

Orange

MOUNTAIN BIKES

ENGLAND

The Orange competitive streak



The successful ongoing development of Orange mountain bikes relies in no small part on the efforts of all those

ive streak

















who have taken them into the competitive arena at whatever level. We're proud that so many have triumphed.

The heart of a bike company

"Our excitement over new designs, and getting to test them, is as strong as ever. For Steve and I, Orange isn't a job. I think in some ways its like being in Charlie's Chocolate Factory and we both have a golden ticket."

Lester Noble, 1999

A commitment to the committed

Orange is a small company formed, owned and run by mountain bike enthusiasts. We have a commitment to providing true high performance bikes for dedicated mountain bike riders and racers. Our aim is to produce the most comfortable and efficient bikes for the demands of those committed to the sport of mountain biking.



Steve Wade, Spain 99

No compromises

Before Orange, the majority of mountain bikes sold were disguised to look like off-road machines but were really aimed to fulfil the requirements of the fashion conscious city rider. The riding position was too upright and cramped for efficient off road riding, corners were cut with essential but easily overlooked components. This runs true even today with some manufacturers still prepared to compromise the frame so they can afford to 'overspec' the rear derailleur in an effort to try and fool customers into thinking they are getting value for money. This runs against the grain of the Orange philosophy. With the frame being the prerequisite of performance, Orange pay particular attention to both the design and materials used on all parts of the bike. After choosing the appropriate material for the main triangle, the design and material of the seatstays, swingarm or even dropouts are equally significant, yet failure to recognise their importance can dramatically spoil the bike's characteristics. We don't take shortcuts- we build real mountain bikes from the metal up. At Orange the frame is king.



Lester Noble, Spain 99

Competitive pedigree

Orange is captivated by off-road riding and racing. We thrive on competition and it is this inbred competitive spirit which has produced the pedigree to achieve true performance machines. This passion and racing knowledge runs throughout the heart of the company. Orange came about because of Lester Noble and Steve Wade's search for the perfect bike to ride and race. In 1986 that bike did not not exist, so the only way to ride it was to create it. Both quickly became known on the racing circuit. Lester rode for the British team right back in 1987, and with their first design, finished top Brit in the World championship of that year. Steve, after finally finding some time away from his welding torch, made his mark by winning the silver medal of the 1996
National championships.





Rachel Gordon
Team Orange rider



A race proven Animal

Orange have always advocated the benefits of race proven products. As well as our own Team Orange riders, over the last two years we have also had a fruitful and mutually beneficial relationship with the charismatic and high flying Team Animal Orange. The riders who are involved in racing Orange are not just some of the quickest riders on the planet, but they also have an astute engineering awareness and so are able to correlate Steve's prototypes more accurately. Their feedback direct from the heat of national and international competition has assisted Steve with the development of the monocoque chassis technology bringing it forward at an amazing rate- and it also helps in determining frame angles,length of the chainstay, height of the bottom bracket, the size of the top tube, reach and rise of the stem, to best suit each bike's aims. Their ability to push a bike to the limits whilst at the same time evaluate its performance, is something which no amount of bench testing and computer modelling can simulate whether that be for Downhill or Cross Country. This marriage between design and 'in-the-saddle' evaluation is directly responsible for the bikes Tim Ponting used to win the 1999 RAV4 British National Series Pro Elite Downhill Championship.

So although you may know Team Animal Orange as bunch of fantastic riders, to us they are that and much, much, more.



Tim Ponting – 1999

"We wanted to work with someone and actually have input into designing a bike. With Orange if something's not quite right, we can get them to fiddle around and change it because everything is made in sunny Halifax"

Steve Kitchin – Team Animal, 99



Tim Ponting's 1999 RAV 4 Series Winning Patriot

British born and bred



Still playing after all these years

Living and working in the heart of mountain bike country, Steve and Lester need little persuasion to ride what they build. Not in an ironic 'keep in touch with the product' sense, but simply because they love riding. Both extensively ride and test designs in the real world. British built Orange bikes make their mark whether it be in the rain and mud of northern England, the dry dusty trails of Spain, the Nevada desert, or even, in Steve's case, the intensity of competing in the Mega Avalanche Downhill race in the Alps.

No fence around the Orange Tree

New designs come not from the pressure of sales, marketing or accountants but from Steve, Lester and the team riders who just want to have the best bike. The philosophy of not accepting the boundaries that constrain others has run from those humble beginnings through to the Championship winning bikes Orange produce today.

Tick Tock, Tick Tock

Some might say that that our desire to create the best mountain bike now borders on obsession as we forever strive towards improving standards in a world where performance can be measured in hundredths of a second. Okay, on the race track, better can be determined by the tick of the stopwatch, however this is not the only criteria for establishing a successful design. A bike also has to be in harmony with the rider. Even riders tuned to the demands of world championship competition can find their energy and stamina quickly drained by the rigours imposed by radical design.





Everybody is a Team rider

At Orange we are in the unique position of building both production and one-off custom framesets and bikes. This translates into you receiving exactly the same care and attention, on exactly the same bike, as the Orange Team rider. No other mountain bike manufacturer deals so effectively with both markets, neither would they entertain a production run of only 10 frames to supply those riders who are looking for extreme sizes. All this gives Orange a unique edge.

Tim Tim

Experimentation with new design concepts and components leads to deeper insight into the requirements of a performance mountain bike. And it is this insight which results in results, right from Tim Davies and our first production Clockwork winning 1989 National championship through to Tim Pointing and the Patriot winning the National Downhill championships in 1999.



Northern roots

The Pennines and Yorkshire Dales provide an appropriate backdrop to our Halifax manufacturing and design house plus our factory assembly plant. This gives us the flexibility to source equipment from anywhere in the world, and choose the best components, regardless of their country of origin. And sometimes we don't have to look far; we have a very amiable relationship with Hope, acknowledged as the maker of the best disc brakes and situated on our doorstep. This enables us to fit Hope disc compatible hubs, on our handbuilt wheels, as standard to all our Pro equipped bikes and above. So if your purse doesn't stretch to getting us to fit disc brakes when you order, at least the change is easy on your pocket later on.

Mud Glorious Mud

The watchful eye of the Orange R&D Team ensures that if any new componentry comes onto the scene offering a significant step forward in function and achieves the Orange seal of approval for durability, it will become available on an Orange mountain bike. We also make it a policy of not underestimating the value of building frames to suit different conditions. Suffice to say that every Orange sold in the UK is built to take on UK conditions, warts and all. Our ability to design and build the best frames coupled with our flexible assembly plant means that an Orange bike has its own unique identity; real, off-the-peg, off-road machines.

