# JOSHUA full suspension:

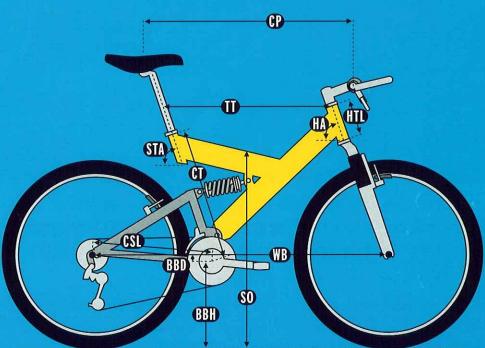
featuring Genesis Geometry The 1998 Joshuas use our proven floating drivetrain swingarm which are updated with three new details:

→ All Joshuas have the new Genesis Geometry.

→ Oversized tubing is used throughout for a more solid, flex free performance.

→ The updated rear end is attached to the main frame of the bike with a completely redesigned adjustable shock mounting plate which allows the rider to customize their bike for ride height, head angles, seat angles, rear wheel travel, and tunable shock performance.

## HEAD ANGLE (*) 70.50 TL00 TL00 TL00 TL00 TL00 TL00 TL00 TL	## MEAD ANDLE (*)  78.59  78.50  78.5	## MARCHANDER (**)  \$18. BEATTONE ANDER (**)  \$25. CHAINSTAY LENDTH (IMM)  ## WHEELBASE (IMM)  ## CT CENTER (YOU')  ## JUSTAM WARNOE (**)  ## 27.87  ## 27.8
\$78 SEATURE ANGLE (*) \$78 CHAINSTAY LENGTH (MM) \$88 SOTTOM BRACKET PORDH (MM) \$88 BOTTOM BRACKET PORDH (MM) \$80 BOTTOM BRACKET PORDH (MM) \$80 HELBASE (MM) \$10 CLENTER TO TOP (*) \$1 INSEAN BANGE (*) \$27.87 \$27.10	STA SEATURE ANDLE (*)   74.90   73.50   73.90   (51 CHAINSTAY LENGTH (MM)   884 ADTON REACKET HEIGHT (MM)   85.50   105.94   2.00   85.50   105.94   2.00   85.50   105.94   2.00   85.50   205.94   2.00   27.10	\$\frac{\frac{1}{5}\text{ SERTURE ANDLE (*)}}{\frac{1}{5}\text{ CSL (CRAINSTRY LERNOTE (MM))}}{\frac{1}{47.00}} \tag{12.50} \tag{13.50}{\text{ 412.50}} \tag{13.50} \tag{13.50}{\text{ 412.50}} \tag{13.50}{\text{ 412.50}} 13
CSL CHAINSTAY LENGTH (MM)   ATL-90   412-00	CS1 CHAINSTAY LEWOTH (MM) 472.00 472.00 472.00 88 H BOTTOM PRACKET HEBRIT (MM) 305.70 305.70 305.70 305.70 27.00 2	CSI CHAINSTAY LENGTH (MM)         472.00         472.00         472.00         472.00         472.00         472.00         472.00         472.00         472.00         472.00         472.00         472.00         472.00         472.00         272.00
BBB BOTTOM BRACKET HEIGHT (MM)         305.90         305.90         305.90           BBB BOTTOM BRACKET GROPHIMI         27.10         27.10         27.10           WB WHEELBASE (MM)         1,058.00         1,078.00         1,078.00           CT CENTER TO TOP (*)         16.00         18.00         21.00           I INSEAM HANGE (*)         27.67 -         27.67 -         27.67 -	BBB   BOTTOM BRACKET HEIGHT (MM)   305.90   30	888   BOTTOM BRACKET HEIGHT (MM)   305.90   30
27.00   27.0	888 SOTIOM STACKET DROP (IMM)   27.00   27.	888   SOTIOM SPACKET DROPEINM   27.10   27.1
WB   WHEELBASE (MM)   1,058.00   1,078.00   1,115.00   1,078.00   1,115.00   16.00   18.00   21.00   1   18.56   18.00   27.67 + 27.	W8 WHEELBASE (MM)         1,058.00         1,078.00         1,175.00           CT CENTER TO TOP (*)         16.00         18.00         21.00           1 INSEAM RANGE (*)         27.67 +         27.67 +         27.67 +	W8   MHEELBASE (MM)   1,058.00   1,078.00   1,115.1
CT CENTER TO TOP (*) 16.00 18.00 21.00 1 10.5EAM HANGE (*) 27.67 - 27.67 - 27.67 -	CT CENTER TO TOP (*) 16.00 18.00 21.00 1 10.05	CT CENTER TO TOP (*) 16.00 18.00 21.00 1 10.05 21.67 - 27.67 - 27.67 - 27.67
1 INSEAM HANGE (*) 27.67 - 27.67 -	1 INSEAM HANGE (*) 27.67 - 27.67 - 27.67 -	1 INSEAM HANGE (*) 27.67 * 27.67 * 27.67
90.17   12.57   14.54	10.17   12.57   14.54	30.17   12.57   34.54
~	S	0
	N	



The Joshua main frame uses our proven side butted 6061 bladed tubing, with new cable routing and a new compression lock out handlebar mounted damping adjuster on most models. This will allow the rider to switch from a fully active bike for the bumps, to a fully damped bike that enhances climbing.

The Joshua design is quite simply the most efficient suspension design available, and now comes with the new standard in mountain bike geometry: Genesis.

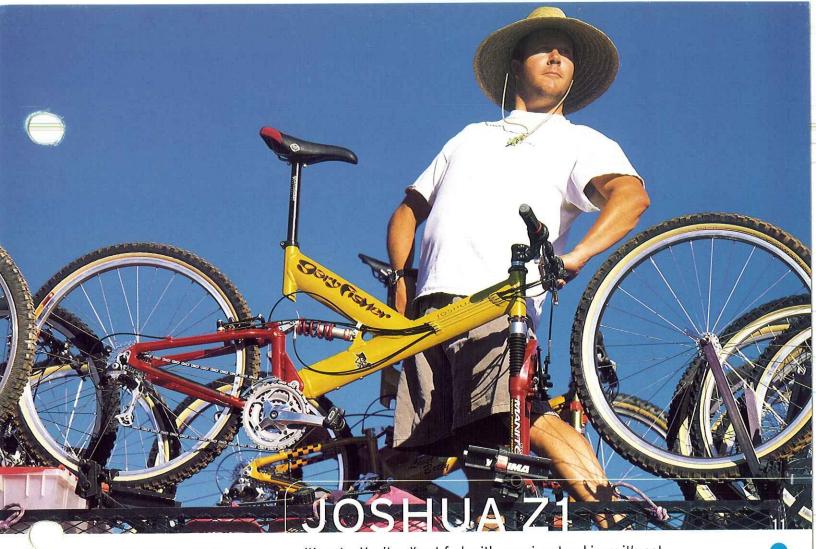


DHSOL

Ever since Shimano slaughtered everyone a few years ago, smaller companies have been making a steady comeback. This bike represents the best of them, (while still using a Shimano drivetrain and brakes) — Mavic, Time, Thomson, WTB, Bontrager, Sugino.

UPGRADES FROM JOSHUA Z1:
ROCK SHOX COUPE DELUXE SL
WITH REMOTE LOCKOUT
SHIMANO XT V-BRAKES
TITANIUM SADDLE RAILS AND HANDLEBAR
SUGINO MIGHTY 900 CRANKSET
CUSTOM PAINT JOB

SIZES	SM, MD, LG	CHAIN	Sachs PC61; 104 length	SADDLE				nium rail; :her/Kevlar side
COLOR	Video Blue and Judy Yellow	FRONT HUS	Mavic Crossmax; 26 hole					CONTROL OF THE CONTRO
MAIN TUBES	Side butted oval cross section 6061 T6 aluminum with	REAR HUB	Mavic Crossmax; 28 hole; 135mm O.L.D.	SEATPOST			Elite; iame	220gm; ter
	Genesis geometry	SPOKES	Straight pull 14/15G butted	SEAT BINDER				gral bolt; iameter
REAR TRIANGLE	6061 T6 aluminum; adjustable geometry		stainless steel; alloy nipples; 255mm front; 273/255mm rear	ANYTHING ELSE?	20000	2000		amping adjuster
FORK	Rock Shox Judy SL; alloy steerer;	FRONT RIM	Mavic Crossmax; 26 hole	<del>-</del> .	Rep	lacea	ble de	railleur hanger
2 3	80mm travel	REAR RIM	Mavic Crossmax; 28 hole		2 wa	terbo	ttle l	osses
REAR SHOCK	Rock Shox Coupe Deluxe SL with remote; 99mm travel	FRONT TIRE	WTB Velociraptor; Kevlar; 2.1; 60 tpi	=				
HEADSET	WTB OS Greaseguard Aheadset; 27mm stack; 25.4/34.0/30.0	REAR TIRE	WTB Velociraptor; Kevlar; 44/50; 60 tpi	PART NUMBER	SM	MD	LG	1
BOTTON BRACKET	Shimano UN72; 73 x 113 shell/axle	FRONT RRINE	FRONT BRAKE Shimano XT V-brake				8 470630 8 470230	
CRANKS	Sugino Mighty 900; hard anodized chainrings; 20/32/42;	REAR BRAKE	Shimano XT V-brake	STEERER LENGTH	SM 203	MD 203	LG 223	1
	58/104mm bolt hole	LEVERS	Shimano XT V-lever	CRANK LENGTH	SM	MD	ILG	i i
PEDALS	Time ATAC clipless	HANDLEBAR	Bontrager race lite; 5° bend	ии	170	175	177.5	1
FRONT DERAILLEUR	Shimano XT; top swing; top pull; 34.9mm/13/a" clamp	STEM	Bontrager Aheadstem; 180gm; 25.4mm clamp diameter;	HANDLEBAR WIOTH	5M   560	560	LG   560	1
REAR DERAILLEUR	Shimano XTR SGS;		44.5mm steerer clamp height	STEM LENGTH	60	90 90	105	
	reverse spring; Rapidrise	GRIP	Fisher dual density	STEM ANGLE	SM	MD	LG	1
SHIFTER	Shimano XT; Rapidfire SL; STI	BAR END	Fish Fins; 120gm	DEGREES	110	10	10	d.
CASSETTE	Shimano XT; 8-speed IG; 11-30			SEATPOST LENGTH	330	390	1 LG	



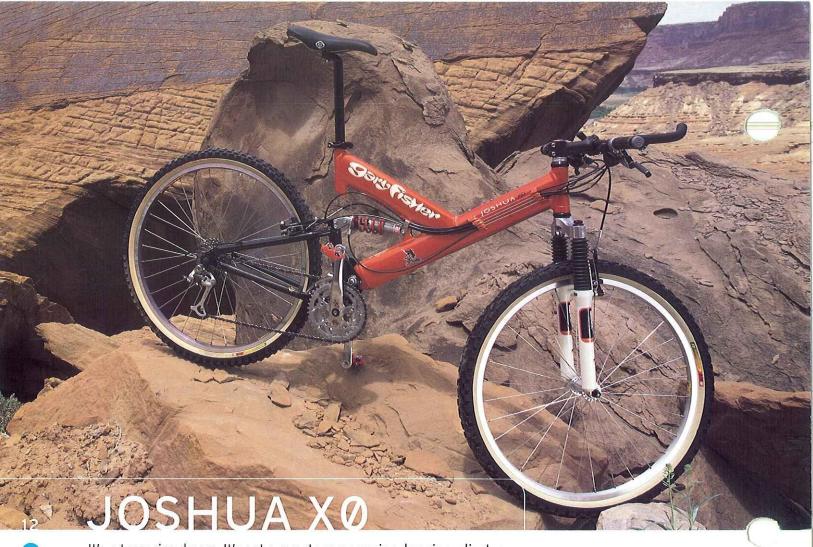
UPGRADES FROM JOSHUA X01: MANITOU X-VERT SINGLE CLAMP FORK WITH TWIN PISTON CHAMBER DAMPING BONTRAGER VALIANT FRONT RIM BONTRAGER MUSTANG ASYM REAR RIM BONTRAGER STEM, HANDLEBAR, AND SEATPOST

It's got a Manitou Xvert fork with oversize stanchions; it's got a WTB GreaseGuard superwide front hub; it's got a Bontrager Valiant front rim, which is radially laced. All of this adds up to a bike with more steering control and more shock absorbtion.

SIZES	SM, MD, LG	FRONT HUB	WTB Greaseguard 1R; 28 hole;	SADDLE	WTB SSTX; cromoly rail; Kevlar sides
COLOR	Team Yellow and Team Red		6mm skewer	SEATPOST	Bontrager comp; 27.2mm diameter
33335	Side butted oval cross section	REAR HUB	Shimano XT; 32 hole; 135mm O.L.D.	SEAT BINDER	Alloy with integral bolt;
MAIN TUBES	6061 T6 aluminum with	SPOKES	DT 15/16G butted stainless steel;		35mm clamp diameter
	Genesis geometry		249mm front; 264/265mm rear	ANYTHING ELSE?	Remote rear damping adjuster
REAR TRIANGLE	6061 T6 aluminum;	FRONT RIM	Bontrager Valiant; 28 hole		Replaceable derailleur hanger
	adjustable geometry	REAR RIM	Bontrager Mustang ASYM; 32 hole		2 waterbottle bosses
FORK	Manitou Xvert single clamp; alloy steerer; 80mm travel	FRONT TIRE	WTB Velociraptor; Kevlar; 2.1; 60 tpi		2 materiolette posses
REAR SHOCK	Rock Shox Coupe Deluxe with remote; 99mm travel	REAR TIRE	WTB Velociraptor; Kevlar; 44/50; 60 tpi		
HEADSET	WTB OS Greaseguard Aheadset; 27mm stack; 25.4/34.0/30.0	FRONT BRAKE	Avid 20		
BOTTON BRACKET	Shimano UN52; 73 x 113 shell/axle	REAR BRAKE	Avid 20	PART NUMBER	SM MD LG 4605108 4505208 4605308

ACAA INIANOLE	" I I I	100000000000000000000000000000000000000	Maria de la companya della companya		Rep	lacea	pie a	erailleur nang	ger
	adjustable geometry	REAR RIM	Bontrager Mustang ASYM; 32 hole		2 w	aterbo	ottle	bosses	
FORK	Manitou Xvert single clamp; alloy steerer; 80mm travel	FRONT TIRE	WTB Velociraptor; Kevlar; 2.1; 60 tpi			9			
REAR SHOCK	Rock Shox Coupe Deluxe with remote; 99mm travel	REAR TIRE	WTB Velociraptor; Kevlar; 44/50; 60 tpi						
HEADSET	WTB OS Greaseguard Aheadset; 27mm stack; 25.4/34.0/30.0	FRONT BRAKE	Avid 20						
BOTTOM BRACKET	Shimano UN52; 73 x 113 shell/axle	REAR BRAKE	Avid 20	PART NUMBER	460616	8 450620	LG 46063	08	
CRANKS	Sugino Mighty 700;	LEVERS	Avid 1.9	STEERER LENGTH	SM	MD	ILG	1	
LANAS	hard anodized chainrings; 20/32/42;	HANDLEBAR	Bontrager comp; 5° bend	MA	193	193	203	Į.	
	58/104mm bolt hole	STEM	Bontrager Aheadstem; 180gm;	CRANK LENGTH	SM	MD 175	175	1	
PEDALS	Time Atac clipless	5,5580	25.4mm clamp diameter;						
ONT DERAILLEUR	Shimano LX; top swing; top pull;		44.5mm steerer clamp height	HANDLEBAR WIDTH	SM   580	580	580		
	34.9mm/13/a" clamp	GRIP	Fisher dual density	STEM LENGTH	SM	IMD	11.0	i	
REAR DERAILLEUR	Gripshift ESP 9.0SL	BAR END	Fish Fins; 120gm	SIEM LENGTH	60	90 90	105		
SHIFTER	Gripshift ESP 900SL			STEM ANGLE DEGREES	SM	MD 10	LG		
CASSETTE	Shimano HG70-I; 8-speed; 11-30			SEATPOST LENGTH	SM   300	MD 350	LG 350	Ĩ	
CHAIN	Sachs PC51; 104 length			99	1300	1330	1330		





It's a tangerine dream. It's got a remote compression damping adjuster. It's significantly lighter: it's the lightest dual suspension bike in its price class. (You know, a lot of our Joshuas are...)

