

1990 BICYCLES



cannondale

GET THE WORLD'S TOP FRAME WITHOUT SPENDING TOP DOLLAR

At Cannondale, we believe you ought to get the best bicycle frame possible, no matter how much you're willing or able to spend. That's why we equip each of our bicycles with a Cannondale 3.0 Series frame, allowing you to enjoy the light weight, remarkable comfort and unsurpassed efficiency of our aluminum frame at any of our many price points. To get anywhere near the performance of our 3.0 frames from another manufacturer, you'd have to spring for one of their mega-buck carbon fiber or titanium frames. But even their best frames can't match a Cannondale.

That's because no one else is quite as good at squeezing every ounce of performance out of their frame material as we are. Through innovative use of computer aided design (CAD) software, we've shaved away extra aluminum in some tubes, increased the diameter of others, and changed the shape of still others.

The resulting frames are the stiffest production frames available, able to churn more of your muscle into forward motion without wasteful frame flex. With the addition of our new aluminum forks (available on selected racing and mountain bikes), our shock absorbing aluminum frames also rank with the most comfortable. And Cannondale frames are among the lightest anywhere. For all of the hype, exaggerated claims and inflated prices, few carbon fiber or titanium frames actually weigh as little as a Cannondale 3.0 Series frame.

And none offer the startling value of a Cannondale. Most of our complete bikes sell for less than carbon fiber or titanium framesets. With Cannondale you get the best frame money can buy, no matter how much you spend.

Cover: Mountain bike racer Pat Janda in the NORBA national point series at Great Gorge, New Jersey. Right: Cannondale employees Tom Maney and Bast Tate take advantage of a sunny afternoon to try out some of our latest gear. Tom's bike features the fresh new color scheme on the SR600. Photos by Steve Wyness.



SOMETIMES SOLVING A GEOMETRY PROBLEM REQUIRES SOME SIGNIFICANT ADDITION

Our 3.0 Series Criterium geometry racing frame has been a resounding success. Its combination of light weight, ultra-quick handling and rigid responsiveness make it the stiffest, fastest, most responsive frame available, perfect for shorter, faster courses with lots of curves and turns.

Still, not everyone who wants a racing frame wants a criterium style geometry. Many riders prefer longer training rides and a frame that emphasizes comfort and stability as well as quickness and handling.

For 1990, we're proud to present the addition that solved our geometry problem: our 3.0 Series Road Race frame. Like the Criterium frame, the Road Race frame was developed with computer-aided design (CAD) and a healthy dose of Cannondale engineering experience, and features cantilever dropouts and our double-offset down tube/seat tube design.

We've designed our Road Race frame with traditional European

racing geometry in mind. The more relaxed head tube angle, for example, places a greater emphasis on stability and comfort, as do the slightly longer chainstays. And the slimmer, U.C.I.-legal down tube also allows for greater comfort while providing plenty of stiff efficiency.

The only problem with our racing frames is choosing between them. It might help to think of the Criterium frame as a Ferrari and the Road Race frame as a BMW. The Ferrari is a quicker, more nimble high performance machine. It accelerates faster and handles better through turns. The BMW, though still quick and responsive, is more comfortable and more relaxing to drive.

Of course, neither Ferrari nor BMW can boast of hand made American craftsmanship. And as far as we know, neither comes with Cannondale's 100% satisfaction guarantee.

CRITERIUM FRAME GEOMETRY

Size	48	50	53	54	56	58	60	63	66
Seat Tube Angle (degrees)	73.00	73.00	73.00	74.00	73.70	73.10	73.00	73.00	73.00
Head Tube Angle (degrees)	70.50	71.50	73.00	74.25	74.25	74.25	74.75	74.75	74.75
Top Tube Length (cm)	49.78	51.56	53.98	55.58	55.88	56.21	56.72	58.72	60.96
Chainstay Length (cm)	39.90	39.90	39.90	39.90	39.90	39.90	39.90	39.90	39.90
Fork Rake (cm)	5.40	5.40	4.57	3.81	3.81	3.81	3.81	3.51	3.51
Bottom Bracket Height (cm)	27.31	27.31	27.31	27.31	27.31	27.31	27.31	27.31	27.31
Wheelbase (cm)	95.40	96.46	96.82	97.71	97.74	97.43	97.79	98.93	100.81
Trail (cm)	6.35	5.66	5.59	5.59	5.59	5.59	5.59	5.59	5.59
Ground to Top of Top Tube (cm)	71.88	75.18	77.72	79.50	81.03	82.80	84.33	87.63	91.44
Down Tube Outer Diameter (cm)	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08

