

**2002**

**DEAUVILLE**  
**PRESS INFORMATION**

# Introduction

Honda's sleek, stylish and convenient mid-sized Deauville debuted in 1998 as the commuting and light touring successor to the NTV650 Revere. Powered by a strong and reliable liquid-cooled V-twin engine, and featuring an innovative integrated fairing design, the Deauville won immediate popularity for its modern looks, ample power and performance, and easy compatibility with busy urban lifestyles.

Of notable appeal has been the extra carrying capacity of its unique, fully integrated pannier bags, and the ability to easily expand on that capacity with a broad range of specially prepared optional equipment. The following year, the Deauville also became one of the first of Honda's diverse range of mid-sized motorcycles to be equipped with its highly effective H.I.S.S. anti-theft ignition system. These attractions among many others have led to strong and steady sales throughout Europe every year since the Deauville's introduction.

Now, after four years on the roads of Europe, the Deauville receives its first major upgrade with a menu of improvements designed to build upon its well-rounded strengths, and further expand its appeal to commuters and professional riders, and all who value its versatile combination of style, performance, reliability and carrying convenience.

# Development Concept

Before setting out to make any major fundamental changes to the design of the Deauville, its development team first made a careful study of user feedback and comments obtained at rider meetings and other gathering places where Deauville riders congregated. Although nearly all owners were extremely pleased with their investment, professional users and those who spend longer hours on their bikes were more apt to have found some shortcomings or improvements they would like to see in the next generation.

While all owners greatly appreciate the Deauville's built-in carrying space, many also voiced a desire for a little more in the way of extra carrying capacity to save them from having to invest even more money in extra aftermarket luggage in order to safely stow away larger articles. Also, while the Deauville's V-twin engine is generally well-liked for its slim dimensions and strong power delivery, some professional riders felt that a bit more attention paid to further minimising vibration would go a long way toward extending its range of comfort to longer distance touring and other all-day riding needs. So, with these and other comments firmly in mind, the Deauville's development team studied ways to make their creation even more useful, comfortable and rider-friendly.

First on list was larger-capacity panniers. However, while a larger storage volume is certainly desirable, a major increase in width would tend to defeat the purpose of the Deauville's otherwise slim proportions. So, special attention was given to expanding the panniers' height—and with it their capacity—as well as the size of their openings, without overly affecting their aggregate width.

Next on the agenda was maximising the Deauville's long-term riding comfort, and with this reducing its levels of vibration. There are several ways

to accomplish this goal, but by far the most effective is to go straight to the heart of the matter, that being the engine itself. Here the team concentrated on searching out vibration's various sources and then seeking ways to neutralise each one through a carefully balanced regimen of weight trimming and reapportionment.

Also, in the interest of improving the Deauville's overall balance of riding control and comfort, the team saw fit to add on a new variation to Honda's well-proven Combined Brake System, to give riders an extra margin of riding confidence and peace of mind in the often intensely competitive chaos of urban traffic.

Finally, to bring the Deauville up to speed in its level of environmental friendliness, the team set out to clear Europe's strict EURO-2 emissions regulations without resorting to more expensive electronic fuel injection, oxygen sensors and other high-tech add-ons.

Taken together, these improvements add up to an even greater sense of riding ease and comfort for both rider and passenger, and give the Deauville a broader appeal to Europe's motorcycle-riding commuters and professionals, as well as those looking for a light and friendly means of getting out of town to enjoy the beautiful world around them.

# Styling

Specially designed to meet Europe's unique requirements for comfortable and convenient two-wheeled transportation, the Deauville's sleekly styled, aerodynamic form slips smoothly and comfortably through crowded avenues and narrow urban streets with remarkable ease. Sweeping gracefully back from nose to tail, and incorporating a beautifully styled set of panniers into its design, this narrow, fully integrated three-quarter fairing provides excellent protection against the wind and elements while offering a host of features to make commuting more convenient and enjoyable.

Although the new 2002 Deauville's styling appears, at first glance, to be basically unchanged from its predecessor, closer inspection reveals a host of new features designed to further improve upon its established comfort, convenience and versatility. Perhaps the first noticeable change is the addition of an attractive, new clear-face, multi-reflector headlight that provides a more brightly illuminated view of the night-time road ahead.

In the cockpit, the Deauville's main gauges feature new carbon-fibre finish dials that extend a more modern, high-tech look to its beautifully integrated instrument panel.

Other improvements include detailed redesigns of such components as the front fender, the step holders and the chrome-plated exhaust system protector plate, giving them more rounded corners and edges that enhance the Deauville's overall look of quality while complying with WVTA regulations. Also, the Deauville's rubber parts have now received a fluoride treatment that ensures extended durability and resistance to damaging sunlight, ozone and air-borne chemicals.

