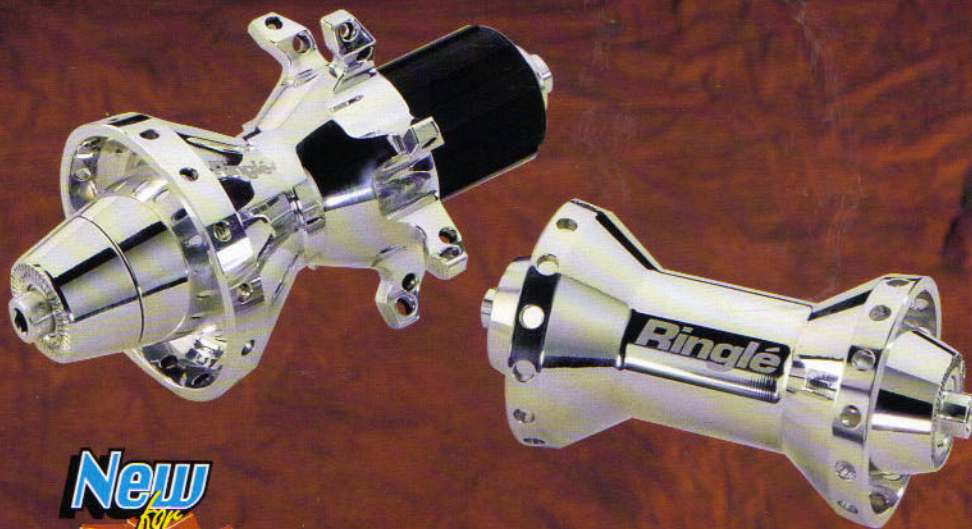




Ringle®

1997 RACING COMPONENTS

The Ti-Stix hubset was designed to provide the ultimate in spoke support. HED's remarkably strong Titanium straight pull spokes have a nipple at each end. This design is stronger than spokes with bends and stronger than straight pull spokes with nail heads. Ti-Stix hubs feature the same internals as our Superduper hubs; oversize axles, silky smooth SKF bearings and our ultra-beefy cassette mechanism. Front 220 grams Rear 439 grams. Available in polished finish.



New
Stix
'97

Ti-Stix®

TITANIUM BLADE
XC RACING WHEELSET

We designed the **Ti-Stix** wheel system to be faster. Ti-Stix wheels are faster because they will accelerate more quickly than the competition and require less energy to keep rolling. This is due to the ultra-low M.O.I. (moment of inertia) which produces a lower apparent weight (lighter feel).

The lower M.O.I. is achieved by reducing the rotational mass, particularly toward the outside diameter of the wheel. For instance: if you assign a gram of weight at

the hub a rotational value of 1 then a gram of weight toward the rim has a rotational value of 177. It becomes apparent that weight reduction at the hub is insignificant and weight cutting toward the rim is all important. This also indicates that you can't judge a wheel by its static weight, you have to understand where the weight is located.

We've cut the weight by using a specially designed hub that accepts straight pull bladed Titanium spokes which



