

SARACEN

MOUNTAIN BIKES

1993

There is a moment it all

comes together

a synergy of body
and machine

A MACHINE

THAT IS A STATEMENT

OF YOUR WILL TO WIN

The roughest terrain
the harshest conditions

THE ULTIMATE
DESIGN ACHIEVEMENT

SARACEN

nothing holds back the
search for speed

WELCOME TO THE 1993 SARACEN RANGE.

IN THE FOLLOWING PAGES, YOU'LL FIND SOME OF THE LIGHTEST AND MOST POWERFUL MOUNTAIN BIKES EVER CREATED.

Right from the entry level Sahara, the 1993 SARACENS incorporate levels of innovation and lightweight strength that would have been unthinkable a few years ago even on the most expensive bikes.



|| 1993 SARACENS are designed as high-performance, race bred machines. That doesn't mean we're only building bikes for hardcore race riders. It's just that we believe every mountain biker has a right to expect the highest possible levels of lightweight performance and responsive handling ● **The same, uncompromising standards of handbuilt quality and race tuned performance run through the whole range - whether you're spending thousands on a world championship machine, or just a few hundred on your first mountain bike** ● Compare a SARACEN with any other mountain bike in the same price range, and you'll find that SARACEN consistently brings you more features, lighter weight and higher performance. With the 1993 range, for example, we've brought advanced features such as integral front suspension and titanium components within the reach of more mountain bikers than ever before ● Using new materials, new components, new design approaches and precision welding techniques, we've stripped away extraneous weight at every conceivable opportunity. The result is a range that combines the legendary strength and ruggedness of SARACEN with an outstanding price to weight ratio. Whatever your budget, SARACEN gives you outstanding value for money ● Last year, we became the first specialist UK mountain bike manufacturer to launch a professional racing team. By any standards, the SARACEN team had an outstanding first year, storming to first place in 63 out of 116 major events ● The lessons we've learned on the race circuit are reflected in the speed and handling of every bike in the 1993 range. Our racing success will help us to mount an even stronger challenge in 1993, on both the professional and the pro-am circuit. And it will bring the exhilaration of race-bred performance to a new generation of SARACEN riders.

MAJOR INNOVATIONS FOR 1993

THE *SARACEN* CLASS OF '92 WAS OUR MOST SUCCESSFUL EVER RANGE OF BIKES.

For 1993, we've overhauled the entire range, with new components, new geometry and a series of major innovations.

In the drive to strip away every gramme of unnecessary weight, we've streamlined and re-designed every detail.



very new *SARACEN* is one of the lightest bikes in its class, with outstanding off-road handling. And whichever *SARACEN* you choose, you'll find features "as standard" that are only available as expensive extras on comparable machines • **Tubing Technology:** The 1993 *SARACENS* have been totally redesigned from the bottom bracket up. Working with Tange, we have developed streamlined, lightweight chromoly tubing – both oversize and midsize – using thinner walls, shorter butts and elliptical profile joints at major stress areas. Add in our new light, investment-cast precision drop-outs and longer top tubes, and you'll see why the *SARACEN* frames are unsurpassed for lightness, strength, rigidity and performance. **Aheadset:** From the Tufftrax upwards, all 1993 *SARACENS* include the acclaimed Dia-Compe and Tioga Aheadset systems. One of the first headset systems to be purpose designed for mountain biking, the Aheadset saves weight and reduces complication. By cutting out unnecessary headset threads, it also improves strength and bearing alignment.

Control Stem System: Our new stem system is designed to work with the Aheadset, allowing us to dispense with the traditional stem quill and long fixing bolt. The stem clamps directly onto the fork – making it lighter and simpler, and giving you more positive control. From the Tufftrax up, all 1993 *SARACENS* are fitted with the new, lighter Ritchey control stem system • **Titanium:** 1993 sees the launch of *SARACEN'S* first ever titanium bike – the awesome Kili Ultra Elite. We've also opened up the benefits of titanium to a new generation of competition riders, with titanium components on every bike from the Kili Pro up • **Bar Ends:** Every serious competition rider uses bar ends. But on most bikes, they're still an optional extra. On *SARACEN*, they're standard equipment from Tufftrax upwards. And as you'd expect, we haven't used just any bar ends – throughout the range, we've used ultra lightweight products from Onza and Ritchey • **Seat Clamps:** On the 1993 *SARACENS*, we've swept away excess weight. Our new Allen bolt seat clamps are lighter and more secure – and there's a standard size seat post throughout the range, for easy upgrading.



Aheadset and control stem system.



PACE RC 35

SLIDERS: *Kevlar carbon*
STANCHIONS: *chromoly*
DAMPERS: *twin microvon elastomers*
TRAVEL: 1.875"
WEIGHT: 1250gms (2lbs 12oz)

TANGE SHOCK BLADES

SLIDERS: *alloy*
STANCHIONS: *chromoly*
DAMPERS: *MCU elastomers*
TRAVEL: 1.5"
WEIGHT: 1304gms (2lbs 14oz)

ROCKSHOX QUADRA

SLIDERS: *magnesium*
STANCHIONS: *chromoly*
DAMPERS: *kryptonite elastomers*
TRAVEL: 1.75"
WEIGHT: 1330gms (2lbs 15oz)

**SARACEN
MAX DRIVE
CHROMOLY**

SLIDERS: *chromoly*
STANCHIONS: *chromoly*
DAMPERS: *MCU elastomers*
TRAVEL: 1"
WEIGHT: 1600gms (3lbs 10oz)

**SARACEN
MAX DRIVE
ALLOY**

SLIDERS: *alloy*
STANCHIONS: *chromoly*
DAMPERS: *MCU elastomers*
TRAVEL: 1"
WEIGHT: 1290gms (2lbs 13oz)

**Suspension
Innovations For 1993**

Elastomer Suspension

If you've ever ridden with front suspension, you'll know all about its tremendous benefits in downhill handling and ride comfort. On the new *SARACENS*, quality suspension is now a realistic, affordable option for every mountain biker.

SARACEN'S choice of elastomer suspension systems use an advanced, synthetic rubber damper to provide combined spring and damping action. The result is a lighter, more reliable and virtually maintenance free system.

**Dedicated Suspension
Geometry**

Even where other manufacturers offer suspension as an option, they're content simply to bolt suspension forks onto their standard frame. At *SARACEN*, we take a different approach. We are one of the first manufacturers in the world to offer dedicated suspension geometry across our entire range.

The geometry of a mountain bike is precisely calculated to provide an optimum handling and ride position. Suspension forks throw these calculations out - and alter the handling - by raising the front of the bike. *SARACEN'S* dedicated suspension geometry steepens the head angle and raises the bottom bracket height to compensate for the longer suspension fork - providing perfect handling characteristics in all conditions

BUILT TO WIN

SARACEN built its reputation for rugged reliability in the early days of mountain biking.