UPGRADES FROM JOSHUA X1: ROCK SHOX JUDY T2 LONG TRAVEL ROCK SHOX COUPE DELUXE WITH REMOTE LOCK OUT ICON CLIPLESS PEDALS SHIMANO XT REAR DERAILLEUR

SIZES	SM, MD, LG	FRONT HUB	Fisher Ginzu Team; 28 hole radial;	SADDLE	WTE	SST	X		
COLOR	Acid Tangerine and Midnight		6mm skewer	SEATPOST				just; 270g	ζm;
MAIN TUBES	Side butted oval cross section	REAR HUB	Shimano STX-RC; 32 hole	-	21.2	mm o	diamet	ter	
	6061 T6 aluminum with Genesis geometry	SPOKES	DT 15G Stainless steel; 253mm front; 264/265mm rear	SEAT BINDER				gral Quick ameter	Relea
REAR TRIANGLE	6061 T6 aluminum;	FRONT RIM	Bontrager Maverick; 28 hole radial	ANYTHING ELSE?	Rep	lacea	ble de	railleur h	anger
4 <del></del>	adjustable geometry	REAR RIM	Bontrager Maverick ASYM; 32 hole		2 wa			osses	
FORX	Rock Shox Judy T2; alloy steerer; 80mm travel	FRONT TIRE	WTB Velociraptor; Kevlar; 2.1: 60 tpi		Rem			imping ad	
REAR SHOCK	Rock Shox Coupe Deluxe with remote; 99mm travel	REAR TIRE	WTB Velociraptor; Kevlar; 44/50: 60 tpi						
HEADSET	Dia-Compe STS OS Aheadset; 25mm stack; 25.4/34.0/30.0	FRONT BRAKE	Avid 10						
BOTTOM BRACKET	Shimano UN52; 73 x 113 shell/axle	REAR BRAKE	Avid 10	PART NUMBER	SM	MD 15042	08 LG 450630	.1	
CRANKS	Sugino Impel 300A; 20/32/42;	LEVERS	Avid 1.0	Particular for the Control of the Co				* 1	
CHARLS	58/94mm riveted bolt hole	HANDLEBAR	Butted aluminum; 580mm;	STEERER LENGTH	187	187	197	Į.	
PEDALS	Icon clipless	***************************************	230gm; 6° bend	CRANK LENGTH	SM	MD	LG	Î	
FRONT DERAILLEUR	Shimano STX; top swing; top pull; 34.9mm/1%" clamp	STEM	Aheadstem with Quick Change; 180gm; 25.4mm clamp diameter; 41mm steerer clamp height	HANDLEBAR WIDTH	170   SM   580	175   MD   580	175   LG   580		
REAR DERAILLEUR	Shimano XT SGS		Fisher dual density	STEM LENGTH	SM	MD	LG	F	
SHIFTER	Shimano LX; Rapidfire+	GRIP		vu	60	90	105	ř	
CASSETTE	Shimano IG60; 8-speed; 11-30	BAR END	Fish Sticks; 125gm	STEM ANGLE DEGREES	SM  10	MD  10	10	ſ	
CHAIN	Sachs PC41; 106 length			SEATPOST LENGTH	SM   300	MD  350	LG   350	1	

WTB SSTX

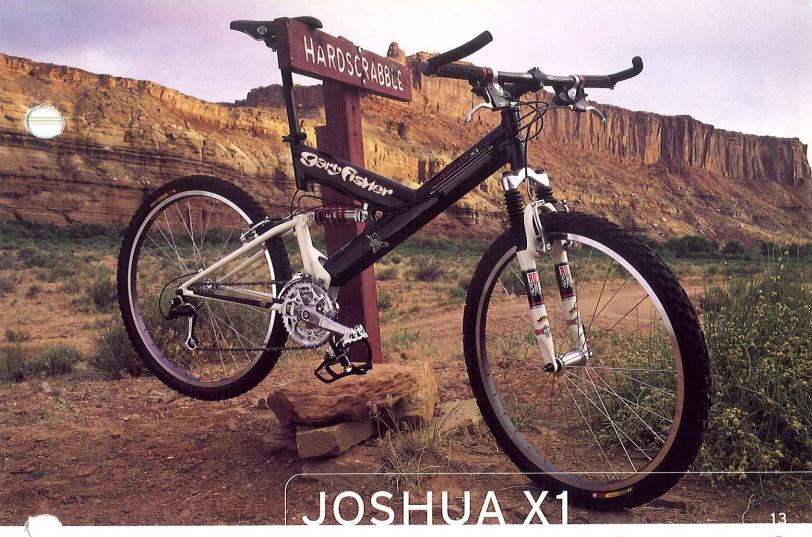
SEATPOST LENGTH

27.2mm diameter

2 waterbottle bosses

Aluminum alloy micro-adjust; 270gm;

Alloy with integral Quick Release; 35mm clamp diameter

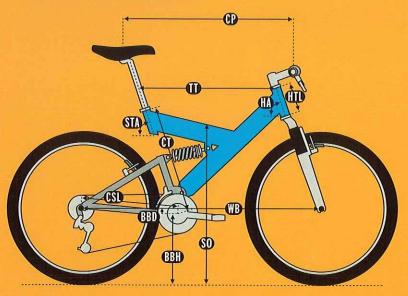


Joshua has gone Genesis. Let's put it this way: basically, it's the entry-level Joshua, the dual suspension bike made with climbing as well as descending in mind.

SIZES	SM, MD, LG	FRONT HUB	Fisher Ginzu Team; 28 hole;	SADDLE
COLOR	Midnight and Team Red		6mm skewer	SEATPOST
MAIN TUBES	Side butted oval cross section 6061 T6 aluminum with Genesis geometry	REAR HUB	Shimano STX; 32 hole; HyperGlide; 7-speed compact cassette; 135mm O.L.D.	SEAT BINDER
REAR TRIANGLE	TIG-welded cromoly	SPOKES	DT 15G stainless steel; 253mm front; 264/265mm rear	ANYTHING ELSE?
FORK	Rock Shox Indy XC; 75mm travel	FRONT RIM	Bontrager Maverick; 28 hole	
REAR SHOCK	Rock Shox Deluxe; 99mm travel	REAR RIM	Bontrager Maverick ASYM; 32 hole	
HEADSET	Dia-Compe ST Aheadset; 25mm stack; 25.4/34.0/30.0	FRONT TIRE	WTB Velociraptor; 2.1; 60 tpi	
BOTTOM BRACKET	Shimano LP27; 73 x 113 shell/axle	REAR TIRE	WTB Velociraptor; 44/50; 60 tpi	
CRANKS	Sugino Impel 300; 42/32/20;	FRONT BRAKE	Dia-Compe 737; direct pull	
CKANKS	58/94mm bolt hole	REAR BRAKE	Dia-Compe 737; direct pull	PART NUMBER
PEDALS	Alloy cage/resin body with Fisher toeclips	LEVERS	Dia-Compe DP7N; direct pull; alloy/alloy; 2 finger	STEERER LENGTH
FRONT DERAILLEUR	Shimano Alivio; top swing; top pull;	HANDLEBAR	Butted aluminum; 230gm; 6° bend	CRANK LENGTH
	34.9mm/1¾" clamp	STEM	Cold forged alloy Aheadstem	uu
.AR DERAILLEUR	Shimano XT SGS		with Quick Change;	HANDLEBAR WIDTH
SHIFTER	Shimano STX; Rapidfire+; O.G.D.		25.4mm clamp diameter; 41mm steerer clamp height	STEM LENGTH
CASSETTE	Shimano IG50; 7-speed; 11-30	GRIP	Fisher dual density	мм
CHAIN	Sachs PC-41; 104 length	BAR END	Fish Sticks; 125gm	STEN ANGLE Degrees

# LEVEL BETTY full suspension:

It used to be that mountain biking was about climbing. The better, revered and idolized riders were the ones who could get up the hills the fastest; and that was the point of the whole ultra lightweight craze we went through a few years back. The climb was the test, and then



the rider just sort of suffered through the descents, with equipment that really was not appropriate for going downhill very fast.

But then equipment got better. Most offroad bikes began to come equipped with suspension forks. Then full suspension bikes became accepted... But only if they could climb. Now, more and more riders are not as concerned with the climb. They want a bike that will handle the

climb - maybe not as fast as on a lightweight hardtail - but will still get up the hill in a respectable manner. And they are fine with going up a little slower, because after the climb, they know there will be a descent; which is the fun part. People are now going back to the roots of Repack: going downhill simply because it's a blast.

	SIZE	SM	MD	LG
\$0	STANDOVER (*)	25.98	25.98	25.98
11	TOP TUBE (*)	22.71	23.90	25.51
CP	COCKPIT LENGTH (1)	24.00	25.80	27.99
minCP	MINIMUM COCKPIT (*)	24.00	25.22	27.41
maxCP	MAXIMUM COCKPIT (*)	25.17	26.57	28.71
HTL	HEADTUBE LENGTH (MM)	115.00	115.00	125.00
HA	HEAD ANGLE (*)	69.50	70.00	70.00
STA	SEATTUBE ANGLE (4)	73.00	72.50	72.00
CSL	CHAINSTAY LENGTH (MM)	412.00	412.00	412.00
BBH	BOTTOM BRACKET HEIGHT (MM)	307.00	307.00	307.00
BBO	SOTTOM BRACKET DROP (MM)	26.00	26.00	26.00
W8	WHEELBASE (MM)	1,062.00	1,084.00	1,121,00
CT	CENTER TO TOP (*)	15.57	17.57	19.07
- 1	INSEAM RANGE (*)	27.98 -	27.98 -	27.98 -
		30.48	30.92	31.90

The Level Bettys represent the newest category of mountain bike around, and the most fun that can be had on 2 wheels. They are full suspension bikes with double crown motorcycle-style forks, featuring 4" of front wheel travel, 5" of rear wheel travel, a more heads-up riding position, wider handlebars, super strong brakes, and beefier wheel sets.

We call them 'Fun Hog' bikes: you'll notice the new model designations: Level Betty FH2, FH1, and FH0. (FH=Fun Hog.)

To haul you down from all of that speed you can carry over the rough, Bettys feature some of the strongest brakes money can buy: A combination of V-brakes and/or ceramic rims and/or disk brakes. And to keep everything rolling along smoothly, they feature bomb-proof wheels covered with gnarly meaty tires.

Check out the whole Genesis Geometry story on pages 6-8. For Fisher factory assembly information see page 56. Also see the Joshua and Level Betty Assembly Instructions on pages 60-63.



UPGRADES FROM LEVEL BETTY FHI:
MANITOU XVERT R
WITH TWIN PISTON CHAMBER
ANSWER AFTERBURNER REAR SHOCK
WTB GREASEGUARD AHEADSET
HAYES DISC BRAKES FRONT AND REAR
TITANIUM SADDLE RAILS AND HANDLEBAR

REAR DERAILLEUR

SHIFTER

CASSETTE

CHAIN

Gripshift ESP 9.0SL

Gripshift ESP900SL

Sachs PC51; 104 length

Shimano HG70-I; 8-speed; 11-30

The Afterburner. Full disc. Tyranoraptor. Berserkr. The MOST Fun Hog, period.

STEM LENGTH

SEATPOST LENGTH

SIZES	SM, MD, LG	FRONT HUB	Hugi/Hayes sealed bearing	SADDLE	Tite	Ber	erkr	; titan	ium rai	ls; lea
COLOR	Wango Mango	<u> </u>	disc brake hub; 32 hole	SEATPOST				p; 230	)gm;	
MAIN TUBES	Side butted oval cross section	REAR HUB	Hugi/Hayes rear disc brake free hub;		27.2	mm d	iame	ter		
	6061 T6 aluminum with	-	32 hole; 135mm O.L.D.	SEAT BINDER					uick Re	lease;
	super long travel geometry	SPOKES	DT 14/15 butted; 263/264mm front and rear		35m	m cla	mp d	iamet	er	
REAR TRIANGLE	6061 T6 aluminum;		950 w rdell Visit borrowates (Settle-try state)	ANYTHING ELSE?	Repl	aceal	ole de	eraille	ur hang	er
	adjustable long travel geometry	FRONT RIM	Bontrager Mustang ASYM; 32 hole		2 wa	terbo	ttle	bosses	5	
FORK	Manitou Xvert R; double clamp;	REAR RIM	Bontrager Maverick ASYM; 32 hole							
	twin piston chamber; 100mm travel	FRONT TIRE	WTB Tyranoraptor; folding bead;							
REAR SHOCK	Answer Afterburner; 132mm travel		52/54; 60 tpi							
HEADSET	WTB OS Greaseguard Aheadset; 27mm stack; 25.4/34.0/30.0	REAR TIRE	WTB Tyranoraptor; folding bead; 52/54; 60 tpi							
BOTTOM BRACKET	Shimano UN72; 73 x 113 shell/axle	FRONT BRAKE	Hayes disc	PART NUMBER	SM 4856108	MD 485620	LG 48563	18		
CRANKS	Sugino Mighty 700;	REAR BRAKE	Hayes disc	FRAMESET ONLY		485220				
	hard anodized chainrings; 22/32/44; 58/104mm bolt hole	LEVERS	Hayes disc front and rear	STEERER LENGTH	400	500	550			
PEDALS	Time Atac clipless	HANDLEBAR	Bontrager Crow bar titanium; 7° bend	CRANK LENGTH	5 M	MD 175	LG 175	1		
ONT DERAILLEUR	Shimano LX; top swing; top pull; 34.mm/1¾ clamp	STEM	Bontrager Aheadstem; 180gm; 25.4mm clamp diameter; 44.5mm steerer clamp height	HANDLEBAR WIDTH	SM 625	MD 625	LG 625	1		
			4-1.5mm section dramp neight							

GRIP

Fisher dual density

Sachs PC41; 104 length



Ahhhh. It's got a disc brake in the place you need it most – on the front wheel – and the rear wheel uses a direct pull brake with a ceramic rim. The most Fun Hog without going Whole Hog.

UPGRADES FROM LEVEL BETTY FH2:
ROCK SHOX JUDY XL
ROCK SHOX SUPER DELUXE REAR SHOCK
HAYES FRONT DISC BRAKE
CERAMIC COATED REAR RIM
XT REAR DERAILLEUR

\$128\$	SM, MD, LG	FRONT HUB	Hayes-compatible disc hub; 32 hole	SADDLE	Tite	c Ber	zerkı	; cromoly	rails
COLOR	Lime Green and Eggplant	REAR HUB	Shimano STX-RC; 32hole; 135mm O.L.D.	SEATPOST		y mic		ljust; 270	gm;
MAIN TUBES	Side butted oval cross section	-			-				m 1000 to 100
	6061 T6 aluminum with super long travel geometry	SPOKES	DT 14/15 butted; 266mm front; 264/265mm rear	SEAT BINDER				gral Quicl iameter	k Release;
REAR TRIANGLE	6061 T6 aluminum;	FRONT RIM	Bontrager Mustang ASYM; 32 hole	ANYTHING ELSE?	Rep	lacea	ble d	erailleur h	ianger
	adjustable long travel geometry	REAR RIM	Bontrager Maverick ASYM; 32 hole;		2 wa	terb	ottle	bosses	
FORK	Rock Shox Judy XL; double clamp; 101mm travel; 13,7mm upper clamp		ceramic						
		FRONT TIRE	WTB Tyranoraptor; folding bead;						
REAR SHOCK	Rock Shock Super Deluxe; 135mm travel		52/54; 60 tpi						
- And Andrews		REAR TIRE	WTB Tyranoraptor; folding bead;						
HEADSET	Dia-Compe STS Aheadset; 25mm stack; 25.4/34.0/30.0		52/54; 60 tpi						
7.5007.5007.0007.0007		FRONT BRAKE	Hayes disc	PART NUMBER	ISM	IMD	11.0	T .	
BOTTON BRACKET	Shimano UN52; 73 x 113 shell/axle	REAR BRAKE	Avid 10	FART HUNDER	4836108	5M   MD   LG 1836108   4836208   4836308			
CRANKS	Sugino Impel 300A; 20/32/42; 58/94mm bolt hole	LEVERS	Hayes disc front; Avid 1.0 rear	STEERER LENGTH	SM  400	MD 500	LG 550	1	
PEDALS	Icon clipless	( <del></del>		CRANK LENGTH	SM	MD	LG	1	
FRONT DERAILLEUR	Shimano STX; top swing; top pull;	HANDLEBAR	Bontrager Crow bar; 7° bend	ми	170	175	175	1	
AUNI DERNICEUR	34.9mm/13/8" clamp	MBIS	Bontrager Aheadstem; 180gm; 25.4mm clamp diameter;	HANDLEBAR WIDTH	SM 625	625	LG 625	1	
REAR DERAILLEUR	Shimano XT SGS		44.5mm steerer clamp height	STEM LENGTH	SM	MD 75	LG	Ĩ	
SHIFTER	Shimano LX; Rapidfire separate	GRIP	Fisher dual density	мм	60	175	90	I	
CASSETTE	Shimano IG60; 8-speed; 11-30			STEM ANGLE	SM	10	LG 10		

# ALUMINUM hardtails: two frame material choices for performance and value

The Genesis hardtail frame is available in both a frameset, and 4 different complete bikes. All of the frames feature the new Genesis geometry and a Fisher-designed double-butted Easton ProGram 6061 T6 tubeset for maximum weight savings, performance, and ride. This custom tubing spec was designed in order to create frames with the

same stiffness as our past steel frames. A Cannondale or M2 frame is twice as stiff in the parking lot test ride, but in the real world off road test, they are kidney killers. We have no pangs of worry calling this the best designed, best performing, best riding off-road hardtail racing frames ever offered. By anyone, anywhere.

In addition to the new Fisher Genesis Geometry, each of these frames feature a gusseted downtube, a reinforced headtube, a newly-designed replaceable rear derailleur hanger, and a scant 3.3lb frameset weight. The chainstays use our new Fisher forged yoke design that creates gobs of tire clearance, yet is light and stiff.



This is the aluminum frame design that the Fisher Mountain Bike Team has ridden during the 1997 racing season, and it is the frame design that can now be purchased by anybody. These bikes and framesets are meant for the intermediate mountain biker through the Grundig pro racer.

All Genesis hardtails are laser cut, hand-welded, and assembled in Waterloo, Wisconsin, USA.

