

A Work Stand for my Lectric XP eBike, Version 1.0

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When a wheel starts to make noise while you ride, how do you track down the source when you get home?

It is hard to beat raising the wheel up so it can be turned by hand.

I don't need to raise my bike up very often, so buying a compatible bike stand is not justified.

What is my willingness to pay? On the one hand, it is a useful tool. But on the other hand, I would prefer it to be free. I also don't have a lot of room, so I want the stand to be small.

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My solution was to round up a few bits from my scrap pile.



I found a broken pool brush handle and



a piece of 4 x 4.

The handle is exactly the same diameter as my seat post, 1¼-inches. I drilled a matching hole in the wood about 1½-inches deep.



On the other side of the wood, I installed a wood screw. It is about ½-inch from the edge and is centered along the block's length.



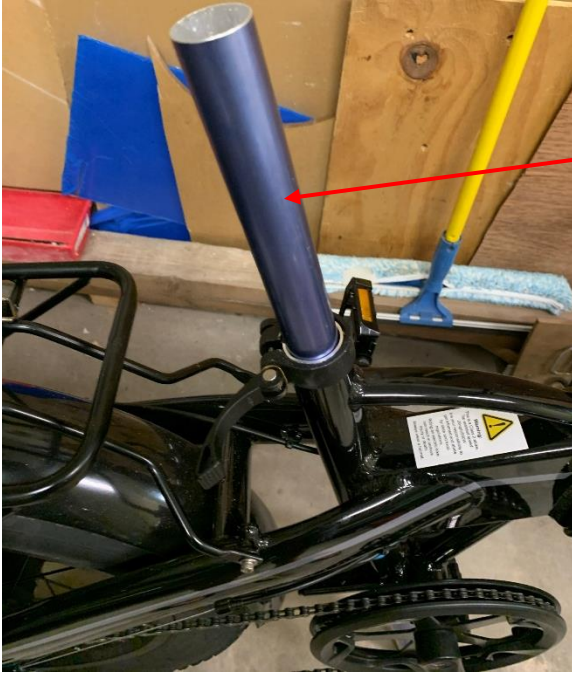
The screw causes the block to tilt.



In preparation for using my bike stand, I installed a Dollar Store hose clamp around the seat post. The screw mechanism is aligned with the gap in the seat post clamp.

I can now remove my seat and later reinstall it with no alignment fuss.

The hose clamp is intended to act as a stop for the seat post plus provides alignment of the seat. It is not there to replace the seat post clamp.



With the seat removed, I slide in my length of pool brush handle until it touches the floor. I had previously cut the top off, so about eight inches are exposed. Using a file, I removed the sharp edges.



I place the block of wood on the floor with the screw lifting up the right edge. If necessary, I could adjust the screw to match the angle of the tube.



I lift up the tube, hold the bike straight up, and slide the block over with my foot. The tube drops into the hole.



Then I lift the bike up with one hand² and let the tube slide down.



When satisfied with the elevation, I enable the seat post lock.

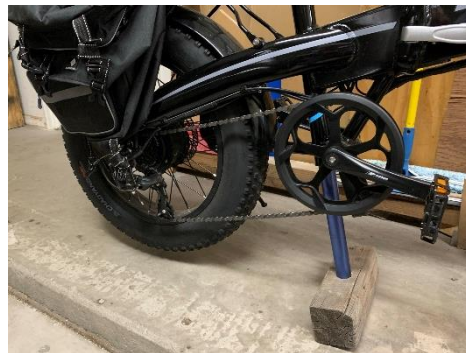
Note that the seat can support far more weight than what the bike weighs. So the seat post lock is not stressed.



I can now work on my front wheel.



To work on my back wheel, I drape my bike chain over the front wheel. This tilts the bike forward. The block rotates slightly until it is again resting on one edge and on the screw head.



Now the back wheel can freely spin.

To remove the stand, I release the seat post lock while lifting up on the bike. Then I lift the pipe up while lowering the bike.

² If this is more weight than you can handle, put a board down next to the front wheel. Then lift the bike up and over the board. Lower the bike and proceed to lock the tube in place.

I welcome your comments and questions.

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