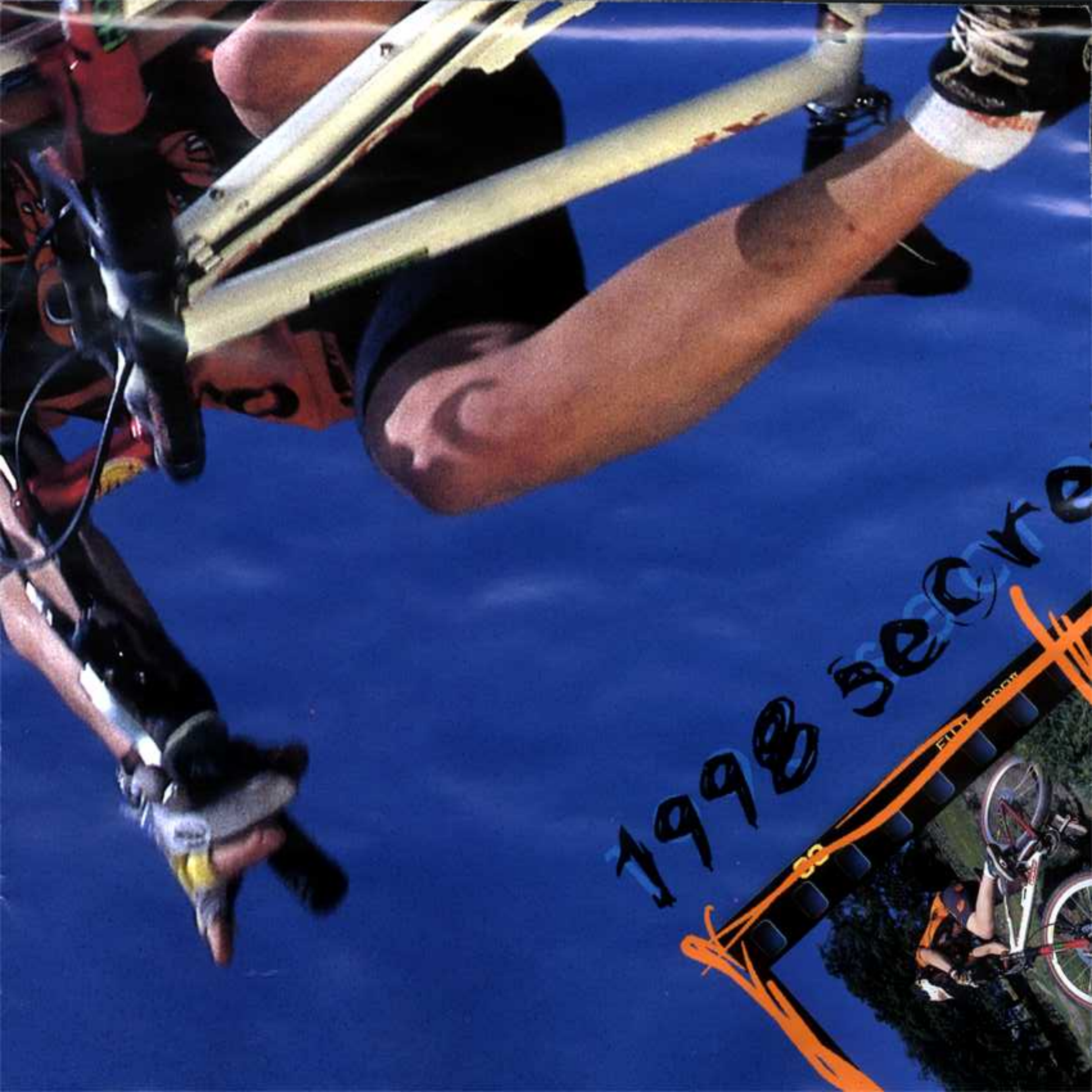
orange

ninety-eight

this way


1998 Secret
FULL CARBON


TIME

STUNTS

33A

34

34A

RDPII - 128

35

35A

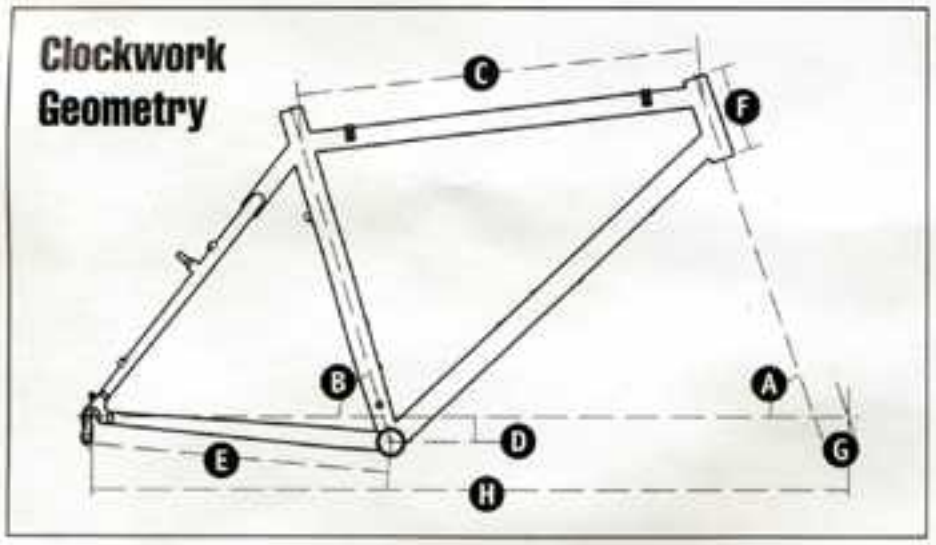
FUJI RDPII

36

Photos: Anton Want – Team Orange Rider: Chris Whitfield

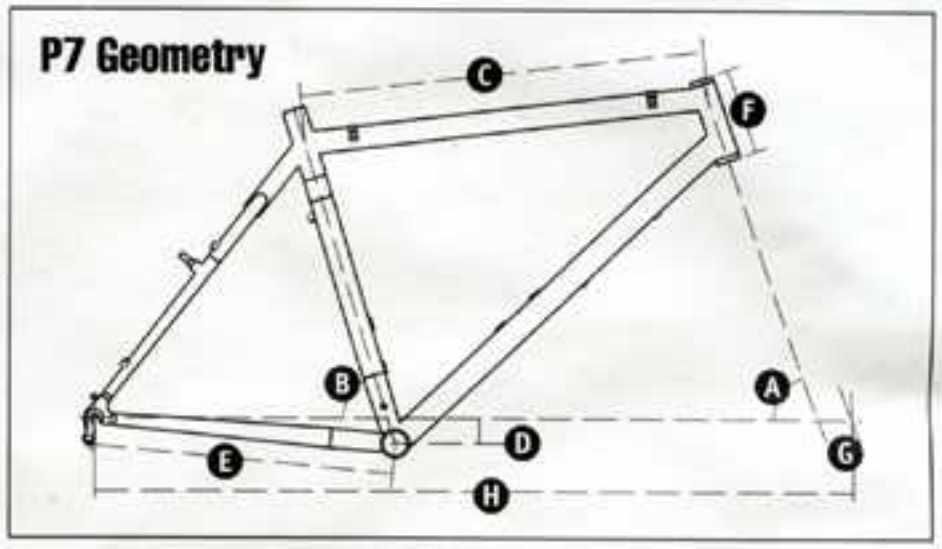

FUJI RDPII
36
PASSED

- Orange Mono Powerstay rear end.
- Seat tube externally butted at clamp and ovalised at bottom bracket.
- Clearflow bridgeless ovalised chainstays.
- Top routed cabling with brazed on bosses to avoid heat induced stress caused by welding.
- Front facing slot in seat tube/separate stainless steel seat post clamp.
- Tough epoxy powder coating.
- Chain hanging pip for hassle free rear wheel removal.
- Bottle bosses on down tube and seat tube and Crud Catcher™ bosses.
- Pannier eyelets.
- Shimano plate front derailleurs and V-brake compatible.



