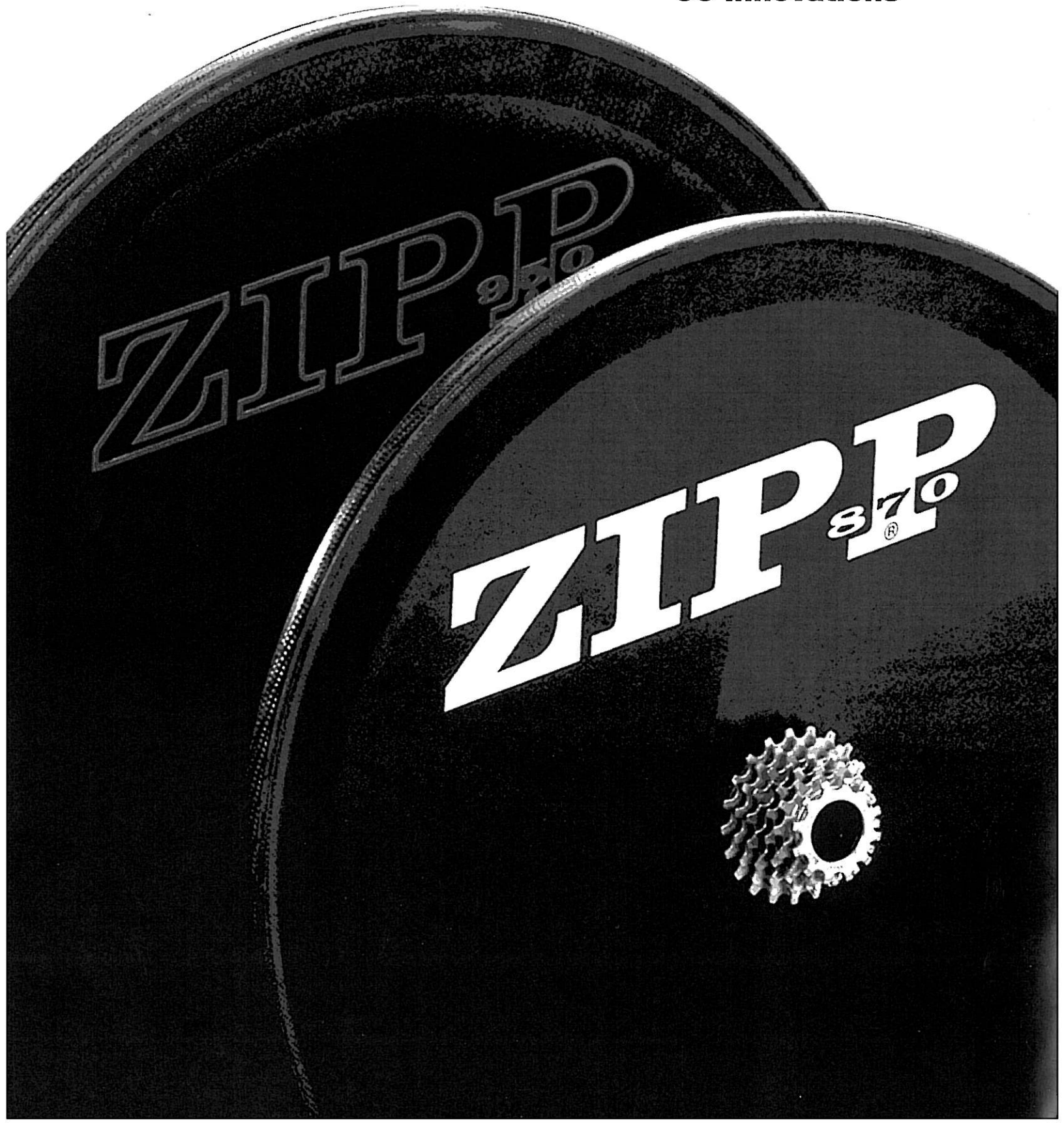


ZIPPER
speed weaponry

96 Innovations



3001

A HIGH-TECH MASTERPIECE ON WHEELS.