ROAD RACE FRAME GEOMETRY

Size	48	50	53	54	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	74.00	73.00	73.00	73.00	73.00
Top Tube Length (cm)	49.78	51.56	53.98	55.58	55.88	56.21	56.72	58.72
Chainstay Length (cm)	40.54	40.54	40.54	40.54	40.54	40.54	40.54	40.54
Fork Rake (cm)	5.40	5.40	4.57	3.81	3.81	3.81	3.81	3.51
Bottom Bracket Height (cm)	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 (cm)	6.35	5.66	5.59	6.35	6.35	6.35	6.35	6.35
Ground to Top of Top Tube (cm)	71.88	75.18	77.72	79.50	81.03	82.80	84.33	87.63
Down Tube Outer Diameter (cm)	4.11	4.11	4.11	4.11	4.11	4.11	4.11	4.11

SR2000 - Dura-Ace on 3.0 Criterion/ Road Race Frame

Rims	Mavic GL330, hard anodized, tubular, 700c
Hubs	Shimano Dura-Ace, freehub, 32 hole on 48-58, 36 hole on 60/63
Spokes	DT, stainless steel, 14 gauge
Tires	Volter Pro SP-1, polyurethane tread protection
Pedals	Shimano Dura-Ace PD-7401, clipless
Crank	Shimano Dura-Ace, Superglide round chainwheels, 29/52
Chain	Shimano Dura-Ace
Freewheel	Shimano Dura-Ace, Hyperglide cassette, 8-spd, 12/13/14/15/16/17/18/20
Bottom Bracket	Shimano Dura-Ace
Rear Derailleur	Shimano Dura-Ace, braze-on
Front Derailleur	Shimano Dura-Ace, 8-spd, SIS
Shift Levers	Shimano Dura-Ace, STI combination, 8-spd, SIS
Handlebars	Modolo X-Tenos, anatomic
Stem	Modolo T-Eit, anatomic
Headset	Shimano Dura-Ace
Brakeset	Shimano Dura-Ace, Super SLR, STI combination levers
Saddle	Selle Italia Turbo, leather
Seatpost	American Classic
Fork	SR Aluminum
Extras	Bottle cage
Color	
Frame	3.0 Criterion, or 3.0 Road Race
Sizes	48, 50, 53, 54, 56, 58, 60, 63

SR800 - 600 Ultegra on 3.0 Criterion Frame

Rims	Volter GTX, hard anodized, 700c
Hubs	Shimano 600 Ultegra, 32 hole on 48-58, 36 hole on 60/63
Spokes	DT, stainless steel, 14 gauge
Tires	Michelin Hi-Lite Comp, 700c x 20c
Pedals	SR/Sampson clipless
Crank	Shimano 600 Ultegra, round chainwheels, 42/52
Chain	Shimano Hyperglide
Freewheel	Shimano Hyperglide, 7-spd, cassette, 13/14/15/16/17/19/21
Bottom Bracket	Shimano 600 Ultegra, sealed mech
Rear Derailleur	Shimano 600 Ultegra, braze-on
Front Derailleur	Shimano 600 Ultegra, 7-spd, SIS
Shift Levers	Shimano 600 Ultegra, SIS braze-on
Handlebars	Modolo T-Eit, anatomic
Stem	Modolo DT-EXE, metallic grey
Headset	Tange-Seiki Vantage, alloy, triple sealed
Brakeset	Shimano 600 Ultegra SLR, aero levers
Saddle	Selle Italia Turbo, white leather
Seatpost	SR CLE-100
Fork	SR Aluminum
Color	Hyper-Highlight blue, Inferno red
Frame	3.0 Criterion
Sizes	48, 50, 53, 54, 56, 58, 60, 63

**SR900 - Athena on 3.0 Road Race Frame**

Rims	Volter GTX, hard anodized, 700c
Hubs	Campagnolo Athena, 32 hole on 48-58, 36 hole on 60/63
Spokes	DT, stainless steel, 14 gauge
Tires	Michelin Hi-Lite Comp, 700 x 20c
Pedals	SR/Sampson clipless
Crank	Campagnolo Athena, 42/52
Freewheel	7-spd
Bottom Bracket	Campagnolo Athena
Front Derailleur	Campagnolo Athena, braze-on
Rear Derailleur	Campagnolo Athena
Shift Levers	Campagnolo Athena, Syncro II, 7-spd
Handlebars	Modolo T-Eit, anatomic, silver anodized
Stem	Modolo Q-Even, silver anodized
Headset	Campagnolo Athena
Brakeset	Campagnolo Athena
Saddle	Selle Italia Turbo, white leather
Seatpost	Campagnolo Athena
Fork	SR Aluminum
Color	White/Campagnolo blue two tone
Frame	3.0 Road Race
Sizes	48, 50, 53, 54, 56, 58, 60, 63

