



CURRIE TECHNOLOGIES
Hybrid Electric Bicycles & Scooters

IZIP
HYBRID ELECTRIC BICYCLES



IZIP ZUMA ASSEMBLY GUIDE

Assembly Tools



Included in your parts box:

- Pedals
- Quick release skewer
- Reflectors (if not already installed)
- Stem
- Toolkit (4+5mm combo Allen wrench, 13+15mm combo open-end wrench)
- Touch-up paint

Helpful Tools:

- Scissors
- Bicycle grease
- Phillips-head screwdriver
- Allen wrenches: 4, 5, & 6mm
- Open-end wrenches: 9, 10, 14, 15, & 17mm or adjustable crescent wrench
- Needle-nose pliers

Assembly will take 1 - 2 hours

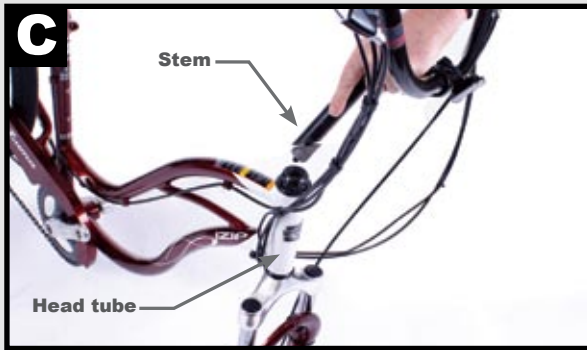
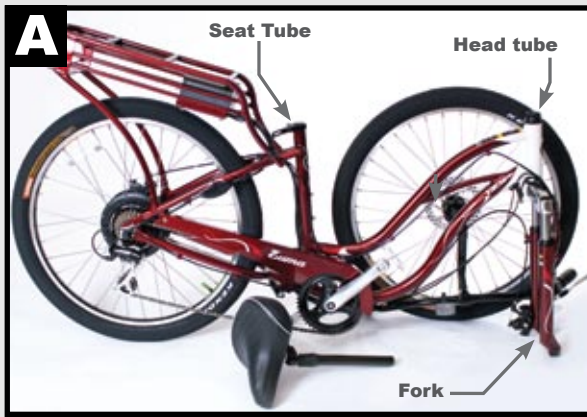
Note: When working on your bicycle as instructed by this guide, please refer to the torque values chart in your owner's manual for detailed torque requirements. Under- or over-tightened components may loosen or break, causing a fall.

Steps in this guide that call for the use of bicycle grease do so in the interest of keeping your bicycle in working condition for as long as possible. Grease is not absolutely vital to the assembly of this product, but failure to apply it as directed could cause parts to seize over time and irreparably damage the frame or components.

Because bicycle parts tend to be greasy, it is recommended that you lay down a tarp or sheet to protect your floor if assembling the bike indoors. It is best to remove the protective packaging during the assembly process only as needed, leaving some intact to protect the bike during assembly.

During assembly it may be helpful to reference the photos on the cover of this guide and on the bicycle box if you are unsure of any steps.

Please take the time to read the battery care and storage section of your manual for useful information on prolonging the life of your battery.



Insert stem into head tube, arranging cables to run in front of the bicycle without twisting



Please recycle packaging materials!

Unpacking and Preparation



1. Carefully remove the bicycle from the box. You should have a friend help you with this, as the bike is heavy. If you are alone, you can lay the box on its side and gently slide the bike out.

2. At this point you can begin charging your battery. The charger is in a small white box, usually rubber-banded to the rack or underneath the bike. Recommend charge time is 6-8 hours. With the charger switch in the OFF position, plug the charger first into the wall outlet, then into the port on the battery (Photo **B**). Turn the charger on.

A solid orange light on the charger indicates that the battery is being charged. A solid green light indicates that the charger has entered trickle charge mode, and your battery is at least 80% full. For maximum range, please charge for the full recommended time period (6-8 hours).



