



# RURUI TARPAN XT9

MANUAL

HIGH-PERFORMANCE ELECTRIC MOUNTAIN BIKE

## WELCOME TO THE RURUI CLUB

We take pride in bringing you a quality product that will offer years of enjoyment. Please read and understand this manual to get brief but all-around understand about your new bike. Let's go and get your bike ready for the coming adventure and journey.

## HAPPY ADVENTURE!

**WE ARE HERE TO HELP!**

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## ASSEMBLY INSTRUCTIONS

1. **Open the box** and, with the help of another person capable of safely lifting a heavy object, remove the ebike from the bike box, placing it upright on the back wheel and front fork protector plate. Carefully remove the packaging material protecting the bike frame and components, and keep the packaging materials in case you want to ship the bike. Otherwise, recycle these materials, especially cardboard and foam, whenever possible. Remove the small box from the bottom of the bike box and carefully set out the contents. Ensure all of the following pieces are included with the ebike:

- Assembly toolkit
- Battery keys
- Charger
- Front wheel
- Front wheel quick release
- Manual(s)
- Pedals (left and right)
- Saddle seat with Seatpost

**If anything is missing, please contact Rurui Ebike.**

We also recommend the following (not included) for assembly and maintenance:

- 15 mm pedal wrench
- A strong friend
- Bicycle grease
- Bike pump with Schrader valve and pressure gauge
- Clean shop towel or paper towel for cleaning excess grease
- Flat-side cutters
- Torque wrench (3-60 Nm) with Allen bits

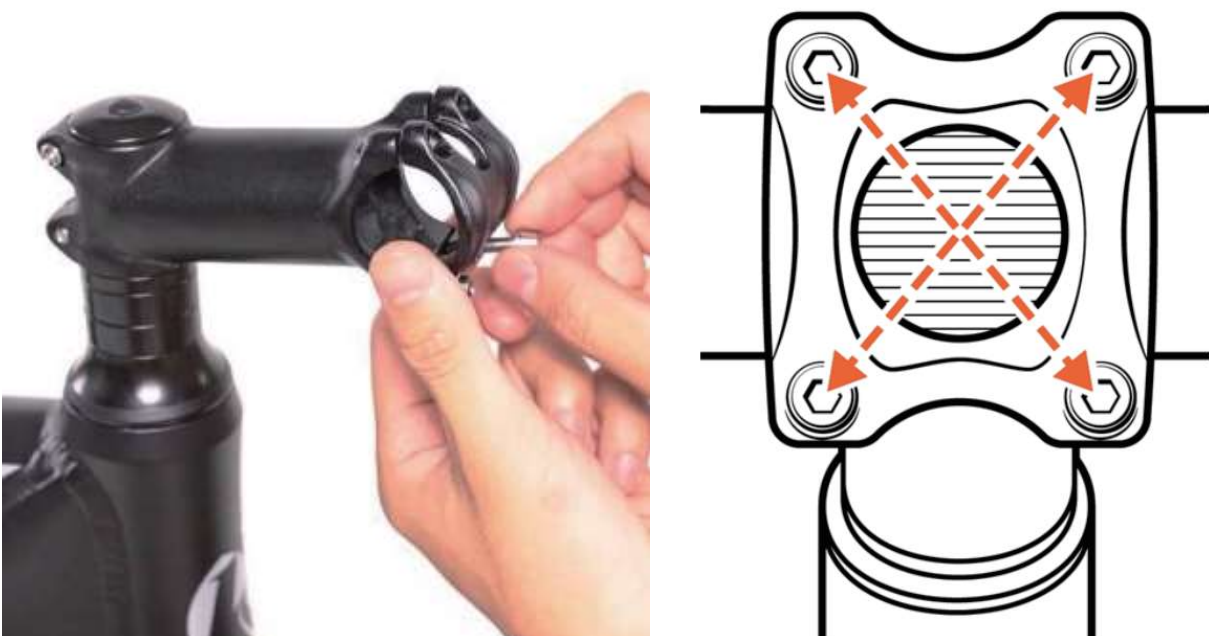
2. **Install the handlebar following the steps below.**

- (a) Locate the handlebar stem faceplate and hardware face forward. Please ensure the handlebar stem is vertical to the bridge of the front fork. Usually, you may need to loosen the two Horizontal screws and the Vertical screw before moving it and tighten the V screw and H screws after located.



(b) Orient the handlebar properly. The brake levers should face forward, the throttle should be on the right side, and make sure the bundle of cables is not twisted.

(c) Center the handlebar on the step after removing the faceplate. The handlebar should be approximately parallel with the front fork when viewed from the side.



(d) Install the stem faceplate. Place the stem faceplate over the handlebar, and thread in the four bolts by hand. Then use an Allen wrench to tighten the bolts evenly, by moving in an "X" pattern. Ensure the gap between the faceplate and stem is even.



**3. Install the front tire** on to the front fork as explained below. Warning: Do not touch the brake rotor, which has sharp edges and can cause serious injury. Touching the brake rotor or brake pads with bare skin can also transfer natural oils to either component, which can decrease braking performance.

- (a) Locate and remove the quick-release skewer from the front fork protector plate. Open the lever, remove the thumbnut and cone spring on the opposite side, and remove the skewer. Keep the washer and the other cone spring in place on the lever side.

