

2007

S-Wing 125

PRESS INFORMATION

Introduction

One of the largest and fastest growing segments of Europe's diverse motorcycle market continues to be the exciting 125/150cc scooter class. These entry-level scooters has been consistently attracting new customers from all age groups, salary levels and ranges of experience, whether recently licensed novices or seasoned riders looking for quick, easy and economical transport.

The main attractions of the 125cc class of scooters include their exceptional riding ease, strong performance and comfortably roomy two-up riding capability. Besides offering a quick, convenient and economical way of running one's errands, getting around town, or simply enjoying a day out with friends, this class of scooters has also gained the interest of a rapidly growing segment of urban commuters who have come to discover that scooters offer a smart and efficient alternative to the family car and public transportation for beating rush hour traffic and meeting one's appointments.

Smaller scooters have also been taking the lead as environmentally friendly modes of transportation. New technologies such as advanced computerised fuel injection and low emissions systems have helped their small-displacement 4-stroke engines make significant strides in a cleaner and quieter new age of rising fuel costs and stricter emissions regulations.

Honda offers a wide selection of scooters in the 125 and 150cc classes, nearly all designed, developed and produced in Europe. Each model features its own distinctive image and sense of style, and all are powered by advanced liquid-cooled 4-stroke engines which offer strong performance, quiet, dependable, low-cost operation and ultra-low exhaust emissions.

Building on the expanding popularity of scooters as a useful mode of transportation, Honda now proudly debuts another distinctive new 125/150cc model. The attractive new S-Wing not only features modern styling, pleasurable riding and operating ease, and the latest fuel injection and low-emissions systems for maximised economy and reliability, and minimised impact on the environment, it also introduces to the Honda 125cc class the cutting-edge technological advancement of our lightweight, responsive and confidence-inspiring Combined Antilock Brake System. With all this and more, the new S-Wing gathers together the best features of Honda's mid-sized scooter line-up in a luxurious and stylish new small-displacement commuter that offers

style, comfort, convenience and dependable economy for pleasurable days of commuting, errand-running or carefree riding enjoyment.

Main Features

The all-new S-Wing 125 and S-Wing 150 combine sophisticated styling, luxurious comfort and strong, economical performance in a leading executive-class business commuter that places the accent on quality in its every detail.

Styling Features

- Attractive 'Executive Class' design and proportions exude a heightened sense of quality and prestige in the 125cc scooter class.
- Broad, aerodynamic front cowl with tall, integrated windscreen provides excellent protection against the wind and elements.
- Large dual multi-reflector headlights with integrated indicators and position lights ensure superb visibility night and day.
- Comfortably contoured stepped seat with low 775mm seat height offers an ideal balance of rider eye level and long-term riding ease.
- Large, easy-access compartment under locking seat provides ample carrying capacity with room for a briefcase, a full-face helmet or other travelling necessities.
- Moulded resin carrier rack integrates passenger grab rails and quick-attach mount for a specially designed 35-litre top box.

Performance Features

- Deluxe Combined-ABS version introduces the first full front and rear Antilock Brake System ever featured on a Honda 125cc-class scooter, for the ultimate in braking control.
- Liquid-cooled, fuel-injected 125cc engine delivers strong performance, quick acceleration and lowest emissions in its class.
- Compliant, sure-handling 33mm motorcycle-style telescopic front fork.
- Dependable dual-damper rear suspension provides a comfortable ride for one or two.
- Large-diameter 240mm front and 220mm rear Combined disc brakes provide Standard version with smoothly responsive stopping ease.

Development Concept

In conceptualising the elegant new S-Wing, Honda's European designers set out to create a premium quality scooter that offers luxurious riding comfort, strong, economical performance, the supreme operating ease of Antilock Brakes and a timeless look of modern style for the business commuter. Starting from the basic concept of creating an Executive Class Business Scooter of the highest quality and prestige in its class, the S-Wing's development team set out to incorporate many of the most advanced features to be found in Honda's broad line-up of scooters. From its full-bodied, aerodynamic form, which provides a refined expression of fine automotive styling in its elegant contours, to its comfortable configuration, supple seat and ample carrying capacity, the new S-Wing offers both the look and feel of solid, reassuring quality infused with fresh, distinctive style.

