

"Any sufficiently  
advanced  
technology is  
indistinguishable  
from magic."

—Arthur C. Clarke



**ZIPP**  
speed weaponry™

In its short life-span the Zipp 2001 has set two World Records, won the USA National Championships, numerous age group and state records and helped American Olympians and the Canadian Olympic Team achieve their best results ever. Such is the speed and technology involved.

The research, development and manufacturing expertise needed to accomplish this performance has not been available in the bicycle industry until Zipp. Three years ago Zipp began its long and challenging

research process to develop not only a bicycle unique to the World, but also the technology and manufacturing strategy necessary to produce it. What you see here is the result of a year on the drawing board, two years in prototyping and years in production. The '93 Zipp 2001 is ready to be unveiled to an unsuspecting market.

Superior frame stiffness is accomplished by incorporating our own BCI molding technology in a sandwich construction, with a hollow monocoque. Net Result...

Very light frame weight, with an average 20% stiffer bottom bracket (when compared to "regular" bikes).

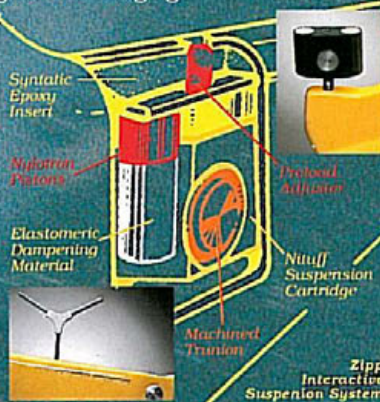
To ensure that the efficiency gain with the stiff frame and drive train did not equate to an uncomfortable ride, we designed the Zipp Interactive™ Suspension System. Many hours of testing with top pro athletes indicated that the ideal system should have limited travel, be easily adjusted and have no weight disadvantage. Utilizing "controlled elastomeric" technology, the Zipp Interactive™ Suspension System affords adjustability from 0" to a maximum of 1.25". In addition to this the preload is adjustable and can in fact be fine tuned while you ride! Adjustability is the key word here, with three elastomeric options and full preload flexibility you will undoubtedly get the "ultimate" ride and feel.

The 2001 has been a ground breaker in aerodynamics since its inception. 1993 has seen even greater improvement primarily caused by the dramatic airfoil shape of the suspension beam and its integral design relative to the frame. Air now passes around the entire package with less turbulence (the beam itself has an aerodynamic aspect ratio of 4:1). In "aero-talk" this is close to ideal.

Assisting in this quest for clean air is the cable routing. Housed in continuous teflon tubes all cables enter the top "dorsal" area of the frame, leaving both sides of the monocoque free of any obstacles that may "trip" or slow down the air flow. Recent wind tunnel tests have concluded that the Zipp 2001 is well over 18% more aerodynamic than a standard bike and even more staggering, this differential is even greater as the bike begins to travel across the wind or is in yaw. To our knowledge, this is the first and only bike in the World, where the drag actually "decreases" as the wind conditions worsen. What this aerodynamic efficiency means to you is that you can travel even faster using less energy!

Independent tests demonstrated a 19% reduction in energy usage at 30mph when riding a Zipp bike when compared to a "traditional" frame.

Fitting yourself on the '93 2001 has been made even simpler. We offer two 26" and two 700c wheeled frames. In addition, the Zipp Interactive™ Suspension beam is available in two lengths and is interchangeable between all bike frames. This affords you almost unlimited geometry combinations with 8 bike size options, 5" of vertical seat height adjustment and 6" of fore and aft seat movement. Given the fact that the 1993 Zipp 2001 is the evolutionary embodiment of everything that makes a bicycle; fast, lightweight, aerodynamic, stiff drive train, riding comfort and basically just "Blazingly Fast." We have to ask... "What is there to think about?"