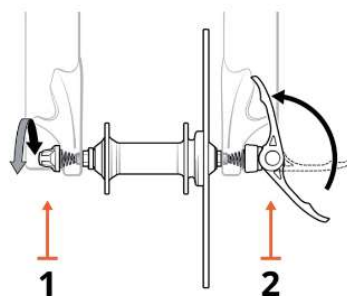


- (b) Lightly grease the quick-release skewer. Place about half of a pea-size amount of bicycle grease onto the threaded end of the skewer and then wipe it across the rest of the skewer.
- (c) Install the skewer through the front wheel hub, starting from the brake-rotor side. Make sure to not touch the brake rotor. Reinstall the cone spring on the skewer. Ensure both cone springs point inward. Keep the lever open and thread on the thumbnut a couple of turns, leaving enough room for the fork dropouts.
- (d) Carefully lift the front of the bike and lower the fork onto the wheel so that the brake rotor enters the caliper, between the brake pads, and the axle enters the fork dropouts fully. If installing the front wheel is difficult, use a 5 mm Allen wrench to turn the inner pad adjustment dial counterclockwise one or two clicks to increase the space between the brake pads. Try to install the wheel again.
- (e) Check that the wheel is fully seated in the dropouts, that the wheel axle is level and parallel to the ground, and that the wheel is centered.





(f) Hold the quick-release lever in line with the axle and tighten the thumbnut until the lever can stay parallel to the floor without being held. Use the palm of your hand to close the lever fully, without touching the brake rotor. The quick-release lever secures the front wheel to the bike, so it's important that the thumbnut is tight enough that the closed lever has adequate clamping force to keep the axle and wheel firmly in place. When you close the lever, there should be enough resistance that it leaves an imprint in your hand.



Front wheel:  
thumbnut (1) and quick-release lever (2)

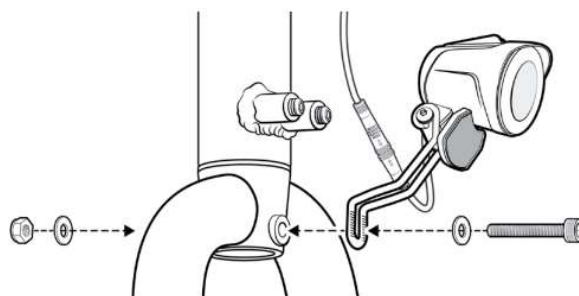
(g) Prop the bike on the kickstand.

(h) Check the security of the front wheel and quick-release lever. If it's too easy or too difficult to close, adjust the lever tension by turning the thumbnut one turn, then close the lever. Check the front wheel security on a regular basis: the front wheel should always be fully seated in the dropouts of the front fork, and the quick-release lever should always be properly secured.

#### 4. Install the headlight.

(a) Locate the headlight mounting hardware on the top of the front fork. Remove it and set it aside for the next step.

(b) Install the headlight bracket. Pass a washer over the headlight mounting bolt end, pass the bolt through the headlight mounting bracket, and then pass the bolt through the mounting point on the fork. On the other side of the fork, pass another washer over the bolt end, and then thread the locknut on by hand.

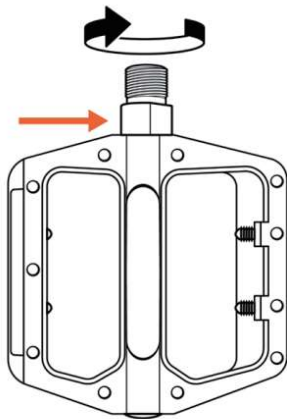


(c) Plug in the headlight connector. Line up the internal notch and pins with the external arrows, and press directly together without twisting.

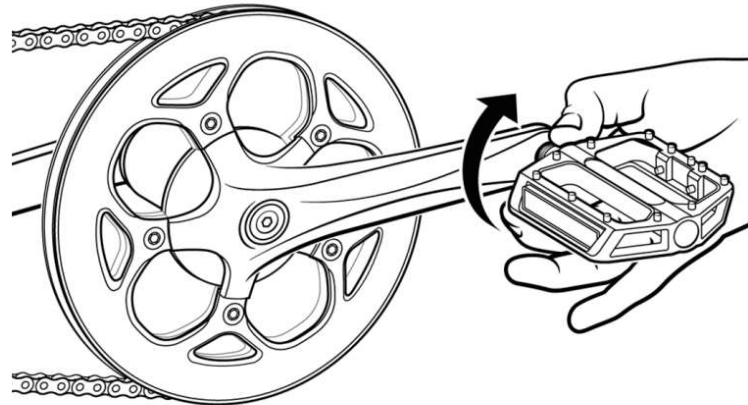
#### 5. Install the pedals.

(a) Locate the right-side pedal, which is marked "R," should have an "R" sticker/imprint attached, and has a smooth pedal axle. The right pedal goes on the crank on the drivetrain side of the bike, which has the chain and is the same as a rider's right side when seated on the bike.

(b) Place a pea-size or slightly smaller amount of bicycle grease onto the threads of the right pedal.



**Right pedal  
with smooth  
pedal axle.**



**Thread the right pedal onto the right  
crank gently by hand, turning clockwise.**

- (c) Carefully thread the right pedal onto the right crank by turning clockwise (toward the front of the bike). Do so slowly and gently by hand. Do not cross thread or damage the threads.
- (d) Place a pea-size or slightly smaller amount of bicycle grease onto the threads of the left pedal.
- (e) Carefully thread the left pedal onto the left crank by turning counterclockwise (toward the front of the bike). The reverse threaded left pedal is marked with an "L," should have an "L" sticker/imprint attached, and has notches on the pedal axle. Thread slowly and gently by hand without cross-threading or damaging the threads.
- (f) Tighten each pedal using a pedal wrench to avoid damage caused by wider wrenches. Torque each pedal to 35 Nm. Wipe off any excess bicycle grease.

