

# Greetings



Tve long believed that the personality of a company, like that of an individual, is largely shaped during its early years. Cannondale began with four dedicated people hand-

building bicycle trailers in a crowded loft above a pickle factory. The hours were long and the pay sporadic, but the group was a close-knit team and the satisfaction of quietly building an innovative product was immense. We were true underdogs, with only the merits of our product and the satisfaction of our customers to keep us alive.

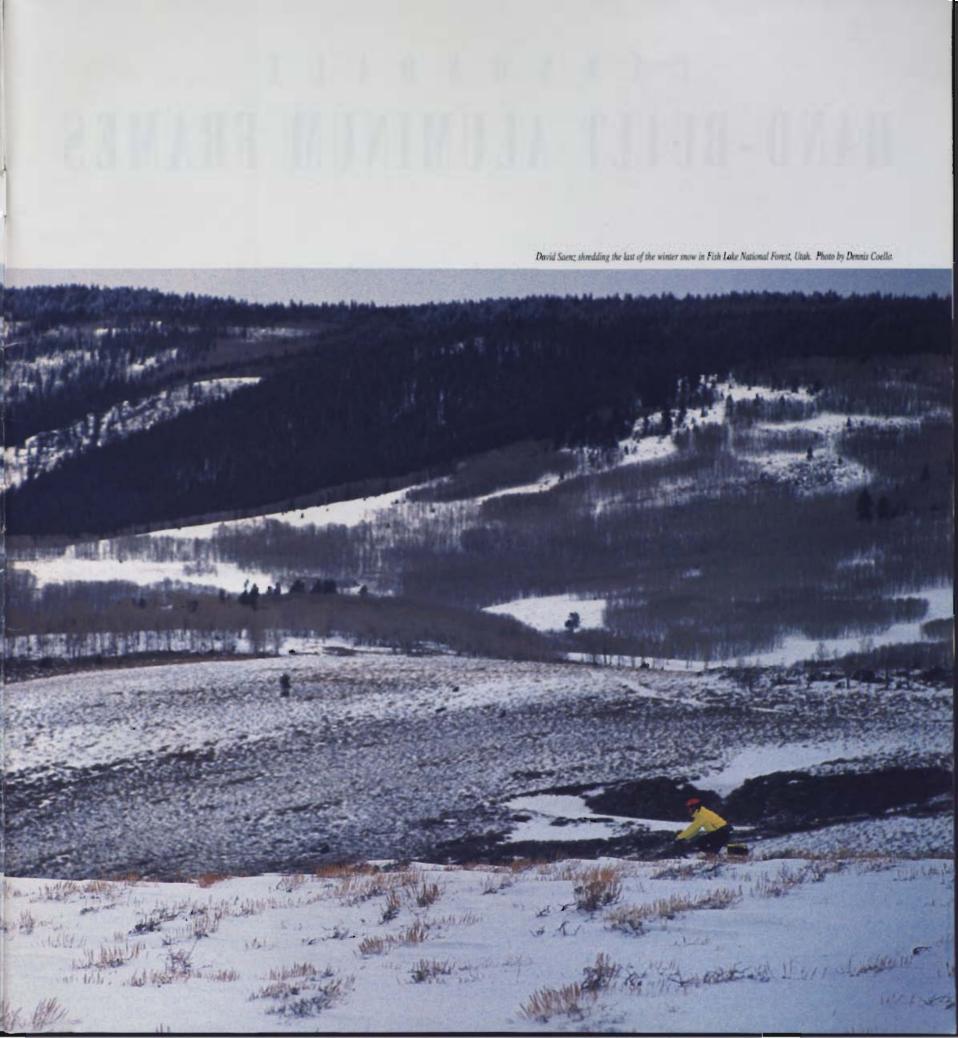
Not much has changed in twenty years. Among our competitors, we are still a small company. Our determination and hunger have survived. Innovative, hand-built products and quality service remain the lifeblood of our company, not slick marketing tactics or seven-figure ad budgets. We continue to be passionate about what we do, and you, our customers, continue to support us. We thank you. And, we invite you to look through our latest offerings in this, our 1992 catalog.

Sincerely,

JOSE

Joseph S. Montgomery
Founder and President





# C A N N O N D A L E

# HAND-BUILT ALUMINUM FRAMES

The receiving department of a bike company says more about their bicycles than any other area. Typically, you'll find it clogged with bicycles just off the boat from the Far East — the same bicycles, with different decals and paint schemes, found in the receiving departments of other "American" bike companies.

A visit to the receiving department of our Bedford, Pennsylvania, factory would reveal lengths of 6061-T6 aluminum tubing in various shapes and diameters. Follow the tubing through our factory, and you'll see it cut to length, mitered, TIG-welded, heat treated, sanded, painted, assembled with components, and packaged. All by hand. Obviously this is far more difficult than FAX-ing an order to Taipei, but the over



four hours of hand labor we spend on every Cannondale frame results in a vastly superior bicycle.

## ALUMINUM TUBING.

We use large diameter 6061-T6 aluminum tubing because it's far more resistant to flexing than standard or mid-size tubes. (Simply doubling a tube's diameter increases its flex-resistance by sixteen times.) A frame that won't flex under the force of your pedaling is a more efficient machine, delivering more energy to the rear wheel for full-bore acceleration in sprints and climbs.

Aluminum is light, so even though the tubes are immense our frames are among the lightest available at any price and of any material; as light as 2.8 pounds on our new 2.8 Series racing frame. A chrome-moly frame with the same dimensions would weigh almost eight pounds.

# CUTTING AND MITERING.

Because we don't use lugs (the prefabricated collared joints found on most frames) we're able to customize tube lengths on every frame size. Lug tooling is expensive, so

other manufacturers often use identical lugs on different size frames. This restricts their ability to customize tube lengths by frame size, and leads to a less than ideal frame/rider fit. Every tube on a Cannondale frame is cut to the optimum length for the frame size and frame style it will be used on.

After being cut to length, tube-ends are mitered to wrap around the tubes they join for a smooth joint and large, secure weld area.

## TIG-WELDING AND HEAT TREATING.

We TIG-weld (Tungsten Inert Gas) our frames by hand because welding is by far the strongest method of creating a frame.

After welding, an intricate heat treating procedure redistributes the alloying elements throughout the frame for full strength and true "unibody" construction.





# SANDING AND PAINTING.

We painstakingly sand excess weld material away from each joint for a smooth, sleek look. Each frame is then cleaned to remove any debris or manufacturing residue. Finally, the sanded, cleaned frames are painted and outfitted with decals before receiving a protective outer layer of clear-coat.



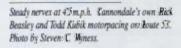
# ASSEMBLING.

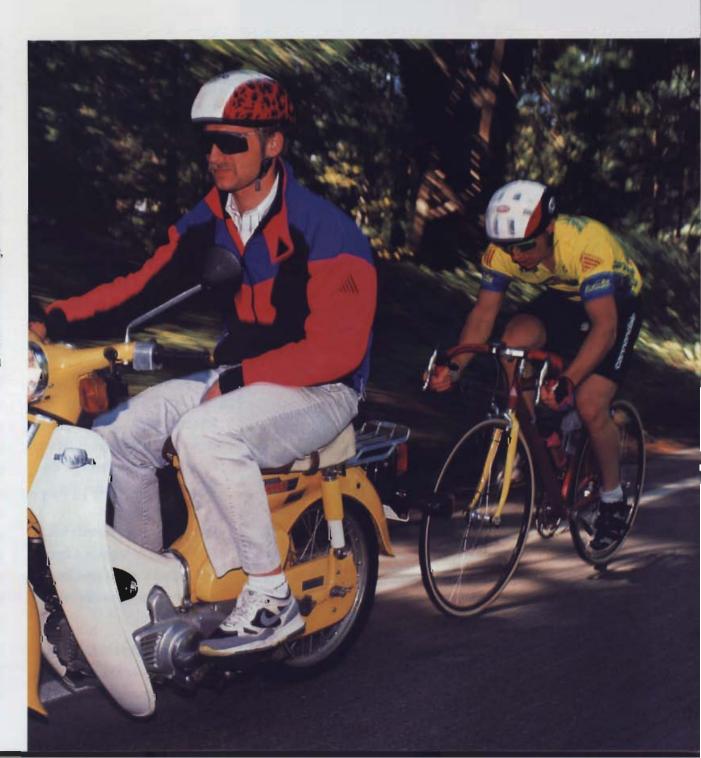
We assemble Cannondale frames into complete bicycles with the finest components in the world. From Ultegra STI road levers to the SunTour Micro Drive drivetrain, from titanium-railed Flite saddles to Smoke tires,

we scour the industry for components that deliver the utmost in function, innovation, light weight and durability.

Having invested so much time, energy and expense in creating Cannondale bicycles, we refuse to sell them through just any bike shop. In fact, fewer than 15% of all the bike shops in the U.S. sell our bicycles. Instead, a network of the industry's most progressive, most service-oriented bike shops serves as the final, crucial link between Cannondale and you. Only by marketing our products through the finest bike shops can we be sure you'll receive the same quality and attention in the sale and service of your bicycle that we invest in its construction.







# SUSPENSION MOUNTAIN BICYCLES

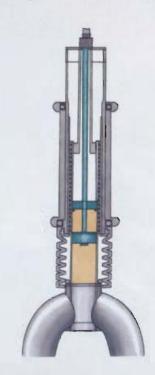
hat happens when your mountain bike starts bouncing and bucking at mega-warp speed? You stop pedaling, rise out of the saddle, and try to absorb the shock with your legs. Handling eventually improves as your speed ebbs and your tires regain contact with the trail, but your thighs, quads, arms, back, confidence, cadence and momentum have all taken a pounding.

Imagine that same stretch of trail at the same speed. This time, the bouncing and bucking never get past your bike frame. Your wheels move vertically, following the contours of the terrain while your handlebars, saddle and pedals remain stable. With your wheels on the ground, steering, traction and control remain intact. You continue pedaling, maintaining your speed. Maybe you even crank it up a notch.

The difference between high anxiety and high speed is a Cannondale Delta V<sup>tm</sup> ("vee") suspension mountain bike. Delta V refers to the frame's unique configuration, designed to maximize strength and flex resistance. (Fittingly, it also means "change in velocity" in scientific jargon.) We offer two Delta V models, our V2000 and V1000, with front and rear suspension, and one Delta V model, the V900, with front suspension only. The full suspension frame, complete with fork

and lightweight custom stem, weighs an almost impossibly light 8.0 lbs. The V900, with front suspension fork, lightweight custom stem, and standard rear triangle, weighs even less at 6.47 lbs.

Stated simply, the Delta V front suspension is a telescoping, shock-absorbing steering tube inside an over-sized head tube. The telescoping action is accomplished with two tubes — an inner and outer tube — that slide against each other. The range and characteristics of their movement are controlled by an oil-dampened, air-supported internal shock-absorbing element.



Between the inner and outer tubes, multiple sets of free-floating needle bearings all but eliminate "stiction," the initial static friction between the inner and outer tubes that must be overcome before the fork can compress. With needle bearings (rather than the bushings found on other suspensions) stiction is minimized so the tubes slide freely against each other. The suspension activates smoothly and easily, even on washboard and other moderately textured terrain, without the sudden "release" felt with other suspensions as high degrees of stiction are overcome.

The front suspension features an air spring preload that adjusts to your weight, and a Dampening Dial<sup>tm</sup> that can be adjusted to provide a full range of dampening. The fork also comes with vibration-dampening Pepperoni <sup>tm</sup> aluminum blades, an over-sized Cannondale stem, and a whopping 45 mm sealed cartridge bearing headset. Finally, our front suspension allows us to save rotating weight by using a 28 spoke front wheel. (Because the suspension is absorbing impacts instead of the front wheel, fewer spokes can be used without compromising the wheel's integrity.)

The full suspension models also feature our E.S.T. (Elevated Suspension Technology) rear suspension with its spring-supported, oildampened shock absorber. The shock absorber links a vertically-pivoting rear triangle, or swingarm, to the frame's main triangle. Because the swingarm's pivot point is above the chainstays, your pedaling energy can't compress the shock. Instead, it's transferred to the rear wheel to drive you forward.



The E.S.T. shock absorber features an adjustable preload that sets easily to your weight. Once adjusted, the preload is correct for any terrain. Each shock also comes equipped with one of three outer springs customized by frame size. The smallest frames — and the lightest riders — are outfitted with a slightly softer spring, while the springs on the larger frames are a bit beefier. (Don't worry if you're tall and lanky; All three springs are available through your Cannondale retailer.)

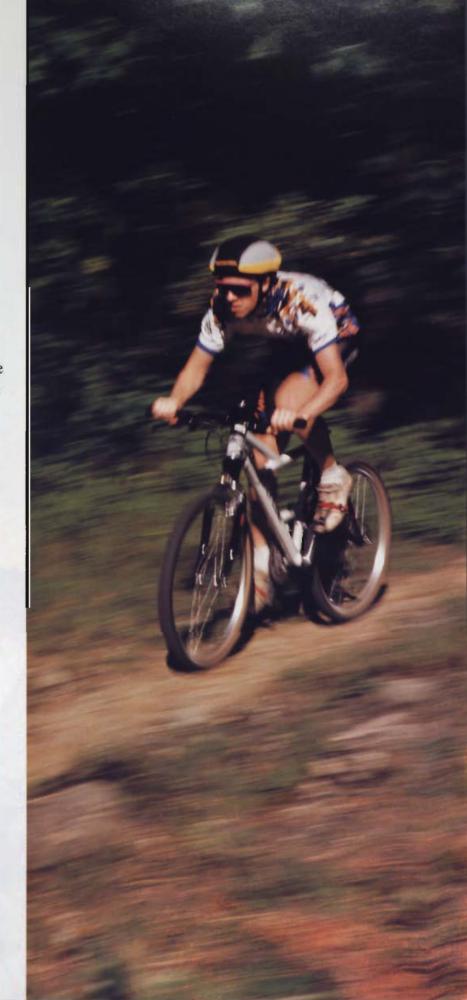
Like all of our high-end mountain bikes, the Delta V bikes come with the powerful Force 40<sup>th</sup> braking system. An innovative method of re-routing brake cables for 40% more braking power, the Force 40 will help you control the blistering speeds you'll reach on the suspension bikes. Our trick replaceable rear derailleur hanger is also standard equipment on the suspension bikes. A great way of protecting your investment, the derailleur hanger can be replaced in moments should it snap off in a crash. (The replaceable rear derailleur hanger is pictured on page 12.)

In addition to the complete bicycles listed on these pages, our Delta V full and front suspension frames are also available as framesets. To custom equip your own Cannondale bicycle, or to upgrade your existing components to a superior frame, contact your Cannondale retailer about purchasing a Delta V suspension frameset.

