

Diamond Back OVERDRIVE COMP

Big Wheels Keep on Turnin'

BY JOHN KUKODA

call it a hybrid on steroids, or a mountain bike on an adrenaline spike, Diamond Back calls it "700C with an attitude." It's the Overdrive Comp, a \$1,155, spare-no-expense, off-road machine that just happens to share the same wheel diameter as your skinny-tire pavement pounder and your neighbor's cul-de-sac cruiser.

Don't let the 700C wheels throw you, though. They're the same size most hybrids have, but that's about the only similarity. For one thing, the Comp comes with an XC Pro Micro Drive

drivetrain, SunTour's best off-road group and, by most accounts, the year's hot component choice among advanced trail riders, who cite its solid, glitch-proof shifting precision, even under load.

A bike's capabilities are dictated primarily by its tires, and the Comp's treads exude potential. They're a 700x45C version of Panaracer Smokes, one of the most capable and popular mountain bike tires. Made at Diamond Back's request for the Overdrive series (there's also an \$825 Shimano Deore DX-equipped version), these tires are a rarity in that they

measure up to their claimed 45-mm width. This makes them a silly millimeter wider than a 26x1.9-inch Smoke, with which they share an aggressive, almost dangerous-looking, chisel-cut tread pattern.

But while the 700x45C Smoke equals the girth of a midwidth mountain bike tire, its rolling diameter is much larger: 71.5 cm vs. 65.3 cm for the 26x1.9-inch version. This is more than 2 inches, and you notice it. The 700Cs are less affected by bumps and washboard, rolling up and over obstacles that



impede smaller wheels.

Having experienced the exasperating limitations of my Alex Moulton mountain bike's 20-inch wheels compared with standard 26-inchers, I expected an even smoother, easier ride over washboard and small rocks on the 700Cs. I wasn't disappointed. But I was still surprised by how much easier the big wheels rode on soft ground. Conventional wisdom dictates using the widest possible tires on squishy surfaces so they float. But these moderate-width Smokes proved easier to pedal through clingy, clay-based mud than the 26x2.1-tired mountain bike I rode through the same soupy singletrack earlier in the day. This results from the ground's shallower angle of attack on the larger tire, even though the contact patch moves forward and higher on the circumference as the tire sinks deeper into the goo.

The 700C Smokes fall short only on rugged, rock-strewn trails. On such rough stuff there's still no substitute for the huge air volume and low, bump-swallowing pressure of a fat 26x2.1, 2.2, or 2.5 tire. These can safely be run as low as 25–30 psi, depending on rider weight, without pinch flats. The 700C Smoke's recommended inflation range is 65–80 psi. At about 70 they rolled extremely well but bounced a bit on rocks. I also tried them at 55 psi and had no problems,



though I stayed on fairly smooth trails.

On most of the currently fashionable, oversized, superstout mountain bike frames, even 55 psi would produce a miserably harsh ride. But the Overdrive Comp is no ordinary mountain bike. Its frame, TIG welded of True Temper OX double-butted chrome-moly steel, uses diameters and gauges only slightly larger than road bike standards (and positively

THUMBNAIL



- Climbs, accelerates, and rolls through mud better than most mountain bikes
- SunTour XC Pro Micro Drive drivetrain is superb



- Crankarms too short
- Needs a lower head tube or a stem with less rise

If the best motorcycle helmets come in nine separate sizes, motorcycle helmets only come in

The motorcycle helmet industry has known for 20 years how critical a proper fit is to safety. Accurate, fractional sizes are your only assurance of comfortable, shock absorbing head protection. The truth is, a lot of companies compromise fit

for lower production costs.

Listen, multi-fit helmets just don't work as well as fractionally sized helmets. Bicycle helmets that sell in 2 or 3 sizes usually rely on over-sized soft foam "fitting pads" which will compress on impact and localize

forces to narrower contact points, leaving the helmet loose on the head.

Headway is Australia's leading bicycle helmet manufacturer, and we've been in the head protection industry for over 25 years. The award winning Headway 701 is



SunTour's excellent Micro Drive drive-train (left) and dirt-grabbing 700C Panacer Smokes (above) make the Comp a full-on off-road machine.

puny compared with those of many mountain bikes). The 1½-inch-diameter top tube and 1¼-inch down tube are a resilient 0.9/0.6/0.9 mm thick, while the externally butted seat tube tapers from a hefty 1.3 mm at the bottom bracket to 0.8 mm at the seatpost. The taper-gauge fork blades are likewise a resilient 1¼ inches at the crown, then raked with a gradual 600-mm radius for responsiveness

throughout their length. The result is a smooth and resilient bike that's reminiscent of a Ritchey P-23 or KHS Team Pro, both light-gauge steel steeds that go a long way toward making suspension unnecessary.

