HONDA

Press Information 2001

JAZZ

JAZZ / JAZZ ES-ABS

JAZZ / JAZZ ES-ABS - 20011 - E

JAZZ / JAZZ ES-ABS

Introduction

Europe's diverse scooter market has witnessed the introduction of a dazzling array of new models over the last few years, with attractive new arrivals designed to appeal to an ever-broadening spectrum of riding styles, tastes and needs. From simple and inexpensive basic modes of transportation to high-tech sports scooters and larger, more luxurious commuting machines, scooters have gained wide acceptance as viable alternatives to the cars that now clog Europe's crowded urban areas. Further, scooters have not only won a growing following among young people, they have also attracted significant attention among more affluent working people who have newly discovered the range of comfort and style available at the higher end of the price and displacement scale, not to mention the superb convenience and ease of use that the 250cc class of scooters have to offer.

Honda's contribution to this exciting and rapidly growing higher displacement segment of the market was for many years represented by the uniquely styled CN250, which was introduced to Europe in 1988. Then, in 1998 Honda took a new step forward with the introduction of the luxurious Foresight.
This new concept in scooters features elegant aerodynamic styling and impressive carrying capacity that has won it a strong following among more mature riders and commuters who were instantly attracted to its spacious comfort, versatile convenience and stronger performance compared the more conventional offerings of smaller scooters.

photo: prototype

JAZZ / JAZZ ES-ABS

Introduction

In the years following the Foresight's introduction, Honda's design engineers have sought to broaden its range of 'City Commuters' with a new breed of scooter featuring sharper, more distinctive styling coupled with sportier performance that would provide a strong appeal to younger, more style-conscious users as well as those looking for more in the way of an exhilarating riding experience.

The end result of this project is the new JAZZ and JAZZ ES-ABS; a pair of all-new, large-format scooters that not only provide exhilarating performance and luxurious comfort, but also an exciting look of Super Sport style that leaves no mistaking their aggressive riding capabilities.

JAZZ / JAZZ ES-ABS

Development Concept

In designing and developing this new scooter, Honda's design team set out first and foremost to create a high-performance urban scooter that would provide not only superb comfort and an exhilarating ride, but also an exciting look of Super Sport-based aerodynamics and speed. Taking the large and luxurious Foresight as a conceptual starting point in this new development, the team concentrated on realising a sharper blend of performance, with quicker acceleration and lighter, more responsive handling.

However, while ultimate style and performance were high on the list of its desired features, a deluxe version of the new JAZZ, to be called the JAZZ ES-ABS, was also designed to incorporate some of Honda's most advanced safety and comfort technologies. Honda's remarkable new 'Auto Idle Stop' function was adapted to reduce noise, emissions and fuel consumption by actually stopping the engine when idled for over a short period of time, and then automatically restarting the engine the instant the throttle is turned.

photo: prototype

JAZZ / JAZZ ES-ABS

Development Concept

Likewise, to enhance rider confidence and peace-of-mind in a wider range of riding conditions, the JAZZ ES-ABS not only incorporates the same easy-operation Combined Brake System (CBS) featured on the standard JAZZ, it was also selected to be the very first scooter to be equipped with Honda's all-new Antilock Brake System (ABS), which was developed exclusively for scooter applications.

The new JAZZ and JAZZ ES-ABS offer an unprecedented combination of leading-edge function and ultimate style in a large-displacement scooter for riders who enjoy the thrill of sports bike performance while appreciating the day-to-day comforts that such a high-grade scooter can offer. Without a doubt, these two all-new Honda scooters bring the fine quality and performance of the sport sedan riding experience to Europe's expanding world of scooter enjoyment.

JAZZ / JAZZ ES-ABS

Colouring Concept

The all-new JAZZ makes its mark on the European city scene in four exciting colour variations that emphasise its prestigious position among the top models of Europe's diverse scooter market.

- Brilliant metallic silver boldly expresses the JAZZ's sporty performance with a shimmering look of excitement.

- Richly appointed candy red deliciously conveys the JAZZ's lively nature and fleet-footed appeal.

- Dark metallic blue exudes a high-calibre sense of urban style on par with many sedan-class cars.

- Deep, lustrous black presents an image of chic sophistication that fits right in with any city setting, whether commuting on business or cruising for pleasure.

All models feature durable, moulded black resin interiors and black seats that provide a soothing complement to the bodywork's attractive main colours.

