

2007
SH300i
PRESS INFORMATION

Introduction

With the debut of the exciting new SH300i, Honda proudly presents the sleek and dynamic new standard of mid-displacement scooters for years to come. A direct DNA descendant of Europe's best-selling scooter, the SH150i/SH125i, the gracefully attractive new SH300i inherits its predecessor's design concept of 'light, compact and best balanced.' It also inherits the original SH's distinctive large-diameter 16" wheels, wide, flat step-through floorboard, sleek design and comfortable riding proportions that have made the SH150i such a remarkable hit on the urban streets of Europe. The new, larger-displacement SH also features a totally new fuel-injected four-valve, four-stroke engine that delivers the strongest acceleration in its class, and a rigid new chassis design with an innovative floating link system that ensures peerless handling on both crowded city streets and open suburban highways.

Honda's engineers saw a glaring need for a perfect model to bridge the gap between the slim size and effortless riding ease of the popular SH150i/SH125i and the stronger performance of the bigger and bulkier models found in the scooter market's larger-displacement classes. They thus boldly set out to create an entirely new scooter concept that could provide the exhilarating power, acceleration and handling of a larger-displacement scooter or motorcycle while maintaining the more manageable size and proportions—and effortless convenience—that have made the SH150i/SH125i one of the most popular scooters on the streets of Europe.

With an eye toward expanding the versatile appeal of scooters beyond the dense traffic of city centres to more open suburban roads and highways, Honda's engineers designed the new SH300i from the ground up to provide an exhilarating yet totally satisfying blend of performance, comfort and convenience that will surely establish it as the strongest and most versatile mid-distance city commuter on the roads of Europe.

Slender and compact for the ultimate in riding ease, yet quick, powerful, and sure-handling to cover longer distances with quietly assured confidence, the new SH300i is also fully equipped with ample carrying capacity and convenience features. Optionally available with the superior stopping control of Honda's most advanced Combined Antilock Brake System, and sleekly styled with a cosmopolitan sophistication and attention to quality and detail that will surely make it one of the most widely popular commuters for these times, with the debut of the all-new SH300i, the new Standard of mid-displacement scooters has finally arrived.

Development Concept

Starting from the chosen goal of creating Europe's 'Best Commuting Partner,' Honda's scooter development team set out to expand on the established attractions of the popular SH150i/SH125i with the added benefits of stronger performance and confident high-speed handling ease. Four points of focus were determined from the start:

- Light weight and compact proportions for brisk, light-handling manoeuvrability
- Easy and convenient operation
- High quality and comfort in both look and function

Desired features included:

- 1) A more powerful engine with the fastest acceleration and smoothest operation in its displacement class. However, without the size and weight common to other scooter engines in this class.
- 2) A slim and lightweight configuration with the shortest wheelbase in its class, for easier manoeuvrability and sharper cornering control.
- 3) The large-diameter 16" wheels made popular with the SH series, which provide smoother and more comfortable handling, especially at the higher speeds that this new mid-displacement scooter would be capable of reaching.
- 4) The spacious flat floorboard area also strongly associated with the SH concept, which permits easy mounting and dismounting, and greater foot and leg positioning freedom, unlike the large central frame tunnel designs found on many models in the class.
- 5) Ample and secure carrying capacity.
- 6) Large-diameter hydraulic disc brakes with ABS also available in an additional version.
- 7) Low noise and vibration to complement its stronger high-speed performance.
- 8) Low fuel consumption and ultra-low exhaust emissions to reflect the world's ever-growing concern for the environment and comply with the latest, most strict EURO-3 emissions regulations.

However, accomplishing these and other related goals proved to be much easier to conceive of than to actually carry out. An entirely new engine had to be designed and developed that could deliver the desired top performance from an unprecedented compact form. A new approach to frame construction also had to be thought out in order to ensure the highest degree of rigidity for top riding performance and handling ease while still preserving the main features that make the SH series so popular, such as its slim proportions and flat floorboard.

