

# How Handlebar Width Affects Your Ride

*A back-to-back, bar-to-bar ride comparison*



**Bar brawl:** Four bars with a width (from left) of 27 inches, 26 inches, 25 inches and 24 inches make the same bike react very differently. Which width is best for you?

**T**he trend towards riding with wider handlebars came from where most mountain biking innovations come from—the fringes. Single-speed mountain bikers adopted wide bars early on to increase leverage for those make-it-or-break-it climbs. More recently, the most elite downhill racers in the world have been clamping up wider and wider bars to slow down the way the front end reacts through rocky and rough sections.

Where bar width was an afterthought just a few years ago, it is now a studied tuning option for everyone from cross-country racers to dual-slammer racers. We recently added the bar type and width to the bike specification chart in every bike test. So why is bar width so important, and how does it affect your bike? Glad you asked.

## GOING BAR-TO-BAR

We recently tested a Race Face Next XC 3/4 low-rise handlebar (July 2009, “Thrash Test”) and came away thoroughly impressed with its ride quality

and durability. This handlebar comes in a 27-inch width, so it was perfect for our comparison. Once Race Face graciously donated four of the \$110 handlebars for our bar-to-bar comparison, we were in business.

One handlebar was left at the full 27-inches wide. The other Race Face Next XC 3/4 low-rise handlebars were cut to 26-, 25- and 24-inches wide.

The next step was to mount the four bars on the MBA test fleet. The MBA test fleet consists of four identical Specialized Stumpjumper Comps that we press into service for comparison testing. Why not simply swap bars on one bike? While changing handlebars is a simple and quick procedure, especially if they are equipped with Specialized’s XC Locking Grips, it is still not as fast as jumping from one bike to the other. The MBA test fleet is the best way to make back-to-back comparisons.

We loaded up the bikes and headed to Corriganville Park in Simi Valley, California. While not a recommended

riding destination, the park serves our comparison needs perfectly with a 1.2-mile course that includes rocks, sand, steep climbs, tight turns and fast descents, allowing us to ride short laps (essential for comparisons) and experience a little bit of everything a trail rider would encounter (except water crossings).

## WIDE LOAD

One question we had going into this experiment was answered on the second lap: Can a rider feel a difference with a handlebar that is trimmed a mere half inch on each side? The surprising answer is yes. There is a marked difference in the ride quality and rider position with each width. The difference was so pronounced that it was easy to identify the width of the bar after just a few turns.

This was a relief, because a comparison where there is not much of a difference is boring and a waste of time. The bar width comparison was neither. We have broken down the feedback on each bar width.

## THE 27-INCH BAR



**Moving along:** The 27-inch-wide bar stretches out the rider position and opens up the rider's chest cavity. It may be psychological, but riders felt they could breathe better with the wide bar. The front feels light, and the added leverage makes it easy to oversteer if you're not careful. Rough trail seems smoother, as rocks and roots don't easily deflect the front wheel. This bar allows for plenty of hand positions (on the grips, on top of the brake levers, or inside the brake and shift levers).

**Climbing:** A rider feels like he magically gains two horsepower when grabbing the 27-inch-wide bar and powering up a climb out of the saddle. The added leverage that the wide bar offers while rocking the bike up the climbs (or during a sprint) allows you to grab another gear and muscle it. Some care needs to be taken with in-the-saddle climbing, because the front end feels lighter and it is slightly easier to loft the front wheel.

**Sand:** The 27-inch-wide bar transformed the Stumpjumper into a 29er in the sand. It tracked straight and felt ultra-stable.

**Descending:** This bar slows down the input from hitting rocks, ruts and roots at speed. The wide bar seems to soften the hits because, while it is not something you'd classify as flexy, the wider bar offers more give with the rider's weight farther away from the handlebar stem.

**Clearance:** This big guys' largest fault is that you scrape your hands on every bush, tree or rock face that may line a tight section of trail. These bars are so wide that even riding close to other riders is a learning experience.

## THE 26-INCH BAR



**Moving along:** The 26-inch-wide bar gives the rider a slightly better connection with the trail than the XL. You become more in touch with the trail surface and its irregularities. Steering is precise but not overly quick, and you still get the benefit of an open chest cavity.

