Battery Box 32.Rear Shock Absorber 33.Rear Brake 34.Motor

2 Electric Motorcycle Identification Number

Users shall keep in mind the identification numbers of the electric motorcycle. Their positions are shown in the figure

- (1) The frame number is stamped at position ① on the middle section of the main frame beam.
- (2) The vehicle nameplate is riveted at position ② on the left-side label bracket of the lower frame tube.
- (3) The motor number is stamped at position ③ on the left end face of the motor hub.



3Ignition-lock Switch

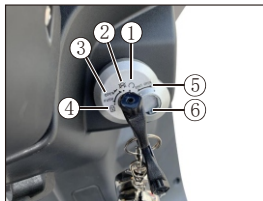
(1)OFF-Lock: All electrical circuits are disconnected, the motor cannot operate, and the key may be removed.。

(2)ON: The whole circuit is closed. The motor, lights and signal devices are functional. The key cannot be removed.

(3)OPEN-Seat Lock: Turn the key left to the OPEN position to unlock the seat.

(4)Handlebar Lock: Turn the handlebar fully to the left. Press down the key and rotate it leftwards to lock the handlebar, so that it cannot turn.

(5)SHUT-OPEN: Insert the key into position ⑥ to open or close the keyhole protector.



4Meters and Indicator Lamps,

(1)Motor speed display; bars change with rotating speed.

(2)Left-turn indicator (⇐) (green): flashes when the left-turn signal lamp is activated.

(3) P-gear parking indicator lamp.

(4)Charging indicator: lights up during charging.

(5)Time display: shows time when not charging; shows remaining charging time while charging.

(6)High-beam in (blue): lights up when headlamp high beam is switched on.

(7)Right-turn indicator (⇒) (green): flashes when the right-turn signal lamp is activated.

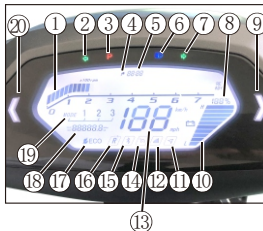
(8)Real-time battery percentage display.

(9)Auxiliary right-turn signal display.

(00)Real-time battery level display.

(01)GPS signal (reserved).

(02)Mobile GPRS signal (reserved).



(04) Cruise control indicator: lights up when cruise control is enabled.

(05)Bluetooth signal.

(06)Energy-recovery indicator: lights up under energy-recovery status.

(07)Minimum-energy-consumption indicator: lights up at lowest power consumption.

(08)Odometer & trip meter; metric / imperial unit switchable.

(09)Riding mode (gear) display.

(20)Auxiliary left-turn signal display.

5Left handlebar Control System

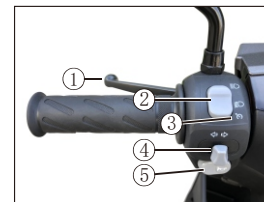
(1)Rear-brake lever: Squeeze the lever to apply rear-wheel brake; the brake lamp turns on.

(2)High/low-beam switch: Low beam at low-beam position; high beam at high-beam position, with the dashboard high-beam indicator lit. Set the lighting switch on the right-handlebar to turn off lights and lamp indicators.

(3)Cruise control: While twisting the throttle grip, press this button on. The vehicle maintains the set speed and the cruise-control icon lights up on the display. Squeeze the brake lever to cancel cruise control

(3)Turn-signal switch: Slide the switch left for left turn; left-turn lamps and indicator flash. Slide right for right turn; right-turn lamps and indicator flash. Return to the middle position to switch off all turn signals.。

(5)Horn switch: Press the button to sound the horn.



6Right-handlebar Control System

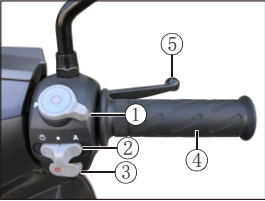
(1)Riding-mode (gear-select) switch: 3-speed modes. “1” -low-speed, “2” -medium-speed, “3” -high-speed.