Simply maintaining the SH's characteristic spacious flat floorboard—the only one of its kind in the entire mid-displacement scooter class—proved to be a major challenge, and unique design innovations were developed to ensure that the frame could capably withstand the extra power and torsional forces that would be exerted on a higher-displacement version of the SH at motorway speeds.

Exceptional comfort and control were also priorities in this new scooter's design, and impressive design innovations in the form of a unique floating link unit swingarm make possible one of the smoothest, quietest, and most comfortable rides to be found in any class of scooter, yet remarkably coupled with the swift, responsive high-speed handling that can make longer commutes a more pleasant experience, and only thought possible on a true motorcycle till now.

In keeping with its stated design goal of becoming 'Europe's Best Commuting Partner,' the new SH300i was also designed from the start to be equipped with Honda's most advanced Combined antilock brake system (Combined ABS), for effortless stopping control on par with the new model's exceptional performance and handling, and a unique feature in its class.

Slim, compact and sleekly attractive styling; breathtaking engine performance and acceleration; precise and confident handling on both city streets and high-speed motorways; luxurious comfort, modern convenience and impeccable attention to detail. Never before thought possible, and only made possible by the world's number one motorcycle manufacturer. Not just another scooter, it's time for the world to make room for the all-new Honda SH300i. The next generation of two-wheeled transportation has finally arrived.

Styling

The all-new SH300i features a 'Solid and Elegant' design image of sleek lines and slim proportions that exude the highest sense of quality and prestige. Borrowing many of its distinctive design fundamentals from the phenomenally popular SH150i/SH125i big-wheeled scooter that has taken Europe by storm since its 2001 debut, the new SH300i carries the slim and lively SH concept to a larger class and a new generation of riding and commuting pleasure.

Slim & Compact Configuration

Specially designed to be slimmer and easier to handle than the vast majority of scooters in the mid-displacement class, the SH300i's overall length is only 3% longer than that of its smaller-displacement predecessor, the SH150i/SH125i. One of the lightest, narrowest and most compact models in its class, the SH300i establishes a new direction in scooter design and function, providing exceptionally comfortable riding ease combined with its impressively strong power delivery and crisper, more sporty handling.

Like its predecessor, the SH300i's most distinctive design features include:

- a) **Slim proportions**, especially compared to other scooters in its displacement class,
- b) **Spacious flat floorboard area** for easy mounting and dismounting and enhanced leg and foot manoeuvring ease while on the move and
- c) **Big, motorcycle-like 16-inch (40.6cm) diameter wheels** mounted with wide, low-profile tyres, which provide a smooth and confidently assured ride that compares more favourably to a real motorcycle than do the much smaller wheels found on many other scooters.
- d) **Easy-mounting 785mm seat height**, which provides an ideal balance of optimal rider eye level and comfortable seating with a relatively easy reach to the ground thanks to its narrow proportions.

Attention-Getting Lighting

The SH300's fuller, more elegantly curvaceous scooter styling comfortably surrounds the rider, and is highlighted in front by a large clear-lens multi-reflector headlight designed to provide maximum illumination over a wide area for excellent night-time visibility. The sleek front bodywork also incorporates distinctive clear-face front indicators with amber bulbs into its smooth design, which also feature ever-on position lamps positioned behind clear plastic lenses which work together with the headlight to enhance visibility and ease other motorists' judgement of the vehicle's distance and approaching speed. At the rear, a fully integrated tail-light and rear indicator assembly.

Colouring Concept

The new SH300i will be released in five luxurious colour variations that beautifully accentuate its inherent feel of quality and prestige. Leading off is a regal metallic red that exudes a luxurious and lively image to complement its slim lines, light weight and responsive performance. Next, a crisp, brightly reflective metallic silver gives expression to the SH's technological sophistication. In deep pearlescent blue, the new SH sets the tone of success for business district commuters with people to see and schedules to keep. A bottomless pearlescent black shimmers in the bright lights to project an urbane sense of quality and sophistication in keeping with the new leader of the mid-displacement scooter class. Last, a glistening light pearlescent green exudes the comfort and confidence of an experienced traveller that is just as happy in the city's hustle and bustle as it is speeding down the highway.

