

# Rivendell

## BICYCLE WORKS

Summer  
1998  
March  
1999



Brooks



Nameplate



Carrier



Bee Wax



Fenders



Hubs



Books



Front-Derailleur



Road



Rear-Derailleur



Levers



Shorts



Calipers



LONG



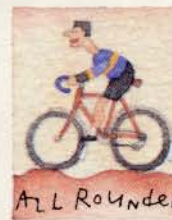
TOOLS



Low



CRANKS and  
CHAINRINGS



ALL ROUNDER



Wool



Nitto



# RIVENDELL BICYCLE WORKS

## GUARANTEE

We sell only things we ourselves use and are completely familiar with, so feel free to ask us anything about anything. If you buy something and aren't happy with it, you have six months to return it, for any reason, for credit or a full cash refund, and up to a year to return it for credit. We much prefer the credit, but it's your call. We've tried to describe things thoroughly and accurately, so there won't be any rude surprises when you open your Box From Rivendell.

## TO RETURN SOMETHING

Include as much information as possible with it. The original invoice if possible, but at least say why you're returning it, and whether you want cash (if you bought it within 6 months) or credit or an exchange. You pay the return postage, we'll take care of the outgoing postage. Allow for a 10-day turnaround.

## FAIR-TO-ALL-PRICING

We (Rivendell employees) pay the same prices you do. We don't have "pro deals" to industry employees, or "bro deals" to friends and family. Also, you can be sure your purchases are not subsidizing lower prices or freebies to famous people in any field, or product placements in movies or television shows. In addition, you'll not find any trickster pricing. Everything is rounded to the even dollar, and we don't try to make something sound lower than it is, with a price like \$19.99 or \$69.95.

## MONEY-GIVING

We are trying to form good habits in this regard; besides which, it feels good to contribute to good causes. Last year we gave to the Bicycle Inter-Community Action and Salvage (BICAS) and the Battered Women's Alternative (BWA). BICAS is run by Kim Young (former Bstone model, and expert bike mechanic). She and her group teach bike mechanics to local, at-risk boys and girls, and sell the rebuilt bikes cheap to people who need transportation. We'll give them another \$1,000 this year, and will try to help in other ways, as well—bike parts, water bottles, and so forth. BICAS: Box 1811 • Tucson, AZ 85702 (520) 628-7950

We probably won't give to BWA this year. In a highly publicized scandal/tragedy last year, a local newspaper heiress drowned in a lake, and to make a long story short, she left a million dollars or so to the BWA. We know the need is ongoing, and our emotional conviction to abused women remains as high as ever, but for this year at least, we'll put our money where it'll make a bigger impact.



# Rivendell Bicycle Works •



WE'RE A FOUR-YEAR-OLD MAIL-ORDER COMPANY for bike riders who prefer traditional, classical bicycles and parts and accessories to today's ever-changing, ever leap-frogging, constantly upgraded and outdated high-tech fare. It isn't *us versus them*, or *retro versus techno*, or *old versus new*. It isn't niche marketing in the tactical sense, either. We just offer the same gear we prefer, and ride, every day.

In general, it's simple gear, because bikes aren't improved by making them complicated, and simple parts allow for more rider input. It's practical in the sense that it fulfills a fundamental cycling (not just psychological) need. And it's proven—much of what we offer was born before we were, and even new items borrow heavily from materials and designs from the past.

Critics see our low-tech/don't-complicate-the-bike approach as contrary to attracting people to the sport, the idea being that anything that requires skill is either elitist, or will scare off new customers. That same notion keeps most of the industry busy developing bicycles which eliminate the need for the same basic cycling skills that all previous generations took for granted and learned with pride. Point-and-pedal bikes get a lot of people into this sport, a noble deed. But in their quest to attract more new cyclists and sell new gear to people who are already equipped, most of today's bike companies have discontinued the best technology and most refined designs from the past. We're trying to keep them in circulation, and at affordable, non-collector prices.

It's not so easy. In some cases, the parts are still being made. But in the past five years alone, at least a dozen makers of traditional bike gear have disappeared, and that makes us nervous. If we're going to stick around, we've got to find new sources or make it ourselves, and we do that a little already. Mostly, though, the start-up costs are too high.

We sell lugged steel frames, leather saddles, wool clothing, waxed cotton saddlebags and panniers, standard pedals clips and straps, assorted curved handlebars, chains and freewheels, cold-forged cranks, sidepull and cantilever brakes, friction shifters, and cotton handlebar tape. We have all you need to build and equip your bike, but there's no gratuitous high-tech, and our selection is narrow. With one exception, every item earned its spot by being the best, the best value, or the last of its kind available.

We also have a small selection of cycling books, posters, catalogues, tools, beeswax, soap, and lubricants. We're selective when it comes to inventory. If we sell it, we also use it, know its quirks, believe in it completely, and can talk about it with authority. The only nonsense we sell is Edward Lear's 1846 classic, Book of Nonsense. It is a truly incredible work that grows on you with each re-reading, even though it has nothing to do with bicycles.

We've survived so far because we don't depend on local business, and with the web and word-of-mouth, we've been able to reach at least eleven countries. We sink our cash into tooling, inventory, and publishing this catalogue and the Reader, leaving little for actual print advertising. So if you know others who might like our catalogue, please tell them about us or us about them. Also, if you have any suggestions on what we should offer, or know where there's a trunk full of parts we might like, please let us know.

Keep this catalogue! It's current until our next one, probably early next year. If you lose it, call up and we'll mail a replacement that day, and if you want more copies to give away, just ask, because we've got tons. —Grant, Peter, Joe, Allen, and Mary

# Table of Contents

|                                       |    |
|---------------------------------------|----|
| HOW & WHY TO JOIN/SUBSCRIBE? .....    | 3  |
| RIVENDELL BICYCLE FRAMES .....        | 4  |
| CLASSICAL SIZING FOR ROAD BIKE .....  | 9  |
| A GOOD POSITION .....                 | 10 |
| MORE FIT INFORMATION .....            | 11 |
| BAGGAGE .....                         | 12 |
| WALLETS & SADDLEBAGS .....            | 17 |
| NITTO-BOTTLE CAGE, RACKS, BARS .....  | 19 |
| GOOSENECKS .....                      | 30 |
| NITTO STEMS .....                     | 31 |
| GOOD SHIFTING THE HARD WAY .....      | 35 |
| SHIFTERS .....                        | 36 |
| FRONT DERAILLEURS .....               | 38 |
| REAR DERAILLEURS .....                | 40 |
| SADDLES & ACCESSORIES .....           | 43 |
| SEAT POSTS .....                      | 48 |
| BRAKES .....                          | 51 |
| PEDALS, CLIPS, & STRAPS .....         | 56 |
| CHAINS & FREEWHEELS .....             | 59 |
| CRANKS .....                          | 60 |
| CHAINRINGS .....                      | 61 |
| BOTTOM BRACKETS .....                 | 66 |
| SUNDRIES & SUBSTANCES .....           | 69 |
| TOOLS .....                           | 71 |
| SAFETY STUFF .....                    | 73 |
| BOOKS .....                           | 74 |
| SOAPS .....                           | 77 |
| TIRES .....                           | 78 |
| RIMS .....                            | 81 |
| HUBS & WHEELS .....                   | 82 |
| RIVENDELL HOURS & VISITING TIPS ..... | 83 |
| CLOTHING .....                        | 84 |
| WHO YOU GONNA CALL? .....             | 88 |



## How and Why To Join/Subscribe

**"JOINING RIVENDELL" AND "SUBSCRIBING TO THE RIVENDELL READER" ARE THE SAME THING. U.S. MEMBERSHIPS COST \$15; FOREIGN ONES ARE \$22 IN U.S. FUNDS. FOR THAT YOU GET:**

Four issues of our 40-page *Rivendell Reader*. It's mostly about bicycles, and covers topics most of the real bike magazines don't. Technical, casual, interesting, unusual, with nothing on travel, stretching, cross-training, diet, recipes, or hero worship. Some good interviews, too.

Member prices on everything we offer. If you know the only thing you'll ever buy from us is a can of FrameSaver and you don't read, then it's not worth it to join.

Rivendollars. Each issue of the Reader has three or four Rivendollars, cumulatively worth

around \$25 toward qualified purchases, and since your \$15 gets you four issues, simple math makes a good case for joining.

Special mailings, listing parts we got in too late to fit into the catalogue, or things we don't have enough of to put into the catalogue.

### REVIEW

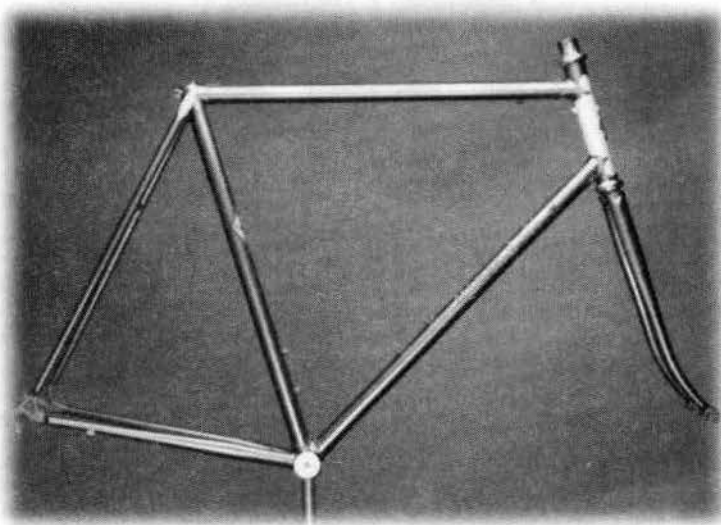
*For \$15/\$22 Foreign, you get*

- 4 issues of the Rivendell Reader
- \$80 to \$90 Rivendollars
- access to good, hard to find parts
- Member prices on all we offer.

You can join/subscribe by phone or fax or mail. MasterCard or Visa or check.

|                                                |           |           |
|------------------------------------------------|-----------|-----------|
| Name _____                                     |           |           |
| Address _____                                  |           |           |
| City _____                                     | St. _____ | Zip _____ |
| Master or Visa # _____                         |           | Exp _____ |
| Day Phone _____                                |           |           |
| If you live in California, which county? _____ |           |           |

# Rivendell Bicycle Frames



*A 61cm Road Standard. Please ignore the stand and bottom bracket clamp.*



We sell all the parts of a bike, but the heart of Rivendell Bicycle Works is Rivendell bicycle frames. We have three models: The **Road Standard**, our version of a modern, all-around road bike; the **LongLow**, a frame very much like the Road Standard, but with a slightly longer wheelbase and clearance for even fatter tires (like an early '80s sport-touring frame); and the **All-Rounder**, a frame equally good for commuting, off-road riding, road riding, centuries, and backyard or transworld touring, depending on how you equip it.

Occasionally we build custom frames, either within these categories for people with special bodies, or outside these categories for those who want a cyclocross, fixed-gear, mountain, or expedition-style touring bike in a "Rivendell style." But the Road,

LongLow, and All-Rounder cover 99 percent of the riding 99 percent of us will ever do.

Our frames are made in the United States, and are hand-brazed and lugged, in the traditional fashion. We believe this is the most desirable in terms of strength, longevity, repairability, and appearance. They're made from premium, high-strength, heat-treated or vanadium-enhanced seamless tubes from Reynolds of England, Columbus and Dedacciai of Italy, and Vitus of France.

One especially important and distinctive feature of Rivendells is that they're designed to allow a higher and far more comfortable handlebar position than is possible with standard designs—without losing their traditional road bike looks. A properly sized and fitted Rivendell is as comfortable as a bicycle gets.

# CATALOGUE & PRICE LIST

We keep a few frames here in Walnut Creek, but the many tubing variables and colors, and the sheer cost of each frame, make it impractical for us to stock a good selection. So for the most part, Rivendell frames are made to order, with tubes we select individually, according to your weight, size, the intended use of the frame, and how you're hoping the bike will feel. Currently, these made-to-order frames take between six and eight months to get, which probably makes them the slowest delivery in the country, and maybe the world. We're trying to find a way to deliver frames faster without a drop in quality, and hope to have good news by November 1998.

What follows is a brief description of some of the features of our frames that distinguish them from other expensive, hand-built frames. If, after reading this, you're still interested in them, please contact us for a frame brochure. It ought to be available after August 25, 1998, and will have color photos, detail shots, and so forth. All that should be on our website by then, too: [Rivendellbicycles.com](http://Rivendellbicycles.com).

## **RIVENDELL FRAMES ARE THOROUGH, BUT NOT OBSESSIVE**

By "thorough," we mean every dimension and braze-on is the way it is for a reason, and by "not obsessive," we mean that if a feature seems unnecessary or if its function could be duplicated by some cheap, practical, and not-too-ugly means, we left it off. Chainstay-mounted spoke holders, front derailleur braze-ons, and internal cabling, for example.

All the frames have fender clearance and dropout eyelets, because we

design Rivendells to be practical, all-weather bicycle frames, and that means they must be fender-friendly. Other standard braze-ons include split cable housing stops for the rear brake and rear derailleur, a pump peg on frame sizes that allow it (most do), downtube shifter braze-ons (use adapters for bar-ends and Ergo, etc.), and two water bottle braze-ons. The All-Rounder and LongLow have rear rack braze-ons, as well, but we'll leave them off if you prefer. If you want a front rack braze-on, we'll do that, too, but you have to request it; and we don't drill holes in the fork blades.

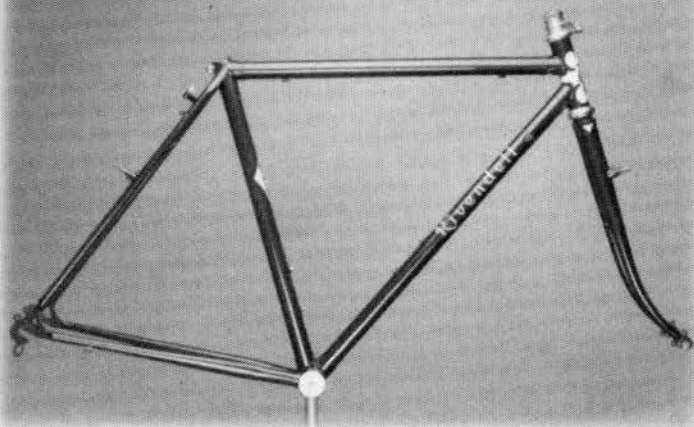
## **RIVENDELL FRAMES LOOK GOOD**

The frame tubes are round and look normal. Our lugs are interesting, even ornate, but not overboard. They're investment-cast CrMo, and although they look nice enough for most bikes in their raw state, they're hand-filed to bring out their best. Lugs are increasingly rare on modern bikes, so ours naturally get a lot of attention, but the beauty doesn't end with the lugs.

The dropouts are classical horizontal, with an occasional vertical, if you insist and are agreeable to debate. Whatever kind you get, all forging lines are removed, and all tube-to-dropout transitions are seamless.

The fork is especially important, both for its looks and its function. Modern forks tend to look boring, severe, unattractive, even mean. Rivendell forks are swooping pretty. Before the dropouts are brazed in, the fork blades are bent, one at a time, over custom-made maple blocks, and the blades are cut to the proper length from the small end, to ensure that the

# RIVENDELL BICYCLE WORKS



*This is a 52cm LongLow. The frame comes with cantilever bosses, as shown, but you may request it with sidepulls, in which case you need a brake with 56mm of reach. We have them.*

bend continues all the way to the dropout. The rake is low and the radius is small, not just for comfort, but looks as well. Reynolds and Columbus supply custom, longer blades, for the clearance we want and the bend we like.

Even though our forks are attractive, they're also smart. While most modern road forks are too short to accept tires larger than 700x28—some barely clear those—and few accept fenders, our Road Standard forks are sized to take tires up to 700x35 (695mm diameter), and you can run them with fenders with tires up to 700x32 (about 690mm diameter). And they still accept short-reach brakes, the same as other frames without so much versatility.

## A RIVENDELL IS STRONG

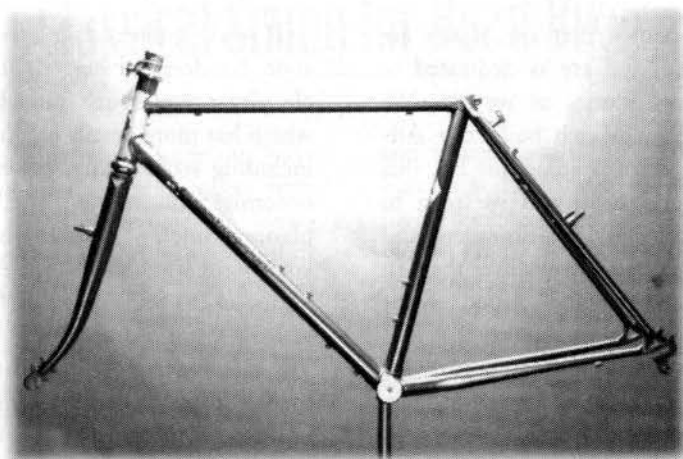
Because the steels used are strong, the tube dimensions are selected according to your proportions and the frame's intended use, and are handled with care at every stage. The miters

are precise, and the brazing is of the highest quality.

The dropouts and lugs and bottom bracket shell are designed to eliminate inborn stresses, and to add strength at joints. So, even though a new frame is strikingly beautiful when you take it out of the box for the first time, your appreciation for it will grow beyond the surface beauty. Fifty thousand miles after you take it out of the box, its practical features and ruggedness will be at the forefront, and it'll still look good, war wounds and all.

A RIVENDELL IS AS WELL-MADE as a bicycle frame can be, for the simple reason that we use the very best materials, and don't cut any corners in the design or making of it. If bicycle riding is a huge part of your life, then rejoice that you can buy such a fine, lifelong frame—one that will maintain its value—for less than a computer that will plummet in worth in half a year and be obsolete in five.

# ☞ CATALOGUE & PRICE LIST ☞



*This here is an All-Rounder. Sizes up through 59 are designed for 26-inch wheels (mountain bike size). If you're a really tall guy and need a frame larger than that, we'll design it around 700c wheels, and you'll still have tons of clearance for fat tires.*

Technology loses its value as soon as something higher tech comes along, but it's likely that whoever inherits your Rivendell will be able to sell it for more than what you paid. (There's no sense buying a frame just so your heirs can cash in when you die, but there's always the chance they'll ride it like you did.)

OUR RIVENDELL FRAME BUILDER IS JOE STARCK, a 38-year-old former head framebuilder for Masi. (Not everyone knows Masi: Since the '40s Masi has been Italy's premier frame. (No? Name one better.) Anyway, in the late '70s, worldwide demand for Masis exceeded Masi's capacity, so it opened a frame shop in California. The builders were trained in the Masi way, and in short order the California Masis were regarded as superior to the Italian ones. Joe was head builder for most of that time. You can read more about him in Rivendell Reader 12.)

Joe has built about 10,000 frames, but equally important, he is a master of the long-cut and a craftsman who takes great pride in his work, who has not become jaded, and shows no signs of burnout. He builds a frame as strong, and as straight, and as pretty, as anybody alive does, or dead did. Lead time for a Joe-built Rivendell is at least six months, and may be as long as eight. As of August 1998, the base price for a complete frame and fork with the fancy paint job is \$1,375. Extra braze-ons add to it. A \$300 deposit gets you a place in line.

We very much want to reduce our delivery times, and the obvious solution is to have more builders. But it's not easy to find qualified ones. In our search, we've ruled out many custom builders and limited production factories that seemed good on the surface. We might have found our prize, though, in the Match Bicycle Company of Woodinville, Wash. Match is a new name, but the small

# RIVENDELL BICYCLE WORKS

group of people that are Match are experienced, and are as dedicated to lugged steel frames as we are. We hope to have Match build our All-Rounders, starting sometime late this year or early next, and we plan to stock Match-built All-Rounders, and at the worst, be able to deliver them in six weeks. We'll be as proud of the Match-builts as we are of the Joe-builts. Tim Isaac of Match gave Joe Starck his first job as a brazer (at Trek, many years ago), and in fact showed Joe how to braze. Tim and his crew at Match are more than qualified to build our frames, and after this build-up, we hope it happens. We have to work out a few of the details, and will keep you informed in the Reader.

If you're interested in a traditional-style, handcrafted lugged, steel bicycle, please request our frame brochure, which has more details on our frames, including sizes, sizing, colors, prices, ordering information, the layaway plan, geometry, and anything else you might want to know. Request by phone (925) 933-7304 or fax (925) 933-7305 or along with your order. We also have a budget handbuilt, lugged frame, called the Heron. Call or send for information about it.

Anytime you want to talk about our frames, please call or fax. If electronic information is more your style, see [www.rivendellbicycles.com](http://www.rivendellbicycles.com) and [heronbicycles.com](http://heronbicycles.com).

—Grant, Peter, Joe, and Allen

---

WE BELIEVE RIVENDELLS ARE THE best designed and best built bicycle frames you can buy, because we know them inside out, and we know the short-cuts not taken. But no matter how good we think they are, they're right for you only if you value the same things we do, and you can be sane and smart, and have different values. For instance, if you know you'll never ride a bike in the rain, you've no reason to value the fender-friendliness of our bikes. If the fattest road tire you'll ever ride is a 700x23, then the fact that ours can gobble something much fatter won't matter.

Another thing: If you've always lusted after an Italian bike, with lots of chrome, decals on every tube, and a glorious racing heritage; or an English bike with scrolly lugs and pinstriping galore; or a hi-tech American nonsteel frame with buttery smooth tigwelds and the wonderful color and rustproofness of titanium—then you should get it, because one will always be calling you if you don't.

After more than 600 frames sold, we've determined there's no typical Rivendell customer. We've sold frames to riders between 17 and 80. Most have two to five other bikes, but some are collectors with up to thirty, and others ride hand-me-downs during the six-to-eight month wait for their dream frame. Some have been riding good bikes for twenty or more years and have seen everything and know exactly what they want; others are graduating from a \$400 Famous Brander, and it doesn't even fit them, and all they know is that they like bikes and plan to ride one a long time, and rather than spending the time and money upgrading every few years, they want want their final frame now.

No matter where you fit in that spectrum, we won't build your frame until we're all sure a Rivendell is right for you. Because our capacity is so limited, there's no incentive for us to sell a frame to someone who, we sense, really wants a Litespeed (or whatever), and we've turned away customers in the past. If you want steel, and you like lugs, and you like our approach to practical design, give us a call.

PHONE: (925) 933-7304 • FAX: (925) 933-7305

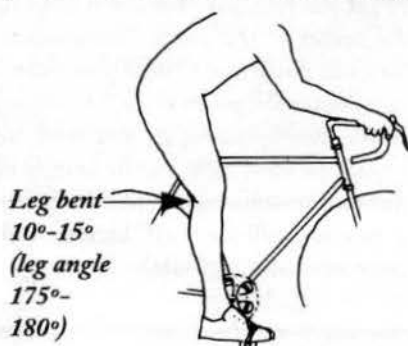
## Classical Sizing for Road Bikes

For Rivendells, we have our own chart and method that takes into account the nuances of our frame design, and we go into more detail in our separate frame brochure, and on the web site; and in person or over the phone when you order a frame. This here's a more general guide, for non-Rivendell frames, and we're including it because every day we talk to people who are on the wrong size bike and know it. Usually the bike is too small, and the rider complains of sore hands, neck, or back, due to handlebars that are too low relative to the saddle.

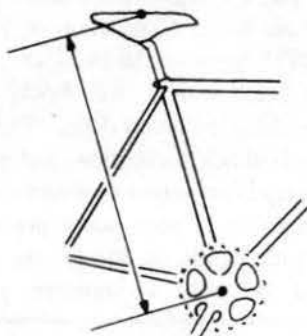
Beware the long seat post! It makes it too easy to buy a frame that's too small. Before the mountain bike started influencing road bikes, road seat posts were 180mm to 200mm long,

and if you raised the saddle to the maximum height and it still wasn't high enough, you got a bigger frame. Now that mountain bike seat posts have snuck onto road bikes, it's easier than ever to get a bike too small.

Another thing that encourages smaller sizes is the idea that a smaller frame is lighter, stiffer, and more maneuverable. But the difference in weight is an ounce or two, and stiffness is the most misunderstood quality of any bike frame, and there are seven things that affect maneuverability more than an extra couple of centimeters of frame height. Yet the comfort difference between Xcm and X+2cm can be dramatic. If you can fit either of two frames, buy the bigger one if you want to be comfortable.



*Your leg is bent just a little at the bottom of the stroke and you can pedal a full circle without tilting your hips. If you drop your heel, the saddle is probably too low, and your leg is trying to extend. If you pedal toes-down, it's probably too high, in which you'll rock side to side, increase pressure on your crotch, and damage your tendons, which, at the bottom of the stroke, will try to simultaneously stretch and contract. If your knee is bent too much at the bottom of the stroke, you'll damage the cartilage under your knee cap, and feel a dull pain in your knee, two days following a hard ride. And your thighs will tire faster.*

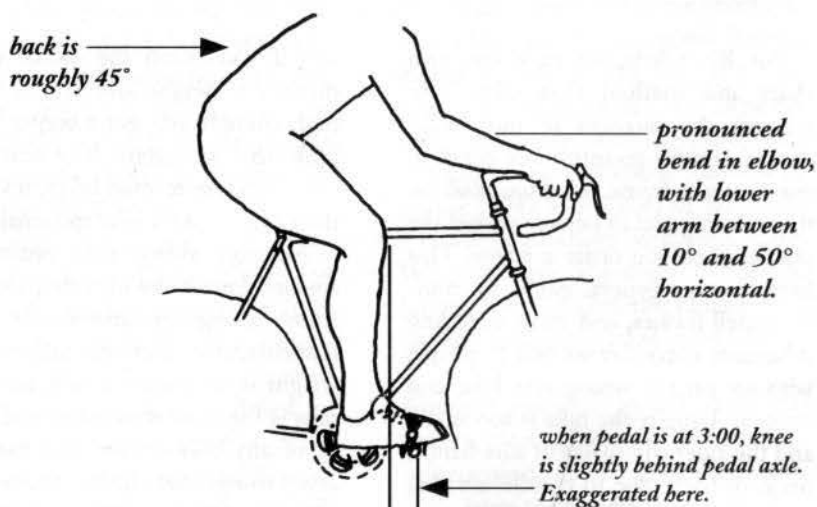


### MEASURING YOUR SADDLE HEIGHT AND PICKING A FRAME SIZE FROM IT

Center of bottom bracket (or crank) to top of saddle

| your saddle ht | minus    | fill in your frame size |
|----------------|----------|-------------------------|
| 64 to 67       | 13 to 14 | _____                   |
| 68 to 71       | 14 to 15 | _____                   |
| 71 to 72       | 15 to 16 | _____                   |
| 72 to 77       | 16 to 17 | _____                   |
| 77 to 80       | 17 to 18 | _____                   |
| 81 to 83       | 18 to 19 | _____                   |
| 84 to 86       | 19 to 20 | _____                   |

## A Good Position For Many Riders



PERSONAL PREFERENCE ALWAYS PLAYS A ROLE, and we'd never underestimate the power of familiarity, but we'd also be hard put to find a rider who didn't like the position shown here. The 45-degree back helps you see better and reduces strain on your back. The pronounced bend in your elbow helps you absorb shock; the approaching-horizontal lower arm also aids shock absorption, and suggests very little weight on your hands. When you're in your riding position with your hands on the hoods, you should be able to remove your

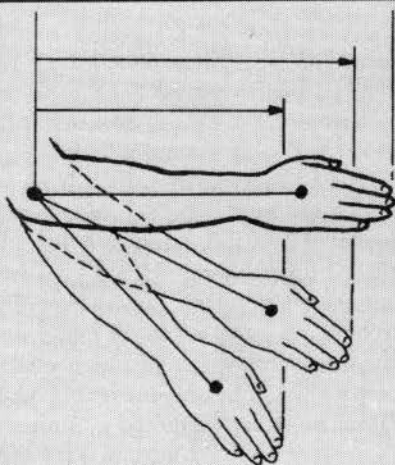
hands—put them behind your back, even—without plopping down onto the stem. We're less adamant about the knee position relative to the pedal, but mention our preference here only to get you thinking. We like it behind the center of the pedal, because that way, the downstroke helps you maintain a rearward position on the saddle. If it's directly above it, you tend to scooch forward more. In any case, it is not easy to achieve this position with a normal, off-the-shelf bicycle and conventional sizing methods.

**Note on stem extension:** Many riders mistakenly believe that, when they're sitting in the saddle and with their hands in the drops, the handlebar should block the front hub. No. If it does, fine, but the error in this method is that it doesn't account for head tube angle or fork rake. You can have the same, identical-and-perfect position on two different frames, and the one with the shallower head tube and more fork offset will tend to shove the front hub out in front of the handlebar more. The

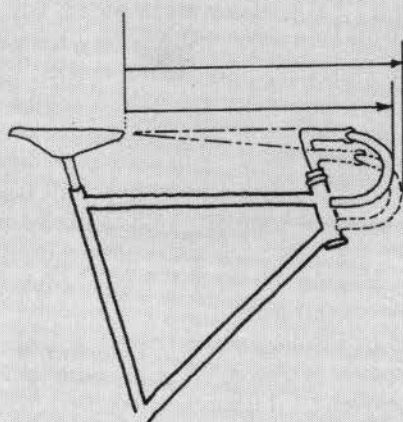
reality is that on midsized bikes that are properly set up, the hub will be fully or partially blocked, but that's a coincidence, and shouldn't be a goal.

**Note on stem height:** If you have long arms and climb steep hills while pedaling off the saddle for long stretches, a lower bar will help your arms relax, because it will let you straighten them out. But don't overdo it! If you climb seated most of the time, a higher bar will save your back.

