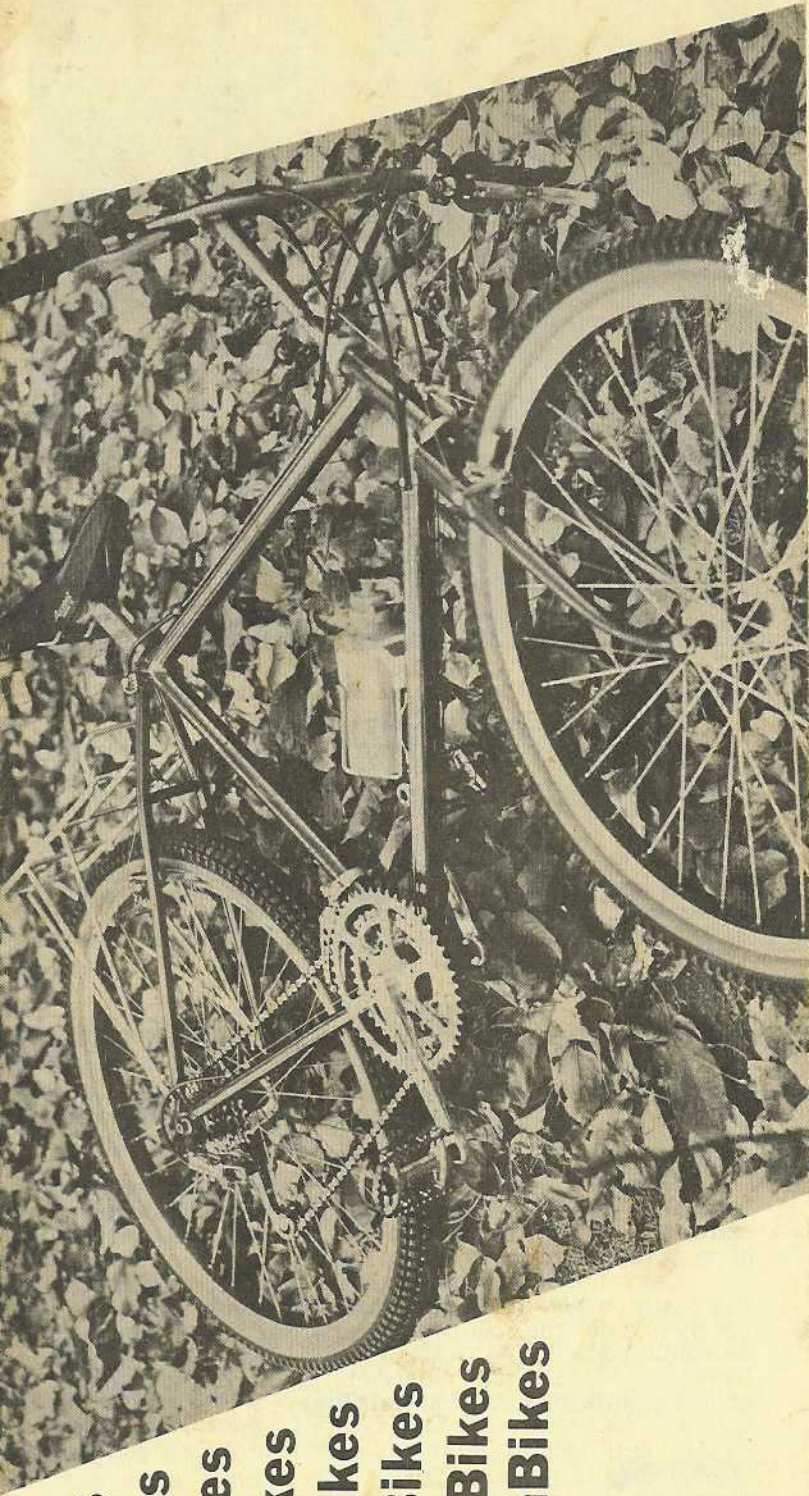


**MountainBikes  
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MountainBikes  
MountainBikes**

**81'**







#### Charles Kelly

Charles Kelly has been involved with balloon tire bicycles for seven years, and is noted for organizing the first off-road races for these bikes.

He has contributed articles on the subject to Bicycling, Mariah, and BMX Plus, and organized the Clunker racing scenes for Evening Magazine. He is sought out and widely quoted as a spokesman for the movement. In collaboration with Gary Fisher he edited a major portion of the 1980 Whole Earth Catalog bicycle section.

#### Gary Fisher

Gary Fisher has been a racing cyclist for 17 years, has been team mechanic for the U.S. National team in Europe, and bike tester for Bicycling magazine. As such he has acquired a familiarity with all forms of bicycles, their production and applications.

In seven years of off-road bicycle experimentation he has pioneered the use of thumbshifters, multiple gearing on balloon tire bikes, and the use of motorcycle parts for dirt riding.

Gary has won more balloon tire off-road races than any other participant in the sport and currently holds the course record for the "Repack" downhill racecourse. (4:22). In 1980 he won the Northern California District cyclo-cross senior championship on his MountainBike.



# RITCHIEY

PALO ALTO

#### Tom Ritchey

At the age of 23 Tom Ritchey is well known in cycling circles as one of the best and most prolific West Coast frame builders. His custom frames have been used in World Championship competition by riders who can choose from any equipment. As a junior racer Tom was known as the 'senior killer' for his victories over some of the finest senior riders in the U.S. Tom's enthusiastic acceptance of off-road bicycles has resulted in some of the most significant developments in this field.

