Possibly
the best bicycle frame in the world.

2005
Principia Bicycle Framesets


FROM HERE
PRINCIPIA
TO HERE
it all comes down to passion

THE SOUL OF A BICYCLE comes from the frame. High quality parts improve the performance, for sure, but the liveliness, responsiveness, handling - it all comes down to one thing in the end. The frame. And attention to minute detail makes a difference. A very noticeable and important difference. You don't need to understand the finer points to recognize the effect. Sharp acceleration, sure-footed braking, stable at speed, nimble in the turns. It's all in the frame. Principia frames are produced with this in mind at all times. With one singurlar purpose: to provide possibly the best ride in the world.

EXCLUSIVE PRINCIPIA TECHNOLOGIES:

ELLIPSE PROJECT

Still the best. The tapered fork steerer, elliptical head tube and bottom bracket combine to create the most precise and responsive Principia ride ever. The benefit comes from aligning the shaping with the forces flowing through the frame. Forces from these areas flow continuously into the rest of the frame, not finding a place to gather. In this way an Ellipse Project frame can either be made very strong and efficient, or very lightweight yet still rideable.

CARBON FRIENDLY SEAT TUBE

Carbon seat posts are lightweight and strong. Which is good. They are also susceptible to failure if fitted incorrectly. Which is bad. The main problem is with the traditional clamping method, which excerts very concentrated pressure on the sides of the seat post. Principia's new, patented, carbon friendly seat tube clamps the post gently, spreading pressure over a larger area. Your carbon seat post will be much happier for it. Additional safety measures apply for carbon seat posts, so please consult your Principia Owner's Manual.

DESIGN 2 SIZE

Now why didn't anyone think of this before? Traditionally, bicycle frames have been designed in a medium size and then the exact same tube specifications have been used for all frame sizes. But, different sized riders place different demands on the frame, so in effect smaller riders have been riding frames that are too heavy and bigger riders have had frames that weren't stiff enough. The Principia D2S system varies the seat, top and down tube diameters according to frame size, so everyone gets the best possible ride. It's a natural evolution of the heralded Principia SX with differential slope geometry introduced in 2003.

TUBE INSERTED WELDING

Unglamorous and invisible, but definitely important. The tubes are fitted inside each other rather than on top of each other, i.e. the seat tube is inserted into the bottom bracket and the top tube into the head tube. It allows for closer tolerances, better weld-quality and saves excess material. Which all adds up to a lighter frame, without any sacrifice on the parts of safety or performance.

SX GEOMETRY

SX Differential Slope Geometry varies the amount of slope according to frame size. The smaller frames get a more dramatic slope, while the larger frames feature only a moderate slope. In a sense, the work on the SX slope technology began 4 years ago, when Principia introduced the S6 (6 centimeter slope) technology. What we found was that while the S6 slope was perfect for the smaller sizes, it often produced an unaesthetical and structurally unsound seatpost length, on the larger frame sizes. The SX technology is a new, individual aproach to sloping frame geometries, ensuring a proper fit for all frame sizes.

Possibly the best frameset in the world.

The new Principia limited edition.
100 individually numberede available worldwide in 2005.

limited

D2S

Available in a very limited series of 100 framesets, the Principia Limited Edition presents a further refinement of the Revolution D2S design. The Limited Edition presents a new integrated head tube that maintains the renowned Ellipse Project characteristics. No compromise - perfect aesthetics, perfect handling.

SX GEOMETRY		TUBE INSERTED WELDING
		PRIN
CARBON FRIENDLY SEAT TUBE		RUST METALLIC

revolution

D2S

The most exciting new frameset from Principia ever, the Revolution is thoroughly redesigned. Extremely lightweight, yet maintaining exceptional power transfer. The all new D2S (design 2 size) technology offers unprecedented ride quality for riders of all sizes. There's a reason why it's called the Revolution.

	TUBE INSERTED WELDING
CARBON FRIENDLY SEAT TUBE	JET BLACK ANODISED
SX GEOMETRY	BLUE METALLIC

ellipse

Tapered seat and down tubes, along with Ellipse Project fork, head tube, bottom bracket and dropout propel the Ellipse ahead of the pack in STW (stiffness to weight) testing. The SX Differential Slope variant progresses from a standard 6 cm slope, to a moderate 3 cm slope on larger sizes.

SX GEOMETRY (opt.)

TUBE INSERTED WELDING

JET BLACK ANODISED

LIQUID BLUE METALLIC

evolution

The Evolution features Ellipse 2 technology with the renowned Ellipse Project monocoque fork and bottom bracket of the Ellipse Project. Combined with SX differential slope geometry and world class Principia craftsmanship the Evolution is turned into a winner. On paper and on the road.

SX GEOMETRY

PRI

NATURAL SILVER

msl^{e} pro

The MSL^{e} Pro continues to be recognized as one of the top hardtail frames in the world. The MSL^{e} Pro features Principia's acclaimed Ellipse Project technology for the head tube and bottom bracket. For 2005 further improvements have been made to the dropouts and chain stays to ensure the MSL^{e} Pro stays ahead of the pack.

