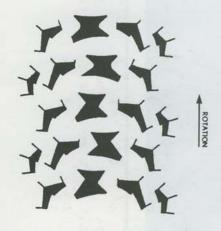
# RIGHEY



QUALITY
COMPONENTRY
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#### RITCHEY MOUNTAIN TIRES

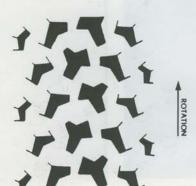
No one designs and manufactures mountain bike tires like Tom Ritchey. Every Ritchey tire is painstakingly designed to provide maximum traction with minimum rolling resistance and the lightest weight. Every tire is also manufactured with the highest quality standards and strictest tolerances. This year brings two exciting new additions to the mountain bike tire line. First, we're pleased to announce the introduction of the new MegaBite Z-Max. The Z-Max combines all of the latest refinements of Ritchey's Vector Force Analysis (VFA) with two full years of race-winning MegaBite experience. Once again, Ritchey sets a new standard in tread design technology with the new super traction MegaBite Z-Max in both the 2.1" and 2.35" widths. The second addition to the line is our new special edition "WCS" (World Championship Series) line of superlight tires. Ritchey tires have always been the lightest full-width tires, and with the new "WCS" series, the lightest just got lighter!



#### MEGABITE Z-MAX

The Z-Max is the newest in the evolution of MegaBite tires. Using Vector Force Analysis, it takes maximum off-road traction to the next dimension!

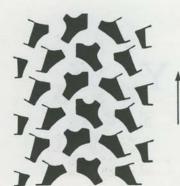
□ 26x2.1	640 grams	60 tpi
☐ 26x2.1 Kevlar	590 grams	60 tpi
☐ "WCS" 26x2.1 Kevlar	530 grams	127 tpi
☐ "WCS" 26x2.35 Kevlar	600 grams	127 tpi



#### MEGABITE HARDDRIVE

The HardDrive use a Vector Force Analysis tread with a more open knob pattern and a wide width. It's perfect for soft, loose, rugged terrain. This is the tire that won the 1989 NORBA Worlds!

□ 26x2.1	680 grams	27 tpi (OEM only)
□ 26x2.1	630 grams	60/66 tpi
☐ 26x2.1 Kevlar	575 grams	60 tpi
☐ "WCS" 26x2.1 Kevlar	520 grams	127 tpi
□ 700x38c	490 grams	27 tpi (OEM only)
□ 700x38c	470 grams	60 tpi



#### MEGABITE OVERDRIVE

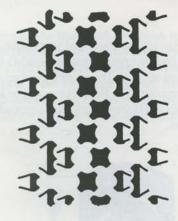
This is the first tire to ever use Vector Force Analysis in its tread design. The OverDrive is an excellent high-speed, low rolling resistance tire that offers great traction and is perfect for fireroads and hard-packed surfaces!

□ 26x2.0	650 grams	66 tpi
☐ 26x2.0 Kevlar	600 grams	66 tpi
☐ "WCS" 26x2.0 Kevlar	530 grams	127 tpi
□ 700x38c	470 grams	66 tpi
☐ "WCS" 700x38c Kevlar	410 grams	127 tpi

#### FORCE DURO

The Force Duro has been a longtime favorite of mountain bikers. It's a long wearing, race proven design that offers excellent performance and light weight!

□ 26x2.0	680 grams	27 tpi (OEM only)
□ 26x2.0	640 grams	60/66 tpi
☐ 26x2.0 Kevlar	575 grams	66 tpi
□ "WCS" 26x2.0 Kevlar	510 grams	127 tpi



#### FORCE RACING K

This two-time NORBA National Championship winning tread is still the leader in light weight, full-width off-road tires. The Racing K is now available in the exclusive "WCS" series design, making the lightest mountain bike tire even lighter!

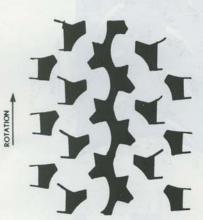
☐ 26x1.9 Kevlar	535 grams	66 tpi
☐ "WCS" 26x1.9 Kevlar	465 grams	127 tpi



### **MOD QUAD**

The Mod Quad uses Vector Force Analysis to combine the lower rolling resistance of the original Quad with the off-road performance of the MegaBites to make it the ultimate in multi-terrain tires!

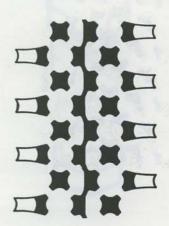
□ 26x2.0	680 grams	27 tpi (OEM only)
□ 26x2.0	650 grams	66 tpi



## **QUAD**

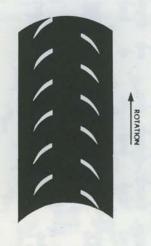
The Quad is the most often copied multi-terrain tire on the market. This ever-popular design sets the benchmark for all-terrain tire performance!

