

Kickstand and steering stop mean you can park it like this loaded



## Sprung tour durch technik

The Tout Terrain Panamericana is a German-made expedition bike that combines four-pannier luggage capacity with full suspension. Dan Joyce reports

If your tours take place mostly on tarmac, there's no need for more suspension than the air in your tyres. That's not what this bike is for. It's called Panamericana after the 25,750km road – often gravel – that runs up the west coast of the Americas. It's a dedicated, rough-stuff touring bike, designed for comfort on dirt roads in remote places. And it should be just as suitable for laden touring on bumpy British bridleways.

### Frame and fork

Retro-fit luggage solutions for fully-sprung bikes often put the carrier racks on the unsuspended lower fork legs and rear triangle. This huge increase in 'unsuspended mass' compromises the suspension, so the bike handles badly and the luggage gets shaken to bits – even worse than on a bike without suspension! Luggage needs to be suspended just

as much as the rider, and on the Panamericana it is, courtesy of some impressive engineering.

The triangulated rear rack forms part of the frame. Sealed-bearing pivots on the rack and just above the bottom bracket connect to a parallelogram rear-suspension section that carries the dropouts. Bumps from the rear wheel compress a DT air shock. Its spring rate is readily adjustable to the weight of you and your luggage via a shock pump.

The rack is super-sturdy compared to a bolt-on carrier. The 14mm top rails are better for stiffness but a problem for some pannier hooks. Newer Ortlieb and Arkel will fit okay, but of my pannier collection only the Carradice Carradry could be forced on, at some risk of snapping the hooks (designed for 8-13mm rails).

The fork is a Maverick SC32, with 80mm of travel and a 'soft lockout' for climbing or road use. As it's an air

24mm through-axle hub adds stiffness to the front end

'Upside down' fork has luggage brackets for custom-made Arkel panniers...

...which have a built-in support frame, inside and out

Pegs on the pannier frame fit into holes in the bracket. The QR collar fits further up

Chris 'Bling' headset. The head tube stop below prevents the steering jack-knifing

Suspension pivots have sealed bearings so should last well

fork, it's as tuneable as the rear shock. What's unusual about it is its upside down orientation: the lower legs slide into the uppers rather than vice versa. Compared to a conventional fork, the SC32 should be stiffer at the more highly stressed fork crown and possibly less stiff at the axle. However, a massive 24mm diameter through-axle hub offsets any lack of stiffness there. The SC32 should run smoothly as time goes on because the oil in the fork has gravity on its side to keep the seals lubricated. If a seal fails, though, you could get oil on the disc rotor.

For touring, the main advantage of an 'upside down' fork is that there's lots of rigid, unmoving upper fork leg to bolt panniers onto. The only bags that will fit are custom Arkel ones (299 Euros!). Max load is 6kg per bag.

### Equipment

The Panamericana is available with 27-speed derailleur gearing or a

14-speed Rohloff hub. We chose the former, which in the premium spec version of the bike that Tout Terrain call 'gold' is Shimano XT. It's quality equipment that works well. I was surprised to find an 11-28T cassette; 11-34 would be better. You use low gears a lot on a heavily laden bike off-road and a gear of 17in could save you from walking – and the strain that pushing such a heavy bike entails.

Brakes are Shimano XT hydraulics, with a bigger, 180mm rotor up front. Little lever effort translates into fantastic stopping power. Hydraulics are harder to maintain if they break, but it's rare that you need to do anything other than change the pads (take spares) and centre the callipers.

The wheels have 32 spokes apiece. I'd prefer the higher strength of 36, especially at the dished rear. However, they're laced to good rims and good hubs. The front on our bike, in fact, was a boutique one by Phil Wood. A Maverick hub is standard. Tyres are spot on for an expedition bike: Schwalbe Marathon XR.

An unusual Syntace VRO stem holds the flat handlebar. The end of it pivots so you can change the height and reach of the stem on the fly. I set it short and high, to prevent weight bearing down on my hands and wrists, which is uncomfortable on a flat bar. I'd fit Ergon grips even so.