Back to the Three R's

Attention to detail where the frame is concerned is the reason why Orange bikes are always tagged with 'great handling' in independent tests. And how is it, that an Orange bike always comes out on the right side of 'rigid' or 'harsh", 'resilient' or 'flexible'? Well obviously design, materials, experience, all play their part, but the most important starting point is all to do with the Orange Three R's: Riding, Riding and Riding.



Performance through innovation

"Bike design should not be about compromise. For example, getting Horiz-Hold right was a pain, people even said it couldn't be done, but we knew it would work. Now we've done it, it wins and we've proved a point."

Steve Wade, 99

Though we are slaves to our CAD stations, and still have the formula books for working out stresses in cantilevered beams, there's still no substitute for riding what we've built - testing to see if what we think will work, really will work. No amount of computer modelling can replace a craftsman's feel for the metal he is working with. No amount of finite element analysis can reproduce the feel of 'bottoming out' a suspension bike after casing a double jump. In this world of click-button CNC trickery, it's easy to lose touch with real-world experience and that indeterminate 'feel'. That's why the monocoque bike you buy from us will be welded by the same hands that welds Team Animal's bikes. In the same jigs. Assembled by the same people.

To create the finest mountain bikes around calls for clear thought and intelligent design. Radical innovations using fly-by-night materials? No thanks. We use proven engineering principles applied to produce the best results.

Take our monocoque construction. It's a sheet of aluminium, bent about and welded up, right? Sure, that's the principle, but as we found out whilst developing our factory-secret welding and heat treating processes it's a complex yet ultimately optimal method for making our high-strength, high-impact bikes, and our lighter weight ones too.

HORIZ-HOLD ELPR
enhanced lateral pivot rigidity

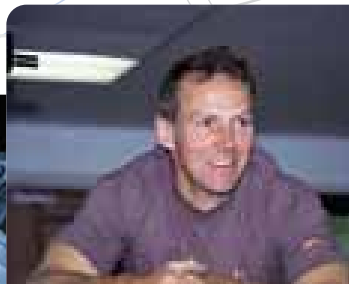


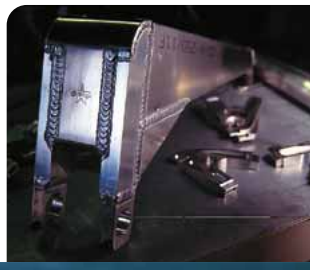
Horiz-Hold pivot

All suspension bikes have pivots, but no bike has a pivot with the precision and integrity of our Horiz-Hold pivot system. Using a stub-axle design welded into the frame, rather than a 'hole and bolt' system like other manufacturers, it took months of intense concentration, prototyping and redesigns and different manufacturing techniques to get a pivot welded directly into the frame. The benefit? Because there's no tolerance between the axle and the frame (as they are one unit), there's no slop at the rear wheel. This is especially important because play at the front is magnified by the time it reaches the rear axle. We kept this fact in mind when deciding on a wider sealed bearing race rather than compromise lateral rigidity by choosing a slim design. Horiz-hold is the first step in getting a better suspension bike.

The second step is to make sure that the stiffness that's built into the pivot system isn't lost by a flexible swingarm. When we got involved with Team Animal, we found that their requirements for suspension travel were secondary to their needs for lateral rigidity. Whilst we had been looking at smooth up and down movement, the speeds and load situations they were







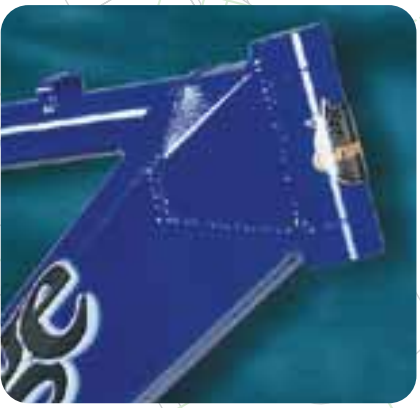
creating on a bike meant that they were flexing the swingarm, causing tracking problems. Any lateral deflection whilst riding a bike at speed means that it doesn't matter how much suspension travel you have – if you cant keep it on that tight smooth line, it's pointless. Make a bike track perfectly and a rider can pick the smoothest route with confidence, saving suspension travel for absorbing the hits.



Light Beam technology

Developed after we took tubular swingarm technology as far as we could– ending up with a rock solid swingarm that worked but weighed a ton. So we switched each leg into a large box section, then after going bigger and bigger on the cross member tubes, we eventually switched to a large monobox to connect the two arms and arrived at fantastic lateral rigidity. One big section monocoque 'Lite Beam' design, it did twice the job at far less weight.





True Track Head column

The third part of the monocoque benefit lay in how sure tracking could be by reinforcing the section joining the downtube to the headtube. By constructing the True Track head column we achieved super precise steering from a lightweight box which can have its thickness matched to the strain imposed by each individual design.

We built prototypes and the team loved them. So we started lightening them to test for breakage. But they didn't break. We ended up getting silly, using lighter and lighter materials to establish the breaking point, and the only way of getting to this point was to go too far. Tim Ponting eventually cracked one but that was only after months of intense, extreme use – in fact it was the same swing arm as seen on the bike he used on those extreme 25 foot jumps as published throughout the international press during 1999. Incredibly this was a very light unreinforced version which tracked perfectly yet had the much thinner section 6061 series aircraft grade alloy that we were prototyping on the Mr XC Ultra Light Beam swingarm. It is a section gauge we would never even consider for a production bike but it did demonstrate to us that stress analysis jigs go so far. For ideal feedback it should be complemented by plenty of 'in the saddle' stress riding . Monocoque might look big and heavy, the reality is different. It's super-rigid and way-light.

"We can't always assume that what we've designed and prototyped is right, we've got to be prepared to give it to the riders and let them give feedback, most importantly, when they tell you it could be better we have to listen and make the changes."

Lester Noble, 99



Typical Orange, monostay simplicity. Elegance and performance.



The Bikes



The Opti-gizmo performance indicator

Orange frames offer the ultimate in performance. Each frame is tailored for specific use. To help you match our frame with your talents and preferences, you will see an 'Opti-gizmo' for each frame that will help you choose the right one. The Opti-gizmo's optimum icon ( ) shows what the bike was specifically designed for. However, the indicator bars show where each model also excels in other disciplines. Please be aware that the Opti-gizmo is only a guide to help you before visiting your local Orange specialist dealer.