□ 26x1.6	580 grams	27 tpi (OEM only)
□ 26x1.6	550 grams	60 tpi
□ 26x1.9	670 grams	27 tpi (OEM only)
□ 26x1.9	640 grams	60/66 tpi
□ "WCS" 26x1.9 Kevlar	560 grams	127 tpi



#### RITCHEY ROAD TIRES

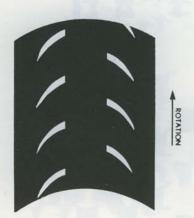
Tom Ritchey has combined years of nationally ranked road racing experience with his innovative and race-winning Vector Force Analysis (VFA) technology to create the world's first road racing tire using VFA. Never before has a road bike tire so accurately addressed the forces imposed upon it. The result is road gripping traction and a super low rolling resistance, which combine to make the ultimate in road tire performance. The Road Force will be standard equipment on the Ritchey Road Race Team bikes, piloted by top riders including Ruthie Matthes and Bobby Julich. Ritchey road tires are now available in a full compliment of diameters and widths, as well as clincher and tubular designs.



#### ROAD FORCE

Ritchey hits the road with the world's first Vector Force Analysis road tires, using unique parabolic grooves for superior cornering and a special contour for an ultra low rolling resistance!

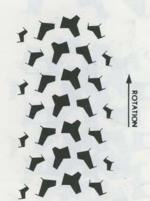
CLINCHER		
□ 700x20c	210 grams	66 tpi
☐ 700x20c Kevlar	170 grams	127 tpi
□ 700x24c	220 grams	66 tpi
☐ 700x24c Kevlar	190 grams	127 tpi
□ 700x28c	260 grams	66 tpi
☐ 700x28c Kevlar	220 grams	127 tpi
TUBULAR		
☐ 700x21c (120 psi)	250 grams	cotton/latex



#### TOM SLICK

The Tom Slick is the only road bike tire made for mountain bikes (26" wheel size) that uses Vector Force Analysis. Using parabolic grooves and the optimal 1.4 width, the Tom slick offers uncompromised road performance!

□ 26x1.4	450 grams	60/66 tpi
☐ 26x1.4 Kevlar	390 grams	127 tpi



#### **MEGACROSS**

This new tire combines input from former World Champion cyclocrosser Thomas Frischknecht with Tom Ritchey's proven MegaBite tire design. The MegaCross is a racing tubular with performance never before available to the cyclocross market!

□ 700x28c	350 grams	cotton/latex
☐ 700x28c Kevlar	300 grams	Kevlar/latex

#### RITCHEY VANTAGE RIMS

Ritchey Vantage rims have become the benchmark for race-winning performance and rim technology. The trademark "V" cross section provides optimal lateral rigidity while at the same time reinforcing the critical spoke area. This design eliminates the need for heavy eyelets, so while the strength is maximized, the weight is minimized. The Vantage advantage is a rim that accelerates faster, climbs quicker, and handles single-tracks more easily. That's why Vantage rims were the number one choice of top pros in the 1990 race season. New for 1991 is the exciting new Vantage Road rim, offering a new level of light weight, performance, and durability for the discriminating road rider. Also new is the Vantage Cross-Sport, a scaled down version of the affordable Vantage Sport, for the growing mid-to-high end hybrid and fitness market!

#### VANTAGE COMP

This is the rim that won the 1989 NORBA Worlds, and in 1990 took a Silver and two Bronze medals in the Pro/Elite Cross-country Worlds. It's the world's lightest MTB rim in the 23mm "responsible" width which pros know offers more air volume and better flat protection!

INTENDED USE: competition and ultra-high performance

OPTIMUM TIRE: MegaBite series tires in 2.0, 2.1, and 2.35 widths DIAMETER: 26"

INNER/OUTER WIDTH: 23mm/17mm

FINISHES: silver, duranomic gray DRILLINGS: 28, 32, 36 holes WEIGHT: 415 grams



The original "V" cross section rim, the Vantage Expert is designed for the rigors of rugged off-road use!

INTENDED USE: high performance riding and racing OPTIMUM TIRE: MegaBite and Force series tires

DIAMETER: 26"
INNER/OUTER WIDTH: 24mm/18mm

FINISHES: silver, black/duro, super hard anodized DRILLINGS: 28, 32, 36 holes WEIGHT: 450 grams

#### VANTAGE SPORT

The Vantage Sport has more features than any other rim at its price. It uses oversize twin side pockets for improved torsional rigidity, while retaining the classic Vantage looks!