	SIZE	XS	ISM	MD	LG	IXL I
50	STANDOVER (*)	25.91	27.57	29.17	30.20	31.88
11	TOP TUBE (*)	21.70	22.90	23.94	24.72	25.47
CP	COCKPIT LENGTH (*)	23.03	24.84	26.49	27.85	28.60
alaCP	MINIMUM COCKPIT (*)	23.03	24.26	25.32	26.68	27.15
Parce	MAXIMUM COCKPIT (*)	24.20	26.00	27.21	28.51	29.26
HIL	HEADTUBE LENGTH (MM)	90.00	90.00	105.00	125.00	145.00
HA	HEAD ANGLE (*)	70.34	70.84	71.34	71.34	71.34
STA	SEATTUBE ANGLE (4)	74.34	73.84	73.84	73.34	72.84
CSL	CHAINSTAY LENGTH (MM)	412.00	412.00	412.00	412.00	412.00
888	BOTTOM BRACKET HEIGHT (MM)	288.14	293.24	293.24	293.24	293.24
880	BOTTOM BRACKET DROP (MM)	44.86	39.76	39.76	39.76	39.76
WB	WHEELBASE (MM)	1,031.48	1,060.88	1,075.88	1,091.38	1,107.88
CT	CENTER TO TOP (*)	13.07	15.57	17.57	19.07	21.07
- 1	INSEAM RANGE (*)	26.91 -	29.57-	31.17-	32.20-	33.88-
		30.41	32.07	34.10	36.12	38.78

	SIZE	XS	SM	MD	LG	XL
\$0	STANDOVER (*)	24.98	26.62	28.24	29.41	30.98
11	TOP TUBE (*)	21.06	21.80	22.37	22.97	23.53
CP	COCKPIT LENGTH (*)	23.51	24.82	25.99	27.16	27.71
niaCP.	MINIMUM COCKPIT (*)	22.37	23.11	23.71	24.88	25.21
Parce	MAXIMUM COCKPIT (*)	24.65	25.97	26.69	27.81	28.37
HIL	HEADTUBE LENGTH (MM)	90.00	90.00	105.00	125.00	145.00
HA	HEAD ANGLE (*)	70.79	70.79	71.29	71.29	71.29
STA	SEATTUBE ANGLE (*)	74.29	73.79	73.79	73.29	73.29
cst	CHAINSTAY LENGTH (MM)	412.00	412.00	412.00	412.00	412.00
BBH	BOTTOM BRACKET HEIGHT (MM)	292.52	292.52	296.52	296.52	296.52
880	BOTTOM BRACKET DROP (MM)	40.48	40.48	36.48	36.48	36.48
W8	WHEELBASE (MM)	1,014.30	1,028.30	1,040.50	1,051.40	1,066.20
CI	CENTER TO TOP (*)	13.07	15.57	17.57	19.07	21.07
- 1	INSEAM RANGE (*)	25.98 -	28.62 -	30.24 -	31.41 -	32.98 -
		29,48	31.12	33.17	35.33	37.88

	SIZE	XS	ISM	MD	LG	XL	
\$0	STANDOVER (*)	24.74	26.38	28.00	29.18	30.74	
11	TOP TUBE (*)	21.06	21.80	22.37	22.97	23.53	
CP	COCKPIT LENGTH (*)	23.33	24.62	25.75	26.89	27.45	
minCP	MINIMUM COCKPIT (*)	22.26	23.00	23.60	24.73	25.22	
maxCP	MAXIMUM COCKPIT (*)	24.41	25.70	26.70	27.82	28.38	
HTL	HEADTUBE LENGTH (MM)	90.00	90.00	105.00	125.00	145.00	
HA	HEAD ANGLE (*)	71.00	71.00	71.50	71.50	71.50	
STA	SEATTUBE ANGLE (*)	74.50	74.00	74.00	73.50	73.50	
CSL	CHAINSTAY LENGTH (MM)	412.00	412.00	412.00	412.00	412.00	
888	BOTTOM BRACKET HEIGHT (MM)	291.00	291.00	295.00	295.00	295.00	
880	BOTTOM BRACKET DROP (MM)	42.00	42.00	38.00	38.00	38.00	
W8	WHEELBASE (MM)	1,013.00	1,027.00	1,039.20	1,050.10	1,064.90	
CI	CENTER TO TOP (*)	13.07	15.57	17.57	19.07	21.07	
	INSEAM RANGE (*)	25.74 -	28.38 -	30.00 -	31.18 -	32.74 -	
		29.24	30.88	32.94	35.09	37.64	

Fisher's new entry level aluminum bikes combine the performance and light weight of aluminum at the price points normally associated with much heavier cromoly bikes. The geometry is a traditional off-road orientation, with performance angles and suspension purpose, but they are still plenty comfortable for all users. They feature gusseted downtubes for strength in off-road riding, and a replaceable derailleur hanger to protect the investment.

The Kaitai frame is made in the USA of 6061 aluminum; the Tassajara frame is built from 7005 aluminum, and is imported. In both cases painting, alignment, and assembly are done in Waterloo, Wisconsin, USA.

Check out the whole Genesis Geometry story on pages 6-8. For Fisher factory assembly information see page 56. Also see the Aluminum Assembly Instructions on page 58.



Are we free riding, or riding for free? I thought it was mountain biking. Big travel, big traction, big Fun Hog... The most fun per dollar.

HANDLEBAR WIDTH

SEATPOST LENGTH

STEM LENGTH

SIZES	SM, MD, LG	FRONT HUB	Fisher Ginzu Team; 32 hole	SADDLE	Tite	c Ber	zerk	r; cı	romoly	rails	
COLOR	Pearl Red and Pearl Gray	REAR HUB	Shimano STX; 32 hole; 135mm O.L.D.	SEATPOST		Alloy micro-adjust; 270gm;			gm;		
MAIN TUBES	Side butted oval cross section 6061 T6 aluminum with	SPONES	DT 14/15G butted stainless steel; 267mm front; 264/265mm rear	SEAT BINDER	Allo	27.2mm diameter Alloy with integral Quick Re			k Relea	se;	
	super long travel geometry	FRONT RIM	Bontrager Maverick; 32 hole	-	8	35mm clamp diameter					
REAR TRIANGLE	6061 T6 aluminum; adjustable long travel geometry	REAR RIM	Bontrager Maverick ASYM; 32 hole	ANYTHING ELSE?		Replaceable derailleur hange				nanger	
FORK	Rock Shox Judy XLC; double clamp;	FRONT TIRE	WTB Tyranoraptor; 52/54; 60 tpi		2 w	aterb	ottle	bos	ses		
	100mm travel; 14mm upper clamp	REAR TIRE	WTB Tyranoraptor; 52/54; 60 tpi								
REAR SHOCK	Rock Shox Deluxe coil over; 135mm travel	FRONT BRAKE	Dia-Compe 737; direct pull								
National Co.	2	REAR BRAKE	Dia-Compe 737; direct pull								
HEADSET	Dia-Compe STS OS Aheadset; 25mm stack; 25.4/34.0/30.0	LEVERS	Dia-Compe DP7N; direct pull; alloy/alloy; 2 finger								
BOTTOM BRACKET	Shimano UN52; 73 x 113 shell/axle			PART NUMBER	SM 480610	8 48052	8 4506	308			
CRANKS	Sugino Impel 300A; 20/32/42;	HANDLEBAR	Bontrager Crow bar; 7° bend	***************************************				enero vo			
VARIAN	58/94mm bolt hole	STEM	Cold forged alloy with Quick Change;	STEERER LENGTH	100	500	550				
PEDALS	Icon clipless		25.4mm clamp diameter; 41mm steerer clamp height	CRANK LENGTH	SM  170	MD 175	XL	Ĩ			
ONT DERAILLEUR	Shimano Alivio; top swing; top pull;	GRIP	Fisher dual density	HANDLEBAR WIDTH	SM	MD	XL	ï			

34.9mm/13/8" clamp Shimano Deore LX SGS

Shimano IG50; 7-speed; 11-30

Sachs PC41; 104 length

Shimano MC40

REAR DERAILLEUR

SHIFTER

CASSETTE CHAIN

# 606157005

# WITNESS THE GRUDGE MATCH OF THE CENTURY!

"What's the difference between the 6061, 7005 and MMC framesets? Why doesn't Fisher use a more 'high tech' aluminum?"

While 6061 T6 doesn't have the highest yield strength of all aluminum alloys, and it not the stiffest, it does have the best ductility for making bikes. And that's far more important. Ductilty is how much a material will bend before breaking and its measured in % of Elongation.

Low % Elongation = low ductility	
Low % Elongation = more brittle material	
Low % Elongation = less fatigue resistant	

The higher the ductility, the better the material for a bicycle frame. If a material has low ductility, you need to use more of it to gain comparable strength, so the lightest aluminum frames come from 6061.

MATERIAL	% ELONGATION (DUCTILITY)
3/2.5 Titanium	12%
Cromoly steel	10%
6061 T6	10%
7005 T6	8%
M2 (15% Al O T6)	5.4%

MATERIAL	FRAME WEIGHT
Fisher Easton butted 6061 T6	3.3 lbs
M2 S works butted (15%Al O T6)	3.7 lbs
Fisher straight gauge 6061 T6	3.8 lbs
Fisher straight gauge 7005 T6	4.0 lbs
Fisher butted true temper cromoly	4.2 lbs

## FISHER 6061 FRAMES

All Gary Fisher 6061 frames are hand made in the USA: in Waterloo, Wisconsin. After welding, each Fisher 6061 frame goes through an expensive, and time-consuming three step

heat-treating process. Step one heats each frame to a near-molten 998° to regain all the strength lost in the welding process. Coming out of the oven, the soft frames are individually inspected and aligned. It's a real Wisconsin craftsperson who does this job, one frame at a time. The third step is to age-harden each frame at 350° for up to 8 hours. It is through this process that the ductility and strength of each frame is restored and optimized. The greatest strength at the lightest weight.

## FISHER 7005 FRAMES

Raw 7005 tubing is actually slightly more expensive than 6061, however a 7005 frame is easier (less expensive) to make. 7005 is used by many Taiwanese and smaller American makers who do not have the expensive high temperature ovens needed to make 6061 frames correctly. You can eliminate two of the three steps involved in heat treating 6061. With 7005 you can skip the heat treating and alignment and simply age-harden.

The drawback to 7005 is that since the ductility is not as high, you have to use more material to make it as strong. More material, heavier frames.

We are using the best Taiwanese frame maker for our 7005 T6 frames, inspecting them one by one in our Waterloo, Wisconsin plant, painting and assembling them in the USA. The 7005 frames are a great value; they just need to be a little heavier to have the same longevity as a 6061 frame.





One of the lightest Fishers ever: a sub-23-pound bike. The Rock Shox SID fork is the new cross country standard, period. Also, it has Crossmax wheels, XTR derailleur and brakes, Time pedals, and Continental Double Fighter tires. I've never had a bike this light and this tough. Never.

UPGRADES FROM MT TAM:
ROCK SHOX SID
MIGHTY 900 CRANKSET
MAVIC CROSSMAX WHEELS
TITANIUM SADDLE RAILS AND HANDLEBAR
XTR V BRAKES
CONTINENTAL DOUBLE FIGHTER TIRES

SIZES	XS, SM, MD, LG, XL	FRONT HUB Mavic Crossmax; 26 hole		SADDLE						0.2	
COLOR	Video Blue and Lime Green	REAR HUB	Mavic Crossmax; 28 hole;		perforated leather/Kev					sides	į
HAIN TUBES	Fisher Genesis double butted		135mm O.L.D.	SEATPOST	Thom 27.2r				;m;		
B-1	Easton ProGram 6061 T6 aluminum										
STAYS	Easton 6061 T6 aluminum		alloy nipples; 255mm front; 273/255mm rear	SEAT BINDER	Alloy with integral bolt; 35mm clamp diameter						
FORK	Rock Shox SID; 63mm travel	FRONT RIM	Mavic Crossmax; 26 hole	ANYTHING ELSE?	Replaceable derailleur hanger						
HEADSET	WTB OS Greaseguard Aheadset; 27mm stack; 25.4/34.0/30.0	REAR RIM	REAR RIM Mavic Crossmax; 28 hole		2 waterbott			le bosses			
BOTTOM BRACKET	Shimano UN72; 73 x 113 shell/axle	FRONT TIRE	Continental Double Fighter; Kevlar; 2.0 race tread								
CRANES	Sugino Mighty 900; hard anodized chainrings; 20/32/42; 58/104mm bolt hole	REAR TIRE	Continental Double Fighter; Kevlar; 2.0 race tread								
PEDALS	Time ATAC clipless	FRONT BRAKE	Shimano XTR V-brake	PART NUMBER	XS 4186008	SM 4186108	MD 4186208	B 418530	XL 8 418640	.	
FRONT DERAILLEUR	Shimano XT; top swing; top pull;	REAR BRAKE	Shimano XTR V-brake	FRAMESET ONLY	4182008				418240		
PRONT DENTITIES	34.9mm/1¾" clamp	LEVERS	Shimano XT STI V-levers	STEERER LENGTH	168	S.M.   168	MD 183	LG 203	223	1	
REAR DERAILLEUR	Shimano XTR SGS; reverse spring; Rapidrise	HANDLEBAR	Bontrager race lite; 5° bend	CRANK LENGTH	X.S	SM   175	MD 175	LG 175	XL 177.5	Ī	
		STEM	Bontrager alloy Aheadstem							1.	
SHIFTER	Shimano XT; Rapidfire SL; STI		with Quick Change; 180gm; 25.4mm clamp diameter;	HANDLEBAR WIDTH	X S   560	550	MD 560	160	XL 560		(
CASSETTE	Shimano XT; 8-speed IG; 11-30		44.5mm steerer clamp height	STEM LENGTH	xs	SM	MD	LG	XL	ř	
CHAIN	Sachs PC61; 104 length	GRIP	Fisher dual density	мм	60	75	90	105	105	1	
		BAR END	Fish Fins; 120gm	STEM ANGLE DEGREES	XS 10	SM  10	10 10	10	III	1	
				SEATPOST LENGTH	X S   330	SM   390	MD 390	LG   390	XL 390	1	



UPGRADES FROM PARAGON:
MANITOU SXR FORK
WITH TWIN PISTON CHAMBER DAMPING
SUGINO MIGHTY 700 CRANK
MAVIC CROSSLAND WHEELS
XTR REAR DERAILLEUR
WTB GREASEGUARD AHEADSET

It's back. The Wango Mango bike. It's a great raceable hardtail: fast, efficient. Cool, light, strong Mavic Crossland wheels. Honkin' cool bar ends.

SIZES	XS, SM, MD, LG, XL	FRONT HUB Mavic Crossland; 26 hole		SADDLE	WTB	SSTX	; cro	molyı	rail; K	evlar side	
COLOR	Wango Mango	REAR HUB	Mavic Crossland; 28 hole;	SEATPOST	Bont	rager	com	p; 27.	2mm d	diameter	
MAIN TUBES	Fisher Genesis double butted Easton ProGram 6061 T6 aluminum	SPOKES	135mm O.L.D.  Mavic Crossland; 255mm front;	SEAT BINDER	Alloy with integral bolt; 35mm clamp diameter						
STAYS	Easton 6061 T6 aluminum		273/255mm rear	ANYTHING ELSE?	Repl	aceab	le de	raille	ur har	nger	
FORK	Manitou SXR; 70mm travel	FRONT RIM	Mavic Crossland; 26 hole	4	2 wa	terbo	ttle b	osses	S		
HEADSET	WTB OS Greaseguard Aheadset;	REAR RIM	Mavic Crossland; 28 hole	_							
HEADSEI	27mm stack; 25.4/34.0/30.0	FRONT TIRE	WTB Velociraptor; Kevlar;								
BOTTOM BRACKET	Shimano UN52; 73 x 113 shell/axle	7	2.1; 60 tpi								
CRANKS	Sugino Mighty 700; hard anodized chainrings; 20/32/42;	REAR TIRE	WTB Velociraptor; Kevlar; 44/50; 60 tpi								
	58/104mm bolt hole	FRONT BRAKE	Avid 20								
PEDALS	Icon clipless	REAR BRAKE	Avid 20	PART NUMBER	X5 4176008	SM 4176108	MD 4176208	LG 4176308	XL 4176408	I	
FRONT DERAILLEUR	Shimano LX; top swing; top pull;	LEVERS	Avid 1.9	STEERER LENGTH		SM		LG	XL	T.	
	34.9mm/1¾" clamp	HANDLEBAR	Bontrager comp; 5° bend	שט	168	168	183	203	253	Į	
REAR DERAILLEUR	Shimano XTR SGS; reverse spring; Rapidrise	STEM	Bontrager alloy Aheadstem with Quick Change; 180gm;	CRANK LENGTH	XS  170	<b>SM</b>   175	MD   175	LG   175	X L  175		
SHIFTER	Shimano XT; Rapidfire SL		25.4mm bar clamp diameter;	HANDLEBAR WIDTH	XS 580	SM 580	MD 580	LG 580	XL 580	Ĩ	
CASSETTE	Shimano HG70-I; 8-speed; 11-30		44.5mm steerer clamp height	STEM LENGTH					XL	Ÿ	
CHAIN	Sachs PC41; 104 length	GRIP	Fisher dual density	- NA	60 60	75	90	105	105	Į.	
		BAR END	Fish Fins; 120gm	STEM ANGLE Degrees	xs 10	SM  10	MD  10	10 10	XL  10		
				SEATPOST LENGTH	XS   300	SM   350	MD  350	150 350	XL  350	1	



ALU:

Super light. This thing reaches that next level of lightness. Now with Rapidfire.

UPGRADES FROM BIG SUR:
ROCK SHOX INDY SL
BOHTRAGER VALIANT SL FRONT RIM
BOHTRAGER MUSTANG ASYM REAR RIM
SADDLE WITH CROMOLY RAILS
FISH FIN BAR ENDS
>1 LB LIGHTER

SIZES	XS, SM, MD, LG, XL	FRONT HUB Fisher Ginzu Pro; 28 hole; 6mm skewer		SADDLE	WTB SSTX; cromoly rail; Kevlar corners								
COLOR	Midnight		1		Bontrager comp; 27.2mm diame						10 4 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6		
MAIN TUBES	Fisher Genesis double butted	REAR HUB	Shimano LX; 32 hole; 135mm O.L.D.	SEATPOST	Bon	trage	rcom	p; 27.	2mm	diam	eter		
	Easton ProGram 6061 T6 aluminum	SPOKES	DT 15/16 butted stainless steel; 253mm front; 264/265mm rear	SEAT BINDER		Alloy with integral bolt; 35mm clamp diameter							
STAYS	Easton 6061 T6 aluminum	3		<u> </u>	-	Replaceable derailleur hanger							
FORK	Rock Shox Indy SL; alloy steerer;	FRONT RIM	Bontrager Valiant; 28 hole ANYTHING ELSE?		Rep	lacea	ble de	raille	ur ha	inger			
	63mm travel	REAR RIM	Bontrager Mustang ASYM; 32 hole		2 w	aterbo	ttle t	osse	S				
HEADSET	Dia-Compe SAS alloy Aheadset; 27mm stack; 25.4/34.0/30.0	FRONT TIRE	FRONT TIRE WTB Velociraptor; Kevlar; 2.1; 60 tpi										
BOTTOM BRACKET	Shimano UN52; 73 x 113 shell/axle	REAR TIRE	WTB Velociraptor; Kevlar;										
CRANKS	Sugino Mighty 500; 20/32/42; 58/104mm bolt hole	N	44/50; 60 tpi										
		FRONT BRAKE	Avid 20										
PEDALS	Icon clipless	REAR BRAKE	Avid 20	PART NUMBER	XS 415500	SM 4166108	MD 416620	LG 416630	XL A16640				
FRONT DERAILLEUR	Shimano LX; top swing; top pull;	LEVERS	Avid 1.9	STEERER LENGTH	XS	SM	MD	LG	XL	1			
	34.9mm/1¾" clamp	HANDLEBAR	Butted aluminum; ATB alloy;	MA.	168	168	183	203	223	Į			
REAR DERAILLEUR	Shimano Deore XT SGS		580mm; 180gm; 5° bend	CRANK LENGTH	X S   170	SM   175	MD 175	LG 175	175	Ï			
SHIFTER	Shimano Deore LX; Rapidfire SL	STEM	Cold forged alloy Aheadstem	ММ					1175	t			
CASSETTE	Shimano IG60; 8-speed; 11-30		with Quick Change; 25.4mm clamp diameter;	HANDLEBAR WIDTH	XS   560	560	560	560	560		)		
CHAIN	Sachs PC41; 104 length		41.0mm steerer clamp height	STEM LENGTH	XS	SM	MD	LG	XL	T			
		GRIP	Fisher dual density	ии	60	75	90	105	105	ř			
		BAR END	Fish Fins; 120gm	STEM ANGLE DEGREES	IXS 10	10	10 10	10	10 10	1			
				SEATPOST LENGTH	XS	SM   350	MD 350	LG 350	X L 350	Ï			



UPGRADES FROM KAITAI:
THE NEW STANDARD
IN HARDTAIL GEOMETRY
INDY XC FORK
AVID DIRECT PULL BRAKES
MIGHTY 350 4 ARM CRANK
ICON CLIPLESS PEDALS

It's the beginning of the beginning. Where Genesis begins. The same frame as the Supercaliber. Dripping with lots of really nice stuff.