**SR600 - New 105 7-speed on 3.0 Criterion Frame**

Rims	Volter GTX, hard anodized, 700c
Hubs	Shimano New 105, 32 hole on 48-58, 36 hole on 60/63
Spokes	DT, stainless steel, 14 gauge
Tires	Michelin Sport Select, 700 x 25c
Pedals	SR/Sampson clipless
Crank	Shimano New 105, Superglide, round chainwheels, 42/52
Chain	Shimano Hyperglide
Freewheel	Shimano Hyperglide, 7-spd, cassette, 12/13/14/15/17/19/21
Bottom Bracket	Shimano New 105, sealed mech
Front Derailleur	Shimano New 105, braze-on
Rear Derailleur	Shimano New 105, 7-spd, SIS
Shift Levers	Shimano New 105, braze-on, 7-spd, SIS
Handlebars	Modolo T-Eit, anatomic
Stem	Nitto Young III, metallic grey
Headset	Tange-Seiki Levin CD, gun metal grey
Brakeset	Shimano New 105 Super SLR, aero levers
Saddle	Icasselle Record, leather
Seatpost	SR CLE-100
Fork	SR Aluminum
Color	Inferno red/white two tone with graphic
Frame	3.0 Criterion
Sizes	48, 50, 53, 54, 56, 58, 60, 63

**SR500 - Black Lightning on 3.0 Road Race Frame**

Rims	Volter GTX, hard anodized, 700c
Hubs	Samsen CE-60, black, 32 hole on 48-58, 36 hole on 60/63
Spokes	DT, stainless steel, 14 gauge
Tires	Michelin Sport Select, 700 x 25c
Pedals	MKS AR-2, black
Crank	Sugino AC130, black, 42/52
Chain	SunTour Accushift Plus
Freewheel	SunTour, 7-spd, 13/14/16/18/20/23/26
Bottom Bracket	Sealed mech
Front Derailleur	SunTour Edge, black, braze-on
Rear Derailleur	SunTour Edge, Accushift Plus, black
Shift Levers	SunTour Edge, 7-spd, Accushift Plus, black
Handlebars	Nitto, black w/gold rings
Stem	Nitto Young III, Black Lightning
Headset	Tange-Seiki ME-II, black finish
Brakeset	Dia-Compe Edge, aero levers, black
Saddle	Vetta Racing, black
Seatpost	Kalloy SP-240L, black
Fork	SR Aluminum
Extras	Toe clips and straps
Color	Black Lightning
Frame	3.0 Road Race
Sizes	48, 50, 53, 54, 56, 58, 60, 63

**SR300 - Blaze on 3.0 Road Race Frame**

Rims	Alessa Model 613, gun metal finish, 700c
Hubs	Maillard 400CX, 32 hole on 48-58, 36 hole on 60/63
Spokes	DT, stainless steel, 14 gauge
Tires	Michelin Select, 700 x 25c
Pedals	MKS AR-2, black
Crank	SunTour Blaze, Powering chainwheels, 42/52
Freewheel	SunTour Accushift Plus, black, 13/14/16/18/20/23/26
Bottom Bracket	Sealed mech
Front Derailleur	SunTour Blaze, braze-on
Rear Derailleur	SunTour Blaze, Accushift Plus
Shift Levers	SunTour Blaze, Accushift Plus 7-spd
Handlebars	ITM 90/A alloy
Stem	SR CTS
Headset	Tange-Seiki ME-II
Brakeset	Dia-Compe Blaze, BRS
Saddle	Vetta Mundial Race
Seatpost	Kalloy SP-240L
Fork	Tange Mangalloy
Extras	Toe clips and straps
Color	Team metallic blue w/large logo on down tube, Black
Frame	3.0 Road Race
Sizes	48, 50, 53, 54, 56, 58, 60, 63

**SR400 - RX100 on 3.0 Criterion Frame**

Rims	Alessa Model 613, gun metal finish, 700c
Hubs	Shimano RX100, 32 hole on 48-58, 36 hole on 60/63
Spokes	DT, stainless steel, 14 gauge
Tires	Michelin Select, 700 x 25c
Pedals	Shimano RX100
Crank	Shimano RX100 Superglide, round chainwheels, 42/52
Chain	Shimano Hyperglide
Freewheel	Shimano RX100, Hyperglide 7-spd, 13/14/15/16/17/19/21/23
Bottom Bracket	Shimano RX100, sealed mech
Front Derailleur	Shimano RX100, braze-on
Rear Derailleur	Shimano RX100, 7-spd, SIS
Shift Levers	Shimano RX100, 7-spd, SIS, braze-on
Handlebars	Modolo T-Eit, anatomic
Stem	Modolo T-Eit
Headset	Tange-Seiki ME-II
Brakeset	Shimano RX100 Super SLR, aero lever
Saddle	Vetta Mundial Race, white
Seatpost	Kalloy SP-240L
Fork	Tange model 189, unicrown, CR-MO
Extras	Toe clips and straps
Color	Metallic blue/white two tone, White
Frame	3.0 Criterion
Sizes	48, 50, 53, 54, 56, 58, 60, 63