> INTENDED USE: multi-purpose performance OPTIMUM TIRE: Force and Quad series tires

DIAMETER: 26", 20" (BMX) INNER/OUTER WIDTH: 25mm/19mm

FINISHES: silver, duranomic gray DRILLINGS: 32, 36 holes WEIGHT: 495 grams

#### VANTAGE CROSS-SPORT

This new rim is a scaled down and narrow version of the popular and affordable Vantage Sport. Available in both 700c and 26" diameters, it's another great Ritchey value!

INTENDED USE: hybrids, touring, multi-purpose riding

OPTIMUM TIRE: MegaBite 700c tires, Quad 1.6 and Tom Slick 1.4 tires DIAMETER: 700c, 26"

INNER/OUTER WIDTH: 22mm/16mm (700c), 22mm/16mm (26")

FINISHES: silver, duranomic gray DRILLINGS: 232, 36 holes

WEIGHT: 500 grams (700c), 450 grams (26")

#### VANTAGE COMP ROAD

New for 1991, the Vantage Comp Road uses the highest quality materials and the top performing "V" cross section to give road riders the ultimate in high performance rims!

INTENDED USE: road racing, criteriums, triathlons

OPTIMUM TIRE: Ritchey Road Force tires DIAMETER: 700c, 26" (triathlon)

INNER/OUTER WIDTH: 20mm/14mm

FINISHES: silver, duranomic gray DRILLINGS: 28, 32, 36 holes

WEIGHT: 420 grams (700c), 380 grams (26" triathlon)











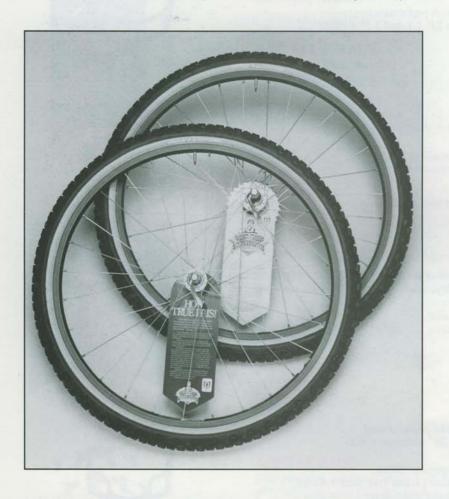
## **PROELITE WHEELS**

#### RITCHEY PROELITE WHEELS

A race proven, limited edition "pro quality" set of team wheels!

Second only to the frame, wheels are reknowned for their importance to the performance of bicycles. Their weight and strength are critical factors which directly influence the way a bike will ride and feel. A wheel is essentially a dynamic structure that is asked to take the first onslaught of punishing abuse. Well designed, shock absorbing wheels are mandatory for mountain bike riders. Taking weight off the wheel, in however small the increments, is a challenge of the highest order. The risks are self-evident, but the rewards of a strong, light, agile, trail gripping set of wheels are unparalleled to any other bicycle component, even the frame.

That's the secret to the Ritchey ProElite Wheels. Only a very limited number are made annually, due to the labor intensive effort put into each and every rim. ProElite Wheels are hand laced and assembled by Wheelsmith. They're so meticulous in their building of ProElite Wheels that each one is individually numbered, and a record kept of it by Wheelsmith.



**VANTAGE COMP RIMS** 

MEGABITE "WCS" TIRES (KEVLAR BEADED)

28/32 SPOKE HAND LACINGS (FRONT/REAR)

WHEELSMITH BUTTED SPOKES

SHIMANO DEORE XT REAR HUB (7-SPEED)

SHIMANO ULTEGRA FRONT HUB

ProElite Wheels start off with Ritchey's championship-winning 415 gram Vantage Comp Rims. Then Ritchey makes use of the ultralight Shimano Ultegra front hub and the Deore XT 7-speed rear hub. These are laced by Wheelsmith technicians using their finest quality 15/17 gauge (front) and 14/16 gauge (rear) spokes. Finally, ProElite wheels receive Ritchey's new ultra-light MegaBite "WCS" Kevlar beaded tires. And if that's not enough, Wheelsmith even guarantees the wheels against spoke breakage and for trueness.

ProElite Wheels are as fast as wheels get. By shedding over one full pound off the rotating mass of your bike, you can actually feel the difference. Previously only available on the Ritchey P-22 Team race bike and to other professional race teams, now's your chance to get a set of these limited edition wheels.

#### RITCHEY PROCONTROL

An advanced system of control components for race-winning performance!

Ritchey introduces ProControl, the world's most advanced fully-integrated, high performance front-end control system for mountain bikes. ProControl features eight different race proven control components, as used by the Ritchey Race Team as well as many of the other top pros.