# \*A note on weight comparisons:

Our full suspension Delta V frame weighs 8.0 lbs. The Delta V frame with front suspension and a standard rear triangle weighs 6.47 lbs. These weights include the frame, fork and a custom, lightweight stem designed exclusively for the Delta V. Remember to add 13 ounces (typical stem weight) to the weight of other suspension systems for an accurate comparison with the Delta V. Weights vary slightly with frame size.

leff Garnett, Cas. II Sunior racer and after-school R&I Assistant par excellence, temporarily trades his road	)
bike for one of the first Delta V suspension bikes. Photo by Steven C. Wyness.	



#### FELTA V FRANE GEICNETKY F2000, F2000, F200

Seat Table Angle degrees Head Tube Angle (begrees) Top Tube Length in. 22:25 23:25 24:25 Chainstay Length in. 16.75 16.75 16.75 Fork Rake in. Battom Bracket Height in. 11.62 11.62 11.62 Whoreflase in. 42.00 43.16 44.34 Trail in. 2.87 2.87 2.87 Ground to Top of Top linbe\*\* 28.60 28.60 28.70

\*\*At knest point

# DELTA 2000

Cannondale Delta V full suspension frameset with Force 40th braking system

Ritchey Logic crankset and brake levers

Smoke 2.1" tires with Kevlar bead and skinwall

Cannondale XYZ bar ends and Easton Hyperlite handlebars

Shimano cartridge bottom bracket

Wheelsmith double-butted spokes



## turbo



# DELTA 1000

Cannondale Delta V full suspension frameset with Force 40 braking system

SunTour XC Comp Micro Drive drivetrain with competition shifters

SunTour XC Pro cantilever brakes

Smoke 2.1" tires with Kevlar bead and skinwall

Ritchey Logic leather saddle

Chinook CR16 rims, 410 g.

#### COMPONENT SPECIFICATIONS

Frame Cannondale Delta V w/E.S.T. Rear Suspension
Fork Cannondale Delta V Front Suspension

Rims Chinook CR16, silver anodized, 32 hole rear.

28 hole front

Hubs SunTour XC Comp w/rear freehub

Spokes Wheelsmith, stainless steel, double-butted

Tires Smoke 2.1°, Keylar bead, skinwall
Pedals SR Low Fat Comp, all alloy

Grank Sun Tour AC Comp MD, 20/32/42
Chain Sun Tour AccuShift Plus II

Freewheel SunTour AccuShift Plus II MD, 7-spd. 11-24

Bottom Bracket Sun Tour AC Comp MD Front Derailleur Sun Tour AC Comp MD Rear Derailleur Sun Tour AC Comp MD

Shift Levers Sun Tour Multimount competition thumbshifters
Handlebars Taperlite Easton E-9, silver anodized aluminum

Stem Cannondale TIG-welded adminum
Beadset Cannondale cartridge sealed bearing

Brakeset Sun Tour AC Pro, low profile, w/Force 40 routing and

Dia-Compe SS-7 levers

Saddle Ritchey Logic, black leather
Seatpost Ritchey Force Directional
Seatpost O.R. Tioga super lightweight QR-CAM

Colors (codes) White w/silver speckle main triangle, jet black fork

and rear triangle (W)

Sizes (inches) 17, 19, 21



# DELTA 900

Cannondale Delta V front suspension frameset with Force 40 braking system

Shimano Deore LX with top-mounted competition shifters

Ritchey Vantage Comp silver anodized rims

Smoke 2.1" tires with skinwall

Dia-Compe SS-7 brake levers

Wheelsmith double-butted spokes

#### COMPONENT SPECIFICATIONS

Frame Cannondale Delta V w/standard rear triangle
Fork Cannondale Delta V Front Suspension
Rims Ritchev Vantage Comp., silver anodized,

32 hole rear. 28 hole from

Hubs Shimano Deore LX, w/rear freehub

Spokes Wheelsmith, stainless steel, double-butted

Tires Smoke 2.1°, skinwall

Pedals Shimano Deore LX Competition Crank Shimano Deore LX, 24/36/46

Chain Shimano Hyperglide

Freewheel Shimano Deore L.X. 7-spd, 13-30

Bottom Bracket Shimano Deore L.X. sealed mech.

Front Derailleur Shimano Deore LX Rear Derailleur Shimano Deore LX

Shift Levers Shimano Deore over-the-bar thumbshifters

Handiebars Aluminum alloy

Stem Cannondale TIG-welded aluminum Bleadset Cannondale cartridge sealed bearing

Brakeset Shimano Deore LX, low profile w/Force 40 routing

and Dia-Compe SS-7 levers

Saddle Ritchey Logic, black leather
Scatpost 4130 CR-MO, heat treated
Seatpost Q.R. Tioga super lightweight QR-CAM

Colors (eodes) Black w/purple (E)
Sizes (inches) 17, 19, 21



# 3.0 S E R I E S M O U N T A I N B I C Y C L E S

The "3.0" in our 3.0 Series mountain frames refers to the triumvirate of qualities that sets them apart from the competition: exceptionally light weight, vibration-dampening comfort and responsive handling. Since their introduction in 1989, our 3.0 Series mountain bikes have made their mark in NORBA Points Series races, at the U.S. National Championships, at the World Mountain Biking Championships and on single track trails and fire roads around the world.

The 3.0 Series mountain bikes are hand-built from beefy, large diameter aluminum tubes that channel more raw power to your rear wheel by minimizing frame flex. All but two models, the M400 and M500, feature the hot

Force 40th braking system (patent pending) which routes your brake cables more efficiently, boosting stopping power by a full 40%. Mudcutter the chainstays provide plenty of rear tire clearance, and our lightweight cantilever rear dropouts come equipped with an innovative replaceable rear derailleur hanger. Bolted to the frame with two sturdy allen screws, the derailleur hanger can be replaced in moments should it snap off in a crash.

Selected models of our 3.0 Series mountain bikes also feature the super-rigid, all-aluminum Pepperoni fork. Weighing less than virtually all other high performance mountain bike forks, the 1.4 lb. Pepperoni absorbs shock and vibration for improved control and comfort.

Our 1992 mountain bikes come with one of two 3.0 Series geometries. All but the M800 feature an 11.63 inch bottom bracket height for flat-out, high speed stability. The "Beast of the East" M800 has a full 13 inches of bottom bracket clearance and more radically sloping top tube that make it perfect for trials and technical riding.

Our rear derailleur hanger can be replaced quickly, easily and inexpensively should it bend or break off in a crash.

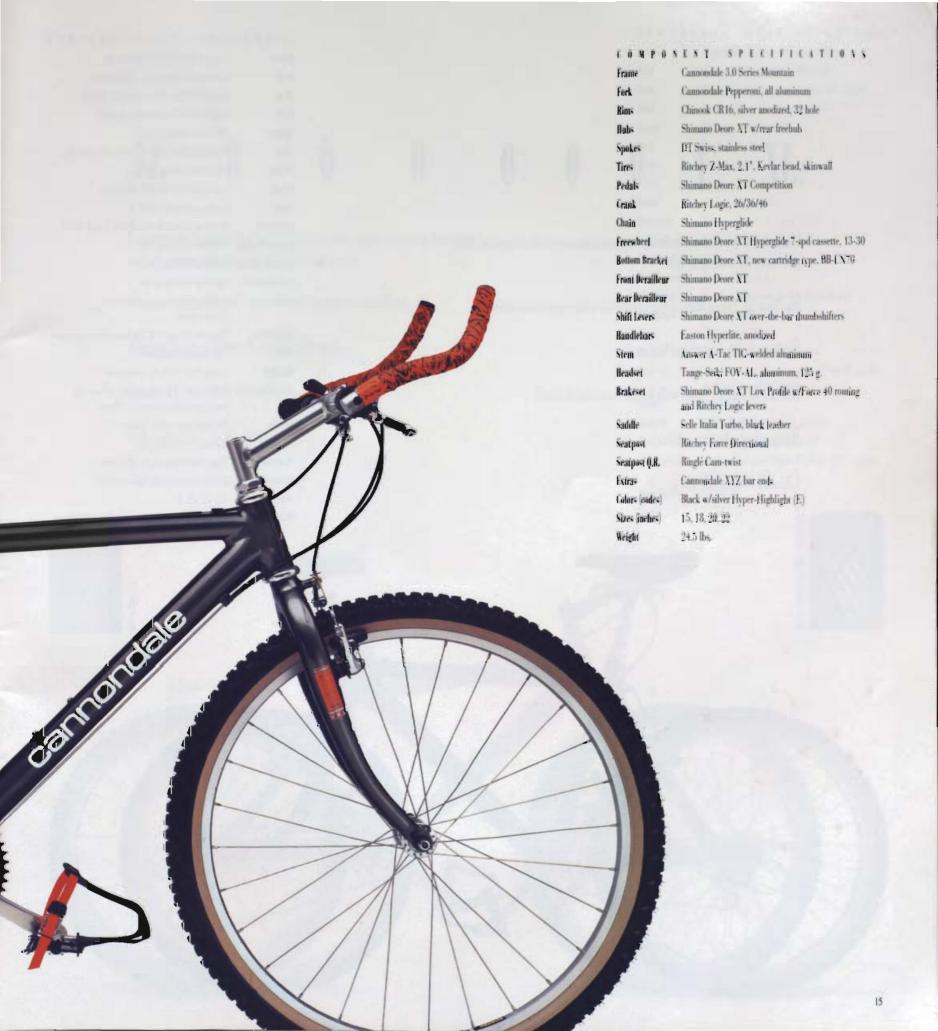


N 0 1 N T A 1 M2000, M1000, M700, M500.	A A(+00	F R	A M	1	6	I	D N M800	111977	RY
Size	15	18	20	22			18	20	22
Seat Tube Angle (degrees)	73.50	73.50	73.50	73.50			72.00	72.00	72.00
Head Tube Angle (degrees)	71.00	71.00	71.00	71.00			71.00	71.00	71.00
Top Tube Length (in.)	21.50	22.50	23.25	24.25			22.50	23.25	24.25
Chainstay Length (in.)	16.90	16.90	16.90	16.90			16.90	16.90	16.90
Fork Bake (in.)	1.75	1.75	1.75	1.75			1.75	1.75	1.75
Bottom Bracket Height (in.)	11.63	11.63	11.63	41.63			13.00	13.00	13.00
Wheelbase (in.)	10.94	41.94	42.94	43.94			42.14	42.74	43.94
Trail(in)	2.62	2.62	2.62	2.62			2.62	2.62	2.62
Ground to Top of Top Tube (in.)	28.90	29.75	31.30	33.25			29.25	31.10	32.90

In addition to complete bicycles we also offer Cannondale framesets. Contact your authorized Cannondale retailer about custom-building your own Cannondale, or upgrading your existing components to a superior frame.

Kelly Steelman and Shawn Withers of Team Cannondale caught mid-slog at the aptly named Mid & Guts Challenge, Revere, Pennsylvania. The team went on to take three of the top five spots. Photo by Neal Palumbo.





# M 1 0 0 0

Cannondale 3.0 Series aluminum mountain frameset with Pepperoni fork and Force 40 braking system

SunTour XC Comp Micro Drive drivetrain with competition shifters

SunTour XC Pro cantilever brakes

Ritchey Z-Max 2.1" tires with Keylar bead and skinwall

Ritchey Logic leather saddle

Chinook CR16 rims, 410 g.

#### COMPONENT SPECIFICATIONS

Frame Cannondale 3.0 Series Mountain

Fork Cannondale Pepperoni, all aluminum

Rims Chinook CR16, silver anodized, 32 hole

Hubs SunTour XC Comp w/rear freehub

Spokes DT Swiss, stainless steel

Tires Ritchey Z-Max, 2.1\*, Keylar bead, skinwall

Pedals SR Low Fat Comp. all alloy
Crank Sun Tour XC Comp MD, 20/32/42

Chain SunTour AccuShift Plus II

Freewheel SunTour AccuShift Plus II MD, 7-spd, 11-24

Bottom Bracket Sun Tour XC Comp MD
Front Derailleur Sun Tour XC Comp MD
Rear Derailleur Sun Tour XC Comp MD

Shift Levers SunTour Multimount competition

thumbshifters

Handlebars Taperlite Easton E-9, black anodized aluminum

Stem TIG-welded aluminum

Beadset Tange-Seiki FOV-AL, aluminum

Brakeset SunTour XC Pro, low profile, w/Force 40

routing and Dia-Compe SS-7 levers

Saddle Ritchey Logic, black leather Seatpost Ritchey Force Directional

Seatpost Q.R. Tioga super lightweight QR-CAM

Lulors (codes) Let black w/grey (E), Sahara gold (G)

Sizes (inches) 15, 18, 20, 22



# M = 8 = 0 = 0

Cannondale "Beast of the East" 3.0 Series aluminum mountain frameset with Pepperoni fork and Force 40 braking system

Shimano Deore LX with top-mounted competition shifters

Ritchey Vantage Comp silver anodized rims

Smoke 2.1" tires with skinwall

Dia-Compe SS-7 brake levers

350 mm 4130 chrome-moly seatpost

#### COMPONENT SPECIFICATIONS

Fork Cannondale 3.0 Series "Beast of the East"

Fork Cannondale Pepperoni, all aluminum

Rims Ritchey Vantage Comp., silver anodized, 32 hole

Hubs Shimano Deore LX, w/rear freehub

Spokes DT Swiss, stainless steel
Tires Smoke 2.1", skinwall

Pedals Shimano Deore LX Compesition
Crank Shimano Deore LX, 24/36/46

Chain Shimano Hyperglide

Freesheel Shimano Deore LX, 7-spd, 13-30

Bottom Bracket Shimano Deore LX, seafed mech.

Front Derailleur Shisnano Deore LX Rear Derailleur Shisnano Deore LX

Shift Levers Shimano Deore over-the-bar thumbshifters

Handlebars Aluminum alloy Stem TIG-welded CR-MO

Headset Tange-Seiki FOVP-5000 oversize

Brakeset Shimano Deore LX, low profile w/Force 40 routing

and Dia-Compe SS-7 levers

Saddle Vetta Anatomic

Seatpost 4130 CR-MO, heat treated, 350 mm Seatpost 0.R. Tioga super lightweight QR-CAM

Colors (eodes) Black w/blue pearl Hyper-Highlight (H), Formula

red w/jet black (R)

Sizes (inches) 18, 20, 22

Weight 25.5 lbs.



# $M \quad 7 \quad 0 \quad 0$

Cannondale 3.0 Series aluminum mountain frameset with Pepperoni fork and Force 40 braking system

Shimano Deore LX with top-mounted competition shifters

Ritchey Vantage Comp silver anodized rims

Ritchey Z-Max 2.1" tires with skinwall

Dia-Compe SS-7 brake levers

#### COMPONENT SPECIFICATIONS

Frame Cannondale 3.0 Series Mountain

Fork Cannondale Pepperoni, all aluminum

Rims Ritchey Vantage Comp, silver anodized,

32 hole

Hubs Shimano Deore LX, w/rear freehub

Spokes DT Swiss, stainless steel
Tires Ritchey Z-Max 2.1', skinwall
Pedals Shimano Deore LX Competition
Grank Shimano Deore LX, 24/36/46

Chain Shimano Hyperglide

Freewheel Shimano Deore LX, 7-spd, 13-30

Bottom Bracket Shimano Deore LX, sealed mech.