This is it, folks: the absolute state of the art. The **ZIPP 3001**, like its predecessor (the 2001), will shake up the athletic world. Quite simply, no other bike comes close to the 3001 in terms of design, performance, and aerodynamics. Check it out:

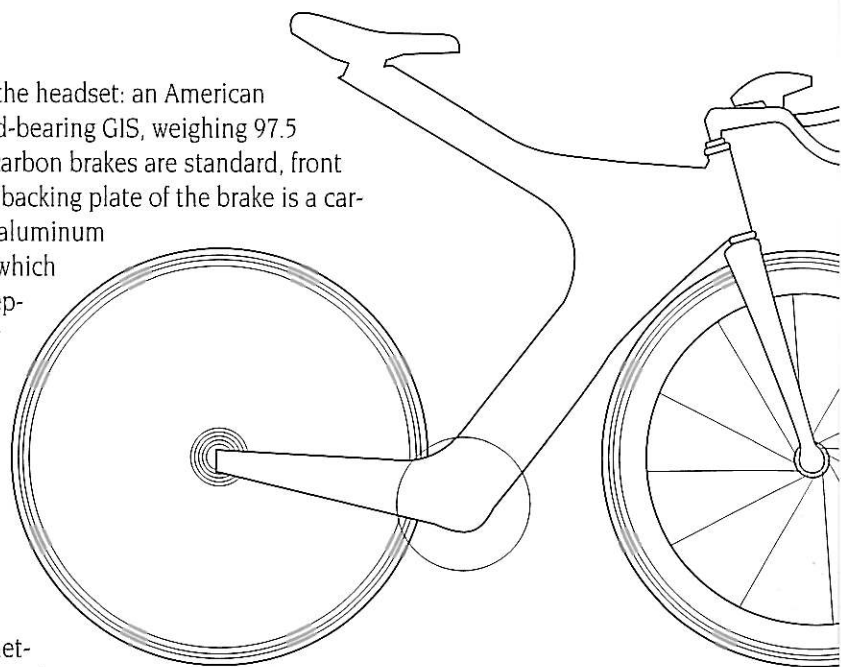
- A ground-breaker in cycling aerodynamics, the ZIPP 3001 arguably is the most streamlined bicycle in the world. The Interactive Suspension System beam is airfoil-shaped, with an aerodynamic aspect ratio of 3:1. (In "aero-talk," that's nearly ideal.) Wind tunnel tests have shown that the ZIPP 3001 is 18 percent more aerodynamic than a conventional bicycle.
- Like the 2001, superior stiffness is accomplished via our own "BCI" molding technology, the net result of which is a hollow monocoque frame. In other words, no lugs, no welds, no seams; just a little more than two pounds of stiffness.
- The 3001 is constructed from high- and medium-modulus graphite, making it one of the most rigid things on the planet. Though increased modulus ratings reduce weight, strength usually is sacrificed. But ZIPP utilizes a material that prevents strength loss. So by combining 57-million-modulus and 43-million-modulus graphite, we've lowered the weight of the bike and increased stiffness significantly.
- The 3001 frameset comes with a carbon aerofork that weighs in at 430 grams. And there's no

skipping on the headset: an American Classic sealed-bearing GIS, weighing 97.5 grams. ZIPP carbon brakes are standard, front and rear. The backing plate of the brake is a carbon-skinned aluminum honeycomb, which provides exceptional rigidity with low weight: 200 grams! It's as powerful as any top-rated brake.

- As for cosmetics, there are no theatrics: a natural carbon finish with painted black chainstays. Very simple. Very cool. The headset is anodized black to match. Permanent multi-colored decals are part of the frame's fabric and clear-coated. "Plumbing" on all 3001's is internal, featuring Teflon cable liners with a Delrin inner sheath that is extremely durable. Bottle cage bosses are standard.

- Four additional laminates increase stiffness for the track version of the 3001. A higher bottom bracket improves ground clearance.

- Almost anyone can fit on a 3001, including extra-tall customers, due to a custom-machined seat bracket.



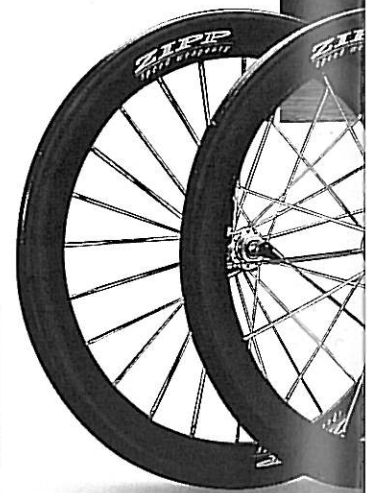
ZIPP

B.

