

Ride with confidence – buy custom wheels

When it comes to bicycles, wheels get no respect. I grimace when I see someone walk out of a department store with a “bargain” \$100 bike with \$5 wheels that already have a noticeable wobble.

Tip 1: Wheels are what are between the road and you. I have an aversion to pavement rash.



Tip 2: Did you know there are only 16 threads on a spoke nipple? If your spokes are just one millimeter short (0.039 inches), you’ve lost two threads of engagement or one-eighth of what holds your wheel together.

Tip 3: Did you know that Shimano and Campagnolo will not warranty their hubs if a wheel is laced radially (where spokes don’t cross)?

“In 1,200 miles, a wheel makes one million revolutions,” said Matt Eames, instructor at the United Bicycle Institute in Ashland, Ore. “A wheel has the ability to store huge amounts of energy.”

Hand-built wheels come at a price but in return, one gets a more reliable/safer ride. If one buys a mass-produced, factory-built wheel, there are compromises. Not knowing a particular customer, production wheels are designed to satisfy everyone from a 120-pound recreational rider to someone at 250 pounds.

A custom wheel, on the other hand, can be built with a particular rider in mind. For a light, recreational rider, I can build a wheel with 14-gauge round spokes, low profile rim with two or three crosses (how many times a spoke crosses other spokes).

But, if someone is a downhill racer, I insist on a four-cross pattern (adds strength, torque transmission ability) with double or triple-butted spokes (thicker on the ends, thinner in the middle) to add elasticity and a rim/hub designed to take punishment. If the rider’s weight exceeds 140 pounds, I would use a 36-hole spoke pattern instead of 32. On our tandem, I used a 40-spoke pattern.

I’ve taken the Advanced Wheel Building seminar at UBI. The target was to build a wheel set that was true within one-thirteenth of a dime or 0.5 millimeters (0.02 inches). Any deviation from that standard was a deduction. In addition, we were challenged to have the spoke tension at 110 kilograms on the drive side. The result was a wheel guaranteed to satisfy even the most-avid cyclist.

I ride with confidence because I know what's between the road and me – quality wheels.
You deserve the same peace of mind.