



THE ELEPHANT TURNS 25

This year, the 61th edition of the EICMA happens to coincide with the anniversary of an historic landmark in the Italian motorcycle industry: the 25th anniversary of Cagiva. It was on October 17, 1978 that the company founded by Giovanni Castiglioni bought the AMF Harley Davidson Italiana production facilities in Schiranna, opening a new age for the Italian motorcycle industry. The first SST and SX models already caught the eye of young consumers during a period when the scooter was all the rage, anticipating the enormous phenomenon of the ultra-technological 125 that marked the 1980's market. Motorbikes like the Aletta Rossa or the sporty Aletta Oro became the motorbike of every sixteen-year-old's dreams and consolidated the commercial success of the firm.

This positive response was also influenced by the sporty image transmitted by clamorous success in all areas of off-road racing and in African marathons. It was, however, the exciting challenge offered by the GP500 where the elephantine logo first achieved extraordinary visibility, beginning with Eddie Lawson, and later with the memorable 1994 season when Jhon Kocinski came within one step of winning the coveted prize. Cagiva also made considerable contributions from an industrial point of view, transmitting the technology and creative energy of its brand name to the promotional policies implemented by Ducati and Husqvarna, and assisting in the rebirth of the glorious brand name of MV Agusta. Even the Cagiva 2004 range remains faithful to the values cultivated during the company's 25-year history by proposing innovative models that boast an enviable combination of performance, style, and price.

The three product families - MITO, RAPTOR, and NAVIGATOR – are ready to hit production with all the chromatic and technical options presented at Munich 2004. Shows, however, should also offer us an opportunity to daydream – and there will be no better place to do that than at the Cagiva stand, thanks to the tantalizing X3 –Raptor, a extreme concept bike that seems to be a sneak preview of more trail-blazing innovations for future Raptors. Rigorously single-saddle, it features high silencers, narrow handlebars, and a stylishly original front fairing dominated by a minimal windscreen and air box fuel injectors. This cutting-edge model is what we have learned to expect from the extraordinary creative capacities of Cagiva.

THE 2004 MODEL RANGE

- Raptor and V-Raptor 1000 – 650
- Navigator 1000
- Raptor and Mito 125
- Colour Range



RAPTOR AND V-RAPTOR 1000-650

New for 2004	"New look": Raptor & V-Raptor change dress
New for 2004	"A richer trellis": arrangement for the assembly of passenger handle and a new side stand
New for 2004	"A bike for couples": new seat and new passenger handle
New for 2004	"Room to move": the new line of accessories for Raptor & V-Raptor
	"Strength is power": Born to compete, the V-Raptor 1000 MY 2004 increases its sports features
	"A perfect physique": Raptor 1000
	"1000 technologically refined cc": descriptive notes on the most exciting twin cylinder in this category
	"The details which make the difference": descriptive notes on the setting up of the 1000 and the 650
	"A very popular sports motorbike" a racing look for the V-Raptor 650
	"The road is its scene": Raptor 650 MY 2004
	"An all- terrain shock absorber": a more comfortable setting for the suspension of the Raptor 650 MY 2004
	"A Japanese engine with a Latin heart": no changes for the Raptor and V-Raptor 650 twin cylinder



RAPTOR & V-RAPTOR: NEW LOOK

Raptor & V-Raptor MY 2004 immediately look more seducing and more aggressive thanks to:

- New front fender
- Mat black frame
- Mat black wheels
- Black instrumentation cover
- Side panels coloured as per bodywork characterized by smooth finishing

RAPTOR & V-RAPTOR: A RICHER TRELLIS

On the MY 2004 frame we modified and strengthened the area of the rear frame, so to be ready to assemble the passenger handle.

The new Raptor & V-Raptor 2004 trellis will be painted mat black to give value to the winding lines. The frame has a diamond structure and it is the main reason for the great street qualities of the Raptor & V-Raptor, a very agile bike and ready to find the ideal direction. The swingarm is painted mat black too. It is characterised by the splendid and personal elliptical section and enriched with a chrome plate having the required distribution chain tensioning system.