1990
RACING
BICYCLES

THE EVOLUTION OF A REVOLUTION

Where the SM2000 excels is anywhere you want quick, snappy handling. Roller coaster kind of trails were a blast. The front end moves quickly into every place you aim it. Tight single tracks were also a breeze on the Cannondale.

—Mountain & City Biking, May, 1989

Even though our revolutionary 3.0 Series mountain bike frame was greeted with rave reviews like the one above, there were still some things we wanted to improve on.

We began with the rear derailleur hanger. All brands of mountain bikes have the unpleasant habit of snapping their rear derailleur hangers in crashes or when a stick or branch gets jammed in the derailleur. And while most people found it frustrating to have

to replace an entire frame when only the derailleur hanger was trashed, they really didn't have any choice. Until now.

On a Cannondale mountain bike, a bent or broken rear derailleur hanger is no longer a problem. Our R & D team has developed a new replaceable rear derailleur hanger, constructed of tough 7000 series aluminum, that allows you to simply replace the bent or broken hanger with a new one. Secured to the frame with two small but remarkably rugged screws, the new derailleur hanger can be replaced in a matter of moments. Your frame is as good as new and you're back on the trail with just a minimal cost.

Mountain Bikes

- New aluminum fork is stronger and smoother riding than chrome-moly.
- New replaceable derailleur hanger.
- Now with 3.0 Technology.
- Frames weigh just 3.6 pounds.

Next, we went to work on pricing and specs. While Cannondales have always been worth far more than their sticker price, we've developed 1990 models that represent some of the best values we've ever offered. Each bike, from our most affordable mountain bike ever, the SM400, to our top of the line SM2000, features Accushift Plus or HyperGlide-style 7-speed shifting and new Express or S.T.L.-style shifters. The SM2000 features our new aluminum mountain bike fork, while the SM1000, SM800 and SM700 come with the hot Ritchey Logic fork. And all our bikes come equipped with our 3.0 Series mountain frame, featuring light weight cantilever rear dropouts, shorter, 16.9" chainstays and a dual 26" wheel configuration.

And despite everything we've added to our mountain bikes, they're still as light as ever. At 3.6 lbs., an 18" 3.0 Series mountain bike frame is lighter than all but the lightest titanium frames, giving you the benefits of evolution without any of the weight.

Our mountain bikes now feature complete 3.0 Technology with cantilever rear dropouts and replaceable derailleur hanger. This bike features our Hyper-highlight blue. (Please note: non-spec components used because we had to go to press before photo samples were available from manufacturers.)



MOUNTAIN FRAME GEOMETRY

Size	16	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 (cm)	54.61	57.15	59.06	61.60	57.15	59.06	61.60
Chainstay Length (cm)	42.93	42.93	42.93	42.93	42.93	42.93	42.93
Fork Rake (cm)	5.08	5.08	5.08	5.08	5.08	5.08	5.08
Bottom Bracket Height (cm)	29.54	29.54	29.54	29.54	33.02	33.02	33.02
Wheelbase (cm)	104.65	107.19	109.73	112.27	107.70	109.22	112.27
Trail (cm)	5.99	5.99	5.99	5.99	5.99	5.99	5.99
Ground to Top of Top Tube (cm)	69.34	72.90	77.98	83.06	74.17	78.99	83.57

SM2000 - Deore XT on 3.0 Mountain Frame

Rims	Wolber AT-18, hard anodized, alloy, presta, 26"
Hubs	Shimano Deore XT, 32 hole, QR f/r
Spokes	Stainless steel, 14 gauge
Tires	Ritchey Megabite Overdrive, 26 x 2.0", Kevlar bead
Pedals	Shimano Competition, alloy body and cage
Crank	Shimano Deore XT, Superglide, round rings, 26/38/48
Chain	Shimano Hyperglide
Freewheel	Shimano Hyperglide 7-spd, 13-30
Bottom Bracket	Shimano Deore XT, sealed mech, bolt axle
Front Derailleur	Shimano Deore XT
Rear Derailleur	Shimano Deore XT, 7-spd, SIS
Shift Levers	Shimano, STI, brake lvr, o/s cables
Handlebars	Taperlite Easton E-9, silver anodized, aluminum
Stem	Cannondale "285"
Headset	Shimano Deore XT
Brakeset	Shimano Deore XT cantilevers, o/s cables
Saddle	Selle Italia Turbo, black leather
Seatpost	Nitto S-65, "pearl", 330mm
Fork	Cannondale aluminum with "pepperoni" blades
Extras	Hite Rite Extra, Shimano Deore XT Seatpost QR, toe clips
Color	
Frame	3.0 Mountain w/level top tube
Sizes	16, 18, 20, 22