## More Fit Information



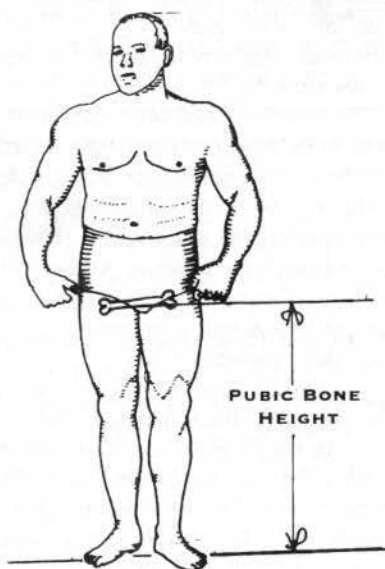
*As the handlebar gets higher, your arm becomes more horizontal, effectively getting longer.*



*As the bar gets higher, it also retreats toward you. How much? On a bike with a 73.5-degree head tube, raising it 4cm brings it back 1.5cm.*

By studying the two pictures up there, you'll see why getting a shorter stem without also raising the bars can have a self-cancelling effect. And how, if you raise the bars, you may even need a longer stem. By sort of the same token, top tubes of a given length tend to feel shorter on bigger frames than on smaller ones. So if you currently ride a 56cm bike with a 55cm top tube, but you know you can fit a 58cm frame, don't be scared off it just because it has a 57cm top tube.

*If you aren't sure whether your saddle is set at the right height, or if you just want another opinion, measure your pubic bone height. With your bare feet ten to twelve inches apart, measure from the floor up to your pubic bone. Hook a metal tape through a thin, hardcover book or a record album cover, and push up until you smash into the bone. Have a friend take the reading on the floor. This distance minus an inch (25.4mm) is nominally the highest top tube you should have. Sole thickness affects it, too.*



## Baggage

**B**AGS MAKE BIKES MORE USEFUL. We offer a variety, from a simple 16-inch square of waxed cotton—which is a bag only when you roll it up like a burrito—to rear panniers capacious enough for five pit bull pups. All our baggage is simple in design, sturdy in its manufacture, and conspicuously lacking in clever yet fragile convenience features.

Most soft luggage and packs are made from 6 to 7oz nylon pack cloth or a heavier, 11.5oz

Cordura nylon.

Nylon is cheap to buy, easy to sew, and has been sold on its tear strength and abrasion resistance, which isn't so honest. High tear strength and abrasion resistance are desirable, but most nylon packs

fail at the seams. Go where folks with nylon packs gather and you'll see a seam fuzzy with fringe before you can say, "Sir, my name's \_\_\_\_\_, and if you don't mind my saying so, you need a new pack."

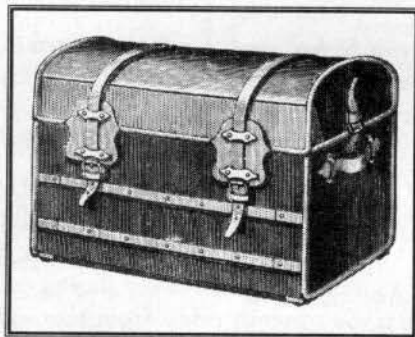
Another problem with nylon is that prolonged exposure to sunlight kills it. Rock climbers see 4,000-lb test nylon webbing, after prolonged exposure, weakened to the point where they can break it with their hands. At high altitude, continuous sun can turn a lightweight nylon tent into rice paper in sixty days, sometimes less.

Lowly old cotton duck can bake in the sun with little damage, and if it starts to fray, it gets fuzzy fast, and the fuzzy edges prevent additional fraying in much the same way that tangled or dreadlocked hair is hard to comb. That's why you can cut off your blue

jeans and wear them unhemmed. You can't do that to nylon.

Cotton lacks nylon's abrasion resistance and tear strength, but a tight weave of heavy cotton duck is plenty strong in both regards, and a pack made of it will outlast a nylon one three times over. Hemp is even stronger than cotton, but it's expensive to buy, and we've yet to see hemp with the fine, dense weave of a high-quality cotton duck. The only intriguing hemp fabric we've seen required a minimum

order of \$100,000, and the stuff offered in smaller quantities is either thin muslin-y fabric, good for curtains and Tai-Chi pants, or have chevron weaves and are recommended for sofa upholstery. We don't know of any pack-worthy



hemp, and if you do, please tell. Carradice is interested in hemp, too, and if we can find good stuff, they'll sew it up.

Another weak point in packs is zippers, especially plastic or nylon ones, and especially coil zippers, and the smaller the coil, the worse, still. The coil abrades the inside of the slider, the slider itself gets bent, and the next thing you know, your self-repairing coil zipper is self-opening, too, and it never gets better. For light use, the amount most panniers are subject too, they're okay. The slider is what usually goes, and sliders are replaceable.

For hard continuous use, and whenever security is more important than one-click convenience or instant access, we like 14oz cotton duck on the Carradice bags, and the the metal prong buckles. —Grant

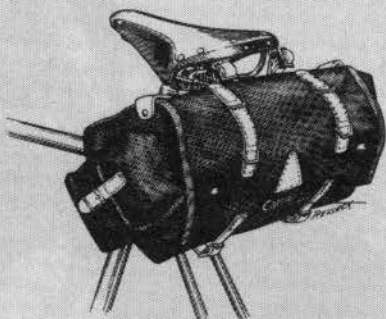
## Carradice Cycle Bags, From England

Carradice bags (rhymes with *paradise snags*) are made in England with designs, fabrics, and methods that have proven reliable since 1932. The fabric is 14-oz waxed cotton duck—heavier than Filson tin cloth, even—the straps are thick leather, and the buckles are zinc-plated steel. These are exceptional bags built to be used every day, and used every day, they'll last 20 years. A few of our customers have 25-year-old Carradices that are still in good service.

Between 1929 and 1952, virtually every saddle in England wore a saddlebag, and Carradice was the brand of choice. They are the traditional "transverse" style, which means they stick out, catch the wind, sway a bit, and gently massage your legs on the backstroke. They require some method of attachment on the saddle, such as the loops built into some Brooks models, or an adapter. We've been working on and hoping for and looking for a good adapter for three years now, and maybe this year something will happen. Saddlebags are the best way to carry medium loads, and with enough lashing straps and creativity, you can carry bulky, unwieldy, oddly shaped cargo that won't even begin to fit in the main pouch.

### SMALL WARNING

If you're used to packs and luggage made with scientific fabrics, plastic one-hand quick release buckles, and mesh outer bags for drying your wet sox, the look of a spanking new

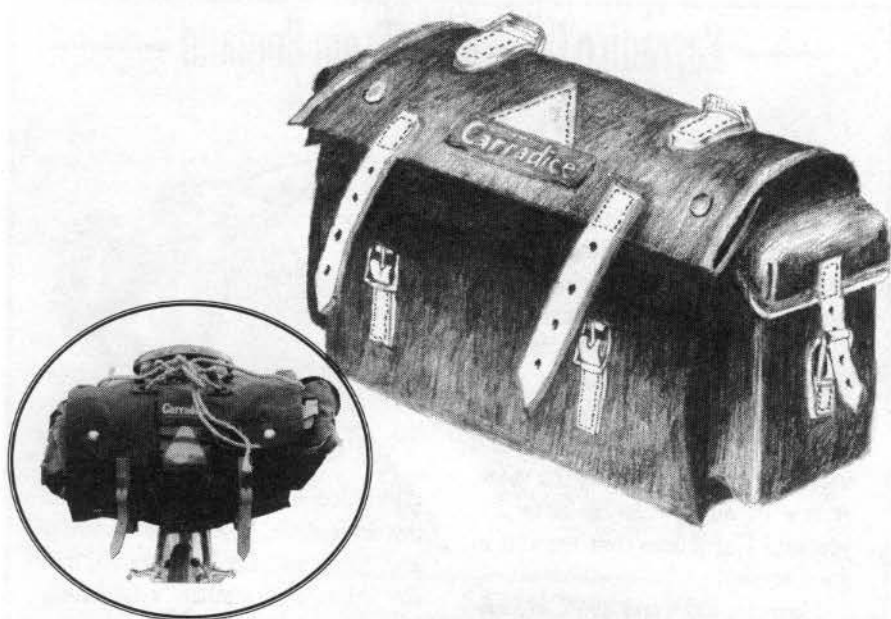


Carradice bag will make you feel uncomfortable. The fabric is starched and black and loud to scratch, and the thick, stiff leather is a pallid, grayish white that makes you wonder why they didn't at least make it darker. It will draw comments from strangers, who'll wonder where you're from and be seriously disappointed if you don't have an accent. If you don't, fake one.

There's nothing stressed or acid-washed or pre-softened about Carradice bags—they actually need breaking in, because the leather straps are too stiff and the prong holes are too tight. It takes 40 days of regular use for these bags to break in, and years of hard use before they start looking nice and weathered. Mine is 12 years old, as waterproof as the day I got it, and it looks better than new.

For keeping your gear dry and secure, and standing up to the hardest use for the next couple of decades, Carradice is the best we've seen or used.

—Grant



## LOWSADDLE LONGFLAP

A hobbit-sized version of the Nelson Longflap, but still big enough to carry a three or four loaves of pumpernickel and a wool sweater. Even though it's the smallest Carradice saddlebag we offer, it's still a behemoth by most standards. Requires at least 10 1/2 inches between the saddle loops and the tire, unless you have a rack or fender or the Nitto saddlebag support. 14"x9.5"x7.5". 854 cubic inches. 11b 8oz. *Non-Member Price \$75*



## NELSON LONGFLAP

In 12 years, only once have I had a load I couldn't somehow fit into or onto mine. Lash points on the flap let you tie on a small bedroll or extra clothing, making this a fine bag for summer overnights, three-day hostel tours, or family day trips where you get to carry everything. Take along a strap or a 4-foot cord, and you can overfill the bag and still tie the flap down—I've done this many times with boxes and bags I otherwise could never have carried. 14"x11"x8". 1,098 cu. inches. Requires at least 12 inches between the saddle loops and the tire, unless you have a rack or fender or the Nitto saddlebag support. *Non-Member Price \$76*



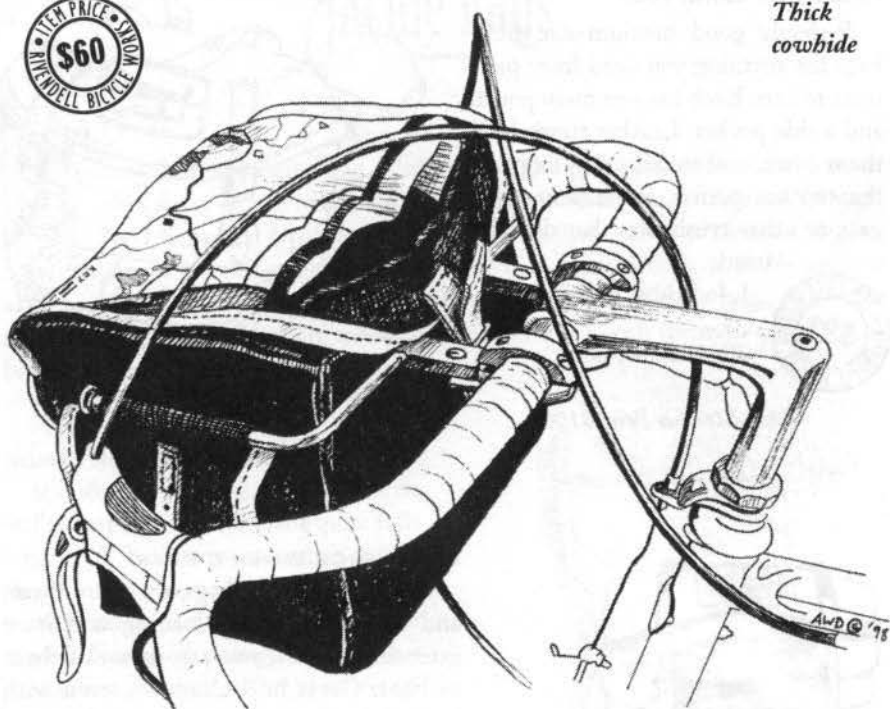
## CAMPER LONGFLAP

This is the cycle-camper's traditional favorite, and if you can't fit it in here, you're being too dainty. If you really hate panniers and you really have to carry a lot, get this monster. The side pockets are large enough for standard sized water bottle or a half-liter Sigg fuel bottle. Needs at least 14 inches between saddle loops and tire, or a rack or fender or the Nitto saddlebag support to keep it from dragging. *Non-Member Price \$79*





*Thick  
cowhide*



## CARRADICE BOXY BAG (FOR DROP HANDLEBARS)

Over the years we've all been told googolplex times not carry any weight on your handlebars, or to at least minimize it; but the French-style boxy bag is just too practical, too user-friendly, and too good-looking to go away. It's big enough to carry a sweater and a camera, and has two outside side pockets with flaps, and a rider-side open-top pocket. There's a map case on top. Made exclusively for Rivendell by Carradice of England, of the usual waxed cotton duck. It doesn't work with Moustache Handlebars. We're working on something for them. This bag requires but does not come with the Nitto front handlebar rack on Page 19.

*Non-Member Price \$65*

## CARRADICE SUPER C FRONT (WORKS AS REAR, TOO)

Perfectly good medium-size front bags for anything you need front panniers to carry. Each has one main pouch and a side pocket. Leather straps hold them down, and sordid nylon loops on the top are perfect for stashing rain gear or other crushables that don't fit inside.



1,464 cubic inches.

2lb 14oz per pair.

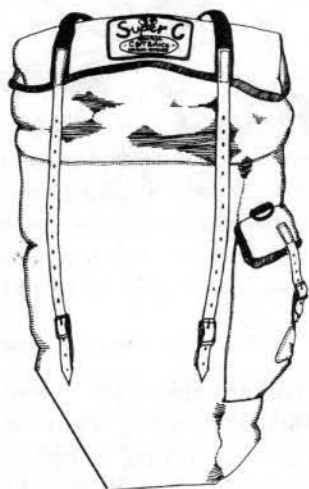
*Non-Member Price \$100*



## CARRADICE SUPER C REAR

If you're after big bags, these are them, and since they're top-loading and have extension sleeves, you can overstuff them to boot. Great heel clearance, even with huge feet. The one main compartment isn't the ticket for Felix Unger types, but it does offer the ultimate in versatility and the ability to carry oddly shaped objects. The best bag for self-contained, long-distance tours. 2,563 cubic inches. 3lb 6oz per pair.

*Non-Member Price \$138*



## THE BENEFITS OF TOP-LOADING, SINGLE COMPARTMENT PACKS

*You can fit more in, and you can fit oddly shaped objects that don't cotton to cramped quarters. Organize your gear with stuff sacks. Mesh ones, if you want to see inside; otherwise, different colors for different things. In a dream world, we'd have a dozen or so earthy shades of beeswaxed, organic cotton and hemp stuff sacks, but for now just go to REI and get the coated nylon ones. Top-loading packs don't offer the instant access of zip-around compartments, but that's what outside pockets are for. Top-loading isn't the only way to go, but it's always a good way.*

## Acme Bags



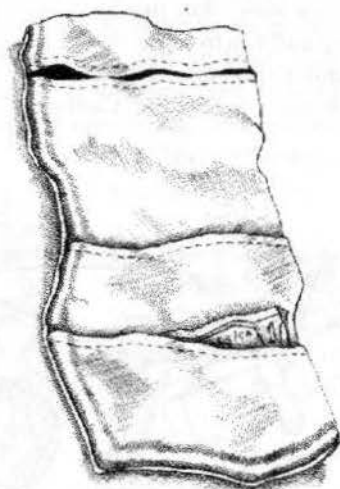
Sometimes we want a bag or something else that isn't commercially available, so we have it made, and leave it logo-less, and call it Acme. Webster's New Universal Unabridged Dictionary defines ACME as *the top or highest point, the height or crisis of anything*. Another dictionary defines it as *the point of utmost attainment*. We can think of no better descriptions of these bags. All Acme bags, wallets, and pouches are made from Filson Tin Cloth seconds, a mustardy-brown, 12-oz waxed cotton duck.

### ACME NORMAL-SIZE WALLET

It's sort of a vertical tri-fold style wallet, but the third fold isn't quite full-length. A basic canvas wallet unlike those you buy in wallet stores or from normal catalogues. Our most popular model. Not good enough to give as a graduation gift, but perfect as an everyday wallet. Get one of those photo-credit card plastic things to put in compartment No. 2, and you're ready to set the world on fire.



Non-Member Price \$15



### ACME BIG BOY MUSETTE

Big enough for a few books, a binder, pencils, note paper, a small camera, and a banana. There are two sets of loops. The lower one is for the waist strap, which we provide (cut the long strap inside the pouch in half). The upper loops are for you to attach your own, homemade shoulder strap to—a rope, a flat inner tube, webbing... 15"x12"x3", but for some reason, it seems to shrink a little over time. 290g. We don't sell many of these, and I'm not sure why. Maybe because you have to work out your own shoulder strap.

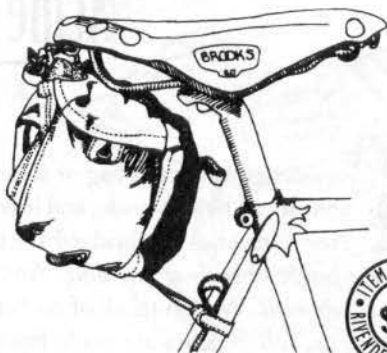


Non-Member Price \$28

# RIVENDELL BICYCLE WORKS

## ACME WAXED COTTON SADDLEBAG

If the Lowsaddle Longflap is too big, but you can't stand the thought of a nylon wedge pack and it won't hold enough anyway, get this. The main pouch is big enough to carry a long-sleeve wool jersey and some food, and the two side pockets hold small things—tubes, tools and the like. The side pockets have loops you can tie together with string or shoelaces if you like, but elasticized necks make that unnecessary. The main pouch closes with a long strap that runs through a loop and ties to a seat stay or seat post. Made to our specs by a husband-and-wife team in Paradise, California.



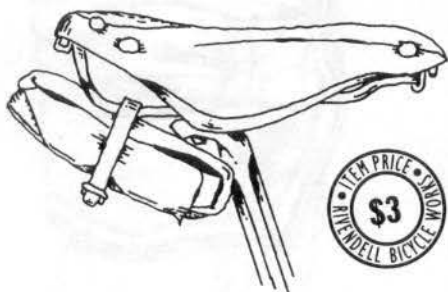
ITEM PRICE • \$28  
RIVENDELL BICYCLE

*Non-Member Price \$32*

## ACME TOOL AND TUBE TOTE

When all you need to carry is a spare tube and a couple tools, you can't beat this 16"x16" square of stout, finely woven, unhemmed waxed cotton. Put your gear in one corner, roll it up until covered, then roll it up like a burrito and strap it to your seat rails or seatstays with a toe strap. Put one in a Carradice pocket, so when you get a flat you can just lay it out like a placemat, and your small stuff won't get lost amongst the roadside garbage.

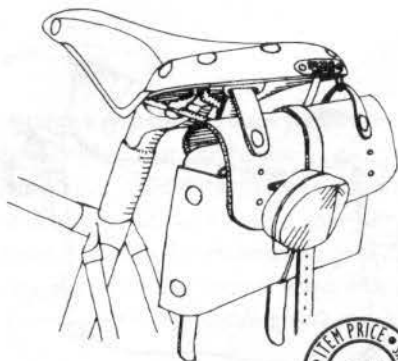
*Non-Member Price \$4*



ITEM PRICE • \$3  
RIVENDELL BICYCLE

## ACME LEATHER SADDLEPOCKET

Rivendell member/leatherworker Steve Jackson made these for us. Thick, pinkish leather that browns with time is held together with chunky copper rivets, and closes with a stout brass buckle. Big enough to carry a wallet, spare tube, a few tools, keys, and some nuts. If you lace cord through the holes in the flap, you can tie on a rain jacket, sweater, or Sunday paper. A horizontal slot lets you clip on a style red flasher light. Roughly 4 1/4" tall x 7 1/2" wide x 1 1/2" deep. Like all our saddle luggage, it is happiest on a saddle with bag loops. *Non-Member Price \$45*



ITEM PRICE • \$41  
RIVENDELL BICYCLE

# Nitto of Tokyo

**N**obody makes anything better than Nitto makes anything Nitto makes. Handlebars, stems, seat posts, racks, bottle cages—if it can be forged, bent, fillet brazed or welded, Nitto can do it, and they're the best in the world.

Nitto designs are invariably simple and clever, with nothing extra and nothing lacking.

Nitto curves are beautiful, Nitto joints are as strong as the unjoined metal, and Nitto's top finish is mirrorlike. Nitto bike parts are as close to jewelry as bike parts get.

Nitto is in Tokyo. It's a family business, with eighty-five employees. The big bosses are the Yoshikawas, and even among Japanese companies, they seem off on their own. Nitto's chairman loves bicycles, and rides one every day. He has refused to compromise quality or farm out production.

Nitto isn't oblivious to market trends, but doesn't bend over backward to follow fads down to oblivion or embarrassment, whichever comes first. They're selective about what they design themselves, and what they'll make as subcontractors for others.

One thing I'd love to see is a Nitto crank. They won't do it, because they regard cranks as Shimano's and Sugino's territory, and they don't want to compete with friends. (Nitto has made stems and seat posts for Shimano.) So as much as the time seems to be right for a pure, classic crank design, it won't be from Nitto. They'd have to sell at least 10,000 cranks a year for a few years to pay for the tooling anyway, and that won't happen. Nitto is too expensive for most bikes.

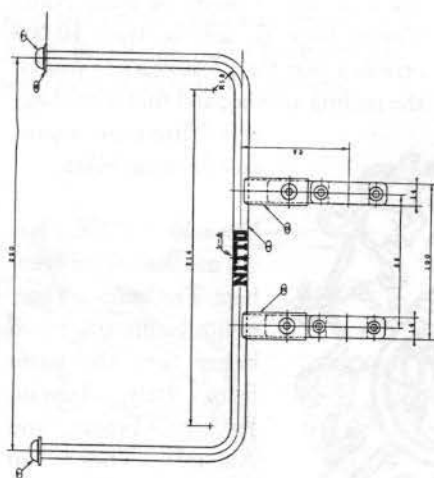
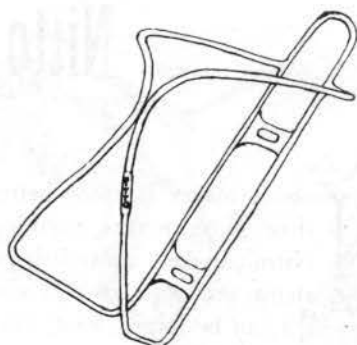


Unpacking a Nitto box is a medium-sized event here. The boxes are premium cardboard, much better than the boxes from Italy, Taiwan, England, France, and America. They're so solid you can hurt your fist punching them.

Inside the boxes, stems are lined up like soldiers, handlebars are tied in neat groups of five, the ribbons linking them color-coded according to width. There's not much air in a box full of handlebars, and maybe you have to have packed them to appreciate that. Never are two models packed in the same box. The exact contents of each box is clearly marked on the outside, and whenever we think we've been misshipped, a recount always proves our error. We're proud to offer Nitto—can't you tell?

—Grant

*Non-Member Price \$32*

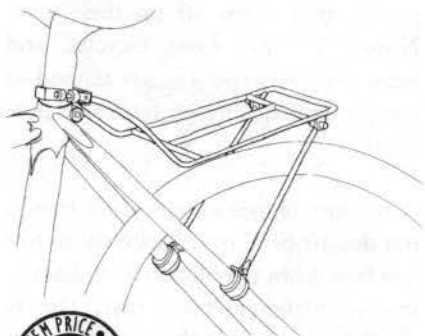


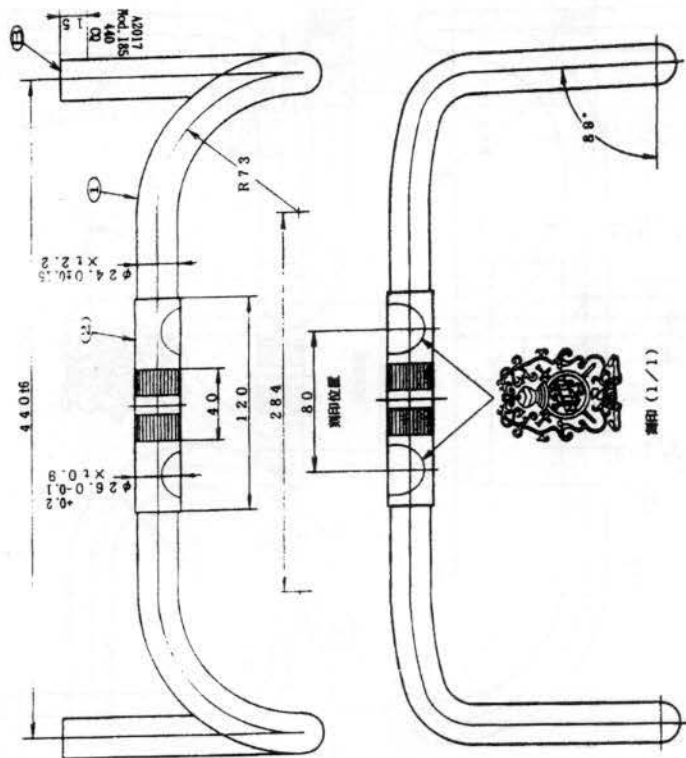
It works only with the Carradice Boxy bag (Page 14). We sell them separately because they're made in different countries, and at any given time it's likely we'll have one in stock, but not the other. We'll try to have them both at once, but when we're dealing with Carradice in England and Nitto in Japan, we're bound to run into problems. Also, they're both kind of expensive, so it would be entirely reasonable to buy one one month, the other the next. Tubular CrMo, satin finished—a typical Nitto work of art. For drop bars only.

*Non-Member Price \$50*



*Non-Member Price \$65*





## NITTO MODEL 185

An excellent all-round road bar. Has the shortest reach of any we offer, and a shallow to medium drop (140mm). Our most popular model of the pre-Dream Bar years, and still a great choice. Rotate them upward about 10 degrees.

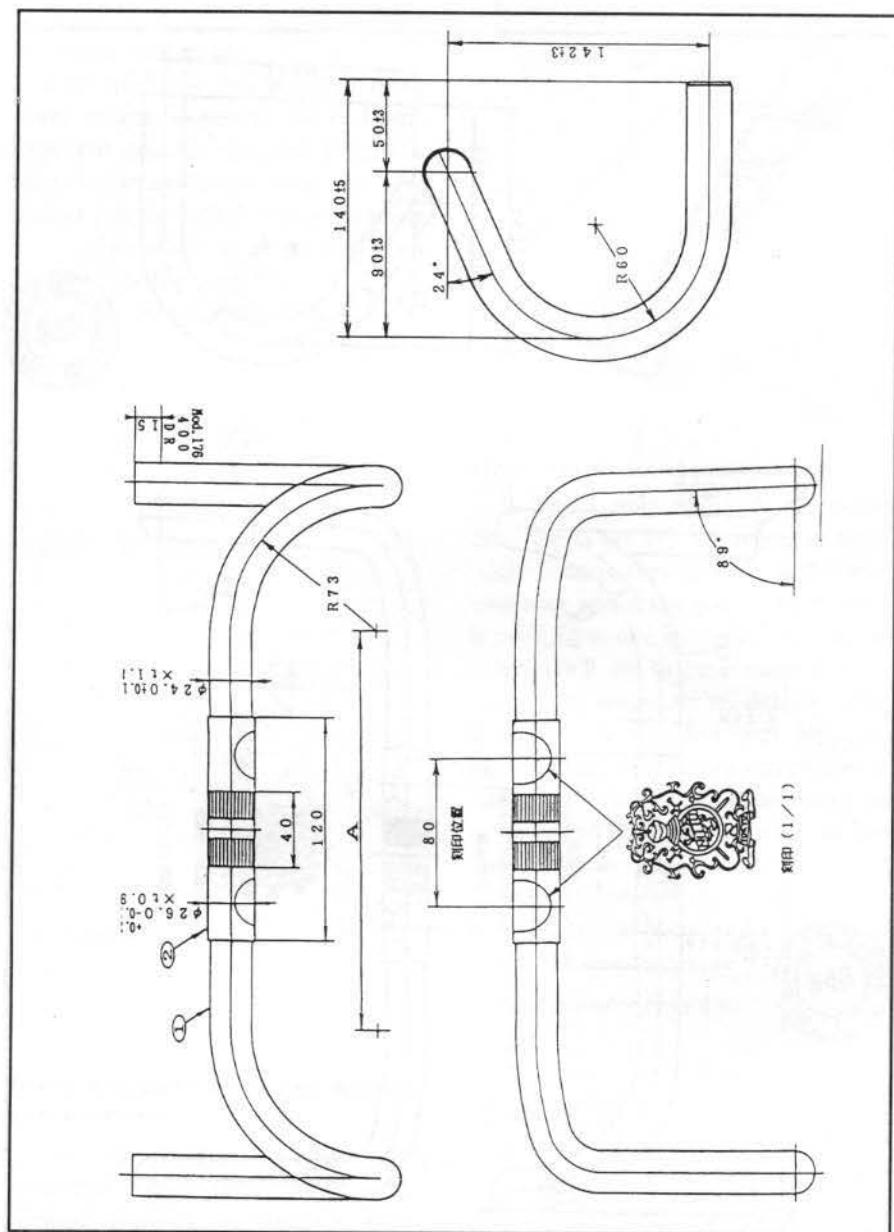
*Weight(42cm): 315g.*

Sizes available: 40, 42, 44cm.

