

Late 94 / 95?

**It's a big wide world out there and like life there are tracks which take you straight to your goal and others, frustratingly, which lead to a dead end. The knowledge acquired from years of "on the trail" experience means that in the world of mountain biking, Orange, like no other company, makes a bike tailored to putting you on the right track from day one**



**O R A N G E M O U N T A I N B I K E S**



**We at Orange  
set out as a group of  
mountain bike racers  
with a vision to push back  
the barriers in  
mountain bike technology.**

**We probably work harder than any company to produce machines that will out-climb, out-sprint, out-handle anything on the racing circuit, yet be comfortable enough for the longest expedition and docile enough on an easy ride with the family.**

Everyone who works at Orange is a keen biker, only interested in producing machines that he or she would enjoy riding, so it's hardly surprising that the company maxim is "only the best will do".

Directors Lester Noble and Steve Wade have both been top-flight competitors in mountain bike racing and know what it takes to be up there with the best. Indeed, from day one, Orange has had one of the biggest racing teams with feedback from its team members proving invaluable in development work. They'll suggest the smallest tweak if it will give them an edge in a race-improvements which rapidly find their way into production bikes.

Of course testing isn't just confined to racing circuits, many hundreds of prototypes are ridden from our R and D Centre in the Lake District. Proving grounds just don't come any tougher! When we've settled on a design it will be ideal for UK conditions and built to last.

Providing the technology for our prototypes are our back room boffins in Halifax, Yorkshire. They wax lyrical about such things as shaving off micro-grams to save weight or a new technique to improve strength and stiffness. They are restless characters who love exploring new materials and are not happy unless they are making things better. Incidentally, they are the people who will also assemble your bike, so you know it will work at 100% from the day you ride it away from your dealer.

Cyclists come in all shapes and sizes, and all have different riding styles, so to help you achieve a perfect ride, first time, we offer a number of options when ordering your Orange, some at the "standard" price, some as optional extras. All could save you on costly up-upgrades later on! (see inside for details).

**So if you're aiming for the winner's rostrum or simply want a bike that's great to ride, it's time to move up to an Orange.**



Orange founders: Steve Wade & Lester Noble



Just two of the wrecking crew: Dan Cook & Jonny Clay (above)



Orange Benelux at the '94 Belgium World Round



## Design Team

Since its inception in 1986, Orange has been captivated by off road racing. We thrive on competition, and it is this inbred competitive spirit which has produced the pedigree in our line of true performance machines.

Lester and Steve both have mountain bike backgrounds. Lester finished top Brit in the 1987 World Championships and Steve, in between his roles as Head Frame Builder and Designer, still actively races at the front in national competition.

Orange has an extremely high regard for the value of design feedback from the heat of top competition. The large number of riders chosen for Team Orange are not just some of the quickest riders in the world, but each also has engineering experience and thus able to correlate Steve's ideas more accurately. It is this feedback which enables Orange to enjoy successful reviews on all our production bikes. Just check out what the mountain biking press have to say about our current crop throughout the brochure.

"The Orange design team seem to get it right every time"  
MTB PRO.

"We've always been impressed with the handling feel of an Orange"  
MBUK.

# The new Orange range

is born out of a racing pedigree,

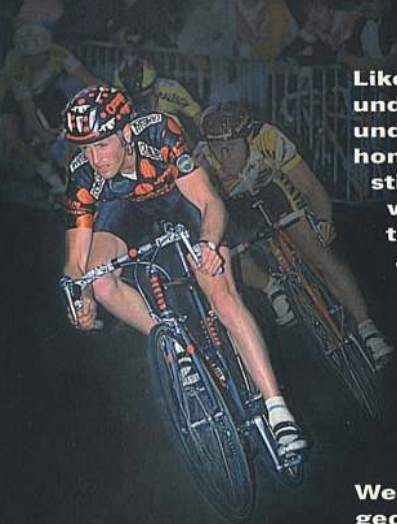
yet every model is equally at home

being ridden by a novice on a gentle ride.

