

KHS Reinvents The Wheel

The KHS SixFifty606

You first saw the KHS SixFifty606 in our “Wheel Wars” story (April 2010) where we pitted three similar bikes with different wheel sizes against each other. The 606 is KHS’ first bike to feature 27.5-inch wheels, and they’re putting a lot of stock in the in-between size (bigger than 26-inch wheels, smaller than 29-inch wheels). Because we have received so many queries from riders about this bike’s performance since it was featured in “Wheel Wars,” a stand-alone, in-depth bike test was in order.

WHO IS IT MADE FOR?

At \$1200, it’s more like who isn’t the 606 made for? This cross-country hardtail trailbike falls into the hardcore enthusiast category and is packed with performance at an attractive price. It could serve as a daily commuter or a do-it-all trailbike and could even be pressed into service as a cross-country or endurance racer.



WHAT IS IT MADE FROM?

The traditional double-triangle aluminum SixFifty606 frame geometry is optimized for the unique 27.5-inch wheels. The hydroformed tubing features a standard 1-1/8-inch head tube. KHS beefs up the downtube/head tube junction with modest gusseting. It is a good thing that the SixFifty606 top tube graphics are bold, because unlike a bike equipped with 29-inch wheels, the 27.5-inch wheels are not an immediate visual tip-off that this bike is all that different.

WHICH COMPONENTS STAND OUT?

The 606 is equipped with a 3.1-inch-travel X-Fusion Velvet fork that boasts magnesium lowers, a forged aluminum crown and a sealed-cartridge damper. Quality touches abound with a Cane Creek headset, 2.1-inch Kenda

Nevegal tires, Shimano SLX rear derailleur, KMC chain, a WTB Silverado saddle, FSA XC300 handlebar and Hayes Stroker Ryde brakes with 6-inch rotors.

HOW DOES IT PERFORM?

Ergonomics: The SixFifty606 practically feels like a “normal” mountain bike. The 11.5-inch bottom bracket height is about a quarter of an inch higher than a 26er, but in relationship to the axles the bottom bracket is significantly lower than one on a 26-inch wheel hardtail (the magic of larger wheels). The 23.5-inch top tube is standard for the large frame. The 90-millimeter stem is perfect for a comfortable cockpit, and the 27-inch-wide FSA handlebar is perfect for this application. The stock WTB grips aren’t too inviting, but they are easy to replace.

Pedaling: You’ll find yourself spinning in the same gears you would choose while riding a 26-inch-wheeled machine. There is little sensation of any additional mass that the larger wheels bring to this party. Crisp and accurate shifting is delivered from a drivetrain consisting of reliable bits from Truvativ, Shimano and SRAM. The Kenda Nevegals aren’t the fastest rolling tires, but on loose terrain their grip is undeniable.

Climbing: Perhaps the best attribute of the bigger-wheeled 606 is that unlike with budget-friendly 29ers in the same category, you don’t notice the wheel size when grinding up climbs or feel the burn of taller gears. You do notice the improved traction from the slightly larger tire contact patch, and despite a tad more rotational weight, we were able to climb our test loops in the same gear ratios as on any other cross-country test bike. As with any hardtail, climbing technical terrain often requires the rider to leave the saddle. The larger wheels do a nice job of filling in the gaps found in uphill trail chatter.

Cornering: Changing direction at speed is where you’ll appreciate the larger 27.5-inch-tire contact patch, which makes the 2.1-inch-wide front tire grip better than it should. Despite the larger wheels, the 606 has a 71-degree head angle and is nimble on tight singletrack. The 27-inch-wide handlebar should be standard on every trailbike, because it allows more leverage in cornering and improves descending. The 606 is well-equipped to excel in both of those areas.

Braking: Our experience with Hayes’ Stroker Ryde brakes leads us to expect unpredictability when they’re stock on a test bike. Without a lever-reach adjustment knob, use a 2-millimeter Allen wrench to position the lever the desired distance from the handlebar. Although the brakes lacked significant power, the feel was consistent at the lever and rarely faded or felt spongy.

Descending: The beauty of these wheels is that you have improved traction, which means more control, but it doesn’t have the same rotational weight penalties associated with many 29er wheels. The air-sprung X-Fusion takes the brunt



Full stride: The benefits of the not-small/not-big wheels are noticeable at speed on rough trails, as they help smooth the gaps between nature's obstacles.

KHS Reinvents

of harsh impacts, and running the rebound on the fast side keeps the wheel glued to the ground when descending at speed. Big-wheeled bikes like the 606 are prime candidates for a thru-axle trailbike fork, and that addition would improve descending precision in technical terrain. Over rocks and roots, we found the 606 didn't get hung up and carried speed better than a 26-inch-wheel hardtail.

TRICKS, UPGRADES OR TIPS?

Riders whose trails routinely have them searching for traction will appreciate the Kenda Nevegal tires front and rear. Riders who frequent hardpacked trails would benefit from swapping the rear tire for a faster-rolling Kenda Karma or Small Block 8. And by the way, a 26-inch tube will work fine in a 27.5 wheel. A 29-inch tube will not.

What hinders the 27.5-inch wheel is the same thing that kept 29ers on the back shelf for 10 years: availability of wheels, tires and forks. There simply isn't the selection of accessories for this wheel size that is available for 26- and even 29-inch-wheeled bikes.

Lastly, toss the platform pedals for clipless pedals. This is way too nice of a performance bike not to get all the benefits of a clipless pedal.

BUYING ADVICE

If you have 1200 bucks in your pocket, are open to sticking to a hardtail rather than dual-suspension bike (and at this price range, that is a logical decision), and want one bike that will serve you for any number of riding purposes, buy this bike. The KHS SixFifty606 beats the pants off any "traditional-wheeled" hardtail at the same price point and doesn't come with the weight and gearing penalty of a 29er. □



Patch kit: The larger diameter wheels provide a larger contact patch for the already predictable Kenda Nevegal tires. This increased traction is felt when cornering at speed.



Climb on: Unlike 29ers, the additional 27.5 wheel weight is minimal on the KHS 606. You can crest hills like a snappy 26er and enjoy the benefits of the larger hoops on the descents.

KHS SIXFIFTY606

Price	\$1200
Country of origin	Taiwan
Weight	29.5 pounds
Hotline	(800) 879-8735
Frame tested	19" (large)
Bottom bracket height	11.5"
Chainstay length	16.7"
Top tube length	23.5"
Head tube angle	71°
Seat tube angle	73°
Standover height	30.5"
Wheelbase	42.5"
Suspension travel	3.1" (front)
Suspension travel	None (rear)
Frame material	Aluminum
Fork	X-Fusion Velvet
Shock	None
Rims	Weinmann XM280 Disc
Tires	Kenda Nevegal (2.1")
Hubs	Alloy
Brakes	Hayes Stroker Ryde
Crankset	Truvativ Fire
Handlebar	Shimano Deore
Shifters	FSA XC300 (27" wide)
Front derailleur	Shimano Deore
Rear derailleur	Shimano SLX
Chainrings	Truvativ (44/32/22)
Cassette	SRAM (11-34)
Tallest gear	28.80 feet (per crank revolution)
Lowest gear	4.66 feet (per crank revolution)
Pedals	Wellgo alloy platform