
PAUL
COMPONENT
ENGINEERING
INC.

PAUL COMPONENT ENGINEERING INC.

FUNCTIONAL, DURABLE, SERVICEABLE.

PRAISE THESE WORDS, OR FACE THE WRATH.

In this age where every new year brings a higher level of complexity, we are driven to administer serenity through simplicity. No matter how trick, how expensive, or how light, we believe the above three words should apply. We do our darndest to bring you function through clever design and good machine work. Parts you don't need a microscope and weird tools to work on.

And yes, we make it all ourselves here at the plant in Chico. This is a rare feature in today's marketing driven world, and we like to blow our horn about it. It does make a difference. We just wouldn't trust somebody else to care as much as we do. Plus, all that noisy machinery is pretty cool.

Another thing we like to brag about is how nasty our local trails are. Steep, jagged lava flow. Dry, gritty volcanic dust in the summer, muckity mucky in the winter. Trails worshiped for product development, ideal proving grounds. We take advantage of this day in and day out tweaking new stuff and seeing how we can make the present line up better.

For 96 there are some new balls, the patent pending **GRIPTION RING** on all the brakes for extreme brake shoe staying power, and the new SLOP ADJUST lever pivot to take up all side to side play. The DDT hub has been put on steroids: fatter everywhere. It now boasts a huge 25.4mm axle. That is one big & stiff axle.

The crew, and a mighty fine one too. Like our parts, only the best need apply. Engineers, programers, and quality obsessed machinists. Bike people committed to making bike stuff. Not just another aerospace firm making bike parts, or not, depending on the whims of the Pentagon. Bike parts are all we do.



So, here is the bottom line, you are going to spend some major dough on cool bike stuff. Make it an investment in something that won't disintegrate after the first stack. Get some PAUL equipment and you'll get parts that function flawlessly, are serviceable, last along time, and just so happen to be some of lightest found 'round the big blue ball.

Our most excellent marketing manager, Eva, wants a listing of colors so she we won't have to list them over the phone so much. It's a long list. Good idea Eva.

BRAKES, MOON UNITS, BRAKE BUDDIES:

silver, black, red, blue, green, gold, and violet

HUBS,LEVERS, DERAILLEURS:

all those plus a RASTA combo

BALLS:

red, blue, silver

So now you know.

POWERGLIDE™

Fully disassemblable. Fully Serviceable. Fully bitchen.

During the POWERGLIDE'S first year we have made many refinements to the first American production derailleur. This includes specific drivetrain requirements, and a general tightening of all tolerances. There is also a heftier cage spring.

Overall, however, we are committed to our initial design. This includes serviceable pins, o-ring sealed cage and body pivots, and a helicoiled cable clamp screw among other niceties:

Every piece is replaceable. Pivot pins can be removed, greased, and replaced in seconds.

