



No. 6
Spring-Summer 2000



Policies & Practices

GUARANTEE

We sell only things we use ourselves and know to be good, and we've tried to be accurate and thorough with the descriptions. That's so you know as much as possible before you buy.

RETURNS

If it has a hole in it or a missing piece, or the color isn't what you thought it was, or it looks better in the catalogue than it does in real life, or you lose your job between the time you ordered it and the time you got it, or for any reason you want to return something, fill out the return form included in each order. You pay the return postage (job or no). You have six months to return it for a real-money refund; and up to a year for credit.

Allow 10 days for exchanges. It's all explained on the return form.

FAIR PRICING

We price things as affordably as we can and still stay in business. We don't give bikes away to Famous people, or pay for "product placement" on popular television shows, so you can rest assured your purchases are not subsidizing folks who can well afford just about anything. Most of what we sell is unique or at least hard to find in your local shop and in the bigger mail order catalogues, and there are two reasons for that. One, we don't consider ourselves competitors to your local shop, and Two, the big companies (Performance just bought Nashbar, by the way) are able to out-price us on certain day-to-day bicycle commodities, such as the latest Shimano parts. So we don't carry them! The unique products we bring you are exceptional values, and you'll realize that as they provide you year after year satisfaction.

MONEY-GIVING

Our sole charity is the Bicycle Inter-Community Action and Salvage (BICAS). Former Bridgestone covergirl and good friend Kim Young teaches bike mechanics and functional bicycle industrial sculpture and art to local, at-risk boys and girls. They sell the refurbished bikes cheap to locals, or in central America. Besides that, BICAS also makes bike racks, garbage receptacles, picture frames, and lamps. BICAS is a good cause, and we give them about \$1,000 a year.



About Rivendell Bicycle Works

WE'RE A SIX-YEAR-OLD BIKE MAKER AND MAIL-ORDER PLACE for bike riders who prefer traditional, classical bicycles and parts and accessories to today's ever-changing, high-tech fare. When you hear "classical" and "traditional" here, don't think of ancient highwheelers, '50s ballooners, English Bobby bikes, or '60s French touring bikes. Those are fine sub-sets of the bicycle world, but they're not our deal. We just like to ride bikes, and are more influenced by the road, touring, and sport-touring bikes of the '70s to mid '80s.

Then, the cycling powers in Japan and Europe were mature, had not yet been corrupted by power, and were not yet influenced by the need to radically change technology every couple of years in order to increase sales in a flat market. Innovation wasn't forced. There was variety and healthy competition, and the best of the new designs were refinements of already excellent ones. We took it for granted at the time, but have come to appreciate it now.

We offer gear for cyclists who can't relate to the aggressive, thrill-seeking and/or body-shaping approach that passes as normal today, and we don't try to appeal to the rambunctious, speed-before-all crowd. It isn't *us versus them*, or *retro versus techno*, or *old versus new*. It isn't niche marketing in the tactical sense, either. The gear we sell is the same gear we prefer, and ride, every day. It is well made, and much of it is the best in the world.

Starting this year, we're listing the country of origin of everything we sell. You'll figure out the codes next to each item. Many catalogues just say "imported," and leave you to wonder—Switzerland or Viet Nam? We haven't yet sourced anything from a foreign country just to take advantage of its cheap labor.

Besides being well made, it is also simple gear, because a bike at its best is reliable, strong, light weight, and...simple. It is practical gear, in that it fulfills a fundamental cycling (not just psychological) need. And it is proven—much of what we offer was born before we were, and even new items borrow heavily from materials and designs from the past. But when something comes along and it's new and better, we don't hold its newness against it.

We think the best bicycles are simple to operate, maintain, and understand. They aren't maximally automated point-and-pedal bikes that absolve you of any responsibility in making a successful gear shift, and devalue any skills you already have. (Not that there's anything wrong with that. For some people, that type of bicycle may be the best choice.) But just as a point-and-shoot camera sacrifices any hope of your learning how light, shutter speed, and aperture interact, the modern indexed-only bike does much the same to you as a cyclist. That's why we like bicycles that allow your input—*manual* bicycles. Compared to the typical point-and-pedal bike, a *manual* bicycle is easier to service, less likely to need service, and many cyclists find them more fun and satisfying to ride. And (more to do with when and how they were designed than their manualness), they tend to be prettier. Less severe, softer looking.

We also sell leather saddles, wool clothing, waxed cotton saddlebags and panniers, standard pedals, clips and straps, assorted curved handlebars, chains and freewheels, forged aluminum cranks, sidepull and cantilever brakes, friction shifters, and cotton handlebar tape. As technology goes, we don't consider it outdated, but refined, and in some cases, perfected. We have all you need to build and equip your bike, but there's no gratuitous high-tech, and our selection is narrow because every item earned its spot by being the best, the best value, or the last of its kind available. And, if we sell it, we also use it, know its quirks, believe in it completely, and can tell you anything you want or need to know about it. Ask away!

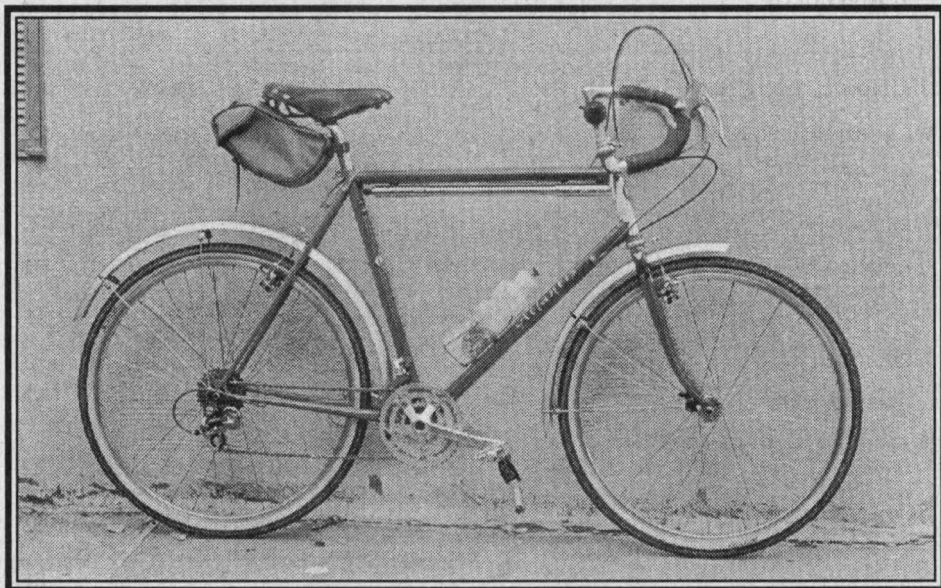
In this catalogue, when we talk about design, craftsmanship, style, and the direction bikes are headed, it sounds intense, as though we're mad at something. We're not, actually, but it's hard to convey our feelings without some frustration seeping out. We realize that the bicycle in 2015 will be largely plastic and electronic, and designed to excite non-cyclists, and be replaced every two years, and just for the record, we'd like to say that although we don't see that as progress, there are dozens of things worse in the world. But Rivendell's purpose isn't to hop onto the trends or aid them. Our purpose is to find, procure, create, and provide the best that bikes and cycling offer from the past and present, and to ensure a lugged, steel, wool and cotton future.

—Grant, Joe, Allen, Jerome, Robert, and Mary

Table of Contents

JOIN RIVENDELL?	4
RIVENDELL BICYCLE FRAMES	6
POSITION IS EVERYTHING	18
FRAME ORDER FORM	22
BAGGAGE	23
RACKS AND MOUNTS	30
HANDLEBARS	32
HANDLEBAR EXTRAS	38
STEMS	40
SADDLES & ACCESSORIES	44
SEAT POSTS	47
GEAR SHIFTING & SHIFTERS	48
FRONT DERAILLEURS	54
REAR DERAILLEURS	55
CHAINRINGS & GEARING	57
CHAINS	59
CRANKS	60
FREEWHEELS	61
BOTTOM BRACKETS	62
PEDALS, CLIPS, & STRAPS	64
SHOES	67
BRAKES	68
HUBS & WHEELS	72
RIMS	74
TIRES & TUBES	75
TOOLS	78
LUBES, LIQUIDS & POLISH	80
SAFETY STUFF	82
CLOTHING	84
RIVENDELL BRAND	88
SOAPS	89
PRINTED MATTER	90
MEET THE STAFF	90
RIVENDOLLARS	92
RIVENDELL HOURS, VISITING TIPS & POLICIES	93
MERCHANDISE ORDER FORM	94
GEAR CHART, 700 C WHEEL	96

The Atlantis, Our New One



THE ATLANTIS BY RIVENDELL

Our new Atlantis frame is an all-purpose, all-surface, all-season, all-weather bicycle, with 95 percent of the quality and attention to detail of a custom Rivendell of the same design, 100 percent of its versatility, at half the cost. It is the best value we've seen anywhere. The lugged steel frame is built with a custom mix of tubing from England, Italy, the U.S., and Japan, using our own lugs and fork crown.

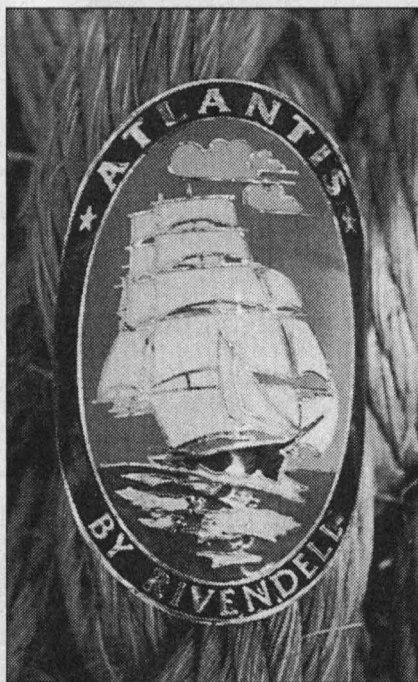
For loaded touring, nothing beats the Atlantis. It has every necessary touring braze-on, enough strength to carry the heaviest loads on or off-road, clearance for the fattest tires for expedition touring, and plenty of room for fenders.

For commuting, the Atlantis is ideal. It is quick, so you can dodge car doors and sprint across intersections when necessary; and it fits racks and full fenders with ease, so you can carry your gear and ride it all year around.

For road riding, just put light road wheels on it, and you've got a good road, century or brevet bike.

The Atlantis has *excellent* road manners..

For trail riding, the Atlantis is pure, simple, and functional. It has more than enough clearance to accommodate the fat, knobby tires, and a steering geometry that feels correct right off the bat.



The Atlantis is our design, brazed in Japan by Toyo, a 10-person custom bicycle frame shop that has been in business for 30 years, and specializes in high-end, finely made frames. They're painted by Uemura, Japan's top painter, and another small shop. With creamy greyish blue-green paint and our signature offset creamy head tube and lug window cut-outs, the Atlantis looks striking and classic.

It even has a head badge, which the photo here doesn't do justice to. You should see the colors!

Continues on page 95

*Additional Atlantis Information
can be found on page 17.*

Knowledge. Entertainment. Savings.

All for Zero Dollars, Once You Do The Math.

You start out by paying \$15, and you get:

1. Our quarterly newsletter.

It's called the *Rivendell Reader*. A typical issue is 40 pages long, and contains stories, articles, and interviews that you absolutely, positively will not read in any other cycling publication.

2. Member prices on everything in this catalogue. Rivendell members generally pay \$5 less than non-members pay on everything we offer.

3. Fifteen dollars off your first order, if you order at the same time you join. So, you recoup it right off, and still get the Rivendell Reader and member prices.

To take us up on it, use the membership/order form on the next page. Mail it in with your check or credit card payment, and—as you can see by the form—we'll take \$15 off your order.

If you're already a member, you may extend your membership by a year and get the same deal.

This Offer is Good For Fax or Mail Orders only.

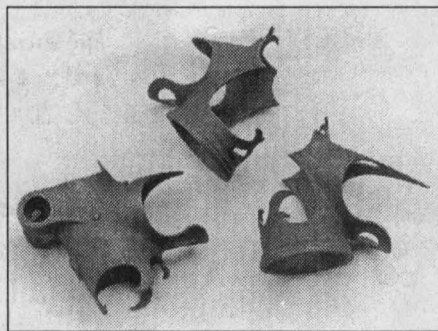
To encourage fax orders, we now have a toll-free fax line.

It is:

Fax: 1 (877) COW-LUGS



+



CATALOGUE & PRICE LIST

Become a Rivendell Member or Extend Your Membership

O-kay. Sounds Fine. Here's my form (One-time offer)

Name _____

Member # (on the label, if a you're already a member. If you're new, write NEW) _____

Mailing address _____

City _____ St _____ Zip _____

Ship to, if different _____

City _____ St _____ Zip _____

Day Ph () _____ Fax () _____

E-Mail _____

QTY	ITEM #	DESCRIPTION	PRICE	TOTAL
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
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Minus \$15 for signing up or renewing - \$15.00
 Local tax (if we ship to California) _____
 Shipping/Handling (\$7 U.S. \$15 foreign) _____
 Sub-total _____
GRAND TOTAL _____

PAYMENT

Check
 MasterCard/Visa #expires _____
 Print Name on Card: _____

Rivendell Bicycle Works
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 ph (925) 933-7304 • fax (925) 933-7305 or 1 (877) 269-5847



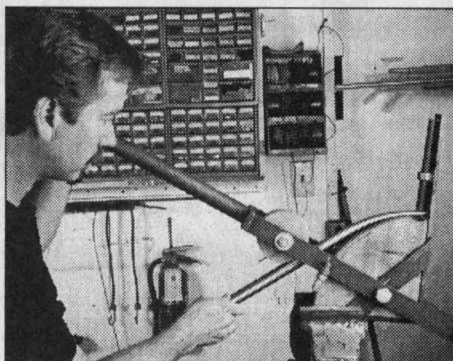
Traditional Methods. Superior Results

FOR THE PAST 6 YEARS lugged steel bicycle frames have been getting increasingly scarce, victims of manufacturing economics and a shortage of good brazers. Now lugged steel frames are almost as rare as steel typewriters, and new cyclists don't give them a second thought.

What a change from just 19 years ago! And all the years before. Back then, Reynolds and Columbus steel tubing was the material of choice, and lugs were a given on all but the cheapest frames. Joining one tube directly to another by melting them both (TIG-welding) was regarded as a cheap way to build a frame, and bike shops wouldn't sell them.

The first TIG-welded frame to make it into a bike shop was the Stumpjumper. More TIG-welded frames followed, and over the past 15 years, tig welding has proven itself to be a reliable way to join tubes, and has totally taken over. TIG works.

Now it's 2000, and even the most revered names from Europe and many in the United States—makers who built their reputation on lugged steel—are offering frames that fly in the face of the style that won them that reputation. It used to mean something to say "I have a Masi" or "My bike's a DeRosa" (or Cinelli, or Tomassini). These days that doesn't even identify the material. Forks crowns have disappeared, fork blades are straight, steel frames get aluminum forks, and tube dimensions are overmanipulated. Many expensive frames take as long to paint as to build. The bike show in Milano shows "traditional marque" frames made with the latest high tech methods and materials, painted to look like jungle animals, and retired racers put their names on frames unlike anything they ever actually rode. In most of the hallowed frame shops in Italy, the founders have burned out, sold out, or undergone a late-life crisis. A business that once had conviction, passion, and an opinion is now controlled by new blood and ideas that kow-tow to market trends. It cheapens the name and makes you wonder if they'd have sold the farm 25 years ago, had the opportunity arisen.



Joe bending a fork blade over a custom-made maple block

People look at Rivendells, and dub them "retro," as though the label explains the frame. They aren't "retro." Retro is style for nostalgia's sake, like cork-topped metal water bottles, wooden rims, beehive hairdos, and Cinelli pedals. There's nothing wrong with that in a style context, but we make bikes for riders. The details of a Rivendell can be explained by the benefits.

Our lugs, for example, hog a lot of attention, because lugs are rare these days, and ours are fancy. But the fanciness came after the important details were in place—the spoons in the stressed areas to eliminate stress risers, the

extensions that allow you to get the handlebars into a higher, more comfortable zone without resorting to extreme measures, the reinforced rims to prevent ovalizing the head tubes. Smart came before fancy.

A Rivendell custom frame and fork, painted and prepped

(all threads cleaned and the head tube and bottom bracket shell squared) takes a year or so to get, and, costs \$1,750 to \$1,800, depending on the model. The frame weighs 4.25 to 5.5 pounds, and the fork, 1.25 to 2 pounds. It costs \$1,200 to \$1,600 for the parts, and the complete bicycle weighs 19 to 25 pounds.

You can go to a local bike shop tomorrow and walk out with a bike that weighs less, shifts and brakes faster, and costs half as much. That's why those bikes outsell Rivendells 3,000 to 1. But if your bike is more to you than an exercise tool, and you like practical, refined design, tradition, craftsmanship, and the idea of riding the best bicycle it is humanly possible to make—one that plows through trends and looks better with each passing fad—then a Rivendell, Atlantis, or Heron frame is a good start, and a bargain, too.

The following pages tell you why.

Craftsmanship and Growing Markets

In any marketplace, technology always, ultimately, defeats craftsmanship. Technology may not slay craftsmanship completely, but given a toehold, it flips it off the main road and into the ditches and alleys, out of sight and mind. It happened with tools, watches, musical instruments, clothing, cameras, and just about everything except hockey pucks. But in the category of sporting equipment, few things have been so affected by technology as has been the bicycle.

It seems to be part of a natural and inevitable evolution. When an industry is young, the market for its products multiplies fast, and manufacturers pop up on every street corner. There's a huge variety, with quality and prices to suit everyone's

needs. But eventually the market grows mature, sales flatten out, and the number of suppliers shrinks, as the financially healthy ones eat up or kill off the poor, weak ones. Some good products cease to exist. Some lesser ones thrive.

In time, a few manufacturers serve a huge market, and that's when manufacturing economics start to weigh heavily on new designs.

And, with sales flat (not growing), high volume manufacturers have to find ways to appeal to more people. They've got to get non-photographers taking snapshots, and non-nerds tapping away on computers. And non-cyclists cycling.

This is fine, but to convert non-users into users means appealing to the lowest common denominator, the three main ones being (1) low price; (2) the appearance of high tech or machismo, and (3) the shortest possible learning curve. If you

combine those with low manufacturing costs and a promotional campaign that plays off inexperience and insecurity, it's easy to sell large quantities of anything to innocent, eager-beaver customers.

The best-selling items in almost any field fit this pattern. Winners beget copycats, and as the competition for market share and profits increases, the materials, methods, and values of the past become endangered. If they continue to exist, they're often repackaged and re-marketed to the same customers as "retro" and

presented in a patronizing way that doesn't threaten the status quo. It doesn't matter that often the original is better. The best made is never the best seller.



Curt files the edge of a non-essential seat stay bridge reinforcement.

Eventually the market is comprised mainly of

customers who have never been exposed to the original culture and its values, and actually may associate anything made by hand or with natural materials as being charming in an old-fashioned sense, but technically inferior (wear your buffalo plaid wool while you're raking the leaves on a crisp fall morning, but take your PolarTech Mark IV to the mountains). It comes from being raised in an age of change and innovation, and believing ads.

When technology is new, most changes are improvements, so people tend to equate newer as better all the time. They're often blind to the fact that the bicycle has evolved and been refined for 130 years—and therefore is more highly evolved than the computer.

In the world of huge companies and modern manufacturing, there are tremendous pressures to simultaneously hit certain "price points" and increase profits. Since highly skilled human labor is such

a huge part of the cost of anything made in developed countries, manufacturers generally redesign goods so as not to require it. If there's no avoiding human labor (bicycle assembly, clothing, and most things that require material handling and assembly), most profit-driven companies have the work done in countries where labor is cheap. Cheap labor can be highly skilled, is often more consistent than what an individual craftsman, making one thing start to finish at a time, might turn out. The fine, even stitching on a Chinese-made Sierra Designs backpacking tent or a North Face sleeping bag attests to that! But the very best of anything requires the care of a craftsman who is more concerned with the result, than with the time it takes to make the day's quota.

Technology and craftsmanship don't have to be at odds with one another, but sometimes, on a solitary purchase, we have to have pick one over the other. It's not inconsistent to use a computer and wear a hand-knit wool sweater, or to pay your bills online yet ride a handbuilt bicycle. You can equip that bicycle with electronic shifting, or stick with friction down tube shifters. You can believe the world is round and still prefer wool to synthetics, and yet ride with a cell phone.

Here's a suggestion: Use cutting edge technology to finish tedious, repetitive jobs fast. Then, when it comes to your playthings, get something you can warm up to and grow old with.

“The frame is everything you said it would be. The detail and craftsmanship are truly special. The bike's striking appearance draws compliments from all knowledgeable riders who see it. I read your comments about the ride characteristics and what to expect, and while it wasn't that I didn't believe you, I just wasn't sure I would be able to discern such subtle features. I was wrong! But best of all is the fit - no more stiff necks and shoulders after 3 hours on the bike. This is a bike that will encourage me to ride more.”

Sincerely, Art M. — Atlanta

BIKES BUILT TO RECYCLE VERSUS BIKES BUILT TO RIDE

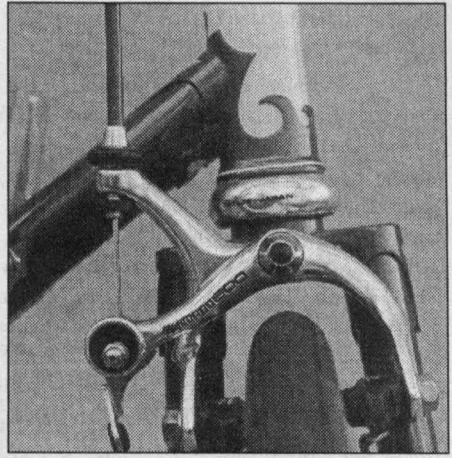
Pro racers may ride faster and more miles than you, but they spread those miles over several frames, and they don't weigh as much as you do, and they ride a frame for a season, and then get new ones. We heard one story of a racer getting 14 frames per season, every season, and a new one before every particularly bumpy-road race. True, a racer rides 20,000 miles in a season. But if you ride 4,000 miles a year, that's still only 5 years worth; and you may weigh more than a typical 152 lb racer does, and may not be quite as smooth on the bike. So during the next decade or score, you will stress a frame as much or more than a racer does, simply because you weigh more and will ride it longer, with a jerkier style. You need a better bike than a bike-rotating pro does.

We realize you expect your frame to last for the rest of your life, so we're extra careful when we design your frame, pick the tubes, and choose the builder. If your frame is a Rivendell, Atlantis, or Heron, you can trust it to last, probably for the rest of your life.

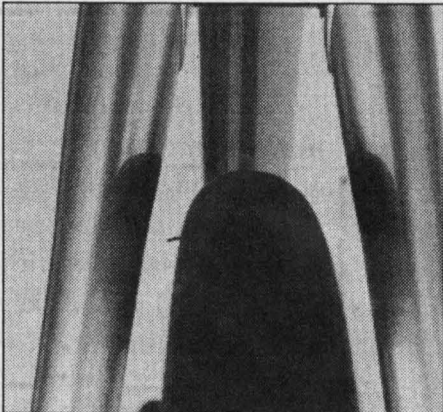
Design Aspects of Rivendell, Atlantis, and Heron Frames; and Good Things To Look For In Any Frame

CLEARANCE—FOR VERSATILITY

During the past eight-or-so years, road bikes have devolved into one-trick ponies, at home only on smooth, dry asphalt, while carrying minimal provisions. They're okay for cyclists with cell phones and sag wagons, but not for the solo, unsupported rider who might break a spoke and get a wobbly wheel during a long ride. But the odd thing is, the features that make a bike more versatile, more able to handle the real world, don't slow you down at all. Quite the contrary! Good clearance lets you ride a wobbly wheel that won't pass through a frame with insufficient clearance.



OUR ROAD FRAME WITH A 700x32. THERE'S ROOM FOR FENDERS, AND WITHOUT FENDERS, IT FITS UP TO A 700x35.



AN AVOCET 700x32 PASSES BETWEEN OUR ROAD FRAME'S CHAINSTAYS WITH ROOM TO SPARE. IF YOU BREAK A SPOKE, IT WILL STILL CLEAR.

Road bike versatility is largely a matter of **TIRE CLEARANCE**—the amount of air between your tires and chainstays, and under the brakes or brake bridge.

BETWEEN THE CHAINSTAYS

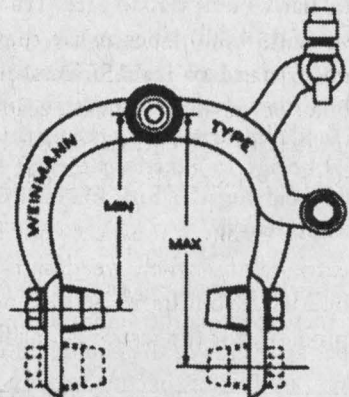
Many road frames are so cramped here that the largest tire you can fit in them is a 700x25—and if you break a spoke or bend your rear wheel (something that's more likely on a hard, skinny tire), the tire will rub on the chainstay every time the wobbly part passes by. You could rub a hole right through a carbon fiber chainstay.

2. UNDER THE BRAKES

Clearance here allows you to ride fatter tires and mount full, real fenders, not just the short clip-ons that look bad and work worse. If you order a Rivendell-designed frame, you'll get the clearance you'll need to mount fenders and ride larger tires. You won't need a special "rain bike," because it is an all-weather bike.

WHAT YOU SHOULD KNOW ABOUT BRAKE REACH

It is the distance from the center of the mounting bolt to the center of the brake pad when the brake is at the top of the slot and the bottom of the slot. Sidepull brakes can be divided into two categories: short reach and standard reach. Short reach brakes have minimum and maxi-



CATALOGUE & PRICE LIST

mum reaches of about 39mm and 49mm respectively; standard reach brakes are 47 to 57mm.

Through the '80s, good sidepulls were made in both short reach and standard reach. Standard reach brakes were designed for year-round, all-purpose riding, with a variety of tires, which is why they were standard. Short reach brakes were for smooth-course criterium racing, with skinny tires. If you had short reach brakes with minimal clearance, it was a sign that you were a criterium specialist, or wanted to look like one.

Short reach brakes have no practical advantage over standard reach brakes. They've taken over largely because fashion is powerful, and the people who were in a position to keep standard reach standard, didn't do it.

For a frame to fit both short reach brakes and fenders or fat tires, the fork length and position of the rear brake bridge have to be within a millimeter of the bottom of the slot when the brake shoes are contacting the rim. Most makers use a production-friendly mid-slot spec, which tolerates inconsistent blade lengths and bridge heights.

We'll build your Rivendell for either short- or standard-reach brakes, as you wish. Either way, we maximize the tire and fender clearance by brazing the rear brake bridge in exactly the right spot, and by cutting the fork blades exactly the right length.

DUAL PIVOT BRAKES AND CLEARANCE

On these brakes, the underside of the caliper arms crowds the fender. Shimano brakes are better in this regard than

Campy (some models of which totally rule out fenders), but no dual pivot offers the clearance of a typical, garden variety, single-pivot sidepull. The only dual-pivot with bountiful clearance is Shimano's RX100, in standard reach; and then, only if the brake pads are down near the bottom of the slots.

DURABILITY

During the past twenty-five years we've seen hundreds of top-quality, famous frames cracked, buckled, and broken. These frames weren't bad; they just lived

hard lives and finally died. On Rivendell frames, we guard against failures with a combination of more and stronger metal in the danger areas, and low-stress design, and careful material handling and brazing.

• A COMMON BREAK is at the right chainstay, behind the bottom bracket. To reduce stress here, we file off the right-side point of the bottom bracket shell, so it doesn't act like a can-opener. Our chainstays, like all the other tubes in our

frames, are made from the strongest, most fatigue-resistant steels. The walls vary in thickness from 0.8mm to 1.0mm, and we often use a heavier right chainstay. Perfect brazing ensures a strong, long-life joint.

• Sometimes the underside of a down tube buckles or cracks behind the headset. It won't buckle unless you run into something, which doesn't count; but even so, a thicker wall and a longer butt will fend off a blow that'll buckle a short-butted, thin-walled downtube. Cracks here are almost always caused by points in the wrong part of the lug. We've eliminated that possibility, with a large, stress-eliminating radius on the lower head lug.

"Awesome is the word to describe the comfort and stability of the ride. I enjoy it very much. I especially like the versatility of the extended head tube and the comfort it affords. In addition, the bike is beautiful. Stunning!"

Arthur L. — California

CATALOGUE & PRICE LIST

• **ANOTHER PLACE FRAMES BREAK** is at the base of the seat tube, just above the bottom bracket. So our lower seat tube butts vary from 0.8mm to 1.0mm, depending on your weight, your frame size, and how you ride. For bottom bracket shells, we use the best investment cast models, modify them as we see fit, then skillfully braze the joint.

• **THE MOST COMMON BREAK** is the right rear dropout. Most failures here are caused by riding broken or bent rear axles. The solution is a rear hub with an axle that won't bend or break, such as Phil or Bullseye. Or ride a cassette-style hub.

Dropouts vary a huge amount in design and materials. We use forged carbon steel dropouts from Tecnociclo in Italy. Special models made for us, with good, sound designs. They're tough.

MANY OF TODAY'S more expensive frames, are "transitional"—something to ride until the next technological or marketing breakthrough persuades you to get another. We design and build your Rivendell to be the last bike you'll ever need. We use the best materials, joint design, and joinery, because our goal is a frame that plain won't break.

POSITION, SIZING, FIT

These three things are more important than everything else combined.

Many rider/geometry chart readers get bogged down with top tube length. There is widespread misunderstanding about the top tube's influence on fit. Differences in seat tube angle, top tube slope (if any) and handlebar height are all at least as influential as the actual mea-

sured length of the top tube, and a 58cm top tube on one bike might feel shorter than a 56cm one on another. And, in the case of Rivendells, the listed top tube dimension is on a theoretical horizontal line to the center of the head tube. When you measure the actual top tube, it won't be as listed.

Confused? Well, don't worry about the top tube length. Tell us your overall height, pubic bone height both' in bare feet and in your cycling shoes, and your saddle height, (center of bottom bracket to top of saddle), and we'll fit you right.

"It rides unlike any other bicycle I've owned. It responds so quickly that sometimes I think its doing the thinking, and I'm merely the rider. I like everything about it. My eleven year-old son enjoys looking at it almost as much as I do"

Ken K. — Illinois

ALL FITTERS AND SCIENTISTIC SIZING SYSTEMS HAVE THEIR BIAS. OURS IS COMFORT. We want you to be more comfortable, right off the bat, than you've ever been on a bike before. It's easy to do.

