



## Press Information 2001

**VARADERO**  
**XL125V**

**Varadero 125**



# Varadero 125

## *Introduction*

Europe's exciting 125cc motorcycle class continues to expand at a remarkable rate, with a broad spectrum of new models designed to appeal to the growing ranks of both new and experienced riders. Most of this growth can be directly attributed to Europe's comprehensive motorcycle licensing regulations, which limit young new riders to motorcycles and scooters displacing no more than 125cc, and producing no more 11kW or 15 metric horsepower of maximum power output.

When first introduced, these restrictions spurred the release of a flood of new models by all manufacturers, which subsequently stimulated a surge of interest in the motorcycles of the 125cc class. Thus, over the

years, the motorcycles of Europe's 125cc class have come to feature exciting styling and top-class technological innovations to rival many other larger displacement machines. These features complement the in-

herent riding ease and economical operation of 125cc motorcycles with eye-catching attractions that have won strong interest in the class, as well as stronger sales.





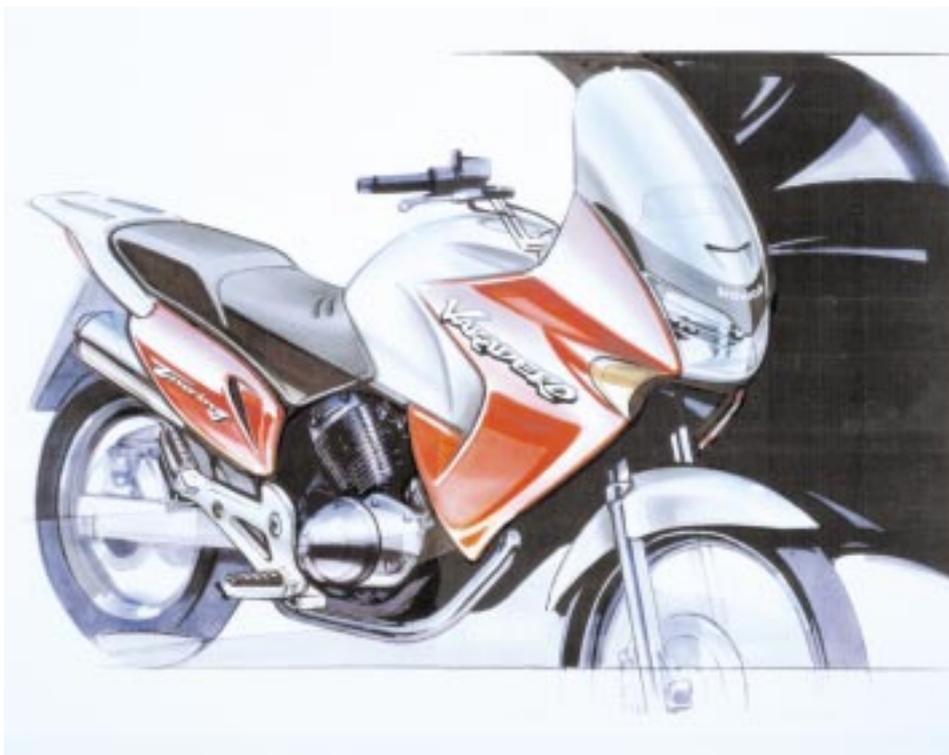
# Varadero 125

## *Introduction*

Honda has many models in this market segment representing a full range of riding styles: from basic transportation to sport bikes, cruisers and dual-purpose machines. However, in recent detailed studies of rider preferences in this market segment, Honda's design and development teams noted a distinct interest in a new on-road model with more of a 'dual sport' orientation that offers the extra riding comfort and wind protection of a large front cowl or fairing.

Based on this research, it was felt that the 125cc class could use a new addition that combines many of the most attractive attributes of Honda's road bikes and larger 'Rally Touring' models. One that delivers a satisfying surge of performance in a larger package that offers more in the way of space and long-lasting comfort. Therefore, in a bold step to further expand the range, Honda now proudly introduces a bright new addition to its lineup of 'Adventure Sports' machines. Powered by a rugged and

reliable 4-stroke V-twin engine, the new Varadero 125 features exciting styling, larger, more comfortable proportions than commonly seen in the 125cc class, and a thoroughly enjoyable riding experience. The new flagship model of Honda's diverse 125cc lineup.





