



**EMERALD™**  
CITY FOLD

**User Manual**  
[www.emerald.shop](http://www.emerald.shop)

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# Thank you for purchasing from EMERALD!

Congratulations on your new EMERALD City Fold Ebike! Electric pedal-assisted cycles (EPACs) are an increasingly popular and eco-friendly alternative means of transportation. With the combination of peddling power and electric assistance, you can cover further distances faster! Long-distance rides and steep hills become no challenge at all on your new EMERALD Bike—all while cutting your carbon emissions to zero and saving on the cost of gasoline.

It is important to take safety measures when riding any bike—whether EPAC or traditional. To ensure a safe riding experience, always wear a helmet and other necessary protective equipment—and check your local traffic laws before you hit the pavement.

Before your first ride on an EPAC, we recommend reading this user guide carefully so you can enjoy a pleasant (and safe) ride in confidence!



# 1. General Description

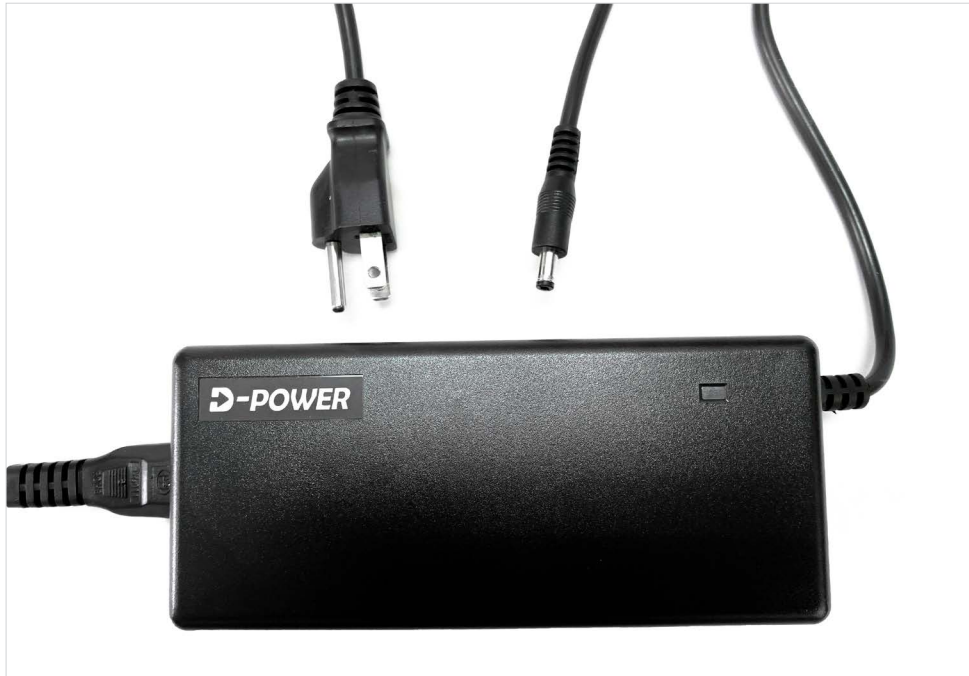
## 1.1 General Description



### Standard Parts Include:

1 x EMERALD City Fold Ebike  
2 x Battery Keys

1 x Charger  
1 x Charger Wire

**Battery Charger**

THE EMERALD City Fold Ebike comes 100% assembled in a folded position. Please refer to Section 2 on how to unfold it.

**WARNING:** When removing packaging and zip ties, do not use box cutters or knives as you may damage the paint or tires. We suggest using a pair of scissors.

## 1.2 The Emerald City Fold Specifications

### Bike Parts

<b>Weight</b>	43 lbs without battery, 48 lbs with battery
<b>Frame &amp; Fork</b>	Magnesium Alloy / Internal Battery
<b>Motor</b>	300W
<b>Display</b>	LED
<b>Battery</b>	36V 7.5AH (7.8AH)
<b>Throttle</b>	Thumb Throttle
<b>Pedal Assist</b>	CLASS 1-5 levels
<b>Range</b>	35 miles
<b>Max Speed</b>	20 MPH
<b>Brakes</b>	Mechanical Disc Brake
<b>Brake Lever</b>	Electric Cut-Off While Braking
<b>Handlebar</b>	Alloy
<b>Headset</b>	Alloy
<b>Grips</b>	Rubber
<b>Stem</b>	Alloy, Folding
<b>Saddle</b>	PU
<b>Seatpost</b>	Alu 31.6*300
<b>Tires</b>	16*2.125 inch WANDA
<b>Tubes</b>	16*2.125 inch WANDA
<b>Wheel</b>	Intergrated Wheel
<b>Cassette</b>	Single Speed 16T
<b>Chain</b>	KMC
<b>Crankset</b>	46T
<b>Pedals</b>	Foldable
<b>Front Light</b>	LED
<b>Rear Light</b>	LED
<b>Lock</b>	None

