

Start by doing what's necessary, then what's possible, and suddenly you are doing the impossible.
- Francis of Assisi



5627 University Way NE • Seattle • 206.527.4822 • www.rodcycle.com

The Newsletter of cycling values!! Jan.-Feb. 2009

The 2009 Bike and Pike Expo!!

Mark your Calendars!! February 21st and 22nd 2009

Great Seattle coffee, great Seattle beer, and great Seattle bicycles. Add to that wood fired pizza, and the chance to converse one-on-one with some of Seattle's cycling gurus and you've got **The Bike and Pike Expo of 2009**.

At R+E Cycles, we love Seattle, and the small companies that actually produce their products here. This season, I asked Charles and Rose Ann at Pike Brewing Company if they would like to put on an event here in Seattle with other Seattle based entrepreneurs (and personalities) and they were just as excited about it as we were.

The flavor of Seattle Small Business is unique, and sometimes gets diluted when an event gets too overwhelmed with big firms that have unlimited advertising budgets. We thought it would be great to put on a smaller event that showcased unique Seattle companies and their products, while at the same time raise money for a local charity.

Bicycle Prices
R+E holds the line in 2009!
See page 7 for details

Rodriguez titanium is here
See Page 6

We will be raffling off a Rodriguez S3 frame (\$2,000 value) to benefit Food Lifeline. Caffe Vita will be giving out samples of their coffee, and Pike Place Brewery will be on site with beer. There's no entry fee, so come on down, and be sure to bring a friend. See pages 4 ~ 5 for more details.



Got Rain on the Brain?

The snow is gone, but the rain lives on. No worries, we have the finest rain jackets in Seattle, on sale now. Use this coupon to get the 'Touring' model for just \$139 (Reg. \$165). Hurry, limited to stock on hand!!

SAVE \$25



Offer limited to stock on hand. No cash value. Expires 02/28/2009

Put on the Red Light!

Commuters love the Mars 2.0 tail light because it bolts right to the rear rack and stays out of the way of everything. No fuss, no muss, and it's really, really red. Reg. \$20

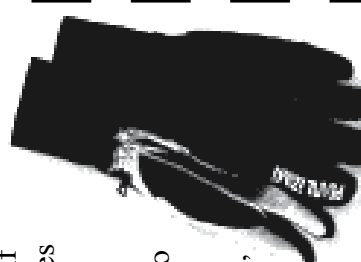
With Coupon \$14.99



Offer limited to stock on hand. No cash value. Expires 02/28/2009

Five Finger Discount

It's still cold in the mornings and evenings, and if you've gone this far without a good pair of gloves then that's just sad. So sad indeed that we're on a mission to remedy that situation. Bring this coupon in (along with your frost bitten fingers) to R+E Cycles and receive a 20% discount on any toasty warm pair of winter gloves in stock (Gore, Pearl Izumi and Arius). C'mon, you know you want to..... Reg. \$35 ~ \$55



With Coupon SAVE 20%

Offer limited to stock on hand. No cash value. Expires 02/28/2009

PRSR STD
U.S. Postage Paid
Seattle WA.
Permit No. 1578

One hit Wonder!

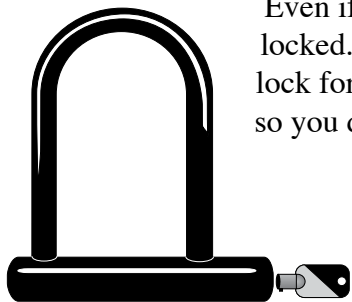
Seems a bit crazy to put an indoor trainer on sale this time of year, but what the heck! We've only got one of these, so let's get 'er gone I say. Minoura M50 trainer. Reg. \$190

One Only \$120



Offer limited to stock on hand. No cash value. Expires 02/28/2009

un-Locked and un-Loaded?



Even if you're not loaded, you need to be locked. Use this coupon to get a Knox U-lock for your bike. Keep one at your work so you don't have to haul it back and forth. Reg. \$25

SALE \$18.88

Offer limited to stock on hand. No cash value. Expires 02/28/2009

The Gory Details

All the Gory details I have for you is that we are closing out our Gore winter gloves. We have Small, and Medium sizes in 2 different styles. Reg. \$55

With Coupon \$30
Limited Supply!