## **Increased Carrying Capacity**

One of the main objectives in the Deauville's redesign was giving it greater carrying capacity, especially in regards to the dimensions of its integrated panniers. While the current bags can carry objects that are approximately the height and width of an A4-size sheaf of paper (or about 210 x 300mm), they can't quite hold the envelope or soft case that would normally contain it without bending corners.

The goal in the design of the new Deauville's panniers was to make at least the left-side bag large enough to easily hold an A4-size soft attaché case or an average laptop computer and its compact carrying bag, or other solid objects within the dimensions of approximately 340 x 280 x 60mm. This is generally considered to be a convenient size for most commuters to carry their essentials without folding or damaging the items in question. With these dimensions set, the left-side bag was expanded in volume by over 30%, from 18 to 24 litres, providing a much more convenient space to carry one's daily necessities.

Although the right-side pannier was also increased in size, the exhaust system passing underneath it necessarily limits the amount of vertical room available to expand its volume. However, even with this limitation, the right-side pannier was increased from 16.7 litres to 19.5 litres in volume, for significantly greater carrying capacity and convenience. As with the current Deauville, should the owner desire even more carrying capacity, a set of larger-volume interchangeable lids will be made optionally available for quick and easy swaps.

But the list of styling improvements doesn't stop there. Both panniers also feature new latching mechanisms that provide a more solid and secure operating feel, and new interior hinges that are now cleanly hidden away from view so as not to distract from the Deauville's cleanly integrated look. The

right-side pannier also features a new built-in heat shield pad to protect the bag and its contents from exhaust pipe heat in slow-moving traffic conditions, and both feature a durable resin underside coating that resists damage from flying debris and road grime.

# Colouring Concept

The new Deauville will be made available in three main colour variations that excite the eye with a look of luxury. Leading off is a brilliant metallic red that draws attention to the Deauville's lively urban character. A bright, new metallic silver envelopes the Deauville's sinewy bodywork in the modern lustre of European style, while a dark metallic green carries over from the previous year to project a more quiet look of mature quality. The Deauville will also be made available in bright white as a special variation that will appeal to fleet users and riding professionals, providing a neutral base for applying identifying markings.

The Deauville's engine has also received a new coat of durable silver paint on its more visible parts, replacing the 'Alogin' coating found on the current engine, while its brake and clutch levers have also been changed in colour from an anodised bronze finish to a rugged black.

Other markings on the Deauville's bodywork include new 'Combined Brake System' marks on the front fender and new Honda Wing marks on the fuel tank, as well as a new, brightly contrasting silver (or black) Honda logo applied to the strip between the headlight and windscreen.

## Colours

- **Pennant Red Metallic**
- **Tasmania Green Metallic**
- **Shield Silver Metallic**
- **Shasta White**

# Engine

The Deauville's proven liquid-cooled V-twin engine has won respect and admiration for delivering strong and reliable performance day in and day out. First used in the long-running NTV650 Revere, this hard-working engine has seen few modifications in its long lifetime of service.

However, after four years of powering the Deauville, the time has come for some fundamental improvements. The two main thrusts of the engine's planned modifications focused on reducing vibration and bringing the Deauville up to contemporary spec in regards to its emissions.

## **Significantly Reduced Vibration**

The most obvious approach to reducing vibration is to dampen it out with soft materials, either by isolating the source—as in rubber-mounting the engine—or isolating the rider by rubber-mounting every component the rider comes in direct contact with. This approach may seem the easiest at first, but it is most certainly not the most effective. Besides, the Deauville's engine plays a central role in the frame's construction, acting as a stressed member. To rubber-mount it would require major gusseting of the frame and likely a complete redesign to restore its lost rigidity and strength—a much bigger project than it at first appears. Instead, the Deauville's development team went straight to the source of its vibration: the engine itself.

The Deauville's V-twin engine features an offset crankshaft design that goes a long way toward cancelling out most of the engine's inherent primary vibration. Still, the combination of all the engine's rotating and reciprocating parts can add up to a major source of vibration, at various frequencies and engine speeds, so achieving an optimal neutralising balance of all these various

vibration sources is critical to minimising the rumbles and numbing buzzes felt by the rider and passenger.

Testing sought out the most acute levels of vibration relative to engine speed, and one of the major contributing factors was found to be reciprocating piston weight and its balance at the crankshaft. A redesign of the pistons and their wrist pins resulted in a significant 10% reduction in weight, which was further balanced out with modifications to the crankshaft's counterweights. But that was only the beginning. Before the job was done, over 80 different parts of the engine were either modified or entirely replaced in the quest for a significantly smoother feel of performance and acceleration, and a more relaxing overall ride.

