

## The Yoda of your toolbox

A torque wrench is an absolute necessity for any professional mechanic and an excellent investment for any serious home mechanic. While many old-schoolers scoff at the thought of using a torque wrench, even calling them "dork wrenches," today's ultra-high-performance parts require a level of precision that simply can't be found in the hands of even the most experienced mechanics. If you've taken the time to carefully follow the torque ratings on lightweight carbon stems, handlebars, seatposts or frame bolts, you know that the torque it takes to tighten these properly is surprisingly low. You also know that a loose bolt is as dangerous as an overtightened one. The line between the two potentially catastrophic scenarios is razor thin, and a well-tuned torque wrench is specifically designed to find it for you.

**Tech features:** The Giustaforza II Pro is a precision torque wrench with a range of 2 to 16 Newton meters. The mechanical wrench features a dial on the bottom to

infinitely adjust anywhere within that torque range, which is specifically tailored for most bicycle applications. Effetto Mariposa makes a larger version of this wrench with a torque rating of up to 60 Newton meters for higher-torque applications, such as bottom brackets. The wrench is 100 percent anodized aluminum and steel, with no plastic parts. It operates by giving a "click" and 3 degrees of movement when the proper torque is reached. Our Deluxe version came with a carrying case and an assortment of cycling-specific bits to fit the most common fastener sizes. The Giustaforza II Pro retails for \$250 and can be purchased through any local bike shop.

Field test results: The "Giu" torque wrench is a serious tool designed for serious mechanics. The \$185 price tag is too steep for the casual mechanic who will only use the tool once or twice. The construction quality and feel of the wrench are meant for the mechanic who not only appreciates a

finely tuned tool but will also use it. Having used several digital torque wrenches in the MBA workshop, we have to say we appreciate the mechanical feel of the Giu wrench and even prefer it for most jobs. There's something about that heavy click feel that's very satisfying. As an added bonus, we never have to worry about a dead battery. Our only real complaint is that the carrying case feels cheap and unworthy of carrying such a fine tool. It does keep all the bits in place and organized, but the thin roll of fabric simply doesn't do the wrench justice. We found a dedicated pocket in our toolbox to house the Giu wrench.

The Effetto Mariposa wrench will be at your beck and call with precision torque to save your most expensive components from the nightmare of stripped bolts and threads or crushed carbon parts. Professional mechanics should put this

wrench at the top of their list of tools to buy, and it should live on the top shelf of the toolbox where it's easy to reach.

## Hits

Precise, high-quality construction

## **Misses**

Low-quality carrying case