TODAY, OUR UNREMITTING QUALITY STANDARDS ARE MORE IMPORTANT THAN EVER. TO BUILD A BIKE THAT COMBINES THE WEIGHT OF A RACER WITH THE STRENGTH OF A TRUE OFF-ROAD MACHINE DEMANDS PRECISION IN DESIGN AND MANUFACTURING.



Every SARACEN bike is individually hand-assembled by skilled mountain bike mechanics. We believe there's no other way of achieving a true precision machine • Look at the finish on a SARACEN bike.

Anyone can build a mountain bike that looks good in a showroom. But at SARACEN, we build frames that will still come up looking good after everything the trail can throw at them. We've developed our own ultra-resilient polyester powder coat process, to create a knock resistant surface that won't flake if it's scratched. There isn't a tougher finish in the industry (although with no CFC emissions, it's remarkably soft on the environment). For 1993, we've perfected a series of sleek finishes, including brushed titanium and polished nickel • At SARACEN, we never cut

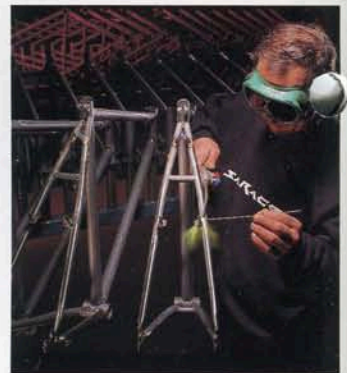
corners on components. We're constantly researching and reviewing the world market to ensure that we use the best available branded parts at every level. Even at the entry level, for example, the Shimano Altus A20 groupset, Bontrager

rims and Ritchey tyres put SARACEN in a class above its competitors. And throughout the range, SARACEN bikes are bristling with world-class technology, from brand leaders like Shimano, Onza, Ritchey, Tange, Dia-Compe, Vetta, Rockshox, Pace, Tioga and Bontrager • Bike design at SARACEN isn't restricted to the drawing

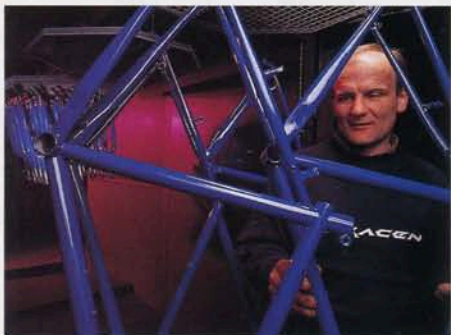
board. Our development and manufacturing is being constantly shaped by the experiences of professional riders – on the race circuit, in endurance trials and in the relentless punishment of continuous off-road work • The result is a range of thoroughbred bikes that are supremely responsive to the real demands of off-road

handling and performance • According to the influential magazine Mountain Biking UK, "SARACEN has become one of the companies to which others will have to look for new industry standards." Don't wait for the others to catch up.

Choose SARACEN now, and give yourself the competitive edge.



Hand finishing is still the only way to ensure total precision in frame manufacture. On every SARACEN welding, brazing and final finishing processes are individually completed by experienced craftsmen.



SARACEN'S polyester powder coat is electrostatically applied over a chromate rust proofing primer, and baked at 180°C. It's then carefully inspected to make sure every bike starts with an immaculate finish.



Unlike most of our competitors, SARACEN'S meticulous attention to detail goes right through to final set-up and beyond, with nationwide backup for spares and service. All our bikes are fully assembled before they leave the factory, under the control of our quality systems.

Take our wheels, for instance. Most other manufacturers use automatic assembly techniques, with every spoke machine-tightened to the same tension. But even with the world's most advanced components, there's no such thing as a perfect rim. We set the tension on every spoke by hand, making minute adjustments to compensate for fractional imperfections in the rim. It takes longer, but it creates a stronger wheel.

This approach ensures that every bike reaches the showroom with a near perfect set-up - not simply as a flat pack. Our unrivalled build quality is reflected in our exceptionally low warranty returns rate which is probably the best in the industry.



Escape beyond the limits

to where there is nothing

but earth and air and you

THE LIGHTNESS OF TOUCH

THE STRENGTH OF PURPOSE

TO FREE THE SPIRIT

The *Sahara's* Shimano Altus A20 is a cut above the groupsets you'll find on most of the competition – and it's supported by lightweight branded components at every point, including Weimann Bontrager rims and Ritchey Mod Quod 2" tyres. Its chromoly construction delivers off-road strength at a competitive weight – from the Tange oversized mainframe to the stem, bars and seatpost. This year's *Sahara* range includes SARACEN'S first dedicated ladies' bike.

The *Sahara Elite* is one of the first ever entry level bikes to be purpose-designed for elastomer suspension. It features all the branded componentry of the standard *Sahara* models. But like SARACEN *Elite* models, the frame has been purpose-designed for suspension – ensuring optimum handling and ride position.

"An extremely well-balanced bike with capabilities that way outshine its price category . . . we'll be amazed if we come across a better bike for the price in 1993."

Mountain Biking UK, December 1992

sahara

elite

sahara ladies



SAHARA

WEIGHT; 12.7 kilos
28 lbs
COLOUR; Racing Red
SIZES; 14.5" 15.5"
17" 19"

SAHARA ELITE

WEIGHT; 13.4 kilos
29.5 lbs
COLOUR; Racing Red
SIZES; 14.5" 15.5"
17" 19"

FRAME SET

FRAME; Tange MTB chromoly double-butted main tubes
FORKS; Max drive chromoly lite
HEADSET; Tioga Avenger (shakeproof)

FRAME; Tange MTB chromoly double-butted main tubes
FORKS; Saracen max drive chromoly elastomer suspension system
HEADSET; Tioga Avenger (shakeproof)

FRAME GEOMETRY

(Based on 17" frame)

HEAD ANGLE; 71°
SEAT ANGLE; 74°
CHAINSTAY LENGTH; 425 mm (16.75")
TOP TUBE LENGTH; 560 mm (22")
B.B. HEIGHT; 292 mm (11.5")

HEAD ANGLE; 71°15'
SEAT ANGLE; 74°
CHAINSTAY LENGTH; 425 mm (16.75")
TOP TUBE LENGTH; 560 mm (22")
B.B. HEIGHT; 310 mm (12.25")

DRIVE TRAIN

CHAINSET; Shimano Altus AT20 48 38 28 round rings
B.B.SET; Shimano cartridge BB LP30
PEDALS; Tioga Surefoot 3 with toe clips and straps

CHAINSET; Shimano Altus AT20 48 38 28 round rings
B.B.SET; Shimano cartridge BB LP30
PEDALS; Tioga Surefoot 3 with toe clips and straps

GEAR SYSTEM

F/R DERAILEURS; Shimano Altus AT20 (dual S.I.S.)
SHIFT LEVERS; Shimano Altus AT20 Rapidfire Plus