Colours

- **Velvet Red Metallic**
- **Quasar Silver Metallic**
- **Pearl Montana Blue**
- **Pearl Night Star Black**
- **Pearl Harvest Green**

Engine

The new SH300i is powered by an all-new liquid-cooled, fuel-injected engine which produces the highest performance and strongest acceleration in its class. Not merely a larger displacement version of an existing design, the SH300i's advanced power unit was uniquely developed and crafted to meet its specific needs, and packed with design features and technologies developed in the racing world and then adapted to this next-generation scooter.

Advanced Honda Racing Technology for the Smallest Engine in the 250cc Scooter Class

The SH300i's newly developed 279cm³ SOHC 4-valve engine borrows much of its highly advanced technology from Honda's famous CRF series of motorcross racers, which are powered by some of the most compact, lightweight and highly competitive engines in their respective classes. In particular, its innovative sealed crankcase configuration, directly influenced by Honda's high-performance CRF engine design, makes possible much smaller and more compact dimensions than any single-cylinder scooter engine in its class. Besides being the most compact scooter engine ever developed in its displacement class, the SH300i's new sealed crankcase engine design also maximises power output by minimising internal resistance losses.

Internal Resistance Minimised For Stronger Power

Unlike most wet sump engines, the SH's crankshaft never comes into direct contact with the engine's reservoir of oil. This eliminates the occurrence of power-robbing windage, which results from the crankshaft contacting the upper surface of the oil sump and churning it into a dense foam. Instead, the SH300i's engine oil is held inside a separate chamber within the engine, and lubricating oil circulating within the crank cavity is quickly evacuated through a one-way reed valve leading back to the oil reservoir cavity with each rotation of the crankshaft. This elimination of oil windage results in significant improvements in power production, quicker acceleration and a major contribution to the SH300i's excellent fuel economy.

The engine's sealed crankcase design also allows the oil reservoir to be positioned for the most compact dimensions, and even allows its oil pan to be raised for ample ground clearance while lowering the engine's centre of gravity.

Reduced Crankcase Air Pressure

The SH300i's new engine was also designed to minimise power losses associated with air pressure build-up within its compact crank cavity. As an engine's piston falls on the intake and power-producing combustion strokes, the air inside the lower crankcase compresses, causing air pressure resistance or pumping loss that can act as a damper and drag on power output. Instead of using a crankcase relieve valve to vent excessive air pressure to the atmosphere, the SH300i's engine utilises the same large one-way reed valve to quickly evacuate both internal oil and building air pressure to the lower reservoir chamber, thus further minimising this source of power-robbing internal resistance.

Plain Bearing Crankshaft

Making another contribution to both reduced frictional loss and smoother operation are plain crankshaft journal bearings replacing the roller bearings normally found in this class of scooter engine. Plain bearings ensure not only smoother, but quieter operation, and further optimise the SH300i's power characteristics.

Benefits of Reduced Internal Resistance

The end results of these efforts to minimise internal friction and resistance can be immediately seen in the SH300i's sharper and stronger low-to-midrange acceleration, which combines with its slim, lightweight form to provide surprisingly strong take-offs and impressive performance from such a 'small' scooter. In fact, the SH300i's low-to-midrange acceleration is easily the strongest and fastest in its entire class, and its top-end performance is also well-suited to long cruises on the motorway. No more sluggish acceleration, the SH300i delivers the performance one might expect of a motorcycle with the comfort, ease and elegance of an ideal commuting partner.

Another important benefit is the SH300i's vastly improved fuel economy, with measured consumption figures of 28 kilometres per litre averaging nearly three kilometres more than most comparable 250cc single-cylinder scooter engines, even with its larger displacement and full EURO-3 emissions compliance taken into consideration.

PGM-FI Electronic Fuel Injection System

The new SH300i's advanced engine is also equipped with Honda's most advanced scooter-oriented programmed fuel injection system for remarkably smooth and efficient operation combined with a strong, responsive power delivery. Miniaturised and fully integrated into its 34mm bore throttle body are the system's electronic control unit (ECU), air temperature and pressure sensors, and even its high-performance digital ignition. This compact system not only ensures dependable starting and strong