## The ride

The suspension earned its keep. Whenever the bike picked up speed, it rippled over stutter bumps, washboard striations, and small potholes on the iron hard winter

bridleways I rode it on. You don't get slammed about by the dead weight of the luggage because it's *not* dead weight: it's suspended. You've still got all that mass to control so it feels bus-like compared to a luggage-less, full-suspension mountain bike. But it's a very comfortable bus, which I was happy to ride all day!

The weight penalty compared to a rigid tourer is largely irrelevant once you've filled four panniers, and is well worth paying when you're on the rough stuff. With panniers removed it's a little sluggish on tarmac but surprisingly capable, in a sedate way, on rocky singletrack.

## Summary

The Panamericana is a premium rough-stuff tourer that I think is at its best when the trip is measured in weeks or days rather than months – trips such as an off-road C2C with a tent or a three-week holiday in Alaska. The build quality and attention to detail is such that it would probably be fine for longer expeditions. But for those touring the world a simpler bike – where you can't blow a seal on your air fork – would be a safer bet.

If you're into *lightweight* rough-stuff riding, a mountain bike or tourer with a big saddlebag and/or small backpack could serve you just as well. Conversely, if your heavyweight touring takes place on tarmac then a conventional tourer is as good. Where the Panamericana scores is for trips that combine rough-stuff with bigger loads. For that sort of riding it's expensive, sophisticated, comfortable – and undeniably very good.

## The Rivals



**Salsa Fargo**  
£625 (frame & fork)

A different way to do a rough-stuff tourer: 29er wheels and fat tyres in a rigid steel frame designed for drop bars, with fittings for disc brakes, carrier racks, and six bottles.  
[www.ison-distribution.com](http://www.ison-distribution.com)



**Riese und Müller Intercontinental**  
From £1625

Another German full-suspension expedition bike that suspends the luggage, available in a range of configurations including with a Rohloff hub.  
[www.enr.m.de](http://www.enr.m.de)



**Pashley Moulton TSR27**  
From £1023

20x1.5inch tyres will handle small bumps better than big ones, but the optional racks carry the luggage suspended and the frame separates for transport (+£100).  
[www.tsruk.com](http://www.tsruk.com)

## TECH SPEC

<b>Bike</b>	<b>Tout Terrain Panamericana</b> ('Gold' spec, derailleur version)
<b>Price</b>	£2800 (without panniers)
<b>Weight</b>	16.5kg/36.4lb (without pedals or panniers)
<b>Size</b>	50cm (M)
<b>Colours</b>	Anthracite, dark blue, or custom
<b>Sizes available</b>	S, M, L, XL
<b>Frame and Fork</b>	Double-butted Columbus and Dedacciai chrome-moly steel tubing for the main frame, stainless steel integral rack, 7076 aluminium dropouts and linkage bars. DT Swiss 190L air shock. Fittings for handlebar stop, three bottles and any gear cable set-up. Maverick SC32 touring suspension fork.
<b>Wheels</b>	Schwalbe Marathon XR 50-559 tyres on 17mm DT X455 aluminium rims, 32x3 butted 2.0/1.8mm spokes on Phil Wood 24mm through-axle front hub (NB. Maverick 24/7 is standard) and Shimano XT centrelock rear.
<b>Transmission</b>	No pedals. Shimano XT 175mm cranks with 44/32/22 chainrings, Shimano XT bottom bracket, Wippermann Connex 9X1 stainless chain, 11/12/13/14/16/18/20/24/28T cassette, Shimano XT shifters and derailleurs. 27-speed, 21-105
<b>Braking</b>	Shimano XT hydraulic disc, 180mm front rotor, 160mm rear
<b>Steering &amp; Seating</b>	Chris King NoThreadset headset, Syntace VRO stem, Syntace VRO 64cm flat handlebar with 16° bend, Fizik Rondine saddle, Ritchey Pro seatpost.
<b>Accessories</b>	Custom SKS mudguards, ESGE kickstand. Lots more available.
<b>Contact</b>	<a href="http://www.bikefix.co.uk">www.bikefix.co.uk</a> , tel: 020 7405 1218