Colours

- Accurate Silver Metallic (Std. & ES-ABS)
- Candy Glory Red (Std.)
- Lapis Blue Metallic (Std.)
- Black (Std.)

photos: prototype

JAZZ / JAZZ ES-ABS

Styling

The new JAZZ/JAZZ ES-ABS was specially designed to provide a high-level balance of crisp performance and superb long-term riding comfort. Its aggressively styled aerodynamic bodywork was extensively wind tunnel tested to achieve an excellent air management design that deflects the onrushing wind and turbulence away from the rider while reducing noise and enhancing riding stability.

The JAZZ's sharply angled nose, with prominent, fully integrated dual headlights projects an aggressive visage, borrowing its hard-edged look of speed directly from the high-performance Super Sport motorcycles that dominate the highways and twisty mountain roads of Europe. A prominent feature on many of Honda's latest Super Sport motorcycles, the JAZZ's large, clear dual multi-reflector headlights feature lightweight plastic construction and a large reflector size to provide a brilliant view of the night-time road ahead.

photo: prototype

JAZZ / JAZZ ES-ABS

Styling

The central air duct beneath its cleanly integrated windscreen directs air up the backside of the screen to deflect wind upward and around the rider's shoulders while increasing air pressure within the cockpit area to effectively keep wind turbulence at bay. The two prominent air ducts visible beneath the headlights are designed to contribute to riding stability at higher speeds while reducing wind noise. Further back, the sinewy lines of the JAZZ's sleek, aero-design bodywork flow gracefully back to culminate in a large, beautifully integrated taillight assembly and sleek spoiler/carrier that join to make a forceful visual statement emphasising the JAZZ's distinctive, sport-oriented design. The large, high-visibility combination taillight features two large, round brake lights surrounded by two round indicators, all cleanly integrated behind a large, bulging, flush-mounted clear plastic lens for the ultimate in aggressive Super Sport styling.

photo: prototype

JAZZ / JAZZ ES-ABS

Styling

Comfortable Accomodations

The JAZZ also features a low seat height and a comfortable reach to the handlebars that make riding and commuting a pleasure. Its ergonomically contoured tandem seat features a 6-position adjustable rider backrest designed to provide a perfect fit and luxurious support for most riders, while the higher pillion section of the seat offers passengers both a comfortable perch and a clear, unobstructed view of the road ahead.

The JAZZ's spacious floorboard area tilts upward at the front to provide maximum foot positioning freedom and riding control, and tapers sharply inward at the back, beneath the seat to provide a more relaxed and comfortable reach to the ground. A pair of cast aluminium pillion steps fold out to complement the JAZZ's sleek, high-tech look while providing pillion passengers with a comfortably positioned place to rest their feet.

photos: prototype

JAZZ / JAZZ ES-ABS

Styling

Ample Carrying Capacity

Under its seat, the JAZZ features a spacious 39-litre Met-In compartment designed with enough room to carry a full-face helmet and more. The seat's spring-loaded hinge opens to the side, and conveniently remains up when raised to free both hands for loading and unloading. A luggage lamp built into the underside of the seat makes it much easier to find things in the dark.

Positioned below the JAZZ's large, integrated instrument panel is a large, locking front glove box that opens down to reveal a spacious 7-litre carrying capacity that is big enough to hold two folded A4-size magazines and more. When the door is in its lowered position, a handy two-cup tray provides a convenient place to place cups and canned drinks. An equally handy 12V–1A electrical socket is also provided for charging cellular phones and powering other small accessories.

Above the glove box, on the left-side panel is a small, partitioned compartment that has been specially designed to hold tickets, spare change and other small essentials. Its spring-loaded cover opens with a simple press on its top latch for the easiest possible access.

Impressively decorating its sleek rear end, a large, beautifully designed cast aluminium rear spoiler accentuates the JAZZ's look of aerodynamic speed. Finished in the same colour as the bodywork, this functionally designed spoiler also performs double duty as a sturdy and convenient rear carrier while offering comfortable hand grips for pillion passengers.