## 6. Install the saddle seat.

- (a) Unlock the seatpost clamp and place the seatpost to the seat tube.



- (b) Locate the saddle seat to proper height and lock the seatpost clamp. Please use the tune knob of the clamp to secure the seatpost to make sure you can't pull it out or push it down.



## 7. Checking and Adjusting for comfort and safety.

### (a) Handlebar test

Brace the front wheel. Stand at the front of the bike, facing the handlebar, and brace the front wheel between your feet and lower legs.

Try to twist the handlebar. Hold both handlebar grips and push forward with one hand while pulling back with the other. Push and pull at the same time with about 20 lbs of force with each hand.

Ensure the handlebar and wheel stay properly aligned. The handlebar and handlebar stem should be tightly secured, and the handlebar should be perpendicular to the front wheel.

Repeat the twist test pulling/pushing with the opposite hands, using about 20 lbs of force pushing with one hand and 20 lbs of force pulling with the other hand.

Push the handlebar forward and backward, the headset (neck of the head tube) should be firmly secured with no movement space.

If needed, align the handlebar and stem and torque the stem clamp bolts evenly.

### (b) Adjust the headlight angle slightly downward so it won't blind oncoming traffic.

### (c) Inflate tires. Check that the tire beads and tires are evenly seated around the rims.

Use a pump with a Schrader valve and pressure gauge to inflate each tire to the recommended PSI (pounds per square inch) indicated on the tire sidewall. Do not overinflate or underinflate tires.

### (d) Check the chain alignment. Stand at the right side of the bike and grab the right pedal. Rotate the right pedal and crank toward the back of the bike as though pedaling backward - this will run the chain through the drivetrain without spinning the wheels. Watch the chain and ensure the chain runs through the drivetrain (the rear cog, chain tensioner, and around the front chainring) smoothly. If the chain doesn't run smoothly or something seems misaligned, please contact us.

### (e) Adjusting the seat height. An ideal seat height for most riders allows them to be comfortable and get the best pedaling efficiency. When the rider is seated, they should be able to place the ball of their foot on the pedal at its lowest position while their leg is almost fully extended, with the knee slightly bent. The seat should never be so high that the rider must rock side to side or fully straighten their legs while pedaling. And the seat must never be pulled out so far that the minimum insertion point is above the seat tube. Warning: Overextending the seatpost can cause it to break or fall off your bike, which will put you at very high risk of serious injury or death. Avoid this danger by inserting your seatpost into the seat tube far enough that the minimum insertion point is no longer visible.





- ( f ) Fine-tune the brake lever positioning. The angle of the brake levers can be adjusted for the most comfortable hand position possible. For most riders, this will allow the m to rest two or three fingers comfortably on the brake lever while keeping their wrists in a neutral position. To adjust the angle, follow these steps:
1. Loosen the brake lever clamp bolt using the appropriate Allen wrench.
  2. Adjust the angle of the brake lever so it's comfortable for the rider.
  3. Retighten the brake lever clamp bolt.
- (g) Fine-tune brake lever feel. The “feel” of the brake levers is controlled by the brake cable tension, which determines how far the brake levers need to be squeezed for the brake pads to press against the brake rotor. We recommend that the brake cable tension be such that squeezing the levers halfway between the starting position and the handlebar grip results in a firm lever feel, indicating that the brake pads are pressing against the brake rotor. If needed, you can make fine adjustments to the brake cable tension by rotating the barrel adjusters at the brake lever housings and/or at the brake calipers.
- (h) Check brakes performance. Squeeze the left brake lever to lock the front brake, and then try to push the bike forward using the handlebar. The front wheel should not spin. Squeeze the right brake lever to lock the rear brake. Again, push against the handlebar to try moving the bike forward. The rear wheel should not spin.
- ( i ) Check the security of the rear wheel. The torque of the rear axle nut should be 40Nm. The rear wheel security and hardware torque should also be checked regularly. Either wheel can become loose or unsecured with normal use.



## BEFORE YOUR FIRST RIDE

- 1. Ride as safely as possible.** Bicycling is an exciting, delightful, and practical way to get around, but like any sport, it involves risk of injury and death. By choosing to ride a bike, you assume responsibility for those risks. Warning: Incorrect assembly, maintenance, or use of your ebike can cause component or performance failure, loss of control, serious injury, or death. Even if you're an experienced bike rider, you must read and understand the entire manual and any documentation provided for subcomponents or accessories before riding.
- 2. Be thoroughly educated** about your bike before riding it. Practice riding your bike, braking, and using the throttle and pedal assist systems in a controlled location before venturing into traffic or other risky conditions. Take extreme care getting to know and learning to control the pedal assist and brake systems. Your Rurui XT9 is probably heavier than other bikes you've ridden, and it will handle quite differently from lighter bikes, especially when you're accelerating or decelerating. Learn to maintain a comfortable stopping distance from all other objects, riders, and vehicles at different speeds, conditions, and with varying payloads.
- 3. Age and ability requirements.** This ebike is not to be operated by anyone under the age of 16. Children under the age of 16 may lack the necessary judgment and skill to safely operate the ebike, potentially resulting in damage to the bike, damage to other property, serious injury, and/or death. Please also check your local laws, which may require a higher age.
- 4. Know and obey all relevant local laws.** It is your responsibility to research and understand relevant laws where you ride your bike. Such laws may cover required helmets and safety gear, required lights and reflectors, required hand signals, where you can legally ride a bike (bikes and ebikes may have different restrictions), how fast you can go, what (if any) cargo or passengers you can carry, rider age, and more. Before using public transportation—buses, trains, etc.—to transport your ebike, check with the relevant transportation authority for any rules governing weight limits, tire widths, lithium-ion batteries, or any other rules that might pertain to ebikes. When you ride on the road, assume you must, at minimum, follow all of the rules that cars must follow. For additional information regarding traffic and vehicle laws, contact the road traffic authority in your area.
- 5. Safety check before each ride.** Before each ride, you must check your bike to ensure everything is working properly.



