# ELECTRIC BICYCLE OWNER'S MANUAL

## For Owners of EG Oahu 500MX and Maui 500MX Electric Bicycle

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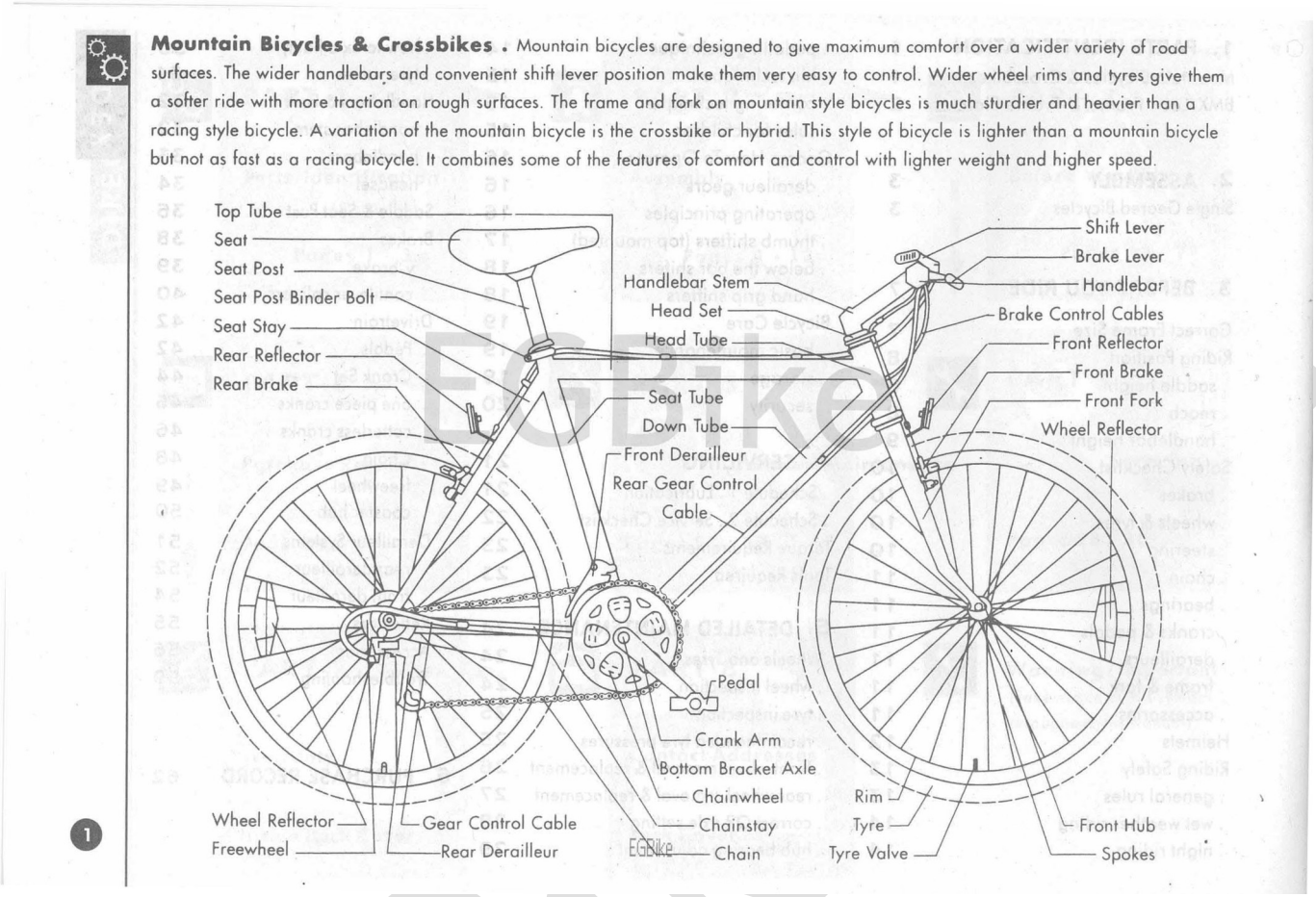
# INSTALLATION INSTRUCTIONS