photos: prototype

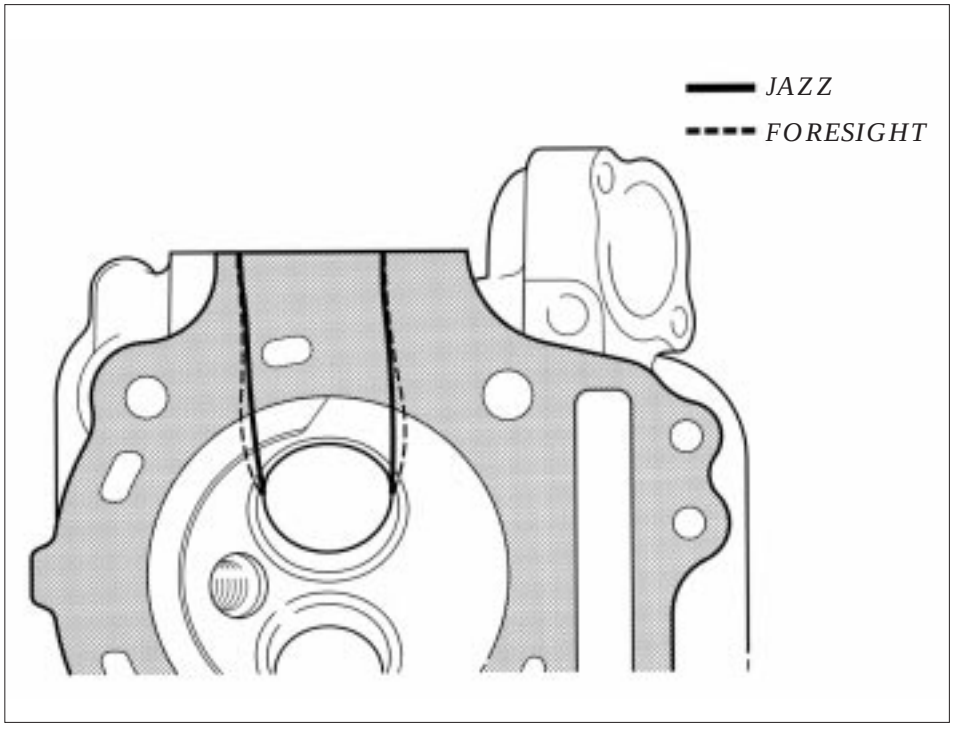
JAZZ / JAZZ ES-ABS

Engine

Strong and Smooth 4-Stroke Power

The new JAZZ derives its aggressive rush of power from a compact and powerful 249cm^3 liquid-cooled 4-stroke SOHC single-cylinder engine that delivers a strong surge of low-to-midrange torque for quick acceleration. Based on the engine currently used in Honda's popular Foresight, this engine has been specially tuned with an optimised cylinder head and intake port configuration that improves intake velocity and boosts the engine's strong low-to-midrange power for quick takeoffs and brisk performance in urban traffic conditions, as well as smooth top-end performance. Its effortless push-button electric starter combines with an automatic choke and a high-output digital CDI to ensure quick, easy starts and optimum performance throughout the engine's wide rev range.

Intake Port Comparison



High-Accuracy Digital CDI

The new JAZZ features a high-accuracy digital CDI unit that permits the engine's combustion characteristics to be precisely tuned for all stages of operation to both maximise its performance and minimise noise output. This highly reliable, maintenance-free unit has been specially set to provide smooth low-rpm performance and high-efficiency combustion throughout the engine's rev range.

The CDI's high-accuracy, high-voltage charge also combines with the convenient push-button electric starter and automatic choke to ensure quick, easy starts and dependable long-term performance. A compact 12-volt maintenance-free (MF) battery provides a strong and stable electrical charge for fade-free lighting and quick, sure starts.