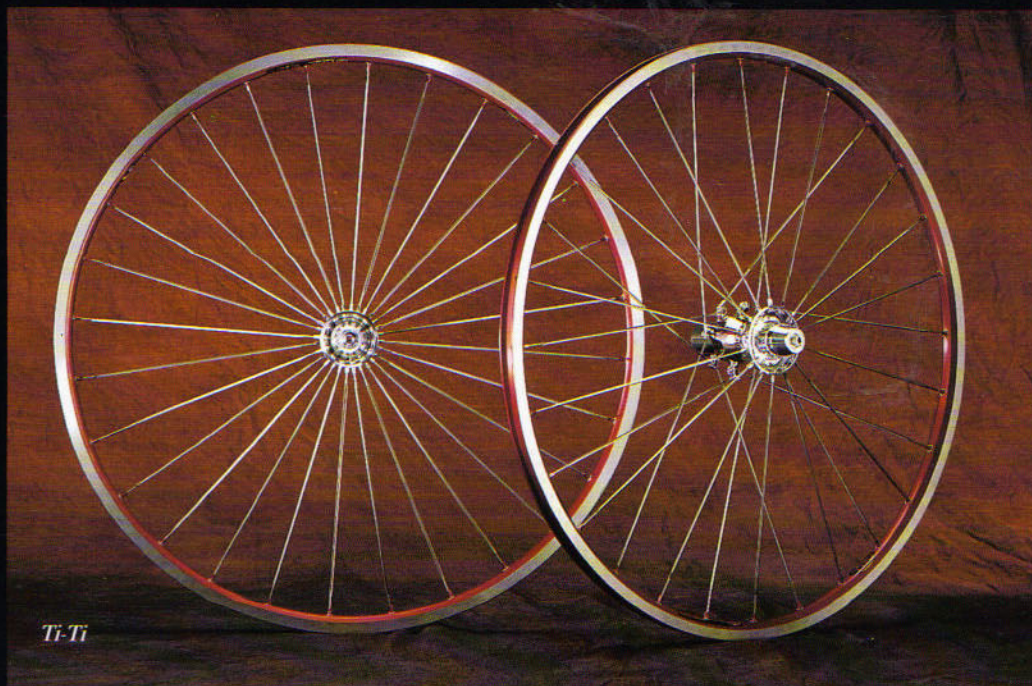
HED Ti-Ti

SPECS

HED Ti-Ti Our lightest feeling aero wheelset

hubs	Ti-Stix hubs
lacing	front - 20 spoke, straight pull radial rear - 28 spoke, straight pull radial on non-drive side, straight pull 2 cross on drive side
spokes	HED Titanium blades, double threaded
nipples	alloy
ribs	HED XC 20 spoke - front HED XC 28 spoke - rear
weight	front 895g, rear 1125g
	Factory assembled

We selected the Sun rim for a number of very good reasons. They are strong, light (about 415 grams), have nice eyelets and feature a beautifully machined braking surface. Like our hubs, spokes and nipples they are made in the USA.



Ti-Ti

are about half the weight of stainless. Because the Ti blades are stronger and harder to break than stainless, we can use fewer spokes. Fewer spokes also means lower wind resistance. If you make a comparison to a 32 spoke three cross wheel that uses 14-15 gauge butted spokes the weight savings is 92 grams for the spokes alone (over 3 1/4 ounces per wheel). This is weight reduction where it counts and it produces a difference that you can feel.

SPECS	Ti-Ti <i>The ultimate for XC racing</i>
hubs	Ti-Stix hubs
lacing	front - 28 spoke, straight pull radial rear - 28 spoke, straight pull on non-drive side, straight pull 2 cross on drive side
spokes	HED Titanium blades, double threaded
nipples	alloy
ribs	Sun CA17A 28 spoke (red or silver finish)
weight	front 762g, rear 965g
	Factory assembled

SPECS	Ti-SS <i>A less expensive alternative to the Ti-Ti set</i>
hubs	Ti-Stix front, Superdupereight slotted for blades
lacing	front - 28 spoke, straight pull radial rear - 28 spoke, radial on non-drive side, 2 cross on drive side
spokes	front - HED Titanium blades, double threaded rear - HED Stainless blades, J hook
nipples	alloy
ribs	Sun CA17A 28 spoke (red or silver finish)
weight	front 762g, rear 1016g
	Factory assembled or unassembled wheel building kit



Ti-SS



SUPERDUPERBUBBA™ SUSPENSION HUB

The **SUPERDUPERBUBBA™** features a unique axle end configuration that keys the axle to the standard dropout configuration. The D-shape axle end prevents rotation of the fork blades around the axle center. This feature actually increases the stiffness of the entire fork/wheel system by turning the axle into a torsion bar. You get the advantages of motorcycle style axle clamps and still get a wheel that is easily removed from the dropouts for flat repairs or travel.

Our huge 17.5mm axle, 1 inch diameter clamping surface and silky smooth SKF bearings also contribute to front end stability. For cross country applications mount the Superduperbubba with a skewer. If quick wheel removal isn't the highest priority, front end rigidity can be enhanced even more with our 6mm Swoopy Bolt kit.

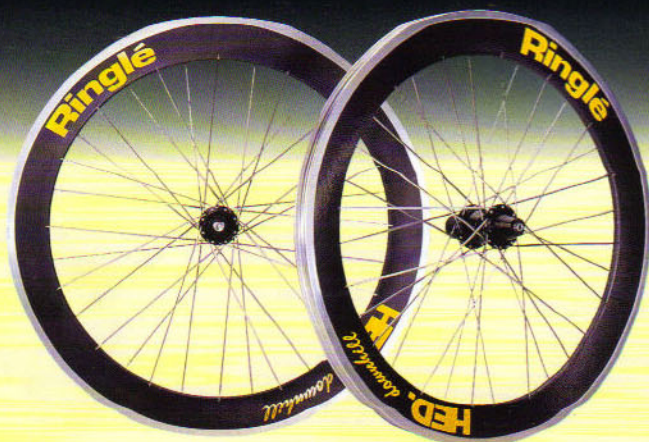
Ringle HED AERO WHEELSETS

downhill

Built for the ultimate in strength and aerodynamic advantage. These are the wheels that our pro teams use for the high speed events like the Mammoth Kamikaze. Features include SUPERDUPER hubs with bladed stainless spokes and a rim constructed of carbon fiber and aluminum. The DH is available in 32 or 36 spoke versions. Pick your color for hubs, tell us how many spokes and we will hand build your wheels and ship them to your favorite shop.