Comfort comes from supporting weight on your butt, as opposed to your arms and hands, and not bending over too far. Our frames encourage this with shallow seat tube angles (which shift weight onto your butt) and taller head tubes (which take weight off your hands by allowing a higher handlebar). On midsized frames, we like the bars within a centimeter of the top of the saddle. On smaller frames, get it even; on 63cm and larger, within 4cm.

It starts with the proper frame size, and in the case of a Rivendell frame, that will probably be larger than the frame you're riding now. But our frames have several easy-to-overlook design details—the extended head tube, a slight upslope on the top tube, and a low bottom bracket—that make them fit differently than other frames of the same listed size.

In some cases, young and flexible and featherweight riders can ride smaller frames (with resulting lower bars) than can older and stiffer and heavier riders. We always talk the size over with you, and are happy to answer any of your questions about it. We know how our bikes fit—take advantage of that and let us help you pick your size!

RIDE QUALITY

How your bike feels depends on its geometry, size and set-up, your weight distribution, and what you're used to.

We like bikes that go around turns well, and are easy to control on rough surfaces and in wind. That sounds obvious, but many highly regarded bicycles fall short in these categories. All Rivendells and Herons lean over with light, consistent resistance. That means you can speed down a twisty mountain road, and make the transitions from leaning left to leaning right, safely, with predictability and control. Just as important but more demanding of the bike (and you) is the sharp, high speed turn that comes unexpectedly. In a situation such as this, no bike can overcome bad preparation or technique, but a bike that tilts easily will help you set up for the turn (by counter-steering) a little later than a bike that doesn't.

Some bikes oversteer—you start to lean and they go too far, so you collect your wits and get the bike back on course. Some bikes understeer, which is what you feel when you're leaning the bike and looking at your path, but the bike seems to plow ahead, not wanting to turn. Your bike should respond instantly, and be easy to control. Those qualities are not at odds; they're the result of good design.

FRAME WEIGHT

Our lightest 52cm road frames, built for 120lb riders, weigh 4lbs. 2 oz. A stout road frame for a big stout guy will weigh between 4.5 and 4.9lb. LongLows weigh about 3 ounces more than Roads, and All-Rounders, about 4 ounces more still.

THE UNIMPORTANCE OF FRAME WEIGHT

That bicycle frame weight is overemphasized becomes clear when you consider the difference between a superlight frame and a normal one is about a pound and an eighth, maybe a pound and a quarter. Calling one frame "30 percent lighter" than another frame sounds impressive until you realize that with 17.5lb of parts on it and a 170lb rider in the saddle, the difference is half to three-quarters of one percent. When you consider handling and longevity, a little more material in the places frames are known to fail begins to make sense.

APPEARANCE

We like bike frames to look low-key from a distance and interesting up close; and if you build it up right, it'll look like a gentle farm horse, as opposed to a sneering hood or a mean, futuristic robot. We also want Rivendell frames to be recognizable, even stripped of paint, and so we use our own, unmistakable lugs. Aesthetically, they split the difference between Italian Plain and English Fancy, and have French-style spoons on the undersides of the tubes. Both of our fork crowns are flat, investment cast, and look great. The frames have minimal decaling, and simple but nice paint jobs (with creamy head tubes and matching lug windows). You'll see more color pictures of them on the web at www.rivendellbicycles.com.

QUALITY

THE BEST WAY to determine a frame's quality is to check its alignment, and then have it analyzed by stress photronics, strain gauges, or finite element analysis. Next, test each joint to make sure the tube fails before the joint, and after that, cut the joints in half and look at the miters.

Then send the frame out for metallurgical analysis to determine the size, location, and severity of the molecular changes in the metal resulting from heat. If by then you're comfortable with the quality, ask the builder for another exactly like it—and this one you'll pay for.

CATALOGUE & PRICE LIST

WAY NUMBER TWO is to look into the bottom bracket shell to see if the tubes are mitered. But what then—do you assume the invisible joints are done the same way? Are you getting the tubing you think you're getting? Do you know if any of the tubes were reversed? It's not unheard of. What about material preparation? A dirty tube can't be brazed well, but you won't find out right away. In any case, meticulous pre-paint frame preparation, and a top paint job done in your current favorite color, can mask a lot.

QUALITY AND GUARANTEES

A manufacturer uses Lifetime Guarantees 1) As a sales tool when there's no other compelling reason to buy

a bike; 2) As ammo for a technically undereducated sales staff; 3) When pressured by dealers who are competing with other lines that offer them; and 4) When there's so much profit built into the pricing that it's a financial and marketing no-brainer.

We suspect that Rivendells are the best frames in the world, and we guarantee that we don't cut any corners in their design or manufacture, and we go to extreme lengths to prevent, avoid, and guard against the causes of frame failure. We know our frames inside out, and believe they are less likely to break than any other lightweight frame made today.

“Thank you very much for the bike. While I waited probably the longest anybody ever has waited for a bike, it was worth it! The craftsmanship and the ride quality of the bike are simply perfect. It blends comfort, performance and beauty in a way I have not experienced before. During Paris-Brest-Paris, I really appreciated a bike that runs straight unless I want it to turn. Then it turns with precision and ease. The bike was a joy on the long straights towards Paris after having been on the road 23 hours that day, while people on other bikes had a hard time riding in a straight line. On the other hand, descending on twisty country roads with rough surfaces, we passed numerous riders on the latest equipment, whose bikes didn't seem to turn and hold the road as well. I have ridden numerous nice bikes in many long-distance events, but never has it felt so easy. I attribute a large part of this to the bike. Raising the bars almost to the level of the seat, a difficult step for a racer, has made a huge difference. I use a longer stem now, so my position is as aerodynamic as before. Yet my shoulders, hands and back hurt much less even after 23 hours in the saddle and 350 miles on the road. It definitely is the way to go for all but track and criterium racers.”

Jan Heine

Rivendell Custom Bicycle Frames

A custom Rivendell bicycle frame takes more than 20 hours to build, and there are few builders in the country with the skill required to build them. It's difficult to say just how many, but we suspect the number is below ten. It might be twelve; in any case, it isn't many, and we're fortunate to have the few builders we do.

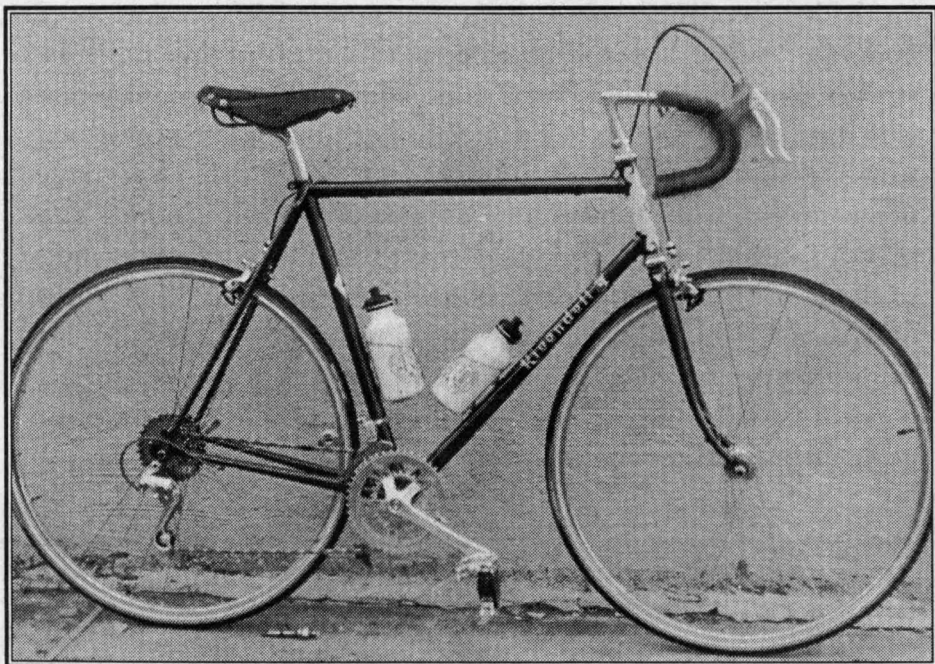
Rivendells are not easy frames to build, even if you're good, even if you're famous. We're particular about placements of bridges, bends in forks, and crispness of lug edges after brazing. None of these things affect how the bike rides, how long it lasts, or how it looks to an trained eye—but they are three of the many things that define a Rivendell, and there's no grey area.

The finest frames from the past were not made this well, and the materials they had to work with were not as good. If you remove the romance you may associate with those names and those times, and strip all those frames of their paint and decals and badges, you'll have a pile of really fine frames that still fall short. They were benchmarks for their era, but as time pass-

es, the bar gets higher. In 2000, our standards for a Rivendell are impractically high.

But, if you're looking for the frame of a lifetime, to ride for the rest of yours, a custom Rivendell is an obvious choice. There are some styles we don't build—tri bikes, recumbents, tandems, and folders, for example. Those are specialty bikes that are best left to speciality makers and those who care about them. But if you want a road bike, a day-tourist, a century or brevet bike, a loaded touring bike, a commuting bike, or an all-around bike that can handle any of the above, we can design it for the peculiarities of your body (if any), and deliver it within about a year, give or take a few months, depending on demand. A Rivendell is not the frame to order if you're in a hurry, or if you have no other bike to ride.

As of May, 2000, we have 154 bikes in line. We have two exclusive builders—Joe Starck and Curt Goodrich—and we are working with a few others (famous fellows who wish to remain anonymous) who have built us samples that met our standards. Don't ask who, and don't guess publicly!



A recent Rivendell road frame.

“I went with a cycling tour group, and we did over 900 miles through the Alps, with almost 100,000 feet of climbing, including the climbs from the ‘97, ‘98, and ‘99 Tours. The Rivendell was the perfect bike. It is a great bike to descend on. I had not the smallest mechanical problem; and you would be surprised at how much dinking around people have to do with their bikes when they have skinny tires, tight clearances, and shifters that don’t tolerate continued use without need for adjustment. I clearly had the prettiest and most reliable bike there. (Road Standard, 62cm)”

Eric Boysen — Colorado

A Rivendell custom has certain non-negotiable design, philosophical, and artistic details that make it a Rivendell.

The “custom” is our design for your body and riding. We vary tube angles and lengths, and make sure you’re on the right size. We consider your history with bikes, and the type of “feel” you’re after in your Rivendell. We know what questions to ask, and we’re good at interpreting fuzzy answers. Put yourself in our hands, and we’ll make sure you get the right frame. You don’t have to be an expert to order one!

Colors

Two greens, a blue, red, and silver. If you want something else, and it goes well with

our decals and is inoffensive to Allen, our style magistrate, we’ll try to accommodate you. There may be a slight upcharge.

When you get a custom Rivendell, you get the best, smartest, most practical design; the most pleasing aesthetics, the finest modern materials, the best traditional methods, and the most comfortable position and ride. A bicycle does not get any better than this.

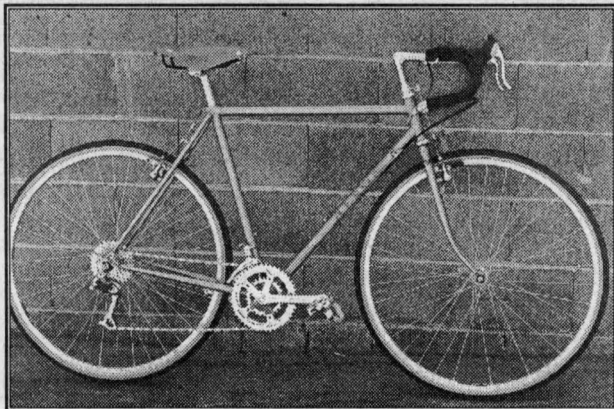
To order

Fill out the order form in this catalogue, or on our website (www.rivendellbicycles.com) or telephone (925) 933-7304. A \$300 deposit gets you a place in line, delivery is about a year, and we’ll update you often.



Rivendell Custom “All-Rounder” style, with Moustach handlebars.

Heron Road and Touring



A customer's Heron Touring.

Herons are Rivendell-designed, Waterford-built, budget-priced road and touring frames. They have 90 percent *plus* of the function of a Rivendell frame, but cost less than half as much. Consequently, they're a terrific value for anybody who wants a frame built with classic styling, with traditional materials and methods, and wants it a lot faster and cheaper than a Rivendell. Or, who just wants a second or third bike as a backup, or to equip for different conditions. Most cyclists own more than one bike, after all, and if you're going to do that, you might as well make them nice ones.

All Herons are built with Reynolds 531 and 525 (seat stays only) tubing, custom-designed for the frames by Waterford's Marc Muller. The Heron-specific lugs, fork crown, and bottom bracket shell are investment cast, and include nice details that give them an older, '60s look, but are far better made than any lugs, crowns, and shells of that era. The question we get most often is: How do Herons compare with a Rivendell? It's a fair question, but not really. If all you're after is a bike to ride that won't break, you can get a Chinese tig-welded frame that costs the importer \$20. It won't win you any dates, but it'll get you down the road, and you can have some wonderful times on it.

A Heron is a much classier frame than that, and if comparisons are in order, it's more appropriate to compare a Heron with a similarly priced road or touring frame. Most won't be lugged or steel; which means they'll be uglier and won't last as long, and if they ever break, they're either not repairable or not

worth repairing. There are some respectable imported lugged frames, notably from England, and we'd rather not step on the toes of any lugged kinfolk when talking up the Heron. It should suffice to say that 95 percent of design and clearance and geometry details we value in Rivendells, we also build into Herons, and few if any other brands—no matter how known the marque, or what country they're from—include these details. As a reminder, those details include:

- Low bottom bracket. For better control on twisty descents, and a nice, light tilt.
- Longer-than normal chainstays. These tend to isolate steering from the thrusting action of pedaling, making the bike feel smooth in its acceleration.
- Shallow seat tube angle. To put more weight on your butt, less on your hands. And to help prevent you from sliding forward as you pedal.
- Moderate head tube angle. A bike that's too steep up front is hard to control on rough ground, in the wind, or when you're tired. Heron head tubes are appropriate for the style of bike (road or touring), but not extreme.
- High, comfortable handlebars. The top tube slopes up 2-degrees, and there's a 5mm extension on the upper head lug. These features allow you to raise the handlebars into the comfort zone.

Hérons ride great—very much like Rivendells, and better than any non-Rivendell we've ridden.

There's a gap between the modern, fat-tubed tig-welded "high-tech" road bike and a Rivendell, and Herons fill it perfectly.

Atlantis²

BY RIVENDELL

ATLANTIS frames are our new, handbuilt, lugged steel all-rounder style frames that cost half of what a custom Rivendell All-Rounder-style frame costs. They're still our design, there are no compromises there. They ride and perform as well as Rivendell All-Rounders. They are just as suitable for anything from road riding, touring, to trail riding. The price difference is due to details that, for most people all the time and for all people most of the time...will never make a difference. There are no custom options, but every All-Rounder we've built under the Rivendell name has taught us what to include and where to put it. There's no color choice, but it's a nice color! The Atlantis is an amazing value, and true to the long-established tradition here, there's a wait for it. Not long, though.

1. How much do they cost?

Frame and fork with headset, \$950, including a Rivendell-like paint job, with cream head tube and lug window fill.

2. What sizes?

Six for now. We may add more later.
51-53-56cm (for 26-inch wheels)
58-61-64cm (for 700c wheels).

3. Who makes them?

Toyo, a small (6-10 person) specialty frame shop in Osaka, Japan. Toyo has made fine frames for 30 years, and currently makes most of Ritchey's frames.

4. Are they lugged?

Of course. We even developed unique Atlantis lugs, and they're magnificent—strong, precise, old-world and elegant; and they help create lifetime frame joints.

5. Color?

We tried to match Testors brand modeling paint, color Interior Blue Green (Modern Russian). It has the soft-clay quality of Bianchi's celeste, but is much more blue and a little more grey. Colors on the web.

6. Will it have a fine head badge?

We hope so. Ninety percent sure. Yes. See the picture on page 3.

7. Tubing?

A mix of Reynolds 725 heat-treated seam-

less CrMo, and some extra-nice Japanese tubing you've never heard of (but similar quality, of course). Possibly some True Temper as well.

9. Will the fork have a real crown?

Yes! Same as the Rivendell All-Rounders.

10. Rear-wheel spacing—130mm or 135mm? 135mm.

11. Complete bikes available?

Yes, we're in the middle of putting together a parts kit that will let us sell a complete bike kit—frame and all the parts you need—for prices ranging from \$1800 to \$2400. It will include Phil this, Brooks that, Nitto bars and stem. Solid, beautiful equipment.

12. What's an Atlantis good for?

Well, just about everything. It is a trail bike, a touring bike, long-distance winter road bike, a commuter, a road bike. The versatility comes by way of the great tire clearance, which lets you fit skinny or fat tires (up to 26 x 2.1 or 700x45), even with fenders; the geometry which makes it ride so well on a variety of surfaces; and the right selection of braze-ons, which make it easy to mount racks and fenders.

13. Where can I buy one?

Through us, direct, or through a handful of hand-picked shops scattered about the country. Shops that feel as we do about lugged steel bikes, and who have supported our efforts, at least emotionally, over the years. We're pleased to have hooked up with these special dealers, and you can expect the best and most from them. For a list, see our web page, an issue of the Reader, or call us.

14. How long is the wait?

Zero to 3 months—call and ask. We'll stock a few, our dealers will keep a few on hand, we'll get a shipment in every 8 to 10 weeks. Some of the frames will be spoken for, but the maximum wait should be about 3 months. A 3-month wait for a frame that'll likely last the rest of your life. Place an order with us (\$250 deposit), or with your dealer.



To order: Fax or mail us the form (page 22) in this catalogue, or call: (925) 933-7304.

A Good Fit for A Good Position

You wouldn't buy shoes that were too small, even for a quarter. But people spend thousand of dollars on too-small bikes, every day, and then tolerate them for years.

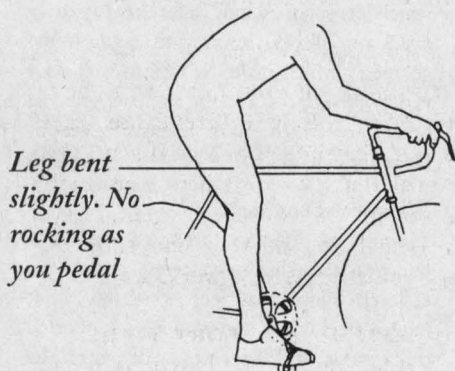
A too-small bike isn't as obvious as tight shoes. The guy in the shop raises the seat post so you get the proper leg extension, and the insidious effects of too-low handlebars don't reveal themselves on a test ride. All you feel is a light new bike, and you may even think, "This is how road bikes feel. I'll get used to it." Your body *will* adapt. But it'll never actually feel comfortable. You're better off with tight shoes—at least you won't wear them, and you're out only a quarter.

If you want to be comfortable, start with

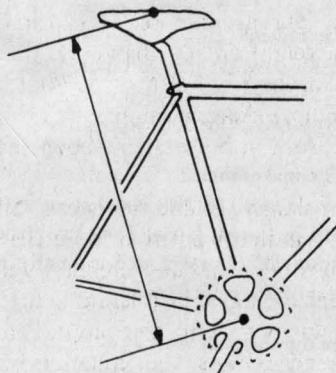
a good position. Get a bike that allows that position.

Sitting on your bike with your hands behind the brake levers, your hands should be light on the handlebars, like playing the piano. Your arms should be loose and wiggly. If the frame's too small, your bars will be too low. Your hands will carry weight, and send tension up your arms, to your neck and lower back. You'll hate your road bike.

This page and the next talk about position, and emphasize handlebar height, because high(er) bars do so much good. There are things you can do to raise the bars on a bike that's too small, but starting with a properly sized bike makes it happen a lot easier.



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. Both of those are bad things!



LEARN YOUR SADDLE HEIGHT!

When you order a frame here, the first measurements we ask for is your saddle height, measured as in the picture there, from the center of the bottom bracket (or crank) to the top of the saddle. Put the take right in line with the seat tube, and keep your eyeball level with the top of the saddle when you read the tape.

There's a relationship between saddle height and barefoot pubic bone height. If you're 5' 5" inches or shorter, it's almost always around 9 to 9.8cm. If you're between 5' 6" and 6' 1", it'll be 10 to 10.5cm. On taller riders, it may be as much as 11cm.

Raise Them Handlebars, Buster.

Get 'em up there, say, another fistfull or so.

Right now, they're way too low. Probably.

The current trend of getting a small frames and jacking up the seat posts is a recent blip that spread from mountain bikes to road bikes, and is reinforced in the media and in bicycle shops and in public as proper and normal. That doesn't make it good. It's not good. It's bad!

The problem with getting a bike that requires a giraffe seat post, is that you then need a giraffe stem. If you have a giraffe seat post and no giraffe stem, the bars will be too low. As a result, you lean over too far, so your back hurts and you strain your neck to see. You carry too much weight on your hands, so they get sore, maybe even damaged. Your arms stiffen up, making it impossible to absorb shock, so your body takes a bouncing.

Young skinny flexible riders can tolerate a low-handlebar position more than old fat stiff ones can, but there's a difference between being able to tolerate something and actually benefitting from it. Personal preference enters the equation somewhere, too, but don't rule out a higher bar position until you've tried it. It's hard not to like. In fact, it's darn near impossible not to like it.

LET'S SAY YOU HAVE A TWO year old bike that was exciting at first, but now that as the novelty is gone, you're faced with the reality that you graduated to a more expensive, better bike that isn't as comfortable. It happens all the time.

If you want to keep the bike, just get a stem that allows you to raise the handlebars.

TRY TO GET THE TOP OF THE BARS LEVEL WITH THE SADDLE. OR AT LEAST CLOSE. AND 1-2 CM ABOVE IT ISN'T BAD, EITHER.

If you have an Aheadset stem, it's harder but still do-able. You just have to buy a new stem with a different rise angle. That'll run you \$40 to \$80. If you have a normal stem, you just need one with a longer quill or a steeper angle, or both. We sell them, and your bike shop may have something that'll work, too.

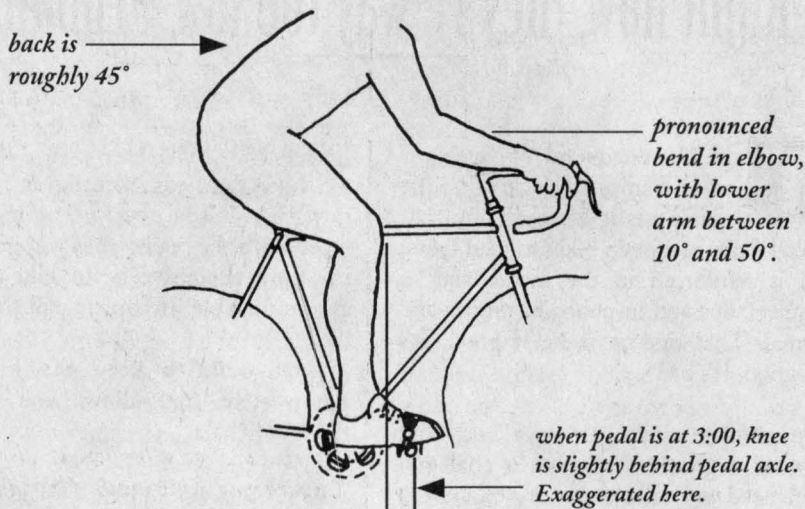
OTHER COMFORT TIPS:

- Slather Vaseline or Noxzema on the chamois in your cycling shorts.
- Wear gloves.
- Rotate drop bars up about 10-degrees.
- Change your hand position frequently.

“It's beauty is exceeded only by its comfort and function. Perhaps it's inappropriate to compare its comfort to such a sedentary state of repose, but the bike is as comfortable as a barcalounger. There is no body tension in any handlebar position, as I've experienced in the past. I can easily be on the hoods or in the drops without restricting my breathing, tensing my trunk, or putting too much weight forward onto my hands.

Jerry H. — California

A Good Position For Many Riders



What To Look For

This fellow here has a good, comfortable position. The 45-degree angle in his back means he's not too hunched over, so his lower back is less likely to ache the next day. Plus, it lets him see better, without straining his neck to lift up his head (thus saving his neck). The slight bend in his elbow suggests that his arms are relaxed, ready to soak up bumps without even a moment's notice. Although we'll never know for sure, it's a good bet that he could remove his hands from the bars, put them behind his back, and pretty much maintain the same upper body position, as opposed to flopping down forward. That's how it ought to be.

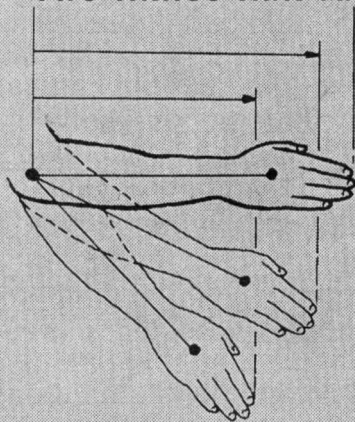
You can't see his saddle, but if you were to measure from the ground to the top of it, and then from the ground to the top of

the handlebar, you'd find very little difference. On smaller bikes, they should be the same height. On giant bikes for long-armed riders, the difference can be up to 4cm. If you look at this relationship on bikes shown in magazines, on racers' bikes, and even on your own, you'll see that it is probably greater than that.

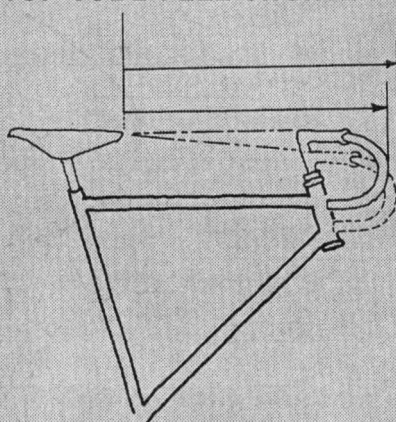
With drop bars, that's usually bad. Try to set the top of the bars close to the same height as your saddle (hard to do this on most bikes). The whole idea of drops in the first place was to give you this level-top position; then, when you want to get down lower, you go down onto the drops. It may sound like a broken record, but it's an important point worth repeating: If you get a sore back, neck, hands, or arms, raise them bars!

Don't Obsess on the Top Tube Length

TWO THINGS THAT MAKE ANY TOP TUBE FEEL SHORTER



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.

See how getting a shorter stem without raising the bars has a self-cancelling effect? And how, if you raise the bars, you may even need a longer stem? Also note: The smaller the frame and the steeper the seat tube angle, the longer the top tube feels. Don't rule out a bigger frame just because its top tube is longer than the one on your current bike

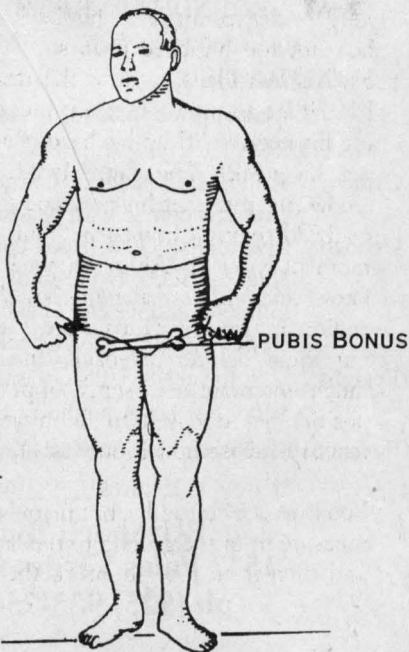
DETERMINING YOUR FRAME SIZE: THE PUBIS HEIGHT METHOD

Take off your shoes and stand on a hard floor. Hook a metal tape through a thin, hardcover book or a record album cover, and push up until you strike bone. Have a friend take the reading on the floor. Repeat three times, and write down the highest reading.

IF YOU'RE BETWEEN 5' 5" AND 6' 2" AND your knees, ankles, and feet work fine, your saddle height will be about 10cm less than your pubis height. If you're shorter, 9 to 10cm. If you're taller, it may be up to 11cm.

This method is 99 percent perfect. It doesn't address crank arm length or variations in pedals and shoe sole thicknesses, but set your saddle according to the rule here, and fine tune it only if necessary. If you use Look pedals or wear thick-soled shoes, you'll have to raise your saddle a bit.

Your saddle height is correct when your foot is level and your leg is bent just slightly at the bottom of the stroke. No rocking your hips.



CATALOGUE & PRICE LIST

Rivendell-Atlantis-Heron Frame Order Form

Date submitted: ___/___/___

Name _____
 Address _____ City _____ State _____ Zip _____
 Day Phone () _____ Fax () _____ email _____
 Age _____ Height _____ Weight _____

Pubic BONE height (see page 21) in bare feet _____ In cycling shoes _____

Saddle height on current bike (see page 15) : _____ cm (inches x 2.54).

Years riding as an adult _____ Current favorite bike (model, size, comments) _____

Type of riding you will do on this bike: _____ Approx. yearly miles: _____

Typical tire: _____ Largest tire: _____ % of time riding on largest tire: _____

What style handlebars will you ride? Drops ___ Moustache ___ Both? ___ Other? ___

If you'll ride with fenders, what's the largest tire you'll ride with them? _____

Rivendell frames only:

Do you have a preference in brake style (sidepull? cantilever?). _____

Do you have a preference in wheel size? (700c or 26"?) _____

Rivendell, Atlantis, and Heron frames:

Size (c-t): Rivendell's choice _____ No. Please build a _____

COLORS (CIRCLE)

Rivendell: (we'll send color chips when we get a deposit)

Atlantis: (one color only). It's bluish with a little green and grey. Cream head tube.

Heron: Blue or Silver.

PRICE AND DELIVERY

ROAD-STYLE CUSTOM.....\$1750 Delivery: call (925) 933-7304 for update.

ALL-ROUNDER CUSTOM.....\$1800 As above.

(Rivendell price includes anti-rusting, two water bottles, all bolts, T-shirt, and cap)

ATLANTIS\$950 Delivery: 1 to 3 months. Call for update.

(Atlantis price includes installed headset, all bolts, 2 bottles, and a cap)

HERON\$815 Delivery: 1 month.

Other: We'll install headsets and bottom brackets on any frame for a nominal charge.

(Atlantis comes with headset installed.)

Deposit: Rivendells, \$300. If you cancel after 60 days, we refund \$150.

Atlantis, \$200. No refunds, since we order the frame based on your deposit/commitment, and we can't cancel. But if you cancel, we'll offer you \$100 in Rivendell credit. In both cases: Check or credit card. Balance before shipping.

Freight: U.S. lower 48: UPS Ground, \$35 per frame, \$50 per complete bike. International, \$200. For faster methods, call.

Payment Enclosed: Visa or MasterCard #: _____

Expires ___/___/___ Your Signature: _____

**Rivendell Bicycle Works / Frame Dept.
 1547 Palos Verdes #403, Walnut Creek, CA 94596
 ph (925) 933-7304 or fax 1-877-COW-LUGS**

2 6 9 5 8 4 7

Other comments? Photocopy this and write on the back, or submit a separate page.