SIZES	XS, SM, MD, LG, XL	FRONT HUB Fisher Ginzu Team; 28 hole			WT	BSST	X															
COLOR	Acid Yellow	REAR HUB	Shimano STX-RC; 32 hole; 135mm O.L.D.	SEATPOST	0SI Alloy micro-adjust; 270 27.2mm diameter				270gr	m;												
MAIN TUBES	Fisher Genesis double butted Easton ProGram 6061 T6 aluminum	SPOKES	DT 15G stainless steel; 253mm front;	SEAT BINDER	5 60	0.000.000.00		0650	Duick	Release;												
STAYS	Easton 6061 T6 aluminum	770112	264/265mm rear		35mm clamp diameter																	
FORK	Rock Shox Indy XC: 63mm travel	FRONT RIM	Bontrager Maverick; 28 hole	ANYTHING ELSE?																		
HEADSET	Dia-Compe STS OS Aheadset;	REAR RIM	Bontrager Maverick ASYM; 32 hole		2 w	aterb	ottle	oosse	s													
menuver.	25mm stack; 25.4/34.0/30.0	FRONT TIRE	WTB Velociraptor; 2.1; 60 tpi																			
BOTTOM BRACKET	Shimano UN52; 73 x 113 shell/axle	REAR TIRE	WTB Velociraptor; 44/50; 60 tpi																			
	Sugino Mighty 350; 20/32/42;	FRONT BRAKE	Avid 10																			
	58/104mm bolt hole	REAR BRAKE	Avid 10																			
PEDALS	Icon clipless	LEVERS	Avid 1.0	PART NUMBER	IXS	ISM	IMD	LLG	(XI	1												
FRONT DERAILLEUR	Shimano STX; top swing; top pull; 34.9mm/1%" clamp	HANDLEBAR	Butted aluminum; ATB alloy; 580mm; 230gm; 5° bend	STEERER LENGTH					08 405640	18												
REAR DERAILLEUR	Shimano XT SGS	STEM	Cold forged alloy Aheadstem	STEERER LENGTH	162	S M   162	MD  177	197	217	Į.												
SHIFTER	Shimano STX-RC; Rapidfire+; 8-speed with OGD		3169	311.8	3164	SIEM			SIEM	SIEM	3164	SIEM	SIEM	3164	3101	with Quick Change; 25.4mm clamp diameter;	CRANK LENGTH	XS  170	SM  175	MD 175	LG  175	175
CASSETTE	Shimano IG60; 8-speed; 11-30		41.0mm steerer clamp height	HANDLEBAR WIDTH	580	580	580	580	580	1												
CHAIN	Sachs PC41; 104 length	GRIP	Fisher dual density	STEM LENGTH	XS	SM	MD	LG	XL	f												
vunii.	ACCOMMENDED TO CONTRACT CONTRA	BAR END	Fish Sticks; 125gm	uu	60	75	90	105	105	Ĭ.												
				STEM ANGLE	XS 10	SM  10	MD  15	LG  15	XL  15													
				SEATPOST LENGTH	300	350	MD  350	1 LG 350	X L 350	I												



ALUMIN

A hand-made 6061 aluminum frame, made in the US of A; the new Manitou Spyder fork; Bontrager welded and machined rims with an ASYM rear – it's real performance. It's a real rider's bike.

UPGRADES FROM TASSAJARA:
MANITOU SPYDER FORK
RAPIDFIRE SHIFTERS
BOHTRAGER MAVERICK RIMS
WITH ASYM REAR
US MADE 6061 T6 ALUMINUM FRAME

COLOR	Acid Tangerine
COLUK	- Actu tangerine
MAIN TUBES	TIG-welded 6061 T6 aluminum alloy
STAYS	TIG-welded 6061 T6 aluminum alloy
FORK	Manitou Spyder; 70mm travel
HEADSET	Dia-Compe STS OS Aheadset;
	25mm stack; 25.4/34.0/30.0
BOTTOM BRACKET	Shimano LP27; 73 x 113 shell/axle
CRANKS	Sugino Impel 250; 22/32/42
PEDALS	Alloy cage/resin body
	with Fisher toeclip
RONT OFRAILIFUR	Shimano Alivio; top swing; top pull;
	34.9mm/13/8" clamp
REAR DERAILLEUR	Shimano STX SGS
SHIFTER	Shimano STX MC40
CASSETTE	Shimano IG50; 7-speed; 11-30
CHAIN	Sachs PC21; 104 length

252 CV25 CV CV	CLI AIL L DO L L
REAR HUB	Shimano Alivio; 32 hole;
	135mm O.L.D.
SPOKES	DT 15G stainless steel; 266mm front
	264/265mm rear
FRONT RIM	Bontrager Maverick; 32 hole
REAR RIM	Bontrager Maverick ASYM; 32 hole
FRONT TIRE	WTB Primal Raptor; 2.1; 60 tpi
REAR TIRE	WTB Primal Raptor; 47/52; 60 tpi
FRONT BRAKE	Dia-Compe 737; direct pull
REAR BRAKE	Dia-Compe 737; direct pull
LEVERS	Dia-Compe DP7N; direct pull;
	alloy/alloy; 2 finger
HANDLEBAR	Butted aluminum; ATB alloy;
	580mm; 230gm; 5° bend
STEM	Diecast alloy Aheadstem
	with Quick Change;
	25.4mm clamp diameter;
	41.0mm steerer clamp height
GRIP	Fisher dual density
BAR END	Alloy short

SADDLE	Fisher 'supersoft' foam
SEATPOST	Alloy micro-adjust; 270gm; 27.2mm diameter
SEAT BINDER	Aluminum alloy micro-adjust; 35mm clamp diameter
ING ELSE?	Replaceable derailleur hanger
	2 waterbottle bosses

PART NUMBER	XS 4035008	SM 4036108	MD 4036208	LG 4036308	XL 4036408	1
STEERER LENGTH	XS  162	SM 162	MD 177	LG 197	217	
CRANK LENGTH	XS   170	SM   175	MD  175	LG  175	X L   175	1
HANDLEBAR WIDTH	X S   580	SM   580	MD  580	LG 580	XL  580	I
STEM LENGTH	X S   90	ISM 105	MD  120	LG 135	XL  135	1
STEM ANGLE DEGREES	X S   5	S.M.   15	MD 15	LG 15	XL 15	
SEATPOST LENGTH	X5 300	SM 350	MD 350	LG 350	XL 350	1



UPGRADES FROM MARLIN: Lightweight aluminum frame DT SPOKES REPLACEABLE DERAILLEUR HANGER

This is the value 7005 aluminum alloy frame bike with comfort features such as Serfas grips, supersoft saddle, and 25° rise stem. Plus... It's aluminum! The alloy bike for the entry-level buyer.

SIZES	XS, SM, MD, LG, XL	FRONT HUB	Oversize sealed; 32 hole	SADDLE	Fish	ner 'su	ipers	oft' fo	am	
COLOR	Red Earth	REAR HUB	Shimano Acera-X; 32 hole;	SEATPOST		minun 2mm d			ro-ad	just;
MAIN TUBES	TIG-welded 7005 aluminum alloy		135mm O.L.D.					- Control of the Cont	Water Torons	
STAYS	TIG-welded 7005 aluminum alloy	SPOKES	DT 15G stainless steel; 268mm front; 266/267mm rear	SEAT BINDER		y with nm cla				Release;
FORK	Cromoly butted	FRONT RIM	Weinmann 519; 32 hole	ANYTHING ELSE?	Rep	lacea	ble de	raille	ur ha	nger
HEADSET	Oversize double sealed; threaded; 35mm stack; 25.4/34.0/30.0	REAR RIM	Weinmann 519; 32 hole		2 w	aterbo	ottle	oosse	s	
BOTTOM BRACKET	Shimano LP27; 73 x 113 shell/axle	FRONT TIRE	WTB Primal Raptor; 47/54							
		REAR TIRE	WTB Primal Raptor; 47/52							
CRANKS	Sugino Impel 250; 22/32/42	FRONT BRAKE	Dia-Compe 737; direct pull							
PEDALS	Resin with Fisher toeclip	REAR BRAKE	Dia-Compe 737; direct pull							
FRONT DERAILLEUR	Shimano Alivio; top swing; top pull;									
	34.9mm/1¾s" clamp	LEVERS	Dia-Compe DP7N; direct pull; alloy/alloy; 2 finger	PART NUMBER	XS 40100	SM 401010	MD 401070	LG 401030	XL 401040	18
REAR DERAILLEUR	Shimano STX SGS	-								
SHIFTER	Gripshift SRT 4.0	HANDLEBAR	Butted aluminum alloy; 580mm; 230gm; 5° bend	STEERER LENGTH	127	127	142	162	182	
CASSETTE	Shimano IG50; 7-speed; 11-30	Mats	ATB cromoly with Quick Change;	CRANK LENGTH	XS	SM 175	MD 175	LG 175	XL  175	1
CHAIN	Sachs PC21; 104 length		25.4mm clamp diameter;							
			25.4mm insertion	HANDLEBAR WIDTH	X S   580	SM   580	580	LG 580	S80	
		GRIP	Serfas dual density	STEM LENGTH	XS	SM	MD	LG	XL	ĩ
		BAR END	Alloy short	мм	90	105	120	135	135	4
				STEM ANGLE	X S   24	SM   24	MD 24	LG 24	24 24	
				UTANAL TANGELDS	IVC	ISM	IMD	11.6	LYE	Y

# STEEL hardtails:

Quintessential Fishers The biggest story for our steel bikes in '98 is that we have substantially improved the fit and comfort of the lower-end bikes. Cool-looking dual density saddles and grips will make for the smoothest test

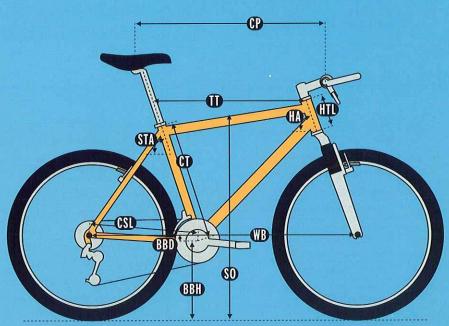
rides ever. High angle stems for the smart people in the crowd that don't see a need to race through life. Comfort to go. Comfort that looks cool.

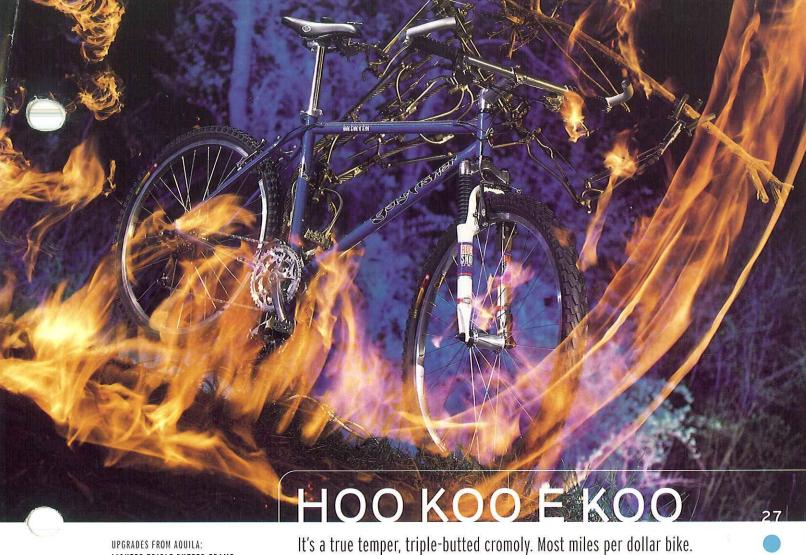
The steel frames have stayed basically the same in spirit with a few nice refinements. First off; we changed the sizing in the extra small frames. We have lowered the standover height and reduced the top tube length to make it fit small riders better.

At the high end of the steel bikes, we have worked to reduce the weight by using higher tech materials in the bottom bracket and have we have redesigned stronger drop outs. But the big news is that we haven't added anything to these bikes. Sure, big tubes look beefy, but they don't do a thing to help the ride of a steel bike. All large tubes do for steel bikes is make them heavy. Leave large diameters to aluminum tubes. Why fix what is not broken.

# Fisher steel bikes just work.

	SIZE	XS	ISM	IMD	ILG	IXL
\$0	STANDOVER (*)	25.83	28.74	29.86	30.86	31.85
П	TOP TUBE (*)	21.14	21.81	22.36	22.95	23.50
CP	COCKPIT LENGTH (*)	23.64	24.90	26.06	27.23	27.78
inCP	MINIMUM COCKPIT (*)	22.48	23.16	23.73	24.90	25.18
HER	MAXIMUM COCKPIT (*)	24.81	26.06	26.67	27.78	28.33
HTL	HEADTUBE LENGTH (MM)	85.00	85.00	105.00	125.00	145.00
HA	HEAD ANGLE (*)	70.48	70.59	71.09	71.09	71.09
STA	SEATTURE ANGLE (4)	73.98	73.59	73.59	73.09	73.09
CSL	CHAINSTAY LENGTH (MM)	420.00	420.00	420.00	420.00	420.00
BBH	BOTTOM BRACKET HEIGHT (MM)	291.81	294.05	298.05	298.05	298.05
880	BOTTOM BRACKET DROP (MM)	41.19	38.95	34.95	34.95	34.95
WB	WHEELBASE (MM)	1,015.66	1,028.51	1,040.31	1,051.31	1,066.01
CT	CENTER TO TOP (*)	13.00	17.37	18.53	19.76	21.24
	INSEAM RANGE (*)	26.83 -	30.74 -	31.86 -	32.86 -	33.85 -
		30.33	33.24	34.80	36.78	38.76
	SIZE	xs	SM	MD	LG	XL
	STANDOVER	25.20	28.35	29.50	30.50	32.17
H	STANDOVER TOP TUBE	25.20 21.14	28.35 21.81	29.50 22.36	30.50 22.95	32.17 23.50
TT CP	STANDOVER TOP TUBE COCKPIT LENGTH	25.20 21.14 23.39	28.35 21.81 24.63	29.50 22.36 25.74	30.50 22.95 26.87	32.17 23.50 27.42
CP inCP	STANDOVER TOP TUBE COCKPIT LENGTH MINIMUM COCKPIT	25.20 21.14 23.39 22.31	28.35 21.81 24.63 23.01	29.50 22.36 25.74 23.58	30.50 22.95 26.87 24.71	32.17 23.50 27.42 25.20
CP inCP	STANDOVER TOP TUBE COCKPIT LENGTH MINIMUM COCKPIT MAXIMUM COCKPIT	25.20 21.14 23.39 22.31 24.47	28.35 21.81 24.63 23.01 25.71	29.50 22.36 25.74 23.58 26.69	30.50 22.95 26.87 24.71 27.80	32.17 23.50 27.42 25.20 28.36
CP nCP xCP HTL	STANDOVER TOP TUBE COCKPIT LENGTH MINIMUM COCKPIT MAXIMUM COCKPIT HEADTUBE LENGTH	25.20 21.14 23.39 22.31 24.47 85.00	28.35 21.81 24.63 23.01 25.71 85.00	29.50 22.36 25.74 23.58 26.69 105.00	30.50 22.95 26.87 24.71 27.80 125.00	32.17 23.50 27.42 25.20 28.36 145.00
CP INCP INCP HTL HA	STANDOVER TOP TUBE COCKPIT LENGTH MINIMUM COCKPIT MAXIMUM COCKPIT HEADTANDLE (*)	25.20 21.14 23.39 22.31 24.47 85.00 70.50	28.35 21.81 24.63 23.01 25.71 85.00 71.00	29.50 22.36 25.74 23.58 26.69 105.00 71.50	30.50 22.95 26.87 24.71 27.80 125.00 71.50	32.17 23.50 27.42 25.20 28.36 145.00 71.50
CP CP CP XCP HTL HA STA	STANDOVER TOP TUBE COCKPIT LENGTH MINIMUM COCKPIT MAXIMUM COCKPIT HEAD TUBE LENGTH HEAD ANGLE (*) SEATTUBE ANGLE (*)	25.20 21.14 23.39 22.31 24.47 85.00 70.50 74.50	28.35 21.81 24.63 23.01 25.71 85.00 71.00 74.00	29.50 22.36 25.74 23.58 26.69 105.00 71.50 74.00	30.50 22.95 26.87 24.71 27.80 125.00 71.50 73.50	32.17 23.50 27.42 25.20 28.36 145.00 71.50 73.50
CP CP CP CP HTL HA STA CSL	STANDOVER TOP TUBE COCKPIT LENGTH MINIMUM COCKPIT MAXIMUM COCKPIT HEADUBE LENGTH HEAD ANGLE (*) SEATTUBE ANGLE (*) CHAINSTAY LENGTH	25.20 21.14 23.39 22.31 24.47 85.00 70.50 74.50 420.00	28.35 21.81 24.63 23.01 25.71 85.00 71.00 74.00 420.00	29.50 22.36 25.74 23.58 26.69 105.00 71.50 74.00 420.00	30.50 22.95 26.87 24.71 27.80 125.00 71.50 73.50 420.00	32.17 23.50 27.42 25.20 28.36 145.00 71.50 73.50 420.00
CP CP CP HTL HA STA CSL	STANDOVER TOP TUBE COCKPIT LENGTH MINIMUM COCKPIT MAXIMUM COCKPIT HEADTUBE LENGTH HEAD ANGLE (*) SEATUBE ANGLE (*) CHAINSTAY LENGTH BOTTOM BRACKET HEIGHT	25.20 21.14 23.39 22.31 24.47 85.00 70.50 74.50 420.00 288.00	28.35 21.81 24.63 23.01 25.71 85.00 71.00 74.00 420.00 291.00	29.50 22.36 25.74 23.58 26.69 105.00 71.50 74.00 420.00 295.00	30.50 22.95 26.87 24.71 27.80 125.00 71.50 73.50 420.00 295.00	32.17 23.50 27.42 25.20 28.36 145.00 71.50 73.50 420.00 295.00
CP CP CP CP HTL HA STA CSL BBH BBD	STANDOVER TOP TUBE COCKPIT LENGTH MINIMUM COCKPIT MAXIMUM COCKPIT HEADTUBE LENGTH HEAD ANGLE (*) SEATTUBE ANGLE (*) CHAINSTAY LENGTH BOTTOM BRACKET HEIGHT BOTTOM BRACKET DROP	25.20 21.14 23.39 22.31 24.47 85.00 70.50 74.50 420.00 288.00 45.00	28.35 21.81 24.63 23.01 25.71 85.00 71.00 74.00 420.00 291.00 42.00	29.50 22.36 25.74 23.58 26.69 105.00 71.50 74.00 420.00 295.00 38.00	30.50 22.95 26.87 24.71 27.80 125.00 71.50 73.50 420.00 295.00 38.00	32.17 23.50 27.42 25.20 28.36 145.00 71.50 73.50 420.00 295.00 38.00
TT CP RCP ACP HTL HA STA CSL BBH WB	STANDOVER TOP TUBE COCKRIT LENGTH MINIMUM COCKRIT MAXIMUM COCKRIT HEADTUBE LENGTH HEAD ANGLE (*) SEATUBE ANGLE (*) CHAINSTAY LENGTH BOTTOM BRACKET HEIGHT BOTTOM BRACKET DROP WHEELBASE	25.20 21.14 23.39 22.31 24.47 85.00 70.50 74.50 420.00 288.00 45.00 1,015.70	28.35 21.81 24.63 23.01 25.71 85.00 71.00 74.00 420.00 291.00 42.00 1,025.90	29.50 22.36 25.74 23.58 26.69 105.00 71.50 74.00 420.00 295.00 38.00 1,039.60	30.50 22.95 26.87 24.71 27.80 125.00 71.50 73.50 420.00 295.00 38.00 1,048.70	32.17 23.50 27.42 25.20 28.36 145.00 71.50 73.50 420.00 295.00 38.00 1,063.40
TT CP inCP exCP HTL HA STA CSL BBH BBD WB	STANDOVER TOP TUBE COCKPIT LENGTH MINIMUM COCKPIT MAKINUM COCKPIT HEADTUBE LENGTH HEAD ANGLE (*) SEATTUBE ANGLE (*) CHAINSTAY LENGTH BOTTOM BRACKET HEIGHT BOTTOM BRACKET HEIGHT WHEELBASE CENTER TO TOP	25.20 21.14 23.39 22.31 24.47 85.00 70.50 74.50 420.00 288.00 1,015.70 13.00	28.35 21.81 24.63 23.01 25.71 85.00 71.00 74.00 420.00 291.00 42.00 1,025.90	29.50 22.36 25.74 23.58 26.69 105.00 71.50 74.00 420.00 295.00 38.00 1,039.60 18.33	30.50 22.95 26.87 24.71 27.80 125.00 71.50 73.50 420.00 295.00 38.00 1,048.70 19.58	32.17 23.50 27.42 25.20 28.36 145.00 71.50 420.00 295.00 38.00 1.063.40 21.08
CP EXCPPEXCP HTLL HAA STA CSL BBH BBD WB	STANDOVER TOP TUBE COCKPIT LENGTH MINIMUM COCKPIT MAKINUM COCKPIT HEADTUBE LENGTH HEAD ANGLE (*) SEATTUBE ANGLE (*) CHAINSTAY LENGTH BOTTOM BRACKET HEIGHT BOTTOM BRACKET HEIGHT WHEELBASE CENTER TO TOP	25.20 21.14 23.39 22.31 24.47 85.00 70.50 74.50 420.00 288.00 45.00 1,015.70	28.35 21.81 24.63 23.01 25.71 85.00 71.00 74.00 420.00 291.00 42.00 1,025.90	29.50 22.36 25.74 23.58 26.69 105.00 71.50 74.00 420.00 295.00 38.00 1,039.60	30.50 22.95 26.87 24.71 27.80 125.00 71.50 73.50 420.00 295.00 38.00 1,048.70	32.17 23.50 27.42 25.20 28.36 145.00 71.50 73.50 420.00 295.00 38.00 1,063.40





