

Dirt Rag Articles



Ellsworth Moment

by Michael Browne

Tester: Michael Browne

Age: 26

Height: 5'8"

Weight: 160lbs.

Inseam: 30"

Vital Stats

Country of Origin: U.S.A.

Price: \$2295 (frame and rear coil shock)

Weight: 8lbs. with Fox DHX 5.0 coil shock

Sizes available: 15, 17 (tested), 19 inches

Contact: www.ellsworthbikes.com

If you're looking for a 5-6" travel full suspension frame capable of all day rides and relatively big hits, you've undoubtedly taken a look at the Ellsworth Moment. This is my account of three months' experience on a Moment, built up in a variety of ways, on trails ranging from my local park to a downhill race course.



Image By: Brad Quartuccio

Let's start with the subject of inquiry that every discriminating mountain biker evaluates—the suspension design itself. With an armful of valuable patents, Tony Ellsworth utilized three in Moment's Instant Center Tracking (ICT) design, offering 5.3/6" of rear wheel travel. Back in issue #98, Maurice broke down the ICT concept:

"ICT means that the focal point of the suspension and the chain torque line track together through the entire suspension range. Like the graphic on the top tube, imaginary lines drawn through the upper swingarm, the lower swingarm (chainstay) and the chain torque line all meet at a point somewhere in front of the bike. This point is the "Instant Center," with the IC location out in front of the bike. Supposedly, the tendency of the bike to fold and squat is avoided, and pedaling efficiency is optimized." Thank you, Maurice.

While the Moment's asking price is hardly chump change, it's a fair observation to note that it's possible to spend more on a frame. But what exactly makes a frame cost this much? It's in the details—like the six hours of machining time required on the CNC'd 7075 aluminum rocker arm. Or the frame's labor intensive yet durable anodized and shot peened finish (even the sharp metal-cutting blades of a facing tool can barely penetrate the finish). Figure in the Enduro-brand "Max Pack" sealed cartridge bearings customized for Ellsworth through an increased ball count to compensate for the low speed, high impact loads. Then consider the U.S.A.-made Worth brand 6061 aircraft grade aluminum tubing. These things add up quickly, and rightfully so. But let's move on.

I'm here to report that the Moment wasn't without its problems, as it arrived with its rear triangle out of alignment. Closer investigation revealed disproportionate space between the wheel and the seat stays, yet proper spacing at the bottom bracket. In a slight twist to the normal bike test, I continued to ride despite the flaw, realizing the defect was cosmetic. The only performance disadvantage I detected was tire rub on the stay during hard cornering. While not ideal for the long term, the stays didn't wear inappropriately during the test.

I found most of the 17" frame's measurements to be on par with my personal preferences for an all-around bike. The 23.5" top tube was, if anything, a bit long for downhill, even with a short 50mm stem, and the 43.5" wheelbase with 16.9" chainstays was a good balance between flickable and high-speed stability. The bottom

bracket height varies between 13-14" throughout travel, which provided suitable pedal clearance through scree field big hit pedaling, one of the Moment's performance advantages. A 69° head tube angle and a 72° seat tube angle round out the package nicely.

My choice of components was made easy when a Shimano Hone group appeared at the doorstep (see review on page 66). I picked a Race Face Deus XC headset, although I later realized this didn't match Ellsworth's recommendation of a deep cup headset for forks with travel of 150mm or more. I snagged some WTB miscellaneous bits (seatpost, stem and handlebar) and threw on a Fox 36 Talas R up front with a Fox DHX 5.0 (with 500lb. coil spring) in the rear. Assembled and tuned, I made my way down to Snowshoe Ski Resort for a brush-up on my downhill racing. Last minute race additions of a Syncros BHT-3 front tire, a Michelin DH Race rear tire, and an E-13 SRS chain guide system brought the bike to a few marks shy of 40 pounds.

So how'd it go, you ask? Swell, I say. The first Moment benefit I noticed was a small but vital detail in an all-around bike—an uninterrupted seat tube that allowed for full seatpost extension. After dropping the seat all the way down, I tuned the suspension to the terrain (minimum Pro Pedal with slowed rebound in the rear and fork at 50psi). After a couple runs, I began to consider my relatively lighter bike as an advantage. If anything, I wished for a longer travel fork, as I was the only racer with a single crown fork. The Moment handled the course well for a 6" bike, soaking up the hits and offering a bottomless rear travel feel. Chatter bumps created by bikes with longer travel affected stability, but I hadn't tuned the bike for those—I wanted safety on the big hits. And that's what I got. A miscalculated drop proved that good equipment can compensate for rider error. All in all, it's a bike I'd feel comfortable with tackling technical lift-assist courses a few times per year. More often than that, and a bike with more travel would be in order for the occasional gravity rider like myself.

So is the Moment better suited to downhill, cross country, or somewhere in between? The bike is supposed to hit all those markets, but I had to find out its versatility for myself. So to this end, I dropped its weight, vowing to stick with the existing wheels (Hone hubs laced to Alex DM24 rims) and overall Hone componentry. Adding a Fox Float XTT fork and a pair of Panaracer Cinder Cone 2.25" tires dropped it to an even 33 pounds. On my local XC trails, the shorter travel fork shifted too much of my weight to the front, which unloaded the rear suspension and made steering twitchier. And while the fork dropped the already tall ride height of 42" down nearly an inch, a properly balanced bike is important...so, back with the Fox 36, which required a 20mm hub and a consequent 2lb. weight gain.

So can a 35lb. bike climb well? Relative to its weight, yes. The bike's efficient suspension allowed me to get the most out of my 3/4 horsepower legs, cleaning technical sections where I usually slip out.

A look down at the shock's shaft showed that a rider's pedaling irregularities are the only thing affecting the shock movement. And heading back down, the one thing I hate most, brake jack (brake-induced suspension movement) appeared in the slightest. But the Moment's best attribute came in its ability to stay active during braking. That alone might be worth the price of admission. So, while not my first choice for areas with less than 500ft. of elevation change, the Moment's efficient suspension and big hit pedalability is ideal for longer runs where speed and gravity play a part in the day's adventure.