Whilst all the models can, and have, put people on the

winner's rostrum, the further up the range you go the greater edge

you'll gain in terms of speed and comfort.



Like the best sports cars, Orange bikes are understated on the surface but very radical under the skin. Tubes are fashioned and honed to give the optimum strength and stiffness where it's needed, and to reduce weight where it's not. Micro butting varies throughout the construction to accommodate the numerous subtleties in the design.

The majority of our development time is spent on the trails of the UK, so you can be sure our bikes are built to handle every conceivable type of terrain you are likely to encounter.

We've spent years experimenting with frame geometry, fork and rear triangle configurations, but we always come back to the set-up that we know gives you the best balance when climbing, accelerating, downhill handling and not least - comfort. This is unlike "flashier" machines which can give you a "twitchy," harsh ride and either go uphill or downhill well. The popularity and consistently good results on the racing circuit are perhaps a good measure of the all round performance of an Orange. Note how many of them line up at the next starting grid at the next race.





**Every Orange frame  
is built from tubing selected  
by Steve Wade, the head  
"Torchmaster," to best suit the  
rider's requirements but even after  
the best, we go one step further.**

After selecting top line tubing we then individualise each tube by internally butting to ensure the strength, stiffness and weight is ideally suited to each frame's purpose. This customising process is labelled Orange "Series 7, 8, 9, and T butting" and shows the dedication that goes into ensuring that every frame out performs its peers. Orange series tubing is designed by us for us.

With performance being the prerequisite of any successful frame, particular attention is paid to the following areas:

### **Headset**

All our bikes use a 1" headset which, in our view, is the optimum size for a mountain bike. Oversize headsets are a classic use of marketing overkill. We leave other manufacturers to produce larger sizes, weighing down the bikes with too much metal in the fork steerers, stem quills, head tubes and bearing assemblies.