Pushing the envelope of mountain bike performance, Ritchey ProControl succeeds as never before in making a super light and highly agile control system. The ProControl system includes the very latest in component design and technology, including the Logic triple butted fork with the Force Directional Steerer, the Logic Comp Headset, the Cliff Hanger drop-cable hanger, the Force Comp heat-treated butted chromoly stem, the butted ProLite Handlebars, True Grip handlebar grips, Logic Brakes Levers, and Logic Cantilever Brakes.

TRUE GRIPS

FORCE COMP STEM

LOGIC CANTILEVERS

CLIFF HANGER
CABLE HANGER

LOGIC BRAKE LEVERS

LOGIC COMP HEADSET

LOGIC FORK (with FD STEERER)

PROLITE HANDLEBARS



ProControl continues Tom Ritchey's tradition of designing the most responsibly engineered lightweight performance products on the market. In addition to reducing needless weight, strength is actually improved through the use of such trademark Ritchey specialities as Force Directional (FD) technology, proprietary heat treatments, and the use of only the highest quality "spare no expense" materials. ProControl strikes a balance between reduced weight and improved strength, the result of which can greatly improve the performance of a mountain bike. Steering is more accurate. Shock absorption is enhanced. Front-end responsiveness and agility is greatly improved.

Ritchey's ProControl will fit any standard-size or 1-1/8" oversize mountain bike, which makes improved performance available to thousands of riders without the high cost of purchasing a new bike. And when you figure ProControl's cost versus its weight benefits and improved front end agility, the new ProControl system from Ritchey is a great value!

## HANDLEBARS & GRIPS

#### RITCHEY HANDLEBARS

Tom Ritchey and Easton Aluminum teamed up to create the new standard in high performance handlebars. Introduced just last year, the ProLite has already become the choice of top pros and many manufacturer's "project bikes". The ProLite uses a special high tech proprietary aluminum alloy, previously reserved for NASA and military use only. With special drawing and butting, Ritchey has worked closely with Easton to create this ultra-light racing handlebar. At just 140 grams, the ProLite is almost 50% lighter than the most popular after-market handlebars. At the same time, testing has shown it to withstand two-and-a-half times the number of fatigue cycles! Why chance carbon fiber or pay extra for titanium when you can take hold of the best bar money can buy. Also this year Ritchey is introducing the new ForceLite, a more affordably priced high performance alloy handlebar!



#### PROLITE HANDLEBARS

The ProLite has already become the choice of top mountain bike racers. Its light weight and durable construction have proven a winning combination!

INTENDED USE: competition, lightweight project bikes

MATERIAL: Easton EA70 aluminum

WIDTH: 540mm

BENDS: 4 degrees, 6 degrees, 9 degrees

ANODIZED FINISHES: black, red, silver, blue

WEIGHT: 140 grams

#### FORCELITE HANDLEBARS

The ForceLite is Ritchey's newly updated version of the popular Force handlebar. Its heat treated aluminum construction and attractive looks make it another great Ritchey value!

INTENDED USE: high performance

MATERIAL: 6061 T6 heat treated aluminum

WIDTH: 560mm

BENDS: 6 degrees, 9 degrees

ANODIZED FINISHES: black, silver WEIGHT: 230 grams



#### TRUE GRIPS

Ritchey's True Grips have fast proven themselves to be the racer's choice. Specially formulated compound which helps your hands stick to the grips without any gummy residue. Unlike many of the "trendy" grips out today, True Grips actually help to improve your riding performance!

COLORS: black, gray WEIGHT: 100 grams

#### RITCHEY FORCE COMP STEMS

The numerous medals won at the 1990 World Championships is just the latest proof that the Force Comp Stem is the lightest, strongest stem available. The Force Comp features a unique, butted "super tubing", made with a proprietary second heat treatment process to allow the use of thinner gauge chromoly. Add to that the Ritchey trademark ovalized extension tube and unparalleled quality construction. Fatigue testing showed the Force Comp to exceed the JIS standards by 300%, and outperform all previously tested stems. At just 290 grams (150mm), the Force Comp weights 100 grams less than its leading competition. And now the Force Comp Road is available for high performance road riders!

#### FORCE COMP (MOUNTAIN)

Simply considered the world's best, this stem won the 1989 NORBA World Championships, plus it garnered a Silver and two Bronze pro/elite medals at the 1990 Worlds!

INTENDED USE: competition, high performance, and

"project bikes"

EXTENSION/RISE: 120mm, 130mm, 140mm, 150mm,

160mm, 170mm (all with 10 degree rise),

130mm (with 20 degree rise)

STEM DIAMETER: 22.2mm (standard), 25.4mm (OS)

FINISHES: satin chrome WEIGHT: 290 grams (150mm)

#### FORCE DIRECTIONAL (MOUNTAIN)

The original FD stem, it's full chromoly construction and has more features than any other stem at its price!