Handlebars and Stem



3. Cut the zip-ties holding the front wheel to the bike frame. Set the wheel aside for now.

4. Rotate the fork so the front brake faces away from the frame, then rest the bike upright on its rear wheel and fork, as shown in photo **A**. When rotating the fork, be sure the cables run in front of the frame and do not wrap around the fork or head tube.

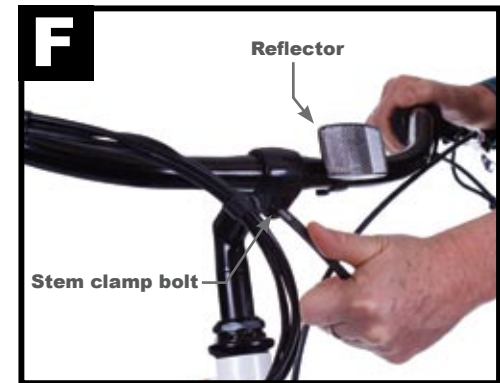
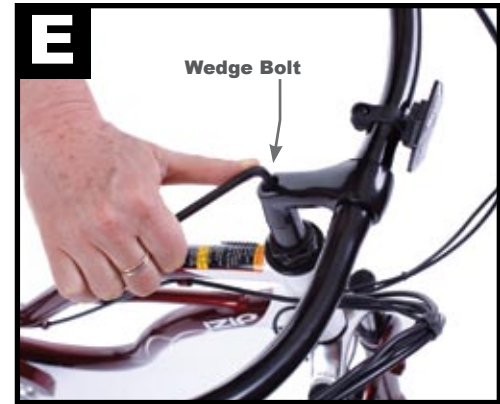
5. Cut the zip-ties holding the handlebars to the frame, then identify the stem (attached to the handlebars). Remove the black plastic protective caps from the stem and head tube, then insert the stem into the head tube facing away from the frame. When inserting the stem, be sure the cables run properly to the handlebar-mounted brakes and shifter, as shown in photo **C**.

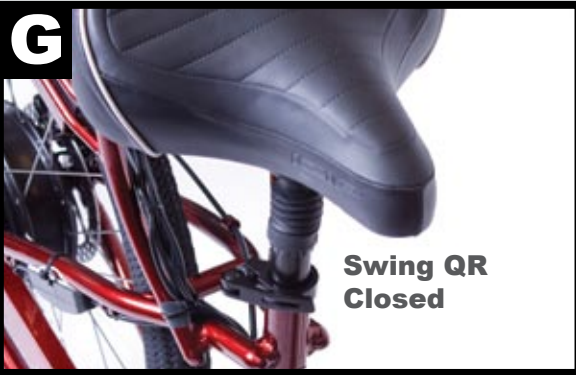


6. Align the stem so it is facing forward in relation to the fork (Photo **D**), then **tighten the wedge bolt securely** (Photo **E**). Be sure that the fork is rotated with the disc brake on the left side (when viewed from behind), and that no cables are tangled around it! Refer to the photos on the cover of this manual for proper cable routing. **It is extremely important that you properly tighten the wedge bolt.** Leaving this bolt too loose can result in the handlebars turning away from the wheel, causing a crash. See the “Before your first ride” section of this guide for more information.

7. Rotate the handlebars until the grips are about level with the ground, then tighten the stem clamp bolt (Photo **F**).

8. If not already installed, **attach the square white reflector to the handlebar** using a Phillips-head screwdriver.





Seatpost



9. Apply grease to the inside of the seat tube, then insert the seatpost and close the quick release tightly (Photo G). It will help during the next steps if you lower the saddle to be about level with the handlebars; it can be adjusted to a comfortable height before your first ride.