### **Wishbone Stays**

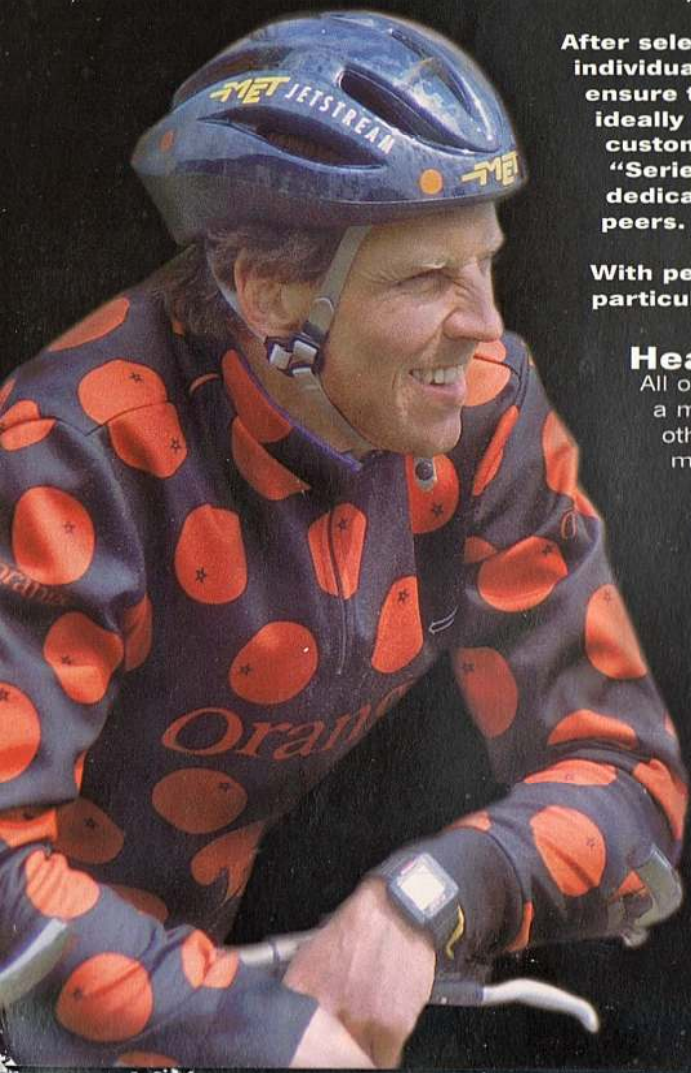
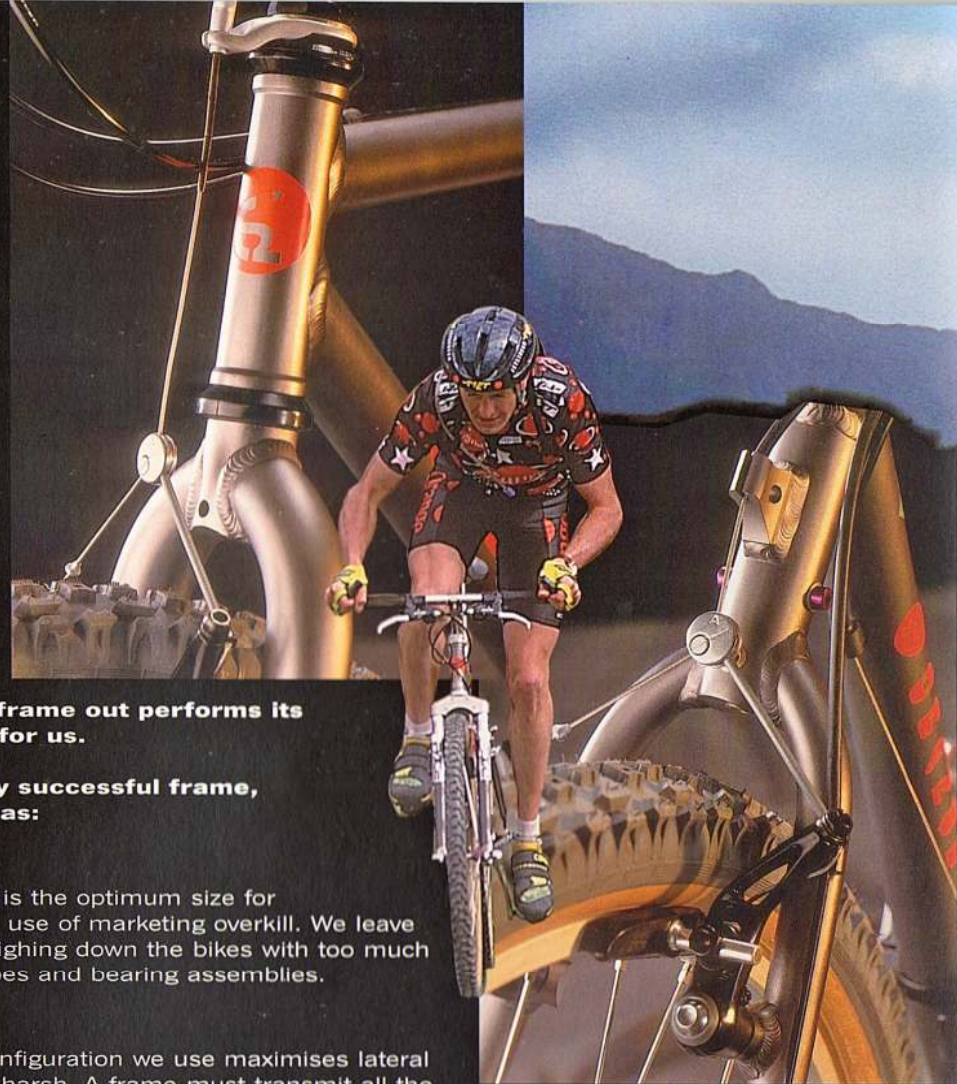
Now fitted right across the range, the stay configuration we use maximises lateral stiffness of the frame without making a ride harsh. A frame must transmit all the power applied at the pedal into turning the back wheel. It is by ensuring the chain stays and seat stays retain the rigidity of the bottom bracket that an Orange frame will deliver direct drive performance. With wishbone seats stays, brake flex too, is kept to a minimum and wheel clearance is good to ensure room for the mud to move. This is an area where three tubes are better than two.