# Varadero 125

## *Development Concept*

Taking several of the development themes used in the creation of the popular XL1000V Varadero as a starting point, the Varadero 125's design team set out to create an unusual and distinctively attractive new 125 that could provide many of the appealing features of larger-displacement machines while maintaining the light handling and brisk operation one normally associates with the class.

In particular, this new 'Adventure Sports' model should provide a higher eye position for the rider than normally found in the class, for easier viewing of the road ahead. It should also offer a comfortable riding position with ample room for not just the rider, but for a pillion passenger as well. Thus, significantly larger proportions than usually seen in the 125cc class were called for. A new frame was developed that would

provide not only the desired size, but also the desired rigidity, geometry and suspension components to ensure precise control and easy handling for all levels of riding skill.





# Varadero 125

## *Development Concept*

This new concept also called for a large front fairing unlike anything ever seen before in the class. One that provides optimal protection against the elements while projecting an aggressive and modern look of speed and agility. Behind this sleek, aerodynamic fairing, the fuel tank also needed to be of an amply large size to provide long days of riding enjoyment. Much like its namesake, the new Varadero's fuel tank plays a central role in its overall design, and

offers an exceptionally large fuel capacity for nearly a week's worth of normal commuting, or approximately 400km of riding between fill-ups.

Again like its larger sibling, and like most of the other models in Honda's exciting 'Adventure Sports' lineup, the new Varadero 125 would be powered by a smaller displacement 4-stroke V-twin engine that serves up the most exhilarating rush of power and performance in its class, while

providing excellent fuel economy and the long-term security of Honda's world-renowned reliability.

Developed for younger riders, commuters and day-trippers looking for an exciting new way to get around, the new Varadero 125 sets the pace in the 125cc class with performance, panache and a wide range of all-day riding pleasure that is difficult to match, yet easy to enjoy.





# Varadero 125

## Colouring Concept

The Varadero 125's impressive proportions and confident look of 'go-anywhere' versatility stand out even among the vast range of attractive models to be found in the 125cc class. Its unique styling and stunning bodywork will certainly prove to be major attention-getters, while its ample size and performance provide comfortable long-term riding enjoyment that is a rare commodity in its displacement class.

The new Varadero 125's colouring and graphics also make a powerful design statement, and complement the bodywork's distinctive styling with wide, boldly contrasting patches of colour. Like its larger namesake, the Varadero 125's large fuel tank plays the central role in its overall design, and its impressive curves are emphasised by a brilliant metallic silver colour that boldly grabs attention in all its colour variations. This silver

colouring also extends to the slim, sportily designed front fender and complements the aluminium parts featured in the Varadero 125's superb construction.

Providing an eye-catching contrast to the silver and black seen elsewhere in its design, the Varadero 125's three featured body colour variations are applied to its sleekly sculpted three-quarter fairing and sidecovers.

These variations include:

- A brilliant, cerulean metallic blue that gives the Varadero 125 a light and airy feel to emphasise its exhilarating performance and everyday riding enjoyment.
- A shimmering candy red that impressively accentuates the new Varadero 125's young and lively design, and 'go-anywhere' appeal.

- A richly lustrous black that gives the new Varadero 125 a clean image of urban sophistication to fit right in with any city setting, whether commuting on business or cruising for pleasure.

All models feature black-painted triple-spoke wheels that draw attention to the Varadero 125's sporty look of speed.

### Colours

- Moody Blue Metallic (with Accurate Silver Metallic)
- Candy Glory Red (with Accurate Silver Metallic)
- Black (with Accurate Silver Metallic)





# Varadero 125

## Styling

Recognisable at first glance, the new Varadero 125's distinctive lines borrow directly from its larger namesake, Honda's unique XL1000V Varadero. Since the larger Varadero soon became a popular fixture on the European scene after its 1999 release, the main goal of the new 125cc project was to create an all-new concept in the class with a machine offering ample size and impressive styling that wouldn't be humbled when pulling up next to a larger displacement bike.