### Electric Specs

<b>Battery</b>	Nominal Voltage: 36V Nominal: 7.5AH (7.8AH) Weight (Approx.): 5 lb
<b>Motor</b>	Motor Parameters: 300W hub-motor Speed: 20 MPH Top Speed: 20 MPH Maximum Torque: 35N.m Noise Level: <=55 Weight: 4lbs (with alu mag wheel)
<b>Display</b>	LED
<b>PAS</b>	Model: BZ-4 Rated Voltage: 5V Installation Direction: Right Color: Black
<b>Charger</b>	Input: 120V-50V 60HZ 2.0A Model: DPLC048V42Y Output: 42.0V-2.0A
<b>Throttle</b>	Size: L 68mm W 40mm H 30mm Waterproof: IPX5 Materials: PC/ABS Wiring: Non integrated wire with SM connector Power: 5V

### Frame Size Measurements

<b>Top Tube Length</b>	24.01 inches
<b>Reach</b>	22.83 inches
<b>Head Tube Length</b>	17.31 inches
<b>Standover Height</b>	17.70 inches
<b>Wheelbase</b>	39.40 inches
<b>Min Saddle Height</b>	30.70 inches
<b>Max Saddle Height</b>	36.20 inches

### Measurements When Folded

<b>Length</b>	39 inches
<b>Width</b>	17.70 inches
<b>Height</b>	20.90 inches

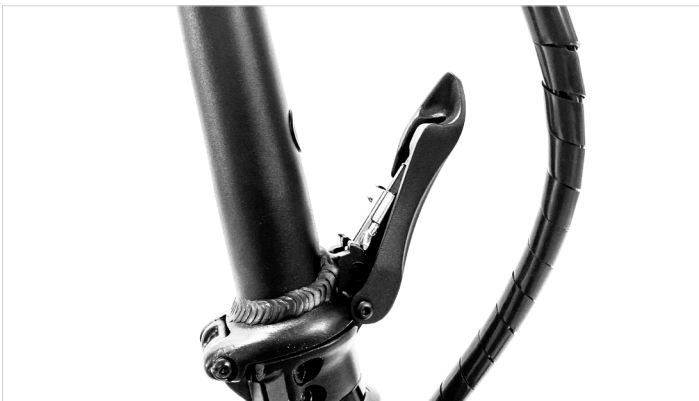
## 2. Unfolding and Folding Your Ebike

### 2.1 Unfolding Your Ebike for the First Time

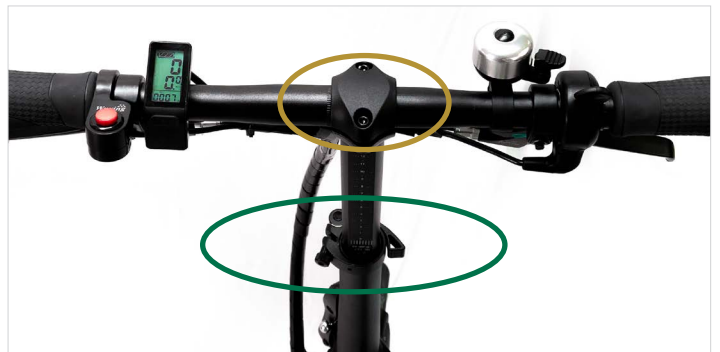
**Step 1** Unfold the frame and locate the body folder. Close the black lever to lock your ebike frame.