Like most of the more recent models in Honda's diverse 125/150cc scooter line-up, the new S-Wing is powered by a strong, smooth and highly reliable liquid-cooled 4-stroke engine that features Honda's latest fully integrated computerised fuel injection system for small-displacement engines. Renowned for easy starting, smooth performance and low fuel consumption, this engine also features Honda's most advanced HECS3 oxygen-sensing low-emissions system for some of the cleanest exhaust emissions in the motorised world, and a major step toward a new future of environmentally friendly vehicles.

Other attractions include the S-Wing's smoothly responsive dual disc Combined Brake system, convenient under-seat storage compartment and easy riding comfort. Of particular note, the Deluxe version of the S-Wing introduces the famed Honda Antilock Brake System to our 125cc/150cc class of scooters for the first time ever. Giving busy urban lifestyles a liberating sense of motivation with effortless control, the new S-Wing's clean, responsive performance and carefree operation help make it an eye-catching, high-quality scooter that's just right for every occasion.

Designed in the proudest Honda tradition to appeal to the needs of a broad cross-section of commuters and discerning riders looking for quick, easy and economical transport around town that also features luxurious comfort and class-leading technology, the new S-Wing's premium quality and outstanding value will certainly make it a popular model on Europe's business commuter scene for years to come.

Styling

The new S-Wing features an elegant and sleekly cosmopolitan European design that is sure to attract admiring glances on every road it's seen. Its generous frontal proportions impressively integrate dual headlights, a tall windscreen and aero-styled rear-view mirrors into the attractive chiselled lines of its smoothly aerodynamic front cowl. From any angle, the new S-Wing presents a commanding presence and sense of pride and grandeur in keeping with its premier executive class commuter development concept.

The S-Wing's wide-coverage front cowl is not only designed for impressive looks, it also provides excellent wind protection and luxurious comfort that belie its actual size. Its tall built-in windscreen features an air intake port under its nose that directs air up the inside surface of the screen to effectively expand its area of wind protection at higher speeds to achieve exceptional riding comfort for its class.

Luxurious riding comfort is further enhanced by the S-Wing's relaxed riding position and comfortably contoured stepped tandem seat, while day-to-day convenience is enhanced by its spacious under-seat carrying compartment, which is one of the largest in its class.

Large Dual Headlights

One styling touch that really distinguishes the new S-Wing from any other scooter in its class can be seen in its large, 'wide-eyed' dual headlights. Sleekly integrated behind elegantly curved polycarbonate lenses, its pairs of multi-reflector halogen headlights, position lights and indicators combine to create a prominent forward visage that really grabs attention while maximising visibility both day and night. At the rear, the S-Wing's dual taillights and clear-lens indicators provide an eye-catching accent on its neatly curved tail.

Colouring Concept

The sleek urban elegance of the S-Wing's stylish bodywork is highlighted by flowing lines and superb quality of construction. Its four attractive colour variations excite the eye with a look of executive-class luxury that pays further compliments to its exciting sense of cosmopolitan style.

The new S-Wing takes to the streets in a brilliant metallic silver that attractively accentuates its sinewy curves in a glistening lustre of modern European style. The S-Wing appears especially fast and potent in a deeply shimmering pearlescent black that looks sleek and sophisticated on every street it roams. Quality and prestige shine through in a breathtaking metallic bronze that accentuates the S-Wing's presence in every scene it graces. Finally, in rich pearlescent purple, the S-Wing seems to evoke the sultry hues of the evening sky wherever it is seen.

Colours

- Quasar Silver Metallic
- Pearl Nightstar Black
- Champagne Bronze Metallic
- Pearl Amethyst Purple

Engine

Like the latest of Honda's growing range of 125cc-class scooter models, the exciting new S-Wing 125 (and S-Wing 150) delivers an impressive rush of performance from a quiet, smooth and highly reliable liquid-cooled 4-stroke engine that's been specially tuned for powerful low-to-midrange torque, quick take-offs and smooth, strong acceleration. This highly efficient engine's fully computerised PGM-FI electronic fuel injection system not only ensures a strong, instantly responsive power delivery, but also excellent fuel economy, low running costs and remarkably low exhaust emissions for dependable transportation that meets the needs of the times while minimising its impact on the environment.

The new S-Wing's compact, forward-oriented single-cylinder engine is mounted in essentially the same location as most scooters of its class, as an integral part of the chassis' fully suspended unit swingarm. Its liquid-cooled configuration makes a major contribution to the engine's low mechanical noise while playing a critical role in stabilising operating temperatures for more exacting control of exhaust emissions. Like other Honda scooters of this type, the engine's compact radiator is located in the frame well under the front of the seat, where it receives a steady stream of cooling air through large louvered ports located behind the front wheel. The radiator is also fitted with an electric fan to maintain stable operating temperatures and performance on even the hottest days.