F/R DERAILEURS; Shimano Altus AT20 (dual S.I.S.)
SHIFT LEVERS; Shimano Altus AT20 Rapidfire Plus

BRAKE SYSTEM

BRAKES; Shimano Altus AT20 M-system
LEVERS; Shimano Altus AT20

BRAKES; Shimano Altus AT20 M-system
LEVERS; Shimano Altus AT20

WHEELS

RIMS; Weinman Bontrager BCX3 36 hole
HUBS; Shimano HG20 rear HB50 front – Q.R.
CASSETTE; Shimano HG50 13-30 7 speed
SPOKES; Rustless 14G
TYRES; Ritchey Mod Quod 26" x 2.0"

RIMS; Weinman Bontrager BCX3 36 hole
HUBS; Shimano HG20 rear HB50 front – Q.R.
CASSETTE; Shimano HG50 13-30 7 speed
SPOKES; Rustless 14G
TYRES; Ritchey Mod Quod 26" x 2.0"

BAR SYSTEM

BARS; Saracen alloy (250gms)
GRIPS; Ergo Ring
STEM; Ultra light chromoly

BARS; Saracen alloy (250gms)
GRIPS; Ergo Ring
STEM; Ultra light chromoly

SEAT SYSTEM

SADDLE; Saracen Comfort System Gel competition style
SEAT POST; Saracen alloy micro adjust 26.2mm

SADDLE; Saracen Comfort System Gel competition style
SEAT POST; Saracen alloy micro adjust 26.2mm

SAHARA LADIES

Same specification as Sahara. Only available in 17" size.

tufftrax

elite

The 1993 **Tufftrax** brings a classic mountain bike right up-to-date, with an all chromoly double-butted frame and the latest generation of Altus A10 off-road components. The acclaimed Tioga Aheadset system is included as standard, together with Onza bar ends, Bontrager rims, Ritchey Megabite Z-Max tyres and Ritchey Force directional control stem. With its sleek Metallic Black finish, the 1993 **Tufftrax** is set to win as many off-road converts as the classic original.

Tufftrax Elite adds lightweight chromoly and elastomer suspension forks to the outstanding specification of the standard **Tufftrax**. The combination of dedicated suspension design with the Tioga Aheadset provides a level of responsive handling and positive control that no other manufacturer can match at this price.

TUFFTRAX

WEIGHT: 12.25 kilos

27 lbs

COLOUR: Metallic Black

SIZES: 14.5" 15.5" 17" 19"

TUFFTRAX ELITE

WEIGHT: 12.93 kilos

28.5 lbs

COLOUR: Metallic Black

SIZES: 14.5" 15.5" 17" 19"

FRAME SET

FRAME; Tange MTB elliptical profile chromoly double-butted oversize frame tubes
FORKS; Max drive chromoly lite
HEADSET; Tioga Alchemy Aheadset system

FRAME; Tange MTB elliptical profile chromoly double-butted oversize frame tubes
FORKS; Saracen max drive chromoly elastomer suspension system
HEADSET; Tioga Alchemy Aheadset system

FRAME GEOMETRY

(Based on 17" frame)

HEAD ANGLE; 71°

SEAT ANGLE; 74°

CHAINSTAY LENGTH;

425 mm (16.75")

TOP TUBE LENGTH;

560 mm (22")

B.B. HEIGHT; 292 mm

(11.5")

HEAD ANGLE; 71°15'

SEAT ANGLE; 74°

CHAINSTAY LENGTH;

425 mm (16.75")

TOP TUBE LENGTH;

560 mm (22")

B.B. HEIGHT; 310 mm

(12.25")

DRIVE TRAIN

CHAINSET; Shimano Altus AT10 46 36 26 round rings

B.B.SET; Shimano cartridge BB LP30

PEDALS; Tioga Surefoot 3 with toe clips and straps

CHAINSET; Shimano Altus AT10 46 36 26 round rings

B.B.SET; Shimano cartridge BB LP30

PEDALS; Tioga Surefoot 3 with toe clips and straps

GEAR SYSTEM

F/R DERAILLEURS; Shimano Altus AT10 (dual S.I.S.)

SHIFT LEVERS; Shimano Altus AT10 Rapidfire Plus

F/R DERAILLEURS; Shimano Altus AT10 (dual S.I.S.)

SHIFT LEVERS; Shimano Altus AT10 Rapidfire Plus

BRAKE SYSTEM

BRAKES; Shimano Altus AT10 M-system

LEVERS; Shimano Altus AT10

BRAKES; Shimano Altus AT10 M-system

LEVERS; Shimano Altus AT10

WHEELS

RIMS; Weinman Bontrager BCX3 36 hole

HUBS; Shimano HG20 rear HB50 front - Q.R.

CASSETTE; Shimano HG50 12-28 7 speed

SPOKES; Rustless 14G

TYRES; Ritchey Megabite Z-Max

26" x 1.9"

RIMS; Weinman Bontrager BCX3 36 hole

HUBS; Shimano HG20 rear HB50 front - Q.R.

CASSETTE; Shimano HG50 12-28 7 speed

SPOKES; Rustless 14G

TYRES; Ritchey Megabite Z-Max

26" x 1.9"

BAR SYSTEM

BARs; Saracen alloy (250gms)

BAR ENDS; Onza R.C.R. (160gms)

GRIPS; Ritchey True Grips II (90gms)

STEM; Ritchey Force directional control stem

BARs; Saracen alloy (250gms)

BAR ENDS; Onza R.C.R. (160gms)

GRIPS; Ritchey True Grips II (90gms)

STEM; Ritchey Force directional control stem

SEAT SYSTEM

SADDLE; Saracen Comfort System Gel competition style

SEAT POST; Saracen Superlight alloy micro adjust (260gms) 26.2mm

SADDLE; Saracen Comfort System Gel competition style

SEAT POST; Saracen Superlight alloy micro adjust (260gms) 26.2mm



traverse elite

The SARACEN *Traverse* incorporates a series of major innovations, designed to reduce weight and improve performance. The key to its low weight is Tange's new midsize chromoly double-butted tubing and the Shimano Deore LX - a revolutionary new groupset that has become established as an industry standard for serious competition machines. This obsession with low weight and high performance is reflected in every component, from the Vetta SL saddle to the Ritchey Megabite Kevlar tyres.