Tires

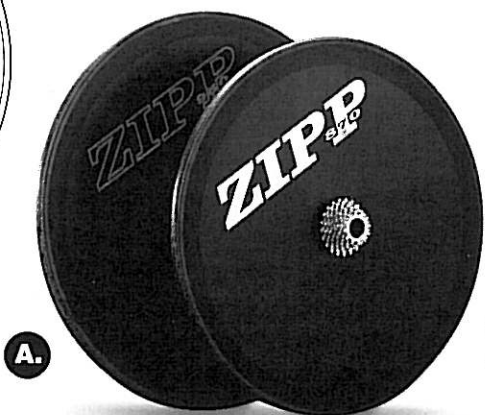
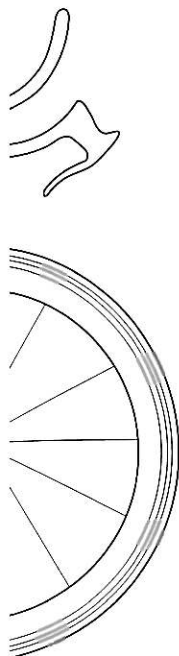
ZIPP/TUFO TIRES. Low rolling resistance. High puncture resistance. Unmatched durability. Very smooth. Five choices: 700c Z21 (21mm), 26-inch Z21, 700c Z19, 26-inch Z19, and the 700c T21. The Z21's are for road racing. The Z19's feature a raised rubber bead for low rolling resistance and are designed for time trialing. Weight for the Z21's and Z19's is about

245 grams. The T21 is for track racing—weighing in at only 198 grams.



310/340

ROAD RACERS' DELIGHT. In the past three seasons, ZIPP has acquired a following in the road-racing community. Though the 400/440 rim is popular among this group, a collective request was less weight. Answering this plea, ZIPP's R&D squad created the **ZIPP 310 (26-inch)** and **340 (700c) rims**.



CONSUMERS CHOOSE ZIPP DISCS. Three ingredients make consumers choose ZIPP discs: superior aerodynamics, unmatched strength, and low weight. When ZIPP makes a disc wheel, nothing is left to chance.

The wheel is ideal for criteriums and road races, which call for less aerodynamics. The weight saved means faster acceleration.

Like the 400/440, a fiber-metallic composite insert skirts the inside diameter of the rim, allowing the wheel to be built and trued using traditional methods.

Discs

A. Two wheels, two sizes, two weights. Too fast. The **ZIPP 870** is a 26-inch disc that comes in at 870 grams, and the 700c **ZIPP 950** weighs 950 grams. New for 1996, the seven- or eight-speed cassette is a ZIPP-designed system. ZIPP discs also can be set up for track use—front and rear.

Deep Section Rims



THE REAL WHEEL. Since their 1991 introduction, the **ZIPP 400 (26")** and **440 (700c) deep-section rims** have been imitated widely. But the copies lack one key ingredient: ZIPP quality.

B. New for 1996: the **ZIPP 530 deep-section clincher rim**. Though similar to the tubular 400/440, the 530 rim is slightly bowed to smooth out airflow that is tripped where the tire meets the aluminum clincher rim. Superior aerodynamics, but more suitable for customers who don't like to glue tires.

Here's what ZIPP deep-section rims offer:

its consistent hoop design enables individual spoke replacement.

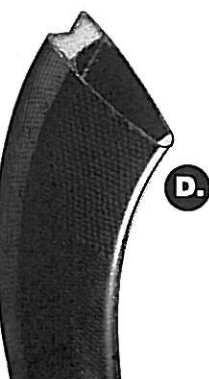
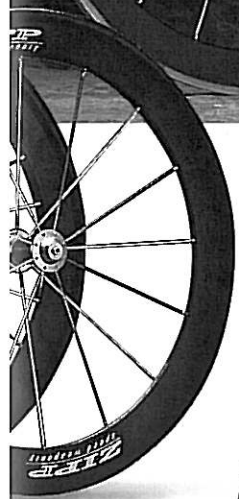
- High-strength T-700 S carbon fiber with a 33.6 modulus rating for stiffness. Coupled with high-impact, modified epoxy resin, the result is a rim with all the right stuff for strength, stiffness, and extremely low weight.