### Aggressive, Aerodynamic Fairing

The design of the fairing was the main priority in the development of the Varadero 125, and as such is strongly based on the distinctive shape of its larger namesake. However, where the original Varadero's lines emphasise its size and power, the new Varadero 125 was given with a sharper, more slanted nose and more curvaceous form that projects an unmistakable look of sporty excitement, as accentuated by the aggressive glower of its large,

fully integrated dual multi-reflector headlights. The fairing's large proportions also play an effective role in deflecting wind and even light rain away from the rider for superb long-term riding comfort. Augmenting this is a vent that flows air in under the windscreen to help deflect the rush of wind up and around the rider by raising the air pressure within the cockpit area.





# Varadero 125

## Styling

### Fully Integrated Indicators

Another concern factored into the design of the Varadero's bodywork was the parking situation in major urban centres, where the stalks of conventional indicators can become entangled with other bikes parked in close quarters. Thus, the new Varadero has its indicator lights fully integrated into the form of the fairing at the front, and playing an integral part in the stylish shape of its tail cowl at the rear, where the two are cleanly integrated with the large central taillight for a modern and impressive look of aggressive style. Like its brilliant dual multi-reflector

headlight, these indicators provide optimal visibility in night-time riding conditions.

### Comfortable Ergonomics

The Varadero 125's broad tandem seat is an uncommon feature in the 125cc class. Contoured to offer a high level of comfort for both rider and passenger on par with larger motorcycles, its wide proportions are designed for long hours of supple, comfortable support. Its cover is constructed of two materials; the rider's portion featuring a deeply embossed pattern that provides both a quality feel and a sharper image.

The wide, relaxed positioning of the Varadero 125's handlebars also contributes to its superb long-term riding ease and comfort, and combines with the taller seat to improve the rider's range of view.

Other superbly styled features include the large, attractively designed die-cast aluminium step holders with their aluminium foot pegs, and the sleek, lightweight triple-spoke cast aluminium wheels, which combine to make an impressive contribution to the Varadero 125's look and feel of quality.





# Varadero 125

## Engine

### High-Powered, Liquid-Cooled 124cm<sup>3</sup> V-Twin Engine

The Varadero 125 gets its strong surge of power from a compact, liquid-cooled V-twin engine putting out a full-bodied range of performance that is tops in its class. Featuring a narrow width and impressive proportions as viewed from the side, this V-twin engine provides a strong central point of focus for the Varadero's large overall design. The V-twin configuration also provides an impressive feel of throbbing power and a pleasant staccato rumble of sound. While its 90° V-twin cylinder angle inherently cancels out most primary vibration, a primary

balancer was also incorporated into its design to further ensure that the engine's vibration doesn't become a distracting annoyance. This low level of vibration also permits the engine to be rigidly mounted in the frame without concern about excessive vibration sneaking up through the seat and handlebars.

Another key consideration in the design of the Varadero 125's engine was achieving the highest power rating possible within the limitations of its class. Although A1 class regulations currently limit power output to 11kW (or 15PS), most of the motorcycles offered in the

class tend to deliver significantly less power than the permissible limit. The 4-stroke V-twin engine powering the Varadero 125, on the other hand, puts out the maximum amount of top-end performance possible while delivering a solid surge of low-to-midrange power for a full-bodied range of riding enjoyment. Its 4-stroke configuration also ensures superb reliability and excellent fuel economy, which is complemented by the Varadero's large fuel tank to provide long days of riding enjoyment between full-ups.





# Varadero 125

## Engine

Although the engine is liquid-cooled for assured operating stability and long-term durability, with its compact radiator discreetly mounted up under the steering head, its exterior design features classic air-cooled finned cylinders that project an impressive look of size and strength. Its water pump and oil filter are also concealed behind the right-side case covers so as not to detract from the engine's clean, purposeful design, which plays such an important part in the Varadero 125's intrepid look of far-ranging Adventure Sport capability.

### **Dual Independent Digital CDI**

The V-twin engine powering the Varadero 125 also features the

latest in ignition design, incorporating not just one, but two separate, fully transistorised ignition systems that independently ignite each cylinder. This high-precision, high-output digital system combines with the push-button electric starter to ensure quick, easy starts and dependable long-term performance. Operating stability is further ensured by a compact, 12-volt maintenance-free (MF) battery.

