Tech Briefs

Tire Balls Fight Flats, Run on Low Pressure

CRESTWOOD, KY—Tire Balls are 32 miniature air pillows that stuff inside a mountain bike tire to replace a single inner tube. The air pressure in each plastic pillow is adjustable. "Because the air volume of each pillow is small, the air pressure ramps up quickly when you hit something. You can run very low pressures for great traction and still have great protection from pinch flats," said Jeff Stoess, sales manager at The Tire Ball Development Company. Tire Balls were introduced to off-road motorcycle racing a few years ago and the system already has impressive wins like Dakar and Baja 1000 under its belt. Different size balls can accommodate tire widths from 2.1 to 2.7 inches. "Another advantage of the system is that if one ball is flattened the other 31 are still working so you can keep going," Stoess added. The company is working on a system for road tires.

Integrated Post Adds Stiffness, Sheds Grams

GOLDEN, CO—Yeti's '08 ASR Carbon incorporates an integrated seatpost and press-in bearing cups to hit the scales at 4.2 pounds. Are racers bothered by losing adjustability with the integrated seatpost? "This is a cross-country racing-only bike so riders see that the design offers light weight and better power transmission to the pedals and they are not bothered by an integrated seatpost," said Chris Conroy, Yeti's general manager. The company figures it saved 80 grams over a traditional seatpost while boosting torsional stiffness close to 50 percent over the '07 ASR Carbon. In addition to providing different seatpost mounts that allow adjustability, Conroy said riders can cut the seat mast off, add a clamp and run a traditional 27.2 seatpost.

Chainstay Allows Riders to Tune Suspension

HAYWARD, CA—Bianchi's Camos cross-country race bike uses a flexing carbon plate behind the bottom bracket to provide 80 millimeters of travel. What's interesting is if you unbolt the flex plate, disassemble the chainstay pivots and flip it over, you can change the spring rate of the back end. "Flip it one way and the ride becomes much softer. Flip it the other way and it's much firmer. It allows a rider to tune suspension to the course they are racing on," said Laurence Marling, Bianchi sales rep. The difference in pre-load comes from how the carbon flex plate is laid up in manufacturing. Flipping the chainstay upside down does not alter the 80 millimeters of travel. The Camos, with a mix of XT and XTR, sells for $6,100. It's handmade in Italy by a carbon supplier to Ferrari.

Kage Saver Replaces Broken Cage Brackets

PASADENA, CA—Pasadena Bicycle Manufacturing Company's $5.95 Kage Saver is a small four-gram L-bracket that replaces a carbon cage's bracket when it breaks. "Most carbon cages come with a lower carbon L-bend to support the weight of the bottle. The problem is these L-bends begin to crack and water gets to the crease further speeding the process," said Steve Lubanski, company president. Carbon cages are not cheap to replace and frequently new cages do not match older cages the rider broke, prompting the purchase of two new matching cages. "This little part saves the shop owner and customer so much grief. Just back out the lower bottle cage bolt and slip this L-bracket in and the cage is usable again," Lubanski added. Kage Savers can be ordered from Lubanski at (626) 792-2550.