Bags Basics

Bags make bikes more useful, and the right bag even improves the look of a bike. We offer a variety of bags, from a simple 17-inch square of waxed cotton—which is a bag only when you roll it up like a burrito—to rear panniers big enough to carry a week's gear. All our baggage is simple in design, sturdy and well-made, and should last you 20 years.

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.

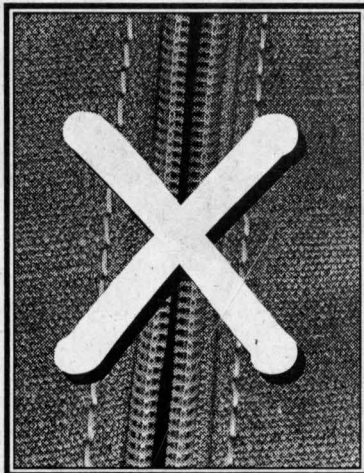
Another problem with nylon is that prolonged exposure to sunlight kills it. Rock climbers see 4,000-lb test nylon webbing, after prolonged exposure, weakened to the point where they can break it with their hands. At high altitude, continuous sun can turn a lightweight nylon tent into rice paper in sixty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

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 we've yet to see hemp with the fine, dense weave of a high-quality cotton duck.

Another weak point in packs is zippers, especially plastic or nylon ones, and especially coil zippers, and the smaller the coil and the more you use it and the more it's stressed, the sooner it'll go. 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. For light use, the amount most panniers are subject to, they're okay. But eschew them on principle, anyway!



For hard continuous use, and whenever security is more important than one-click convenience or instant access, we like stout cotton duck, thick leather straps, and real metal prong buckles—materials and technology that have stood up for

more than a century. They aren't as fast, but they're fast enough, and they won't fail under any circumstances.

Our most popular bag is the Banana Bag. Close behind, the Carradice saddlebags. We take luggage a little too seriously, and everything we offer is made to look good and last for 20+ years.

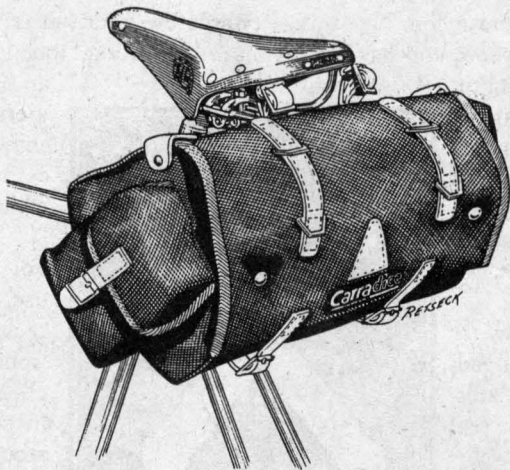
Everybody who works at Rivendell has a bag fetish. It's a job requirement. We collect them, use them, and love them—if they're good. We all hate the baddies.

—Grant

Carradice Cycle Bags, From England

Carradice bags are made in England with designs, fabrics, and methods that have proven reliable since 1932. The fabric is 14oz waxed cotton duck, with a slightly stodgy smell to it. 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. Old black Carradices fade to grey (or maybe it's just the ground-in dust).

Between 1929 and 1952, virtually every saddle in England wore a saddlebag, and Carradice was the brand of choice. They are the traditional style saddlebags, sometimes called "transverse," 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. The Nitto Uplift on page 29 is ideal.



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

Shown alongside modern packs made of laboratory-born fabrics and computer-designed buckles and features, a Carradice looks like a homemade pack for hauling coal. The fabric is starchy and black and stiff, and the thick, stiff leather is too pale. There's nothing distressed or acid-washed or pre-softened about Carradice bags, and they take a month of hard use before the prong fits in the hole right, and years before they start approaching photogenic.

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. There aren't many bicycle-type accessories you can actually grow old with, but this is one of them.

—Grant

COTTON BAGS?!—DON'T THEY GET SOAKED IN THE RAIN?

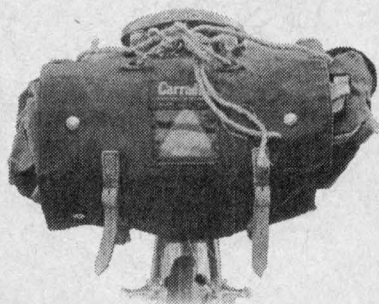
I've had a Nelson Longflap for 15 years, and used it tons, in all weather. It looks beat up and has faded to grey, but it still keeps out water. The Banana Bag is more water-resistant than waterproof, so you should spray

it with Scotchguard™ if you ride it for long hours in the rain. That shouldn't scare you off! Thick cotton is good, and the bags we offer are rugged, functional, good looking, and will last for years and years.

Three Big Carradice Saddle Bags...

CARRADICE NELSON LONGFLAP

The standard Carradice saddlebag, the all-time classic since 1932. Big enough for a large thermos bottle, mittens, rain cape, heavy wool shirt or sweater, lunch for four, and the normal emergency roadside repair stuff. D-rings on the top flap allow you to tie on extra stuff, and it's a Good Idea to bring along some thin rope to do it with. It requires at least twelve inches between your saddle loops and a bare tire, but if your bike has fenders or a rack, the bag can't rub on the tire, so you needn't concern yourself with exactly how much clearance there is.



ITEM# 20-010

MEMBER PRICE \$70
NON-MEMBER \$75

GBR

CARRADICE LOWSADDLE LONGFLAP

A hobbit-sized version of the Nelson Longflap, originally designed for small bikes with saddles closer to the tire. But it's not a small bag. Take it on any century ride, and you'll still have the biggest bag out there. People will still ask you *what's in that thing?* and *hey, do you have room for this?*, and you will. As a rule, it requires a minimum of ten and a half inches between the saddle loops and the top of the tire. Assuming you don't have fenders or a rack. If you do, you won't have to worry about the bag rubbing on the tire.



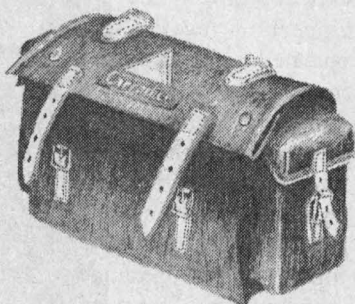
ITEM# 20-009

MEMBER PRICE \$70
NON-MEMBER \$75

GBR

CARRADICE CAMPER LONGFLAP

This is your bag if you need to need carry a lot, but for philosophical or financial or bike frame limitations or mechanical ineptitude reasons refuse to carry racks and panniers. It's styled exactly like longflaps Lowsaddle and Nelson, but is bigger everywhere. The side pockets are deep enough to swallow standard sized water bottles whole. As an experiment, we once fit thirteen Brooks B.17 saddles into one—that's how big it is. As with all the Carradice saddlebags, it's easy to rig up a shoulder strap from the D-rings or something. If you've got a Camper, things will fit, and anything that doesn't, you can lash onto the top of the flap. Always carry rope for that.

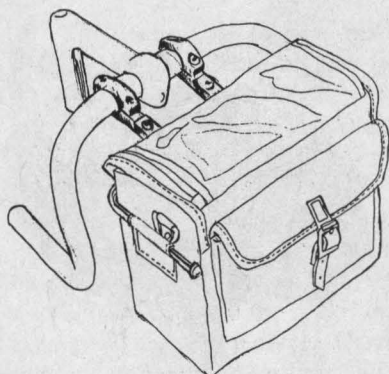


ITEM# 20-006

MEMBER PRICE \$75
NON-MEMBER \$80

GBR

...and a handlebar bag



CARRADICE BOXY BAG

This style, originally a French design, has been around for at least 51 years. Ours is made to our spec by Carradice. Lots of people say "Hey, handlebar bags mess up your steering!" to which we reply "Not if you don't overload them." This is a delightful bag to use, so convenient, ideal for small loads you want to get at en route, pardon the French. One outside pocket, three nylon ones inside, to separate sandwich from camera. A removable map case holds a map, your children's artwork, or anything else that's paper or flat. Requires the Nitto Boxy Bag support, which is sold separately on page 30.

GBR ITEM# 20-032
MEMBER PRICE \$60
NON-MEMBER \$65

Why Top Loading is Good

I've worn out at least ten zippers in my life, on otherwise "built to last a lifetime" bags. I gave up on No. 7 coils, then I gave up on No. 10 coils, and eventually I even wore out the big metal zipper on my L.L. Bean duffel bag—one of the brown ones that they're probably going to discontinue because they've made it for 60 years or so.

When I worked at REI years ago, we saw zippers come back ruined all the time. I've seen probably 200 broken coil zippers in my life, but never a broken metal buckle. Zippered compartments and plastic buckles aren't heinous; they just aren't as reliable as top-loading and metal buckles. Don't get the idea that when you get a top-loading bag, you're sacrificing conve-

nience. Top-loading bags just require a different packing method, and in some cases, are much more convenient.

The best way to organize your top-loader is with mesh or colored stuff sacks. Use one each for your cooking gear, first aid kit, dinner, spare clothing, dirty clothes, and so on, turning your single-compartment bag into a modular, multi-compartment one. If you have something big and gangly to carry, you don't have fixed compartments to frustrate you. You can overfill the compartment and still cram in more, because you don't have to close a zipper around them. You can pack up while wearing mittens, jam the stuff down there, and cinch up the straps with all your might. It will fit.

—Grant



Carradice Cycle Bags

CARRADICE SUPER C FRONT

Medium-sized panniers for tidy packers, or as supplements to the big rear panniers, or instead of big rear panniers, whenever you don't need to carry a whole lot.

A smart combination for overnight or credit card tours: These Super C front bags, a big Carradice saddlebag, and a Boxy Bag. If you can share the tent load with a partner, you ought to be able to go for 1 to 3 days with that combo. Priced per pair.

Same tough, waxed cotton as all the Carradice bags. 1,464 cubic inches per pair.

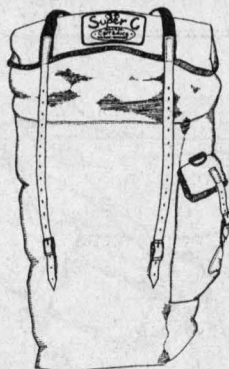


ITEM# 20-013
 MEMBER PRICE \$110
 NON-MEMBER \$115

GBR

CARRADICE SUPER C REAR

Huge to a fault, if that were possible, and in rear panniers, it isn't. It's not like you have to put 35 pounds in each one of them; sometimes you just need more space to carry a box of puffy cereal, or a heavy wool jacket that doesn't pack so well. A built-in coated nylon extension sleeve lets you overfill the main compartment and still protect your gear from the weather. What good would that be if the straps weren't cut extra long? None! One outside pocket holds a fuel bottle or water bottle. While your low-life, convenience-seeking cycling partners are cursing their zippers on cold mornings, you're already packed. Take off without 'em! Per pair.



ITEM# 20-014
 MEMBER PRICE \$135
 NON-MEMBER \$140

GBR

ANTLOAD-CARRADICE TENSION STRAP

Mike Cobb used to make these for us under the name Cobbworks. Then he sold the name Cobbworks and that whole business with the oyster bucket panniers, and started his new business as Antload. These are the same straps as the ones formerly known as Cobbworks; and as pannier straps go, they're the best we've seen, used, or heard of.

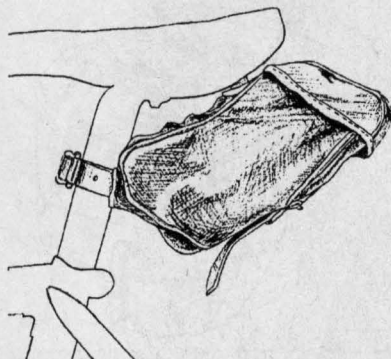
Made of thick black nylon until we find a source for military-spec cotton webbing. With a stainless steel hook, a sewn-in tension cord, and a tension-lock buckle. Priced per pair.

Imagine a strap

ITEM# 20-040
 MEMBER PRICE \$22
 NON-MEMBER \$27

USA

More Bags



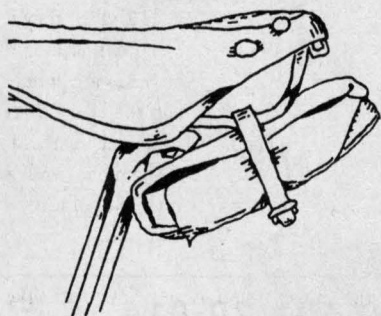
DULUTH BANANA BAG

This is our best-selling bag. It's perfect for fair-weather day rides. Big enough to hold a sandwich, keys, wallet, spare tube and patch kit, a few tools, and a spare jersey or wind-breaker; and you can on extra gear on top—a rain jacket or a wool jacket. Or instead of all that, you can fit about 5 medium bananas in it. Olive green or light grey cotton duck with fine leather trim and brass buckles. Made exclusively for us by Duluth Tent and Awning, makers of the famous Duluth Pack.

Deluxe details, quite the bargain.

USA ITEM# 20-041/OLIVE
MEMBER PRICE \$75
NON-MEMBER \$80

USA ITEM# 20-048/GREY
MEMBER PRICE \$75
NON-MEMBER \$80



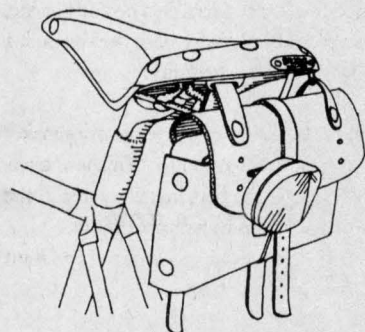
ACME TOOL AND TUBE TOTE

It's a 17" x 17" square of unhemmed Filson Tin cloth, the same 12 oz. waxed cotton that Filson has made its toughest pants and jackets out of for a hundred years or more; or a special marine duck, in a light greyish green. Whichever we have around or can most easily get. They're both stout! Lay it flat, and put your daily needs in one corner. Roll it a few times, fold in the side corners, then complete the roll and secure it to the saddle rails with a leather toe strap. If you stop to fix a flat, open it up and lay it down like a placemat. That way you won't lose anything under the leaves.

USA ITEM# 20-043
MEMBER PRICE \$3
NON-MEMBER \$8

ACME LEATHER SADDLEPOUCH

This is a nifty rock-solid little pouch made of thick pinkish leather that darkens with use, time, and oiling. It's held together with fat-head copper rivets, and the buckles are brass. Leather, copper, brass—what's not to like? Rub the leather dressing of your choice into this, warm it up with a hair dryer so it soaks in good, and you have a tough and totally waterproof bag for the rest of the year. Big enough to hold a wallet, keys, a few tools and a spare tube. Four holes on the outside let you tie on a rain cape or the Sunday paper, and a slit fits many red flasher lights.



USA ITEM# 20-028
MEMBER PRICE \$46
NON-MEMBER \$50

Nitto, the Metal Masters



Three Yoshikawas (front row and second from left in the rear). Mrs. Yoshikawa is holding a photo of the princess of Japan, who naturally rides a Nitto-equipped bike.

Nobody makes anything better than Nitto (say "neat-oh") makes anything Nitto makes. Handlebars, stems, seat posts, racks, bottle cages—if it can be forged, bent, fillet brazed or welded, Nitto does it, and they're the best in the world at whatever it is. The quality and consistency is so far beyond anything else we've seen or used that it's almost not even fair to compare them. Even in Japan, a country known (among those who are in a position to know) for its legendary quality, a mention of Nitto elicits instant reverence. Nitto is in a class by itself, looking down at the rest of the world with binoculars.

Nitto designs are simple and clever, with nothing extra and nothing lacking. The curves are beautiful, the joints are strong, and the surface finish on anything Nitto makes is jewel-like.

Nitto is a family-owned business in Tokyo, 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, rides one every day, and went on 6 tours last year alone. 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. They're selective about what they design themselves, and what they'll make as subcontractors for others. Unpacking a Nitto box is an 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 whack them hard with a cue ball-sized monkey's fist on the end of a two-foot tether, and it barely leaves a mark.

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 tried to pack handlebars 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.

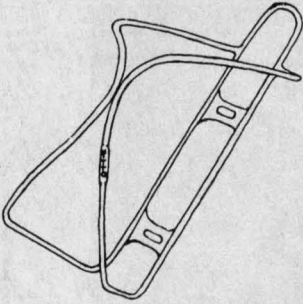
We've never seen any parts and accessories maker with Nitto's quality, attention to detail, and quality control. Nitto is the best manufacturer in the bicycle business; certainly, nobody's better.

—Grant

NITTO

CATALOGUE & PRICE LIST

Nitto

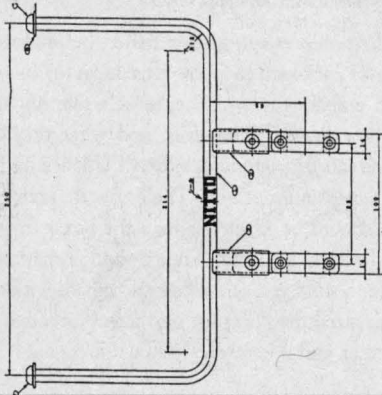


NITTO BOTTLE CAGE

This might be the prettiest thing Nitto makes, and we've yet to see anybody hold it in their hand without reaching for their wallet with the other. If a water bottle cage can be beyond words, this one is. The copies are already popping up. No respect!

Thirty dollars is a whopping lot for a bottle cage, but this one is fillet-brazed by hand, which makes that \$30 seem like a bargain. The perfect gift for cyclists who can't bring themselves to spend \$30 on a bottle cage. If you put one on your bike, and you'll want another. Right there's your warning. 53g.

JPN ITEM# 20-030
 MEMBER PRICE \$30
 NON-MEMBER \$35

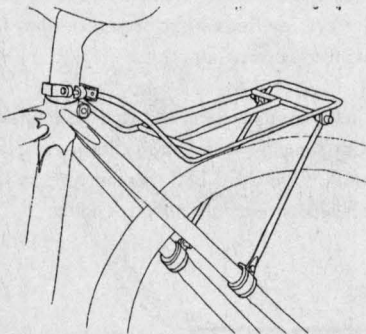


NITTO BOXY BAG RACK

Made especially for the Carradice Boxy Bag. It clamps onto drop bar sleeves between 25.4mm and 26.4mm diameter, and tightens with 4mm allens. We'll try really hard to keep the Boxies and these racks in stock at all times, but they're both non-standard items for their respective manufacturers, and made at opposite ends of the world, so at any given time, we may be out of one or the other.

It mounts to any drop bar, clamps securely with 4mm allen bolts, won't scratch even the smoothest Nitto handlebars, and never slips.

JPN ITEM# 20-031
 MEMBER PRICE \$46
 NON-MEMBER \$51



NITTO SADDLEBAG SUPPORT/MINI REAR RACK

This made-for-Rivendell rack allows you to carry a too big and/or poorly loaded saddlebag on a small bike, without it rubbing the tire. And, you can strap stuff on to it and carry more than will fit into a Banana bag, and about as much as will fit into a big Longflap. With just a little more creativity than your next door neighbor has, you can do overnights with this and a handlebar bag. Handy, light, and simple as pie to mount, as it attaches to the seat post and seat stays. It fits seat stays around 14mm to 16mm in diameter, and if yours are smaller, just build them up with tape.

JPN ITEM# 20-029
 MEMBER PRICE \$60
 NON-MEMBER \$65

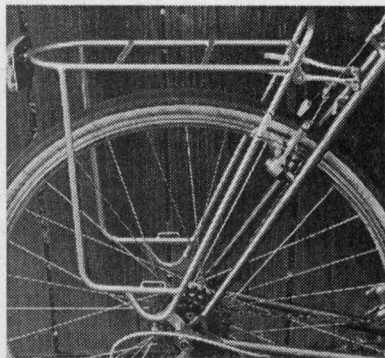
Nitto

NITTO REAR RACK

The best racks are tubular steel. It's stronger than aluminum, and if it does break, it's easier to get a guy in a turban to weld it up for you. The best designed rear racks have widely spaced supports (as opposed to V-shaped ones), which stabilize your bags and keep them from wobbling. These Nitto racks satisfy both those requirements, and are a soft, satiny silver, too, so they enhance the look of any nice bike.

Each rack comes with an assortment of seat stay connecting rods, and you use the ones that best fit your frame. It's easy. If you don't have brazed-on rack mounts, use the included clamps, which are sized for 16mm seat stays.

Two sizes: Medium, for frames up to 57cm; Large, for bigger. We generally have good stock of these, but if you have a major trip planned, call us 2 months before you leave. That way, if we're out, there may be time to get it in before you leave.



MEDIUM

ITEM# 20-022

MEMBER PRICE \$125

NON-MEMBER \$130

JPN

LARGE

ITEM# 20-021

MEMBER PRICE \$125

NON-MEMBER \$130

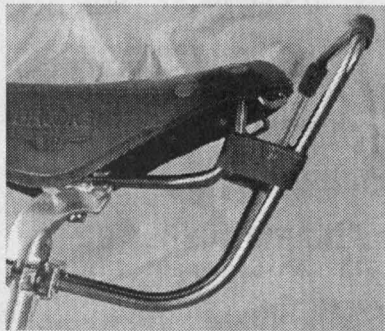
JPN

NITTO

NITTO SADDLEBAG UPLIFT

If your saddle's too low to carry a Carradice, or if you max out with a Lowsaddle Longflap but need the larger capacity of a Nelson or a Camper, or if you just want to carry the bag higher and more upright, this neat Nitto widget will let you do that. Over the years we've seen and used a dozen devices intended to do the same; this one is by far the best.

It's the only one that mounts to the seat post, and this is better, because seat rail configurations vary, making universal fits impossible. Comes with instructions, which explains the tape you see in the picture there. Tape is good!



ITEM# 20-036

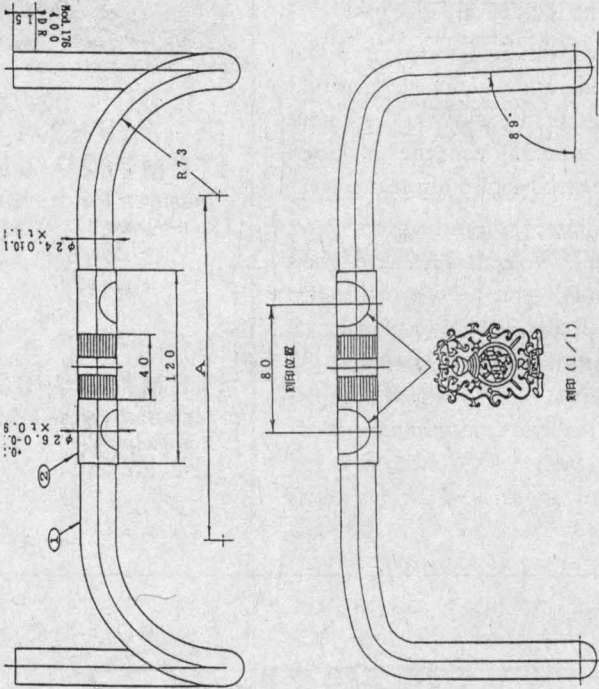
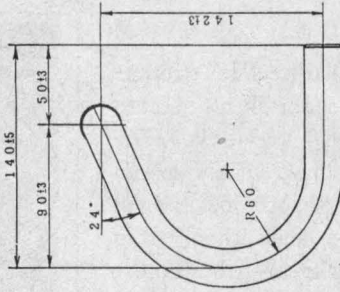
MEMBER PRICE \$32

NON-MEMBER \$37

JPN

CATALOGUE & PRICE LIST

Nitto



40 CM

JPN ITEM# 16-080
 MEMBER PRICE \$40
 NON-MEMBER \$45

42 CM

JPN ITEM# 16-081
 MEMBER PRICE \$40
 NON-MEMBER \$45

44 CM

JPN ITEM# 16-082
 MEMBER PRICE \$40
 NON-MEMBER \$45

46 CM

JPN ITEM# 16-097
 MEMBER PRICE \$50
 NON-MEMBER \$55

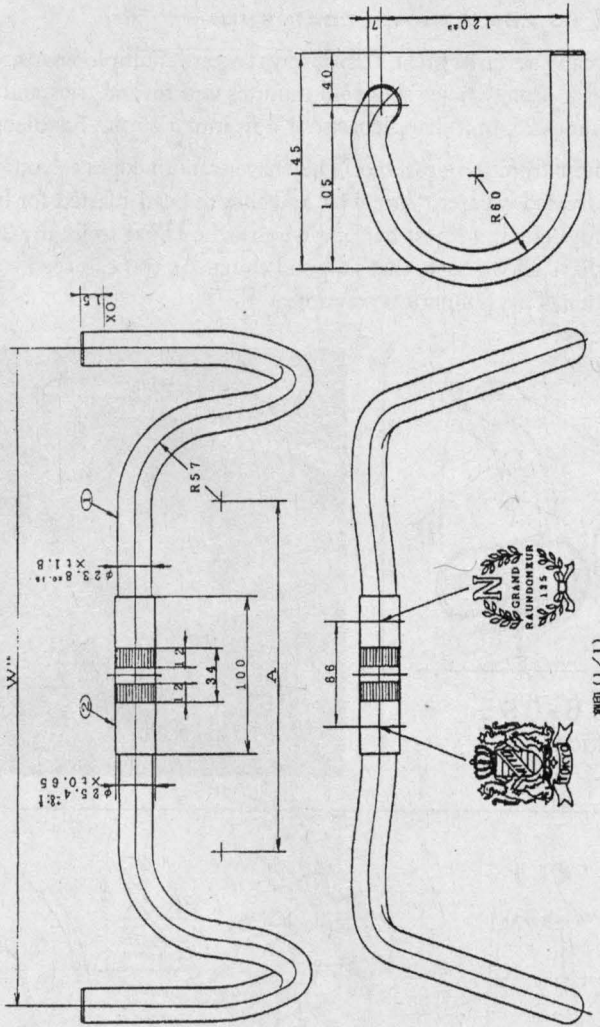
NITTO MODEL 176 (DREAM BAR)

Two years ago 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, and the relatively flat, hand-supporting upper curve of the DirtDrop. A wonderful all-round road drop that's hard not to love. The 46cm model is heat treated, so it costs more. Nitto says that width needs to be heat treated, and we go along.

Weight (42cm): 330g.

Sizes available: 40-42-44-46cm

Nitto



NITTO RANDONNEUR

Randonneur bars originated in France, and came as standard equipment on lots of the touring bikes sold here in the '70s. The upper portion is gently sway-backed, leading to little hand-supporting humps behind the brake levers. The drop is shallow, and the ends flare slightly. Ours are 42cm wide to the center of the curve, and 45cm wide at the ends. That's wider than the randonneur bars of old, and generally better for keeping a heavy, loaded bike under control. A nice bar, and some riders will ride no other. That's a little closed minded, but if you these, why switch?

Weight: 365g.

Sizes available: 45cm x 26 clamps

GROOVED BARS OR NOT?

Grooves result in a round grip with aero cabling, but there's no inherent advantage to that. There is a disadvantage to a groove bar used with standard (non-aero) cables, though, so we don't sell grooved handlebars.

ITEM# 16-036

MEMBER PRICE \$42
NON-MEMBER \$47

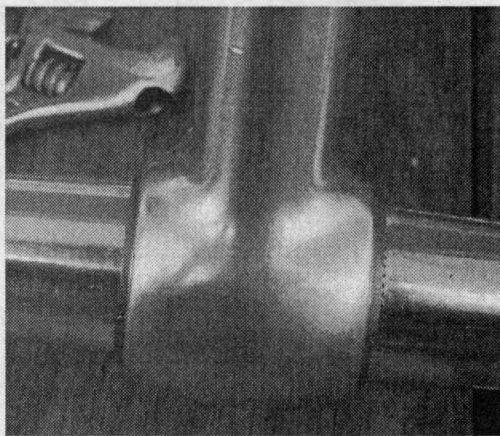
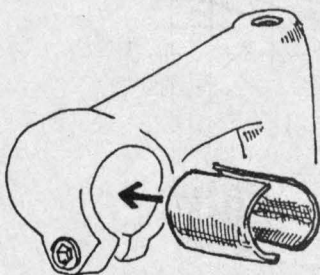
JPN

Nitto

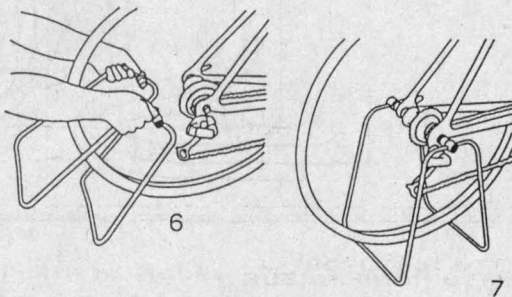
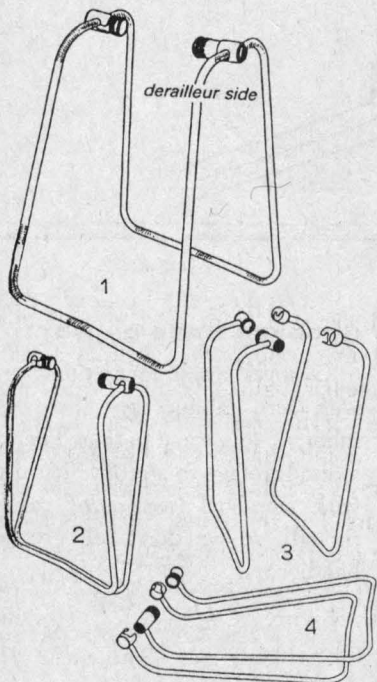
NITTO'S 25.4 TO 26MM HANDLEBAR SHIM

Beer and pop cans never fit great, they always require multiple wraps, you always get a sharp edge, and it usually takes about 40 minutes and several tries and either glue or Scotch tape to shim a 25.4mm handlebar so it'll fit into a 26mm handlebar clamp.

Nitto makes these from stainless steel. They have smooth edges so you won't cut yourself, they're heat treated we aren't sure why, and they're bead-blasted for better gription. They'll let you shim either a Priest bar or a Moustache H'bar to fit any 26mm stem we have, and since that's all we have, that's a good thing. As you can see by the photo, the shim in well hidden. This is a perfect solution.



