

When I Ride My Lectric eBike, My Butt Hurts and my Hand Goes Numb

Version 1.0

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My Lectric XP meets my needs amazingly well except in one area: the “fit.”

I searched the web for “bicycle fit” and was humbled by the complexity of adjusting a bicycle to be comfortable. It can also take less than a 1/8-inch change in the height of the seat or handlebars to make a large change in comfort.

At the one extreme are performance riders. They likely have a “fitter” on retainer. Spending hours on their bikes at maximum exertion demands a perfect fit.

At the other extreme is... me. Riding an hour is about my limit, although I have to admit that this is more about discomfort than endurance. After all, I am riding an eBike! But this doesn't mean a poor fit is tolerable.

First, I will review what can be changed. Then I will draw on expert advice to hopefully make things better. What I will present is a far cry from being professionally fitted, but it is worth a shot.

Fundamental truth: Make small changes to the bike, take a test ride long enough to feel the difference, and then make another small change, if needed.

If you make a big change, you can blow right past that sweet spot.

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The Variables



Thankfully, there aren't that many things you can adjust. Unfortunately, they interact:

1. Seat height
2. Seat angle
3. Seat setback (fore/aft position)
4. Handlebar height
5. Replace the seat

Seat Height

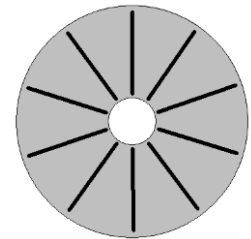


When my seat was at the wrong height, my knees and legs started to hurt. While I ignored the pain in my butt and numbness in my right hand, I raised the seat about ½ inch at a time until the pain was gone. This took about ten short test rides.

Seat angle

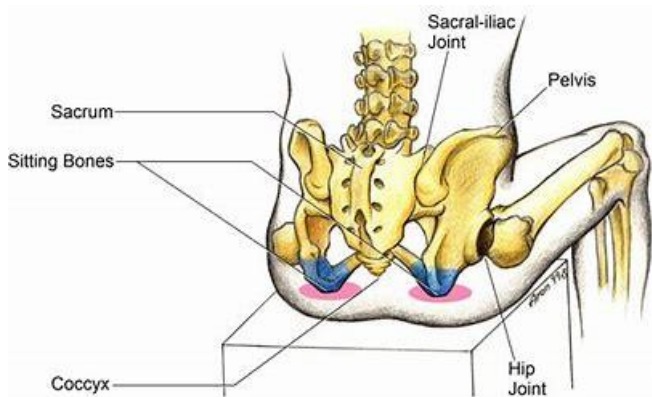


If you take a close look at the clamp that joins the seat to the post, you will find that it has a series of grooves radiating out from the bolt hole. They let you change the seat angle in small increments. When the bolt is tight, these grooves prevent the seat from pivoting.



A recommended starting point is with the front of the seat level. As one expert said, you do not want this part of the seat tilting up as it will press on your “man parts” or “lady parts,” which will, eventually, be painful.

You can tilt the seat a little up or down, but do it one click at a time.



[This picture](#) shows you what is going on when you sit. The Sitting Bones, also called the Sit Bones, carries your weight. If your bicycle seat is too narrow, the Sit Bones can ride on the edges and be forced apart by your weight. Ouch!



The goal is to have your Sit Bones resting on a back part of the seat. This means you are sitting above the front part of the seat and back from the post. It did feel funny at first.

Seat Setback



Seat angle and Seat Setback are linked. Together they define where your Sit Bones land.



These rods are the Seat Rails.

By loosening the seat clamp, you can slide the seat fore and aft without disturbing the seat angle.

An “ah-ha” moment was when I learned that I was sliding down the seat because my seat setback was too far back. It does make sense; my Sit Bones slide forward because that is where my body wants them to be. Slide the seat forward, and I will have my Sit Bones back up on the back of the seat.

The total possible range of the setback is less than two inches, so I only moved my seat 1/8 inch at a time.

As I shifted my butt from the low part of the seat to that higher part, it effectively increased my seat height. Time to adjust the seat height again. Damn.



Then I had to recheck the setback. Note that the seat post is at an angle, so changing the seat's height also changes its setback relative to the handlebars. This can drive you mad! Don't give up; you will eventually get these into a comfortable position.

When you do not have knee or leg pain, and your butt stays put on the rear part of the seat, you have arrived at a good seat position.

Handlebar Height

My right hand would go numb after a few minutes of riding. The experts say this is because I'm putting too much pressure on the nerves in my palm.



Consider the case of me sitting straight up. There would be almost no pressure on my palms.

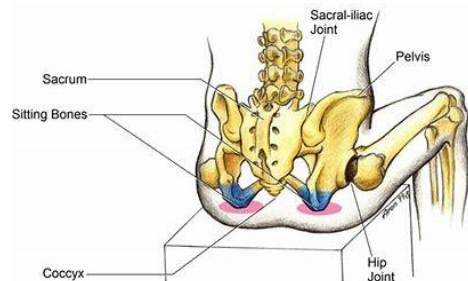


Next, consider what happens when I'm leaning forward. Some of my body weight must be supported by my palms. It won't be long before my hands go numb.

The ideal body position for me is sitting straight up with my forearms horizontal. I couldn't achieve this position because I ran out of height on my handlebars. Fortunately, raising the handlebar to its upper limit significantly increased the time before I needed to shake out my right hand. An expert at the bike shop suggested buying riding gloves, but my expert bike riding daughter told me she never wears gloves. I'll side with the expert – my daughter!

Replace the Seat

To my surprise, all of the experts I found said that they rarely replace the seat and do so only after making the other adjustments.



From what I could gather from the experts, the problem is rarely the cushion in the seat. It is more about where the Sit Bones press down *on* the seat.



Picture your Sit Bones pressing on this seam. As you move side to side, the edge of the seat will try to pry your Sit Bones apart. Ouch! That would be a good reason to buy a new seat.

When my butt started to hurt, I bought a [Cloud 9](#) seat. It didn't help, so I returned it. Then I purchased a [Selle Lagoon](#). Same story. I reinstalled the stock seat. But this time, when I had everything adjusted fairly well, I decided to give the Selle a second try. It is marginally better, but I think further fine adjustments might help.

Results So Far

Before I started my DIY fitting, my butt would start to hurt within 10 minutes, and my right hand would go completely numb after 20. Initially, I lowered the height of the seat, but that caused immediate knee pain, so I but it back to its original height. I could sit on the rear part of the seat but was sliding forward.

After inching² the seat forward a few times, I started to notice improvement. My butt started to get a little uncomfortable after 30 minutes. If I shift around a little, I was fine again. My right hand began to tingle at this same time. When I changed my grip, it felt fine again. I no longer slide forward. So, I have improved my comfort, but more fine-tuning is in order.

² At about 1/8 inch at a time.

After replacing the stock seat with the Selle Lagoon, I experimented with moving the seat forward 1/8 inch at a time. I then went on a one hour ride. If I shifted my weight about every 20 minutes and repositioned my right hand, all felt tolerable. It would be nice if the new seat felt like sitting in my easy chair, but that may be unrealistic. For now, I keep a wrench in my pannier so I can make a few more fine adjustments to the seat.

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