**6. Ride appropriately for conditions.** Always travel at speeds appropriate for local terrain and conditions as well as your experience level. When in doubt, slow down. Always use a low pedal assist level until you are comfortable with your Rurui XT9 and confident about controlling its power, weight, and responsiveness (e.g., during start-up, turns, and braking) at different speeds, in different conditions, and with whatever payloads you might carry. Riding with your headlight on will make you more visible in any conditions. The headlight will turn on when the bike is powered on. We recommend you keep it on whenever you ride. Concentrate on the path ahead. Avoid potholes, gravel, ice, wet or oily roads, wet leaves, curbs, train tracks, speed bumps, drain gates, thorns, broken glass, and other obstacles, hazards, and puncture-flat risks. Warning: Crossing train tracks or similar grooved or raised surfaces at a diagonal can make the surface “grab” or deflect your wheel, causing your bike to suddenly get stuck or crash, leading to serious injury or death. Always cross such hazards at a perpendicular angle or, when in doubt, dismount and walk your bike across.

**7. Wear a helmet and appropriate safety gear.** We strongly advise that you wear a properly fitting, certified bicycle safety helmet while riding your bike, which may be required by law in your area. Wear appropriate safety gear including closed-toe shoes. If you are wearing loose pants, secure the bottom using appropriate leg clips or bands to prevent the fabric from flapping and getting caught in the chain or other moving parts. Never use items such as headphones or hoods that can compromise your hearing or field of vision. A local, certified, and reputable bike shop can help advise you on what gear is best for the weather and other riding conditions in your area. Maximize your visibility with bright colors and reflective outerwear or vests. Never compromise your ability to be seen or heard by removing your bike’s reflectors, blocking or removing the headlight or taillight, or removing the bell.

## 8. Safety checklists.

### (a) BEFORE YOUR FIRST RIDE

- Record the serial number, in case it will be lost or stolen. The serial number of Rurui XT9 bike is located on the head tube of the frame.
- Make sure handlebar cables were routed correctly when the handlebar was installed.
- Make sure your pedals are secure using a pedal wrench.
- Check that the cable connectors on the bike are all plugged in securely and that nothing loosened in shipping.
- Check the brake functions per the directions but note that brakes can rub a little the first few times you ride. This is okay and normal; any squeak or noise should go away with use.
- Check everything on the “Before every ride” list below.

### (b) BEFORE EVERY RIDE

- Check that all quick-release levers and axle nuts is secured.
- Check brake performance and brake signal shows on display when you squeeze each brake lever.



- Ensure tires inflated to within the PSI limits marked on sidewalls. Ensure tires have good tread
- Ensure rims run true and have no obvious wobbles, dents, or kinks. Check each wheel spoke. If any are loose or broken, seek help from a certified, reputable mechanic.
- Ensure the handlebar and stem are correctly aligned, adjusted, and tightened for proper steering. Ensure the handlebar grips are secure and undamaged.
- Check that headset, wheel, pedal, and bottom-bracket bearings are lubricated, run freely, and display no excess movement, grinding, or rattling.
- Ensure pedals are securely tightened to the cranks. Ensure the cranks are not bent and are securely tightened to the bottom bracket.
- Ensure the chain is clean, lubricated, and runs smoothly. Take extra care with chain maintenance if the bike is used in wet, salty, dusty, or otherwise damaging conditions. Check that the chain tensioner is aligned and functioning properly.
- Check that the frame and fork are not bent or broken. Check that the seat is adjusted properly.
- Ensure the hub motor is spinning smoothly and is in good working order. Ensure the power cable running to the hub motor is secured and undamaged.
- Ensure the throttle and pedal assistance are operating normally.
- Ensure the battery is charged. Ensure there is no damage to the battery. Lock the battery to frame and check that it is secured.
- Look over electrical cable connectors to make sure they are fully seated and free from debris or moisture. Check cables and cable housing for obvious signs of damage. Ensure cables are secured away from moving parts.
- Ensure all reflectors are properly fitted and not obscured. Ensure all accessories and components installed on the bike are properly secured and functioning according to their manufacturer's specifications.
- Check all safety gear, clothing, cargo, and accessories for loose or potentially loose straps/elements and secure them. Ensure rider and any passengers are wearing a helmet and other required riding safety gear, and inspect these items for signs of damage.
- If your bike has fenders: Ensure they are centered over the wheels, adjusted properly, properly secured, and have no cracks or holes.

(c) AFTER EVERY RIDE

- Store your bike and battery in a dry location and take other sensible precautions
- Guard against damage from the elements by following the recommendations in "Bike Maintenance"
- Charge your battery in a temperature-controlled location and follow the recommendations in "Battery Information"



## BATTERY INFORMATION

The battery that comes with your Rurui XT9 is a state-of-the-art, lithium-ion battery that's designed to give you years of power with proper care and use. Follow the recommendations here for the best possible performance.

