



# PEDIGREE MACHINERY

**In these fast changing times of exotic materials, full suspension and esoteric American frame designs just where does a non-suspended steel frame British bike stand? When that bike is a Chas Roberts D.O.G.S. B.O.L.X. the answer is, 'Up with the best of them.'**  
Pics: Geoff Waugh

A visit to Chas Roberts always seems like a pilgrim's epic journey. Travel by car or bike traps you in the one way traffic nightmare of Croydon. Choose public transport and you end up walking a maze of suburban streets until you reach one that mixes terraced homes and small warehouses. Roberts' premises are here.

From the outside, the place looks unassuming, disappointing even, but step inside and some of the finest bikes you'll ever see are on display. There are tourers and track bikes, tandems and racers and, of course mountain bikes. Each one is a testament to Roberts' design talents, mastery of materials and joining techniques and understanding of what goes into making a great bike.

The creation of classic designs like the White Spider means Roberts is currently best known for mountain bikes, a situation tinged with irony as Chas' record of quality frame building stretches way back. Before mountain biking existed, his road and track bikes had already acquired legendary status among aficionados.

Many people would rest on their laurels at this point, but Chas is not satisfied. 'We're trying to fight back,' he explains. 'Because right now, a lot of stuff with an American label sells just because it is American. We've got to work twice as hard to get the message across that we can

make things of equal if not better quality here in Britain.'

Which brings us to the latest Roberts project - the D.O.G.S.B.O.L.X. - a no-holds barred race bike custom built for people who want to go fast. And no compromise. If you want to go out on all day trail rides stop now. This bike is not for you. 'We wouldn't recommend it for recreational riding at all,' says Chas. 'For that you want something that's a bit more forgiving like the White Spider.'

Ask a top motor racing driver and he will tell you that a couple of hours racing in a Grand Prix is a very distressing experience, because no compromise is made to driver comfort. Everything on the car is geared towards getting it from A to B in the shortest possible time. The man at the controls is expected to be able to handle that fact.

The D.B. is a bit like that. It isn't built for comfort and long hours in the saddle. It is built for speed and, if you have done any racing, it will come as a revelation to you. It has the ability to cover rough ground very quickly in as straight a line as your riding skills allow.

Roberts builds every frameset from scratch, so talking about the geometry on the test model is kind of irrelevant. 'We'll build it however the customer wants it,' Chas explains. Far more important is the frame's construction.

It used to be the case that all tubing suppliers would only supply tubes in complete sets to frame builders. Some still stick rigidly to this, which limits the frame builder's ability to experiment with different combinations of tubing, but others are now more willing to supply selected customers with whatever individual tubes they require.

'This opens up a world of possibilities for us,' explains Chas. 'We are able to look at each tube as a unit and evaluate it on its own merits, because each tube in a frame has its own specific job and is subject to stresses peculiar to it.'

By identifying the individual needs of each tube and tailoring the material used to meet those specific needs, Roberts has come up with a high octane combination of quality parts beautifully crafted into an elaborate sum.

How has this been achieved? 'We've done it by seeing what works and what breaks,' Chas says matter of factly. 'It's taken us a couple of years of research to arrive at a point where we're happy with the mix of tubes in this bike.'

Kitted out with lots of trick bits, the test bike was extremely light, but Chas wanted high performance and did not see light weight as the be all and end all when designing the D.B. One area where this is apparent is in the choice of Columbus Max OR for the down tube. It isn't the lightest available but its inclusion is justified by the need for greater strength in that area.

'Could you just describe the rest of it as a custom blend of tubing?' Chas asks. 'After spending so long on it, we don't want Joe Bloggs coming out with copies.'

That prospect seems highly unlikely. For tube makers to supply individual tubes, they have to respect your work and Chas has definitely won that respect. Also what imitator would be able to blend fillet brazing, internal brazing and silver soldering the way that Roberts does?

The top tube is Columbus Max and the chainstays, head and seat tubes are Columbus Nivacrom. Fork blades and seatstays, silver soldered into place, are Reynolds 753 and the one piece horseshoe monostay is custom drawn from Reynolds 531 tubing. The stem and fork crown are also 531.

The beauty of the D.B. isn't just in this mix of tubes. It's

what Roberts has done with them and the way they've been put together. For starters, the main tubes have been manipulated and ovalised. The down and top tubes are ovalised to present a vertical face at the head tube before turning to horizontal at the seat tube and bottom bracket junctions. This results in amazing lateral rigidity. Coincidentally, many influential US designers reckon this type of tube set up will be the accepted norm for performance frame design in the not-too-distant future and contribute to a standard look for high-end MTBs.

Fillet brazing has been used for most of the joint areas and it has been done so well as to make an artistically minded person weep. This technique allows for real versatility in setting frame angles but you have to be extremely precise to get it right. Not a problem for Roberts, though he has retained a lug at the seatpost/top tube junction for the extra support it gives in the seat collar area. It's typical of his attention to detail, just like the top tube routed cable guides.

The seat stays and fork blades have been silver soldered into place. A neat touch is finishing them in black to contrast with the white that predominates on the rest of the bike. The whole appearance has a kind of moulded, sculpted appearance which screams out *handbuilt!*

So how does all this transfer into performance terms? The key word is stiffness. The frame layout and Roberts' mastery with the brazing torch has resulted in a hugely rigid frame. Flex is eliminated in all the key areas resulting in amazing power transmission. The bike just flies.

Roberts reckon the straight blade D.B. forks are the lightest steel forks on the market. They are incredibly rigid and direct. You sometimes think the bike has anticipated your intentions and gone for it! It is that manoeuvrable.

Monostay designs on steel frame bikes usually add up to a super hard platform for high acceleration and this one is no different. Response to rider input is instantaneous. Fully built up to this spec (the choice of spec is yours) it still had excellent mud clearance even with a beefy Specialized Hardpack 2.1 at the front and a big Smoke on the back. The excellent SunTour MicroDrive is



so lacking in physical size that it contributed to the impressive clearance just by being there and no-one who has ridden the bike has yet complained about chain-suck.

Expert riders Paul Burwell and Mark Beisiegel took the bike off-road for a weekend and were extremely reluctant to give it back. Both agreed that it is one of the most impressive riding MTBs ever to come out of this country. It precisely fulfills its demanding, racing brief.

So now to the name. Roberts would have us believe the acronym stands for Dirt Orientated Geometry System Blend Orthogonal Lateral Xtra. Don't believe a word of it. Viz magazine, Britain's million selling and very rude comic, describes anything absolutely brilliant as being 'the dog's bollocks'. This bike is called the D.O.G.S. B.O.L.X. and that is all you need to know.



TECHNICAL

**Test Model Spec:**

**Headset** - Ritchey Logic Comp

**Rims** - Campagnolo Thorr  
**Stem** - Reynolds 531 Custom

**Seatpost** - USE Titanium  
**Saddle** - Flite Titanium rails

**Gruppo** - SunTour MicroDrive / XC Pro

**Tyres** - Specialized Hardpack (front)  
Panaracer Smoke (rear)

**Handlebar** - 3TTT powder-coated

Special thanks to Simon Ellison at Ron Kitching for SunTour MicroDrive components.