### **A Stronger Clutch**

Interviews with long-term daily users of the Deauville also turned up a desire for a stronger clutch, as the current unit threatened to grow weaker with the rigours of all-day every-day riding that it was often exposed to in the dense traffic conditions of city centres. To ensure that the Deauville's clutch and transmission could stand up to the most punishing abuse of constant gear changes and short-shifting, its clutch friction plates were given a stronger, new surface material, while the number and size of the clutch plates were kept the same. The transmission was also reworked to match the power transfer changes in the new clutch, and several of the gears and even the countershaft sprocket were beefed up to ensure more dependable long-term operation.

### **Lower Emissions**

As noted earlier, ensuring that the new Deauville meets current and future exhaust emissions regulations was also a major goal in the redesign of its

engine. So equipping it with Honda's latest clean energy technologies was high on its list of desired improvements. On the intake side, the Deauville's free-breathing aircleaner ensures a smooth flow of air into the carburettors for more stable performance over a wide range of riding conditions.

To ensure cleaner combustion, a new AI (Air Induction) system was also installed, delivering a shot of fresh air to the engine's exhaust ports from a new, filter-equipped sub-chamber to optimise combustion efficiency by extending the burning of residual fuel and exhaust gases into the exhaust ports.

This more completely burned exhaust is then further scrubbed of harmful emissions by a set of new, two-stage catalysing heat-tubes. The first tube is installed in the exhaust pipe leading into the silencer and the second is located within the silencer itself to further reduce harmful emissions. Coated in a highly effective catalytic material, these two heat tubes significantly reduce emissions of hydrocarbons and nitrous oxides to levels that easily conform with Europe's strict planned EURO-2 emissions regulations, which are scheduled to go into effect in 2003. The heat tubes also feature larger holes than normal, for less restrictive exhaust flow and minimal effect on the Deauville's strong power output.

The addition of these new catalysing heat tubes to the exhaust system also necessitate a change in fuel, thus only unleaded fuel can be used in the new Deauville.

# Chassis

The Deauville's strong yet lightweight twin-spar steel frame wraps around the slim V-twin engine to provide agile handling and reassuringly neutral control. Its rigid and responsive 41mm front fork combines with a heavy-duty single-shock rear suspension system to assure a comfortable, well-controlled ride for one or two, and the rear damper's spring preload can be easily adjusted by way of a large remote control knob that provides a quick and efficient response to changing load requirements.

Very little in the way of improvements were required in the Deauville's frame, suspension and chassis components to ensure its top-class comfort and handling. However, one small modification did make a large contribution toward realising the reduced vibration sought in the engine's major modifications.

On the current Deauville, the exhaust system's silencer is suspended directly from the end of the right-side pillion step holder, which then tends to transfer vibration to the passenger and rider through the steps in a direct line of metal-to-metal contact from the engine. Rather than trying to dampen out vibration with a complicated rubber-mounting system, the entire exhaust mount was relocated from the step hanger to a discreetly positioned new bracket attached to the lower frame. This new mounting system not only eliminates a major source of irritating vibration, but also provides an elegantly strong and simple long-term solution to the exhaust system's mounting needs. The step hanger now hovers behind the exhaust system, totally isolated from this source of vibration, and thus providing no distractions from the Deauville's superb riding comfort.

## **New Combined Brake System**

Since the Deauville is most used by daily commuters and riding professionals who often spend long hours in the saddle exposed to the rigorous stresses of city traffic, it is especially important that all its operations be more attuned to the requirements of heavy urban traffic conditions. Swift and confident response to all rider inputs plays a much more important role in riding safety in the close quarters of city streets and narrow lanes, as there is considerably less margin for error here than on the open road. Therefore, in the interest of promoting greater overall confidence and control over the widest possible range of riding situations, the Deauville has now been equipped with a new, simplified version of Honda's proven Combined Brake System, which was specially configured for the Deauville's unique operating needs.

The system features a new pair of CBS 3-piston callipers mounted to the front fork, and a conventional dual-piston calliper at the rear replacing the single-piston calliper featured on the current model for a larger effective braking area and more even pad wear. The rear brake is mounted with new sintered metal brake pads that feature a larger surface area for reduced braking effort and longer wear, and grip a new, 1mm-thicker disc rotor for reduced heat build-up. A larger-capacity master cylinder was also added to handle the new operating requirements of the Combined system. The rear brake also features a new proportional control valve (PCV) installed in-line between the master cylinder and the rear calliper to help maintain an optimum balance of braking control in high-pressure applications for more stable braking operation.

In this new system, a squeeze of the front brake lever results in essentially the same brake operation as conventional systems: in this case, the outer two

pistons of the left-side calliper and all three pistons of the right-side calliper are engaged, providing strong, linear braking response with minimal effort and excellent feedback for virtually all braking situations. However, since this is not a full Dual-Combined Brake System, there is no secondary master cylinder to engage the rear brake calliper with hand brake operation.