Front Derailleur Shimano Deore LX
Rear Derailleur Shimano Deore LX

Shift Levers Shimano Deore over-the-bar thumbshifters

Handlebars Aluminum alloy Stem TIG-welded CR-MO

Headset Tange-Seiki FOVP-5000 oversize

Brakeset Shimano Deore LX, low profile w/Force 40 routing

and Dia-Compe SS-7 levers

Saddle Vetta Anatomic

Seatpost 4130 CR-MO, heat treated
Seatpost 0.R. Tioga super lightweight QR-CAM

Colors (codes) Black w/blue pearl Hyper-Highlight (H), Formula red

w/jet black (R)

Sizes (inches) 15, 18, 20, 22 Weight 25.5 lbs.



# M 5 0 0

Cannondale 3.0 Series aluminum mountain frame with all chrome-moly Tange fork

Shimano Exage 500 LX STI brake and shift levers

Shimano Exage 500 LX 7-speed freehub, with Hyperglide

Ritchey Vantage Sport silver anodized rims

Ritchey Z-Max 2.1" tires with skinwall

#### COMPONENT SPECIFICATIONS

Frame Cannondale 3.0 Series Mountain

Fork Tange, all CR-MO

Rims Ritchey Vantage Sport, silver anodized, 36 hole
Hubs Shimano Exage 500 LX w/rear freehub

Spokes DT Swiss, stainless steel

Tires Ritchey Z-Max, 2.1", skinwall

Pedals Tioga Surefoot III w/Powerclip toeclips and

straps

Crank Shimano Exage 500 LX, 28/38/48

Chain Shimano Hyperglide

Freewheel Shimano Hyperglide cassette, 7-spd, 13-30

Bottom Bracket Shimano Exage 500 LX
Front Derailleur Shimano Exage 400 LX
Rear Derailleur Shimano Exage 400 LX
Shift Levers Shimano Exage 500 LX STI

Handlebars Aluminum alloy Stem TIG-welded CR-MO

Seatpost Kalloy SP-242, alloy post

Seatpost Q.R. Kalloy STP-AR

Colors (codes) Dark metallic grey (C), White w/silver

speckle (W)

Sizes (inches) 15, 18, 20, 22 Weight 27.5 lbs.



M 4 0 0

Cannondale 3.0 Series aluminum mountain frame with all chrome-moly Tange fork

SunTour's new XCM Lite mountain group, with X-Press 7-speed shifters

Ritchey Vantage Sport silver anodized rims

Sansin CE-60 sealed mechanism hubs, with chrome-moly axles

Tioga Trail Dawg tires with skinwall

### COMPONENT SPECIFICATIONS

Frame Cannondale 3.0 Series Mountain

Fork Tange, all CR-MO

Rims Ritchey Vantage Sport, silver anodized,

36 hole

Hubs Sansin CE-60, sealed mech.

Spokes DT Swiss, stainless steel

Tires Tioga Trail Dawg, skinwall

Pedals Black resin, w/Powerclip toe clips and straps

Crank SunTour XCM Lite, 28/38/48

Chain DID Super Lanner

Freewieel SunTour XCM 7-spd, 13-30

Bottom Bracket Japanese sealed mech., bolt axle

Front Berailleur SunTour XCM Lite
Rear Berailleur SunTour XCM Lite
Shift Levers SunTour X-1 X-Press
Handlebars High strength steel
Stem TIG-welded CR-MO
Headset Tange-Seiki, ME-H

Brakeset XCM forged alloy w/XCM levers

Saddle Black "Lambskin" vinyl w/VariFoam padding

Seutpost Kalloy SP-242, alloy post

Scatpost Q.R. Kalloy STP-AR

Colors (codes) Bright metallic blue (B), Jet black (E)

Sizes (inches) 15, 18, 20, 22 Weight 27.5 lbs.



biking is a new sport, and your actions on your next ride will influence which trails will be open for bicycle use in the years to come. Minimizing skidding, avoiding muddy areas, and being courteous to hikers and equestrians are simple things we can all do on every ride to keep the land open to bicycles. And if you're feeling ambitious, voluntary trail maintenance and

The International Mountain Bicycling Associatrail riding:

Leave no trace Control your bicycle Always yield the trail Never spook animals

Remember, good trail habits are everyone's Route 2, Box 303, Bishop CA 93514. Or call,

on't take land access for granted. Mountain packing out others' trash will benefit everyone. tion (IMBA) has established these rules for good Ride on open trails only Plan ahead business. For more information contact IMBA at 619/387-2757. 25 miles west of the Las Vegas Strip, Jimmy Martinez Photo by Neal Palumbo.

traverses the Cottonwood Valley in the shadow of Mt. Potosi.

# CROSS TRAINING BICYCLES

The focus is on comfort, versatility and performance with our 1992 Cross Training ("hybrid") bicycles. Fun and easy bikes to ride, they're stable, sure handling, high performance machines equally at home on dirt roads or paved.

At the heart of these popular bicycles is our Cross Training frame. Hand-crafted from large diameter, vibration-absorbing aluminum tubing, the lightweight frame converts pedal strokes into propulsion with a minimum of wasteful frame flex. We've outfitted our Cross Training frame with a host of extras, ranging from our innovative replaceable derailleur hanger to waterbottle bosses to front and rear rack mounts.

Every Cross Training bicycle comes equipped with top quality components, including "rider friendly" upright handlebars and indexed, bar-mounted shifters. Each also comes outfitted with comfortable medium profile tires and powerful cantilever brakes.

Our Cross Training bikes can also be easily customized as your component preferences evolve. Down tube braze-ons allow easy conversion to down tube-mounted shifters, 700 c wheels permit a wide range of tire and rim options, and our cantilever brake bosses are compatible with many of the hottest new mountain bike brakes.

### CROSS TRAINING FRAME GEOMETRY

H800, H600, H4	400	
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Size (in.)	16"	18	20	22
Seat Tube Angle (degrees)	N/A	75.00	70.00	73.00
Head Tube Angle (degrees)	N/A	68.00	70.00	70.00
Top Tube Length (in.)	N/A	20.11	21.60	21.93
Chainstay Length (in.)	N/A	17.00	17.00	17.00
Fork Rake (in)	N/A	3.02	2.63	2.63
Bottom Bracket Height (in.)	N/A	10.63	10.63	10.63
Wheelbase (in.)	N/A	41.54	41.54	41.54
Trail (in.)	N/A	2.34	2.25	2.25
Ground to Top of Top Tube (in.)**	N/A	28.60	30.84	31.25

<sup>\*</sup>Information not available at press time.

In addition to complete bicycles we also offer Cannondale framesets.

Contact your authorized Cannondale retailer about custom-building your own

Cannondale, or upgrading your existing components to a superior frame.

Cycling journalist Jane McNall riding near Long Canyon, outside of Moab. Jane's first book, a collection of rides in and around San Francisco, should be out later this year. Photo by Dennis Coello. A NOTE ON BICYCLE SAFETY...

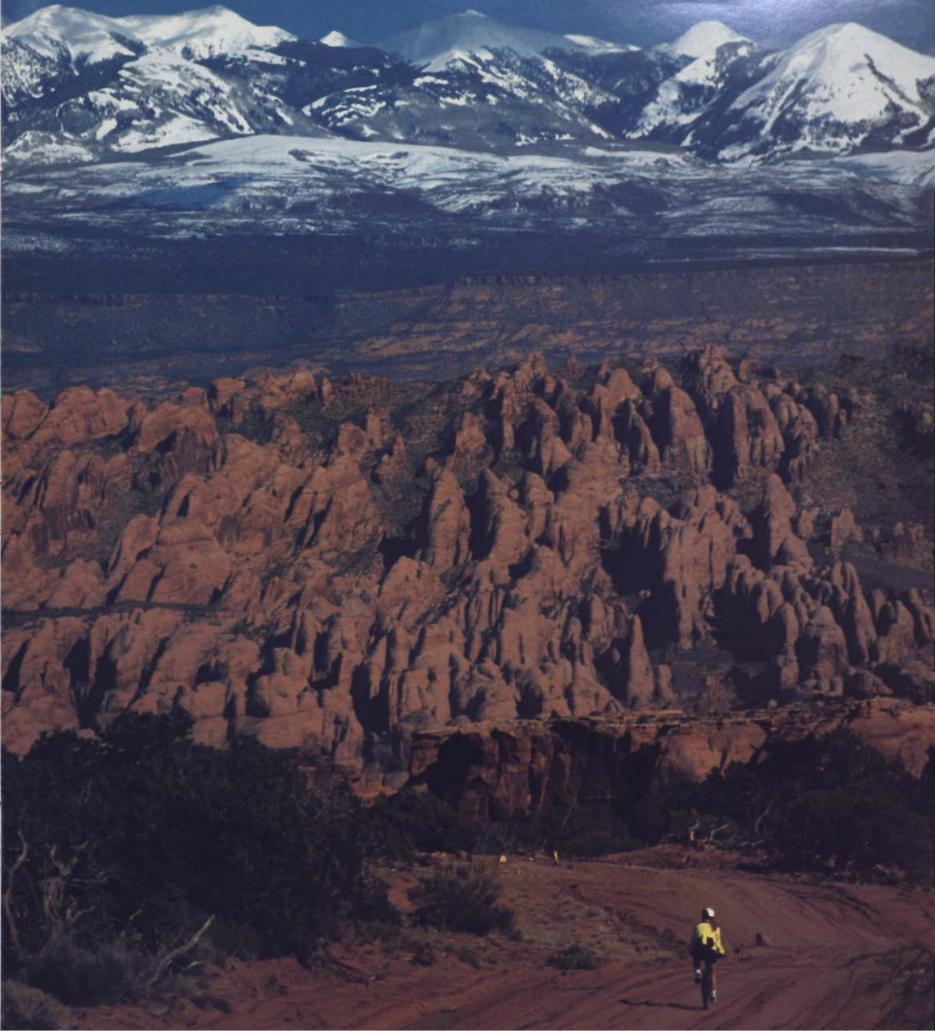
You can easily reduce the risk of accident and injury while riding by taking a few simple precautions.

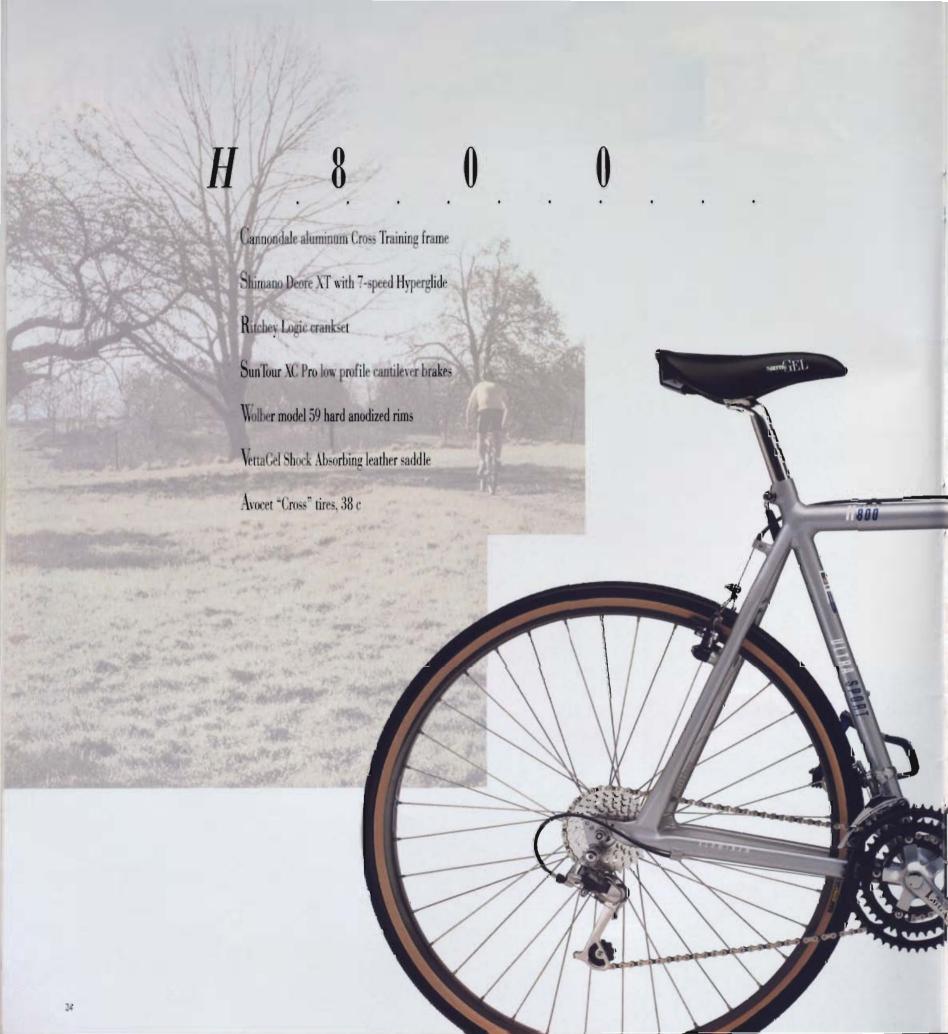
We strongly encourage you to take these basic steps:

- Always wear a helmet when riding.
- Keep your speed under control.
- Don't ride at night without proper lighting, or in inclement weather.
- Learn and obey all traffic laws that apply to bicycling.
- Check to insure the quick release skewers on your wheels are properly closed before each ride.
- Test your brakes for proper operation before each ride.
- Make sure your bicycle is equipped with a full complement of reflectors.
   (Every Cannondale bicycle is shipped with those reflectors required by the Consumer Product Safety Commission. If your Cannondale bicycle does not come with reflectors, please contact your retailer or call us toll-free at 1 800 BIKE USA.)
- Have all repair and maintenance work performed on your bicycle by an authorized Cannondale retailer.

We strongly recommend that you familiarize yourself with the basic operation of all the parts on your bicycle. To learn more about cycling safety and bicycle operation, check your library for bicycling books or contact your local bike shop, police department or YMCA about bicycle safety classes.

<sup>\*\*</sup>In the middle of tube length.







# H 6 0 0

Cannondale aluminum Cross Training frame

Shimano Deore DX STI levers with 7-speed Hyperglide

Dia-Compe 986 low profile cantilever brakes

Ritchey Vantage Cross-Sport silver anodized 700 c rims

VettaGel Shock Absorbing saddle

Tioga Surefoot II pedals with Powerclips and toestraps

### COMPONENT SPECIFICATIONS

Frame Cannondale Cross Training

Fork Tange CR-MO

Ritchey Vantage Cross-Sport, 700 c, silver

anodized

Hubs Shimano Exage 500 LX w/rear freehub

Spokes DT Swiss, stainless steel
Tires Tioga Bloodhound, 700 x 38 c

Pedals Tioga Surefoot II, w/Powerclip toeclips and straps

Crank Shimano Exage 500LX, 30/40/50

Chain Shimano Hyperglide

Freewheel Shimano Hyperglide, 7-spd cassette, 13-30

Bottom Bracket Shimano Deore, sealed mech.