FRAME SIZE (inches)	15	17	19	21
A. Head angle (°)	70.5	70.5	70.5	70.5
B. Seat angle (°)	73	73	73	73
C. Top tube length (mm)	524	544	563	583
D. Bottom bracket height(mm)	35	35	35	35
E. Chainstay length (mm)	420	420	420	420
F. Head tube length (mm)	85	85	120	140
G. Fork offset (mm)	45	45	45	45
H. Wheelbase (mm)	1024	1039	1057	1070
Rider height range	5'3"-5'7"	5'6"-5'9"	5'8"-6'1"	6'0"-6'4"
10° rise stem length (mm)	115	130	130	145
Steerer length (mm)	168	168	203	223
Seat post diameter	all seat posts 26.4 mm, shimmed to 29.6 mm			
Frame weight (grams)	1850	1940	2040	2100

- Clearflow bridgeless ovalised chainstays.
- Top routed cabling with brazed on bosses to avoid heat induced stress caused by welding.
- Machined externally butted head tube.
- Front facing slot in seat tube/separate stainless steel seat post clamp.
- Tough epoxy powder coating finish.
- Chain hanging pip for hassle free rear wheel removal.
- Stress dispersing diamond bottle bosses on down tube and seat tube.
- Crud Catcher™ bosses.
- Pannier eyelets.
- Shimano plate front derailleurs and V-brake compatible.



FRAME SIZE (inches)	15	17	19	21
A. Head angle (°)	70.5	70.5	70.5	70.5
B. Seat angle (°)	73	73	73	73
C. Top tube length (mm)	524	544	563	583
D. Bottom bracket height (mm)	35	35	35	35
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Rider height range	5'3"-5'7"	5'6"-5'9"	5'8"-6'1"	6'0"-6'4"
10° rise stem length (mm)	115	130	130	145
Steerer length (mm)	168	168	203	223
Seat post diameter	all seat posts 26.4 mm, shimmed to 29.6 mm			
Frame weight (grams)	1880	1950	2090	2140

Orange

1998 secret stuff

Rumours abound with speculation as to what we are up to at our Research and Development plant. For the record, we are currently working on several full-suspension aluminium monocoque designs. Pictured overleaf are the X4, a URT cross country bike an the X628, a downhill specific DRT chassis with fully adjustable suspension giving six to eight inches of travel.

Clockwork



Resurrection! The Clockwork returns. So many people asked why we changed the Clockwork name to the C-16R. Well constant development means constant improvement and the C-16R was sixteen generations on from the original Clockwork. 'But we liked the Clockwork!' we heard time after time, so here it is reinstated, but better than ever – a C-17R if you will (or to tell the truth, more like a C-21R).

The 1998 version is over three pounds lighter than the 1989 vintage, achieved by careful specification of our custom double butted series 7.2 tube set. The lively, robust chassis rides like many bikes that cost twice the price. Ever important is rider comfort, for which the Clockwork has always been praised. A hard day's riding doesn't need to be made harder by your bike, many Polaris competitors swear by the C-series/Clockwork Orange workhorses. Yet it is still sharp enough to beat 'better' bikes out on the cross-country race circuit. Sharing the same suspension ready geometry as the P7, you can specify a suspension fork as a standard option.

An ideal platform whether you want to campaign it on the race circuit or go fully equipped to explore the farthest reaches of the globe. The Clockwork was, still is and always will be the ultimate all round performer.

Clockwork Features:

P7



It was after witnessing the wilder members of the Orange test team putting the P7 through its paces that the quote 'Tested on Animals' was born. After two years of constant thrashing the P7 and the phrase have become inextricably linked.

Regardless of how far your pocket stretches in terms of componentry, the base ingredient is the P7 cromoly frame, featuring our own Series 8 micro-butted tubes – the ultimate steel chassis. Choose the specification to suit and you have a finely tuned bike which hates to go slow and demands to be hammered by all hard-core riders.

Voted best bike under £1,000 for two years running, 1996 and 1997 by *MBUK* readers, this is what they said: 'The bike handles well whether you are racing, bumming around the woods or packed up to the hilt for a world tour. The P7 is always ready to take you there.'