Offer limited to stock on hand. No cash value. Expires 02/28/2009

Carbon Footprint?



Not sure if it decreases or increases your carbon footprint, but it is carbon and your feet will use it. We've got a few pairs of FSA Carbon compact SLK cranks in 170mm that we're selling for 1/2 price. Reg. \$400

With Coupon \$199
SAVE 50%

Offer limited to stock on hand. No cash value. Expires 02/28/2009

Bet my money on a Bobtail Bag

The Detours Bobtail bag is just perfect for the minimalist cyclist that has grown out of that miniature 'tube sock' kind of thing. Let's face it, once you're established enough to have a wallet, cell phone and some keys, you really need a place to keep it all when you ride. Reg. \$50

With Coupon \$42.99



Offer limited to stock on hand. No cash value. Expires 02/28/2009

Speed Up!



Proper chain lube helps eliminate friction and helps you Speed Up! Use this coupon to get the 2oz. bottle of Triflo for just \$3.99.

Reg. \$5

Save \$1.00

Offer limited to stock on hand. No cash value. Expires 02/28/2009

The Economic Cycle

Over the last several years, we've offered more and more Rodriguez bikes, and less and less other brands. This has to do with our bicycle designs. Customers like the way our bicycles fit them, and the comfortable ride they get on at Rodriguez hand-built frame. They also like the fact that our bikes are hand-built right here in Seattle. Sometimes a customer really wants a Rodriguez, but can't quite afford one, so they've got to settle for something made overseas that doesn't fit as well and doesn't have the same ride quality.

Smiley has been asking me to come up with a high quality hand-built steel Rodriguez bike that he can sell for under \$2,000. It seems that there are a couple of high quality, 'made in Taiwan or China' bikes out there that sell for around \$1,500 or so, and it would sure be nice to have the Rodriguez fit and comfy ride in a bike around that price range. Hand-building a bicycle in Seattle for under \$2,000 seemed an impossible task, but that's just the kind of thing I like to try and do. So, we worked hard with some of our vendors this winter, and came up with an amazing new offering.

The Rodriguez Navigator is a bike that is made for riding in the Northwest, and is hand-built right here in our shop in Seattle. The design incorporates long reach brakes so that fenders and wider tires are no problem (thinking of Seattle), and comes with a triple crank set. In fact, the bike is modeled after our bestselling bike, the Rodriguez Rainier, and even has our exclusive bottle opener on the seat stay.

We're going to build 75 of these in 2009, so they'll probably sell quickly. If you, or someone you know can use a bike like this, I wouldn't drag your feet.

So let's recap (there will be a test next week):

The Rodriguez Navigator is

- Hand-built in Seattle U.S.A.
- Designed for use in the Northwest
- Equipped with a triple crank set
- Ready for fenders and/or wider tires than other road bikes
- Only \$1,600 (first 75 bikes)
- Painted classic black (unless you want a custom color)

At R+E Cycles, you can buy economically and still get bikes made right here in Seattle, U.S.A.

Check out the next page for more U.S. made economical options.



Nothin' up our sleeves....

It's not magic that allowed us to come up with 3 economically priced Rodriguez bicycles for 2009, it's hard work, positive relationships with our vendors, and good planning. Below are 3 options for Rodriguez bicycles that are priced as low as many Taiwanese and Chinese made bikes (we were told it was impossible), but these are hand-made right here in Seattle out of higher quality materials.

The Rodriguez Shiftless

\$800

The Shiftless is a frame and fork that we make right here in Seattle out of U.S. made True Temper Steel. The frame is built with track dropouts and is perfect for that person that wants a sweet 'fixie' but also wants something unique, and hand-made right here in Seattle. Choose from any of our 30 or so paint colors. Many other options available on this frame as well, stop by the store and pick up a Shiftless spec sheet. (Available now)



