

ELECTRIC BICYCLE OWNER'S MANUAL

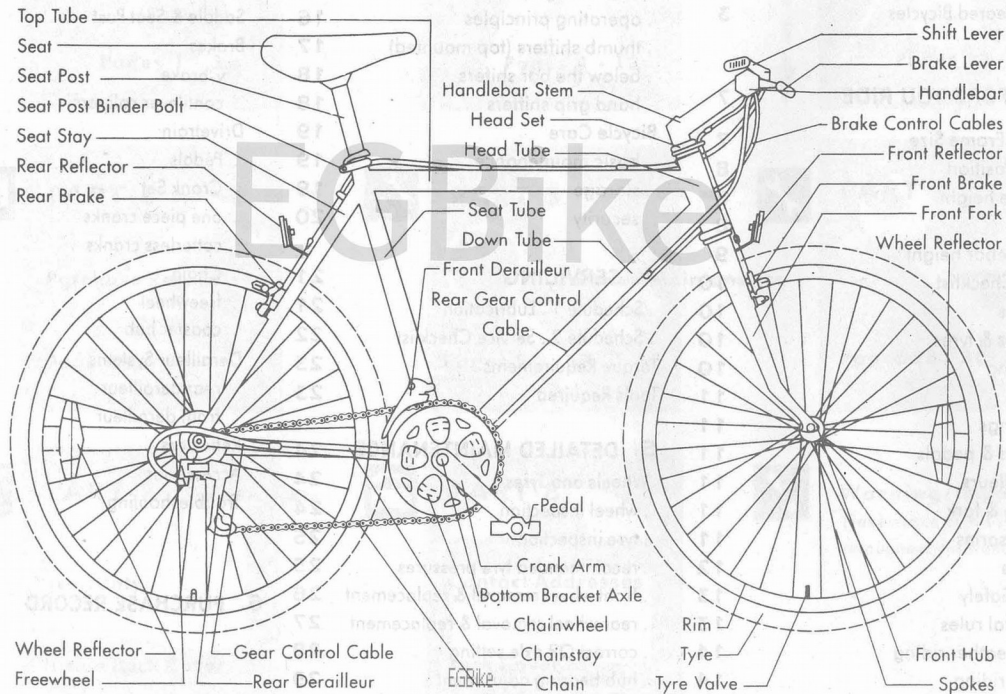
For Owners of EG Zurich 350 IX and 350 IX Step-thru Electric Bicycle

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INSTALLATION INSTRUCTIONS

Mountain Bicycles & Crossbikes . Mountain bicycles are designed to give maximum comfort over a wider variety of road surfaces. The wider handlebars and convenient shift lever position make them very easy to control. Wider wheel rims and tyres give them a softer ride with more traction on rough surfaces. The frame and fork on mountain style bicycles is much sturdier and heavier than a racing style bicycle. A variation of the mountain bicycle is the crossbike or hybrid. This style of bicycle is lighter than a mountain bicycle but not as fast as a racing bicycle. It combines some of the features of comfort and control with lighter weight and higher speed.



How to install the bicycle out of the box

1. Unpack the bicycle from the box and cut all the ties that held the bicycle together during shipping.
2. Turn the front fork 180 degrees. If the fork cannot turn, loosen the screws holding the handlebar stem and then turn the fork. Tighten the handlebar stem back after turning the fork forward; such that the stem will protrude forward.
3. Install the handle bar onto the handlebar stem. An Allen key is supplied to install the handle bar.
4. Remove the battery from the rack, so that it is easier to turn the bicycle upside down to install the front wheel. To remove the battery, insert the keys into the lock and turn the key to unlatch the battery. Gently slide the battery out from the holder.
5. ! WARNING: Please make sure that the saddle and the handle bar are installed properly before turning the bicycle upside down to install the front wheel. Ensure the weight of the bike does not bend the rear mudguard.
6. Turn the bicycle upside down such that the fork is facing upward.
7. Check the pattern of the tire such that when installed they will match the direction of the rear tires and the motor connector on the same side to where you will connect the motor cable.
8. Install the front wheel by placing the wheel between the forks. Place the wheel past the front v-brake.
9. ! NOTE: Please make sure the lock washers are in between the hub motor and the fork on

both sides of the hub motor.