RAPTOR & V-RAPTOR: A BIKE FOR COUPLES

Riding a Raptor or a V-Raptor is a pleasure not only for the rider. The new seat for MY 2004 has been modified in the rear part for the passenger who will have a bigger comfort thanks to a wider seat. To this important modification there is to add the passenger handle. It is made of a particular material soft to the touch and suits well the rear line of the bike.



RAPTOR AND V RAPTOR: A SIGN OF THE TIMES

Owners of Raptors often replace their driving mirrors in order to personalise their bikes. On 2004 models we decided to replace them, following today's trend regarding style and quality. The new driving mirrors give a better view and can be easily adjusted, in addition to being more stable at high speed.

RAPTOR & V-RAPTOR ACCESSORIES: ROOM TO MOVE

Due to the comfort offered by the new seat and to the well known distribution features of the twin cylinder engine Raptor & V-Raptor are enjoyable to ride both in long distance journey as well as in the city's streets. Cagiva has highlighted this attitude by creating a full range of accessories designed for tourism.

• TANK BAG, SADDLE BAGS AND WINDSCREEN

The comfortable driving position and the smoothness of the propulsion unit make Raptor and V-Raptor a touring motorbike, now improved with the addition of new accessories designed to this purpose. Tank bags, saddlebags and the possibility of fitting a plexiglass protection windscreen (available in two versions) have increased the occasions in which you can enjoy driving a Raptor and V-Raptor.

• ALARM

The Cagiva accessory range includes the essential remote controlled theft alarm with a variable code. The gearcase especially made for this model can be easily installed thanks to a presetting device inserted in the harness of the electric system of the "naked" motorbikes from Varese.



V-RAPTOR 1000: STRENGTH IS POWER

Initially it was created to provide fun on winding roads and hairpin bends and to make an authoritative appearance on the stage of city centres and fashionable places. But soon this image appeared too banal for a motorcycle, which has soon captured the interest of mechanics and drivers, due to its technical potential and its performance. Therefore, extreme trims, professional suspensions and GP tyres have soon changed its quiet existence into a fast life dictated by the chronometer. It raced in main Italian, English, Dutch and Austrian tracks, has become a strong opponent to more specialised and more sporting motorcycles and it is record holder among the motorcycles in its category. Although it has never stopped performing stunts, thanks to the wide and low handlebar its vocation is certainly to try to set a record.

For this reason, we have transferred to the 2004 model range some of the experience built up during competitions and subsequently we have created a more specialised model capable of high performance.

We have raised the rear by 30mm in order to increase the clearance and subsequently the rake in a bend. This alteration, obtained through a different ratio of the suspension leverages, has also modified the weight distribution in order to obtain a perfect 50% - 50% balance between the two axles with the driver on the saddle. The new and professional Sachs shock absorber is provided with a 5mm longer stem and it allows the setting to be personalised through adjustment of the pre-loading and of the hydraulic brake in extension (available with 50 clicks) and in compression (available with 40 clicks).

This excellent unit can be easily distinguished from the one used on the Raptor 1000 because of the box (containing the adjustments of the hydraulic brake in compression) placed on the right side of the frame. Equally remarkable for its technical value is the Marzocchi fork (with 43mm stems) favoured by professionals, which allows the adjustment of the pre-loading and the hydraulic brake in extension and in compression. Regular track goers and all those who like extreme riding will appreciate the presence of a steering damper, placed in parallel with the lower steering plate.

This unit has a stabilising function as well as an aesthetic one: it also makes the V-Raptor front more stylish thanks to the refined design of the clamps supporting the fork stems. The V-Raptor 2004 is the most powerful twin cylinder motorbike in its category, it is as stable as a sports motorcycle and its brakes boast an exceptional triad of Brembo Gold Series callipers. It has become a true war machine, capable of laying down the law both on the road and on the track. Strength is power.



RAPTOR 1000: A PERFECT PHYSIQUE

If you calculate the ratio between the weight and the power of the Raptor 1000 you will obtain a value of 1.8 kg./hp. A value that speaks for itself, a value that was a peculiarity in extremely specialised and sports motorcycles of a few years ago; but those bikes were not very versatile and riding them was demanding and tiring. Raptor 1000 is an easy, versatile motorbike, suitable for all types of drive, a good example of useful technology capable of simplifying the relationship between motorbike and driver.

