3D RACING ROVER XC

HOMEGROWN HARDTAIL

By Chris Evertsen

PHOTOS: JIM SAFFORD

"A cyclist wants, needs and, most importantly, deserves a bicycle that is fit to his specific riding style and attitude."

—Chris Herting

From the first frame he assembled with his dad in the family garage to the 3D Rover XC gracing these pages, Chris Herting, owner and operator of 3D Racing, has always worked methodically and deliberately on one bike at a time, focusing on each frame he builds.

Herting learned his trade in his early teens when he and his brother customized bikes from old BMX and Schwinn road bikes. They used their father's tools in the family garage to cut and tack tubes. Then their father would come home from work and finish the welding. "It was a lot of fun, and we learned through trial and error. Sometimes the errors hurt a lot, but when it all came together and we assembled a winner, the rush of success was overwhelming," Herting added.

From that stemmed a small business of repairing and customizing. Through the guidance of several frame builders—Rob Rupe and Frank Waddleton among them—and his own experimentation, Herting developed an expertise as a builder. Then Herting met John Parker, a frame builder for American Iron in California's San Fernando Valley. Parker contracted Herting to build frames for American Iron, and in 1986, they formed Yeti Cycles and moved to Durango, Colorado. During his time with Yeti, Herting continued to hone his skills in aluminum and build frames for friends at the Yeti facility. In 1992, Herting split from Yeti and set up his 3D Racing shop. Working from the 1000-square-foot shop attached to their home, he and wife Leeann have produced many top-notch bicycles.

The author gets some singletrack air aboard the nimble Rover.

Practice makes for perfect, superclean welds—you get plenty of rear-end mud clearance too.

RIDING THE ROVER

With a quick once-over determining that the tires were set with my preferred pressure, I grabbed my carrying tools, pump, water bottles, a spare and a waist pack stuffed with enough food to sustain my energy, I clipped into the pedals and rode onto the Chilao trails to start my ride. Chilao starts off with five miles of rolling singletrack, winding through a dense forest of large California pines. As I warmed up to the ride, I took the opportunity to aquaint myself with the feel of the team-issue Rover XC's component package.

The Rover is studded with a venerable what's what of trick, lightweight components. At the control center, mounted on a Critical Racing stem and bar combination are Grip Shift X-Ray 8-speed twist-shifters and Dia-Compe PC-8 brake levers. I've found this combination to perform admirably in all forms of adverse conditions including mud. And the Shimano XTR derailleurs shift smoothly and easily. Critical Racing also supplied the cantilevers mounted with Aztec pads, completing the brake ensemble. The Answer seat post was another fine addition with its independently adjustable angulation and fore and aft settings.

SADDLE TIME

At the base of the first major climb there is a fork in the trail, and I chose to go to the left. Much to my chagrin, a quarter mile up the trail, as it banked around the side of the hill into a gorge, the path lead into what was probably the toughest climbing switchback trail I've encountered. With a twist of the wrist the gears dropped into the grannies, and I powered up. The rear tire—onZa's K 2.1 Honch—did its trail-grabbing, pine cone–crushing best to get me and this lightweight steed up this climb but to no avail.