JPN | ITEM# 16-095
 MEMBER PRICE \$6
 NON-MEMBER \$9



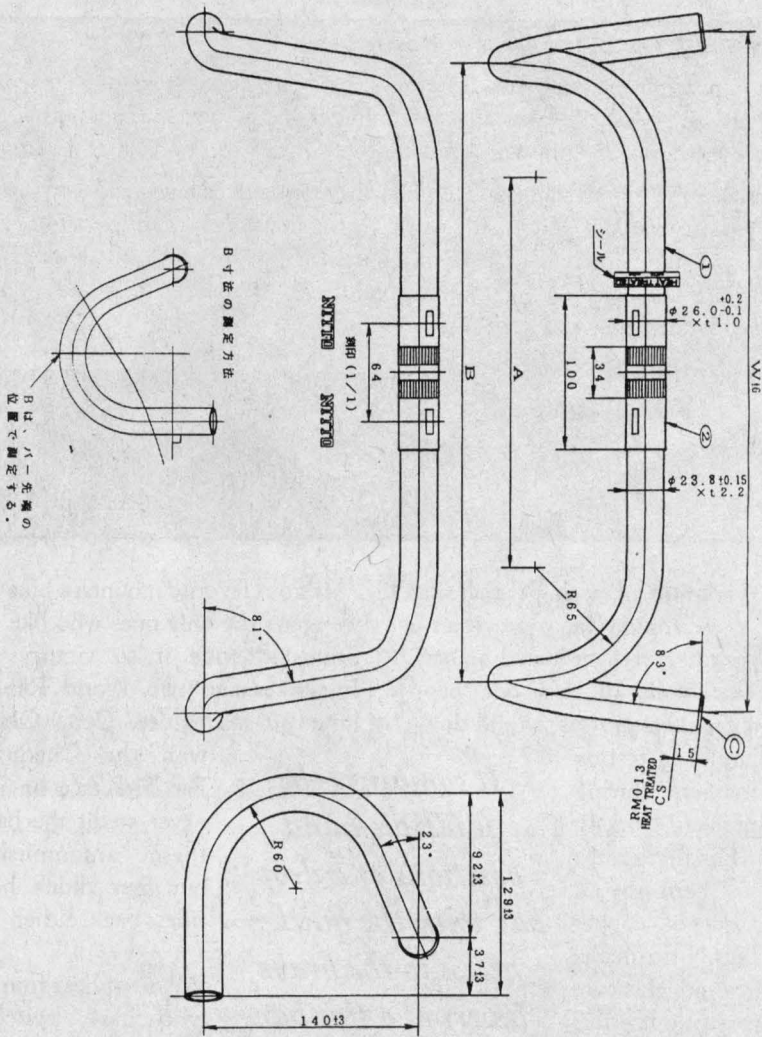
NITTO'S FOLDING BICYCLE STAND

A big stand is fine when you have the space and time, but for general maintenance and minor assemblies, this Nitto folding stand is the winner. It's small and gets smaller when you fold it, so you can take it with you to events, or work on your bike in the family room or kitchen. It lifts the rear wheel off the ground, so you can run through the gears and mess with the derailleurs. It hold the bike stably and vertically, so you can do things like shellac bar tap and not have the drips land on the fork blades. Simple, strong, light, pretty—just what you'd expect from Nitto.

JPN | ITEM# 20-042
 MEMBER PRICE \$45
 NON-MEMBER \$50

CATALOGUE & PRICE LIST

Nitto



NITTO DIRTDROP

A wide, strong bar, perfect for controlling a loaded bike or tandem. It's good for unloaded singles, too—it's Allen's favorite bar, and if you ride it once, you may never look at a 42cm wide bar again (so, be warned). Wide bars lighten steering by offering more leverage, and many of our customers, after riding this one, won't even go back to 44cm bars. A 7-degree flare increases wrist clearance, important for climbing hills in the drops. The flare is subtle, so the brake levers stay vertical.

Don't compare the width of this bar to other bars. This one flares 7-degrees, so the end-to-end winds up at a whopping 52cm. But the more important width is at the center of the curve, about where the brake levers go, and it's just 48cm wide there. Still wide enough, but not so wide that anybody you ride with will notice. But you'll feel the difference whenever you ride a bike with narrow bars. It'll be a relief to get back onto these.

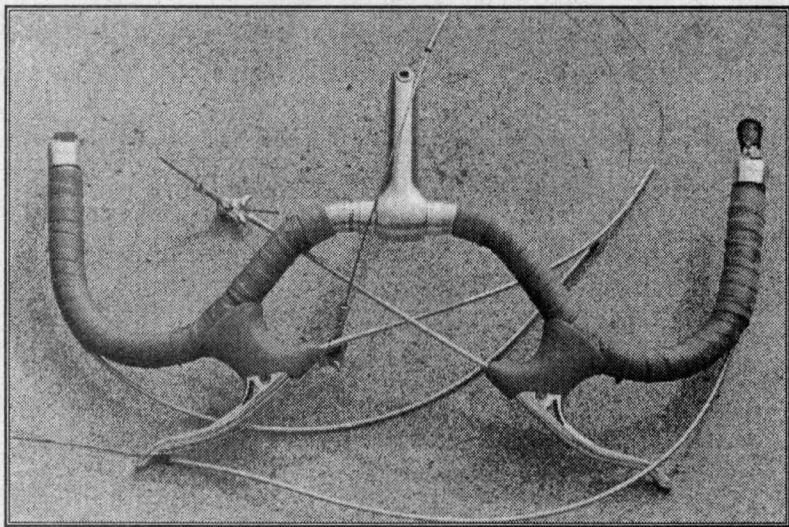
ITEM# 16-005

MEMBER PRICE \$50

NON-MEMBER \$55

JPN

The Moustache Handlebar



A variation of a shape that has been around for more than a century—longer than drop bars, even. The details of this one bend evolved during five prototypes and thousands of miles of testing and refinement during my commute to work in 1990-91. The first prototype was bent by a plumber out of copper tubing. This Nitto-made, copper-free model is perfect in every way. 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, 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 Iditabikes and two World Record 24-hour off-road rides. 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.

It combines the multiple hand positions of a drop bar with the quick—access to the brake levers of a flat bar. Ideal for city, mountain, or long distance touring.

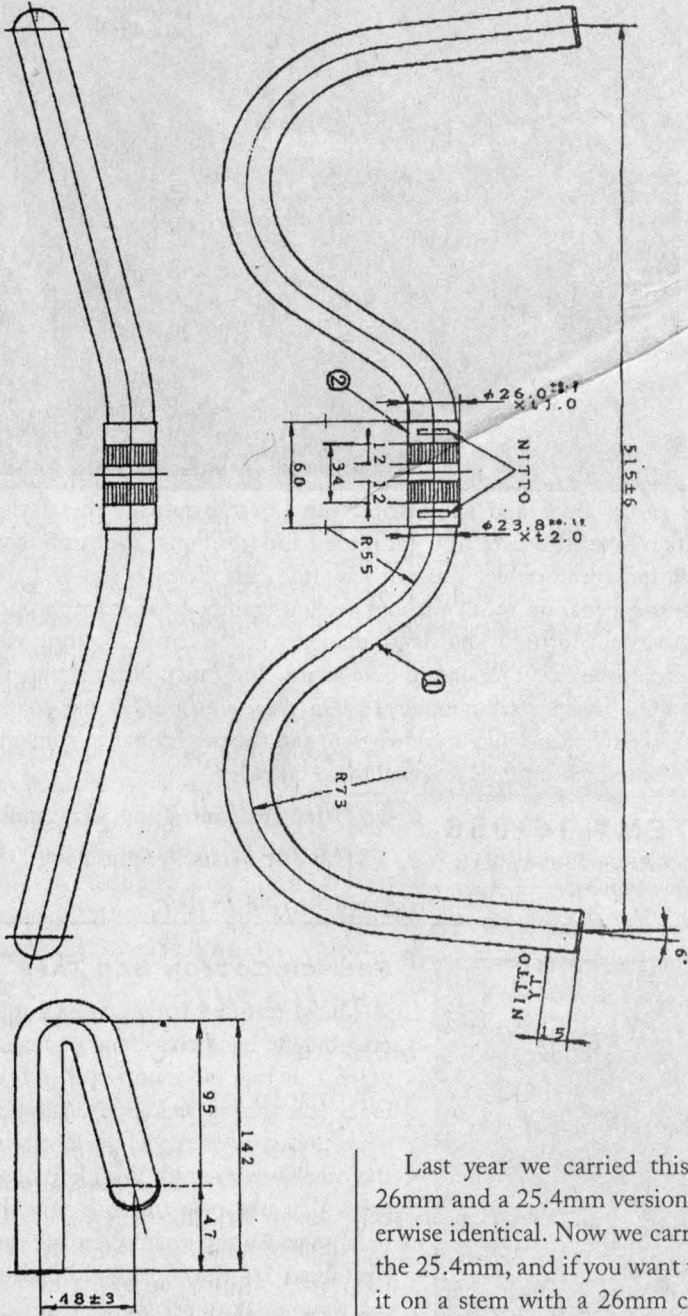
We often hear from people who have switched to Moustache H-bars and found relief from back and neck pain. It's really hard not to like this bar.

Use it with the Nitto shim to fit into 26mm stems—a perfect solution, it works great. Don't hate shims! The Moustache Handlebar fits all road fittings and bar-end shifters. Does not fit thumbshifters or normal mountainbikey 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.

CATALOGUE & PRICE LIST

The Moustache Handlebar



Last year we carried this in a 26mm and a 25.4mm version; otherwise identical. Now we carry just the 25.4mm, and if you want to use it on a stem with a 26mm clamp, just get the shims. They work perfectly and tuck nicely out of sight. Our most popular bar.

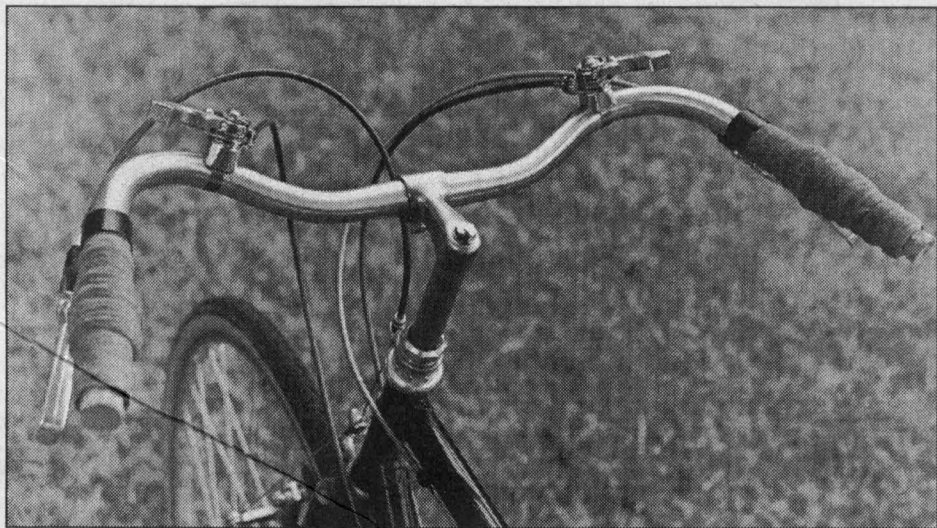
25.4 MM

ITEM# 16-027

MEMBER PRICE \$50
NON-MEMBER \$55

JPN

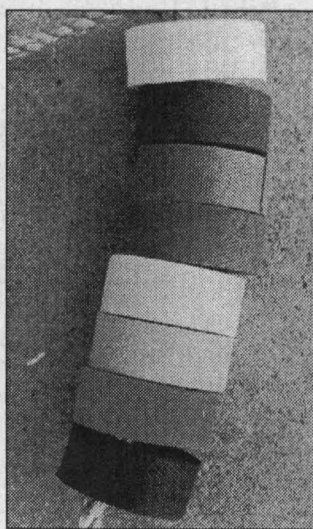
Priest Bar



For casual rides and short trips, the Priest bar beats the daylights out of flat, mountain bike style bars. You get more hand positions. Your grip is wrist-in, far more natural and comfortable. You can have the bars close to you and still get up off the saddle and pedal up a hill without feeling cramped for space—your knees fit in the curves without hitting. The clamp diameter at the bar is 25.4mm, which means it fits most cheap stems, all mountain bike stems, and fancy Nitto stems, if you use a fancy Nitto shim (order part number 16-095, \$6). The perfect bar to get someone who doesn't like to ride, to like to ride again, and the perfect bar to convert tired old mountain bikes to comfortable, practical town bikes.

TWN ITEM# 16-056
 MEMBER PRICE \$18
 NON-MEMBER \$23

Made by Hsin Lung, Taiwan's best bar maker.
 Width: 54cm. Weight: 360g.



FRENCH COTTON BAR TAPE

Thick, textured cotton, woven especially for wrapping bicycle handlebars, and unchanged for almost 50 years. Cut two inches off each roll and pre-wrap the brake lever clamp area. Start at the bottom of the bar, wrap clockwise on the left, c-clockwise on the right, or the other way around. Wiggle it as you go, watch for gaps. If you're new to cloth tape, buy an extra roll, because you're sure to miscalculate the amount of overlap (about 1/4 the width) and end up short. Sold per roll, you need two per bar.

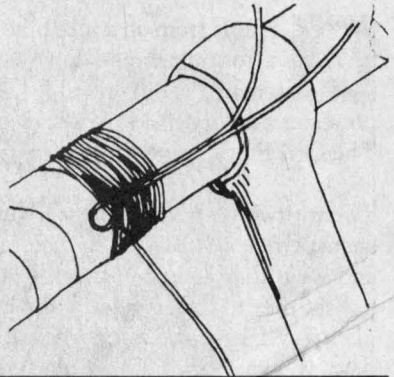
FRA ITEM# SEE LIST
 MEMBER PRICE \$3
 NON-MEMBER \$8

COLOR	ITEM#
Black	16-068
Blue	16-069
Green	16-071
Lt Blue	16-076
Orange	16-072
Red	16-073
White	16-074
Yellow	16-075

Handlebar things

HEMP TWINE

This is the hardest but best way to dress up a fine wrap of cloth tape. Start at the edge of the sleeve, cover about 3/4-inch of tape with twine wraps, and when you've 4 wraps from stopping, take another short piece, make a loop of it, lay it down and do the final 4 wraps over it. Then take the loose end of the wrapping twine, stick it in the loop, and pull it back under the last four wraps. Leave it raw, or coat it with Elmer's. One ball of twine will do seventy or eighty bars, and even if you never get that far, it's always good to have a ball of twine around, right?



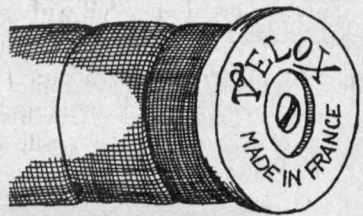
ITEM# 16-086

MEMBER PRICE \$5
NON-MEMBER \$10

HUN

BLACK VELOX PLUGS

The classy way to plug handlebars that aren't already plugged with handlebar-end shifters, and some riders who actually prefer bar-end shifters use something else on one of their bikes just so they can have a bike with these Velox handlebar plugs. Who can blame them? Made the same way for thousands of years. French. Last year Velox quit making them. Bar-end plug fans the world over screamed bloody murder, and so...they started making them again, black only. Maybe they'll quit again, so buy whilst y'can.



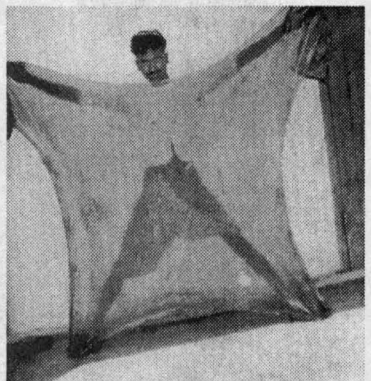
ITEM# 16-077

MEMBER PRICE \$6
NON-MEMBER \$11

FRA

SHELLAC

A *laccifer lacca* lands on a tree, bites the tree, and oozes out this stuff that hardens into a shell, which becomes a cocoon for baby bugs. They hatch and fly off, and then Indians scrape the now-empty cocoons off and crudely process them. All you do is dissolve it in denatured alcohol, then brush it onto cloth bar tape to add texture, color, durability. Shellacking is addictive. You can get colors and textures that are unduplicable in foam and and bad-boy logotapes. Two or three coats over yellow cotton gives a baseball-mit brown color—a perfect match for the HoneyB.17. It richens red. Experiment, and you'll be a pro on your third try. Instructions included. Enough for 10 bars at least.



NATURAL(CINNAMON)

ITEM# 16-061

MEMBER PRICE \$8
NON-MEMBER \$13

IND

Stems

An ugly stem on a nice bike is like a too-big, brand new, factory-packed flat-billed Chinese polyester corporate-logo baseball cap on The Girl From Ipanema. It's not right.

Twenty-two years ago there were no ugly stems. Even cheapies had their charm, and what they lacked in finish work and polish, they at least made up for in simplicity and balanced proportions. These days, you can spend \$200 on a stem and get something gross and out of balance, that seems to flaunt its mean looks.

Stems should be slender, or at least in proportion to the size of the frame tubes and handlebars. They shouldn't look like somebody got a block of aluminum and drilled two semi-strategically placed holes through it and *there you go, guy*.

Most road handlebars have 26mm center sections. Traditional Cinellis are 26.4mm, and fit only Cinelli stems.

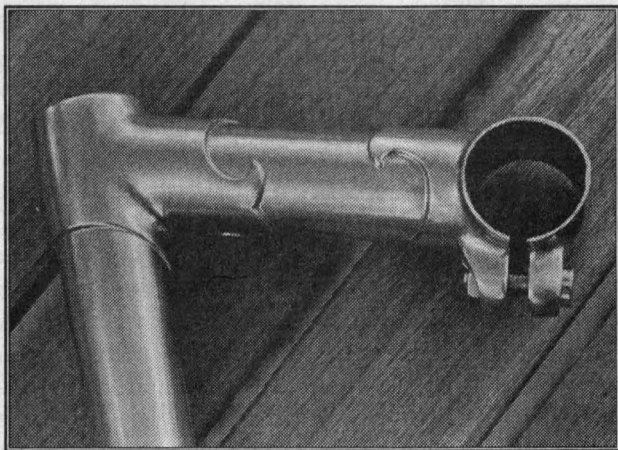
Cinelli has started making 26mm stems, though. Most 3ttt stems fit 26mm bars, although lately 3ttt bars are closer to 25.8mm. A 26mm stem can clamp onto that, but if quality control allows them to wander into the 25.7mm range, it'll slip.

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 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 tired of riding their bars too low. 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. That seems to be the theme in this catalogue—higher handlebars!



A Lugged Stem?



A lugged stem makes sense. Non-lugged stems work fine, the world doesn't really need a lugged stem. But we like lugs in general, and though it would be fun to make one. Had we know headaches and delays and expenses it would lead to, we wouldn't have started; but they're mostly behind us now, and by Fall of 2000 we expect to be delivering...lugged stems.

Ours lugged stem is made for us by Nitto. We send them our lugs and design, they braze them, polish them, plate them, and test them.

There's nothing functionally revolutionary about it, but since we're on the subject, there are a few details worth noting.

1. The quill is 170mm long, or 35mm (about 1.375-inches) longer than the quill on an Italian forged stem. It lets you get the bars higher.

2. It is made of tubular steel, either Reynolds 853 or some other strong, CrMo steel. It will be neither light nor heavy, but it will be strong.

3. The clamp diameter is 26mm. This fits most road bars out there, and if you use the shim we sell, it'll clasp onto any 25.4mm handlebar, as well.

4. It is nickel plated and nicely polished, to go with any fine bicycle.

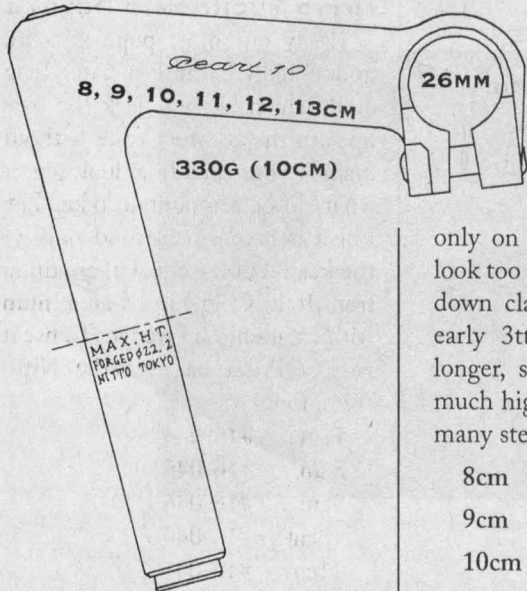
5. It is sized for normal, threaded, one-inch steer tubes, and the angle between the quill and extension is 73.5-degrees. It is not available for threadless steerers, or in other angles.

6. It will be available in 1cm increments between 8cm and 12cm, measured center-to-center, on the centerline of the tubes, the same as all Nitto stems, but different from Italian stems. A 10cm Nitto (or lugged) stem measures about 10.7 along the top of the extension.

The lugged stem you see here is a prototype; we don't have them yet. But we will, eventually, and you may contact us for an update. The best way is by calling up our website: rivendellbicycles.com, and hitting the LUGGED STEM button. Price undetermined, about \$175.

CATALOGUE & PRICE LIST

Nitto Stems



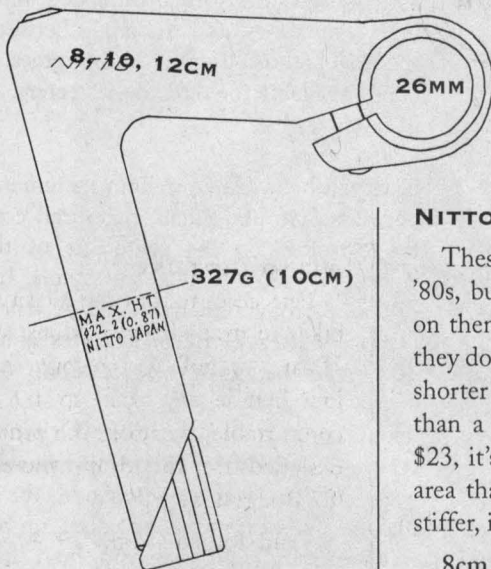
NITTO PEARL

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.

- 8cm #16-034
- 9cm #16-035
- 10cm #16-030
- 11cm #16-031
- 12cm #16-032
- 13cm #16-033

JPN ITEM# SEE SIZES
 MEMBER PRICE \$45
 NON-MEMBER \$50



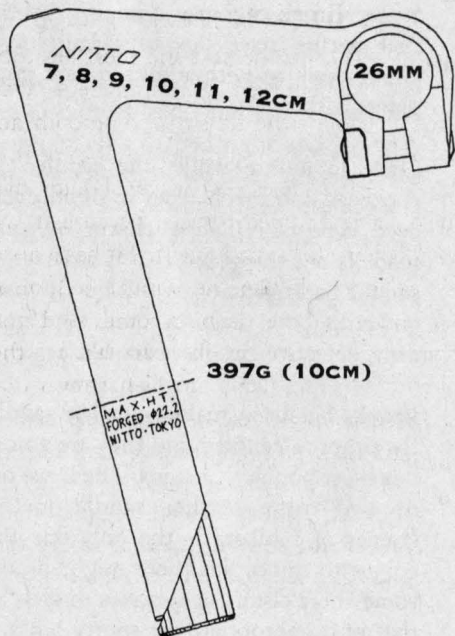
NITTO AERO

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.

- 8cm #16-011
- 10cm #16-009
- 12cm #16-010

JPN ITEM# SEE SIZES
 MEMBER PRICE \$23
 NON-MEMBER \$28

Nitto Stems

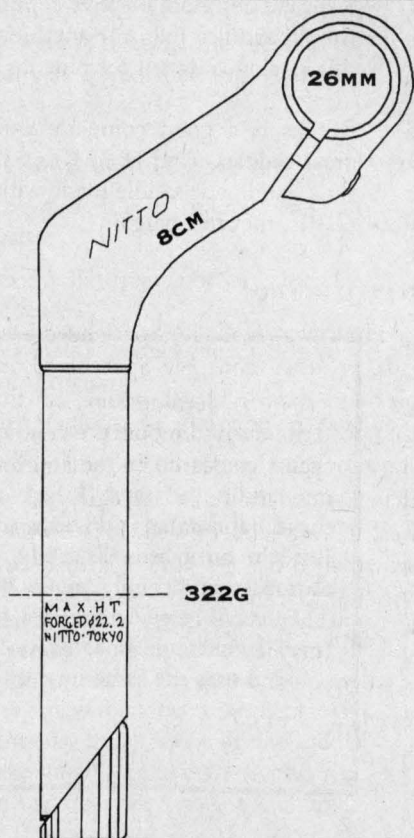


NITTO TECHNOMIC DELUXE

Easily our most popular stem, undoubtedly because it has a long quill, which lets you jack the bars up into the comfort zone without making your road bike look like it wants to be a mountain bike. The finish is excellent, second only to the Pearl, but the equal of anything from Italy. Cold-forged aluminum with an aluminum wedge. To use it with a Priest bar, get the Nitto shim, too.

- 7cm #16-044
- 8cm #16-045
- 9cm #16-046
- 10cm #16-040
- 11cm #16-041
- 12cm #16-042

ITEM#	SEE SIZES	JPN
MEMBER PRICE	\$37	
NON-MEMBER	\$42	



NITTO 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 '87 Bridgestone MB-1.

Cold-forged from 2014 aluminum.

ITEM#	16-007	JPN
MEMBER PRICE	\$45	
NON-MEMBER	\$50	

Saddles

Probably the single most common complaint about bikes is saddles. Men get their penile artery squished, and their penis goes numb, and according to the experts, the older you are and the more frequently you squash it down, the less likely it is to open up again when you kind of wish it wood. Women get their folds crushed.

The grooved, anti-impotency saddles remain controversial. An Italian study suggests that many a penile artery runs a crooked course. And, if yours crosses over the hard edge of the groove, there's more pressure on it than there would be if the saddle were grooveless.

Brooks's answer to the impotency problem is a well-designed saddle with sufficient width to support your sit bones, and a slight rise in the rear of the saddle, to lift your penis artery off the saddle. Over the last few years we've sold more than 900 Brooks B.17s. Most people who buy one, buy another and another, mainly because a properly set up, broken in B.17 is like a pillow for your crotch.

Women's ischial tuberosities are spaced wider than are men's, and although most women do well on a B.17, some prefer wider women's saddles. We have several on hand, and if you want one, ask. We may have to special order it.

Brooks saddles are made by hand, and that means there are slight differences from saddle to saddle. The differences shouldn't be seen as defects, but just signs that they're made by hand by people. On 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.

Some Brookses 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). The charm of hand made is one thing, but that is a defect, so send it back. One of us will buy it cheap and ride it for years to come. (But honestly, defective Brookses are rare!)

Brooks has been making leather saddles for almost a century, and they are among our most popular...things. There are one or two other leather saddle makers (Leper of Holland is the only one that comes to mind, but there might be one somewhere else), but Brooks's models are the most appropriate for sporty bikes. If Brooks ever closed up, its saddles would quadruple in price overnight. Appreciate the times we live in, and buy a real leather saddle for your tender behind and nice bike. We get more positive comments on Brooks saddles than for anything else in this catalogue except for pine tar soap.

Brooks is a good company and makes great saddles. And at \$73 to \$135 each for a handmade saddle made without any plastic, they're a bargain

—Grant

Jerome Says...

"I'm always amazed when an old cyclist comes up to me and looks at my saddle and says, 'I had one of those...and hated it! Hard as a rock!' But put on a little Proofide, go on four rides, and you'll notice a change. Then you'll laugh when the next guy (maybe the same one) comes up to you and uses the same line on you."

—JH

Easy Living With a Leather Brooks

A BROOKS DOES NOT NOT REQUIRE A LONG BREAK-IN, during which you'll hurt, bleed, and go numb and impotent. It's shaped right and is pretty comfortable right off the bat. As is the case with any leather thing, from shoes to baseball mitts, 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 plastic saddles, so when you take off your old saddle and put on a Brooks, you'll have to lower the seat post.

When you hold a Brooks horizontally 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:

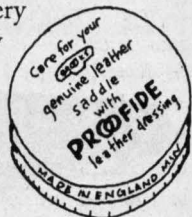
- 1) sufficient width to support your sit bones.
- 2) relatively flat rear portion, for the same reason
- 3) proper *pitch* to reduce pressure on your perineal region
- 4) a narrow neck, so you don't scrape your thighs.

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 in the rear portion, and from then on you'll be fine.

CARE

A light coating of Proofide once or at most twice a year, topside and bottom. Actually, the guy in the world who has repaired the most Brooks says put it on top, only, and he probably knows, but in my head it makes sense to put it on the bottom, too, so that's what I'll do. 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.

In last year's catalogue I said that with proper care and no major soakings, you'll probably get 15,000 miles out of your Brooks. Immediately, several customers wrote in claiming twice that, easily. I just like to put a bad spin on things, so you aren't disappointed. Also, there are so many factors that affect the life of your saddle. If you weigh 250 and ride it wet for long miles, bye-bye Brooks. If you insist on soaking it for a day or two in your homemade sardine-and-neatsfoot oil concoction just because the town expert said to, same thing. It's probably best to say that as a natural material, leather is not going to keep its shape as long as scientific plastics. But it looks better, and is far more comfortable, and the cost of a leather saddle is incredibly low, considering the hand work that goes into it. Every fine bicycle, and every sore butt deserves one! —Grant



BROOKS PROOFIDE

Brooks-approved leather dressing for Brooks saddles. A pinch between your cheek and gum, and you're set.

ITEM# 11-005

MEMBER PRICE \$6
NON-MEMBER \$8

GBR

Saddles & Stuff



STEEL

GBR ITEM# 11-006
MEMBER PRICE \$73
NON-MEMBER \$78

TITANIUM

GBR ITEM# 11-007
MEMBER PRICE \$130
NON-MEMBER \$135

BROOKS B.17

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 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 copper plated steel rails, about 522g; or natural titanium rails, about 440g.



BROOKS SPANNER (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.

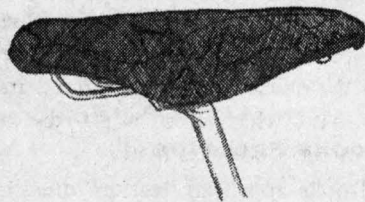
One of these decades, Brooks may even supply it with a small hole in the non-business end, so you can hang it on a nail!

GBR ITEM# 19-013
MEMBER PRICE \$5
NON-MEMBER \$10

B.17 BONNET, BY CARRADICE

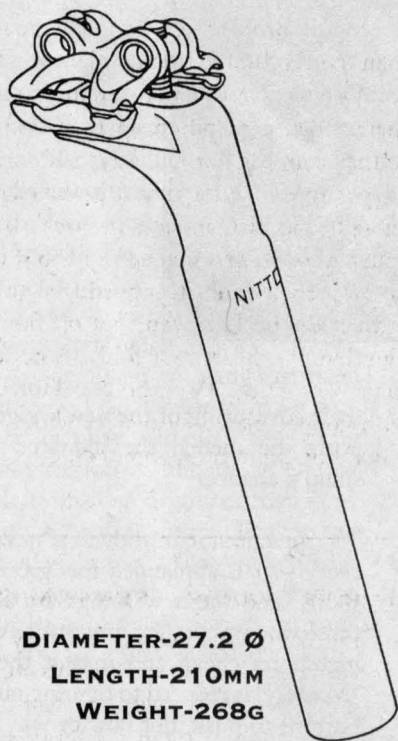
Inspired by shower caps and made of black coated nylon, elastic, with leather reinforcements. This is what you need for super sweaty bottoms and rain rides. Leather-reinforced slots let you thread Carradice straps through it. Paranoid cyclists should place a plastic bag underneath this—not to imply that it isn't totally waterproof by itself, but there is some stitching, so some leakage might happen.