Unlike its competitors, Raptor 1000 is not the result of a sport motorbike deprived of its superstructures, but was created by Cagiva intuition, style and technology. The result is a comfortable motorcycle, with a low saddle, which makes it exceptionally manoeuvrable, light and extraordinarily powerful; all this is enhanced by a minimalist design which emphasises the beauty of the mechanical components. Very refined in its technical solutions, this propulsion unit responds to the rider management and command of gas: it is docile and amenable in the more gradual opening and it becomes really aggressive if the 9.22 Kgm. push is required.



RAPTOR AND V-RAPTOR 1000 : TECHNOLOGICALLY AND REFINED CC

Dedicated to the connoisseurs of beautiful engineering and to all those who love strong sensations, the 90 V twin cylinder represents a manifesto of motor technology. With a total displacement of 999cc obtained with a 98mm bore and a 66mm stroke it is characterised by a timing system made up of a double overhead camshaft (DOHC) with 4 valves per cylinder; the exhaust valves have a 33mm diameter and the induction valves have a 40mm diameter. In order to obtain a more compact longitudinal development, a mixed timing system (gears and silent chain) has been adopted, a technical solution that makes it completely different from its competitors. Another special feature of this motorcycle is an automatic decompressor placed on the exhaust camshafts which eases the starter.

Very impressive for their sizing, the two bodies provided with Mikuni throttle valve (52 mm diameter) use a single injector and are controlled by a gear case that also runs the ignition. Particular care was taken in the making of the air box, provided with an electronically controlled blade valve which reduces the air flow when running at a slow rate. In order to solve the problem of the rear wheel bouncing, caused by the excessive exhaust brake, this propulsion unit is provided with an ingenious anti-skipping device which makes the clutch slip 30% in cases when the clutch is disengaged abruptly.

RAPTOR AND V-RAPTOR 1000: THE DETAILS WHICH MAKE THE DIFFERENCE

Raptor and V-Raptor 1000 are different from the 650cc version in some refined details. An example is provided by the Nippon Seiki instrumentation, which boasts among its functions displayed on the LCD display unit, the water temperature gauge as well as an advanced self-diagnosis system, which in a series of symbols communicates likely problems of malfunction.

The brackets which support the engine to the frame, unlike on the 650cc version, are finely forged in aluminium alloy and are characterised by a glaze finish which add a special touch.

The saddle covering is made of two different materials: hammered effect imitation leather for the passenger side and non-slip material for the passenger. The 1000cc model is immediately recognisable also from the back: bigger silencers (the V-Raptor 1000 silencers have a carbon fibre finish) and a 5.5 inches rear rim are the details that make it different from versions with a smaller displacement.



RAPTOR 650: A VERY POPULAR SPORTS MODEL

Little needs to be said about the V-Raptor 650: it is enough to see and experience it.

Muscular shapes, impressively aggressive, it represents a new frontier for motorcycle design. It has been designed for the person who has already tried everything as far as performance, roadholding and handling are concerned; the 2004 model has more sport orientated features.

This new improved shock absorber and the suspension leverage were redesigned in order to raise the rear part by 30mm. This new trim, thanks to a bigger clearance allows the achievement of a rake of a very sporty motorcycle and at the same time, the new load distribution (50%- 50%) transforms the front section into a sharp blade capable of striking extraordinarily precise directions. The thrilling potentials of the V-Raptor 650 is also enhanced by the handlebar configuration; low and wide to better control the stunt quality of this motor-bike. Extremely aggressive in every way, in 2004 it will be made in Cagiva red: one more reason to take it out on the track.



RAPTOR 650: THE ROAD IS ITS SCENE

Raptor 650 is a great performer, capable of taking on the most demanding roles thanks to its generous character and a spectacular stage presence. It can happily live in the most chaotic traffic, make heads turn in the most mundane squares, go out of the city very fast and perform very successfully on the track. But people like Raptor 650 above all because of its minimalist style which aims at improving the looks of a technologically advanced engine and of remarkable engineering.