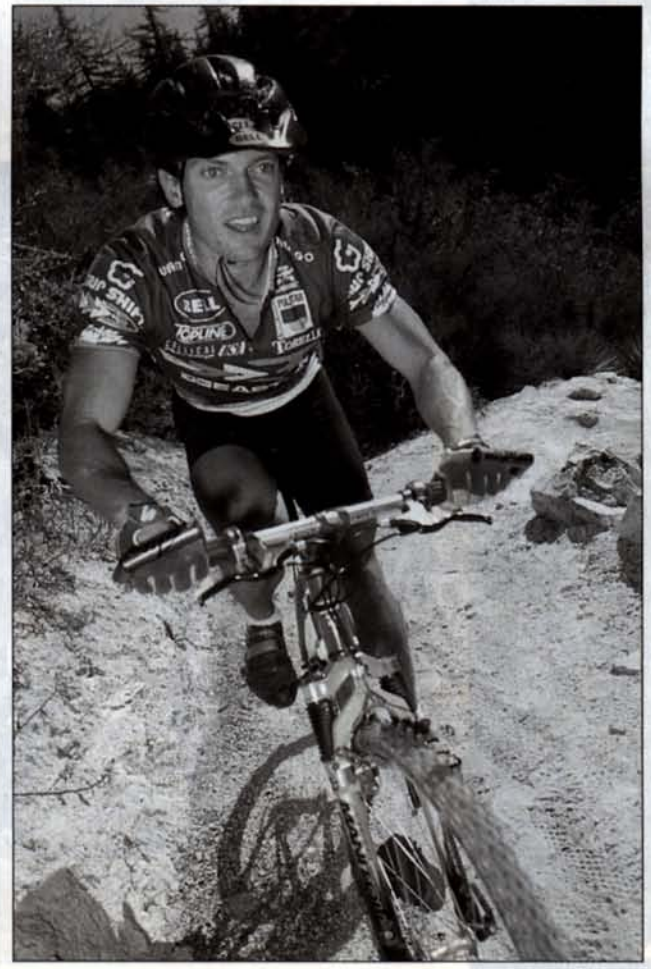
Grip Shift X-Ray shifters let you find your gear, and Critical Racing's see-through stem helps eliminate control-center flex.

This hill was the definition of unridable, so I threw the 3D Racing Rover over my shoulder and hiked up the trail for about 200 yards. When I reached a point where riding was again possible I drank some water, silently thanking Herting for designing the blood-red Rover to weigh only 23¾ pounds. As I continued farther up the quad-busting path, the Rover dug in and performed at its climbing best.

WHY ALUMINUM?

"Easton aluminum's strength-to-weight ratios are unmatched," claimed Herting. "That allows me to build the best, lightweight bicycle possible." Light is right. You practically have to anchor the 3-pound 4-ounce double- and triple-butted frame to the ground. Herting built this suspension-correct Rover XC with the seat tube angle set at 72.5 degrees, placing your butt squarely over the rear wheel. The

Critical Racing cantilevers mounted with Aztec pads provided excellent braking power.



The Rover's light weight makes it a great climber.

SPECIFICATIONS

Price:	$1500 (frame and suspension fork)
Sizes available:	Made to order
Size tested:	18 in.
Total weight:	23 lb 12 oz
Frame weight:	3 lb 4 oz
Fork weight:	3 lb 4 oz
Front wheel weight:	3 lb 1 oz
Rear wheel weight:	4 lb 6 oz
Frame:	Easton Elite 7005 aluminum
Fork:	Manitou EFC; King threadless headset
Shock:	Fox air/oil, 3.25 in.
Rims:	Torelli 32-hole
Spokes:	Wheelsmith 14/15-gauge
Hubs:	Shimano XTR (front); Shimano XTR freehub (rear)
Tires:	onZa Aggro K 2.1 (front); onZa Honch K 2.1 (rear)
Crank:	Topline 175mm
Chain rings:	Shimano XTR 26/36/48
Derailleurs:	Shimano XTR (front and rear)
Bottom bracket:	Ultimate titanium
Shifters:	Grip Shift X-Ray
Cassette:	Shimano XTR 12-32 8-speed
Chain:	Sedis silver ATB
Saddle:	Torelli titanium
Seat post:	Answer 26.8 x 350mm
Brakes:	Critical Racing cantilevers, Dia-Compe PC-8 levers
Pedals:	onZa H.O.
Handlebar:	Critical Racing aluminum
Stem:	Critical Racing
Manufacturer:	3D Racing, 450 Pioneer Cir., Durango, CO 81301; (303)385-7840

GEOMETRY

Seat tube:	18 in. (center to center)
Top tube:	23 1/2 in.
Head angle:	70°
Seat angle:	72.5°
Chainstays:	16 3/4 in.
Wheelbase:	42 1/2 in.
Fork offset:	1 1/2 in.
Bottom bracket height:	12 in.