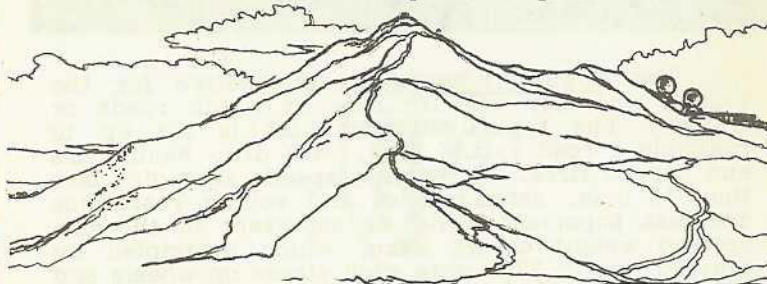


## J.F. Scott's '53 Varsity !

#### John Finley Scott

John Scott assembled his first multiple gear balloon tire bike in 1953, a 9 speed. Since then he has ridden countless thousands of off-road miles and conquered numerous mountain passes, including: Ingram (12,800'), first bicycle ascent of White Mountain (California, 14,246'); participated in first bicycle ascent of Telescope Peak (Death Valley, 11,200').

Scott developed the Davis Double Century route from 1974-1977, and has long been associated with the California Association of Bicycling Organizations as a lobbyist for cyclist's rights.



MountainBikes came into being because we needed the best possible bikes for our own off-road use. We were already using the finest components available because we were interested in performance rather than low price, but eventually we realized that none of the frames on the market lived up to our standards and expectations.

In 1978 Tom Ritchey agreed to build frames for us that included all the features we regarded as necessary for the ultimate machine for performance and light weight. While the original MountainBikes were built solely for our personal use, as soon as we started riding them we found other dirt riders who were looking for quality equipment, and for this reason we have decided to make them available to everyone. We will sell nothing that does not measure up to our high standards.

Our approach to components is very simple. In seven years of dirt riding we have literally shattered thousands of dollars worth of bicycle components, and we have developed firm opinions as to which parts are dependable enough to be associated with the MountainBike name. We want to build a bike that will get you out of the hills as sell as into the hills, again and again with little or no maintenance.

We realize that our bikes are expensive. This is unavoidable in light of the quality of the machinery. Others may build less expensive bikes, but we don't believe that anyone builds them better.





The MountainBike is an alternative for the tourist who may wish to ride on rough roads or trails. The typical touring bike is set up to resemble a road racing bike, with drop handlebars and narrow tires. At touring speeds averaging less than 15 mph, aerodynamics and rolling resistance are less important; what is important is the unsprung weight of the bike, which is tripled by touring gear. This puts such stress on wheels and tires, especially on dirt or gravel roads, that flats and wheel damage are common occurrences for many tourists.

The MountainBike is a lightweight, extremely rugged bicycle built to go anywhere. The 26 x 2.125 balloon tires give superb traction and soak up the roughest terrain. The multiple gearing and light weight make for unbelievable climbing ability while the heavy duty tandem brakes give you the confidence you need to take on any descent.

MountainBike frame geometry and components have been developed and tested under the most extreme conditions possible, from rugged rides in the Sierras and the Rockies to all-out downhill racing. MOUNTAIN BIKES are the originators and will always be the innovators in the field.

Quotes from road test of the Ritchey MountainBike appearing in BMX Plus!, February, 1980. Dean Bradley, tester.

"The MountainBike...challenge(s) the definition of bicycle."

"Very possibly the world's most versatile bicycle."

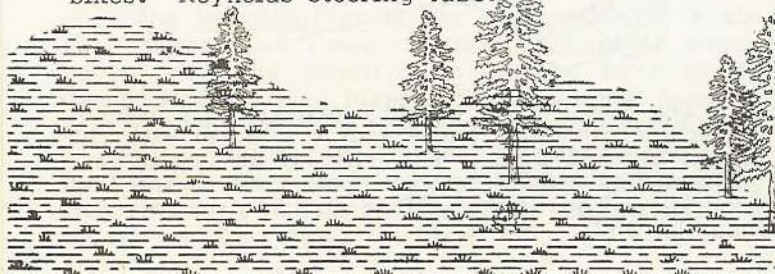
"If you can't get there, the blame lies in you, not the machinery."

"These bikes went where four-wheel-drive, motorcycles, and even tanks could not have gone. In our test rider's quest for true wilderness, only hikers and helicopters followed."

"...the obvious bike of the future."



The Tom Ritchey MountainBike Frameset represents the state of the art in hand-brazed custom balloon tire bicycle frames. Made by hand one at a time, these frames are built to the standards of the finest racing bicycles and tandems, using the best components and materials. Frame geometry has been carefully selected to give the most stable ride under the most trying conditions, uphill, downhill, wet, on any road surface or on no road at all. Fabricated with lugless (brazed) joints from carefully selected oversize double-butt chrome-manganese and chrome-molybdenum tubing. All fittings are brazed on, including: water bottle mounts, cable guides, and cantilever brake bosses. Available in sizes from 19"-24" in a variety of Imron enamel finishes. Comes with custom Tom Ritchey sealed bearing bottom bracket, Campagnolo or Shimano dropouts, quick-release seatbolt for 26.8 mm seatpost. Custom tapered-blade fork with Tange heavy duty blades and custom (extra wide) crown. Tapered fork blades absorb shock far better than BMX-style forks found on most balloon-tired bikes. Reynolds steering tube.