Sharp lines sculpture the plastic polymers of the lifting tank, which allows an easy inspection of the air filter and of the rear cylinder. The saddle, only 775mm from the ground, plays an essential role in the Raptor design as it combines the tank and the rear lamp in one fixture giving continuity and balance to the side view. The futuristic digital analogue instrument system represents another strongly attractive element. It is made with precision (guaranteed by Nippon Seiki quality) and it boasts a special arrangement in tandem with the analogue speed indicator and the digital multifunction tachometer (in 2003 also in miles), which makes it extraordinarily compact and visible. In 2003 Raptor 650 will also come in the new striking orange; particularly suitable to its aggressive style and performance on the road. In short a recognition gained on roads and for its style.

RAPTOR 650: AN ALL-TERRAIN SHOCK ABSORBER

Raptor 650 MY 2004 unlike its sister V-Raptor retains its technical features unchanged: the 650 design aims at dynamics and precision. With a 25 steering pipe rake, the Raptor 650 is a very steady and safe motorbike as well as being acutely responsive in terms of changing direction, thanks to a load distribution (46% front –54% rear) which favours handling and drive traction. Dynamic qualities enhanced by the effectiveness of an oversized Marzocchi fork with stems (43 mm) diameter and by the Sachs shock absorber purposely designed for this model. By 2004 the new suspension will have been reset in order to make it more effective. This is a decision which will improve the driving experience and make the Raptor 650 more responsive to handling and more comfortable, especially on uneven surfaces.



RAPTOR AND V-RAPTOR 650: A JAPANESE ENGINE WITH A LATIN CHARACTER

Raptor and V-Raptor 650 share the most advanced propulsion unit in a twin cylinder motorbike of the same category. Characterised by a 90V structure and fed by two Mikuni BDSR 39 carburettors, it is the only motorbike in this displacement band to be able to boast a timing system made up of a double overhead camshaft with 4 valves per cylinder. Our work on this excellent unit has been targeted to strengthen the torque as well as power. To give it a distinctive character, we have tuned its sound: we made it more vigorous in line with the quality of our three colour models. The new exhaust system 2 in 2, thanks to an appropriate setting of the carburation has given more stamina to the dynamic twin cylinder. Also the updated radiator guarantees performance, reliability and consistency on every occasion, its convex shape contributes to the aesthetic balance of the motorcycle.

NAVIGATOR 1000

New for 2004	"New look": new graphics for a more aggressive Navigator
	"The Sport Tourer": Cagiva red and alloy wheel rim for the most sporty off road enduro
	"Refined mechanics": a detailed description of the frame and the suspension characteristics
	"A generous heart": detailed notes on the best twin cylinder performer in its category
	"Travel equipment" : equipment and accessories
	"More comfort for the passenger": a new anti-heat safety feature



NAVIGATOR 1000: "NEW LOOK"

As per the Raptor & V-Raptor family also the Navigator changes dress in order to wear something more appropriate that reflects its performance potential. The new colours are highlighted by the presence of the following aesthetic improvements:

- Opaque black frame
- Opaque black wheels
- Front fairing support in opaque black with the CAGIVA brand
- Luggage rack coloured opaque black
- Crankcase covers coloured opaque black
- New Navigator logo
- New rear vision mirrors

NAVIGATOR 1000: SPORT TOURER

Navigator never fails to amaze in any area of performance.

Magnificent and easy to handle, this touring motorbike can comfortably carry the passenger as well as bags and a small trunk. Ideal for those who like travelling, and reliable thanks to low maintenance (valve adjustment every 24,000 km) and precision building. These characteristics, to a certain extent present in some of the motorbikes made by the competition, are only part of its many assets.

When the gas is turned on you discover that this touring motorbike despite being quiet delivers almost a hundred horse power which is easily tameable and capable of giving a pleasure, unexpected on bikes of the same category. Its exciting performance is bridled in the sound and intuitive mechanics, which give confidence even in the most challenging situations.