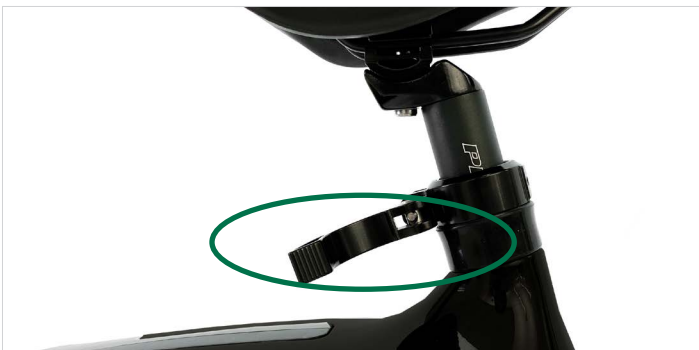
**Step 2** Unfold the riser and close the riser folder.



**Step 3** Release the Stem Quick Release lever and adjust the height of the handlebar (green circle). Locate the screw tool inside the shipping box and unscrew the two screws (gold circle) to flip the handle upside and ensure the brake handle is positioned correctly.



**Step 4** Release the lever of the clamp seat post and adjust the height of the saddle



**Step 5** Push the button on the left side of the battery pack to turn on the battery before riding.



## 2.2 Folding Your Ebike for Storage

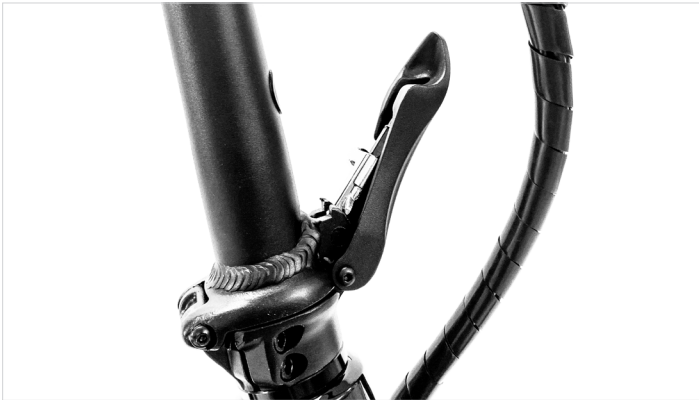
**Step 1** Power off your ebike and rest it on the kickstand.



**Step 2** Ensure the pedals are aligned with the seat post. Push the pedals in, then fold them.



**Step 3** Locate the riser folder below the handlebars and release the lock by pulling the black lever.



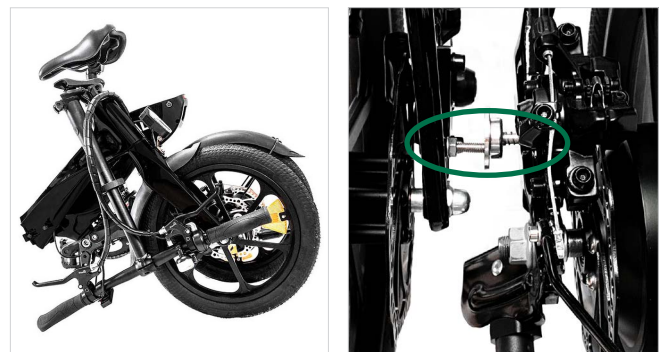
**Step 4** Guide the handlebar down at a 45 degree angle and lean to the side.



