



RITCHEY P-21

Time-warp technology



Tom Ritchey is an icon of "conservative" bicycle design. The Northern California native began building and racing road bikes in high school and never looked back. Back then, Tom's designs were considered cutting-edge. He fiddled with each aspect of the traditional diamond frame, trying different geometry, threadless bottom brackets, tubing combinations and lugless-brazed construction. Splitting his time between his garage-based frame shop and road racing, Ritchey became one of the top Junior racers in the country, making the Junior World Championship team in '74. By the time a couple of his acquaintances asked him to build some fat-tired bicycles, Tom had popped out a respectable amount of road

frames. In doing so, the young craftsman learned to appreciate how well-perfected the diamond frame bicycle was. Tom's first mountain bikes were much like the bicycles that were raced over the cobblestones and largely unpaved roads in the '30s (with the exception of motorcycle brake levers and flat handlebars). Over the years, Ritchey has focused on improving each aspect of the traditional diamond frame design rather than reinventing the bicycle altogether. After a decade and a half, few aspects of the mountain bicycle have escaped his scrutiny, but the soul of his bikes remains the same.

ENTER THE P-21

When MBA decided to test fully rigid fat-tire bicycles, the first name that came

All that it takes: Tom Ritchey has removed every non-essential gram from the P-21, right down to the braze-on fittings. Mr. Ritchey didn't rely only on racing luck, the right weather and unpronounceable Euro racers to win the last two World Championships; his creative bicycle design had a lot to do with it.

up in conversation was Ritchey. With a couple of World Championships and a considerable list of national and international victories chalked up to his ultralight brand of steel bicycles, no rigid bike evaluation would be complete without one. Our weapon of choice? The P-21. Clad in a group that (except for a few Shimano bits) carries the Ritchey logo on every part, this red-white-and-blue racer

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weighed in at a tad over 22 pounds, and it was devoid of any ridiculously light and breakable junk. Hey, life could be a lot worse for an *MBA* test rider. The P-21 was going to be one of those rides that everyone would have "dibs" on for first dirt.

FIRST LOOK AT THE FIGHTER PLANE

The P-21 is a complete concept off-road bicycle, but it looks as retro as a lugless framed bike can get. Braze-ons are traditional: gears on the downtube and brake on the top tube. The seatpost clamp/seatstay junction is a '20s fastback design. How often do you see fat-tire bicycles without a sloping top tube? The Ritchey is as level as the horizon. The P-21's frame tubes are the famous ultra-short-butted Tange Prestige tubes that Ritchey himself designed for TIG-welding. The "Logic" tubes aren't oversized in the mountain bike sense of the word. All three main tubes are 1.125 inches in diameter. The rear section of the frame is relatively standard-looking also, disguising the internal butting trickery necessary to keep the P-21's frame weight hovering around what we calculate to be the sub-three-pound range (light for a chromoly frame). The label on the seat tube of the red-white-and-blue bike states that the frame was made in Japan. You probably thought that Ritcheys were made in America; not so. We have come to expect top-notch construction and alignment from the few Japanese frame manufacturers still practicing the craft and the P-21 follows suit.

PRIVATE-LABEL COMPONENTS

Nearly every component on the P-21 is, in some way, designed or modified by Tom. View the bike from any angle and Ritchey's "Force Directional," "Logic" or "World Championship" logos present themselves. None of these components are actually manufactured by Ritchey; most are imported from top players in Japan or Taiwan. Some items, like brake levers, bear an undeniable family resemblance. Ritchey's tires, however, are like no others on the planet.

In the driver's compartment, the P-21 feels roomy and spartan, like a classic sports car. Its Logic Pro saddle has a smidgen more padding than most emaciated "Flite" clones, but isn't overplush. Controls are hung on a WCS-finish, 130mm, ten-degree stem and an Easton-made WCS alloy handlebar. Brake levers are Logic items that fit handily over Grip-Shift 500 eight-speed gear changers. Fat, Ritchey-label, foam grips span the short distance between the shifters and a set of alloy Logic bar ends. Although the stem

◀ Tom Ritchey hates when we say this, but the Ritchey P-21 is a road racer for the dirt. It's at its best at high speed on medium rough singletrack. It's a little slow-handling for technical low-speed work, but this is an all-or-nothing NORBA race bike.

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is high, the low head tube and 15.25-inch fork keep the bars in the sweet spot, three inches below the saddle (we were reminded how much height suspension has added to the modern mountain bike when riding the rigid Ritchey).