Refer to the appendix to this guide for more information on the use and adjustment of quick release levers. **It is vital to your safety that you understand and properly secure this lever!**

Front Wheel



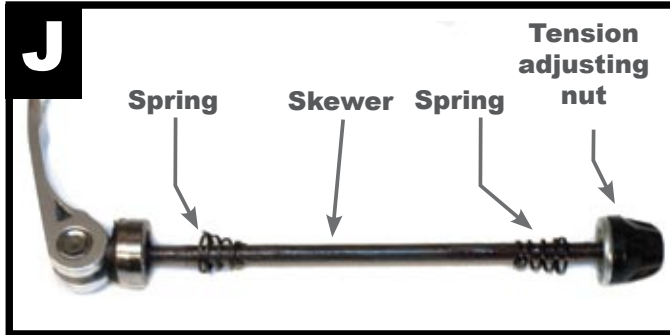
10. Flip the bike over so that it rests on its handlebars and saddle. Be careful not to damage the throttle or brake levers.

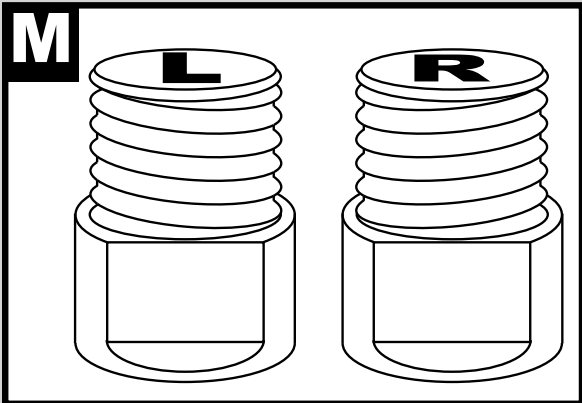
Remove the plastic dropout protector from the end of the fork (Photo I).



11. Remove the tension adjusting nut and one spring from the quick release skewer (photo J), taking care not to lose either of the small springs. Push the skewer through the front hub, then replace the spring and end nut. Leave the nut loose for now, about two turns in. Install the wheel into the fork, guiding the brake rotor into the caliper as shown in photo K.

Securely close the quick release. Refer to the appendix of this document for more information on the use and adjustment of quick release levers. **It is vital to your safety that you understand and properly secure this lever!**





Pedals



12. Find the pedals in your parts box. Grease the threads and thread them securely into the crank arms using a 15mm open-end wrench (Photo L). Note that the pedals have opposite thread directions and must go on a specific side of the bicycle. The pedal meant for the drive-side (the side of the bicycle with the chain and gears) has a standard thread, which is tightened clockwise. The non-drive-side pedal has a reverse, non-standard thread. It must be turned counter-clockwise to be screwed in.

The pedals are marked 'R' and 'L' for "Right" and "Left," however they can also be identified by their threads, as shown in figure M.

13. Turn the bike right-side-up, using the kickstand to keep it upright.

14. Adjust your front and rear brakes. Your brakes may not be fully adjusted from the factory; refer to your owner's manual for detailed instructions on brake adjustment or consult a professional bike mechanic if you are not comfortable making these adjustments yourself. **Do not attempt to ride your bicycle without properly adjusting the brakes!**

15. Adjust your shifters and derailleurs, referring to the owner's manual for full instructions. **Riding your bicycle without properly adjusting the drivetrain can cause irreparable damage!** Consult a professional bike mechanic if you are not comfortable making these adjustments yourself.

Battery



Installation:

Your bicycle comes with a 36 volt Lithium-Ion battery. To install the battery, simply **slide it into the rear rack**, as shown in photo **N**.

This type of battery does not have a 'memory', and riding on a partial charge will not harm the battery in any way. Recharge time for this battery is 6-8 hours to reach a full charge.

Locking:

A lock is integrated into the battery pack to keep it in place while riding. It is recommended that the battery pack be locked whenever you are riding in order to maintain a strong connection. **After sliding a battery pack into place, lock it with one of the included keys** (usually packaged with the battery or rubber-banded to the rack), making sure the lock cylinder fully engages into the rack. All keys included with your bicycle are identical.



Operation

On the Zuma, electric assist functions are controlled using the handlebar-mounted control pad below the throttle (Photo **O**). The red ON/OFF toggle button is used to turn the system on or off, indicated by the glowing lights on the throttle. The green PAS/TAG toggle button is used to switch between 'PAS' (Pedal Assist) and 'TAG' (Twist and Go) modes. Setting the button to the 'out' position sets the bike to TAG mode; the 'in' position sets the bike to PAS mode.