If you have a leather saddle and you sometimes ride in the rain, you ought to get one. At the very least, cover the saddle with a duct-tape reinforced plastic bag.



GBR ITEM# 11-014
MEMBER PRICE \$15
NON-MEMBER \$20

Seat Posts



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

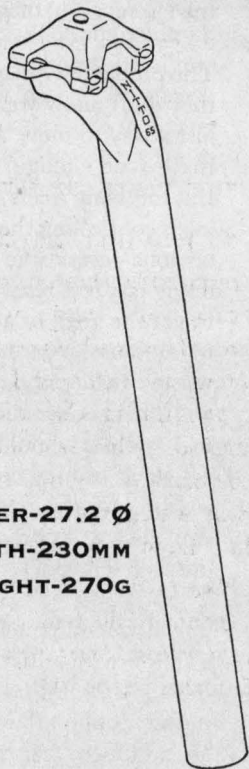
NITTO FROG SEAT POST

Nitto calls it the Jaguar, but from the side it looks like a Frog. Two-bolt seat posts 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 allen's, accessible from underneath. Nitto claims this is the strongest seat post they've ever tested, so you know, at least, that it is strong enough. Seat posts don't come any better than this.

ITEM# 11-016

MEMBER PRICE \$75
 NON-MEMBER \$80

JPN



DIAMETER-27.2 Ø
LENGTH-230MM
WEIGHT-270G

NITTO CRYSTAL FELLOW

After 5 years of selling a blowout-priced Nitto post with the Specialized label, we finally ran out, so now we buy fresh ones from Nitto at the current price. This one has the same general design, but the level of finish is even higher (unnecessarily so), particularly around the unseen clamp area.

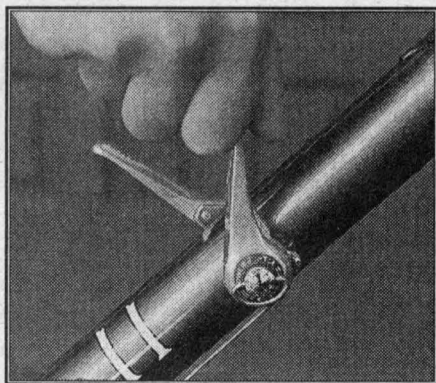
If you haven't seen a Nitto seat post, then you haven't seen a seat post this nicely made and finished. We stock only the 27.2mm, since that's what all of our bikes and most good bikes require.

ITEM# 11-031

MEMBER PRICE \$55
 NON-MEMBER \$60

JPN

A Case For the Manual Bike



Phase One technology increases chances for survival. Things like making stone tools and fire and shelter are Phase One. Once survival was assured, people had the time to develop Phase Two technology—recreation and entertainment things like marbles, harps and tag. Much of today's technology is Phase Three. That's when, now that we've long stopped fretting about survival and grown bored with traditional forms of entertainment and recreation, we invent things that allow us to shut off our brain, grow extra fat, lose coordination and still get by. Things like remote controls, electric pencil sharpeners, and video games are Phase Three. Whether a calculator or a computer art program is Phase Two or Three depends on who's using it, and why. In the early elementary grades, they're definitely Phase Three. If Phase Three totally takes over, future generations won't know how to play hopscotch or tic-tac-toe.

I think modern bicycle technology is about Phase 2.8. The overriding goal of modern bike parts makers and the bike industry in general, is to make the bike easy to operate, because they think non-cyclists are intimidated by a bike's complications. The industry also knows the same non-cyclists like things that combine a macho facade for a he-man image, with a high tech core for the shortest possible learning curve. Manufacturers see it as following trends and giving people what they want. But when they simultaneously eliminate other alternatives, and

their advertising of the new widgets supports the media, the old stuff doesn't stand a chance.

The practice of introducing new things every year is applauded for "growing the sport," and the new things are aimed at those who want to get into fitness-enhancing sports cheap and master them fast. "Mastery" is reduced to figuring out which buttons to push, not how or why or even when to push them. As you read this, millions are being spent on drivetrains that shift by themselves, relieving you of the chore, even, of pushing buttons.

The problem with automatic bikes is that they don't allow you to learn. If bikes are just a way to move and get exercise, then that's good enough, and it doesn't matter. But for many riders, part of the fun of riding is controlling the bike's functions with obvious levers and cables, learning by doing just *how much* to pull the lever back to get the gear; or adjusting the toe strap more loosely or snugly, depending on where you're riding, how you're feeling, and what shoes you're wearing. If you see this as drudgery, nothing we say here will convince you it's otherwise. If you see it as just part of being a bicycle rider, then you already know everything we could possibly tell you.

The first requirement for a manual bike is a shifter with a friction shift mode. It can index, too, but it's a manual only when it's in the friction mode in the same way that an autofocus camera with the manual

...Manual Bike

override is a manual when it's in manual mode. Most new cyclists don't know what friction shifting is, since STI, ERGO, and TWIST-GRIP shifters don't have a friction mode. Among those who know a smidgen about friction shifting, but don't have much experience with it, there's a pervading misconception that friction shifting requires timing, sensitivity, and years of experience to master. Not so! Friction shifting is easier than tying shoelaces, and takes one one-hundredth as long to master. Once you've got it, you can use any derailleur with any freewheel or cassette. You don't have to make sure they're compatible. Although they're no doubt working on it, nobody so far has been able to make a derailleur that won't work with a friction shifter. That would be like making a spoon that worked with cereal, but not with soup. A friction shifter by its nature has to work with any derailleur that is pulled by a cable.

The second requirement for a manual bike is a frame and fork with no moving parts to "take the edge off." (We're not ragging on suspension here; we're just defining "manual bike.") There's a notion that comfort must come from without; but a good position on the bike allows you to relax and soak up shocks unconsciously. Good technique, such as lifting your butt off the saddle when you're going over bumps, helps even more.

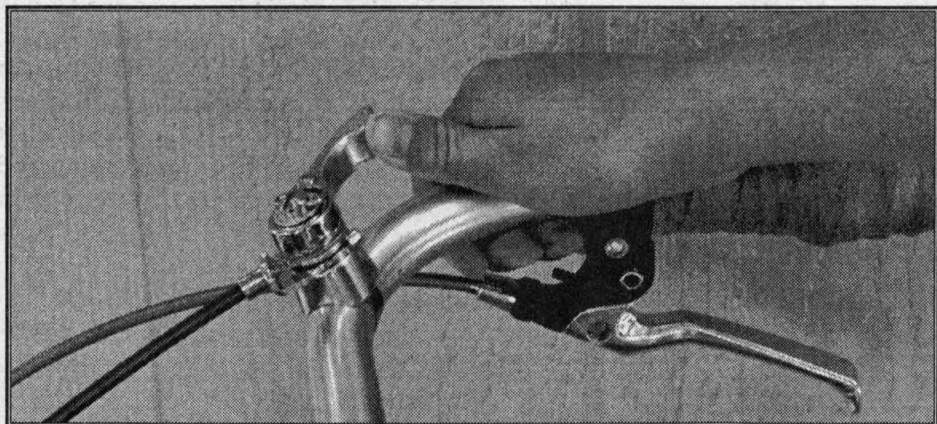
Suspension has its place. If you race against other riders who use suspension,

then you'll be handicapped without it. But if thrills and fun are your goals, the manual bike is at least its equal, and certainly a less alien sight on a quiet mountain trail (leave your neon advertising riding jersey at home, too). If you define thrills as something like riding at the edge of control without panic, then you can do it just as well, but more slowly, on a manual bike. And, since you're riding 1-2 mph slower (it won't be more than this), the thrills and fun last longer. As a bonus, any crash you do suffer will be at a lower speed.

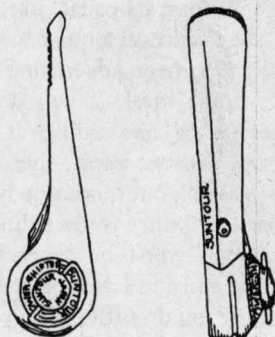
Not a bad tradeoff!

In bicycle marketing, racers are put on a pedestal, and anybody who doesn't race is encouraged to revere and emulate those who do. Racing used to improve the breed, but now that racing has become more specialized, racing bikes have mutated into weirder and weirder forms that often have no benefits at all for the non-racer.

Manual bikes are simple and good. Not just mechanically, but to operate, too. Nobody is holier for riding one, and we aren't on a mission to convert experienced riders who already know what they like. The point we're trying to make is that manual bikes are easy, and they involve you more, and when so many other widgets in your life are Phase 3, a Phase 2 bicycle can be a good thing. — *Grant*



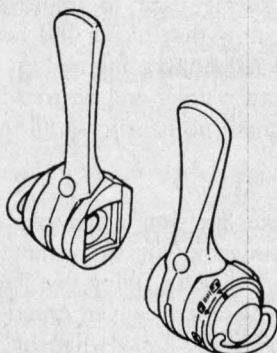
Downtube Shifters



SUNTOUR SPRINT POWER RATCHET SHIFTERS

Our favorite shifters. They're slender, have no indexing option, and they work far, far better than any shifter has a right to work. Perfect on the downtube, on TakeOffs, or on SuperMix bar-ends. They have the same Power Ratchet as the others. If I/Grant needed a pair of shifters, I'd easily spend \$150 for these. There are none better, and when these are gone, it's highly unlikely that anybody will remake shifters with such a fine Power Ratchet. It just won't happen. We have maybe a two-year supply of these, and are already starting to fret about *what then?* Don't go your whole life not having tried these!

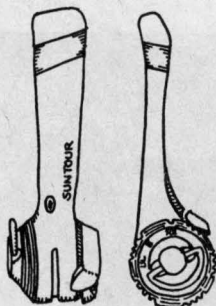
JPN ITEM# 17-036
MEMBER PRICE \$30
NON-MEMBER \$35



SUNTOUR SUPERBE PRO 7/FRICTION SHIFTERS

The left one has a really fine power ratchet, the right indexes or shifts in pure, unslipping friction, according to how you set the dial. The integral lever stops are curved to fit standard 28.6mm downtubes, but people have put them on oversized downtubes as fat as 31.8mm, and no problem. The shape of the shift lever is the best (prettiest) we've seen, and the finish is ultra-ultra. Jerome here recommends these as the best shifters to use with Kelly TakeOffs, since they pull the most cable.

JPN ITEM# 17-037
MEMBER PRICE \$28
NON-MEMBER \$33



SUNTOUR SUPERBE PRO 6/POWER RATCHET SHIFTERS

Fantastic shifters, either on the downtube, or mounted onto Kelley TakeOffs. The neat thing here is that both shifters have SunTour's power ratchet, and the right one indexes most modern (Shimano, Sachs, SunRace) 6-speed clusters, too, provided you have the right derailleur, such as a SunTour XC Pro. There's a grey band of rubber across the grip-portion of the lever. It doesn't add or take away anything important. Like all SunTour power-ratchet shifters, these blow away anything made before or since.

JPN ITEM# 17-038
MEMBER PRICE \$35
NON-MEMBER \$40

Handlebar-End Shifters

SUNTOUR 1986 6SP/POWER RATCHET BAR-ENDS

These were made in 1986, and are designed for indexing six-speed SunTour freewheels, which are great if you can find them but good luck. Fortunately, the right lever also has a friction mode, so it'll work with any freewheel or cassette. The left lever is pure power ratchet, very nice. If you can get over the blackness, you're all set.

SEE ALSO P. 53 FOR OUR SUPERMIX HANDLEBAR-END SHIFTERS.



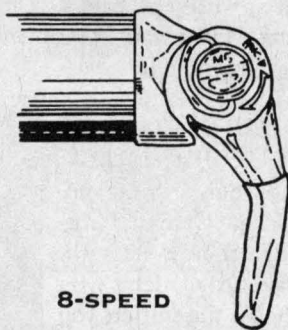
ITEM# 17-031

MEMBER PRICE \$45
NON-MEMBER \$50

JPN

SHIMANO 8-SP/FRICTION BAR-ENDS

If you want to index Sachs or Shimano or SunRace clusters, these are the ones to get. Then, if you graduate to friction, you can turn the wingnut adjuster on the inside of the right shifter to Friction mode. Then, once you decide you no longer need the indexing, even as a backup (for what? when the friction stops working? It won't!), you can further graduate to the velveteen smoothness of SunTour Sprint downtube shifters, which mount right onto the Shimano pods, turn your formerly garden variety indexed shifters into SuperMix bar-ends.



8-SPEED

ITEM# 17-062

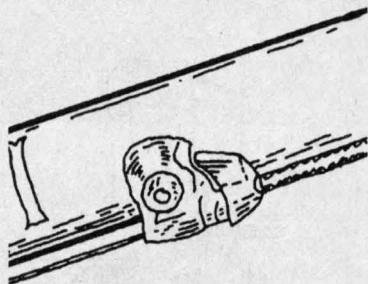
MEMBER PRICE \$68
NON-MEMBER \$73

JPN

DOWNTUBE SHIFTER BOSS ADAPTERS

These slip over downtube shifter bosses, allowing you to use bar-end shifters on bikes with downtube shifter bosses. We have Shimano and SunTour, same part number, same price, same function, same quality, they both look fine, you'll not regret either, it just doesn't matter, your bike won't feel a difference.

All of our bikes, and many bikes still, come with downtube shifter braze-ons. So these adapters come in handy during conversions.



ITEM# 17-045

MEMBER PRICE \$17
NON-MEMBER \$22

JPN

CATALOGUE & PRICE LIST

Kelly TakeOffs

These are a smart, practical, wonderful alternative to STI and ERGO shifters.

Some advantages over those others:

1. A VISUAL INDICATION OF WHAT GEAR YOU'RE IN.

That's enough. The dials Shimano now has are just another interference between you and the bike. If you need to know exactly what gear you're in, use the time-honored, most trusty technique of all: Look back and down.

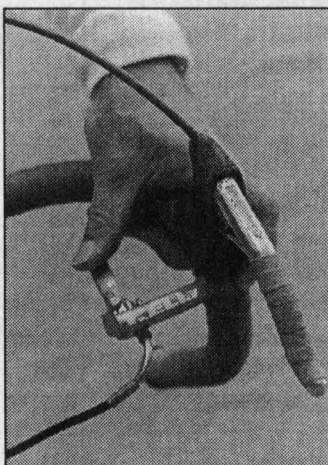
2. YOU CAN SHIFT FROM MORE HAND POSITIONS.

Even with your hands on top of the bars. If you want convenience, these have more of it.

3. YOU CAN CHOOSE YOUR SHIFTERS.

SunTour, Shimano, Sachs, Campy; friction, index, or both. TakeOffs let you choose the shifters you want, and let you use parts you may already have.

4. IF YOU CRASH AND WRECK A BRAKE LEVER, YOU DON'T



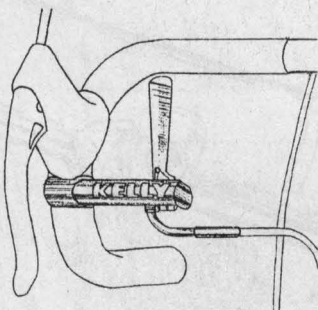
MESS UP THE SHIFTER, TOO.

The shifters and brakes are independent, as they should always be. There are no functional, real, practical advantages to integrating them; only manufacturing and selling ones.

5. THEY COST LESS.

There are some situations where STI or Ergo shifting is faster—off-the-saddle shifting. And when you're already down low on the drops, STI shifters are faster. But a fraction of a second longer won't ruin a ride, and we aren't talking about more than that. The only other possibly perceivable fly-in-d'ointment is that the connecting tube (the thing that says Kelly on it) gets in the way a bit when you try to wrap your fingers around the brake lever body. It requires a modified grip, not a big deal. If you can get over that and you like all the other stuff, get them.

For more information, see Chris Kelly's website: www.kellybike.com.



TAKEOFFS, COMPLETE KIT

(cables, mounts, dt shifter boss adapters)

TakeOffs accept any downtube shifters, and even Shimano bar-end shifters. A "complete kit" includes the mounts, cables and housing, a couple funny little tubes, downtube shifter adapters as cable stops, and instructions. You still have to buy the downtube shifters. The SunTours we sell work particularly well, because for any given amount of lever travel, they wrap more cable than most. Jerome likes them with the Superbe Pro/7 shifters.

USA ITEM# 17-051
 MEMBER PRICE \$75
 NON-MEMBER \$80

SuperMix Bar-End Shifters

NO MATTER HOW FULL your life is, how loving your family is, how wide your travels have been, how high your dream-fulfillment batting average, or how Lincolnesque your eulogy will be when go to that Great Beeswax, Wool, Shellac, and Velox Bar Plug Factory in the sky; you haven't lived until you've tried SuperMix bar-end shifters. Among bar-end shifters, these are the tops. If you like bar-end shifters, nothing else comes close.

You can put almost any downtube shifter onto the shifter mounts, but the best ones are SunTour's Sprint downtube shifters.

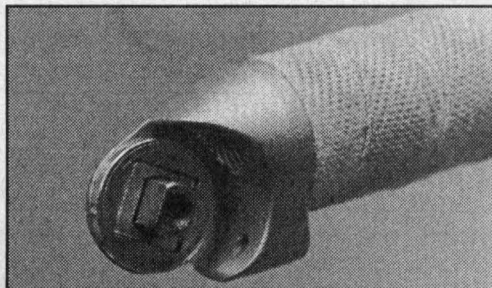
These are longer by a few millimeters than prefab bar-end shifters, and the extra leverage and the light-action of the ratchet combine to give you really smooth, accurate, light, and positive shifting. Even without indexing, it is hard to be out of gear, or between gears. You can shift these with your baby finger, or smack them with your fist, and you get the gear every time. Not to imply that easy is *good*, of course...

What you need:
Dia-Tech shifter mounts (#17-068). \$22
Sprint DT shifters (#17-036) \$28

Step One:

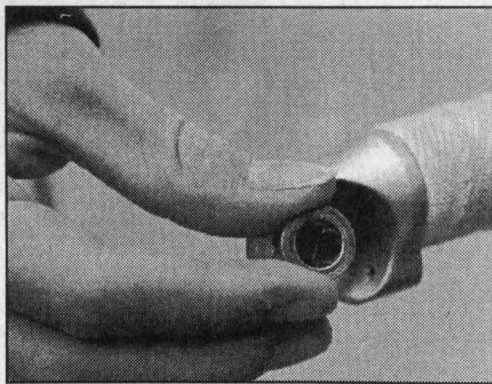
Mount the Dia-Tek pod. Slip the round spacer with the square hole over the raised square part. Stick in the threaded boss, too.

Note: Jerome set up his with the left shifter-mount on the right, and vice versa. That way, the wing nut is accessible as you ride, and it looks better from the outside, too.



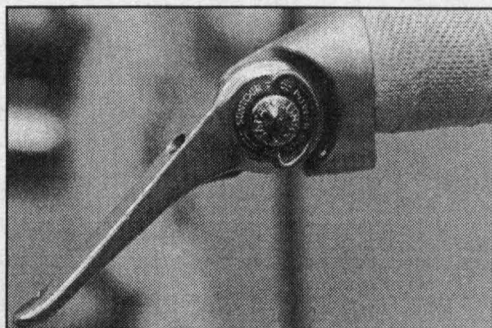
Step Two

Put the silver SunTour washer onto it. Push it up flush.



Step Three:

Mount the lever. You may have to try a few different orientations until it slips on right. Then tighten it.



Front Derailleurs

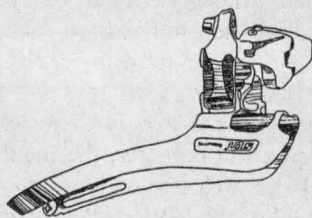
Front derailleurs have the easiest job of any bike part, especially when shifting to a smaller chainring. They de-rail the chain by pushing it off one ring so falls onto to the next one, and you can do that with your finger or a stick. Upshifts to bigger rings are harder (with finger, stick, or derailleur), but the only way to mess one up with a front derailleur is to pedal too slowly; and if you're pedaling that slowly, you shouldn't be shifting to a harder gear in the first place. .

There are front derailleurs for every gearing and frame configuration. Here's how to pick one that'll work for you for sure.

1. Make sure it fits your seat tube. Every derailleur we sell fits 28.6mm seat tubes, the standard size for steel frames. Aluminum seat tubes are fatter, and require a bigger clamp. .

2. Capacity. Some are designed for two chainrings no more than 14t or 16t apart, and others are designed for triples, and a 24t chainring spread. But manufacturers build more range into their front derailleurs than they claim to. We've used Dura-Ace racing models with up to a 50 x 46 x 24 front, and a 13 x 32 in the rear. Shimano would shriek at that, but it works perfectly, and we've done the same with enough other "racing" front derailleurs to state flatly that it works.

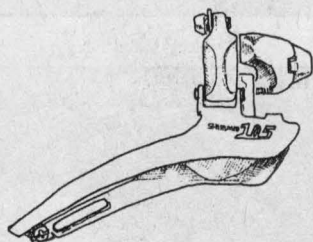
Odd as it might seem, we sell just two front derailleurs, and they're both Shimano 105s. If you want to keep your all Campy bike all Campy, that's fine, spend what it takes. But if all you're after is a smart, good-looking, and highly functional front derailleur, put on a Shimano 105. It looks better than the Ultegra and works as well. Performance beats our price, but we can't help that.



SHIMANO 105 DOUBLE

The new 105 parts are nicely polished, minimally logo-ed, all silver, and are the best values in Shimano's line. This one here has a good-looking cage (so it looks good on a Rivendell, for instance), and shifts great on road doubles and half-step + granny-style triples. That's when the middle and outer rings are within 5t of one another.

JPN ITEM# 17-083
MEMBER PRICE \$35
NON-MEMBER \$40



SHIMANO 105 TRIPLE

This one's for three rings up front and big, 10-tooth or so jumps (50x40x30, etc). The inner cage is offset a lot lower than the outer cage, a slight advantage on mountain- or big-jump gearing. The lower cage also makes it incompatible with half-step gearing, because it runs into the middle ring when the chain is on the outer ring.

Shimano designed this for "racing triple" gearing (52x42x30, etc), but it works as well for "mountain triples" (46x36x24).

JPN ITEM# 17-082
MEMBER PRICE \$35
NON-MEMBER \$40

How To Pick A Rear Derailleur

THE CRITERIA ARE CAPACITY AND CHAIN WRAP.

Capacity is how big a rear cog it'll shift to. This is determined by how low the upper pulley is when it's all the way inward, close to the spokes. If the pulley runs into the cog, it won't shift onto it. They (the rear derailleur makers) can design a derailleur with a super low pulley, but then it won't shift as well on the lower range of gears (the small cogs).

Some racing derailleurs have a 24t capacity, meaning the largest cog they're designed to shift to is 24t. Whenever you see t after a number, in a gearing context, it means teeth. Most racing derailleurs go to 26t. If you have a rear derailleur that's rated to 26t on your bike, and you have a special ride coming up and want just a little lower gear, try it out before buying a new derailleur, because it may work.

Chain wrap is the derailleur's ability to bend the chain and take up chain slack. The longer the rear cage is (the thing that the pulleys are in), the more chain the derailleur will wrap. If you ride with a 26t spread up front (50t big ring, 24t small ring (50 minus 24 is 26), and a big one in back (13 x 32, or 19t, since 32 minus 13 is 19), you need a rear derailleur that can wrap 45 teeth, since $26 + 19 = 45$. Nobody makes one, which is why no manufacturer specs a

bike with those chainring combinations. But if you limit your use of the small front ring to the 3 largest rear cogs (a reasonable thing to do), that changes things. You still have the 26t spread up front, but then you just have to subtract the smallest cog you'll use with it from it. That may be a 22t cog (on a 13-14-15-18-22-26-32 seven speed freewheel). So 32 minus 22 is 10; add the 26 from up front, and you get 36t. Lots of derailleurs can handle that.

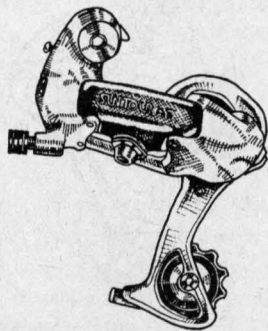
That is a terribly confusing explanation. If you're confused, just call and ask.

A relatively recent derailleur style is the "racing triple." It has the long cage of a touring derailleur—so it's just as good at taking up chain slack—but its upper pulley (the "jockey" pulley) is positioned to ride close to freewheels up to 28t. The good side of this is improved index shifting on freewheels with 28t or fewer on the biggest cog. In theory, the closer the jockey pulley is to the cog, the faster will be the shift. In real life, it makes more of a difference if you index, and with non-indexed, or *friction* shifting, it doesn't seem to matter at all.

Our selection of derailleurs isn't extensive but for all practical purposes, the models we offer will shift well, last long, look good, and handle all of the friction shifting and most of the indexing you'll ever need. They are all good values. —Grant

SUNTOUR XC PRO SHORTIE

This was SunTour's best mountain bike triple derailleur, in a short cage version, but it's equally suited to road bikes, and if you can live with a rear cog no larger than 28t and don't need to index, you can look around until you need a wash, and you won't do better than this one. The sealed pulleys alone are worth \$20. This derailleur is rugged, finely finished, attractive, and good for at least 40 thousand shifts. Perfect for road doubles and non-wide range triples—something like 46 x middle x 24, with up to 28t in the rear.



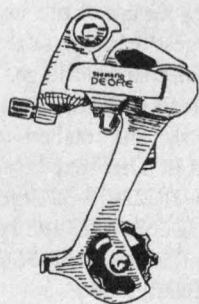
ITEM# 17-040

MEMBER PRICE \$58

NON-MEMBER \$63

JPN

Rear Derailleurs

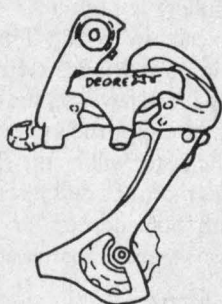


SHIMANO DEORE (1987!)

Our top choice in a true touring derailleur that doesn't index. This Deore, built in 1987 or so, actually does index 6 speeds, and you can still get Shimano 6-speed freewheels and an adapter ring that converts a 7-speed Shimano bar-end shifter to 6-speed indexing.

But don't do it. Get this derailleur for its faultless Shimano movement and reliability, and it's fine but understated, silver finish. Shifts to 34t, so if you get yourself one of those Shimano 'mega-range' freewheels with a 34t big cog, you're all set.

JPN ITEM# 17-073
MEMBER PRICE \$75
NON-MEMBER \$80

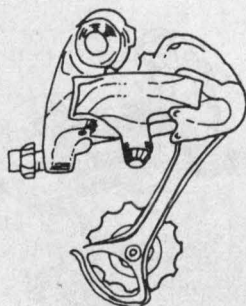


SHIMANO DEORE XT/GT

Indexable, frictionable, and Shimano makes it, so you know it works. This one has gone through several changes throughout the years, all small, none of them made it any worse, and even the first ones, about 10 years ago, were just fine. Largest rear cog: 32T. Performance and Nashbar can always beat our price, sometimes by as much as \$20. They must buy them cheaper than we do, but we feel obliged to offer this anyway, so here it is.

The Deore is a nicer looking derailleur, but this one works as well, and if you have to index 8 or 9 speeds, this is the one to get.

JPN ITEM# 17-010
MEMBER PRICE \$48
NON-MEMBER \$50



SHIMANO 105 TRIPLE

For triples up front and up to 28t in the rear, although Shimano says 27t. This year's version is shiny silver, looks great, and given all that, it's hard to justify anything fancier and costlier. Ideal for a semicompact racing triple set-up with a good low gear for really weak legs or really steep hills (46 x 36 x 24 by 12 x 28); or our favorite half-step (46x42x24 by 12x28).

Shimano's 105 parts group is probably the best value out there, and the derailleurs are the best part of it. What bargains, and what great shifters!

JPN ITEM# 17-059
MEMBER PRICE \$40
NON-MEMBER \$49

Chainrings & Gearing

Off-the-shelf, two-chainring style road bikes come with 53t big rings and 12t small cogs. That's a 119-inch gear, and it's good only for some racing and fast pack rides. If you ride alone or with friends who don't shave their ropelike legs, or if they do shave but their legs aren't ropelike, then a top gear of 95 to 103 inches will

be better. On a 700c-wheeled bike, a 46x12 or 13 works fine; or a 50x13 or 14. Or anything in between.

The smaller big 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. Smaller big chainrings are a revelation!

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 1-2t apart. 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 actually works okay.

3. 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.

4. MOUNTAIN TRIPLE

Big jumps between the chainrings, and a wide range in the rear: 46/ 36/ 24 x 12/ 28, for instance. It's like Alpine gearing, with an extra chainring, and is 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.

5. RACING TRIPLE

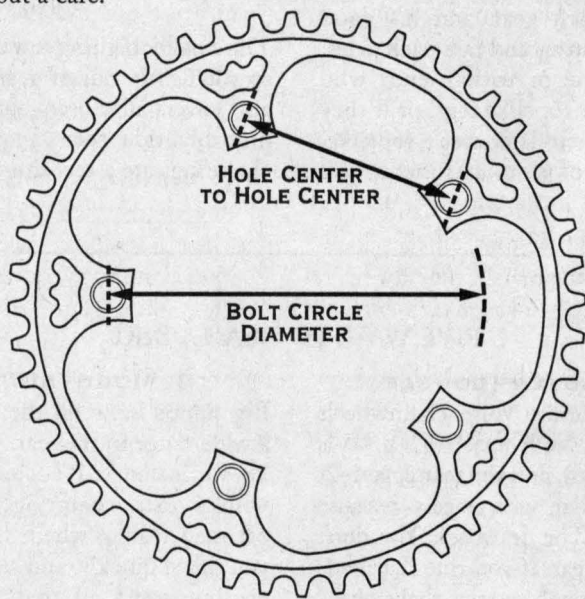
Big, ten-tooth jumps in the front rings and small jumps in the rear, which is typically an 8- or 9-speed. 50/40/30 x 12/26 is typical. You select the front chainring for the approximate highs and lows the next few miles will require, and then shift in the rear. The 8- and 9-speed rear cogs require more 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, and they all work! Cyclists couldn't even coast until the '30s, and when multiple gears came about it was a royal pain to change gears. It's not quite sane to keep rejoicing about advancements that were made fifty or more years ago, but it's a good perspective to keep handy.

