



IBIS RIPLEY 29ER

There is very little doubt that the hottest category in the sport is the trail, or all-mountain, 29er. These bikes were initially cumbersome, lethargic platforms upon which boatloads of scorn and insult were heaped by devotees of 26-wheeled machines and, to a large degree, those riders were right. Much of the 29er's undeserved reputation as big wheel clown bikes came at the hands of the initial full-suspension 29er. Over the years, the platform has evolved. A slew of new bikes are making 29ers with 120 mm of travel, or more, into nimble, quick-footed steeds that are proving to be the most capable do-it-all bikes in the dirt.

Ibis avoided the first two or three rounds of the 29er product cycle. Rather than follow the stampede to market, they began to not-so-quietly percolate dreams of a 29er that could live up to their high

standards for feel on the trail and response at the bars. Then they made a wish list of qualities the bike should have and began to engineer ways to make it happen. This process started more than six years ago, and the results have finally hit the market: the Ibis Ripley.

The Details

The Ripley delivers 120 mm of travel in the rear, designed to feel a little more trail with a 120-mm fork and little more all-mountain with a 140-mm fork. In search of the nimble feel they felt lacking in other 29ers, Ibis followed a simple mandate: make the thing as small as possible. They applied that thinking to the head tube, taking advantage of current forks with a lower taper on the steer tube, and keeping the head tube very low, only 100 mm on the large. The bottom bracket sits less than 13 inches from the trail and the chain stays are only

17.5 inches to keep the rear of the bike nimble and ready to follow your every line. These are not revolutionary numbers now, other new bikes possess similar geometry, but again, this is Ibis's first outing. One can't help but feel if they had gotten this bike out two years ago they would have owned the category and laid waste to the competition for seasons.

So what took so long? The Ripley is an engineering tour de force for Ibis, going far beyond shortened stays and a low head tube. The carbon frame is pure Ibis, yet forgoes the signature tube between the down tube and top tube the Mojo relies on for its shock mount. It's the same Mojo monocoque style of construction that does away with any joints and uses a 3D inner mold for layup. But it's at the rear that the innovation

comes fast and furious. The small parts that make up the rear of a full-suspension bike are often aluminum, even on a carbon bike, and frequently when carbon they are actually just aluminum over-wrapped with carbon. This is due to the difficulty of making these small parts with a standard bladder process. Even when these parts are fully carbon, the foam molds are left inside, adding weight. Ibis, along with their factory in Asia, pioneered a new type of mold using foam glass microspheres. They use it for the clevis joint, the wishbone that attaches the seat stays to the shock, and the swing arm uprights. These new molds stay behind like the old ones, but weigh half as much. They would have used it for the linkage too, but more about that later. This technology necessitated a move to a new factory and all new molds just when Ibis was in sight of the Ripley finish line, which proved to be a horrendously

expensive undertaking. It is this factory change, more than any other feature, that shows Ibis's attention to detail and is the reason why some of the Ripley's game changing thunder was stolen while other brands enjoyed another two years to evolve.

Another bit of rear-end magic comes from the mounting point of the front derailleur. Instead of the more common seat tube mount, the Ripley mounts the front derailleur to the swing arm. This means it always follows the path of the chain and the tire while maintaining its relationship to the chain rings. It results in more clearance and a quiet ride, especially when mated to Shimano Shadow+ derailleurs, and ensures front shifting performance is identical, regardless of rear travel. Beyond these benefits, Ibis had a very good reason for mounting the derailleur there—the seat tube was busy—and this brings us to the most talked about aspect of the Ripley. It was announced more than two years before the bike was actually launched.

THE BOTTOM LINE

PRICE: \$5,956 (as tested)

GROUP: Shimano XT

FORK: FOX Float 32 120 mm Kashima forks with 15QR

OTHER: Stan's ZTR Arch 29er Rim 32H wheelset, FOX Float CTD Kashima rear shock, IBIS alloy stem with Hi-Fi carbon bar and KS LEV dropper.

WEIGHT: 26.15 lbs (with pedals and cages)

MORE: ibiscycles.com

Was this strategy a marketing coup or an example of the all too familiar "ready, fire, aim" school of mountain bike product launches? Who cares. The design is so stunningly simple and, as it turns out, so elegantly effective, it makes all other linkages look like a Rube Goldberg machine. Dave Weagle, the man behind the famous dw-link, took 120 mm of travel and housed it in two eccentric bearings. Standard BB30 bearings, available at a store near you, nest the eccentrics, which are off-center holes in a larger cylinder. BB30 bearings face much more load as