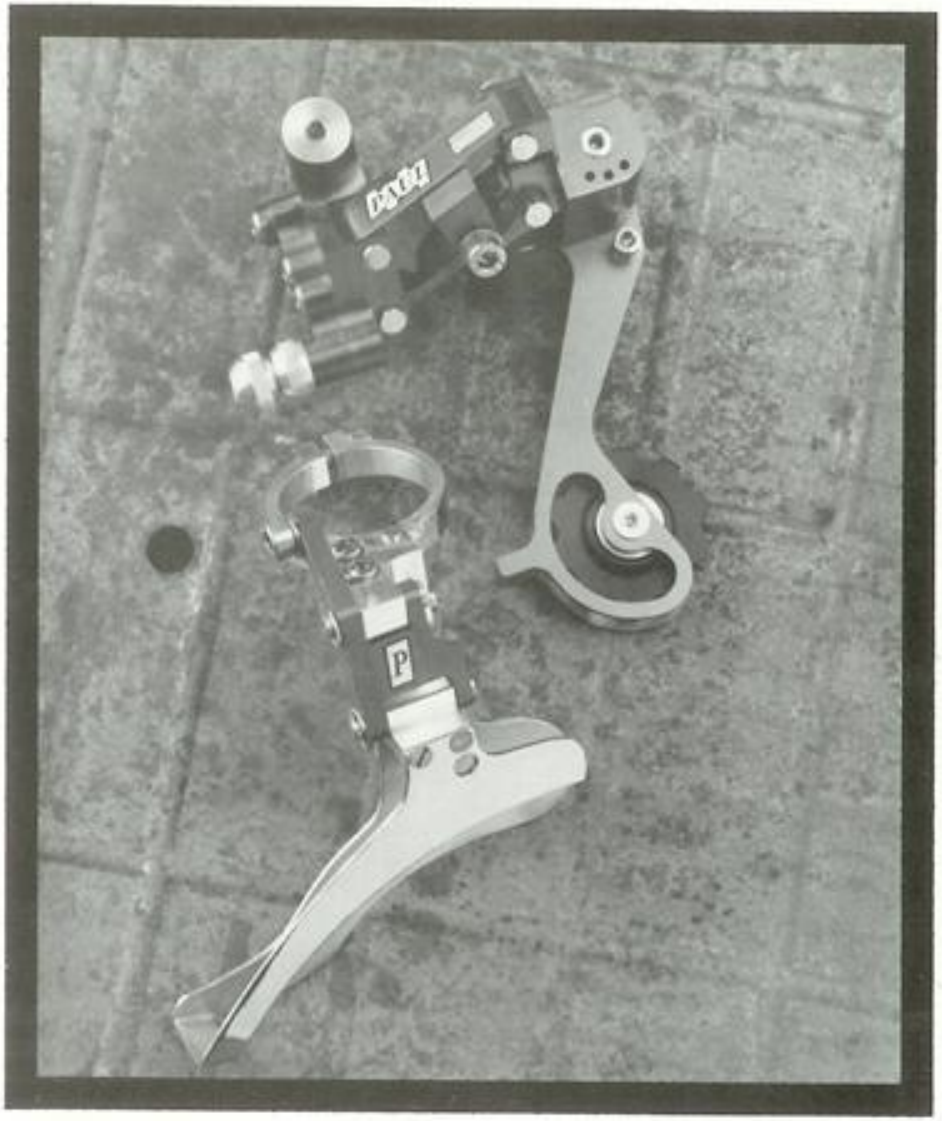
Friction free, floating, sealed bearing pulleys. Precision CNC'd links and bodies for supreme alignment. Brass cage pivot bushings.

There is also a break away bolt at the dropout, with a hex broach on both sides so once you biff, the part left in the dropout can be removed on the spot.

Motorheads will note the name is from Chevy's first automatic tranny. While it had only two gears, it was built bombproof. Many are still in use shifting 1000 horsepower drag cars. We reckon this aint too far from the intended use of our own POWERGLIDE.

SPECS:

	POWERGLIDE	*409*
BODIES, LINKS	6061 T-6 BILLIT	6061 T-6 BILLIT
CHAIN CAGES	6061 T-6 BILLIT	STAINLESS STEEL
PIVOT BUSHINGS	BRASS	BRASS
CAGE & MOUNT BOLT	7075 T-6	STAINLESS STEEL
CABLE CLAMP SCREW	STAINLESS STEEL	STAINLESS STEEL
JOCKEY WHEELS	DELRIN W/SEALED BEARINGS.	
CAPACITY	32 TEETH (MEDIUM CAGE)	28 TEETH
OPTIONS	LONG, MEDIUM, SHORT CAGES	1-1/8, 1-1/4, 1-3/8; TOP & BOTTOM PULL
WEIGHT	175 GRAMS (med cage)	100 GRAMS