Front Derailleur Shimano Deore LX
Rear Derailleur Shimano Deore LX
Shift Levers Shimano Deore DX STI
Handlebars Aluminum alloy
Stem TIG-welded, CR-MO

Headset Tange-Seiki ME-SII, triple sealed

Brakeset Dia-Compe 986 cautilevers, black finish

Saddle VettaGel, Shock Absorbing Seatpost Kalloy SP-242, alloy post

Seatpost Q.R. Kalloy STP-AR

Colors (codes) Formula red (R), Midnight blue w/black fork (M)

Sizes (inches) 16, 18, 20, 22 Weight 25.5 lbs.



Cannondale aluminum Cross Training frame

Shimano Exage 500 LX STI levers with 7-speed Hyperglide

Ritchey Vantage Cross-Sport silver anodized 700 c rims

Tioga Bloodhound 700 x 38 c tires

XCM forged alloy cantilever brakes

#### PONENT SPECIFICATIONS

Cannondale Cross Training

Fork Tange CR-MG

Ritchey Vantage Cross-Sport, 700 c, silver Rims

anodized

Shimano Exage 500 LX w/rear freehub Hubs

Spokes DT Swiss, stainless steel Tioga Bloodhound, 700 x 38 c

Black resin w/Powerclip toeclips and straps Pedals.

Shimano Exage 400, 30/40/50 Crank

Shimano Hyperglide Chain

Freewheel Shimano Hyperglide, 7-spd cassette, 13-30

Shimano Exage 500LX **Bottom Bracket** Shimano Exage 400LX Front Derailleur Rear Derailleur Shimano Exage 400LX Shift Levers Shimano Exage 500LX STI

Handlebars High strength steel TIG-welded, CR-MO Steni Readset Tange-Seiki ME-II XCM forged alloy Brakeset

Black "Lambskin" sinyl w/VariFoam padding Saddle

Kalloy SP-242, alloy pea Scatpost Kalloy STP-AR Scatpost Q.R.

Bright metallic blue (B), Whits w/silver speckle (W) Colors (codes)

Sizes (inches) 16, 18, 20, 22 26.0 lbs. Weight

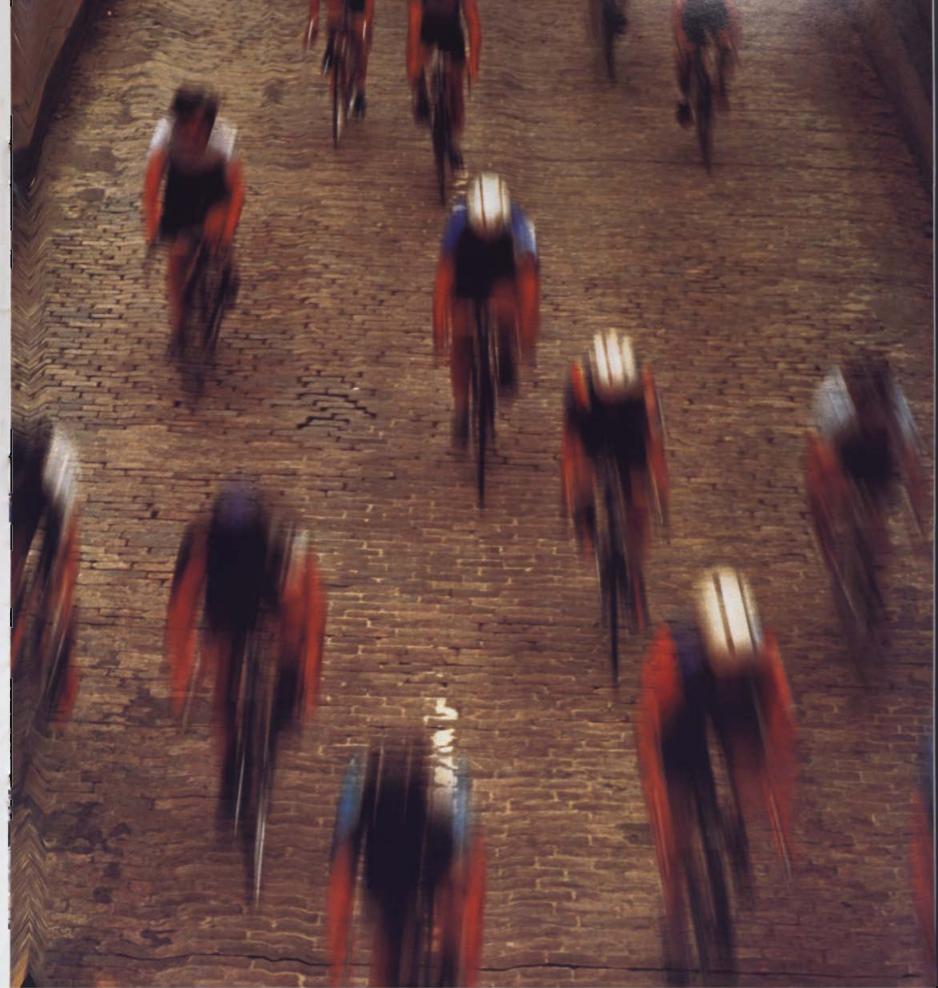


# PACING BICYCLES

Three years ago we broke new ground in light weight, comfort and handling with our 3.0 Series racing frames. Designed with CAD (computer-aided design) technology and finite element analysis software, the frames combined the best aspects of hundreds of computer-generated prototypes.

Although the response to the 3.0 Series frames was fantastic, we never stopped designing computer prototypes. Our new 2.8 Series frame represents the result of our continuing efforts. Barely nudging the scale at roughly 2.8 lbs. (weights vary slightly with frame size), the 2.8 Series frame concentrates aluminum where it's needed and ingeniously shaves it away from where it's not.







Cannondale 2.8 Series super lightweight frameset with Road Race geometry

Shimano 600 Ultegra 8-speed with STI road levers

 $\begin{array}{c} \text{Mavic MA2 Argent rims and Continental Grand Prix} \\ 23\ c\ \text{foldable tires} \end{array}$ 

Look Carbon pedals

Shimano cartridge bottom bracket





MITORO CO	MPUNENT SPECIFICATIONS
Frame	Cannondale 2.8 Series Road Race
Fork	Alominum alloy
Rims	Mavic Open 4 CD, hard anodized
Hubs	Mavic 550 RD, 556 RD
Spokes	Wheelsmith, double-butted, stainless steel
Tires	Michelin Super Comp HD, 700 x 23 c
Pedals	Mavic 646 LMS
Crank	Maric 631, 39/53
Chain	Sedis
Freewheel	Sachs 8-spd, 12-21
Bottom Bracket	Mavic 610 URD
Front Derailleur	Mavic, new for 1992
Rear Derailleur	Mavic 8-spd, 840
Shift Levers	Mavic 821
Handlebars	Mavic 351
Stem	Mavic 365
Headset	Mavic 305
Brakeset	Mavic, new for 1992
Saddle	Flise, citanium rails
Seafpost	Kingsbery USA
Extras	Vetta cork handlebar tape
Colors (codes)	Yellow w/black (Y)
Sizes (cm)	48, 50, 53, 54.5, 56, 58, 60, 63
Weight	20.0 lbs.

11700 LUM	BANKAL SERCILICATIONS
Frame	Cannondale 2.3 Series Road Race
Fork	Aluminum alloy, polished and black anodized
Rims	Mavic MA2 Argent, silver anodized
Hubs	Shimano Ultegra w/rear freehub
Spokes	DT Swiss, stainless steel
Tires	Continental Grand Prix, Kevlar bead, 23 c
Pedals	Look Carbon
Crank	Shimano Ulregra, 39/53
Chain	Shimano Hyperglide
Freewheel	Shimano Ukeges 3-spd cassette, 12-21
Bottom Bracket	Shimano Ultegra cantridge, BB-UN70
Front Derailleur	Shimano Ulregra
Rear Derailleur	Shimano Ultegra 3-spd
Shift Levers	Shimano Ulregra STL
Handlebars	Cinelli 64E
Stem	Cinelli 1E
Headsei	Tange Seiki Vantage, aluminum
Brakeset	Shimano Ultegra, Super SLR
Saddle	Ritchey Logic, leather
Seatpost	Kalloy SP-248, cold forged
Extras	Sampson Fat Wrep handlebar rape
Calors (cades)	Radiance red w/black anodized polished fork (R)
Sizes (em)	48, 50, 53, 54.5, 56, 58, 60, 63

21.25 lbs.

# R 8 0 0

Cannondale 2.8 Series super lightweight frameset with Road Race geometry

Mavic MA2 Argent rims and Continental Grand Prix 23 c foldable tires

Look Carbon pedals

Shimano cartridge bottom bracket

Cinelli 1E stem and 64E handlebars

Ritchey Logic leather saddle

### OMPOSENT SPECIFICATIONS

Frame Cannondale 2.8 Series Road Race

Fork Aluminum alloy

Rims Mavie MA2 Argent, silver anodized
Hubs Shimano Ultegra w/rear freehub
Spokes DT Swiss, stainless steel

Tires Continental Grand Prix, Keylar bend, 23 c

Pedals Look Carbon

Crank Shimano Ultegra, 39/53 Chain Shimano Hyperglide

Freewheel Shimano Ultegra 8-spd cassette, 12-21
Bottom Bracket Shimano Ultegra cartridge, BB-UN70

Front Derailleur Shimano Ultegra
Rear Derailleur Shimano Ultegra, 8-spd
Shift Levers Shimano Ultegra, 8-spd

Handlebars Cincili 64E Stem Cincili 1E

Headset Tange Seiki Vantage, aluminum Brakeset Shimano Ultegro, Super SLR Saddle Ritchey Logic, leather Seatpost Kalloy SP-248, cold forged

Extras Sampson Fat Wrap handlebar tape

Colors (codes) Formula red (R). Silver and white w/silver

speckles (S)

Sizes (cm) 48, 50, 53, 54.5, 56, 58, 60, 63

Weight 21.0 lbs.



R 7 0 0

Cannondale 2.8 Series super lightweight frameset with Road Race geometry

Shimano 105SC with 7-speed Hyperglide

Mavic MA2 Argent rims and Continental Grand Prix 23 c foldable tires

Scott Lemond II Clip-On bars and Crip Shift shifters

Profile for Speed alloy, forward-position seatpost

Hed "Tail" saddle waterbottle mounts

#### COMPONENT SPECIFICATIONS

Frame Cannondale 2.8 Series Road Race
Fork Aluminum alloy, polished and anodized

Rims Mavic MA2 Argent
Hubs Shimano 105 w/rear freehub
Spokes DT Swiss, stainless steel

Tires Continental Grand Prix, Kevlar bead, 23 c

Pedals (not included)
Crank Shimano 105SC, 42/53
Chain Shimano Hyperglide

Freewheel Shimano Hyperglide 7-spd cassette, 13-21

Bottom Bracket Shimano 105 Front Derailleur Shimano 105 Rear Derailleur Shimano 105

Shift Levers Grip Shift "Pro Line", 7-spd Handlebars Steer horn type w/Scott Clip-Ous

Stem TIG-welded, CR-MO

Headsel Tange-Seiki ME-SII, triple sealed
Brakeset Shimano 105, Super SLR
Saddle Ritchey Logic, leather
Seatpost Profile For Speed Aero Pro SP
Extras Hed "Tail" twin bottle holder

Colors (codes) Diamond black pearl metallic w/silver anodized

polished fork (E)

Sizes (em) 48, 50, 53, 54.5, 56, 58, 60, 63

Weight 22.0 lbs.



# RACING BICYCLES

racing frames in 1989. Named for their three key attributes — exceptionally light weight\*, vibration-dampening comfort and responsive handling — the 3.0 Series frames have become a favorite of racers, triathletes and other aggressive riders who insist on superior performance.

Like all our frames, the 3.0 Series racing frames are hand-built of large diameter 6061 T-6 aluminum tubing. These mammoth tubes are far more resistant to flexing than standard or mid-size tubes, so they squeeze the maximum performance out of every pedal stroke; With less frame flex wasting pedaling energy, more of your effort is used to push you forward.

The 3.0 Series racing frames feature our exclusive double-offset bottom bracket cluster, which joins the seat tube to the bottom bracket shell forward of its centerline. This innovative approach lets us use shorter, lighter, and more flex-resistant chainstays. It also allows the seat tube to intersect the down tube before it reaches the bottom bracket shell, reducing the effective length and the flex of the down tube.

We've outfitted the 3.0 Series frames with a weight-saving butted seat tube. Tapered chainstays put the meat of the tubes where it's needed (near the bottom bracket shell), and save weight by using less material where they join the cantilever dropouts. Finally, every 3.0 Series racing frame comes equipped

with a replaceable rear derailleur hanger that can be replaced in minutes should it snap off in a crash. (The replaceable rear derailleur hanger is pictured on page 12.)

The 3.0 Series frames are available on your choice of four complete bicycles. Three of the four, the *R*600, *R*500 and *R*400, feature our Road Race geometry. Known for its blend of speed and comfort, the Road Race frame's stable head angle and 16-inch chainstays make it perfect for fast, long distance cruising. The fourth model, the *C*600, features our ultra-nimble, ultra-fast Criterium geometry. With a steeper head angle, immense down tube, and shorter chainstays, the Criterium is a monster through the curves and in sprints.