## RITCHEY/MOUNTAINBIKE STANDARD SPECIFICATIONS

Frameset: Lugless brazed frame made with oversize chrome-moly and Reynolds double-buttet tubing. Campagnolo seatpost quick-release, Campagnolo dropouts, Imron paint. Standard braze-ons include down tube water bottle cage bosses, cantilever brake bosses, derailleur and brake cable stops for split housing.

Bottom bracket: Sealed bearing Tom Ritchey custom.

Crankset: Extra-long TA Cyclotourist triple.

Pedals: BMX type with anodized alloy cage and chrome-moly shaft.

Rear derailleur: Huret Duopar "Eco".

Front derailleur: SunTour Compe V or VX.

Shift levers: SunTour Mighty Thumb shifter.

Handlebars: Tom Ritchey custom "Bullmoose" bar/stem.

Freewheel: Heavy-duty wide range 6-speed.

Seatpost: Extra-long SR Laprade.

Saddle: Avocet Touring II.

Headset: Chris King sealed bearing.

Hubs: Phil Wood 6-speed with allen-keyed end bolts.

Rims: Anodized alloy box construction 26 x 1.75 with polished braking flats.

Spokes: DT stainless steel.

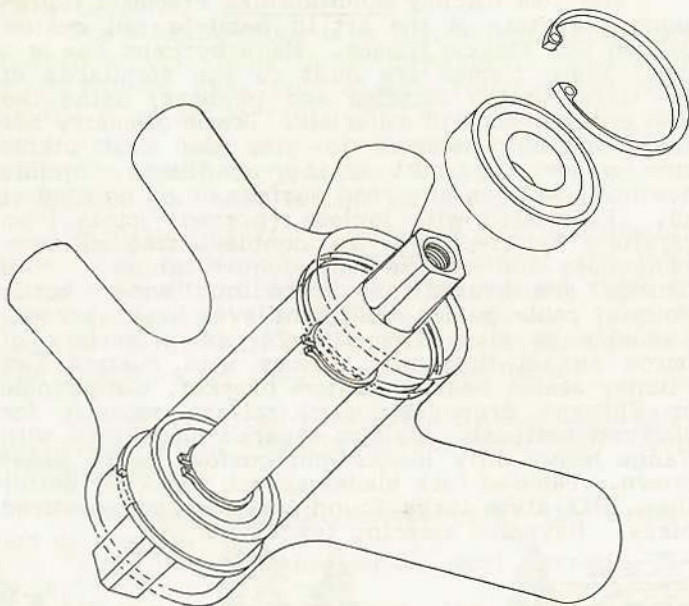
Tires: Skinwall 26 x 2.125 balloon tires.

Brake Levers: Genuine Magura motorcycle levers.

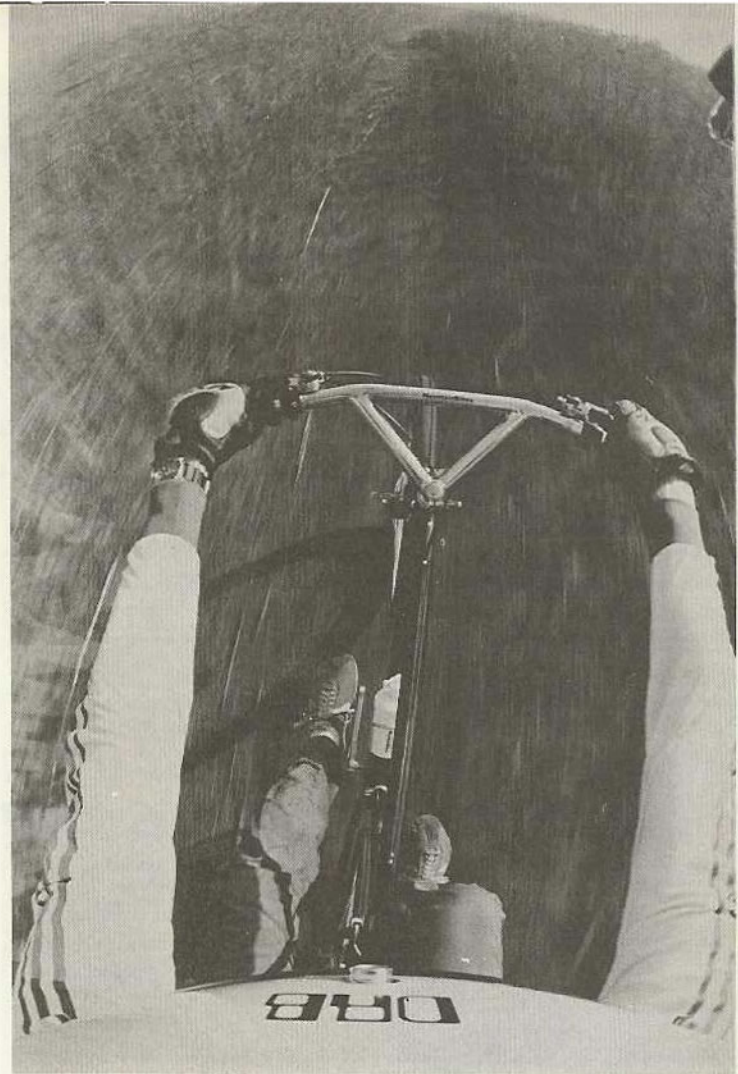
Brake cables: Heavy-duty motorcycle brake cables.

