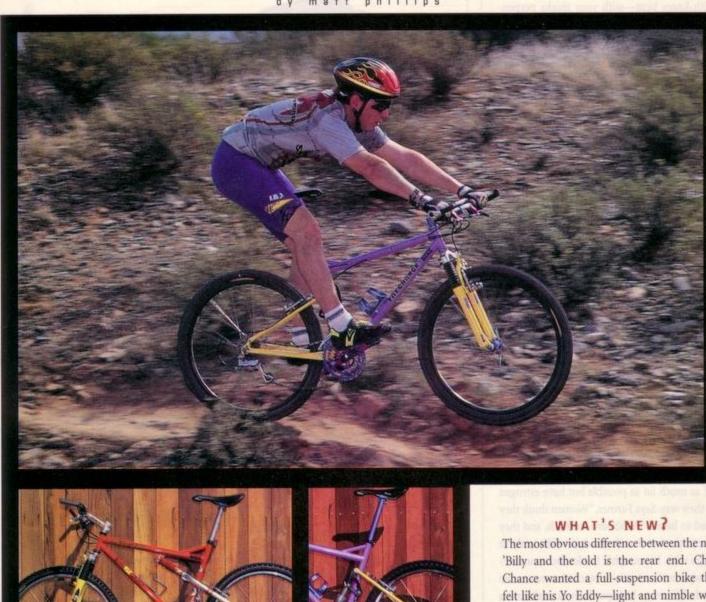
SECOND CHANCE

SHOCK-A-BILLY, THE NEXT

by matt phillips



IN THE SUMMER OF '91 I LANDED MY FIRST

job in a bike shop. In one corner of the store, up on a stand, was a candy-apple-red Fat Chance Yo-Eddy. Equipped with XC Pro Micro Drive, Mavic 231s and More Extreme 2.5s, it was the first bike that ever made my heart race. I couldn't afford to buy it, but I never forgot that yearning.

A few years later, when Fat City made its Shock-A-Billy (a full-suspension bike based on the Amp rear end), I satisfied my longing and made the 'Billy my first full-suspension bike (above, left). Soon after, though, Chris Chance began toying with a McPherson strut full-suspension design of his own. He played with some prototypes, scrapped the concept, then went back to the drawing board. Now, after a two years of designing and tweaking, Chance is making available the fruits of his labors: a new Shock-A-Billy (\$1,895 for the frame; \$3,945 as tested) that uses a linkage of his own design. The question is, how does this bike (shown at top and above right) compare with the effective and proven Amp-style suspension?

The most obvious difference between the new 'Billy and the old is the rear end. Chris Chance wanted a full-suspension bike that felt like his Yo Eddy-light and nimble with precise rear-wheel control. To accomplish this, he spec'd box section chromoly chainstays for stiffness. He also designed a rocker so the shock wouldn't act as a stressed member of the frame. And he relocated the main pivot. On the old bike, the pivot is at the small ring, providing active travel in all chainrings. The new bike places the pivot between the big and middle ring and above the small. The idea, says Chance, is to provide an active ride in the larger rings. And when you're riding in the small ring, the tire is pulled into the ground for better traction.

To ensure a long life in the nastiest of riding conditions, Chance spent a great deal of time working on the seals and pivots. The main pivot features a Teflon-impregnated bearing that rotates on a hollow 7075 aluminum shaft machined to very high tolerances. Two seals are used on this pivot. One
keeps grit off the shaft itself and the other
keeps dirt out of the bearing. At both ends of
the seatstays, the pivots use Delrin washers to
keep things slippery and o-rings to keep it all
clean. Holding the Horst link together is a
specially designed bolt. The female side of the
bolt is what the pivot moves on, so it's
machined from stainless steel for long life.
The male side keeps everything together, so
it's machined from 6-4 titanium for high
strength and light weight. Both the swingarm
pivot and the rocker pivot feature oil ports for
easy maintenance. (Fat City provides an oiler

with each frame.) Additionally, all aluminum pieces are hard anodized.

Up at the front triangle some things carried over from the previous model, and some were improved. Held over was the oversized dropped top tube, the minimal down tube gusset, the seat tube brace and the custom-drawn True Temper chromoly tubing. New to the mix are two water-bottle mounts instead of one (hey, somebody's listening to us) and, in a major break from Fat City tradition, a 1½-inch head tube instead of 1 inch, for increased rigidity. Rounding out the frame features are a set of staggered rear cable stops, full-length derailleur housing from the rear stop to the

rear derailleur and the always-impressive Fox Alps 4R shock. Pertinent frame measurements on our medium test bike: 43.75-inch wheelbase, 23-inch top tube, 12.25-inch bottom bracket, 18-inch (center to top) seat tube. Enuf numbaz. Howzit ride?