Advanced PGM-FI Electronic Fuel Injection System

In the interests of strong, responsive performance, low fuel consumption and low emissions to meet the most stringent environmental regulations, all of Honda's latest scooters feature the precision control of a fully digital Programmed Fuel Injection (PGM-FI) system. Like these other models, the new fuel-injected S-Wing sets the standard for fuel economy and clean emissions, while providing exceptionally strong, smooth and reliable performance.

This compact system fully integrates the throttle body, sensors, injector and digital electronic control unit (ECU) for both the fuel injection and ignition systems into one compact and lightweight unit to further ensure quick starts and smooth, reliable response for optimised power and performance. In these times of rising fuel prices, top fuel economy and low running costs are especially important to daily commuters, and

the new S-Wing really stands out with its extended riding range on a tank full of petrol and its long-term, low-maintenance reliability.

High-Accuracy Digital Ignition

As noted above, the S-Wing's digital electronic ignition is fully integrated into the PGM-FI fuel injection system's ECU to maintain optimal combustion characteristics for easy starts and smooth operation in all riding conditions. Delivering a precise, high-voltage charge, this system uses a convenient push-button electric starter to ensure quick and easy starts, and smooth, dependable long-term performance.

Ultra-Low Exhaust Emissions

Like most of Honda's latest fuel-injected scooters and motorcycles, the new S-Wing 125 and S-Wing 150 are also equipped with Honda's most advanced HECS3 oxygen-sensing catalytic emissions system for the lowest exhaust emissions in their class. With its electronic circuitry integrated into the fuel injection system's ECU, this system monitors both the fuel injection sensors and an oxygen sensor installed in the exhaust system to precisely maintain the optimal fuel/air mixture for its metal catalyser element to minimise emissions of carbon monoxide (CO), hydrocarbons (HC) and nitrous oxides (NO_x). The end result meets the highest standards of environmental protection, and easily clears the strict limits imposed by the latest EURO-3 exhaust emissions regulations.

Chassis

Like several other fine Honda scooters in this competitive class, the new S-Wing features stunningly modern and attractive bodywork that organically surrounds a slim yet rigidly constructed tubular steel frame. With a low seat height and relaxed riding position for easy long-term commuting comfort, the S-Wing's compliant, light-handling suspension systems offer reassuring handling stability and smoothly confident control.

Introducing Honda's First Full ABS-Equipped Scooter in the 125cc Class

The Deluxe versions of the new S-Wing 125 and S-Wing 150 proudly introduce the enhanced confidence and control of the first complete front and rear disc Antilock Brake System ever featured in the Honda 125cc scooter class. Like the systems currently featured on several of Honda's larger scooters, this new ABS works in concert with Honda's innovative Combined Brake System to provide exceptionally smooth and confidence-inspiring braking control in the most extreme braking conditions, where riders of all skill levels need it most.

At the heart of this advanced system is a compact, motor-driven modulator that exerts precise control over the operation of both front and rear brakes. Its high-speed 16-bit computerised ECU constantly monitors a pair of Hall-effect sensors which track the rotating speed of a pulsar ring attached to the centre of each rotating wheel, and instantly reacts when needed.

ABS Operation

Whenever the slightest hint of tyre slippage is detected—registering as minute fluctuations in the relative speeds of the front and rear wheels that are usually far too small for riders to detect—the ABS ECU instantly activates the electro-hydraulic modulator to stop tyre slip before it can start. This is achieved with a rapid cycling of 'Decrease – Hold – Increase' brake pressure intervals that maintains just enough brake pressure to provide smooth and steady deceleration, but without allowing either the front or rear wheel to stop, slip and lose control.

Honda's scooter-oriented ABS is one of the simplest, most compact and most efficient such systems in motorcycling. As such, the S-Wing's development team felt that the time was right to introduce this remarkable system into Honda's 125cc line-up of

scooters in order to give users of this high-quality Executive Commuter the most effective braking control available for the ultimate in riding confidence and control.

With the added capabilities of ABS complementing the excellent response and performance of its Combined Brake System, the Deluxe version of the S-Wing reassures its riders with the most comfortable and confident braking control to be found in the 125cc class. Over such variable traction surfaces as wet crossing lines or metal plates, this added control can make all the difference in maximising a rider's confidence and security, and should prove to be a highly welcome feature that helps riders utilise the S-Wing's brakes to their full potential.