### **Variable Geometry**

With 15", 17", 19" and 21" models it is important to have different geometry for the different rider sizes. That's why when we design our bikes we rope in riders from the low five footers to the high sixes. Using this information, we massage the tubing layouts to ensure a near custom fit. With the top tube, seat tube and seat angles varying throughout the size range, the chainstay length and steering geometry of the bikes is standard right across the range. That ensures that a rider on the clockwork STX can have a bike with the same handling traits as an XTR equipped Vit T. Our road frame, Dynamo has a race-proven geometry all of its own.

### **Steve Wade On Frames**

"To maximise on performance the rider has to attain total empathy with the machine at all times, on all terrain. Optimally the bike should complement the riders strengths and skills and compensate for weaknesses."



# Go anywhere, do anything. **CLOCKWORK** The bare minimum.



This was the name of our first ever British Championship winning frame, under Tim Davies in 1989.

Now, after five years of development, Tim's still riding an Orange and Clockwork is still as strong. With a Series 7 frame, which is as solid as the UK terrain is varied, this is the minimum requirement for proper off road work. Its custom drawn tubing, component spec options from STX to XTR means that Clockwork can be an everyday work horse, or a free flight racer. Sharing the innovations tried and tested by Team Orange, this is a high performance chassis for everyone. As capable in the hills as on the race track, Clockwork is just as well mannered on long climbs or steep mountain descents.



"It's great to be riding Orange again - the geometry of the bikes is perfect for my riding style." Tim Davies, MOUNTAIN BIKER.  
"Orange has stuck with slim lines and they've always been one of the best in balancing flex with stiffness". MTB PRO

# P7 Hammerhead, tested on animals.

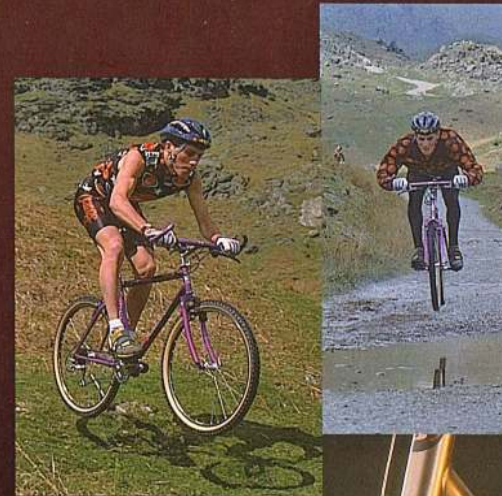


When P7 first hit the market, some people were confused. Here was a bike that was heavier than the previous Prestige, and yet we were pushing it as a new concept! The riders with a taste for the super-lightweight weren't sure about the theories, but the hard core riders rejoiced. P7 gives extra strength and stiffness in a hammerable, crash resistant chassis that is ideal for riders whose ideas of fun turn most people's stomachs. By specifying the profiles of the Series 8 microbutted tubing we could place the metal in the tube set to produce frames which are still light, but incredibly strong. Eating up drop-offs, big air and offroad abuse, this frame and fork is left standing when others have fallen by the wayside. An ideal platform suspension fork addition, or for use with the F7 fork design, this is one Orange tougher than the rest.



"It's designed for the rider who appreciates the feel that top-notch custom tubing can yield - the P7 is one kick-ass bike. Excellent frame, excellent handler."