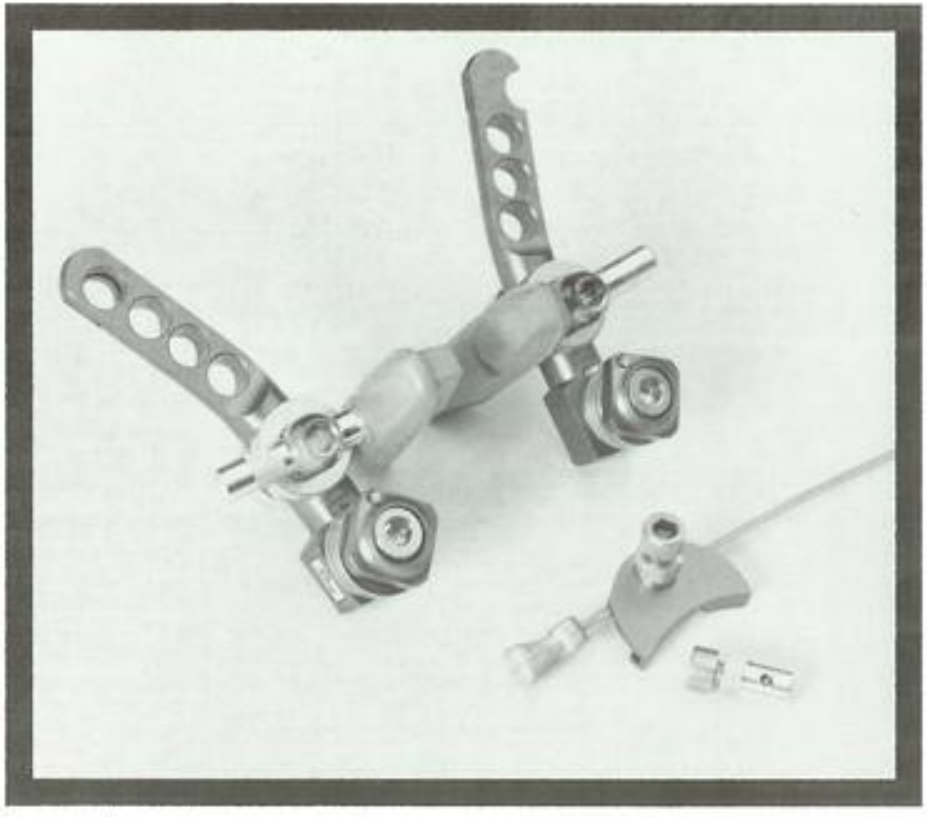
409™

Like our ground breaking and trend setting POWERGLIDE, the new *409* was created with much inspiration and lots of perspiration. It is the missing link in American bicycle technology.

A unique wide parallelogram, and large diameter brass bushings make it extremely rugged and precise. CNC'd from 6061 T-6 aluminum to our precise standards, it is strongly sprung and fully rebuildable.

Using a special machining process, we have crafted a beautiful and long lasting cage. Precision formed and bent from tough and corrosionless stainless steel, we haven't been able to wear one out yet.

Available spring '96 in 1 -1/8, 1 -1/4, & 1 -3/8 clamp sizes; and top or bottom pull. Save your pennies and save your dimes because she's real **FINE**.



BRAKES, AND WHY OURS ARE BETTER:

Back around 1990, when there was maybe one other American brake set, Paul machined out the first set of *STOPLIGHTS* in what was then his garage. They had many new features that worked extremely well. Like round cross section arms, which everybody else is currently playing catch up on. These now have the new **GRIPTION RING**, which gives our one bolt pad adjust system incredible staying power.

The pivots are sealed and simple: They do not rely on what is on the bike, but rotate on their own separate, oversize stainless bushing.

Springs: Our exclusive square wire SQUARE WAVE springs are heavy duty, and fully adjustable. Never had a failure with these, never.

Cable clamp: Starting to see copies of these. We put flats on them so you can grab them with a 8mm open end. Much better (and lighter) then Vise Grips. It is said Paul has a real soft spot for these.

Don't be fooled: PAUL Component Engineering is the leader in brake design.

STOPLIGHTS™ THE ULTIMATE BRAKE SET.

At 95 grams (sans pads) these are the lightest no compromise brakes around. They are the real thing, the original, and the best. Just ask anyone who has used them-this is one sweet set of stoppers.

We precision machine each one out of solid billit to rigorous engineering requirements here in our plant in Northern California guaranteeing quality assurance. Cable carrier duty is handled by the stiff and light **MOON UNIT**. Used exclusively on all our brakes are our SQUARE WAVE square wire springs - fully durable through a wider range of tension adjustments. Ti anchor and eye bolts.

STOPLIGHT MC™

BUILT FOR THE AGRO SPORT RACER, we developed a more affordable version of the awesome *STOPLIGHTS*. Renowned o-ring sealed pivot is included, as is the **original**, and still the best round arm, one bolt pad adjustment system. Silver **MOON UNITS** and grey Eagle Claw II shoes are there too.



Our brakes rotate on their own precision, oversized and sealed pivot.



Exclusive, patent pending, **GRIPTION RING** for rock solid pad placement.



