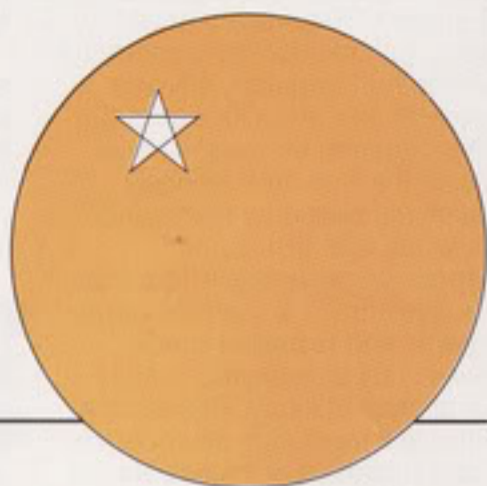


THE BIG



When Orange riders get together they gab like sisters who've been separated at birth and just re-united. They'll talk endlessly about the latest performance updates from the factory and the changes they've made to set up their machines to their specific needs. Orange design and engineering people participate in more of these fat-chewing sessions than most riders realise. Cleverly disguised by the factory to look, act and speak like regular mountain bike types, they're out there among us. There's a fair chance you've talked with an Orange insider and didn't even know it. The goal is to find out what customers want from their machines. And the result is a group of uniquely special bikes. I took a ride on the Orange Aluminium 'O', to find out if these boys really listen to us regular guys.

Frameset - Trick Shapes

This is quite possibly the only Aluminium Max tubed frame around. What is Max? Similar to Tange Concept tubing, it is an intelligent use of tube thickness, diameter and shaping to best meet the needs of off-road riding.

Of the entire tubeset, only the head tube and steerer tube maintain a traditional shape. Both the top tube and down tube are radically ovalized - vertically at the head tube and horizontally at the seat tube - to resist flex.

The rear stays, both seat and chain, share massive rectangular box-sections. When you consider that this frame has been around as a prototype since early 1990 (Cannondale, for example, have only just moved to box-section, and only for the chainstay) you get an idea of how much R&D goes into an Orange. They could have released it in 1990, but chose to further refine the design with feedback from Team Orange.

The headtube is a full (1 1/4") Evolution diameter, giving maximum joint area for the ovalized tubes, resulting in a very strong and stable front end.

Another special feature of this unique frameset is the use of a sealed, cartridge bottom bracket. High quality sealed roller bearings are pressed into the bottom bracket shell to provide maintenance free use. Less spanner time equals more riding time.

Forks are dependable 4130 Crom-Alloy units. With a constant curve of the blades they not only look nice, but performed admirably to boot. For the insane Waynes out there, Orange offer Rock-Shox as an option this year. How fast do you want to go? All cable guides are slotted, and there are two sets of water bottle mounts. Dropouts, of course, are vertical.

Geometry-Comfort and Joy

How do you combine stiffness and responsiveness with comfort? By careful selection of the angles used in the construction of the frame. With a successful racing team providing the feedback, Orange have recognised that comfort is a very important factor. Stamina can be easily eroded

through the harsh ride that steep angles can bring. Why waste energy? Quite.

Running a 71 degree head and a 72.5 degree seat angle helps create a bike that is both fast and agile, yet amazingly comfortable. Seatstays come in at 16 7/8" and the top tube on the 17.5" test bike measured 22". Long enough for good positioning, while not feeling too stretched out and distant from the bars.

How Does An Orange Roll?

After the frame, wheels make the greatest contribution to how a bike performs. The guys at Orange obviously understand this, and, applying the Orange philosophy of 'only the best', fit some of the classiest wheels available on a production machine. Using hubs from the relevant groupset, all wheels are handbuilt using double-buttet stainless steel spokes from DT-Swiss - among the best there is.

Rims are from Mavic, with a choice to suit the end use of the bike: the almost indestructible M6 (490g), or M7 (580g) for general riding and touring; MA40 (400g) or M231 (410g) for racing and recreational riding. Apart from the M231, Mavic's other latest Ceramic rim, the M261, is also available. Both are said to improve braking performance and modulation.

Tyres are Specialized Ground Control 'S', very light at 575g, thanks to the Kevlar beading. You shouldn't need me to tell you how good these rubbers are, but just in case you haven't heard... They offer great traction in almost every situation. OK, there are other tyres around that do specific jobs better, but none that shine in every department. Great choice.

Gruppos - You Choose

Being relatively small gives Orange the freedom and flexibility to choose from some of the world's best component manufacturers. Shimano, Mavic, SunTour and Campag, are all available on the Orange.

