

MANTIS BICYCLE CO.

1996 Frame Collection

Mantis bicycle frames have always been the most innovative frames in the industry because Mantis has built a legacy of innovation with a series of firsts. The first monocoque frames, the first elevated chainstays, one of the first and most unique McPherson Strut rear suspension bikes, and now the first thermoplastic carbon monocoque rear suspension bike. Mantis frames have changed the look of mountain bikes, yet each frame is a finely tuned riding machine -- Mantis bike frames are renowned for their handling, stability and climbing. Plus, our frames have always been better at riding a wider range of conditions than ordinary bikes. That's why we don't make ordinary bikes, and that's why riding a Mantis is a different experience than what you've come to expect.

Our commitment is to continue to innovate and make your riding experience exhilarating and gratifying. Buy a Mantis frame and learn what the legacy of innovation means to you.



Our New Lifetime Warranty

Mantis bicycle frames are designed to withstand the requirements of the most demanding technical riding conditions on the planet. We stand behind our product and will warranty for the lifetime of the original owner all defects in materials and workmanship on our frames. However, neither man, nor materials are immortal and we cannot warranty frames that fatigue through wear and tear, are damaged or fail due to accident, abuse or damage as a result of use for purposes other than which the product was intended. This warranty does not apply to damage due to metal lapses such as improper assembly, maintenance or installation of parts or accessories which are not compatible with the bicycle frame.

Please visit your authorized Mantis dealer for sympathy, support and to process your warranty claims.

Screaming V™



Start by throwing away your expectations. We are asking you to *learn to forget.* The Screaming V's monocoque front triangle is made of reinforced thermoplastic, as are the compression strut and swing arm. At the heart of the McPherson strut rear suspension is a new 1.75-inch piston travel Noleen nitrogen charged shock. This new shock has a beefed up 10mm chromoly shaft and double top out O-rings in the cylinder, which significantly limit flex, as well as adjustable compression damping to tune your ride.

Forget about full suspension bikes being heavy – this frame is about 5 lbs, with the rear shock. The Screaming V will not feel like the plodding, fat suspension bikes you've ridden before. It is light and agile, like a good hardtail. Carbon technology and efficient design allow lighter, stiffer parts than you've ever experienced.

Forget about carbon bikes being fragile. The Screaming V is made of Cytec CMY thermoplastic carbon, which is tougher under impact and less brittle than old carbon/epoxy bikes. The Screaming V is also reinforced in critical areas, making the frame tougher and more resistant to abuse.

Forget about mushy rear brakes. The interrupted seat tube design utilizes a shorter, rigid carbon compression strut which allows the brakes to be pulled from the center, and opens the rear triangle for vertical wheel travel. The synergy of these three elements will give you full suspension travel with stiff, solid rear brakes. Expect to brake later and harder into technical corners. Our revised geometry places the swingarm and compression strut at a wider angle than other rear suspensions which minimizes torsional flex.

Easier climbing because of lighter frame weight, more responsive speed control because of the rear section engineering, better handling because of the stiffer rear, better damping control due to the new Noleen shock, and aggressive riding over rough terrain because of the active rear suspension. Sounds like a faster lap than you've ever ridden, doesn't it?

*Frame Size**	*Size Range*	*Head Angle*	*Seat Angle*	*Chainstay Length*	*Top Tube Length*	*Bottom Bracket Height*	*Head Tube Length*	*Rear Suspension Travel*	*Seat Post Size*
16"	15"-17"	70.5°	73.0°	16.6"	22.0"	12.2"	4.25"	3.8"	27.0mm
18"	17"-19"	70.5°	73.0°	16.6"	23.0"	12.2"	4.25"	3.1"	27.0mm
20"	19"-21"	70.5°	73.0°	16.6"	23.5"	12.2"	5.25"	3.1"	27.0mm

**Measured vertically from the center of the bottom bracket to the center of the seat tube.*

Pro Floater™



The Pro Floater is one of the original, all time great full suspension bicycle frames. It is a McPherson strut bike, because the McPherson strut design is fully active, resists flex more efficiently, and is simpler to use than any other type of rear suspension. The triangulation of the swingarm and compression strut holds the rear wheel in place with less material than any other type of rear suspension.