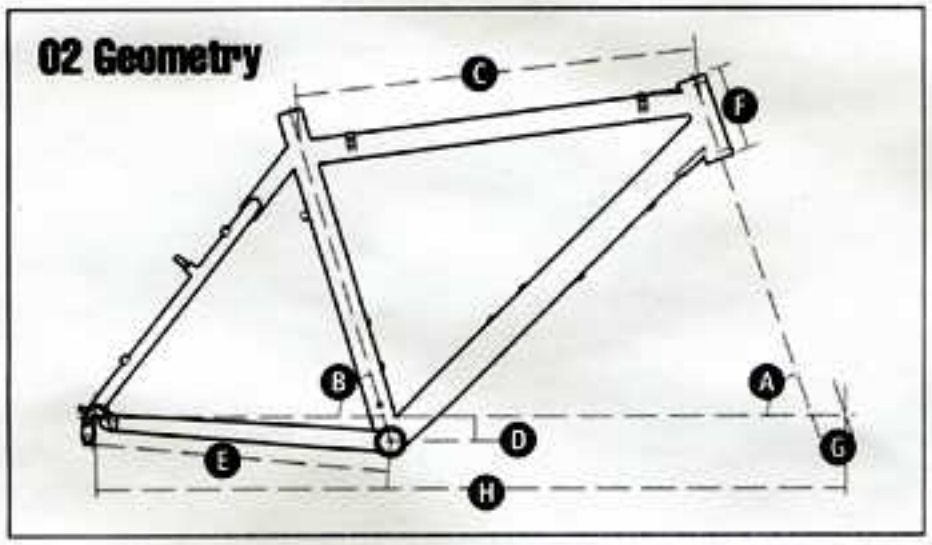
We said it was 'Ready to hammer' and judging from the fact that it was voted into first place, we think you must agree.

P7 Features:

- Heat-treated custom double-butted series 8 cromoly tube set.
- Orange Mono Powerstay rear end.
- Seat tube externally butted at clamp and ovalised at bottom bracket.

- Swaged downtube for maximum rigidity.
- Externally machined bottom bracket shell.
- Ovalised chainstays, with anti-chainsuck plate.
- Offset custom drop-outs for superior clearance and strength with pannier eyelets and replaceable rear derailleur hanger.
- Top routed hydraulic hose compatible cable routing via stress reducing side welded bosses.
- Orange polished/lacquered finish or tough epoxy powder coating.
- Bottle bosses on down tube and seat tube and Crud Catcher™ bosses.
- Front facing slot on seat tube/separate aluminium seat clamp.
- V-brake compatible.
- Suspension fork as standard.

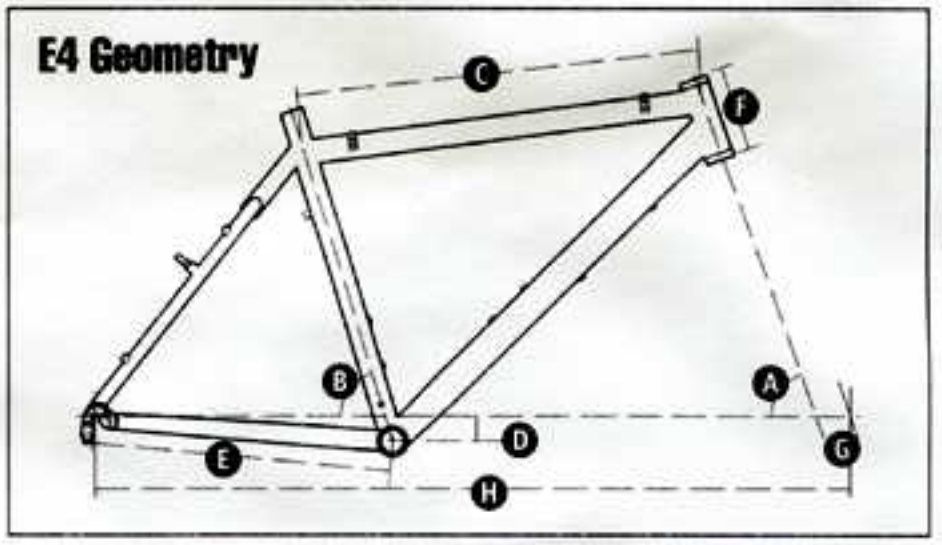
02 Geometry



FRAME SIZE (inches)	15	17	19	21
A. Head angle (°)	70.5	70.5	70.5	70.5
B. Seat angle (°)	73	73	73	73
C. Top tube length (mm)	525	546	565	585
D. Bottom bracket height(mm)	35	35	35	35
E. Chainstay length (mm)	420	420	420	420
F. Head tube length (mm)	100	100	120	140
G. Fork offset (mm)	45	45	45	45
H. Wheelbase (mm)	1025	1043	1059	1074
Rider height range	5'3"-5'7"	5'6"-5'9"	5'8"-6'1"	6'0"-6'4"
10° rise stem length (mm)	100	115	130	145
Steerer length (mm)	183	183	203	223
Seat post diameter (mm)	31.6	31.6	31.6	31.6
Frame weight (grams)	1500	1560	1610	1680

