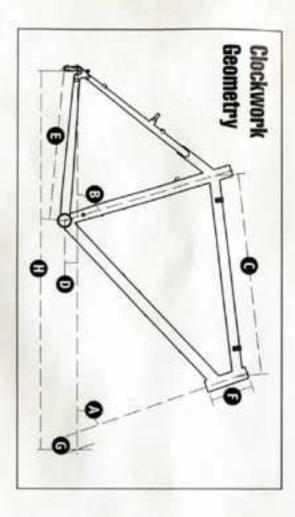
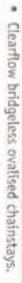


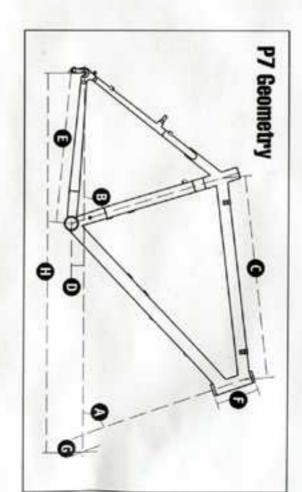
- Orange Mono Powerstay rear end.
- Seat tube externally butted at clamp and ovalised at bottom bracket.
- Clearflow bridgeless ovalised chainstays.
- Top routed cabling with brazed on bosses to avoid heat induced stress caused by welding.
- Front facing slot in seat tube/separate stainless steel seat 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(π	ım) 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 po	all seat posts 26.4 mm,	shimmed to	29.6 mm
Frame weight (grams)	1850	1940	2040	2100



- 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<sup>™</sup> bosses.
- Pannier eyelets.
- Shimano plate front derailleurs and V-brake compatible.



Frame	Seat	Steen	10° r	Rider	H. W	G. Fo	F. He	E. Ch	D. Bo	C. To	B. Se	A. He	FRAM
Frame weight (grams)	seat post diameter	teerer length (mm)	10° rise stem length (mm)	tider height range	i. Wheelbase (mm)	5. Fork offset (mm)	. Head tube length (mm)	Chainstay length (mm)	Bottom bracket height (	Top tube length (mm)	B. Seat angle (°)	A. Head angle (°)	FRAME SIZE (inches)
1880	all seat po-	168	115	5'3"-5'7"	1024	45	85	420	(mm) 35	524	73	70.5	15
1950	all seat posts 26.4 mm,	168	130	5'6"-5'9"	1039	45	85	420	35	544	73	70.5	17
2090	shimmed to 29.6 mm	203	130	5'8"-6'1"	1057	45	120	420	35	563	73	70.5	19
2140	29.6 mm	223	145	6'0"-6'4"	1070	45	140	420	35	583	73	70.5	21





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

# L)OCHWOSH



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

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

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

Clockwork Features:



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

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

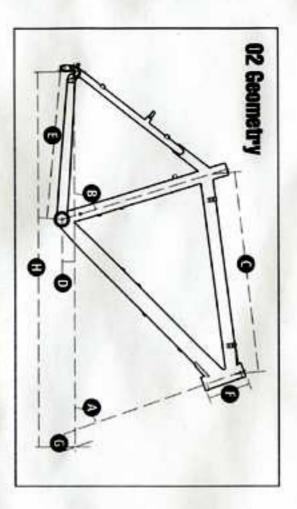
world tour. The P7 is always ready to take you there. are racing, bumming around the woods or packed up to the hilt for a Voted best bike under £1,000 for two years running, 1996 and 1997 by MBUX readers, this is what they said: 'The bike handles well whether you

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

## P7 Features:

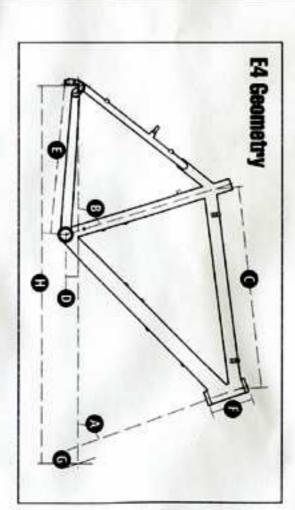
- Heat-treated custom double-butted series 8 cromoly tube set
- Orange Mono Powerstay rear end. Seat tube externally butted at clamp and ovalised at bottom bracket

- 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<sup>™</sup> bosses.
- Front facing slot on seat tube/separate aluminium seat clamp.
- V-brake compatible.
- Suspension fork as standard.



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(m	ım) 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 street
- 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



FRAME SIZE (inches)  A. Head angle (°)  B. Seat angle (°)  C. Top tube length (mm)  D. Bottom bracket height(m	70.5 73 73 525 (mm) 35	70.5 73 546 35	70.5 73 565 35
D. Bottom bracket height(m	m) 35	35	35
E. Chainstay length (mm)	420	420	420
F. Head tube length (mm)	100	100	120
G. Fork offset (mm)	45	45	45
H. Wheelbase (mm)	1025	1043	1059
Rider height range	5'3"-5'7"	5'6"-5'9"	5'8"-6'1"
10° rise stem length (mm)	100	115	130
Steerer length (mm)	183	183	203
Seat post diameter (mm)	26.8	26.8	26.8
Frame weight (grams)	1420	4 /00	1530

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

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 mer 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.





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

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?

# 02 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.



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.

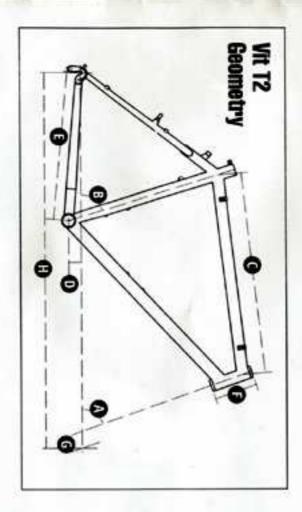
Orange design S-bend powerstay rear end gives a crank-to-dirt power transfer you won't believe, combine that with the legendary rider comfort the E-series bikes have always given – after all battered rider is a tired rider – and you have a race winning formula.

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 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.

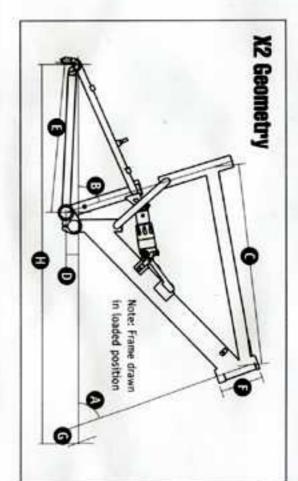


FRAME SIZE (inches)	17	19	21
A. Head angle (°)	70.5	70.5	70.5
B. Seat angle (°)	73	73	73
C. Top tube length (mm)	546.4	565.2	585
D. Bottom bracket height (mm)	m) 35	35	35
E. Chainstay length (mm)	420	420	420
F. Head tube length (mm)	85	120	140
G. Fork offset (mm)	45	45	45
H. Wheelbase (mm)	1039.3	1056.8	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	all seat posts 25.4 mm, shimmed to 28.2 mm	to 28.2 mm
Frame weight (grams)	1360	1480	1500

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

Specifications are liable to change without notice.

velopment work able in the future tings with riders

> United Kingdom: Orange Mountain Bikes Limited, PO Box 100, Penrith, Cumbria CA10 2DE For the latest information see your Orange dealer or contact:

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







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

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



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

function. With the pivot point so close to the bottom bracket, whether works! There are no complex, maintenance hungry linkages - no fuss, just but in simple terms, the Orange single pivot URT design rear triangle just URT, DRT, which way? The debate goes on. Both systems have their place, 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.