Brakes: Mafac Tandem Cantilever.

Optional equipment and custom frame or parts work is available.



The Tom Ritchey sealed bearing bottom bracket is machined into the frame and is integral with the bottom bracket shell. This enables us to use larger bearings spaced further apart than in the Phil Wood BB. The Ritchey BB is also 36 grams lighter than the Phil at 251 g.



Dean Bradley

The MountainBike is also a fine city bike! Equipped with the new high-performance 26 x 2.125 skinwall tires, you will be nearly as fast as the ten-speed cyclist, with improved handling, braking, and resistance to the perils of inner city roads such as potholes, tracks, curbs, and sewer grates. Smooth riding and nimble handling make this a fine commuter bike, satisfactory in any weather conditions or traffic. The ruggedness we build in for use far from repair shops makes the MountainBike a dependable steed, with few of the tire and wheel damage problems associated with the more fragile lightweight ten-speeds.

For the BMX rider who is outgrowing his 20" bicycle, the MountainBike offers an alternative to motorcycles as an adult sport, and additionally fills the gap between BMX bikes and high quality road bikes.

The MountainBike satisfies the adult rider's desire for quality equipment while providing the ruggedness and stability of the 26 x 2.125 tire. High performance and ease of handling make this the ideal off-road or on-road all around vehicle.

The MountainBike is the culmination of a six year program of research and development which began with the construction of the first multi-geared balloon tired bikes. These original hybrids proved to be the most efficient human powered form of transportation for off-road use and since then have been the subject of continuous improvement from the early "European/American crossbreeds" to today's highly refined machine.



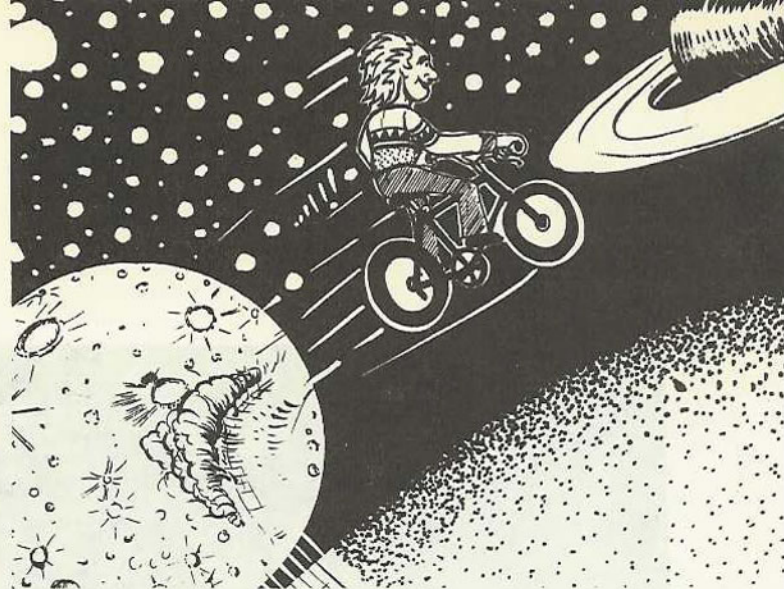
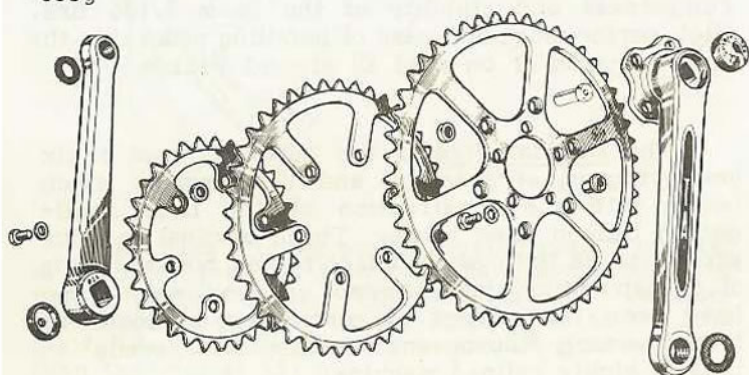


### CRANKSETS

#### TA Cyclotourist cranksets.

We offer these cranksets in lengths from 170--185 mm and single, double, or triple chainring combinations from 26-50 teeth. They are popular because they are light and strong, and offer so many combinations of length and size of chainrings. Extra long cranks provide torque for conquering steep hills and the 26 tooth inner chainring makes possible "tree climbing" low gear ratios.

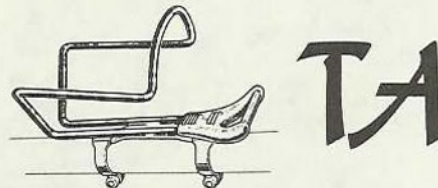
Crankarms (specify length, 170, 175, 180, 185)#101  
 Outer rings (40-52 teeth).....#111  
 Inner rings (36-42 teeth).....#112  
 Inner rings (26-35 teeth).....#113  
 Assembly bolts for double rings.....#114  
 Assembly bolts for triple rings.....#115  
 Weight of triple with 26/38/50 and 180 mm arms is 595g



### BOTTLES AND CAGES

#### TA steel bottle cage

We offer the TA steel cage because it will take abuse and holds the bottle securely even on rough descents. TA steel cage.....#116



#### Mariplast Bottle

Available in colors, red, yellow, white, light and dark blue.....#117

### PEDALS

The best pedals for off-road use are high-quality BMX pedals, with a chrome-moly shaft. These are a double sided "rat-trap" design. Clips and straps can be in the way when frequent stops and starts are necessary.