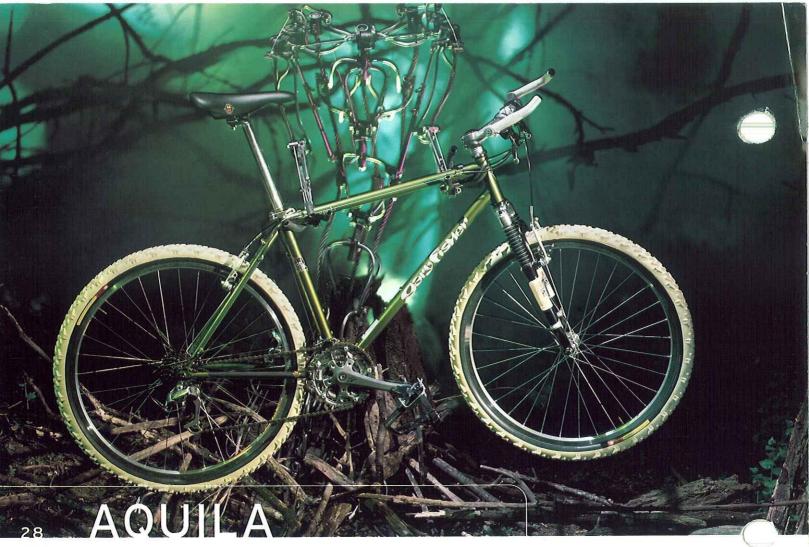
LIGHTER TRIPLE BUTTED FRAME ROCK SHOX INDY XC WTB VELOCIRAPTOR TIRES AVID DIRECT PULL BRAKES WTB SSTX SADDLE

The 30mm top tube and 33mm down tube are the optimal sizes; this frame could outlast you. And a 28-hole radial front wheel that's light and strong.

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SIZES	XS, SM, MD, LG, XL	FRONT HUB	Fisher Ginzu Team; 28 hole radial;	SADDLE	WTB SSTX
COLOR	Sapphire Blue	7	6mm skewer	SEATPOST	Aluminum alloy micro-adjust; 270gm;
MAIN TUBES	TIG-welded true temper	REAR HUB	Shimano STX-RC; 32 hole; 135mm O.L.D.		27.2mm diameter
	triple butted cromoly		Transport of the second of the	SEAT BINDER	Alloy with integral
STAYS	Tapered cromoly	SPOKES	DT 15G stainless steel; 253mm front; 264/265mm rear		Fisher spoon Quick Release; 31.9mm clamp diameter
FORK	Rock Shox Indy XC; 63mm travel	FRONT RIM	Bontrager Maverick; 28 hole radial	ANYTHING ELSE?	2 waterbottle bosses
HEADSET	Dia-Compe STS OS Aheadset; 25mm stack; 25.4/34.0/30.0	REAR RIM	Bontrager Maverick ASYM; 32 hole		Rack mounts
BOTTON BRACKET	Shimano LP 27; 73 x 113 shell/axle	FRONT TIRE	WTB Velociraptor; 2.1; 60 tpi		

	TIC	REAR HUB	Shimano STX-RC; 32 hole;		27.2	2mm c	diame	ter		
MAIN TUBES	TIG-welded true temper triple butted cromoly	-	135mm O.L.D.	SEAT BINDER	Allo	y wit	h inte	gral		
STAYS	Tapered cromoly	SPOKES	DT 15G stainless steel; 253mm front; 264/265mm rear				oon Q :lamp			se;
FORK	Rock Shox Indy XC; 63mm travel	FRONT RIM	Bontrager Maverick; 28 hole radial	ANYTHING ELSE?	2 w	aterb	ottle l	osse	s	
HEADSET	Dia-Compe STS OS Aheadset; 25mm stack; 25.4/34.0/30.0	REAR RIM	Bontrager Maverick ASYM; 32 hole		Rac	k mou	unts			
BOTTOM BRACKET	Shimano LP 27; 73 x 113 shell/axle	FRONT TIRE	WTB Velociraptor; 2.1; 60 tpi							
CRANKS	Sugino Impel 300A; 20/32/42;	REAR TIRE	WTB Velociraptor; 44/50; 60 tpi							
CRARAS	58/94mm blot hole	FRONT BRAKE	Avid 10							
PEDALS	Alloy cage/resin body	REAR BRAKE	Avid 10							
	with Fisher toeclip	LEVERS	Avid 1.0	PART NUMBER	01650	SM 08 016510	8 016620	8 016630	8 01664	08
RONT DERAILLEUR	Shimano STX; top swing; top pull; 31.8mm/1¼" clamp	HANDLEBAR	Butted aluminum; 580mm; 230gm; 6° bend	STEERER LENGTH	XS	SM   162	MD 177	LG   197	XL 217	I
REAR DERAILLEUR	Shimano LX SGS	STEM	Cold forged alloy Aheadstem	CRANK LENGTH	XS	SM   175	MD 175	LG 175	XL 175	ï
SHIFTER	Shimano STX-RC; Rapidfire+;	SIEM	with Quick Change;	мм	170	175	175	175	175	b
	8-speed with OGD		25.4mm clamp diameter;	HANDLEBAR WIDTH	XS 580	5M	MD 580	LG 580	580	
CASSETTE	Shimano IG60; 8-speed; 11-30	0	41.0mm steerer clamp height	CTCH LENGTH						50 E
CHAIN	Sachs PC21; 104 length	GRIP	Fisher dual density	STEM LENGTH	90	105	120	135	135	Į.
VUATA		BAR END	Fish Sticks; 125gm	STEM ANGLE	xs 5	SM  10	MD 10	LG 10	XL 10	
				SEATPOST LENGTH	XS  300	SM   350	MD 350	1 LG 350	XL 350	



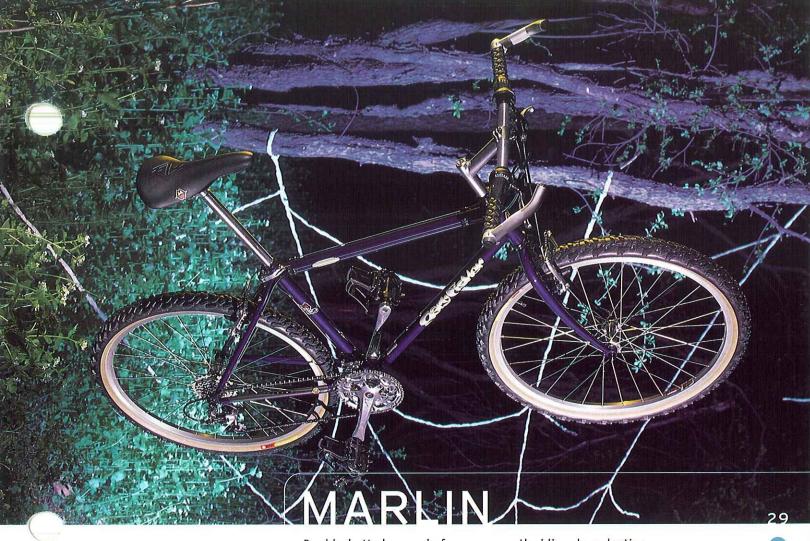
It's got suspension, and it's an eight-speed, too. Double-butted cromoly frame. Rock Shox. 24-speed, and V-brakes... Sorry, That's 'direct pull': the brakes formerly known as V-brakes. 15° rise stem, and an ASYM rim: What a dish-free dish.

UPGRADES FROM MARLIN: ROCK SHOX INDYS STX-RC 8-SPEED BONTRAGER MAVERICK RIMS WITH ASYM REAR AHEADSTEM

1998

23712	XS, SM, MD, LG, XL	FRONT HUB	Oversize sealed; 32 hole	SADDLE	Fish	er 'sı	iperso	oft' fo	am		
COLOR	Bright Green	REAR HUB	Shimano STX-RC; 32 hole; 8-speed; 135mm O.L.D.	SEATPOST			n alloy iamet		o-ad	ust;	
HAIN TUBES	TIG-welded double butted cromoly	-	·	SEAT BINDER	Oui	L Dal	02501	47m	m cla	nn di	meter
STAYS	Cromoly	SPOKES	15 stainless steel; 266mm front; 264/265mm rear	+						iip uic	meter
FORK	Rock Shox Indy S; 50mm travel	FRONT RIM	Bontrager Maverick; 32 hole	ANYTHING ELSE?							
HEADSET	Dia-Compe STS OS Aheadset; 25mm stack; 25.4/34.0/30.0	REAR RIM	Bontrager Maverick ASYM; 32 hole		Rac	k mou	ints				
BOTTOM BRACKET	Shimano LP 27: 73 x 113 shell/axle	FRONT TIRE	WTB Primal Raptor; 2.1								
	(Company) and the Department of the Company of the	REAR TIRE	WTB Primal Raptor; 47/52								
CRANKS	Sugino Impel 250; 24/34/42	FRONT BRAKE	Dia-Compe 737; direct pull								
PEDALS	Alloy cage/resin body with Fisher toeclip	REAR BRAKE	Dia-Compe 737; direct pull								
FRONT DERAILLEUR	Shimano Alivio; top swing; top pull;	LEVERS	Dia-Compe DP7N; direct pull	PART NUMBER	XS	SM	MD 8 014020	LG	XL	íl.	
	31.8mm/1¼" clamp	HANDLEBAR	Butted aluminum ATB alloy; 580mm;		01400	08   014010	8   014020	8   014030	8   01404	18	
REAR DERAILLEUR	Shimano STX-RC SGS		230gm; 6° bend	STEERER LENGTH	XS	SM	MD 197	LG 217	X L   237	1	
SHIFTER	Shimano STX-RC; Rapidfire+; 8-speed with OGD	STEH	Diecast alloy Aheadstem with Quick Change;	CRANK LENGTH	XS  170	SM  175	MD 175	LG 175	XL  175		
CASSETTE	Shimano IG60; 8-speed; 11-30		25.4mm clamp diameter; 41.0mm steerer clamp height	HANDLEBAR WIDTH	XS	SM	MD 580	LG	XL	î.	
CHAIN	Sachs PC21; 104 length	GRIP	Fisher dual density	uu	590	580		580	580	1	
		BAR END	Alloy short	STEM LENGTH	XS	SM  105	120	135	135		
		DAK ENU	Alloy short	STEM ANGLE	XS 5	5M	MD  15	LG  15	XL  15	1	
				SEATPOST LENGTH	XS	SM  350	MD 350	LG   350	XL  350	1	





UPGRADES FROM WAHOO:
DOUBLE BUTTED CROMOLY FRAME STX REAR DERAILLEUR DIA-COMPE 737 V-BRAKES BUTTED ALLOY HANDLEBAR

Double-butted cromoly frame: smoooth riding, long-lasting. Mmm mmm... Goodness. We got got.

SIZES	XS, SM, MD, LG, XL	FRONT HUB	Alloy sealed Quick Release; 32 hole	SADDLE	Fisher 'supersoft' foam
COLOR	Team Yellow; Ballistic Blue	REAR HUB	Shimano Acera; 32 hole;	SEATPOST	Aluminum alloy micro-adjust;
MAIN TUBES	TIG-welded double butted cromoly		135mm O.L.D.		27.2mm diameter
STAYS	Cromoly	SPOKES	15G stainless steel; 268mm front; 266/267mm rear	SEAT BINDER	Quick Release; 47mm clamp diameter
FORK	Oversize cromoly butted	FRONT RIM	Weinmann519; 32 hole;	ANYTHING ELSE?	2 waterbottle bosses
HEADSET	Oversize threaded; double sealed;		Schraeder valve drilling		Rack mounts
	35mm stack; 25.4/34.0/30.0	REAR RIM	Weinmann519; 32 hole;		
TIOM BRACKET	Shimano LP 27; 73 x 113 shell/axle		Schraeder valve drilling		

	TIG-welded double butted cromoly		135mm O.L.D.		27.2	2mm c	liame	ter		
MAIN TUBES	TO THE PROPERTY OF A SECTION AND A SEC	SPOKES	15G stainless steel; 268mm front;	SEAT BINDER	Qui	ck Rel	ease	47mi	m cla	mp diamete
STAYS	Cromoly		266/267mm rear	ANYTHING ELSE?	2 w	aterbo	ottle	bosse	s	
FORK	Oversize cromoly butted	FRONT RIM	Weinmann519; 32 hole;	ANTIHAV CCCC		k moı				
HEADSET	Oversize threaded; double sealed;		Schraeder valve drilling		Rac	K mot	ints			
	35mm stack; 25.4/34.0/30.0	REAR RIM	Weinmann519; 32 hole;							
BOTTOM BRACKET	Shimano LP 27; 73 x 113 shell/axle		Schraeder valve drilling	ř.						
CRANKS	Sugino Impel 250; 24/34/42	FRONT TIRE	WTB Primal Raptor; 47/54							
PEDALS	Resin with Fisher toeclip	REAR TIRE	WTB Primal Raptor; 47/52							
FRONT DERAILLEUR	Shimano Acera-X; top swing; top pull;	FRONT BRAKE	Dia-Compe 737; direct pull				V			Ÿ
(2)	31.8mm/1¼" clamp	REAR BRAKE	Dia-Compe 737; direct pull	PART NUMBER TEAM YELLOW		18 032011				
REAR DERAILLEUR	Shimano STX; SGS	LEVERS	Dia-Compe DP7N; direct pull	BALLISTIC BLUE		08   032010				/6 [
SHIFTER	Gripshift SRT 4.0	HANDLEBAR	Butted aluminum; 580mm;	STEERER LENGTH	123	143	163	183	203	1
CASSETTE	Shimano IG50; 7-speed; 11-30	Named Viewsking	230gm; 6° bend	CRANK LENGTH	XS	SM 170	MD 175	LG   175	XL 175	T
CHAIN	Sachs PC21; 104 length	STEM	ATB cromoly with Quick Change;	им	1110	8.0000				ř.
			25.4mm clamp diameter; 25.4mm insertion	HANDLEBAR WIDTH	580	580	MD 580	LG   510	XL   580	[
		GRIP	Serfas dual density	STEM LENGTH	90	105	MD 120	LG  135	135	Ĩ
		BAR END	Alloy short	STEM ANGLE	XS 24	SM   24	MD 24	LG	XL 24	1
				SEATPOST LENGTH	XS   300	S.M   350	MD 350	LG   350	XL 350	[

Butted cromoly, WTB tires, 'V-brakes', and quality comfort features. Alloy bar ends. Give 'em what they want, and they will smile.