### **Low-Emissions Air Induction System**

To keep exhaust emissions low while maintaining the engine's full performance potential, the Varadero 125 uses the same simple yet effective air injection system featured on several of the larger models in Honda's

streetbike lineup. This system directs a stream of fresh air from a small unit located on top of the head covers directly into each cylinder head's exhaust port, just behind the exhaust valve. Introduced into each port at the precise instant that the burning gases rush out of the combustion chamber on the exhaust stroke, this shot of air provides the extra oxygen needed to prolong the combustion process beyond the combustion chamber and into the exhaust port. The result is more complete combustion of exhaust gases and significantly lower emissions figures that easily exceed Europe's strict EURO-1 emissions control standards.



# Varadero 125

## *Engine*

### **High-Mounted Off-Road-Type Exhaust System**

The Varadero 125's impressive 2-into-1 exhaust system features a large, canister-style silencer positioned high under the right side of the seat for an aggressive 'Rally Touring' look borrowed from such predecessors as the Transalp 650V. This large-capacity silencer also features a built-in heat shield that

provides enhanced protection for pillion passenger legs against the heat of the exhaust. The system is also complemented by a large-volume aircleaner to ensure low noise output coupled with the Varadero 125's impressive V-twin sound.

### **Smooth-Shifting 5-Speed Transmission**

The Varadero 125 also features a rugged 5-speed transmission that

maximises the engine's feel of low-to-midrange acceleration. This results in quicker starts and livelier performance throughout the engine's rev range. The system also features a light-pull clutch and smooth-shifting operation that appeals to novices and experts alike.





# Varadero 125

## Chassis

The new Varadero 125 pioneers a new direction in both styling and rider ergonomics for its class. Designed to provide a more imposing sense of full-bodied size than seen in most of the motorcycles in the 125cc class, its ample proportions are more on par with larger midrange motorcycles, and provide a comfortable upright riding position highlighted by a higher eye position that affords a wider, easier-to-see view of the road ahead.

### **New Twin-Tube Steel Frame**

The Varadero's tubular steel double-cradle frame features a unique twin-tube backbone configuration that provides extra rigidity for assured riding confidence and control. Its box-section steel tube swingarm

features the same cross-section as that used for the XL650V Transalp for superb rigidity and precise wheel tracking. The chassis' relatively long, 1,450mm wheelbase also contributes to its responsive handling and confident control at higher speeds, while its midsize-class 800mm seat height provides a comfortable riding position that combines with the Varadero's relaxed handlebar positioning to realise the higher rider eye position desired in its fundamental design.

### **Responsive Suspension**

The Varadero 125's compliant front and rear suspension systems provide precise, responsive handling and a supple ride, whether zipping across

town or searching out the ends of old, abandoned fire trails up in the distant hills. Its rigid and responsive 35mm front fork offers neutral steering control and a plush 150mm of long-travel axle stroke to soak up any big bumps that may lie in wait along the way.

The Varadero 125's steering head and wide handlebars also offer a full 43° of left and right steering lock that ensures both a narrow turning radius and greatly enhanced manoeuvring freedom and riding ease, especially for novice riders caught in slow and tight riding conditions, such as the dense congestion of downtown traffic.





# Varadero 125

## Chassis

At the rear, the Varadero 125 rides on a smoothly responsive mono-shock rear suspension that supports the rigid box-section steel swingarm to provide a full 150mm of bump-absorbing axle stroke for an enjoyably comfortable ride for both rider and passenger. The centrally positioned, direct-mounted rear damper features 7-step adjustable spring preload that can be easily adjusted with the tools provided in the toolkit.

### **Sportbike-Look Wheels and Brakes**

The Varadero 125 rolls on a set of attractive hollow-section, three-spoke

cast aluminium wheels painted in a lustrous black for a look of lightweight agility and sport riding high performance that gives further emphasis to Varadero's larger proportions compared to other models in its class. Mounting an impressive-looking set of wide-carcass 100/90-18 front and 130/80-17 rear semi-knobbly on-road tyres like those featured on the XL650V Transalp, the Varadero 125 provides precise cornering and control at all speeds, along with competent and confident handling when venturing off the tarmac onto less travelled trails.

The Varadero 125's impressive front and rear disc brakes include a large-diameter 276mm drilled front rotor that is stopped by a compact dual-piston brake calliper mounting sintered metal pads for responsive braking control. At the rear, a lightweight single-piston calliper grips a 220mm disc for a high-performance combination of stopping power.