Synthetic Epoxy Insert

Nylon Plastics

Elastomeric Dampening Material



Machined Titanium



Preload Adjuster

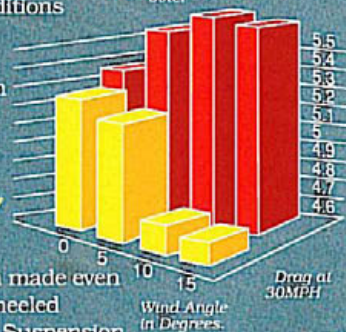
Nituff Suspension Cartridge

Zipp Interactive™ Suspension System

Wind Tunnel Test

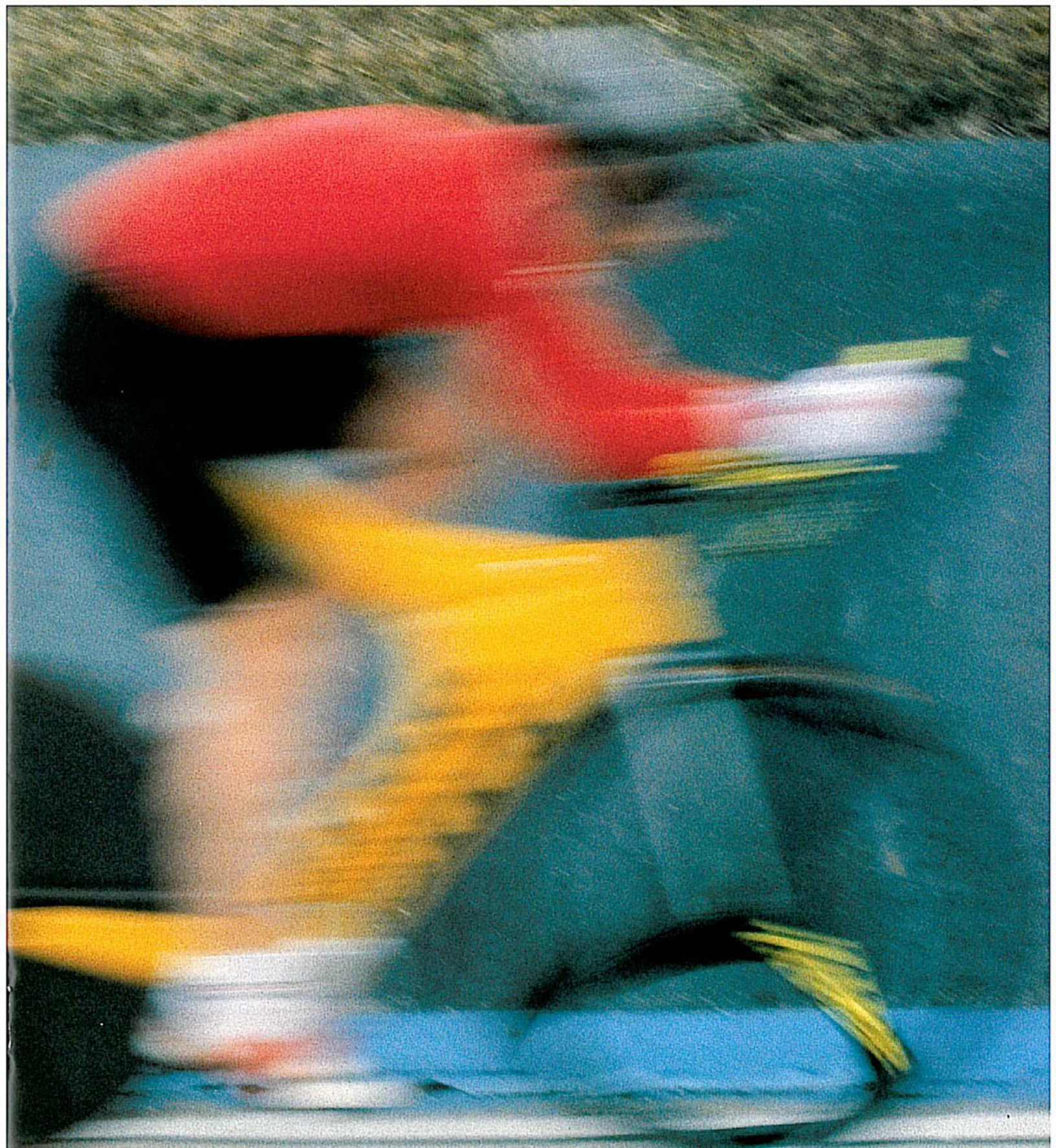
■ Zipp 2001  
■ Standard Frame

All Zipp wind tunnel tests are done with a rider on the bike. Drag coefficient is inclusive of rider and bike.



