

Talking Torque, Pt. 1

RBR 2/25/10

This week's topic was prompted by **Keith S.** from Mechanicsburg, Pennsylvania, who wrote: "I read an RBR note on torque wrenches, which almost prompted me to buy one. What held me back was my last visit to the local bike shop. When I asked them about torque specifications and if they torqued my parts, the look on the mechanic's face told the whole story -- they don't use torque wrenches. My question is, if they're so important, why don't the bike shops use them? Two other shops told me they don't. What am I to believe? Is it all a marketing thing?"

It's definitely not a marketing thing, Keith. Torque wrenches have become a necessity with the influx of carbon frames and components.

When tightening steel or aluminum parts, you can get a feel for how tight is right. But that's not the case with carbon. It's very easy to over-tighten and break expensive carbon parts or under-tighten and have them come loose (and maybe break).

The only way to be sure of tightening right is with a torque wrench. It puts a number on tightness -- the number you now see printed on many parts (metal too) or in the installation instructions.

As for why some shops still don't use torque wrenches, one reason is that they simply don't understand why it's necessary. Or they're unconvinced. They've tightened by feel since day one and they're not going to change -- yet.

Also, if they don't sell or repair high-end carbon bicycles or parts, they may see no sense in buying tools to service them. But that's probably not the type of shop most of us do business with.

I think you'll find that more and more shop mechanics are using torque wrenches. They actually make working on bikes easier as well as more precise.

For home mechanics who do assembly or repair work on carbon bicycles and components, I recommend owning a torque wrench. Even if you're a rider who does only simple maintenance, a torque wrench will allow you to verify that bolts are properly tight.

Checking is important because carbon components are more likely to loosen with regular use than steel or aluminum parts. You can confirm torque before any important event, then ride with peace of mind, knowing that your bike is safe.

Of course, a torque wrench is useless unless you know the torque specifications for the component you're tightening. If the number isn't on the part or in the instructions, you can consult charts such as the one at [Park Tool](#). Look at the bottom of the page, where you'll also find a handy conversion for the common ways torque values are expressed.

Okay, now that I've made a case for adding a torque wrench to your home shop, which wrench should you buy?

Next week in Pt. 2 I'll tell you about several good ones.