- Swaged downtube for maximum rigidity.
- Externally machined bottom bracket shell.
- Ovalised chainstays, with anti-chainsuck plate.
- Offset custom drop-outs for superior clearance and strength with replaceable rear derailleur hanger.
- Top routed hydraulic hose compatible cable routing via stress reducing side welded bosses.
- Orange polished/lacquered finish or tough epoxy powder coating.
- Bottle bosses on down tube and seat tube and Crud Catcher™ bosses.
- Front facing slot on seat tube/separate aluminium seat clamp.
- V-brake compatible.
- Suspension fork as standard.

E4 Geometry



FRAME SIZE (inches)	15	17	19	21
A. Head angle (°)	70.5	70.5	70.5	70.5
B. Seat angle (°)	73	73	73	73
C. Top tube length (mm)	525	546	565	585
D. Bottom bracket height(mm)	35	35	35	35
E. Chainstay length (mm)	420	420	420	420
F. Head tube length (mm)	100	100	120	140
G. Fork offset (mm)	45	45	45	45
H. Wheelbase (mm)	1025	1043	1059	1074
Rider height range	5'3"-5'7"	5'6"-5'9"	5'8"-6'1"	6'0"-6'4"
10° rise stem length (mm)	100	115	130	145
Steerer length (mm)	183	183	203	223
Seat post diameter (mm)	26.8	26.8	26.8	26.8
Frame weight (grams)	1420	1480	1530	1600

The impressive features list reads as follows: CNC punched and folded 6061 T6 Aluminium sheet spars, CNC machined bottom bracket and pivot sections, needle roller pivot bearings, Orange Independent Braking System (IBS), internal hydraulic hose routing, adjustable wheel base and shock position to name but a few.

These monocoques are conceived, designed and hand-built at the Orange R&D workshop and tested by Team Orange. They're proud to be Halifax born and bred!

You may have seen prototype test bikes out on the trails or at race me reticent to discuss the details. However, production models will be avai on a limited edition basis. Expect the prices to reflect the amount of d and hand-craftsmanship that has gone into each bike.

ety

Orange

ei

O2



Not so long ago the Orange Aluminium O was a bike renowned for its strength and ride qualities, a rock steady performer. It was honed and refined and eventually evolved into the E-series of thoroughbred race bikes. We decided to revisit that original 'O' philosophy and we've come up with a cracker.

The O2 is a tough, light, no compromise, hardcore mountain bike that's built to rampage. In short, a typical product of our Animal Aided Design programme. The geometry and build is designed to benefit from new features like longer-travel suspension forks and V-brakes.

The oversize Series 14 tube set is custom butted for maximum strength and rigidity, with top tube and swaged downtube both gusseted for optimum stress dispersion.

The ultimate Orange thrashmobile, ready to rock and roll. Are you up to it?

O2 Features:

- Heat-treated 7005 custom double-butted Series 14 aluminium tube set.
- Orange Mono Powerstay rear end.
- Machined externally butted head tube with gussets at top tube/down tube and head tube/down tube junction for improved impact absorption.

E4



Orange have always believed in the value of cross country racing as a valuable aid to designing mountain bikes. Lets face it, if a bike can stand up to the punishment Pro-Elite racers dish out, then it should be good enough for anyone. As the mountain bike market has evolved and diversified with more emphasis on freeriding and full-suspension models it is with pride that we present the Orange E4 – our latest no compromise race bike, built purely for the athlete, designed to 'whup ass' and put the rider at the front of the pack.

Using Easton Elite tubing the quality of the frame is unquestionable. Orange design S-bend powerstay rear end gives a crank-to-dirt power transfer you won't believe, combine that with the legendary rider comfort the E-series bikes have always given – after all battered rider is a tired rider – and you have a race winning formula.

A serious racers tool, the E4 will only be available in limited numbers after the Team Orange allocation. Get in early to avoid disappointment.

