



GROUND UP CUSTOM SINGLESPEED

Tester: Jeff Guerrero
Age: 31
Height: 5'3"
Weight: 135lbs.
Inseam: 28.75"

VITAL STATS

Price: \$1200 (frame only, unpainted)
Weight: 5.22lbs. (frame only)
Size: 15.5" seat tube (center to top)
Country of Origin: USA
Contact: www.groundupdesigns.com

I stumbled across Colorado Springs framebuilder Eric Baar on *Dirt Rag's* online forums. A user by the name of Rattlecan had been spouting off like some wisenheimer know-it-all. He was also touting a website full of interesting bike designs—no two the same—calling his one-man company Ground Up Designs. Shortly thereafter, I met Eric at the Fruita Fat Tire Festival. He showed me his newly built singlespeed with sliding dropouts, and we went for a ride on the fabled Zippety Do Dah trail. Despite having already ridden 100 miles that day, Eric stayed at the front of the pack on his singlespeed. I was impressed.

A huge benefit of working directly with the framebuilder on your bike's design is the ability to communicate effectively. During the planning process, Eric and I discussed specific geometry measurements and he made suggestions as necessary, guiding me through the design of my new frame. My primary design objective was to build a fun bike to ride. Not necessarily a racing bike, but not quite a hucking bike. I specified a 100mm Fox Fork, and Eric suggested a 69.5° head tube angle and a 72° seat tube angle. My custom racing bike has a 21" effective top tube, but I felt that a slightly longer top tube would befit a singlespeed, so we added a half-inch to the top tube with the intention of running a 90mm stem as opposed to the 100mm stem on my racing bike.

Chain tensioning is handled via sliding dropouts of Eric's own design. Like an eccentric bottom bracket, sliding dropouts facilitate the use of disc brakes on a singlespeed and allow you to run a quick

release rear wheel. They can be difficult to align perfectly, but once they're adjusted you are set until you change your gear ratio. Although my effective chainstay length could be up to a half inch shorter, I'm currently riding the bike set up with a 16.875" chainstay length.

A big concern of mine was that the frame included ample clearance for the fork crown and adjuster knobs, which is often problematic on small frames. My frame has more than enough clearance thanks to a tight, gusseted head tube junction. My final concern was the bottom bracket height, which I maintained should be higher for east coast log hopping, whereas Eric tends to build them lower for stability on long Rocky Mountain downhills. We agreed on a 12" bottom bracket height, and after months of happy log hopping, I'm sure we made the right choice.

The frame materials are a mix of Dedacciai steel tubing, a straight-gauge BMX downtube and stainless steel chainstay and seatstay bridges made from leftover tubing that Eric acquired from the Bristol Brewing Company. I admit I was taken aback when I first weighed the frame, but I relaxed when my complete bike still weighed less than 25 pounds. Remember, I didn't ask for a light bike—I asked for a fun bike. And Eric maintains that my frame is built to last a lifetime.

So far I've found the bike to be everything I asked for. I've had a blast riding the bike in all conditions, slopping it up in the mud, crashing through rock gardens, jumping logs and bombing the downhills. The frame rides exactly the way it should—solid yet

somewhat forgiving. Chalk it up to the ride characteristics of good old-fashioned steel.

While the bike's forté is technical trail riding, it's no slouch in the climbing department. The frame is stiff in every direction—transferring power with incredible efficiency—and the long top tube leaves plenty of room for out of the saddle climbing. If I wanted the bike to climb even better, I could easily flip my stem over to achieve a racier riding position.

On the other hand, I could simply run a shorter stem if I wanted the bike to handle wheelie drops and dirt jumps even better. The Ground Up's relatively slack head angle and short wheelbase (40.375") complement each other, creating a bike that snakes through the tight turns and remains stable on high-speed descents. As I had hoped, this bike handles technical trail features better than any hardtail I've ever ridden.

Cosmetically, the single pass welding on the front triangle is not without flaws, but the imperfections enhance the bike's handmade quality. The brazing on the rear triangle is smooth and clean, and the custom cable ties—small loops of welding rod that accept zip ties—go along with the handmade theme. Eric routed the hydraulic brake line along the downtube and across the chainstay, allowing for a clean top tube that's ready for singlespeed shouldering.

A couple of noteworthy functional details include a front facing seatpost clamp and three drainage holes in the bottom bracket shell. After months of wet weather riding and numerous washings, I inspected the bottom bracket. The bottom bracket spun as freely as the day it was installed, and the shell was clean as a whistle (save for a tiny bit of silt clinging to the film of anti-seize lubricant).

A custom bike deserves a custom paint job, and Eric wholeheartedly recommended I use Spectrum Powder Works, also located in Colorado Springs. I decided on a black powdercoat with gray scalloped panels featuring the Ground Up logo and a matte finish clear coat. I also requested a Steelmark logo for the seattube. The logo was originally designed by the Pittsburgh-based U.S. Steel Corporation, but now represents the American steel industry as a whole. In 1962 the Pittsburgh Steelers adopted the Steelmark, and today more people associate the logo with my hometown's professional football team than with the industry it represents. The total cost for the powdercoating was \$345 (\$140 for the black, \$45 for the panels, \$80 for the Steelmark logo, \$20 for masking the stainless bridges and \$60 for the clear coat). Expensive, yes, but worthwhile. The bike is a functioning work of art.

Finally, the bike needed a crowning jewel, and for that I turned to Jen Green of Revolution Cycle Jewelry in Philadelphia. Jen is a hardcore singlespeeder with a talent for creating spectacular sterling silver headbadges. I emailed Jen a skull design that I've adopted as my personal logo, and in about a week's time she delivered my custom badge. No muss, no fuss. All of Jen's badges are custom quoted, and mine cost \$90—quite fair if you ask me.

I will admit that spending nearly \$1,700 on a frame may be considered indulgent. But in today's world you pay the price for quality, even more so when it comes to handmade merchandise that's crafted by fellow mountain bikers in the United States.

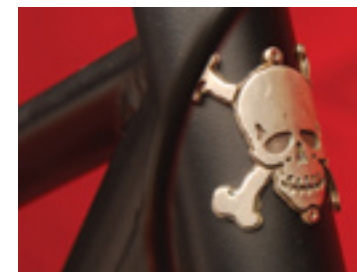
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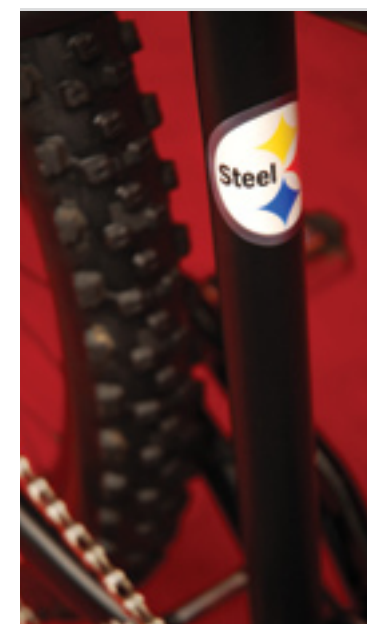
The TIG welded head tube gusset allows for plenty of fork crown clearance.



Paint by www.spectrumpowderworks.com



Skull headbadge by www.headbadges.com



The Steelmark is property of the AISI.



Ground Up Designs recommends using blue Loctite on the sliding dropout bolts.