(2)Lighting Switch- When the switch is at “ ” position, front and rear lights are off. When at position, headlamp, front position lamp, rear tail lamp and license-plate lamp turn on. High/low beam is controlled by left-handlebar switch. At “A” position, auto-headlamp mode is activated. Headlamp, front position lamp, rear tail lamp and license-plate lamp automatically turn on in dim ambient light and turn off in bright ambient light.

(3)Start Button Switch- After turning on ignition lock, press this button, “READY” appears on instrument. Twist throttle grip and the vehicle runs.

(4)Throttle Grip- Controls vehicle speed. Twist towards yourself for acceleration; twist away for deceleration

(5)Front Brake Lever- Squeeze the lever to brake front wheel, the brake lamp lights up.



Pre-ride Inspection

- Develop the habit of inspecting the vehicle before riding for basic performance and safety. Check the following items (refer to this manual for adjustment and maintenance).
- 1、Tire Pressure: Front-wheel pressure: 220±10 kPa; Rear-wheel pressure:250±10 kPa.
 - 2、Turn on ignition lock. Check battery power, throttle grip and motor for normal operation.
 - 3、Check lights, instrument indicators, combined switch and horn for normal function.
 - 4、Check rear-view mirrors for loose mounting. Adjust them at riding position for clear rear view.
 - 5、Swing handlebar. Check steering stem for smooth rotation, no looseness, tightness or jamming.
 - 6、Lift front wheel off ground and rotate it. Check speedometer needle movement.
 - 7、Check brake system for flexibility, reliability, damage and looseness.
 - 8、Check tightness of main components. Recommended tightening torques are listed in the table below.

Component	Tightening Torque	Component	Tightening Torque
Handlebar	35-45N.m	Swing-arm	50-60N.m
Front Fork	40-50N.m	Motor Shaft	60-70N.m
Front Wheel Shaft	50-60N.m	Rear Shock Absorber	35-45N.m

Riding Precautions

- 1、For first-time riders, practice in open area. Obtain valid qualification before road riding.
- 2、Set ignition lock to “ON”. Hold handlebars with both hands and press start button. After “READY” appears, twist throttle grip slowly with right hand (do not squeeze brake levers during start-up). Vehicle moves forward slowly. Twist inward to accelerate; release grip for automatic reset and deceleration. Vehicle is equipped with cruise-control function; speed remains unchanged after throttle reset. Squeeze brake lever for deceleration.
- 3、A buzzing sound upon motor start-up is normal high-efficiency magnetic-field operating noise. It disappears when motor reaches optimal rotating speed.
- 4、Avoid high-speed riding, sharp turning and emergency braking on rainy or slippery roads. Maintain safe driving distance.
- 5、Turn on turn-signal lamp and reduce speed when turning. Turn on headlamp for night riding.
- 6、Return throttle grip to idle position and apply hand brakes for stopping. For emergency braking, apply both front and rear brakes simultaneously for quick stop.
- 7、If battery-level indicator flashes during riding, battery power is low. Charge in time.
- 8、Power-cut switch activates when brake lever is squeezed. Do not apply brake at vehicle start-up to prevent power-cut start failure.

▲ Note:

1.Do not ride with one hand.

2.Observe traffic rules strictly. Drunk driving is prohibited.

VII. Post-riding Precautions

1. After riding, stop the vehicle steadily, turn off power and remove the key. .
2. Check battery level in time to avoid affecting next use
3. Use the side stand for parking. Park on firm and flat ground. .
4. Engage the handlebar lock to prevent theft.

Proper Use and Maintenance of Main Components

Good usage and maintenance practices can effectively extend service life of the electric motorcycle. A full-scale inspection and maintenance is recommended at our authorized service station every three months (including checking brake performance).

Charger

1. Charger Operating Instructions

(1) On-vehicle Charging

When charging the battery on-board, turn off the main power switch of the vehicle first. Connect the charger output plug to the battery charging socket, then plug the charger input into 220V AC mains socket.