## MKS

#### MKS BM-7 Pedals

These feature a chrome-moly shaft, one-piece aluminum cage. In red, blue, and gold anodizing. Clips and straps may be attached. Weight: 362g....#122

#### SunTour MP-1000 Pedals

These are ultra-light, sealed-bearing pedals with a hollow chrome-moly shaft. Clips and straps may be used, cage is replaceable. Available in red, blue and gold. Mean looking and expensive! Weight: 314g. ....#123

### SUNTOUR MP-1000 PEDALS







Dean Bradley

The Fat Tire Flyer is a non-profit bi-monthly newsletter of off-road bicycle activities. For a one-year subscription send \$2 to the Fat Tire Flyer, P.O. Box 757, Fairfax, CA 94930 (phone: 415-456-6277 or 415-457-7016)

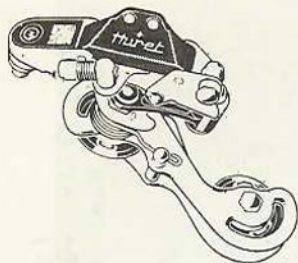


## REAR DERAILLEURS

### Huret DUOPAR Deraillleur

The DUOPAR is the only deraillleur we know of that will shift with absolute fidelity into a low gear at low speed and under high torque loading. The DUOPAR also shifts quickly in higher gears and easily handles the high range of gears found on MountainBikes. Two models are available: titanium and aluminum alloy, weight: 260g.....#130

Steel and aluminum alloy, weight: 300g.....#131



**DUOPAR**



### SunTour VX Deraillleur

The SunTour VX is a sturdy and precise low priced deraillleur for wide-ratio gearing in off-road service. Weight: 216g.....#132

## FRONT DERAILLEURS

### SunTour Compe V

The Compe V deraillleur is a sturdy shifter which operates in the opposite fashion from most deraillleurs in that the cable pulls the chain on to the small chainring, providing positive shifts into the low gears, while a spring returns it to the large ring. Weight: 136g.....#134

### SunTour VX

The VX operates in conventional fashion, with the cable pulling the chain on to the large ring. Although the VX is slightly heavier than the ultra-light deraillleurs, we recommend it as sturdy and reliable. Weight: 105g.....#135

### Shimano Dura-Ace EX

The Shimano "Trapeze" mechanism lifts the chain while guiding it onto the next ring. Operates conventionally. Weight: 98g.....#136

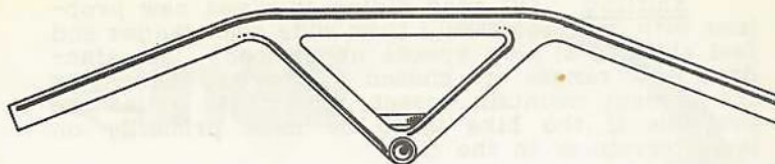
### Simplex wide ratio front deraillleur

Especially good for triple chainrings because of its extra long cage.....#137

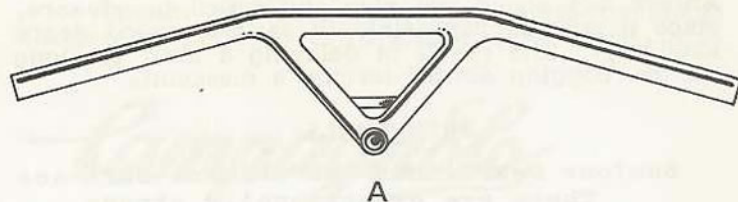
# SunTour

### SunTour Thumbshifters

The thumbshifter is the only shift lever which permits rapid gear changes while allowing the rider to keep both hands on the bars, a vital consideration in rough terrain (bar-end shifters tend to snag on brush). While made for the right hand, these shifters work well on either side. Weight: 91g.....#140



B



A



B



A

### Tom Ritchey "Bullmoose" handlebar/stem.

This is a one piece chrome-moly brazed bar and stem that offers unprecedented lightness and strength in an off-road or touring upright bar. Comes with hanger for front brake cable, expander wedge and allen-keyed bolt. Nickel plated, weight 896g, 26" wide.....#141

Type "B", 28" wide.....#142



Recent tests by Frank Berto of Bicycling magazine have shown the Regina Oro to be the strongest deraillleur chain on the market, and the Shimano Uniglide to be the best shifting. The new Dura-Ace Uniglide chain, made of chrome-moly steel is said to be longer lasting than the conventional Uniglide.

Regina Oro, weight: 379g.....#150  
Sedis-Sport, weight: 340g.....#151  
Shimano Uniglide, weight: 383g.....#152  
Dura-Ace Uniglide, weight: 383g.....#153





**Shifting** Off road riding involves new problems with gearing, among them wide gear ranges and fast shifting at slow speeds under load. Our standard gear ranges are chosen to take the rider over the highest mountain passes, but closer ratios are available if the bike is to be used primarily on level terrain or in the city.

**Gearing.** On extremely rough terrain it is essential to stay in an exceptionally low gear (in some cases below 30") in order to maintain torque. Always look ahead and plan shifts well in advance, since it may be impossible to shift if speed drops suddenly. The result of delaying a shift too long will be 'boggling down,' forcing a dismount.