UPGRADES FROM GITCHE GUMEE: CROMOLY MAIN FRAME WTB PRIMAL RAPTOR TIRES ALLOY BAR ENDS

SIZES	XS, SM, MD, LG, XL, MD-L	FRONT HUB	Alloy sealed Quick Release; 36 hole	SADDLE	Fish	ner 'su	ıp
COLOR	Video Blue; Bloodshot Red	REAR HUB	Shimano RH40; 36 hole; 135mm O.L.D.	SEATPOST		minum 2mm d	
MAIN TUBES	TIG-welded cromoly mains	is	ASSESSED BY THE REAL PROPERTY OF THE PROPERTY	<u>1</u>		Zá nice na	
STAYS	High Tensile	SPOKES	15G stainless steel; 266mm front; 264/265mm rear	SEAT BINDER		ck Rel	1,777.05
FORK	Oversize cromoly butted	FRONT RIM	Weinmann 519; 36 hole;	ANYTHING ELSE?		aterbo	
HEADSET	Oversize threaded; double sealed;		Schraeder valve drilling		Rac	k mou	nı
-	35mm stack; 25.4/34.0/30.0	REAR RIM	Weinmann 519; 36 hole;				
BOTTOM BRACKET	Shimano cartridge CT91;		Schraeder valve drilling				
	68 x 116 shell/axle	FRONT TIRE	WTB Primal Raptor; 47/54				
CRANKS	Shimano Altus; 24/34/42	REAR TIRE	WTB Primal Raptor; 47/52				
PEDALS	Resin	FRONT BRAKE	Direct pull				
FRONT DERAILLEUR	Shimano Altus CT92; top swing; top pull; plate style; 31.8mm clamp	REAR BRAKE	Direct pull	PART NUMBER VIDEO SLUE SLOODSHOT RED		SM 08 039010 18 0390118	
REAR DERAILLEUR	Shimano Alivio	LEVERS	Direct pull; alloy/alloy; 2 finger	STEERER LENGTH	ıxs	SM	Ti.
SHIFTER	Gripshift MRX 170	HANDLEBAR	ATB steel; 580mm	MM	123	143	ŀ
-	Person conservation for W. Carl Market	STEM	ATB steel; with Quick Change;	CRANK LENGTH	170	SM 170	1
CASSETTE	Shimano HG50; 7-speed; 11-28		25.4mm clamp diameter;		2000		100
CHAIN	Sachs PC10; 104 length	×	25.4mm insertion	HANDLEBAR WIDTH	X S 580	580	
		GRIP	Dual density; Serfas logo	STEM LENGTH	XS	SM	3
		BAR END	Alloy short	uu uu	90	105	

SADDLE	Fisher 'supersoft' foam
SEATPOST	Aluminum alloy micro-adjust; 27.2mm diameter
SEAT BINDER	Quick Release; 47mm
ANYTHING ELSE?	2 waterbottle bosses Rack mounts

PART NUMBER	XS	SM	MD	LG	XL	MD-L
VIDEO BLUE	0390008	0390108	0390208	0390308	0390408	0393208
SLOODSHOT RED	0390018	0390118	0390218	0390318	0390418	0393218
STEERER LENGTH	IXS	ISM	MD	LG	IXL	MD-L
мм	123	143	163	183	203	163
CRANK LENGTH	IXS	ISM	IMD	LG	IXL	IMD-L I
мм	170	170	170	170	170	170
HANDLEBAR WIDTH	IXS	ISM	IMD	LG	IXL	MD-L I
ми	580	580	580	580	580	580
STEM LENGTH	IXS	ISM	IMD	LG	IXL	MD-L
ww.	90	105	120	135	135	90
STEM ANGLE	IXS	ISM	IMD	LG	IXL	MD-L I
DEGREES	24	24	24	24	24	24
SEATPOST LENGTH	IXS	ISM	IMD	LG	IXL	MD-L I
VV	300	350	350	350	350	250



UPGRADES FROM A HARDWARE STORE BIKE: BUILT-IN RELATIONSHIP WITH YOUR COOL LOCAL FISHER DEALER COMES FULLY ASSEMBLED IN MORE THAN ONE SIZE WEIGHS LESS THAN YOU DO

XS, SM, MD, LG, XL, MD-L

Onyx Black; Orange Peel

Shimano HG50; 7-speed; 11-28 Sachs PC10; 104 length

Gripshift ESP 5.0 Gripshift ESP 500

SIZES

COLOR

STAYS

FORK

HEADSET

CRANKS

PEDALS

SHIFTER CASSETTE

CHAIN

BOTTOM BRACKET

FRONT DERAILLEUR

REAR DERAILLEUR

MAIN TUBES

A cool comfort mountain bike with oversize headset, Serfas dual density grips, dual density saddle. Plush grips and saddle, for comfort where you park your carcass.

GITCHE GUMEE



FIG-welded mains; cromoly seat tu	ıbe
High Tensile	
High Tensile	
Oversize threaded; double sealed; 35mm stack; 25.4/34.0/30.0	
Shimano cartridge CT91; 58 x 116 shell/axle	
Shimano Altus; 24/34/42;	
Resin	
Shimano Altus; top swing; top pull plate style; 31.8mm clamp	;
Gripshift ESP 5.0	
Grinshift ESP 500	

REAR HUB	Shimano RH40; 36 hole; 135mm O.L.D.
SPOKES	15G stainless steel; 265mm front; 263/264mm rear
FRONT RIM	Weinmann 519; 36 hole; Schraeder valve drilling
REAR RIM	Weinmann 519; 36 hole; Schraeder valve drilling
FRONT TIRE	Knobby style black side and tread; 2.0
REAR TIRE	Knobby style black side and tread; 2.0
FRONT BRAKE	Direct pull
REAR BRAKE	Direct pull
LEVERS	Direct pull; alloy/alloy; 2 finger
HANDLEBAR	ATB steel; 580mm
STEM	ATB steel with Quick Change; 25.4mm clamp diameter; 25.4mm insertion
GRIP	Serfas dual density

FRONT HUB Alloy sealed Quick Release; 36 hole

PART NUMBER	IXS	ISM	MD	ILG	IXL	IMD-L	Ė
DNYX BLACK	0290008	0290108	0290208	0290308	0290408	0293208	ш
ORANGE PEEL	0290018	0290118	0290218	0290318	0290418	0293218	ŀ
STEERER LENGTH	XS	SM	MD	LG	XL	MD-L	ř
чи	125	145	165	185	205	165	Į,
CRANK LENGTH	XS	SM	MD	LG	XL	MD-L	ï
мм	170	170	170	170	170	170	ı
HANDLEBAR WIDTH	XS	SM	MD	LG	XL	MD-L	r
uu	580	580	580	580	580	600	l,
STEM LENGTH	XS	SM	MD	LG	XL	MD-L	r
uu	90	105	120	135	135	90	I
STEM ANGLE	XS	SM	MD	LG	XL	MD-L	T
DEGREES	24	24	24	24	24	24	

2 waterbottle bosses

Rack mounts

SADDLE

SEATPOST

SEAT BINDER

ANYTHING ELSE?

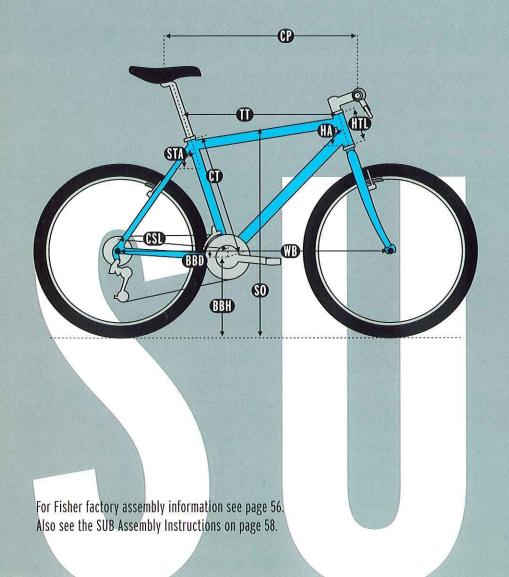
SEATPOST LENGTH

# SPORT UTILITY BIKES:

durable and versatile on- and off-road We have continued to listen to our dealers and massage these bikes to make them fit better. This year, we have revised the steering geometry to make them really fun to ride, but more comfortable and predictable for all levels of cyclists.

We firmly believe in the SUBs having 26" wheels. They are so much lighter, more durable and versatile for every kind of use than 700c wheels. On the spec side of these bikes, we have definitely aimed at increasing the fit and comfort. Higher sport rise bars and stems, much softer dual density saddles. They work really well.

SIZE	XS	SM	MD		XL	=	SIZE	XS	SM	MD	LG	XL	MD-L
SO STANDOVER (*)	24.34	25.98	27.60	28.77	30.34	10	\$0 STANDOVER (*)	24.96	28.10	29.25	30.25	31.46	23.30
II TOP TUBE (*)	21.06	21.80	22.37	22.97	23.53	2	II TOP TUBE (*)	21.14	21.81	22.36	22.95	23.50	22.36
CP COCKPIT LENGTH (*)	23.39	24.13	25.26	26.40	27.50	A	CP COCKPIT LENGTH (*)	23.42	24.12	25.23	26.36	27.45	24.61
ISCP MINIMUM COCKPIT (*)	22.31	23.05	23.65	24.78	25.27		MINCP MINIMUM COCKPIT (*)	22.34	23.04	23.61	24.74	25.23	24.41
BICP MAXIMUM COCKPIT (*)	24.46	25.21	26.22	27.35	28.43		MAICP MAXIMUM COCKPIT (*)	24.50	25.20	26.19	27.31	23.39	26.18
HTL HEADTUBE LENGTH (MM)	90.00	90.00	105.00	125.00	145.00		HIL HEADTUBE LENGTH (MM)	85.00	85.00	105.00	125.00	145.00	105.00
HA HEAD ANGLE (*)	72.03	72.03	72.53	72.53	72.53		BA HEAD ANGLE (*)	71.12	71.62	72.12	72.12	72.12	72.12
STA SEATTUBE ANGLE (*)	75.53	75.03	75.03	74.53	74.53		STA SEATTUBE ANGLE (*)	75.12	74.62	74.62	74.12	74.12	74.62
CSL CHAINSTAY LENGTH (MM)	412.00	412.00	412.00	412.00	412.00		CSL CHAINSTAY LENGTH (MM)	420.00	420.00	420.00	420.00	420.00	420.00
BBH SOTTOM BRACKET HEIGHT (MM)	283.38	283.38	287.38	287.38	287.38		BBH BOTTOM BRACKET HEIGHT (MM)	283.43	286.43	290.43	290.43	290.43	290.43
BBD BOTTOM BRACKET DROP (MM)	49.62	49.62	45.62	45.62	45.62		BBD BOTTOM BRACKET DROP (MM)	49.57	46.57	42.57	42.57	42.57	42.57
W8 WHEELBASE (MM)	1,006.48	1,020.48	1,032.68	1.043.58	1,058.38		WB WHEELBASE (MM)	1,011.79	1,021.99	1,035.69	1,044.79	1,084.19	1,035.69
CT CENTER TO TOP (*)	13.07	15.57	17.57	19.07	21.07		CI CENTER TO TOP (*)	13.00	17.10	18.33	19.58	21.08	18.33
	25.34 -	27.98 -	29.60 -	30.77 -	32.34 -		I INSEAM RANGE (*)	25.96 -	30.10 -	31.25 -	32.25 -	33.46 -	25.30 -
	28.84	30.48	32.53	34.69	37.24			29.46	32.60	34.19	36.17	38.36	32.16







UPGRADES FROM NIRVANA: LIGHTWEIGHT ALUMINUM FRAME NEW SHIMANO NEXAVE COMPONENTS BONTRAGER MAVERICK RIMS WITH ASYM REAR ARC ALLOY HANDLEBAR

7005 Aluminum. The luxury SUB. The Range Rover of SUBs. New Shimano Nexave equipment - derailleurs with reverse pull.

COLOR	Onyx Black
MAIN TUBES	TIG-welded 7005 aluminum alloy
STAYS	TIG-welded 7005 aluminum alloy
FORK	Cromoly
HEADSET	Oversize threaded; double sealed; 35mm stack; 25.4/34.0/30.0
OTTOM BRACKET	Shimano LP27; 73 x 113 shell/axle
CRANKS	Sugino XD 300; 26/36/46
PEDALS	Alloy with Fisher toeclip and straps
ONT DERAILLEUR	Shimano Nexave; top pull; 34.9mm/1%" clamp
EAR DERAILLEUR	Shimano Nexave; Rapidrise
SHIFTER	Shimano Nexave; Rapidrise
CASSETTE	Shimano IG50; 7-speed; 11-30
CHAIN	Sachs PC21; 106 length
FRONT HUB	Alloy sealed Quick Release; 32 hole
REAR HUB	Shimano STX; 32 hole; 135mm O.L.D.
SPOKES	DT 15G stainless steel; 266mm front

264/265mm rear

Bontrager Maverick ASYM; 32 hole
Tioga City Slicker; 26 x 1.5; 60 tpi
Tioga City Slicker; 26 x 1.5; 60 tpi
Shimano Nexave V-brakes
Shimano Nexave V-brakes
Shimano Nexave
ARC alloy; 580mm
ATB cromoly with Quick Change; 25.4mm clamp diameter; 25.4mm insertion
Serfas dual density
Fisher 'supersoft' foam
Polygon PM900 suspension seatpost; 27.2mm diameter
Alloy with integral Quick Release; 35.0 clamp diameter
2 bottle mounts Rack mounts

Bontrager Maverick; 32 hole

PART NUMBER	XS  4020008	SM 4020108	MD 4020208	LG 4020308	XL 4020408	
STEERER LENGTH	XS   127	SM 127	MD 142	162	X.L   182	
CRANK LENGTH	XS	5M 175	MD 175	LG   175	XL  175	
ANDLEBAR WIDTH	XS 580	SM 580	MD 580	LG 510	XL 580	
STEM LENGTH	XS	5M 90	MD 105	LG 120	X L   135	
STEM ANGLE	X S   24	SM 24	MD 24	LG   24	X L 24	l
EATPOST LENGTH	XS	SM	MD 350	LG 350	XL 350	ĺ





Dual density saddle and grips, and all of that good stuff. Simply elegant and efficient. (Spelt: Ee-fish-int.)

GROOVY SPEC: CROMOLY SUB FRAME NEXUS INTERNAL 7-SPEED DRIVETRAIN **HUB ROLLER REAR BRAKE** SUSPENSION SEATPOST

SIZES	SM, MD, LG, XL, MD-L
COLOR	Red Earth
MAIN TUBES	TIG-welded full cromoly
STAYS	Cromoly
FORK	Cromoly
HEADSET	Oversize threaded; double sealed; 35mm stack; 25.4/34.0/30.0
BOTTOM BRACKET	Shimano Altus cartridge; 73 x 121 shell/axle
CRANKS	Sugino single ring for Nexus 34T
PEDALS	Dual density resin
SHIFTER	Shimano Nexus
CHAIN	Sachs; 104 length
FRONT HUB	Alloy sealed Quick Release; 36 hole
REAR HUB	Shimano Nexus 16 tooth; 36 hole; 35mm O.L.D.
SPOKES	DT 15G stainless steel; 266mm front; 269/270mm rear

FRONT RIM	Weinmann 519; 36 hole
REAR RIM	Weinmann 519; 36 hole
FRONT TIRE	Tioga City Slicker; 26 x 1.5; 60 tpi
REAR TIRE	Tioga City Slicker; 26 x 1.5; 60 tpi
FRONT BRAKE	Shimano Altus
REAR BRAKE	Shimano internal roller
LEVERS	Alloy/Alloy; 2 finger
HANDLEBAR	ARC alloy; 580mm
STEM	ATB steel with Quick Change; 25.4mm clamp diameter; 25.4mm insertion
GRIP	Shimano Nexus
SADDLE	Fisher dual density
SEATPOST	Polygon PM900 suspension seatpost; 27.2mm diameter
SEAT BINDER	Alloy with integral Quick Release; 35mm clamp diameter
ANYTHING ELSE?	Dark smoke chainguard

PART NUMBER	SM  0400108	MD 0400208	LG 0400308	XL 0400408	MD-L 403208	ĺ
STEERER LENGTH	SM   145	165	LG   185	XL 205	MD-L 165	Ţ
CRANK LENGTH	SM   170	MD 175	LG   175	175	MD-L 170	Î
HANDLEBAR WIDTH	SM   580	MD 580	LG   580	XL 580	MD-L 580	ţ
STEM LENGTH	<b>SM</b>   90	MD 105	LG   120	XL  135	MD-L 90	
STEM ANGLE	5 M   24	MD 24	LG  24	XL 24	MD-L 24	Ĭ
SEATPOST LENGTH	<b>SM</b>   350	MD 350	LG 350	XL 350	MD-L 250	Ĩ





UPGRADES FROM ZEBRANO: DOUBLE BUTTED CROMOLY FRAME HIGHER 'TOWN' GEARING DIRECT PULL 'V-BRAKE' STYLE BRAKES DUAL DENSITY SADDLE SUSPENSION SEATPOST

Comfortable double-butted cromoly frame. New dual-density saddle perched atop a suspension seatpost, which evens out the bumps in your ride. Mountain bike tough, but oh so smooth. Smooth as buttah. The Red Velvet Rig.