The 2009 Rodriguez Navigator

\$1,599

It's been several years since there was a sub-\$2,000 U.S. made bicycle on the market, but here at R+E Cycles, we've done it for you in 2009. The Navigator is a Randonneur/Sport bike with clearance for fenders and wide tires just like our Rainier. The frame is hand-built right here in Seattle, and the component group is a mixture of Shimano/Tektro and other mid-level components. We're committing to build just 75 of these bikes, so if you, or someone you know might be interested, you'll want to act sooner rather than later. Go to www.rodcycle.com or stop by the shop to pick up the complete spec/option sheet for the Navigator. (Available in March 2009)



The 2009 Rodriguez Limited

\$2,199

We've put our heads together and come up with a sweet Sport/Race bike that is \$400 less than our least expensive option last year. That's right, \$400 less than the Sport Mirage last year. We're using the same frame tubing as the Shiftless and the Navigator, but Campagnolo Mirage components and a Profile Carbon fork. We have a limited number of the component groups to make this bike as well, thus the name 'Limited'. Go to www.rodcycle.com or stop by the shop to pick up the complete spec/option sheet for the Limited. (Available now)



Shoe Bethcha!

Shoe bet we've got a great deal on Super Feet insoles! Buy a pair for just \$34 (Reg. \$40) and you'll feel like you've got new feet!

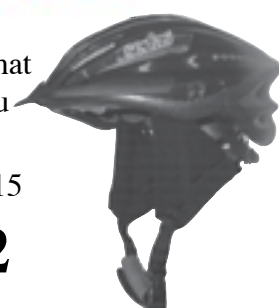


SAVE \$6

Offer limited to stock on hand. No cash value. Expires 02/28/2009

Happy New Ear!

That's a pun so ridiculous that I just had to use it. What's even more ridiculous though, is the fact that your ears are freezing in the morning because you misplaced your headband/ear cover thingy. Use Helmufs and they stay with your helmet. Reg. \$15



With Coupon Just \$12

Offer limited to stock on hand. No cash value. Expires 02/28/2009

The 2009 Bike

Want to go to an event this February that's bicycle oriented and highly focused on Seattle based companies?

We love our customers, and we love Seattle's small companies. It just so happens that a lot of our customers are owners of those small companies, so we've decided to team up this February 21st and 22nd for an Expo to showcase some of these products.

R+E Cycles will be showing the new \$800 Shiftless frame/fork, the \$1,600 Navigator and unveiling a new Titanium Rodriguez. Wow, that's a lot of new items this season, huh? We will also be raffling off a custom made S3 Rodriguez frame built to your specifications to benefit Food Lifeline.

The Pike Brewing Company will be here with some of the finest Seattle beer you've ever tasted. Come and try Pike's Naughty Nellie golden ale, and Pike Tandem double ale. All of the beer will be \$4 per pint and will benefit Food Lifeline.

Author and Adventure Cyclist Willie Weir will be here from 1:00pm ~ 3:00pm each day to answer all of your questions regarding self supported bicycle touring/traveling. He'll also have his books on hand for sale throughout the weekend, and will donate a book for the raffle to benefit Food Lifeline.

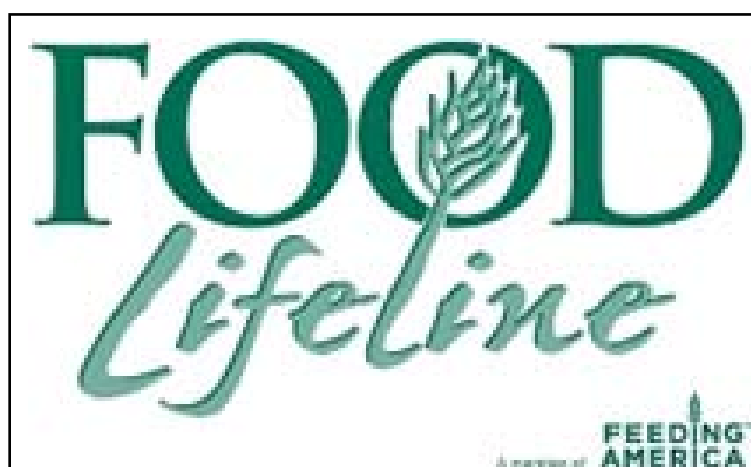
Caffe Vita Coffee Roasting Co. will be serving up samples of their exceptional coffee both days, and representatives will be on hand to answer questions and recommend the right coffee for you.