*Non-Member Price \$42*



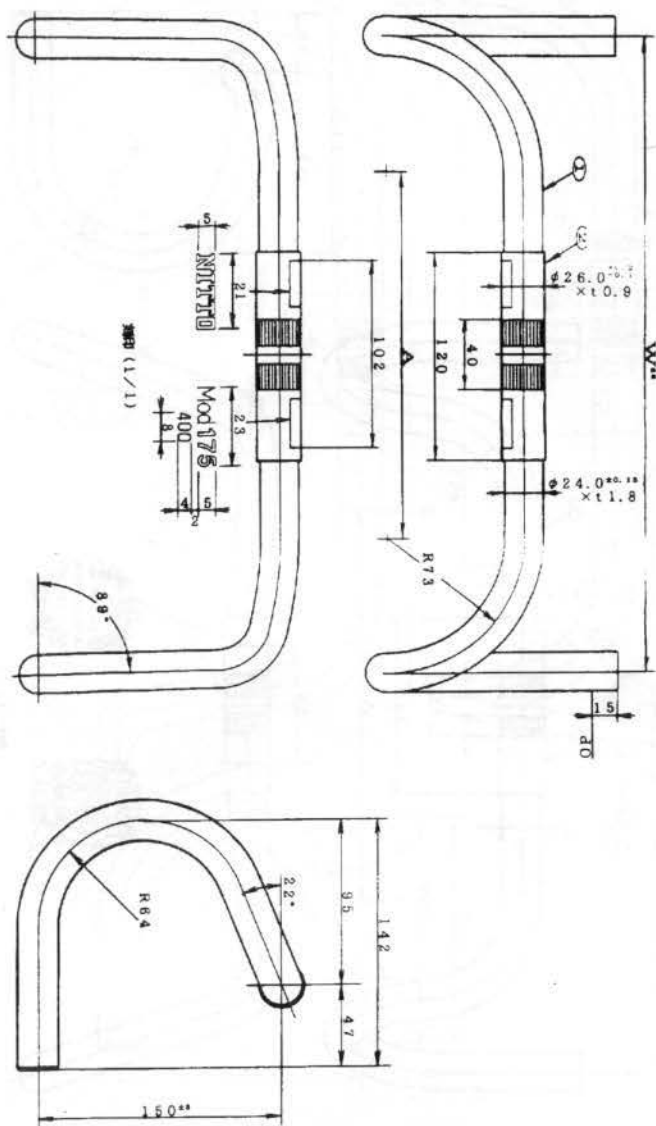
**PHONE: (925) 933-7304 • FAX: (925) 933-7305**



## NITTO MODEL 176 (DREAM BAR)

We sent Nitto specs for a "dream handlebar," and a month later the prototype came, labeled "dream bar." Then, in keeping with its preferred numbering system, Nitto assigned the dream bar No. 176, so that's its official name. It combines the large, roomy radius of a deep drop bar—close to that of the 175—with a medium drop of 142mm, 2mm deeper than the 185, and the relatively flat, hand-supporting upper curve of the DirtDrop. An all-round road drop that's hard not to love. You can, for clarity's sake, order it as the Dream Bar, without us thinking you're going along with the silly nomenclature. *Weight(42cm): 330g. • Sizes available: 40-42-44cm*  
*Non-Member Price \$42*





## NITTO MODEL 175

This is the last pure, classic-in-every-way road bar. Shaped a lot like the Merckx bend 3ttt, but without the cable grooves. Lots of flat roaming room. If you like deep drops, you'll like this one. It's not as deep as a Cinelli 66, but it's still deep.

Weight(42cm): 337g.

Sizes available: 42, 44cm.

Non-Member Price \$42

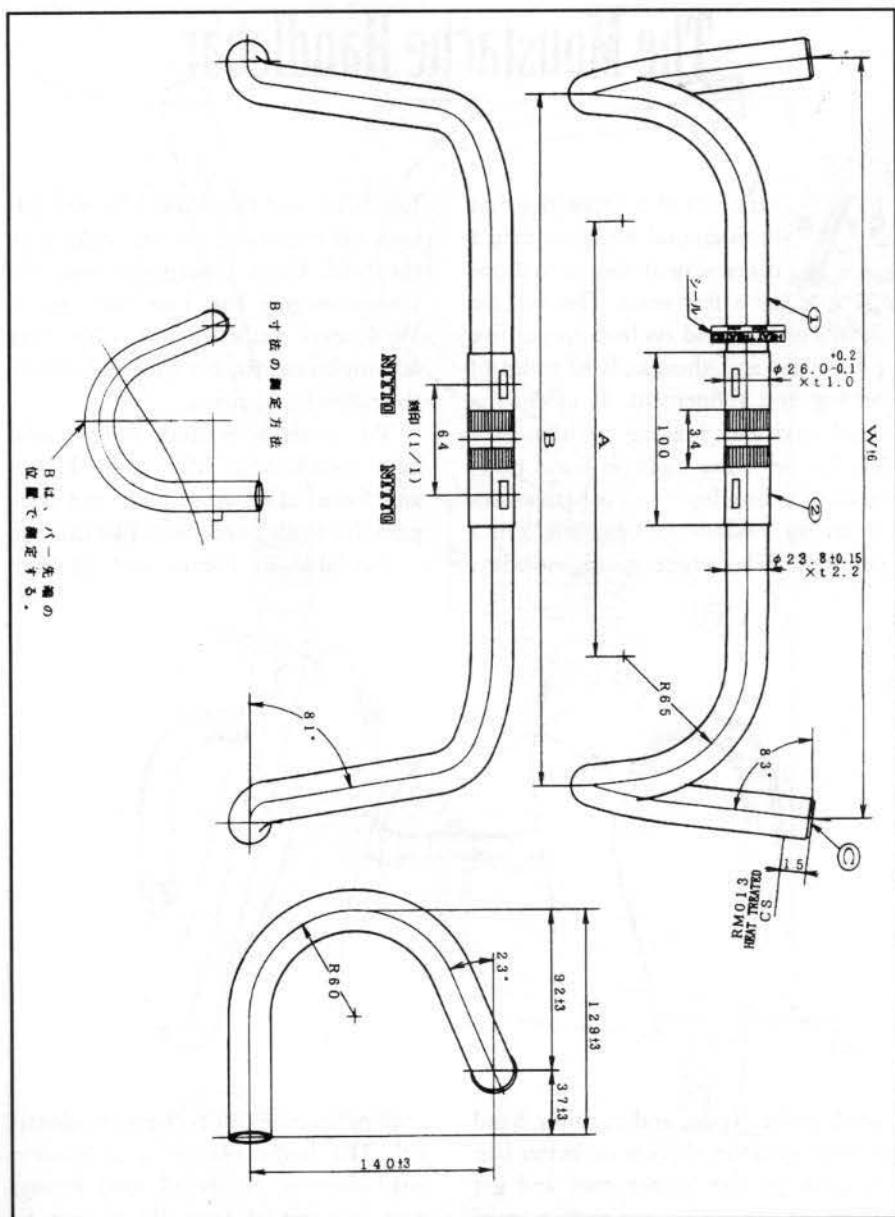




## (1/1) 0000

*Weight: 365g • Sizes available: 45mm • Non-Member Price \$42*





## NITTO DIRT DROPS

Originally designed for Bridgestone's 1987 MB-1. A 7-degree flare increases wrist clearance, important for climbing hills in the drops, which you'll do a lot if you position these bars high enough for good all-around trail riding. The flare is subtle, so the brake levers stay vertical.

Two widths: 48cm (normal) and 52cm (wide) Those measurements are from the center of one end to the center of the other, but the flare makes them measure wider than they feel. Center-to-center at the curve, they measure about 42cm (normal) and (wide). The normal one is good for everyday riding, touring, and off-road. The widey is great for touring and tandems.

Weight: 416g. • Non-Member Price \$54



PHONE: (925) 933-7304 • FAX: (925) 933-7305

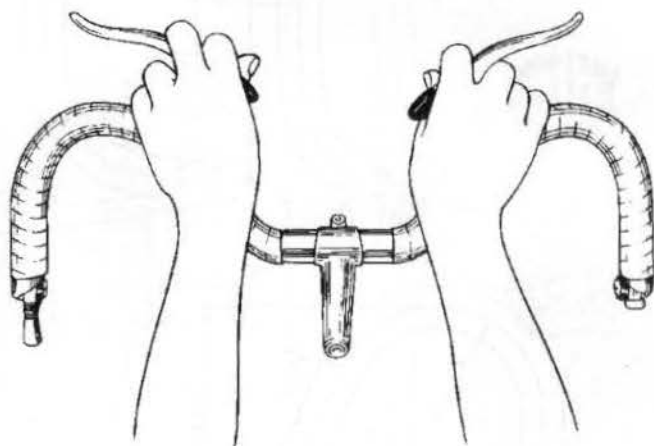
## The Moustache Handlebar

A variation of a shape that has been around for more than a century, predating even drops by a few years. The specific details of the bend evolved during five prototypes and thousands of miles of testing and refinement. It offers the quick and easy braking position of a flat bar with the multiple hand positions of a drop bar—and is better than either for a whole lot of riding. On a commute bike where speed, visibility,

Iditabikes and two World Record 24-hour off-road rides, and still rides it on the road. Gene Oberpriller won the Chequamegon Fat Tire race on it. We'd never credit the bars with these accomplishments, but they didn't hold the riders back, either.

We often hear from people who have switched to Moustache H'bars and found relief from back and neck pain. It's really hard not to like this bar.

Available in 26mm and 25.4mm



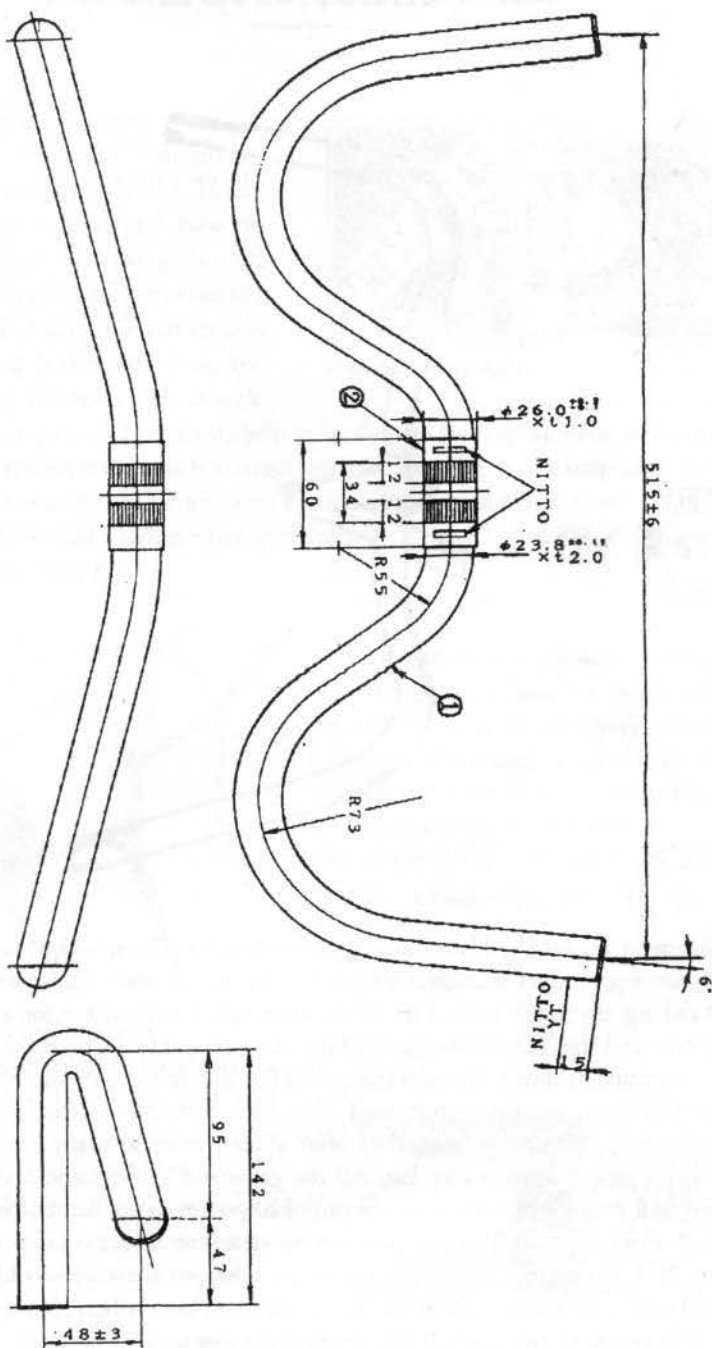
quick brake access, and multiple hand positions matter, there is no better bar. You can go fast on the road and get more aero than you can with a standard drop bar. The wider-than-a-drop-bar grip helps you to pull up steep climbs and stay in control on bumpy sprints. You can ride the Moustache Handlebar off road and reach the brakes instantly, just as you can with a straight bar.

It's our favorite mountain bike bar, but we aren't the only ones who like it. John Stamstad rode it to victory in two

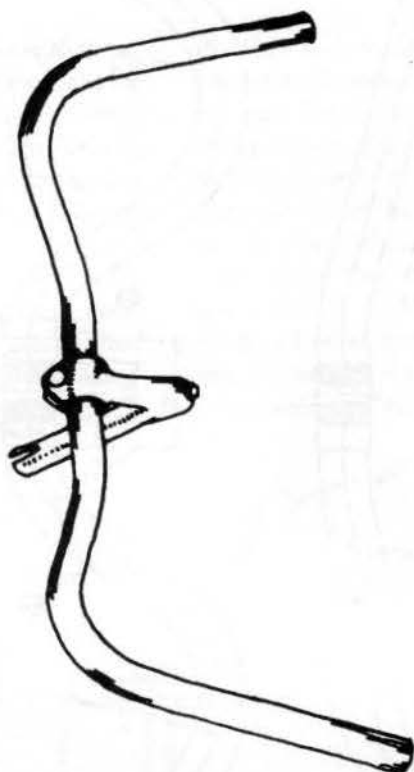
clamps, but otherwise identical. The bar diameter is 23.8mm—road size—so it fits all road fittings and bar-end shifters. Does not fit thumbshifters or normal mountain-bike stuff. Heat-treated 2014 T6 aluminum, suitable for off-road riding as well. Tip: Most people, switching from drops to Moustache H'bars, prefer a stem about 3cm to 4cm shorter.

*Weight: 346g.*

*Width: 51cm.*



## The Priest Bar



Made in Taiwan, by Hsin Lung, Taiwan's best handlebar maker, famous world-wide among product managers whose job it is to cut costs whilst simultaneously not risking anybody's neck. Five or six years ago, I designed it for a Bridgestone city bike and the XO-3. On the city bike, it went upside up, on the XO-3, it went upside down. If you're still riding flat bars in the city, and you don't love them, put these on instead. They look better, feel better, and you can ride them either way. They offer at least twice as many hand positions as a mountain bike bar. All the grips and shifters and brake levers will swap right over, so you're only \$20 poorer in pocket, but you get it back in a better bar. You can even use the same stem, because the clamp diameter is 25.4. For a quick and rather classy city bike, put these on an old road frame. You'll need a stem with a 25.4mm clamp. We don't list any here, but we might have some in stock. In any case, all bike shops have them.



*Width: 54cm. Weight: 360g.*

*Non-Member Price \$22*

# Handlebar Accoutrements

## FRENCH CLOTH BAR TAPE

Either Tressostar or Chimiplast. (Same tape, different label.) Thick, nicely textured cotton, and how do you not like that? Cut two inches off the end of each roll, and pre-wrap the brake lever band-clamp. Then remove the brake lever bodies and wrap the bar, starting at the open end. Wiggle the tape as you go—that seems to help it lie flat. So does spraying it wet as you wrap it. PRICED PER ROLL, AND YOU NEED TWO PER BIKE. We try to keep all colors in stock, but please list a second choice. *White • Black • Medium Blue • Light Blue • Red • Yellow • Orange • Green*

*Non-Member Price \$4*



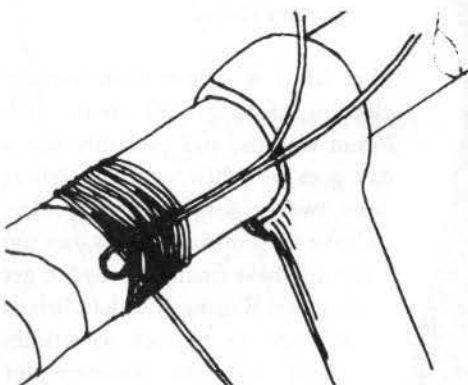
*Two rolls per bike!*



## HEMP BAR TAPE FINISHING TWINE

The classiest way to finish off a handlebar wrap of cloth tape. Instead of electrician's tape, wrap it with this. Finish it off (tie it) with a whip-finish. Then you might as well shellac it, too. 405ft. Tannish.

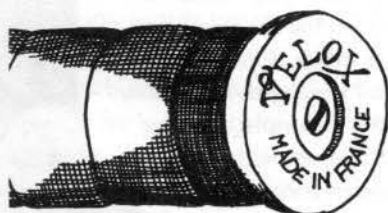
*Non-Member Price \$8*



## VELOX HANDLEBAR PLUGS

Why use chrome-plated plastic with world champion stripes when the real McCoy's are here now, and so cheap? Back in the early '70s, Velox plugged every middle- to high-quality 10-speed in Europe, and half of them in the United States. Back then, you could get any color you wanted. Only black is still being made, but we have a small pile of blues and light greens, too. Specify color, or you get black. Not compatible with bar-end shifters. Guess why!

*Non-Member Price \$7*



## Goosenecks


 n ugly stem on an otherwise nice bike is like cheap, plastic mesh imported baseball cap with a tacky commercial logo on Grace Kelly. What for?

The stem is your bike's hood ornament. Where it positions your bars, and how reliable it is are obviously more important than cosmetics, but the best stems can do all that as well as the worst ones, so why not use a beaut?

On road bikes, we prefer stem angles between 70 and 75 degrees, because when you look at them from the side, they seem to flow into the curve of the handlebar. It looks good.

We sell tons of stems to riders who want the bars higher. Nobody ever wants them lower. When you raise the stem, the bar comes closer to you. On a bike with a 73.5-degree head tube, for example, raising the bars 4cm will bring them back toward you about 1.5cm.

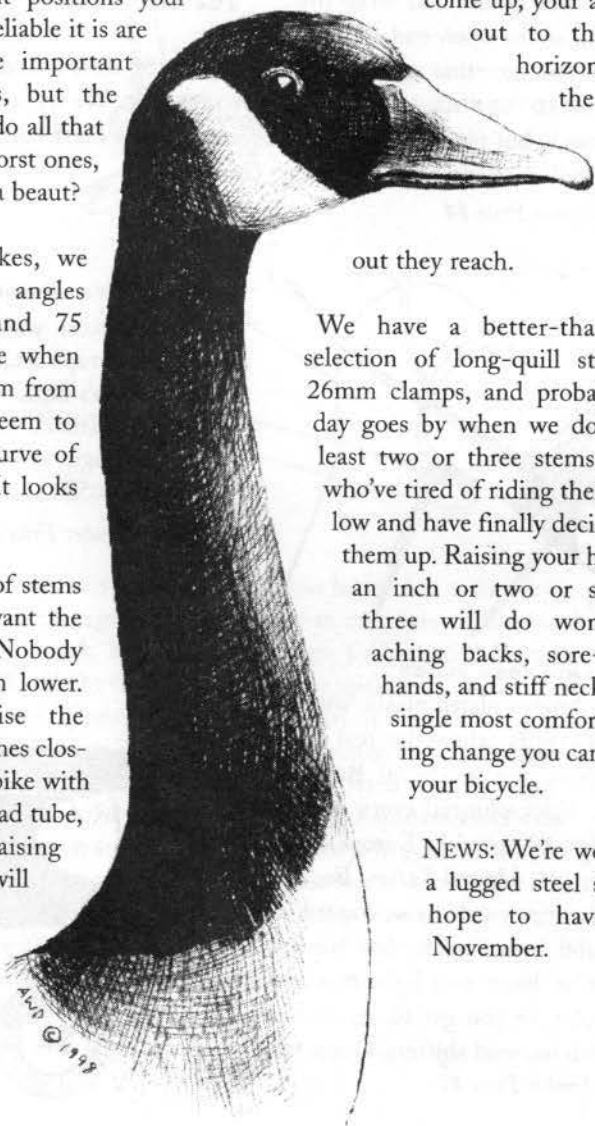
But that's not all! Because the bars are higher, they're also closer. This would be true even if your head tube angle were 90-degrees, and the bars came straight up.

Even that's not all! As the bars come up, your arms reach out to them more horizontally; and the more horizontal your arms, the farther

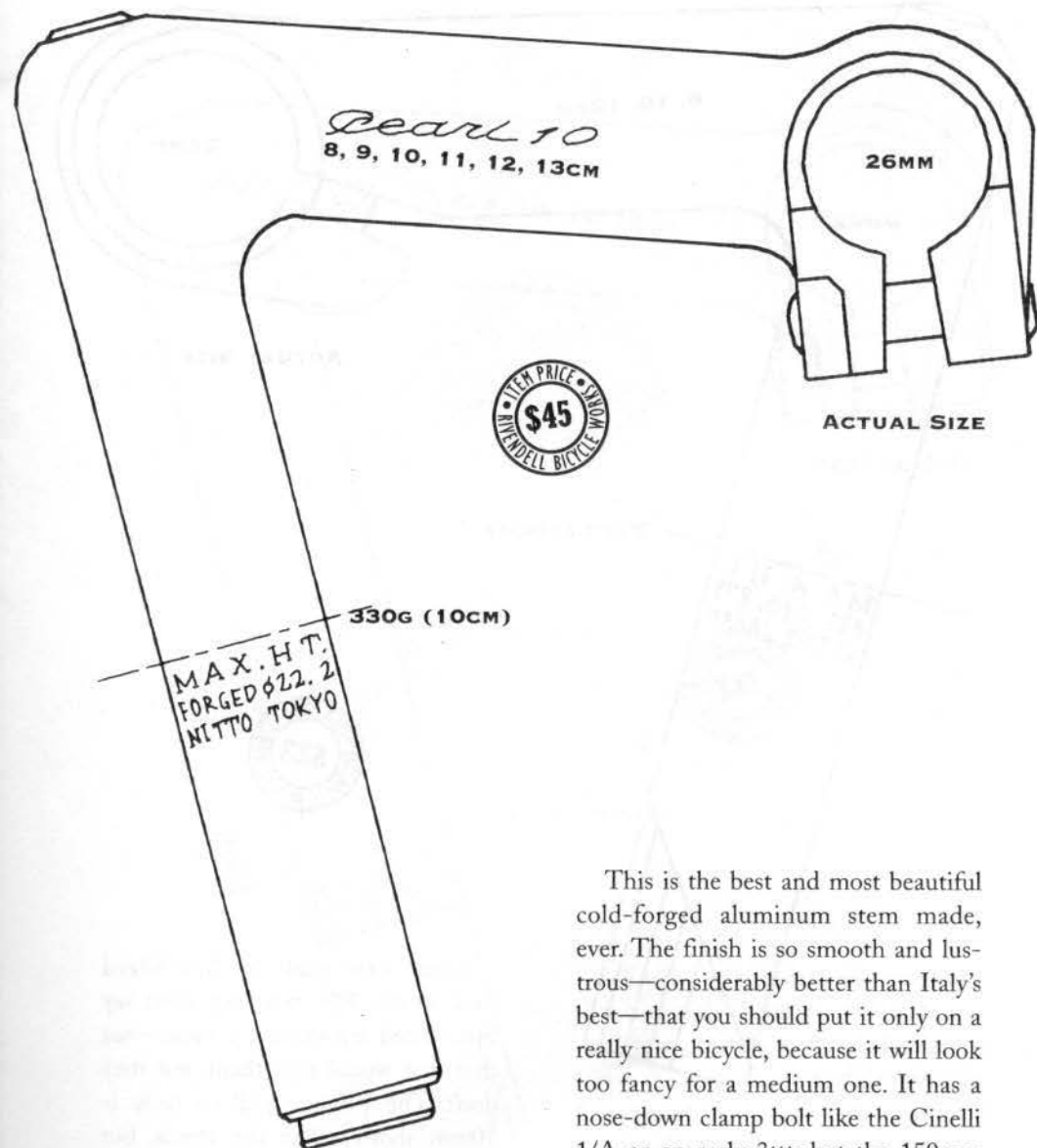
out they reach.

We have a better-than-average selection of long-quill stems with 26mm clamps, and probably not a day goes by when we don't sell at least two or three stems to riders who've tired of riding their bars too low and have finally decided to get them up. Raising your handlebars an inch or two or sometimes three will do wonders for aching backs, sore-to-numb hands, and stiff necks. It's the single most comfort-increasing change you can make on your bicycle.

**NEWS:** We're working on a lugged steel stem. We hope to have it by November.



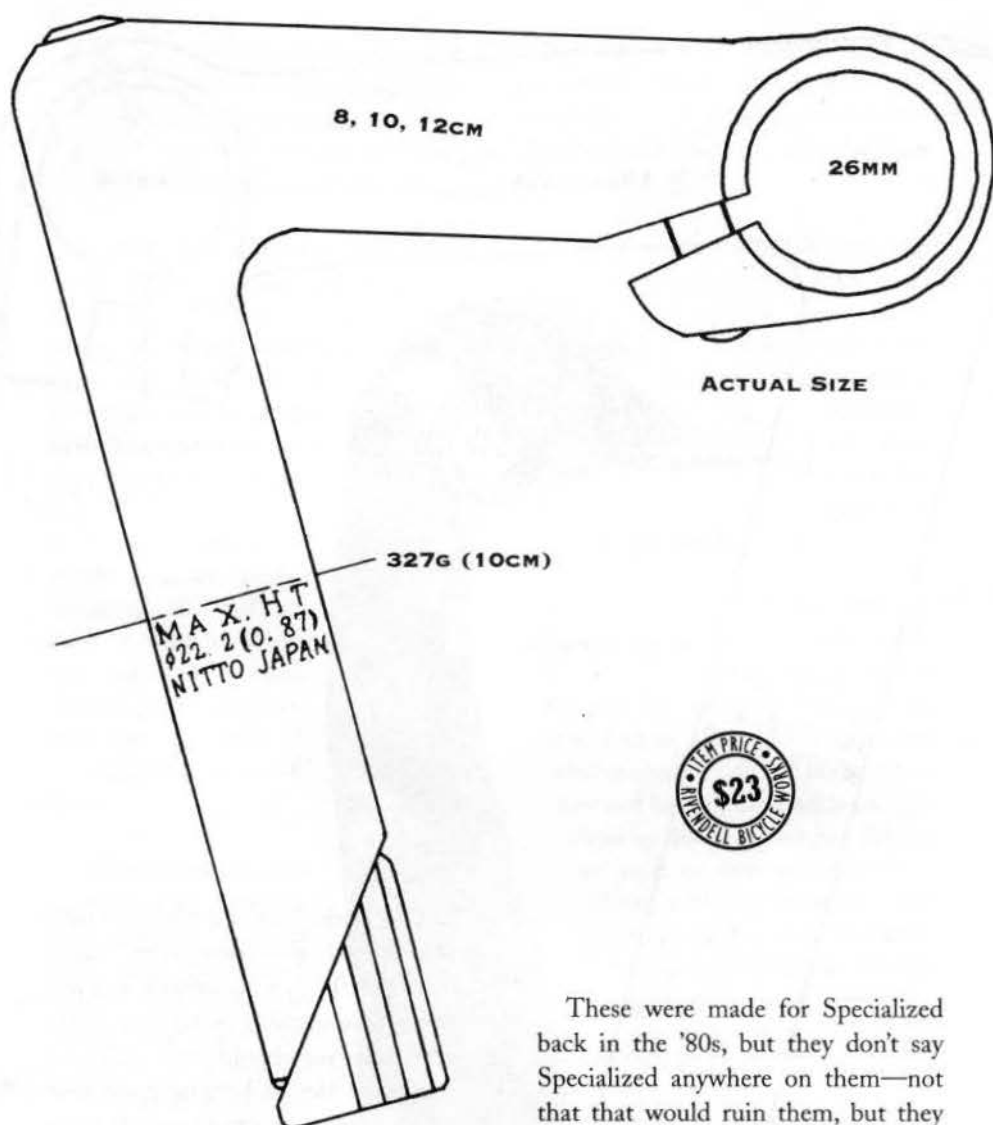
# Pearl



This is the best and most beautiful cold-forged aluminum stem made, ever. The finish is so smooth and lustrous—considerably better than Italy's best—that you should put it only on a really nice bicycle, because it will look too fancy for a medium one. It has a nose-down clamp bolt like the Cinelli 1/A or an early 3ttt, but the 150mm quill is 15mm longer, so you can get the bars almost that much higher. The clamp area is narrower than many stems, and it looks especially elegant.