- ZIPP deep-section tubular rims incorporate "V-Rim" technology, which improves tire-centering and lets a rider choose 18mm or 22mm tires. It also enhances the tire-to-rim bond, which then creates ideal "aerodynamic continuity."

C. The ZIPP 400/440 still is the only 100 percent carbon fiber rim on the market. With more than 2,000 hours of wind tunnel testing and fifteen years of advanced composite knowledge behind it, you know it's the best deep-section rim for your speed-freak customers.

D. To increase strength and make lacing easy, a fiber-metallic composite insert is located on the inside diameter of each rim. In addition to providing superior support for spoke nipples,

- ZIPP deep-section rims are the most aerodynamically advanced rims available. Why? Shorter spoke length and greater spoke angle. Spokes move fastest where they are farthest from the hub. Because ZIPP deep-section rims require shorter spokes, they eliminate the fastest moving part of the spoke, thereby eliminating turbulence. Also, the shorter spoke means a larger spoke angle, resulting in superior strength and lateral stiffness.



Hubs

HUB HUBBUB: In 1996, ZIPP once again will impress you with its technologically innovative line of hubs. Here's a sneak preview:

E. The **ZIPP 217 rear cassette hub** debuts, featuring ZIPP's new proprietary eight-speed system. Weighing in at about 220 grams, the ZIPP 217 owes its uniqueness to four longitudinal pawls positioned inside a stainless steel cassette body. That body is machined internally and externally for absolute accuracy. A carbon tube spreads the load from one bearing to the other, and a rubber seal engages when the cog lock ring is installed. The non-drive side is protected by a double seal. Available with 24, 28, and 32 spoke holes—all slotted.

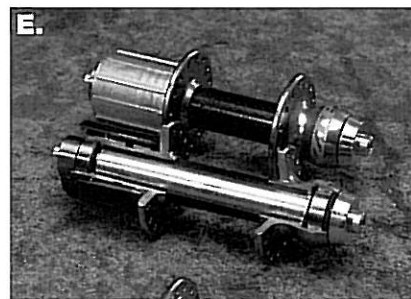
F. This past year, the 145-gram **Ballistic Mountain Front Hub** received rave reviews, placing number-one in VeloNews' September 1994 test. Since then, it has placed in the top 15 percent of every magazine test. It's essentially the same for 1996: a 19mm, three-part hollow

axle surrounded by a structural carbon tube. The bearings are double-sealed, and stainless-steel knurled end caps ensure a strong grip on suspension fork dropouts. Grease zerks on both flanges enable simple lubrication maintenance.

G. Also double-sealed, the **ZIPP 100 front hub** utilizes a machined, high-profile center aluminum axle. Bearing seats are preloaded with ZIPP's own Wavespring. Spoke holes come slotted, and the ZIPP 100 can be threaded and tapped for track use. Total weight: 99 grams. And when paired with a 217 rear, the weight is a mere 316 grams.

- The **ZIPP Rear Freewheel Hub** weighs in at 185 grams, and it's available as a seven- or eight-speed. Available with 28 slotted spoke holes.

- All ZIPP hubs sport the "smoke" finish with a laser-etched ZIPP logo on the left side. No stinkin' decals here!



Accessories

GOTTA-HAVE-ITS. Every ZIPP athlete has got to have a full range of ZIPP accessories. And we've got plenty to offer:

- Way-cool **T-shirts, golf shirts, mugs, caps, sun visors, water bottles, and Off the Front handlebar tape.** There also is the **ZIPP promotional video package.**

- Don't forget about our 6061 T6 aluminum **quick-release levers**, which are coupled with titanium skewers. A definite "click" tells any cyclist when they're open or closed, and the anodized ZIPP logo caps this sleek package. Front: 37 grams. Rear: 40 grams.

- The **ZIPP wheel bag** is manufactured in Cordura exclusively for ZIPP. Each bag carries and protects one wheel.

- **Union Titanium spokes with alloy nipples** work incredibly well, and this combination reduces spoke/nipple weight by up to 45 percent. They require no more maintenance than standard spokes and nipples. ZIPP offers them in bladed lengths—alone or as part of a built wheel.



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