Mr O

Heavy-duty pro-spec downhill bike for tackling fearsome World Cup courses.

"...no flexing around with lots of pivots, one big main swing-arm pivot running on a cartridge bearing without bushings keep it all really smooth." **DIRT**

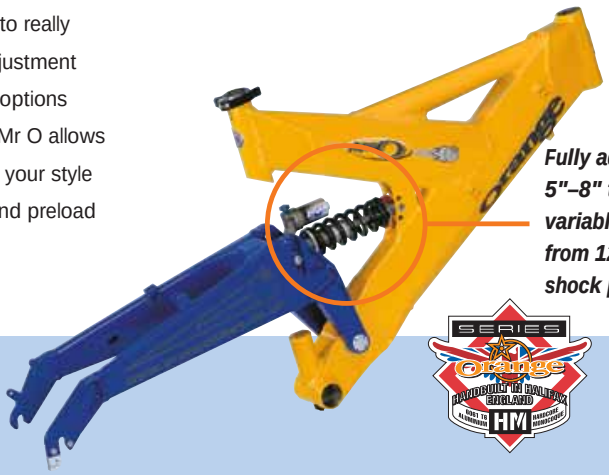








World Cup level Downhill competition demands a unique type of bike. With courses becoming more technical year-on-year, these machines are developing into a breed that makes them appear far removed from 'conventional' mountain bikes. Mr O has evolved with a torsional strut, bracing the front triangle and adding increased stiffness to the already strong monocoque frame. This directs every bit of the rider's input into really carving the corners and exiting fast. With fine adjustment from five to eight inches of rear wheel travel and options between a flat and rising rate to eat the bumps, Mr O allows you to dial in the settings to entirely complement your style of riding. Not forgetting compression, rebound and preload shock adjustment as well, you have almost infinite possibilities to tune the ride. With its big travel and long wheelbase stability, Mr O is ideal for the demands of the International Downhill circuit or anywhere that big bump performance is needed. Mr O soaks up the hits - if you are into gnarly downhilling this is the bike for you.

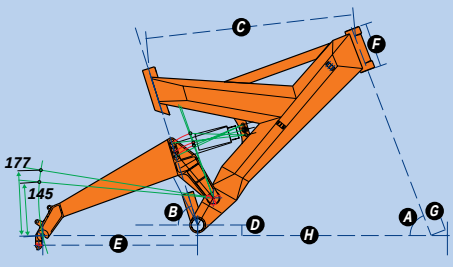


Fully adjustable 5"–8" travel and variable shock rate from 12 possible shock positions.



The Facts

- ***Hand-built in Halifax heavy duty 6061 T6 aluminium monocoque.***
- ***Adjustable travel - 5in to 8in***
- ***Takes a triple chainset - ride back up those hills***



FRAME SIZE	18"
A. Head angle	69
B. Seat angle	72
C. Top tube length	560
D. BB height	0
E. Chainstay length	420
F. Head tube length	120
G. Fork offset	n/a
H. Wheelbase	1057
J. Rider height	One size
K. Stem length	65
L. Seat tube Ø	31.6

Unless otherwise indicated all measurements are in millimetres.

Patriot

Our original high performance FS bike for full-on competition or 'just riding'.









"The back end remains very active at all times... combined with the frame's incredible stiffness and stability, makes for a very fast bike across terrain where you need to put the power down... in other words, the bitty terrain that dominates most of the UK's downhill courses and the sort of terrain that most of us ride pretty much every time we're out. A top UK made all rounder for those who like to push the envelope."

TOTAL BIKE



Patriot LT

"It shocked a few people who didn't believe I could win downhills and duel on the same bike... If I had to sum it up in one word, I'd say 'dependability'."

Tim Ponting

Team Animal Orange

"It's an excellent all day bike with acres of potential"

MBR



Patriot LT



Patriot Pro



Full 6" travel and variable shock rate.

If you race on the downhill circuit you will be aware that 1999 was a transitional year, suddenly the goalposts were shifted. Whereas other manufacturers had continued on their quest to increase the amount of travel, and consequently weight, Steve and the crew had been secretly locked away in the prototyping room working on a bike that, incredibly, was cutting back on rear wheel travel. Designed and built in Britain for British courses, the brief was to increase lateral rigidity, restrict travel between 5 and 6 inches, shorten the wheelbase and to make it light! What the others hadn't realised was that UK DH courses differ massively from the small 'cliffs' of World Cup races. To be competitive on the intricate wooded courses associated with the north of England and the sprinting courses popular in the south, a lighter, sharper bike was required. Team Animal Orange recognised that to win on these courses they needed a bike which was quicker handling and most importantly could be pedaled hard, almost a duel bike with full suspension. Using our mono-coque construction techniques including True Track head column and Lite Beam swingarm, we achieved DH strong yet XC light with an incredible lateral rigidity due to a beefed up Horiz-Hold pivot.



The resulting chassis is one of the all time greats. How so? Well, it was last season's most successful UK DH bike, consistent on every course or any terrain (Robin Kitchin also qualified 6th at the final round of the World cup in Kaprun), and taking the RAV4 National Downhill Series under Team Animal's Tim Ponting. Not that success was restricted to downhill, it also out-performed the competition in Dual slalom finishing on the podium in every national round. For 'just riding' the Patriot has been a hit in every magazine test it's taken part in. It's fully XC capable whether trailing with your mates or getting to the top of the hill during your solitary DH training rides.

So, for those of you whose racing is predominately on the shorter intricate courses associated with the UK, the Patriot is next season's podium ticket.



