Jargon busted!

■ GUSSET
A strengthening plate welded below the down tube where it joins the head tube; designed to disperse front impact stress away from the heat-damaged weld area – to do this properly it shouldn't be welded along the rear edge.

■ IN-LINE SEATPOST
Most seatposts have a clamp which sets the saddle behind the seat tube's centreline, and bike geometry tends to reflect this position choice. In-line seatposts move the saddle forward, putting more rider weight over the front.

■ SCANDIUM
The strongest, lightest aluminium alloy available in tubesets suitable for building into bike frames. Capable of producing sub-3lb MTB frames, it's best avoided by air bandits and the crash-prone.

■ MUD CLEARANCE
The gap between tyres and frame or fork. Sticky mud tends to collect in these areas and can clog or prevent the wheel from turning, so the more clearance the better.

■ CRUD CATCHER
The original – and many say the best – down tube-fitted mountain bike mudguard. Keeps the mud out of your face and stays put over rough trails.

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Mail order machines

Fancy saving some serious dosh on your next bike? Course you do. Buying direct could get you a lot more for your money, as we've been discovering...

Words Seb Rogers **Pics** Steve Behr

Money makes the world go round, and everyone wants their cut. By the time you get your hands on your brand new pride and joy from your local bike shop, hundreds of companies and individuals around the world will have been paid for their part. From the courier who delivered it to the shop, to the factory worker making metal tubes, everyone gets a portion of your cash.

Cutting out a link or two in this chain could save you money… or get you a better bike for the same outlay. Buying direct used to be fraught with potential pitfalls, but the wonders of the internet make everything so much easier and more straightforward. You can see what you're about to buy, often make changes to the spec online and, if all else fails, you can usually pick up the phone and speak to a real person. Most mail order bikes these days arrive at your front door fully built and ready to ride. The only possible downside is that you can't usually try before you buy.

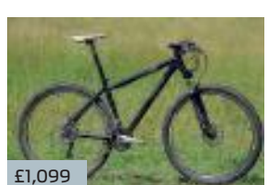
We've chosen four very different hardtails to see just what's available when you cut out the middleman. On-One's big-wheeled Scandal 29er and Van Nicholas's titanium-framed Zion are available direct from their manufacturers, and both offer something very different from the norm. The Focus Black Forest from internet mail order specialists Wiggle, on the other hand, boasts a value-packed spec that should see it worrying some big-name brands. And the Kinesis Maxlight is available from mail order giant Chain Reaction Cycles with any spec you choose. All four look great value on paper, but how do they ride? Time to hit the trails to find out… »

This month's bikes on test...

£1,179

VAN NICHOLAS ZION

Ti-framed trail bike offering easily customised spec at a tempting price



£1,099

ON-ONE SCANDAL 29ER

Big-wheeled renegade with ultralight scandium tubes and good looking spec

£995

KINESIS MAXLIGHT CUSTOM

Svelte trail-muncher built to order with SRAM transmission and Marzocchi fork

£679

FOCUS BLACK FOREST

German design and build quality at a decidedly un-German price point

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Van Nicholas Zion

£1,179 Titanium trail muncher with custom build options

WORKSHOP WISDOM

MBUK'S MECHANIC SAYS...

Budget but not cheap
Titanium bikes come with a high price tag thanks to the cost of the raw material and the fact that it's a difficult metal to work with, but Van Nicholas have brought the price down by cutting out the costs of getting their rig on to a shop floor. Neat weld beads and the open-ended gusset show attention to detail.

The Van Nicholas range represents the rebirth of web company Airborne's radical line of low cost, 'customisable', titanium framed bikes. The new company have a more European focus but have lost little of their enthusiasm for bringing titanium to the masses. The Zion is the workhorse of the range, starting at £1,068.