SM800 - Deore LX on 3.0 Mtn. Frame Sloping Top Tube

Rims	Ritchey Vantage Expert, black Duronomic, 26"
Hubs	Shimano Deore LX, 36 hole, QR f/r
Spokes	Stainless steel, 14 gauge
Tires	Ritchey Force Duro, 26 x 2.0"
Pedals	Shimano Competition PD-M550, w/toe clips
Crank	Shimano Deore LX, Superglide, round rings, 26/38/48
Chain	Shimano Hyperglide
Freewheel	Shimano Hyperglide 7-spd, cassette, 13-30
Bottom Bracket	Shimano, sealed mech, bolt axle
Front Derailleur	Shimano Deore LX
Rear Derailleur	Shimano Deore LX, 7-spd, SIS
Shift Levers	Shimano 7-spd, 2-finger competition STI w/brake lever, o/s cables
Handlebars	Bulge design, aluminum
Stem	Tubular CR-MO, roller type
Headset	Tange Seiki double locknut, triple sealed
Brakeset	Shimano Deore LX cantilever front, U-brake rear, o/s cables
Saddle	Vetta Anatomic, black
Seatpost	SR Tall Cool One, 350mm
Fork	Ritchey Logic
Extras	Seatpost QR
Color	Red Shred, Chameleon lime
Frame	3.0 Mountain w/sloping top tube
Sizes	18, 20, 22



SM1000 - Deore DX on 3.0 Mountain Frame

Rims	Wolber AT18, hard anodized, presta, 26"
Hubs	Shimano Deore DX, sealed mech, 32 hole, QR f/r
Spokes	Stainless steel, 14 gauge
Tires	Ritchey Megabite Overdrive, 26 x 2.0"
Pedals	Shimano Competition, alloy body, steel cage
Crank	Shimano Deore DX, Superglide, round rings, 26/38/48
Chain	Shimano Hyperglide
Freewheel	Shimano Hyperglide 7-spd, 13-30
Bottom Bracket	Shimano Deore DX, sealed mech, bolt axle
Front Derailleur	Shimano Deore DX
Rear Derailleur	Shimano Deore DX, 7-spd, SIS
Shift Levers	Shimano 7-spd, STI w/brake lvr, o/s cables
Handlebars	Taperlite Easton E-9, aluminum, black anodized
Stem	Ritchey Force Directional, black chrome
Headset	Shimano Deore DX, sealed mech
Brakeset	Shimano Deore DX cantilevers, o/s cables
Saddle	Cannondale Competition, black leather
Seatpost	Strong PM30, hard anodized black
Fork	Ritchey Logic
Extras	Seatpost QR, toe clips
Color	Black and white w/splash (9M2000) graphic, Black
Frame	3.0 Mountain w/level top tube
Sizes	16, 18, 20, 22



SM700 - Deore LX on 3.0 Mountain Frame

Rims	Ritchey Vantage Expert, black Duronomic, 26"
Hubs	Shimano Deore LX, 36 hole, QR f/r
Spokes	Stainless steel, 14 gauge
Tires	Ritchey Force Duro, 26 x 2.0"
Pedals	Shimano Competition PD-M550, w/toe clips
Crank	Shimano Deore LX, Superglide, round rings, 26/38/48
Chain	Shimano Hyperglide
Freewheel	Shimano Hyperglide 7-spd, cassette, 13-30
Bottom Bracket	Shimano, sealed mech, bolt axle
Front Derailleur	Shimano Deore LX
Rear Derailleur	Shimano Deore LX, 7-spd, SIS
Shift Levers	Shimano 7-spd, 2-finger competition STI w/brake lever, o/s cables
Handlebars	Bulge design, aluminum
Stem	Tubular CR-MO, roller type
Headset	Tange Seiki double locknut, triple sealed
Brakeset	Shimano Deore LX cantilevers, black, o/s cables
Saddle	Vetta Anatomic, black
Seatpost	Odyssey Aerator, black anodized, Shraeder
Fork	Ritchey Logic
Extras	Seatpost QR, toe clips
Color	Chameleon lime, Metallic blue
Frame	3.0 Mountain w/level top tube
Sizes	16, 18, 20, 22