- The battery should be fully recharged after each use. That way, you'll get the maximum range on your next ride and reduce the chance that you'll over-discharge the battery, which can reduce its lifespan. There is no memory effect on this type of battery, so charging after short rides will not cause damage.
- Charging the battery after a ride generally takes 3 to 7 hours. In rare cases, charging may take longer to allow the battery management system to balance the battery, particularly when the bike is new, after long periods of storage, or if the battery has been completely depleted.

**DANGER:** Never open the battery housing, which will void the warranty and can result in battery damage. It can also expose you to caustic substances and electrical shock or it could create a fire hazard, which can lead to serious injury or death.

**DANGER:** Never immerse or submerge the battery in water or liquid, including water in the battery mount, which can cause damage, serious injury, or death.

**WARNING:** Using aftermarket battery accessories or products that have not been tested by Rurui Ebike for safety and compatibility may void your warranty, create an unsafe riding condition, result in bike/property damage, or cause serious injury or death. If you use products not tested and recommended by Rad Power Bikes, you do so at your own risk.

**WARNING:** Using a damaged battery or charger can create additional bike damage or a fire hazard. Stop using your battery and charger and contact us immediately if any of the following occur:

- Your charger's flexible power cord or output cable or any of the electrical cables on your bike is frayed, has broken insulation, or any other signs of damage,
- Your battery or charger is physically damaged, non-functional, or performing abnormally,
- Your battery or charger experienced a significant impact from a fall, crash, or shipping damage, with or without obvious signs of damage, or
- Your charger becomes too hot to touch (it's designed to get warm with normal use), makes an unusual smell, or shows other signs of overheating.
- Store any damaged battery or charger in a safe location and, as soon as possible, recycle or otherwise dispose of it according to local rules. Contact us if you have any questions or to purchase a compatible replacement battery or charger

**NOTICE:** Always follow any safety information attached to the battery or charger. A sample label for the battery that shipped with your bike is shown at right, some details and manufacturing location may differ.





**NOTICE:** Failure to follow the battery-charging best practices outlined here and in the following sections could result in unnecessary wear to the charging components, battery, and/or charger, and could lead to an underperforming or non-functional battery. Batteries damaged due to improper care will not be replaced under warranty.

### Removing and installing the battery

You can charge your battery either when it's on or off your bike. If you choose to remove it for charging, storage, transportation, security, or some other reason, keep the following best practices in mind to prevent battery damage.

**BATTERY REMOVAL:** Put the bike upside down, turn the key of the battery to the off and unlocked position. Carefully pull the battery out from the frame, be careful not to drop or damage the battery.

**BATTERY INSTALLATION/MOUNTING:** To install the battery, make sure the keyport is in the off/unlocked position. Carefully align and slowly slide the battery down until it's in place. Turn the key of the battery to the locked position.

### Before you charge

Before you charge your battery, make sure to first check the battery, charger, and electrical cables for signs of damage. Store and use the charger in a safe place—away from children, direct sunlight, dirt, debris, tripping hazards (including electrical cords), or any materials that could ignite in the unlikely event of a charger or battery malfunction. Position the charger and battery where they're not at risk for falls or other impacts.

**WARNING:** Letting the charger's plug contact metal objects could cause a power discharge (a spark), which could injure you or create a fire hazard.

**WARNING:** Letting a battery charge unattended increases the risk that a charging problem will go undetected and lead to component damage or a fire hazard. Always charge your battery where you can monitor it.

Your battery needs to charge at room temperature or a bit cooler (50°F to 77°F (10°C to 25°C)). It generates heat while charging, but it's designed to air-cool; keep it uncovered and the lights facing upward on a flat, stable, hard surface.

**NOTICE:** Charging your battery in excessively hot conditions or interfering with its ability to air-cool can damage your battery or charger. Always charge your battery at room temperature: 50°F to 77°F (10°C to 25°C). Charging your battery at low temperatures may slow charging or prevent a full charge. Keep the battery and charger uncovered, make sure the charger is on a hard, flat, stable surface, and use the charger right-side-up (with charging lights facing upward).

### Charging procedure

1. Plug the charger into the battery's charging port or the charging port on the frame. With the battery installed onto or uninstalled from the bike, place the charger on a flat, secure surface with the charging indicator lights facing up, and connect the DC output plug from the charger (round barrel connector) to the charging port on the side of the battery.



2. Plug the charger into a power outlet. Connect the charger input plug (100/240-volt plug) to the power outlet. Charging should initiate and will be indicated by LED charge status light on the charger turning red. When charging is complete, the indicator light will turn green.

3. Unplug the charger from the outlet, then the charging port.

**NOTICE:** The charger is designed to stop charging automatically when the battery is full. Nevertheless, leaving your battery charging longer than necessary can cause needless wear. We recommend you remove the charger from the battery within one hour of the green light indicating a complete charge. Store the charger carefully, making sure its plug does not come in contact with liquids, dirt, debris, or metal objects, which can damage the plug and interfere with future operation.

**WARNING:** Charging your battery with a charger other than one supplied or recommended by Rurui Ebike

**WARNING:** Lithium-Ion batteries can be dangerous. Take care when using and charging your battery. Failure to follow the above guidelines could result in damage to property and/or serious injury. Contact us immediately if you have any questions regarding battery safety.

### Long-term battery storage

If storing your bike for longer than two weeks at a time, follow the recommendations below to maintain the health and longevity of your battery.

- Power off the battery either locked to the frame or unlocked and removed from the frame for storage
- Store the battery in a dry, climate controlled, indoor location between 50°F to 77°F (10°C to 25°C).
- We recommend that you store your battery at approximately 40-75% charged.
- Check the battery's charge level monthly.
- Storing your battery for long periods at full charge can cause range decline over time.
- Storing your battery for long periods at very little or no charge can cause permanent range decline or a non-functional battery.