## Zipp 2001 Multisport Bike





**ZIPP**  
**7-YEAR**  
**WARRANTY**  
**PERFORMANCE**  
**70,000 MILE**

**ZIPP 2001**

# ZIPP 2001



Brad Beven



Zipp 2001 Road Bike



Jo-Ann Ritchie



**ZIPP 2001 Frame Sizing:**

26" SMALL	Small beam Large beam
26" LARGE	Small beam Large beam

**Approximate Rider Heights**

4'11"-5'3"/150-160cm
5'3"-5'7"/160-170cm
5'6"-5'9"/167-175cm
5'9"-6'1"/175-185cm

**Conventional Bike**

46cm-48cm
48cm-51cm
51cm-55cm
55cm-58cm

**ZIPP 2001 Frame Sizing:**

700c SMALL	Small beam Large beam
700c LARGE	Small beam Large beam

**Approximate Rider Heights**

5'3"-5'7"/160-170cm
5'7"-5'11"/170-180cm
5'10"-6'1"/178-185cm
6'1"-6'4"/185-193cm

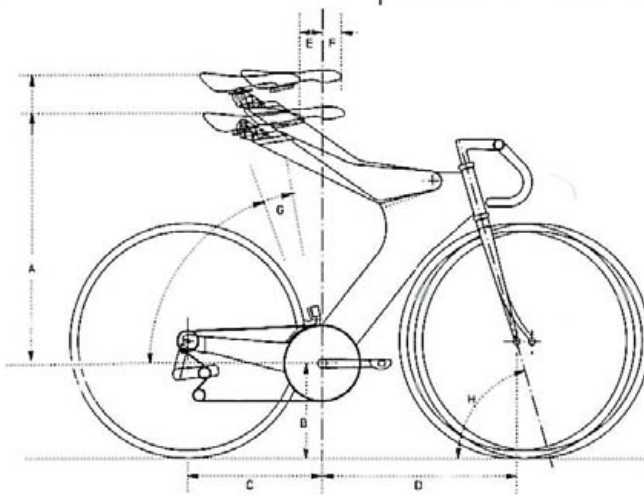
**Conventional Bike**

48cm-51cm
51cm-57cm
57cm-59cm
59cm-61cm

All frame sizes can be ordered as road, multisport/time trial or track. Available in 11 colors.

**"Those who create are rare; those who cannot are numerous."**

—Gabrielle Chanel

**1. 26" Small**

A.	25" to 27.5"	63.5-69.9cm small beam
A.	27.5" to 29.5"	69.9-74.9cm large beam
B.	10 1/2"	26.7cm
C.	14 1/8"	35.4cm
D.	22 1/8"	56.2cm
E.	3"	7.6cm
F.	1 3/4"	4.5cm
G.	73°-80°	
H.	74°	

**2. 26" Large**

A.	28.5" to 31"	72.4-78.7cm small beam
A.	31" to 33"	78.7-83.8cm large beam
B.	10 1/2"	26.7cm
C.	14 1/8"	35.4cm
D.	22 1/2"	57.0cm
E.	3"	7.6cm
F.	1 3/4"	4.5cm
G.	73°-80°	
H.	74°	

**3. 700c Small**

A.	26.0" to 28.5"	66.0-72.4cm small beam
A.	28.5" to 30.5"	72.4-77.5cm large beam
B.	10 3/4"	27.3cm
C.	15 1/4"	38.7cm
D.	22 1/2"	57.1cm
E.	3"	7.6cm
F.	1 3/4"	4.5cm
G.	73°-80°	
H.	74°	