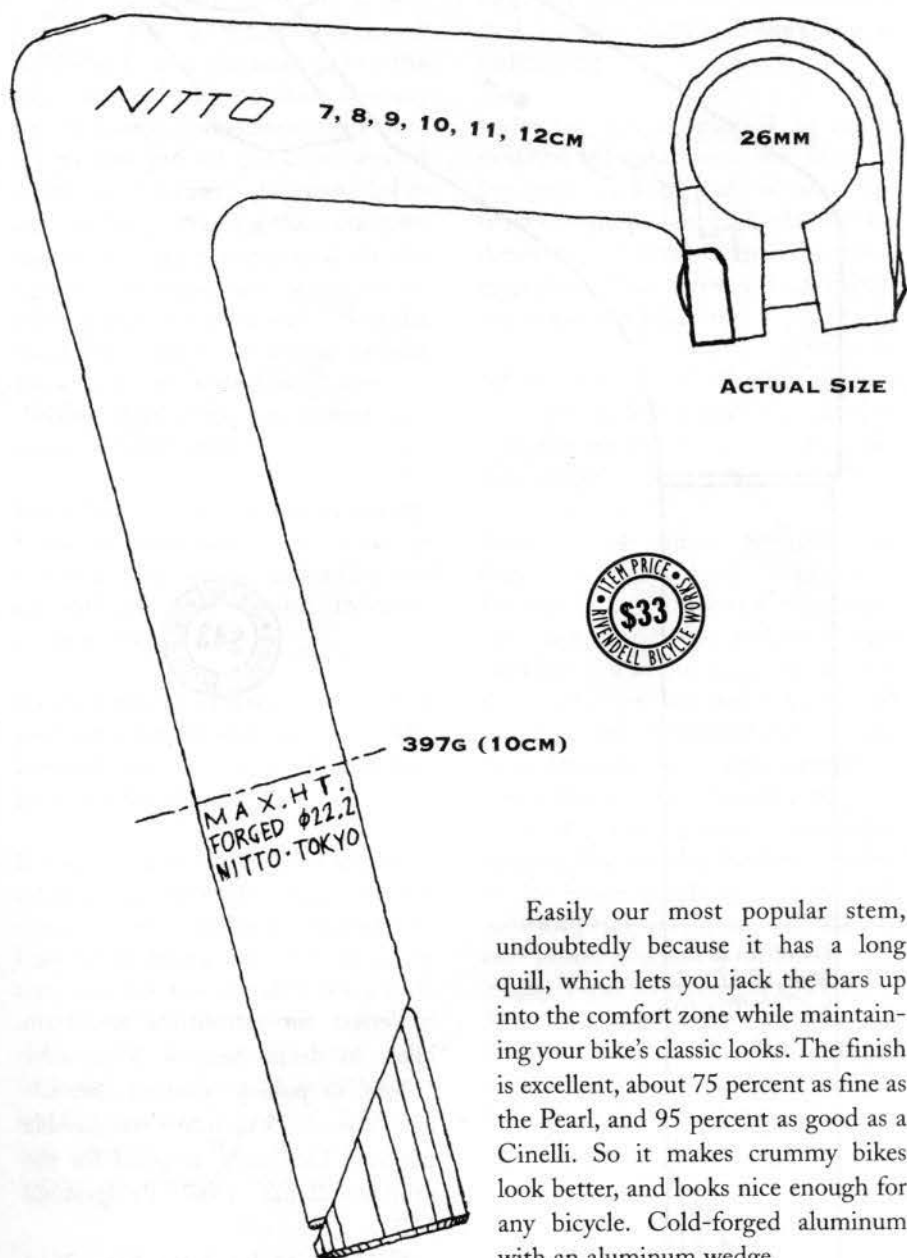
*Non-Member Price \$49*

# Aero



These were made for Specialized back in the '80s, but they don't say Specialized anywhere on them—not that that would ruin them, but they don't. The 140mm quill on these is 10mm shorter than the Pearls, but still 5mm longer than a standard Italian cold-forged stem. At \$23, it's way underpriced. Has a wider clamp area than the Pearl, so it ought to be slightly stiffer, if that matters. *Non-Member Price \$25*

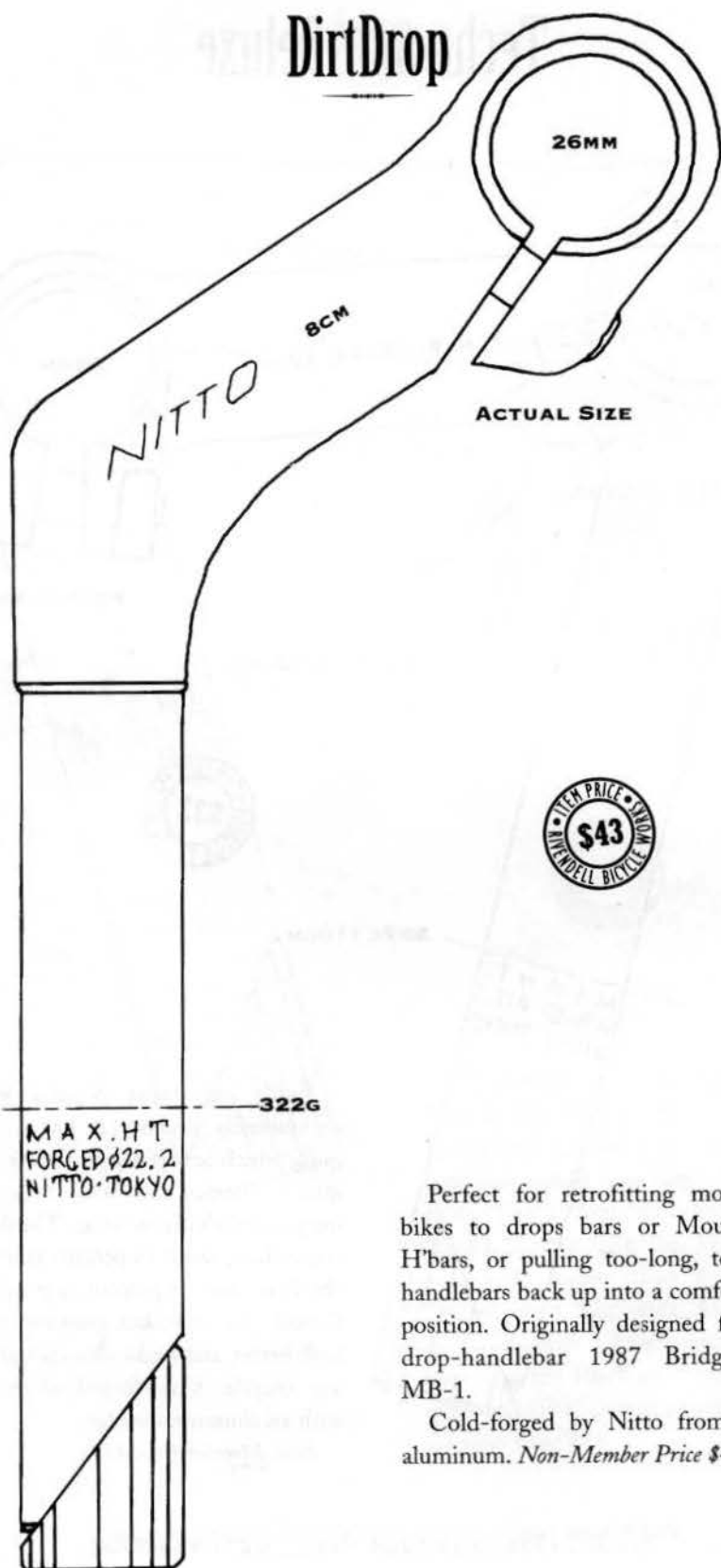
# Technomic Deluxe



Easily our most popular stem, undoubtedly because it has a long quill, which lets you jack the bars up into the comfort zone while maintaining your bike's classic looks. The finish is excellent, about 75 percent as fine as the Pearl, and 95 percent as good as a Cinelli. So it makes crummy bikes look better, and looks nice enough for any bicycle. Cold-forged aluminum with an aluminum wedge.

*Non-Member Price \$35*

# DirtDrop



Perfect for retrofitting mountain bikes to drops bars or Moustache H'bars, or pulling too-long, too-low handlebars back up into a comfortable position. Originally designed for the drop-handlebar 1987 Bridgestone MB-1.

Cold-forged by Nitto from 2014 aluminum. *Non-Member Price \$48*

## Good Shifting the Hard Way



You can buy shifting that requires no learning and no skill, and ride a bike for 20 years and never miss a shift. You just have to buy the right system, and maintain it every so often, and that's cheap and easy. When you see all the experienced riders in town and all your friends and all the pros using the same perfected shifting system, and all the reviews you read rave about them, and it's the only thing offered in the local bike shops, it seems weirdly backward to voluntarily choose shifting that's less convenient and requires more skill.

But all your choice of shifters determines is what you have to do in order to shift gears, and there are no difficult and terribly inconvenient choices.

So it's a matter of either purchasing performance or learning an easily learned skill, and a good case can be made for the latter.

If you can tolerate a short learning curve, you increase your related component options thirtyfold. Instead of being locked into a system, you can use any shift lever with any freewheel or cassette, and any chain. You can personalize your bike with parts from 14 manufacturers from seven countries. You can buy 50-year old derailleurs at swap meets or garage sales and know

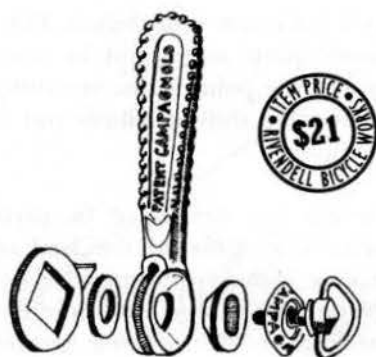
they'll work with your shifters. Fifty-year-old parts might not be your bag, but the point is, the versatility that friction shifting allows you is unlimited.

Indexing was developed by parts makers who followed the lead of Japanese camera makers, who figured out that a large portion of the American market wanted instant expertise. That's not a bad thing, but it's worth knowing.

All the shifters we offer have a friction option. Some of them index, as well, but we sell them for their friction modes.

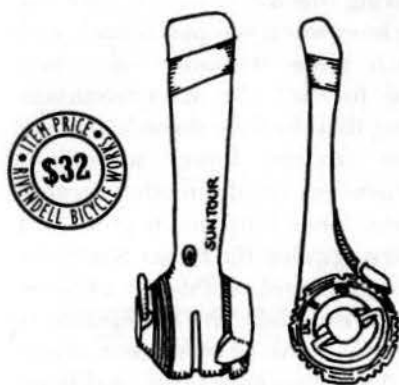
Many of the shifters we offer are SunTour, and have SunTour's famous Power Ratchet mechanism. This is a remarkable piece of engineering that allows light tension on the lever when you pull it back, and much more resistance when you push forward; the main advantage being that the lever doesn't slip, like pure friction levers sometimes (depending on the model) tended to do. Since SunTour is gone and indexing rules, the Power Ratchet is also gone, and our supply of these levers, especially the bar-enders, is dwindling. We've seen some crummy Taiwanese knock-offs, and hope to find out who made them, and see if they can do them better.

## Downtube Shifters



### CAMPAGNOLO NUOVO RECORD

The shifters of choice on 85 percent of the pro bikes from 1970 through 1984. Pure friction, featherweights, and they last forever. Nevertheless, SunTours, for just \$7 to \$12 more, work better. For braze-ons. 39g per pair. *Non-Member Price \$26*



### SUNTOUR SUPERBE PRO NOLAT

Made in 1986, and many regard them as the best shifters ever made. Both shifters have SunTour's power ratchet, and the right lever indexes with 6-speed Sachs and Shimano free-wheels. 82g. *Non-Member Price \$36*



### SUNTOUR SUPERBE PRO LAT

The left front-derailleur shifter has the smoothest, finest power ratchet imaginable. the right has three modes: an index mode that works with Sachs seven-speed freewheels, a fake index mode that gives you the clicks but lets you override them, and between those, a pure, smooth friction mode that works great and never slips. Beautiful, great shifting levers. 84g (sans cables/housing, which they come with). *Non-Member Price \$30*



### SUNTOUR SPRINT

Also from 1986. Power Ratchet left and right. Pure, perfect, slender and pretty. The finish is a step below the Superbe Pros, but they shift as well, weigh less, and still look good. Put these on and you will never, ever, wish for anything else. 59g.

*Non-Member Price \$32*

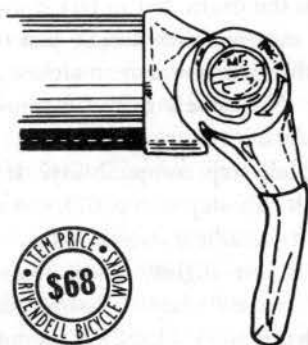
## Handlebar-End Shifters



### SUNTOUR 1986 POWER-RATCHET BAR-ENDERS

The right lever indexes the hens-tooth-like SunTour six-speed clusters, but has a nice, smooth, pure friction mode, too, so you can use it on anything. The left lever has a Power Ratchet. With cables and housing. A great deal, our biggest seller, a rapidly dwindling supply.

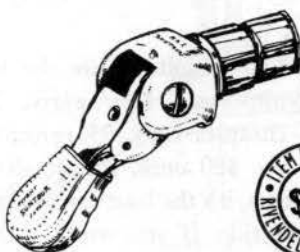
*Non-Member Price \$52*



### SHIMANO BAR-END SHIFTERS

Designed for eight- and nine-speeds, and Shimano says they won't work for seven, but we have our experience-based doubts. There's also a friction mode, so they'll work with anything you throw at them. Complete with cables and housing and the downtube shifter boss adapters. 185g.

*Non-Member Price \$70*



### SUNTOUR POWER RATCHET

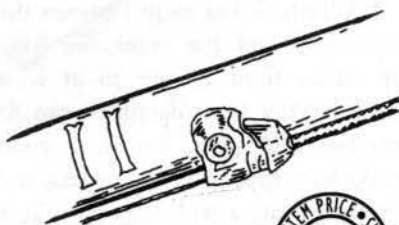
These, last made in 1985, are the best bar-end shifters we've ever used, and they'll probably outlast cockroaches. They aren't finished like jewelry, but they shift great, don't slip, last long, and give you total control over the derailleur movement and your shifts. We have the last stocks on Earth, and our supply might last through September. Limit: One set per customer per month.

*Non-Member Price \$48*

### DOWNTUBE SHIFTER BOSS ADAPTERS

These slip over downtube shifter bosses, allowing you to use bar-end shifters, or STI/Ergo. We have the best price in town. 33g.

*Non-Member Price \$25*



## Front Derailleurs



Front derailleurs are the least important bike parts. The cheapies work 95 percent as well as the \$80 ones, and of all the components, it's the least essential to a successful ride. If you wreck a front derailleur, you can shift with your finger or an L-shaped stick, and by your tenth shift, you'll think "hey, neat!" and after that you'll never be a front derailleur snob.

But if you want a front derailleur, here are some things to consider:

**1. Capacity.** Road racing models usually have a rated capacity of 14 teeth. That means you can use them with chainrings up to 14 teeth apart. The feature that affects capacity is the length of the cage. If you mismatch a racing front derailleur with 53x34 rings, the chain will drag on the low part of the cage when you're in the small chainring and smaller rear cogs.

Touring and mountain front derailleurs are designed for 16-to-24 tooth differences in chainrings, and have longer, lower cages, so the chain passes through them without dragging.

**2. Width.** It has to fit between the chainwheel and the crankarm. This gap varies from 7.5mm to at least 13.5mm. Any front derailleur can fit into the wide gaps, but most good cranks have gaps of 11mm or less, and if you mismatch a wide-cage derailleur with one of those, the outside cage gets in the way of the crank arm before it can shift the chain to the outer ring. The early '90s SunTour and the very

latest Shimano fronts are too wide for Ritchey cranks, no fault of the crank.

**3. Seat tube compatibility.** If your seat tube has a front derailleur braze-on, you need a braze-on style front derailleur. Otherwise, match the seat tube diameter with the front derailleur's clamp diameter. The most common seat tube diameter used to be 28.6mm, or 1-1/8 inches. Now with so many non-steel bikes out there, seat tube diameters vary a lot, and so do clamp sizes. Match them up!

**4. Top pull or Bottom pull?** Some cyclo-cross and mountain bikes have front derailleurs which are pulled from the top, rather than the normal bottom-pull. Naturally there are those who are willing to defend either position to the death, but in fact it doesn't make tons of difference, so just make sure the one you buy matches your frame. We stock only bottom-pull front derailleurs.

**5. Half-step compatibility?** If you go with half-step (see p. 62), you need a front derailleur whose inner cage plate is just slightly lower than the outer cage plate. Road racing derailleurs work okay, but mountain bike derailleurs don't. When you shift to the outer ring, the inner ring rubs it.

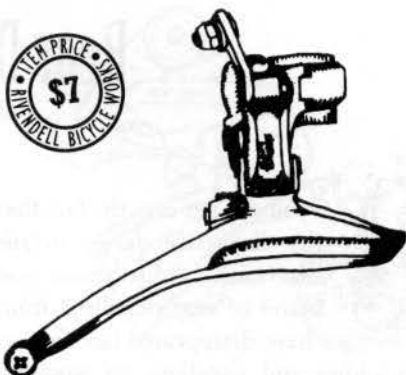
Three chainrings with 10-to-12 tooth differences, are best handled with cages that are well-staggered. These are some of the things to look for when picking a front derailleur. Or, when you call us up, just ask for advice.

# CATALOGUE & PRICE LIST

## SUNTOUR LITE, WITH SHIM

The world's best deal on a front derailleur. Don't be fooled by the low price—it shifts as well as any front derailleur, and it looks good enough to put on any bike. The only weird thing about it, is actually good: It's sized for a 31.8mm seat tube, so to make it work on normal 28.6mm seat tubes, we supply it with a clear rubbery shim. Sometimes you have to put a layer of cloth tape under or over the shim, but it always works. 116g.

*Non-Member Price \$8*



## SHIMANO DURA ACE

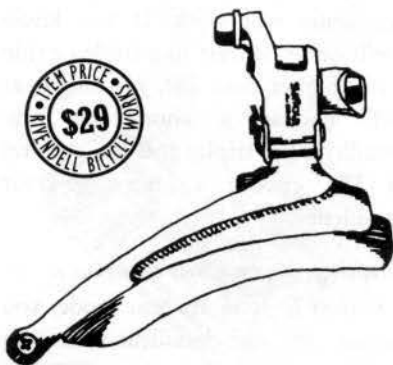
New old stock from 1977 or so, when Shimano still had Campy envy. It's the lightest front derailleur we sell, and Shimano pulled out all stops in making it, so it looks good under the microscope. Good for doubles when the chainring difference is 15t or less. 99g. *Non-Member Price \$40*



## SUNTOUR ALPHA 5000 TRIPLE

A wonderful front derailleur for two or three chainrings. Designed for an 18t spread, but seems to work fine with at least 22t. All silver, no paint, visible adjustment screws so you know which screw affects inward travel and which affects outward travel. Best of all, the cage is narrow enough to work with high-quality cranks with low Q factor. Our most popular model. 111g.

*Non-Member Price \$35*



## SIMPLEX B & B

Glaring, in-your-face proof that cheap front derailleurs work great. It's red and white and chrome, and half the clamp is plastic. But it's French, and \$5. Made for road doubles, but may work with some triples. 125g. *Non-Member Price \$6*



## Rear Derailleurs

If you can get over the fact that the distinctive design details that used to distinguish one brand of rear derailleur from another have disappeared like fins on Caddies and panelling on woodies, and what we're left with are homogenized designs that shift great and look boring, then there's not much to whine about, rear derailleur-wise. There are plenty to choose from in all price ranges, and they all work great.

Picking a rear derailleur among the models on the following pages can be easy. There are about four ways to narrow down the search.

### 1. REAR COG CAPACITY.

For doubles (two front chainrings) and rear cogs up to 28t, any of the derailleurs will work. If you know you'll never convert to a triple or ride a cog higher than 28t, you might as well choose a short-cage rear derailleur. For triples and rear cogs up to 32t, choose a long-cage rear derailleur.

### 2. SHIFT LEVER COMPATIBILITY.

If you shift in friction mode, you can use any rear derailleur with your

shifter. If you shift in index, make sure the rear derailleur is index-compatible with your shifters. Despite all the manufacturers's warnings about how you should use only their shifters with their derailleurs, there are probably a dozen inter-brand combos that work. By "work," we mean perfectly.

### 3. WRAP.

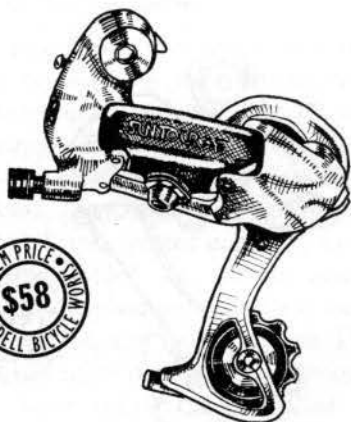
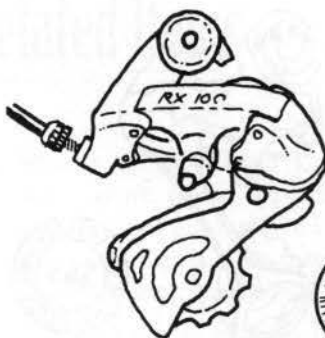
This is the derailleur's capacity to take up chain slack, and prevent a long chain from flopping around. Long cage derailleurs wrap more chain than do short cage derailleurs. Wide range gearing requires a derailleur with lots of wrap. Two-chainwheel road bikes with large rear cogs 28t or smaller easily get by with a short cage rear derailleur.

### 4. PRICE

Cheaper rear derailleurs work great. They're invariably heavier and less well finished than more expensive derailleurs, and if you're pulling out all the stops on a new bike, the extra \$30 or so for a fancy model comes easy.

## SHIMANO RX100 SHORT CAGE

As is the case with the other RX100 parts, we feel this is the best value in Shimano's rear derailleurs. All silver, shifts great, and looks decent. For two-chainring fronts and rear cogs up to 28t. 270g. *Non-Member Price \$38*



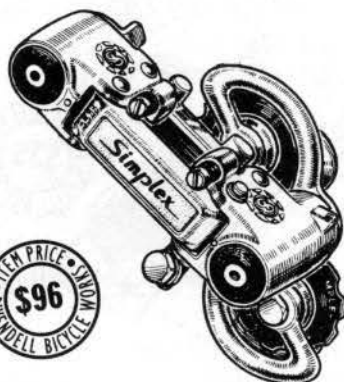
## SUNTOUR XC PRO SHORTIE

This was SunTour's best mountain triple rear derailleur, and it came in three versions, differentiated by rear cog capacity. This one, the shortie, handles rear cogs up to 28T. It shifts great, looks great, and is beautifully made. A good choice for a road double or a compact triple. Sealed pulleys. 235g. We know one fellow with five of these. 244g. *Non-Member Price \$62*

## SIMPLEX #5500 REAR DERAILEUR

The last of the classic drop-parallel-ogram styles, it shifts great, goes up to 26T, weighs just 199g, and sells for \$200 in Japan. They haven't been made since 1981, and it's unclear to us how many are actually left, but our price on them has skyrocketed, so we're passing on the savings! Not many left. After November we'll probably be out. 185g.

*Non-Member Price \$100*





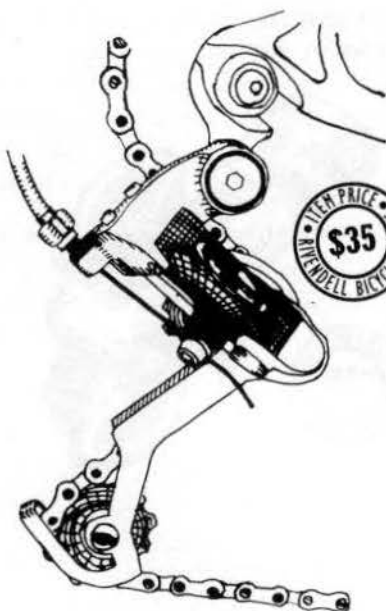
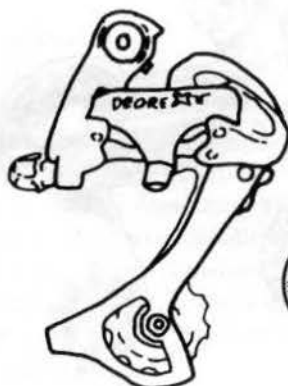
## SHIMANO ULTEGRA TRIPLE

The best-looking modern touring derailleur, mainly because it's all silver and well polished. Curiously, it'll shift up to a 38t rear cog, but where do you get cogs larger than 34t? Nobody in his or her right mind has ever or ever could complain about the shifting performance of a Shimano rear derailleur, and this one is right up there. Chain wrap is 36t. 221g.

*Non-Member Price \$67*

## SHIMANO DEORE XT

The classic mountain bike rear derailleur. We sell it and rave about it for any three-chainring, wide-range gearing use, road or trail. Shifts to 32t in the rear, and wraps 38t, two more than the Ultegra. The black body looks mountain bikey, but not bad. Nashbar sells them for less than we buy them for, so don't think we're gouging. 250g. *Non-Member Price \$67*



## SACHS CENTERA LONG CAGE

A down and dirty, great-shifting triple. Goes up to 32t, wraps at least 36t. Not the wonderful choice for a fancy new expensive bike, but for getting a guest bike back up and running, or for any use where looks don't matter, this is the way to go. A functional A, and aesthetic C. and at 311g, it's about a weight B-.

*Non-Member Price \$36*

## Saddles & Related Items


 hen I was nine and wanted to be a cub scout, my dad discouraged it because they didn't wear leather belts. So we joined Indian Guides, who didn't have costumes, and we wore our leather belts. It's pretty simple: When you're a kid, and your dad likes leather, you like leather forever.

I also played a lot of baseball, and used to loiter in the baseball mitt stores, feeling and smelling all the Rawlings Heart-of-the-Hides, and Wilson A2000s, and the occasional Nokona, MacGregor, and Spalding. I could tell an imported mitt from a real one, blindfolded. I'm not just saying that—I often had someone I was there with test me, and I never missed. The domestic mitts were hard and smooth, like horse saddles, and smelled so good. The crummy imports had soft, thin, velvet-like leather and smelled like chemicals. The colors were off, too — a Wilson was golden brown, its foreign copy was yellowy. A Rawlings or Spalding was browner still, but the darker imports were a weird mahogany. It was a relief to take my hand out of one of those and stick it into an American mitt, with the thick, stiff, smooth leather that looked and smelled the way it's supposed to.

I don't get to play baseball anymore, so I ride my bike and sit on a Brooks leather saddle. I like the idea of natural materials on a bike and in my riding costume, so I wear wool socks and shorts, a wool or cotton top of some kind, wrap the bars with cloth bar tape (usually shellacked), and wear goatskin gloves. I'm sure fake leather gloves

launder up better than goatskin, but there aren't many opportunities for goatskin, so I get it where I can. I like these materials because they work well and bring back memories.

I don't ride as much as I used to (I get in 3-4 days a week), so my rides are more important than ever. I'm also having more fun, and part of the fun is the Brooks saddle.

Brooks makes more than thirty models, and the B.17 is our favorite, by far. It's narrow enough to look fast, but wide enough to support the ischial tuberosities, a big deal when comfort and/or potency are issues.

Women's ischial tuberosities are spaced wider than are men's, and although most women do well on a B.17, some still prefer the wider women-specific jobs. Women's saddles have snubby noses, but I've never understood why, so I asked Brooks, and they told me men's saddles had longer noses to support the plumbing. That never occurred to me until I looked down, and sure enough, that it does. (I also faxed Georgena Terry the same question, with no reply. Looking back, she may have thought I was a weirdo trying to get her to say "women don't have \_\_\_\_\_" or something psycho like that. Georgena, I had no such thing in mind.)

We don't stock the Brooks Pro, the classic racing model. We can get it for you if you like, but it's 10mm narrower in the rear than the B.17, which means it doesn't support your bones as well, and it lacks bag loops. We like the width and the loops.

We get a few calls for Ideale saddles, a no-longer made French leather one. If you have an old French bike you're trying to restore to original condition, good luck. If all you want is a good leather saddle, just get a Brooks, because they're better, anyway. If you hunt around for Ideales instead of buying Brooks, maybe in five years you'll be looking for Brooks. Support Brooks while Brooks is still in a position to support you.

Brooks saddles are made by hand, and that means there are slight differences from saddle to saddle. In the B.17, for instance, the skiving (shaved leather) at the lower edge varies. There's no foolproof tool for this, and doing the entire lower edge in one pass, keeping the edge the same width its whole length, is impossible for mere mortals. Sometimes the tool slips off or dives into the leather, and the cut isn't made in one pass. You can see the starting and stopping points.

That's not a defect.

One of our members, a leatherworker, says you should rub beeswax into the skived lower edge of your Brooks saddle. Burnish it in with a horn or piece of wood or cap from a Bic pen. It darkens the pores and seals them from sucking up water. It's not as effective as a waterproof saddle bonnet, but why miss any opportunity to rub beeswax into leather? Talk about heaven!

Some Brooks have drooping eyelids that partly cover the saddlebag loops. Carve them up with a knife.

That's not a defect, either.

Once in a rare while, the saddles are cockeyed too much (they're often cock-

eyed acceptably). If you get one of those, send it back with a note. The charm of hand made is one thing, but we don't want you riding around on a lopsided saddle, thinking they're all that way, not being happy, and grouching to your clubmates about Brooks or Rivendell on your Sunday ride! Nineteen in twenty Brooks saddles are virtually perfect, and we sort before sending. Then we buy the baddies ourselves, because even they're fine to ride.

So many traditional cycling parts and accessories have vanished or been vanquished, leading to a collector's market where people keep new stuff in its original boxes and pray their heirs revere it as much as they do. Used and worn out widgets sell for two to ten times what they cost new forty years ago. If Brooks folds, the price of its saddles will double overnight, and be totally out of reach within five years. Those who have them won't ride them anymore, for fear they'll be stolen, or devalued from use. It would be a depressing movie.

We sell about 320 Brooks saddles per year. Right now, all non-vegan bicycle riders should rejoice that Brooks saddles are still being made the way they were made sixty years ago, and that they cost less than many saddles that pop out of computer-designed injection molds, twelve at once. There are plenty of miles ahead of me this year, and they all matter, a lot, and I don't want to sit on plastic saddle any more than I want to catch a baseball with a funny-leather mitt. My eye knows the Brooks is prettier, the frame I ride deserves it, and my butt insists on it.—*Grant*



**RIVENDELL  
BICYCLE WORKS**  
**1561 - B Third Avenue**  
**Walnut Creek, CA**  
**94596**

**PLACE  
STAMP  
HERE**



# Rivendell Frame Order Form



## STYLE

Road Standard • LongLow • All-Rounder  
**TOP TUBE:** \_\_\_\_ Std \_\_\_\_ Short \_\_\_\_ Unsure

FOR A COMPLETE RUNDOWN OF THE DETAILS, PLEASE SEE OUR CATALOGUE OR CALL FOR A FRAME INFORMATION PACKAGE. OR JUST CHECK "UNSURE" AND WE'LL SEND YOU THE INFORMATION.

### PRICE: FRAME & FORK: \$1,375

For orders received thru October, Price now includes a painted head tube painted (PHT)—a cream head tube, as opposed to the same color as the tubes; and matching cream lug windows. The former base price was \$1,225, with these options adding \$150, but virtually all frames go out this way, so now it's standard. If you don't want this deluxe treatment, deduct the \$150. Also, we now spray all the tubes with FrameSaver, N/C.

Note: Our cost on a frame exceeds \$820 in material and labor alone, and we typically spend between three and ten hours hashing out the details. Deposits lock in the price at the time of the deposit, but please don't "lock in the price" unless you're serious about a frame, as the increasingly long lines tend to discourage others from ordering.