SPECS:	*STOPLIGHTS*	*STOPLIGHT MC*
ARMS	6061 T-6 BILLET	6061 T-6 BILLET
ANCHOR BOLTS	6-4 TITANIUM	304 STAINLESS STEEL
EYEBOLTS	6-4 TITANIUM	304 STAINLESS STEEL
MOON UNIT	6061 T-6 BILLET	6061 T-6 BILLET
MOON UNIT CLAMP	8mm 2024 HEX	8mm 2024 HEX
MOON UNIT CLAMP BOLT	304 STAINLESS STEEL	304 STAINLESS STEEL
WEIGHT	95 GRAMS	125 GRAMS
SHOES	EAGLE CLAW II	EAGLE CLAW II

CROSSTOP II™

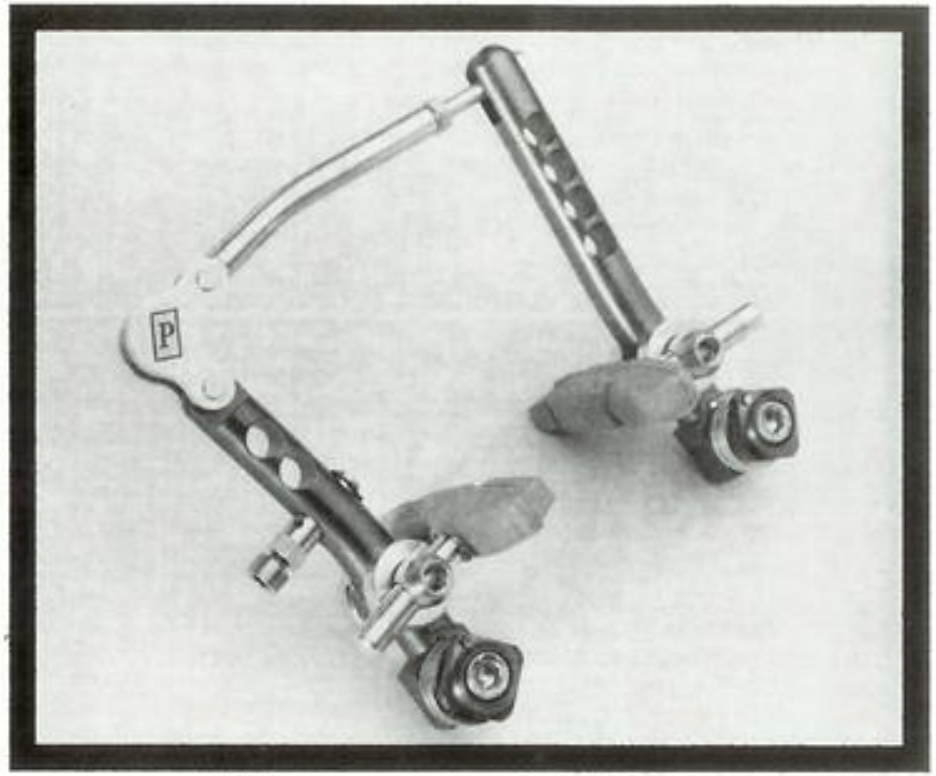
THIS IS THE BRAKE FOR YOUR FULL SUSPENSION RIG. As, or more, powerful then the *STOPLIGHT* series, one finger braking has never felt so plush.

This sexy unit *solves* the rear brake problems associated with the full suspension revolution: mushy, powerless feel, cable routing nightmares, and lack of heel clearance.

On our **CROSSTOP II**, cable housing leaves the frame and goes directly to the (IRD inspired) **DEALIE**, bypassing flimsy housing stops and friction inducing, weird systems of pulleys, cranks and levers. For '96 we have upgraded the **DEALIE** pivots to precision, serviceable brass bushings.

With the **CROSSTOP II** you get all the controllable feel and awesome power of the *STOPLIGHTS* (without having to put up with heavy and noisy disks that drag). In fact, this brake is so nice feeling, and so cool looking, many of us at the plant use them on all our rides. They also work really, really good with drop levers.

Mountain Bike Magazine gushed all over these brakes. Velo News said these brakes had a well thought out design, with lots of leverage. However, MTB & Mountain Bike Action didn't like 'em. Why this dicotomy? It all boils down to this: This is a highly set-up sensitive brake. Please read and follow the instructions very carefully, it makes all the difference. Thanks.