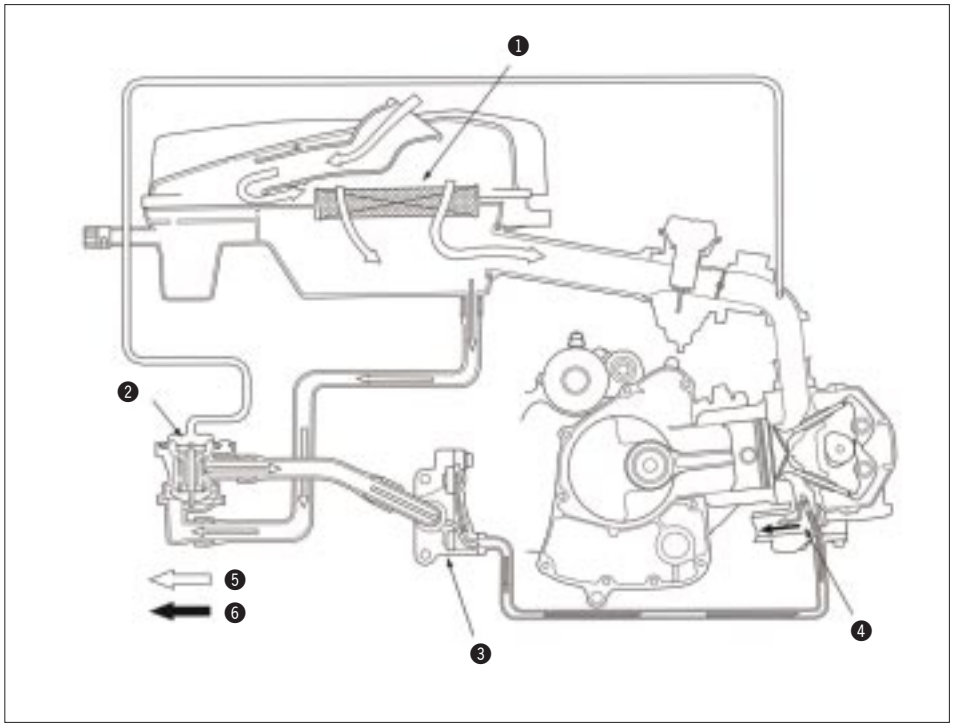
Pollution-Reducing Air Induction System

To help reduce air pollution caused by partially burned fuel, the JAZZ features a compact and highly effective Pulse Secondary Air Induction (PAIR) system that introduces a stream of fresh air directly into the exhaust port to prolong the burning of exiting exhaust fumes. The new system is operated by a control valve which reacts to the vacuum that develops in the intake port during the engine's intake stroke to time the air jet to enter the exhaust port precisely as the exhaust valve opens. This extra breath of fresh air helps complete the combustion of exhaust fumes and remaining fuel exiting the combustion chamber to reduce exhaust emissions. A one-way inline check valve also ensures that no exhaust fumes are fed back into the system.

Pulse Secondary Air Induction System Diagram

❶ *Aircleaner*
❷ *PAIR control valve*
❸ *PAIR check valve*
❹ *Exhaust port*
❺ *Fresh air*
❻ *Exhaust gas*

Pulse Secondary Air Induction System Diagram



New 'Auto Idle-Stop' Function

In a concerted effort to realise reductions in both noise and air pollution wherever feasible, Honda's engineers sat down and considered the amount of pollution motor vehicles produce when NOT on the move, but are instead sitting still with their engines running, whether waiting for traffic signals to change, or just waiting.

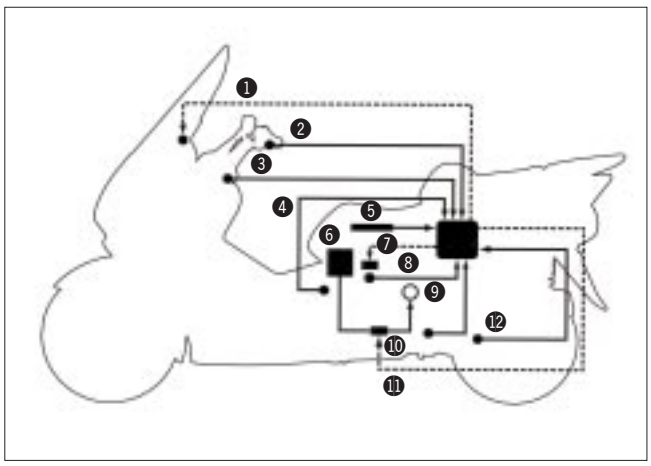
Taking a first step toward reducing this source of pollution, Honda's engineers set out to develop an ingenious electronic system that not only stops the engine's idling in a few short seconds, but also automatically restarts the engine the very instant the throttle is turned to start moving again. Christened the 'Auto Idle-Stop' system, this is how it works:

Once the engine has warmed up to a sufficient minimum operating temperature of over 60˚ C and then been ridden at a speed exceeding 10km/h, the Auto Idle-Stop function automatically takes control. A micro-switch installed under the rider's seat tells the system's computer that the scooter is indeed being ridden. From then on, whenever the scooter comes to a stop for over three seconds, its engine automatically stops. No noise, no vibration, no exhaust emissions, nothing; perfectly stopped.