**4. 700c Large**

A.	29" to 31"	73.7-78.8cm small beam
A.	31" to 33.5"	78.8-85.1cm large beam
B.	10 3/4"	27.3cm
C.	15 1/4"	38.7cm
D.	22"	55.9cm
E.	3"	7.6cm
F.	1 3/4"	4.5cm
G.	73°-80°	
H.	74°	

All measurements reflected are utilizing straight forks. Three fork options are available (in 26" or 700c) with the 2001: 0 Race for multi sport; 3.0 for road; 2.0 for track.

Note: Dimension "A" is measured along line from crank center directly to center of seat top.

**Zipp 2001 Track Bike**

## ZIPP 400/440

An overriding priority for Zipp has always been to push the parameters of research and development. This is a way of life at Zipp and the deep section Zipp 400/440 rims are testament to this ongoing effort. When these products were first released to an excited market at the end of 1991, we immediately began working on refinements for 1992. 1993 marks only 12 months of marketing and manufacturing for this product and the market share already achieved, speaks for itself.

The rims are stronger and lighter than ever before due to better material utilization and further refinements of the actual manufacturing process.

New laminating techniques were employed by working closely with our suppliers and developing advanced composite material, specifically for the task at hand. While the Zipp 400/440 are still the only 100% carbon fiber rims on the market there are many "copies" making their appearance. At Zipp we are committed to total quality and performance and while there will always be "cheaper" options we believe you get what you pay for!

A benefit unbeknown to most is the depth of experience and expertise that stands behind every Zipp product. With over 2000 hours in wind tunnels and over 15 years of precision craftsmanship in advanced composites, we are uniquely qualified to bring you some of the finest and best engineered products imaginable!

Both the 400/440 can be used as front or rear wheels.

Specs:	ZIPP 400	ZIPP 440
Size	26" Tubular	700c Tubular
Profile	19mm	19mm
Tire Size	18-22mm	18-22mm
Weight	400gm	440gm
Spoke Count	12-28	16-32
Rim	B.C.I. Molded, T700s Carbon Fiber, 33.6 Modulus Rating, High Impact Epoxy Resin	
Braking Surface	Abraded Fiberglass	

V Rim Seating Technology

Glass Fiber Abraded Braking Surface

T700S High Strength Carbon Fiber

High Temperature Synthetic Support

3D Bladder Molded

Fiber/Metallic Composite Support Structure

**ABOUT THE RIM...** The inherent characteristics of carbon fiber (strength, stiffness and lightweight) make it the perfect material to utilize in a product such as this. What sets Zipp apart, is the actual manufacturing process that has been developed in order to accomplish this task. Our engineers did not only have to spend countless hours developing the graphite and resin materials with our vendors, they then had to design the actual machinery and formulate the process itself. This is part of the

reason why Zipp technology is proprietary and sought after by friend and foe alike...

We utilize high strength carbon fiber with a 700 KSI strength rating and a 33.6 MSI modulus rating for stiffness. High impact modified epoxy resin is incorporated into the construction to further ensure extreme strength and durability.

To encourage greater strength and allow for easy lacing, we developed a "fiber metallic composite" insert that is located on the inside diameter of every rim. This feature not only gives superior support to the spoke and nipple, but due to its consistent hoop design, allows you to replace individual spokes without tearing down the entire wheel.



Jean Hansen

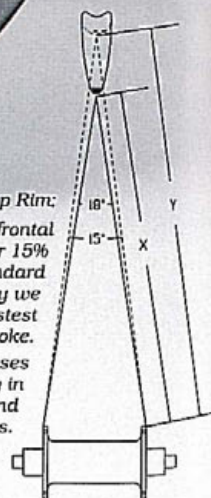


John Kennedy



# ZIPP 400

**Why You Need a Zipp Rim:**  
Spoke length and frontal area is reduced over 15% compared to a standard wheel. More importantly we have reduced the fastest moving part of the spoke. Zipp spoke angle increases by 17% resulting in superior strength and lateral stiffness.