Inferno Catering will be firing up some of the best wood-fired pizza you've ever tasted, all weekend long. You can buy by the slice, or the whole pizza.

Other local cycling personalities Glenn Erickson and Bill Thorness will also be in attendance as well as the entire staff here at R+E Cycles.

All in all, the weekend will be a fun gathering showcasing some real Seattle companies that produce their wares right here. We're happy to be a part of the Northwest, and proud that the proceeds of this event will stay right here in the Northwest through **Food Lifeline**.

Feb. 21st, 9:00am ~ 7:00pm • Feb. 22nd, 10:00am ~ 6:00pm




Benefit Food Lifeline of Western Washington

Food Lifeline is the Western Washington affiliate of Feeding America (formerly known as America's Second Harvest). As Washington's largest hunger relief agency, Food Lifeline is working to provide nutritious food to hungry people in Western Washington. Each year Food Lifeline rescues and distributes nearly 22 million pounds of food to its network of food banks, meal programs and shelters in 17 counties of Western Washington, feeding nearly 600,000 hungry people.

As supporters of Food Lifeline's mission to end hunger, you are a part of the network that is working together to create change to ensure that hungry families do not have to go without a meal, and hungry children get the proper nutrition to meet the challenges of learning in school.

Get Fit

If you've got a great bike, but you'd like to be more comfortable on it, why not stop by R+E Cycles for a complete fitting with your bike? We've been performing custom fitting here for 35 years, and even developed the entire Next-fit™ system. Reg. \$200 Call 206.527.4822 for an appointment.

With Coupon \$150 

Offer limited to stock on hand. No cash value. Expires 02/28/2009

Rain Ready

The KHS Urban X comes with fenders, rack, and big bouncy tires for banging around town. It's the perfect grocery getter for winter, spring, summer or fall. Reg. \$459

With Coupon \$399



Offer limited to stock on hand. No cash value. Expires 02/28/2009

and Pike Expo!



The Pike Brewing Company

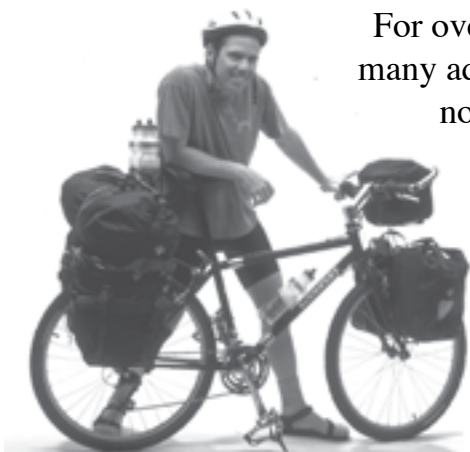
1415 first Ave.
Seattle, WA
206-622-6044
pikebrewing.com

Brewing fine beers right here in
Downtown Seattle



A new Jersey! We haven't done an R+E jersey in a few years, so now's your chance.

The official 2009 Bike and Pike Jersey design by Charles Finkel of the Pike Brewery in Seattle will be on sale at the event.

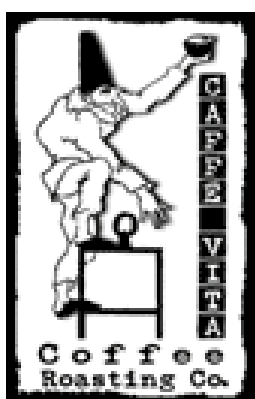


For over a decade now, we've followed the many adventures of Willie Weir. Willie will not only be at Bike and Pike 2009, he'll be taking part in it.

WILLIE WEIR

is the author of Spokesongs, a columnist for Adventure Cyclist magazine and is known to public radio listeners for his commentaries aired on KUOW in Seattle, Washington. His

writings have appeared in newspapers across the country and earned him a gold and bronze Lowell Thomas Award, given by the Society of American Travel Writers. He has cycled over 60,000 miles throughout the world.



If you've been to our shop, you've probably ordered an espresso or two from our coffee shop, Pedal a Latte. We serve Caffe Vita coffee because they're a small Seattle company, not to mention it's the best coffee you can buy. We're thrilled that they are going to take part in the 2009 Bike and Pike event.