WHICH MTB





Scientific,  
light,  
race bred,  
power.



**Aluminium frames arrived fairly early on in the development of mountain biking.** Though those first generation bikes were strong and did their job, they had compromises in several sectors. Not least, the problem for many aluminium builders was that the large tubing dictated large components, especially in the head-tube area. By fabricating Series 9 Max tubing, with a slimmer profile but superior strength, we were then able to use conventional components, rather than the overweight options. This is a frame years ahead of the rest of the market, with a true no-compromise design. While many contemporary aluminium frames are criticised for being overtly harsh, the E2 is praised for its comfort. It rides like someone's flattened the bumps out!



"The balance, feel, geometry - call it what you like - is pretty much race perfect on the E2; there is nothing it can't do well."  
"The E2 may be the best aluminium frame available - it rides that well."  
MOUNTAIN BIKER

# VIT T<sub>2</sub> ultimate, extreme, do no more.



It's been said that titanium is the ultimate metal for mountain bikes, but this is a leading statement that can confuse when you consider that there are several grades of titanium. Orange 3A1-2.5V Series T Seamless is designated Grade 9 quality, and as such, 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 good looking forever. We looked long and hard at the problems and assets of the material uses and have added something new to the titanium frame wars. With its unique wishbone rear stays, Vit T gives a ride with punch and rigidity. Its clean lines, sharp handling, rapid response and tough construction make it the top choice for a race or high performance bike. It's a chassis that excels when push comes to shove. Provide the power, steer the course and the bike will work with you. You can do no more....



"As a superlight high performance machine that will bring inspiration to your riding, the VIT T2 can't be faulted."  
"A winner from the first turn of the pedal."  
MTB PRO

**Tri, train, race,  
stand out,  
be different.** DYNAMO

**Though died-in-the-wool mountain bikers may consider road bikes to be something to be sneered at, here at Orange we take a different approach.**

Riding the road is an ideal supplement to off road when training for high level racing. Amongst the Team Orange riders, Jonny Clay has the highest level of road experience with a tally of road successes, and along with our duathlon champion Richard Allen, they were a great design team to develop the Dynamo. A proven geometry, altered a little for perfection and coupled with the application of our proven Series 9 Road butted aluminium construction, gives a bike with lightning speed and excellent stability, with the aluminium fork soaking up the potholes in the trail. If you want to get race fit, there are worse ways to do it.... By winning both road and triathlon events the Dynamo is fast becoming the professionals' choice.



"Not only is this shiny wonder a road racing bike, it is an extreme road bike. The Dynamo is tight, stiff and light....the bike tracks perfectly....it's a great ride."  
WINNING



# All Orange bikes are supplied with the best components manufacturers have to offer.

To give an example, Shimano, probably the most innovative manufacturer of mountain bike components in the world,

produce over a dozen off road groupsets, we offer their top five. And where we feel there is a void in these top five, we will mismatch a groupset to upgrade and improve its function. At Orange, we never downgrade or compromise the function.



## Customising your Spec.

No other manufacturer offers you so many options. You can get it right first time and also avoid expensive up-grades later on. It is particularly important to match the frame/stem length with your torso/leg length proportions, and your riding style, to gain the perfect riding position.

You can, for instance, specify from a range of stem lengths (3), frame sizes (3, with 4 on the "Clockwork"), shifters, tyres, as well as colours, and all at the "standard" price.

## Accessory Options.

At a time when the "aftermarket component" is king, Orange continues to produce some of the finest components on the market. With other manufacturers rallying round high quality component manufacturers to purchase the latest equipment, here at orange we design and refine our own. With our in-the-saddle testing procedure, we can throw mud, grit and time at component design, something that the in-the-office design teams can only dream of. The result? An integrated range of components that add high performance and style to any bike. Whilst these are being grabbed by other bike owners to fine tune their own machines, Orange customers

receive them as standard. As well as our lightweight established componentry such as the Lite Stick, 55's and the Stalks there are a whole new range of titanium components now available. These include stem, bar ends and bottom brackets, setting new standards for hi-tech componentry. And all of which cost much less than their one off price.