**NOTICE:** Incorrect storage of your battery can result in a damaged or non-functional battery. Follow the above recommendations to reduce such risk.



## OPERATION AND PRACTICE

### Start-up procedure

After the bike has been properly assembled according to the assembly guide, all components are secured correctly, a certified, reputable mechanic has checked the assembly, and you have read this entire manual, turn on the bike and select a pedal assist level following the steps below:

1. Check that the battery is locked securely and turn on the red switch of it.
2. Turn on the display by pressing the M button near the left grip.
3. The display will light and initialize the electronic system.
4. If there's no error code/icon shows on the display, go on and try all functions. Otherwise please see "Troubleshooting" and contact us.

### Power assistance from the motor

Your Rurui XT9 is equipped with different ways for a rider to use power assistance from the motor to propel the bike forward:

**NOTICE:** You'll have to select a level of pedal assistance (PAS) from 1 through 5 (using the up and down arrow button near the left grip) to obtain power assistance. When the PAS level is 0, the motor will not respond to your throttle and pedal.

**PEDAL ASSIST (hybrid):** Pedal assist uses a cadence sensor built into the drivetrain of the bike. The cadence sensor detects when the rider revolves the pedals (at least half of a circle) and signals the electric motor to provide the level of pedal assistance (1-5) that the rider has selected.

**THROTTLE (electric):** The thumb throttle is located on the right side of the handlebar. The rider can use it to propel the bike forward without pedaling. Once you release the throttle or apply the brakes, the throttle will no longer propel the bike forward.

**WALK MODE (electric):** While dismounted, press and hold the down arrow button to engage in walk mode. Please hold the handlebar with both hands and adjust the position of the pedal to not hurt your calf when walking. The speed of walk mode is 6km/h and you can exit walk mode by applying the brakes.

**CRUISE MODE (electric):** While riding in pedal-assist or throttle mode, press and hold the down arrow button to engage in cruise mode. The motor will propel the bike forward at the current speed without pedaling or engaging the throttle. You can exit cruise mode by pressing and holding the down arrow button or applying the brakes.

**NOTICE:** The cruise mode is disabled by default, please see "Display operation" to enable it if needed.



### Brake motor cutoff

To protect your safety and the motor lifespan, both brake levers contain motor cutoff switches, which cut off power from the motor whenever the brakes are applied. Try the following steps:

- a. In a clear, open area, turn on the bike. With appropriate safety gear and clothing, sit on the bike.
- b. Squeeze the left brake lever to engage the front brake, and you will see the brake signal shown on the display.
- c. Lightly apply the throttle. The bike should not move since the brake is applied.
- d. Release the throttle.
- e. Release the brake.
- f. Test that the throttle now operates with the brake not engaged.
- g. Release the throttle.
- h. Perform steps “a”-“g” again, this time with the rear brake lever (on the right side of the handlebar).

### Headlight operation

The headlight can be turned on/off by pressing and releasing the up arrow button once the bike has been powered on. We recommend riding with the headlight on, even during daylight. The headlight is designed to help others see the bike, especially in low-light conditions. Depending on rider preference and visual ability, an additional bike light may be necessary to illuminate the path ahead for the rider.

### Display operation

Rurui XT9 comes with an M5 LCD display. It can show the data of riding and indicate e-bike faults. And you can customize the settings yourself, please read the display manual if needed.

Operation	Effect
Press M button and hold	Turn on/off the display
Press M button and release	Toggle display ODOMeter, TRIP mileage, VOLTage, CURrent, and system up TIME.
Press M&UP button and hold	Toggle CURrent speed and AVeraGe speed.
Press UP button and release	Increase PAS&throttle level or setting value
Press DOWN button and release	Decrease PAS&throttle level or setting value
Press UP button and hold	Turn on/off headlight
Press DOWN button and hold	Engage in walk or cruise mode
Press UP&DOWN button and hold	Enter Setup mode



## Display settings

NO	Settings	Range	Default
P01	Backlight Brightness	1-3	002
P02	Unit of Mileage	0: KM, 1: MI	000
P03	System Voltage	24V, 36V, 48V	048
P04	Sleep Interval	0: Never, 1-60MIN	010
P05	Motor Assist Level	0: 3 Levels, 1: 5 Levels	001
P06	Tires Diameter	16-28IN	27.5
P07	Speed Measure Magnetic Spots	1-100	001
P08	Speed Limit	0-100KPH	100
P09	Throttle Response Time	0: Delay, 1: Immediately	000
P10	Enabled Riding Modes	0: PAS only, 1: Throttle only, 2: both enabled	002
P11	PAS Sensitivity	1-24	008
P12	PAS Strength	1-5	003
P13	Booster Magnetic Steel Spots	5, 8, 12	012
P14	Current Limit	0-20A	015
P15	Undervoltage Threshold		39.0
P16	ODO Erase	Press UP button for 5 seconds	000
P17	Enable Cruise Mode	0: Cruise Disabled, 1: Enabled	000
P18	Speed Display Scale	50-100%	100
P19	Disable 0 Motor Assist Level	0: 0 Level Enabled, 1: Disabled	000
P20	Communication Protocol	0: No.2, 1: 5S, 2: NO, 3: NO	000

### Best practices for extending range and battery life

Follow the best practices listed below to help extend your range and battery life.