The chassis Titanium is amazing stuff. It doesn't corrode, it's immensely strong and it typically builds into a bike frame that has a uniquely sprightly feel. It's also fiendishly expensive and tricky to work with, and that, plus the fact that it's not as stiff as steel or aluminium, is enough to put many manufacturers off. Titanium has typically been the preserve of high end custom builders, turning out small numbers of beautifully crafted frames with telephone number price tags for the few riders able to appreciate/afford them. But Van Nicholas, like Airborne before them, have found ways to bring the price down.

If there's cost-cutting in the production, it's not immediately obvious. Constant-diameter top and down tubes look a little ordinary next to some of the fancy profiles of aluminium tubed competitors, but they do the job without fanfare. Running the cables under the top tube keeps them out of the way, but makes shouldering the Zion a pain in the neck – literally. An open-ended gusset at the join with the externally butted head tube adds extra protection against damage from hard frontal impacts, while Crud Catcher mounts are a nice UK-friendly touch that mud-plugging riders will appreciate. Curvy stays feature rack mounts and bosses for rim brakes, though we opted for an upgrade to hydraulic discs. Mud clearance is huge up top and on the miserly side – even with the 1.95 inch tyres fitted – down below.

There's a wide choice of forks available, and we went with the basic RockShox Tora Solo with 80mm (3in) of travel. It's not the lightest or most sophisticated fork, but its firm feel and limited travel seemed to suit the sprightly trail manners of our test bike.

The detail Drop down menus on the Van Nicholas website allow every aspect of the bike's spec to be tweaked. We opted for the basic Shimano LX-based spec and substituted a riser bar for the standard flat one. Details like the Mavic Crossride wheelset and gold coloured KMC chain set the Zion apart from much of the price-equivalent competition, while most of the Van Nicholas finishing kit looks good and works well. The one exception was the saddle on our test sample, which was loose on its rails and creaked constantly.

The ride The Zion's pared down lines, skinny tyres and narrow saddle hint at a bike that's built for speed. But any notions of having to tame a nervy thoroughbred are dispelled as soon as you climb aboard. Despite an in-line seatpost and compact frame dimensions, there's enough room for a rider of average proportions to stretch out and get comfy, while the relatively modest fork still manages to patter over all but the hardest, biggest hits willingly enough. Better still, the front end, from bar position to the way the fork responds to weight shifts in the turns, feels spot-on. Neither too twitchy nor too sluggish, the Zion's geometry unflinchingly rides the narrow

