



Vertigo
VERTIGOMOTORS

EXPERIENCE
AND PASSION



COMBAT ICE HELL
COMBAT CAMO

© VERTIGOMOTORS



Combat THE HELL

VERTIGO COMBAT: POWERFUL, LIGHTWEIGHT AND VERSATILE. EXPERTLY DESIGNED FOR PLEASURE AND PERFORMANCE.

Starting from a blank canvas it has been possible to create the perfect bike. The basic principles were clear, lightweight, powerful and versatile, after that it was important to include reliability, size and its absolute Trial pedigree. To ensure reliability, all the components (gearbox, starter, water pump, chassis, etc.) have been thoroughly tested in the toughest conditions for over two years.

As for the size, this was a critical point, because the smaller it could be the easier it would be to control, change direction and ride in a dynamic way in order to have the ability to conquer more difficult sections. The use of specially designed fan, radiator, water pump and compact engine has really helped to reduce the overall dimensions of the Combat. The engine performance of Combat Vertigo is truly spectacular, 31 hp at 9200 rpm combined with the impressive torque and power delivery provided throughout, allowing confidence to be high to tackle even the most demanding terrain.

The 6-speed gearbox includes 4 Trial related ratios with the top 2 gears designed specifically for the road or trails (top speed limited to 110 km/h). Each gear is perfectly suited to cover all situations. All gears have 4 different and unique injection maps to provide an endless array of power options. The revolutionary chassis combines two types of materials to create a lightness and stiffness like never before. The overall weight of just under 65 kg can be reduced further to 62 kg using the Powerparts option. By having the fuel tank in a low central position fuel load plays no part in changing the feel or operation of the bike, and furthermore it is hidden from damage. The large capacity airbox, located at the highest part of the bike ensures a cool and clean air intake to provide consistent performance. The suspension is designed to be used both for pleasure and performance, and offers an incredible level of traction. The large diameter clutch diaphragm delivers a smooth and progressive action, giving the rider good control and instant action when the need arises.

The simple and clean lines with the high level finish of all the components shouts innovation and perfection. The overall effect is to create a Trial bike, as was the original goal, at the next level.

EXPERIENCE, PASSION AND DESIGN CONCEPT

Experience and passion define the basis of the Vertigo brand. Vertigo has arisen from the strong desire to drive the evolution of Trial bikes to a new level.

Vertigo grew from the idea of creating a bike to match the passion that existed within the team. The project was born with no restrictions or limits, nothing was beyond reach to ensure that the absolute goal was realised. To achieve the best, you must have the best resources. Vertigo combined the best technical team, the best designers, the best riders, the most enthusiastic end users and the best professionals in each and every department. Although their skills were diverse, they shared the same experience and passion.

Vertigo sought the best in design, technology, innovation and research in pursuit of excellence. Equally important, the Vertigo dream is to deliver a different experience, building a community of customers and friends, where together we can share and enjoy the common passion that exists. The Vertigo Club will offer the unique opportunity for customers to ride and train in an exclusive members only private practice area, reserved for you and other Vertigo riders.

The Vertigo dream, passion and experience have been at the heart of our inspiration, initially, now and always. The first bike from Vertigo offers just the start of all these concepts: The VERTIGO COMBAT: Powerful, lightweight and versatile. Expertly designed for pleasure and performance.