INTENDED USE: high performance and general use riding EXTENSION/RISE: 120mm, 130mm, 140mm, 150mm (all

with 10 degree rise),

130mm (with 20 degree rise)

STEM DIAMETER: 22.2mm (standard), 25.4mm (OS)

FINISHES: black chrome WEIGHT: 350 grams (140mm)

### FORCE COMP (ROAD)

This is the new stem used by 1990 World's Silver Medalist Ruthie Matthes and World's team rider Bobby Julich. Using the same proprietary construction as the World Champion mountain bike stem, it's quickly becoming the choice of discriminating road racers worldwide!

INTENDED USE: road racing, criteriums, triathalons, and

high performance road riding

EXTENSION/RISE: 90mm, 100mm, 120mm, 130mm, 140mm,

with 80 degree rise (-10 degree rise)

HANDLEBAR DIAMETER: 26.0mm

FINISHES: satin chrome

WEIGHT: 240 grams (110mm)

#### FORCE DIRECTIONAL (ROAD)

The FD stem offers all of the super strength characteristics of the trademark Ritchey chromoly construction, now available to road riders at an affordable price!

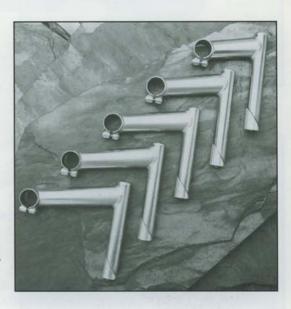
INTENDED USE: high performance road riding, general use EXTENSION/RISE: 90mm, 100mm, 120mm, 130mm, 140mm,

with 80 degree rise (-10 degree rise)

HANDLEBAR DIAMETER: 26.0mm

FINISHES: satin chrome, black chrome WEIGHT: 260 grams (110mm)





## SEATPOSTS & SADDLES

#### RITCHEY FORCE DIRECTIONAL SEATPOSTS

Have you ever seen a seatpost bend sideways? They don't because all the forces are imposed on the fore and aft directions. So Tom Ritchey designed the world's first and only force directionally butted seatpost. It uses superior strength 2014 series aluminum in the post, but that's only the beginning. Instead of a bulky cast clamp, the FD post is joined to a super-tough forged, single bolt clamp. Then a special welding process is used to create not only the toughest seatpost available, it's also the lightest. The 300mm FD seapost weighs over 15% less than the leading competition. The FD is now available in both mountain bike and road bike sizes, and all are built with the craftsmanship and aesthetics that make Ritchey components the number one choice of serious riders!



#### FORCE DIRECTIONAL SEATPOST (MOUNTAIN)

It's tough, butted, light, and has the looks that belong in a showcase. The FD Seatpost is the ultimate in high performance posts, and it's now available in road and off-road lengths as well as standard and oversize diameters!

INTENDED USE: competition and lightweight "project bikes" POST MATERIAL: 2014 series alloy (standard), 6061 T-6 alloy (OS)

CLAMP: forged alloy, single bolt

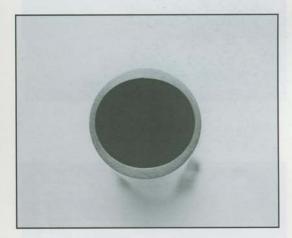
DIAMETERS: (standard) 26.2mm, 26.4mm, 26.6mm, 26.8mm,

27.0mm, 27.2mm, (OS) 28.6mm, 28.8mm, 29.0mm, 29.2mm, 29.4mm, 29.6mm, 29.8mm,

30.0mm

LENGTHS: 300mm, 330mm (OS in 330mm only) WEIGHT: 250 grams (standard 26.8x300mm)

300 grams (OS 29.4x330mm)



#### FORCE DIRECTIONAL SEATPOST (ROAD)

The world's first butted seatpost is now available in a road length, letting road racers benefit from a stronger, lighter seatpost!

INTENDED USE: road racing, criteriums, triathalons

POST MATERIAL: 2014 series aluminum CLAMP: forged alloy, single bolt

DIAMETERS: 26.2mm, 26.4mm, 26.6mm, 26.8mm,

27.0mm, 27.2mm

LENGTHS: 210mm WEIGHT: 210 grams



#### LOGIC RACING SADDLE

This isn't just a name stamped on some leather! Tom Ritchey totally redesigned the bicycle saddle to reduce weight and add comfort and performance. A new base shell holds shortened rails, therefore reducing weight. Then careful research led the way to a superior contour for more comfort and maximum rider performance!