PAS (Pedal Assist)

In this mode, the twist-throttle is only active when the pedals are in forward motion. A magnet ring on the bottom bracket spindle rotates when the pedals are turned. A sensor picks up this rotation and activates the throttle when necessary. After a few seconds of pedaling in this mode, the motor will automatically spin up to 50% power to provide additional assistance.

TAG (Twist and Go)

In TAG mode, the twist-throttle is always active. The pedal sensor is disabled in this mode, and the motor will not activate unless the throttle is turned.

Before your first ride...

- **Remove all remaining packaging on the bike.**
- **Check the operation of your front and rear brakes** by pushing the bike forward and operating the brake levers.
- **Check the tightness of all nuts and bolts**, especially the stem bolts and the bolts securing the brake levers and shifters to the handlebars.
- **Make sure the stem's wedge bolt is tight.** Check that it is tightened properly by standing over the front wheel, holding it with your thighs, then trying to turn the handlebars. If the handlebars can be turned independently of the wheel, the wedge bolt must be tightened further.
- **Make sure your front wheel is secure in the frame.** Refer to the appendix to this guide discussing quick release levers for detailed instructions on using quick releases.
- **Make sure your tires are filled to the pressure recommended on the sidewall. For best ride quality, we recommend filling your tires to the manufacturer's maximum recommend pressure of 80 PSI.** Over- or under-inflated tires can blow off the rim and cause a fall. We recommend using a bicycle pump with pressure gauge.
- **Test power:** lean the bike on its kickstand, raising the rear wheel off the ground. When the bike is powered on (indicated by the throttle lights) you can test system power by twisting the throttle in TAG mode and watching the rear wheel. Refer to the troubleshooting chart on this page for assistance if the bike will not power on.

Refer to owner's manual for detailed troubleshooting chart

Bike won't turn on (no lights on throttle)	Battery not seated properly against rack terminals Need to press handlebar ON/OFF switch Battery not charged
Throttle lights work, but motor will not run	Bike may be in Pedal Assist mode. Press the green button next to the throttle to change to Twist-and-Go mode.
Brakes rub when riding	Re-adjust brakes, referring to owner's manual
Gears/chain make clicking or grinding noises while riding	Re-adjust drivetrain, referring to owner's manual
Can someone help me with...?	Call the Currie Technologies technical and customer service department at 1-800-377-4532

Appendix: Quick Release Levers

Many Izip and Ezip bicycle models use quick release (QR) levers to facilitate common tasks such as front wheel removal and seat height adjustment. When properly adjusted, quick release levers are both safe and convenient, but you must understand and apply the correct technique to adjust them properly before riding your bicycle to prevent serious injury or death from a fall.

Quick release levers use a cam action to clamp the wheel or other components in place. Because of their adjustable nature, it is critical that you understand how they work, how to use them properly, and how much force you need to apply to secure them.

Warning: The full force of the cam action is needed to clamp the wheel securely. Holding the nut with one hand and turning the lever like a wing nut is NOT a safe or effective way to close a quick release and will not clamp the wheel or other components safely.

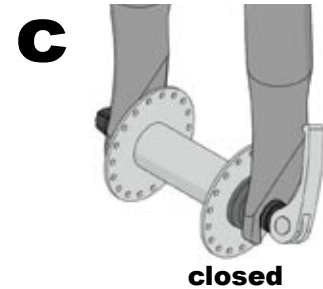
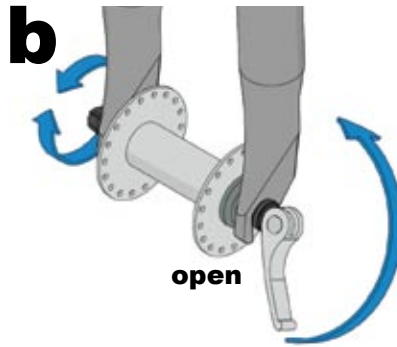
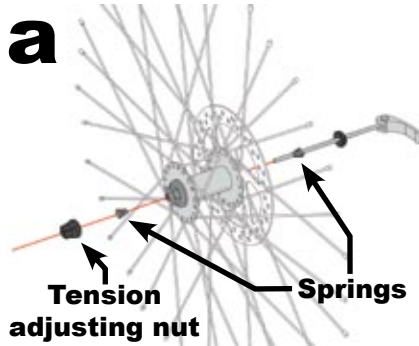
QUICK RELEASE USAGE