**Step 5** Locate the body folder. Pull the black lever to open the ebike frame.

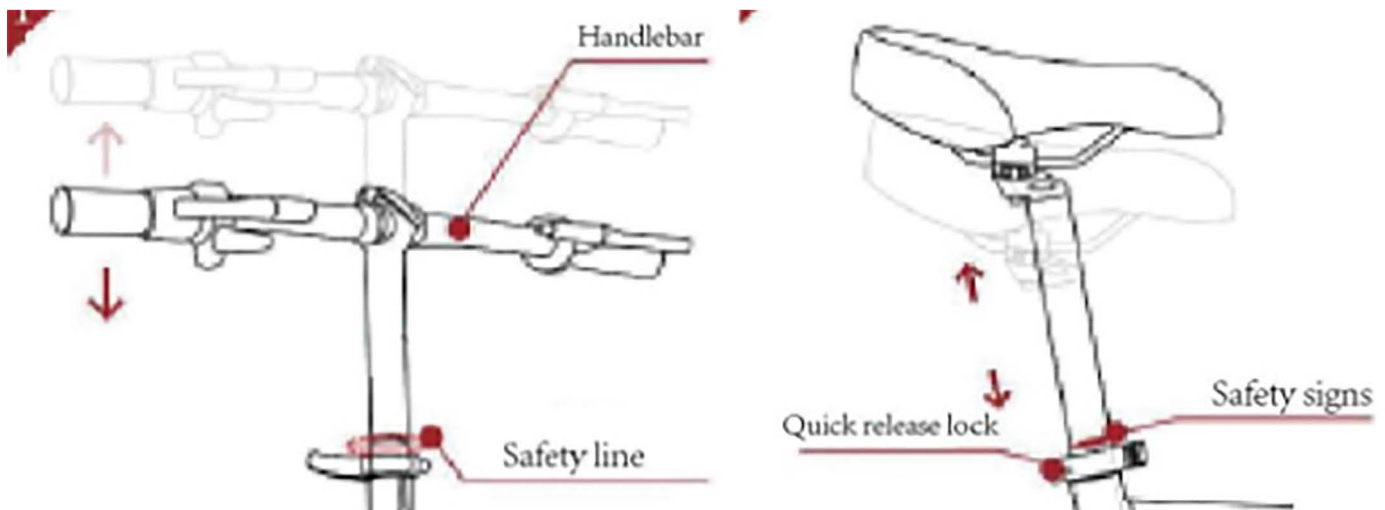


**Step 6** Fold the ebike frame and ensure the magnetic buckle between the tires is secure. Use the integrated wheel to easily move the ebike.





**WARNING:** Ensure the handlebar is attached securely. A loose attachment may lead to loss of control of your ebike when riding, which may cause serious injury. If you are unsure, please take your bike to a local bike store and ask them to check it thoroughly. Insert the riser at the depth not less than the minimum depth (with the safety line as the minimum depth) and lock the stem quick release lever. (See figure below.) The insertion of the seat post shall not be lower than the minimum insertion depth (take the safety line as the minimum depth) to ensure safety and lock the Seat Post Clamp. (See figure below.)



## 3. Display and Controls

### 3.1 Turning On/Off

Locate the power button on the left side of the battery pack. Press and hold for 2 seconds to turn on/off.





### 3.2 Display

Locate the display screen on the left side of the handlebar. After following Figure 3.1, press the power button directly below the screen to turn on the display. The display screen will show your battery life, pedal assistance level, speed, and distance traveled.

### 3.3 Pedal Assistant Level

The arrow buttons below the display screen control the pedal assistant level (up to 5 levels). Press (+) to increase assistance level. Press (-) to reduce the assistance level. When it reaches 0, no assistance is provided.

### 3.4 Front and Back Lights

The red button on the left side of the handlebar controls your front and back lights. Press it to turn them on/off.

### 3.5 Brakes

The handbrakes are located in front of either side of the handlebars. The left handbrake controls the FRONT wheel's disc brake, and the right handbrake controls the REAR wheel's disc brake. Please be careful when getting on for the first time and ensure you are familiar with the throttle and braking power before taking it out for a ride.

### 3.6 Bell

The bike bell is located on the right side of the handlebars. Press down on the trigger to activate the bell.



## 4. Battery

**IMPORTANT:** Do not charge the battery with any unauthorized third-party chargers. Failure to do so will highly increase the risk of battery damage, malfunction of battery computer chip, reduce the life span of the battery and also void your warranty.

**WARNING:** Fall Hazard. Loose battery may cause loss of control and result in serious injury or death. Lock battery and remove key before operation.

### 4.1 General

The EMERALD City Fold Ebike uses a Li-ion battery charger. Your battery is the main energy source for your ebike. We recommend that you only recharge it with the charger provided with your ebike.

The battery can be charged while attached to bike or separately. You should recharge your battery after each use or when the battery indicator on the display indicates that the battery charge is low. Complete charge time is 3-4 hours. The battery charger light will turn green when your ebike is fully charged.

### 4.2 How to Use Your Charger

Properly connect the power plug into any household sockets.

You will see RED LED light on your charger, showing that you are charging your ebike.

If you see GREEN LED light, it means your EMERALD City Fold Battery is fully charged.

When you have finished charging, pull out the power plug from the battery socket and remove the power plug from the wall socket. Safely store away your charger for later use.

### 4.3 Charging While the Battery is Inserted in the Battery Slot

To charge the battery while it is inserted in the battery slot, reach in to remove the battery seal around the charging port of the battery. Plug the charger into the wall outlet and then into the port located on the side of the battery. Continue charging until the display shows the battery is full.