## Horses for Courses

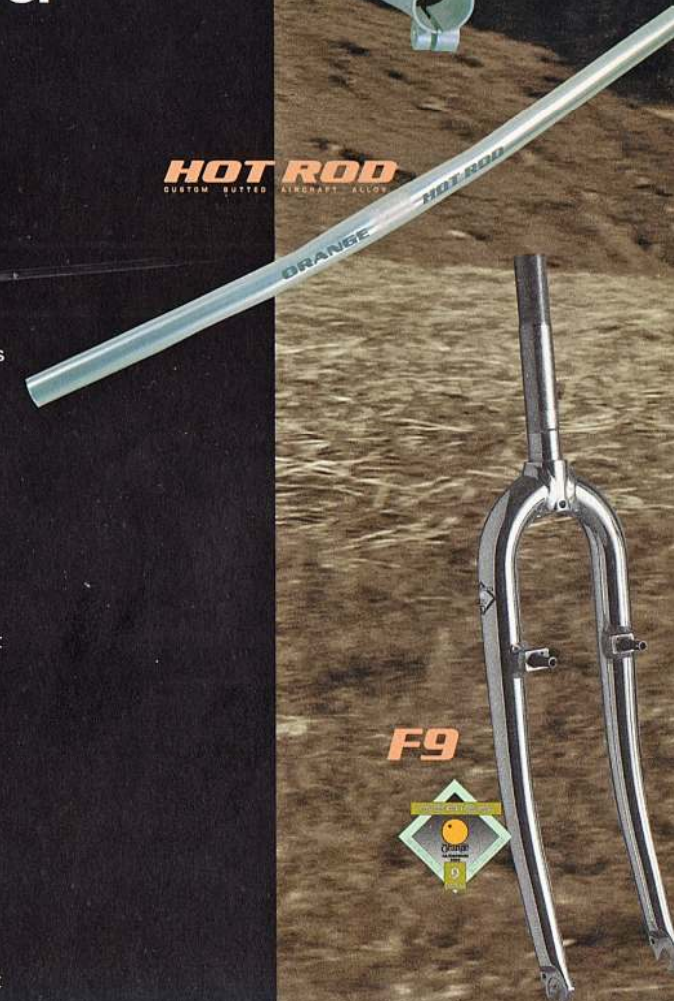
With mountain biking being a young and dynamic sport, new componentry is forever being hyped into the market. At Orange we would be the first to admit that all changes are not necessarily for the better. That is why we always try to retain a stock of those bits which have proved their pedigree and may out perform newer componentry in a particular application. For this reason we still list over bar thumbshifters in our options.

## Continual Update.

The watchful eye of the Orange R and D team will ensure that if any new componentry comes onto the scene offering a significant step forward and achieves the Orange seal of approval for durability, it will be available on an Orange mountain bike.



**HOT ROD**  
CUSTOM BUILT AIRCRAFT ALLOY





**Ti EDGE**



**ENDURO**



**5K 8**



**5K 8 Ti**



**5**



**L52**



**Ti BB**

# True to our seat of the pants design philosophy, all our clothing is developed to be effective in action.

Clothing designers can visualise stylish clothing in their sketch pads, but it's only the "hands on" approach that can ensure the garment is right on the trail.

It has not been easy to isolate only the effective materials as the specific nature of mountain biking means that garments that work well on tarmac are not necessarily right for off-road. Wind chill factors, flexibility of movement, weather proofing and on trail toughness are all important factors, without them you could be a victim of the weather. Likewise, off the trail we wanted clothing to show our allegiance to the brand. We've designs to do both.