The Navigator is fast when taking bends, thanks to the eighteen inch rear wheel. The outstanding drive is further complemented by the powerful braking of the Nissin callipers and the suspension work that backs up the steady directional control even at a high speed.

This versatility makes the Navigator a different motorbike from its rivals on the market so much so that it can be considered the only Touring Sport motorbike available on the market.



NAVIGATOR 1000: REFINED MECHANICS

The complexity of the Cagiva Navigator frame is justified by the necessity of meeting many requirements such as sturdiness when fully loaded, steady directional control and a comfortable handling. As a result we have built a trestle structure with square and rectangular tubes which links to a steel rear swing arm support plates. The engine mounting is particularly attractive and finely forged in aluminium alloy, the material also used for the rear swing arm. The quality of the suspension is exceptional for this category of vehicle.

At the front there is telehydraulic fork with 45mm diameter stems whereas at the rear there is a single shock absorber which can be adjusted in the pre loading and in the hydraulic brake which is connected using finely crafted alloy aluminium leverages.

NAVIGATOR 1000: A GENEROUS HEART

Unflinching, environmentally friendly, capable of steady as well as high speed, the 90 V twin cylinder adapt itself excellently to any situation. Downrated of about 8 horse power in sixth gear compared to the standard units of the Raptor (and with a limiting device set to 9000rpm in sixth), this propulsion unit is appreciated also for its low running costs thanks to the low fuel and maintenance demand. An accurate rimapping of the integrated ignition and injection gearcase has also made this engine more docile, therefore more suitable to the versatile touring features of the Navigator. Among the technical specifications that it shares with the Raptor range there is a system of "secondary air" which has the advantage of limiting the harmful emissions.



NAVIGATOR 1000: TRAVEL EQUIPMENT

It boasts several distinctive elements such as the double elliptic front lamp, a sized engine-guard or the integration of the tank and the front fairing: strong signs of design and personality. The Navigator is extremely streamlined and provides excellent comfort both to the rider and to the passenger, thanks to the right balance between saddle and footboard and to the aerodynamic protection provided by the compact and attractive front fairing. The digital analogue instrument system has been expanded: as well as the usual information it provides a self diagnosis system which allows the display of possible failures through symbols.

It is equipped with a parcel rack and there is an optional set of specially designed suitcases which are available in colours matching the chassis; they do not spoil the Navigator's streamlining and guarantee more than 140 litres of locked storage space.

NAVIGATOR 1000: MORE COMFORT TO PASSENGER

The main priority when designing the Navigator was to ensure the improvement of the passenger's comfort; on this type of motorbike he/she is not an occasional guest but a travel companion who shares emotions and pleasures.

For these reasons the Navigator, is equipped with a comfortable saddle and an ergonomic handle as well as anti-heat kit. This feature includes specially provided guards placed over the outer parts of the exhaust manifolds and of the balancer in order to decrease the heat especially in a low gear or in city traffic. Thanks to their shiny stainless steel surface these guards also improve the elegance of the exhaust manifolds and the appearance of the raised silencers which are a strong technical and aesthetic characteristic of this motorbike.



125: RAPTOR and MITO

New for 2004	"Baby Raptor": the new Raptor 125
	"Compulsory training school for riders" : a new system to fit the fairing to the Mito
	"Environmentally friendly": 125 are EURO1 approved
New for 2004	"More comfortable and more sporty": more comfortable suspension setting for Raptor and Mito 2004



BABY RAPTOR: THE NEW RAPTOR 125

An evolution from the stylistical and technical base of the planet, the new 125 Raptor owes its name to the introduction of design concepts derived from its bigger sisters, like the front headlamp, the new redesigned passenger seat, and the V-Raptor's handlebars. New is also the front fender characterized by a smoother profile and the license plate holder derived from the X-Raptor.

Technically, the 125 Raptor receives a new exhaust system having an extractable silencer and a new linkage for the rear suspension that gives a weight distribution more concentrated to the front end. Aesthetically, the 125 Raptor differentiates itself from the previous Planet by the following improvements:

- New front fender
- New seat
- New handlebar
- New handle grips
- New instrumentation support
- New license plate holder
- Frame coloured black
- Wheels coloured black
- Fuel tank protection coloured black
- Raptor and Celtic logos



MITO 125 : "COMPULSORY TRAINING SCHOOL FOR RIDERS"

MITO : four letters which identify the most timeless Italian sport motorbike on the market.