The rear foot brake pedal in this new system now engages not only the compact, new dual-piston calliper by way of its in-line PCV, but also extends a measured balance of braking force to the centre piston of the front left brake calliper to ensure optimum braking control when only the foot pedal is depressed.

Since only one of the front brakes' six pistons is engaged, during normal operation braking emphasis remains focused on the rear brake, while the proportionally smaller front braking forces provide a steadying influence on overall braking control. However, this balance of operation changes in response to strong brake inputs, at which times the in-line PCV levels out sharp increases in rear brake pressure to help maintain an optimum balance of front and rear wheel braking forces for more controlled and effective braking response.

The goal of this system is to ensure that at least some front brake operation is engaged during any and all braking manoeuvres, while providing a greater proportional amount of front brake input during instances of unusually forceful rear/foot brake operation. As is well-known, even small amounts of additional front brake operation are far more effective at slowing down a moving vehicle—whether car, truck or motorcycle—than the rear brake alone. Likewise, overly strong and sudden engagement of only the rear brake drastically increases the chance of rear tyre slippage, and with it the possibility of loss of control, with potentially disastrous results. By providing a measured

balance of front braking force when only the rear brake is engaged, and increasing the ratio of front braking force as rear brake pressure suddenly increases, the Deauville can more quickly and effectively reduce its speed, or even stop in a shorter distance than can be achieved by the rear brake alone.

Of course, by far the most effective application of braking forces is always the co-ordinated use of both front and rear brakes, with a greater emphasis on front wheel brake operation. However, as can often be the case in dense city traffic conditions, sometimes a rider is only able to react to sudden events with the foot brake, in which case the new Deauville now provides a much more reassuring range of response with its unique balance of braking control.

# Optional Equipment

The new 2002 Deauville continues to be supplied with an extensive array of optional parts and equipment that help extend its range of comfort and convenience. This list of components includes:

- A taller polycarbonate windscreen for an expanded range of wind protection.
- Larger-volume pannier lids that further expand the panniers' carrying volume from 19.5 to 30.5 litres (right side) and from 24 to 35 litres (left side), permitting the carrying of objects the size of a full-face helmet and more.
- Custom-made fabric inner pannier bags with strong carrying handles and zippered centre panels that permit expansion to fit the larger sized lids.
- An injection-moulded resin rear carrier that bolts directly to the tail over the hand grip mounts.
- A large, stylish 45-litre locking top box in matching body colours.
- A convenient, large-volume tank bag.
- Side-mounted lower shields to extend the fairing's range of wind protection downward by deflecting the wind and cold away from the rider's feet and legs.
- A convenient, easy-operation see-saw-type gear change lever to help minimise scuffing and damage to shoes.
- A handy 12-volt accessory socket that combines with the Deauville's built-in wiring harness to facilitate installation of such aftermarket electrical components as a radio or car stereo.
- Plastic knuckle visors that attach to the front cowl to further improve wind protection.

- Electric grip heaters to provide an extended range of cold weather riding comfort.
- A motion- and vibration-sensitive alarm system that emits a piercing wail if tampering is detected.
- A state-of-the-art multiplex RDS (Radio Data System) audio system that features handlebar-mounted control of all operations, automatic Europe-wide reception of networked radio station broadcasts and fits into a special mount in the Deauville's right-side pannier.

## Specifications

## DEAUVILLE (ED-type)

Engine	Liquid-cooled 4-stroke 6-valve SOHC 52 • V-twin
Bore × Stroke	79 × 66mm
Displacement	647cm <sup>3</sup>
Compression Ratio	9.2 : 1
Carburettor	36mm slant-type CV × 2
Max. Power Output	41kW/7,750min <sup>-1</sup> (95/1/EC)
Max. Torque	55Nm/6,250min <sup>-1</sup> (95/1/EC)
Ignition	Digital transistorised with electronic advance
Starter	Electric
Transmission	5-speed
Final Drive	Enclosed shaft
Dimensions	(L×W×H) 2,215 × 780 × 1,260mm
Wheelbase	1,475mm
Seat Height	814mm
Ground Clearance	144mm
Fuel Capacity	19.5 litres
Wheels	Front/Rear 'S'-section triple-spoke cast aluminium
Tyres	Front 120/70-ZR17M/C (58W) Rear 150/70-ZR17M/C (69W)
Suspension	Front 41mm telescopic fork, 115mm axle travel Rear Single damper with adjustable preload, 120mm axle travel
Brakes	Front 296mm dual hydraulic disc with Combined 3-piston callipers and sintered metal pads Rear 276mm hydraulic disc with dual-piston calliper and sintered metal pads
Dry Weight	228kg

All specifications are provisional and subject to change without notice.