**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. Install the handle bar by inserting the handlebar stem into the head tube. An Allen key is supplied to install the handle bar stem.
3. Adjust the handlebar by loosening the nut holding the handlebar and then re-tightening it with the included Allen wrench.
4. ! WARNING: Do NOT over tighten nut against the fork; for you will risk damaging your suspension fork.
5. The front and rear LED/reflector run on the main Li-on battery, and is operated via the light button on the handlebar display unit.
6. 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.
7. ! 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 firmly locked onto the rear rack, it may slide off the rack and cause damage to the battery.
8. 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.

# OPERATION INSTRUCTIONS

## How to operate the Electric Bicycle

The Electric bicycle can be operated in 3 different modes: Manual, Pedal Assist and Throttle Modes

1. *Manual Mode –*
   - To use your bike in full Manual mode, simply make sure the Display on the bike is “OFF” and then, pedal the bicycle normally as you would any bicycle. Your motor is geared such that forward motion is never hampered by the motor

2. *Pedal Assist (PAS) Level 1 – 5*
   - To use your bike in Pedal assist levels 1 thru 5, simply turn on the battery power to the electric bike by turning the key clockwise to the “ON” position.
   - Press “Power/M” button on the pad 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 the system is first switched “ON” it will default to start in the “PAS Level 1”.
   - You can adjust the desired speed and power usage by pressing “+” or “-” buttons to the desired PAS level and operate your E-Bike as you normally would any bicycle.
   - In “PAS Level 1”, the system will provide you with the most “miles per charge” of battery power use among the PAS modes and the slowest speed among the PAS levels.
   - In “PAS Level 5”, the system will provide you the lowest “miles per charge” of battery power use among the PAS modes and the highest speed available among the PAS levels.

2b. *Pedal Assist (PAS) and Throttle on demand (PAS Level 0)–*
   - To put your bike in NO Pedal assist and “Throttle on demand” mode only, switch “ON” the bike’s electrical system by pressing the “Power/M” button on the Pad located to the left of the handlebar and then press “-” button on the pad until “0” appears on the LCD screen. Pedal the bicycle normally as you would any bicycle.
   - In this mode, the motor will only function with the use of the throttle.
   - In this mode level, the PAS function has been turned off.
   - ! CAUTION: This mode can still achieve a speed of 20 MPH. User discretion is advised
   - The motor will stop if the brake lever is depressed even if you are have the throttle depressed/engaged.
   - This mode will give you a Moderate to low “miles per charge” of battery power use among the pedal assist modes, depending on your throttle use.
   - Holding down the throttle in this mode is essentially the same as placing your bike in PAS Level 5 and running the motor.
   - To switch back to pedal assist modes, press the “+” button until you reach the desired PAS level.

3. *Throttle Mode –*
   - To ride the bike fully on “Electric Mode”, switch “ON” the bike by pressing the “Power/M” button on the Pad located to the left of the handlebar.
   - Place the PAS on any level you desire, because while the thumb throttle is engaged, the PAS mode is not active and has no effect on the speed or power of the electric motor.