front 1340 g

rear 1570 g



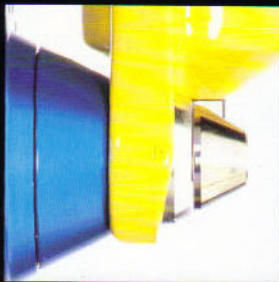
SPECS

SUPERDUPERBUBBA™

- 17.5mm axle
- two SKF precision sealed cartridge bearings
- 25.4mm diameter clamping surface
- threaded axle for 6mm bolts or skewer
- 32 or 36 spokes
- 202 grams
- 46mm flange diameter (center to flange 34mm)
- laser engraved graphics
- black, silver, turquoise, red hot, cool green

NOTE: Fits ALL Manitou, RockShox Judy (C, XC, SL, DH, DHO) and INDI (C, XC, SL). Does not fit RockShox Mags, Quatra or other forks that do not have a flat dropout blade large enough to accommodate a 25.4mm clamping surface.

D-shaped axle end prevents rotation of the fork blades around the axle center.



Swoopy Bolt Kit enhances front end rigidity.

SUPERDUPEREIGHT™

CASSETTE HUB

The first thing you'll notice about the **SUPERDUPEREIGHT™** cassette hub is how quickly it engages when going from a coast to applying your power. In time we think you'll begin to notice just how much faster these hubs roll. Way, way down the road you'll realize that these hubs have been with you a long time and they're still rolling smoothly. It's all because we've made no compromise when it comes to constructing the Superduperight. That includes making the hub mechanism as robust as it needs to be to stand up to the incredibly high and varied loads created by a strong mountain biker. That makes for a tougher sell to a weight freak but it also means you won't be sending a hub back to us and our customer service guy can spend more time with his feet up on his desk.

Along with making the hub durable, we've made the hub serviceable. Using standard bicycle tools (a 5mm hex key and a 16mm cone wrench), it takes only a couple of minutes to periodically clean and lubricate the clutch mechanism.

SPECS

SUPERDUPEREIGHT™

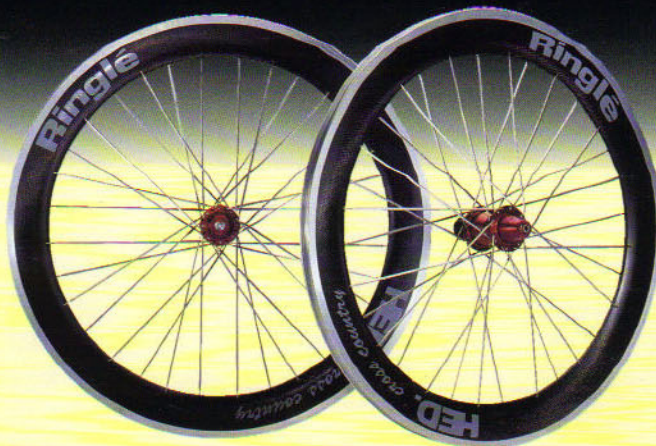
- 15mm axle
- four SKF precision sealed cartridge bearings
- 32 or 36 spokes
- 417 grams
- compatible with Shimano-type cogs
- 52mm flange diameter (center to left 34mm - center to right 21mm)
- laser graphics
- black, silver, turquoise, red hot, cool green

cross country

These are great everyday wheels for those with extreme tendencies. If your reason for riding to the top is to bomb down the other side, these are your wheels. They are lighter than the DH, so they will accelerate more quickly and climb better. They're light enough to feel lively and strong enough to have that confidence inspiring feel on the descents. Our SUPERDUPER hubs are laced with bladed stainless spokes to a lighter version of the HED rim. The XC is available in 32 spokes and all the Ringlé colors.

front 1060 g

rear 1230 g





TWISTERS™

SEAT POST BINDER

They are just too light and too convenient not to have one on your bike. No searching for tools to make a minor seat adjustment and no hassle when removing the seat for loading the bike into the car.