Riding with an improperly adjusted wheel quick release can allow the wheel to wobble or fall off the bicycle, which can cause serious injury or death. Therefore, it is essential that you:

1. Ask your dealer or a local bike shop to help you make sure you know how to install and remove your wheels safely.
2. Understand and apply the correct technique for clamping your wheel in place with a quick release.
3. Each time, before you ride the bike, check that the wheel is securely clamped.

Installing a quick release front wheel

In a quick release system, the wheel hub is clamped in place by the force of the quick release cam pushing against one dropout and pulling the tension adjusting nut, by way of the skewer, against the other dropout. The amount of clamping force is controlled by the tension adjusting nut. Turning the tension adjusting nut clockwise while keeping the cam lever from rotating increases clamping force; turning it counterclockwise while keeping the cam lever from rotating reduces clamping force. Less than half a turn of the tension adjusting nut can make the difference between safe clamping force and unsafe clamping force.



1. Remove the tension adjusting nut and one of the small springs, then slide the quick release skewer through the hub. If your bicycle has a disc brake, insert the skewer starting on the side with the brake rotor. Replace the spring and tension adjusting nut (fig a).
2. If your bicycle has rim brakes, disengage them to increase the clearance between the tire and brake pads.
3. Install the wheel into the dropouts, making sure the quick release lever is on the left side of the bicycle.
4. Holding the quick release lever in the OPEN position with one hand, tighten the tension adjusting nut with your other hand until it is finger tight against the fork dropout.
5. While pushing the wheel firmly to the top of the slots in the fork dropouts, and at the same time centering the wheel rim in the fork, move the quick-release lever upwards and swing it into the CLOSED position (fig b & c) The lever should now be parallel to the fork blade and curved toward the wheel. To apply enough clamping force, you should have to wrap your fingers around the fork blade for leverage, and the lever should leave a clear imprint in the palm of your hand.

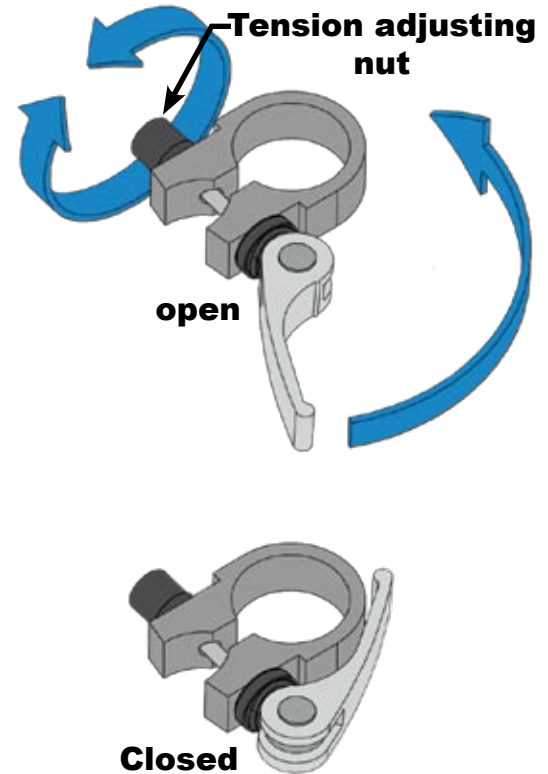
WARNING: Securely clamping the wheel takes considerable force. If you can fully close the quick release without wrapping your fingers around the fork blade for leverage, and the lever does not leave a clear imprint in the palm of your hand, the tension is insufficient. Open the lever; turn the tension adjusting nut clockwise a quarter turn; then try again.

