

- Before pictures of the original 9T sprocket.



- First I took off the nut that was holding the sprocket in place. I placed a wood dowel in between the chain and the sprocket to stop the sprocket from spinning so that I could loosen the nut.



- Here's what it looks like with the nut off.



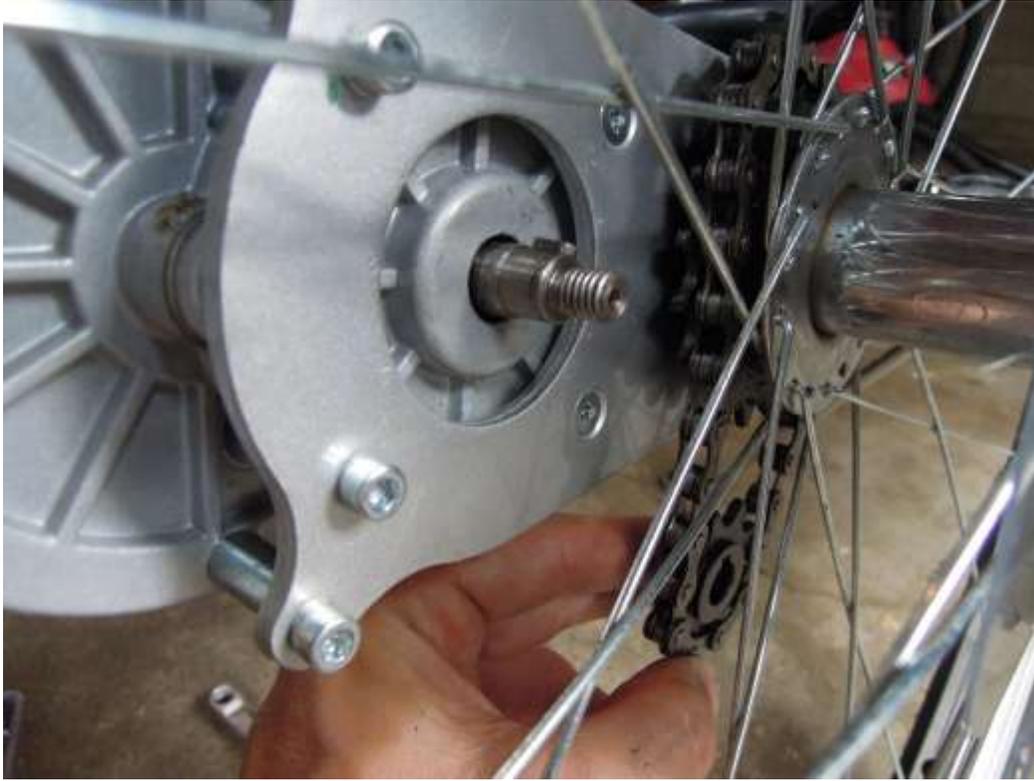
- Then I used a flat head screw driver to push the sprocket off of the bolt. I went from one side of the sprocket to the other and really had to pry quite hard, but it came off. I used a popsicle stick under the screwdriver to protect the metal of the rest of the bike.



- Sprocket almost off. It gets close to the spokes of the tire and you need to rotate the tire to find an opening between the spokes to get the sprocket off.



- Sprocket off! Chain and sprocket are dangling down.



- I took the sprocket out of the chain. With the chain hanging, I used a chain tool to open up one of the links on the chain.



- Here is the chain link opened and the two ends hanging. From here you can lift the chain off of the freewheel sprocket and pull it off the bike.



- Original chain is 14 links. The new one needs to be 15 links.



- Again I used a chain tool to open the link and shorten the new chain to 15 links.



- The old chain and the new chain.



- Hang new chain over the freewheel.



- Use chain tool to put chain together.



- **New 13T sprocket next to the original 9T sprocket.**



- **Place sprocket into hanging chain. Before this, I placed the sprocket in place on the bolt/axle, then took it off and flipped it over and put it back on to check and see which direction lined up better with the freewheel. On mine, the side of the sprocket that is raised a little higher, faced toward the motor.**



