

My Electric Bike Experience

By Dr. Larry Bickford

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I really lucked out that in that I live in Santa Barbara and that's where Ken Kalb and Electric Star is located! Ken is incredibly knowledgeable about bikes and passionate about electrics. His focus is on quality bikes that work appropriately for the user. And that's big! A well designed electric bicycle will completely change the way in which you think of and utilize the bicycle for around town transportation, commuting and recreation. In the last year, quite a few electric bikes have shown up on the market. Many are junk (cheap parts), and some are downright dangerous (unstable, Wheelies, even unexpected flips). There are indeed a few "good ones" but most use pedal-assist systems which simply aren't for me. I also considered retrofitting my old mountain bike to save money. Ken was right-on in guiding me away from building an unsafe conversion bike.

I chose the Hebb Electro-Glide bike after researching and riding 5 other brands and models. I happily found that it's exactly what I need. The bike is well made, intelligently designed, really nice to ride -- and damn good looking, too! It has a variable throttle which provides the amount of power from the motor you desire. That's important. Here's why: You can soar up a 10% grade using the motor alone at 9 to 11 mph, or at half throttle power with light pedaling and go 15mph while getting some exercise, or even 20mph getting a good quad and calf workout. That compares to about 7 mph on a well-equipped road bike at a pretty high pedal cadence with a substantial work load. It's a whole different reality!

On the flats, the 7-speed Shimano Nexus gearing works so well you don't really need the motor at all, except perhaps just taking off from a dead stop. And that's where some of the fun is! Pedaling along at a 72- 80 stroke cadence gets you exercise. Add some motor power to cruise along at 22mph, or cut the speed and pedaling down and relax! Taking off from a dead stop is what strains the knees and leg muscles most. So, while waiting at that traffic light, add some Hebb power and get going without effort as you fly by the cars! Steep hill coming up? No problem. Twist the throttle and climb.

I found the "pedal assist" bikes awkward, but I'm sure there are some people out for a casual ride might be okay with them. These have a computer which automatically adds power to the pedal stroke -- the newer ones based on a sensor measuring torque load on the crank. You control how much "assist" the motor puts out, but not when and how much you desire for a specific road condition. Via the handlebar attached controller, you can select the assist mode desired, but never just none. I found myself paying too much attention to the controller settings when watching traffic should be the goal. Personally, that's not how I want to bike. I want to control the power and pedaling seamlessly, effortlessly. The Hebb Electro-Glide's power on demand makes it easy, safe and fun. Batteries are an issue with any electric motor vehicle, not to mention flashlights, remote controls, cell phones and computers. With electric bikes, the current choice is either old technology SLA (sealed lead acid) -- heavy but inexpensive power storage -- and the

new-tech Lithium Ion batteries. These are a third of the weight, take you twice as far, plus, and hold the charge better. But they cost three or four times as much. So if you can afford the extra expense, Lithium Ion is clearly the way to go.

I mentioned safety. There are two issues here: the safety of the bike build and safety on the road. Some electric bikes sold today are simply unstable. Cheap components like brakes, hubs, cranks can lead to trouble. Tires and rims need to match and be appropriate for the task. Tires are not a place to compromise, considering they are your connection to the road. Even the premium bikes use cheap Kenda's. The Hebb comes with premium Scwalbe Marathon Plus, arguably the best urban tire out there.

Safety on the road is, I think better with a competent electric bike than on non-motorized machines. The throttle allows you to quickly maneuver the bike out of potentially dangerous situations. The LED lighting system on my Hebb is perfect for seeing and being seen, runs off the battery and doesn't utilize much power.

The bottom line is that the Hebb ElectroGlide is great transportation and great fun! Working with Ken and understanding his rationale for selling electric bikes and the brands he chooses was enlightening. It's so nice to meet someone who truly cares about doing the right thing for you and, ultimately, for our home, our planet Earth.