6. If the lever cannot be pushed all the way to a position parallel to the fork blade, return the lever to the OPEN position. Then turn the tension adjusting nut counterclockwise one-quarter turn and try tightening the lever again.
7. Re-engage the brake to restore correct brake pad-to-rim clearance; spin the wheel to make sure that it is centered in the frame and clears the brake pads; then squeeze the brake lever and make sure that the brakes are operating correctly.

Adjusting a quick release seatpost clamp

In a seatpost quick release system, the seatpost is clamped in place by the force of the quick release cam pushing against one side of the clamp and pulling the tension adjusting nut, by way of the skewer, against the other. The amount of clamping force is controlled by the tension adjusting nut. Turning the tension adjusting nut clockwise while keeping the cam lever from rotating increases clamping force; turning it counterclockwise while keeping the cam lever from rotating reduces clamping force. Less than half a turn of the tension adjusting nut can make the difference between safe clamping force and unsafe clamping force.

1. With the quick release clamp in the OPEN position, insert the seatpost, with saddle attached, into the bicycle's seat tube.
2. Swing the quick release lever into the CLOSED position.
3. Grab the saddle with both hands and attempt to rotate it (and thus rotate the seatpost in the seat tube).
4. If you are able to force the seatpost out of alignment with the frame, the seatpost clamp needs to be adjusted. Holding the quick release lever in the OPEN position with one hand, tighten the tension adjusting nut with your other hand about 1/2 turn clockwise.
5. Attempt to swing the lever into the CLOSED position. If the lever cannot be pushed all the way to the CLOSED position (figure b), return the lever to the OPEN position, then turn the tension adjusting nut counterclockwise one-quarter turn and try tightening the lever again. Repeat steps 3, 4 & 5 until proper quick release tension is achieved.



BICYCLE TORQUE VALUES

<u>Component</u>	<u>Recommended Torque Value (in-lb)</u>	<u>Nm</u>
Headset, Handlebar, Seat area		
Seat fixing bolt (seat rail binder)	174 - 347	19.7 - 39.2
Stem handlebar binder bolts (2)	174 - 260	19.7 - 29.4
Stem wedge (binder) bolt - quill type for threaded headset	174 - 260	19.7 - 29.4
Threaded headset locknut	130 - 150	14.7 - 16.9
Threadless stem clamp bolts	120 - 144	13.6 - 16.3
Crankset, Bottom Bracket, Pedal area		
Chainring bolt (aluminum)	44 - 88	5.0 - 9.9
Chainring bolt (steel)	70 - 95	7.9 - 10.7
Crank bolts	305 - 391	34.5 - 44.2
Pedal (into crank)	307 - 350	34.7 - 39.5
Derailleur, Shift lever area		
Front derailleur cable pinch	44 - 60	5.0 - 6.8
Front derailleur clamp mount	44 - 60	5.0 - 6.8
Rear derailleur cable pinch bolt	35 - 45	4.0 - 5.1
Rear derailleur mounting bolt	70 - 86	7.9 - 9.7
Shift lever (MTB thumb-type)	22 - 26	2.5 - 2.9
Shift lever (SRAM "grip-shift" type)	17	1.9

BICYCLE TORQUE VALUES, CTD.

<u>Component</u>	<u>Recommended Torque Value (in-lb)</u>	<u>Nm</u>
Wheel area		
Wheel axle nuts to frame/fork	260 - 390	29.4 - 44.1
Brakes		
Brake cable pinch bolt (linear pull)	53 - 69	6.0 - 7.8
Brake caliper (linear pull) to frame/fork	45 - 60	5.1 - 6.8
Brake lever (MTB type)	53 - 69	6.0 - 7.8
Brake pad to caliper	50 - 70	5.6 - 7.9
Disc brake caliper mount	60 - 90	6.8 - 10.2
Disc rotor to hub	35 - 55	4.0 - 6.2



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