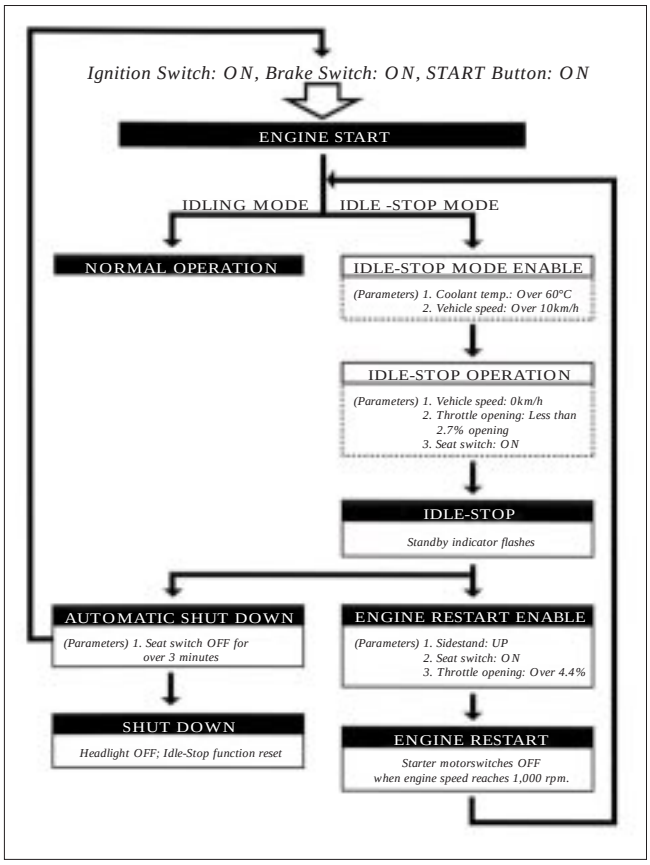
Auto Idle-Stop System Components

❶ *Standby indicator*
❷ *Starter switch*
❸ *Idle-Stop switch*
❹ *ECT sensor*
❺ *Seat switch*
❻ *Battery*
❼ *Auto-Bypass starter*
❽ *Throttle sensor*
❾ *Starter motor*
❿ *Engine speed sensor*
⓫ *Starter relay*
⓬ *Rear wheel speed sensor*

Auto Idle-Stop System Components



Auto Idle-Stop System Operation Flowchart



Engine

During the period of time that the engine is stopped, however, all other electrical functions continue to operate normally. The headlight and taillights remain on, turn indicators continue to function, and even the clock and gauges continue to provide their various indications as if everything were operating 'normally.'

Then, when the rider turns the throttle slightly—in fact, only 4.4% of full operating range—the engine instantly jumps back to life and the scooter accelerates away from its stopped position as if nothing had happened.

What's more, the engine can still be instantly restarted even if the rider dismounts and walks away from the scooter. The scooter still remains 'ON' and ready to ride, even though its engine is 'OFF.' However, before the Auto Idle-Stop system will allow the engine to be restarted, it first checks the pressure-sensitive microswitch installed in the seat to make absolutely sure that the rider is again securely seated.

If the rider doesn't return to the scooter's seat within a fixed three-minute time interval, the Idle-Stop function then takes one more step in its control of the scooter's functions and automatically turns off all its electrical functions, and doesn't turn them on again until the ignition key is switched off and on to reset the system.

A large, square-shaped push-button switch mounted on the right-side panel permits the Idle-Stop system to be easily enabled (UP) or disabled (DOWN), which simply limits the JAZZ to conventional scooter operation. A convenient indicator light built into the speedometer provides an easy-to-see indication of the system's status.

photo: prototype

Engine

Compact, High-Efficiency Radiator

Positioned under its seat, the JAZZ's high-efficiency radiator receives a steady stream of cooling air directed with baffles from the intake vents behind the front wheel, around the forward positioned fuel tank, through the radiator and then out the bodywork's side ports. A thermostat-equipped electric fan provides extra cooling capability when temperatures rise in dense traffic or when stopped.

New 3-Stage Hyper-Belcon Transmission System

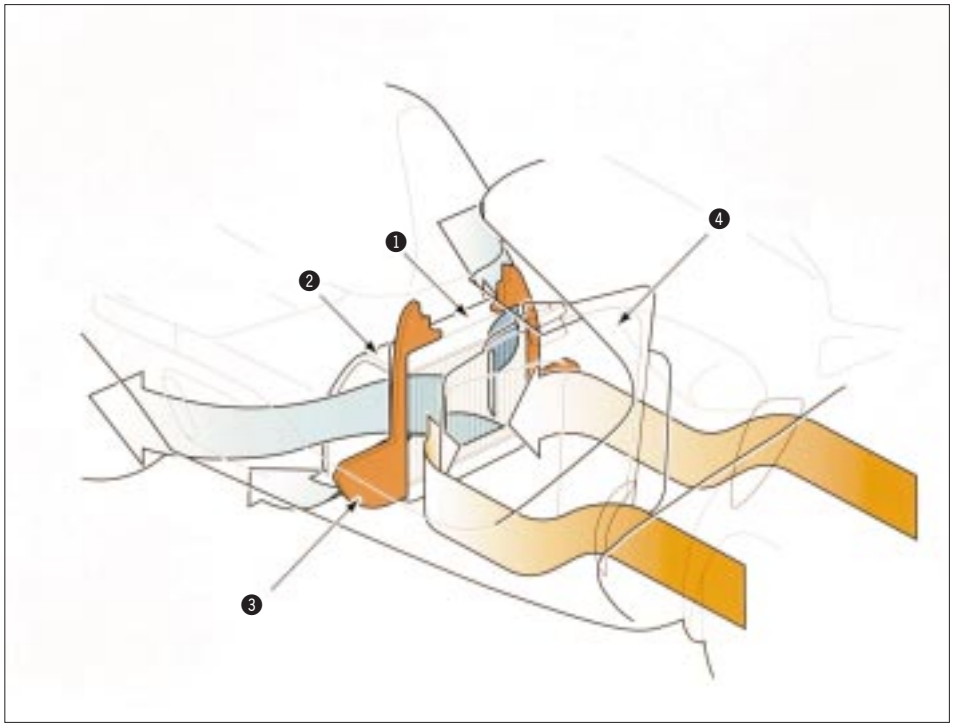
Another high-tech innovation featured for the first time in the new JAZZ is its new 'Hyper-Belcon' belt converter system. Honda's scooters have for many years featured a relatively simple V-Matic belt drive system that automatically controls the final drive ratio of the belt turning the rear wheel by changing the effective diameter of the forward (drive) pulley.

