

Cycling in a Recliner

You have probably seen those funny bicycles where the rider is ensconced in something akin to a Barcalounger. These things are called [recumbent bicycles](#). They cost a bit more than many of their conventional cousins, affectionately referred to as "wedgies". They often weigh a bit more, too. But the comfort level can't be beat, and it is much easier to enjoy the beautiful scenery in these parts while riding. Once you have ridden one for a few months, you won't want to return to convention.

I started down this road (no pun intended, although it is a hackneyed phrase) around 15 years ago. Years of weightlifting had strengthened my neck and trapezius muscles to the point where riding hunched over the handlebars of my road bike caused muscle spasms. I enjoyed riding enough to tolerate this problem, but jumped at the opportunity to test ride a recumbent in Minneapolis. Riding upright, with no need for arm support, was a revelation. So I bought a somewhat comical looking [model](#) from Erik's Bike Shop there. Customization raised the cost to \$1200 for a 29 lb. (gulp!) steed, but what the hell...the low profile cut the wind resistance, so it was faster on the flats than anticipated. And in Minneapolis, the flats are all that there is!



I merrily used it for a while, but like most enthusiasts, I yearned to waste more money on this hobby. Eventually I found my way to a veritable gold mine of shiny metal tubing and rubber called [Calhoun Cycle](#) that specializes in recumbents and analogous pedaled exotica. I quickly purchased a used, [highly customized 23 lb recumbent](#) (that is about as light as they get) with a shorter wheel base that made it faster but trickier to ride. I had some close calls on (what became) steep downhill thrill rides, and started to look for something else.

After moving to Boulder, I dimly remembered that a recumbent expert and customizer lived in Colorado Springs. This is Kelvin Clark, doing business as [Angletech Cycles](#). This time I wanted to get it right. A round of phone calls and emails to Kelvin revealed that this would cost around \$5,000, which sounds like a lot but in reality barely brings bragging rights in Boulder. I settled on a classic design, upgraded with a light titanium frame from [Rans](#), a Kansas manufacturer of both recumbents and airplane kits!



The high cost resulted from the titanium frame, the usual weight-shaving, overpriced component set (wheels, derailleur, etc.) and the unusual drive train that I specified. I have always hated front derailleurs and their accursed multiple chainrings. The damn things throw chains and downshift badly under heavy load. My first recumbent eliminated this by using the brilliant Sachs (now SRAM) [dual drive system](#). This combines a conventional rear derailleur and cassette with a three-speed internal rear hub, similar (perhaps identical) to those used on the classic Raleigh three-speed bicycles from the 1960s. This provides a wide gear range similar to that on most mountain bikes -- essential for recumbents in this Hilly Hell -- with only a single front chainring. The internal hub is a bit heavy and has a bit of internal drag, but being rid of the multiple chainring/front derailleur issues is worth it. Moreover, one can shift the internal hub while stopped.

Unfortunately, the Rans frame that I ordered precluded use of the SRAM dual drive. Kelvin proposed an alternative German-made, 14 speed rear hub with internal gearing. [One popular website](#) described this as a "triumph of teutonic engineering", but its price (over \$1,000) required a Mercedes-sized budget, and the thing cannot be downshifted under load. Because Boulder is a series of hills connected by short stretches of cardiac reprieve, this would not do.

Enter Florian Schlumpf, the Swiss designer and manufacturer of the revolutionary [Schlumpf Mountain Drive](#). This is an internal planetary 2.5:1 reduction gear, which mounts inside the front chainring. It is switched in and out by using your heels to kick a shaft back and forth through the bottom bracket. With a 46 tooth front chainring and a conventional long-cage rear-derailleur and wide-range 9 speed rear cassette, I achieved a gear range of 13- 102 inches: 13-41 inches with it engaged, and 33-102 with it disengaged. So not only did this achieve a nearly 8:1 gear range, but it did so with little overlap.¹ The efficiency of planetary gearing is very high, and while it does weigh something, this is matched by the weight reduction enabled by elimination of two front chainrings, the derailleur, and its cable. With a pair of high pressure (120 lb.) Continental Grand Prix tires, the 23 lb. steed is a screamer (for a recumbent, anyway).

Now I was equipped to do battle with the rarified set that rides Hwy. 36. Most any morning, there are serious cyclists out for training rides, as well as serious bike commuters. These folks provide convenient benchmarks for my cycling prowess. At the

¹ Because a recumbent chain is so long, all the cassette cogs are usable.

start of Spring, I was routinely caught and passed by just about everybody. I was occasionally able to keep up with a weekender or two, but was regularly humiliated by everybody else. My problem was not the recumbent, nor my weight or leg strength. Instead, decades of asthma earlier in life (now blissfully ended) diminished my aerobic capacity, well below the younger athletes, and somewhat below the older serious cyclists I battle.

Nonetheless, I improved to the point where I can match more than a few of those lycra-clad weenies who share the road. They look annoyed when a jerseyless altecocker on a 2-wheeled Lazy Boy pulls up behind them, and furiously try to drop me. Some can, but some can't. I learned to let them pull away on hills, where both my inability to stand out of the seat and my lower aerobic capacity work to my disadvantage. After I crest, when they think they are comfortably ahead and have eased off, I hammer the high gears to exploit my lower wind resistance. Pretty soon I am right behind and annoying them again. This may be juvenile behavior, but we altecockers need to refresh our self-esteem in this city of obsessed physicality.