Limited Edition Millenium Patriot

The Facts

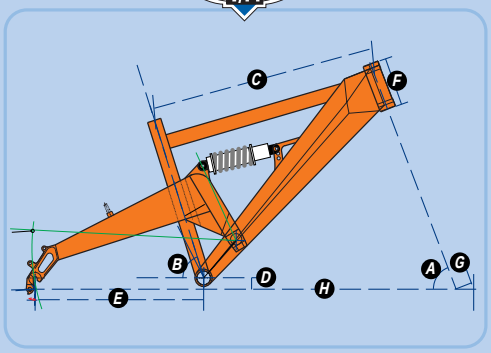
Model:

PATRIOT

- ***Handbuilt from custom specced and butted Series LM 6061 T6 tubing/aluminium monocoque.***
- ***RAV4 National DH series winner***
- ***The winningest DH bike on the '99 UK circuit.***
- ***Lightbeam swingarm for tracking accuracy and ride quality. Up to 6 inches of travel.***
- ***options of FOX coil over shock for big bump control.***



- ***Available in three models including long travel.***
- ***Hope Bulb hubs on Pro model, disc compatible.***
- ***Disc as standard on LT (Long Travel rear option must only be used with discs).***



FRAME SIZE	14"	16"	18"
A. Head angle	71°	71°	71°
B. Seat angle	73°	73°	73°
C. Top tube length	540	560	580
D. BB height	0	0	0
E. Chainstay length	420	420	420
F. Head tube length	120	120	120
G. Fork offset	Dependent on fork fitted		
H. Wheelbase	Dependent on fork fitted		
J. Rider height	4'6"-5'8"	5'6"-5'10"	5'8"-6'1"
K. Stem length	Dependent on stem fitted		
L. Seat tube Ø	27.2 shimmed to 31.6		

Unless otherwise indicated all measurements are in millimetres.

Sub5 & Mr XC

Two bikes, one aim - fast efficient XC use. If speed's your thing, then Mr XC is the perfect machine to hone your competitive edge. Sub5 is designed for the trail rider with attitude.









Code name Mr versatility. If you're the type of person who doesn't have a pigeon hole view on mountain biking, who can't be categorised any further down than 'mountain biker', who looks to the different disciplines listed in the Optomiser Chart at the side of this page and with drooling mouth wants to tick every one of them- then the Sub 5 is the bike for you. 5inches of Fox Air succulent rear wheel travel combined on a super lightweight monocoque construction with all the Orange trimmings, Horiz-Hold pivot, Ultra Lite Beam swing arm, and True Track head column designed for all travel single crown forks.

Cloned from the championship winning Patriot and Mr XC, the Sub 5 takes hardcore trail blazing into a completely different fun park. Whereas suspension was normally seen as a drag when riding uphill, the lightweight Sub 5 glides to the top smoothing out all the bumps and maintains traction every step of the way. Then, when your head touches the clouds, drop your saddle, (the full length of your seatpost), tighten up your chin strap, and rip downhill with the comfort and precision normally only associated with top

"...the frame rides brilliantly. Decent weight and extremely stiff and abuse-proof with an impressive amount of plush, trail-tracking travel. It's an energy-saver, hill-tamer and pulse-racer all in one neat British-built package."

Maximum Mountain Bike





Ultra Light Beam monocoque swing arm and Horiz-Hold pivot system feature on both Mr XC and Sub5.

HORIZ-HOLD
ELPR
enhanced lateral pivot rigidity



It has been said that good frame building achieves the status of an art form, but we say this can only be achieved through design and engineering perfection; form must follow function. Mr XC demonstrates the point perfectly. Monocoque construction married together with Orange tubular technology may look unusual but to anybody who wants to race top flight competition in comfort, Mr XC represents a Rembrandt.

Each tube on the tubular main frame is custom specified according to frame size and position in the frame, to keep weight to a minimum. Yet lateral rigidity is unequalled for a lightweight cross country suspension bike by virtue of our unique Horiz-Hold pivot and our Ultra Lite Beam monocoque swing arm. The result is a chassis that gains its strength not only from the material used, but also the placement of that material. Suspension travel can easily be matched to each individual's weight and taste by virture of the highly acclaimed Fox Air/oil shocks delivering from 3 to 5 inches of plush rear wheel action.

New to the world of XC racing, race proven after its win in the 1999 Scottish National Championships, and trail proven with thousands of miles under its belt, Mr XC is the bike you need when you're looking to go at the speed of Lite.

"Where the Orange also leads the way was in rear end stiffness. The box section swingarm and Horiz-Hold pivot did their job well, stamping out any rear end flex."
Cycling Today

"Hi Lester,
Just got back from the Scottish Nat. Champs. I won Gold in the XC."
Email from Rachael Gordon
Team Orange, 99









The Facts

Models:

SUB5 Mr.XC

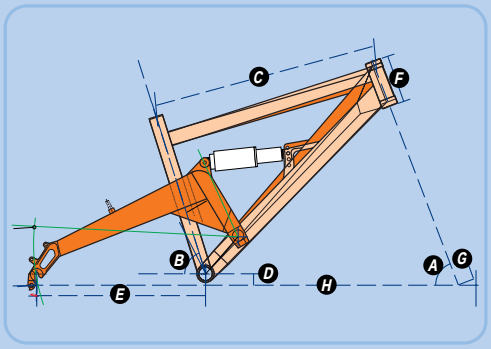
- ***Developed for high speed XC use***
- ***Handbuilt from custom specced and butted 6061 T6 aluminium***
- ***Ultralightbeam swingarm provides optimal travel and stiffness***
- ***Choose from ultra lightweight tubular or monocoque design.***











FRAME SIZE	14"	16"	18"	20"
A. Head angle	71°	71°	71°	71°
B. Seat angle	73°	73°	73°	73°
C. Top tube length	540	560	580	590
D. BB height	0	0	0	0
E. Chainstay length	420	420	420	420
F. Head tube length	120	120	120	120
G. Fork offset	Dependent on fork fitted			
H. Wheelbase	Dependent on fork fitted			
J. Rider height	4'6"-5'8"	5'6"-5'10"	5'8"-6'1"	6'0"-6'4"
K. Stem length	70	90	110	130
L. Seat tube Ø	27.2	27.2	27.2	27.2

Unless otherwise indicated all measurements are in millimetres.

MsIsle & Airo

Ultimate hard-tail jump bikes for new-school trailriding.









The world of pro-level dual slalom is a tough one. Riders demand strength, durability and a ride that will allow lines to be repeatedly hit with pinpoint precision. For demos and dirt jumps a frame has got to have the integrity to stand repeated beatings, bad landings and huge jumps. MsIsle is Pro-Issue to Team Animal, and the frame you can buy will be a berm-banging hardtail identical to the ones they ride. A Quattro Box rear triangle holds everything in track when you're sprinting hard or nailing turns. The monocoque downtube, including True Track Head column, holds everything in line for power-pedalling and steering accuracy in the heat of the competition.

