



MAELSTROM > Freeride means different things to different people. For some it is lift-assisted park riding, for others it is epic back-country adventures, and for another group, it is having a single bike that can do all of the above in addition to the occasional DH race. The Maelstrom is packed with design and engineering features that give riders of all types a bike that performs admirably in a wide range of conditions, offering high-performance climbing and pedaling efficiency while providing 7" (180mm) of super high quality rear wheel travel.

Adjustable Headtube Angle > Corsair frames are equipped with a headtube/headset system that allows 3 degrees of headtube angle adjustment. The Maelstrom is shipped with a zero-degree headset that results in a headtube angle of 66 degrees when using a 565mm fork with 180mm of travel. For riders that love to fine tune their ride, our optional 1-degree headset allows the headtube angle to be increased to 67 degrees, or decreased to 65 degrees. The 1-degree headset is also extremely helpful when using a fork that differs from the recommended axle-to-crown measurement.

Center Balance > The pivot point on the Maelstrom is in a mid-high position and is positioned behind the bottom bracket. By putting the pivot in line with or behind the bottom bracket, Center Balance helps alleviate the heavy feel that can be associated with a forward pivot location. Corsair bikes have a lighter, more maneuverable front end and ride-feel because of the center balance design.

Center of Gravity > Low center of gravity results in a more maneuverable bike. The Maelstrom's single swingarm pivot is located mid-high on the seat tube and behind the centerline of the bottom bracket. The rear shock is mounted low and just in front of the seat tube allowing for an uninterrupted seat tube which allows for full seat height adjustment. These placements are key in achieving the Maelstrom's low center of gravity.

Low Leverage Ratio > Many bikes utilize suspension systems that result in leverage ratios of approximately 3:1, whereas the Maelstrom has a leverage ratio of 2:1, (7" of rear wheel travel with 3.5" of shock stroke) This 2:1 ratio has a number of benefits: First, longer and lower stroke ratio shocks have a larger environment in which to do their work, resulting in less stress on the shock itself, which leads to more durable/longer lasting equipment. Second, longer stroke shocks offer a greater range of adjustability. Finally, lower spring rates result in more sensitive shock reaction.

Rear Suspension Design > The Maelstrom features a single pivot rear suspension design. Designed for serious pedaling, the Maelstrom includes a full length seat tube which allows for full saddle height adjustability. The bike's 10.5" x 3.5" (267x90mm) rear shock is actuated by an innovative rocker link that pivots around the bottom bracket shell. Finally, the Maelstrom's mid-high rearward mounted swingarm means that the overall swingarm length is short – resulting in optimal lateral stiffness and a lightweight swingarm, both of which contribute to high quality suspension performance.

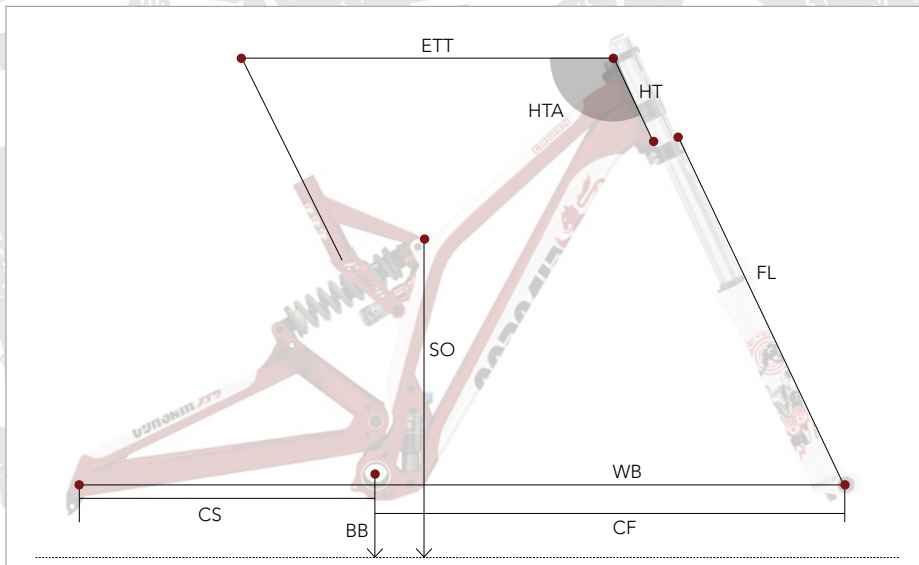
Axle Path > The Maelstrom's axle path has been carefully considered in order to produce maximum suspension performance. Specifically, a high rearward pivot location is used to achieve a rearward axle path. The greater the rearward movement of the axle, the more efficient the design becomes at transferring energy to the rear shock rather than the frame. By combining this pivot placement with our idler pulley system, the Maelstrom's axle path offers high quality suspension movement and energy management while providing for efficient pedaling.

Pedaling Efficiency > Pedaling efficiency is a challenge facing every long-travel bicycle design. The Maelstrom utilizes a swingarm-mounted idler pulley to neutralize chain-growth and reduce pedal feedback in all three chainrings. This pulley position that creates a very slight stiffening of the rear swingarm while pedaling – a functionality often referred to as "anti-squat" – which results in a more efficient and responsive pedal feel. The idler pulley system's effect on chain growth is notable - 5mm of chainpull at 180m travel is a very low number, better than many short travel XC bikes (not to mention other Freeride and DH designs). The Maelstrom's idler pulley system supports the use of a front derailleur and offers the ability to use one, two or three chainrings.