Zipp's exclusive V-Rim technology provides better tire centering and bonding onto the rim. This design not only improves the tire to rim relationship, but affords the rider an opportunity to choose between 18mm - 22mm tires.

Another Zipp exclusive feature is the abraded glass braking surface which is an extra step in the production that we feel is extremely important. Your brakes become "super responsive" as a result and will allow you to brake later, harder and stop sooner. Courses that normally generate extreme brake stress are much easier to handle i.e. high speed downhill, criteriums or emergency stops. We suggest installing new brake blocks or at least sanding your existing blocks to ensure optimum braking efficiency.

Aerodynamically, the Zipp 400 and 440 allows shorter spoke length and greater spoke angle, dramatically reducing frontal area compared to a traditional wheel. (see diagram) Due to the reduced spoke length, we have eliminated the fastest moving part of the spoke; as a result eliminated turbulence. Equally important is "aerodynamic continuity," meaning the transition of air flowing around the tire and the rim is extremely smooth and uninterrupted. There is no "trip area." Air trip is normally created by

lack of continuity between two separate surfaces, in this case the tire and rim junction. It is important to note that the overall width of this rim is only 19mm, this is extremely narrow and presents the smallest frontal area possible to the wind.

Regardless of your riding style or racing discipline, you can lace the Zipp 400 and 440 from 12 - 32 spokes and literally blow away your competition!



Pauli Kuru

# ZIPP 440

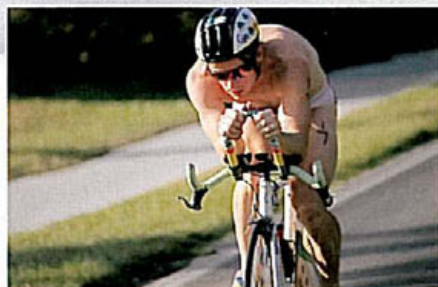


Michelle Jones

**"My grandfather once told me that there was two kinds of people: those who do the work and those who take the credit. He told me to try to be in the first group; there was less competition there."**

—Indira Gandhi

Garret McArthur



In the beginning our design criteria was to build incredibly strong, aerodynamically superior wheels. Aluminum rims were ruled out as impact resistance would suffer dramatically. A true, hollow, continuous carbon fiber composite rim was developed, (the first of its kind), with co-molded spoke/disc area. This facilitated continuity of fiber reinforcement from hub to tire. Using the difference in thermal expansion of assorted fibers and resins, we tension our skins, adding strength and stiffness to the wheel. Fiber type and orientation is selected carefully to obtain maximum performance and we use only aircraft quality materials processed at

## Zipp Discs

temperatures up to 300° F. The ability to perform these steps is totally unique in the bicycle industry. Zipp is the only company with the necessary equipment to capitalize on "autoclave" technology. The extremely low perimeter weight and unequalled strength of these wheels allows the cyclist to bring them up to speed quicker and with less effort!

Lateral stiffness is of critical importance - lack of stiffness translates directly into a loss of energy! This becomes more apparent as you sprint uphill or during out of the saddle acceleration. Zipp discs are stiffer than a wheel with a 36 spoke 330g aluminum rim, they are also over 20% stiffer than other discs available today!

Flat is faster! The single biggest factor in aerodynamic drag is frontal area (size). The only part we present to the air is the tire. The entire aerodynamic profile is only 19mm! This allows air to flow freely between the "framestays", gear cluster, chain and wheels, dramatically reducing the drag.

Due to the increasing popularity of cassette systems, Zipp has developed a disc hub specifically for these. The exclusive Zipp wavespring is utilized and the hub is completely Shimano compatible. (8 speed HG) Available in early 1993, the Zipp cassette discs are a fine addition to the established family of Zipp disc wheels.