"...a chunky small framed trail bike offering a fast responsive ride, a long top tube reach, enough damage limitation features to give crash 'n burners full confidence, the manoeverability and reflexes of a bat on steroids and an adaptability that will attract interest from a far wider field than the niche market at which many of these new breed hardtails are aimed." **MBUK**





Reinforced monocoque construction of the unique True Track head column takes the brunt of impacts, allows the use of triple clamp forks and makes for deadly accurate tracking.



With big gussets, box section ali and butch CNCed drop outs, the Quattro Box rear triangle keep the back end planted.



A ground-up dirt bike, this is the one bike in our range designed not to keep its wheels firmly on the trail. If you're looking to pull off the big moves either trials style or on the dirt jumps, then Air O is the tool for the job. With its hand built aluminium custom butted tubeset and stiff Quattro Box rear triangle, all the power you put through the pedals goes into giving you the speed you need to get maximum air time. With its 3mm (think 'thick and tough') downtube and gusseting where it counts to spread forces away from critical weld areas, the Air O is specifically designed for the rough and tumble of take off and landing. A tricks and stunts special – test pilot required!



"The bike hits the power band instantly... ...Flies as true as a locked on Exocet. A stonker" **DIRT**



The Facts

Models:

MsIsle/AIRO

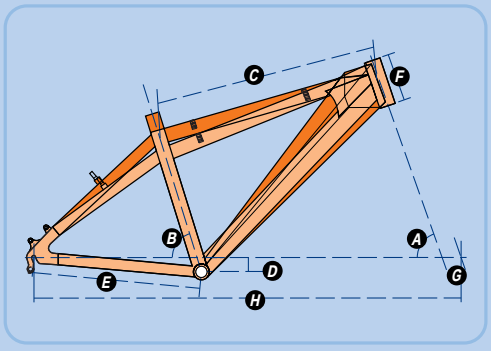
- ***Handbuilt from custom specced 6061 T6 Series T/M(MsIsle)/ Series HD(Airo) dirt specific tubing.***
- ***Quattro Box rear triangle takes a beating and comes back for more.***
- ***The ultimate fun-time pairing.***
- ***Choose from tough tubular or monocoque design.***











FRAME SIZE	14"	16"	18"(MsIsle only)
A. Head angle	71°	71°	71°
B. Seat angle	73°	73°	73°
C. Top tube length	543	565	580
D. BB height	35	35	35
E. Chainstay length	420	420	420
F. Head tube length	120	120	120
G. Fork offset	Dependent on fork fitted		
H. Wheelbase	Dependent on fork fitted		
J. Rider height	5'1"-5'6"	5'5"-5'10"	5'6"-6'1"
K. Stem length	80	80	110
L. Seat tube Ø	27.2	27.2	27.2

Unless otherwise indicated all measurements are in millimetres.

E4

Thoroughbred race chassis for maximum power extraction.









For pure XC racing, many riders prefer the instant acceleration kick of a hard-tail chassis. We're not here to argue for or against suspension – each has its place. I f you are choosing a hard-tail frame for competition then you need that little bit extra and the E4 has it in our custom specified Easton Elite Superlight tubing. We've always advocated the benefits of the monostay and along with the bulged, swaged, and 'S' shaped chain and seat stays it provides a compliant, comfortable and day-long ride, with the kick-and-go response that you need from a lightweight race bike. Razor sharp handling, ultra light weight and Championship winning performance blend into a chassis with race blood coursing through its veins, yet the E4 also makes an ideal trail bike for those riders looking for a machine that will cover large distances at race speeds. Only made in limited numbers you'll have to be quick to catch one.

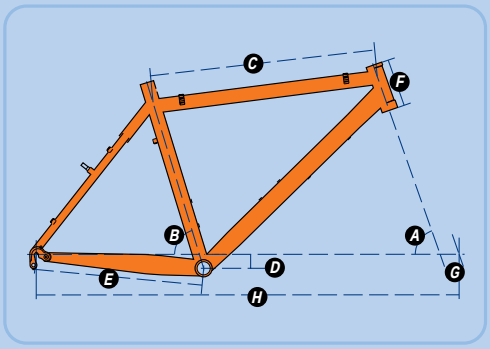
"Possibly one of the finest examples of an aluminium hardtail frame around. Does whatever you want - fast XC use or racing. Day long comfort with sprint performance. It's perfect."

www.bikemagic.com



The Facts

- ***Easton Elite super light double butted 7005 aluminium tubeset.***
- ***Race developed geometry with high speed handling***
- ***Lightest and strongest in its class***



FRAME SIZE	17"	19"
A. Head angle	70.5	70.5
B. Seat angle	73	73
C. Top tube length	546	565
D. BB height	35	35
E. Chainstay length	420	420
F. Head tube length	100	120
G. Fork offset	45	45
H. Wheelbase	1043	1059
J. Rider height	5'6"-5'9"	5'8"-6'1"
K. Stem length	90	110
L. Seat tube Ø	26.8	26.8

Unless otherwise indicated all measurements are in millimetres.

evO2

A real riders bike – the more you put in the more the evO2 will give you back.







evO2 Limited Edition

It's not mechanically possible to build 'fun' into a bike yet we've achieved it on the evO2. Sharing similar geometry to our Championship winning E4, the evO2 gets its unique feel from the tuned chassis. At the heart, its huge custom butted swaged downtube is designed to deflect less under steering torque giving great cornering performance and providing strength on landing after those unexpected moments of air time. Combine that downtube with the rest of our Series 14 7005 aircraft grade tubing beefy gussets and a design which produces superb power transfer and you have a machine that will sprint, corner, climb, descend with less rider effort and more precision, leaving you just to get on and enjoy the ride.

" ..a bike that lets you ride how you want to ride, where you want to ride. Jumps, trails, races, whatever. This bike will do it all with confidence."

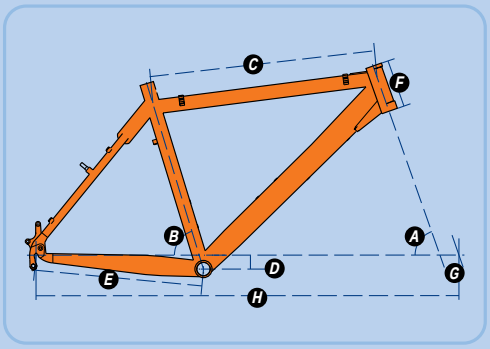
Maximum Mountain Bike



evO2

The Facts

- ***Supersize Series 14 Aluminium DB 7005 custom tubeset***
- ***Day-ride comfort with durability and control***
- ***Built to stand the knocks, but light with it***



FRAME SIZE	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	525	546	565	585
D. BB height	35	35	35	35
E. Chainstay length	420	420	420	420
F. Head tube length	100	100	120	140
G. Fork offset	45	45	45	45
H. Wheelbase	1025	1043	1059	1074
J. Rider height	5'3"-5'7"	5'6"-5'9"	5'8"-6'1"	6'0"-6'4"
K. Stem length	70	90	110	130
L. Seat tube Ø	27.2	27.2	27.2	27.2

Unless otherwise indicated all measurements are in millimetres.