—Grant

Chainrings

If you want something not listed, we may be able to get it (ask), but we're in a simplify-life mode right now, chainringwise, so for the time being we'll focus on the ones below. All the rings below are silver. The brands vary—Willow, Sugino, Ritchey, and maybe others—but they're all good rings, and you can mix them on cranks without a care.



135 bcd – fits New Campy road.

\$30.

#12-095 135 x 49

130 bcd. Fits modern road cranks except Campy. All sizes, \$30.

#12-019 130 x 39t

#12-020 130 x 42t

#12-088 130 x 48t

#12-090 130 x 49t

#12-092 130 x 50t

110 bcd - fits classic Mountain triples.

Not "compact drive." \$25 each.

#12-075 110 x 34t

#12-013 110 x 36t

#12-014 110 x 38t

#12-015 110 x 40t

#12-116 110 x 42t

#12-115 110 x 44t

#12-016 110 x 46t

#12-017 110 x 48t

#12-120 110 x 50t

74 bcd - classic mountain granny.

\$20 each

#12-027 74 x 24t

#12-028 74 x 26t

#12-029 74 x 28t

#12-102 74 x 30t

WILLOW (BRAND)

TRIPLIZER CHAINRINGS!

Converts doubles to triples. Then you need a bottom bracket spindle 6 to 8mm longer than your current one. You may also need new derailleurs and a longer chain. Call for details if you're unsure.

74mm bcd fittings.

\$52 each, including bolts.

For old Campy

#12-114 144 x 42t

For new Campy

#12-112 135 x 39t W (silver)

Modern Road (non-Campy)

#12-108 130 x 39t

#12-137 130 x 40t

#12-110 130 x 46t

Chains

In general, it's easier to make a strong wide chain than it is a strong narrow one, but chains keep getting narrower anyway, to squeeze into small spaces between too many rear cogs that are crammed into too small of a space.

Modern chains are pretty good. Many come with magic links which allow you to separate your chain by hand. This would be fantastic if we took off our chains a lot to clean them, but nobody really does that, so magic links are merely good.

The Holy Grail is a chain lube that doesn't attract dirt, that lasts in foul weather, and is easy to apply. This year's favorite is Boeshield T-9. Don't write saying yours is

better—we've tried it and we just like Boeshield a whole lot more.

Chains wear out when the pins rub against the holes in the plates, enlarging them. When that happens, the chain is said to have stretched, but it's really just gotten sloppier. There are numerous ways and several devices that help you determine whether or not your chain has stretched too much to continue using. By far the cheapest and easiest is to shift to the big chainring, grab a link at 3:00 (as you're looking at it), and see if you can pull it straight off the ring far enough to expose a whole chainring tooth. If you can, replace your chain.



SUNRACE SILVER

A good-pretty-inexpensive chain that works with anything between friction and 8-speed indexing. Shiny silver, looks great on any bike, and won't break. There's no master link. 6-9 speeds

SACHS PC 51

A German chain, strong, silver and black, and it comes with a built-in "power link," which lets you take it apart and assemble it by hand. Good for anything short of 9-speeds.

ITEM# 13-031

MEMBER PRICE \$10
NON-MEMBER \$11

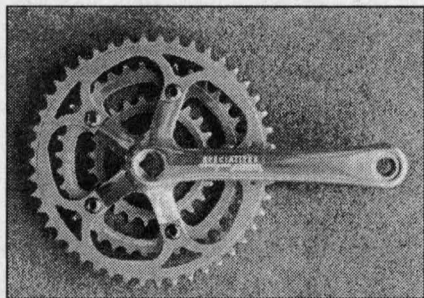
TAI

ITEM# 13-019

MEMBER PRICE \$19
NON-MEMBER \$20

GER

Cranks



TA ZEPHYR

Aaaarrggghhh!

One of the unfun things about focusing as we do on just our very favorite items in any category, is that when the maker stops making it, we're left high and dry. It happened with the Ritchey Logic 110/74 triple crank, but we replaced it with the TA Zephyr. Now, two days before the catalogue is finished, we find out that TA has decided to change it, not sure how, and reintroduce it sometime in the Fall. This crank needed no changing, but we suspect the bolt pattern will change, since it's not the mountain bike standard anymore.

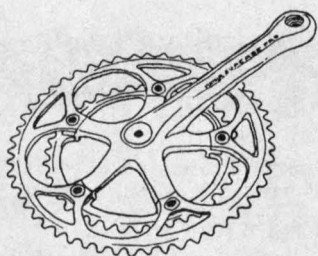
So, we're investigating other cranks. Ritchey has some new ones coming out, and Tom likes low Q-factors, so we might stock one or more of those. There are some other possibilities we aren't at liberty to talk about. For an update, call or fax.

Sorry about that. —Grant

FRA ITEM# 12-122 (170MM)
MEMBER PRICE \$200
NON-MEMBER \$210

FRA ITEM# 12-123 (172.5)
MEMBER PRICE \$200
NON-MEMBER \$210

FRA ITEM# 12-124 (175MM)
MEMBER PRICE \$200
NON-MEMBER \$210



SUNTOUR SUPERBE PRO CRANKS

Cold-forged (the strongest way) and beautifully finished, made in 1990, when SunTour was still making stuff the best possible way in Japan. 172.5mm arms only, with 53 x 39t rings. The 130mm bolt circle allows you to fit standard modern road rings as small as 38t. Superbe Pro bottom brackets are hard to find, but Phil makes a superb Superbe replacement, and we have them.

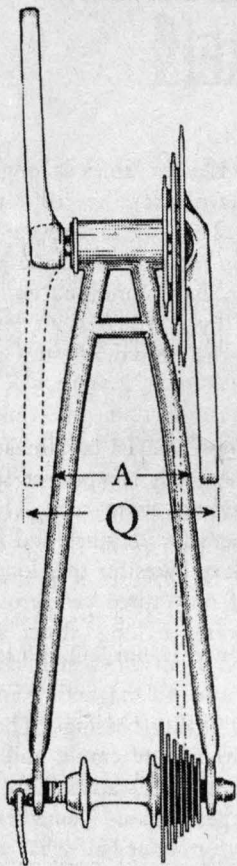
JPN ITEM# 12-072
MEMBER PRICE \$120
NON-MEMBER \$125

WHAT IS Q-FACTOR AND SHOULD YOU CARE?

It's how far apart the crank arms are from the outside of one crank to the outside of the other, at the pedal hole. It affects how far apart your legs are when you pedal. That, in turn, affects pedal-to-ground clearance around turns, aerodynamics, how your muscles work, and most important of all, pedaling feel.

During the last 15 years, Q-Factors have increased humongously (we call 15mm to 30mm "humongously"), even though manufacturers privately acknowledge that narrower, for many people, is better. The reasons cited (for the widening cranks) are too many and varied to explain here, but we'll go into it more in a Rivendell Reader. We are just so unapologetic, unabashed,

CATALOGUE & PRICE LIST



unashamed, self-professed, nut-extremists for cranks with low Q-Factors. Most cranks have wide ones. "Narrow" to us is below 155mm. Medium is up to about 164mm. Anything higher than that is wide. Crank makers don't list Q-Factors because they don't want you to ask. They'd rather it wasn't an issue. It ought to be an issue, though. It's not up there with rain forests or the health benefits of cycling, but narrow your focus to cranks and physiological minutiae, and Q factor becomes one of those things that thinking cyclists ought to think about. If you like wide, or if you aren't sensitive to wide Q's, you're in luck. Cyclists who were riding good bikes 20 years ago grew up with low Qs, though, and once you've become used to them, it's hard to give them up. Write-call-fax for more low-Q Factor propaganda, or read the Rivendell Reader. We sort of beat this topic to death.

Freewheels

SRAM bought Sachs a couple years ago, and in those two years, has stopped making both 6-speed and 7-speed freewheels. That's not joyous news. We're getting freewheels wherever we can: SunRaces from Taiwan, Sachses from France, Shimanos from Singapore. Freewheels have a future. The worldwide will continue to be high enough for years to come. India has half a dozen freewheel makers, and the only one I asked said they made 3-4,000 freewheels per day, and we're testing them now. And there's a new French company that bought out some old French companies, and it plans to make pro-quality freewheels again. For now, it's time to quit being a freewheel snob. Just pick one that has a decent range of gears, and go. Sachses? Sachss? Who knows?

6 SPEEDS

SHIMANO: 14-17-20-24-28-32

ITEM# 13-036

MEMBER PRICE \$16

NON-MEMBER \$21

TAI

7-SPEEDS

SACHS: 12-13-15-18-22-24-28

ITEM# 13-015

MEMBER PRICE \$48

NON-MEMBER \$53

FRA

SUNRACE: 13-14-16-18-21-24-28

ITEM# 13-029

MEMBER PRICE \$20

NON-MEMBER \$25

FRA

Bottom Brackets

A bottom bracket consists of a spindle, bearings, and whatever it takes to hold it all together, usually cups (in the case of cup-and-cone models) or retaining rings (in the case of sealed models).

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 a particular frame may call for something else. If you're buying a bottom bracket for a particular crank, and you don't know what length bottom bracket to get, ask. We may know.

Another consideration is the taper dimension. There is a JIS standard, popular in Japan and on most mountain bike bottom brackets; and an ISO standard, common on road cranks, especially European ones. They both have similar tapers, about 2-degrees, but the ISO spindle is skinnier, so if you put it into a JIS crank, the crank may slide on too far.

CUP-AND-CONE BOTTOM BRACKETS are a dying breed, but not because they aren't good. Manufacturers, who use up the bulk of the bottom brackets made, don't like them because they require skilled labor and more time to install and adjust. Bike shops generally dislike them for the same reason. Your local shop may be an exception, but probably isn't. Still, if you take both a cup- and-cone bottom bracket and a cartridge bottom bracket of the same price and quality and subject them to the same loads, the cup-and-coner will

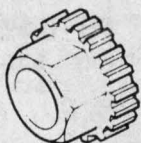
probably last five times as long. The weak point in a cartridge model is the bearing retainers. They're fine for even-loading situations in industry, but have a hard time with the hard, uneven, twisting loads imposed by a strong stout guy torquing them up the steep driveway. Ca-rack! Ca-runch!

Phil Wood makes a fantastic bottom bracket. Actually, it is perfect. It costs a lot, and is worth every cent. They've been doing them for 28 years, and I've been in the thick of bikes for that long, and have heard of only three problems, ever, and those were a long time ago. They're machined from 17-4 stainless (you can tell, because it's magnetic), and use only the best quality bearings. They come in widths to fit any crank, and if you're a weight nut, there's a titanium model also. You can get Famous Name sealed bottom brackets for about half what a Phil costs, but none has Phil's quality or reputation.

The Ritchey cup-and-cone models are no longer made, but we have plenty, and they mate perfectly with Ritchey cranks, which are now available only in Compact drive, which we don't cotton to or carry. They're unique among cup-and-coners in that their bearings are farther apart than usual. It's a smart design, but makes adjusting them slightly more challenging. Use a green Park pin spanner and you'll do fine.

If you have a question regarding bottom bracket/crank compatibility, call us up.

—Grant



PHIL WOOD BB TOOL

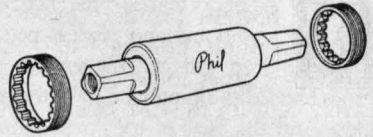
For installing and removing Phil bottom brackets. You can do it with one, but it's easier with two. Use with vise grips or a crescent. Sold each.

USA ITEM# 19-035
MEMBER PRICE \$9
NON-MEMBER \$14

Bottom Brackets

PHIL WOOD BOTTOM BRACKET

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. Mounting instructions included.



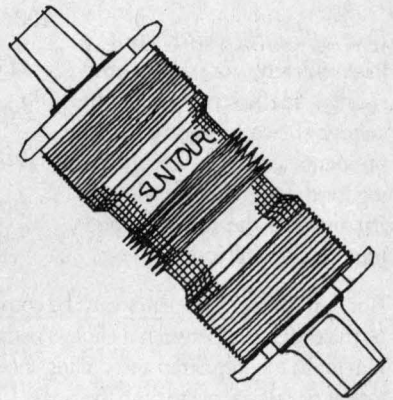
Spindle length	Item #
108	12-045
111	12-046
113	12-047
116	12-048
110.5 Superbe	12-049
119	12-050
123	12-051

ITEM#	SEE CHART	USA
MEMBER PRICE	\$123	
NON-MEMBER	\$128	

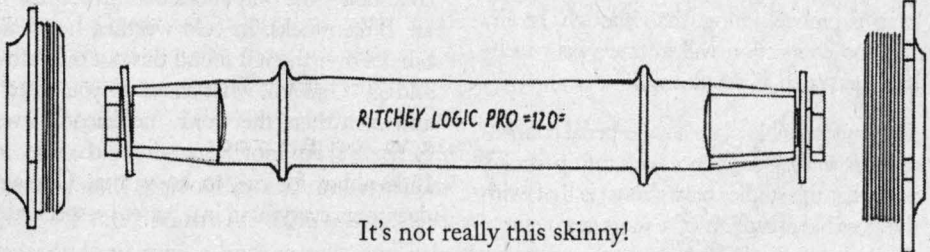
Don't Forget the Retaining Rings: \$17 per set
 English # 12-053
 Italian # 12-054
 French # 12-052

SUNTOUR GREASE GUARD

Grease Guard bottom brackets are a Wilderness Trail Bikes design, made by SunTour, and they're pretty neat because once they're installed, you can repack them with new grease and push out the old bad grease in just a couple of minutes. You need a grease gun to do this, but every auto supply store has one. Get a Dualco brand, pack it with grease (WTB recommends WTB brand grease, but we've used others), and then follow the simple instructions included with the bottom bracket. Many smart people swear by this design/concept/bottom bracket. The 115mm spindle fits many cranks. The cups are English threaded, so they fit American, Japanese, English, Taiwanese, and Chinese frames. For 68mm wide bb shells



ITEM#	12-067	JPN
MEMBER PRICE	\$35	
NON-MEMBER	\$40	



It's not really this skinny!

PRO		JPN
ITEM#	12-117	
MEMBER PRICE	\$40	
NON-MEMBER	\$45	

The Why Of Regular Old Pedals

The performance difference between traditional and clipless pedals has been grossly exaggerated—sometimes likened to skiing with or without bindings! And the tales of toe straps cutting off your circulation are laughable if they weren't so misleading. If you can manage your belt, a scarf, or a tie, you can manage toe straps. As far as "getting locked in to the pedals" goes, that's a bunch of malarkey, too. It's always been good practice to slightly loosen the straps for descents and trails, but even if you don't, you'll probably come out of the pedals in a crash. I always have.

So it boils down to efficiency. *Does efficiency matter?* And if it does, and if you say clipless pedals are more efficient, let's see the proof.

Does efficiency matter? isn't a joke. Clearly, for competitive riding, inefficiency is your enemy. If two biological clones on identical bicycles are sprinting for the line, the one with the flat tire and the too-tight bottom bracket will lose.

But that sort of inefficiency can't be compared to the difference between a clipless pedal system and a toe-clip/strap and cycling shoe with a cleat or ridged sole to grab the pedal. On the downstroke, how can there be a difference? All you're doing is pushing down. Moving the pedals over the top or through the bottom requires a little more connection to the pedal, but the degree of connection provided by a standard/non-clipless shoe with a toe clip and strap is probably more than enough. In any case, no connection will improve your technique as much as practice will.

The only possible place a shoe-pedal connection can make a difference is on the up-stroke, and what the studies have shown is that, with the possible exception of a short steep climb, the best you can do is unweight the up-pedal. Forget about actually pulling up on it. Even if that were possible, it wouldn't be good, because your legs need some rest, and the up-stroke is the best place to get it.

One benefit of regular pedals—and to me, this is a huge benefit—is that you can hop onto your bike with any shoe, and run an errand. When you get off your bike, you can walk into a store jam-packed with Waterford crystal and Ming vases without slipping. You can carry your bike up stairs to the train station, go into stores without drawing attention to yourself (plain clothes help here, too), and in general, ride your bike to help you do things.

For a lot of riding, you don't even need cycling shoes. Good normal shoe choices: Addidas Samba soccer shoes, Nike Leather Cortez, or just about any court shoe. Just avoid running shoes, sport-utility sneakers, or anything with knobs and a flared sole. If the shoes have soft soles, use the MKS platform pedals—pure comfort, even with Converse All-Stars!

One of our members has crossed the country three times and is just now finishing a trip from Alaska to Tierra del Fuego. We've spoken a few

times along the way, and the last time I asked him, "Hey, Carter, what shoes are you riding in?" He's riding in Hush Puppies—and if you think he bought them new, or out of nostalgia, you don't know Carter. He doesn't wear cycling shoes, and he's as bicycle-y as a human being gets. Another member lives in Toronto. For the past 15 years, he's averaged between 6,000 and 10,000 miles per year and completed numerous brevets, and—because of a foot condition—the only shoes that his feet allow are Birkenstocks. In cold weather, he wears booties over them. I found this out only after asking, "Graham, what shoes do you wear?" and even then, the word "inefficient" never came up. I'm not suggesting you ride in Birkies, but for me, to know that Graham does, puts everything in a better perspective.

Even if you prefer clipless pedals for your race bike or weekend marauder, it's good to have at least one bike you can just hop onto like Homer Price, and ride.

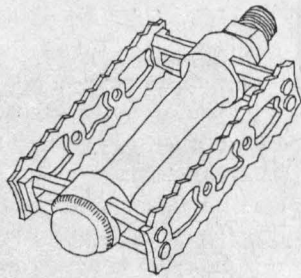
—Grant

*Even if you
prefer clipless pedals
for your race bike or
weekend marauder,
it's liberating to
have at least one
bike you can just
hop on and ride.*

Regular Old Pedals

MKS TOURING/CYCLO CROSS PEDALS

Our most popular pedal, and the one that draws the most raves. It looks like the 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, as most people do. Allen's personal favorite, and probably everybody should have one bike with a pair of these on it.



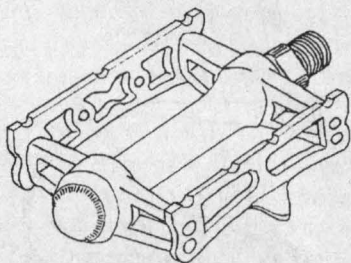
ITEM# 14-020

MEMBER PRICE \$38
NON-MEMBER \$43

JPN

MKS SYLVAN TRACK PEDALS

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 15,000 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. If you grew up on Campy road pedals and now you can't find them, these are the logical choice.



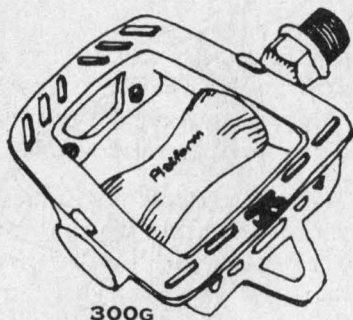
ITEM# 14-021

MEMBER PRICE \$45
NON-MEMBER \$50

JPN

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, and Jerome rides them with Keds and beats me in my Sidis. If you commute to work in regular shoes, or just want a nice, comfortable and easy-to-flip-into pedal, this is it. Designed to be used with toe clips and straps, of course.



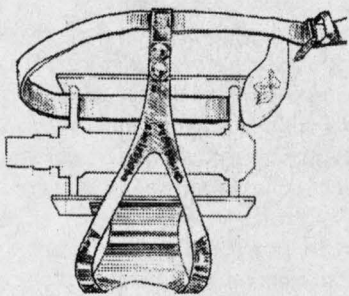
300G

ITEM# 14-030

MEMBER PRICE \$26
NON-MEMBER \$31

JPN

Toe Clips, Straps, and Buckle Pads

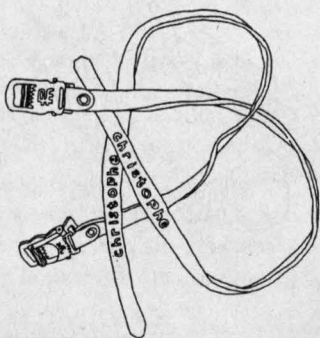


CHRISTOPHE TOE CLIPS

Chromed steel toe clips that were the standard for decades, maybe scores. Toe clips keep your foot from sliding forward on the pedal, possibly preventing some kind of bad accident. They also hold the toe strap open, so you can put your foot in there. These are Christopes—chromed steel classics from France that have somehow managed to survive unchanged in these wacky times. Pedals and straps are sold separately, of course.

FRA ITEM# SEE SIZES
MEMBER PRICE \$9
NON-MEMBER \$14

!Size	Item #		
S	14-015	M	14-014
L	14-013	XL	14-016

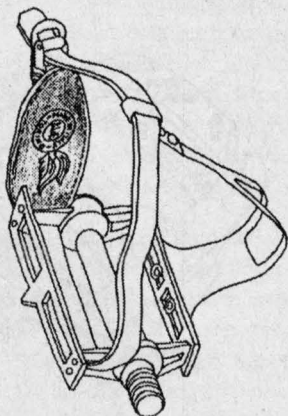


CHRISTOPHE LEATHER TOE STRAPS

These are generally not imported to the U.S., but we asked our supplier to get them for us, and danged if he didn't.

Historically, fancy toe straps have been laminations of leather-nylon-leather. Sandwiching the nylon in between leather made them expensive and reduced the stretch, so a tree trunk-thighed rider wouldn't pull out of them during the finishing sprint. For normal riding, plain leather is 100 percent as good. These are solid leather, usually black.

FRA ITEM# 14-034
MEMBER PRICE \$6
NON-MEMBER \$11



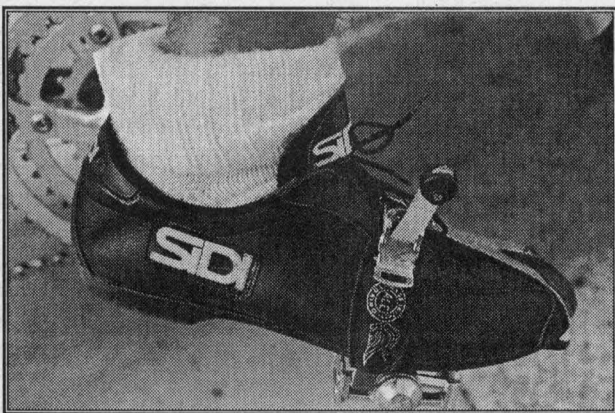
ALE BUCKLE PADS

I like the idea that somewhere in Italy someone still believes it's important to supply these. They're leather pads that slip onto toe straps and slide up under the buckle and isolate your shoe from that buckle, thus removing a major bullet from the ammo belt of those who claim toe straps are somehow uncomfortable, which they aren't.

These are a nice way to add a little comfort and class and gold writing to your bike for about the same price as a couple of packets of those caffeinated exercise goops you suck out of plastic; and these will last about twenty million times as long.

ITA ITEM# 14-007
MEMBER PRICE \$5
NON-MEMBER \$10

Shoes



SIDI TOURING SHOES

The cycling shoe situation was pretty bleak for us knuckledraggers who still don't ride clipless. Then, with Al's help and Sidi's cooperation, Italy's most famous cycling shoe maker agreed to resurrect this recently discontinued model, provided we agree to buy 300 or so pair per year, which we did.

They're fantastic shoes. People with skinny feet say they fit, people with fat feet (I have a EEE) rave about them. We've never had a pair returned because "the shape wasn't right for my foot." At least ten people have bought them and come back immediately for another pair or two, fearing they'll go under one more time and not be available.

At \$130 per pair, they're not cheap. But lots of cycling shoes these days cost way more than that, and none delivers the evening ball looks of the Sidi Touring,

with its plainish black, laces to the toe upper. The laces, of course, are hideously cheap and will break in 7 weeks, but the rest of the shoe will last five years at least, which comes out to pretty cheap per year.

It's nice to be able to walk in them. The ridges on the bottom grip the pedals, and a moderately snug toe strap, you won't lose half a wheel to Lance because of the shoes you're wearing. They go in and out of pedals with ease. They're light. The soles are thin, rubbery plastic, and totally isolate your sole from the pedal cages, no matter how hard you push.

Great fit, great looks, made in Italy, good gription, easy in and out, fine for walking, and with Lorica uppers, they're as durable as shoes get.

They're sized small. Forget what you wear in European sizes, even in other Sidis. Go by the chart, go by the chart, go by the chart below there, left. —Grant

Men's Size	Sidi Size	Item #
7	39	22-052
7.5	40	22-053
8	41	22-054
8.5	42	22-055
9	43	22-056
9.5	44	22-057
10	45	22-058
10.5	46	22-059
11	47	22-060



ITEM#	SEE SIZES	ITA
MEMBER PRICE	\$130	
NON-MEMBER	\$135	

Brakes

We're one of the last places you can buy single-pivot sidepulls. In the mainstream market they're dead, and I don't know any manufacturer who still makes them. Dual-pivots have taken over.

Dual pivot brakes work great. They're the bike equivalent of power brakes, but the advantages come at a price, and the price is fender clearance. "Fender clearance?!" you say, "I don't need no fetid fender clearance!"

That's true if you're a sunnyweather weekend warrior, but rain rides can be pleasant if your bike has fenders, and rain rides can be a nice change of pace once in a while. We think every bike should have the potential to be a year-round, all-weather bike, and we're doing our part to make that a reality for you, by selling single pivot sidepulls.

Don't get the idea that single pivot sidepulls are less brake than a dual pivot. True, you do have to squeeze harder for the same amount of stopping power. But cyclists did this for years, and nobody complained. Certainly, modern brake shoes have supercharged the performance of thousands of brakes, and if your braking demands are high, you can equip sin-

gle-pivot models with aftermarket brake shoes. Mathausers are hard to get now, but there are others out there that, even if they aren't as good (and they aren't), they'll still boost your brakes a bunch.

Why won't somebody make a standard reach dual pivot that offers good fender clearance?

Likewise, V-brakes have taken over the off-road market, and you see them on lots of touring bikes, too. V-brakes were developed because dual-suspension mountain bikes presented cable-routing problems. So, Shimano came up with a powerful brake that didn't require cable stops, and that is the V-brake. For normal off-road riding or touring, we prefer the cantilever. Avid makes a really nice one that's designed to work with normal road levers (in truth, we haven't found one that doesn't), and we offer that for the first time this year.

There are tricks to setting up any cantilever. We like the straddle cable hanger near the bottom of the fork crown. For more information about cantilevers (apologies to the computerless), look up: http://bontrager.com/rants/rant_0008_08_03_1998.html#Stnd_Canti_basics.

—Grant

Cables & Housing

Top, professional quality.

SunTour brake cables & housing: For front and rear brake cables, taupe housing, stout cables, and four housing ferrules. Japan.

\$7 Item #15-025

Brake cables, no housing: Stiff, strong, smooth. QBP brand. Coated, which is why they cost so much. Taiwan.

\$3 each Item #15-001

Derailleur cables: Smooth and coated. Same as above. Index compatible.

\$3 each Item #17-003

Kool Stop Canti Shoes

Mathausers brake pads, the best ever, are excessively hard to come by these days, and we've given up. But Kool Stop has been making them for Mathausers for years, and Kool Stop's "salmon" colored pads are the same compound. The Kool Stop road shoes look too odd for our snooty tastes, but the cantilevers are fine, so here they are. They work well.

\$9 per wheel (pair) Item #15-061

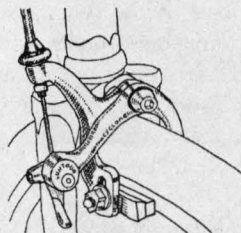
Sidepull Brake Calipers

SUNTOUR CYCLONE

These 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, good enough for any bike.

Maximum reach: 50mm.

Specify allen or nutted centerbolts, or we'll assume you want allen.



ALLEN# 15-026

MEMBER PRICE \$45

NON-MEMBER \$50

JPN

NUTTED# 15-027

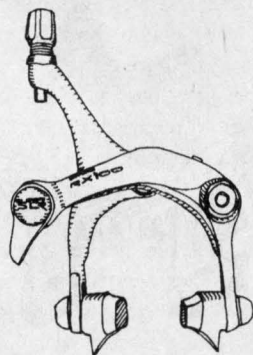
MEMBER PRICE \$45

NON-MEMBER \$50

JPN

SHIMANO RX100 DUAL PIVOTS

The only **standard reach dual pivot sidepull** made, and it may not be made for long. In fact, Shimano may have quit making it last year, but we have a fair number of them (80 pair or so). When you need or want a standard reach sidepull, these are the most powerful, efficient ones on the planet. They don't look as good as old Campys, and they crowd fenders more, but they have more reach, and if you need the reach, you don't have much choice. They stop the bike really well, and aren't ugly. We put them on standard-reach Rivendells.



ITEM# 15-040

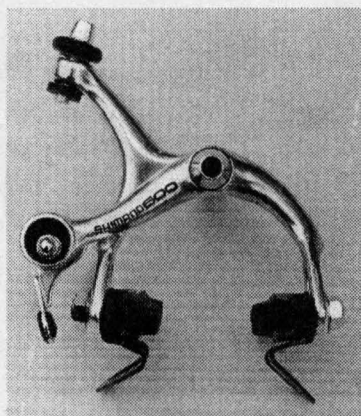
MEMBER PRICE \$57

NON-MEMBER \$62

JPN

SHIMANO 600 EX SIDEpulls

New old stock from 1985. These Shimano 600 EX sidepulls are a window into the world of function, value, and humility that used to dominate Shimano's entire line. They have all the good stuff: Micro-adjusting quick-release, rubber-donut barrel adjuster, good fender clearance, and wheel guides for easy and quicker wheel re-installation. The only hitch is that we bought them as rear/nutted brakes. A rear nutted is exactly the same as a front allen. We supply the front allen bolt, and to make the rear one work on allen-style brake bridges, we supply a converter sleeve-washer that fills in the gap perfectly. Our best deal in sidepulls!



ITEM# 15-042

MEMBER PRICE \$50

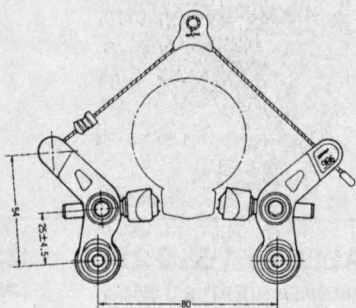
NON-MEMBER \$55

JPN

Cantilevers

DIA COMPE 986 CANTILEVERS

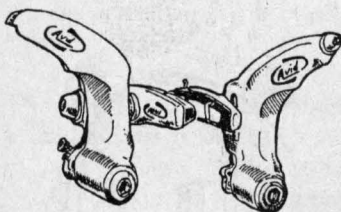
Originally made for the '90 Bstone MB-Ø, and for about 15 months after that, it was the most popular high-end cantilever on the market. There's nothing super great shakes about them, but they work just fine, and in this age of the V-brake and dwindling supplies of cantilevers, you should snap them up like popcorn, because they're so cheap. The \$25 price is for a bike's worth (front and rear wheel). The best deal you'll ever see, and they're good brakes. Ti Finish.