ON THE TRAIL

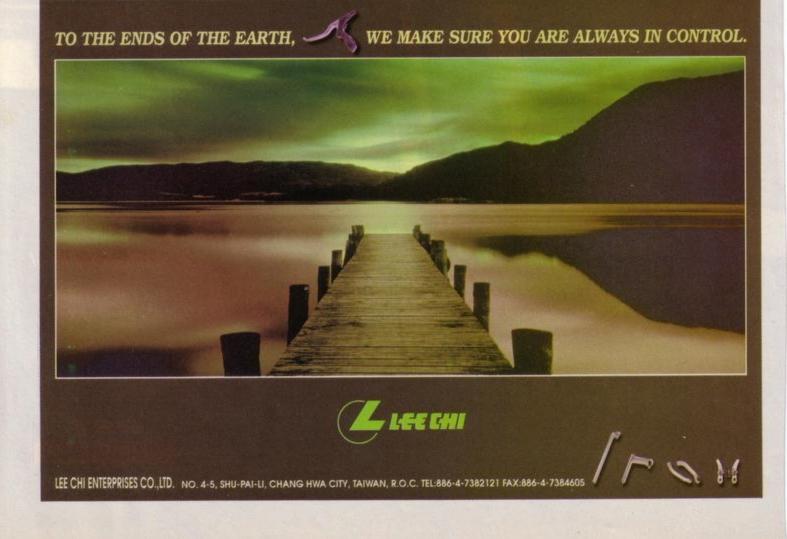
One of the first things you notice when jumping from the old 'Billy to the new is a huge increase in rear-end stiffness. On fast rocky sections the old bike would often bounce around and side load. But the new bike just cruises right on through. The best word to describe the new Shock-A-Billy's ride is smooth. Every trail situation can be handled in a calm and controlled manner, and rear-wheel traction was excellent. The pivot placement does cost you some suspension activity in the small ring, but the added traction seems worth it. (And it's not that the suspension doesn't work at all when you're in the granny ring. It's just not quite as supple.)

Speaking of suppleness, this was a quality that seemed to be missing altogether from this suspension when I first rode it. The shock worked fine on the medium to big hits, but was lacking over small bumps. Then the rear

FAT CITY SHOCK-A-BILLY

DISTRIBUTED BY: Fat City Cycles, Box 1439 South Glens Falls, NY 12803; 518/747-8620 PRICE: \$1,895 (frame only); \$3,945 (as tested) WEIGHT: 28 lbs. (complete) SIZES AVAILABLE: S, S/M, M (tested), M/L, L HEAD/SEAT ANGLE: 72°/73° COMPONENT HIGHLIGHTS: Ringlé stem, seatpost, hubs, skewers and bottle cage; Kooke cranks, chainrings and brake levers; Joe's brakes; Chris King headset; Selle Italia Flite titanium seat; Mavic 217 rims; Wheelsmith spokes; Onza Bolas Grandes tires; CWA bar-ends; Rock Shox Judy fork; Sachs derailleurs; Grip Shift X-Ray shifters; Answer Hyperlite handlebar

HITS: • Legendary handling • Rear-end stiffness MISSES: • Short head tube



end was disassembled to see how well the pivots were sealed (which was excellent, by the way), and I discovered that the rocker pivot was stiff. The reason was that the rocker plates were just a hair too wide, causing them to rub on the side of the pivot bearings. After a quick grind and rebuild, the rocker moved freely. Ahhh, now the bike became supple and active.

With 3.2 inches of rear-wheel travel and 3 inches up front, the ride was very balanced and well suited for cross-country riding. Downhilling isn't out of the question, either—there's plenty of room for larger chainrings and Chance mentioned he was working on a new link that provides more travel. He's still unsure whether it will retrofit to the current frame, or require a whole DH-specific frame.

Fat City bicycles are legendary for their handling, and this bike does nothing to blemish that record. Despite its 28 pounds, this 'Billy had the magical feel of a precision instrument. It was very controlled, glued to the ground, and most important, fun to ride.

THE COMPLAINTS

First, something must be said regarding this

bike's looks. My roommate summed it up nicely when she said it reminded her of a giant Easter egg. The violet and yellow are okay, but Fat City should consider replacing the turquoise and purple with black to save our eyes. Even worse are the Kooka cranks, which look like an anodizing machine barfed on them. Then again, maybe you're into that.

Aside from cosmetics, our gripes are few, but still worth mentioning, beginning with the short, 90-mm head tube. With the seat set at the right height, it was a long reach down to the zero-degree Ringlé stem. Also, this bike could use a bit of help from Jenny Craig. Its weight made it feel just a little less agile in the tight twisties compared with my first generation 24.25-pound Shock-A-Billy. Much of this weight can be blamed on the wheels, which feature brass nipples, wire-bead Onza Bolas Grandes tires and Ringlé hubs. The Judy DH fork and all-steel construction don't help matters either.

WAY FAT

Chris Chance has done his homework and improved the breed. Besides its performance in tight conditions, everything about this new bike is better compared with the old version. Most appreciated was that rear-end stiffness, which allows the rider to hold a better line through bumpy corners. Also improved is the suspension action. Compared with the old, this bike is much more smooth and supple throughout the range of its travel. Finally, the attention paid to the pivot seals really shows. Even after taking this bike on a muddy ride, then committing the ultimate no-no—aiming a high-pressure hose directly at the pivots—the pivots remained clean and greased. Impressive.

Perhaps the best feature of this new bike, though, is its versatility. Build it up with light-weight parts and you have a fine cross-country race bike. If and when a link that provides longer travel is available, DH pilots will also love it. For the recreational rider, it offers all-day comfort and stable, predictable handling. And most important, for all types of riders, it really is fun to ride.

It's been two years since I got my Shock-A-Billy. I've grown to love it for its light weight and phenomenal handling. But the new Shock-A-Billy ups the ante and shows why mountain biking's technology boom is so exciting. This bike simply rides better than the old version in almost all conditions.