P7

The hardcore trail tool for lovers of the real steel feel









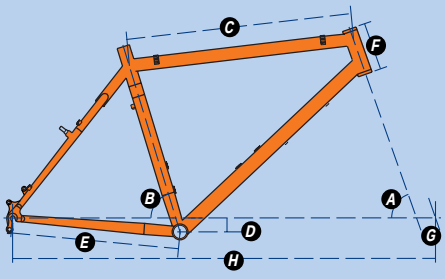
Don't dismiss CroMo steel frames as being part of that retro/fashion thing. The cold hard facts are that steel has been used as a structural material for mountain bikes for so long that some may see it as old fashioned. Far from dead, steel frames have never been so technically advanced. In terms of ride quality, feel and character, few aluminium frames can compare with the hand crafted custom steel frame. And that's exactly what the P7 is, with its custom drawn heat treated Series 8 tubing, hand welded into a lightweight chassis that comes alive under your pedal strokes. Built to take the toughest abuse in the harshest conditions, reliable, dependable and still the standard by which all other high performance CroMo chassis are judged, the P7 is the bike for the hardcore obsessive. It won't let fashion stand in its way.

"Steel bikes are getting increasingly hard to find as the price of lighter aluminium frames drop ever lower, but they should still have a definite place in the rugged riders heart. If you're after dependable, bombproof performance with lively feel then seek out the slim tubes of the P7. Steel is dead. Long live steel." **Maximum Mountain Bike**



The Facts

- ***Series 8 Custom Butted CroMo tubeset***
- ***Custom built high performance steel framesets***
- ***Outfitted for racing or intensive trail work***



FRAME SIZE	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	524	544	563	583
D. BB height	35	35	35	35
E. Chainstay length	420	420	420	420
F. Head tube length	85	85	120	140
G. Fork offset	45	45	45	45
H. Wheelbase	1024	1039	1057	1070
J. Rider height	5'3"-5'7"	5'6"-5'9"	5'8"-6'1"	6'0"-6'4"
K. Stem length	70	90	110	130
L. Seat tube Ø	29.6	29.6	29.6	29.6

Unless otherwise indicated all measurements are in millimetres.

Gringo

The ultimate all round performance platform









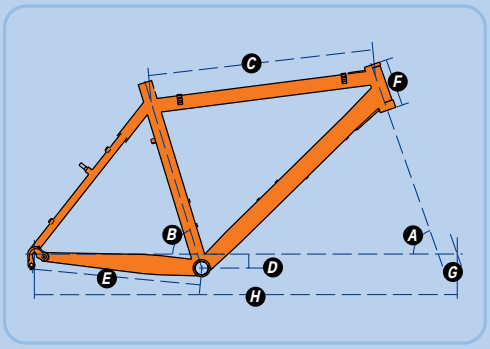
Launched last season, the Gringo was designed specifically for the rider who wanted the lightweight benefits of aluminium combined with the all round usability and comfort of steel. The Gringo's sturdy gusseted Series 12 butted 7005 aluminium frame has undergone some detail tweaking for this season with refined chainstay, new disc ready dropouts and a change in the cable routing. This all combines with the classic Orange geometry to improve an already impeccable frame. The Gringo is the bike for those who want the light weight aluminium ride ethic yet still desire the everyday workhorse of an all round mountain bike. Features like the monostay rear end and its huge mud clearance, rack mounts and Crud Catcher bosses mean that the Gringo is equally at home as a lightweight off road tourer as well as being the qualified trail blazer you need for the weekends.

"...the Gringo is a barrel-load of laughs. It's got the kind of dialled-in ride that flatters a rider's skills, at whatever level. It's equally adept on long uphill drags, fast fireroad descents and slow, tricky singletrack." **MBUK**



The Facts

- ***Series 12 Custom Butted Aluminium tubeset. Low weight, high performance***
- ***Streets ahead of other bikes in its class***
- ***Same evolved geometry and monostay rear triangle as our other hardtails.***



FRAME SIZE	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	525	546	565	585
D. BB height	35	35	35	35
E. Chainstay length	420	420	420	420
F. Head tube length	100	100	120	140
G. Fork offset	45	45	45	45
H. Wheelbase	1025	1043	1059	1074
J. Rider height	5'3"-5'7"	5'6"-5'9"	5'8"-6'1"	6'0"-6'4"
K. Stem length	70	90	110	130
L. Seat tube Ø	27.2	27.2	27.2	27.2

Unless otherwise indicated all measurements are in millimetres.

Cycle clothing

Functional clothing that keeps you comfortable, warm and dry whilst riding your bike



Check sleeve cycle top



Pertex shirt

Canvas combat shorts





Pertex shorts



CoolMax bib shorts

CoolMax shorts



Team Orange Dh Shirt







Socks

Check sleeve cycle top

Long sleeve. Eschler technical fabric cycle top with a casual look, subtle embroidered logos and a looser fit. Rear zip pocket.
Colours: red/check, blue/check.

Pertex shirt

Ultimate breathability combined with wind resistance makes it ideal for cruising, cycling or clubbing. Reflective stripes on arms, chest pocket and hidden zip pocket centre back.
Colours: orange, grey, indigo.

Pertex shorts

Extremely light and hard- wearing. 100% Pertex Extreme with internal mesh lining and CoolMax pad unseen from the outside. Features zip pockets and embroidered logos.
Colours: orange, grey, indigo.

Heavy duty canvas combat shorts

These shorts are for the heavy-duty players. Stone-washed canvas, they include a pad for comfort, a combat pocket on each leg, adjustable belt and legs and a small inside pocket for life's little necessities. ***Colour:*** sand.

CoolMax shorts

Super performing CoolMax, anatomic eight panel cut with moulded seamless reinforced Eschler pad, rubberised non-pull grippers, drawstring waist and Orange logos.