DESIGN FEATURES: special ergonomic "racing" profile, top quality sheepskin leather, medium density padding

RAILS: shortened length spring steel

COLORS: black, white WEIGHT: 315 grams

#### RITCHEY LOGIC BRAKESET

Now there's a lightweight brakeset that actually helps you go faster. The new Logic Brakeset is a high performance braking system with the features top racers demand! Ritchey starts off with a powerful new "medium" profile cantilever design, then constructs them using the best quality cold-forged alloy available for brakes. Logic cantis use a "minimalistic" two position spring design, plus Ritchey has reduced the distance from the fork to eliminate performance robbing chatter. A specially designed increased brake pad adjustment hole increases vertical adjustability, offering the best rim/tire versatility. To get maximum performance from Logic Brakes, Tom Ritchey designed the new Logic Brake Levers. The unique 3-finger lever is ergonomically "correct", featuring a "wedge" profile to reduce fatigue, plus a special index finger "harbor" to add comfort. Cold-forged for strength, Logic Brake Levers are just the thing to finish off this truly high performance brakeset!



#### LOGIC CANTILEVERS

Logic cantilevers not only provide you with the ultimate in stopping power, they're ultra-light in weight to help you go faster!

DESIGN: maximum force "medium" profile

CONSTRUCTION: cold forged 6061 T6 alloy, brass bushing pivot

bearing, two position spring adjustment

PAD ADJUSTMENT: increased vertical adjustment hole

CABLE END: special "tuck" to hide cable ends

COLORS: black, silver WEIGHT: 145 grams/set

#### LOGIC BRAKE LEVERS

Now you can get a handle on braking performance with the stronger, full reach ,lighter weight Logic Brake Levers from Ritchey!

DESIGN: 3-finger trim profile with special index finger

"harbor", ergonomically correct finger angulation

LEVER MATERIALS: cold-forged 6061 T6 alloy CABLES/HOUSING: low friction, high strength BRS

WEIGHT: 95 grams/set

# **CRANKSET & BOTTOM BRACKET**

#### RITCHEY LOGIC CRANKSET

In testing our riders called it "bolt on performance". We simply call it Logic. Tom Ritchey created this new crankset with the serious rider in mind. The Logic Crankset is cold-forged for super strength, and features an ultra-clean "hidden pin" design for less weight and greater strength. The Logic Crankset has the lowest "Q-Factor", which gives an efficient and ergonomic pedaling motion. The left crank arm also receives a unique reinforcement at the axle area to increase strength. Finally, the super duraluminum is hand polished to a high quality satin finish that's only found on the highest quality cranks.



#### RITCHEY LOGIC CRANKSET

Ritchey brings Logic to one of the most important parts of the bike: the cranks. The Logic Crankset offers light weight, excellent power transmission, and an ultra-low "Q-factor"!

MATERIALS: hand polished super duraluminum LENGTHS: 170mm, 172.5mm, 175mm, 177.5mm,

180mm

INNER RING: 74mm OUTER RINGS: 110mm

CHAINWHEELS: 24/36/46t, 26/36/48t

WEIGHT: 650 grams

#### RITCHEY BOTTOM BRACKETS

Current fads to widen bottom brackets aren't necessary with Ritchey's new Logic Bottom Brackets. The Logic BB fits a standard 68mm frame shell, while moving the cup-bearing position out to 78mm. This gives you the strength of a wider or oversize bottom bracket without needless extra weight and availability hassles. Through careful design and the use of the highest quality chromoly and ni-chromium materials, Ritchey has developed the lightest and toughest bottom brackets available!



#### LOGIC PRO BOTTOM BRACKET

When it comes to bottom brackets, this is the top of the line. It's strong, light, and provides unmatched pedaling performance!

CONSTRUCTION: sealed chromoly cups, precision

ground bearings

SPINDLE: hollow nickle-chromium steel

THREADING: English

SIZE: 68x120mm (centered)

WEIGHT: 285 grams

#### LOGIC COMP BOTTOM BRACKET

Now you can use the Logic of a Ritchey Bottom Bracket at a more affordable price!

CONSTRUCTION: heat treated bearing steel, sealed

SPINDLE: hollow chromoly

THREADING: English

SIZE: 68x120mm (centered)

WEIGHT: 295 grams

## **HEADSETS & CABLE HANGERS**

#### RITCHEY LOGIC HEADSETS

Upper bearings of headsets don't wear out, but lower bearings do. That's because nearly all loads and impact work against the lower bearings. The upper bearings work mainly as a "keeper". That's why Tom Ritchey designed the Logic Headsets. Oversized 3/16" bearings on the bottom increase the strength by substantially increasing the amount of load bearing surface. To balance the corresponding load requirements on the top, Logic uses 1/8" bearings which also reduce weight. The result is a headset that has the strength of an oversize headset while actually reducing the weight of a standard size headset. And all this with the race winning durability of a Ritchey design!