Andrew McNaughton



Sue Latshaw

Specs	ZIPP 870	ZIPP 950	ZIPP 1150
Size	26" tubular	700c tubular	700c tubular
Weight	natural -870gm color-945gm	natural-950gm color-1020gm	natural-1150gm color-1250gm
Hub		dual side 7.8 speed freewheel or 7.8 speed cassette*	
Bearings		fully sealed NSK	
Axle		9.5mm OD Chromium Molybdenum 4130	
Rim	100% Carbon/Kevlar Hybrid		Carbon/Glass Hybrid
Wheel		Uni-directional carbon fiber/glass, .Nomex Honeycomb core, Toughened Epoxy, 300° F. Autoclave Processing	
Braking Surface:	Kevlar/Carbon	Kevlar/Carbon	Glass Reinforced
Lateral Rim Tolerance		.25mm/ .010"	
Available in 11 colors		* Cassette system is Shimano™ Compatible.	







This wheel is a perennial favorite and it just keeps on performing. It has silenced the critics more than once with its unique personality and continued popularity. Most of our customers will tell you that in the composite spoked wheel business, there simply is no better value for the money. Utilizing the identical Zipp hollow, continuous fiber composite rims as Zipp discs, the **Zipp 3000** 3000 three spoke is almost equal to Zipp discs performance with less weight (only 900g) and less side wind resistance.

The 3000 has a very low spoke cant (angle). This enables the spoke to be tucked in and slipstream behind the tire. Being airfoil in shape and raked forward the spokes allow gradual cutting of the air. The fewer spokes you have the less you pump the air, hence our decision to go with three. Overall width of this wheel is only 19mm, this results in a reduced (frontal) profile thus it "cheats" the wind more effectively.

Flex tests show the Zipp 3000 to be more laterally stiff than a wheel with a 32 spoke 330g aluminum rim and even stiffer than some discs on the market! This is due largely to the one piece molded construction ensuring fiber continuity with no seams throughout the wheel!

Matched against some of the most respected wheels in acceleration tests, the Zipp 3000 came second only to our Zipp 950 disc. The reason for this is the completely hollow and continuous carbon composite rim that affords the rider the luxury of extremely low perimeter weight. This feature is simply "not available" from our competitors.

Like most Zipp products the techniques employed and technology developed to build these wheels is unique to us. We are confident that nowhere in the World are wheels built quite like these!

If you require unmatched lateral stiffness, superb aerodynamics with less weight in a composite spoked wheel...Look No Further.

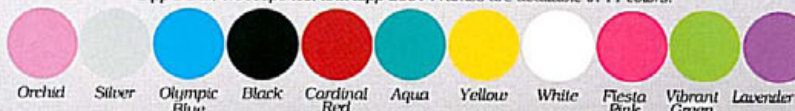
**"A hunch is creativity trying to tell you something."**

—Frank Capra



Melissa Maniak

Zipp Discs, Threespokes, and Zipp 2001 Frames are available in 11 colors.



Zipp's exclusive hollow continuous fiber composite rim.

Specs	ZIPP 3000
Size	700c Tubular Tire (18-22mm)
Weight	Front:900gm, Rear:945gm
Hub,Front	6061 T6 Aluminum
Hub, Rear	Road: English thread for freewheel/track; English thread L.H. locking thread.
Bearings	Fully sealed NSK 9R-6
Axles	9.5mm O.D. Chromium Molybdenum Steel 4130/Front:6061 T6 Aluminum
Rim	100% Carbon/Glass Hybrid
Wheel	Uni-directional carbon fiber/toughened epoxy/internal bladder molded
Braking Surface	Glass reinforced
Lateral Rim Tolerance	±.25mm/±.010"

The Ballistic hub range was developed with very clearly defined goals; make them super light, make them durable and make them fast! We achieved these goals with innovative, but still practical thinking.

All Ballistic hubs feature a structural "directional laid" carbon fiber center section. To date we are the only manufacturer in the industry to develop technology that is exactly accurate. In order to guarantee quality and the ability to hold very tight tolerances, we manufacture all tubing in house, in a machine designed and built by Zipp, specifically for this purpose.