One part fits all. Use all the supplied parts for bikes with through drilled lugs or collars. For bikes with threaded lugs or collars, eliminate the adjustment nut and washer and just screw in until tight. Make sure to trim off the excess Titanium rod.

SPECS

- grade 5 6AL-4V Titanium rod
- 7075-T6 alloy lever, washers and adjustment nut
- stainless steel compression spring & pivot pin
- brass friction reducing pivot follower
- accommodates 42mm span across lugs – make sure to trim off excess rod
- 39 grams – all parts used
- thread in application – 16-24 grams dependent on length
- laser engraved graphics
- black, silver, turquoise, red hot, cool green

TWISTERS™

TITANIUM WHEEL SKEWER SET

Faster than a cam action QR!

All forks now come with recessed dropouts that turn conventional cam operated quick releases into slow releases. On the other hand, *Twisters™* are specifically designed to work quickly and easily with recessed drops.

Light weight: 89 grams per pair, enough said.

Comfortable to use: The wide, flat lever is finger friendly and its length provides more than enough leverage to easily tighten on a wheel.

SPECS

- grade 5 6AL-4V Titanium rod
- 7075-T6 aluminum alloy lever, serrated floating torque washer and serrated adjustment nut
- stainless steel pivot pin and centering springs
- brass friction reducing pivot follower
- laser engraved graphics
- black, silver, turquoise, red hot, cool green

New
Since
'97



MOBY™ DEUCE

The '97 **MOBY™ DEUCE** incorporates Easton's new EA70-T6 Taperwall tubing. Ultimate strength and fatigue life have been dramatically increased without increasing the overall weight of the tubing. The report issued by the independent lab that performed comparative tests of numerous seatposts can be summed up in one word, impressive. All things considered (usable length, weight vs. strength, cost, etc.) you won't find a better post.

Other features that you will appreciate include our patented one bolt rail clamp that allows easy adjustment for a wide range of saddle positions and our anodized graphics with height scale. The height scale adds so much convenience, you'll wonder how you lived without it.

SPECS

materials

Easton® EA70-T6 Taperwall tubing, 7075-T6 for adjustment clamp parts, Stainless steel threaded insert, Steel socket head cap screw

length

350mm (280mm seat rail to max height line)

sizes

26.8, 27.0, 27.2, 31.6

graphics

permanent anodize and laser engraving

colors

black, silver, turquoise, red hot, cool green

weight

26.8 x 350mm = 240 grams

Special clamp drums are available for oversize carbon rails, sold separately.



ZOOKA™

CLAMP-ON STEM

The **ZOOKA™** is designed specifically for threadless headset and steerer tube systems. The one piece, CNC machined, hollow 7075-T6 barrel is light and extremely stiff. The internal steerer clamp design does not have any exposed bolts or lugs to wreak havoc with your knees.

The removable 7075-T6 end cap facilitates quick bar changes and makes packing a bike for travel a snap.

A set of height spacers is also included. The set includes a 1/8", a 1/4" and a 1/2" spacer. The spacers make available height settings at each 1/8" interval up to 7/8". The spacer kit allows a zero degree stem to be adjustable up to the equivalent of a ten degree stem, and a ten degree stem to be adjustable to a twenty degree stem. All fasteners are titanium.

Zooka stems feature laser engraved graphics and come in the following colors:

Black, Silver, Turquoise, Red Hot, Cool Green

MOUNTING TIP:

Do not cut your steerer tube until you are sure. It is possible to move spacers from the bottom to the top of the stem, thereby changing the rise without cutting the steerer tube. Once you are sure that you are comfortable, it is advisable to cut off the excess tube so that the preload cap sits flush with the stem.

SPECS

reach	rise	steerer	weight*
90mm	10°	1 1/8	164.4g
105mm	10°	1 1/8	169.6g
120mm	0°	1 1/8	179.8g
120mm	10°	1 1/8	177.9g
135mm	0°	1 1/8	183.3g
135mm	10°	1 1/8	187.6g
120mm	0°	1 1/4	181.8g
120mm	10°	1 1/4	182g
135mm	0°	1 1/4	186.2g
135mm	10°	1 1/4	190.4g

**no other stem that we know of comes with a preload cap, therefore we do not include its weight in the chart.*

For your reference 1 1/8 caps = 14.5 grams, 1 1/4 caps = 20.2 grams.



SLAMMA JAMMA™

THREADLESS HEADSET

The heart and soul of the *Slamma-Jamma™* are the stainless steel sealed cartridge bearings that are produced for Ringlee by SKF. Two years ago we teamed up with SKF (one of the world's largest manufacturers of high quality bearings) to design a new headset. The ultimate goal was to create the best headset money could buy. We met the challenge by developing higher load capacity bearings and providing better protection from moisture.

