

# Tech Briefs

## Mavic Gives Makeover to Carbon Fiber Spokes

HAVERHILL, MA—Racers who crash and get a pedal shoved into their Mavic R-Sys carbon fiber spoke wheels can now ride away from the crash as if they were riding metal spoke wheels. Mavic recalled its initial R-Sys wheels in January and its re-engineered R-Sys wheels are just hitting the market. “At issue was the strength of a wheel during a crash, especially when a pedal gets shoved into the carbon spokes,” said Sean Sullivan, Mavic’s marketing director. Carbon’s impressive stiffness and strength can be compromised by the slightest cut or gouge, so Mavic completely changed the layout of the carbon fiber spokes it uses in its R-Sys wheels. “We were shooting for crash performance equal to our Zicral or stainless steel spokes, which we now have,” he added. Mavic’s R-Sys spokes were originally made with unidirectional fabric. Re-engineering the fabric layout and using a multi-weave outer layer resulted in a spoke five times more crash resistant and three times more torsionally rigid than the original carbon spoke. “We also redesigned the nipple area to disperse stress over a larger area,” Sullivan said. Wheels with the updated spokes are easy to identify by the multi-weave outer layer and a three-stripe logo.



## Beefy Versa Rack Accommodates Disc Brakes

MADISON, WI—Disc brakes offer all-weather performance, but they make it difficult for bikes to accommodate traditional racks. Rack makers have adapted. Delta’s lower rack mount clamps around the seatstay well away from the calipers. Topeak uses extensions on its lower legs to swoop around bulging calipers. Planet Bike’s Versa rack bulges its lower struts to clear calipers, and also eliminates the forward support strut, increasing heel clearance. “Clearing calipers is not really a problem with commuter bikes since so many of them mount the caliper between the stays. However, quite a few people are using their mountain bikes or 29ers to commute now and their calipers are in the way,” said Mark Lalonde, Planet Bike’s warranty manager. Versa rack’s lower support is bulged to clear calipers so it mounts to the dropout using a long screw and spacers. This is Planet Bike’s second-generation disc-compatible rack and it increased its adjustment to allow the rack to be installed cleanly on everything from a standard 26-inch frame to a 29er. Made of 10-millimeter 6061 aluminum, Versa has a 55-pound load rating. The Versa retails for \$37.



## Guide Stops Dropped Chains on One-By-Nines

GRAND JUNCTION, CO—MRP developed its 1.X upper chainguide with Adam Craig to deliver a bombproof lightweight guide compatible with one-by-nine drivetrains that are increasingly popular with cross-country racers. “You would be surprised by how many requests we have had from riders. It’s not only that one-by-nine drivetrains are lighter, it’s a much simpler drivetrain,” said Ryan Cranston, MRP’s product manager. “Currently one-by-nine riders use a bash-ring on the outside and cobble together something to keep the chain from dropping off on the inside, usually a cut-up front derailleur. No matter what you think, you will always drop your chain on a one-by-nine system,” he added. MRP’s 1.X guide mounts between the bottom bracket cup and the bottom bracket. The mounting plate is 2.5 millimeters thick, just the right thickness to replace the standard 2.5-millimeter spacer. The top thermoplastic chainguide adjusts to 50- or 49-millimeter chain lines depending whether a one-millimeter spacer is used. MRP is offering either a 58-gram 1.X for 32- to 36-tooth chainrings, or 62-gram version for 32- to 40-tooth chainrings. It sells for \$50.