\* 3.2 lbs. on a 56 cm. Criterium geometry frame

ROAD RA	CE	F	RA	M E	G E	0 M	ET	RY
R1000, R900, R800, R700, R	500, <i>R</i> 500	), R400						
Size (cm)	48	50	53	54.5	56	58	60	63
Seat Tube Angle (degrees)	73.00	73.00	73.00	74.00	73.70	73.10	73.00	73.00
Head Tube Angle (degrees)	70.50	71.50	73.00	73.00	73.00	73.00	73.00	73.50
Top Tube Length (cm)	49.78	51.56	53.98	55.58	55.88	56.21	56.72	58.72
Chainstay Length (em)	40.54	40.54	40.54	40.54	40.54	40.54	40.54	40.54
Fork Rake (em)	5.40	5.40	4.57	3.81	3.81	3.81	3.81	3.51
Bottom Bracket Height (em)	27.31	27.31	27.31	27.31	27.31	27.31	27.31	27.31
Wheelbase (cm)	96.04	97.19	97.46	98.35	98.38	98.07	98.43	99.57
Trail (em)	6.35	5.66	5.59	6.35	6.35	6.35	6.35	6.35
Ground to Top of Top Tube (cm	72.80	74.00	77.00	78.90	30.10	81.60	83.00	86.80

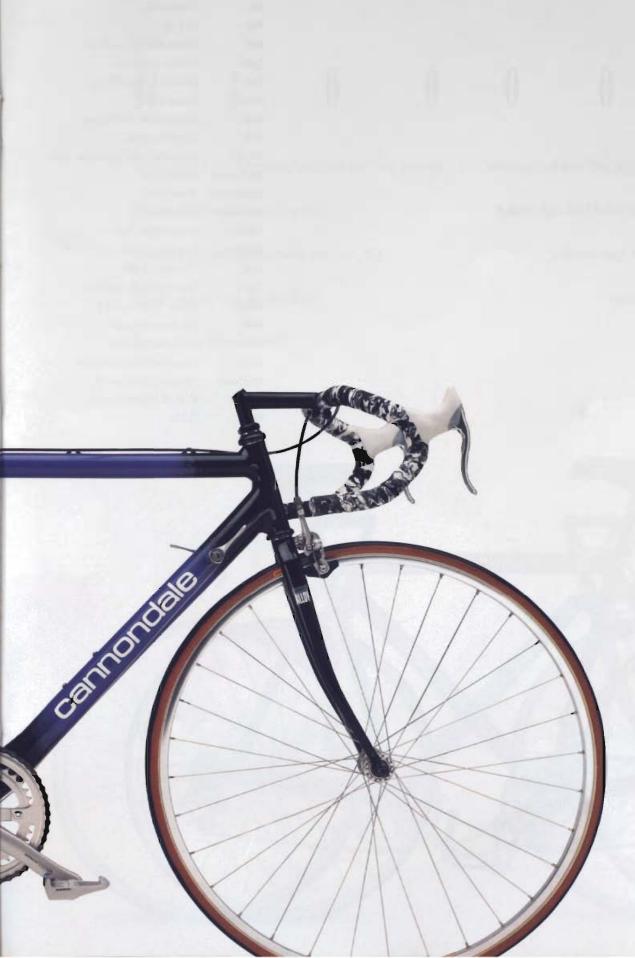
In addition to complete bicycles we also offer Cannondale framesets. Contact your authorized Cannondale retailer about custom-building your own Cannondale, or upgrading your existing components to a superior frame.

C600 48 73.00 73.00 73.00 74.00 73.70 73.00 73.00 70.50 71.50 73.00 74.25 74.25 74.25 74.25 74.75 49.78 51.56 53.98 55.58 55.88 56.21 56.72 58.72 39.90 39.90 39.90 39.90 39.90 39,90 39.90 39.90 5.40 5.40 4.57 3.81 3.81 3.81 3.81 3.51 27.31 27.31 27.31 27.31 27.31 27.31 27.31 27.31 96.82 95.40 96.46 97.71 97.74 97.43 97.79 98.93 6.35 5.66 5.59 5.59 5.59 5.59 5.59 5.59 71.10 74.00 77.00 78.90 80.19 81.60 83.00 36.30

Hometown favorite Marianne Berglund en route to her fifth La Jolla Grand Prix victory in seven years. The win was Marianne's ninth (out of ten races) through the early part of the '91 season. Photo by Rich Cruse.







#### COMPONENT SPECIFICATIONS

Frame Cannondale 3.0 Series Road Race (R600)

or Criterium (C600)

Fork Aluminum alloy Rims Mavic MA

inis. Sintan, max

Hubs Shimano 105 w/rear freehub Spokes DT Swiss, stainless steel

Tires Continental Grand Prix, 700 x 23 c

Pedals Shimano 105 clipless Crank Shimano 105SC, 42/53 Chain Shimano Hyperglide

Freewheel Shimano Hyperglide 7-spd cassette, 13-23

Bottom Bracket Shimano 105 Front Derailleur Shimano 105 Rear Derailleur Shimano 105

Shift Levers Shimano 105 7-spd

Handlebars Modolo, alloy, anatomic bend Stem TIG-welded, CR-MO

Headset Tange-Seiki ME-SII, triple sealed
Brakeset Shimano 105, Super SLR
Saddle Vetta Racing w/VettaGel

Saddle Vetta Racing w/VettaGet
Scatpost Lee Chi alloy, cold forged

Extras Sampson Fat Wrap handlebar tape

Colors (codes) R600 only: Bright metallic blue (B), R600 and

C600: Jet black and purple fizz (E)

Sizes (cm) 48, 50, 53, 54.5, 56, 58, 60, 63

Weight 22.0



### R 5 0 0

Cannondale 3.0 Series aluminum frame with Road Race geometry

Shimano RX100 7-speed Hyperglide with RX100 triple crankset

Mavic MA rims with Michelin Select Sport tires, 23 c

Modolo anatomic bend alloy handlebars

Vetta racing saddle with VettaGel

Sampson Fat Wrap handlebar tape

### COMPONENT SPECIFICATIONS

Frame Cannondale 3.0 Series Road Race

Fork Aluminum alloy
Rims Mayic MA

Hubs Shimano RX100 w/rear freehub Spokes DT Swiss, stainless steel

Tires Michelin Select Sport 700 x 23 c

Pedals Shimano RX100

Crank Shimano RX100, 30/42/52 triple

Chain Shimano Hyperglide

Freewheel Shimano Hyperglide 7-spd cassette, 13-23

Bottom Bracket Shimano RX100
Front Derailleur Shimano RX100
Rear Derailleur Shimano RX100
Shift Levers Shimano RX100, 7-spd
Handlebars Modolo, alloy, anatomic bend

Stem TIG-welded, CR-MO

Headset Tange Seiki ME-SII, triple sealed
Brakeset Shimano RX100, Super SLR
Saddle Vetta Racing w/VettaGel
Seatpost Lee Chi alloy, cold forged

Extras Sampson Fat Wrap handlebar tape
Colors (codes) Formula red w/white fork (R)
Sizes (cm) 48, 50, 53, 54, 5, 56, 58, 60, 63

Weight 22.5 lbs.



### R 4 0 0

Cannondale 3.0 Series aluminum frame with Road Race geometry

Shimano RX100 with 7-speed Hyperglide

Mavic MA rims with Michelin Select Sport tires, 23 c

Modolo anatomic bend alloy handlebars

Vetta racing saddle with VettaGel

### COMPONENT SPECIFICATIONS

Frame Cannondale 3.0 Series Road Race

Fork Aluminum alloy
Rims Mavic MA

Hubs Shimano RX100 w/rear freehub Spokes DT Swiss, stainless steel Tires Michelin Select Sport 700 x 23 c

Pedals Shimano RX100 Crank Shimano RX100, 42/52 Chain Shimano Hyperglide

Freewheel Shimano Hyperglide 7-spd cassette,

13-23

Bottom Bracket Shimano RX100
Front Derailleur Shimano RX100
Rear Derailleur Shimano RX100
Shimano RX100, 7-spd
Handlebars Modolo, alloy, anatomic bend
Stem TIG-welded, CR-MO

Stem TIG-welded, CR-MO
Headset Tange Seiki ME-SII, triple sealed
Brakeset Shimano RX100, Super SLR
Saddle Vetta Racing w/VettaGel
Seatpost Lee Chi alloy, cold forged
Colors (codes) Daytona blue (B), Jet black (E)
Sizes (cm) 48, 50, 53, 54-5, 56, 58, 60, 63

Weight 22.0 lbs.



### TOURING BICYCLES

hen we first introduced our aluminum bicycles with their distinctive large diameter tubes, we offered one model; a touring bike. Since then, our touring bikes have crossed continents, circled the globe, and become famous for their light weight and solid, efficient performance.

Our touring frames feature stiff, large diameter aluminum tubing that all but eliminates wasteful frame flex. Ride a Cannondale touring bike, and the same energy that normally gets lost in frame flex is channeled where it belongs: into pushing you up a hill, through a stiff head wind, or down a quiet country lane.

For 1992, we offer our touring frame with two component packages. Whether you choose the expedition-ready T1000, or the versatile T600, you'll enjoy a superior frame coupled with dependable components including 21-speed gearing and cantilever brakes. Less obvious but equally important, each touring bicycle we produce features Cannondale's American craftsmanship and over nine years of experience producing the finest long distance cycling machines in the world.

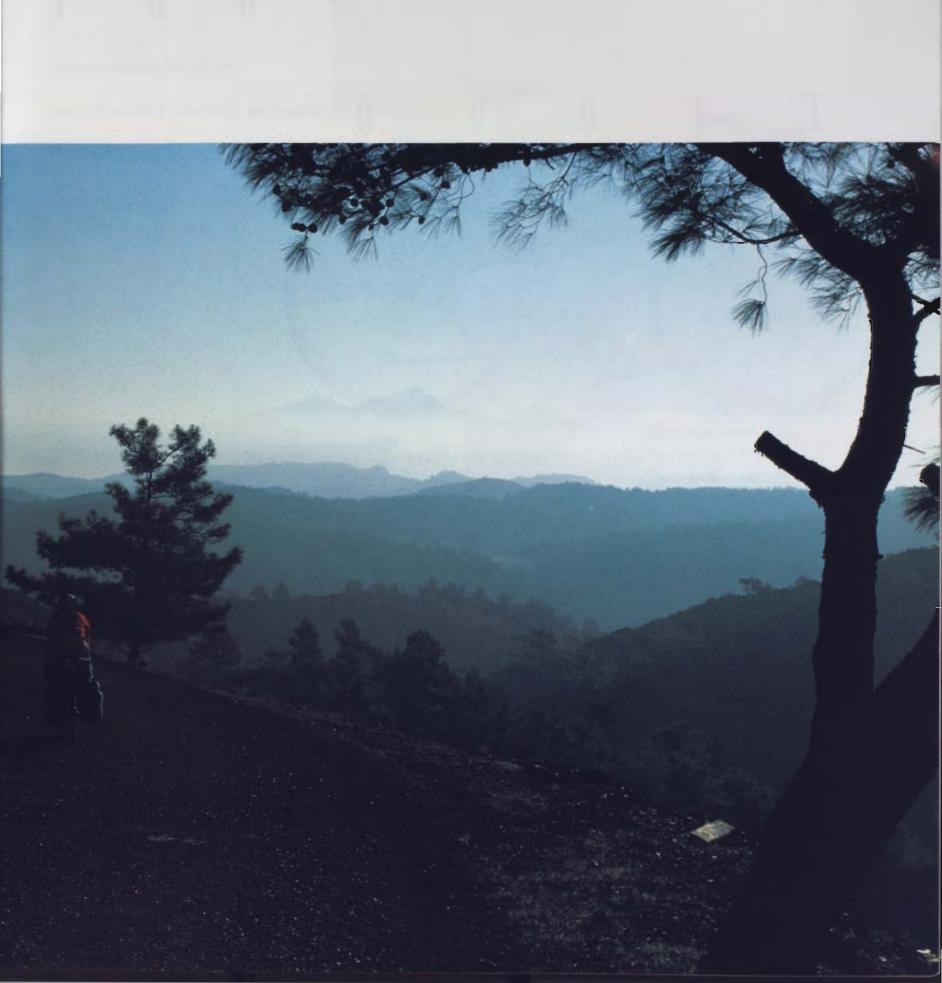
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Marie W. Co.																		

T1000, T600				
Size	19	21	23	25
Seat Tube Angle (degrees)	76.70	73.50	73.50	73.50
Head Tube Angle (degrees)	72.00	72.00	72.00	72.00
Top Tube Length (in.)	20.30	21.75	22.25	23.25
Chainstay Length (in.)	18.00	18.00	18.00	12.00
Fork Rake (in.)	2.13	2.13	2.13	2.13
Bottom Bracket Height (in.)	16.20	10.36	10.44	10.52
Wheelbase (in.)	41.10	41.30	41.60	42.79
Trail (in.)	2.15	2.15	2.15	2.15
Ground to Top of Top Tube (in.)	29.40	31.30	33.20	35,20

In addition to complete bicycles we also offer Cannondale framesets. Contact your authorized Cannondale retailer about custom-building your own Cannondale, or upgrading your existing components to a superior frame.

Finally, a descent... Mike Lingren and Laura Holmes enjoying a well-earned downhill run into Marmaris near the south coast of Turkey. Laura and husband Rod, both formerly of our accounting department, traded dual careers for multiple gears in 1989 and have been cycling the world ever since. Photo by Rod Holmes.







Cannondale aluminum Touring frame

Shimano Exage 500 LX 7-speed freehub with Hyperglide

Dia-Compe 986 cantilever brakes

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Frame	Cannondale Touring
Fork	Tange, all CR-MO
Kims	Wolber Super Champion 59, hard anodized, 36 hole
Hubs	Shimano Deore XT w/rear freehub
Spokes	DT Swiss, stainless steel
Tires	Michelin HiLite Tour, 700 x 35 c
Pedals	SunTour Superbe, sealed bearing
Crank	Ritchey Logic, 28/42/50
Chain	Sedis "ATB"
Freewheel	Shimano Hyperglide cassette, 13-30
Bottom Bracket	Shimano, sealed cartridge, BB-UN70
Front Derailleur	Shimano Deore XT
Bear Denaillear	Shimano Deore XI
Shift Levers	Shimano Deore, bar-end type
Handlebars	Nino 55 FA
Stem	Nitto Technomic
Headset	Mavie 305
Brakeset	Dia-Compe 986, black, w/287 aero levers
Saddle	Brooks Team Pro, pre-softened leather
Seatpost	Kingsbery USA
Extras	Cannondale racks and bottle cages, Esge fenders
Colors (codes)	Anthracite (A)
Sizes (inches)	19, 21, 23, 25

28.5 lbs.

### The component specifications

Frame	Cannondale Touring
Fork	Tange, all CR-MO
Rims	Sun M17, 36 hole
Hubs	Shimano Exage 500 LX w/rear freehub
Spokes	DT Swiss, stainless steel
Tires	Michelin Select, 700 x 32 c
Pedals	MKS AB-2, black finish
Lrank	Shimano Exage 400LX, 30/40/50
Uhain	Shimano Hyperglide
Ireewheel	Shimano Hyperglide cassette, 13-30
Bottom Branket	Shimano Deore, sealed mech.
Front Berailleur	Shimano Exage 400 LX
Rear Derailleur	Shimano Exage 400 LX
Shift Levers	Shimano RX100, 7-spd
Handlebars	Modolo, alloy, anatomic bend
Stem	TIC-welded, CR-MO
lleadset	Tange-Seiki ME-SII, triple sealed
Brakeset	Dia-Compe 986, black, BL-07 levers
Saddle	Vetta Anatomic w/VettaGel/Shock Absorbing
Seatpost	Lee Chi alloy, cold forged
Extras	Cannondale rear rack
Colors (zades)	Champagne (C)
Sizes (Suekes)	19, 21, 23, 25

### TANDEM BICYCLE

Abasic rule of physics: As a tube's length increases, so does the ease with which it can be flexed. Apply the rule to tandem design, and you can see why most tandems are flexible and inefficient: their slim chrome-moly tubing is too susceptible to flexing when used in the lengths required for tandem frames.

A second rule of physics: As a tube's diameter increases, so does its resistance to flexing. In fact, simply doubling a tube's diameter makes it sixteen times more flex resistant. If the makers of chrome-moly tandems used large diameter tubing, they'd recapture the stiffness lost by their long tube lengths. But the frame would weigh a ton.