IT'S ABOUT EXCEPTIONAL COFFEE

A desire to bring great espresso to Seattle was the catalyst behind our success. We began at the base of Queen Anne in 1995 and have since added four cafes and a roasterie, and we've enjoyed growing with the community and honing in our craft of coffee quality and service. - Caffe Vita

BILL THORNESS Writer | Editor
Professional Writing, Editing and Consulting Services
for Medical and Business Clients
Phone: (206) 752-8122 | Email: bill@billthorness.com

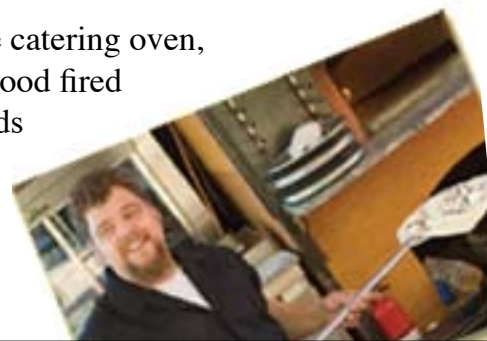
Bill Thorness will be here on Saturday signing his book



Inferno Catering

Owner & Chef Cary Kemp's love of traditional Neapolitan pizza began in 1990 after training at the famous Sorbillo pizzeria in Naples, Italy. For nearly 15 years, Cary worked at several successful pizzerias... Trattoria Mitchelli's, Paisan on 1st, Pogacha and Via Tribunali.

With his mobile catering oven, Cary delivers wood fired pizza to hundreds of events each year throughout the Pacific Northwest!



Crank it Up!

Crank Brothers are still cranking out the Speed Lever. This is the best way to remove or reinstall your tires fast. Folds small enough to fit in your seat bag. Reg. \$10

With Coupon \$7.99

Offer limited to stock on hand. No cash value. Expires 02/28/2009



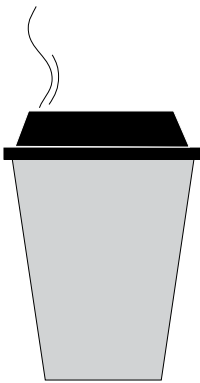
Is your bike broke, and so are you?

Then use this coupon to get Zinn & the art of Road Bike Maintenance for 25% off the regular price. Reg. \$37

SAVE 25%

Offer limited to stock on hand. No cash value. Expires 02/28/2009





Free Coffee

No need to overthink this one. Just come in, look around, buy something worth \$15 or more, and then use this coupon to get a free coffee drink in our coffee shop, Pedal a Late'

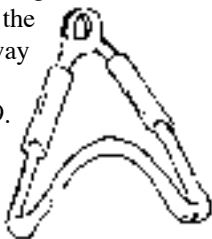
Free is a very good price!

FREE COFFEE

One coupon per customer. No cash value. Expires 02/28/2009

Tired of Flats?

So you purchased the armadillo kevlar tires and they ride like they're made of stone right? The bummer is, you're still gonna get flats with them unless you get something to knock the sticker or glass from your tire before it can work it's way through. Use this coupon to get a pair of Tire Savers (an R+E exclusive) at Seattle bike repair for just \$8.99. (Reg. \$10)



SAVE 10%

Offer limited to stock on hand. No cash value. Expires 02/28/2009

Tire Blowout!

Bring your bike to our repair shop for a complete overhaul (\$260) and we'll throw in a \$120 pair of Hutchinson Fusion tires for FREE! 700 and 650 sizes in stock



SAVE \$120

Offer limited to stock on hand. No cash value. Expires 02/28/2009

Pain in the Neck!

Use IB Relief to apply pain reliever directly where it hurts. Why take pills when you don't have to. IB-Relief goes to work on the pain immediately. Use this coupon to save \$3 on a 2oz tube. Reg. \$25. With coupon just \$21.99



SAVE \$3

Offer limited to stock on hand. No cash value. Expires 02/28/2009



All Tied Up?

Titanium arrives at R+E

If you would have asked me 20 years back about the future of bicycle frames and the materials used to build them, I would've told you that titanium would be the main material used to build bicycles by the year 2000. It seemed that it was the perfect answer for the rider that wanted a smooth riding bike like a steel frame, and wanted the light-weight of aluminum or carbon fiber. The only drawback was the price. My thinking was that titanium would eventually drop in price and heavy steel frames would finally meet their match.