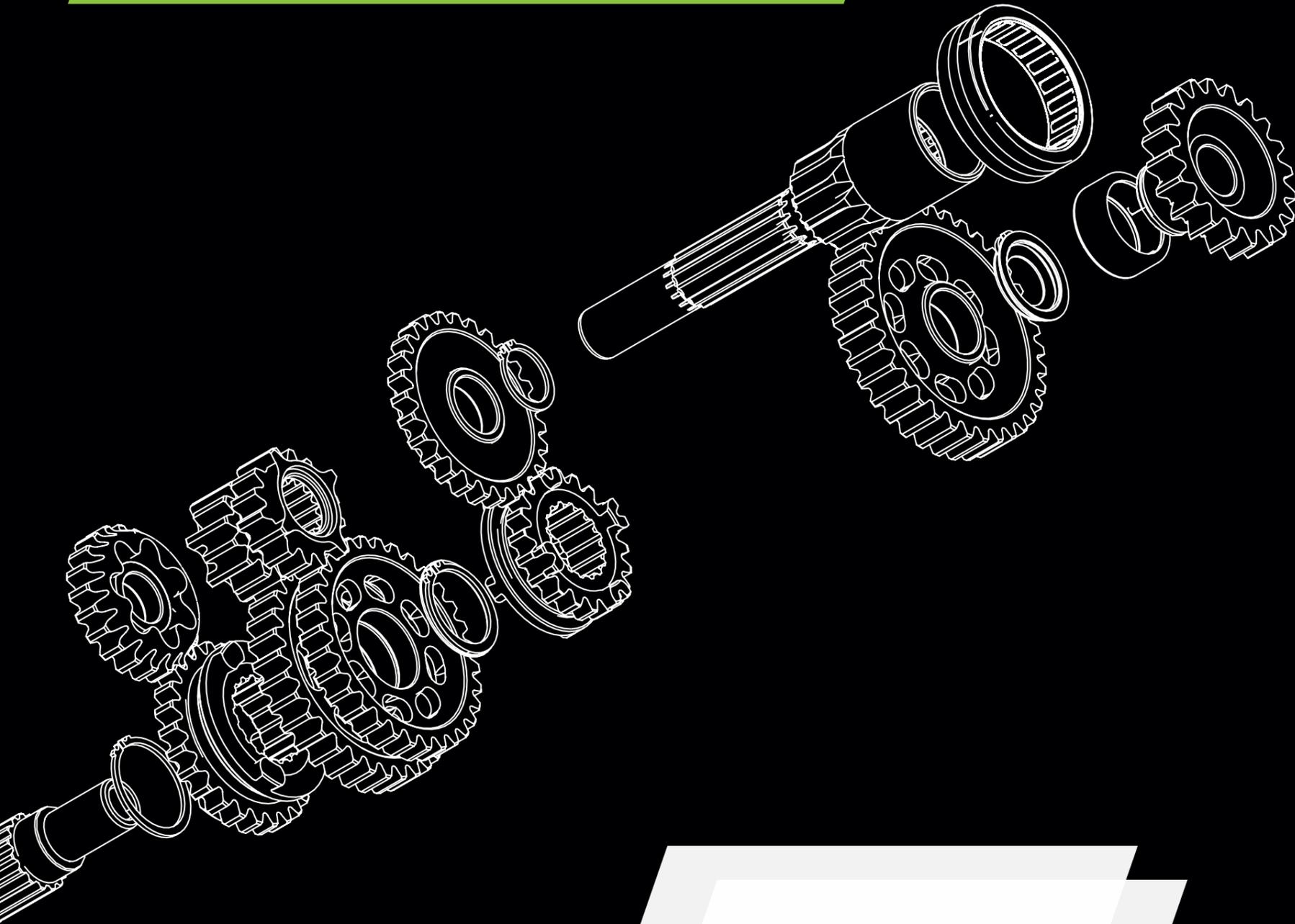


COMBAT CAMO WORKS



COMBAT ICE HELL

POWERFUL
AND VERSATILE



Combat ICE HELL



COMBAT ICE HELL

THE PURE TECHNOLOGY



	TYPE, CAPACITY, ATTRIBUTES	HIGHLIGHTS
ENGINE TYPE	2 stroke engine, 300 CC, EFI	last generation of ECU engine control and management
POWER	31 HP / 9200 rpm	torque and power are controlled by the ECU, depending on the driver engine map selection and gear engaged.
TORQUE	4,9 Kg.m / 4500 rpm	
GEARBOX	6 speed gear, 4 gear trials developed, each one ECU controlled	max. speed 115 km/h
CLUTCH	oil wet multidisc	134 mm diameter diaphragm
RADIATOR	V special design, adapted to frame shape	maximum air intake capacity, high warm dissipation
ECU ENGINE CONTROL UNIT	Vertigo design, controlling: gear position, engine temp, humidity, pressure, gas pump, water pump, radiator function, electr timing	24 different maps capacity, 4 gear maps for pilot
ENGINE CONTROL SENSORS	integrated injection driver	
	integrated starter driver	
	barrel gear sensor, can control each gear engaged	the engine maps are adjusted for every gear
	protocol can 2.0B	
	crankshaft position sensor	this allows the ECU to adjust very accurately the timing for injection and ignition
	PWM pump water control	electrical water pump and fan control allows the ECU to control the water temperature, regardless the pilot does and engine rpm
	engine fan control sensor	
BATTERY	LiFePo4 de 2.1 Ah i 13,2 V	necessary to ensure that all the system gets the electrical power needed in every moment
POWERBOX ECU	Vertigo design	control all the electrical power, save all the components from short circuit
MANIFOLD	Titanium	
WEIGHT	63 kg	
FRAME	15CDV6 steel + aluminum 6082	high flexibility from steel multitubular combined by rigidity at some required areas from aluminum frame
SWING ARM	cast aluminum pivoting points arm, 2 pivot swivel points swing arm	less weight, improving swing movement, easiest maintenance
FRONT SUSPENSION	Tech Alu gold	long travel suspension, high performance adjustable shock absorber
REAR SUSPENSION	monoshock / swing arm, Vertigo special swing arm combined with multiregulation REIGER monoshock	long travel suspension, high performance adjustable shock absorber
FRONT MUDGUARD	double injection, PPR / TPR combined components	soft areas were required to improve mudguard function
REAR MUDGUARD	double injection, PPR / TPR combined components	soft areas were required to improve mudguard function
AIRBOX	high capacity upper airbox, 1,1l capacity, airbox on top	fresh and cleaner intake air, upper position to improve waterproof condition
GAS TANK	HIGH CAPACITY LOW CG, 2,7l capacity, low and centered Gravity Center position	perfect balance of weight, less or more weight does not affect balance on general weight, constant bike performance
GAS CAP COVER	PPR Clip Cover, PPR Cover over gas tank cap bayonet type	clean and safe area from dirty and water, easy to refill
EXHAUST MUFFLER	2 exit exhaust, symmetric and centered silencer	very low weight and power / torque response
HANDLEBAR	Renthal	
RIM	Morad mechanized	
CRANKCASE	Magnesium	
REAR AXLE	Paralleled excentric	