**Climbing:** This large bar offers powerful leverage while climbing out of the saddle, but it is not as easy to loft the front wheel accidentally while climbing in the saddle. It is easy to hold your intended line.

**Sand:** It tracked straight and felt ultra stable.

**Descending:** The 26-inch-wide bar slows down the input from hitting rocks, ruts and roots at speed. This bar softens blows, and riders could hold their lines, even through technical sections.

**Clearance:** The reduction of a half inch on each side of the bar helps make this bar a lot easier to ride on thick trails lined with bushes, trees and rock faces.

## THE 25-INCH BAR



**Moving along:** The 25-inch-wide bar felt familiar, like the bar that comes stock on a medium-sized Stumpjumper (which is actually 25.5-inches wide). After riding the larger bars, riders felt like they were pinching their shoulders with this bar. The

bike tracks straight while hammering in the seated position, and there is a power stroke feeling you get with your elbows tucked in and pulling back on the grips.

**Climbing:** The bike felt different on the climbs. Forget the big ring torqueing. Stay in the saddle and spin. There is a good bend in your elbows, and there is more emphasis on pedaling technique than upper body muscles. The front wheel stays in better contact with the trail surface, especially when the going gets steep.

**Sand:** You have to keep a light touch on the grips and keep your weight back. The front wheel has the tendency to wander if you don't concentrate on keeping it pointed straight.

**Descending:** The bike felt more nervous on the downhills, and the rider felt every rut and surface change. Riders found themselves more concerned with searching for the smoothest line and steering away from obstacles.

**Clearance:** We didn't even brush our arms on the same bushes that grabbed our hands with the two larger bars.

# Handlebar

## THE 24-INCH BAR



**Moving along:** The 24-inch-wide bar is a definite shoulder pincher. The rider sits with bent elbows in an aerodynamic position. Surprisingly, riders liked the power feeling of this bar while pedaling in the saddle, even if they didn't benefit from the leverage of the wider bars. In the saddle, it feels like you are using your hands to help pull your legs forward for another rotation on the cranks (like rowing). The one trouble with the narrow bar is the lack of hand-position options. You get

the grips and nothing else. The bike turns quick and is super fun on tight sections of trail.

**Climbing:** Stay in the saddle and spin. There is a good bend in your elbows, and there is more emphasis on your pedaling technique. The front wheel stays in better contact with the trail surface, especially when the going gets steep. Out-of-the-saddle efforts are not rewarded.

**Sand:** Sketchy! Unless you use proper body position for sand, you will find the front wheel plowing the soft stuff.

**Descending:** The small bar is harsh and transfers every bump to the rider. The quick steering takes a steady hand and steel nerves when the going gets steep and fast.

**Clearance:** There were no issues here, and if something did stick out into the trail, it was easy to steer around it.

## THE BEST WIDTH

Your size, your riding style and the trails you ride will all determine the best bar width for your bike. The convenient aspect of experimenting with bar width is you don't need four bars. Start with a wide bar and feel the same things we felt. You can then slide your grips and controls toward the stem and ride more, feeling the difference in ride quality. Once you find that magic width, you can cut the bar to your perfect length. □



**Same corner, different feel:** The widest bar (above) boosted confidence entering corners, and riders felt more in contact with terra firma. The narrowest bar (below) required a more upright position and a lower cornering speed.



**Push or pull:** Climbing with the narrow bar (left) was best accomplished in the saddle while using your hands and arms to pull the bar towards you (think rowing). Climbing with the wide bar allows for out-of-the-saddle attacks and throwing the bike from side to side.



## BAR WIDTH AND FIT

### CHANGES TO THE COCKPIT

Your bar width effectively lengthens the cockpit by straightening out your arms, forcing you to move forward over the front wheel. Looking down over the bike, we imagined an invisible isosceles triangle, with one corner on each side of the handlebar (where the bar plugs would push in) and the third corner halfway between the stem and saddle (where your shoulders would rest). We calculated the height of each triangle to approximate how much handlebar choice affects the cockpit.

Handlebar width	Approximate change in stem's effective length
From 24" to 25"	+8mm
From 25" to 26"	+10mm
From 26" to 27"	+14mm
From 24" to 27"	+32mm