Well, something got in the way of that prediction. Steel got much stronger, and therefore, much lighter. Steel actually got so light, that we can build an S3 steel frame as light, or lighter than any titanium frame (unless we build a wet noodle ti frame), and it still comes in a lot less expensive. Titanium is so springy, that it is possible to build it lighter, but then the ride really suffers. For these reasons, we really saw no sense in offering titanium frames in the Rodriguez line-up.

Last year however, it came to my attention that some customers want titanium for other reasons than weight. Some people like the look of ti, or don't want to have to protect a paint job, and are willing to pay a bit more for that convenience. So, for 2009, R+E Cycles is happy to announce the arrival of the Rodriguez titanium custom frame.

This winter Dan P. (our machinist) made all of the appropriate fittings for the welding equipment to enable ti welding, and Dennis has been honing his titanium welding skills. We've opened the frame shop for titanium frame repairs (yes, titanium can still break like other bikes) and we've performed several ti frame repairs already on various brands of bikes. Dennis built a ti frame for himself to ride to and from work.



Titanium is an addition to our offerings, and won't replace any of the steel frames we make. So, if you're looking for extreme light weight, you'll still want to be looking over the Rodriguez S3 frames. But if you are looking for titanium, you can now come on over to R+E Cycles and have your ti frame built in Seattle with the same care and attention to fit and service that we strive to achieve.



2009 Rodriguez Ti frames

\$2,699

Custom ti frame with Alpha Q or WoundUp carbon fork

\$3,199

Custom ti frame super light with Alpha Q or WoundUp carbon fork

\$6,899

Custom ti tandem frame w/o fork

Travel Options

For an additional price (based on frame model) we can build any of the ti frames with titanium S&S couplers for travel as well.

Impossible just takes longer

Some 2009 News

We Have the Best Customers in the World

June 10, 2008

Hello Dan,

Hi This is John from NY , I'm the person that sort of influenced you changing your website to state \$125.00 per wheel vs \$125.00 per pair.

As mentioned I said I would get back to you when My new frame was up and running...

I love the brakes!!! I had a bit of a tussle getting the rear set up as I was using a wide (Salsa) hangar so I called and one of your guys advised using a normal small hanger in the rear.

That did the trick. My first ride with the brakes and the new frame was Sunday on a 100K lots of climbing (1400 + feet total)

So lots of down hill and some steep ones, the brakes were super!!

Modulation was very smooth and without any noticeable fade, NO front fork chatter and QUIET!!!

Although its weird the brakes do squeal some times at slow speed (mostly the rear when I squeeze hard, IE : in traffic at creep speed) but screaming downhill at 39 MPH no noise, no chatter!!!

Actually I was hoping I didn't need to use the FORK CROWN mount cable hanger as I did with the other Cantis (only thing that prevented chatter) . I took a chance and used a standard headset hanger with your brake.

NO ISSUES!!!!!!

So Good Job captain. I can now put the shimanos, pauls, and tektros in the junk bin or ?? or junkyard frame project , but on my new touring frame Big squeeze are staying.

BTW - One of the wrenches at a very good shop I use now and then (not many by me) looked at the brakes and gave them a try he was pretty impressed.

Again it was a bit tricky getting them dialed in but well worth the effort!

Have a great day! "John"



Thanks John, and we've been putting together an installation manual for the Big Squeeze brakes so that 'dialing them in' is easy now. -Dan

Read John's letter, and more on our 'online customer scrapbook' at www.rodcycle.com

R+E Holds the Line in 2009!

Good news! At R+E Cycles we are having a non-inflationary year. In tandem with introducing three new economically priced bicycles (see page 2 ~ 3) we are announcing that we are holding the line on price for our existing Rodriguez models for 2009!

Big Squeeze Bonanza!

Our Trillium Big Squeeze brakes are really taking off! We've sent several pairs around the country, and even some to other countries.

Video Madness

This winter we're putting together some video instruction DVD's for packing and un-packing our travel bikes. These will be provided to people who purchase a Rodriguez travel bike for free. They will also be available for purchase for those who have other brands of travel bikes.