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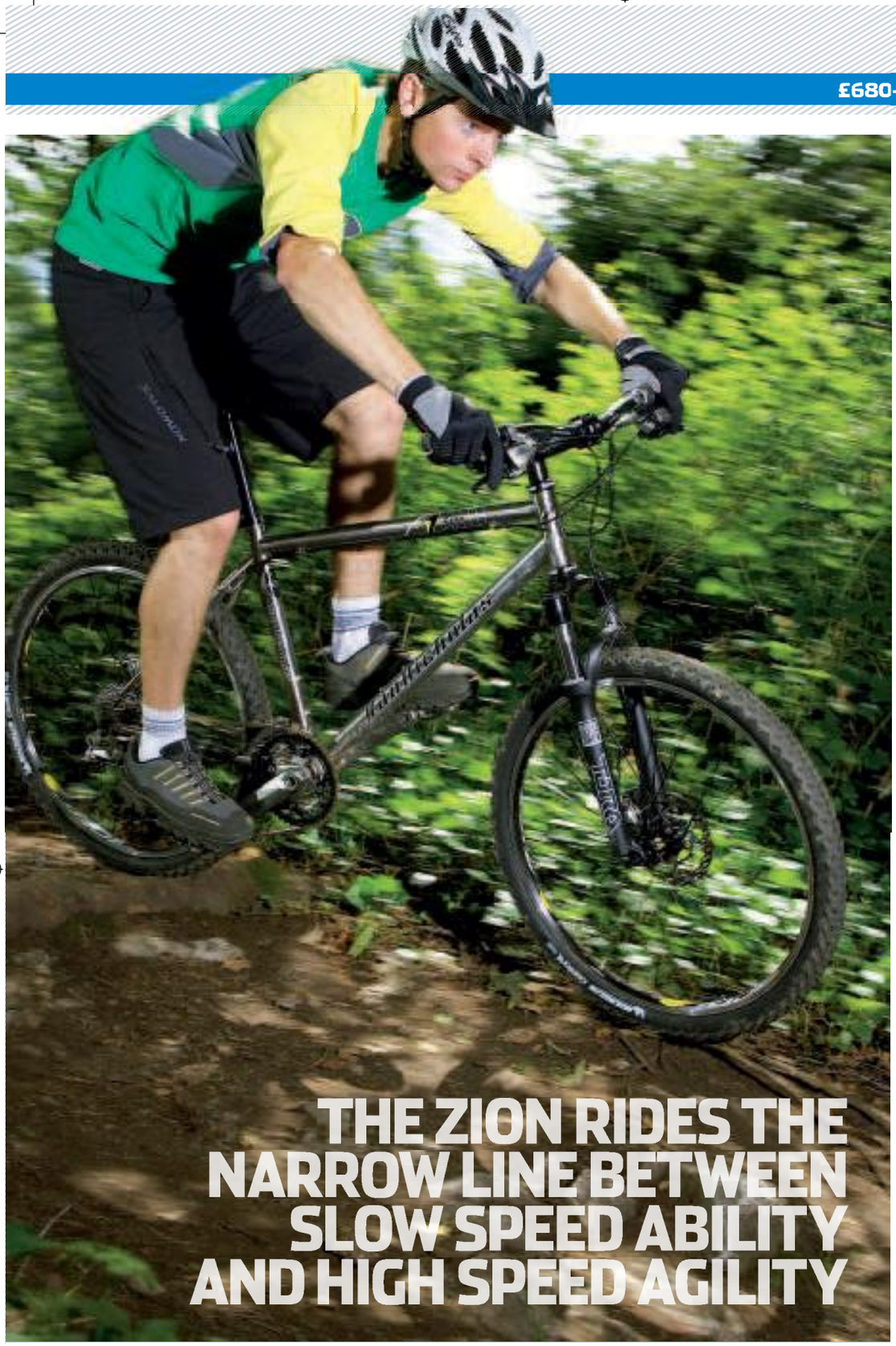

THE ZION RIDES THE NARROW LINE BETWEEN SLOW SPEED ABILITY AND HIGH SPEED AGILITY

line between the contradictory demands of slow speed stability and high speed agility. Everything from low speed granny-ring grunts to flat-out singletrack chasing feels reassuringly intuitive. The Zion doesn't need to be persuaded to go out for a ride – it wants to.

One of the biggest reasons for investing in a titanium hardtail, of course, is the mythical vibration-absorbing ride quality that's associated with this material. Despite its budget price, the Zion certainly has more than a hint of the forgiving character of the best titanium frames. High frequency trail buzz seems less apparent than with an alu chassis, and there's no trace of unwanted flex under hard pedalling. With narrow tyres and a short travel fork, though, this accommodating character can get the unwary Zion rider into all sorts of trouble. It's easy to be lulled into a false sense of security, only to ride full tilt into a section of washed-out rubble and suddenly find the fork at its limit and the tyres bouncing from obstacle to obstacle. Not a bike for the inexperienced or clumsy then, but one that'll shine under a rider who appreciates finesse over brute force.

SO GOOD

- Great build and ti ride quality at a price that's close to aluminium
- Custom build spec options

NO GOOD

- The saddle on our test bike was loose on its rails and creaked

Tyre clearance around the chainstays is on the tight side, even with the relatively narrow 1.95in Michelins fitted

Titanium's long been a sought-after material for hardtails – it's light, strong, corrosion-resistant and has a great ride quality

The Van Nicholas website allows you to swap specs to suit your needs – we went for a riser bar instead of the standard flat bar

MBUK VERDICT 9

SPEC
VALUE
CLIMBING
DESCENDING
SINGLETRACK

Conventional wisdom says titanium hardtails are expensive, but the Zion proves you can have titanium ride quality at close to aluminium prices

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