The new Noleen shock for 1996 is a 1.25-inch piston travel nitrogen charged shock with a fat 10mm chromoly shaft and double stopout bushings in the cylinder to significantly limit flex. This shock also allows separate adjustment of spring rate, preload and compression damping, allowing the rider to truly dial in the bike to his or her own weight, riding style and riding conditions.

For '96, we have continued to improve the Pro Floater. The front triangle is carefully constructed of 6013 aluminum to give you a ride that is 30% stronger than the 6061 aluminum frames. Additionally, we have CNC'd the swingarm pivot structure which reduces frame weight, stiffens the pivot point and makes it more durable.

The compression strut utilizes oversized aluminum tubing which resists bowing, resulting in a lighter, stiffer rear end that vastly improves stopping power and control. All-aluminum frame construction reduces weight for better climbing and suspension response.

The increased stiffness in the box section swingarm reduces flex at the rear wheel for better cornering. The box section tubing is directional in its strength, because of flat sides and that means there are solid walls of aluminum resisting lateral and vertical bending, virtually locking the rear wheel in place. On an aluminum bike like the Pro Floater, the swingarm is a much more solid unit than the compression strut, which is why we rigidly attach the rear wheel to the swingarm.

*Frame Size**	*Size Range*	*Head Angle*	*Seat Angle*	*Chainstay Length*	*Top Tube Length*	*Bottom Bracket Height*	*Head Tube Length*	*Rear Suspension Travel*	*Seat Post Size*
16"	15"-17"	70.5°	73.0°	16.5"	22.0"	12.3"	4.25"	2.5"	28.6mm
18"	17"-19"	70.5°	73.0°	16.5"	23.0"	12.3"	4.25"	2.3"	28.6mm
20"	19"-21"	70.5°	73.0°	16.5"	23.5"	12.3"	5.25"	2.0"	28.6mm
22"	21"-23"	71.0°	72.0°	16.5"	24.25"	12.3"	6.25"	1.8"	28.6mm

**Measured vertically from the center of the bottom bracket to the center of the seat tube.*

Flying V™



Remember the first time you saw a Flying V? Most enthusiasts do, because it was such a radical bike that it changed our perceptions of what a mountain bike could be. We've designed a hardtail out of oversized aluminum, increasing stiffness and reducing weight. This is arguably the best handling rigid bicycle on the market.

Monocoque front triangles are great, because they put the material directly where you want it. The Flying V has a very stiff and very durable front end, because of the huge box section front area. The large attachment to the head tube makes the bike very solid under front-end impacts, and reduces torsional flex allowing your steering inputs to turn directly into cornering.

The Flying V has always had awesome mud and chainsuck clearance - only now we've got it with less weight and more stiffness. The rear triangle is welded on with oversized aluminum tubing, resisting torsional twisting and braking force bowing better than before, allowing more responsive braking and cornering.

Superior mud and chain clearance is delivered by CNC machining a wishbone with more clearance and rigidity than a bent tube offers. If there is chainsuck that somehow hits the wishbone, the chain will harmlessly dig into a solid piece of aluminum, rather than a thin-walled tube, for greatly increased durability.

*Frame Size**	*Size Range*	*Head Angle*	*Seat Angle*	*Chainstay Length*	*Top Tube Length*	*Bottom Bracket Height*	*Head Tube Length*	*Rear Suspension Travel*	*Seat Post Size*
16"	14"-16"	70.0°	73.0°	16.3"	21"	11.6"	4.25"	n/a	28.6mm
18"	17"-19"	70.5°	72.0°	16.4"	23"	11.6"	4.25"	n/a	28.6mm
20"	19"-21"	70.5°	72.0°	16.5"	24"	11.6"	5.25"	n/a	28.6mm

**Measured vertically from the center of the bottom bracket to the center of the seat tube.*

Mantis Colors Mantis bicycle frames are custom frames and we consider the finish an important decision. If you would want a custom color, we will accommodate your request but require a five week lead time as well as a $100 surcharge. To better serve you, we offer the following colors with a three week order lead time:

Team Series	***Super Series***	***Standard Series***
Team Green	Super Red	Black
Team Blue	Super Green	Polish
(formally Mantis Blue)	Super Blue	*(Polish available only on Pro Floater)*

Screaming V is only available in Carbon Finish.

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