- Avoid applying full throttle when the bike has slowed to very low speeds, stalled, or stopped.
- Pedal to assist the motor when climbing hills and accelerating from a stop. Reduce your power consumption whenever possible.
- Do not climb hills steeper than 15% in grade.
- Avoid sudden starts and stops.
- Accelerate slowly.





## Parking, storage, and transport

Please follow these tips to ensure your bike is well cared for when you're not using it.

### PARKING AND STORAGE

- Park in accordance with local rules and regulations, especially if you're in a public place.
- Park indoors whenever possible. If you must park outdoors in rain or wet conditions, do not do so for an extended period of time, and afterward park in a dry location to allow the bike systems to dry out. When any bike is exposed to wet conditions, it will need a more frequent maintenance schedule to prevent rust and corrosion and to ensure all systems work safely.
- Avoid parking or storing your bike in direct sunlight, which can cause damage to the display and fade stickers.
- Do not park or store your bike in excessive heat, such as inside of a parked car on a hot day. Always store your bike within this temperature range: -4°F to 140°F (-20°C to 60°C).
- Switch the power and any lights off to conserve battery power. Remove the key from the bike and ensure the battery is locked to the frame in the off position or use the key to remove the battery and bring it with you for security.
- Register your bike with BikeIndex, 529 Garage, or a regional bike registry (ask your local bike shop for recommendations) to increase the chance you'll get your bike back in the unfortunate event it's stolen.
- Lock up your bike to reduce risk of theft. You can purchase a lock from our website or consult a local, certified, and reputable bike shop.

### TRANSPORTING

- When pushing or carrying the bike, turn off the power to avoid accidental acceleration from the motor, e.g. by mistakenly twisting the throttle. Another option is to keep the bike powered on and use "walk mode"
- Only use racks (i.e., a bike rack for your car or other vehicle) designed for the size and weight of your ebike. Pay particular attention to whether the rack can accommodate the width of your ebike tires.
- When carrying your ebike on a rack for transport, remove the battery, and place/wrap it securely inside your vehicle, making sure it can't roll around and that its plugs and contacts are protected. This will reduce the weight of the bike, make lifting and loading it easier, and keeps your battery safer.
- Do not leave a battery in direct sunlight or any location that is or may become excessively hot or cold, like a parked car, for extended periods.
- Before using public transportation (buses, trains, etc.) to transport your ebike, check with the relevant transportation authority for any rules that might pertain to ebikes, including rules governing weight limits, tire widths, lithium-ion batteries, etc.



- Avoid transporting bike(s) from Rurui Ebike on a vehicle rack during rain, which may cause water damage to the electrical components.

### Record serial number of the bike and parts

We recommend you record the serial number of your bike (frame) for insurance or regional bike registry. And we may request serial numbers for other parts when providing services. You can find serial numbers at:

- Frame S/N - bottom of the head tube
- Display S/N - backside of the display
- Motor S/N - motor casing
- Battery S/N - battery label
- Controller S/N - controller label



## MAINTENANCE

### Check and service your bike regularly

On any bike, certain parts need to be replaced periodically due to wear, and sometimes parts become damaged for various reasons. Check your bike before each ride by following the directions in “Safety checklists”. Have your bike regularly serviced by a certified, reputable bike mechanic.

Components of any ebike are subject to higher wear compared to the components of bikes without power assistance. This is because ebikes can travel at higher average speeds than regular bicycles and generally weigh more. Higher wear is not a defect in the product and is not subject to warranty. Typical components affected are the tires, brake pads and rotors, suspension forks, spokes, wheels, and the battery.

Visit our website if you need to replace a part on your bike. If you want something that isn't listed there, please contact us for help. Be extremely careful about using parts or accessories that we have not recommended for safety and compatibility with your specific bike model.

### Recommended service intervals

Regular maintenance of any bike is key to ensuring the best possible performance and reducing wear and tear on systems. Ideal service intervals vary depending on use conditions. We generally recommend inspections, service, and necessary replacements be performed at the time and distance intervals described below, but you should have your bike serviced more frequently if you ride aggressively, with heavy payloads, or in harsh conditions. Have your bike inspected immediately if you notice problems or your bike has been involved in a fall or other accident.



**WARNING:** Riding your bike when any component's useful life is surpassed can cause that component to fail, resulting in loss of control, serious injury, or death. Pay attention to signs of wear such as cracks, scratches, component color change, and operational changes that could indicate a component needs replacing. Before each ride, check your bike using the "Safety checklists". If you do not have the experience, skills, and tools to perform safety checks and regular maintenance, consult a local certified, reputable bike mechanic for help.

#### **AFTER BREAK-IN PERIOD OF 50-100 MILES (80-160 KM)**

- Inspect  Check all cables and the chain for stretch
- Check spoke tension and the trueness of the wheels
- Check all bolted connections for loosening and ensure they are tightened
- Service  Have a certified, reputable bike mechanic perform a thorough tune-up.

#### **WEEKLY, 100-200 MILES (160-320 KM)**

- Inspect  Check all bolted connections for loosening and ensure they are tightened for proper torque.
- Check drivetrain for proper alignment and function (including chain, free wheel, chainring, and chain tensioner).
- Check wheel trueness and spoke tension, and check for quiet wheel operation (without spoke noise).
- Check frame for any damage.
- Service  Clean frame by wiping frame down with damp cloth.
- If needed, adjust the brake tension.
- Clean and grease the chain.
- Replace  Replace any components confirmed to be broken or damaged beyond repair by Rurui Ebike or a certified, reputable bike mechanic.