In this conventional system, the gap between the sides of the spring-loaded pulley is at its widest at stop or very low speeds to allow the belt to be positioned close to the centre of the pulley, where the engine can more effectively apply the engine's torque for quicker acceleration. As engine and vehicle speeds increase, the set of weighted rollers mounted on one side of the pulley are forced outward toward the pulley's outer perimeter by the rapidly building centrifugal force. These rollers in turn put pressure on one side of the pulley to force the sides together, which causes the drive belt to gradually ride up higher and higher in the narrowing 'V' of the pulley, subsequently changing the drive ratio to allow the engine to turn the rear wheel faster in relation to its own speed of rotation.

Cooling Airflow

❶ *Radiator*
❷ *Exhaust deflector shield*
❸ *Partition plate*
❹ *Fuel tank*

Cooling Airflow



Engine

While this system is basically a simple and effective means of 'changing gears' while conveying the engine's power to the rear wheel, by reason of its very simplicity it fails to take maximum advantage of the engine's peak torque output at certain engine and vehicle speeds. Thus, scooters often tend to feel like they have a midrange weak spot where they seem to 'bog down' part way through their range of acceleration.

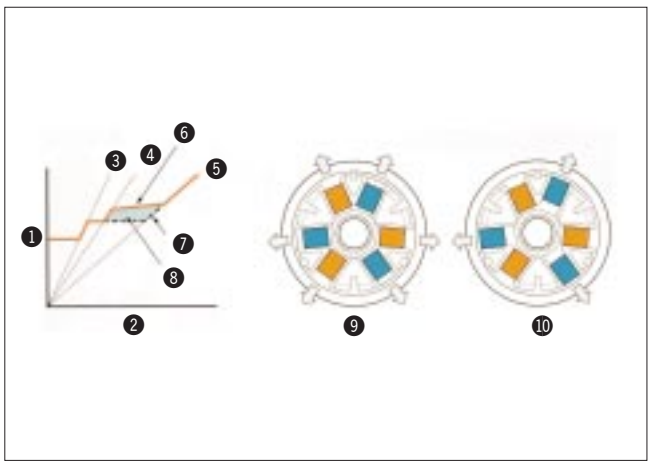
In the JAZZ's new Hyper-Belcon system, a newly developed set of six weighted rollers are used to close the gap in the drive pulley and increase the drive ratio. Initially, its operation is exactly the same as a conventional V-belt system: In the first few seconds of acceleration from stop, the rear wheel accelerates strongly owing to the low drive ratio. However, as the engine speed increases and the weighted rollers are gradually forced outward, three of the rollers are intentionally stopped short of the full range of expansion. This causes the drive ratio to stop changing briefly while the engine's midrange speed and subsequent torque continue to increase. Later, at higher engine speeds, the remaining three weighted rollers are exposed to enough centrifugal force to continue their outward movement and fully close the V-belt drive pulley—and shift the belt transmission to its highest ratio—on their own.