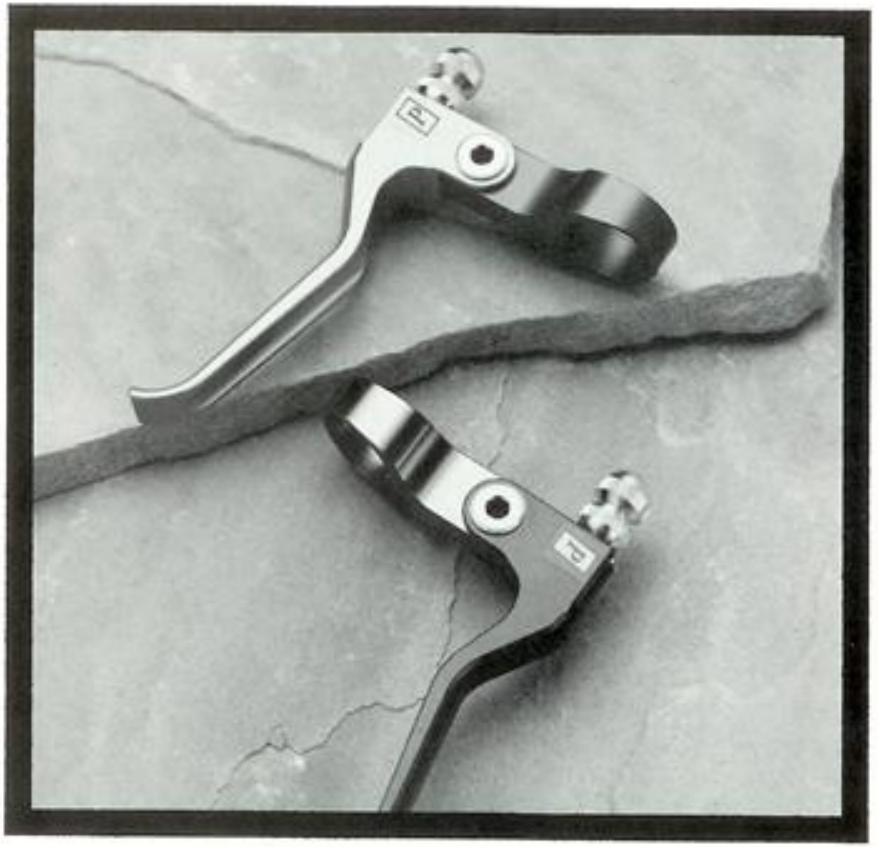


SPECS:	CROSSTOP II
ARMS	6061 T-6 BILLET
ANCHOR BOLTS	304 STAINLESS STEEL
EYEBOLTS	304 STAINLESS STEEL
MOON UNIT	6061 T-6 BILLET
MOON UNIT CLAMP	8mm 2024 HEX
MOON UNIT CLAMP BOLT	304 STAINLESS STEEL
WEIGHT	130 GRAMS
SHOES	EAGLE CLAW II

LOVE LEVERS



Exclusive SLOP ADJUST pivots eliminate all side play.



LOVE LEVERS™ -

These concupiscent beauties best exemplify what PAUL Component Engineering is all about: Functional, Strong, Durable, Simple. Once these goals are obtained, then and only then, do we make the stuff light-and these suckers are *light:* 110 grams per pair (that's 55 grams each, da). Wide, form fitting lever. Minimal yet structurally sound clamp. For '96 we have lengthened the lever a tad (1cm.), and removed 5 more grams of fat. And, as if they weren't lovely enough, we've come up with an ingenious, brass, easily adjusted SLOP ADJUST pivot. With a turn of a wrench all side to side play can be dialed out.

Other stuff: Reach adjusters. Light and cool *slotted* barrel adjusters. CNC'd 6061 T-6 throughout. Brass pivot and stainless steel thrust washers.

Get some and find out why MOUNTAIN BIKE said-"*Love Levers are a form of decadent practicality one rarely sees in the bike world. Jump on it...These are the best levers we have ever tried.*"



F*HUB*

Last year's intro of the new hubs with funny names was, understandably, overlooked by many because of the excitement over the POWERGLIDE. However, it has been a year now and these smoothies have proved themselves over and over again on the race circuits. Big 19mm (for stiffness), hollow (for lightness), 7075 aerospace aluminum axle. Big, bottom bracket sized bearings. Stiff, oversized, thin wall hub shell (with Powerbands!). And finally, our brilliant, self-locking adjustment system. Very stiff, very light, and very smooth.



F*HUB* DDT

D is for downhill. **D** is for dual slalom. **T** is for *Totally Tuff*. No longer will your sliders live a separate existence, but will be united in unerring steering control and rigidity.
The DDT has been totally redesigned for 1996. Most excellent 37mm precision sealed bearings roll on a 25.4mm axle. That's a full inch, dude! Larger shell and end caps, too. This new design is also much easier to service than the previous model. You're welcome.