The *Traverse Elite* has been designed to provide all the handling benefits of elastomer suspension, while keeping added weight to a bare minimum. With lightweight alloy construction and SARACEN'S maintenance-free elastomer system, *Traverse* suspension adds an extra performance dimension to this thoroughbred machine. On both *Traverse* and *Traverse Elite*, components include Forcelite bars, Vantage Sport rims and Force directional control stems from Ritchey, Aheadset systems from Tioga and bar ends from Onza.

h TRAVERSE

WEIGHT: 11.57 kilos
25.5 lbs
COLOUR: Flamboyant
 Ultra Violet
SIZES: 14.5" 15.5"
 17" 19"

i TRAVERSE ELITE

WEIGHT: 12.02 kilos
26.5 lbs
COLOUR: Flamboyant
 Ultra Violet
SIZES: 14.5" 15.5"
 17" 19"

FRAME SET

FRAME: Tange new lightweight midsize chromoly double-butted frame tubes
FORKS: Max strut chromoly ultra lite
HEADSET: Tioga
 Alchemy alloy/steel Aheadset system

FRAME: Tange new lightweight midsize chromoly double-butted frame tubes
FORKS: Saracen max drive alloy elastomer suspension system
HEADSET: Tioga
 Alchemy alloy/steel Aheadset system

FRAME GEOMETRY

(Based on 17" frame)

HEAD ANGLE: 71°
SEAT ANGLE: 74°
CHAINSTAY LENGTH: 425mm (16.75")
TOP TUBE LENGTH: 560mm (22")
B.B. HEIGHT: 292mm (11.5")

HEAD ANGLE: 71°15'
SEAT ANGLE: 74°
CHAINSTAY LENGTH: 425mm (16.75")
TOP TUBE LENGTH: 560mm (22")
B.B. HEIGHT: 310mm (12.25")

DRIVE TRAIN

CHAINSET: Shimano Deore LX 46 36 26 round rings
B.B.SET: Shimano cartridge BB UN 51
PEDALS: Victor VP 180 with toe clips and straps

CHAINSET: Shimano Deore LX 46 36 26 round rings
B.B.SET: Shimano cartridge BB UN 51
PEDALS: Victor VP 180 with toe clips and straps

GEAR SYSTEM

F/R DERAILLEURS: Shimano Deore LX (dual S.I.S.)
SHIFT LEVERS: Shimano Deore LX Rapidfire Plus

F/R DERAILLEURS: Shimano Deore LX (dual S.I.S.)
SHIFT LEVERS: Shimano Deore LX Rapidfire Plus

BRAKE SYSTEM

BRAKES: Shimano Deore LX M-system
LEVERS: Shimano Deore LX

BRAKES: Shimano Deore LX M-system
LEVERS: Shimano Deore LX

WHEELS

RIMS: Ritchey Vantage Sport 36 hole (495gms)
HUBS: Shimano HG20 rear HB50 front - Q.R.
CASSETTE: Shimano HG50 12-28 7 speed
SPOKES: Stainless 14G
TYRES: Ritchey Megabite Z-Max Kevlar 26" x 1.9"

RIMS: Ritchey Vantage Sport 36 hole (495gms)
HUBS: Shimano HG20 rear HB50 front - Q.R.
CASSETTE: Shimano HG50 12-28 7 speed
SPOKES: Stainless 14G
TYRES: Ritchey Megabite Z-Max Kevlar 26" x 1.9"

BAR SYSTEM

BARS: Ritchey Forcelite (175gms)
BAR ENDS: Onza R.C.R. (160gms)
GRIPS: Ritchey True Grips II (90gms)
STEM: Ritchey Force directional control stem

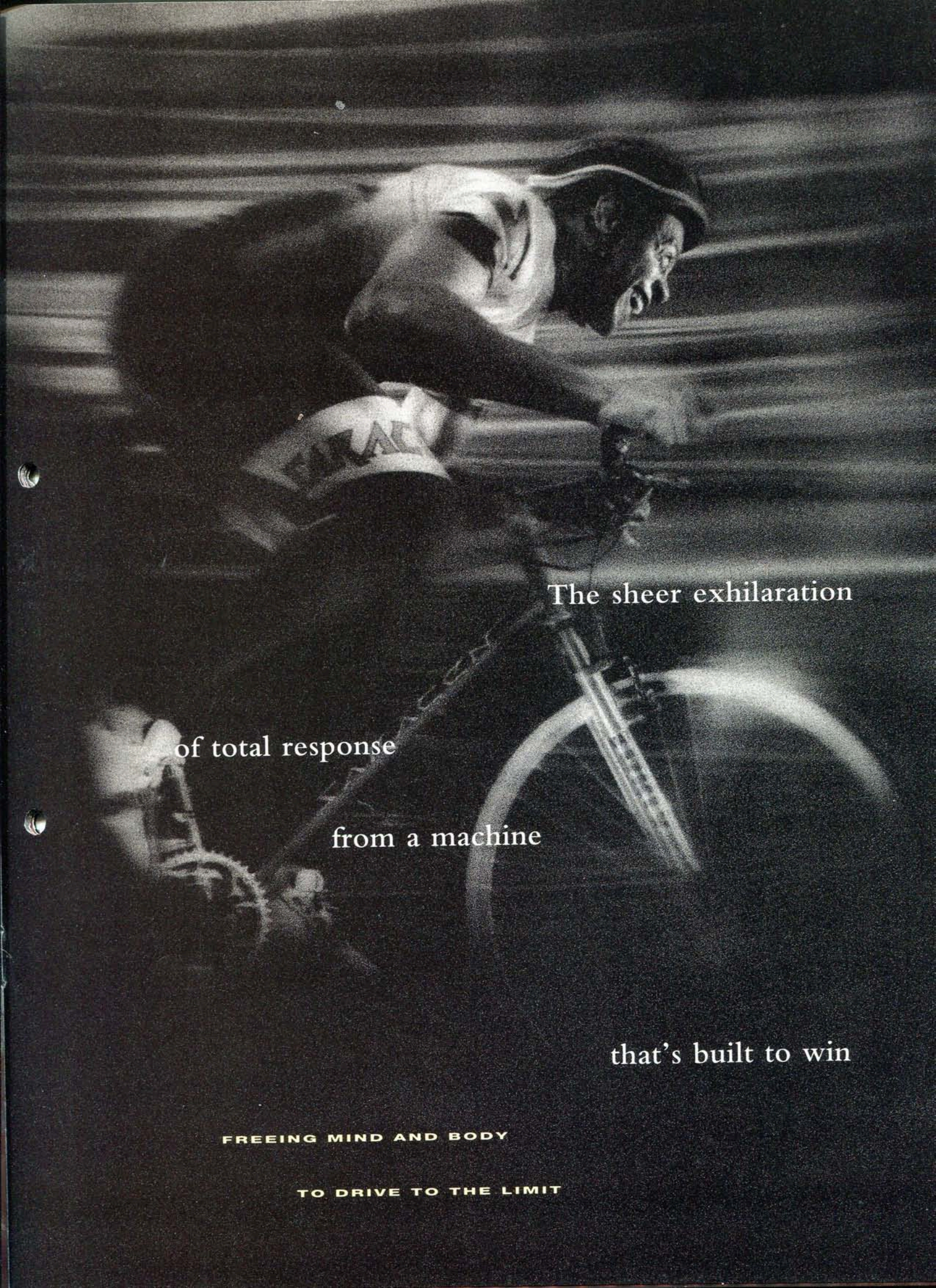
BARS: Ritchey Forcelite (175gms)
BAR ENDS: Onza R.C.R. (160gms)
GRIPS: Ritchey True Grips II (90gms)
STEM: Ritchey Force directional control stem

SEAT SYSTEM

SADDLE: Vetta SL competition
SEAT POST: Saracen Superlight alloy micro adjust (260gms)
 26.2mm

SADDLE: Vetta SL competition
SEAT POST: Saracen Superlight alloy micro adjust (260gms)
 26.2mm





The sheer exhilaration

of total response

from a machine

that's built to win

FREEING MIND AND BODY

TO DRIVE TO THE LIMIT





Saracen Clothing

New for 1993 is the official SARACEN clothing collection. As you'd expect from a Company that's obsessed with quality, every item in the range is a premium product.