SIZES	XS, SM, MD, LG, XL
COLOR	Bright Green
MAIN TUBES	TIG-welded butted cromoly mains
STATS	Cromoly
FORK	Cromoly
HEADSET	Oversize threaded; double sealed; 35mm stack; 25.4/34.0/30.0
BOTTOM BRACKET	Shimano LP27; 73 x 113 shell/axle
CRANKS	Sugino XD 300; 26/36/46
PEDALS	Dual density resin
RONT DERAILLEUR	Shimano FC500; top pull; 31.8mm/1¼" clamp
REAR DERAILLEUR	Shimano Alivio GS
SHIFTER	Gripshift SRT 4.0
CASSETTE	Shimano IG50; 7-speed; 11-30
CHAIN	Sachs PC21; 106 length
FRONT HUB	Alloy sealed Quick Release; 32 hole
REAR HUB	Shimano Acera; 32 hole; 135mm O.L.D.
SPOKES	15G stainless steel; 268mm front;

266/267mm rear

Schraeder valve drilling
Weinmann 519; 32 hole; Schraeder valve drilling
Tioga City Slicker; 26 x 1.5; 60 tpi
Tioga City Slicker; 26 x 1.5; 60 tpi
Direct pull
Direct pull
Direct pull; alloy/alloy; 2 finger
ATB steel; 580mm; silver
ATB steel with Quick Change; 25.4mm clamp diameter; 25.4mm insertion
Serfas dual density
Fisher dual density
Polygon PM900 suspension seatpost 27.2mm diameter
Quick Release; 47mm clamp diameter
2 bottle mounts Rack mounts

Weinmann 519; 32 hole;

PART NUMBER	XS 0130008	SM  0130108	MD 0130208	LG 0130308	XL 0130408	1	
STEERER LENGTH	XS  125	SM  145	MD 165	LG 185	XL  205	1	
CRANK LENGTH	XS  170	SM   175	MD 175	175	X L   175	1	
HANDLEBAR WIDTH	XS   580	<b>SM</b>   580	MD 580	LG 580	XL  580		
STEM LENGTH	X S   90	SM   90	MD 105	120	X L   135	1	
STEM ANGLE DEGREES	X S   24	SM   24	MD 24	LG 24	X L   24	1	
SEATPOST LENGTH	XS	SM	MD	LG	XL 150	1	





A mucho comfortable SUB (Sport Utility Bicycle) with a dual density saddle, dual density Serfas grips, cool-looking 25° stem and 30mm rise bar.

GROOVY SPEC: CROMOLY FORK CROMOLY MAIN FRAME GRIPSHIFT/SHIMANO DRIVETRAIN 26" WHEELS

SIZES	XS, SM, MD, LG, XL, MD-L
COLOR	Sapphire Blue
HAIN TUBES	TIG-welded cromoly mains
STAYS	High Tensile
FORK	Cromoly
HEADSET	Oversize threaded; double sealed; 35mm stack; 25.4/34.0/30.0
BOTTON BRACKET	Shimano Altus Cartridge; 68 x 118 shell/axle
CRANKS	Shimano Altus; 24/34/42
PEDALS	Dual density resin
RONT DERAILLEUR	Shimano Altus; top pull; 31.8mm/1¼" clamp
REAR DERAILLEUR	Shimano Acera
SHIFTER	Gripshift MRX 170
CASSETTE	Shimano HG50; 7-speed; 11-30
CHAIN	Sachs PC10; 104 length
FRONT HUB	Alloy sealed Quick Release; 36 hole
REAR HUB	Shimano RH40; 36 hole; 135mm O.L.D.
	15G stainless steel

FRONT RIN	Weinmann 519; 36 hole; Schraeder valve drilling
REAR RIM	Weinmann 519; 36 hole; Schraeder valve drilling
FRONT TIRE	Tioga City Slicker; 26 x 1.5; 60 tpi
REAR TIRE	Tioga City Slicker; 26 x 1.5; 60 tpi
FRONT BRAKE	Shimano Altus CT92
REAR BRAKE	Shimano Altus CT92
LEVERS	Alloy/Alloy; 2 finger
HANOLEBAR	30mm rise steel
STEM	ATB steel with Quick Change; 25.4mm clamp diameter; 25.4mm insertion
GRIP	Serfas dual density
SADDLE	Fisher 'supersoft' foam
SEATPOST	Alloy micro-adjust; 27.2mm diameter
SEAT BINDER	Alloy with integral Quick Release
ANYTHING ELSE?	2 bottle mounts Rack mounts

PART NUMBER	XS  0400008	SM 0400108	MD 0400208	LG 0400308	XL 0400408	MD-L 403208	Ţ
STEERER LENGTH	XS	SM   145	MD 165	LG   185	XL 205	MD-L 165	Ĩ
CRANK LENGTH	XS	SM   170	MD  170	LG   170	XL  170	MD-L 170	I
HANDLEBAR WIDTH	XS  580	SM   580	MD 580	LG 580	XL 580	MD-L 580	
STEM LENGTH	XS	SM  90	MD 105	LG   120	XL  135	MD-L 90	Į
STEM ANGLE DEGREES	X S   24	5 M   24	MD  24	LG 24	XL 24	MD-L 24	l
SEATPOST LENGTH	XS	SM 350	MD 350	LG 350	XL 350	MD-L 250	Ĭ





Have shock, will travel. Chrome-plated and tough.

SIZES	11.5" frame; 24" wheels	FRONT RIM	Weinmann 519 alloy; 32 hole;		
COLOR	Chrome		Schraeder valve drilling		
MAIN TUBES	TIG-welded	REAR RIM	Weinmann 519 alloy; 32 hole; Schraeder valve drilling		
STAYS	High Tensile steel	FRONT TIRE	Blackwall knobby; 24 x 1.95		
FORK	RST 261 coil spring/elastomer; 50mm travel	REAR TIRE	Blackwall knobby; 24 x 1.95		
HEADSET	Steel sealed; 22.2/30.0/27.0	FRONT BRAKE	Direct pull		
BOTTOM BRACKET	YST 613	REAR BRAKE	Direct pull		
The second of th	SR XR17; 24/34/42	LEVERS	Alloy direct pull		
CRANKS		HANDLEBAR	ATB steel		
FRONT DERAILLEUR	Resin; steel axle Shimano CT92; Down pull;	STEM	ATB steel; 25.4mm clamp diameter; 22.2mm insertion		
Contract Contract	28.6mm/11/8" clamp	GRIP	Gripshift kraton	PART NUMBER	0310608
REAR DERAILLEUR	Shimano Tourney	BAR END	Cromoly	STEERER LENGTH	11.5"
SHIFTER	Gripshift MRX 170	-	(4	90	162
CASSETTE	Shimano HG60; 6-speed; 14-28	SADDLE	Fisher 'supersoft' foam	CRANK LENGTH	11.5"
CHAIN	KMC UG50; 100 length	SEATPOST	ATB steel short reach; high rise; 26.6mm diameter	HANDLEBAR WIDTH	165
FRONT HUB	Nutted axle; 32 hole	SEAT BINDER	Cromoly M6 x 23.5 (boys)	INTOCEDAR HIDII	540
REAR HUB	Sealed nutted axle; 32 hole; 135mm O.L.D.	ANYTHING ELSE?	1 waterbottle boss	STEM LENGTH	11.5" 80
SPOKES	15G plated; 241 front; 239/240 rear			STEM ANGLE DEGREES	11.5" 40
				SEATPOST LENGTH	11.5" 300



•

Compact frame. The real Fisher-proportioned mountain bike geometry. A shorter cockpit for '98. You asked for it, we did it.

Towards V	
COLOR	Red (boys); Light Purple (girls)
MAIN TUBES	TIG-welded
STATS	High Tensile
FORK	High Tensile
HEADSET	Steel sealed; 22.2/30.0/27.0
BOTTON BRACKET	YST 613
CRANKS	SR XR17; 24/34/42 riveted
PEDALS	Resin; steel axle
RONT DERAILLEUR	Shimano Acera-X; Down pull; 28.6mm/11⁄a" clamp
REAR DERAILLEUR	Shimano Tourney
SHIFTER	Gripshift MRX 170
CASSETTE	SRHG60; 6-speed; 14-28
CHAIN	KMC UG50; 100 length
FRONT HUB	Nutted axle; 32 hole
REAR HUB	Sealed nutted axle; 32 hole; 135mm O.L.D.
SPOKES	15G plated; 241mm front; 239/240mm rear

FRONT RIM	Weinmann 519 alloy; Schraeder valve drilling
REAR RIM	Weinmann 519 alloy; Schraeder valve drilling
FRONT TIRE	Blackwall knobby; 24 x 1.95
REAR TIRE	Blackwall knobby; 24 x 1.95
FRONT BRAKE	Direct pull
REAR BRAKE	Direct pull
LEVERS	Direct pull alloy
HANDLEBAR	ATB steel
STEH	ATB steel; 80mm; 25.4mm clamp diameter; 22.2mm insertion
GRIP	Gripshift Kraton
SADDLE	Fisher 'supersoft' foam
TROSTABLE	Steel pin; 26.6mm diameter
SEAT BINDER	Cromoly; M6 x 23.5 (boys); M8 x 27 (girls)
INYTHING ELSE?	1 waterbottle boss

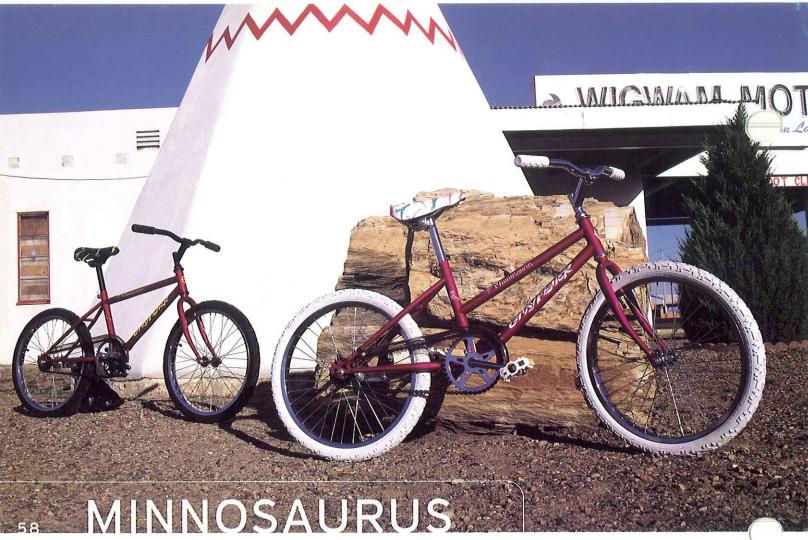
PART NUMBER	BOYS 0300608	GIRLS     0300708
STEERER LENGTH	BOYS 152	GIRLS
CRANK LENGTH	BOYS 165	GIRLS
HANDLEBAR WIDTH	BOYS 540	GIRLS     540
STEM LENGTH	BOYS 80	GIRLS
STEM ANGLE DEGREES	BOYS 40	GIRLS
SEATPOST LENGTH	BOYS 300	GIRLS





Twenty-inch wheels, six speeds, and the chain will stay put. Alloy rims: It has big bike brakes, so it has big bike rims.

SIZES	11.5" frame; 20" wheel	FRONT RIM	Weinmann 519 alloy;			
COLOR	Blue (boys); Teal (girls)		Schraeder valve drilling			
MAIN TUBES	TIG-welded High Tensile	REAR RIM	Weinmann 519 alloy; Schraeder valve drilling			
ZYATZ	TIG-welded High Tensile	FRONT TIRE	Blackwall knobby (boys);			
FORK	High Tensile		Whitewall knobby (girls)			
HEADSET	Steel; 22.2/30.0/27.0	REAR TIRE	Blackwall knobby (boys); Whitewall knobby (girls)			
BOTTOM BRACKET	VP-B31W; 68 x 30.5/52/30.5 shell/axle	FRONT BRAKE	Changstar cantilever			
CRANKS	One-piece style; 40 tooth	REAR BRAKE	Changstar cantilever			
PEDALS	Resin; steel axle	LEVERS	Alloy short reach			
REAR DERAILLEUR	Shimano Tourney TY22	HANDLEBAR	50mm rise steel; downhill style			
SHIFTER	Gripshift MRX 170	STEM	ATB steel; 80mm;	PART NUMBER	BOYS	GIRLS     0380118
CASSETTE	SRHG60; 6-speed; 14-28		25.4mm clamp diameter; 22.2mm insertion	STEERER LENGTH		GIRLS
CHAIN	KMC UG50; 100 length	GRIP	Gripshift kraton	WW	133	143
FRONT HUB	Nutted axle	SADDLE	Fisher 'supersoft' foam	CRANK LENGTH	BOYS 140	GIRLS
REAR HUB	Sealed nutted axle; 125mm O.L.D.	SEATPOST	Steel pin; 26.6mm	HANDLEBAR WIDTH	BOYS 520	GIRLS
SPOKES	15G plated; 188mm front;	SEAT BINDER	Alloy 8 x 25	STEM LENGTH		GIRLS
	185/187mm rear	ANYTHING ELSE?	1 waterbottle boss; double	STEM LENGTH	80	80
			Chainguard	STEM ANGLE	BOYS	GIRLS
				SEATPOST LENGTH	BOYS	GIRLS   250



Timeless dinosaur graphics on a single-speed mountain bike for kids.

00.10702702	Book Alexandra Broken Katalan
COLOR	Red (boys); Pink (girls)
MAIN TUBES	TIG-welded High Tensile
STAYS	TIG-welded High Tensile
FORK	High Tensile
HEADSET	Steel; 22.2/30.0/27.0
OTTON BRACKET	One-piece
CRANKS	One-piece style; 40 tooth
PEDALS	Resin; steel axle
CHAIN	KMC 410; 100 length; 1/8" width
FRONT HUB	Nutted axle
REAR HUB	Sealed nutted axle; 110mm O.L.D.
SPOKES	14G plated; 189mm front;
310463	185mm rear

FRONT RIM	Chrome steel; Schraeder valve drilling
REAR RIM	Chrome steel;
	Schraeder valve drilling
RONT TIRE	Black dinosaur tread (boys);
	White dinosaur tread (girls)
REAR TIRE	Black dinosaur tread (boys);
	White dinosaur tread (girls)
EAR BRAKE	Coaster
HANDLEBAR	50mm rise steel downhill style
STEM	ATB steel; 80mm;
	25.4mm clamp diameter;
	22.2mm insertion
GRIP	Kraton
SADDLE	Fisher 'supersoft' foam;
	Dinosaur print
SEATPOST	Steel pin; 25.6mm
AT BINDER	Cromoly 8 x 25

PART NUMBER	BOYS  0360008	GIRLS    0360118
STEERER LENGTH	BOYS	GIRLS
CRANK LENGTH	BOYS 140	GIRLS
HANDLEBAR WIDTH	BOYS 520	GIRLS
STEM LENGTH	BOYS	GIRLS
STEM ANGLE	BOYS	GIRLS
SEATPOST LENGTH	BOYS	GIRLS





SIZES	Compact frame; 16" wheel
COLOR	Blue (boys); Pink (girls)
MAIN TUBES	TIG-welded
STAYS	TIG-welded
FORK	High Tensile
HEADSET	Steel loose ball; 22.2/30.0/27.0
OTTON BRACKET	One-piece
CRANKS	One-piece; 32 tooth
PEDALS	Resin
CHAIN	KMC 410; 1/8" width
FRONT HUB	Nutted axle

REAR HUB

SPOKES

14G plated

Sealed nutted axle; 110mm O.L.D.

FRONT RIM	Chrome steel; Schraeder valve drilling
REAR RIM	Chrome steel; Schraeder valve drilling
FRONT TIRE	Knobby
REAR TIRE	Knobby
REAR BRAKE	Coaster
HANDLEBAR	Steel BMX; 130mm rise
STEM	25.4mm clamp diameter; 22.2mm insertion
GRIP	Kraton mushroom style
SADDLE	Fisher 'supersoft' foam; lizard print
SEATPOST	Steel pin
SEAT BINDER	Bolt
ANYTHING ELSE?	Three-piece pad set  Color-matched training wheels  Smoke chainguard

PART NUMBER	BOYS 0350008	GIRLS     0350118
STEERER LENGTH	BOYS	GIRLS
CRANK LENGTH	BOYS	GIRLS
HANDLEBAR WIDTH	BOYS 450	GIRLS
STEM LENGTH	BOYS	GIRLS
STEM ANGLE DEGREES	BOYS	GIRLS
SEATPOST LENGTH	BOYS	GIRLS   250

## **Wheel Specifications**

We use computer controlled wheel lacing machines which assemble a wheel off the programmed information for spoke length, hub characteristics, and rim dimensions. After lacing, each wheel is stress relieved on a pneumatic press, and then goes through one of our 7 Holland Mechanics wheel truing robots. These machines use a computer program and light sensors to true, dish, and tension the wheels. The machines can be programmed to set their limits of accuracy, which is determined by the number of times the robot goes around the wheel. We use 3 rounds per wheel, about the highest degree of accuracy in the industry. When the wheel exits the robot, it gets stress relieved one more time, and then hand checked for true on a vellum. A vellum is a hypersensitive truing stand, using dial indicators to show run out of both true and round. Our standard for each is .7 mm total runout. In addition, we also randomly check wheels for overall tension with hand tensionometers which are recalibrated each day for accuracy.

### Parts Installation Specifications

On the assembly line, most of the parts are installed using torque calibrated air tools. This ensures that critical parts are installed correctly. The torque specs we follow are listed on page 94, although there are a few exceptions which we detail here.

#### Front derailleur

To prevent damage of the paint on the seat tube, front derailleurs are installed at about 20 lb/in, much below their correct torque.

After final adjustment, they should be tightened to Shimano's spec.

#### Headset nut

Since stem insertion will effect the headset adjustment, we do not set the bearing adjustment of the headset, nor do we tighten the headset locknut past 10 lb/in.