#### FREEWHEELS

SunTour New Winner and Shimano Dura-Ace

These are exceptionally strong freewheels and they offer a wide range of sprockets (from 13 to 32 teeth) in 5- and 6-speed configurations. Standard 6-speed, weight 490g.

Dura-Ace 6-sp, specify cogs (13-26, 13-28, 13-31).....#154

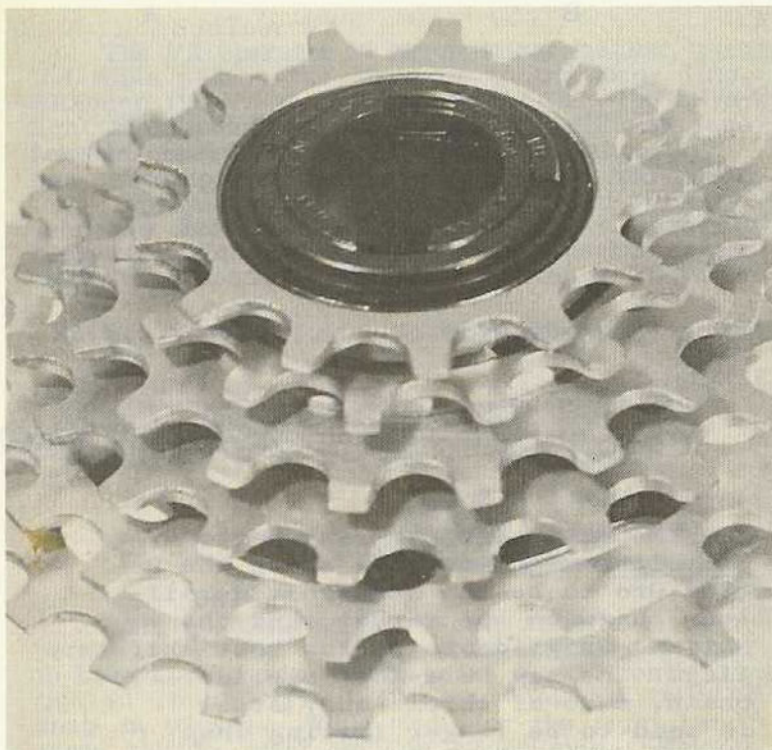
Dura-Ace 5 sp, 13-24.....#155

New Winner Ultra-6 specify cogs (13-24, 13-26, 13-28).....#156

New Winner Ultra-6, specify cogs (13-30, 13-32).....#157

New Winner 6-sp (regular) specify cogs (13-24, 13-26, 13-28).....#158

New Winner 6-sp (regular) specify cogs (13-30, 13-32).....#159



**SR AH stem:** This is an aluminum alloy single-clamp stem in the traditional road style. These have been found to be adequate for most off-road use. Features recessed allen-bolt. Specify steering tube diameter, .833" (American) or 22.2 mm (European and MountainBike). In lengths (forward extension) of 80 or 60 mm. Weight (80 mm): 320g SR AH.....#161

**Cinelli**

#### Cinelli Road Stems:

The finest traditional European road stem. Comes only in 22.2 steering tube diameter, forward extension of 70, 90, or 110 mm. Weight 310g..... Cinelli stem (specify length).....#163

Adaptor shim for motorcycle style handlebar (Magura or Laguna) to fit single clamp stems..#166

**Campagnolo**

Campagnolo Record Micro-adjusting 180 mm long, available in diameters 26.8, 27.0, 27.2 mm. Weight: 285g.....#170

**SR**

**SAKAE**

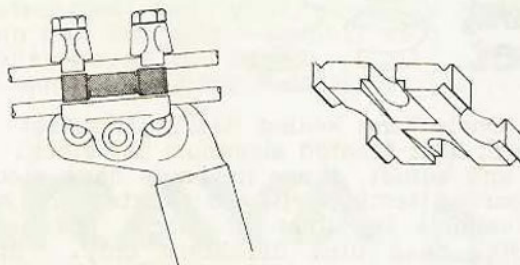
#### SR Laprade

Single allen-bolt adjustment, 220 mm long, available in diameters 26.8, 27.0, 27.2 mm Weight: 258g.....#171

**LAPRADE**

#### French Laprade Seatpost

This is the company which sold the design rights for the Laprade to SR. Forged aluminum alloy, 240 mm long, allen-key adjustable. Weight: 160g.....#173



#### Joe Breeze Seatpost Adaptor

This adaptor permits use of a four-wire type saddle (Brooks B-72, B-66, etc.) with a Campagnolo micro-adjusting seatpost. Weight: 61g.....#175

**AVOCET**

#### Avocet Anatomic Touring Saddles

These are nylon base, leather covered saddles with foam padding. We offer touring models because they are wider than normal racing saddles and better suited to MountainBikes. Women's models are wider and shorter than men's. Touring II is longer lasting due to the better quality of the materials.