## 4.4 Removing and Charging the Battery Out of the Battery Slot

You can remove the battery for charging. You must ensure the ebike is completely shut down before you attempt to remove the ebike power cell. To do this, press the power button and hold for 2 seconds to shut down your ebike.

Please note you cannot remove the battery without removing the seat from the post (step 2).

**Step 1** Locate and pull the seat adjustment lever.



**Step 2** Completely remove the seat from the post.



**Step 3** Locate the battery lock. Insert the key into the battery lock indicated below and turn it. Keep the key inserted.



**Step 4** Locate the hand grip behind the taillight. This is the removable battery. Pull the battery out of the slot.



## 4.5 Maximizing Battery Performance

To ensure maximum battery life, please remember to always fully charge the battery after each ride. Total battery discharge may damage your battery cells. To prevent total battery discharge during extended periods of non-use, remove the battery pack and store it in a cool, dry place.

Optimal storage temperature is 32F – 86F. If the battery is stored outside of this range long-term, it will cause accelerated battery discharge and battery damage.

To ensure you get the most out of your battery on one charge, it is recommended to use pedal assist on level 1 when riding your ebike.

If your battery is running low when you are riding, it is strongly recommended to pedal alongside than only using the throttle so you can have assistance all the way until you safely reach charging point.

To get the maximum mileage out of your battery, please refrain from using full throttle throughout your ride. Full throttle provides the highest electric motor power output. However, it is also the fastest way to drain your battery power. Please monitor the battery life throughout your ride.

Make sure to avoid prolonged journeys when applying maximum throttle due to the high-power output of the electric motor. Use a mix intervals of low, medium and maximum power if and when needed to prevent the electric motor from overheating in high temperature weather.

To maximize your battery life span, please do not deplete the battery completely during use, or fully charge your battery to 100%. Around 90-95% charge is the optimal charge level.

Reduce unnecessary braking where possible. Smooth cruising is the best form in prolonging your mileage.

## 4.6 Battery Charger Information

### Different export regions - Product input voltage:

- CE input voltage: 100-240Vac
- SAA input voltage: 100-240Va
- FCC input voltage: 100-240
- Vac CUL input voltage: 120Vac
- CTUVUS input voltage: 100-120Vac

## 4.7 Disposal

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding the collection systems available.

If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

# 5. Finding Your Fit

Seat height can be easily adjusted by releasing the quick release lever located on the seat post. Once loose, adjust it to the desired height and ensure it is straight (i.e. parallel) to the bike frame. Then, firmly tighten the quick release screw head by hand and close the quick release lever. To ensure your saddle is secured, try to turn the seat left to right. If the seat still turns, undo the quick release lever. Slightly tighten the quick release screw by hand. Lastly, close the quick release lever again to make sure the seat post is tightly and safely gripped in place.

**WARNING:** DO NOT raise the seatpost to above “minimum insert” line clearly printed on the back of the seatpost. Raising the seat post above minimum insert line will cause damage to the seat post, frame and could even potentially injure the rider.

## 6. Routine Maintenance

Component	Inspect Before Every Ride	Inspect Every 5-10 Rides
Brake Pad Adjustment	x	
Quick Release Adjustment	x	
Tire Pressure	Recommended 40 PSI	
Tire Wear/Damage	x	
Lights Operation	x	
Controls & Display	x	
Seat Post Quick Release Adjustment	x	
Moving Parts		Lube to prevent from wearing out
Chain Wear		x
Brake Pad Wear		x
Spoke Tension		x
Wheel True		x
Derailleur Adjustment		x
Battery & Charger		x
Bottom Bracket Adjustment		x
Bolts, Nuts, Mounting Hardware		Tighten

Depending upon the length of ride and riding conditions, inspect more frequently when riding in wet or dirty conditions.