The stainless bearings feature special angular contact races that are packed with a full complement of 38 balls. The special raceways and extra balls dramatically increase the radial and axial load capacity of the bearings. The bearings have removable seals and are 100% packed with waterproof grease.

The custom bearing cartridges are pressed into alloy bearing cups that are designed with a more tortuous

path to help prevent the entry of water and grit. The top cap is designed to overlap the top bearing cup like an umbrella and has a O-ring seal around the steerer tube. Rain and corrosive sweat will flow around the headset rather than through it, further promoting the life of the stainless bearings.

SPECS

- available for 1 1/8 in. or 1 1/4 in. steerer tubes
- SKF stainless steel 38 ball double sealed angular contact bearing cartridges
- 7075-T6 alloy bearing cups and caps
- stainless steel crown race plate
- laser engraved graphics
- black, silver, turquoise, red hot, cool green

REFERENCE WEIGHT:

1 1/4 inch = 132 grams + 34 grams for pre-load cap & screw



H₂O XC™

ULTRA LIGHT
BOTTLE HOLDER

It will hold'em when others let go.

Used extensively by top pros since '92, the XC cages have proven they withstand the pounding of off-road racing conditions. Bottles are easy to get in and out but you won't lose them when going over rough terrain (or hitting pot-holes when you're on the road).

You can "dial in" the fit to the bottle by using the lateral mounting slots to expand or contract the cage diameter. By reducing the cage diameter you can increase the amount of "grip" on the bottle.

Available in black, silver, turquoise, red hot, cool green.

Only 49 grams

ANTI CHAIN SUCK THING™

CHAIN DEFLECTOR PLATE

68 gram insurance policy

Would you add 68 grams to the weight of your bike in order to prevent chain suck and demolished chain stays? Thousands already have by installing the original **ANTI CHAIN SUCK THING™**. This simple clamp-on device is designed to deflect a stuck chain before it jams between the chain ring and the chain stay of your frame. If you allow chain suck to continually gouge your stay, that is where your frame will break some day.

All chainring combinations can be accommodated with one of two different sizes:

- *24-34 Works for 22-32, 24-34, 26-36, or any 10-Tooth difference.*



- *24-36 Works for 20-32, 24-36, or any 12-Tooth difference.*

Both sizes available in Black only.



BOXXER™

DOWNHILL RACING HUB

We worked hand in hand with RockShox to develop the hub axle and dropout specifications for their elite pro only **Boxxer™** downhill fork. Virtually all of the pros seen racing on the Boxxers in '96 were on the Boxxer hub by Ringle. For '97 Rockshox will introduce the 101.6mm (4inch) travel JUDY DHO that incorporates the very same Boxxer hub. The DHO/Boxxer hub system features wider 110mm hub spacing, 20mm hollow axle and motorcycle style axle pinch clamps. These features combine to provide the ultimate in front end stability.

SPECS

- 28.6mm diameter sub-axle with 20mm bore
- Two SKF precision sealed bearings
- 110mm dropout spacing
- 55.6mm spoke hole diameter (center to flange 37.4mm)
- Black with laser graphics
- 204 grams

Available as an accessory from RockShox.

General Information

- All Ringle racing components come with instructions. Please ask your shop to provide these instructions to you at the time of purchase. The instructions contain vital information for proper installation and maintenance. Please pay particular attention to torque values.
- All Ringle products are sold with a limited material and workmanship warranty intended for the original owner for a period of one year.
- Should you ever experience a problem or defect, please contact your dealer or the Ringle factory. We will repair or replace the component at our sole discretion.

Please do not send any merchandise without first obtaining a return authorization from the Ringle factory.

Some Good Advice: Mountain biking can be a dangerous sport. However, there are things you can do to reduce the danger to yourself and others. Ride in control, always wear a helmet and maintain your equipment. Before each ride, check the condition and adjustment of your bike. Regularly check your complete bike for signs of wear and tear. If you crash, there may be hidden damage to your frame or components. Have your bike checked by a qualified bicycle mechanic for signs of damage.

cover: Unidentified pro racer flying down Deer Valley DH course on prototype hub developed for Answer/Manitou.
photo: by Tom Moran, Singletrack Photography



*We work with many of
the fastest mountain bike
racers in the world
to design, develop, test
and evaluate the products
that we offer.*

*The components in this
catalog are the real thing
and are the very same as
those used to win National
and World Cup events.*

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