

## PARTNERS IN GRIME



The gnarly grin says it all. Ken's tasteful tie 'n' shirt image belies a radical brain.

**When MBI reader engineer Ken Simpson bought a lightweight frame, he had no inkling of where it would all end...**

# LIGHT FANTASTIC

**K**en Simpson is a man who believes bikes should go on a diet. This is applied no more fervently than to his own steed which currently weighs in at a svelt 17.75lb. You reckon that's light. Well Ken says with slicks he can get the weight down to around the 15.5lb mark.

48-year-old Ken began his lightweight fetish when he rediscovered cycling after a spell on moto-cross trials bikes. Having already built himself a trials bike he figured building a push bike would be a walk in the park. But rather than go into frame building, he concerned himself with lightweight components and groupsets. The first Simpson

lightweight mountain bike was an Emmelle that he slipped a pair of slicks onto and hung on the balance. It went to 19lb. To a man like Ken that set it positively in the heavyweight division and he set about his goal to build the lightest possible MTB.

'About six months ago I went to the States and bought this Titan titanium frame. At 2lb 15oz for an 18.5in frame it is light, and I couldn't wait to get it home and into the workshop,' he recalls.

Bike shops in the Shrewsbury area will no doubt remember Ken, the man who weighed a piece first and, if he reckoned he could make it himself lighter, then left for his machine shop without handing



The titanium seatpin is home-crafted. A jubilee clip replaces the seat clamp bolt - how long it will last we don't know.



A Mavic mech perforated and adjusted for 11-23T 700-CX Shimano hybrid micro gearing.







Ken's 17.75lb Titan featherweight champ - is it in a class of its own? He says he's not finished yet.

over a bean. There he made the trick titanium front hub, and built a conversion bracket to hold the 16, 28, 38T chaining configuration. The rings themselves are painstakingly drilled out to save weight, as are the cranks. The chainset revolves on a Titan bottom bracket. Even the eight-speed sprocket cluster has been drilled out a la XTR cogs.

**Report & Pics:  
Geoff Waugh**

One of the downers for Ken were the stainless steel spokes on his Emmelle which, he considered, added too much weight to the overall package. His latest creation has titanium spokes no less. These are laced radially into the front rim and on the left side at the

*The drill'er miller has gone to work on the chainset and cranks. The chain comes like that, see Tricknology.*





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Ken's own marque titanium hubs.

rear. The sprocket side has a conventional three-cross weave.

'Two sets of 36 titanium spokes save 204g over stainless and with alloy nipples that is shaved to 8oz,' he says.

Components that might not warrant a second glance on some MTBs saw themselves fitted to the Titan, purely for their low-fat content. For example, the brake levers are Sturmey Archer plastic units and the grips are cork. These are slipped on to a carbon fibre bar,

along with Grip Shifts which is one of the lightest gear-changing systems around. At the rear the Grip Shifts work a Mavic road mech that has been doctored to cover the 11-23 tooth spread.

His seat post is hand made from titanium and incorporates a lightweight cradle fixing.

But it's not all exotica on the Simpson bike. Household names such as Zoom appear on the stem. Ritchey provides the brakes and blocks. A

Shimano XT rear hub is there albeit with a titanium spindle. Tyres are courtesy of Ritchey and are the light 1.7in Z-Maxs.

'I haven't finished with the bike yet. It will get lighter and at the moment I am working on the stem and forks. There is a weight saving to be made there', declares Ken.

After witnessing what Ken Simpson can produce with a machine shop and a bit of titanium, we can only agree.



## TECHNICAL SPEC

**Frame:** Titan titanium 18.5in

**Fork:** titanium

**Groupset:**

**Shifters:** Grip Shift

**Cranks:** Hand made

**Bottom Bracket:** Titan

**Pedals:** Specials, titanium spindles

**Chain:** Regina hollow pin

**Freewheel:** Shimano cassette 8-speed 11-23T drilled out

**Chain rings:** Hand made

**Derailleurs:** Shimano Micro front & Mavic rear

**Brakes:** Ritchey Logic

**Components:**

**Headset:** Titan

**Stem:** Zoom

**Bars:** Carbon fibre

**Grips:** Cork

**Saddle:** Flite Titanium

**Seat Post:** Hand made titanium

**Wheels:**

**Tyres:** Ritchey Z-Max 1.7 front and rear

**Rims:** Matrix Titan

**Hubs:** Hand-made titanium 32 hole front & Shimano XT rear

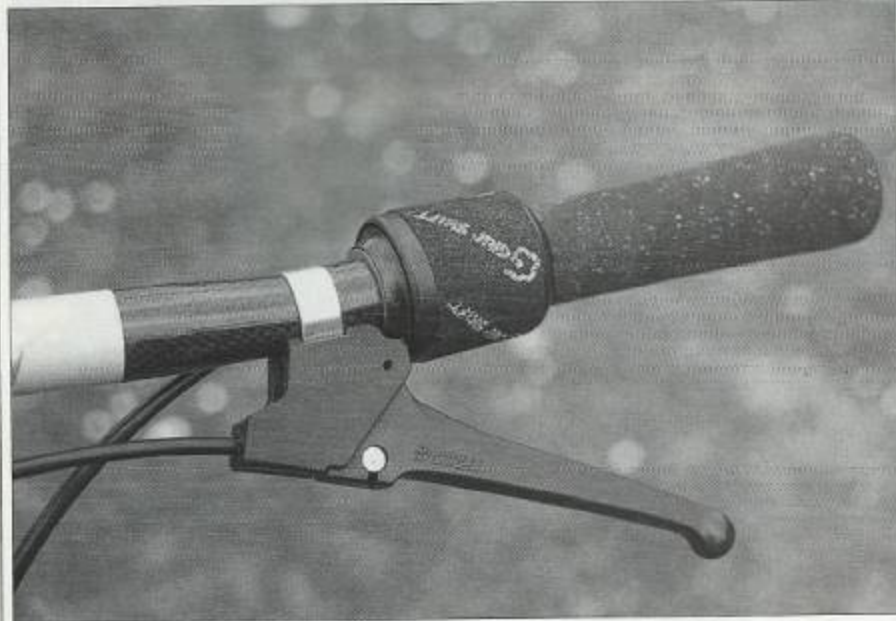
**Spokes:** 14 gauge titanium

**Extras:** Simpson titanium bolt kit

**Weight:** 17.75lb

## GONNA MAKE YOU A STAR

Bizarre, beautiful, ugly or awesome. If your bike is unique we want to know about it for 'Partners in Grime'. Tell us why it's so special in no more than 50 words and send a good photo. If the bike is right we'll be in touch. Post your stuff with an SAE to: 'Partners in Grime', Mountain Biker International, United Leisure Magazines, PO Box 3205, 4 Selsdon Way, London E14 9ZR.



Cork and plastic mitt contacts save tonnage on a carbon bar.