10. Turn the wheel until the lock washers on either sides of the hub motor spindle drops all the way into the fork opening and the lock washer covers the opening of the fork. Lock in the axle by tightening the nuts on both sides to equal tightness using either wrench size 18 or an adjustable wrench.
11. ! WARNING: Do NOT over tighten nut against the fork; for you will risk damaging your fork.
12. Connect the motor cables by aligning the arrows on both end of the connectors.
13. Turn the bicycle back around on its wheels, and lower the kick-stand.
14. Install the Front LED reflector lamp and front fender onto your bicycle on the arch of your fork.
15. Install the fender stays against hole near to the bottom end of your bicycle fork.
16. Install the pedals to the bike. Each of the pedals has a letter indicating which side it needs to be installed to. R=Right and L=Left. Install them using the provided wrench.
17. Place the small black plastic cover over the stem screw of the bike.
18. ! WARNING: Before riding the bicycle ensure the main Li-on battery is properly installed and locked in before riding the bicycle. If the Battery is not locked onto the rear rack, it may slide off the rack and cause damage to the battery.
19. Insert the battery into the rear rack and lock in your battery with provided key. Ensure that the rails are properly aligned below the battery. Ensure that the battery is locked in by lightly tugging on the battery to ensure it will not slide out.
20. (Optional) Install the spring by stretching them against both the fork and frame, then place the sleeve over it. This spring provides tension to hold your wheel straight during both when the bicycle is parked or when it is ridden.

OPERATION INSTRUCTIONS

How to operate the Electric Bicycle

The Electric bicycle can be operated in 3 different modes:

1. *Manual Mode* –

- Make sure the Battery Meter/power meter on the left of the handlebar is “OFF” and then, pedal the bicycle normally as you would any bicycle.

2a. *Pedal Assist Mode (LOW)* –

- Turn on the battery power to the electric bike by switching on the Battery. Switch is on the battery.
- Press the red “ON/OFF” button on the meter located to the left of the handlebar to turn “ON” the system. Pedal the bicycle normally as you would any bicycle.
- The motor will stop if the brake lever is depressed even if you are still peddling the bicycle.
- The motor will stop when you stop peddling in this mode.
- When first switched “ON” the motor starts off in the “LOW” power mode.
- In this mode the motor is very power efficient, and will assist you with the least power as you pedal.
- In “LOW” mode, the system provides you with the most “miles per charge” of battery power use among the pedal assist modes.

2b. *Pedal Assist Mode (Medium)* –

- To put the bike in “Medium” pedal assist mode, switch on the bike as you would on the above “LOW” mode and then press the green “Mode” button to light up the “MED” mode

and pedal the bicycle normally as you would any bicycle.

- In this mode, the motor will assist you with a moderate amount of power as you pedal the bicycle.
- The motor will stop if the brake lever is depressed even if you are still peddling the bicycle.
- The motor will stop when you stop peddling in this mode.
- This mode will give you a balanced “miles per charge” of battery power use among the pedal assist modes.

2c. Pedal Assist Mode (High) –

- To put the bike in “High” pedal assist mode, switch on the bike as you would on the above “LOW” mode and then press the green “Mode” button to light up the “HIGH” mode and pedal the bicycle normally as you would any bicycle.
- In this mode, the motor will assist you with a high amount of power as you pedal the bicycle.
- ! CAUTION: This mode is designed to achieve a speed of 20 MPH. User discretion is advised
- The motor will stop if the brake lever is depressed even if you are still peddling the bicycle.
- The motor will stop when you stop peddling in this mode.
- This mode will give you a low “miles per charge” of battery power use among the pedal assist modes.

3. Fully Electric Mode –

- Press the red “ON/OFF” button on the handlebar meter to turn “ON” the system.
- Place the “MODE” switch to the left of the handle bar in any position you desire, because while engaging the thumb throttle, the pedal assist mode is in-active and does not have any effect on the speed or power of the electric motor.
- Depress the thumb throttle in any increments of power you desire to power the motor of the bicycle and it will take off.
- This mode can be used in conjunction with any of the above modes as the amount of motor power supplied while twisting the thumb throttle overrides whatever mode the “MODE” switch on the handle bar is engaged in.
- You can engage this mode whenever you want as long as the system is turned “ON”.
- While peddling will lighten the load demand on the electric motor, you do NOT need to pedal in this mode of operation.
- ! CAUTION: This mode is designed to achieve a speed of 20 MPH. User discretion is advised
- The motor will NOT stop when you stop peddling while the thumb throttle is engaged.
- The motor will stop if the brake lever is depressed even if the thumb throttle is engaged.
- ! CAUTION: Remember to let go of the thumb throttle when getting on or off the bike whether or not the brake levers are engaged.
- In this mode, the electric bike will use the most amount of battery power it will use even more battery power than in any of the pedal assist modes.
- This mode will give you the least “miles per charge” compared to any of the above modes of operation

About the Brake Safety Feature on all our Electric Bikes.