CoolMax bib shorts

Same design and fabric as CoolMax shorts with bib for the serious rider. The ultimate in comfort.

Team Orange downhill shirt

Short or long sleeve, the official Team Orange downhill race shirt. 100% Polyester, cut to fit over body armour. Orange logo on front Angry motif on back.

Team Orange tops

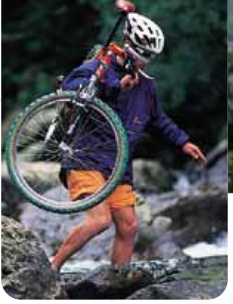
Short or long sleeve, the official Team Orange race shirt. 100% Orange PolyDri, brushed on the inside to enhance rapid moisture wicking. Long sleeve version also available.

Socks

Performance cycling socks with Orange logo. Smooth toe seam, open knitted section for ventilation, elastic top, true heel avoids bulky seam. Padded sole and toe for extra comfort.
Colours: white, black.











WindScreen

Simple Pertex Extreme shell. Fleece lined neck, packs into small bum bag, key pocket, reflective tape on back, draw-cord around neck, elasticated cuffs and hem.

Usage: cooler spring/summer days as a convenient pull over shell.

Colours: indigo, cherry.



WindShield

Pertex Extreme shell with Climonitor high-wicking lining. For warmer days, this versatile garment can be worn reversed for wind protection without the insulating effect of the lining. Draw-cord neck and hem, reflective tape front and back, three-quarter zip with cover flap, hand pockets, elasticated cuffs, bum bag, key pocket.

Usage: spring/autumn as a medium-weight warmer jacket.

Colours: indigo, cherry.



WindShelter

Reversible Pertex Extreme with ultra-soft yet extremely hard-wearing Italian micro-fibre fleece lining. Ventilated zip side panels, draw string neck, reflective tape on front and back, three-quarter zip with flap cover, two hand pockets, elasticated cuffs, bum bag, key pocket, drop back with cord on hem.

Usage: autumn/winter for cold weather and wind protection.

Colours: indigo, cherry.



Horrid Day jacket

The Orange Horrid Day jacket is a full waterproof garment. Made from Pertexion fabric this garment will protect you from wind and rain in equal measure. Breathable and waterproof, Pertexion provides superb moisture transport features that are essential for active sports whilst keeping the horrid stuff at bay.

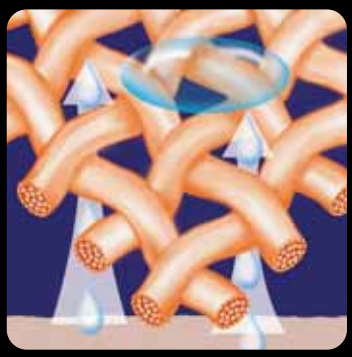
Usage: horrid days, of course.

Colours: indigo/black, cherry/indigo.

Pertex Extreme

Pertex Extreme is an advanced technical performance fabric from Perseverance Mills, made exclusively for Orange. Its micro filament weave means that it forms a solid barrier against wind. A hydrophilic yarn combined with a dense weave gives Pertex Extreme a high natural water resistance, yet the natural capillary action of the fibres quickly wick moisture from the inner to the outer surface, making this light fabric eminently breathable. Perfect for the Orange advanced technical jackets.

How the microfibre construction functions



External water droplets are too large to penetrate microfibre construction.

Tight construction of microfibres provide maximum insulation from the wind.

Perspiration molecules are small enough to pass through microfibre weave.

Pertexion

Pertexion is designed to give outstanding protection in severe wet weather. A lightweight full waterproof fabric which also affords total windproofing and excellent breathability.

The secret to Pertexion lies in its unique bi-component coating, comprising of a microporous and a hydrophillic poly-urethane element.

In simple terms this means that in a garment constructed from Pertexion you won't get wet.

Lesiure clothing

The Orange casual closet, something for every occasion (well, almost)





Printed T's



Re-TronicT-shirt



Panelled polo shirt



Waffle swet top



Baseball cap

Printed T's

100% cotton, pigment washed. Orange Mountain Bikes Winged logo. Designs can change and new ones are introduced frequently. ***Colours:*** assorted.

Re-Tronic T-shirt

High quality T-shirt with contrast stripe on arms and rib around neck. Subtle Orange embroidered logo on chest and left hand corner. ***Colours:*** black/stone, brown/stone.

Panelled polo shirt

Three coloured panelled long sleeve polo shirt, just right for summer evenings and warm enough to wear in the winter.
Colours: black/cream/olive, olive/cream/black.

Waffle sweat

Not your ordinary sweatshirt, this heavily textured fabric is brushed on the inside for extra comfort, embroidered with Orange logo.
Colour: brown.

Grandad shirt

Tough, hard-wearing, 100% cotton over or under shirt. Embroidered logo on front and rear, long shirt tail and Orange stud Buttons. Mr or Mrs Versatile.
Colour: grey.

Mechanic trousers

100% cotton. These comfortable pants have got to be tried to be believed. Loose fitting but tapered around the ankle, embroidered with Orange logo.
Colour: grey.

Embossed zip top pullover fleece

Italian fleece, brewed as a special, mixing a cotton fleck with more hard-wearing polyester producing a garment that is light, warm and hangs superbly. Elephant cord trim, two chest pockets and large embossed logo on back.
Colours: stone, orange.

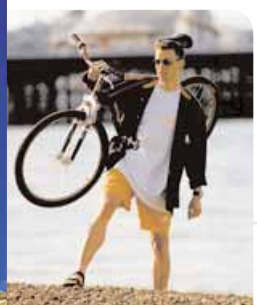
Baseball caps

Heavy duty embroidered baseball caps. Dark grey with Orange Mountain Bikes wing logo.

Needlecord padded jacket

Everybody's favourite, this year in a warm red check, heavily quilted and padded for comfort and protection on those long walks back from the pub.
Colours: red and green.







Grandad shirt



Zip top pullover



Needlecord padded jacket



Mechanic trousers

Components

Fitted as standard components on the Orange range, these juicy parts are also available separately for upgrading your existing set-up.

Friction Addiction grips

Super functional design made in dual compound kraton rubber with palm pad and Orange star design finger grip. Features cut guides for Grip Shift users and Zip Tie grooves for hardcore downhillers. Available in black or red. Come with Orange endplugs.



Box Stem

Rock solid rigidity. The perfect way to connect your bars to your Orange Monocoque chassis. CNC machined from 6061 billet, 10° rise, 80mm and 110mm reaches.