Thank you!

## EXTRAS

**HEADSET, INSTALLED** Tange-Sekei (Japan). \$50 \_\_\_\_

**BOTTOM BRACKET.** We can install any bottom bracket we list in our catalogue. We need to know which crank you'll use. Prices vary from \$30 to \$135, with not much in between. Call for details.

**FRAME PUMP.** Chrome plastic Silca, to fit frame. \$20 \_\_\_\_

**TOUCH-UP PAINT.** The paint we use is meant to be sprayed on by a pro, so don't expect seamless results. If we change colors next year, there's no guarantee that we'll still have your 1998 available ( it may be a special mix requiring us to buy gallons of two different colors at \$30/gallon) Pearls are harder to touch-up than solids. Shelf life, about 6 months. Our advice? Get it while you can, and if it dries up before you need it, make do with a close approximation. \$8 \_\_\_\_

**FREIGHT:** UPS Ground to the lower 48, \_\_\_\_ \$35; Other? \_\_\_\_

### DELIVERY: THE BIG HURDLE

As of August 1998, it's about seven months. When we get your order and deposit (minimum \$300, maximum whatever you can stand), you get the next place in line, and we tell you our target delivery date, barring unforeseen delays. You can pay the balance the week before Joe cuts your tubes, or chip away at it with payments along the way. Each time we get a payment, we send you a receipt showing the progress and balance due.



PLACE  
STAMP  
HERE

RIVENDELL  
BICYCLE WORKS  
1561 - B Third Avenue  
Walnut Creek, CA  
94596



# Rivendell Order Form



MAILABLE, FAXABLE, COPYABLE  
**PARTS & ACCESSORIES ORDER FORM**

NAME \_\_\_\_\_ ORDER DATE \_\_\_\_\_

MAILING ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

SHIP TO, IF DIFFERENT \_\_\_\_\_

WORK PHONE: (     ) \_\_\_\_\_ HOME. PHONE (     ) \_\_\_\_\_ FAX OR EMAIL? \_\_\_\_\_

[illegible]

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|--|--|--|--|--|--|

BACK ISSUES/RR, \$2 EA: 2, 3, 4, 5, 7, 8, 9, 11, 12 (CIRCLE WHAT YOU WANT; WHOLE SET IS \$15)

First Subtotal:

Minus any Rivendollars or Gift Cert:

Second, possibly lower subtotal:

Tax (CA only):

Shipping (see below left):

**Membership or subscription renewal (\$15)**

TOTAL:

|  |  |
|--|--|
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**ATTENTION NEW MEMBERS!**

If you are joining now and already have the catalogue ,  
please put an X here \_\_\_\_\_.

If you already have a sample copy of the RR, tell us  
which issue it is and we'll start your subscription with  
the next one. I have \_\_\_\_\_. Thanks.

**PAYMENT**

Check or money order number: \_\_\_\_\_ Amount: \_\_\_\_\_

Credit Card Number: \_\_\_\_\_

EXPIRES (numerical month/year) \_\_\_\_\_ / \_\_\_\_\_

**SHIPPING**

|        | Ground | Air  |
|--------|--------|------|
| UPS    | \$5    | \$12 |
| CANADA | \$15   | \$22 |
| INT'L  | \$25   | \$45 |

*Send by mail or fax to:*

**RIVENDELL BICYCLE WORKS**

**1561 - B Third Avenue • Walnut Creek, CA 94596**

**ph (925) 933 - 7304 • fax (925) 933 - 7305**

**e-mail: RivBici@earthlink.net**

## Notes On Things Not Listed

### **LIGHTS**

We don't stock lights. That doesn't mean we don't use them, or that we think they're frivolous. Sometimes a cigar is just a cigar!

### **FENDERS**

We stock ESGE fenders, made of recycled German plastic, reinforced with cellulose. With stainless steel hardware AND non-stainless wingbolts, for \$40/pair. Superb quality & attractive. Sizes: 700c x 35, 700c x 45; 26 x 50, 26 x 65. Soft silver, with thin black stripes.

### **RAINGEAR**

From October through April. Ponchos and jackets and spats and trousers from Carradice, at least. Mostly the same as last year, with maybe some variations. Detail on request or in a future Reader.

### **LONGSLEEVE JERSEYS**

We have a few, from Sergal of Italy and Kucharik of Gardena, and they're very nice (\$75). But Sergal's out of business, and our stock isn't large enough to include them in this catalogue, and Kuchariks are cash-flow killers, so we're being careful with them for now. More in October?

### **FRAME PUMPS**

Silca, chrome-plated plastic, with presta-only heads. They're \$20, or \$15 with a frame. There are a better pumps (Zefal, for one), but Silcas are fine, and they weigh less and look better.

### **CASUAL RIDING SHORTS**

We're investigating these, may have something by next Spring.

### **SHOE COVERS**

Still investigating. We're trying to avoid the plastics industry as much as possible, but unless Carradice can make some out of cotton duck, and we're asking, we may go plastic on you here.

### **HELMETS**

They're best bought after trying them on, and we're mail order.

### **RACKS**

Usually in stock! Nitto-made, assorted versions, and we're constantly working with Nitto to nail down the details for a full-blown, complete line of racks. In the past we've frustrated many by listing racks, and then not being able to deliver, so we're laying low for a while until we have it together. Rear racks are here now, \$115, and if you're interested, call. Low-riders and fronts are coming, not sure when. We have prototypes.

### **POSTCARDS AND POSTERS**

We have the final artwork—Joe building frames, and twelve French cycling posters from the early 1900s. What we don't have is \$ to print them, yet.

### **SUSPENDERS**

Homemade, \$10 per pair, plastic non-biting teeth, red or navy, no choice of color.

### **T-SHIRTS**

Rivendell SS, \$14, LS, \$22. In M-L-XL-XXL. Others, maybe.

## SIZES AND SIZING

ROAD AND LONGLOW: 52 to 66, 1 cm increments;  
ALL-ROUNDER: 42 to 65, 1 cm increments (60-65 use 700c wheels)

\_\_\_\_ PLEASE BUILD THIS MODEL \_\_\_\_ IN THIS SIZE \_\_\_\_  
\_\_\_\_ I'LL DEFER TO YOUR JUDGEMENT ON SIZE

MY HEIGHT \_\_\_\_ AND WEIGHT \_\_\_\_ AND AGE \_\_\_\_

SADDLE HEIGHT ( CENTER OF BB TO TOP OF SADDLE) \_\_\_\_

PUBIC BONE HEIGHT (FLOOR TO BONE, BARE FEET 10" APART) \_\_\_\_

PUBIC BONE HEIGHT WEARING CYCLING SHOES \_\_\_\_

## FRAME SPECS

**REAR SPACING:** Road & LongLow: 130mm: All-Rounder: 135mm  
—Others on Request—

**BRAKES:** Road Std—short-reach sidepulls  
LongLow—cantilevers or standard reach sidepulls (circle)  
All-Rounder—cantilevers

**HEAD TUBE EXTENSION: ALL FRAMES GET A 15MM HEAD TUBE EXTENSION (HTX)  
TO ALLOW A HIGHER HANDLEBAR POSITION AND MORE COMFORT.**

## COLORS & COSMETICS

You can send in a deposit without choosing a color. You can see colors on our website after 8/26/98, or in our frame brochure after 9/12/98. Plenty time to pick color! ([www.rivendellbicycles.com](http://www.rivendellbicycles.com))

Silver Metallic • Burnt Orange • Burnt Tangerine Pear (+\$60)! • Solid Green • Pearl Green • Lt. Green Metallic • Smokey Blue • Deep Blue Metallic • Red  
• JB's (Painter's) Choice: *Joe Bell picks the color. It won't be from the list above, but it'll be in keeping with the look of a Rivendell, and it will not be duplicated ever again. So you'll have your own color.*

Sign Here \_\_\_\_\_ Date \_\_\_\_\_

## DEPOSIT

**MINIMUM \$300 DEPOSIT; BALANCE BEFORE SHIPPING.**

☐ Check enclosed ☐ Visa ☐ Mastercard

Visa/Mastercard #: \_\_\_\_\_

Expiration: \_\_\_\_/\_\_\_\_

Ship to: \_\_\_\_\_

Name: \_\_\_\_\_

City: \_\_\_\_\_ St. \_\_\_\_\_ Zip \_\_\_\_\_

Home Phone: \_\_\_\_\_

Day Phone: \_\_\_\_\_

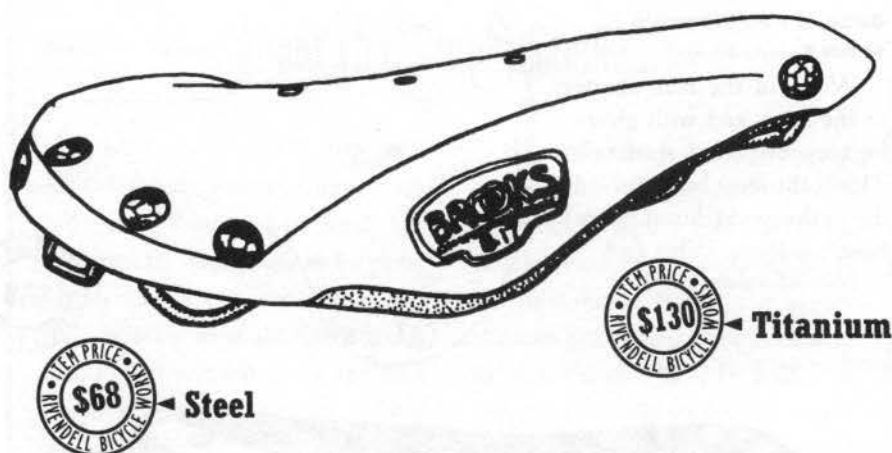
*Send by mail or fax to:*

**RIVENDELL BICYCLE WORKS**

**1561 - B Third Avenue • Walnut Creek, CA 94596**

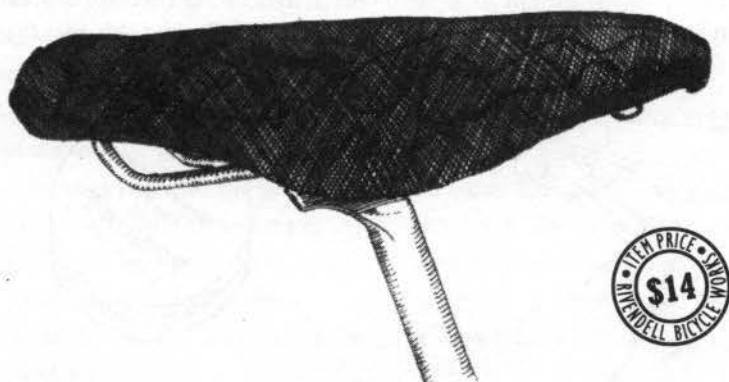
**ph (925) 933 - 7304 • fax (925) 933 - 7305**

**e-mail: [RivBici@earthlink.net](mailto:RivBici@earthlink.net)**



## BROOKS B.17 SADDLE

One of Brooks's older models, much older than the Pro, and for many riders, it's the most comfortable, least genital-numbing saddle out there. Ours is a spiffed up (just for Rivendell) B.17 with thicker leather than the normal B.17, 13mm hand-set copper rivets, and a skived lower edge. Wide enough and flat enough in back to support your sit bones, and shaped right so if you set it up properly with the rear portion slightly higher than the neck, it won't cut off flow to your plumbing or crush your folds. A perfect mate for a Carradice. Two choices: Honey brown with black powder coated rails, about 522g and \$68; or medium grey with titanium rails, about 440g and \$130. *Non-members add \$5 to each.*



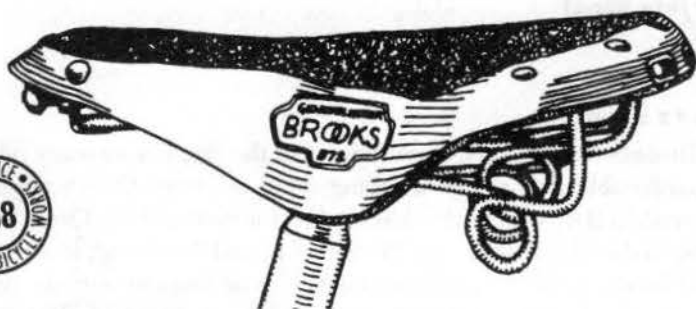
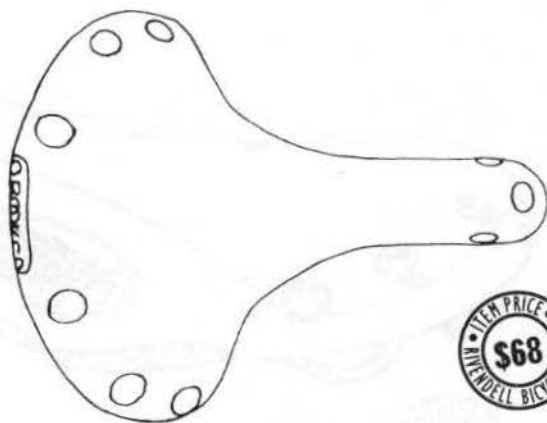
## CARRADICE B. 17 SADDLE BONNET

You put it on your saddle to keep it dry in the rain, and in that regard, no B.17 rider should be without one. You probably ought to put a plastic bag underneath it, just to be sure. We aren't aiming for paranoia-induced sales, but on hot days, it also protects your saddle from getting saturated with salty butt-sweat, which, if you think that's good for it, please explain. It has strap slots, so it doesn't interfere with the saddlebags. Made exclusively for us. Carradice doesn't make them for other saddles, either, but if you don't mind some wrinkles, it also fits a Team Pro. *Non-members, \$16.*

## BROOKS PRO WOMEN'S SADDLE

Wider in the rear, shorter in the nose, and with gleaming copper-plated steel rails. This is the most beautiful saddle in the world, but it doesn't have bag loops. What for?

*Non-Member Price \$70*



## BROOKS B.72 SADDLE

The original mountain bike saddle, a two-railed jobber which requires either a straight post or the increasingly hard to find Joe Breeze Seat Sandwich (we have, \$10). Black, with integral loops for carrying a Carradice or ACME saddlebag. The ideal saddle for riding upright. Sold with cheap-style clamp that works great with a cheap-style, clampless seat post (we have, 27.2 only, \$10). *Non-Member Price \$70*



## BROOKS TENSION TOOL

Cute, compact, chromed. You may ride your Brooks for years and never need to use this, but if you ever want to tension the leather, heaven help you if you're without one, because no normal tool will fit into that tight area. *Non-Member Price \$8*



## PROOFIDE

Don't be putting baseball mitt oil, boot grease, or hair tonic on your saddle to soften it. Don't soften it, period. A light dressing or two per year of Proofide is all it wants.

2.75oz with the tin.

*Non-Member Price \$7*



## About That Brooks Saddle...

IT DOES NOT NOT NOT REQUIRE A LONG BREAK-IN PERIOD, during which you'll hurt, bleed, and go numb and impotent. It's shaped right and is pretty comfortable right off the bat. There is some breaking in as the saddle molds itself to your butt, but even a new, hard Brooks will be reasonably comfortable if you set it up right.

Before you mount any new saddle, measure your saddle height from the center of the bottom bracket to the top, where you sit. Brooks saddles are taller than most plastic saddles, so when you take off your old saddle and put on a Brooks, you'll probably have to lower the seat post. Actually, you can count on it.

When you hold your Brooks horizontal and look closely, you'll see that the rear portion is 3mm to 5mm higher than the middle (neck) and front (nose). That's called *pitch*, and it's an important feature, because it keeps the pressure off the relatively important area between your anus and genitals.

### The keys to saddle comfort are:

- 1) sufficient width to support your sit bones, aka ischial tuberosities.
- 2) relatively flat rear portion, for the same reason
- 3) proper pitch to reduce pressure on your perineal region
- 4) a narrow neck, so you don't scrape your thighs.

If you're used to a skinny saddle, you might find a more supportive saddle, like the B.17, slightly uncomfortable at first. If it's at the right height and angle, the discomfort is probably due to your sit bones getting used to the pressure of support. Put up with it for a week or two, and eventually the pressure on the saddle will make small depressions, and from then on you'll be fine.

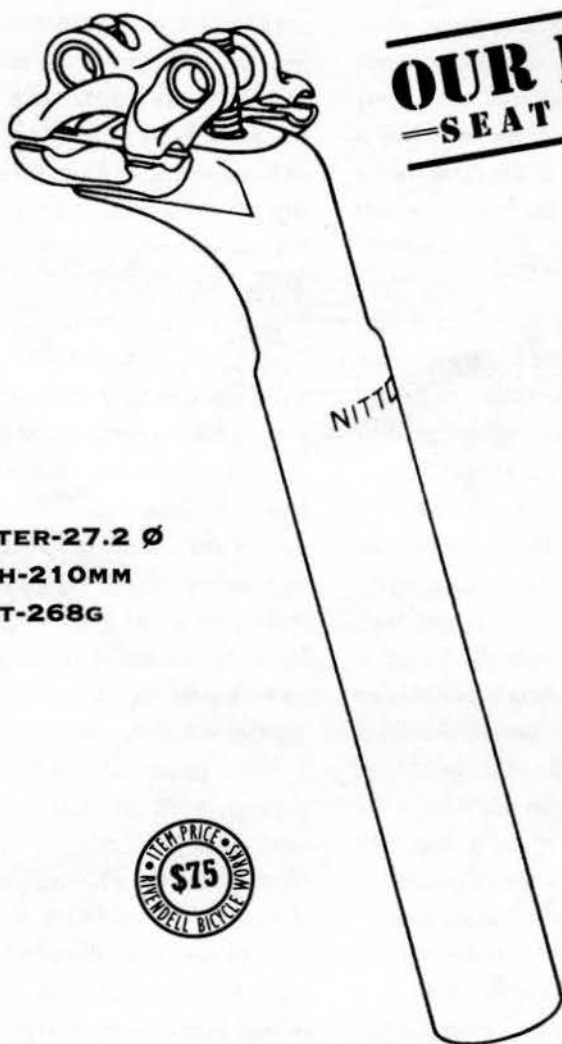
### CARE

A light coating of Proofide once or at most twice a year, topside and bottom. In wet weather, cover it with a bonnet or plastic bag. If the elements get to it and your saddle starts to sag or flare, tension the nose. If the sides are really splayed, drill 5 to 6 holes in the lower edge, forward of the seat post and on both sides, then lace the two sides together with a shoe lace.

With proper care and no major soakings, you'll probably get 15,000 miles out of your Brooks. The record is 60 years, but there's something fishy about that. The saddles are durable—a hundred years of saddlemaking sees to that—but I don't think medium-mileage rider of normal weight can get 60 years out of one. Maybe a lightweight LOL from Liverpool or Quigley-On-Thames can, but not a normal, heavy-set, heavy-sweating, mega-miler American bicyclist.

—Grant

## Seat Posts



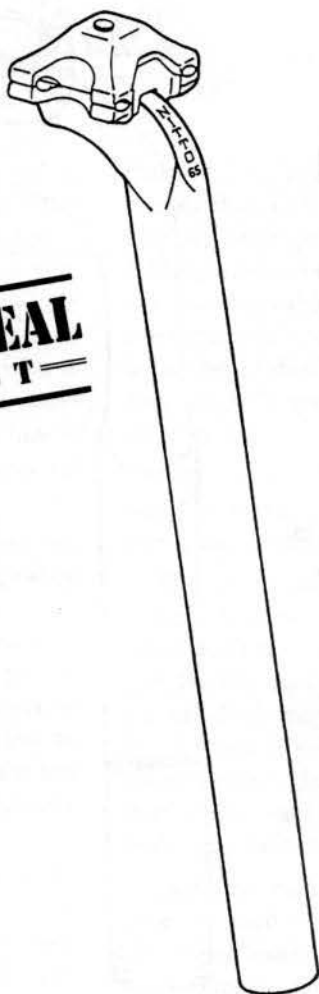
**DIAMETER-27.2 Ø**  
**LENGTH-210MM**  
**WEIGHT-268G**



**NITTO FROG POST**

Nitto calls it the Jaguar, but it from the side it looks like a Frog. Two-bolters are slower to adjust than one-bolters, but are mechanically superior, since they're less prone to slipping and require less tightening force (per bolt) than a single bolt. This one's easier to use, since the bolts are 6mm allens, accessible from underneath. Nitto claims this is the strongest seat post they've ever tested. We try to keep them in stock, but if you want one, please be prepared to wait.

*Non-Member Price \$80*



**OUR BEST DEAL**  
**SEAT POST**

**DIAMETER-27.2 Ø**

**LENGTH-330MM**

**WEIGHT-270G**



**NITTO ONE-BOLT SEATPOST**

This post is so strong and so pretty and plenty light enough and so cheap, that you'd have to have some really good reason—like maybe your riding buddy owns another seat post company—for getting any other post.

How can we sell them for \$33, when posts not nearly as good sell for twice that? Because we got a screaming good, all-or-nothing deal on 350 of them four years ago. They were made for mountain bikes, but the only difference between a Nitto mountain post and road post is the length, so if the length bugs you or you want to save 20g, cut some off. Just make sure you have at least 65mm/2.6-inches sticking in your seat tube. *Non-Member Price \$35*



**DIAMETER-27.2 Ø**  
**LENGTH-220MM**  
**WEIGHT-282G**



*It says Vitus here, but you can remove it with a Scotchbrite pad. As we did before Jeff drew it.*

**OUR FRENCH**  
**SEAT POST**

#### VITUS WAYBACKER

Talk all you want about lining up your knee over the center of the pedal, but most riders we know routinely shove the saddle all the way back on the rails and wish it went farther. With this post, sitting back far is no problem at all. Perfect for frames with too-steep seat tubes, or saddles with rail configurations that don't allow much rear movement. Or flip it around and play Tri-Guy/Girl.

Well made in France of forged aluminum, shiny silver. The silkscreened Vitus on the sides comes off easily, a good thing. Seat posts shouldn't shout out their names at you! *Non-member price \$50*

## Brakes

**T**he first time I took apart a Campy Nuovo Record brake lever, maybe 25 years ago, I was astounded at how simple it was. There are six parts to the whole thing, and with a Y-wrench and a small flathead screwdriver, you can take it apart in less than ninety seconds, without rushing. You can see exactly how it works and the role each of those six parts plays.

This year I realized that those old Campy brake levers are the standard by which I judge all bike parts, not just brake levers. There are worse ways to rate them. For any given bicycle part or anything else, there are advantages to simplicity. Simple things cost less to make, and can be made better for less cost. But I like simple things because I can understand them.

In the case of that Campy brake lever, the inside pieces that you don't see are as pretty as the outside pieces. Campy expected you to take it apart to replace a bushing when the lever developed side play, and they didn't want you to think they cut corners.

The SunTour brake levers we sell, and the Campy Gran Sport levers that come with the complete Gran Sport brakeset, are copies of those Campy Nuovo Record levers. None are still being made.

In last year's catalogue we talked a little about dual-pivot sidepulls, and while we were careful not to yell at them too loudly, the overall review wasn't glowing. We're backpedaling on

that one. They're still heavier and more complicated and less fender-friendly than are single-pivot sidepulls. But it's a little inconsistent for us to tell you not to worry about a hundred or so extra grams in a saddle, and in the next breath berate dual pivot brakes because they weigh 30 grams more than single pivot models.

And they're still more complicated. But I've taken a good short look at them, and frankly, I'm not baffled.

The fender issue remains a biggie, though. I know the majority of road riders don't ride their nice bikes in the rain, but it is not a good thing to design a brake that's incompatible with fenders. I think, if you do that, then you should make it clear in the propaganda that if you want to use fenders, this brake may frustrate you.

Last year, based on limited experience and field reports, I was sure that dual-pivot brakes made it a pain in the neck to mount fenders, and ate up too much clearance. In fact, they are more difficult, and Campy dual-pivots, as nice as they are in other ways, flat-out don't work with fenders. But Shimano dual pivots work with fenders provided the frame is designed with fenders in mind and you limit the tire to 680mm diameter, and you use the right fenders and know some mounting tricks. In RR13 or 14 we'll report on the fender-ability of various dual-pivot sidepulls. Single pivots make fenders so much easier, though. —Grant

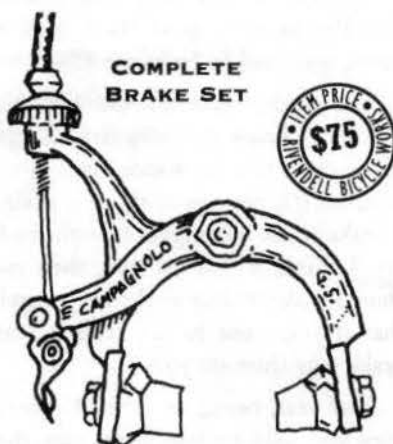
## SUNTOUR CYCLONE SIDEPULLS

These are the brakes Peter and I and Pal Jeff use to slow down. They work great and lack nothing. There's a true micro-adjusting quick release and a rubber barrel adjuster—two features that make life wonderful, and two features lacking in modern sidepulls. They center by means of two 5mm hex keys; simple. New old stock from the mid-'80s.

Maximum reach: 50mm.

Specify allen or nuted center-bolts, or we'll assume you want allen.

*Non-Member Price \$48*

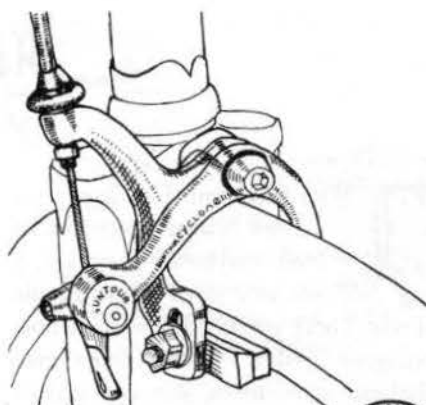


## SHIMANO RX100 DUAL-PIVOT SIDEPULLS

You can be mad at Shimano soft all you want, but it's hard to find fault with these, the best value in Shimano's line. Powerful, light action brakes, that work with any of the levers we sell, even the RX100 levers on p.55. Silver finish, not paint. The finish isn't as shiny as Ultegra's, but it's good enough to not get you kicked out of the club.

Specify **SHORT** (for modern road frames) or **STANDARD REACH** (max reach 57mm; for older road frames or our LongLow).

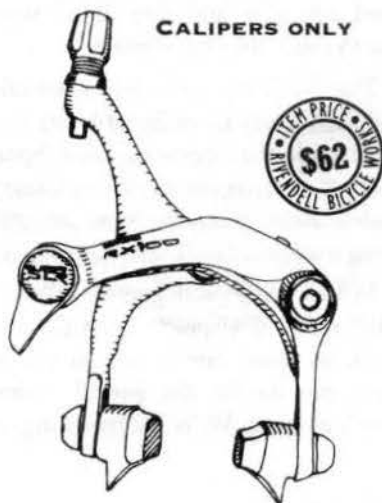
*Non-Member Price \$64*



**CALIPERS ONLY**

## CAMPAGNOLO GRAN SPORT SIDEPULLS

Back in the Stone Age these were Campy's cheapies, which was like getting first runner-up in the Miss World contest (or Mr. Universe, whatever). Cold-forged, clean design that hides nothing, and everything is practical and well thought-out. At \$75 per complete brakeset, these have got to be the best deal around, and the only thing we'd change is the cable housing, which—although good enough for Eddy Merckx, isn't as good as the new delrin-lined stuff, which we sell for \$5, including cables. *Non-Member Price \$77*



**CALIPERS ONLY**

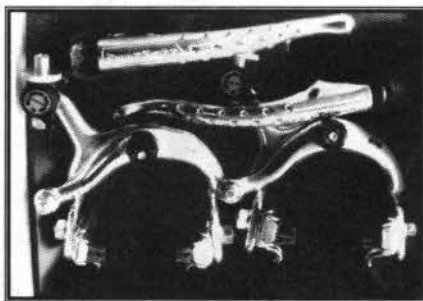
# CATALOGUE & PRICE LIST

## WEIMANN SIDEPULL BRAKESET

Standard reach (up to 57mm) for old road bikes or sport-touring bikes. Swiss, but not as fine in finish and details as fine Swiss watch. It's a decent brakeset to get a brakeless bike back on the road. Quick release on the calipers, barrel adjuster, easy and unique centering. Nuted centerbolt.



*Non-Member Price \$36*



**COMPLETE BRAKESET**

## Cantilevers

### DIA-COMPE #986

Originally made for the 1990 Bstone MB-Ø, and for about 15 months after that, it was the most popular high-end cantilever on the market. The best deal you'll ever see, and they're good brakes. Ti Finish.

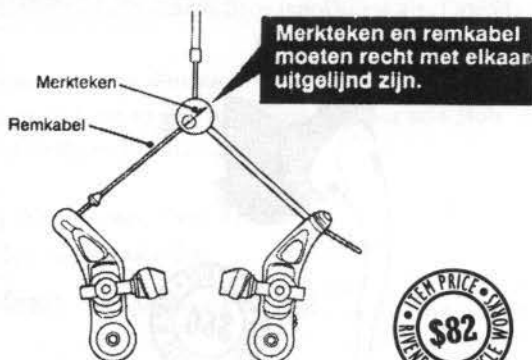
*Non-Member Price \$30*



### SHIMANO DEORE XT

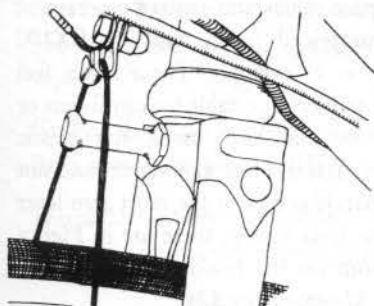
Eighty-five dollars for a bikesworth of cantilevers seems like a lot to those of us still cursed with mid-'70s prices in our heads; but these are worth it, easy. Naturally, they've been discontinued, but we're constantly scrounging for them, and with a little luck, we'll have them in stock half the time. Silver, cold-forged, not a single thing wrong with these. Finished better, and with better hardware than the Dia-Compes, but at \$25, the Dia-Compes are still the better deal.