Serviceability > The Maelstrom's rear swingarm is attached to the main frame using our washerless SureLock axle system which prevents the hard anodized 7075 aluminum axle from loosening. When it comes time for service, this simple system is among the easiest high-performance bikes to service and maintain.

Fit, Finish & Attention to Detail > As with all Corsair bikes, great time and effort have gone into ensuring that the smallest details are treated with the greatest degree of importance. The Maelstrom's hardware is recessed into the frame, creating smooth, clean lines and durable mechanical connections. Our M8 shock mounting bolts use a proprietary design to ensure rattle-free rear shock performance. Corsair's custom-designed, interchangeable dropouts (Maxle or Q.R. compatible options), make our frames more versatile, and our 12-step painting process (which includes a special extra-durable clear coat) creates a long lasting, high quality finish.





CORSAIR MAELSTROM: FREERIDE		SMALL		MEDIUM		LARGE	
		mm	in	mm	in	mm	in
ST	SEAT TUBE LENGTH (C-T)	410	16.1	450	17.7	450	17.7
STA	SEAT TUBE ANGLE	71.5°		71.5°		71.5°	
OD	SEAT TUBE OD	34.9	1-3/8	34.9	1-3/8	34.9	1-3/8
ID	SEAT TUBE ID	30.9		30.9		30.9	
ETT	EFFECTIVE TOP TUBE (C-C)	577	22.7	597	23.5	617	24.3
HT	HEAD TUBE LENGTH	110	4.3	110	4.3	110	4.3
HTA	HEAD TUBE ANGLE	66°		66°		66°	
SO	STAND OVER	659	25.9	659	25.9	659	25.9
CS	CHAIN STAY LENGTH (C-C)	431	17.0	431	17.0	431	17.0
WB	WHEEL BASE (C-C)	1130	44.5	1150	45.3	1170	46.1
CF	CENTER TO FRONT (C-C)	699	27.5	719	28.3	739	29.1
DROP	BOTTOM BRACKET DROP	16	0.6	16	0.6	16	.6
BB	BOTTOM BRACKET HEIGHT	359	14.1	359	14.1	359	14.1
W	BOTTOM BRACKET WIDTH	83	3.3	83	3.3	83	3.3
EE	REAR SHOCK (E-E)	267	10.5	267	10.5	267	10.5
RSW	REAR SHOCK MOUNT WIDTH	M8 X 22					
RS	REAR SHOCK STROKE	89	3.5	89	3.5	89	3.5
RT	REAR SUSPENSION TRAVEL	180	7.1	180	7.1	180	7.1
OLD	REAR AXLE WIDTH	150					
FL	SUGGESTED FORK LENGTH	565	22.2	565	22.2	565	22.2
FT	FRONT SUSPENSION TRAVEL	180	7.1	180	7.1	180	7.1

Five-Star Build >

Availability: Winter 2007

Frame: Custom formed and shaped 6061 Aluminum Tubing, mid-high single pivot swingarm, adjustable headtube angle, replaceable Maxle rear drop-outs

Rear Shock: Manitou Revox 10.5" x 3.5" w/ 22.0mm x 8mm hardware

Fork: Marzocchi 66 ATA, 1 1/8" alloy steerer

Headset: Corsair Inside Design with 0 degree adjustment for 1 1/8" steerer

Stem: Funn Rippa Stem, 45mm x 31.8mm

Handlebars: Corsair 7050 Triple Butted - 710mm x 31.8 x 30mm rise

Grips: Funn Gorilla Lock-on grips

Brakes: Avid Code w/ 185mm rotors

Front Derailleur: Shimano XT, (M760-E), bolted to frame

Rear Derailleur: SRAM X-9 Long Cage

Shifters: SRAM X-9 Trigger Shifter (Front and Rear)

Cassette: SRAM PG-970 - 11-34T nine speed

Chain: SRAM PC-951 w/ PowerLink

Crankset: Race Face Diabolis - 175mm arms

Chainrings: 24/36T Chainrings w/ Bashring

Chainguide: Black Spire Stinger

Bottom Bracket: Race Face X-Type - 83mm

Pedals: Corsair Inside Design Low Profile flat pedals

Wheels: Corsair Inside Design Go Big wheelset

Front Hub: Corsair Cartridge bearing (2) 110 x 20mm Thru Axle - 32H

Rear Hub: Corsair Cartridge bearing (4) 150mm x 12mm Thru Axle - 32H

Spokes: Stainless 2.2- 2.0 Black Single Butted Stainless w/ silver AtomLab alloy nipples

Rims: Corsair Cold Worked and Heat Treated - 32mm wide x 32H

Tires: Kenda Nevegal - 26x2.5"

Tubes: Kenda DH inner tubes

Saddle: Corsair Inside Design w/ 7mm Chromoly rails

Seatpost: Syncros 30.9mm

Seat QR: Corsair - 34.9mm

Corsair Maelstrom is available as a frame only, or as a complete bike.

Specifications subject to change without notice.