rigidity of Easton's Elite 7005 aluminum and the 16 3/4-inch chainstays add up to efficient climbing ability on even the most twisted ascents. The chainstays are connected to the bottom bracket shell via a CNC-machined H-section that adds to the frame's rigidity. This also allows for maximum chainstay clearance for even the fattest of fat tires. A long, 23 1/2-inch top tube lets you spread out and keep your body weight centered. The head tube is angled at an aggressive 70 degrees, and that becomes even more aggressive under fork compression. Add a wheelbase of 42 1/2 inches and Herting built exactly what XC designates in a bicycles design: rigidity in the climbs, agility on the technical and stability on descents. All the tubes are joined with aesthetically pleasing industrial TIG welds with the cable guides riveted to the top tube. The top tube routing keeps the cable lines clean even on the muddiest of days.

With each pedal stroke I felt some power-robbing flex from the extremely light, 365-gram Topline cranks and the Ultimate titanium bottom bracket. The combined bowing action of these components made me nervous. The Ultimate bottom bracket is 1994's model so it doesn't have O-ring seals. Even so, I prefer the stiffness of a chromemoly spindle. I spoke with Dan Trennary of Topline and expressed my concerns. "Team Dos Equis Barracuda used these cranks all year [in 1994]. There is some flex, but we haven't had any failure," Trennary stated. "And to decrease flex the '95 model will require a shorter bottom bracket (122mm)." The Rover bottom bracket shell width is 73mm and the current spindle length is 172mm. Rider weight for the Topline cranks is spec'd as under 180 pounds, and since I tip the scales at mere 160 pounds, my concerns may be unwarranted. At the crest of the mountain it began to sink in just how comfortable the Rover XC is. Mounted on the unique Answer seat post is a Torelli saddle. Its combination of titanium rails and flexible shell made for a pleasant perch.

FORKED

Front suspension is provide by Manitou's Elastomer Fluid Controlled (EFC) suspension fork. The EFC's remarkable suspension spring rate comes from a stack of polyurethane elastopolymer

On a technical descent, the Rover is a balanced beast that can deal with anything thrown its way.

with a full 3 inches of travel. Preload adjustments can be made using the knobs located at the top of each fork blade. What makes the EFC what it is is the oil cartridge rebound damper, filled with stock 5-weight oil, located in the left fork blade with the adjustment dial on the bottom of the leg. I asked Tom Rogers of Manitou why the rebound damper is in only one blade. "[It] doesn't affect the action of the fork, and the single cartridge supplies sufficient damping," Rogers said. "Besides that, Manitou wants to keep the total weight of the EFC down to 3¼ pounds."

Herting drills and countersinks the CNC-machine dropouts for more weight savings without sacrificing strength or rigidity.

The rest of my ride consisted of cross-country and singletrack trails. Putting the strenuous effort of the death hike behind me, I jumped on the cranks with a good dose of reckless abandon and hammered down the trail. For every turn, flick and twist that the trail demanded, the Rover XC deftly responded. From the onZas' traction to the Grip Shift's precise shifting, this hand-built cross-country bike is hard to resist. The 3D frame is well balanced and up to the task of handling everything placed in its path. Did I mention the bike was light? Rapidly approaching a fallen tree, I applied some brake and bunny-hopped right over into a triple set of whoop-de-doos, getting some nice air off each. Through the cross-country trails the Rover's agile handling characteristics are more fun than a barrel of monkeys. Cranking onto the downhill the Rover again proved to be a smooth-handling machine. I grabbed a handful of brake and the Critical cantis scrubbed off speed in a hurry, allowing the two of us to negotiate the terrain.

The 3D Racing Rover XC is a well-balanced, homegrown machine that's ready to take its rider to the edge of ecstasy and back. As a designer and builder of custom frames, Herting is sure to supply each rider with exactly what he or she might want. I can only hope that he doesn't want this bike back too soon. ■