Whoa Nelly!

You've been training so hard this winter that you're speed has increased substantially. The last thing you can afford is a speeding ticket on your bicycle right? Well, maybe you can afford a Sigma 506 computer at R+E, especially if we cut the price to just \$18.88 for you. That way, you can keep track of your new found speed. Reg. \$25



SAVE 24.448%

Offer limited to stock on hand. No cash value. Expires 02/28/2009

See The Light!

The Mars 4.0 tail light. Strap this bad boy onto your messenger bag, or seat post and believe me, drivers will 'See the Light'! You gotta see it to believe it, so I'll quit typing now. Reg. \$30



With Coupon \$26

Offer limited to stock on hand. No cash value. Expires 02/28/2009

You're getting warmer...



It's still cold in the morning! Use this coupon to save 20% on any arm warmers or leg warmers that we have in stock.

SAVE 20%

Offer limited to stock on hand. No cash value. Expires 02/28/2009

Spring forward

Spring into a pair of Rodriguez Gel gloves for just \$19.99. Reg. \$25



SAVE 20%

Offer limited to stock on hand. No cash value. Expires 02/28/2009

Darn....still no Magic....just physics

In the last few years, manufacturers have really been pushing 700c wheels even on smaller bikes. This has led some to assume that 700c wheels may be faster or better because they are bigger. As a result, I find myself explaining 700c vs. 650 wheels several times per month. After just completing a series of emails with a 5' tall woman who was unhappy with a 700c bike that she had purchased (not from us) I decided that it was time for a basic article on the subject. Sorry about the length, I've actually left out pages of detail to try and keep it short.

650 and 700c are both just as fast. I realize that obsessing on minutia can result in the realization that a 650 wheel has to turn a little faster than a 700c to go the same speed, and this results in more friction in the bearings. But, if we apply the same obsessive compulsive approach to the weight comparison, that small difference is easily negated by the fact that there is less tube, tire, spoke length and rim material to get turning in the first place. This results in less rotational weight. 650 wheels are not slower than 700c. For instance, if a larger wheel was faster, then why not return to the 27" wheel standard of the 1970's? This is a bigger wheel than a 700c, yet no company (or magazine for that matter) has embraced it as faster than a 700c.

- Why would the industry push one wheel size?

The reason the industry wants to push 700c is that it's easier to spec bikes if all your bikes use the same size of wheel. When you slip a 650 in the mix for your smaller bike, for instance, now instead of 1,000 of the same 700c forks, you're ordering maybe 800, and then 200 of the 650 forks. This same thing holds true for rims, tubes, spokes, rim strips and tires. In effect, you've just raised your cost on the entire run of 1,000 bikes because you've increased the numbers of individual 'SKU's' as they are called in mass production. If a big bike company orders their bikes in 10,000 unit quantities for each model from a Taiwan or Chinese manufacturer, their costs could increase maybe 20%~25% if they started trying to offer the type of flexibility that a small company like us can give you. Building one bike at a time has its advantages.

Be reasonable, just give in -

As you can see, it would be much, much easier if we just did what they do, and pretend there are no other options for you. But, with our commitment to fitting our customers comfortably to their bikes, we really can't do that.

- Toe Overlap:

The reason for using a smaller wheel on a smaller bike is for good design. If your wheel hits your foot when you turn, this is called 'toe overlap' (see illustration below). The smaller a frame becomes, the closer the wheel gets to the rider's foot. A small amount (maybe 1cm or so) of 'toe overlap' can be common on modern bikes, but more than that can be quite a nuisance, especially if the rider wants to use fenders. A smaller wheel allows us to design a shorter reach frame with the proper head tube angle, fork rake and trail for good control while at the same time ensuring that the rider doesn't have too much (or any) toe overlap. Using a 700c wheel on a bike with an effective top tube of less than 53cm requires design gymnastics (or in some cases, cheating a little) to keep this from happening. Some companies offer bikes like that, leading some to believe that they have some new 'magic' design (sorry, they don't). Design gymnastics still result in improperly fitted bikes, bikes with lots of toe overlap, or bikes that have 'floppy' steering.