#### LOGIC COMP HEADSET

You can't find a stronger, lighter headset! That's why so many top pros choose the Logic Comp headset for top performance on the road and off!

INTENDED USE: on/off-road competition and performance riding

STACK HEIGHT: 33mm

CONSTRUCTION: 1/8" top bearings, 3/16" lower bearings,

crmo bearing steel, precision polished races

LOCKNUT: super duraluminum

UPPER CONE: tough steel for big wrench torqueing

SIZING: standard 1" COLORS: black cp WEIGHT: 115 grams

#### LOGIC HEADSET

The Logic Headset has the same world championship winning design as the Logic Comp at a more affordable price!

INTENDED USE: on/off-road competition and performance riding

STACK HEIGHT: 33mm

CONSTRUCTION: 1/8" top bearings, 3/16" lower bearings,

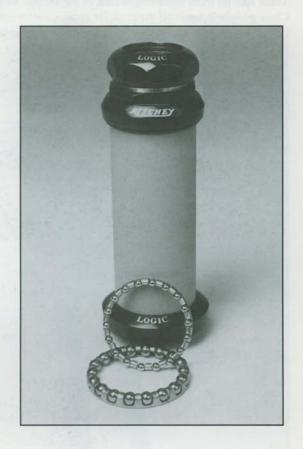
high quality bearing steel races

LOCKNUT: steel

UPPER CONE: tough steel to withstand big wrench torqueing

SIZING: 1", 1-1/8" (OS) COLORS: satin cp

WEIGHT: 130 grams (standard 1"), 140 grams (1-1/8"OS)



#### **CLIFF HANGER CABLE HANGER**

Now you can take braking performance to the edge with the new Cliff Hanger Cable Hanger from Ritchey!

DESIGN: special high strength, low profile for full stem

adjustment (optional cable adjuster)

MATERIALS: 6061 forged alloy

CABLE DROP: deep 16mm drop for smoother cable routing

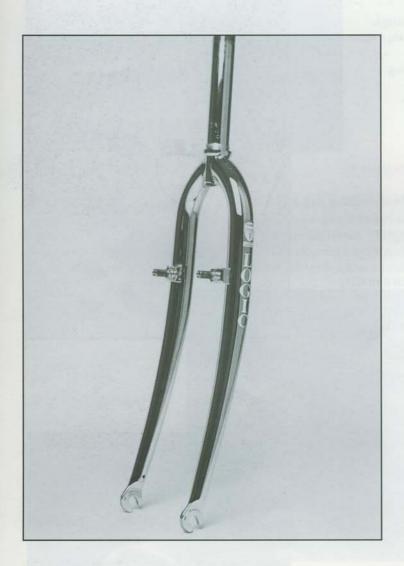
COLORS: silver, black SIZING: 1", 1-1/8" (OS) WEIGHT: 17 grams





#### RITCHEY LOGIC FORKS

Have you ever seen a fork bend sideways? In nearly twenty years of building and racing bicycles, Tom Ritchey hadn't. That's why he designed the new Logic Fork, using his proven philosophy of putting the strength where you need it and trimming the fat. The Logic Fork uses the world's first Force Directional butted steerer, which is thicker on the front and back, and thinner on the sides. It's stronger than conventional steerers where it needs to be, but lighter. Then Tom designed big 27mm triple butted fork blades, which make the Logic Fork Track like no other lightweight fork in the world. In fact, the Logic fork carried a Ritchey rider to victory in the 1989 NORBA World Championships, and half the pro/elite cross-country medals at the 1990 World Championships were won with Ritchey Logic Forks. With Logic you get proven performance and proven durability!



STEERER: force directionally butted chromoly

FORK BLADES: specially designed 27mm round triple

butted chromoly, large radius curve

OFFSET: 1.8"

SIZING: 1", 1-1/8" (OS)

COLORS: chrome, black, raw

THREAD LENGTH: 40mm with 25mm slotting

WEIGHT: 700 grams (127mm steerer)

STEERER	HEAD TUBE	APPROX.	APPROX,
LENGTH	<u>LENGTH</u>	BIKE SIZE	WEIGHT
127mm	75-90mm	16-17"	700 grams
140mm	85-100mm	18-19"	715 grams
165mm	100-130mm	20"	730 grams
190mm	135-155mm	21-22"	745 grams
215mm	155-180mm	23"	760 grams
240mm	180-205mm	23-24"	775 grams

# **TUBING & DROPOUTS**

#### RITCHEY LOGIC FRAME TUBING

Frame tubes rarely fail in the middle. They fail at the ends and in the weld zone. That's why Tom Ritchey, with 20 years of frame building experience, designed the new steel Logic Frame Tubing. Logic tubing is butted slightly thicker at the ends, but with a shorter and stronger butting. This lets the tube withstand the concentrated heat of TIG welding. This also allows a much longer "thin" area, reducing weight significantly. These specially drawn Tange tubes allow the building of the lightest chromoly frames in the world, but also strong enough to carry riders to three of the top six pro/elite medals at the 1990 World Championships. This year Ritchey introduces a full range of *new* Logic tubing, including mountain, road, and hybrid/cross tubesets.