Choose from two ranges - Saracen Racewear and Saracen Activewear.

Saracen Racewear

This is the official SARACEN Team kit. The sharp, clean, striking design that's repeatedly headed the field at the UK's major professional events. The range includes super-lightweight jerseys and shorts in quality lycra, designed to give you maximum comfort and minimum wind resistance in competition action. There's also the official team short-zip tracksuit top. All items are available in small, medium, large and extra large.

Saracen Activewear

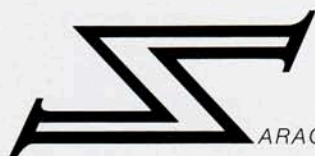
Saracen Activewear is cool, distinctive and superbly hard-wearing. Every shirt features a subtle, hand embroidered logo and we've used only high quality, cotton-rich material throughout the range.

Choose from all-cotton T-shirts in purple, teal blue, jade and black; polyester/cotton polo shirts in jade and black; and polyester/cotton sweatshirts in purple, teal blue and black.

SARACEN TEAM

In the pioneering years of mountain biking, SARACEN tested the new, off-road technology to the limit in sponsored endurance trials across the world.

IN 1992, WE BUILT ON THE SUPERB COMPETITION PEDIGREE OF SARACEN BIKES TO LAUNCH OUR OWN PROFESSIONAL RACING TEAM - PUTTING US AMONG THE TOP THREE RACE TEAM SPONSORS IN THE UK.



SARACEN'S aim was to provide a punishing new test-bed for future bike development. But as with everything else we do, we were never prepared to settle for second best. We set out to compete at the very highest level of the sport in the UK. Our reputation, our resources and the superb quality of our bikes allowed us to attract some of the Britain's most talented and experienced professionals - a powerful line-up that



made an instant impact on the home racing circuit ● After just one season, SARACEN has emerged as a major force in UK competition biking, with our riders reaching the podium in more than 70% of all the races they entered. In total, SARACEN riders finished first in 63 out of 116 entries, with a further twenty-two 2nd and 3rd places ● Highlights of the season included three British Championship titles and numerous wins in major mountain bike events. Three SARACEN riders were selected to race for Britain in world championships ● Perhaps most important, all of these successes were achieved on standard production bikes from across the SARACEN range. Our aim was to prove and refine the

performance of bikes for our customers, by using the Kili Flyer, Kili Pro and Kili XTR in professional racing action throughout the season. The results have been fed directly back into our development process, helping us to hone the race-tuned performance of the 1993 SARACENS to perfection ● Following the tremendous success of the team - and the invaluable contribution they've made to our development process - we're stepping up our

racing commitment for 1993, with a new, increased pro-am line-up. In addition to our formidable core of pro-elite riders, we'll be entering riders for every one of the major categories. And with a strong junior team, we'll be helping to develop the champions of tomorrow - as well as making a serious challenge for all of the major professional titles. As in 1992, all SARACEN riders will be mounted on production bikes from right across our competition range. So when you choose SARACEN, you could well be riding a champion's bike. ● Watch out for the SARACEN team at all of the major UK events in 1993. You'll always find them ready to talk mountain biking. And you'll always find them among the leaders.





kili racer

team

KILI RACER TEAM

WEIGHT: 12.02 kilos

26.5 lbs

COLOUR: Brushed Titanium

SIZES: 15" 16" 17" 18" 19"

FRAME SET

FRAME: Tange new lightweight midsize chromoly double-butted frame tubes, competition geometry

FORKS: Saracen max drive alloy elastomer suspension system

HEADSET: Tioga Alchemy alloy/steel Aheadset system

FRAME GEOMETRY

(Based on 17" frame)

HEAD ANGLE: 71° 15'

SEAT ANGLE: 74°

CHAINSTAY LENGTH:

419mm (16.5")

TOP TUBE LENGTH:

565mm (22.25")

B.B. HEIGHT: 310mm (12.5")

DRIVE TRAIN

CHAINSET: Shimano Deore LX 46 36 26 pound rings

B.B. SET: Shimano cartridge BB UN 51

PEDALS: Victor VP 180 with toe clips and straps

GEAR SYSTEM

F/R DERAILLEURS:

Shimano Deore DX (dual S.I.S.)

SHIFT LEVERS:

Shimano Deore DX Rapidfire Plus

BRAKE SYSTEM

BRAKES: Shimano Deore LX M-system

LEVERS: Shimano Deore DX

WHEELS

RIMS: Ritchey Vantage Sport 32 hole (495gms)

HUBS: Shimano Deore DX - Q.R.

CASSETTE: Shimano HG70 12-28 7 speed

SPOKES: Stainless 14G

TYRES: Ritchey Megabite Z-Max Kevlar 26" x 1.9"

BAR SYSTEM

BAR: Ritchey Forcelite (175gms)

BAR ENDS: Onza R.C.R. (160gms)

GRIPS: Ritchey True Grips WCS (50gms)

STEM: Ritchey Forcelite control stem

SEAT SYSTEM

SADDLE: Vetta SL competition

SEAT POST: Saracen Superlight alloy micro adjust (260gms) 26.2mm

Despite its affordable price tag, the *Kili Racer Team* is every inch a serious competition bike. With its brushed titanium finish, competition geometry and slender, midsize chromoly tubing, it has the look and feel of a racing machine. The Shimano Deore LX and DX groupset has been upgraded at the front and rear mechs, hubs, gear shifters and brake levers for vital weight savings. It's supported by a full complement of race-quality components from Ritchey, Tioga and Onza, with alloy suspension forks as standard.

The *Racer Team* uses 32-hole Ritchey Vantage Sport rims, for example - a crucial weight benefit compared with the 36-hole rims used in comparable bikes. Add Ritchey Forcelite bars and control stem, Vetta SL saddle and Ritchey Z-Max Kevlar tyres, and you have a winning specification.

"A machine that exudes elitism... better materials and higher standards of construction, fit and finish should result in superior long-term performance."

Bicycle Magazine, February 1993



The **Kili Pro** is built to compete at the highest level. We've teamed Shimano Deore DX gearing with Ritchey Logic brakes and cranksets – creating a vital advantage in weight and performance.