FORM AND FUNCTION

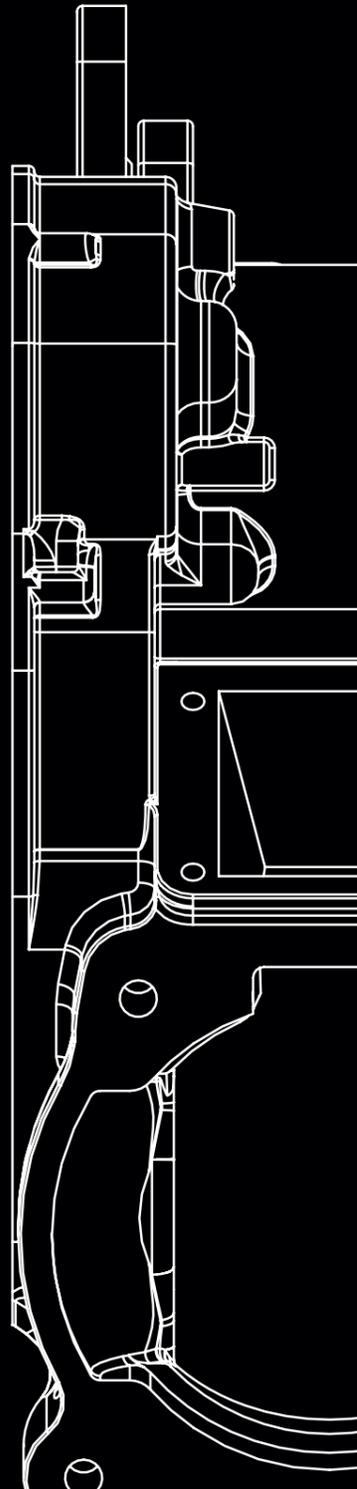
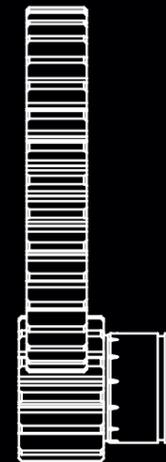
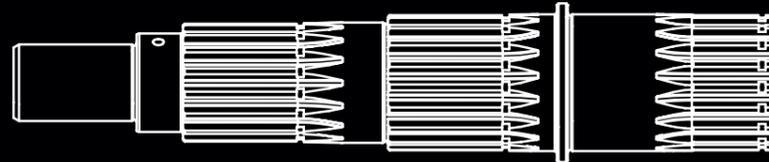
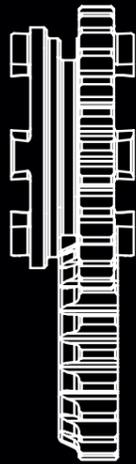
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COMBAT CAMO

PERFORMANCE AND PLEASURE



COMBAT CAMO WORKS



GAS TANK POSITIONING
low and central for best balance,
no matter what gas level

LEIGHT WEIGHT
frame

GEAR BOX
control by ECCU



THE PURE
TECHNOLOGY



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FORM AND
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