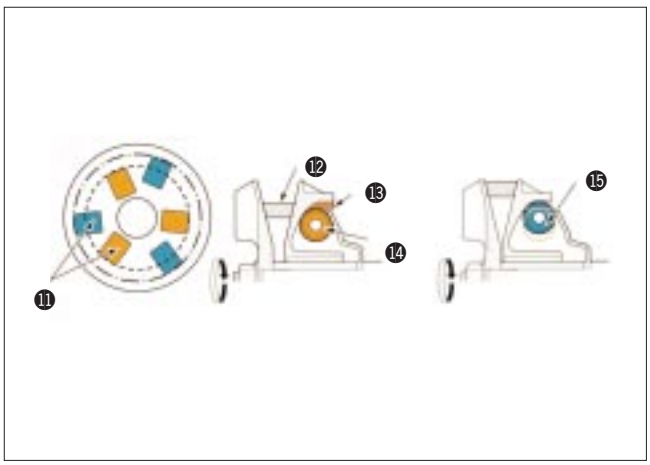
The effect of this ingenious system on the JAZZ's performance is to smoothly divide the belt transmission's normally linear variation in ratios into three distinct steps (or 'gears') of operation that extend the effectiveness of the engine's midrange power to provide a stronger surge of acceleration and sharper performance overall.

Hyper Belcon System Diagram

❶ *Engine speed (rpm)*
❷ *Vehicle speed (km/h)*
❸ *LOW*
❹ *MID*
❺ *TOP*
❻ *JAZZ speed change characteristics*
❼ *Conventional speed change characteristics*
❽ *Range of increase in acceleration characteristics*
❾ *LOW -> MID 6 rollers move outward*
❿ *MID -> TOP 3 heaviest rollers move outward*
⓫ *As engine speed increases, the 6 weight rollers move outward to increase their radial height–and the drive ratio–in two steps of operation.*
⓬ *Drive belt*
⓭ *Radial height difference*
⓮ *Weight roller*
⓯ *Radial height increases*

Hyper Belcon System Diagram





Engine

Lightweight Exhaust System

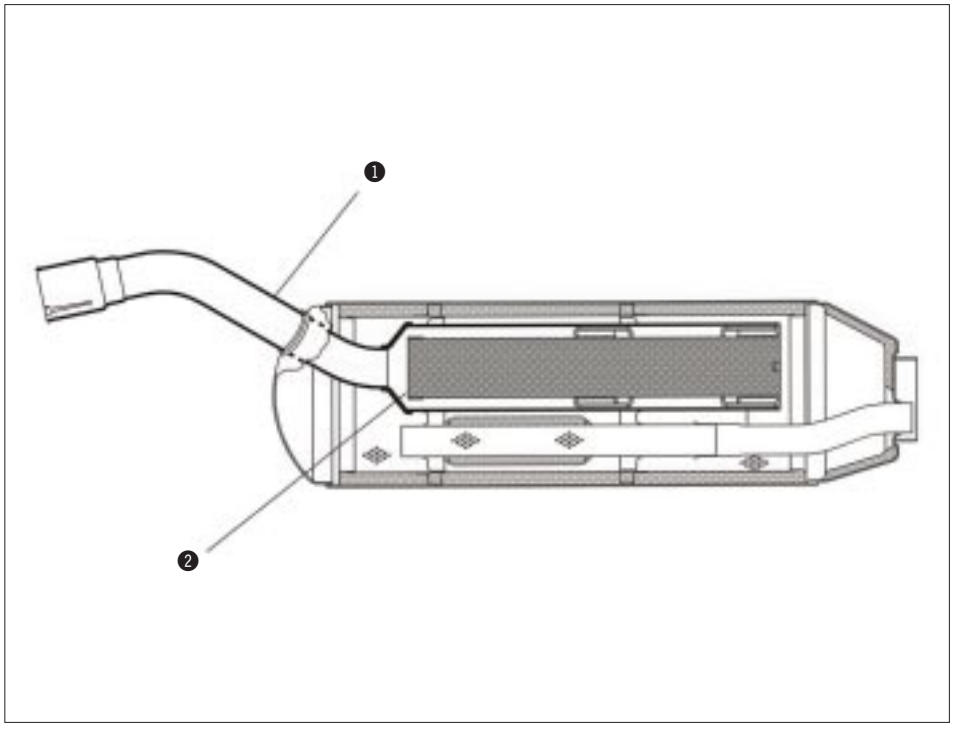
The JAZZ also features a large-volume canister-style muffler that complements the inherently low noise of the 4-stroke engine to ensure quiet, well-mannered riding. More than that, however, it also contributes to the JAZZ's reduced exhaust emissions. While the engine's Air Induction system is highly effective in reducing the emission of unburned exhaust gases, the JAZZ's exhaust system further augments the combustion process by featuring a built-in heat tube that maintains a high exhaust temperature for more complete burning of exhaust fumes.

The full-featured JAZZ ES-ABS also features a brilliantly polished chrome muffler cover to highlight its deluxe status.