JPN ITEM# 15-012
 MEMBER PRICE \$25
 NON-MEMBER \$30

AVID CANTILEVERS

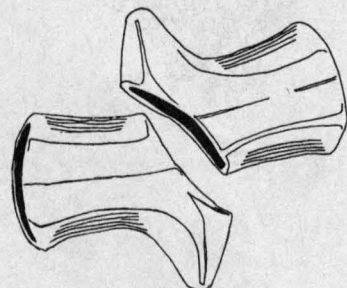
A relatively new designed-in-Colorado, made-in-Taiwan cold-forged aluminum cantilever designed specifically for regular old road brake levers. It has a slightly different arm design and a linear spring (not a coil), and according to Avid, the spring "builds tension faster and with less movement" than does a coil. We haven't had problems with coil-spring brakes, and continue to sell them, but in any case, this Avid works great, and we like it a lot. Set up is easy, and the brake shoes are grippy.



TAI ITEM# 15-062
 MEMBER PRICE \$80
 NON-MEMBER \$85

FAKE CAMPY BRAKE HOODS

Replacement hoods for old Campagnolo, Modolo, and SunTour Superbe levers. Thicker than old Campy, but not by much, and they fit just as well. Brownish color, darker than some of the old thin translucent ones, but more durable, too. Not the hoods for your museum showpiece restoration project, but if you're the kind of rider who grabs a pocketful of cookies and a big bite of a ham-with-jelly sandwich on white before going out for a 90km solo circumnavigation of the Flemish industrial centers, you'll find these will do the job just fine. Instructions not included. Just remove the bar clamp and wiggle them on from the rear, like a python swallowing a piglet.

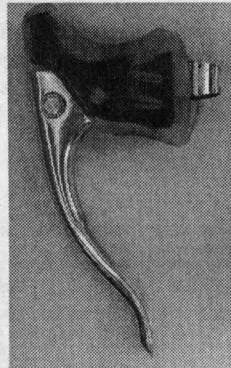


USA ITEM# 15-053
 MEMBER PRICE \$15
 NON-MEMBER \$20

Road Brake Levers

CAMPAGNOLO TRIOMPHE ROAD LEVERS

The only difference between these and Campy Record brake levers is the bar clamp; and there's nothing weird about this one. The rest of the lever is identical. The hoods are weird, though. The supplier stripped the original hoods off them to sell separately, so he supplied them to us with clear Modolo anatomic hoods. The fit is fine, the quality is even better, and the anatomic part is fine; but the clear hoods give the lever a spooky iMac look, and you have to wrestle them on yourself. We supply instructions, but if you don't have strong thumbs, patience, and a spare 20 minutes, don't buy.



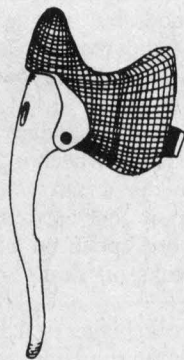
ITEM# 15-055

MEMBER PRICE \$54
NON-MEMBER \$59

ITA

DIA-COMPE AGC 251 AERO ROAD LEVER

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. But they are excellent levers, and good enough quality for any bike,



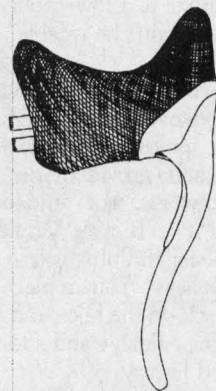
ITEM# 15-013

MEMBER PRICE \$50
NON-MEMBER \$55

JPN

SHIMANO RX100 ROAD LEVERS (AERO)

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 for big hands, they're the most comfy-ergonomic lever we offer. Some might say they're spookily ergonomic. They raise the bar to a ridiculous level and make perfectly good (but less ergonomic) levers seem inadequate, which they aren't. Anyway, these are a great deal.



ITEM# 15-037

MEMBER PRICE \$25
NON-MEMBER \$30

JPN

Spoked Wheels Are Better Wheels

A wheel laced with shiny, slender, sparkling silver spokes, with its strength-belying delicacy, is the universal symbol of bikes and bicycling. It's an engineering phenomenon, and a work of art.

Spoked wheels are the last remaining bicycle part whose manufacture can't be totally robotized. There are robot wheel builders, but the spokes have to be stuck in the hub by hand. In the big factories, teams of young women grab six to ten spokes at a time in their fist, then fan them out just right, and stick them in the hub in one motion. A few rounds of that, and the hub's full of spokes and ready to be laced to the rim. Then it goes into one of several types of wheel-robots, and it comes out pretty good, but not good enough. A human catches it as it rolls down a trough, and puts the finishing touches on it.

As traditional and archetypal and symbolic as the spoked wheels is, it is also the best kind. There's a safety and repairability built into it that spokeless wheels don't have. If one spoke on a 32 to 48-spoke wheel breaks, big deal.

If two break, bigger deal, but it's not likely to happen on the same ride, and even if it does, you've still got 30 to 46 spokes to ride home on. Be careful around those 20-spoke wheels that are starting to pop up, though. They require heavier rims and higher tension, so each spoke is under greater tension (stress). If one highly tensioned spoke in a low-spoke wheel breaks, that wheel won't be rideable.

Expensive spokes cost \$0.35 each. A cheap spoke wrench costs four dollars, so fixing a spoked wheel costs less than a candy lunch, provided your effort doesn't make it worse. For guidance, buy Jobst Brandt's *The Bicycle Wheel* for twenty-four dollars, and now you're up to twenty-eight dollars. You replace the spokes, you're back on the bike, and you've learned something valuable and added to your tool chest and library.

There's no such thing as a minor injury in a high tech wheel. They cost a mint. They're faster in wind tunnels, and probably good for time trials, but for everyday

riding they're dumb and expensive. The absolute ultimate road wheel for sub-210 pound riders, is a parallel-sided box-section rim laced with stainless spokes with brass nipples to a top quality hub. If it's a front wheel, it can have 32 or 36 spokes. If it's a rear wheel, it can have 32 to 40 spokes. It will cost, depending on some particulars, between \$150 and \$220, and will last you 15,000 to 35,000 miles, depending on how much wet pumice you ride through on your prolonged, rain-soaked, descents.

Rear wheels don't have to have more spokes than the fronts, but there's logic in doing it that way. The rear wheel is dished, which makes it weaker; and it carries more weight, which makes it more vulnerable. When you see a pothole or a bump, you unweight the front wheel to get over it without crashing, and that puts more weight on the rear, just in time to smack into it. Four extra spokes back there make a lot of sense. Off-center rear wheel rims are smart—one of the few good things to come about in the high-tech devolution. A 32-spoke rear wheel built on an off-center rim has little to no dish, and is as strong as a dished wheel built with 36 spokes.

Front wheels rarely go out of whack. They're not dished, and usually, when you find yourself about ready to hit an unavoidable bump or hole, you can lift the front wheel over it (but the rear smacks it). There's nothing wrong with 36-spoke front wheels, but the weight and wind resistance penalties are minimal, and an argument can be made for a super damage-resistant front wheel, since a wobbly front wheel is more dangerous to ride than a wobbly rear one.

The spoked wheel is the last part of the bike that still has to be made with human labor. Robots and computers can do the rest. In fourteen years the spoked wheel will be as rare as leather saddles are now.

Even if the molded wheel evolves and surpasses the spoked wheel in reliability, and comes under it in price, and weighs even less, and all of the problems inherent in the current ones just go away, some riders will still want to ride around on the real thing.

—Grant

Hubs and Quick-Releases

Rear hubs lead a hard life, and Phil Wood makes as good a hub as any, maybe better, so the only rear hubs we sell are Phils. We sell front Phils, too.

Front hubs—all they do is roll. The SunTour XC9000 front hub we offer has to be the best hub deal in the world, and is as good as any front hub made. It has a cold-forged body, angled flanges, high polish, and bearings that are both sealed and shielded. You'll get 10 years out of it

before you'll need to replace the readily available bearings, and replacing the bearings is easy.

QUICK-RELEASE SKEWERS

Assorted top-quality SunTour, Shimano, and SunTour-made-for-Specialized skewers. Fronts and rears. We'll try to match them by brand, but no guarantees. They're close enough!

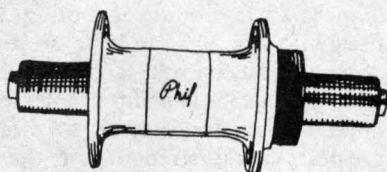
Front Q/R: #18-043 \$8

Rear Q/R: #18-041 \$8

PHIL WOOD HUBS

Phil Wood has been making this hub for 28 years, with only minor changes (always improvements). It is highly evolved, refined, there never were any bugs, and since 1998 or so, it's been field-serviceable with two 5mm allens, but you'll probably never have to.

Hub	Item#
Front 32°	18-033
Front 36°	18-034
Rear 32° x 130 x 6sp	18-064
Rear 32° x 130 x 7sp	18-035
Rear 36° x 130 x 6sp	18-061
Rear 36° x 130 x 7sp	18-037
Rear 32° x 135 x 6sp	18-063
Rear 32° x 135 x 7sp	18-036
Rear 36° x 135 x 6sp	18-062
Rear 36° x 135 x 7sp	18-038
Need something wacky?	Call!



ITEM# SEE CHART

MEMBER PRICE \$97
NON-MEMBER \$102

USA

SUNTOUR XC 9000 32H FRONT, NO Q/R

SunTour's best in 1988, and right up there with a Phil, almost. If you ride 32-hole fronts (and who can't?), this is the best deal in the world. Carry a couple in your pocket wherever you go. Hand them out at Halloween. This is cheap, and these are great. A quick-release is not included, although they are quick-release hubs.



ITEM# 18-052

MEMBER PRICE \$20
NON-MEMBER \$25

JPN

The Wheel Deal

We can supply wheels for Rivendell-Atlantis-Heron bicycles. Call for rim and hub options and prices (roughly \$200 per wheel with Phil hubs, \$170 with SunTour). For a bike you already have, it may be best to buy locally, or call Joe Young in New Hampshire (603) 740-4539 or www.youngwheels.com.

Rims

If you ignore for a moment all single purpose, special purpose or special event rims that don't have to live a working rim's life, rims can be heaped into just 2 groups: Normal and Heavy Duty.

Normal rims are for road riding with unloaded bikes. The classic normal road rim was the Mavic MA2, discontinued just last year. There are normal rims, but nothing still available matches the MA2 in value and track record. It was designed before the age of cutting edge, so it didn't have to be lighter, sleeker, or have any unique features to it that, remarkably, no other rim makers had picked up on. There was nothing patentable about it!

The MA2 is a study in boring, smart design. It was 20.5mm wide, so it could accept tires as narrow as 700x20, and as wide as 700x35. It had a simple, rectangular box section, proven to offer the greatest lateral strength for the least weight. Its braking surface (sidewall) was thick enough to endure years of abrasive braking, and tall enough to make brake set-up easy. The double eyelets (ferrules joining both the inner and outer circumferences) distributed spoke stress over a larger surface area than do single eyelets, and never, not once, loosened up. There was nothing outstanding about any detail of the MA2 except its reliability, and its uncanny ability to stay in circulation until Y2K.

You can bet its canning was not due to any real, actual, inadequacy. It probably got ousted because somebody confused "perfect" with "antiquated."

Heavy duty rims should be at least 22mm wide, and up to 24mm. Weight isn't as important with them, so anything under about 580g is acceptable. Indeed, if the rim is both wide and light (say, 24mm and 475g), then you've got to wonder about the thickness of its walls. When you're touring, commuting, or trail riding, a certain amount of mass is a good thing. You want rims that can hold up, and you don't get that with soda-can walls, ceramic coated or not. Ceramic coatings are

fine, and applying them to race wheels makes sense, but for everyday wheels, a thicker wall and a sound design will keep you out of more trouble.

Rims should have parallel braking surface. V-shaped braking surfaces accentuate any downward force a cantilever might be pressing on a rim, and there's no benefit, so why do it? Yet many rims are V-shaped. There's no benefit.

Many highly touted modern rims have machined sidewalls, to improve braking. There are minor pluses and minor minuses to machining. 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. Machining sidewalls to perfect an already adequate braking surface removes the humps and thins the sidewalls, and unless the maker plans for it by starting with a really thick wall, you get an expensive rim that comes pre-worn out! If you ride machined rims, ceramic-coatings are a good idea, for abrasion resistance.

We're fishing for new rims, and haven't concluded anything. Araya (Japan) has a rim that could replace the MA2. Araya has been around for more than 20 years, makes great rims, and is one of the few rim makers left that still can do double eyelets. Ambrosio has one, too — the Torelli "Master Road". The Bontrager Fairlane and Maverick look good for a 700c touring rim, to replace the hard-to-get Sun CR18. Bontrager rims are made by Trek, have a great reputation. I'm a big Keith Bontrager fan, and I'd like to get his name somewhere on the bikes.

—Grant

Tires

I've never owned a camera that wasn't a better camera than I am a photographer, and I've never lost traction on a dry road because the rubber didn't grip enough. Real people take bad pictures and lose traction because they mess up, not because their gear does.

Here's what we value in tires, and why.
Sufficient volume. There's no reason in the world to ride a road clincher that's any narrower than 24mm. With tire markings as they are, that pretty much means a 700x26 or 28. Don't say these tires weigh too much, because they get as light as 220g, and you can get 70g tubes. If that's not light enough, ride tubulars. A puffer tire tolerates a wider range of pressures better than does a skinny one. Soften it to 80 psi for rain or chipsealed roads. If you have a slow leak and no spare or patch, you can ride it longer between pump-ups. The fatter, slightly softer tire protects the wheel more, and it's faster on rough roads, because it deforms and rolls over bumps, instead of getting bounced upward, losing speed and jarring you at the same time. Air volume is good! More is better, to a point.

Round cross-sections for corners, or wide ridges for durability. A round tire leans over consistently. Tires with ridges or pointed middles feel as though they're pulling you down when you lean over hard. But for touring, the ridge is desirable. It adds rubber at the wear point, and fast cornering isn't an issue.

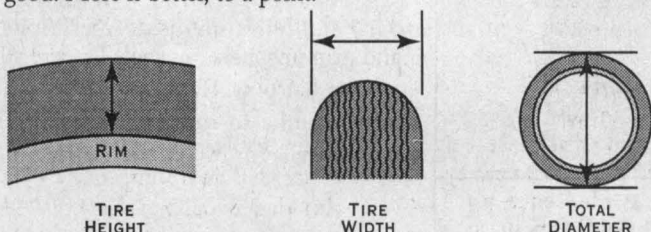
Strong casings, for safety. A blown or cut sidewall makes you crash instantly. Inspect your sidewalls, but start with strong ones.

A little tread on wet roads. 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. It doesn't seem to work that way in western Contra Costa County.

Tan sidewalls. These look the best and make it easier to tell (by looking) when your tire's going flat. If the sidewalls are black, you can't tell. Same with grey.

We are developing our own road clincher and hope to have it out by October 2000. That's all we'll say about it now.

—Grant



TIRE SPEC CHART

MODEL	HEIGHT	WIDTH	ØMM	WEIGHT
Panaracer Pasela-K 26 x 1.25 (wire)	32	30.5	627	300g
Ritchey Crossbite 26 x 1.9 (kevlar)	44	43	656	604g
Panaracer Cat 1 700 x 26 (wire)	25	24.	680	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

Presta-Valve Tubes, \$4 ea.

700c Item #10-004

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

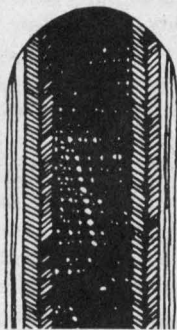
26 Skinny Item #10-003

BLACK. 93G MIN; 135 MAX. FOR 26-INCH TIRES UP TO 35MM WIDE (ABOUT 26 x 1.3)

26 Medium Item #10-002

BLACK. 140G MIN, 165G. FOR 26-INCH TIRES UP TO 45MM WIDE (ABOUT 26 x 2.1)

Tires

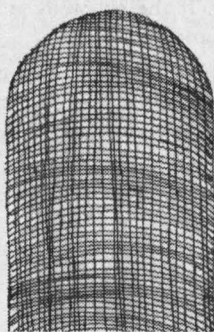


WIRE BEAD

JPN | ITEM# 10-027
MEMBER PRICE \$22
NON-MEMBER \$27

PANARACER CAT PRO 700x26 (25MM)

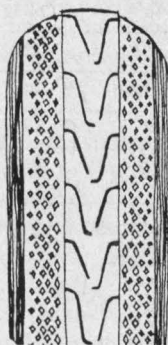
Recently discontinued by Panaracer, but we have lots left (in wire bead), and you won't find a better tire anywhere. They run perfectly true, are light for their volume, and the casings are some kind of nylon-kevlar mix, so the sidewalls won't easily cut. We really like strong sidewalls. Our top choice for road riders under 210 pounds.



JPN | ITEM# 10-005
MEMBER PRICE \$28
NON-MEMBER \$33

AVOCET 700 x 32 ROAD SLICKS

If your frame can fit it and you don't have any psychological hurdles about riding tires labeled 700x32, then you won't find a better tire for all-around road riding on dry roads. They're round, they're slick, and they corner and grip unspeakably well. They're silent, even around hairpins. Remarkable! They have sufficient volume to run as low as 80 p.s.i. if the surface calls for it.



JPN | ITEM# 10-028
MEMBER PRICE \$25
NON-MEMBER \$30

PANARACER PASELA 700x35

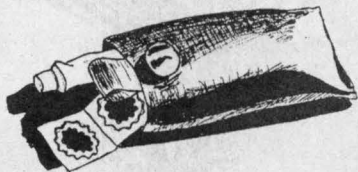
A light, tough, totally reliable tire for touring, commuting, tandems, fire trails if you ride sanely, and any rough asphalt. It won't corner like an Avocet until the center rib wears down, but for straighter roads, and certainly for touring and distance riding, it's a better choice. Rave reviews from users. Durable, comfortable, long wearing—you put it on and forget about it. The tire says "inflate to 75p.s.i.," but based on our experience, that's conservative. Kevlar or wire bead.

KEVLAR BEAD
JPN | ITEM# 10-011
MEMBER PRICE \$32
NON-MEMBER \$37

Tires

ANTLOAD PATCH KITS

Mike Cobb makes patch kit containers from broken inner tubes and snaps, and stuffs them full of what you need to fix a flat with, minus the tire levers. Namely, rubber cement, a square of sandpaper, and genuine Rema patches. Kim Young, some of you know, was a Bstone catalogue cover girl (1994), and runs BICAS, a youth bicycle mechanic organization. They go through a thousand or so patches a year, and she says the only patches that work consistently are Remas. Why carry any other kind?



ITEM# 10-012

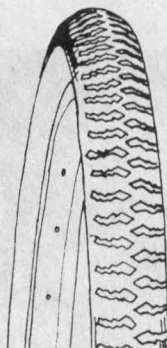
MEMBER PRICE \$5
NON-MEMBER \$7

FRA/USA

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, corners like a roundy, and has sufficient volume and grip for most non-competitive off-road riding.



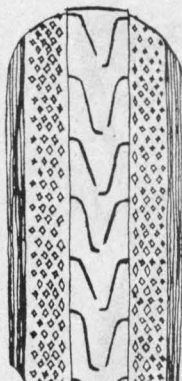
ITEM# 10-015

MEMBER PRICE \$32
NON-MEMBER \$37

JPN

PANARACER PASELA 26 x 1.25

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. As do our other Panaracer tires, it has the never-shouldabeen-discontinued "tornado" casing, made of nylon and kevlar. Strong, tough, light, and tan!



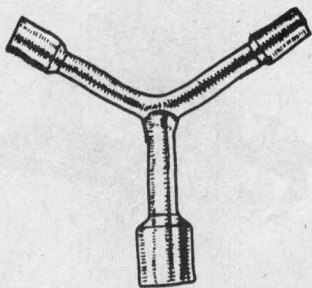
WIRE BEAD

ITEM# 10-010

MEMBER PRICE \$30
NON-MEMBER \$35

JPN

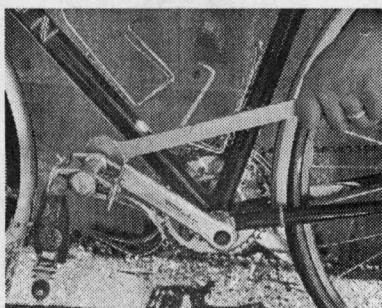
Tools



HOZAN Y-WRENCH

Everybody needs a Y-wrench, and this Hozan is the best and most expensive 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. For brake levers, fenders, nutted brakes, brake shoes, and that's about it. Every bike shop uses one, and every home mechanic needs two, unless you're one of those infuriating aliens who never misplaces tools.

JPN ITEM# 19-023
 MEMBER PRICE \$10
 NON-MEMBER \$15



ELDI No. 61 PEDAL WRENCH

Throw every other pedal wrench you own into the nearest garbage can. The best pedal wrench is the venerable ELDI No. 61. Your great-great grandchildren will be glad you had the good sense to buy it. It is the best.

Tip: Hold the wrench in the middle to do the final snugging during installation (or, if you hold the end, go light). That way, you won't have to wrestle as much when you remove them. Long, heavy, solid hardened steel; and rustproof. What a beaut, and our price is ridiculously low.

GER ITEM# 19-051
 MEMBER PRICE \$15
 NON-MEMBER \$20



NITTO STEM PRY

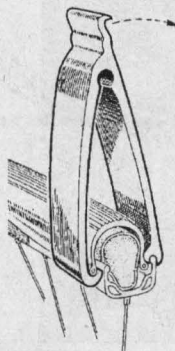
Nitto makes this tool for prying open the stem clamp, so's you don't scratch up the bar sleeve when you put it in. It works better than a nickel in vise grips, or a screwdriver, but nevertheless falls into the category of "non-essential tools for the home mechanic." If you're a shop guy-girl, though, isn't the peace of mind that comes from knowing you'll never scratch your customer's handlebars worth the \$22? Double ended, to fit most stems.

JPN ITEM# 19-029
 MEMBER PRICE \$22
 NON-MEMBER \$27

Tools

THE TYRE LEVER FORMERLY KNOWN AS VAR

These won't pinch tubes or mark up rims. They're French, they used to be marketed as VAR brand lever, and they are by far the best tire lever I've used for 32mm wide and skinnier tires. I'm now using the Eldi levers on larger tires.



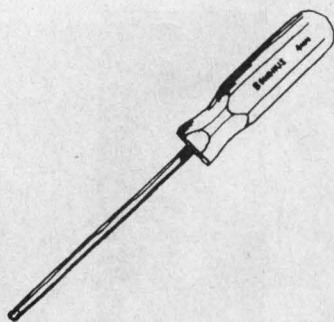
ITEM# 19-045

MEMBER PRICE \$9
NON-MEMBER \$11

FRA

4MM BONDHUS (BALL-HEAD) ALLEN 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. Actually, "a real blessing" doesn't go far enough. Mounting a single bottle cage without one of these will drive you bananas, and after that, you'll kick the cat. It is so frustrating, because the L handle keeps knocking into the cage, so you can barely tighten it before you have to start over again. German, top quality, and when you need one, nothing else will do...as well.



ITEM# 19-011

MEMBER PRICE \$6
NON-MEMBER \$9

USA

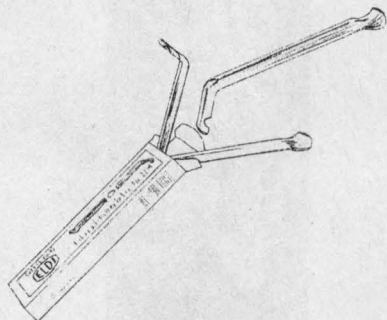
ELDI TIRE LEVERS

The challenge: Tire levers that will last 50 to 150 years or 10,000 tire changes, whichever comes first.

The budget: \$100.

The solution: Eldi Steel, and you have \$97 left over.

Unlike the cheap steel levers we all hate, these have smoothish rounded edges, and don't harm rims. Fanatics will touch them up with an emery board, anyway. Three pieces of solid, bent, shaped genuine steel for only \$3? Buy some before Eldi gets bought out by a heartless conglomerate that thinks steel tire levers are archaic. Some pro mechanics use no others.



ITEM# 19-050

MEMBER PRICE \$3
NON-MEMBER \$6

GER

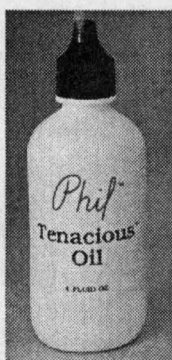
Lubes & Liquids



BOESHIELD T-9

This heinous-sounding stuff was developed to keep Boeing's airplanes from rusting; and with Boeing's budget, you can imagine they came up with a good formula. It is our current favorite chainlube. It's wax-based, so as chain lubes go, it's relatively tidy and doesn't tend to collect gunk as fast as oil-based lubes. It's not as dirt-rejecting as White Lightening, but an application lasts longer, and it's still pretty good. You don't need to look around any more for the ultimate chain lube; T-9 is good enough for the rest of your life. 4 oz drip bottle.

USA ITEM# 13-033
 MEMBER PRICE \$7
 NON-MEMBER \$9



PHIL 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. Good to use on any new pedals. Run a squirm of oil around the bearings, let it soak through, and put the dustcap back on. Grease is better, this is quicker. A bottle will last the average home-user 10 years. Sometimes, for quick jobs, you don't want to dip your finger into the grease, and that's when you grab for this. Great for nothing, good for everything!

USA ITEM# 31-013
 MEMBER PRICE \$6
 NON-MEMBER \$7



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 would any rider of steel not use it? We've tested seven other anti-rust goops, and this one is the clear winner. It takes 5 minutes to spray the frame, and 10 minutes to clean up, using Simple Green, WD-40 or 409 for that. Boeig T-9 in aerosol works well, too. One aerosol's enough, and this one got here first.

Not shippable by air

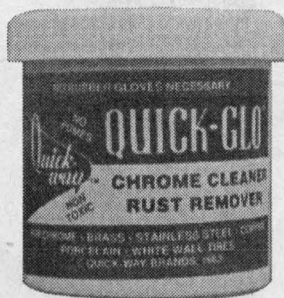
USA ITEM# 31-006
 MEMBER PRICE \$13
 NON-MEMBER \$15

Polish, Hand Cleaner & Wax

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. Quick-Glo is really amazing stuff, it's been around since the '50s or so, 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. For instance, if you're boiling water for tea in an enameled tea kettle, and you forget it's on and boil the pot dry, the enamel will brown pretty badly, and you'll think, "Great Scot! I've just ruined another kettle!"

But Quick-Glo can fix it, and will fix it, if you just rub it on enough.



ITEM# 31-015

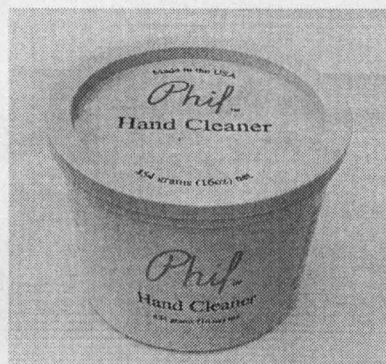
MEMBER PRICE \$6
NON-MEMBER \$7

USA

PHIL HAND CLEANER

By far the best hand cleaner we've tried, and we here at Rivendell Bicycle Works fancy ourselves hand-cleaner connoisseurs. This grainy brown stuff gets out the grime and rinses off in a jiffy. It's all natural, doesn't smell, isn't toxic, and when it's all used up, you've got yourself a plastic celeste-colored bowl. Not sold in hardware or auto-supply stores, and I've never even seen it in a bike shop.

You'll never find a better hand cleaner, or one that's more pleasant to use. Cheaper, maybe, but none as good.



ITEM# 31-038

MEMBER PRICE \$6
NON-MEMBER \$7

USA

BEESWAX

From local 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 shoe laces 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).

Beeswax is one of the best smelling substances on earth, as you probably know already.

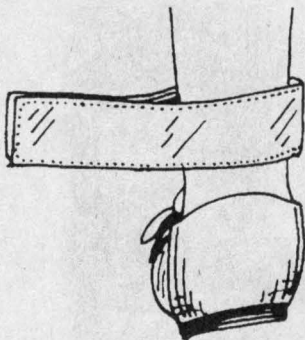


ITEM# 31-002

MEMBER PRICE \$3
NON-MEMBER \$4

USA

Safety Stuff

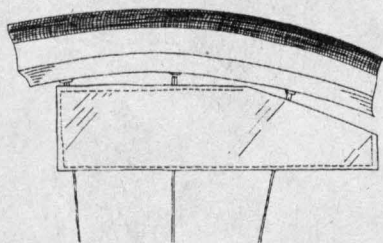


ACME ANKLE REFLECTOR

More surface area and reflectivity than any other ankle reflector. Ankle reflectors, by the way, do so much for so little money and weight and hassle, that every rider needs at least one. Even during daylight, they keep your pants out of the chain grease, and make you slightly more visible. These are our own design, and are the best ankle band made.

Made of Reflexite, the shiniest and most reflective material we've used. Some shade of white, yellow, or orange, as available. Also good for night running, on legs or arms.

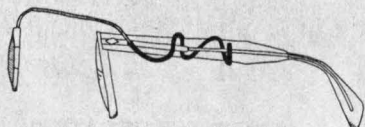
USA ITEM# 31-016
 MEMBER PRICE \$5
 NON-MEMBER \$10



ACME WHEEL REFLECTOR

We've all seen cheap bikes at night, their wheel reflectors shining and turning around, and as Riders of Good Bikes, we've all kind of sort of been slightly envious, right? Maybe I'm just speaking for myself. Anyway, these white Reflexite-n-Velcro reflectors weigh about 4g each, go on and off in seconds, don't throw the wheels off balance or interfere with spoke tension. I/Grant have used them for more than 15 years, and wouldn't ride at night without them. They're no substitute for lights, but you can't be too visible at night, you know? Sold each.

USA ITEM# 21-080
 MEMBER PRICE \$5
 NON-MEMBER \$7



CHUCK HARRIS'S REAR VIEW MIRROR

The best we've used—it keeps its adjustment over long miles and bumps. Chuck makes it from recycled materials, and he's made more than 60,000, so the bugs are gone. The arm is a spoke. The mirror is big, easy to use on your first try. Racers and cool guys eschew rear view mirrors. Tourists, commuters, and others with stronger survival instincts, aren't so handicapped. There's nothing cool about not knowing what's bearing down on you, and it's nice to know when you're dropping folks you don't want to drop.