Avocet Men's Touring I, weight 400g.....#180

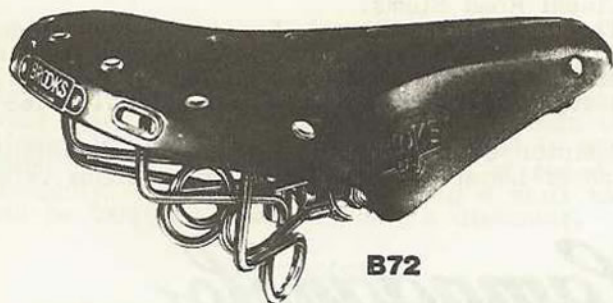
Avocet Men's Touring II, weight 400g.....#181

Avocet Women's Touring I, weight 350g.....#182

Avocet Women's Touring II, weight 350g.....#183



# BROOKS



**B72**

## Brooks B-72 Saddle

This is a wide leather saddle mounted on a four-wire single loop steel frame. Requires an adaptor to fit a Campagnolo seatpost.  
Weight: 551g .....#184

## Proofide

This leather dressing is a necessity for preserving leather saddles which are exposed to rain and mud. In cans.....#185



**the King sealed bearing headset**



## Chris King Sealed Bearing Headset

Made of heat-treated aluminum bar stock. Easy to install and adjust, these headsets have stood up to our rigorous testing with no maintenance necessary. Available in silver or black, European or MountainBike head tube diameters only. Specify steering tube threading, English, Italian, or French. Weight: 100g.....#190



## Shimano 600-EX Headset

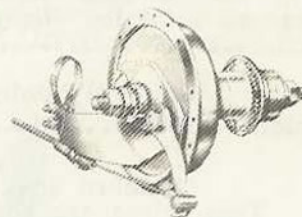
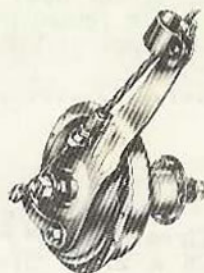
A light alloy conventional ball-bearing headset with a labyrinth seal. Requires its own wrenches for adjustment. Weight: 140g.....#191

*Campagnolo*

## Campagnolo Record Headset

Traditional steel loose-ball headset. Weight: 182g.....#192

# Sturmey-Archer



## Sturmey-Archer 90 mm rear drum brake.

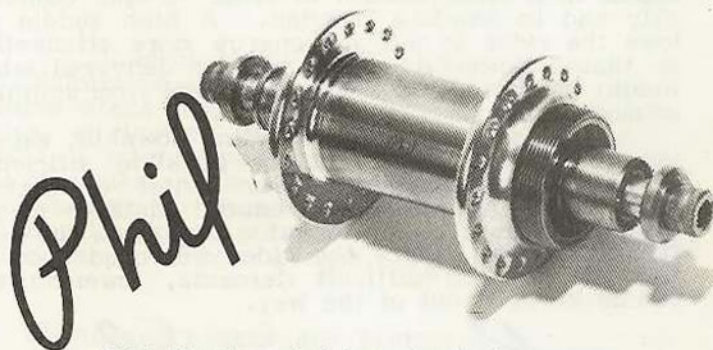
A large diameter, high quality steel drum brake and hub. Comes with steel tourist-type brake lever, cable and housing. Weight: 1040g.....#210

## Sturmey-Archer 90 mm front drum brake.

The companion to the 90 mm rear. Also comes with lever and cable. Weight: 945g.....#211

## Sturmey-Archer 70 mm front drum brake.

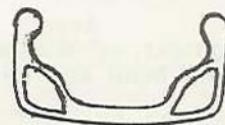
This hub is recommended for lighter riders and lighter use. Uses fewer and smaller ball bearings. Weight: 676g.....#212



## Phil Wood sealed bearing hubs.

Sealed bearings for longest life under the dirtiest of conditions. Quick release or allen-keyed end bolts. 36 holes, front 100 mm, rear (6-speed) 126 mm. We have tested these hubs over the most severe terrain and have found them to be the strongest and most precisely made sealed bearing hub available. Weight: 440g  
With allen-keyed end bolts.....#215  
With Campagnolo Quick Release.....#216

# ARAYA



RIMS

## Araya and Ukai Alloy Rims

These 26 x 1.75 rims are each two pounds lighter than the old-style steel tubular rims for a four-pound weight reduction on the most strategic part of the bike. They are an extruded box construction and have proven to be at least as strong as steel rims. Takes either a 1.75 or 2.125 tire and works exceptionally well with rim brakes. Anodized red, blue, gold or silver. Weight: 532g..#230



SPOKES

Off-road riding calls for strong spokes and to this end we offer DT (Swiss) stainless steel 14 gauge 270 mm spokes (fit 4-cross lace-ups to 26" rim with any size flange). Weight: (36)288g..#235



## MITSUBOSHI



### Mitsuboshi Skinwall Tires

This is an excellent tire for street use, combining a rounded cross-section with a raised center strip for reduced rolling resistance. Inflation pressure 30-55 lb. Weight 896g Each.....#240

### Uniroyal Nobby Tires

Weight: 1344g.....#241

### CyclePro SnakeBelly Tires **Snake Belly**

These tires are the first 26 x 2.125 tires on the market to offer a superb off-road tread with a lightweight casing. One pound each lighter than the Uniroyal. Air volume is slightly smaller than the Mitsuboshi and Uniroyal.....#242

Tubes: 26 x 2.125, 383g.....#251  
26 x 1.75, works with 2.125 tire, 220g.....#252

Rim strips for 26" wheel.....#255

**Saddle Position.** Many of the better cross-country bicycles have quick-release seatpost clamps. The reason for this is that different riding conditions require different saddle heights.

When riding uphill or on level ground keep the saddle in a high position in order to spin comfortably and to maintain traction. A high saddle allows the rider to use his energy more efficiently, so that a powerful stroke can be delivered while weight on the saddle keeps the wheel from spinning in mud or dust.