It's just one of a series of innovations – from titanium bottle cage bolts and a chromoly saddle rail to the Ritchey World Championship Series foam grips. And with the **Kili Pro**, we've become one of the first manufacturers in the world to use the new Ritchey Logic bar ends.

The **Kili Pro Elite** is built around the same stunning race specification as the **Kili Pro**, coupled with the superb handling of Rockshox Quadra elastomer suspension forks.

Both standard and **Elite** versions use Ritchey components throughout, including Kevlar Z-Max tyres from Ritchey's World Championship Series – among the lightest off-road tyres available anywhere in the world. Ritchey's championship-tuned technology is a key factor in the exceptionally low weight of the **Kili Pro** range, with Ritchey Logic seat post, Forcelite bars and control stem and Vantage Competition rims.

kili pro kili pro

elite



K KILI PRO

WEIGHT: 10.89kilos
24 lbs
COLOUR: Polished Nickel
SIZES: 15" 16" 17" 18" 19"

I KILI PRO ELITE

WEIGHT: 11.57kilos
25.5 lbs
COLOUR: Polished Nickel
SIZES: 15" 16" 17" 18" 19"

FRAME SET

FRAME; Tange new lightweight midsize chromoly double-butted frame tubes, competition geometry
FORKS; Max strut chromoly ultra light
HEADSET; Tioga
Alchemy alloy Aheadset system

FRAME; Tange new lightweight midsize chromoly double-butted frame tubes, competition geometry
FORKS; Rockshox Quadra elastomer suspension system
HEADSET; Tioga
Alchemy alloy Aheadset system

FRAME GEOMETRY

(Based on 17" frame)

HEAD ANGLE; 71°
SEAT ANGLE; 74°
CHAINSTAY LENGTH; 419mm (16.5")
TOP TUBE LENGTH; 565mm (22.25")
B.B. HEIGHT; 292mm (11.5")

HEAD ANGLE; 71°15'
SEAT ANGLE; 74°
CHAINSTAY LENGTH; 419mm (16.5")
TOP TUBE LENGTH; 565mm (22.25")
B.B. HEIGHT; 310mm (12.5")

DRIVE TRAIN

CHAINSET; Ritchey Logic super shift 46 36 24
B.B.SET; Shimano cartridge BB UN 51
PEDALS; Victor VP 193 with toe clips and straps

CHAINSET; Ritchey Logic super shift 46 36 24
B.B.SET; Shimano cartridge BB UN 51
PEDALS; Victor VP 193 with toe clips and straps

GEAR SYSTEM

F/R DERAILLEURS; Shimano Deore DX (dual S.I.S.)
SHIFT LEVERS; Shimano Deore DX Rapidfire Plus

F/R DERAILLEURS; Shimano Deore DX (dual S.I.S.)
SHIFT LEVERS; Shimano Deore DX Rapidfire Plus

BRAKE SYSTEM

BRAKES; Ritchey Logic
LEVERS; Shimano Deore DX

BRAKES; Ritchey Logic
LEVERS; Shimano Deore DX

WHEELS

RIMS; Ritchey Vantage Comp 32 hole (415gms)
HUBS; Shimano Deore DX – Q.R.

RIMS; Ritchey Vantage Comp 32 hole (415gms)
HUBS; Shimano Deore DX – Q.R.

CASSETTE; Shimano HG70 12-28 7 speed
SPOKES; Stainless double-butted
TYRES; Ritchey Megabite Z-Max Kevlar WCS 26" x 1.9"

CASSETTE; Shimano HG70 12-28 7 speed
SPOKES; Stainless double-butted
TYRES; Ritchey Megabite Z-Max Kevlar WCS 26" x 1.9"

BAR SYSTEM

BARS; Ritchey Forcelite (175gms)
BAR ENDS; Ritchey Logic alloy (135gms)
GRIPS; Ritchey True Grips WCS (50gms)
STEM; Ritchey Forcelite control stem

BARS; Ritchey Forcelite (175gms)
BAR ENDS; Ritchey Logic alloy (135gms)
GRIPS; Ritchey True Grips WCS (50gms)
STEM; Ritchey Forcelite control stem

SEAT SYSTEM

SADDLE; Vetta SL competition chromoly (240gms)
SEAT POST; Ritchey Logic (250gms) 26.2mm

SADDLE; Vetta SL competition chromoly (240gms)
SEAT POST; Ritchey Logic (250gms) 26.2mm

kili flyer

elite

The *Kili Flyer's* frame is built from a combination of Tange lightweight and Prestige ultra light midsize tubing – using heat treated steel to produce the same strength from radically thinner walled chromoly. The Shimano Deore XT gearing is coupled with Ritchey Logic cranks and brakes, for the perfect combination of smooth performance and racing weight.

The *Kili Flyer Elite* adds Tange Shock Blades elastomer suspension forks to the thoroughbred *Kili Flyer* specification.

Both standard and *Elite* machines use nothing but professional racing components throughout, including titanium frame bolts, the new Tioga alloy Aheadset system and a full complement of Ritchey competition parts – Logic bar ends and seat post, Vantage Competition rims, Prolite bars, Forcelite control stem and Z-Max Kevlar WCS tyres.

KILI FLYER

WEIGHT: 10.66kilos
23.5 lbs
COLOUR: Flamboyant
Ocean Blue
SIZES: 15" 16" 17"
18" 19"

KILI FLYER ELITE

WEIGHT: 11.23kilos
24.75 lbs
COLOUR: Flamboyant
Ocean Blue
SIZES: 15" 16" 17"
18" 19"

FRAME SET

FRAME; Tange new lightweight Prestige ultra light midsize chromoly double-butted frame tubes, competition geometry
FORKS; Max strut chromoly ultra light
HEADSET; Tioga Alchemy alloy Aheadset system

FRAME; Tange new lightweight Prestige ultra light midsize chromoly double-butted frame tubes, competition geometry
FORKS; Tange shock blades elastomer suspension system
HEADSET; Tioga Alchemy alloy Aheadset system

FRAME GEOMETRY

(Based on 17" frame)

HEAD ANGLE; 71°
SEAT ANGLE; 74°
CHAINSTAY LENGTH; 419mm (16.5")
TOP TUBE LENGTH; 565mm (22.25")
B.B. HEIGHT; 292mm (11.5")

HEAD ANGLE; 71°15'
SEAT ANGLE; 74°
CHAINSTAY LENGTH; 419mm (16.5")
TOP TUBE LENGTH; 565mm (22.25")
B.B. HEIGHT; 310mm (12.5")

DRIVE TRAIN

CHAINSET; Ritchey Logic super shift 46 36 24
B.B.SET; Shimano cartridge BB UN 71
PEDALS; Victor VP 193 with toe clips and straps

CHAINSET; Ritchey Logic super shift 46 36 24
B.B.SET; Shimano cartridge BB UN 71
PEDALS; Victor VP 193 with toe clips and straps