*Non-Member Price \$85*



### SELCOF PARALYSIS PREVENTER

It prevents the straddle wire cable from falling onto the front wheel if your cantilever brake cable breaks or loosens, thus preventing an instant header. Forged, Italian, aluminum. If you have a Rivendell frame, we'll give it to you free with any order, but you have to remind us.





## SUNTOUR SUPERBE ROAD LEVERS

SunTour's best, pro-quality road lever, built without compromises. Wonderfully simple, just six parts plus the hood. Non-aero, so you can move them around on the bar more easily, retape, switch stems or bars—all the normal activities that aero levers make difficult. You'll love the look of these, and the shape and fatness of the hood is the best. Not as thin as old Campy, not as fat as new Campy. Our first choice for a traditional road bike.

*Non-Member Price \$48*



## DIA-COMPE AGC 251 BRAKE LEVERS

These were made when the U.S. dollar was strong, the Yen was weak, and Japanese makers didn't have to figure out how to cut costs. The black hoods fit snug, the metal is polished pretty well, and there are no obvious shortcuts. They don't have as large a body as modern aero levers, so if you have big hands and like big levers, these aren't the ones.

*Non-Member Price \$66*



## SUNTOUR CYCLONE ROAD LEVERS

Similar to a Superbe Pro but with a less fancy finish and no cut-out in the lever. The brake cable barrel sticks out farther and is easier to use, saving you maybe eight seconds every year or two or however often you replace the cables. The body and hood appear to be identical to the Superbe Pros.

*Non-Member Price \$35*



## SHIMANO RX100 BRAKE LEVER

Shimano's strength has always been the great values and perfect function of its midpriced parts, and the RX100 group is an example. These levers feel good, pull enough cable for cantilevers or sidepulls, and have metal, not plastic bodies. You can buy \$240 levers and not get that. If you want the most aero lever for the least money, these are it. Plenty of room on the hoods for big hands.

*Non-Member Price \$28*

# CATALOGUE & PRICE LIST

## MODELO NON-AERO HOODS

Black. They also fit Campy, SunTour Superbes and Cyclones, and some Dia-Compes. We're always looking for gum hoods, but can find only the blackies. These last longer, anyway.

*Non-Member Price \$14*



## TIM ZOWADA'S CUSTOM HOODS ATTENTION: WE DON'T SELL THESE!

BUT RIVENDELL MEMBER TIM ZOWADA CAN MAKE YOU CUSTOM LEATHER HOODS FOR YOUR BRAKE LEVERS, PROVIDED THEY'RE NOT THE STI/ERGO STYLE. GORGEOUS HOODS, THEY'LL MAKE ANY BIKE LOOK BETTER. ABOUT \$35/PAIR. (616) 348-5416

## MATHAUSER BRAKE SHOES

The best we've tried, but increasingly hard to get, so we reduced our selection to the ones least likely to be unavailable. :

**Basic road—\$14 (set of four)** *Non-Member Price \$15*

*Fits all sidepulls. They look crude, but outstop all others.*

**Basic cantilever—\$20 (set of four)** *Non-Member Price \$22*

*As above, but for cantilevers.*

## CABLES & HOUSING

Top, professional quality.

**SunTour brake cables & housing—\$6** *Non-Member Price \$7*

For front and rear brake cables, taupe housing, stout cables, and four housing caps.

**Brake cables, no housing—\$3 each**

Stiff, strong, smooth. QBP brand. Coated, which is why they cost so much.

**Derailleur cables—\$3 each**

Smooth and coated. Same QBP brand as above. Index compatible.

## Pedals, Clips, & Straps



ou can insist on a leather saddle and a lugged steel frame and even cloth bar tape and real Velox bar plugs, and still ride clipless pedals. That's fine, of course. What concerns me is that new cyclists don't even consider traditional cleats, mainly because they're not modeled out there, and nobody makes them anymore. It's another case of new stuff and old stuff not coexisting.

Last year Adidas introduced a shoe called the Campiolo. It looked traditional—it was black, had lace holes and no velcro—and even though it was tapped for clipless cleats, Adidas also made a traditional cleat for it. Adidas had some financial difficulties and was closed and then bought up by Salomon, and the fate of the Campiolo—who knows? Usually when companies are bought, the new owners jettison the past real pronto and go warp-speed for high tech.

Last week I got a call from Tim, from North Wave (cycling shoe maker), and he said they were introducing a traditional cleated shoe again. I specifically asked if there'd be a real cleat for them, and he specifically said "yes." The prospect of selling shoes by mail is scary, and our experience fitting shoes by mail has not been good, but if we can work out a way to nail the sizes, look for them next Spring. Or ask your local bike shop.

In the past ten years, ever since clipless pedals took off, real cleats have

taken an undeserved drubbing. Believe this: They work great. They're easy to get in and out of. They don't trap you, and the straps won't cut off your circulation unless you pull too tight, so don't. Anybody who berates traditional cleats and clips and straps is either not experienced or is underestimating you.

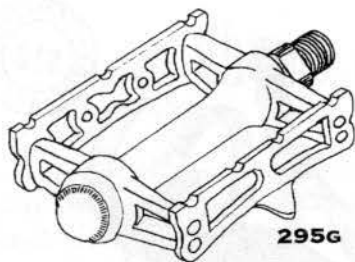
One thing I like about traditional pedals is that they're compatible with any shoe. They don't require you to put on mini-ski boots just to ride to the store, or just to go for a bike path ride with your friends or children or someone else. Even if you prefer clipless pedals for your race bike or week-end marauder, it's good to have at least one bike you can just hop on and ride, forget the get-up.

All the pedals on the next page are made by Mikashima (MKS) in Japan. You've seen MKS-pedals sold under other names, most famously, SunTour, Specialized, and WTB. They're good pedals and good values.

ALE of Italy still makes fine clips and straps, but I wonder who else buys them. ALE is a pleasure to deal with. It's not uncommon to order something from a U.S. distributor and wait two to three weeks for it, but our ALE orders consistently arrive in six to eight days, and the record is five. We're trying to get them to make toe straps in natural, but I think we're not communicating well.

—Grant

# CATALOGUE & PRICE LIST



295G

## MKS SYLVAN

Classic track-style aluminum cages with screw-on dustcaps, and serviceable bearings. Not pro quality, but they break in nicely, get smoother as they go, and ought to last 12,000 miles. Sometimes the factory adjustment is a little tight (as factory adjustments tend to be). If so, remove the dustcap, hold the wrench flats in a bench vise, and loosen the locknut. Then loosen the cone 1/12 turn, and cinch down the locknut.



Non-Member Price \$46



300G

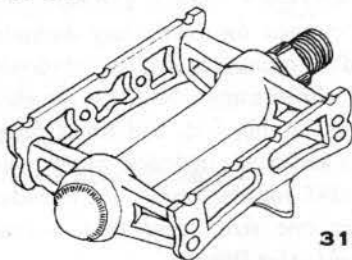
## MKS TOURING/CYCLO CROSS PEDALS

Our most popular pedal, and the one that draws the most raves. It looks like a cheap rat-trap pedals from the '70s, but it's excellent quality, lasts for years of hard use, and is our first choice for off-road, city, and general rough-stuff riding. Big foot support. Excellent pedal for toe-clipless riding, too, since both sides are the same. Easy to flip into if you use clips. Non-Member Price \$40

## MKS NUEVO KEIRIN

It's 1998, and who except MKS would bother to introduce a new, professional quality standard, non-clipless pedal? Japanese Keirin racers still ride with clips and straps, and supplying them is a prestigious gig in Japan, as the Keirin Society (NJS) has the strictest quality standards in the world. Our best pedal for traditional, cleated shoes.

Non-Member Price \$85

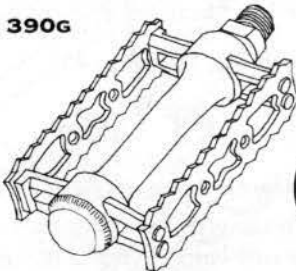


315G

## MKS PLATFORM

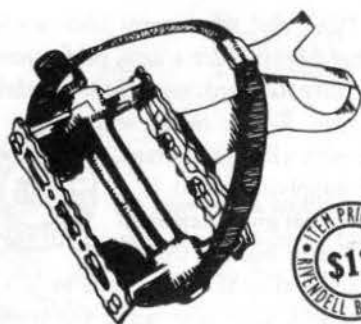
Our cheapest pedal in price and quality, but it's not garbage by any means, and it's the best pedal we know of for pedaling with sneakers, Hush Puppies, dress shoes, or thongs (shoe-type). I've often worn Converse All-Stars and pedaled up the local 11-mile mountain with no measurable loss in time or comfort. If you commute to work in regular shoes, or just want a nice, comfortable and easy-to-flip-into pedal, this is it. Designed for toe clips and straps, of course.

Non-Member Price \$30



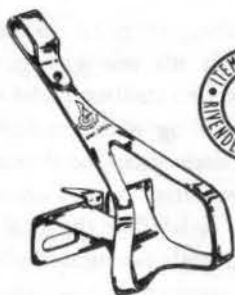
390G





## ALE CYCLO-CROSS AND COMMUTER CLIPS/STRAPS

Designed for easy entry and exit, good for cyclo-cross, of course (double steel clips=strong), but also for short commutes, big feet, and timid riders. Clips and straps included. Shown with the MKS touring pedal, not included. Order one size larger than normal.  
*Non-Member Price \$15*



## CAMPY ALUMINUM

The lightest clips we have, and at 29g in a medium (fits to 43), they're light enough for anything. And they won't break unless you abuse them. Good for old-style record attempts. Note the new cheap price.

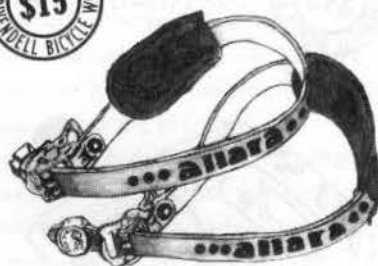
S (fits to 39), M (fits to 43).



## ALE STAINLESS STEEL TOE CLIPS

Our everyday, best-quality toe clip. Stainless steel, thin, light, and easily shaped to fit your shoe. 68g (med) Sizes: S (below 8); M (8-10); L (10.5-12); XL (Sasquatch)

*Non-Member Price \$15*



## ALE SUPER TOE STRAPS

A layer of nylon between two of leather. The nylon prevents stretch, which matters for certain competitive events, but not for regular riding. With buckle pads to keep the metal off your shoe, and buttons for grabbing. The best toe straps made. Yellow, red, or blue. List a second choice?

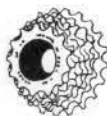
*Non-Member Price \$18*

## ALL LEATHER TOE STRAPS (ALE BRAND)

Your basic leather toe strap in whatever color we happen to have in stock, usually Nurse White, but sometimes blue. No choice.



## Chains and Freewheels



The world freewheel situation is healthier than the U.S. freewheel situation, and we're more optimistic about the future than we used to be. Shimano makes decent cheap freewheels in Singapore. Regina now makes them in China (is this a good thing?). Marchisio is making them in Italy. SRAM-owned Sachs still makes them, and that's what we carry.

### SACHS P51 CHAIN

Sachs's new chains start with P, for the Power Link, a variation of Lickton's link, Craig's Masterlink, and whatever other hand-disassemblable chainlinks there are out there. Because of a new pin treatment, these new P-chains are stronger than the old M-chains, but we've never broken one of those. The P51 is the upgrade replacement for last year's M55, at the same price. Silver/black links. *Non-Member Price \$20*



### SACHS FREEWHEELS

Top-quality freewheels that won't let you down. Sporadic supply.

#### SIX:

- 13 x 21 (14-15-17-19)
- 13 x 24 (15-17-19-21)
- 13 x 28 (15-17-20-24)

#### SEVEN:

- 12 x 24 (13-15-17-19-21)
- 12 x 28 (13-15-17-21-24)
- 13 x 24 (14-15-17-19-21)
- 13 x 26 (15-17-19-21-23)
- 13 x 28 (15-17-19-21-24)



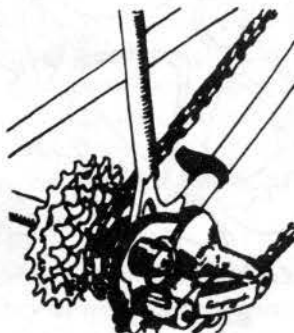
### CHAIN ROLLER

Remove the rear wheel and stick this in the right dropout (the right one). With the chain in the red groove, you can turn the cranks and have at the derailleur pulleys and chain without purging the rear hub. Made in Italy of red and yellow plastic. *Non-Member Price \$10*



### COLUMBINE QUICK-CHANGER

Change wheels without touching the chain. Plastic, weighs a few grams, mounts on the chainstay. Clever, cheap, light. Once we found out about this, we quit brazing chain hangers onto the frame. *Non-Member Price \$7*



## Crank

### RITCHEY TRIPLE CRANKS

The best crank made, probably Tom Ritchey's best component design yet, and functionally unimprovable; that's what we think, anyway. Cold forged aluminum. Equally good for mountain or road. Pretty satin silver finish. Made in Japan by Sugino. 46x36x26 rings. 170-172.5-175mm. Chaining subs are

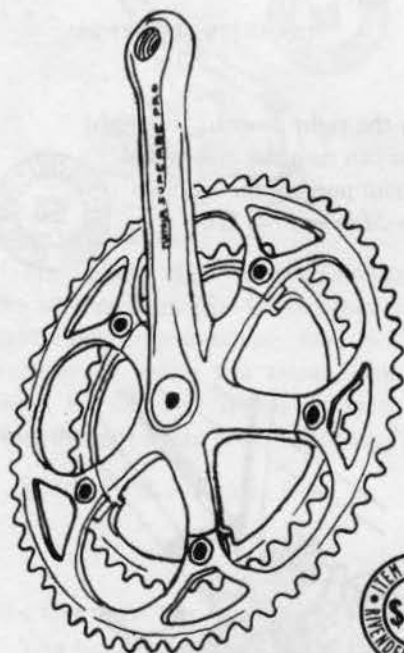
\$10 per ring and we keep originals.



**BCD: 110MM (OUTER AND MIDDLE)  
74MM (INNER)**

**Q: 150 TO 151 (TRIPLE)**

**138 TO 142 (DOUBLE)**



### SUNTOUR SUPERBE PRO CRANKS

SunTour's best road crank, made in 1992 or so. Cold-forged, beautifully, and we bought them cheap, so we can make money on them and offer you a great deal. The 172.5s have 53x39 chainrings; the 175s have 52x42 rings. It requires a relatively narrow spindle taper, similar to most European cranks. We can't get any Superbe bottom brackets, but Phil makes one for this crank, and it fits better than the original. We have enough cranks to last through February, probably.

Trivia: Dia-Compe made the left arms; Sugino made the rights.



**BCD: 130**

**Q: 145 TO 149 (DOUBLE)**

## Chainrings and notes on gearing



Off-the-shelf, two-chainring style road bikes come with 53t big rings and 12t small cogs, and the resulting 119-inch gear isn't all that useful. If you just want to ride solo or with friends who aren't bent on dropping you, you'll probably prefer a big chainring between 46t and 51t.

The smaller ring lowers your top gear, so you'll "run out of gear" earlier. But it also lowers all subsequent gears, so you'll probably ride them more. Putting on a 46 to 51t outer chainring is one of the most useful changes you can make.

### FIVE WAYS TO GEAR A BIKE

#### 1. CROSSOVER (DOUBLE)

Road racing gearing. With chainwheels ten to fourteen teeth apart (53 x 42 is typical these days), and the rear cogs close together. It's popular with racers because shifting is easy. The drawback: You don't get a very low gear. If you ride flat roads or are strong enough to race, that's okay.

#### 2. ALPINE (DOUBLE)

Big differences in the chainrings, like Crossovers, combined with medium range rear cogs, usually up to 26 or 28 teeth. A popular gearing on production bikes in the '70s, but not seen that much anymore. The gearing range is too low for racers, and the shifting sequence is too awkward for gear freaks, but if you want to avoid triples and you don't need super low gears, it'll work well for you.

#### 2. HALF-STEP + GRANNY (TRIPLE)

Closely spaced middle and outer chainrings plus an independent small (granny) chainring, and a wide range in the rear. A typical HSG has chainrings of 50/46/28 combined with a 13 x 32 rear, but there are dozens of other ways. HSG is a good way to get a wide range of gears, small increments between them, and a simple shifting sequence. If you're interested read RR11 & 12, or send for reprints of the half-step stories in those issues.

#### 3. MOUNTAIN TRIPLE

Big jumps between the chainrings, and a wide range in the rear: 46/ 36/ 26 x 12/ 28, for instance. It's good for off-road riding, where the terrain slows you down quickly, and small decreases in gearing aren't all that useful. Modern "compact" triples are a variation, but with smaller rings and rear cogs: 42/32/22 x 11/26.

#### 4. RACING TRIPLE

Big, ten-tooth jumps in the front rings and small jumps in the rear, which is typically an 8- or 9-speed. 50/40/30 x 12/26 is typical. You select the front chainring for the approximate highs and lows the next few miles will require, and then shift in the rear. The 8- and 9-speed rear cogs require more rear wheel dish, so you get weaker wheels. If you don't need the range, you can do a racing triple with a 6 or 7 rear cogs.

There are lots of ways to gear a bike. They all work fine; they just give you different things. — Grant

## CHAINRING

GEAR CHART  
700c/27 WHEEL

REAR COG

|    | 24 | 25 | 26 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41  | 42  | 43  | 44  | 45  | 46  | 47  | 48  | 49  | 50  | 51  | 52  | 53  | 54  |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 11 | 59 | 61 | 64 | 69 | 71 | 74 | 76 | 79 | 81 | 83 | 86 | 88 | 91 | 93 | 96 | 98 | 101 | 103 | 106 | 108 | 110 | 113 | 115 | 118 | 120 | 123 | 125 | 128 | 130 | 133 |
| 12 | 54 | 56 | 59 | 63 | 65 | 68 | 70 | 72 | 74 | 77 | 79 | 81 | 83 | 86 | 88 | 90 | 92  | 95  | 97  | 99  | 101 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 119 | 122 |
| 13 | 50 | 52 | 54 | 58 | 60 | 62 | 64 | 66 | 69 | 71 | 73 | 75 | 77 | 79 | 81 | 83 | 85  | 87  | 89  | 91  | 93  | 96  | 98  | 100 | 102 | 104 | 106 | 108 | 110 | 112 |
| 14 | 46 | 48 | 50 | 54 | 56 | 58 | 60 | 62 | 64 | 66 | 68 | 69 | 71 | 73 | 75 | 77 | 79  | 81  | 83  | 85  | 87  | 89  | 91  | 93  | 95  | 96  | 98  | 100 | 102 | 104 |
| 15 | 43 | 45 | 47 | 50 | 52 | 54 | 56 | 58 | 59 | 61 | 63 | 65 | 67 | 68 | 70 | 72 | 74  | 76  | 77  | 79  | 81  | 83  | 85  | 86  | 88  | 90  | 92  | 94  | 95  | 97  |
| 16 | 41 | 42 | 44 | 47 | 49 | 51 | 52 | 54 | 56 | 57 | 59 | 61 | 62 | 64 | 66 | 68 | 69  | 71  | 73  | 74  | 76  | 78  | 79  | 81  | 83  | 84  | 86  | 88  | 89  | 91  |
| 17 | 38 | 40 | 41 | 44 | 46 | 48 | 49 | 51 | 52 | 54 | 56 | 57 | 59 | 60 | 62 | 64 | 65  | 67  | 68  | 70  | 71  | 73  | 75  | 76  | 78  | 79  | 81  | 83  | 84  | 86  |
| 18 | 36 | 38 | 39 | 42 | 44 | 45 | 47 | 48 | 50 | 51 | 53 | 54 | 56 | 57 | 59 | 60 | 62  | 63  | 65  | 66  | 68  | 69  | 71  | 72  | 74  | 75  | 77  | 78  | 80  | 81  |
| 19 | 34 | 36 | 37 | 40 | 41 | 43 | 44 | 45 | 47 | 48 | 50 | 51 | 53 | 54 | 55 | 57 | 58  | 60  | 61  | 63  | 64  | 65  | 67  | 68  | 70  | 71  | 72  | 74  | 75  | 77  |
| 20 | 32 | 34 | 35 | 38 | 39 | 41 | 42 | 43 | 45 | 46 | 47 | 49 | 50 | 51 | 53 | 54 | 55  | 57  | 58  | 59  | 61  | 62  | 63  | 65  | 66  | 68  | 69  | 70  | 72  | 73  |
| 21 | 31 | 32 | 33 | 36 | 37 | 39 | 40 | 41 | 42 | 44 | 45 | 46 | 48 | 49 | 50 | 51 | 53  | 54  | 55  | 57  | 58  | 59  | 60  | 62  | 63  | 64  | 66  | 67  | 68  | 69  |
| 22 | 29 | 31 | 32 | 34 | 36 | 37 | 38 | 39 | 41 | 42 | 43 | 44 | 45 | 47 | 48 | 49 | 50  | 52  | 53  | 54  | 55  | 56  | 58  | 59  | 60  | 61  | 63  | 64  | 65  | 66  |
| 23 | 28 | 29 | 31 | 33 | 34 | 35 | 36 | 38 | 39 | 40 | 41 | 42 | 43 | 45 | 46 | 47 | 48  | 49  | 50  | 52  | 53  | 54  | 55  | 56  | 58  | 59  | 60  | 61  | 62  | 63  |
| 24 | 27 | 28 | 29 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 41 | 42 | 43 | 44 | 45 | 46  | 47  | 48  | 50  | 51  | 52  | 53  | 54  | 55  | 56  | 57  | 59  | 60  | 61  |
| 25 | 26 | 27 | 28 | 30 | 31 | 32 | 33 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44  | 45  | 46  | 48  | 49  | 50  | 51  | 52  | 53  | 54  | 55  | 56  | 57  | 58  |
| 26 | 25 | 26 | 27 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 41 | 42 | 43  | 44  | 45  | 46  | 47  | 48  | 49  | 50  | 51  | 52  | 53  | 54  | 55  | 56  |
| 27 | 24 | 25 | 26 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41  | 42  | 43  | 44  | 45  | 46  | 47  | 48  | 49  | 50  | 51  | 52  | 53  | 54  |
| 28 | 23 | 24 | 25 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40  | 41  | 41  | 42  | 43  | 44  | 45  | 46  | 47  | 48  | 49  | 50  | 51  | 52  |
| 29 | 22 | 23 | 24 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 38  | 39  | 40  | 41  | 42  | 43  | 44  | 45  | 46  | 47  | 47  | 48  | 49  | 50  |
| 30 | 22 | 23 | 23 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 32 | 33 | 34 | 35 | 36 | 37  | 38  | 39  | 40  | 41  | 41  | 42  | 43  | 44  | 45  | 46  | 47  | 48  | 49  |
| 31 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 30 | 31 | 32 | 33 | 34 | 35 | 36  | 37  | 37  | 38  | 39  | 40  | 41  | 42  | 43  | 44  | 44  | 45  | 46  | 47  |
| 32 | 20 | 21 | 22 | 24 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 30 | 31 | 32 | 33 | 34 | 35  | 35  | 36  | 37  | 38  | 39  | 40  | 41  | 41  | 42  | 43  | 44  | 45  | 46  |
| 33 | 20 | 20 | 21 | 23 | 24 | 25 | 25 | 26 | 27 | 28 | 29 | 29 | 30 | 31 | 32 | 33 | 34  | 34  | 35  | 36  | 37  | 38  | 38  | 39  | 40  | 41  | 42  | 43  | 43  | 44  |
| 34 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 25 | 26 | 27 | 28 | 29 | 29 | 30 | 31 | 32 | 33  | 33  | 34  | 35  | 36  | 37  | 37  | 38  | 39  | 40  | 41  | 41  | 42  | 43  |

Numbers shown are in "gear inches," the normal American and English way of calculating gears. By looking at the numbers, you can tell whether a 44 x 23 or a 36 x 19 is the bigger gear, and so forth. Formula: rear cog/front cog x nominal wheel diameter (26 or 27). The distance traveled method takes into account actual wheel diameter, and that's a smarter way to go...but it's sort of like Esperanto in that regard. For comparing one combination to another, this works fine.

## CHAINRING

GEAR CHART  
26" WHEEL

REAR COG

|    | 24 | 25 | 26 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43  | 44  | 45  | 46  | 47  | 48  | 49  | 50  | 51  | 52  | 53  | 54  |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 11 | 57 | 59 | 61 | 66 | 69 | 71 | 73 | 76 | 78 | 80 | 83 | 85 | 87 | 90 | 92 | 95 | 97 | 99 | 102 | 104 | 106 | 109 | 111 | 113 | 116 | 118 | 121 | 123 | 125 | 128 |
| 12 | 52 | 54 | 56 | 61 | 63 | 65 | 67 | 69 | 72 | 74 | 76 | 78 | 80 | 82 | 85 | 87 | 89 | 91 | 93  | 95  | 98  | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 115 | 117 |
| 13 | 48 | 50 | 52 | 56 | 58 | 60 | 62 | 64 | 66 | 68 | 70 | 72 | 74 | 76 | 78 | 80 | 82 | 84 | 86  | 88  | 90  | 92  | 94  | 96  | 98  | 100 | 102 | 104 | 106 | 108 |
| 14 | 45 | 46 | 48 | 52 | 54 | 56 | 58 | 59 | 61 | 63 | 65 | 67 | 69 | 71 | 72 | 74 | 76 | 78 | 80  | 82  | 84  | 85  | 87  | 89  | 91  | 93  | 95  | 97  | 98  | 100 |
| 15 | 42 | 43 | 45 | 49 | 50 | 52 | 54 | 55 | 57 | 59 | 61 | 62 | 64 | 66 | 68 | 69 | 71 | 73 | 75  | 76  | 78  | 80  | 81  | 83  | 85  | 87  | 88  | 90  | 92  | 94  |
| 16 | 39 | 41 | 42 | 46 | 47 | 49 | 50 | 52 | 54 | 55 | 57 | 59 | 60 | 62 | 63 | 65 | 67 | 68 | 70  | 72  | 73  | 75  | 76  | 78  | 80  | 81  | 83  | 85  | 86  | 88  |
| 17 | 37 | 38 | 40 | 43 | 44 | 46 | 47 | 49 | 50 | 52 | 54 | 55 | 57 | 58 | 60 | 61 | 63 | 64 | 66  | 67  | 69  | 70  | 72  | 73  | 75  | 76  | 78  | 80  | 81  | 83  |
| 18 | 35 | 36 | 38 | 40 | 42 | 43 | 45 | 46 | 48 | 49 | 51 | 52 | 53 | 55 | 56 | 58 | 59 | 61 | 62  | 64  | 65  | 66  | 68  | 69  | 71  | 72  | 74  | 75  | 77  | 78  |
| 19 | 33 | 34 | 36 | 38 | 40 | 41 | 42 | 44 | 45 | 47 | 48 | 49 | 51 | 52 | 53 | 55 | 56 | 57 | 59  | 60  | 62  | 63  | 64  | 66  | 67  | 68  | 70  | 71  | 73  | 74  |
| 20 | 31 | 33 | 34 | 36 | 38 | 39 | 40 | 42 | 43 | 44 | 46 | 47 | 48 | 49 | 51 | 52 | 53 | 55 | 56  | 57  | 59  | 60  | 61  | 62  | 64  | 65  | 66  | 68  | 69  | 70  |
| 21 | 30 | 31 | 32 | 35 | 36 | 37 | 38 | 40 | 41 | 42 | 43 | 45 | 46 | 47 | 48 | 50 | 51 | 52 | 53  | 54  | 56  | 57  | 58  | 59  | 61  | 62  | 63  | 64  | 66  | 67  |
| 22 | 28 | 30 | 31 | 33 | 34 | 35 | 37 | 38 | 39 | 40 | 41 | 43 | 44 | 45 | 46 | 47 | 48 | 50 | 51  | 52  | 53  | 54  | 56  | 57  | 58  | 59  | 60  | 61  | 63  | 64  |
| 23 | 27 | 28 | 29 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 49  | 50  | 51  | 52  | 53  | 54  | 55  | 57  | 58  | 59  | 60  | 61  |
| 24 | 26 | 27 | 28 | 30 | 31 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 46 | 47  | 48  | 49  | 50  | 51  | 52  | 53  | 54  | 55  | 56  | 57  | 59  |
| 25 | 25 | 26 | 27 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 40 | 41 | 42 | 43 | 44 | 45  | 46  | 47  | 48  | 49  | 50  | 51  | 52  | 53  | 54  | 55  | 56  |
| 26 | 24 | 25 | 26 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43  | 44  | 45  | 46  | 47  | 48  | 49  | 50  | 51  | 52  | 53  | 54  |
| 27 | 23 | 24 | 25 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 39 | 40 | 41  | 42  | 43  | 44  | 45  | 46  | 47  | 48  | 49  | 50  | 51  | 52  |
| 28 | 22 | 23 | 24 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40  | 41  | 42  | 43  | 44  | 45  | 46  | 46  | 47  | 48  | 49  | 50  |
| 29 | 22 | 22 | 23 | 25 | 26 | 27 | 28 | 29 | 30 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39  | 39  | 40  | 41  | 42  | 43  | 44  | 45  | 46  | 47  | 48  | 48  |
| 30 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 36 | 37  | 38  | 39  | 40  | 41  | 42  | 42  | 43  | 44  | 45  | 46  | 47  |
| 31 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 29 | 30 | 31 | 32 | 33 | 34 | 34 | 35 | 36  | 37  | 38  | 39  | 39  | 40  | 41  | 42  | 43  | 44  | 44  | 45  |
| 32 | 20 | 20 | 21 | 23 | 24 | 24 | 25 | 26 | 27 | 28 | 28 | 29 | 30 | 31 | 32 | 33 | 33 | 34 | 35  | 36  | 37  | 37  | 38  | 39  | 40  | 41  | 41  | 42  | 43  | 44  |
| 33 | 19 | 20 | 20 | 22 | 23 | 24 | 24 | 25 | 26 | 27 | 28 | 28 | 29 | 30 | 31 | 32 | 32 | 33 | 34  | 35  | 35  | 36  | 37  | 38  | 39  | 39  | 40  | 41  | 42  | 43  |
| 34 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 24 | 25 | 26 | 27 | 28 | 28 | 29 | 30 | 31 | 31 | 32 | 33  | 34  | 34  | 35  | 36  | 37  | 37  | 38  | 39  | 40  | 41  | 41  |

Numbers shown are in "gear inches," the normal American and English way of calculating gears. By looking at the numbers, you can tell whether a 44 x 23 or a 36 x 19 is the bigger gear, and so forth. Formula: rear cog/front cog x nominal wheel diameter (26 or 27). The distance traveled method takes into account actual wheel diameter, and that's a smarter way to go...but it's sort of like Esperanto in that regard. For comparing one combination to another, this works fine.