#### **MONTHLY, 250-750 MILES (400-1200 KM)**

- Inspect  Check brake pad wear, alignment, and the brake lever tension.
- Check chain stretch.
- Check chain alignment and drivetrain functioning.
- Check brake cables for corrosion and fraying.
- Check wheel trueness and spoke tension, and check for quiet wheel operation (without spoke noise).
- Service  Clean and lubricate drivetrain.
- Check crankset and pedal torque.
- Clean brake cables.



- Tension spokes and true wheels if any loose spokes are found.
- Replace  Replace brake cables if necessary.
- Replace brake pads if necessary (typically when the pad material is thinner than the backing plate).

#### **EVERY 6 MONTHS, 750-1250 MILES (1200-2000 KM)**

- Inspect  Inspect drivetrain (chain, chainring, freewheel, and chain tensioner).
- Inspect all cables and housings.
- Service  Standard tune-up by certified, reputable bike mechanic
- Grease bottom bracket.
- Replace  Replace brake pads.
- Replace tires if necessary.
- Replace cables and housings if necessary.

#### **Tire and wheel care**

The tires and inner tubes that came with your ebike are designed for durability and safety for regular cycling activities. Wheels and tires need to be checked before each use to make sure they're in good condition. Always replace tires and inner tubes that have punctures, cuts, bulges, damage, or excessive wear before you ride.

#### **TIRE INFLATION**

Inflate tubes and tires to within the PSI range stamped onto the tire sidewall. Underinflating your tires can result in loss of control. Overinflating can make tires burst. Either scenario can lead to serious injury or death. Always maintain the correct air pressure of your tires, which is listed on the tire's sidewall, and use a regulated air source with a pressure gauge so that you can measure pressure accurately.

#### **WHEEL "TRUENESS"**

Your wheels should always spin straight ("true") and must be repaired or replaced if they wobble side to side or up and down when spinning. To test them, do this:

1. Spin the wheel.

2. Brace a dull pencil against the frame or fork, with the tip just touching the rim.

If the gap between the spinning rim and pencil changes more than 5 mm, your wheels may need truing. If your wheels become untrue or if spokes loosen, which can happen with normal use, we recommend that you have a certified, reputable bike mechanic perform wheel tuning and truing operations. Do not attempt to true wheels or tighten spokes unless you have the highly specialized skills and tools to do so.



## TIRE REPLACEMENT

Even tires equipped with built-in flat-preventative tire liners can and do get flats from punctures, pinches, impacts, and other causes. If you get a flat tire or see evidence of tire wear, you must replace your tire and/or tubes before operating the bike again. Otherwise, you risk bike/property damage, serious injury, or death.

**CAUTION:** Removing a tube from your wheel rim before the air has been released from it can cause the tube to burst, potentially causing serious injury. Always release air pressure before removing your tube.

## MOTOR GREASE

The motor of your Rurui XT9 bike is the geared brushless type. So, it does not need to maintain (replace the brush) regularly. But it still needs grease for bearing and gears. If you notice a louder sound or noise when the motor works, please try to clean the motor and lubricate all gears and bearings with Lithium-based grease.

## Troubleshooting

Please contact us for help if you have these error code on your bike.

Error Code	Error Type	Common Solutions
E000	System in Good Condition.	-
E001	Reserved. Not used yet.	-
E002	Brake Lever Cutoff	Replace brake levers
E003	PAS Sensor. Not used yet.	-
E004	Walk Mode. Not used yet.	-
E005	Cruise Mode. Not used yet.	-
E006	Battery Undervoltage	Replace the battery
E007	Motor	Replace the motor
E008	Thumb Throttle	Replace the throttle
E009	Controller	Replace the controller
E010	Communication Signal Receiving Failure	Replace the failure part
E011	Communication Signal Dispatching Failure	Replace the controller





## LIMITED WARRANTY AND OTHER TERMS

We guarantee a 1-year warranty to the original owner/buyer for all manufacturing defects. We will send the replacement parts free of charge if the parts of your bike break in their warranty period without improper use or accident. After the warranty expires, we will still provide technical support for free, but the customers have to buy the replacement items. We will send the original items (same model and spec from the same manufacturer) as a priority for all warranty replacement items. When the original items are not available (beyond our control), we will provide compatible items without prior notice. The warranty covers but is not limited to the following listed. If there's any part of your bike is broken, please feel free to contact us for help. To view more about the warranty, go to <https://ruruiebike.com/pages/rurui-warranty>.

Part	Defective Type	Period
Battery	Not Charging / Not Storing Power / Range per Charger Less than 30%	12-Month
Charger	Not Charging	6-Month
Controller	Functional Failure	6-Month
Display	Blank, Functional Failure	6-Month
Frame	Desoldering / Material Fracture / Deformation	12-Month
Front Fork	Deformation / Functional Failure	6-Month
Front / Middle Axle	Functional Failure	6-Month
Headlight	Functional Failure	6-Month
Saddle	Crack	3-Month
Other Wearing Parts	Shipping Damage / Abnormal Wearing	1-Month

**NOTICE:** Providing the order number (valid purchase voucher) and S/N numbers for those parts (refer to their batches easily) will help our experts to provide solutions and suggestions faster and more effectively.

Defective Type	S/N Numbers
Battery, Charger, and E006	Frame S/N + Battery S/N
Display	Frame S/N + Display S/N
Controller, Throttle, E002, E009, E010, and E011	Frame S/N + Controller S/N
Motor, Pedal-assist, Throttle, Walk Mode, E007 and E008	Frame S/N + Controller S/N + Motor S/N
Others	Frame S/N

**RETURN POLICY:** <https://ruruiebike.com/pages/return-policy>