Lower the saddle when riding downhill, especially on rough terrain, since pedaling efficiency is not a factor, and a lower center of gravity helps cornering; also, the reduced distance to the ground makes it easier to put a foot down for controlling slides. Since the rider will need room to flex his legs on difficult descents, lowering the saddle keeps it out of the way.

# Campagnolo

Campagnolo MountainBike custom-modified quick-release seat binder bolt. The strongest and best working quick release. Specify seat cluster or seat clamp when ordering. Weight: 73g.....#260

Shimano Seatpost Quick Release. Weight 92g. Specify seat cluster or seat clamp.....#261

Avocet Seatpost Quick Release. The lightest of the seatpost QR's, uses an aluminum alloy head and adjuster nut. Weight: 56g.....#262



### Grab-on MX Grips

These grips provide a positive, well cushioned grip, and work well with or without gloves.

Grab-on MX I, neoprene.....#270

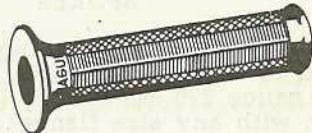
(We recommend replacing stock bar plug with Tressostar variety). Tressostar plugs.....#271

Grab-on MX II, neoprene with plastic core, no end plugs required.....#272

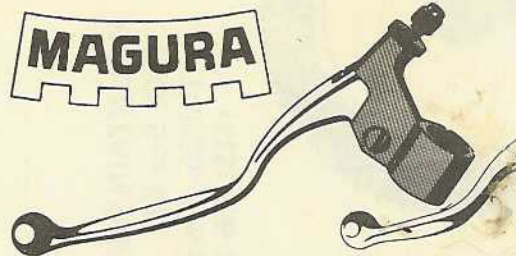
Magura surgical rubber grips.....#273

Flanders "Jackhammer" grips.....#274

Sundancer sculptured grips.....#275



The MountainBike braking system super most powerful rim brake on the market. achieved by using the most effective components including the Mafac Tandem Cantilever Brake, motorcycle power-levers, motorcycle cable covers, housings, and brazed-on (frame mounted) stops.



### Magura Motorcycle Brake Levers

The best levers for flat-bar off-road are made for motorcycles. We offer the Magura aluminum levers; they provide great mechanical advantage and robust construction as precaution against spills. We have seen these levers bent double and bent back without breaking.

Long levers, weight: 165g (each).....#300

Shorty levers, weight: 150g.....#301

### Motorcycle Brake Cables and Housings

Motorcycle cables and housing give more positive brake response than lighter gauge bicycle cables, eliminating mushy brakes and providing a margin of safety against breakage. We offer three sets of cables and housings for different setups.

Split Housing for MountainBike. Weight 101g.....#310

Full Housing for Cantilever brakes. 160g.....#311

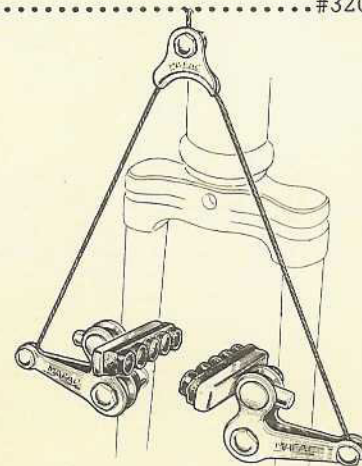
Full Housing for drum brakes. Weight 240g.....#312

Cantilever brakes are preferred for off-road use. They suffer less elastic deformation than any other bicycle rim brake, while their ample tire clearance resists fouling due to mud build-up (this is why they are used in cyclo-cross racing). They are also remarkably light in weight. The principal objection to their use is the difficulty of retrofitting--if the bosses are not brazed on at the time of manufacture, it is necessary to repaint the frame. They are the ultimate "plan ahead" component. At Mountain Bikes we plan ahead. Additionally, there is no way that most high-quality bolt-on brakes can be made to fit round a 2.125 tire!

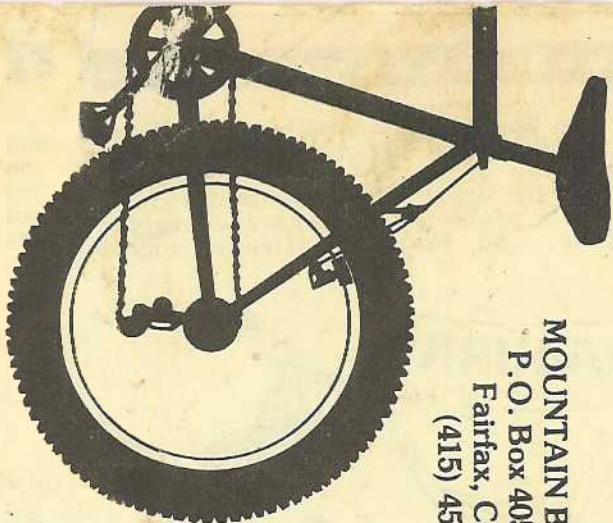
### Mafac Tandem Cantilever Brakes

Veritably the King Kong of rim brakes--the biggest shoes, the greatest mechanical advantage; lightweight and simple. Per pair, including bosses and hangers but without levers and cables, weight 125g.....#320

# MAFAC







**MOUNTAIN BIKES**  
**P.O. Box 405**  
**Fairfax, CA 94930**  
**(415) 456-1898**