E4 Features:

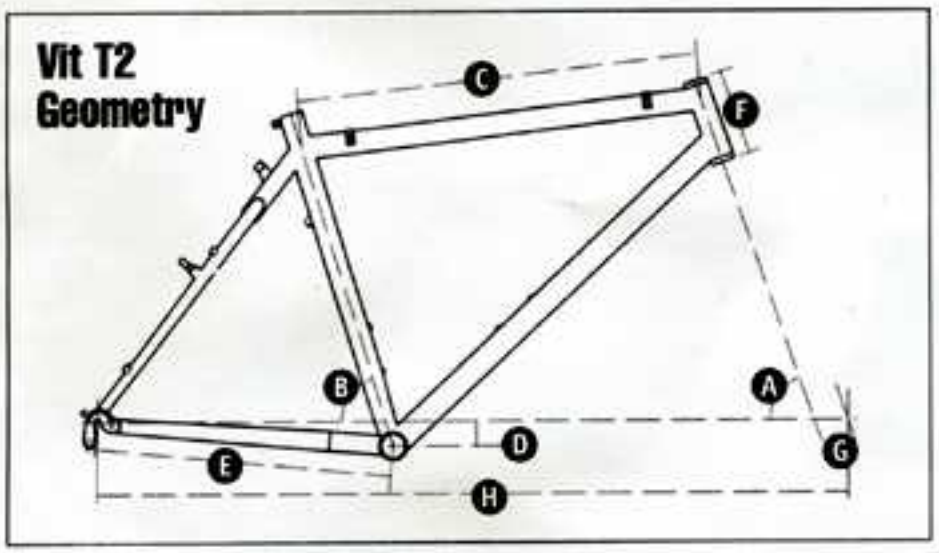
- Easton Elite 7005 T6 double-butted Series 14 aluminium.
- Orange Custom Mono S-bend Powerstay rear end.
- Machined externally butted head tube

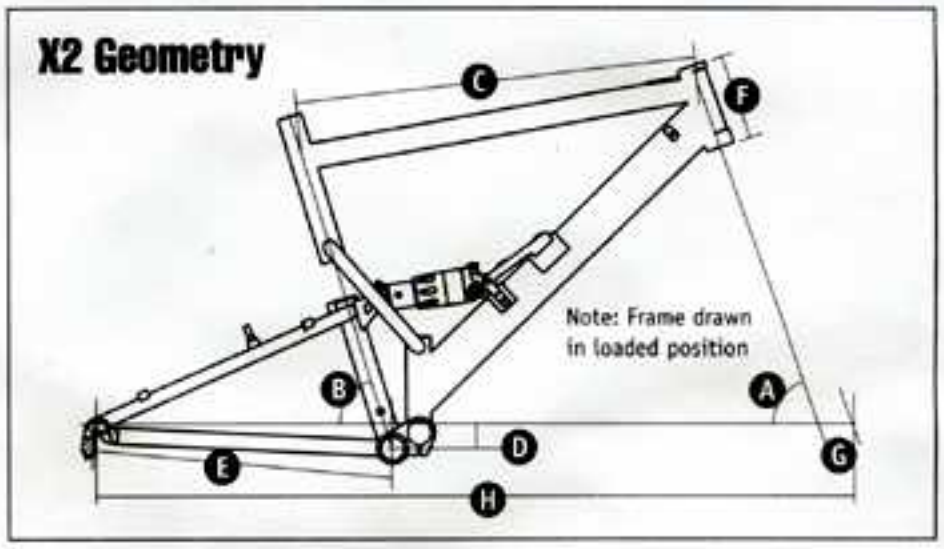
- Orange Series T seamless 3Al/2.5V titanium tube set.
- Orange Mono Powerstay rear end.
- Machined externally butted head tube.
- Butted seat tube.
- Ovalised chainstays.
- Offset drop-outs for superior clearance.
- Top routed cabling.
- Vapour blasted raw titanium finish.
- Bottle bosses on down tube and seat tube.
- USE 420 aluminium seat post as standard.

- Separate aluminium quick release seat clamp.
- X-Design shocker mounting with gussets welded to downtube at sides to maintain tube strength.

Rear Triangle:

- X-Bend shock stays for maximum chain clearance.
- Clearflow bridgeless ovalised chainstays.
- X-Design one piece machined pivot clamp and custom drop-out with replaceable rear derailleur hanger.
- Bottom bracket mounted anti-chainsuck plate.
- X-Design fully adjustable sealed oversize pivot for outstanding lateral rigidity. Light weight self-lubricating thermo-plastic bearings. 6082 T6 hard anodised aluminium pivot brushes. Internal shim stack allows fine adjustment of pivots. Easy to maintain and adjust with no special tools.