GEAR SYSTEM

F/R DERAILLEURS; Shimano Deore XT (dual S.I.S.)
SHIFT LEVERS; Shimano Deore XT Rapidfire Plus

F/R DERAILLEURS; Shimano Deore XT (dual S.I.S.)
SHIFT LEVERS; Shimano Deore XT Rapidfire Plus

BRAKE SYSTEM

BRAKES; Ritchey Logic
LEVERS; Shimano Deore XT

BRAKES; Ritchey Logic
LEVERS; Shimano Deore XT

WHEELS

RIMS; Ritchey Vantage Comp 32 hole (415gms)
HUBS; Shimano Deore XT - Q.R.
CASSETTE; Shimano HG90 12-28 7 speed
SPOKES; Stainless double-butted
TYRES; Ritchey Megabite Z-Max Kevlar WCS 26" x 1.9"

RIMS; Ritchey Vantage Comp 32 hole (415gms)
HUBS; Shimano Deore XT - Q.R.
CASSETTE; Shimano HG90 12-28 7 speed
SPOKES; Stainless double-butted
TYRES; Ritchey Megabite Z-Max Kevlar WCS 26" x 1.9"

BAR SYSTEM

BARs; Ritchey Prolite (140gms)
BAR ENDS; Ritchey Logic alloy (135gms)
GRIPS; Ritchey True Grips WCS (50gms)
STEM; Ritchey Forcelite control stem

BARs; Ritchey Prolite (140gms)
BAR ENDS; Ritchey Logic alloy (135gms)
GRIPS; Ritchey True Grips WCS (50gms)
STEM; Ritchey Forcelite control stem

SEAT SYSTEM

SADDLE; Vetta SL competition chromoly (240gms)
SEAT POST; Ritchey Logic (250gms) 26.2mm

SADDLE; Vetta SL competition chromoly (240gms)
SEAT POST; Ritchey Logic (250gms) 26.2mm



The **Kili XTR** is designed for professional - standard riders who accept no compromise in their drive for maximum performance. Its midsize frame is built from heat-treated Tange Prestige ultra light and ultra strong tubing. The Shimano XTR is the finest competition groupset in the world, and it's complemented by titanium components throughout the bike - including pedal axles, bottom bracket set, frame bolts and saddle rail. Ritchey WCS components, Dia-Compe alloy Aheadset system and Pace competition forks complete the specification.

The **Kili XTR Elite** uses the lightest and most advanced front suspension in the industry - Pace RC35 carbon fibre elastomer forks. It's teamed with the same, dazzling range of components as the standard **Kili XTR**, using top-grade Ritchey WCS components across the board - including Prolite WCS bars, Logic bar ends, WCS grips, Logic WCS seat post, Vantage Pro WCS rims, Z-Max WCS tyres and Forcelite control stem.

kili xtr

kili xtr elite



Ⓚ KILI XTR

WEIGHT: 10.66 kilos
23.25 lbs
COLOUR; Flamboyant
 Ultra Violet
SIZES; 15" 16" 17"
 18" 19"

Ⓚ KILI XTR ELITE

WEIGHT: 10.89 kilos
24 lbs
COLOUR; Flamboyant
 Ultra Violet
SIZES; 15" 16" 17"
 18" 19"

FRAME SET

FRAME; Tange Prestige ultra light and ultra strong midsize chromoly double-butted frame tubes, competition geometry
FORKS; Pace RC 30 competition forks
HEADSET; Dia-compe alloy sealed bearing Aheadset system

FRAME; Tange Prestige ultra light and ultra strong midsize chromoly double-butted frame tubes, competition geometry
FORKS; Pace RC 35 elastomer suspension system
HEADSET; Dia-compe alloy sealed bearing Aheadset system

FRAME GEOMETRY

Based on 17" frame

HEAD ANGLE; 71°
SEAT ANGLE; 74°
CHAINSTAY LENGTH; 419mm (16.5")
TOP TUBE LENGTH; 565mm (22.25")
B.B. HEIGHT; 292mm (11.5")

HEAD ANGLE; 71°15"
SEAT ANGLE; 74°
CHAINSTAY LENGTH; 419mm (16.5")
TOP TUBE LENGTH; 565mm (22.25")
B.B. HEIGHT; 310mm (12.5")

DRIVE TRAIN

CHAINSET; Shimano XTR 46 36 26
B.B.SET; Titanium sealed
PEDALS; VPT1 105 titanium axle with toe clips and straps

CHAINSET; Shimano XTR 46 36 26
B.B.SET; Titanium sealed
PEDALS; VPT1 105 titanium axle with toe clips and straps

GEAR SYSTEM

F/R DERAILLEURS; Shimano XTR (dual S.I.S.)
SHIFT LEVERS; Shimano XTR Rapidfire Plus

F/R DERAILLEURS; Shimano XTR (dual S.I.S.)
SHIFT LEVERS; Shimano XTR Rapidfire Plus

BRAKE SYSTEM

BRAKES; Shimano XTR M-system
LEVERS; Shimano XTR

BRAKES; Shimano XTR M-system
LEVERS; Shimano XTR

WHEELS

RIMS; Ritchey Vantage Pro WCS 32 hole (395gms)
HUBS; Shimano XTR - Q.R.
CASSETTE; Shimano XTR 12-28 8 speed
SPOKES; Stainless double-butted
TYRES; Ritchey Megabite Z-Max Kevlar WCS 26" x 1.7"

RIMS; Ritchey Vantage Pro WCS 32 hole (395gms)
HUBS; Shimano XTR - Q.R.
CASSETTE; Shimano XTR 12-28 8 speed
SPOKES; Stainless double-butted
TYRES; Ritchey Megabite Z-Max Kevlar WCS 26" x 1.7"

BAR SYSTEM

BARS; Ritchey Prolite WCS (123 gms)
BAR ENDS; Ritchey Logic alloy (135gms)
GRIPS; Ritchey True Grips WCS (50gms)
STEM; Ritchey Forcelite control stem

BARS; Ritchey Prolite WCS (123 gms)
BAR ENDS; Ritchey Logic alloy (135gms)
GRIPS; Ritchey True Grips WCS (50gms)
STEM; Ritchey Forcelite control stem

SEAT SYSTEM

SADDLE; Vetta SL competition titanium (180gms)
SEAT POST; Ritchey Logic WCS (240gms) 26.2mm

SADDLE; Vetta SL competition titanium (180gms)
SEAT POST; Ritchey Logic WCS (240gms) 26.2mm

kili ultra

elite

KILI ULTRA ELITE

WEIGHT: 10.43 kilos

23 lbs

COLOUR: Natural

Titanium

SIZES: 15" 16" 17"

18" 19"

FRAME SET

FRAME: Aerospace grade full titanium frame tubes, competition geometry
FORKS: Pace RC 35 (with titanium kit) elastomer suspension system

HEADSET: Dia-Compe alloy sealed bearing Aheadset system

FRAME GEOMETRY

(Based on 17" frame)

HEAD ANGLE: 71°15'

SEAT ANGLE: 74°

CHAINSTAY LENGTH:

419mm (16.5")

TOP TUBE LENGTH:

565mm (22.25")

B.B. HEIGHT: 310mm

(12.5")

DRIVE TRAIN

CHAINSET: Shimano

XTR 46 36 26

B.B.SET: Titanium

ealed

PEDALS: VPTI 105

titanium axle with toe

clips and straps

GEAR SYSTEM

F/R DERAILLEURS:

Shimano XTR

(dual S.I.S.)