The aluminum tubes used in Cannondale tandems are enormous, and they're as long, or longer, than the tubes in chrome-moly tandems. We're able to get away with it, and create a stiffer frame with more stoker (rear rider) room, thanks to the exceptionally light weight of aluminum. In fact, our frames weigh as much as 25% less than chrome-moly frames while blowing them away for stiffness and stoker comfort.

We've designed our tandem frame to accommodate either 27" or 700 c wheels. In outfitting the complete tandem, we've chosen components with an eye towards fast touring. However, the tandem can easily be customized for more specific touring or racing applications.

TANDEM FRA	M E	6 E	0 м	ET	RY
Size (in.)	21 x 19	23 x 19	23x21	25x21	25x23
Front Seat Tube Length (in.)	22.37	22.84	23.83	25.09	26.12
Rear Seat Tube Length (in.)	18.12	18.11	20.35	20.27	22.85
Front Seat Tube Angle (degrees)	75.30	74.10	74.10	72.00	72.00
Rear Seat Tube Angle (degrees)	75.30	74.10	74.10	72.00	72.00
Front Bottom Bracket Height (in.)	10.75	10.75	10.75	10.75	10.75
Rear Bottom Bracket Height (in.)	12.00	12.00	12.00	12.00	12.00
Chainstay Length (in.)	17.00	17.00	17.00	17.00	17.00
Head Tube Angle (degrees)	73.00	73.50	73.50	73.50	73.50
Fork Rake (in.)	2.25	2.13	2.13	2.13	2.13
Trail (in.)	1.78	1.78	1.78	1.78	1.78
Ground to Top of Front Top Tube (in.)	30.90	31.40	32.10	33.40	34.10
Ground to Top of Rear Top Tube (in.)	28.50	28.50	30.50	30.50	32.50
Effective Front Top Tube Length (in.)	21.40	22.10	22.10	23.10	23.10
Effective Rear Top Tube Length (in.)	28.00	28.00	29.00	29.00	30.00
Wheelbase (in.)	69.00	69.00	70.00	70.20	71.20

In addition to the complete bicycle our tandem is also available as a frameset. To custom equip your own Cannondale tandem, or to upgrade your existing tandem components to a superior frame, contact your retailer about purchasing a Cannondale tandem frameset.



### COMPONENT SPECIFICATIONS

(C: captain, S: stoker)

Cannondale aluminum Tandem Frame

CE-MO, tandem Fork

Chinook CRT 16 tandem, 40 hole, hard anodized, 700 c Rims

Sansin tandem, sealed bearing, 40 hole Hubs DT, stainless steel. 14 gauge Spokes Michelin Hi-Lite Tour, 700 x 35 c Tires MKS AR-2 w/Tioga Powerclips and straps Pedals

Shimano Deore XT, 32/42/54 (38 synchronizing) Crank

SunTour Accushift Chain Freewheel SunTour 7-spd, 13-30 Shimano Deore XT, sealed Bottom Bracket

SunTour XC Pro Front Derailleur

SunTour XC Pro 7-spd Accushift Plus Rear Derailleut

Shift Levers Grip Shift, 1992 SRT Handlebars Nina, C: 400/420, S: 450 C: CR-MO TIG, S: CRO-MO Stem Headset Mavic, sealed, built-in lock

Brakeset Scott Self Energizing cantilevers, Dia-Compe 251T aeso

double levers. Stoker handrests

Saddles VettaGel/Shock Absorbing

Ritchey Force Directional, C. 250 mm, S. 350 mm Seatposts

Seatpost Q.R. Ringlé Cam-twist Extras Vetta cork handlebar tape

Black w/blue pearl Hyper-Highlight (H), Formula red (B)

21x19, 23x19, 23x21, 25x21, 25x23





### CANNONDALE CYCLEWEAR



About a year ago we noticed a number of mountain bikers had begun wearing two pairs of Lycra shorts when riding.

Adopting an idea long popular with criterium racers, the mountain bikers knew that Lycra slides well against Lycra, but tends to adhere to things like mountain trails and human skin. In a fall, they reasoned, two layers of Lycra would move freely against each other without catching, reducing the risk of tearing either their shorts or their thighs.

The dual-short approach had its problems.

The riders complained about the warmth of the extra shorts, and the bulk caused by two chamois pads left many feeling they'd been on horses instead of mountain bikes. Still, the rider's enthusiasm for the idea convinced Apparel Designer Alison Kellagher that they might be onto something.

Alison began to play with some ideas. A far better approach than two shorts, Alison quickly realized, would be to use a heavier Lycra for an outer layer, but to limit the outer layer to areas normally shredded by wipeouts and exposure to brush, branches and brambles: the side of the thighs and the lower reaches of the legs.



Over the next two months, Alison and Sue Duvall of our Bedford, Pennsylvania R&D department created preliminary patterns and began to comb through fabric samples. A 5.8 oz. Lycra blend was eventually chosen for the main short and a beefy, high-denier 10.5 oz. blend was selected for the outer thigh/leg panels. Patterns were then adjusted to maximize the effectiveness of the selected fabrics.



Finally, we sewed up a number of prototypes at our Bedford factory and distributed them among our employees for testing, instructing them to focus on fit, function and comfort.

After further tweaking, finished patterns were approved and orders placed for fabrics.

We then subjected the finished product, our High Performance Mountain Short, to further testing. Just to be sure.

Every piece of Cannondale cyclewear shares a similar heritage with our High Performance Mountain Short. Each design is dictated by the demands aggressive cycling places on clothing. From a seamless BioSuedetm chamois that eliminates irritating stitching, to articulated sleeves that fall naturally toward the handlebars, every piece of Cannondale clothing enhances your performance on a bicycle. The fabrics, chamois liners, gripper elastic, zippers, thread and other materials used in our garments have been selected for quality, comfort and durability. And we've tested every piece of Cannondale cyclewear ourselves under oftentimes extreme conditions.







### MEN'S CYCLEWEAR





### MEN'S SIX PANEL SBORT (M830)

Of the various shorts we offer, the Men's Six Panel Short may be the most popular choice among our male employees. Some appreciate the precisely contoured fit provided by six panel construction. Others comment on the angled waistline, cut higher in back and lower in front, that creates a perfect fit in the normal, "forward-leaning" riding position. Still others like the hefty quality of the 5.8 oz. nylon Lycra\*; or the way our Soft-grip<sup>in</sup> gripper elastic thigh bands prevent the short from sliding up at the thighs and collecting painfully in the groin. And although none of our burly corporate riders admit it, we suspect they all appreciate the indulgent comfort provided by our synthetic chamois, which we've backed with a breathable soft foam pad and absorbent terry panel. Colors (codes): Black (E), Black with fade logo screenprint (O). Black with white Cannondale screenprints (C).

### MOUNTAIN SHORT (M205)

Realizing that Lycra slides better against Lycra in a fall than it does against either terra firma or human skin, many mountain bike riders have begun wearing two pairs of standard Lycra shorts for added protection. While the riders swear by the concept. none enjoy the diapery feel of multiple chamois liners or the extra warmth resulting from a second layer

Our High Performance Short refines this basic concept, offering a second layer of Lycra where it does the most good, and eliminating it - along with the second chamois - where it's unnecessary. Crafted from 5.8 oz. Lycra, the short features wide, abrasion-resistant, 10.5 oz. Lycra outer-panels that extend down the side of each leg and wrap around the lower thigh. Along with the double layer of Lycra at the legs, the short also incomorates a plash synthetic chamois backed by a soft, breathable form pad and absorbent terry panel. A high-back/low-front. waistline provides plenty of coverage in back without binding or bunching in front, and Soft-grip gripper elastic thigh bands hold the short comfortably in place during aggressive pedaling.

Colors (codes): Black with grey thigh/leg panel (S).

### MEN'S SLEEVELESS POLY/COTTON JERSEY (M123)

We offer our Men's Sleeveless Poly/cotton Jersey in the firm conviction that less is sometimes more. A great choice for scorching summer rides, the jersey's sleeveless design and moisture-wicking poly/cotton fabric help you stay comfortable when the mercury climbs. Lightweight stretch ribbing at the neck and arm holes keep the jersey from scooping air and "ballooning" around you, and an extra waterbottle fits neatly into one of the jersey's three elastic closure rear pockets. Like all our jerseys, the Men's Sleeveless Poly/cotton Jersey is cut longer in back for a full overlap with your cycling shorts. Colors (codes): Red (R), Royal blue (V), Yellow (Y).

### MEN'S EIGHT PANEL SEAMLESS BIOSUEDE™ CHAMOIS SHORT (M893)

Our Eight Panel Seamless BioSuede Chamois Short is the best choice for extended riding because it couples a fantastic fit with a vastly superior chamois. The glove-like fit is a function of full eight panel construction, which allows greater contouring than a four or six panel design. Our BioSuede chamois eliminates irritating seams while precisely matching complex anatomical contours to prevent bunching and chafing. For even greater comfort, we've backed the BioSuede chamois with a polyester fleece pad.

The short is cut from a long-lasting 8.4 oz. nylon/Lycra blend, and features our high-back/lowfront waistline that provides plenty of coverage in back without bunching across the front. Comfortable Soft-grip gripper elastic thigh bands prevent the short from riding up at the leg and bunching at the groin. Colors (codes): Black (E), Black with Cannondale screenprints (C).

### MEN'S SEX PANEL SHORT WITH REFLECTIVE PIPING (M214)

Admittedly, calling our men's six panel short with reflective piping the "Men's Six Panel Short With Reflective Piping" may seem a bit uninspired. Still, the name communicates a key feature of the short and it is marginally better than calling it the "Butt Light." (A more popular choice among our sales staff.)

While the short does indeed come trimmed with highly reflective giping and logos, don't let the posterior pyrotechnics fool you. Underneath the sparkle is a serious cycling short with the same high performance characteristics found in our M830 Six Panel Short (see left). The piping and logos are made reflective with millions of clear, time, mirror-coated microspheres. Equally important, the strategically placed piping stretches, moving with the short for a proper, nonbinding fit throughout your entire pedal stroke. Colors (codes): Ebony (E).

### MEN'S TEAM ISSUET JERSEY (M216)

When Team Cannondale (comprised largely of employees from our Connecticut offices) takes to the streets, this is their jersey of choice. Beyond the fact that it was designed for them, shows their sponsors' logos, and is provided to them free of charge, it also happens to be a great cycling jersey. Made from a special non-pilling, moisture-wicking COOLMAX/poly blend, the jersey has a comfortable, cottony hand on the inside, yet is sleek to the touch on its matte-finish outer surface. For comfort, we've included a tapered collar that won't harass your chin, a seven inch zipper for ventilation control, and articulated sleeves oriented for the standard riding position. In back, we've given the jersey three roomy elastic closure pockets and a longer cut to overlap with our Team Issue Short. Colors (codes): Team print (O).

### MEN'S TEAM ISSUE SIX PANEL SHORT (M209)

Even our less-than-fashion-conscious Team Cannondale looks sharp when they match the Team Issue Jersey with our Team Issue Short. The short features six panel construction and a printed side panel that coordinates perfectly with the Team Issue Jersey. Like our other shorts, the Team Issue Short incorporates an angled waistline that's cut low in front to prevent bunching and high in back out of kindness to those farther back in the peloton. To prevent the short from riding up at the leg and bunching at your groin, we've trimmed each leg with Soft-grip gripper elastic. A rich, fleece-backed seamless BioSuede chamois provides a perfect and comfortable - finishing touch. Colors (codes): Black with Team print side panel (O).

### MEN'S CONTOUR SHORT (M265)

Like a good taxedo, our Four Panel Short is an elegant, understated classic in basic black. But unlike a tux, the Four Panel Short is an eminerally practical choice for training rides and everyday excling. Crafted from durable 5.8 oz. aylon Lycra, the Four Panel Snort provides the same contoured fit of many more expensive six panel shorts, thanks to innovative: seam placement and precise pattern making. Our high-back/low-front angled waistline insures pleaty of coverage in back - and no bunching in front - when you're stretched way out on the drops. Soft-grip gripper elastic thigh bands prevent the short from slipping up at the thighs and bunching at the groip, and a plush, synthetic chamois is backed by a soft, breathable foam pad for a comfortably cushioned time. Colors (codes): Black (E).

### WOMEN'S CYCLEWEAR

Every garment in our Women's Cyclewear line is individually crafted to match the proportions of a women's anatomy. Our women's shorts, for example, feature a longer leg length and a higher rise (the area between crotch and waist). We also give the women's shorts a proportionately wider cut in the pelvis and a smaller diameter waist than our men's shorts. Finally, we use either our seamless BioSuede<sup>tm</sup> chamois or a "straight-cut" chamois in our women's shorts because many women find Y-cut chamois pads irritating.

We've applied the same gender-specific philosophy to the design of our women's tops. They're cut shorter in the torso and smaller in the waist than our men's jerseys. The women's jerseys are narrower through the shoulders, but have added room in the bust. And for a close fit that won't catch air and "balloon" while you ride, our jerseys have smaller diameter sleeves and necklines. (Unless otherwise noted, all women's garments come in small, medium and large sizes.)

### WOMEN'S SPORT TOP (F211)

As attractive as our Women's Sport Top is, it would be easy to overlook its high performance features. Constructed of 5.8 oz. Lycra® for support and a sleek fit, the Sport Top is lined in front with a comfortable COOLMAX/Lycra blend that breathes and wicks moisture. The Sport Top's high-cut front won't scoop air and slow you down, nor will it encourage suggestive comments from roadside cretins when you're stretched out on the drops. We've given the Sport Top a low-cut back for plenty of cooling ventilation and a full-length front for full-tummy coverage in the less-than-flattering, bent-over-atthe-waist, normal riding position. In back, a small, contrasting cross-strap holds the shoulder straps safely in place.

Colors (codes): Jude green with purple (P), Red-violet with mango orange (O).

### WOMEN'S PCL SHORT (F208)

The "PCL" in our Women's PCL Short refers to a blend of polyester, cotton and Lycra. The polyester is especially durable and helps the fabric wick moisture. The cotton adds excellent breathability and is comfortable against the skin, and the Lycra supplies four-way stretch to give the short a trim, wind-shearing fit. The PCL Short comes with a wide Lycra Scrunch<sup>28</sup> waistband for extra comfort and double-layer PCL thigh bands that prevent the short from shiding up at the leg and bunching at the groin. The short also has an angled waistline (higher in back, lower in front) for a perfect fit on the bike, and a synthetic Hourglass chamois for extra pedaling comfort.

Colors (codes): Black with mango orange and red-violet (O), Black with purple and jade green (P).