SM600 - Exage 500 LX on 3.0 Mountain Frame

Rims	Ritchey Vantage Sport, 26"
Hubs	Shimano Exage 500 LX, 36 hole, QR f/r
Spokes	Stainless steel, 14 gauge
Tires	Ritchey Force Duro, 26 x 2.0"
Pedals	Shimano Competition, resin body
Crank	Shimano Exage 500 LX, 26/38/48
Chain	Shimano Hyperglide
Freewheel	Shimano Hyperglide, 7-spd, cassette, 13-30
Bottom Bracket	Shimano Exage 500 LX, sealed mech
Front Derailleur	Shimano Exage 500 LX
Rear Derailleur	Shimano Exage 500 LX, 7-spd, SIS
Shift Levers	Shimano, 7-spd, STI, w/brake lever
Handlebars	Bulge design, aluminum
Stem	Tubular CR-MO
Headset	Tange Seiki double locknut, triple sealed
Brakeset	Shimano Exage 500 LX cantilevers
Saddle	VettaGel w/VettaSkin cover
Seatpost	Kalloy model 243, alloy, 300mm
Fork	Unicrown, full CR-MO
Extras	Seatpost QR, toe clips
Color	Hyper-Highlight blue, White
Frame	3.0 Mountain with level top tube
Sizes	16, 18, 20, 22



SM400 - XCM on 3.0 Mountain Frame

Rims	Alesa 421, black, 26"
Hubs	Maillard CX400, sealed mech, 36 hole, QR f/r
Spokes	Stainless steel, 14 gauge
Tires	Farmer John's Nephew, 26 x 1.95"
Pedals	SR SP-530 FB, black resin
Crank	Sugino AC110, black round rings, 28/38/48
Chain	SunTour Accushift Plus
Freewheel	SunTour Accushift Plus 7-spd, 13-30
Bottom Bracket	Japanese, sealed mech, bolt axle
Front Derailleur	SunTour XCM
Rear Derailleur	SunTour XCM, Accushift Plus 7-spd
Shift Levers	SunTour XCM 7-spd, Accushift Plus "X Press"
Handlebars	High strength steel, black
Stem	Tubular CR-MO
Headset	Tange Seiki ME-II, chrome steel
Brakeset	Dia-Compe XCT cantilevers
Saddle	Vetta Anatomic, black
Seatpost	Kalloy model 243, alloy, 300mm
Fork	Unicrown, full CR-MO
Extras	Seatpost QR
Color	Black, Team red with large logo on down tube
Frame	3.0 Mountain with level top tube
Sizes	16, 18, 20, 22



SM500 - XCE on 3.0 Mountain Frame

Rims	Ritchey Vantage Sport, 26"
Hubs	Miche Rangles, sealed mech, 36 hole, QR f/r
Spokes	Stainless steel, 14 gauge
Tires	Ritchey Force Duro, 26 x 2.0"
Pedals	Aseed VP-867, alloy body, steel cage
Crank	SunTour XCE, Power Rings, black round, 26/38/48
Chain	SunTour Accushift Plus
Freewheel	SunTour Accushift Plus 7-spd, 13-30
Bottom Bracket	Japanese, sealed mech, bolt axle
Front Derailleur	SunTour XCE
Rear Derailleur	SunTour XCE, Accushift Plus, 7-spd
Shift Levers	SunTour XCE, X Press
Handlebars	Bulge design, aluminum
Stem	Tubular CR-MO
Headset	Tange Seiki, sealed mech, chrome steel
Brakeset	Dia-Compe XCM cantilevers
Seat	Vetta Anatomic, black
Seatpost	Kalloy model 243, alloy, 300mm
Fork	Unicrown, full CR-MO
Extras	Seatpost QR
Color	Team graphic black/white/magenta, Jade
Frame	3.0 Mountain with level top tube
Sizes	16, 18, 20, 22



1990
MOUNTAIN
BICYCLES

WHEN ENJOYING THE JOURNEY IS MORE IMPORTANT THAN COMPLETING IT QUICKLY

It's been said that there's more to life than increasing its speed. Many cyclists couldn't agree more. Some prefer to go at their own pace, enjoying the benefits of exercise but also relishing the feel of the sun on their face and the beauty of their surroundings.

Touring Bikes

- Now with 3.0 Technology
- Lighter, more efficient and comfortable
- Cantilever brakes, DT spokes and Michelin tires on all models

Yet, just because you may take your cycling casually, doesn't mean that your bike should be casually built. Touring cyclists need a stiff, efficient bike as much as racers. Wasteful frame

flex can really add up on a hundred mile day, especially when you've got forty pounds of gear strapped to your bike. We've known that right from the start, that's why the first bicycle we built was a touring bike. We brought efficiency to a long wheelbase and have been improving on that concept ever since.