## CONVERTING A DOUBLE TO A TRIPLE

We get 125 calls a year from riders who want to do this. Usually it's a ten-minute call that starts out with a hopeful customer and ends up with a semi-bummed out one. The source of the bumming is the cost and complication of converting; but mostly the cost. On a brighter note, there are hundreds of happy converters out there. Here's how to do it and how much it'll cost, approx.

### STEP #1

#### MAKE SURE YOUR CRANK CAN BE TRIPLIZED

The key is the crank's bolt circle diameter (bcd), which you can determine with the help of the chart on the next page.

### STEP #2

#### MAKE SURE IT'S WORTH IT

It costs \$80 to \$180 to convert, and you can get a new adequate triple crank for as little as \$100. You'll still need other parts, but at least have a whole new crank. If your current crank is too good to replace, go on to Step Three.

### STEP #3

#### THE OTHER PARTS YOU'LL NEED

a. **A triplizer chainring**, to replace your current middle ring. You bolt the new third chainring onto it. Willow triplizer cost \$52, and come in a small range of BCDs and tooth sizes. TA triplizers cost around \$75, and most bike shops can order them for you.

b. **A longer bottom bracket spindle**. Exactly how much longer you'll need to go depends on the particulars of your frame, but 6mm is normal. If you have a cup-and-cone bottom bracket, you'll be able to find a spindle for it, for between \$10 and \$40, and you can keep using your existing cups/

If you have a cartridge bottom bracket, you'll need a whole new bottom bracket, and that'll cost between \$25 and \$150. Even though we generally hate sub-Phil Wood cartridge bottom brackets, if you've had no problem with your cheapy Shimano, just get another one with a longer spindle. Around \$40?

c. **A third chainring**. One with a 74mm bolt circle diameter (BCD).

d. **A long cage rear derailleur**. Even if you don't plan to switch from a 24t large rear cog to a 32t one, you'll still need a longer cage to take up the slack generated from shifting to the small chainring.

Cost: \$35 to \$175, but you'd have to be nuts to spend \$175. Good derailleurs can be had for under \$50.

e. **A new chain**—only if you plan to put on a substantially larger rear cog. That's \$19 at Rivendell; \$14 to \$40 elsewhere.

f. **A new front derailleur**. We sell them for \$7 to \$25. With indexed front shifting, you need an indexable front derailleur.

### TIPS FOR GOOD SHIFTING

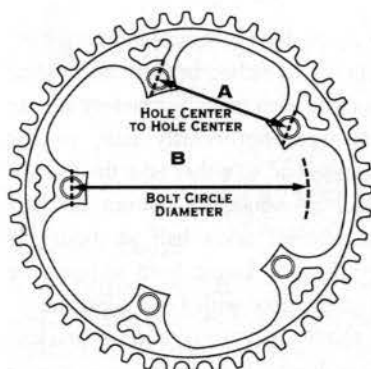
1) Keep the tooth difference between the small and middle ring greater or equal to that between the middle and upper. 50/40/28 will shift better than 53/40/30.

2) Keep the total chainring difference to 24t or fewer. If you have a 52t big chainring, stick to an inner ring no smaller than whatever 52 minus 24 is. This is a conservative suggestion, but most wide range rear derailleurs are rated to 24t.

Converting is cheaper than a new bike, and it makes a lot of sense. There's just more to it than plopping down \$52 to \$75 for a triplizer ring. Unless you have some spare parts hanging around, you can count on spending at least \$150.

If this is confusing, call and let's talk about it. We're happy to coach you through it.

# Know Your Crank's Bolt Circle Diameter



| IF A IS | then BCD IS        | SMALLEST CHAINRING |
|---------|--------------------|--------------------|
| 86.4    | 144 (old Campy)    | 41                 |
| 79.5    | 135 (new Campy)    | 39                 |
| 76.4    | 130 (new road)     | 38                 |
| 64.7    | 110 (std mtn)      | 34                 |
| 43.5    | 74 (std mtn inner) | 24                 |

The numbers are millimeters. If your A is something not listed, your crank is probably an old, old Campy, a modern compact mountain, or French, or Zeus.

| 74MM BCD |       |       | 110 BCD  |       |       | 130MM BCD |       |       | 135MM BCD     |       |       | 144MM BCD     |       |       |
|----------|-------|-------|----------|-------|-------|-----------|-------|-------|---------------|-------|-------|---------------|-------|-------|
| Size     | Brand | Price | Size     | Brand | Price | Size      | Brand | Price | Size          | Brand | Price | Size          | Brand | Price |
| 24       | O     |       | 34       | W     |       | 39        | O     |       | 49            | W     |       | 42            | O     |       |
| 25       | W     |       | 36       | O     |       | 47        | O     |       | 51            | W     |       | 46            | O     |       |
| 26       | O     |       | 37       | W     |       | 48        | W     |       | For           |       |       | 50            | O     |       |
| 28       | O     |       | 39       | O     |       | 52        | O     |       | current Campy |       |       | For old Campy |       |       |
| 29       | W     |       | 42       | O     |       | 53        | W     |       | only.         |       |       | and copies    |       |       |
| 30       | O     |       | 46       | O     |       |           |       |       |               |       |       |               |       |       |
| 32       | O     |       | 46 inner | W     |       |           |       |       |               |       |       |               |       |       |
| 34       | O     |       | 49       | W     |       |           |       |       |               |       |       |               |       |       |
|          |       |       | 50       | W     |       |           |       |       |               |       |       |               |       |       |
|          |       |       | 51       | W     |       |           |       |       |               |       |       |               |       |       |
|          |       |       | 53       | W     |       |           |       |       |               |       |       |               |       |       |

## CODE

W = Willow brand. American, machined 7075 T6.

O = Other. Always excellent, usually 7075 T6 or 2014. Nothing cheesy.

## WILLOW TRIPLIZER CHAINRINGS

If your nice road bike came with gears way too high, and you want to make it more useful without discarding the whole blame crank...well, that's what these are for, and they've saved the day for hundreds of riders already. Read the previous page for details.

Sizes available

BCD    TEETH

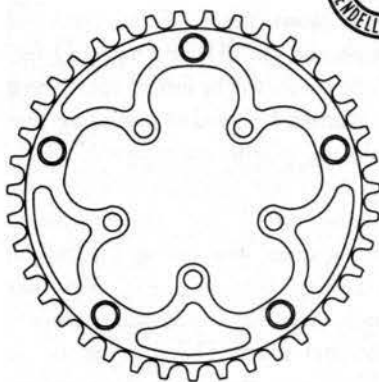
144    42

135    39

130    46 (good for half-stepping)

40

39



## Bottom Brackets

**B**ottom brackets come in different threadings, depending on what threading your frame is. Italian frames and a few American hand-builts use Italian threading. Pre-1986 French bikes have French threads, but most French bikes sold in America after that came with English. Swiss frames often have Swiss threads. Everything else has English. If your bike's adjustable (left-hand side) bottom bracket cup says "1.375 x 24 tpi," it's English. If it says "36 x 24 tpi," it's Italian. Those two cover 99 percent of the bikes out there.

THE LENGTH OF THE SPINDLE is determined by the crank you use and the frame it's going on. Most crank makers specify a length, but the particulars of the frame may call for something else. Ask us; we may know.

Another consideration is the taper dimension. SunTour Superbe spindles are the skinniest, Japanese mountain bike spindles are the fattest, and European road spindles are in between. So if you have a Superbe crank and you stick it on a Shimano mountain bike spindle, the spindle won't penetrate the crank far enough, and you'll have a higher Q-factor (the cranks will be further apart). So if that matters, it's good to make sure your cranks and spindles are compatible.

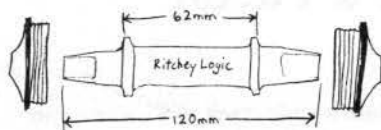
CUP-AND-CONE BOTTOM BRACKETS are a dying breed for three reasons: Manufacturers, who use up the bulk of the bottom brackets made, don't like them because they require skilled labor to install and adjust. They'd rather use air guns and buzz them in in thirty seconds or less, all adjusted. There's nothing wrong with that.

Bike shops don't love cup-and-cone bottom brackets, either, because back when bikes came with them, the factory adjustments were notoriously bad, so the mechanics had to either take the time to overhaul or adjust the bottom brackets themselves—it takes half an hour—or suffer the bad karma from putting the bike on the floor with a bad adjustment. BUT MOST CARTRIDGE bottom brackets aren't as durable even much less expensive cup-and-cone bottom brackets. Cup-and-cone bottom brackets are so simple in design, little can go wrong with them. Hard pedaling by strong and heavy riders, imposes tremendous twisting and bending stresses on spindles and bearings, and we have first, second, and third hand knowledge of many respected cartridge bottom brackets blowing up fast. They're not much more complicated than are cup-and-cones, but one weak point is the bearing housing. The bearings themselves may withstand a zillion revolutions at a hundred thousand rpm, but the slow, uneven, heavily loaded stresses imposed by a bull-strong hillbilly rider stomping her way up Tobacco Mountain seems to kill the housings, break the seals, and leads to ruined bearings. Servicing a cup and cone bottom bracket is satisfying. You need the right tools and some good instructions, and away you go. It's a good feeling, packing fresh bearings in a bed of way too much clean, white grease, then locking in a perfect adjustment. It's not the sort of think you'd want to do all the time, but it's a satisfying experience, and teaches you things about bikes you can't learn any other way. —GP

# CATALOGUE & PRICE LIST



**Pro**

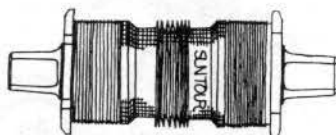


**Comp**

## RITCHEY LOGIC

A perfect match for the Ritchey crank. It has a wider-than-usual bearing separation, to reduce twisting. It also takes a unique cup with external bulge to house the wider bearings. Use a Park green pin tool on the adjustable cup.

Two grades. The **Pro**, with ground and polished bearing surface; and the **Comp** has less polished bearing surfaces, but should still last you at least 15,000 miles. Great deals, both.

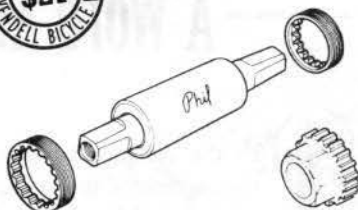


## SUNTOUR GREASE GUARD (WILDERNESS TRAIL BIKES DESIGN)

In the crank bolt is a tiny hole which leads to the bearings. You get a grease gun and shoot grease in the hole, and the good grease goes into the bearings and forces the bad grease out through the seals where the spindle enters the cups. Ground and polished bearing surfaces, best quality balls.

115mm spindle.

Non-Member Price \$15

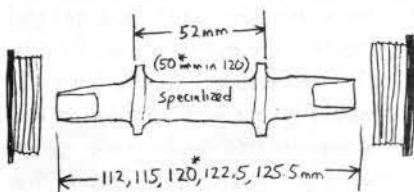


## PHIL WOOD

A rare, perfect bicycle part, made with the best 17-4 series stainless steel, by a company that for 27 years has maintained the highest quality standards in the industry. Totally reliable, no maintenance for fifteen to thirty thousand miles. Specify spindle length: 103, 108, 111, 113, 116, 116 for Superbe, 119, 123 and threading: English, Italian, French, and Swiss. Ti models available, \$265. They're a couple ounces lighter.

## PHIL WOOD BB TOOL

For installing and removing Phil bottom brackets. You can do it with one, but it's easier with two. Grab them with vise grips or a crescent wrench. New lower price.



## MONGREL BOTTOM BRACKETS

Specialized Pro spindles and excellent, but not pro grade Tange Cups, with 11-ball retainers. Fits most Japanese cranks. Fantastic deal. Specify the spindle length: English cups.

112, 115, 120, 122.5, 125.5. Non-Members \$27



## A Word About Q-Factor

It's the distance between the outside of the cranks at the pedal hole, and determines how far apart your pedals are, and therefore how far apart your feet are, when you pedal. I like low Q-factors (below 142 on double; below 155 on a triple), but it is politically correct to acknowledge that personal preference plays a big role. Still, if you're like most riders, once you ride a low-Q crank, you won't like the wide ones anymore.

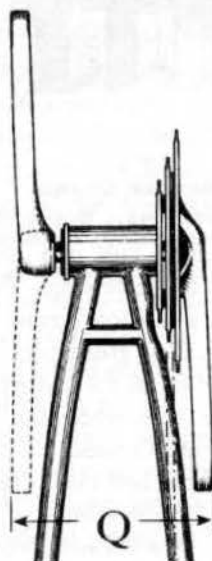
A low Q-factor: (1) increases cornering clearance; (2) flexes and stresses the frame less; (3) increases pedal clearance in deep single-tracks and around rocks; and (4) improves aerodynamics. Of the current cranks, Ritchey has the lowest Q-factor.

The topic of Q-Factor angers some modern crank makers, and lots of these people are my friends. I'm not saying lower is better. It would take a herd of doctors and kinesiologists and some other kinds of scientists to make that statement. I (and most riders I know) prefer low Q-factors, more for pedaling feel than for the four irrefutable reasons stated above. And we often hear from riders whose knee or hip problems mysteriously disappear after going

from a wide crank to a narrow one. Never the other way around.

Several years ago, Q-factors increased dramatically, with no fanfare. If the same change were made in crank arm length or handlebar width, both of which are less consequential, sirens would have gone off all over the world. It is of minor interest that recent world hour records have been set with customized, low-Q cranks. Moser's, in particular, was 90mm. I'm not sure the exact figure of O'Bree's or Boardman's cranks, but they weren't normal.

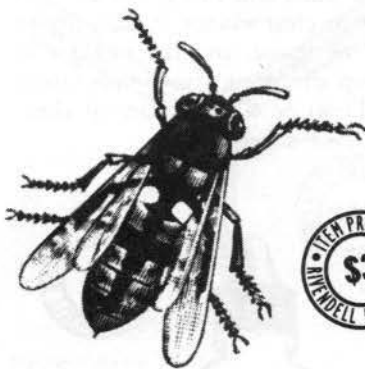
Short people are more affected by high Q than long legged riders, so should probably pay more attention.—*Grant*



## Sundries & Substances

### BEESWAX

From local, not Russian, bees. Tons of uses on and off a bike. Put it on all threaded surfaces to prevent loosening. Make emergency cable end-caps, to prevent fraying. Put it on shoelaces to prevent loosening. Strengthen string, lubricate screws and nails. First, break off a small chunk and knead it till it's soft and gummy. It'll harden up again, but will never get crumbly, and will always be ready to rub into threads (like pedal dust caps or headset locknuts).



### SHELLAC

Shellac comes from lac bugs (like the one to the left there) that bite into trees and ooze it out through their pores. You brush it on cloth bar tape to protect and texturize it—just like French riders did 50 years ago, and cheap fun. We sell 2 oz bags of shellac flakes. Dissolve it in denatured alcohol, then brush one to six layers on cloth bar tape, letting each layer dry. The results are spectacular. Instructions included. Specify light (creamy yellow) or normal (amber-to-cinnamon). One 2oz bag will do five bars.

### VAR'S SAPONIFIED GREASE

I've wanted to get some VAR grease since I first saw Daniel Rebour's Louve-worthy illustration of the tub, back in 1982 or so. Finally, we ordered it in July, 1997, it arrive in February, 1998. The tub label changed, and shown here is the good one. As white as snow, so you can tell when it's contaminated. Its thickness, whiteness, saponification, and Frenchness make this our favorite grease ever.



## FRAME SAVER

East Haddam, CT. frame builder Peter Weigle developed this to protect steel frames from rusting out from the inside. It works so well and is so cheap (\$3 to \$4 per frame), why not? We've tested 7 other anti-rust goops, and this one is the clear winner. It takes five to spray the frame, and ten minutes to clean up afterward. Use Simple Green or WD-40 or 409 to clean up afterwards. *Non-members, \$14.*



## PHIL WOOD'S TENACIOUS OIL

The slowest-running oil on earth, which makes it good for places where you really should use grease, but you either don't have any, or you're too lazy to overhaul and regrease it—just use some of this and you'll be allright. Good to use on any new pedals. Run a squirm of oil around the bearings, let it soak through, and put the cap back on. Grease is better, this is quicker.

*Non-members, \$6.*

## QUICK-GLO RUST REMOVER/POLISHER

Use this with a Scotchbrite pad, and rust comes off so fast you'll think it must be poison, but it's not toxic at all. Really amazing stuff, and it's not just for rusty bike parts. It's also a great general purpose metal polisher, and everybody has some tarnished and ugly-looking metal around.

*Non-members, \$6.*



## WHITE LIGHTNING

Shake like mad (the bottle), then drop a drop on each pin, and you'll be all set for 3 weeks of dry rides, a week of wet ones. Most chainlubes claim to repel dirt. This one, at least, doesn't seem to attract it. Good!

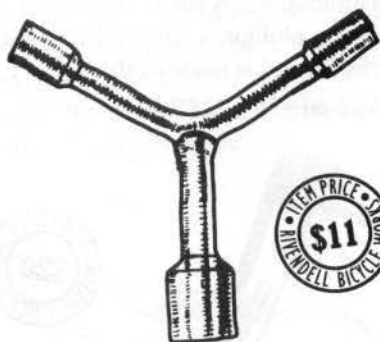
*Non-members, \$9.*



## Tools

### 8-9-10 Y WRENCH

Everybody needs a Y wrench, and this Hozan is the best one. Chromed steel, precise, useful all over a bike, and one of those tools you use all the time for decades and don't appreciate until you can't find it. Every bike shop uses one, and every home mechanic needs one. *Non-Member Price \$13*



### PATCH KITS

A large number of cyclists who own \$3,000 bicycles don't patch their tubes. We'd like to change that. We have a variety of brands—Rema, Specialized, Cobbworks. They all work better than glueless patches. *Non-Member Price \$7*

### ALU BOTTLE CAGE WITH BOTTLE

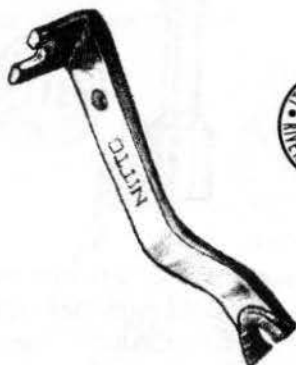
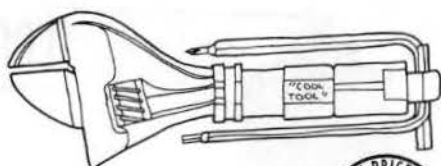
One of cycling's great mysteries is the popularity of aluminum bottle cages. They mark up bottle and make them so ugly you don't want to touch them. Steel and titanium and plastic don't do that, but Ti cages cost a lot, and plastic ones are ugly. This one is chromed steel, about 100g. Sturdy, reliable, looks great, and no amount of jiggling will blacken the bottle. It ought to last a decade, and comes with a bottle. 93g. *Non-Member Price \$15*



## COOL TOOL

Nothing against beer, but raise your hand if you're tired of bike multi-tools with bottle openers. The Cool Tool has 14mm and 15mm crank bolt wrenches, a chain tool, 4-5-6 allens, flathead, 8-9-10 boxes, phillips, a flattened crescent), one more, and is made in the U.S.

*Non-members, \$21.50.*

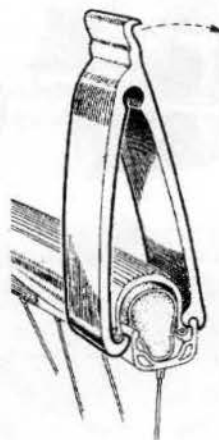


## NITTO STEM PRY

It pries the stem clamp open so you don't scrape your bars. One side is for TIG stems, the other for others. Made by Nitto for Nitto stems, but it works with most others. If \$20 is too much, a nickel in vise grips actually works okay. Peter knows a way with a penny and a bolt, too, but he's not here right now to tell it. *Non-Member Price \$22*

## THE TYRE LEVERS FORMERLY KNOWN AS VAR

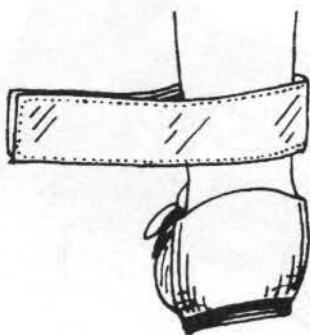
These won't pinch tubes or mark up rims, and that makes them our favorite. They're French, they used to be marketed as VAR brand lever, and they are by far the best tire lever I've used. *Non-Member Price \$10*



## 4-5-AND-6MM BALL-HEAD WRENCHES

Handy for bottle cages and racks. The ball-head lets you go in at a slight angle, a real blessing when mounting racks or bottle cages. German, top quality, kind of pricey. Whoever Bondhus was, he deserves a prize for this. *Non-Member Price \$7*

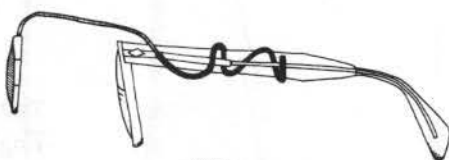
## Safety Stuff



### CHUCK HARRIS'S REAR VIEW MIRROR

The best mirrors available—they positively keep their adjustment over long miles and bad ground. Chuck Harris, derailleur maker, makes them out of recycled materials, and he's made more than 60,000 of them over the years, so you can bet he has it down. The arm is a spoke. Sometimes he decorates the back sides with bicycle motifs snipped from magazines. It's a grab bag, be flexible!

Specify: a) wire-framed glasses; b) plastic-framed glasses; or c) helmet  
Non-Member Price \$18

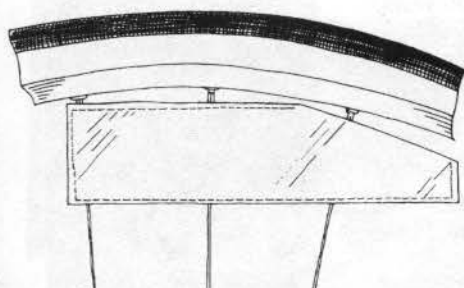


### ACME ANKLE REFLECTOR

More surface area and reflectivity than any other, and if you think those things don't matter, try again. The best ankle band made, and they fit arms, too.



*Chuck grinds out another at his pedal-powered grinder.*



### ACME WHEEL REFLECTORS

White Reflexite with velcro. Each weighs about 4g and goes on and off in seconds. Doesn't throw the wheel off balance or mess with the spoke tension. There's no reason other than vanity to ever ride without them. Certainly, use them at night.



## Books

### THE BICYCLE WHEEL

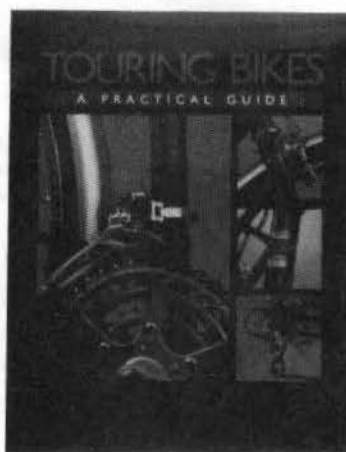
Wheel-building theory and practice, and widely regarded as the definitive book on wheels. Good for wheel-builders and non-wheelbuilders. The spoked wheel is a beautiful thing, and a symbol of the bicycle, and this book makes you appreciate it even more.



### TOURING BIKES

English framebuilder-physicist Tony Oliver's look at bike frames— what goes into them, what's good, what's bad. We don't buy his whole program (he likes brazed-on front derailleurs because he's anal about clamping things onto paint, for instance), but that's a difference of opinion, not a criticism. This book will open your eyes, educate you, fascinate you, and you'll probably buy one as a gift later on, after reading it yourself. There's no way you'll regret buying this book. If your spouse is into bikes and you don't know what to buy for him/her, but you happen to be reading this right now and you have \$40 burning a hole, this is a sure hit.

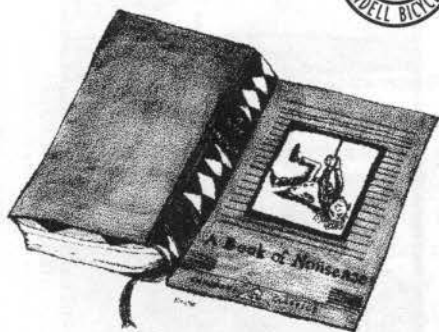
*Non-Member Price \$45*



### LE PETITE LIVRE JAUNE

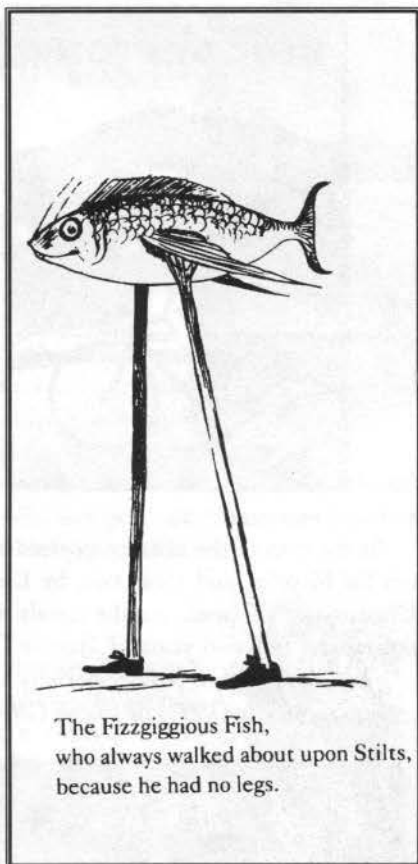
Daniel Rebour died in 1991, but for 30 years, he was technical editor of *Le Cyclisme*, a French cycling magazine. He wrote and illustrated hundreds of articles, and virtually every new significant component was reviewed and immortalized by his illustrations. Parts makers commissioned him to do their entire catalogues. He wrote this for VAR, a fine tool maker. Order it as *The Little Yellow Book* if you're having a bad French day. 42 pages, translated to English. Not just charming; lots of good info. *Non-members, \$14.*





## A BOOK OF NONSENSE

Edward Lear's magnum opus, first published in 1848. Limericks, short stories, a dictionary, stuff on animals, and a botany lesson. We offer a DOUBLE-YOUR-MONEY-BACK GUARANTEE IF YOU DON'T LOVE THIS BOOK, but you pay the return postage. If this book doesn't make you happy, nothing will. It's not just a silly book. Edward Lear was a genius, and this appeals to all ages, for various reasons. Read the short stories, too!



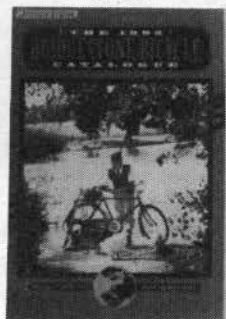
The Fizzgiggious Fish,  
who always walked about upon Stilts,  
because he had no legs.



1994



1992

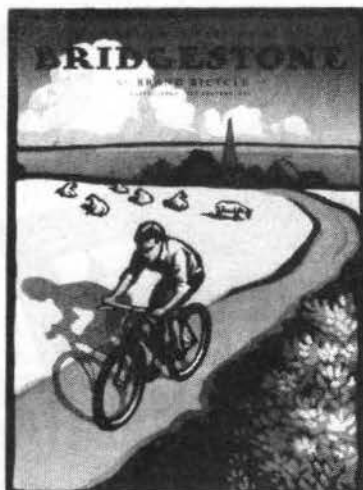
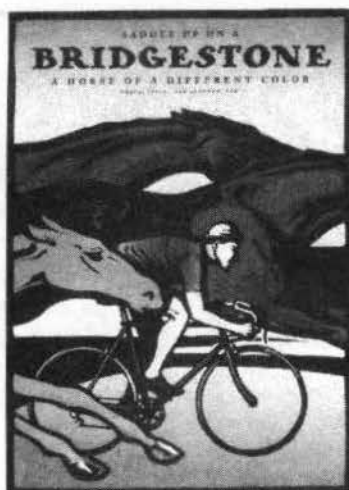


## 1992 & 1994

### BRIDGESTONE CATALOGUES

Before Rivendell, I worked at Bstone and had \$150K catalogue budgets and time to focus. These catalogues, and the help of many talented contributors, came of it. They're not like most bike catalogues. Learn about forging, casting, metalmaking, wool, and things like that...

If you can buy only one, get the 1992 one, because we'll run out of those much sooner. We don't have any 1993 catalogues.



## BSTONE POSTERS

At the turn of the century, posters were the main advertising medium for bicycles, and these two, by English linoleum-block print artist Christopher Wormell, are the equals of any. They were commissioned during the last two years of Bstone. They're 24-inches wide, 36-inches tall, and have sold in poster-specialty shops for \$17. Dwindling supply, \$8 each.

Specify Horse (1993) or Sheep (1994).



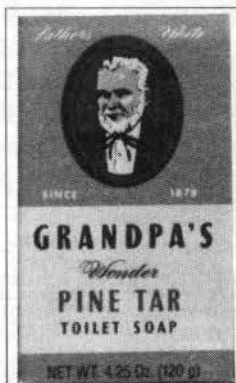
## HERON POSTER

An 18 x 24-inch colored pencil poster by 19-year old Lafayette, CA artist Andrew Denman, who also drew the Carradice Boxy bag somewhere else in this catalogue. The colors are neat, and there's lots to look at. Herons are our separate line of budget-priced handbuilds. Catalogue available August 30. Or web: [heronbicycles.com](http://heronbicycles.com).