### WOMEN'S HARMONYTH JERSEY (F206)

The COOLMAX/poly fabric in our Women's Harmony Jersey has a smooth, matte-finish outer surface for sharp looks and a cottony inner surface that feels great against your skin. The slightly "brushed" inner surface also allows a thin layer of cooling air to circulate against your skin, while the COOLMAX fibers breathe and wick moisture for dry comfort. The jersey's articulated, nylon Lycra sleeves are oriented to naturally "reach" toward the handlebars, and a tapered collar won't chafe the skin below your chin. The jersey also features a seven inch front zipper that controls ventilation, and a light elastic hem at the waist. We've given the Women's Harmony Jersey a longer cut in back for a healthy overlap with cycling shorts, and we've finished it off nicely with three elastic closure rear pockets for storing maps, munchies or patch kit.

Colors (codes): Lemon yellow with purple and jade green (P), Red-visifet with mango orange and black (O).

### WOMEN'S HARMONY SHORT (F212)

Our Women's Harmony Short features a comfortable, breathable, straight-cut synthetic chamois (backed by a soft pad and terry panel) that's great at wicking moisture for dry comfort. Six panel construction provides a contoured fit, and an angled high-hack/low-front waistline won't bunch in front or cause embarrassing drafts in back. Cut from 7.5 oz. Lycra, the short comes trimmed with Soft-grip's gripper elastic thigh bands and a wide, comfortable Scrunch's waistband.

Colors (codes): Black with jade green and purple (P). Black with red violet and mango orange (O).

### WOMEN'S SLEEVELESS JERSEY (F217)

Our Women's Sleeveless Jersey is especially well suited for sweltering summer rides. Constructed of a breathable, moisture-wicking COOLMAX/poly blend, the Sleeveless Jersey exposes more of your skin to cooling winds generated by your forward progress. The openings for the neck and arms are cut close to prevent the jersey from scooping air and inflating around you, and a longer cut in back overlaps with cycling shorts while you ride: you won't discover a painful, sunburned stripe across your lower back while toweling off from your post-ride shower.

Colors (codes): Lemon yellow with purple (P), Red-violet with mango orange (O).







### ALL-TERRAIN WEAR

Our A.T.W.<sup>100</sup> (All-Terrain Wear) clothing bridges the gap between skin-tight, spandex cyclewear (which is great so long as you're actually on your bike) and general-purpose activewear (which looks sharp but is poorly suited for even casual riding).

Eye-catching clothing designed around subtly concealed high-performance cycling features, the A.T.W. line lends itself especially well to casual mountain biking, where a loose, non-binding fit is more important than a sleek profile. Off the bike, the good looks and comfortable fit of our anorak and shorts make them appropriate for everything from day-sailing to happy hour at the local cantina. (Unless otherwise noted, all A.T.W. garments come in small, medium, large and extra large sizes.)

### UNISEX A.T.W. ANORAK (C132)

Our Unisex Anorak is a versatile, attractive shell. Cut full to allow layering for comfort across a range of conditions, its functional styling flatters members of either gender. We've equipped the anorak with raglan sleeves for unrestricted arm movement and a half-length front zipper that controls ventilation. Elastic cuffs, elastic waistband and high drawcord collar all keep warm air in and cold air out.

The anorak is made with a Teflon through the wash after a rough day in the saddle, and you can wear it with jeans and a sweater to the movies that night. A zippered, flap-covered kangaroo cargo pocket safely stores critical gear, from your favorite pair of Oakleys to two-for-one coupons for the local taco shack. Two hand warmer pockets, concealed behind the kangaroo pocket, offer numbed hands a welcome refuge from chilling winds.

Colors (codes): Khaki green with cranberry accents (C), Orange with khaki green accents (O), Stonewashed navy blue with coral accents (N).

### MEN'S A.T.W. ADVANTAGETM SHORT (M204)

The Men's Advantage Short calls to mind the fabled book that shouldn't be judged by its cover. While the casual observer might note the Advantage Short's attractive six oz. Supplex®outer shell (treated with Teflon for resistance to wind, water and stains), a full appreciation of the short is impossible without examining what's inside.

Suspended within the short is a functional, padded brief of breathable, moisture-wicking tricot. A lightweight pad — a layer of comfortable COOLMAX over a layer of polypropylene — is confined to the center section of the brief for minimal bulk. And to avoid unsightly seams across the front and back of the short, we've used the existing seams along the drawstring/elastic waistline to attach the brief to the short.

The Men's Advantage Short features two deep front pockets for loose change, pocket knife or car keys. In back, a sewn-on, hook-and-loop closure, "patch" pocket won't bunch up around your bottom when you pull on the shorts.

Colors (codes): Black with navy blue waistband (N), Forest green with cranberry waistband (C), Purple with orange waistband (O).

Field of screams. R&D Engineer Christoph Mack a hop, skip and a wheelle away from our Georgetown, Connecticut headquarters. Photo by Steven C. Winess.

### MEN'S A.T.W. CROSS TRAINING SHORT (M218)

While it can't match many of the new, non-organic, fabrics for pure performance, 100% cotton denim retains a nearly universal appeal. For our Cross Training Short, we've selected a quality 10 oz., 100% cotton denim that's been stonewashed for a soft, comfortable hand and an aged, weathered look.

The short itself is liner-less, so it can be combined with our A.T.W. Undershort for cycling, coupled with a supporter for three-on-three basketball, or worn with normal briefs while book browsing. The Cross Training Short features an elastic/drawcord waist, a pair of deep, free-hanging pockets in front, and a sewn-on, hook-and-loop closure, "patch" pocket in back that won't bunch itself into oblivion when you pull on the short.

Colors (codes): Blue denim with black accents (E), Blue denim with cranberry accents (C).

### MEN'S PADDED A.T.W. UNDER-SHORT (M219)

A light, padded cycling liner with the natural comfort of 90% cotton and the four-way stretch of 10% Lycra®, our Men's Padded Undershort converts your favorite gym shorts or sweatpants into functional cyclewear. Like our high performance nylon/Lycra shorts, the Padded Undershort has an inseam extending to the lower thigh and a high-back/low-front waistline for full coverage in back without binding across the front. Light elastic seams at the waist and thighs hold the undershort in place while you pedal, and a seamless, moisture-wicking polyester pad cushions you against road shock and saddle abrasion. For extra comfort, we've covered the pad with the same cotton/Lycra fabric used in the undershort's main panels. The Men's Padded Undershort is particularly effective in combination with our Cross Training Short.

Colors (codes): Black (E).



### RACING GLOVES (BG99)

Your hands represent two of the five contact points with your bicycle, so you should choose your cycling gloves with the same care used in selecting Lycra shorts or cycling shoes. Our Racing Gloves are a smart choice. Their supple pigskin palms and underlying Shock Stopper in neoprene padding provide insulation from road shock, and their anatomically-positioned palm stitching insures the gloves bend precisely where your hands bend. The back side of the thumb features an absorbent terry panel for wiping a sweaty brow or runny nose. Hook-and-loop closure wristbands help insure a good fit and simplify getting the gloves on and off.

Colors (codes): Grey and mango orange with red-violet accents (S), Purple and sky blue with yellow accents (Y), Red and black with white accents (R).



### CYCLING BAGS

n 1988, Sally Vantress packed her Cannondale front and rear panniers and her Cannondale handlebar bag, and left Aptos, California to cycle the world.

Over the next 18 months and 75,000 miles, her Cannondale bags dodged a cyclone and broiled beneath a scorching sun in New Zealand. They survived Hong Kong's oppressive heat and withstood leech and mosquito attacks in Australia. In China,

they were subjected to rain and mud outside Zhaoqing and fought off hordes of crazed cockroaches on the overnight ferry to Wuzhou. Later, the bags were jammed on board a Trans-Siberian railway train for the long trip to Moscow.

All Cannondale bags feature internal frames to hold the bags' shape and reduce stress on the seams.

In Europe, the bags slogged through persistent rains in Germany and Ireland, dodged morning rush hour traffic in Rome, and withstood a sudden windstorm in Port Baracares. Back in the U.S., the bags escaped pit bulls in Kentucky, battled head

Cotton-wrapped, poly-core thread swells when wet to help keep rain from penetrating at the needle holes along each seam. winds and speeding RV's in Kansas, and climbed the Tetons and Cascades as Sally pedaled home to California.

The same tenacious durability that allowed Sally's bags to survive her trip are built into every bag we make. And although you may never be tested by New Zealand cyclones or Chinese cockroaches, it's nice to know your bags have already passed with flying colors.

Exterior packets, found on many Cannondale bags, are handy for change, sunscreen, maps and other small items.

Five-stitch-per-inch construction. More stitches weaken the fabric with needle holes, fewer stitches result in a weak seam.



Bar tacking in key stress areas helps prevent blow-outs at the seams.

All Cannondale bags mount with rpck-solid security, yet release quickly and easily when it's time to take them off the bike. Check out our Seat Cleat \*\* seat bags, quick release handlebar bags and spring mounted panniers.

Every Cannondale bag is crafted from rugged, waterproof 500 denier Cordura® nylon. The larger fibers on 1000 denier fabric are too large for a tight, waterproof weave, and the smaller fibers in lighter fabrics lack abrasion resistance.

One of the Cannondale panniers that accompanied Sally Vantress on her 18 month, 75,900 mile trip around the world. Sally has recorded the trip in her book "Seeing Myself, Seeing the World." Please call 408/479-8081, or write to Sally as P.O. Box 543, Capitola, CA 95010 for more information.





Our Sherpa Fannypack comes with a total of five compartments. The roomy 150 cu. in. main compartment has a foam lining that holds the bag's shape and protects your kidneys from getting jabbed by your cargo. At the rear of the bag, two zippered outer pockets flank a waterbottle-toting pouch with drawcord and cordlock closure. Pocket number five. a small zippered pocket for car keys and change, is located in front where the pack joins the waistbelt. To encourage air circulation between you and the bag, we've used a sturdy, large-hole mesh fabric for the panel that rests against your back. We've also moved the waistbelt's quick-release buckle to one side so it won't dig into your abdomen when you're bent over the handlebars.

Colors (codes): Black (E), Khaki (K), Magenta (M), Violet blue (B).

### SEAT CLEAT MOUNTAIN EXPANDERTM (B106)

Four years after introducing the world's first expandable seat bag, we offer an updated model for mountain biking. Our Mountain Expander starts your morning ride with 90 cu. in, capacity, then expands to 125 cu. in. to hold Lycra tights or your A.T.W. Anorak as the day warras up. The bag features our trick Seat Cleat mounting system along with our new seatpost clip for fast attachment to your bike. A drawstring/cordlock closure allows over-stuffing, and is covered by a hookand-loop closure mud flap that cinches down to keep tools, snacks, etc., from bouncing noisily while under way. For further noise reduction we've lined the Mountain Expander with soft foam padding. Colors (codes): Black (E), Black and neon vellow (Y), Khaki (K), Red (R), Violet blue (B),

### SEAT CLEAT MOUNTAIN BAG (B117)

Stuff your patch kit, tire levers and car keys in the Seat Cleat Mountain Bag and you'll still have room for a jumbo Granny Smith. This 50 cu. in. capacity bag mounts in a snap with Seat Cleat convenience and our handy new seatpost clip. The Seat Cleat Mountain Bag's drawstring/cordlock closure allows over-stuffing, and a handy hook-and-loop closure mud flap keeps dirt out of the bag. The mud flap also functions as a cinch strap that, along with a padded lining, keeps the bag's contents from rattling as you bounce down the trail.

Colors (codes): Black (Et. Black and neon yellow (Y), Khaki (K), Red (R), Violet blue (B).

### TREE LINETH HANDLEBAR BAG (B105)

Our new Tree Line Handlebar Bag attaches securely to your stem and handlebars with nylon straps and Fastex buckles, vet provides an unobstructed view of your front wheel's immediate trajectory. (A nice feature when picking your way through the technical stuff.) The bag is outfitted with a hook-and-loop closure mesh pocket on top. Underneath, a fabric channel accommodates brake cables to keep their routing and operation smooth and efficient. The bag's 175 cu. in. main compartment is lined with foam to discourage rattling cargo, and an expandable front pocket provides an extra measure of storage space. Colors (codes): Black (E). Black and neon yellow (Y), Khaki (K), Red (R), Violet blue (B).

### HARD-LINERTM RACK TRUNK (B112)

Our Hard-liner Rack Trunk is extremely versatide, thanks to its rigid, waterproof, insulated liner. Fill. it with 12 oz. containers of your favorite libation. add ice, and it's a small cooler for the beach. Towel off the inside, and its tough, protective liner makes it a serviceable camera case. And of tourse, you can strap it to your rear rack and load it with cycling gear.

The outside of the bag is equipped with two stretch mesh side pockets and nylon web carrying handles. Sturdy snaps secure bag to liner, allowing easy removal of the lines for cleaning, yet preventing the opened bag from collapsing around it. Colors (codes): Black (E), Khaki (K), Red (R), Violet blue (B).

### REAR CARRIER BACK (BR85).

Our lightweight aluminum resurrack tickles the scales at less than 300 grams, yet provides a stable. sturdy platform for panniers, suck trunks and other cargo. Welded for strength, the rack features our patented one-bolt adjustment and a tough powder

Lallon (codes): Black (E), Jungle green (J), Red (R), Silver (S), White (W),

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B112-E

# SEAT CLEAT<sup>M</sup> SYSTEM

Pew products have been met with such unanimous acclaim as our Seat Cleat seat bag mounting system. From Bicycle Guide magazine ("It's quicker, neater, and as secure as you could want.") to Bicycling magazine ("...one of the best we've seen...eliminates cumbersome straps and buckles.") to Mountain Bike Action magazine ("We're amazed it took this long to be invented."), praise for the elegant simplicity of the Seat Cleat has been overwhelming.

For 1992, we've made the Seat Cleat system even better with our new seatpost clip. Simply twist the Seat Cleat into place over the saddle rails (as shown below), then push the bag forward and the seatpost clip automatically secures itself around the seatpost. No other mounting arrangement even comes close to matching the convenience — or the rock-solid stability — of the Seat Cleat system.





### SEAT CLEAT EXPANDER<sup>M</sup> WEDGE (B108) HOOK-AND-LOOP EXPANDER (B109)

B118-8

Open a zippered gusset in our Seat Cleat
Expander Wedge and it goes from a 100 cu. in.
bag to 150 cu. in., allowing you to enlarge the bag
or shrink it as needed. Along with the adjustable
main compartment, the Seat Cleat Expander Wedge
comes with two mesh side pockets with hook-andloop closure. Our new seatpost clip, along with the
Seat Cleat mounting system, make getting the bag on
and off your bike a breeze. (Also available with
hook-and-loop strap mounting. Not shown.)
Colors (codes): Black (E), Black with neon yellow (Y),
Red (R), Silver (S), Violet blue (B).

### SEAT CLEAT RACER WEDGE (B118)

With its 30 cu, in, capacity, the Seat Cleat Racer Wedge can stow a spare tube with room left over for other gear. The Seat Cleat and seatpost clip make mounting the Racer Wedge a snap, and an internal elastic strap keeps the bag's contents from rattling after every bump.

Colors (codes): Black (E), Black with neon yellow (Y), Red (R), Silver (S), Violet blue (B).

