

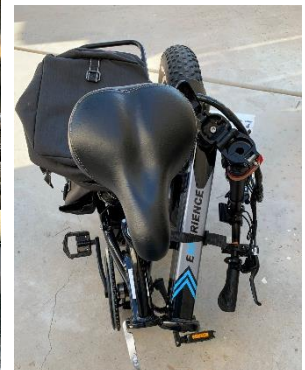
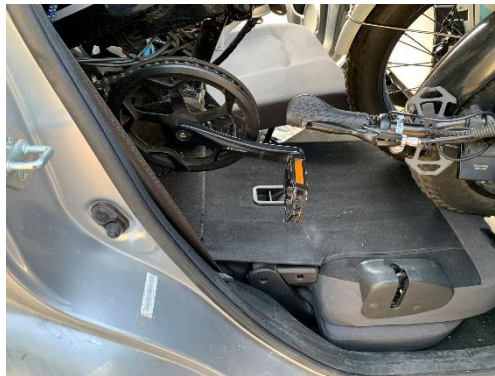
Placing a Lectric XP eBike in Neutral, Version 1.1

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My Lectric XP step through 2.0 eBike has seven gears which are great for going down the road.



But when I need to maneuver the bike in close quarters or when it is folded, the cranks become a problem. They freely turn in the reverse direction but jam in forward when the back wheel can't turn. The cranks can also jam into part of the frame or handlebars when the bike is folded, preventing the bike from rolling forward.

The solution is simple: put the bike in neutral.

What say? Didn't you know it had neutral? You will need a tool, but don't panic. It is very easy to make if you don't already own it.

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The front sprocket has a chain guard around it. The chain engages with the sprocket while being flanked by the guard.



Here is the tool used to put my bike into neutral. Yes, it is just a strip of thin, soft plastic about 1/2 inch wide and a few inches long. I prefer to use bright orange, so it is easy to see.

First, I stand on the right side of the bike. Then I slide the strip between the chain and the bottom of the sprocket. Then I turn the crank counterclockwise.

When I get all the way around, the tool falls out the top.



The chain is now in the gap between the sprocket and the chain guard. With the back wheel fixed, you can freely turn the crank in either direction.



This is a potentially dangerous condition. If you jump on the bike and push down hard on a pedal, it will offer little resistance and could throw you. I remind myself that I'm in neutral by looping the tool through the sprocket spokes.



To take the bike out of neutral, wrap the tool around the chain and pull horizontally about $\frac{1}{4}$ inch. The chain should shift back onto the front sprocket as you start to turn the crank counterclockwise. Listen for a clatter as the chain engages with the sprocket.

My chain always shifted towards the bike frame. If your chain shifts away, you will need to pull from the left side of the bike.

Be mindful that the tool will have some chain grease on it.

I used this trick on my version 1.0 XP and found that I had to constantly pull on the chain with a plastic loop while I turned the crank counterclockwise. This guided the chain up and onto the chain guard perimeter.

The chain didn't fall off and slid smoothly. When I was ready to leave neutral, I pulled the loop in the opposite direction and guided the chain back onto the sprocket.

I don't yet see why the two bikes behave differently, but the result was the same – I was able to put it in neutral and get it back into gear.

I welcome your comments and questions.

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