The test bike came equipped with a Shimano DX gruppo, including STI under-bar shifters, which I must say performed flawlessly during the test. Orange, however, recognise that most racers are favouring over-bar shifters, and offer these on all their top bikes. Shifting, was, as expected, excellent across the 12-28 cluster, no doubt aided by the short arm rear mech. Nice touch. Gearing, with the 26/36/46 chainring set-up was adequate, but personally I would have liked to have seen a 24T granny gear.

Nice to see Mavic componentry being offered too. Check out the weights of this quality gear, feather-light and durable.

Braking

It has been shown time and time again that the better the supporting surface the better the braking action. So when you attach a first rate pair of cantilevers onto the massive box section seatstays of the Aluminium 'O' the results are obvious.

*Introducing
the next phase
of the Orange
World*

*Domination
plan - the
Aluminium
'O'. Report:*

*Andy
Stephenson.*

*Pics: Dave
Willis of Eric
Whitehead
Photography*



The test bike came equipped with Shimano DX cantilevers front and rear. Interestingly they were the 1990 type, not the latest low profile, inboard style. Believing in changing a spec only if it offers a performance increase, Orange have decided to stick with the '90 style. Say no more. As expected the braking was flawless, the two-finger levers offering great control and modulation.

Miscellaneous: It All Adds Up

Many bike manufacturers often cut corners on the ancillary parts, sub-standard tackle on an otherwise good bike. I was pleased to see that Orange have bucked this annoying trend and gone for quality throughout.

A San Marco Rolls saddle is a functional and comfortable touch. The Kalloy seatpost is held in place by a neat seat collar/clamp with the usual Q/R binder. Would you prefer an allen bolt?

The test bike came fitted with a Custom Orange Stalk bar stem combination. These Aircraft grade Cro-moly stalks are welded to a Prestige bar to save almost 1/2lb over a standard set up. Angles and lengths can be varied for true custom fit. Production bikes will come with the Orange Stalk, at 150mm and 120mm reach and 90 degree or 105 degree rise, a traditional pipe stem.

As the test bike was fitted with a Shimano gruppo, pedals were DX with Christophe clips and straps.

All Aluminium 'O's will be fitted with 1 1/4" XT headsets, even if you spec a DX gruppo. No compromise here.

Grips are, let's be fair here.....crap. Good job they come off easy.

Option Package

It is possible to spec the Aluminium 'O' with a variety of performance enhancing products. The most notable are the amazingly popular Rock-Shox, but the list also includes Magura Hydro-stops, Shimano SPD pedals and of course Custom Orange Stalk from guess who...

Riding The Aluminium 'O'

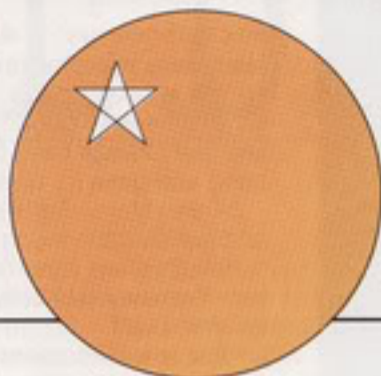
Let's get one thing straight, this bike rips. From the first turn of the pedals it's clearly no slouch - and I'm still on the tarmac. Turning off onto one of my favourite climbs, a steep single-track, littered with rocks and as greasy as a Channel swimmer, I got a very pleasant surprise. The 'O' climbs with more prowess than a mountain goat on steroids. Rear end traction is second to none.

Reason - well, the chainstays at 16 7/8" are not particularly short, I've ridden bikes with chainstays a full one inch shorter and they haven't climbed this well. The answer is in the rear triangle. The clever box-section chain and seatstays make for a very stiff rear end, transmitting all available power to the ground. The relatively relaxed seat angle of 72.5 degree (some bikes are running 75 degrees) also helps, in positioning the rider's weight over the rear wheel for maximum bite. Proving what a balanced frame this really is, the front wheel stayed resolutely on the ground. Slow speed tracking was good.

Downhill - Speed Crazy

Cresting the climb the track leads out onto open fireroads, downhill for 2 miles. With open corners and good visibility, it's a flat out test of the 'O's high speed stability. This is where the racing heritage of the bike and Team Orange's pre-production input

THE BIG



shines through.

It tracks as if on the proverbial rails, with no twitches or skittering in mid corner. It does however, require commitment from the rider, choose a line and stick to it - no problem for an experienced rider.