SHIFT LEVERS:

Shimano XTR

Rapidfire Plus

BRAKE SYSTEM

BRAKES: Shimano

XTR M-system

LEVERS: Shimano XTR

WHEELS

RIMS: Ritchey Vantage

Pro WCS 32 hole

(395gms)

HUBS: Shimano XTR

- Q.R.

CASSETTE: Shimano

XTR 12-28 8-speed

SPOKES: Stainless

double-butted

TYRES: Ritchey

Megabite Z-Max Kevlar

WCS 26" x 1.7"

BAR SYSTEM

BARS: Ritchey Prolite

WCS (123 gms)

BAR ENDS: Onza

titanium

GRIPS: Ritchey True

Grips WCS (50 gms)

STEM: Ritchey

Forcelite control stem

SEAT SYSTEM

SADDLE: Vetta SL

competition titanium

(180gms)

SEAT POST: Ritchey

Logic WCS (240 gms)

26.8mm



The awesome 1993 *Kili Ultra Elite* is the first all titanium *SARACEN* – one of the most eagerly awaited bikes ever built. For most of us, it's simply a bike to dream about. For a select few, it will be the machine to carry them to championship success.

The *Ultra's* killing edge is the lightweight frame, built entirely from aerospace grade titanium – and wherever practical, titanium components have been used from the Onza bar ends to the titanium kit on the Pace RC-35 carbon fibre suspension forks. As you'd expect, the *Ultra* is equipped throughout with world-championship standard components from Ritchey and Shimano. Could this be the world's greatest ever mountain bike?



The release

from everything
holding you back

AT THE HIGHEST LEVEL

THE DECISIVE EDGE

IS MEASURED IN GRAMMES

THE SARACEN GUIDE TO MTB-SPEAK

A serious modern mountain bike is a complex and advanced piece of machinery. So if you're new to the sport, you could be forgiven for thinking you need a detailed knowledge of engineering to be sure you're choosing the right bike. That's why we've put together this simple glossary of terms. It explains the key features you should look out for in a mountain bike specification, and it'll help you to make a more informed decision.

CARTRIDGE B.B. SET: A sealed for life maintenance free bottom bracket bearing assembly. **CHROMOLY:** An advanced high strength steel with added chromium and molybdenum to produce an outstanding strength to weight ratio. Now accepted as the optimum material for mountain biking. **DITCHING:** A fluted butt profile used to save weight and increase strength on heat-treated steel frames. **DOUBLE-BUTTED:** By reducing the thickness of frame tubing in the centre of its length - where there's less stress - double butting reduces weight without sacrificing strength. **DUAL S.I.S.:** New for '93, front and rear indexed gears with total shifting precision (standard on all '93 Saracens). **ELASTOMER:** Lightweight and highly reliable suspension system, which uses Elastopolymer synthetic rubber to provide both spring and damping mediums. **ELLIPTICAL PROFILE TUBING:** Ovalising the tube at both ends to provide a greater contact area at major stress points. **GROUPSET:** Coordinated gear, chainset and braking system from the same manufacturer. **HEAT-TREATING:** A process of repeatedly heating and quenching steel, which alters the molecular structure to provide the same strength from around half the thickness. **KEVLAR:** A synthetic material first developed for NASA's space programme, it combines very low weight with the strength properties of steel, and it's used to create ultra-lightweight high performance tyres. **MIDSIZE TUBING:** An innovation in tubing technology that delivers all the strength of full oversize tubing, but with a narrower external diameter. **M-SYSTEM BRAKE:** Shimano new improved system for consistent all weather braking. **OVERSIZED FRAME TUBING:** Bigger diameter tubes for off-road strength with decreased wall thickness to save weight. **RAPIDFIRE PLUS:** New for '93, Shimano under bar trigger gear shifters - push trigger for down shift, pull for up shift (standard on all '93 Saracens). **RITCHEY WCS:** Ritchey's top-grade components. WCS (World Championship Series) products were used by Ritchey's championship-winning team. **RITCHEY:** America's leading innovative designer and producer of lightweight performance componentry. **ROCKSHOX:** America's brand leader in front suspension systems. **SHIMANO:** Established throughout the industry as the manufacturer of the world's finest moving component parts. **TANGE:** Major Japanese manufacturer of cycle tubing, front forks and elastomer suspension forks. **TITANIUM:** Lightweight high strength metal used widely in the aerospace industry. The ultimate mountain bike material.

FRAME GEOMETRY NOTES

- Angles given are those based on a notional straight top tube.
- Saracen frame geometry is variable and angles and dimensions given are based on 17" frame size.
- Frame sizes are measured from centre of bottom bracket to centre point of top tube along the seat tube.
- Weight will vary according to size.

WARRANTY

Saracen Cycles has an excellent non-return record due to 100% of all our components being assembled in our workshops prior to delivery to the retailer. This permits us to offer you the following comprehensive warranty:

Saracen Cycles Ltd warrants the replacement of original components of Saracen Mountain Bikes due to defects in material and/or workmanship according to the following conditions and limitations: The frame and forks are warranted for a period of 5 years (in the case of suspension forks, 1 year). The original components, other than the frame and forks, are warranted for a period of 1 year (labour and transportation charges are not included). The warranty is limited to the original retail purchaser only and proof of purchase is required to validate this warranty.

The warranty does not cover damage or failure due to abuse, neglect, accident, improper re-assembly, maintenance or commercial hiring, normal wear and tear or installation of parts or accessories not originally intended for, or incompatible with the bicycle as sold.

Saracen Cycles Ltd shall not be responsible for incidental or consequential damage or loss. The user assumes the risk for any and all personal injury or damage of the bicycle, or other losses if Saracen bicycles are used at any time in any competitive event (including bicycle racing, dirt biking, freestyling or similar activities or training for such activities).

Claims must be made through an authorised dealer.

Saracen Cycles' policy is one of continuous improvement; therefore specifications may be changed, without prior notice.

Mountain bikes, although tough, are not indestructible. Excessively rough use may result in damage to your machine or you - take care and always wear an approved helmet. Optimum riding performance depends on having your bike serviced regularly at your Saracen dealer.

SARACEN

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RetroBIKE
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