ADJUSTING OUR BEAUTIFUL HUBS:

Stop the shimmy-here's the skinny.

While most trick hubs just get wobbly, ours are fully adjustable for normal bearing wear, even while the wheel is still in the fork. The Fhub takes a 19mm cone wrench, and the DDT uses a 25mm, or one inch for adjusting the self locking bearing pre load nut. But, don't touch them until they need it. Thanks.



the big Fhub
& the really
big Fhub
DDT
bearings.

SPECS:

	Fhub	Fhub DDT
SHELL	6061 T-6 ALUMINUM ONE PIECE. OVERSIZE/THIN WALL W/ POWERBANDS!	6061 T-6 ALUMINUM ONE PIECE. OVERSIZE/THIN WALL W/POWERBANDS!
BALLINGS	28, 32, 36 HOLE	28, 32, 36 HOLE
AXLE	7075 T-6 ALUMINUM. 19mm O.D. HOLLOW CORE	7075 T-6 ALUMINUM. 25mm O.D. HOLLOW CORE
BEARINGS	NSK emq 17mm x 30mm	NSK emq 25mm x 37mm
ADJUSTING CONES	6061 T-6 SELF-LOCKING	6061 T-6 SELF-LOCKING
END CAPS	6061 T-6	6061 T-6
FRAME ATTACHMENT	QUICK RELEASE	9mm TITANIUM BOLT W/BRASS FRICTION RINGS
WEIGHT	149 GRAMS	190 GRAMS
SPACING	108mm	109mm



Michelle Grainger, rad chick and one of our many pro & expert riders .

Thanks for the cookies Michelle.



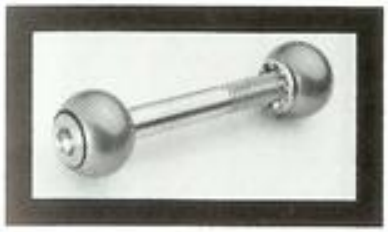
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This is the page we had planned to use for our new BeefSteak Crank. It's not ready yet. Maybe next year.
However this is the design found on the back of all our t-shirts



BLUE BALLS™

Our seat post binder keeps you up tight. Ti bolt: 11 grams, Stainless bolt: 20. Blue



FIRE BALLS™

Red



BARE BALLS™

Silver



MOON UNITS™

The original custom, and still the coolest, most functional canti cable hanger. Big head bolt and wrenchable 8mm hex clamp. 7 grams.



BRAKE BUDDY™

We carve these out of 6061 T-6 aerospace aluminum plate on our CNC. Very stiff, but also very light. Dramatically reduces flex and increases brake power. This comes standard with spacers and titanium mount bolts. 48 grams.

Duds & Togs



JERSEY

Made from double-knit **wool**, olive center and black sleeves. All that talk about how good wool is is true. Our logo is embroidered on the front breast & center back pocket. Three pockets for easy access to riding and other paraphernalia. Made for us by some nice people in Healdsburg, CA.
Small, medium, large.





JERSEY DRESS

This ain't no downstream dress. Airy, loose, cool, tank style, green cotton bodice. Oh so hip woven Guatemalan skirt. Strong enough for a man, but made for a woman.
Small, medium, and large.

T-SHIRT & CAP

We pay homage to the end mill. Basically, this is the sharp part of a milling machine that removes the metal. (This is an important tool for us). Our not so famous peace sign, "be nice, ride a bike" logo is on the back so people know just how cool you are from either end. This quintessential mountain bike t-shirt is a must have for every bike weenie, and it feels good next to naked skin. Hanes Beefy-T made from 100% preshrunk cotton. Large, & X-Large.

CAP ...One size fits all. Nice & real leather strap for accurate cranial adjustment. 100% cotton in a low profile style even the most discriminating fashion hound pines for. Medium long bill.

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ALL OF US here at the plant realize what a gift it is to inhabit our fragile earth. We print on recycled paper with soy based inks. We use minimal packaging, ride to work whenever possible, and recycle our waste. The earth is a gift, a privilege. **PLEASE** tread lightly. Minimize impact, and respect other trail users too. Besides being nice to the dirt, this keeps our precious open trails open. **NO ACCESS, NO DICE.** We all share in this responsibility.

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