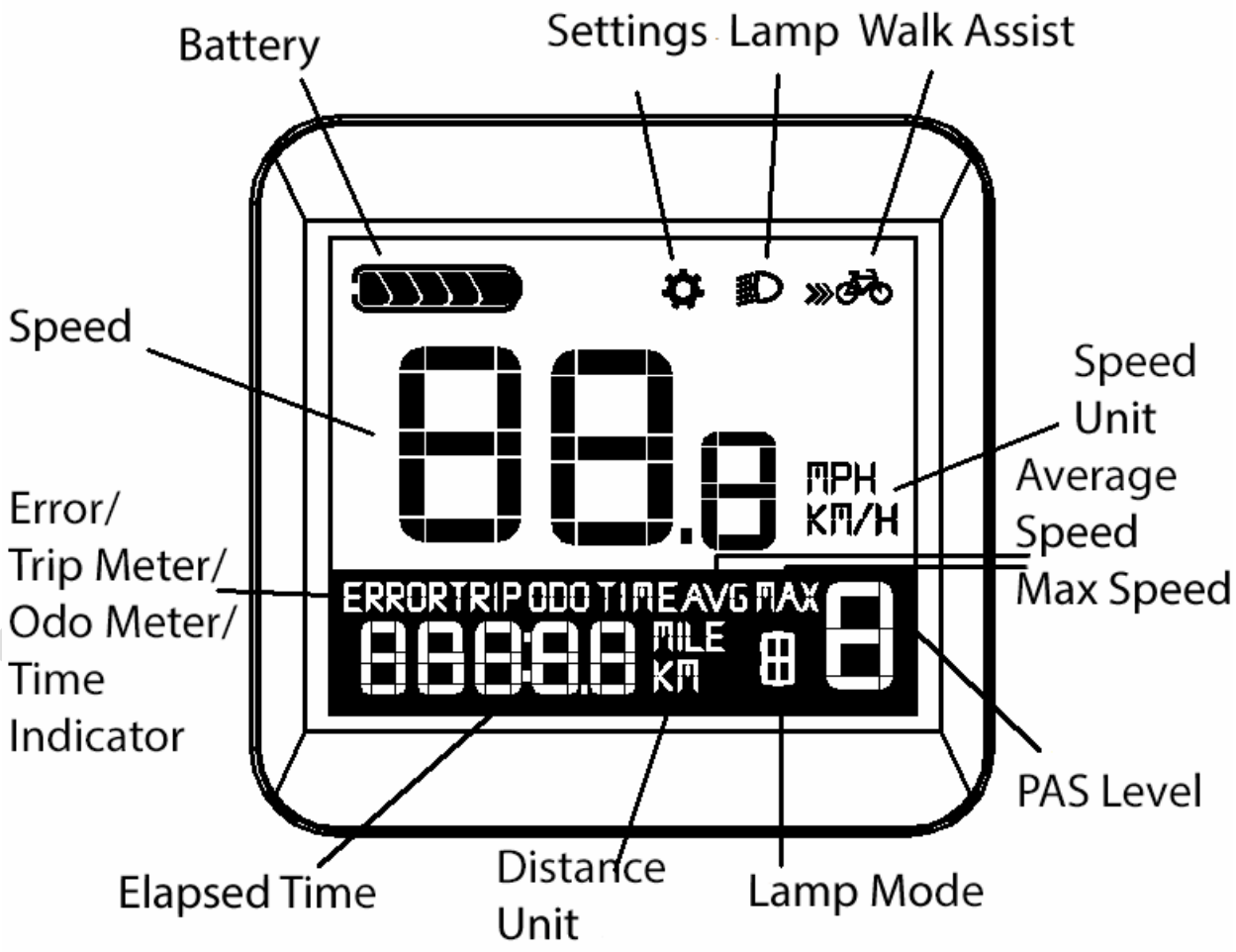
- Depress the thumb throttle in any increments of power you desire to power the motor of the bicycle and it will take off as demanded.
- This mode can be used in conjunction with any of the above modes as the amount of motor power supplied while twisting the thumb throttle overrides all PAS modes the system is set to.
- You can engage this mode whenever you want as long as the system is turned “ON”.
- While peddling will lighten the motor load and assist lower the 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 weather or not the brake levers are engaged.
- In this mode, the electric bike will use the most amount of battery power it will use the most amount of battery power compared to any PAS modes on this bike.
- This mode will give you the least “miles per charge” compared to any of the above modes of operation
- To assist the motor from a dead stop in this mode, it is suggested to gear down to lower gears before stopping your bike.