Twelve successful, passionate years for riders who have become champions or dedicated fans. This motorbike evokes nostalgia for the past but is at the same time extraordinarily up to date: season after season it confirms its commercial success. Therefore even in 2004 Mito will continue to thrive among those young people who are keen to experience the basic elements of sport riding.

It will successfully accomplish this task due to the strength of its features: its shape holds a remarkable degree of continuity however a finer focus on detail has been introduced.

RAPTOR AND MITO: ENVIRONMENTALLY FRIENDLY TWO-STROKE ENGINE

CO 8g/km, HC 4g/km, NOX: 0.1

These values make it difficult for a two-stroke engine to be environmentally friendly. Cagiva has found a solution and has obtained an EURO1 approval, thanks to research and development aiming at reducing polluting agents. Provided with a catalyst placed inside the exhaust pipe, the new engine retains its power and high performance. Liquid cooling system, laminar induction and an exhaust regulation valve are the main technical characteristics of this two-stroke engine. The exhaust regulation valve, through an actuator, shuts down the exhaust at medium and low speeds making it more effective without altering the performance at higher speeds. The two models differ for the technical configuration of the radiator and the exhaust system.

The Planet radiator is in a convex position in relation to the direction of travel whereas on the Mito this position is concave in order to improve the thermal exchange, a solution adopted by competitors.

This is the result of a choice made to set a style. The same criteria was adopted for the exhaust system: the Mito is provided with an extractable silencer and a conic exhaust inside the fairing, whereas the Raptor is provided with a chrome silencer like the one fitted on big 4-stroke engines. Capacitive ignition, electric starting and separate lubrication are also special features of this extraordinary two-stroke engine capable of environmentally friendly 11KW.



RAPTOR AND MITO: MORE COMFORTABLE AND MORE SPORTY

Thanks to the double beam in precious aluminium and superb suspensions, which are normally found in more powerful motorbikes, Mito & Raptor combine a sporty look to comfort. For 2004 both the Marzocchi fork with upside down stems (40mm) and the Sachs shock absorber have had their setting changed in order to achieve a more comfortable ride.

The two adjusted shock absorbers cope better with rough surfaces thanks to a closer control of the brake on the rebound and the use of less preloaded springs. The well known precision of this frame remains unaltered also thanks to the sizing of the rear fork in the distinctive shape of a boomerang .

All the technical equipment provided with these two models remains unaltered for 2004: the Brembo Gold Series two piston caliper, the 320mm semi-floating front disc brake, the 230mm forato rear disc brake with its Brembo Gold Series two pistons caliper.

Mito is still the only motorbike in its category which can boast a professional steering damper, placed in parallel with the upper plate of the fork. Raptor and Mito are fitted with two tanks which are a work of art: the first one is made of plastic polymers, the second one is made of sheet metal but both can be lifted to make maintenance easier. The Raptor's is very practical since it is equipped with an internal volume capable of storing a helmet.



COLOURS OF 2004 MODEL RANGE

MODELLO	COLORE	SELLA
RAPTOR 1000	CAGIVA RED COSMIC SILVER BAT BLACK	RED-LEATHER BLACK-GREY BLACK-GREY
V-RAPTOR 1000	BAT BLACK BLUE MARINE COSMIC SILVER	RED-BLACK BLACK-GREY
RAPTOR 650	CAGIVA RED BLUE MARINE SHYNE YELLOW COSMIC SILVER	BLACK FOR ALL COLOURS
V-RAPTOR 650	CAGIVA RED BLUE MARINE SHYNE YELLOW COSMIC SILVER	BLACK FOR ALL COLOURS
NAVIGATOR	BLUE MARINE BAT BLACK	BLACK FOR ALL COLOURS
MITO 125	CAGIVA RED BAT BLACK	RED-BLACK BLACK-BLACK
RAPTOR 125**	SHYNE YELLOW JUMP GREY	BLACK