- The days of yesteryear:

Years ago (1990 and before) we built lots of small bikes with 700c wheels. That's because, in the old days, before carbon forks were the norm, we had a much easier job as frame builders designing small bikes with 700c wheels. We could change the head tube angle to a 'slacker' degree to move the wheel out in front of the rider and then build the fork with more 'rake' to accommodate proper handling (keeping the trail number to 55~60mm). The 'slacker' the head tube angle, the more 'rake' is required in the fork to maintain the appropriate 'trail' number. The added rake moved the wheel out even further. Carbon forks on the other hand, cannot be changed from their molded rake. Carbon fork manufacturers don't offer forks in rakes that would be required to accommodate really slack head tube angles. If we could custom make carbon forks, the way we used to

make steel forks, then we could pull this off, and our jobs would be easier.

- The things I've seen:

Smaller bikes with 700c wheels and modern carbon forks have been made by many manufacturers, and I've probably seen them all in the repair shop. The techniques used are many. Here's a list of the solutions I've seen:

-- Completely ignore proportions:

Some manufacturers don't even pretend. They simply make the small frames with a 54cm top tube, just like their bigger frames. So the reach to the handlebars for a 5' tall rider is the same as the 5' 8" rider.

I actually appreciate this approach as it doesn't pretend to be something it's not. You'll get the proper stand-over height, but a shorter rider's reach to the bars will be a long trip.

- Sacrificed performance:

If the head tube angle is made very slack, say 69° or less, that will usually be enough to get the 700c wheel out of the way of the foot of most people who need a top tube of less than 53cm, even with a modern carbon fork. "Why not just do that?" you ask? Well, it gets really technical to explain, but 'trail' is the reason. In short, if a bike has a very slack head tube angle, but not enough rake in the fork, the steering is affected in a very negative way. I actually rode an expensive custom titanium bike made this way a few years back and was shocked at how poorly it handled. I wouldn't have been doing the 'look ma, no hands' trick unless it was followed by the 'look ma, no teeth' trick.

- Tricky:

Here's a tricky one. If a bike has a modern carbon fork, a 72° head tube angle, a top tube length of 51cm, no toe overlap, and 700c wheels, has the company found the magic formula? No. They have artificially shortened the top tube by making the seat tube angle really steep. What this means for the rider is that the seat will have to be pushed all the way back on the rails in order to get the knees in the right pedalling position (unless they like really sore knees). Once the seat is pushed back on the rails to accommodate for thigh length, the reach to the bars becomes the same as if the top tube were 54cm.

- Embrace toe-overlap:

Some manufacturers simply make the smaller proportion bikes with the same head and seat tube angles as they use on their bigger bikes. Then they just put on the big wheels and hope the rider is careful when they turn corners on the bike (see picture on page 4). This has been an option that I've had customers choose, but then return the bike after deciding they didn't like it. As I said before, some folks are fine with it, but for the top tube lengths of 52cm or less, I've rarely had a customer happy with an extreme amount of toe overlap. Remember, most manufacturers will not take the bike back for a refund.

- Use proportional wheels:

Here's an idea....why not go to the extra expense and use a little smaller wheel on the bikes that are smaller? This is the method that companies use when they are trying to provide the best fitting bikes without compromising safety or good performance. It costs a lot more for the manufacturer, and requires a commitment to, and understanding of their customer's needs. We can't pretend that there's no difference, and again, we would love to return to the days of one size wheel for all the bikes, but the fact is that wouldn't be the best for our customers.

- We aim to please!

What ever your wishes, we're happy to build a bike for you. If you need a smaller bike, and you want 700c wheels, we're happy to build that, we just want you to be able to make an educated decision before you spend the money. We make bikes like this several times each year. Most of these customers are willing to accept either toe overlap, or a steel fork to enable us to provide them with good design and no toe overlap. Suffice to say, that there is a method to our madness!

Example of a small bike with a 51cm TT and lots of toe overlap. We've found that most riders don't want this much toe overlap.



The same foot on a bike with 650 wheels and a 51cm TT. This is how most people want their bike to be as far as toe clearance.



R+E
CYCLES

Rodriguez

Tritium

NEXT-fit