#### LOGIC TUBESETS

Tom Ritchey steels the world! Ritchey designed Logic tubing has proven to be the best performing steel tubing in the world, with the results to prove it: 1989 NORBA World Champion, (men's pro/elite cross-country), 1990 Hillclimb Worlds gold medal (men's pro/elite), 1990 Worlds Cross-Country silver and bronze medals (men's pro/elite), two 1990 World's Cross-Country bronze medals (men's and women's pro/elite), and a 1990 Worlds Road silver medal (women's).

#### MOUNTAIN

LOGIC PRESTIGE PRO "WCS"

(Intended Use: pro competition, project bikes)

LOGIC PRESTIGE COMP

(Intended Use: competition)

LOGIC EXPERT

(Intended Use: competition, performance riding)

LOGIC SPORT

(Intended Use: performance, sport riding)

#### **CROSS**

LOGIC CROSS

(Intended Use: hybrid, cross and fitness bikes)

#### ROAD

LOGIC ROAD PRESTIGE

(Intended Use: road racing, time trials, triathalons)

#### RITCHEY LOGIC DROPOUTS

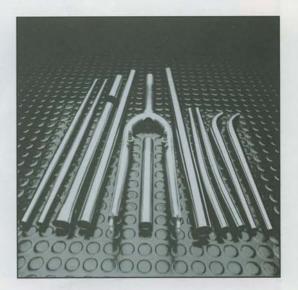
Logic finally comes to dropouts. With nearly 20 years of custom and race frame building experience, who better than Tom Ritchey to design a high performance set of dropouts!

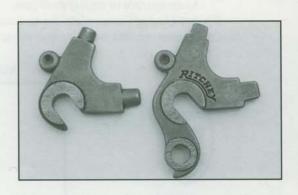
#### REAR VERTICAL DROPOUTS

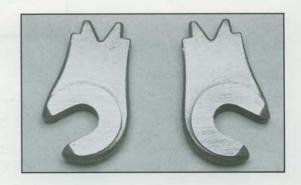
- forged for strength and durability
- new design over axle center derailleur position gives optimal chain wrap
- ☐ half moon tange allows for off-center slotting giving better chain/cog clearance and additional strength weld surface area
- 2-3mm shorter derailleur hanger, reducing mass and weight not needed on modern mountain and road bikes with slant parallelogram derailleurs
- ☐ SS/CS angles: 53 and 62 degree mountain design, 74 degree road bike design

#### FRONT DROPOUTS

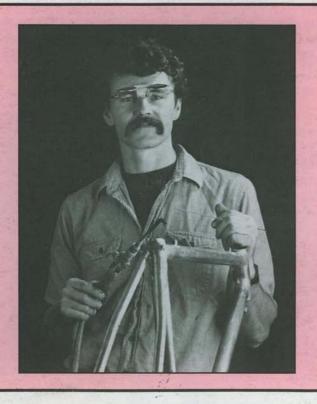
- ☐ wide width designed for 16-19mm fork blade ends
- forged for strength and durability
- unique weight-saving cut away allows for improved heat up







# RIGHEY



"For the past 20 years, I've built, ridden and raced bicycles. They've provided me with a never-ending influx of fun and enjoyment. That's probably why I enjoy designing and creating new and better performing components for bicycles. I hope that our exciting new line of Ritchey Quality

Components can help make your bicycling experience a better one."

- TOM RITCHEY

## How To Get Ritchey Quality Components

#### RETAIL CONSUMERS

Ritchey Quality Components are found as standard equipment on the world's finest bicycles.

As an upgrade or replacement part,
Ritchey Quality Components can be found in performance oriented bicycle shops worldwide.

#### BICYCLE DEALERS

If you would like to place an order for Ritchey Quality Components, contact your usual bicycle parts distributors.

If you are unable to local a Ritchey Distributor, contact a regional Ritchey office.

#### **AUTHORIZED DISTRIBUTOR**





#### Worldwide Headquarters

Ritchey Design, Inc. 1326 Hancock Street Redwood City, CA 94061 (415) 368-4018 fax (415) 368-0840

#### Europe

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#### Taiwan

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