- **Another angle.**



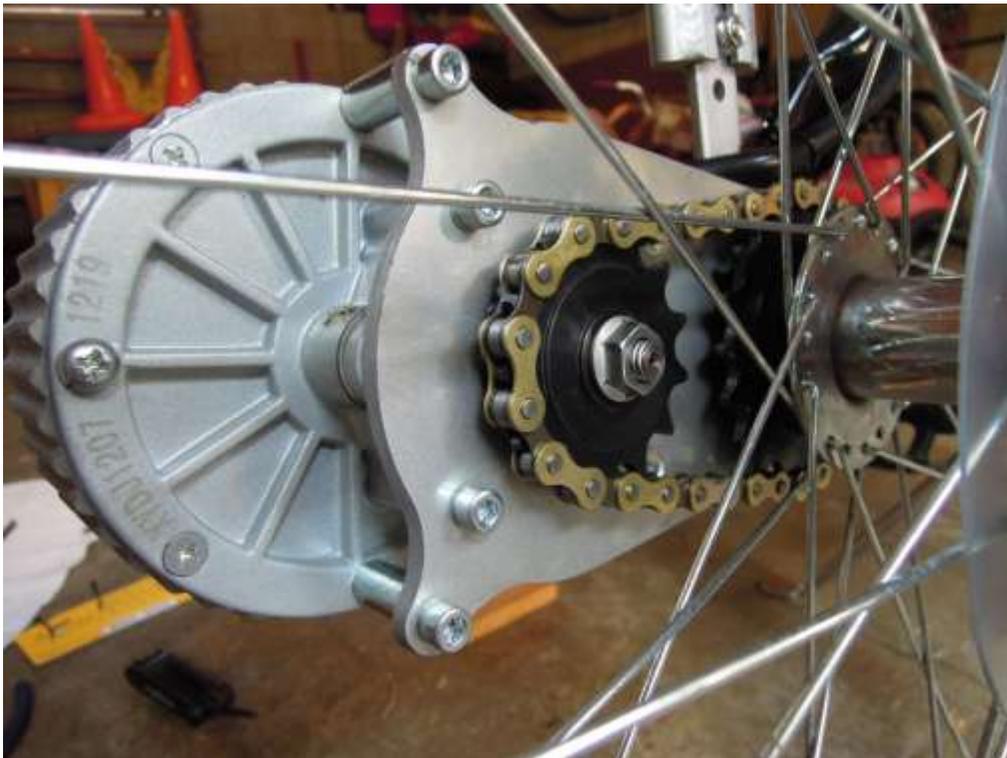
- **Again, you need to spin the tire to find a gap in the spokes. Even then, it is quite a challenge to slide the sprocket on. I had to loosen the motor mount adjusting screws and nuts to loosen up the motor mounts to get it to slide on. Then you have to spin the sprocket so that the notch in the sprocket lines up with the pin on the bolt/axle.**



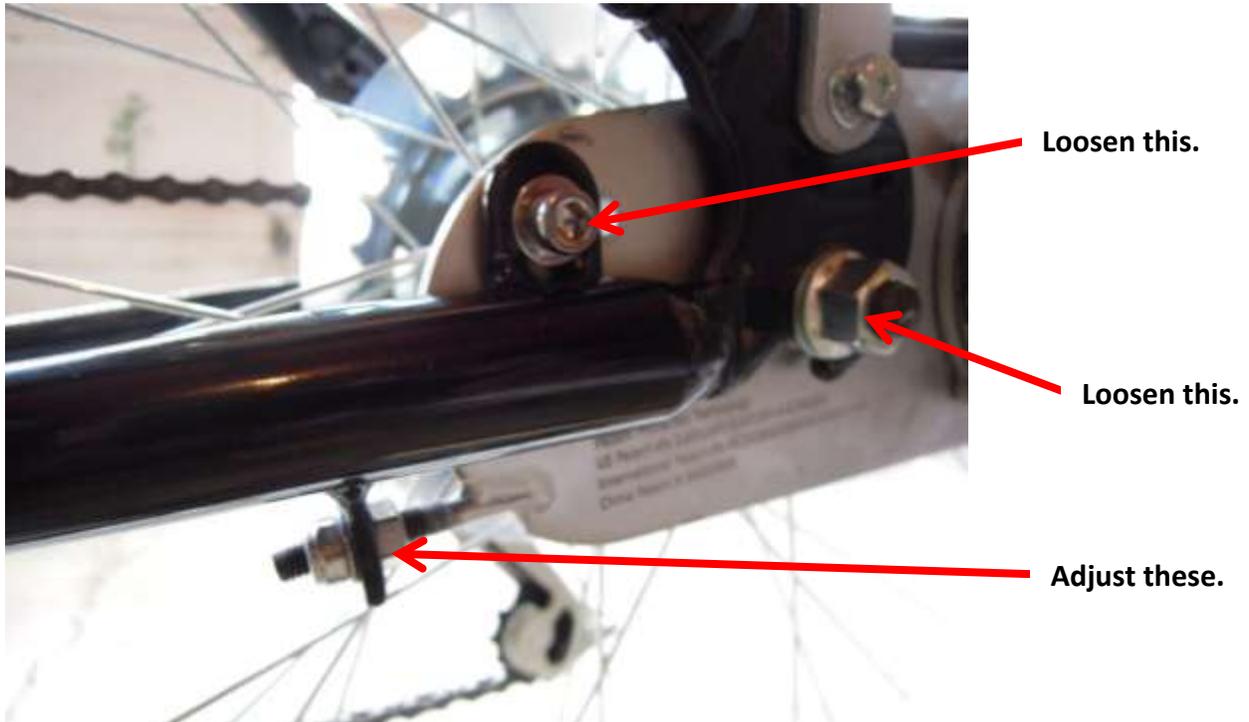
This is the pin. It can and will fall out. Line this up with the notch in the sprocket while keeping it in place. This was the most challenging part of the modification.



- **Finally! Here is the new sprocket in place with the nut tightened.**



- These are the adjustment nuts and screws that I had to loosen to get the sprocket in place. I also used these after the sprocket was in place to move the motor and tighten up the new chain.



- Here is a snapshot from a video I took of my Ezip Trailz going 21mph on flat ground with very light pedaling after I did the 13T drive sprocket modification.