## 7. Troubleshooting

Problem	Solution
Top speed is too slow.	<ol style="list-style-type: none"> <li>1) Please ensure your battery is fully charged.</li> <li>2) Please check in display settings to see if your speed restriction is on/off.</li> </ol>
Motor doesn't work but the power is on.	<ol style="list-style-type: none"> <li>1) Make sure the battery is fully connected and the connector is fully tightened. If in doubt, re-install the battery.</li> <li>2) Check and make sure that the outside black cable connector leading to the rear motor is fully plugged in.</li> </ol>
Distances appear to decrease after charges.	<ol style="list-style-type: none"> <li>1) Check your tire pressure, make sure they are not too low.</li> <li>2) Make sure your battery is fully charged before using.</li> <li>3) Battery replacement is needed.</li> </ol>
Power is on, display, front lights and rear lights are working, but thumb throttle and the motor does not work.	<ol style="list-style-type: none"> <li>1) Check and make sure that all outside black cable connectors are fully plugged in.</li> <li>2) Controller replacement is needed.</li> <li>3) Please contact us immediately.</li> </ol>
Power is on, display, front lights and rear lights and thumb throttle are working but pedal assist does not register.	<ol style="list-style-type: none"> <li>1) Check and make sure that all outside black cable connectors are fully plugged in.</li> <li>2) Controller replacement or PAS sensor replacement is needed.</li> <li>3) Please contact us immediately.</li> </ol>
Power is on, display, front lights and rear lights are working but thumb throttle does not work.	<ol style="list-style-type: none"> <li>1) Check and make sure that all outside black cable connectors are fully plugged in.</li> <li>2) Controller replacement or thumb throttle replacement is needed.</li> <li>3) Please contact us immediately.</li> </ol>
Power is on, and the throttle is down, but the bike doesn't work.	<ol style="list-style-type: none"> <li>1) Ensure battery is fully charged.</li> <li>2) Check and make sure that all outside black cable connectors are fully plugged in.</li> <li>3) Replacement of fuse or controller is needed.</li> <li>4) Please contact us immediately</li> </ol>
Charger is connected to the wall but there is no LED indicator light.	<ol style="list-style-type: none"> <li>1) Make sure the charger is fully connected to the wall socket. Avoid any loose connections.</li> <li>2) Check whether there is electricity flowing into the wall socket.</li> <li>3) Replacement of battery charger is needed.</li> </ol>
You plug in the charger to both the socket and your EMERALD City Fold Ebike but the LED light remains green, which means it is not charging.	<ol style="list-style-type: none"> <li>1) Battery may be fully charged.</li> <li>2) Ensure the charger is fully connected to both the socket and the battery.</li> <li>3) Using a voltage meter to check current on your battery, if close to 0 voltage is detected, please replace your battery.</li> </ol>
Battery charger has no light.	Please ensure the power plug is properly plugged into the main socket.
Battery charger has a red light after overnight charging.	Please ensure the power plug is fully plugged into the socket and the charger is fully connected to your power cell.

Please contact us at [support@emerald.shop](mailto:support@emerald.shop) for any issues.



## 8. Important Safety Information

READ AND UNDERSTAND ALL INSTRUCTIONS AND WARNINGS. FAILURE TO FOLLOW THESE SAFETY INSTRUCTIONS COULD RESULT IN SERIOUS PERSONAL INJURY, DEATH, OR DAMAGE TO THE PRODUCT ITSELF OR NEARBY PROPERTY. IN ORDER TO ENSURE MAXIMUM SAFETY AND LONGEVITY OF YOUR BRAND NEW EMERALD CITY FOLD EBIKE, IT IS VITAL THAT YOU FOLLOW THE SAFETY GUIDELINES IN THE MANUAL.