*About the Brake Safety Feature on all EG 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 Operate the Display Unit**

- Pressing “Power/M” button turns ON the electrical system to your bike.
- Pressing and releasing “Power/M” button once the system is ON toggle between Odo = Odometer, Trip = Tripmeter, Max = Max speed, AVG = Average Speed and Time = Total time since last reset
- Pressing and holding “Power/M” button for 3 seconds will turn OFF the system
- Pressing “+” or “-” adjusts the PAS mode to the desired levels as indicated to the right of the display.
- Pressing and holding “LAMP” button for 3 seconds cycles through Auto (A) or ON/OFF the LED Head and Tail lamp. When it’s dark out the light will come on automatically, when you press this button it will turn the lights OFF. OR when it’s daylight out, pressing this button will turn the lights ON
- Pressing and holding “Walk assist” button will engage the walk assist. The motor will keep turning as long as the button is held down.
- Pressing and holding “-” button while on Max Speed, AVG or Trip will zero out the meter.


Battery
Settings
Lamp
Walk Assist
Speed
Speed Unit
MPH
KM/H
Average Speed
Max Speed
Error/
Trip Meter/
Odo Meter/
Time
Indicator
ERROR TRIP ODO TIME AVG MAX
MILE
KM
PAS Level
Elapsed Time
Distance Unit
Lamp Mode

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

There are 2 Battery meters on your bike. The 1st meter is located conveniently on the top left of the LCD screen on the handle bar. The 5 battery segments on the display represents the state of discharge of your battery. The 2nd meter is located on top of your battery mounted to the frame of your bike. The 4 LEDs shows 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 and how long it's kept charging will affect the overall longevity and life of your battery.

To conserve battery power, switch off the electrical system by pressing the "Power/M" button on the meter on the left of the handlebar, when the electric power is not needed.

! NOTE: You can remove the keys from the bike after locking the battery onto the Frame. You will NOT need the key to operate the electrical system of this 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 do we reproduce them at EG Bike.

## 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: 12.8Ah
Battery and Motor Voltage: 48v
Charge temperature range 0~45°C
Discharge temperature range –20~55°C
Total Charge time from total discharge: 6-8 hours
- Please make sure you fully charge your battery (Charger LED turns green) the first 3x you charge your battery.

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 at least 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, even if you have not used the battery during that time.
- 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 or Short circuits. 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 -20～35℃,
Battery Storage relative humidity: 5～65％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 ～ 35℃,
Charger relative humidity: 5～65％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%. 48v battery for a continuous run range of more than 40 miles on a single charge in pedal assist mode.
- Produces a continuous and sustained power of 500 Watt power with a peak of up to 1000 Watts.

*High power and high torque –*

- Fast pick up even under heavy load. Easily climb and ascend steep inclines.
- Low power consumption, Long-battery life and a Compact design.
- The 48 volt Battery pack weighs 11 Lbs.

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

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

**Charging the Battery**

- Connect the Charger to the wall outlet first before connecting the Charger to the Battery.
- Ensure the Charger is firmly plugged into the Wall outlet.
- Ensure the Charger output terminal and the Battery input terminal are firmly mated to each other.
- When the charger is plugged into a wall outlet, the charger LED indicator will turn solid RED to indicate that the battery is charging.
- The Charger LED indicator 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 fully charge the battery at least once 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 leave the charger plugged into the wall out let charging the battery for more than 24hrs at a time 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 serial numbers except for the battery's 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 behind the seat post tube of the bike on the frame.
3. The Motor serial number is located on the under side of the motor hidden under the protection plate.
4. The Battery serial number is located near the output contacts of the Battery pack.

**How to detach the rear wheel of the Electric bike**

1. ! WARNING: We do not condone modifying the EG Electric Bicycle in any way shape or form. Modifying the bike in any way, will void your Warranty. The instructions below are written only for the maintenance or repair of the bike.
2. Remove the plastic covers over the screws on the rear axle.
3. Unscrew the nuts on both sides of the rear axle and the wheel should come right off.
4. Unhook the chains from the rear Cassette (cogs)
5. To install it back on, please note and reverse all the detachment instructions.