## Soaps! \$3 per Bar



### **GRANDPA'S PINE TAR SOAP**

Made the same way since 1878, with a strong pine tar scent that cuts through the stench, but washes off thoroughly. Most women hate the smell, most men love it. Many washers use it to cure or appease skin problems, or as a contact lens wash; and besides that, it's also the best shampoo you'll find. It never builds up, doesn't strip your hair of oils, but gets out the grease. Our best selling item by far. Hefty, 4oz. cake.



### **GRANDMA'S FANCY LUXURY SOAP**

With olive oil, camomile, and orange essence. Mild and nice smelling. Unlike Pine Tar soap, it's not powerful enough to cut through the onionlike stench in a nervous man's armpits (we hear), but it's fine for faces and the like. 3.25oz.



### **PATCHOULI SOAP**

Patchouli is a plant extract used a lot in India for centuries, and popularized in this country by hippies in the mid-'60s. Lather up with this, and the smell lingers. Mix it with Pine Tar for a Paul Bunyan-meets Marianne Faithful effect. Our second most popular soap. Out of four!

### **BAKING SODA SOAP**

Strangely scentless, so it's a good choice if you hate the cheap perfumey smells of the megacorp soaps, but can't handle pine tar or patchouli.



### **LIP IVO**

The original lip balm, first made in 1903. It's vanilla with peppermint, and unlike real Chapstick, it's non-addictive. We sell it because I can't find it anywhere else. Not too waxy or slimy, and it actually stays on.



## Tires

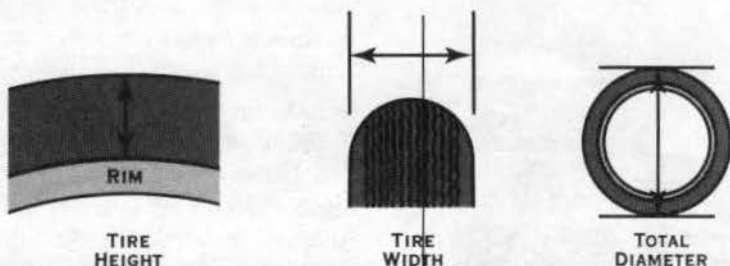


like round cross-sections, because they corner better. In a touring or long-distance tire, extra rubber in the middle give better wear, and eventually you'll get a round cross section out of it, at which point it'll corner like a roundy. **We like light tires with high volume**, and you'll notice we don't sell any tire skinnier than 24mm. The whole idea of pneumatic tires is to ride on a cushion of air, and if your air volume is so low that you have to pump it up to 125 psi in order to protect the rim, it doesn't make lots of sense.

Bicycle tire theory and some lab tests say bike tires are too skinny to hydroplane, and that tread traps water and reduces grip on wet roads. But we've found a little **tread helps grip on wet roads**. Experiment yourself; maybe your roads are different than ours.

Since most of the riding we do involves fast, high speed cornering, where, if our tire sidewall blows out, we go into a ditch and or smack hard into a rock, we nuts for strong sidewalls. Unrelated to that, we sell only **skinwall tires with black rubber**.

In the following chart, the 26-inch tires were measured on a 22.5mm wide Sun CR18 rim. 700c tires were measured on a 20.5mm wide Mavic MA2 rim. We weighed one sample of each tire, and inflated one of each tire to maximum psi and let it sit for a week before measuring it; because tires tend to stretch. All of the tires we sell mount easily, stay on, and run perfectly true.

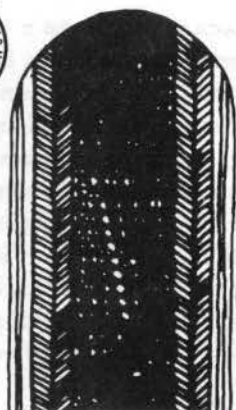


| TIRE SPEC CHART                        |        |       |        |           |
|----------------------------------------|--------|-------|--------|-----------|
| MODEL                                  | HEIGHT | WIDTH | ØMM    | WEIGHT    |
| Panaracer Pasela-K 26 x 1.25 (kevlar)  | 32     | 30.5  | 627    | 246/300g  |
| Avocet Fasgrip 26 x 1.25 (wire)        | 29     | 31    | 630    | 375g      |
| Ritchey Crossbite 26 x 1.9 (kevlar)    | 44     | 43    | 656    | 604g      |
| Panaracer Cat 1 700 x 28 (kevlar/wire) | 25     | 24.   | 680    | 275/320g  |
| Avocet Road Slick 700 x 32 (wire)      | 27     | 27    | 693.77 | 303g      |
| Avocet Road Slick 700 x 35 (wire)      | 30     | 32    | 699    | 370g      |
| Panaracer Pasela 700x35 (kevlar/wire)  | 31.5   | 31.5  | 692    | 369/411gg |

# CATALOGUE & PRICE LIST



**Wire  
Bead**



**Kevlar  
Bead**

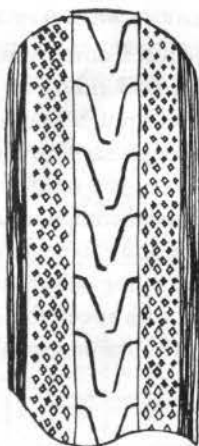
## AVOCET 700 x 32 & 35 ROAD SLICK

Good for: All-around road riding on dry roads. These are the best dry-road cornering tires we've tried, and they both have sufficient volume to run as low as 80 p.s.i. if the surface calls for it.

The 32 actually measures 27.5 or so, and the 35 is around 32. Great tandem tires. The tire says "inflate to 95 p.s.i."



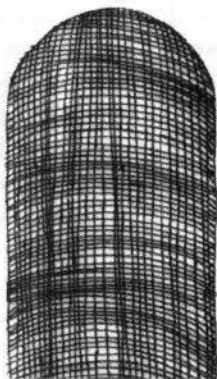
**Wire  
Bead**



**Kevlar  
Bead**

## PANARACER CATEGORY PRO 700x28 (25MM)

Good for: All-around road riding on decent surfaces. Reasonably light, exceptionally strong, runs absolutely true, and corners great. If you're ready to give up the hard skinnies, but you don't want to step up to the 700x32s, or if your frame won't fit them, this is the way to go. Kevlar or wire bead. A fantastic tire; you'll like it a lot. The tire says "inflate to 105 p.s.i."



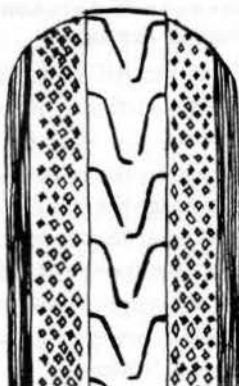
## PANARACER PASELA 700x35

Good for: Touring, commuting, fire trails if you don't ride like a gonzo-boy, and any rough asphalt. It won't corner like an Avocet until the center rib wears down, but for straighter roads, and certainly for touring and distance riding, it's a better choice. Durable, comfortable. The tire says "inflate to 75 p.s.i.," but based on our experience, that's conservative. Great tandem and fire road tire. Kevlar or wire bead.

*Non-Member Price Add \$5 each*

### Paris-Roubaix tubulars! \$45ea, or 2/\$80.

If you ride tubulars, you know these. A review: 24.5mm wide, combination tread tubular designed for speed over rough roads, and comfort. Made under the Clement label for years, but recently Foxonal (Thailand) has made them, and the label may say Foxonall, or Clement. No matter. They are Paris-Roubaixs. Available September 5? No returns on glued tires.

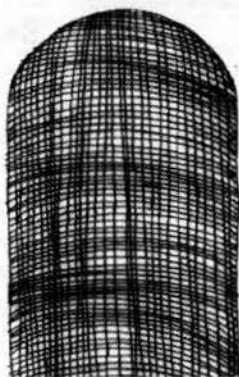
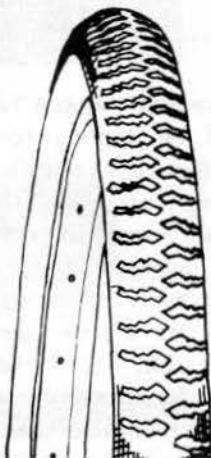


## **PANARACER PASELA 26 x 1.25**

**Good for:** Fast road riding, light touring, commuting. This is the smallest 26-inch tire we sell, and it's still big enough to protect the rim on bad roads and natural bumps. Just slightly heavier than the skinniest 26 x 1-inch tires (from Ritchey and Continental), but much more volume, for better rim protection and comfort. Tire says inflate to 85psi. That sounds low, but in this tire it works well.

## **AVOCET FASGRIP 26 x 1.25**

**Good for:** Road riding on dry roads, and touring. It's not as light, and doesn't feel as fast as the Pasela 26, but it's slightly fatter, so it cushions more, and it has that nice, round, slick rubber for the best dry-road cornering in the world.



## **RITCHEY CROSSBITE 26 x 1.9**

**Good for:** Combination road and trail-riding, trail riding in general, heavily loaded or rough touring.

Tire people say that for maximum performance, you need to tailor the tread and rubber compound to the particular terrain, and maybe for competition you do. But for all-around trail riding mixed with street, this one works great. Doesn't buzz on asphalt.

**PRESTA-VALVE TUBES, \$4 EA.**

### **700c**

BLACK. 97G MINIMUM, 120G MAXIMUM. FITS FROM 700 x 23 TO 700 x 35.

### **26 SKINNY**

BLACK. 93G MIN; 135 MAX. THE PERFECT TUBE FOR TIRES UP TO 26 x 1.25.

### **26 MEDIUM**

BLACK. 140G MIN, 165G MAX THE BOX SAYS IT'S FOR TIRES BETWEEN 1.5" AND 2.2-INCHES.

### **26 FAT**

BLACK. 168G MIN, 178G MAX. FOR BIG TIRES.



PHONE: (925) 933-7304 • FAX: (925) 933-7305

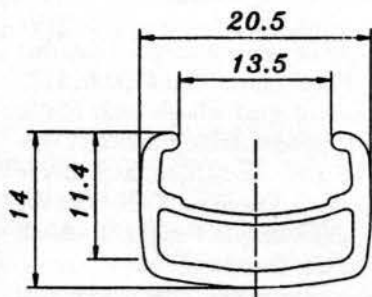
## Rims

We prefer traditional, reliable, box-section rims at least 20mm wide, with parallel braking surfaces. Much of a rim's lateral strength comes from its width, and a little wider is a lot stronger. Parallel braking surfaces bring out the best in any brake, especially cantilevers.

Many highly touted modern rims have machined sidewalls, to improve braking. But machining has its trade-offs. When an aluminum extrusion is rolled into a rim, the sides very slightly crumple, and in theory the uneven surface needs to be smoothed out to improve braking. It sounds better than it is. Get a piece of paper and a thick yellow highlighter, and draw a thick, barely wavy line (straight, but wavy), representing the braking surface. Now lay a straight-edge along the low points, and draw a line connecting them. See what happens to

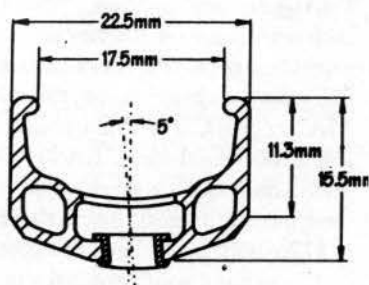
the high points? Machining sidewalls to perfect an already adequate braking surface removes too much metal. You have an expensive rim that comes pre-worn out! If you ride machined sidewalls, make sure they're also ceramic-coated, so you don't make the situation worse. All in all, Sun's sanded sidewalls are a better idea.

The best rim doesn't guarantee a reliable wheel, and a mediocre rim can be built into a completely reliable one. **You ride wheels, not rims**, and the builder makes more difference than the rim. Still, if you're going to start from scratch, you might as well start with good rims. The MA2 and CR18 certainly aren't the only good rims out there, but they're strong, consistent, and are our first choices. Too bad they don't come in asymmetrical versions, for rear wheels.



MAVIC MA2

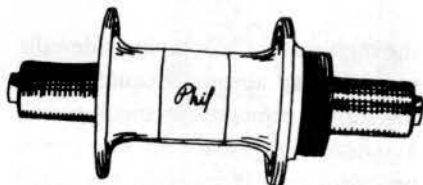
Double eyelets, 20.5mm wide, 460g, and many smart riders—perennial megamiles, usually—who will ride no other road rim. Mavic says “for tires to 700x28,” and if that’s an actual 28mm, it means at least any 700x32, although we ride them with 35s, no problem. Silver only, 32H or 36H.



SUN CR18

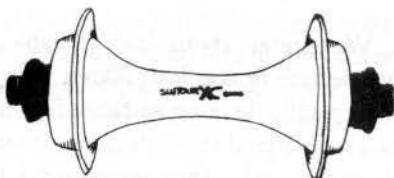
Wider by 2mm than the MA2, and better for fatter tires, trail riding and loaded touring. Tall, parallel sidewalls, and a triple box section add good weight and strength. It comes in both 26-inch and 700c, and is wide enough to carry tires up to 700x45 or 26 x 2.1. Silver, 36H or 40H.

## Hubs & Wheels



### PHIL WOOD HUBS

The Taj Mahal of hubs. Field-serviceable with two 5mm allens, but you'll probably not have to do it. Silver, fat-bodied, perfect. In 28, 32, 36, or 40 hole, any width, for any freewheel. Need help? Ask. Same price, front or rear. Special models available—track/fixed, tandem hubs, heavy duty touring models. They cost more. Ask.



### SUNTOUR XC9000 FRONT HUBS, 32-HOLE

SunTour's best in 1988, and as smooth and well sealed as a hub can be. Compared to Phil, the only drawback is serviceability. These require a special tool, and take more time. Still, most people get eight to ten years out of them, which works out to pretty cheap per year.



### WE SELL COMPLETE WHEELS, TOO

If you buy all the parts from us and can wait 3 weeks, we can deliver to you a set of wheels that'll see you through just about anything you throw at them. Rear wheels are 3x, fronts are 2x or 3x (depending on our mood; there's no functional difference). Butted DT spokes with brass nipples. Standard road wheels are on Mavic MA2 rims as long as we can get them. Twenty-six inch wheels are on Ritchey or Sun or Bontrager or some other good rim that meets our specs and is available at the time). Prices range from \$100 to \$175 per wheel, depending on the specifics. A pair of road wheels with Mavic MA2 or Sun CR18 Phil hubs costs \$350, and includes quick-releases. A typical \$100 wheel has a Ritchey Rock rim (we got some cheap, and they're good) on a SunTour sealed cartridge or Shimano Deore or XTR hub. We have more hubs and rims than we list here. Call for details. Freight on wheels is \$12, which is less than our cost, and may be less than local tax.

If you have your own hubs or rims, or just want to get some wheels that are different from the standard Rivendell wheelsets described above, have them built locally, or contact Joe Young. He's built many wheels for us, but has since moved and started his own wheel business.

Web: [www.youngwheels.com](http://www.youngwheels.com). Ph: (603) 749 4090. Joe has built wheels for world champions, the Ritchey team, Thomas F....he's been building for more than 25 years, has built thousands of wheels, and can ship direct to you. We're out of the loop (there's no commission deal going on here). —Grant.

# CATALOGUE & PRICE LIST

## **RIVENDELL'S HOURS & VISITING TIPS**

### **HOURS**

Monday through Friday approximately 9am to 6pm Pacific time. Although two days a week, usually Tuesday and Friday, we ride until 10:35.

We aren't open weekends, but if you're from out of town and want to stop by and see us, Grant, who lives closest, can usually arrange to meet you. Call first.

We'd like to be open Saturdays, but nobody here wants to work then. Maybe we'll find someone who can enter orders and take phone messages on Saturdays.

### **WHAT TO EXPECT**

We have around 1300 square feet, including small show room with a few frames, a small workshop, and an upstairs warehouse/work area, which is where we spend most of our time. It's convenient and affordable, but it's frumpy enough that we'd prefer you didn't take photos and put them on the web. There's no shopping area, not like you're used to. We want you to be comfortable, but we can't dote on you, and if you're off by yourself in one of the rooms for more than a couple hours (it happens), we start to get nervous. Still up for a visit? Good!

### **WILL CALLS**

If you're in the area and need to will call something, phone it in first so we can have it ready for you. And if you're in the area from out of town and just want to see the Works, call first and come on by. We always like to meet the people behind the names on the screen, and we're flattered that you'd want visit!

In any case, please understand that ninety-nine percent of our business is conducted by mail, and we get the phones when they ring. Also, you don't get to look over our shoulders as we punch in your order. It makes us make mistakes!

### **TO FIND US**

From the south or west: Take 680 N to the North Main exit. Set the odometer to zero. Turn right/north onto North Main for .33 miles, then left (at Cruchon's restaurant) onto Third Ave. for 0.1 mile. Just past the Ryder truck rental place, turn left into the Walnut Creek Business Center. We're around the corner, facing Walnut Creek Printing, and next to Flathead Jack. Look for the brown door by the brown fence, and the 1561-B sign. The B stands for brown.

From the north: Take 680 S to the Oak Park exit. Left onto Main for about half a mile, the right onto Third for a tenth of a mile, then left into the Walnut Creek Business Center. Turn right, look for Flathead, hands off his car, and we're next to him.

## Looking For Longsleeve Seersuckers


 he guy I know who rides the most rides almost exclusively in a long-sleeved oxford cloth shirt. My Pal Jeff rides in a long-sleeved cotton work shirt, and half the time I do, too. There's no rebellion going on here. There's just no great advantage to cycling-specific torso-wear. If you want the pockets that a cycling jersey offers, and you like the look and fit of a clinger, go for it. Otherwise, it just doesn't matter, in which case any shirt in your wardrobe will do fine.

Don't let scientists and techies scare you off cotton. It gets sweaty and stays wet, which means you leave it at home during your multi-day, self-supported, sub-zero snowshoe races. For one-to-three-hour fairweather rides in known climes, cotton works great. Add a thin wool undershirt, and it's even better. Long-sleeve seersucker would be perfect. Seersucker is a hot-weather fabric, because it's crinkliness keeps it off your skin. But since it's a hot-weather fabric, nobody makes a long sleever. If you find one, tell me, please.

I much prefer light weight long sleeves in hot weather. What you lose in the wind not being able to blow directly on you, you gain in shade.

Cycling shorts make more of a difference than cycling tops. Most of the time I wear wool Kuchariks. They're so comfortable, I often wear them for a morning ride, and keep them on the rest of the day.

One of the best things to happen to cycling in the past few years is the proliferation of baggy cycling shorts. My

own version is a pair of baggy swim trunks, but I'm going to get some real ones, made of cotton, and maybe next spring we'll carry them. They won't replace my Kucharik woolies, but I'll ride them at least a third of the time, provided they work at least as well as my swim trunks, and I think they will.

Wear wool jerseys next to your skin. Don't be afraid! Start off with a clean body, leave a little pine tar soap in your armpits from the shower, and you'll get seven good rides in a wool jersey between washings. The best way to wash Kucharik's wool (which is Superwash without the label): Ivory soap flakes, cold water, hang dry. The Nova Scotia woolies are 10 percent nylon, and I wash them with the normal load of clothes, and hang dry.

First-cut lambs wool is the softest, because the hair is tapered. Once cut, the wool is never tapered again. Scratchiness is the end-fibers poking you, which happens when the fibers are too short to lay down. Virgin wool is softer than recycled wool, because it's longer, and some wools are naturally softer than others, just like people hair. The wool undershirts we have may be the best thing in the whole catalogue (frames excepted!).

SmartWool cycling sox are as close to perfect as cycling sox get. I crashed in a pair two years ago and tore a half-dollar sized hole in the ankle. I've washed them forty times since (I have more than one pair), the hole hasn't grown, and there are no other holes. They're cushy but not hot, and they work just as well off the bike.

*—Grant*

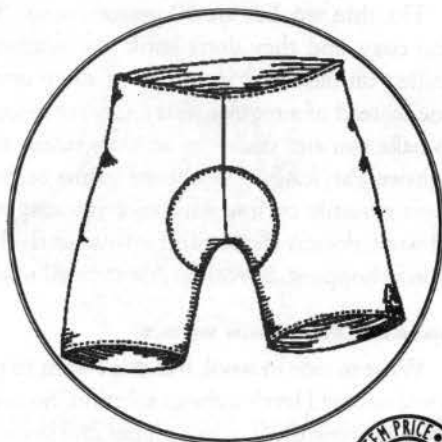
# CATALOGUE & PRICE LIST

## WOOL SHORTS (KUCHARIK)

Kucharik has been making cycling clothing since 1934, and these are the best wool shorts we've ridden. They still ride up like the wool shorts of old, but not as much, and most importantly, they don't ride down or give you a ring around the thigh, or that "too bad I have to pour myself into a spandex suit to enjoy the sport I love" feeling. You won't wear plastic after wearing these. They not HOT!

Superwash wool with a fake chamois. They fit better after the first washing. These don't last as long as thick synthetic shorts. In time, the fabric tears at the edge of the chamois. The tears don't seem to grow.

S: to 29w; M to 33w; L: to 36w; XL: 37-40.



## KUCHARIK SHORT SLEEVED JERSEYS!

Made to our specification by Kucharik. Different from the standard Kuchariks. These are grey with blue cuffs and collar (sometimes a red collar), with a 7-inch zipper, non-elasticated hem. Cut fuller than most jerseys. Despite being SuperWash wool, they shrink almost two sizes if you wash and dry them warm. If you wash cold and air dry, they'll shrink a size.

S 34-36; M 36-38; L 40-42;

XL 42-44; XXL 45-46; 50: 50



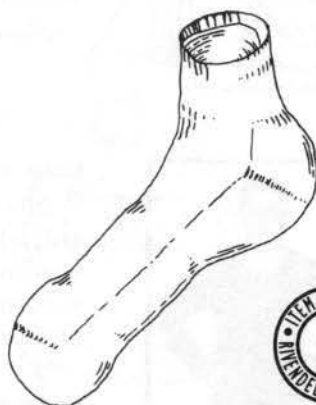
## SMART WOOL (BRAND) SOCKS

Eighty percent Superwash wool with 20 percent nylon. The bottoms are thicker than the tops, the toes are tough, they don't shrink, they wear forever. Three years, at least.

Med (M 4.5 to 8; W 6 to 9.5)

L (M 8.5-11.5; W 10 to 12)

XL (M 12-15; W 13.5-16.5)



# RIVENDELL BICYCLE WORKS

## NON CYCLING-SPECIFIC WOOLIES THAT WORK GREAT FOR CYCLING

The thin woolies are 90 percent wool, 10 percent nylon, but feel like 96/4. Soft and cozy, and they don't stink like synthetics. If you wear plastic jerseys and get chilled on descents, wear one of these underneath. On warm days, you can wear one instead of a regular jersey. On hot afternoon rides when you don't want the sun to bake you and you don't want to freeze at sunset, wear the sleeveless one under a lightweight, long-sleeve cotton t-shirt or button-down. These thin woolies are the most versatile cycling garments you can own. The heavier grey long-sleeve top is all wool, doesn't shrink, and washes in the machine. Great for cold weather cycling, wood chopping, anything. All are well made in Nova Scotia, and very nice.

### SHORT SLEEVE THIN WOOLY

Want to ride in wool, but don't want to pop for a real jersey? Here's a cheap solution. So comfortable and versatile. Lacks a zipper and pockets, but for \$24, who cares? Equally good general wear, too. *Non-members*, \$26.



### SLEEVELESS THIN WOOLIES

Wear this under a cotton shirt or any jersey. You won't overheat on the climb, and it'll keep off the chill off when on a cool descent.

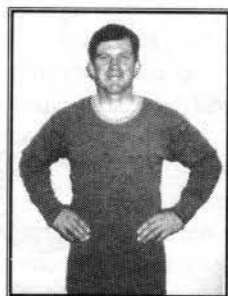
*Non-members*, \$18.



### LONG SLEEVE THIN WOOLY

Ideal on cooler days, but works well up to 90-degrees, too, since it's so thin. We wear them alone or under other layers; like under the scratchy grey job on the right. Good pajama top, too.

*Non-members*, \$33.



### LONG SLEEVE GREY WOOL SWEATER

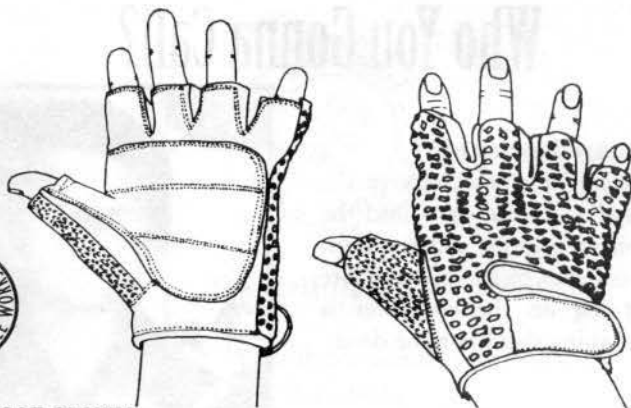
All wool, ribbed, cut long, and ideal for casual wear and cold rides. Exceptional deal, and exceptionally scratchy, for wool. If you wear it next to your skin you'll think it's 10 percent wire. Over another shirt, it's fantastic.



*Pal Jeff, ever arms akimbo, braves the wirey wooly without an undershirt*

# CATALOGUE & PRICE LIST

ITEM PRICE • \$14  
WINDMILL BICYCLE



## ACME GOAT GLOVES

Most cycling gloves look like they were designed by superheroes for superheroes. These are made to our spec, and just the opposite. Simple, Pakistani-made cotton crochet-backed gloves with goatskin palms and terry-cloth thumb.

S (for small palms) ; M (for medium palms); L (large palms) XL (larger palms yet)

## WINTER WOOL GLOVES

With fingers or fingerless (shown). These are 85 percent wool, zero percent cotton, with some nylon for strength. The palms have rubbery dots which soon smear off, but no matter, they still grip well. Cozy the instant you put them on—unlike neopreners—and also unlike neopreners, you can take your hand out mid ride (to pee or whatever) and the glove doesn't feel all cold and wet when you stick your hand back in. The full-fingered ones are good down to about 32°. Your hardware store may have them cheaper than we do. Ours does! I don't know how, but they do.

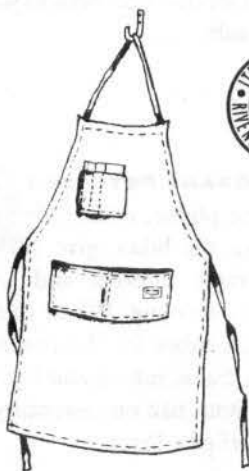
ITEM PRICE • \$12  
WINDMILL BICYCLE



## BIG SMITH SHOP APRON

Big Smith has been making work clothes since 1916, and it's doubtful this apron has changed since then. You pull on the waist cords to adjust the neck loop, then wrap the ends around your back and tie it off in front. Two lower pockets hold stuff, and the upper one holds pencils and allens. It's sewn at the top only, so you don't lose things when you lean over. Blue denim or brown duck. Specify, but be flexible?

ITEM PRICE • \$15  
WINDMILL BICYCLE



## Who You Gonna Call?

### ALLEN ESCOBAR

I answer calls and questions, receive the parts orders and enter the parts into the inventory; process returns, enter orders, help Joe pick and ship, clean up, make sure the shipment log on the computer is updated, do anything that has to be done.



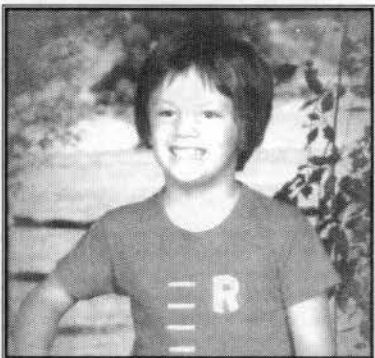
### PETER KELLEY

I'm the General Manager, so I stick my nose into everything. I make sure the orders get entered and shipped and we bring in more money than we spend. We spend it fast, so we're always walking a tightrope. I purchase roughly half of the inventory and make sure Grant doesn't spend all our money buying the other half. I also make sure the computers keep running.



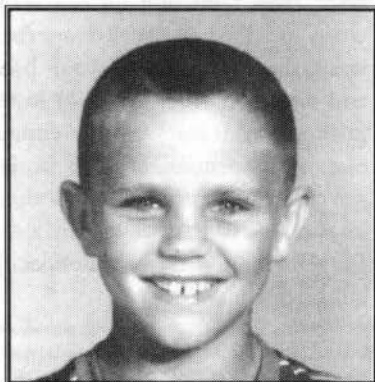
### JOE BAUDER

I do 95 percent of the shipping and answer 15 percent of the calls. International/APO shipments have to go to the post office, and I do that on my bike. I also install Heron headsets, take the voicemail messages, and if we don't get back to you pronto, it's my fault.



### GRANT PETERSEN

I answer the phone, enter orders, make a mess, design the bikes, give advice, keep the refrigerator stocked, and write the Reader and catalogue. When you order a frame, I pick tubes for the frames. I also manage the frame tubing and lug inventory. I order about half our inventory and try to sneak stuff past Peter.





## **Contributors**

### **Parts illustrations**

Pal Jeff Thomas

Allen Escobar, who also drew the fitting pictures

Spencer Chan

Kim Young

Daniel Rebour

and Andrew Denman, who also drew the goose.

Apologies for any omissions.

### **Cover**

John Segal

### **The Good Photos**

(of frames, and such)

Bob Schenker

### **The Bad Photos**

(of parts)

Grant Petersen, who also wrote it

### **Design and Layout**

Meghan Mahler, Elf 26 Design





Rivendell BICYCLE WORKS  
1561-B Third Avenue  
WALNUT CREEK, CA 94596

Bulk Rate  
US POSTAGE  
PAID  
WALNUT CREEK  
CALIFORNIA  
PERMIT #816

FOUR DOLLARS