(2) Off-vehicle Charging

Remove the battery from the vehicle for separate charging. Connect charger output plug to battery charging socket, then connect charger input to 220V AC mains socket.

(3) During charging, charger indicator light is red. When it turns green, the battery is nearly fully-charged and enters float-charge state. Further charge for 1-2 hours for better full-charge effect. Total charging time shall not exceed 12 hours. Stop charging and send the charger to authorized service station if red light stays on after 12 hours.

(4) Charge in cool and well-ventilated place, keep away from flammable and explosive materials. Do not cover the charger during charging. After charging, unplug mains input plug first, then disconnect charger from battery. .

2. Charger Maintenance Method

- (1) When carrying the charger together with vehicle, wrap it with cushioning material to prevent bump and vibration damage. .
- (2) During use and storage, prevent foreign objects, water or other liquids from entering the charger to avoid internal short-circuit.

▲ Note:

- 1 Use only the original charger supplied with this vehicle.
- 2 Pay attention to applicable battery type and voltage of the charger. Mixed-use is strictly prohibited.
- 3 Stop charging immediately in case of abnormal indicator light, strange smell or overheated charger housing, and send for repair.
- 4 Cut off power after charging. Do not leave charger connected to AC mains for long time under no-load status.
- 5 Do not disassemble or replace internal components of the charger without authorization.
- 6 Keep the charger out of children's reach.



Charging port

Discharging port

Battery

Battery capacity will gradually decline with service time and mileage. Proper use and maintenance can effectively prolong battery service life.

1. Battery Usage Instructions

- (1) Fully charge the battery before first riding for a brand-new vehicle.
- (2) Charge as soon as possible if battery indicator flashes during riding. Over-discharge is forbidden.
- (3) Check battery level after each ride. Avoid deep discharge. Charge in time. For long-term storage without use, perform supplementary charging every one month to extend battery life.
- (4) Battery capacity is affected by ambient temperature. Effective capacity will drop by 20-30% when temperature is below 0°C, which is normal.

2. Battery Proper Maintenance Method

- (1) Re-charge the battery timely after every use regardless of remaining capacity, so as to extend battery service life.

- (2) 当When battery capacity declines obviously, go to service station for inspection in time to confirm whether capacity fading is normal. Maintenance may be performed to improve battery condition if necessary.
- (3) Battery inspection and maintenance at authorized service station every three-month is recommended, check for loose connectors.
- (4) Keep battery surface clean and dry. Keep away from open fire and high-heat sources. Do not expose to direct sunlight in hot seasons.

3、Waste Battery Disposal

If vehicle performance is affected by battery faults, the service station shall test and identify waste battery and dispose it as follows:

- b) For batteries out-of-warranty: dealers shall perform paid trade-in at a price 5% higher than local scrap price, user bears price difference. Collected waste batteries are sent back to company and disposed by qualified manufacturer.
- c) For batteries purchased outside official supply chain: inform user not to dispose by himself, deliver to local qualified recycling entity. Our service station will not provide after-sales service but may offer recycling service following procedure b).

▲ Notice:

1. Do not discard waste batteries arbitrarily to avoid environmental pollution.
2. Waste batteries shall not be disposed of privately. They shall be recycled by the company's after-sales service stations.

▲ Notice:

Do not reverse the positive and negative poles of the battery or cause short circuit. Do not place metal objects or tools on the battery. Disconnect all electrical switches before wiring to reduce the risk of sparks occurring during final connection.

(III) MotorThe vehicle is equipped with a permanent magnet DC brushless motor.

1. Motor Operation Instructions

(1) The motor together with the whole vehicle shall normally operate under an ambient temperature of $-15^{\circ}\text{C} \sim 40^{\circ}\text{C}$ and relative humidity $\leq 90\%$. Operating outside this range will affect normal motor performance.