Stubby stem

Forged 6061 heat-treated aluminium, triple bolted front loader 11/8" 15° rise stem, 65mm reach.



Boner Fido ahead stem

Welded 6061 heat-treated aluminium, this front loading 11/8" 10° rise stem comes in 70mm, 90mm, 100mm, 110mm, 120mm, 130mm lengths and various colours.



Orange MM saddle

Angry Orange motif embroidered into leather titanium railed saddle with kevlar reinforced corners. Available in two colour schemes – grey and blue or red and black.





Angry Orange saddle

Angry Orange motif embroidered into leather titanium railed saddle with kevlar reinforced corners. Available in two colour schemes – grey and blue or red and black.

SuperCross 2 bars

This riser bar aimed at all round use, offers the higher position without the weight penalty of downhill bars. Features wide-bulge profile to add strength, however, it is not recommended for heavy downhill use. 6061 double butted heat-treated aluminium. 30mm rise, 9° sweep. 650mm wide.



HotRod 2 bars

An excellent no-nonsense lightweight bar. Now comes in a 600mm length for extra controllability. 2014 heat treated tri-butted duraluminium, 150 grams.

Orange juice bottle

Super lightweight plastic drink bottle. Large size with fast-flow nozzle for speedy fluid delivery. Ideal for racing.



X-Terminator 2 downhill bars

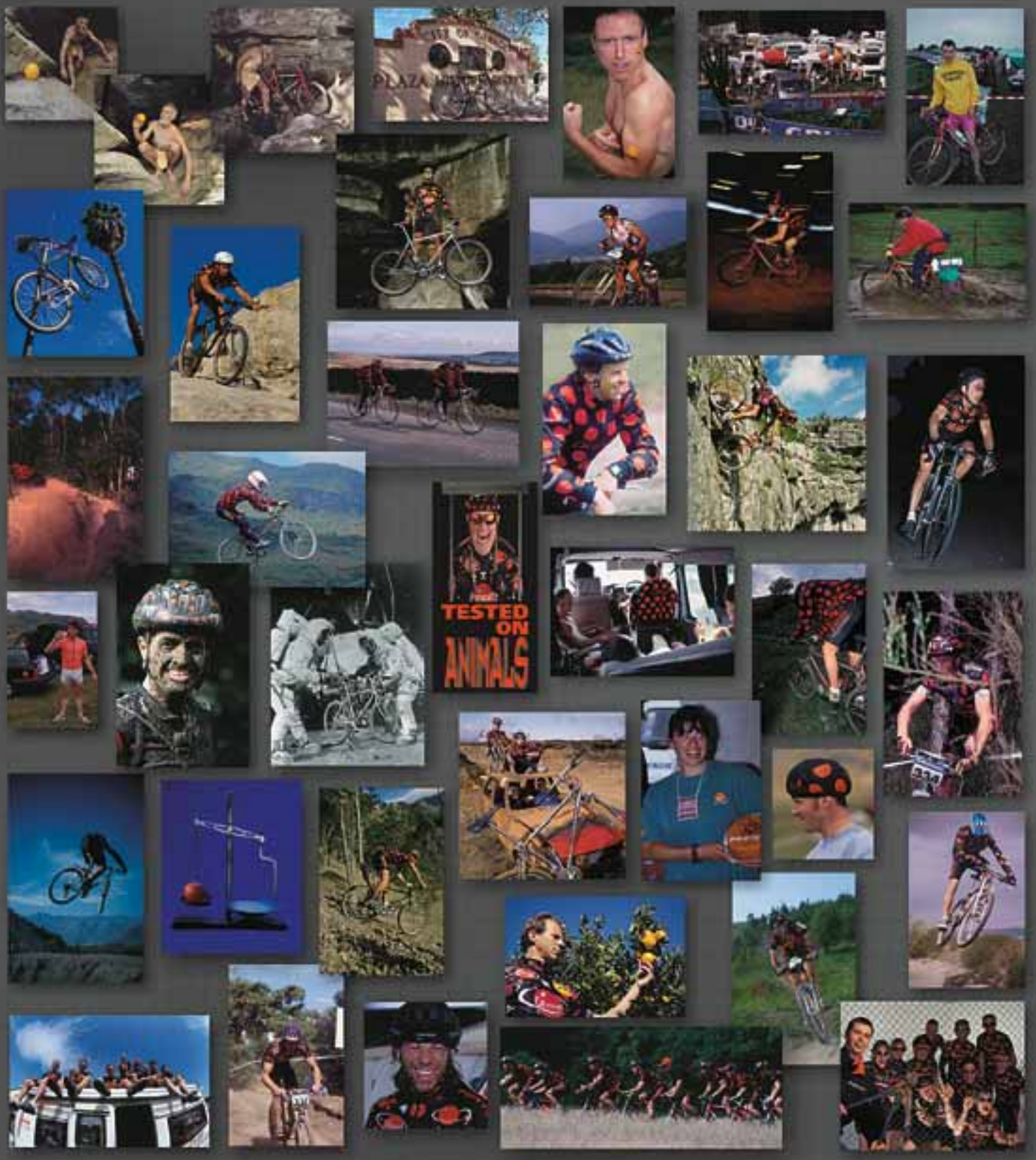
Designed for the stresses of downhill racing. Wide-bulge profile. Butted 3mm heat-treated 6061 aluminium. 50mm rise, 9° sweep, 700mm wide. These bars can be used with an optional cross brace if required.

"Considered components that offer rock solid performance and enhance the overall feel of any Orange bike"

www.bikemagic.com







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Bob Allen, Ian Casement, Paul Bliss, Michael Rose. Quote on back cover from This Game of Ghosts by Joe Simpson.

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'Planet Earth is 4,600 million years old. We can liken earth to a person of 46 years of age. Nothing is known about the first years of this person's life... only at the age of 42 did the Earth begin to flower. Dinosaurs and the great reptiles did not appear until one year ago when the planet was 45. Mammals arrived eight months ago and in the middle of last week man-like apes evolved into ape-like men and at the weekend, the last ice age enveloped the Earth.

Modern man has been around for four hours. During the last hour man took to agriculture. The Industrial Revolution began a minute ago. During those sixty seconds of biological time, modern man has made a rubbish tip of paradise.'

Please respect your planet and don't buzz other trail users.

Naturally, this brochure is printed on paper made from sustainable forests.



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