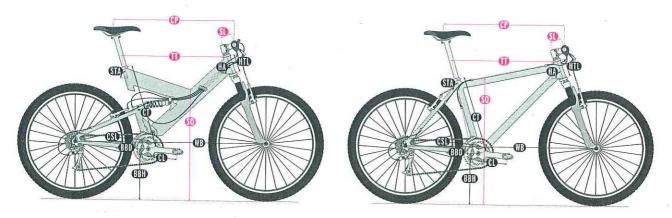
#### Handlebar clamp bolt

The position of the handlebars varies according to preference, so these bolts are only tightened enough to hold them during shipping. Although we intend to have all other fasteners correctly tightened, bikes get a variety of treatment after leaving the factory which can effect the work we've done. Bolts can be shaken loose and wheels can be knocked out of true. For this reason, we expect that your assembly procedures will include checking to ensure that ALL fasteners on the bike are tight. We also expect our dealers to assemble and adjust Fisher bikes to a very high standard. After all, we both want everyone riding a Fisher to be safe and happy with their new bike! In addition to going over the bolts of a bike, making the necessary adjustments, and checking the wheels, there are additional parts to assemble on every bike.

#### Reflectors

Check that front and rear reflectors are oriented so that their reflective surfaces are perpendicular to the ground, and that all reflective surfaces are clean and in good condition. The front reflector should point directly forward, and the rear should point directly back. The rear reflector should be at least three inches below the top of the seat.

	EM/FA SIZE	Exact Muscle / Frame Association
SO	STANDOVER	The vertical distance from the ground to the point on the top tube where you straidle the bike.  You need plenty of clearance to be able to control the bike in all terrain.
TT	EFFECTIVE TOP TUBE	The horizontal measure from the center of the headset to the center of the seatpost.  The most important measurement when buying a bike, because it cannot be changed.
CP	COCKPIT	The horizontal measure from the center of the handlebar to the center of the seatpost.  This is where you spend your time. (The next two measurements show how it can be adjusted.)
MIN CP	HINIMUM COCKPIT	The shortest the cockpit can be made by changing the stem to the shortest one available.
MAXCP	HAXIHUM COCKPIT	The longest the cockpit can be made by changing the stem to one which is 30mm longer than original - the maximum that we recommend to retain optimum handling.
SL .	STEN LENGTH	The original stem: measured from the center of the steerer tube to the center of the handlebar.
CL	CRANK LENGTH	The distance from the center of the bottom bracket to the center of the pedal axle.  A rider with long legs can benefit from longer cranks.
HTL	. HEADTUBE LENGTH	The dislance between the upper and lower headset.  Effects how high your handlebar is relative to your saddle.
НА	HEAD ANGLE	The angle of headtube to the ground. Tailored to optimize steering precision on each frame size.
STA	SEATTUBE ANGLE	The angle of seattube to the ground. Tailored to optimize power transmission on each frame size.
CSL	CHAINSTAY LENGTH	The distance from the center of the bottom bracket to the center on the rear axie.
ввн	BOTTOM BRACKET HEIGHT	The vertical distance from the center of the bottom bracket to the ground.  Expresses clearance of the frame over obstacles.
BBD	BOTTOM BRACKET DROP	The vertical distance the bottom bracket is below an imaginary horizontal line drawn through the axles.  The greater the bottom bracket drop, the lower the rider's center of gravity.
WB	WHEELBASE	The distance between the axles.  Tailored to optimize weight distribution on each frame size.
ст	CENTER TO TOP	The distance from the center of the bottom bracket to the top of the seat tube.  Because some people still feel they need to know.
Į.	INSEAM RANGE	If your inseam is within this range, this size of bike should fit you.



# GENESIS GEOMETRY 71

	III MANALO INCI		GENESIS J	SAUHEO		GENESIS L	EVEL BETTY:	\$	GENESIS A	LUMINUM H	ARDTAILS				
	EM/FA SIZE		MZ	MD	LG	MZ	MD	LG	XS	MZ	MD	LG	XL	EM/FA SIZE	
STANDOVER	50	(")	25.67	25.67	25.67	25.98	25.98	25.98	25.91	27.57	29.17	30.20	31.88	-	
EFFECTIVE TOP TOBE	TT	(")	22.71	23.90	25.51	22.71	23.90	25.51	21.70	22.90	23.94	24.72	-	5.0	(")
COCKPIT LENGTH	CP	(")	24.05	26.43	28.62	24.00	25.80	27.99	23.03	24.84	26.49		25.47	TT	()
MINIMUM COCKPIT	MIN CP	(")	24.05	25.27	27.46	24.00	25.22	27.41	23.03	24.26		27.85	28.60	CP	(")
MAXIMUM COCKPIT	MAX CP	(")	25.22	27.15	29.29	25.17	26.57	28.71	24.20	-	25.32	26.68	27.15	MIN CP	(")
STEM LENGTH	SL	(MM)	60.00	90.00	105.00	60.00	75.00	90.00	-	26.00	27.21	28.51	29.26	MAX CP	(")
CRANK LENGTH	CL	(MM)	170.00	175.00	175.00	170.00	175.00	175.00	60.00	75.00	90.00	105.00	105.00	SL	(MM)
HEADTUBE LENGTH	HTL	(MM)	115.00	115.00	125.00	115.00	115.00		170.00	175.00	175.00	175.00	175.00°	CL	(MM)
MEAD ANGLE	HA	(°)	70.50	71.00	71.00	69.50		125.00	90.00	90.00	105.00	125.00	145.00	HTL	(MM)
SEATTUBE ANGLE	STA	(°)	74.00	73.50	73.00		70.00	70.00	70.34	70.84	71.34	71.34	71.34	HA	(°)
CHAINSTAY LENGTH	CSL	(MM)	412.00	(1) (1) (1) (1) (1)		73.00	72.50	72.00	74.34	73.84	73.84	73.34	72.84	STA	(°)
TON BRACKET HEIGHT	ввн	(MM)	15/22/2005/05/05	412.00	412.00	412.00	412.00	412.00	412.00	412.00	412.00	412.00	412.00	CSL	(MM)
TTOM BRACKET DROP	BBD	(MM)	305.90	305.90	305.90	307.00	307.00	307.00	288.14	293.24	293.24	293.24	293.24	ввн	(MM)
TION BRAUNCE PRUP	WB		27.10	27.10	27.10	26.00	26.00	26.00	44.86	39.76	39.76	39.76	39.76	BBD	(MM)
12E	0	(MM)	1,058.00	1,078.00	1,115.00	1,062.00	1,084.00	1,121.00	1,031.48	1,060.88	1,075.88	1,091.38	1,107.88	WB	(MM)
iop	СТ	(")	16.00	18.00	21.00	16.00	18.00	21.00	13.07	15.57	17.57	19.07	21.07	ст	(")
INSEAM KANGE	1	(")	27.67	27.67	27.67	27.98	27.98	27.98	26.91	29.57	31.17	32.20	33.88	1	(")
	-		- 33.32	÷ 35.33	+ 37.69	+ 33.63	- 35.64	- 38.00	+ 30.41	- 32.07	- 34.10	- 36.12	- 38.78		

\* Cranks on LG Joshua ZØ and XL Supercaliber are 177.50mm long.

STANDOVER EFFECTIVE TOP TUBE COCKPIT LENGTH MINIMUM COCKPIT MAXIMUM COCKPIT STEM LENGTH CRANK LENGTH HEADTUBE LENGTH HEAD ANGLE SEATTUBE ANGLE CHAINSTAY LENGTH BOTTON BRACKET HEIGHT BOTTOM BRACKET DROP WHEELBASE CENTER TO TOP INSEAM RANGE

# CLASSIC GEOMETRY

			ALUMINUM	HARDIAIL: N	III AI	10		ALUMINUM	RIGID: TASSA	JANA	Name of the last o			- A
	EM/FA SIZE	-	XS	SM	MD	LG	XL	XS .	SM	MD	LG	XL	EM/FA SIZE	
STANDOVER	50	(")	24.98	26.62	28.24	29.41	30.98	24.74	26.38	28.00	29.18	30.74	so	(")
EFFECTIVE TOP TUBE	TT	(")	21.06	21.80	22.37	22.97	23.53	21.06	21.80	22.37	22.97	23.53	тт	(")
COCKPIT LENGTH	CP	(")	23.51	24.82	25.99	27.16	27.71	23.33	24.62	25.75	26.89	27.45	CP	(")
MINIMUM COCKPIT	MIN CP	(")	22.37	23.11	23.71	24.88	25.21	22.26	23.00	23.60	24.73	25.22	MIN CP	(")
MAXIMUM COCKPIT	MAX CP	_(")	24.65	25.97	26.69	27.81	28.37	24.41	25.70	26.70	27.82	28.38	MAX CP	(")
STEM LENGTH	SL	(MM)	90.00	105.00	120.00	135.00	135.00	90.00	105.00	120.00	135.00	135.00	SL	(MM)
CRANK LENGTH	CL	(MM)	170.00	175.00	175.00	175.00	175.00	170.00	175.00	175.00	175.00	175.00	CL .	(MM)
HEADTUBE LENGTH	HTL	(MM)	90.00	90.00	105.00	125.00	145.00	90.00	90.00	105.00	125.00	145.00	HTL	(MM)
HEAD ANGLE	НА	(°)	70.79	70.79	71.29	71.29	71.29	71.00	71.00	71.50	71.50	71.50	HA	(°)
SEATTUBE ANGLE	STA	(°)	74.29	73.79	73.79	73.29	73.29	74.50	74.00	74.00	73.50	73.50	STA	(°)
CHAINSTAY LENGTH	CSL	(MM)	412.00	412.00	412.00	412.00	412.00	412.00	412.00	412.00	412.00	412.00	CSL	(MM)
BOTTOM BRACKET HEIGHT	ввн	(MM)	292.52	292.52	296.52	296.52	296.52	. 291.00	291.00	295.00	295.00	295.00	ввн	(MM)
BOTTOM BRACKET DROP	BBD	(MM)	40.48	40.48	36.48	36.48	36.48	42.00	42.00	38.00	38.00	38.00	BBD	(MM)
WHEELBASE	WB	(MM)	1,014.30	1,028.30	1,040.50	1,051.40	1,066.20	1,013.00	1,027.00	1,039.20	1,050.10	1,064.90	WB	(MM)
CENTER TO YOP	ст	(")	13.07	15.57	17.57	19.07	21.07	13.07	15.57	17.57	19.07	21.07	ст	(")
INSEAM RANGE	Ī	(")	25.98 - 29.48	28.62 + 31.12	30.24 + 33.17	31.41 + 35.33	32.98 + 37.88	25.74 + 29.24	28.38 + 30.88	30.00 - 32.94	31.18 + 35.09	32.74 - 37.64	1	(")

EFFECTIVE TOP TUBE COCKPIT LENGTH MINIMUM COCKPIT MAXIMUM COCKPIT STEM LENGTH CRANK LENGTH HEADTUBE LENGTH HEAD ANGLE SEATTUBE ANGLE CHAINSTAY LENGTH BOTTOM BRACKET HEIGHT BOTTOM BRACKET DROP WHEELBASE CENTER TO TOP INSEAM RANGE

<sup>\*</sup> Cranks on LG Joshua ZØ and XL Supercaliber are 177.50mm long.

			STEEL HAR	DTAILS: HOO	) KOO E KOO:	AQUILA		STEEL RIGI	D: MARLIN:	WAHOO: GITC	HE GUMEE				
	EM/FA SIZE		XS	SM	MD	LG	XL	XS	SM	MD .	LG	XL	MD-L	EM/FA SIZE	
STANDOVER	50	(")	25.83	28.74	29.86	30.86	31.85	25.20	28.35	29.50	30.50	31.70	23.55	50	(")
EFFECTIVE TOP TUBE	TT	(")	21.14	21.81	22.36	22.95	23.50	21.14	21.81	22.36	22.95	23.50	22.36	TT	(")
COCKPIT LENGTH	CP	(")	23.64	24.90	26.06	27.23	27.78	23.39	24.63	25.74	26.87	27.42	24.58	CP	(")
MINIMUM COCKPIT	MIN CP	(")	22.48	23.16	23.73	24.90	25.18	22.31	23.01	23.58	24.71	25.20	24.38	MIN CP	(")
MAXIMUM COCKPIT	MAX CP	(")	24.81	26.06	26.67	27.78	28.33	24.47	25.71	26.69	27.80	28.36	26.15	MAX CP	(")
STEN LENGTH	SL	(MM)	90.00	105.00	120.00	135.00	135.00	90.00	105.00	120.00	135.00	135.00	90.00	SL	(MM)
CRANK LENGTH	CL -	(MM)	170.00	175.00	175.00	175.00	175.00	170.00	170.00	170.00	170.00	170.00	170.00	CL	(MM)
HEADTUBE LENGTH	HTL	(MM)	85.00	85.00	105.00	125.00	145.00	85.00	85.00	105.00	125.00	145.00	105.00	HTL	(MM)
HEAD ANGLE	на	(°)	70.48	70.59	71.09	71.09	71.09	70.50	71.00	71.50	71.50	71.27	71.50	HA	(°)
SEATTUBE ANGLE	STA	(°)	73.98	73.59	73.59	73.09	73.09	74.50	74.00	74.00	73.50	73.50	74.00	STA	(°)
CHAINSTAY LENGTH	CSL	(MM)	420.00	420.00	420.00	420.00	420.00	420.00	420.00	420.00	420.00	420.00	420.00	CSL	(MM)
BOTTON BRACKET HEIGHT	ввн	(MM)	291.81	294.05	298.05	298.05	298.05	288.00	291.00	295.00	295.00	295.00	295.00	ввн	(MM)
BOTTOM BRACKET DROP	BBD	(MM)	41.19	38.95	34.95	34.95	34.95	45.00	42.00	38.00	38.00	38.00	38.00	BBD	(MM)
WHEELBASE	WB	(MM)	1,015.66	1,028.51	1,040.31	1,051.31	1,066.01	1,015.70	1,025.90	1,039.60	1,048.70	1,063.40	1,039.60	WB	(MM)
CENTER TO TOP	ст	(")	13.00	17.37	18.53	19.76	21.24	13.00	17.12	18.33	19.58	21.08	18.33	ст	(")
INSEAM RANGE		(")	26.83 + 30.33	30:74 - 33.24	31.86 - 34.80	32.86 + 36.78	33.85 + 38.76	26.20 + 29.70	30.35 + 32.85	31.50 - 34.43	32.50 - 36.41	33.70 - 38.60	25.55 - 32.41	1	(")

STANDOVER EFFECTIVE TOP TUBE COCKPIT LENGTH MINIMUM COCKPIT MAXINUM COCKPIT STEM LENGTH CRANE LF" HEADT! HEAD ANGLE SEATTUBE ANGLE CHAINSTAY LENGTH BOTTOM BRACKET HEIGHT BOTTOM BRACKET DROP WHEELBASE CENTER TO TOP INSEAM RANGE

<sup>\*</sup> Cranks on MD, LG, and XL Marlin are 175.00mm long.

		1	ALUMINUM	SPORT UTIL	ITY BIKE: U	TOPIA		STEEL SPO	RT UTILITY	BIKES: NIRV	ANA: ZEBRAN	0			
	EM/FA SIZE		XS	SM	MD	LG	XL .	XS	SM	MD	LG	XL	MD·L	EM/FA SIZE	
STANDOVER	so	(")	24.34	25.98	27.60	28.77	30.34	24.96	28.10	29.25	30.25	31.46	23.30	50	(")
EFFECTIVE TOP TUBE	TT	(")	21.06	21.80	22.37	22.97	23.53	21.14	21.81	22.36	22.95	23.50	22.36	TT	(")
COCKPIT LENGTH	CP	(")	23.39	24.13	25.26	26.40	27.50	23.42	24.12	25.23	26.36	27.45	24.61	CP	(")
MINIMUM COCKPIT	MIN CP	(")	22.31	23.05	23.65	24.78	25.27	22.34	23.04	23.61	24.74	25.23	24.41	MIN CP	(")
MAXINUM COCKPIT	MAX CP	(")	24.46	25.21	26.22	27.35	28.43	24.50	25.20	26.19	27.31	23.39	26.18	MAX CP	(")
STEM LENGTH	SL	(MM)	90.00	90.00	105.00	120.00	135.00	90.00	90.00	105.00	120.00	135.00	90.00	SL	(MM)
CRANK LENGTH	CL	(MM)	170.00	175.00	175.00	175.00	175.00	170.00	175.00	175.00	175.00°	175.00°	170.00	CL	(MM)
HEADTUBE LENGTH	HTL	(MM)	90.00	90.00	105.00	125.00	145.00	85.00	85.00	105.00	125.00	145.00	105.00	HTL	(MM)
HEAD ANGLE	на	(°)	72.03	72.03	72.53	72.53	72.53	71.12	71.62	72.12	72.12	72.12	72.12	HA	(°)
SEATTUBE ANGLE	STA	(°)	75.53	75.03	75.03	74.53	74.53	75.12	74.62	74.62	74.12	74.12	74.62	STA	(°)
CHAINSTAY LENGTH	CSL	(MM)	412.00	412.00	412.00	412.00	412.00	420.00	420.00	420.00	420.00	420.00	420.00	CSL	(MM)
OTTOM BRACKET HEIGHT	ввн	(MM)	283.38	283.38	287.38	287.38	287.38	283.43	286.43	290.43	290.43	290.43	290.43	ввн	(MM)
BOTTOM BRACKET DROP	BBD	(MM)	49.62	49.62	45.62	45.62	45.62	49.57	46.57	42.57	42.57	42.57	42.57	BBD	(MM)
WHEELBASE	WB	(MM)	1,006.48	1,020.48	1,032.68	1,043.58	1,058.38	1,011.79	1,021.99	1,035.69	1,044.79	1,084.19	1,035.69	WB	(MM)
CENTER TO TOP	ст	(")	13.07	15.57	17.57	19.07	21.07	13.00	17.10	18.33	19.58	21.08	18.33	ст	(")
INSEAM RANGE	1	(")	25.34 - 28.84	27.98 - 30.48	29.60 + 32.53	30.77 + 34.69	32.34 + 37.24	25.96 + 29.46	30.10 + 32.60	31.25 + 34.19	32.25 + 36.17	33.46 + 38.36	25.30 - 32.16	1.	(")

STANDOVER EFFECTIVE TOP TUBE COCKPIT LENGTH MINIMUM COCKPIT MAXINUM COCKPIT STEN LENGTH CRANK LENGTH HEADTUBE LENGTH HEAD ANGLE SEATTUBE ANGLE CHAINSTAY LENGTH BOTTOM BRACKET HEIGHT BOTTON BRACKET DROP WHEELB . -CENTIL INSEAN RANGE

<sup>\*</sup> Cranks on SM, MD, LG, and XL Zebrano are 170.00mm long.