All hubs feature the exclusive Zipp wave spring technology. While wave spring technology is not unique to general industry, it has been apparent in the bicycle industry through the efforts of Zipp. Over the last four years we have manufactured hubs incorporating the wave spring for use in the Zipp discs and three spokes.

The wave spring insures an equal thrust preload. This is done specifically to engage all of the ball bearings with the inner and outer races at the same time, all the time.

Bearings without a preload will endure all the impact on

potentially only one ball at a time, hence the frustrations our competitors face with continual bearing failure. Our axle is now essentially "live" and there is no press fit involved, the bearings can handle a tremendous amount of punishment. This is the main reason that we are able to utilize smaller and lighter bearings.

This feature is so effective that since we introduced the wave spring, Zipp has never had a bearing failure! To us technology is pointless without durability, we make a point of it!

Superior technology and attention to detail has resulted in hubs that are impressively light, at 97g the front hub is a dream come true for road and off-road riders alike.

Weighing in under 300g, the Zipp 8 speed cassette hub is a staggering 30% lighter than its competitors. This is of equal benefit to road and off-road riders as all Zipp rear hubs are available in 7 or 8 speed. Zipp's freewheel hub is perfect for road riding and tips the scales at 197g!

The Zipp Ballistic hub family is designed to go fast! Treat yourself to some real technology; you won't regret it!



Christian Bustos



Andrew MacMartin

# Ballistic HUBS

Specs	Ballistic Front	Ballistic Rear Cassette Road	Ballistic Rear Cassette Mountain	Ballistic Rear Freewheel Road
Hole Count	12-32	24,28,32	28,32,36	24,28,32
Weight (With Cassette Body)	97g	297g	299g	198g
Axle	Alum.	4130 Cromoly	4130 Cromoly	4130 Cromoly
Axle Lengths	100mm	130mm	135	126,130mm
Speeds		7/8 Spd.	7/8 Spd.	7/8 Spd.
Spacers	Alum. O-Ring Retainers	Alum. 2 <sup>nd</sup> Set Screw Knurled Steel	Alum. 2 <sup>nd</sup> Set Screw Knurled Steel	Alum. 2 <sup>nd</sup> Set Screw Knurled Steel
Compatibility	All	Shimano 7/8 Sp.	XT 7 Sp. XTR 8 Sp.	All Freewheels

Canadian Olympic Team



Mario Huys

John Stenner



To accommodate a 7 speed cassette on either the road or mountain hub, the 4.5mm spacer must be installed onto the 8 speed body. Durac or Ultegra lock rings can be utilized with all Zipp cassette hubs. Hubs are provided without quick release skewers.



Greg Watson

Joan Hansen

Although we are deadly serious about building the fastest speed weapons in the World, we have more fun than anyone else while we are doing it!

If you would like to get totally "Zipped," we have developed all sorts of fun things to do that with, including the Hot Zipp handlebar tape from "Off the Front" to coordinate your bike and wheels.



Zipp Visor



Decals

Zipp Flag T-Shirt

T-shirts and sun visors are available too, keep in touch as new designs come out all through the summer!



Michael White



The Zipp 2001 Intercontinental Speed Weapon Video



To help support our product we run advertising in over 40 magazines around the World and have now made a video available of the new Zipp 2001 bicycle. Due to its unique design and blazing speed, we thought we should communicate this to you directly. We now accept Visa and Master Card, so call us directly to get your copy.

Incidentally, if you have any questions at all about Zipp products, please call. We have technical representatives who would be happy to help. We look forward to hearing from you!

U.S.A. 800-447-8372  
INTERNATIONAL (317) 243-4230  
FAX: (317) 243-4235



Zipp Polo Shirt With Embroidered Logo



Zipp Bar Tape





**ZIPP**  
*speed weaponry™*

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**FINE PRINT:** Zipp bikes and wheels already own two World Records—we plan to get more. \$16.99 gets you a video of the ZIPP 2001 Intercontinental Speed Weapon, a Zipp T-Shirt, and when you buy your bike, send us proof of purchase and get your \$16.99 back!



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