- ALL our electric bikes make use of a wired brake lever kill switch for safety purposes. When

the brake lever is engaged, it sends a kill signal to the controller to disable the motor under all circumstances and condition. This will ensure the motor does not continue to spin when you need the bicycle to stop.

How to read the Battery Meters and about the Li-on battery

There are 2 Battery meters on your bike. 1 is located conveniently on the left hand side of the handle bar. The 4 red LED lights below the incremental bars indicate the state of the battery discharge. The other Battery meter is located on to the top rear of battery with 4 green and 1 red LEDs showing the current capacity of the battery in various states of discharge.

As with any Lithium-ion batteries, there are a limited number of times a battery can be charged. While priming Lithium-ion batteries are not necessary (which means it may be charged whenever you want without affecting its charge capacity), the number of times it is charged does affect the overall longevity of the battery life.

To conserve battery power, switch off the electrical system by pressing the “ON/OFF” button on the meter on the left of the handlebar, when the electric power is not needed.

! NOTE: The sole purpose of the keys is used only to latch and unlatch the battery pack for removal. You do not need to insert this key to operate the electrical system of the bicycle.

! WARNING: Please keep your keys to your electric bicycle in a safe place. Each set of keys are unique to your particular electric bicycle and unfortunately we do not keep a copy of your keys on file. Nor would we have a way of reproducing them.

CARE INSTRUCTIONS

Battery

! WARNING:

- Never short circuit the charge or discharge battery terminals.
- Never charge the battery by the discharge terminals or discharge the battery by the charge terminals.
- Keep the battery away from excessive heat and or open flames.
- Never pour on or submerge the battery in water.
- To avoid damage to the battery, never subject the battery to intense physical impact, shock or severe vibration.
- Protect the battery from water or moisture at all times.
- Protect the discharge and charge terminals of the battery from rain or water logging.
- Keep the battery away from children.
- When the battery is not in use for an extended period of time, remove the battery from the battery holder for storage.
- Never disassemble the battery. The battery does not contain serviceable parts.
- Do not sit on or place any object on or over the battery.
- Use only the supplied charger to charge the battery.

Battery capacity: 12Ah

Battery and Motor Voltage: 36V

Charge temperature range 0~45°C

Discharge temperature range $-20\sim 55^{\circ}\text{C}$
Total Charge time from total discharge: 4-6 hours
Total Charge time for the initial first 3 charges: 12 hours

If you have any questions about this battery or its usage, please do not hesitate to contact us

Storage, Maintenance and transport

Battery

- If the battery needs to be stored for an extended period of time, it should be kept at around 50% charge capacity (or charge the battery for about 2-3hours from empty) and should be placed in a dry and well ventilated place.
- To maintain battery life expectancy, the battery needs to be charged at least once for 2-3 hours every two months.
- The battery and charger should be kept in storage in a clean, dry and well ventilated place. Avoid contact with corrosive substances and keep the battery away from excessive heat and or open flames.
- Should the battery need to be transported, pack it in a box, and ensure that it is always protected from intense physical impact, shock, severe vibrations, direct sunlight, or water logging. The battery may be transported in a vehicle such as an automobile, train, ship, airplane and etc. Please check your local rules and regulations regarding such transportation.

Battery Storage conditions: Room temperature $-20\sim 35^{\circ}\text{C}$,

Battery Storage relative humidity: $5\sim 65\%RH$

Charger

- The charger should be disconnected from the battery when it is kept in storage.
- Should the charger need to be transported, pack it into a box and ensure that it is always protected from intense physical shock, severe vibrations, impact, direct sunlight, or water logging. The battery may be transported in a vehicle such as an automobile, train, ship, airplane and etc. Please check your local rules and regulations regarding such transportation.