# Varadero 125

## Equipment

### **Integrated, High-Visibility Instrument Panel**

The Varadero 125's slim, compact, fully integrated instrument panel features large-faced fully electronic speedometer and tachometer dials for easy viewing. Between them is positioned a large LCD panel that includes displays for the coolant temperature gauge, odometer/trip meter and clock. A push-button on the front panel is provided for resetting the trip meter.

### **Wide, Convenient Rear Carrier**

The Varadero 125's large, sleekly designed rear carrier was borrowed

directly from the XL650V Transalp and features rugged reinforced cast resin construction. Offering ample carrying capacity and four convenient tie-down hooks to secure even larger loads with ease, this carrier also features contoured pillion passenger hand grips incorporated into its rails that resist extremes in temperature to provide a more comfortable hand hold in extreme weather conditions.

### **Spacious Carrying Capacity**

The Varadero 125's comfortable locking seat opens to reveal a large

storage space under the rider's section that provides ample room for carrying gloves, tool kit and other riding essentials. A special mount for carrying a U-lock is also provided under the pillion portion of the seat.

### **Easy Maintenance**

The left-side sidecover of the Varadero 125 detaches to provide easy access to such internals as the fuse box and the high-output maintenance-free battery.





# Varadero 125

## *Optional Equipment*

The new Varadero 125 will also be released with a wide range of thoughtful and convenient optionally available parts and equipment that increase its range of enjoyment—and security. These include:

- A taller windscreen that provides added protection against the wind and elements, particularly at higher speeds.
- A set of 4, soft polyurethane side visors that attach to the outer edges of the fairing to give the hands a wider range of wind protection.
- A large-capacity 45-litre top box designed to easily mount on the rear carrier with a key-operated, quick-detach locking mount. The box also features a large, comfortable moulded-in handle for exceptional carrying ease.
- A set of electrically heated handle-bar grips that greatly enhance riding comfort on cold days. The grips feature a convenient control switch that permits the grip temperature to be easily adjusted.
- A custom-fit tank bag that offers 13 litres of easily accessible carrying capacity. Its quick-detach magnetic pads mount easily to the top of the fuel tank.
- A sturdy, spring-loaded centre-stand that mounts to the frame to offer easier maintenance and more stable parking in some locations.
- An aggressive-looking aluminium cross bar that attaches to the handle-bars to provide a more pronounced off-road look.
- A large, moulded resin engine undercowl that protects the engine cases against grime and potential damage from objects tossed up by the front wheel.
- A high-security alarm system that releases an ear-splitting shriek whenever tampering or other movement is detected.
- A strong, easy-to-use U-lock that conveniently mounts in the carrier provided under the seat to provide extra protection against theft.
- A form-fitting, waterproof motorcycle cover that protects the Varadero 125 from rain, wind and prying eyes.



# Varadero 125

## Specifications

### Specifications

### Varadero 125 (ED-type) (95/1/EC-values)

Engine	Liquid-cooled 4-stroke 4-valve SOHC 90° V-twin
Bore × Stroke	42 × 45mm
Displacement	124.7cm <sup>3</sup>
Compression Ratio	11.8 : 1
Carburettors	22mm VP-type × 2
Max. Power Output	11kW/11,000min <sup>-1</sup>
Max. Torque	10.7Nm/9,500min <sup>-1</sup>
Ignition	Dual digital transistorised with electronic advance
Starter	Electric
Transmission	5-speed
Final Drive	'O' ring sealed chain
Dimensions (L×W×H)	2,140 × 830 × 1,255mm
Wheelbase	1,450mm
Seat Height	800mm
Ground Clearance	190mm
Fuel Capacity	17.5 litres (including 2-litre reserve)
Wheels	Front/Rear Hollow-section triple-spoke cast aluminium
Tyres	Front 100/90-18 56P Rear 130/80-17M/C 65P
Suspension	Front 35mm telescopic fork, 150mm axle travel Rear Monoshock swingarm with adjustable spring preload, 150mm axle travel
Brakes	Front 276mm hydraulic disc with dual-piston calliper Rear 220mm hydraulic disc with single-piston calliper
Dry Weight	149kg

All specifications are provisional and subject to change without notice.