Like all other Honda models equipped with ABS, the S-Wing's system features an automatic self-diagnostic program which constantly monitors all main electronic and hydraulic system components. If any malfunction is detected, the system automatically shuts itself off and reverts to standard, fully reliable brake operation. A red LED warning light on the instrument panel simultaneously lights to provide a visible indication of system irregularities and the need for timely service.

Easy-Operation Combined Brake System

Like most of the scooters in the Honda line-up, both Deluxe and Standard versions of the S-Wing feature the enhanced braking ease and control of Honda's innovative Combined Brake System. Linking together the operation of a single 240mm three-piston calliper front disc brake with a 220mm single-piston calliper rear disc, this highly effective system provides both novice and experienced riders with easy, reassuring braking control.

In this relatively simple system, the right-side brake lever operates like a conventional motorcycle brake system, controlling the two outer pistons of the three-piston front brake calliper for strong, responsive braking operation. Breaking with conventional designs, the left-side brake lever controls not only the rear disc brake, it also actuates the centre piston of the front brake calliper by way of an inline pressure equaliser. This smoothly balanced combination of front and rear brake operation gives riders an extra boost in braking control, even if only the left-side lever is used. When both levers are used, the S-Wing provides the same sharply responsive feel of braking control one would expect with many larger motorcycles.

Spacious Riding Comfort

The S-Wing's relaxed and roomy riding position is highlighted by its wide-coverage front cowl which effectively keeps the blast of wind at bay, its plush, deeply contoured stepped seat, and its comfortably positioned handlebars. This layout contributes to the S-Wing's effortless handling in virtually all traffic conditions, while its slim proportions in the seat area assure an easy reach to the ground for riders of all sizes. Its spacious contoured seat also provides comfortable and secure seating for two, even on longer rides.

Equipment

Attractive, Automotive-Style Instrument Panel

The S-Wing's wide, recessed instrument panel conveys the look of a luxury sedan with its attractively designed four-dial façade. Its smartly appointed design provides a steady reminder of Honda's unerring attention to detail. Instruments include a large, easy-to-read speedometer and tachometer pair positioned within easy view at the panel's centre surrounded by paired coolant temperature and fuel gauges. Prominently positioned indicator lights and a large LCD digital clock and dual-trip meter complete the design together with a handy average fuel consumption readout that continually gauges fuel economy based on, among other factors, throttle operation. Finally, the whole assembly is recessed behind an attractively styled clear plastic lens and backlit by coolly illuminating white LEDs (Standard version: amber).

Spacious Under-Seat Carrying Compartment

As with most of the models in Honda's fine line-up of scooters, the new S-Wing features a handy carrying compartment under its locking tilt-up seat for ample carrying convenience and a secure place to store one's helmet or daily necessities. Designed to hold a full-face helmet with room to spare, this spacious compartment also provides ample capacity for an A3 briefcase, a load of shopping or other travelling essentials. For the busy executives the S-Wing commuter is specially directed at, this compartment also features a handy 12V DC utility socket for charging mobile phones and other accessories.

Up front, a compact locking compartment further enhances the S-Wing's carrying convenience and security by keeping such small essentials as gloves, papers and other articles close at hand without having to leave the seat. Shopping bags and other bulky items with handles or straps can be easily and securely hung from the convenient fold-out carrying hook centrally located to the right of the compartment door.

Compact Rear Carrier

Behind the S-Wing's comfortable tandem seat is located a compact moulded resin rear carrier that also offers a comfortable hand grip for pillion passengers. Like similar carriers found on Honda's SH series of big-wheeled scooters, this rack is specially designed with moulded-in attachment points to allow for easy one-touch mounting of a

specially designed 35-litre top box (optionally available), which quickly clips directly onto the carrier and can be secured with a key. No other mounting hardware is required.

Optional Equipment

Honda Access will be supplying the new S-Wing with a broad assortment of optional parts and accessories to further extend its range of operating versatility while elegantly complementing its cosmopolitan style. These accessories include:

35-Litre Top Box

A stylish 35-litre top-box designed specially for easy, one-touch mounting on the S-Wing's rear carrier. Able to carry a full-face helmet or two open-face helmets, its upper lid is painted in body-matched colours. The locking box also comes with its own set of keys.

Backrest Pad

A pillion backrest pad that attaches to the front surface of the top box to enhance riding comfort.