(2) The battery voltage shall be maintained between 50V and 68V. Otherwise, normal operation of the motor will be impaired, or the motor will fail to reach its rated performance.

(3) Check for abnormal noise when the motor runs idle, and inspect the wheel rim for severe deformation or wobble. Do not force-start the vehicle when it is blocked; avoid repeated starting if the vehicle is obstructed. This may burn out the motor. Restart the motor only after removing the obstruction.

(4) Operate the motor at low speed on poor road conditions to avoid severe vibration.

2. Motor Maintenance Instructions

Have the motor inspected at the company's after-sales service station every three months. During daily use, check the mounting tightness of the motor shaft. Tighten nuts promptly if any looseness is found.

▲ Notice:

Do not operate the electric vehicle (whether riding or pushing) when the water on the road surface exceeds the motor shaft on rainy days. Excessively deep water will cause water seepage into the motor and result in motor failure.

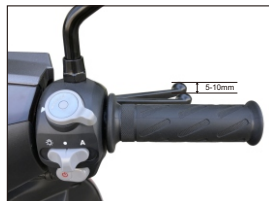
(IV) Brake System Adjustment

Both the front and rear wheels of the vehicle are equipped with disc brakes. The brakes shall be inspected before driving, and the inspection items are as follows:

1. Front Brake Adjustment

(1) This vehicle is fitted with a hydraulic disc brake system. The brake fluid level will drop as the brake pads wear out.

(2) The brake mechanism requires no daily adjustment, but the brake fluid level and the wear condition of brake pads shall be checked regularly. Always inspect and ensure no leakage occurs in the brake system. If the free travel of the brake handle is excessive while the wear of brake pads does not exceed the limit, air has entered the system and must be exhausted. Please entrust the company's after-sales service station to carry out this operation.



2. Rear Brake Adjustment

- (1) The free travel refers to the distance the rear brake lever ① moves before braking engages, which shall be 5–10 mm.
- (2) This brake mechanism requires no routine adjustment.



(V) Fuse Replacement

Frequent blowing of the vehicle fuse is generally caused by short circuit or overload of the electrical system. Please ask personnel from the maintenance station to inspect and repair it.

When replacing the fuse, open the fuse box, remove the old fuse, install a new fuse of the same specification (15A for this vehicle), and then reassemble the fuse box.

▲ Warning:

1. Before inspecting or replacing the fuse, turn off the ignition switch (turn the key to the "OFF" position) to prevent short circuits.
2. The replacement fuse must be of the identical specification. Do not use incorrect specifications, and never substitute with any other conductive materials.

(VI) Tire Maintenance

Regularly check tire pressure and tread. Frequent tire inspections are required to ensure maximum safety and extended service life.

1. Tire Pressure

Insufficient tire pressure will not only accelerate tire wear, but also seriously impair the running stability of the motorcycle and make riding difficult. Excessively high tire pressure reduces the contact area between the tire and the ground, which may lead to wheel skidding and even loss of control. Tire pressure adjustment shall be carried out when the tires are cold.

Item	Front Wheel	Rear Wheel
Tire Pressure	220±10 kPa	250±10 kPa

2. Tire Tread Inspection

Excessively worn tires will severely degrade the handling stability of the motorcycle and may cause loss of control. The tire must be replaced when the tread depth at the center of the tire is less than 0.8 mm.

(VII) Lamp Bulb

The specifications (voltage and rated power) of the bulb for each lamp are shown in the table below. Always use a bulb of the same specification for replacement. Using a bulb with mismatched specifications may lead to overload of the electrical system and premature bulb failure.

Headlamp	12V 13.5W(High) 12V 9W(Low)	Rear Turn Signal Lamp	12V LED
		Rear Position Lamp /Brake Lamp	12V 3.6W 12V 2.4W
Front Position Lamp	12V LED		
Front Turn Signal Lamp	12V LED	Instrument Lamp	LCD Display

Electrical Schematic Diagram