For 1990, we've applied the same computer aided design technology that revolutionized our racing and mountain frames to our touring frame. Our new 3.0 Series touring frames are now lighter, (as little as 3.4 lbs. on smaller sizes) stiffer and more comfortable than ever before.

Available in three models, our sport touring bikes provide Cannondale's legendary efficiency in a more stable, comfortable package. And now each model is equipped with cantilever brakes front and rear. Perfect for anything from a ride around town to a cross country odyssey, our sport touring bikes are hand crafted at our factory in Bedford, Pennsylvania, and covered by our 100% satisfaction guarantee.

TOURING FRAME GEOMETRY

Size	19	21	23	25	27
Seat Tube Angle (degrees)	76.70	73.50	73.50	73.50	73.50
Head Tube Angle (degrees)	72.00	72.00	72.00	72.00	72.00
Top Tube Length (cm)	51.56	55.25	56.52	59.06	61.80
Chainstay Length (cm)	45.72	45.72	45.72	45.72	45.72
Fork Rake (cm)	5.41	5.41	5.41	5.41	5.41
Bottom Bracket Height (cm)	25.91	26.16	26.52	26.72	27.00
Wheelbase (cm)	104.39	104.90	105.66	108.46	111.76
Trail (cm)	5.46	5.46	5.46	5.46	5.46
Ground to Top of Top Tube (cm)	72.39	77.47	82.55	87.63	92.71

ST1000 - Expedition-Equipped 3.0 Touring Frame

Rims	.....	Wolber Model 59, hard anodized, 27"
Hubs	.....	Sansin RE-40S, forged, 36 hole, sealed bearing
Spokes	.....	DT, stainless steel, 14 gauge
Tires	.....	Michelin Hi-Lite Road, 27 x 1 1/8"
Pedals	.....	SunTour Superbe, sealed bearing
Crank	.....	SunTour XC Comp, round chainwheels, 26/45/49
Chain	.....	SunTour Accushift Plus
Freewheel	.....	SunTour, sealed, 13-30
Bottom Bracket	.....	SunTour Grease Guard
Front Derailleur	.....	SunTour XC Comp
Rear Derailleur	.....	SunTour XC Comp
Shift Levers	.....	SunTour Command Levers, brake lever mounted, Accushift Plus
Handlebars	.....	Nitto Handonneur
Stem	.....	Nitto Technomic, forged alloy
Headset	.....	Tange-Seiki Vantage, triple sealed, alloy
Brakeset	.....	Dia-Compe 984 cantilever, aero levers, ratchet adjustment
Saddle	.....	Brooks Team Pro, all leather
Seatpost	.....	American Classic, silver anodized
Fork	.....	Tange, CR-MO, full sloping crown, low rider bosses
Extras	.....	Trioga Claw cable hanger/headset lock, low riding front racks, rear rack, 3 bottle cages, Edge fenders, toe clips and straps
Color	.....	Anthracite
Frame	.....	3.0 Touring
Sizes	.....	19, 21, 23, 25, 27



ST400 - XCM on 3.0 Touring Frame

Rims	.....	Alessa model 716, 27"
Hubs	.....	Maillard 400 CX, 36 hole, sealed mech
Spokes	.....	DT, stainless steel, 14 gauge
Tires	.....	Michelin Select, 27 x 1 1/8"
Pedals	.....	MKS AR2
Crank	.....	Sugino AC110, 28/40/50
Chain	.....	DI2 Leiner
Freewheel	.....	SunTour, Accushift Plus, 6-spd, 14/16/19/22/26/30
Bottom Bracket	.....	Sealed mech
Front Derailleur	.....	SunTour XCM
Rear Derailleur	.....	SunTour XCM, Accushift Plus
Shift Levers	.....	SunTour Blaze, Accushift Plus, brake-on
Handlebars	.....	ITM 90A, alloy
Stem	.....	SR CTS
Headset	.....	Tange-Seiki ME-II
Brakeset	.....	Dia-Compe XCT, cantilever, aero lever, black finish
Saddle	.....	Vetta anatomic
Seatpost	.....	Kalloy SP 240L
Fork	.....	Tange Mangalay, low rider bosses
Extras	.....	Toe clips and straps
Color	.....	Metallic blue
Frame	.....	3.0 Touring
Sizes	.....	19, 21, 23, 25, 27