TIW

TUBE INSERTED WELDING

JET BLACK ANODISED

mtb ht

New for 2005. The Principia Evolution Series MTB HT combines Ellipse Project technology, anodised finish and the race-winning geometry of the MSL^{e} Pro in a premium package. Ellipse Project head tube and bottom bracket provide unparalleled steering and solid acceleration.

PRI

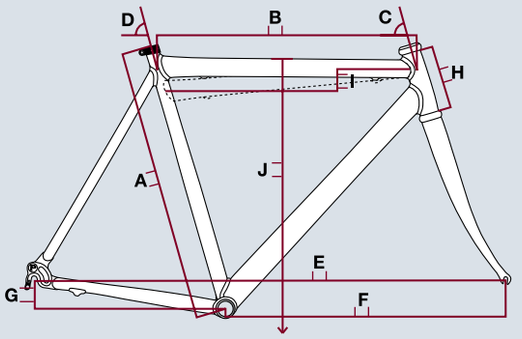
NATURAL SILVER

geometries

SX FRAME GEOMETRY (Limited, Revolution, Ellipse SX, Evolution)										
Size	A: C/top	B: Top tube	C: Head tube	D: Seat tube	E: Wheelb.	F: Fr-ce	G: BB drop	H: Head tube	I: Slope	J: Standover
46(XS) 650c	460	500	72,0	74,0	946	558	35	96	80	701
49(XS/S)	460	515	72,0	75,5	966	570	70	96	74	725
51(S)	480	530	72,5	74,4	970	574	70	96	58	735
53(S/M)	510	542	73,0	74,0	975	579	70	113	48	758
55(M)	540	554	73,0	74,0	987	591	70	133	38	782
57(M/L)	565	566	73,0	73,5	994	598	70	152	33	799
59(L)	590	578	73,5	73,5	1001	606	70	170	29	824
61(L/XL)	610	590	73,5	73,0	1008	612	69	190	29	843
63(XL)	630	602	74,0	72,5	1019	619	68	208	29	865
65(G)	650	614	74,0	72,0	1026	626	68	220	27	892
ROAD FRAME GEOMETRY (Ellipse)										
Size	A: C/top	B: Top tube	C: Head tube	D: Seat tube	E: Wheelb.	F: Fr-ce	G: BB drop	H: Head tube	I: Slope	J: Standover
49	520	522	72,0	74,8	968	573	70	96	17	754
51	540	530	72,5	74,4	970	574	70	96	0	764
53	560	542	73,0	74,0	975	579	70	113	0	782
55	580	554	73,0	74,0	987	591	70	133	0	801
57	600	566	73,0	73,5	994	598	70	152	0	819
59	620	578	73,5	73,5	1001	606	70	170	0	838
61	640	590	73,5	73,0	1008	612	69	190	0	857
63	660	601	74,0	72,7	1012	615	68	208	0	876
MTB FRAME GEOMETRY (MSLe Pro, MSL)										
Size	A: C/top	B: Top tube	C: Head tube	D: Seat tube	E: Wheelb.	F: Fr-ce	G: BB drop	H: Head tube	I: Slope	J: Standover
15.5”	414	542	71,0	74.5	1028	606	38	96	169	740
16.5”	439	557	71,0	74,0	1038	616	38	96	147	751
17.5”	465	573	71,0	73.5	1050	628	38	103	129	767
18.5”	490	590	71,0	73,5	1067	645	38	113	113	783
19.5”	515	608	71,0	73,5	1086	663	37	123	99	801
20.5”	541	627	71,0	73,0	1100	678	36	133	86	818
CYCLOCROSS FRAME GEOMETRY (RSL CC)										
Size	A: C/top	B: Top tube	C: Head tube	D: Seat tube	E: Wheelb.	F: Fr-ce	G: BB drop	H: Head tube	I: Slope	J: Standover
51	540	532	72,0	74,0	1002	586	64	96	27	780
53	560	545	72,5	73.5	1007	590	64	113	27	800
55	580	558	72.5	73.5	1021	604	63	133	26	818
57	600	571	72.5	73,0	1029	612	62	152	26	837
59	620	584	72,5	73,0	1049	629	62	170	20	851

Measuring Conventions

Frames with sloping top tubes have top tube lengths that are measured horizontally, from the head tube to an imaginary, extended seat tube. The amount of slope is measured as the vertical deviation from head tube to seat tube. Standover height is measured at top tube midpoint.



A: Center-Top
B: Top Tube*
C: Head Angle
D: Seat Angle
E: Wheelbase
F: Front-Center
G: Bot. Bracket Drop
H: Head Tube
I: Slope*
J: Standover Height*

NOTE ON SEAT POST SIZING: The Limited and Revolution use 27,2 mm seat posts up to size 55. Sizes 57 and larger use 31,6 mm seat posts. The Ellipse SX, Evolution and MSL^{e} Pro use 31,6 mm seat posts. All other models use 27,2 mm seat posts.

Complete bikes shown are a suggested build only. Specifications subject to change witout notice.

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