FRAME SIZE (inches)	17	19	21
A. Head angle (°)	70.5	70.5	70.5
B. Seat angle (°)	73	73	73
C. Top tube length (mm)	546.4	565.2	585
D. Bottom bracket height (mm)	35	35	35
E. Chainstay length (mm)	420	420	420
F. Head tube length (mm)	85	120	140
G. Fork offset (mm)	45	45	45
H. Wheelbase (mm)	1039.3	1056.8	1070
Rider height range	5'6"-5'9"	5'8"-6'1"	6'0"-6'4"
10° rise stem length (mm)	130	130	145
Steerer length (mm)	168	203	223
Seat post diameter	all seat posts 25.4 mm, shimmed to 28.2 mm		
Frame weight (grams)	1360	1480	1500

FRAME SIZE	S	M	L
A. Nominal head angle (°)	70	70	70
B. Nominal seat angle (°)	73	73	73
C. Top tube length (mm)	545	565	585
D. Nominal B/B height (mm)	25	25	25
E. Chainstay length (mm)	415	415	415
F. Head tube length (mm)	120	120	140
G. Fork offset (mm)	45	45	45
H. Wheelbase (mm)	1050	1065	1080
Rider height range	5'0"-5'9"	5'8"-6'1"	6'0"-6'4"
10° rise stem length (mm)	120	130	145
Steerer length (mm)	202	202	222
Seat post diameter	all seat posts 27.2mm shimmed to 30.1mm		
Frame weight inc. shock (grams)	2840	2900	2960

Specifications are liable to change without notice.

tings with riders
lable in the future
evelopment work

For the latest information see your Orange dealer or contact:

United Kingdom: Orange Mountain Bikes Limited, PO Box 100, Penrith, Cumbria CA10 2DE.
Tel: +44 (0)1422 311113 Web: www.cyclenet.co.uk/orange

Germany: Bohnen Radsport, Lobbericherstrasse 79, Grefrath, Germany Tel: +49 (0)21 58 91 7521

Scandinavia: Orange Scandinavia, Kommendörsgatan 15, Stockholm, Sweden Tel: +46 (0)8 855 212





VIT T2



Orange bikes are not fanciful fashion accessories to decorate scenic backdrops. They are designed to perform in all conditions. That said the Vit T2 is as close as we come to making something more fanciful than simply functional. Just to behold the Vit T2 in the flesh, so to speak, will make you understand – its elegant lines, its fine construction – you can see this frame was built by a caring craftsman. But it doesn't end there, not only is it one of the most attractive bikes out there, it also offers awesome handling and a ride response that you probably never thought existed. Our philosophy with the Vit T2 was to build the ultimate mountain bike. Wishbone rear stays in titanium? Of course. Why compromise when you've gone this far already?

We only use 3Al/2.5V titanium in our Series T seamless tubing. It is Grade 9 quality, and as such, is of the highest strength. This is the only titanium whose performance backs up the reputation of the material, by offering incredible strength, fatigue resistance and the ability to stay looking good forever.

Pure and simple. You can probably do no better when choosing a high performance mountain bike for either racing or dedicated riding. Be warned though, your bank manager may disagree.

Vit T2 Features:

X2



Bucking the trend for full suspension bikes to go for bigger travel and more weight, the X2 is designed to be the freeriders machine. The *raison d'etre* for the X2 is that it is the ultimate all round full suspension bike. That the X2 is lighter than the current crop means the bike is a very able climbing machine as well as being a race winning downhill bike. DH racer Chris Whitfield of Team Orange, given the choice, often takes an X2 for its sharp handling and power transfer rather than his big-travel monster.

URT, DRT, which way? The debate goes on. Both systems have their place, but in simple terms, the Orange single pivot URT design rear triangle just works! There are no complex, maintenance hungry linkages – no fuss, just function. With the pivot point so close to the bottom bracket, whether you're standing or sitting, the suspension always does its job.

X2 Features:

Front end:

- Custom butted 7005 T6 aluminium tube set gusseted at top tube/head tube junction for improved impact absorption.
- Eccentrically machined externally butted head tube.
- Crud Catcher™ bosses.
- X2 unique double butted, double strength, aero downtube.