Adjustable Top Box Liner

A nylon top box inner bag featuring a size-adjustment zipper that permits easy expansion from 15 litres in volume to 25 litres. The bag also features a handy A4-sized front pocket, and an adjustable shoulder belt and carrying handle for easy transport out of the top box. Features a silver Honda Wing logo printed on the front pocket.

Pillion Backrest

This backrest is designed to mount directly to the standard rear carrier, for an elegant, sporty and perfectly integrated look that also greatly enhances pillion passenger comfort.

Lower Windscreen

A specially designed lower (395mm) windscreen complements the S-Wing's styling with a sportier look.

Stainless Steel Footrest Panels

A set of four stainless steel footrest plates with rubber grip pads that add an eye-catching dash of elegance to visually upgrade the S-Wing's stylish good looks.

Decorative Body Moulding

A set of four chromed decorative side body mouldings designed to enhance and accentuate the curves of the S-Wing's design. Two fit along the edges of the scooter's leg shields and two extend under the sides of the seat.

Alarm Kit

This system features a vibration-sensitive electronic anti-theft alarm that warns off vandals and potential thieves with a penetrating high-decibel shriek.

U-Lock

A compact yet sturdy U-lock with a tamper-resistant barrel key lock that can be carried in the under-seat compartment.

Body Cover

A rugged, full-coverage body cover protects the S-Wing's paint from the sun's damaging ultraviolet radiation. Water resistant, the cover is made from breathable fabric which allow the vehicle to dry while covered. Tie ropes affixed to the lower edges allow the cover to be tightened underneath to avoid fluttering which might damage the paintwork. Two holes in the lower front area of the cover enable a U-Lock to be securely passed through.

Specifications

S-Wing 125 (ED-type)

ENGINE

Type	Liquid-cooled 4-stroke SOHC single
Displacement	125cm ³
Bore x Stroke	52.4 x 57.8mm
Compression Ratio	11 : 1
Max. Power Output	9.7kW/9,000min ⁻¹ (95/1/EC)
Max. Torque	11.1Nm/7,500min ⁻¹ (95/1/EC)
Idling Speed	1,500min ⁻¹
Oil Capacity	1 litre

FUEL SYSTEM

Carburation	PGM-FI electronic fuel injection
Throttle Bore	26mm
Aircleaner	Dry; cartridge-type paper filter
Fuel Tank Capacity	9.4 litres

ELECTRICAL SYSTEM

Ignition System	Digital transistorised with electronic advance
Ignition Timing	10° BTDC (idle) ~ 30° BTDC (8,500min ⁻¹)
Sparkplug Type	CR8EH-9 (NGK); U24FER9 (ND)
Starter	Electric
Battery Capacity	12V/7AH
ACG Output	170W
Headlights	12V; 55W x 1 (low); 60W x 1 (high)

DRIVETRAIN

Clutch	Automatic; centrifugal
Transmission Type	V-Matic
Belt Converter Ratios	2.640 ~ 0.820
Final Reduction	9.857
Final Drive	V-belt

FRAME

Type Centre backbone; steel tube

CHASSIS

Dimensions (LxWxH) 2,090 x 745 x 1,435mm
Wheelbase 1,490mm
Caster Angle 27°
Trail 82.5mm
Seat Height 776mm
Ground Clearance 134mm
Dry Weight 148.6kg *(150.6kg)
Kerb Weight 156kg (F: 65kg; R: 91kg)
*(158kg (F: 66kg; R: 92kg))
Max. Carrying Capacity 180kg
Loaded Weight 336kg (F: 112.7kg; R: 223.3kg)
*(338kg (F: 113.3kg; R: 224.7kg))

SUSPENSION

Type Front 33mm telescopic fork, 85.7mm axle travel
Rear Dual-damper unit swingarm, 98.1mm axle travel

WHEELS

Type Front Triple-spoke cast aluminium
Rear Triple-spoke cast aluminium
Rim Size Front 13M/C x MT2.75
Rear 12M/C x MT3.50
Tyre Size Front 110/90–13M/C 56L
Rear 130/70–12M/C 62L
Tyre Pressure Front 175kPa
Rear 200kPa (with passenger: 250kPa)

BRAKES

Type Front 240 x 4mm hydraulic disc with Combined three-piston calliper, drilled rotor, *(ABS) and sintered metal pads
Rear 220 x 5mm hydraulic disc with single-piston calliper, Combined Brake system, *(ABS) and resin mould pads
* Deluxe ABS version

All specifications are provisional and subject to change without notice.