The Comp's resilience complements its eager agility. This bike responds instantly, and although not exactly squirrely, it did feel more skittish than most mountain bikes—more like a road bike with fat tires. The good news is that when climbing and accelerating, it responds like one, too. Even though I've been spoiled recently by a bunch of light mountain bikes—the heaviest is barely 24 pounds, the lightest just 20—the 26.4-pound Comp still made me grin.

The frame is designed with a long front center for good stability, and short chainstays (16.9-inch) that produce a tight rear triangle for so large a wheel. This design combines with the aggressive Smoke tread to make the Comp an excellent out-of-saddle climber. Also helping is the one-piece Avenir Brahma bar, which puts the rider's hands in perfect position for getting maximum power out of arms and legs. As a result, I could traverse the rolling, fairly smooth dirt trail of my off-road commute in a single, high gear. I'd sit and cruise on the flats, then jam hills out of the saddle. The Comp

feels designed for this type riding.

In short, I was impressed with the Comp's off-road capabilities. This is definitely no gussied-up, overpriced hybrid. But I'd be less than honest if I didn't hammer its awkward frame sizing system. Diamond Back offers its Overdrive bikes in 4 sizes: 15 through 21 inches in 2-inch increments, measured to the top of their sloping top tubes. I'm 5-foot-10 with a 32-inch inseam and normally ride an 18- or 19-inch mountain bike, yet the 17-inch Comp's top tube, stem reach, and 350-mm Kallay seatpost fit me fine. This means the smallest, 15-inch model would only fit someone a few inches shorter, which leaves out riders less than about 5-foot-5. Meanwhile, the 21-inch version could be the official bike of the NBA.

Even though the 17-incher's reach and saddle position were fine for me, the overall fit left much to be desired. The too-wide, 60.5-cm handlebar was a supply error; a more appropriate, 58-cm Brahma bar will come with the bike by the time you read this. But our sample's diminutive, 170-mm crankarms are standard, while the 15-inch version comes with 165s. Each size is about 5 mm too short. Perhaps that's why I liked the bike best out of the saddle, where I could employ my body weight for leverage, even though I'm an avowed seated

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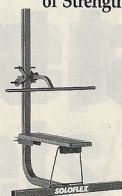
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climber. Pity the poor NBA forward on his 21-inch frame, trying to apply power through its 175-mm crankarms.

The other fit problem resulted from the tall head tube, which limited bar height to saddle level—2 or 3 inches too high for my tastes. Fortunately, the solution for Diamond Back is simpler than changing the frame design: Simply spec a version of the Zoom stem with less rise. In my case, no rise would have been perfect. With this change and longer cranks, the bike's handling and climbing would be even better. ■

DIAMOND BACK OVERDRIVE COMP

Distributed by: Western States Imports
4030 Via Pescador
Camarillo, CA 93010

Country of Origin: Taiwan

Suggested Retail Price: \$1,155

Sizes Available: 15, 17 (tested), 19, and 21 in. (measured center to top)

Weight: Frame, 4.7 lbs.; fork, 1.9 lbs.; complete bike, 26.4 lbs.

Frame and fork: True Temper OX double-butted chrome-moly steel tubing; TIG-welded construction

Wheelbase 41.2 in.; 104.6 cm

Seat tube 17 in., 43.2 cm (actual);

21.5 in., 54.6 cm (effective)

Top tube 22 in.; 56 cm (effective)

Head angle 72 degrees

Seat angle 73 degrees

Chainstays 16.9 in.; 42.9 cm

Bottom bracket height 11.9 in.; 30.2 cm

Fork rake 1.8 in.; 4.57 cm

Trail 2.66 in.; 6.75 cm (based on 28-in. wheel diameter)

Wheels:

Hubs SunTour XC Pro Grease Guard;

135-mm rear axle spacing

Spokes 32 front, 36 rear; 14/15-gauge

double-butted stainless, 3-cross

Rims Avenir Duro 17, gray

Tires Panaracer Smoke, 700x45C,

65-80 psi

Drivetrain:

Derailleurs SunTour XC Pro Micro Drive;

XC Pro thumbshifters

Chain SunTour AP11

Crankset SunTour XC Pro Micro

Drive, 170-mm crankarms

Bottom bracket SunTour XC Pro Micro

Drive Grease Guard

Freewheel SunTour Micro

Drive cassette

Components:

Brakes Dia-Compe 987

cantilevers; SS7 levers

Pedals SR Low Fat Comp;

Avenir nylon clips and straps

Headset Tioga Avenir, 1 1/4 in.

Seatpost Kalloy alloy, 350 mm

Saddle Selle Italia Turbo, textured

synthetic cover

Bar/stem Avenir Brahma alloy,

60.5 cm/Zoom chrome-moly, 13.5 cm

Gear Inches

(based on 28-in. wheel diameter)

	20	32	42
11	x	82	107
12	47	75	98
14	40	64	84
16	35	56	74
18	31	50	65
21	27	43	56
24	23	37	x