### SEAT CLEAT MINI WEDGE (B116)

Our Seat Cleat Mini Wedge is a diminutive classic, offering 25 cu. in. of capacity for cash, keys, patch kit and tire levers. The bag attaches neatly to your bike with our patented Seat Cleat mounting system, which we've improved for '92 with our seatpost clip. Inside the bag, an elastic strap holds your gear in place to avoid annoying rattling.

Colors (codes): Black (E), Black with neon yellow (Y), Magenta (M), Red (R), Violet blue (B).

### SEAT CLEAT FLAT FIXER (B121)

Contoine our Seat Cleat Flat Fixer with your trusts. Zefal and you're ready to handle the all-too-frequent puncture. Our Flat Fixer is somprised of three tough tise levers and a full patch kit inside a 25 cu, in, seat bag. The bag features Seat Cleat mounting with our new seatpost clip, and we've added a Cordura "boot" to the patch kit to serve as a temporary fix for blownout sidewalls. At elastic strap, secured to the floor of the bag, prevents the tire levers and patch kit from clattering around inside the bag.

Colors (codes): Black (E), Red (R), Silver (S), Violet blue (B)

### CICUSTS' TANNIPICA (BID4)

Our Cyclises' Fannypack features 65 cu. in. capacity in its zippered main compartment, complemented by a small, zippered outer pocket and hook-and-loop closure mesh top pocket. An off-center, quick-release waistbelt buckle won't dig in at your navel when you grab the handlebars.

Colors (codes): Black (E), Khaki (K), Magenta (M), Violet blue (B).



### TRESTLE<sup>TO</sup> RENDUEBAR HAG (B115)

Used alone on armountain, racing or hybrid bike, our Trestle is a great alternative to the more limited capacity of a seat bag. Combined with panniers for loaded touring, it's a convenient storage area for frequently needed items like sunscreen or wallet. The Trestle's main compartment holds a full 560 cu. in. of gear, while a top pocket, front expander pocket and two stretch mesh side pockets are great for smaller items like snacks and Tom Clancy paperbacks. Inside, an internal support frame holds the bag's shape and spreads the weight of the contents to reduce stress on the seams. The Trestle comes complete with shoulder strap and integral watertight map case Colors (codes): Black (E), Khaki (K), Red (R), Violet blue (B).

### CYCLIST'S DEFFEE 18103)

B103-B

From end to end, our new Cyclist's Duffle is designed to accommodate cycling gear. At one end, a large zippered compartment stashes a helmet. At the other end, three stretch mesh pockets stow waterbottles (upright, to avoid leaking). The large 1,600 cu. in. main chamber stores clothing and other more cumbersome paraphernalia. To one side of the main chamber, and with its own access, is a dirty laundry compartment that's perfect for muddy mountain biking shoes. A final interior compartment can carry papers from the office, cycling gloves, and every issue of Dirt Rag ever published. On the bag's exterior, a large, hook-and-loop closure mesh side pocket carries plane tickets or wallet. Colors (codes): Violet blue and magenta with mango accents (B).

layer of padding protects your back from random abuse by the bag's contents.

In addition to the roomy 775 cu. in. main compartment, the Fastback comes with two stretch mesh side pockets (perfect for waterbottles) and a zippered key pocket where the waistbelt joins the bag. In back, an outer pocket expands to reveal a wraparound reflective gusset visible from behind and to

Calars (codec): Black (E), Khaki (K), Magenta (M), Violet blue (B).

### COROOSE<sup>IN</sup> RACK TRUNK (BIL3)

The only problem you're apt to have with our Caboose Rack Trunk is deciding what to carry in it. [as rigid, waterproof, insulating liner makes the Caboose a handy cooler, but it can just as easily function as a tough. protective case for your 35 mm. camera.

The Caboose mounts quickly to your rack with hook-and-loop straps, and an adjustable carrying handle makes toting the bag easy when it's off the bike. A total of six outer pockets (a U-lock pocket, two stretch mesh waterbottle pockets, and three small cargo pockets) and to the bag's versatility and capacity. (Colors (codes); Black (E), Khaki (K), Red (R), Violet blue (B),

### CROSSROADS M HANDLEBAR BAG (B114)

Our Crossroads bag offers 560 cu. in. of capacity. allowing you to bring along cameras, sweatshirts and gourmet lunches too bulky to fit into a seat bag. The Crossroads comes with our patented quick-release mounting system that lets you pop the bag off the bike with the pash of a button, and an internal support frame that reduces stress on the bag's seams and prevents it from sagging. Two stretch mesh side pockets and an integral hook-and-loop closure map case add to the Crossroads' convenience. Colors (codes); Black (E), Khaki (K), Red (R), Violet blue (B).

### EXPANDER FRONT/REAR PANNIERS (B119)

Equally at home on front or rear racks, our Expander panniers offer 799 cu. in. of cargo space that you can quickly zip down to 400 cu. in. to keep gear snug and stable against the bike. The Expanders feature our spring mounting system, rigid internal frames (similar to those on the Overlands) and two mesh outer pockets per pannier.

Colore (codes): Black (E), Khaki (K), Red (R), Violet bine (B),

### OVERLANDIN REAR PANNIERS (B120)

Perfect for a cross-country odvssey, our Overlands can carry a full 1,250 cu. in. of gear in each bag. Our patented internal support frames hold the bags' shape and spread the load to avoid stress at the seams. They also form a handy top platform for carrying large cargo like tents and sleeping bags. With easy access through side zippers, there's no need to unload the top platform to get inside the panniers. The Overlands also feature our spring mounting system, a mesh side pocket and three exterior cargo pockets per side. including one that converts into a fannypack for excursions away from the bike. Colors (codes): Black (E), Khaki (K), Red (R), Violet blue (B).

## BICYCLE TRAILERS

### THE STOWAWAYTM (B007)

In the same weight range as the lightest child-toting trailers, but with many more features:

Collapses for easy storage and car transport

Shock absorbing suspension for passenger comfort

Rigid shell provides superior protection

Rugged fender intercepts rocks and debris that fly off the bicycle's rear wheel



Our new Stowaway fills the needs of customers who want a child-toting bike trailer but have limited storage space, as well as those who like to bring a trailer along when car-topping their bikes. Remove the quick-release wheels, place them inside the trailer, and the collapsible Stowaway folds down to a compact package that can be packed in your trunk or stored in a closet.

The Stowaway's chassis is a tough, vacuum-formed polyethylene shell. Precisely shaped to form a comfortable seat for up to two children, the roomy 24" wide interior also provides a firm base for the trailer's rugged aluminum roll cage/canopy support assembly. The canopy itself is crafted from hefty, high-visibility nylon. Trimmed with reflective fabric, the canopy sports a zippered screen front for ventilation and two large side windows for maximum scenery appreciation. In back, a zippered panel provides access to a handy rear storage area.

To keep the Stowaway's center of gravity low we've equipped it with 20" wheels that are canted slightly inward at the top for added stability. For comfort, the quick-release wheels — with their sporty disk-wheel covers — feature true independent suspension complete with shock absorbing rubber bushings.

Inside the trailer, children travel in luxury thanks to storage pockets for snacks or this week's favorite toy, and waterbottle pockets help insure the kids won't go thirsty. Foam-backed, forward-facing seats provide a reassuring, if less than flattering, view of Mom or Dad, and multi-point safety belts discourage fledgling daredevils from abandoning ship while under way.

The Stowaway connects securely with your bike via a lightweight boom hitch that attaches easily to your bicycle's rear triangle. The trailer's actual hinge point is not where the boom attaches to your bike, but directly behind your rear wheel. This is important. With the hinge point behind your rear wheel, handling is vastly improved and the Stowaway can pivot when cornering without hitting your rear wheel and causing a nasty tumble. Attached to the boom hitch is a fender to intercept any rocks or road debris that might come off your bike's rear wheel.



Jason Allen heading out for some early-season training miles. Easter Sunday, 1991. Photo by Kathy Ceconi.

### BUGGERTM BICYCLE TRAILER (BOO6)

Introduced as the world's first bicycle trailer — and Cannondale's first product — over 20 years ago, the Bugger is a legitimate classic. Constructed around a rugged polyethylene shell that comfortably seats two children (maximum height: 40 inches), the Bugger goes on and off your bike in seconds thanks to our unique torsional hitch. A five-point child restraint system secures children over both shoulders, across the waist and between the legs. Quick-release, child-resistant buckles make getting kids in and out a bneeze. The Bugger comes with a soft foam pad for a cushioned ride, and the trailer's fread-approrting shell actually allows children to anooze while under way.

### RUCCER SUNSHADE (1221)

Protect your children from prolonged exposure to the sun. Our sunshade attaches quickly and easily and can be removed just as fast. The open design provides plenty of flow-through ventilation for cool comfort.

### BUGGER RAIN CANOPY (A222)

Seal out the elements with our Rain Canopy and keep children warm and dry. Easy to install or remove, the Rain Canopy features a zippered door and snug, wraparound fit to keep out rain and spray. Two side windows allow you to peek in on passengers without exposing them to the weather. (Not shown.)



### CANNONDALE ACCESSORIES BH03-B. Вн60-в FAST GRIP WRAP MOUNT (BHO5) AND MTB RAGE CAGE (BH60) BRAZE-ON MOUNT (BHO5B) WATERBOTTLES Great for mountain biking, our rugged Rage Cage is constructed of solid 1/4" welded aluminum rod. BHRTT-W Our two Fast Grip waterbottles hold a full 25 ounces of your favorite refreshment. Each features a con-Powder coated for a tough finish, the Rage Cage is venient wide mouth for easy cleaning and ice cube available in an assortment of hot colors. Colors (codes): Black (E), Blue (B), Hot Tamale (H), Jungle insertion, and both offer the hassle-free operation of green (J), Red (R), Silver (S), White (W), Yellow (Y). hook-and-loop attachment. Colors (codes): Blue (B), Red (R), White (W). FLIGHT CAGE (BH85)

### QUENCH (BH02) AND SUPERQUENCH (BH03) WATERBOTTLES

Compatible with standard cages, our Quench and Superquench bottles offer you a choice of capacities as well as a choice of colors. Our Quench waterbottle holds a full 24 ounces, while the Superquench's quart capacity makes it a smart choice for longer rides or hot, humid days. Both bottles feature wide mouths that simplify cleaning and adding ice cubes or powdered energy drinks.

Colors (codes): Black (E), Blue (B), Clear (X), Clear with Cannondale logo (C), Red (R), White (W), Yellow (Y).

### RAILS-TO-TRAILS WATERBOTTLE (BHRTT)

We're donating a portion of the proceeds from the sale of each Rails-to-Trails waterbottle to assist the Rails-to-Trails Conservancy, a non-profit organization converting abandoned railroad corridors into trails for mountain bikers, hikers and other groups. (In a recent 12 month period alone, Rails-to-Trails helped open 40 new trails totaling over 600 miles in 25 states.) The Rails-to-Trails bottle holds a generous 32 ounces, features a wide mouth for cleaning and adding ice cubes or powdered drink mixes, and comes emblazoned with the Conservancy's attractive logo. Colors (codes): White with Rails-to-Trails logo (W).

Our high-impact Flight Cage weighs in at just 48 grams. Its sleek, efficient styling holds your waterbottle firmly in place, yet allows the removal and reinsertion of the bottle with remarkable ease. *Colors (codes):* Black (E), Purple (P), Red (R), White (W), Yellow (Y).

### FEATHERLITE CAGE (BH55)

The excellent strength-to-weight ratio of lightweight aluminum rod allows us to craft a sturdy cage at a mere 40 grams. Our welded Featherlite Cage is available in your choice of eight attractive colors. Colors (codes): Black (E), Blue (B), Hot Tamale (H), Jungle green (J), Red (R), Silver (S), White (W), Yellow (Y).

### TRANSPORT TRUCK RACK (A205)

Drive around with an expensive bicycle lying in the bed of your pick-up truck, and you're asking for trouble. All that bouncing can easily damage even the most rugged components.

Our Transport Truck Rack offers a more sensible alternative. Clamp the front fork of your bike onto the horizontally-mounted Transport and your bike rides safely and securely in an upright position. Standard equipment on the Transport lets you carry two bicycles. The Transport comes fully assembled, installs without tools or alterations to your truck, and is available in widths for narrow- (54"- 59.5") and wide-bed (60"-65.5") trucks.





BH85-Y

BH02-R

BH55-S



### EXTRA BIKE MOUNT (A205B)

Mount extra bicycles (up to four, depending on the width of your truck bed) with additional Bike Mounts. These additional Mounts attach easily to the Transport with just an allen wrench. (One per package.)

### WHEEL MOUNTS (\$205A)

Protect your front wheel by mounting it to your Transport alongside your bike. Easy allen wrench attachment. (One per package.)

### RIPPLE GRIPTS FOLDING TOOL (A801)

Tucked nearly inside our Ripple Grip's ergonomically shaped ABS plastic handle are four allen keys (2, 4, 5 and 6 mm.) and self-locking phillips and flat head screwdrivers. All are constructed of tough, durable chrome vanadium steel, and each is securely anchored to a chrome steel chassis concealed in the brightly colored handle. Two integral spake wrenches, mounted into the base of the handle, complete the package.

(Colors (codes): Black (E), Red (R), Yellow (Y).

### DEFLECTOR BIKE SHIELD (A300)

Our Deflector Bike Shield protects your rackmounted bike from airborne hazards ranging from kamikaze bugs and wind-driven rain and grit to the occasional myopic sparrow. In front, a tough, protective panel of windproof and waterproof Cordura nylon absorbs the brunt of the abuse. For a snug, aerodynamic fit, the Deflector's central panel is crafted from a nightly-woven sylon/spandex blend. The rear waterproof panel provides wrap-around protection to your saddle.

The Deflector attaches securely to your hike with hook-and-foop straps and non-marring, non-slip, rubber-coated hooks. These removable hooks let you throw the Deflector in the washing machine for quick, easy cleaning. The deflector fits both mountain and road bikes, and is also compatible with wiathlon-style aero handlebars and upright or fork-mounting bike racks.

Color (codes): Black (E), Black with jungle green central panel and large white Cannondale logos (I).



### SEND US YOUR PHOTOS!

We would love to consider your photographs for use in our catalog. If you have natural, unposed shots that show our products in use and capture the unique spirit of cycling, please send them to Kathy Ceconi at our Georgetown, CT address. Should we decide to use one of your shots, you will receive \$200 worth of Cannondale product at no charge. Sorry, but only 35 mm. slides can be considered. Photos not selected for use will be returned.

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Cover photo: Self-confessed outdoor junkie Caren Mapes exploring Slick Rock. An accomplished telemark skier, white water kayaker and mountain bike racer, Caren recently spent four months touring Nepal by mountain bike. Photo by Tim Brown.

Studio photography by Frank Poole.

### cannondale

For more information, call 1 800 BIKE USA. (In PA, or outside the U.S., dial 1-814/623-2626.)

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All components and specifications subject to change without notice