In the Orange range of clothing, we have a range of garments that meets all of the situations that you're going to meet on the trail, or off it. From stylish T-shirts and Sweatshirts to the pinnacle of technical clothing with the Wind Shelter. We've put as much time into the clothing as we have into the development of the bikes. On the race track in the lycra race kit, in the bar in the leisure wear, on the high mountain in the Windshelter, Orange clothing can go anywhere, and suffice it to say, all Team Orange use the same garments that are available to you. What better endorsement!



## WIND SHELTER



For an engine to function efficiently, it must maintain the correct temperature. Similarly, a human powered machine has the same vices; the body must not overheat or become too cold.

After two years of research, Orange has developed a garment in which the internal air temperature is as easy to regulate as pushing a button in an air conditioned car.

A specialist Italian micro fibre outer, combined with a micro pile inner is constructed with adjustable air vents for the ultimate temperature control whatever the terrain and altitude.

**"Wind Shelter" a garment for all seasons whatever the reasons.**





**No 1 Seed T-Shirt**

Part of a larger range including: Planet Orange and Orange.

**King of the Mountains Design**

Available in short or long sleeve lycra race shirt, track top and crash hat cover.

**Orange 8 Panel Race Short**

Available in thigh and calf length designs



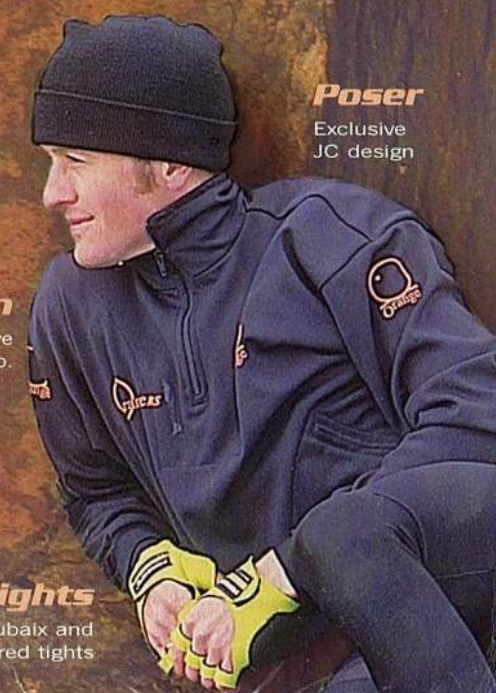
**Planet Orange Race Shirt**

Available in short sleeve or sleeveless designs

**Orange 8 Panel Race Short**

Available in thigh and calf length designs

Orange



**Poser**

Exclusive JC design

**O'Rangers design**

Available in black long sleeve cotton race shirt and track top.

**Orange Race Tights**

Bibbed quilted Roubaix and waist lycra contoured tights

For a complete and up to date list of Orange clothing, please refer to the price list.



Mountain bikes haven't been here as long as the planet, so it's only right that they should give the earth some respect. Take time out to plan all weather routes, ride carefully to avoid erosion and don't buzz other trail users. After saying that, "get out in the hills and ride." If you've got an Orange bike, you've got no excuses.

The information in this brochure is designed to help you choose Orange and in so doing provide you the most fun and success with your riding. If there are some questions which you feel still remained unanswered, please call in at your nearest Orange dealer. Every stockist is specially selected for his extensive knowledge and after sales service. It will also give you the opportunity of seeing the uniqueness of Orange in the flesh and further prove our boast that "there is nothing like an Orange".

**ORANGE MOUNTAIN BIKES**

**PO BOX 100  
PENRITH  
CUMBRIA  
CA10 2DA**



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0768 67871**

From the moment this brochure goes to print, it becomes dated. In fact as we write this final footnote Steve has just rushed in with news of perfecting wishbone technology on the Dynamo road bike. The ever active minds will never stand still, and for that reason specification is liable to change without notice. Check with your local stockist for the latest spec. Creative work by THEM 0532 342224. Photos by: Ian Casement, Jon Sparks, Simon Miles and Orange.