Fireroads are OK, but hammering the single-track is where it's at. Steep, twisty, a great loam surface with gobs of grip and a few sections of rock marbles. Let's Go! Launching the 'O' into the first turn you're glad Orange specced Ground Controls, as the back end starts to come round on the slicker than you thought surface. You hit a berm and it all straightens out, ready to attack the rocks. With loads of room to move around you can adjust your weighting, choose your line and commit. This is where aluminium scores, absorbing the shock and giving a most resilient ride. Into the turns, and although the 'O' may ride as smooth as a Cadillac, it definitely doesn't handle like one. The ease with which it flicked from one turn to the next made it a joy to ride in fast technical sections.

With a top tube length of 22" and a stem reach of 135mm, the 'O' was a perfect compromise of comfort and liveliness. Go to a top tube that is too long and you can easily wash out on the front. Too short and you end up fitting a stem with too much reach, and the front wheel tucks under, and snakes on slow climbs, weight distribution is too far forward and fast descents become very hairy. Nice to see Orange getting it right.

Gripes and Groans

What didn't I like about the Aluminium 'O'? With the Orange R&D Department working overtime and the input from Team riders out on the race circuit it's easy to see why this bike is so 'sorted'. Alas even the best have their faults, happily they are only minor.

Those grips, the Plastiche Cassano grips would be more at home on the vicar's lawnmower. However, grips are a personal choice, and they are easy to change anyway.

Although the Rolls Saddle is a quality piece of kit and superbly comfortable at that, it is the type that acts like a sponge when it even sniffs water. Result - a wet saddle that takes forever to dry. Again, very easy to rectify by using a waterproof saddle cover.

Finally, you will probably get a puncture sooner or later - as you do - and getting the wheels out quickly is important in a race situation. So you will curse when you undo the Q/R and the front wheel refuses to drop out without unwinding the skewer. Safety dropouts are a good idea, but if you race regularly you may want to file them off.

Conclusion - R&D Works

With many so called race ready bikes about as competitive as a supermarket trolley, it was refreshing to hop on the Orange and instantly feel at home. With an excellent frame offering stiffness with resilience, a choice of quality groupsets and an option package on top. You really have got, what could be your ultimate bike.

This bike is ready to race straight out of the box, if you can't win on this machine, try more training...

Although at home hammering the race circuits, this bike is so comfortable it makes an ideal performance play bike.

If you are looking for a bike that can take a beating, hammer down the trail faster than a crazed Banshee, and eat up the competition quicker than a starved Sumo, then the Aluminium 'O' has to be at the top of your shopping list.

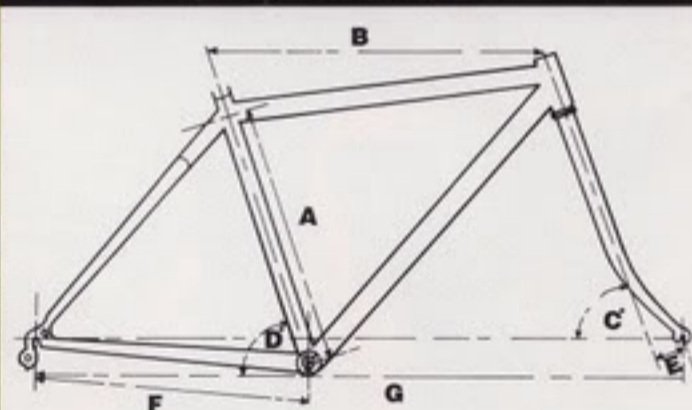
A serious bike for serious riders.



ORANGE ALUMINIUM 'O'

FRAME:	Aluminium Max
GROUPSET:	Shimano LX DX, XT, Mavic, Suntour, Campagnolo. As requested
STEM:	Orange 'Stalk'
SADDLE:	San Marco Rolls
COLOURS:	Orange & White, Matt Silver
OPTIONS:	Rock-Shox, Magura hydraulic brakes, SPD pedals. Custom Orange Stalk.
PRICE:	LX £749.00 DX £829.00 XT £939.00. (Others on request)
COMMENTS:	Orange are about to change the Spec on the grips, the Plastiche Cassano's are now history. Production bikes will be fitted with MTN-2 Grab On's.

GEOMETRY



- A) Frame sizes available - 17", 19", 21" B) Top tube - 22ins
C) Head angle - 71 D) Seat angle - 72.5 E) Fork rake - n/a
F) Chainstay Length - 16 7/8 ins G) Wheelbase - 41.5"

CONTACT:

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