### General Safety

- 1. Before hitting the road, it is very important your bike has been correctly assembled and tightened.** If you are not familiar with setting up your ebike, we strongly recommend you go to your local bike shop for assistance.
- 2. When installing key components and parts, please make sure everything is properly tightened and adjusted properly for your height.** Quick releases, including front wheel and seat saddle, must be locked in place tightly without any movement.
- 3. When operating your ebike for the first time, we strongly recommend you push the throttle down slowly to feel the power first.** DO NOT press the throttle all the way down when you first get on.
- 4. Always wear a helmet while riding.**
- 5. Never ride your ebike while under the influence of drugs or alcohol.**
- 6. Stop using your ebike if any part is damaged.** Inspect your ebike and all component parts regularly. If you suspect any part is damaged, discontinue use immediately. Continuing to use your ebike if any part is damaged may cause overheating, fire, explosion, electric shock, or smoking, which could result in serious personal injury or death. It could also result in other damage to your ebike or nearby property.
- 7. Inspect your ebike before every ride.** Confirm (1) all bolts are tightened securely, (2) no parts are damaged before every ride, and (3) tire pressure. Failure to do so may cause the bike to break or collapse during your ride, which may result in serious personal injury or death.
- 8. Ride your ebike on paved road/streets only.** The suspension system on your ebike is designed for use only on paved roads/streets. Do not take this bike dirt jumping, BMX, or to any extreme sports that will stress the suspension system. If the suspension system is damaged or fails, the rider may fall off the bike and sustain serious or fatal injuries.
- 9. Take your ebike to a professional bicycle mechanic for all service.** Please consult a professional bicycle mechanic to properly assemble, repair, and maintain your ebike. Improper assembly or repair could damage your ebike, which may result in serious personal injury or death.
- 10. Please be extra cautious if you are riding at night.** Our High output LED Front light Lights can assist with visibility; however, it is extremely important you make yourself known to other drivers by wearing a reflective jacket.
- 11. Be extra caution when riding in traffic.** Many car owners are not aware of the speed at which an e-bike can travel.

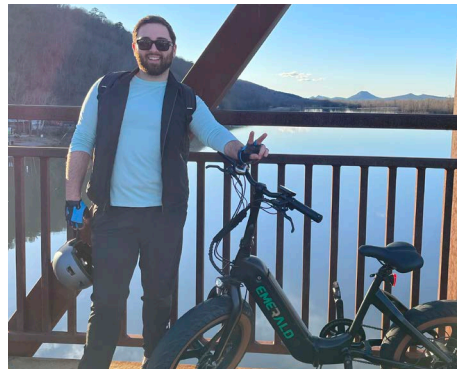
## Battery

- 1. The battery charger must be used for the original EMERALD City Fold Battery.** Other types of battery may damage your charger, adversely affect your battery, battery management computer chip, reduce maximum performance of your ebike, or cause injury to people. We cannot guarantee any third-party battery charger quality and performance. If damage occurs to your ebike while using third-party charger, all EMERALD warranty will be voided.
- 2. DO NOT use your battery charger if it is damaged or does not charge anymore.** Please recycle properly at your local council. DO NOT dispose it into the household bin.
- 3. DO NOT use your battery if the outside casing temperature gets too hot to touch, any bulging occurs, if there are any cracks within the casing, or if any other medium to severe damage is seen on the outside of the casing.** It is designed for indoor use only.
- 4. The battery charger is intended to be correctly oriented in a horizontal or floor mount position.** If the shape of the plug does not fit the power outlet, use an attachment plug adapter of the proper configuration for the power outlet. Never put batteries on the charger during charging.
- 5. Please store your battery properly.** Avoid keeping your battery in extreme temperatures (below 32F or above 86F), as it can damage and reduce the life span of your battery. Store your battery in room temperature for optimal performance. Avoid charging your battery when the temperature is either below 32F or above 86F, as it can cause irreversible damage to your lithium battery cells.
- 6. Do not disassemble your battery under any circumstances.** There is a high voltage inside the charger. Do not attempt to open it. It will immediately void your warranty with EMERALD. Do not puncture, burn or damage your battery in any way, this may cause serious harm to yourself and those around you. Do not use the battery if it is damaged in any way.
- 7. Children should be supervised to ensure they do not play with the charger.** Please ensure anyone intending to use the charger is properly trained or supervised during its usage.

## Throttle Upgrade

- 1. For maximum sports performance, we have programmed all models to release maximum power on acceleration.** Please be cautious when riding for the first time.
- 2. DO NOT push the thumb throttle all the way down as soon as you get your ebike for the first couple of times.** Get used to feeling the power of the motor smoothly by increasing the speed slowly. After you get used to the electric power output, take great care if you choose to apply full power.
- 3. Using either of the brake levers will automatically cut the power to the electric motor to further improve safety of the rider.**
- 4. Braking power must be applied lightly and slowly increased as desired, even with hydraulic brakes that have extremely efficient braking power.** Sudden harsh braking may cause potential injuries.
- 5. When walking with your ebike, please ensure the motor is completely turned off to prevent accidentally turning on the throttle and causing the ebike to suddenly jolt forward, which may lead to an accident.**

# Send us your photos of EMERALD in Action!



## #EmeraldinAction

Use our hashtag #EmeraldinAction for a chance to be featured on the site and social media.





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