WIRE FRAMES

USA ITEM# 21-023
 MEMBER PRICE \$16
 NON-MEMBER \$19

PLASTIC FRAMES

USA ITEM# 21-022
 MEMBER PRICE \$16
 NON-MEMBER \$19

More Stuff

ALE BOTTLE CAGE

One of cycling's great mysteries is the popularity of aluminum bottle cages. They mark up bottles and make them so ugly you don't want to touch them. Titanium and plastic cages don't do that, but Ti cages cost a lot, and plastic ones make any bike look like garbage. This one is chromed steel, about 100g. Sturdy, reliable, looks great, and no amount of jiggling will blacken the bottle. Being coated in genuine Italian chrome, it eventually will rust, but the rust doesn't look so bad, and rust or no, it ought to last a decade or more. A fantastic deal. 93g.

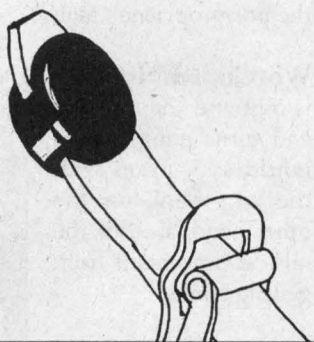


ITEM# 29-001
 MEMBER PRICE \$10
 NON-MEMBER \$15

ITA

TOE STRAP BUTTONS

If you're going to ride with toe straps, you might as well go all the way and use the buttons. These slip onto the end of the strap, and have a screw that pokes the leather and keeps them there. They provide a handle for snugging and a stop while loosening. We'd love to be able to tell you they're made of some kind of natural material whose harvesting saves the rain forests, but they're merely plastic. If you don't buy them, they're landfill. Assorted colors, no choice, all from Italy.



ITEM# 14-033
 MEMBER PRICE \$1
 NON-MEMBER \$2

ITA

TOMBOW ERASER

The best in the world, as everybody who's ever used it will swear to. Erases onionskin, bible paper, newspaper, or the tannish crumbly paper second-graders use for just about everything. Ideal for draughtsmen, students, kindergartners, artists, and crossword puzzle do-ers.

We introduced these in last year's catalogue (No. 5), and they became one of our best selling items, with much of the business repeat. Somebody buys one, someone else at home tries it and takes it, so they need another. It's hard to buy The Best In the World anything for just \$2, but that's what's going on here.



ITEM# 31-043
 MEMBER PRICE \$2
 NON-MEMBER \$4

JPN

Sensible System for Summer

Racers sort of have to wear advertising, and it's too expensive to create advertising on wool, so team jerseys are some kind of soft, washable plastic, and call it fabric.

The problem is that plastic stinks. Winter mountaineers were the first to discover this, back in the late '70s, when polypropylene underwear started encroaching on the market long dominated by the Norwegian navy blue all-wool Stil-Longs. You'd save \$7 and about 4oz per set, and water would run through the polypropylene as though it were a sieve. Two days into the trip, everybody in sight stank like bad onions. It took a while to figure out that it was the polypropylene's fault.

What happens is this: Your armpit sweat is oily, and the oil coats the plastic fiber and turns pungent and rancid as it mixes with the air. Wool, on the other hand, absorbs the oil and prevents it from getting stinky.

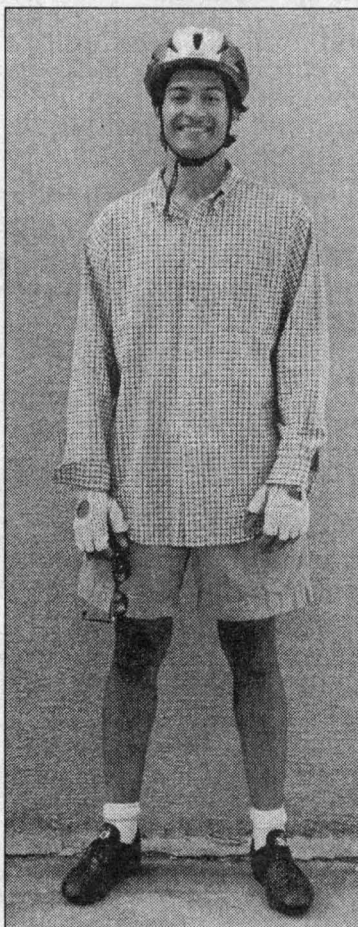
Most plastic cycling clothing is even worse than polypropylene. Last year, Jeff and I were about 7 miles into an 11-mile climb when suddenly we both noticed the familiar smell of rancid human sweat. We both wash with pine tar soap and wear wool, and beyond that, I always leave a little lather in the pits just to kill any smell that might leak out. We ride the same mountain every weekend, and hadn't ever smelled the other guy before.

I said, "Something stinks!" and Jeff said, "I thought it was you."

I said, "I never smell!" (which is true), and half a minute later we rounded a bend and came upon two costumed riders who were probably on day two or three in the same jerseys. They shouldn't do that.

So, wear wool when the temp could drop or the ride is long. Cotton isn't so bad, either, so don't let the techies scare you off it. It gets sweaty and stays wet, which means you leave it at home in cold or unpredictable weather. But for one-to-three-hour fairweather rides in known territory and mild to warm weather, cotton works great. Add a thin wool undershirt, and you'll do fine down to fifty degrees; even less, if you're climbing.

During hot weather, I ride almost exclusively in long-sleeves, and the best hot-weather top I've found is long-sleeve seersucker sport shirts. They aren't cycling, but they're ideal for cycling. A light plaid doesn't even show your sweat.



The most versatile, wonderful, gotta-have-them cycling garments made are thin wooly undershirts. We sell them in natural (cream color) and green. We have sleeveless, short-sleeved, and long-sleeved. Wear one, two, or three layers at a time, as the weather demands, in any combination. My preferred triple-layer is: short-sleeve, then long-sleeve, then sleeveless, in that order. If I get a little too warm, off comes the sleeveless. If it really warms up, off comes the long-sleever. It's hardly ever too warm for a single layer of short-sleeved light wool.

—Grant

CATALOGUE & PRICE LIST

Clothing

KUCHARIK LS BLUE ALL-WOOL JERSEY

If you still want to wear cycling clothes despite our best efforts on the previous page to get you to dress like Homer Price, then you might like this long-sleeved jersey, made to our specification by Kucharik. Grey cuffs and collar, with a 7-inch zipper, and three pockets in back. Cut fuller than most jerseys so you don't have to buy a size or two up. Wash them warm and let them air dry (it takes a day). If you wash and dry hot, they'll shrink about half a size.

M: 36-38 (#21-095) L: 40-42 (#21-095)
 XL: 42-44 (#21-096) XXL: 44-46 (#21-097)
 XXXL: 48-50 (#21-098)

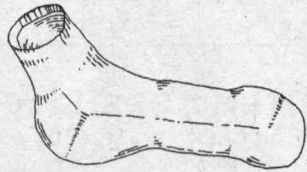


ITEM#	SEE SIZES	USA
MEMBER PRICE	\$80	
NON-MEMBER	\$85	

SMARTWOOL SOCKS

Despite a recent stock market crash which saw the wool content in these go from 70-something percent down to 52, these remain the best all-white cycling socks available. The old 70+ percenters sometimes became "flower socks," a term used in Taiwan, which isn't where these are made, referring to the tops losing their elastic and puffing out. We're investigating a Wigwam model, an 85-er, and maybe we'll have that in the next catalogue.

M: M 4.5 to 8 W 6 to 9.5 (#21-082)
 L: M 8.5-11.5 W 10 to 12 (#21-081)
 XL: M 12-15 W 13.5-16.5 (#21-083)

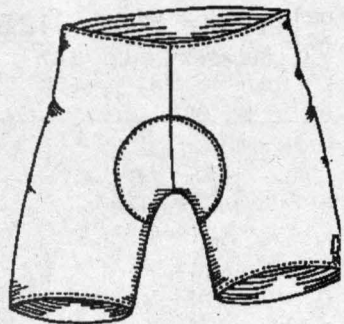


ITEM#	SEE SIZES	USA
MEMBER PRICE	\$9	
NON-MEMBER	\$10	

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. Superwash wool with a fake chamois. They fit better after the first washing. These don't last as long as thick synthetic shorts, but they're far more comfortable to ride a bike in. They feel *normal*.

S: to 29w (#21-038) M: to 33w (#21-036)
 L: to 36w (#21-034) XL: 37-40 (#21-040)

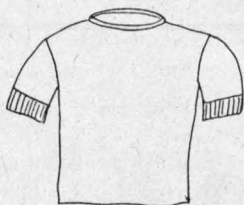


ITEM#	SEE SIZES	USA
MEMBER PRICE	\$58	
NON-MEMBER	\$63	

UNDERWOOLIES!

Since we introduced these in 1998, they've quickly become our most popular item besides pine tar soap. Typically, a customer will try out one, like it, then buy two more just like it and one of the others. Many of our customers wear them virtually every day for months (there's no reason to call us up and lie about that).

They're 90 percent wool, 10 percent nylon, but the nylon is only in the collars and cuffs. They launder well, get soft and cozy, and 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. Great for cold weather cycling, working, wood chopping, knot tying, hiking, running, skiing, skipping, skating, sliding, shopping, and sleeping. They're great pajama tops.



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.

CAN	ITEM#	SEE SIZES
	MEMBER PRICE	\$24
	NON-MEMBER	\$29

S: #21-117	M: #21-118
L: #21-119	XL: #21-120



SLEEVELESS THIN WOOLIES

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

CAN	ITEM#	SEE SIZES
	MEMBER PRICE	\$17
	NON-MEMBER	\$22

S: #21-113	M: #21-114
L: #21-115	XL: #21-116



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.

CAN	ITEM#	SEE SIZES
	MEMBER PRICE	\$28
	NON-MEMBER	\$33

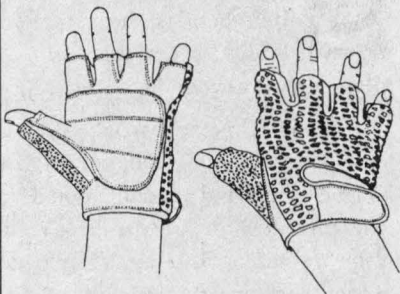
S: #21-123	M: #21-124
L: #21-125	XL: #21-126

Clothing

ACME COW SKIN GLOVES

Folks have worn gloves for centuries, but only in the past 15 years, and mostly in the bike industry have they become just more advertising space. Our logo on this glove would've cost pennies, but we still prefer it plain. Simple, Pakistani-made cotton crochet-backed gloves with cowskin palms with a terry-cloth thumb-back for wiping your nose.

- S: # 21-084 L: # 21-086
 M: # 21-085 XL: # 21-087



ITEM#	SEE SIZES	PAK
MEMBER PRICE	\$15	
NON-MEMBER	\$16	

KUCHARIK WOOL LEG WARMERS

You can wear wool sox with the toes cut out for arm warmers, but legs need leg warmers, actual, real ones. Leg warmers are so useful. You don't need to debate shorts or tights. They take up almost no space when you remove them (they'll always go into your jersey pocket or the Banana bag), and even if you really should have worn tights, you'll never get too cold in these. Eventually they slip down, exposing thigh. All leg warmers do that. Pull them up or use safety pins.

- S: # 21-033 M: # 21-032
 L: # 21-0031 XL: # 21-030

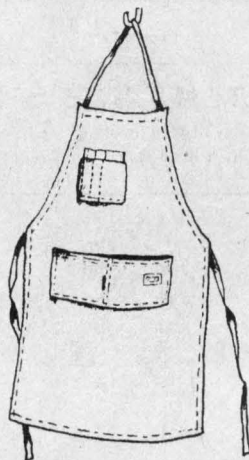


ITEM#	SEE SIZES	USA
MEMBER PRICE	\$37	
NON-MEMBER	\$42	

SHOP APRON

A shockingly heavy, thick, stiff-as-sheet-cork apron, made just for us of stout, elephant grey cotton duck in Dulth, by Duluth Tent and Awning. There's no particular benefit to having it so thick, and it's not the the bee's knees for sweltering summer days, but if it's *not* hot, and you just *want* a tough apron that won't wear out or make you look like Heloise, this is the one to get. Did we say it was *thick*?

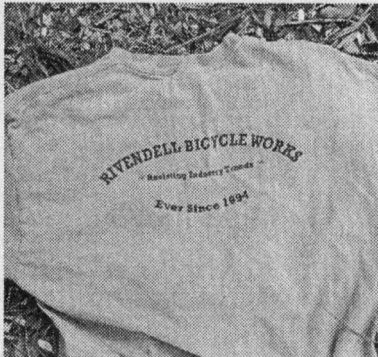
One long lower pocket holds lots of tools, even a No. 61 pedal wrench, and a normal-sized upper one holds allens, a ruler, and pencils. It costs more than any apron alive, but it'll outlast any other you can get 3:1.



ITEM#	22-064	USA
MEMBER PRICE	\$30	
NON-MEMBER	\$35	

CATALOGUE & PRICE LIST

Rivendell Brand



RIVENDELL T-SHIRT

All cotton, Rivendell logo on the front, with a catchy slogan on back. Various colors (natural, grey-green, or grey-blue), depending on the time of year. You pick the size and take whatever color and slogan happens to be in stock then. Slogans vary: "Traditional to a Fault," "Resisting Industry Trends," or some other wiseacre remark.

- L: # 22-019
- XL: # 22-021
- XXL: # 22-022

USA	ITEM# SEE SIZES
	MEMBER PRICE \$14 NON-MEMBER \$14



RIVENDELL CYCLING CAP

Great shape, nice design, and every 4 months one of us gets to pick a new color with no "help" from anybody else. That's the rule. No color choice, but most of us have good taste. If you want to know the current color, just ask. Early Spring: Jerome. When those run out, Grant. Then Allen, then Joe. That's our rotation.

Cycling hats make good visors-under-helmets, too. You cut out the crown just above the band, and it fits well under that helmet, vents extremely well, absorbs sweat, looks sporty.

USA	ITEM# 21-133
	MEMBER PRICE \$9 NON-MEMBER \$9



RIVENDELL WATER BOTTLES

Made by Specialized, and nobody makes a better bottle than the standard model Specialized. They leak less than any other, and usually not at all. The flow is high. They don't make the water taste bad. What else matters in a water bottle?

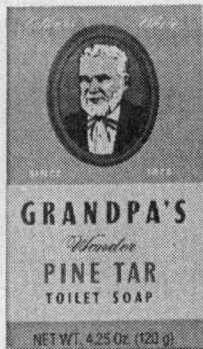
Note our price: Half to one third of what most charge for bottles. It's not that they're gouging you; we just don't make anything on ours. White or clear, no choice. Either 21- or 28oz, no choice. Why no choice? Because we aren't sure what we'll have in at any given time, and there's no room to stock a variety. But for \$2, who cares?

USA	ITEM# 24-060
	MEMBER PRICE \$2 NON-MEMBER \$3

Soaps

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 all 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, and you only have to try it once to either understand why or think most of our customers have lost their ability to smell. Hefty, grandpa-sized 4oz. cake.



ITEM# 25-001

MEMBER PRICE \$4
NON-MEMBER \$6

USA

PATCHOULI SOAP

Patchouli is a plant extract used a lot in India for centuries, and was popularized in this country by hippies in the mid-'60s. Lather up with this, and the smell lingers. Mix it with Pine Tar and your popularity will soar.

Unlike pine tar soap, this does not work well as shampoo, but is no worse than other soaps in that regard, and if you're stuck somewhere with greasy hair and nothing else, go ahead, you'll still be better off.



ITEM# 23-005

MEMBER PRICE \$4
NON-MEMBER \$6

USA

LIP IVO

If you ever use lip stuff, you might as well try the original, first made in 1903. It's vanilla with peppermint, and unlike real Chapstick, it's non-addictive—your lips won't crack and flake after two days of not using it.

Not too waxy or slimy, it actually stays on, and unlike so many lip balms these days, you don't have to dip a dirty finger into it before applying it to your lips. It's only a dollar, and most people who try it come back and buy more so they don't have to share or worry about misplacing one. People's spouses like it.



ITEM# 31-009

MEMBER PRICE \$1
NON-MEMBER \$2

USA

Printed Matter

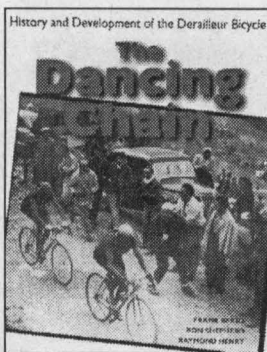


LUG CALENDAR 2000-2001

If this isn't the best lug calendar you've ever seen, we'll send you quadruple your money back. Twenty-five stunning 7" x 9" shots of lugs from the past and present, made around the world. There's some text for each lug, too, just so you know what you're looking at. Spiral bound, thick, expensive paper. As of June, 2000 we have 50 left. They will sell. Don't wait too, too long.

Marc Elliot took the photos, and they're top notch, super sharp and detailed. They make even some of the ugly lugs look good!

USA ITEM# 24-048
MEMBER PRICE \$16
NON-MEMBER \$21

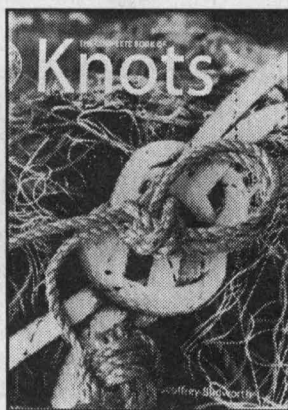


THE DANCING CHAIN

This is a book on the history of the derailleur bicycle. Written by Frank Berto, Ron Shephard, and Raymond Henry, all cyclists, historians, and eminently qualified to tell you just about all there is to know about the development of the derailleur. Lots of facts, details, photos, and drawings—many by Daniel Rebour, cycling's most famous illustrator. 335 pages, 9 x 11, hardbound.

If you have a small cycling library and you enjoy bike history and culture, then you'll like this book a lot, because it's chock full of it.

USA ITEM# 23-013
MEMBER PRICE \$50
NON-MEMBER \$55



THE COMPLETE BOOK OF KNOTS

There was life before nylon webbing, Fastex buckles, and Velcro. If our forefathers and their friends didn't know any knots, we might not be here. What's more, knots are still useful, and even modern people need to tie good ones about 7 times per year. Knots are therapeutic, too, and you can tie them during tv commercials. Everyone should know how to tie at least 10 knots, but most people know just five, and some know none! This book, written by a guy who edited the Ashley book, is the least-overwhelming, best knot book I've read. It tells the history and best use of tons of knots, and has the best instructions I've seen for the venerable Monkey's Fist.

USA ITEM# 23-011
MEMBER PRICE \$19
NON-MEMBER \$20

Books and Posters

THE BICYCLE WHEEL

Wheel-building theory and practice, and widely regarded as the definitive book on wheels. Good for wheelbuilders 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. Written by Jobst Brandt.



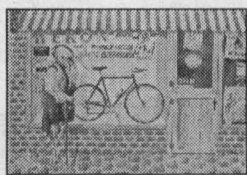
ITEM# 23-008

MEMBER PRICE \$25
NON-MEMBER \$30

USA

HERON POSTER

An 18 x 24-inch colored pencil poster by then 19-year old Lafayette, CA artist Andrew Denman, who will be famous someday. The colors are neat, and there's lots to look at.



ITEM# 24-031

MEMBER PRICE \$7
NON-MEMBER \$12

USA

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. A perennial best-seller here, if you can believe it. We offer a double-your-money-back guarantee if you don't love this book, but you pay the return postage—an offer we've been taken up on just 3 times out of more than 200 books sold. Edward Lear was a genius, and this book appeals to all ages, for various reasons.



ITEM# 23-004

MEMBER PRICE \$14
NON-MEMBER \$16

USA

BICYCLE MAINTENANCE

There are so many maintenance books out there, and as far as I know, they're all good. Whenever a new kind of shock-fork comes out, last year's book won't have how to fix it in it, but for the most part, the books that were good in 1980 are still good today.

This one is as good as any we've seen. It's published in England, and is written by an English fellow. The photos and text are fantastic, really clear. At \$35, it's one of the most expensive maintenance books in the land, but it'll help you come to peace with your bike, and if you aren't there yet, it's a bargain.



ITEM# 23-015

MEMBER PRICE \$35
NON-MEMBER \$40

USA

RivenDollars

TWENTY

RIVENDOLLARS

WITH A MEMBERSHIP OR RENEWAL

GOOD FOR \$20 TOWARD ANY PART OR ACCESSORY
PURCHASED AT THE SAME TIME YOU JOIN OR RENEW.

Not combinable with other coupons,
but it still more than covers the cost of a membership or renewal!

Mail orders only. You can't use it over the phone.

Cut it out, sign it anywhere, and send it in.

TEN

RIVENDOLLARS

MINIMUM \$150 PURCHASE

Good Through December 31, 2002
Members only, not combinable with other coupons.

SEVEN

RIVENDOLLARS

MINIMUM \$80 PURCHASE

Good Through December 31, 2002
Members only, not combinable with other coupons.

FIVE

RIVENDOLLARS

MINIMUM \$30 PURCHASE

Good Through December 31, 2002
Members only, not combinable with other coupons.

Hours, Visiting Tips, and Policies

HOURS

M-F, 9:15 am to 6:00 pm Pacific time.

VISITING TIPS

We aren't a normal retailer, and we don't have a browsing area, a shopping area, or the people to wait on you. If you can deal with all that, and promise not to interpret our attending to business as rudeness, then by all means call first, and come on by. We're much more friendly than we sound right here.

WHAT TO EXPECT

We have around 1300 square feet, including a small show room with a few frames, a small workshop, and an upstairs warehouse/work area. It's affordable, but frumpy. Please no photos.

WILL CALLS

Call first so we can have it ready for you, please.

SIZINGS AND FITTINGS

Schedule it a week in advance. Bring your cycling shoes, and if you ride clipless, your pedals, too. Sessions last an hour, and we charge \$150. But if you then order a frame within a month, you may apply all of it toward your purchase.

TO FIND US

(NOTE, WE MAY MOVE IN SPRING 2000)

From the south or west: Take 680 N to the North Main exit. Turn right onto N. Main for .33 miles, then left (at Cruchon's restaurant) onto Third Ave. for 0.1 mile. Just past the yellow trucks, turn left into the Business Center. Just before the 2nd telephone pole, turn right. We're behind the brown door with the Diner's Club sticker on it, near the stumps and the 1561-B sign. Open the door, walk upstairs.

From the north: Take 680 S to the Geary/Treat 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.

STOCKED ITEMS

We try hard to keep stock of everything in this catalogue, but we may temporarily run out of some items. Joe will keep that to a minimum, but bear in mind that many of the items we sell are rare, esoteric, or just plain too weird for any distributor to stock in sufficient quantities; and others are imported especially

for us. The prices listed are good until the next catalogue or price update in the Rivendell Reader.

SPECIAL ORDERS

We'll special order certain items for an additional \$7. Orders are placed twice per month; delivery varies.

RETURNS, IN GENERAL

If you aren't completely happy with what you buy from us, you have 60 days to return it for a full refund by check or credit card (as you originally paid). We've never argued a return, and won't start with you.

PAYMENT

Visa or Mastercard, personal checks or money orders. We don't hold checks to wait for them to clear, but in 5+ years of business, we've never had a bounced, uncollectible one. Maybe that's because we vow to reproduce the offending check on our website (rivendellbicycles.com). All orders shipped to California get charged the local (your) sales tax.

SHIPPING/HANDLING CHARGES

Domestic Orders

Standard: \$7 per order, delivered Priority Mail or UPS, our choice (unless you have a P.O. Box, in which case it won't be UPS). Allow 7-10 days for delivery.

3-Day Select: \$12

2-Day Select: \$20

Next Day: \$45, delivered the next afternoon.

All 3-2-1-day orders must be received by 12:00 Pacific time. We'll bust our behind for you, but cannot guarantee delivery.

Back Orders: \$2 per item, up to a maximum of \$6.

Wheels: \$12 per wheel, unless it's part of a bike.

Frames: \$35, shipped UPS ground. \$50 for 3-day Air (allow an extra day here for preparation).

Bikes: \$50, shipped UPS ground.

Special Orders: \$10 per order.

CATALOGUE ORDER FORM

NAME _____ ORDER DATE _____
 ADDRESS _____
 CITY _____ STATE _____ ZIP _____
 SHIP TO, IF DIFFERENT _____
 WORK PHONE: () _____ HOME PHONE () _____
 FAX: () _____ EMAIL: _____

ITEM#	DESCRIPTION	QTY.	SIZE	EACH	TOTAL

SHIPPING		
	Ground	Air
Standard	\$7	\$20
CANADA	\$15	\$22
INT'L	\$25	\$45

First Subtotal: _____
 Minus any Rivendollars or Gift Cert: _____
 Second, possibly lower subtotal: _____
 Tax (CA only): _____
 Shipping (see left): _____
 Membership or subscription renewal (\$15)
 99-Year Membership/Subscription (\$200)
 TOTAL: _____

If we are out of an item, may we make a same-price, equal or better function and style substitution? It won't be a color switch.

Yes No

PAYMENT

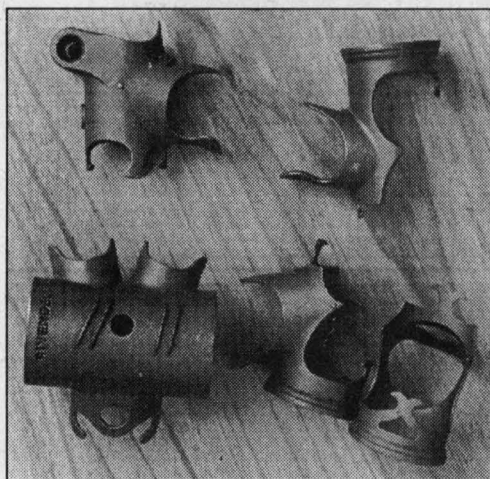
Check or money order number: _____ Amount: _____

Credit Card #: _____ EXPIRES (month/year) _____ / _____

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 (17? 18?) and we'll start your subscription with the next one. I have _____. Thanks.

CATALOGUE & PRICE LIST



The Atlantis lugs and bottom bracket shell. There's more to lugs and lug design than meets the eye, and these are good ones. The seat lug is the same as on Rivendells. The head lugs have the same cast-in extension and reinforcing rims (here we show the side and front of the lower head lug). The "whales tails" on the front of the head lugs are the same. The bb shell has cast-in cable guides and a drainage hole.

AVAILABILITY: Starting August, 2000.

We'll do our best to keep some in stock, but if we're out of your size, there will be a 1 to 3-month wait. Call for availability. We have 9 dealers scattered about the country, as well—in Issaquah, San Francisco, Berkeley, Cupertino, Kansas City, Madison, College Park, Greensboro, and Minneapolis. Call for the name of your Atlantis dealer.

PRICE: \$950, including a headset. Dealer's prices may vary, probably not by much. A well-equipped, complete Atlantis bicycle will cost between \$1900 and \$2400, including assembly and delivery. If you have a budget, we'll work with it. Call us for particulars, or check with your Atlantis dealer.

Atlantis Geometry

(subject to change without notice)

frame size to lug top	wheel size	seat tube	head tube	top tube	fork rake	bb drop	chain stay	rear hub space
51cm	26	72.5	72	53	4	48	44	135
53cm	26	72.5	72	55	4	48	44	135
56cm	26	72	72	57	4	48	44	135
58cm	700c	72	72.5	59	4.5	80	45.5	135
61cm	700c	72	72.5	60.5	4.5	80	45.5	135
64cm	700c	72	72.5	62	4.5	80	45.5	135

Seat post: 27.2mm. Dropouts: forged, 2-eyelets, vertical rears. Braze-ons: brake, der cable stops, pump peg, seat stay stop, 3 water bottles, rear rack mounts. Stem quill: 22.2mm. Clear-coat: Yes!

Sizing

If your pubic bone height (in cm) is	Then your saddle height (in cm) will be	And your Atlantis frame size* is
77 to 79	67 to 69	51
79 to 83	69 to 73	53
82 to 85	72 to 75	56
84 to 89	74 to 79	58
87 to 93	77 to 82	61
90 to 96	80 to 85	64

* Men: If your saddle height falls in the range of two sizes, pick the smaller one if you plan to frequently ride really fat tires. For general pavement riding mid smallish to midsized tires (up to 26 x 1.4 or 700x38), go with the larger size. Women: If your saddle height lands you into two sizes, go with the smaller one.

GEAR CHART 700C/27 WHEEL

CHAINRING

REAR COG

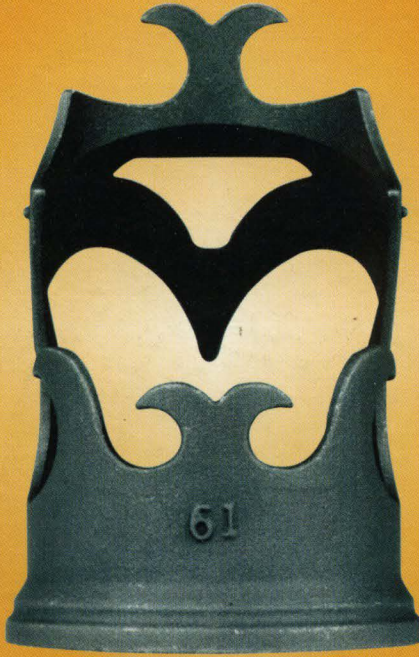
	20	22	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
11	49	54	59	61	64	66	69	71	74	76	79	81	83	86	88	91	93	96	98	101	103	106	108	110	113	115	118	120	123	125	128	130	133
12	45	50	54	56	59	61	63	65	68	70	72	74	77	79	81	83	86	88	90	92	95	97	99	101	104	106	108	110	113	115	117	119	122
13	42	46	50	52	54	56	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	39	42	46	48	50	52	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	36	40	43	45	47	49	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	34	37	41	42	44	46	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	32	35	38	40	41	43	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	30	33	36	38	39	41	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	28	31	34	36	37	38	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	27	30	32	34	35	36	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	26	28	31	32	33	35	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	25	27	29	31	32	33	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	23	26	28	29	31	32	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	23	25	27	28	29	30	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	22	24	26	27	28	29	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	21	23	25	26	27	28	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	20	22	24	25	26	27	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	19	21	23	24	25	26	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	19	20	22	23	24	25	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	18	20	22	23	23	24	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	17	19	21	22	23	24	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	17	19	20	21	22	23	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	16	18	20	20	21	22	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	16	17	19	20	21	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.

Notes



FRONT COVER PHOTO: MARC ELLIOT — BACK COVER PHOTO: JACK VOSNEY
BUILDER PHOTOS: BOB SCHENKER
DESIGN & LAYOUT: CRAIG DAWSON, MEDIA SOLUTIONS, SAN FRANCISCO
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LUGGED FRAMES
ONLY • ALWAYS

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FOUR DOLLARS