Charger Storage conditions: Room temperature $-20\sim 35^{\circ}\text{C}$,

Charger relative humidity: $5\sim 65\%RH$

Charger

! WARNING:

- Never place any object on the charger.
- Never pour any liquid on or insert any metal into the charger.
- Never disassemble or modify the charger in anyway.
- Never plug or un-plug the charger with a wet hand
- Do not use the charger during a lightning storm.
- Use only the supplied charger to re-charge the battery.
- Do not operate the charger in an unstable, dusty or an excessively damp environment.
- Avoid using the charger under direct sunlight.
- Operate the charger in a well ventilation environment.
- Unplug the charger from the wall outlet when not in use.

Accessories

! WARNING :

- Ensure you do NOT raise the seat post pass the safety mark etched on the seat posts.
- Ensure that your assembled accessory does not interfere with the steering, braking or the natural movement of the bicycle.

Electric Motor and Battery Features

High efficiency and power saving Electric Motor–

- A Brushless Motor with gears
- High efficiency of up to 85%.
- Efficiency>80%. 36V battery for a continuous run range of more than 50 miles on a single charge in pedal assist mode.
- Produces a continuous and sustained power of 350 Watt power with a peak of up to 700 Watts.

High power and high torque –

- Fast pick up even under heavy load. Easily climb and ascend sloppy terrains.
- Low power consumption, Long-battery life and a Compact design.
- The 36 Volt Battery pack weighs 8 Lbs.

Trouble-free, Low maintenance, Long life span and Easy to maintain electric motor –

- High Quality Brushless Electric Disc motor with an advance speed sensor and gears.
- Closed system motor requires only surface cleaning and dry storage.

Charging the Battery

- Align the arrow on the connector to the battery charging port and then connect the battery to the charger; ensure the output terminal of the charger and the input terminal of the battery are firmly connected.
- When the charger is plugged into a wall outlet, the charger LED indicator will turn RED to indicate that the battery is charging
- The LED indicator on the charger will turn GREEN when the battery is fully charged.
- Disconnect the charger from the wall outlet before disconnecting the charger from the battery.
- To ensure long battery life, fully charge the battery for at least twelve (12) hours during the first initial three charges and charge the battery at least once for 2-3 hours every 2 months
- ! NOTE: Only charge the battery pack using the supplied charger.
- ! NOTE: Always plug the charger onto the Battery pack before plugging the charger to the wall socket.
- ! WARNING: Do NOT charge the battery for more than 24hrs for risk of damaging the battery.

Repair and Service

! WARNING:

- Inspect the bicycle frequently. Failure to inspect the bicycle and to make repairs or adjustments, as necessary, can result in injury to the rider or to others. Make sure all parts are correctly assembled and adjusted as written in the owner's manual.
- Immediately replace any damaged, missing, or worn parts.
- Make sure all fasteners are correctly tightened as written in the owner's manual
- Parts that are not properly tightened can be lost or operate poorly.
- Do not over tighten parts, as over-tightening may damage the part.

- Make sure any replacement fasteners are of the correct type and size.
- Your bike uses an Aluminum Alloy frame. Ensure that the bicycle frame is carefully and frequently inspected; as Aluminum frames can develop micro fractures from stress, severe impact and shocks. If you see these micro fractures or cracks, stop riding the bicycle immediately.
- In case of micro fractures, have the bicycle frame repaired and inspected by a qualified professional before riding the bicycle again.

NOTE: Have a bicycle service shop make any repairs or adjustments for which you do not have the correct tools to or if you do not sufficiently understand the instructions set forth in this electric bicycle's manual supplement or the bicycle owner's manual.

Inspection of the Bearings Maintenance

1. Frequently check the bearings of the bicycle. Have a bicycle service shop lubricate the bearing once a year or any time they do not pass the tests as noted in the Bicycle owner's manual.

Serial Numbers to your EG Electric Bike

1. There are 3 serial numbers that are of importance on your EG Electric Bike. They are the Frame serial number, the Motor serial number and the Battery pack serial number. All the 3 serial numbers can be found on the outside of the box the bicycle was shipped in.
2. The Bike Frame Serial number to your EG Electric Bike is located right where the front Fork meets the frame of the bike. It is at the front of the frame right near where you install the front reflector LED Lamp to the bike.
3. The Motor serial number is located on the hub motor.
4. The Battery serial number is located at the bottom of the Battery pack.