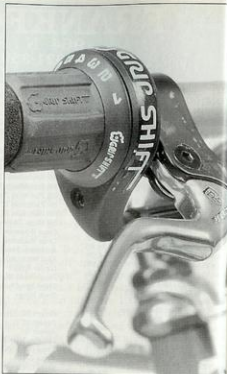
The drivetrain is centered around Shimano's Deore XT Compact drive system with a few twists. Shifting is capably handled by Deore XT derailleurs (front and rear). An 11-28 eight-speed Deore cassette is driven by a Logic compact crankset with 22/32/42 Sugino chainrings with cool-looking shifting-profile teeth. Putting the pedals to the soil is handled by red-colored (will this color thing ever stop?) Alpha and Omega Bite 2.1 tires on 32-hole, ferruled, Ritchey Rock 395 rims. Hoops are laced to a Deore XT rear hub and a (roadie) 600 EX front hub with 15/17-gauge Force Directional spokes (yep, he even has designer spokes).

THE NORTHERN NUMBERS

Frame geometry is NORBA-class. Our P-21 has a center-to-top measurement of 18.5 inches and a shortish 22.5-inch top tube. Seat angle is steep at 74 degrees and the head angle measures in at 71 even. Wheelbase is the magic 42 inches and the chainstays are 16.75 inches. Bottom bracket height checks out to be the indus-



Enough is enough: Ritchey is one of the few remaining off-road builders to use a level top tube. The need to reduce the volume of Tange tubing was the "modus operandi" here. The P-21 uses the smallest possible head tube, shaving some grams from the fork along the way.



Another convert: The Ritchey P-21 is yet another top-level racing bike to be equipped with GripShift. The system is significantly lighter and much less expensive than its Shimano competitor. Shifting is nearly as good, but not as precise.



Tiny, but effective: The fastback seat stay cluster has been a Ritchey trademark since Tom's days of brazing road bikes in Northern California's Bay Area. Brake cable routing is effectively downsized and diminutive. The seat stays and clamp boss are fillet-brazed, while the main frame is TIG-welded.

try-standard 11.5 inches. Our complete bicycle weighs in at 22.3 pounds.

Sizes are available from 14 to 23 inches. Suggested retail for a P-21 is \$2500. Contact Ritchey USA at 1326 Hancock St., Redwood City, CA 94061 or call them at (408) 368-4018.

FIRST DIRT ON THE P-21

The origins of this bike are evident to anyone who has ridden the road serious-

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ly. The P-21 is happiest when it is ridden with a degree of finesse. Don't get us wrong; the '21 can be ridden aggressively, but to get the most out of this bike it's best to relax into it and put the power down. In curves, fast or slow, simply lean in and pedal out. Utilizing this roadie technique allows the P-21 to carry its speed through the turn. A brutal attack style exaggerates the flexible nature of the bike's ultra-minimal "Tom Tubing" and ignores the point of this bike's design.

Climbing is fun on the P-21 in any situation. Short stays and Ritchey's aggressive Alpha and Omega (bite) tires keep the rear end turning without churnin' and the bike's steep seat angle pushes the front end forward (keeping the wheel from lofting under power). Hard efforts are best done out of the saddle (the 74-degree seat angle makes the transition from seated to standing effortless). This is a rigid bike. Even though the frame and fork soak up a lot of pounding, the standing position is required to keep the wheels stuck to the terra firma for a significant amount of a day's ride. Descending makes this more apparent. As long as the trail surface remains moderate, the P-21 is easy to fly. It has good manners on

steep, technical downhills and with its minimal weight can be hopped over most obstacles with ease. Brakes are well matched to the '21's performance. The red pads haul the bike down from any speed with a firm feel at the lever. Modulation is important on a rigid bicycle because it spends a great deal of its time sketching over the rough stuff. A delicate touch is required to keep the tires from skidding.

NITPICKS

MBA's test riders liked most everything on the P-21. Most wondered what a suspension fork would add to its performance. Blasphemy! Sorry, dudes. The '21 has a short crown-to-axle measurement and the switch would upset the bike's geometry by a full degree. We all wished for grips that didn't spin around the handlebar. The pads on both Logic cantilevers had to be reset twice. They refused to stay in place for some reason (cranking the fixing nuts unusually tight solved the problem).

Overall, the P-21 is at its best on a NORBA-type trail—fast, moderately rough, with a lot of undulating grades and a couple of long doubletrack ascents thrown in. Screaming-fast downhills become a bit of a chore without front forks and there is probably a limit to the amount of punishment a 22.3-pound, steel-framed bicycle can take. For racin' retros, the P-21 is quite the E-ticket. □