ST800 - Deore LX on 3.0 Touring Frame

Rims	.....	Sun Mistral M17, Duranomic, 27"
Hubs	.....	Shimano Deore LX, 36 hole, sealed mech
Spokes	.....	DT, stainless steel, 14 gauge
Tires	.....	Michelin Select, 27 x 1 1/8"
Pedals	.....	MKS AR-2, black finish
Crank	.....	Shimano Mtn LX, Bpocase 28/44/50
Chain	.....	Shimano Hyperglide
Freewheel	.....	Shimano Hyperglide, 7-spd, cassette, 13/15/17/20/23/26/30
Bottom Bracket	.....	Shimano, sealed mech
Front Derailleur	.....	Shimano Deore LX
Rear Derailleur	.....	Shimano Deore LX, 7-spd, SIS
Shift Levers	.....	Shimano RX-100, SIS, brake-on
Handlebars	.....	ITM 90/A alloy
Stem	.....	Nitto Young
Headset	.....	Tange-Seiki ME-SIL, sealed
Brakeset	.....	Shimano Deore LX, cantilever
Saddle	.....	VettaGel w/VettaSkin, anatomic, black
Seatpost	.....	Kalloy SP240L, black
Fork	.....	Tange Mangalay, w/low rider bosses
Extras	.....	Toe clips and straps
Color	.....	Inferno red
Frame	.....	3.0 Touring
Sizes	.....	19, 21, 23, 25, 27



1990
TOURING
BICYCLES

THE ULTIMATE EXPRESSION OF THE ALUMINUM ADVANTAGE

If the benefits of using oversized aluminum tubing are dramatic on our regular frames, they are positively phenomenal on our tandem frame. Because chrome-moly tandems use relatively small diameter tubing, their extra long tubes are especially vulnerable to frame flex which robs you of efficiency and control. While Cannondale tandem frames also use long tubes, their ultra-large diameter provides them with far greater lateral stiffness that reduces their susceptibility to flexing.

And it's no secret that steel is heavier than aluminum. Our tandem frame weighs in at 9 lbs., 14 oz.; a full 25% less than a standard chrome-moly tandem frame. And our stiffer, lighter aluminum tubes also allow us to provide something that chrome-moly tandem frames just can't offer: adequate room for the stoker. Our stoker's top tube is as long as 22.85 inches (on our 25" x 23" size), offering an extra measure of comfort and enjoyment for the rider in the back seat.

TANDEM FRAME GEOMETRY

Size	25x23	25x21	23x21	23x19	21x19
Front Seat Tube Length (cm)	66.34	63.73	60.53	58.01	56.82
Rear Seat Tube Length (cm)	58.04	51.49	51.69	46.00	46.02
Front Seat Tube Angle (degrees)	72.00	72.00	74.10	74.10	75.30
Rear Seat Tube Angle (degrees)	72.00	72.00	74.10	74.10	75.30
Front Bottom Bracket Height (cm)	27.31	27.31	27.31	27.31	27.31
Rear Bottom Bracket Height (cm)	30.48	30.48	30.48	30.48	30.48
Chainstay Length (cm)	43.18	43.18	43.18	43.18	43.18
Head Tube Angle (degrees)	73.50	73.50	73.50	73.50	73.00
Fork Rake (cm)	5.41	5.41	5.41	5.41	5.72
Trail (cm)	4.52	4.52	4.52	4.52	4.52
Ground to Top of Front Top Tube (cm)	86.61	84.84	81.53	79.76	78.49
Ground to Top of Rear Top Tube (cm)	82.55	77.47	77.47	72.39	72.39
Effective Front Top Tube Length (cm)	58.67	58.67	56.13	56.13	54.36
Effective Rear Top Tube Length (cm)	76.20	73.66	73.66	71.12	71.12
Wheelbase (cm)	180.85	178.31	177.80	175.26	175.26

BUILD YOUR OWN GREAT BICYCLE WITH A CANNONDALE FRAMESET

In addition to a full line of complete bicycles, we also offer our customers the option of Cannondale framesets. Each frameset, whether racing, mountain or sport touring, can be easily built up with standard components; any parts unique to our oversize tubing are included along with the frameset. And like our complete bicycles, (and every other product we manufacture) our framesets are covered by our 100% satisfaction guarantee.

Criterion and Road Race Framesets

- Aluminum fork for comfort and light-weight
- 126mm or 130mm rear dropout spacing
- Sizes: 48, 50, 53, 54, 56, 58, 60, 63, 66 (Criterion frame only)

Mountain Frameset

- Available in sloping top tube (U-brake rear studs), or level top tube (cantilever rear studs)
- Chrome-moly fork
- 130mm or 135mm rear dropout spacing
- Sizes: 16 (level top tube only), 18, 20, 22

Touring Frameset

- Lighter, faster, more comfortable 3.0 Technology
- Chrome-moly fork with low-riding rack bosses
- Cantilever brake studs front and rear
- Sizes: 19, 21, 23, 25, 27

Specifications subject to change without notice.

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