Exhaust System Cross-Section

❶ *Exhaust pipe*
❷ *Heat tube*

Exhaust System Cross-Section



JAZZ / JAZZ ES-ABS

Chassis

The JAZZ's highly rigid tubular steel frame is carefully designed to ensure light, responsive handling and confident control in virtually all riding situations, whether riding alone or fully loaded with a passenger along for the ride. The frame's double-link hanger engine suspension system also helps minimise annoying vibration.

Large Fuel Tank

The JAZZ's large-capacity 12-litre fuel tank provides a wide range of riding enjoyment and commuter convenience on a tankful of fuel, permitting nearly a week of carefree riding between fuel stops. Positioned low and forward in the JAZZ's frame for optimal weight and mass centralisation, the fuel tank's filler spout is conveniently located behind a cleanly integrated locking cover built into the floor tunnel that provides easy access without having to leave the JAZZ's comfortable seat.

Responsive Motorcycle-Class Suspension System

The JAZZ's responsive suspension system features a motorcycle-class 33mm hydraulic front fork that delivers solid control and smoothly assured operation for sporty, confident handling even when carrying a passenger. Its unit swingarm rear suspension is supported by two dampers featuring dual-rate springs and 7 steps of preload adjustment for a comfortable, well-controlled ride, as well as high torsional rigidity. The rearward positioning of the dampers also helps maximise the available storage space in the JAZZ's large Met-In compartment while also enhancing its lightweight design.

Lightweight and sportily styled 5-spoke cast aluminium wheels are shod with wide-body tubeless tyres that offer a plush, easy ride while eliminating inner tube maintenance hassles. The larger 13-inch diameter of the front wheel contributes to the JAZZ's sporty performance while providing optimal handling control and riding comfort and all speeds.

photo: prototype

JAZZ / JAZZ ES-ABS

Chassis

Fully Hydraulic Combined Brake System
Both the JAZZ and the JAZZ ES-ABS feature front and rear disc brakes controlled by Honda's exclusive Combined Brake system for optimised braking operation and enhanced control and riding confidence. This advanced, scooter-oriented system features a Combined three-piston front disc brake calliper that grips a large-diameter 240mm rotor between sintered metal pads, and a compact single-piston calliper rear brake calliper that stops a 220mm rotor.

In this specially adapted system, the right-side brake lever controls the two outer pistons of the front brake calliper, much like a conventional motorcycle brake system. The left-side brake lever, however, controls not only the rear brake, but also the centre piston of the front brake calliper by way of a delay valve that assures a more smoothly controlled balance of braking forces when only the left-side lever is used, for a responsive feel on a par with many large motorcycles.

photos: prototype

New Combined Antilock Brake System

The new JAZZ ES-ABS is Honda's first scooter—and first motorcycle since the release of the ST1100 Pan-European CBS-ABS+TCS—to be equipped not only with a fully hydraulic Combined Brake System (CBS), but also a unique, newly developed Antilock Brake System (ABS) in a totally integrated configuration. Completely different in design and construction from the system featured on the Pan-European CBS-ABS+TCS, this remarkably compact new system is called the Hydraulic Combined Antilock Brake System, or H.-C. ABS.

This new Antilock Brake system features three main components:

- A pair of Hall-effect wheel speed sensors that monitor the toothed pulser ring mounted on each wheel to indicate minute differences in front and rear wheel rotation speed, and gauge tyre slip.
- A fully integrated, electro-hydraulic brake pressure modulator that contains three sets of solenoid-operated valves (one for the outer pistons of the front calliper, one for the rear calliper, and one for the Combined centre piston of the front calliper) and a motorised pump that works with a set of reservoir chambers to maintain a steady rate of hydraulic pressure.
- A high-accuracy electronic control unit (ECU) that constantly monitors the wheel sensors and instantaneously controls the modulator to help prevent tyre slip or wheel lock while braking.

ABS modulator cut away model

The electronic signals generated by the wheel speed sensors are constantly monitored by the ECU in order to calculate tyre slip. If any slip is detected during braking—even in amounts too small to be perceived by the rider—the ECU immediately commands the brake pressure modulator to momentarily reduce hydraulic pressure to the brakes, thus helping prevent wheel lock.

The three basic stages of ABS operation are:

Pressure DECREASE Mode

The instant the ECU detects any tendency towards wheel lock, it rapidly reduces hydraulic pressure to the corresponding brake callipers by closing the IN valve between the master cylinder and the calliper, and opening the OUT valve leading to the pump and reservoir chamber, in order to immediately drain-off the excess pressure.

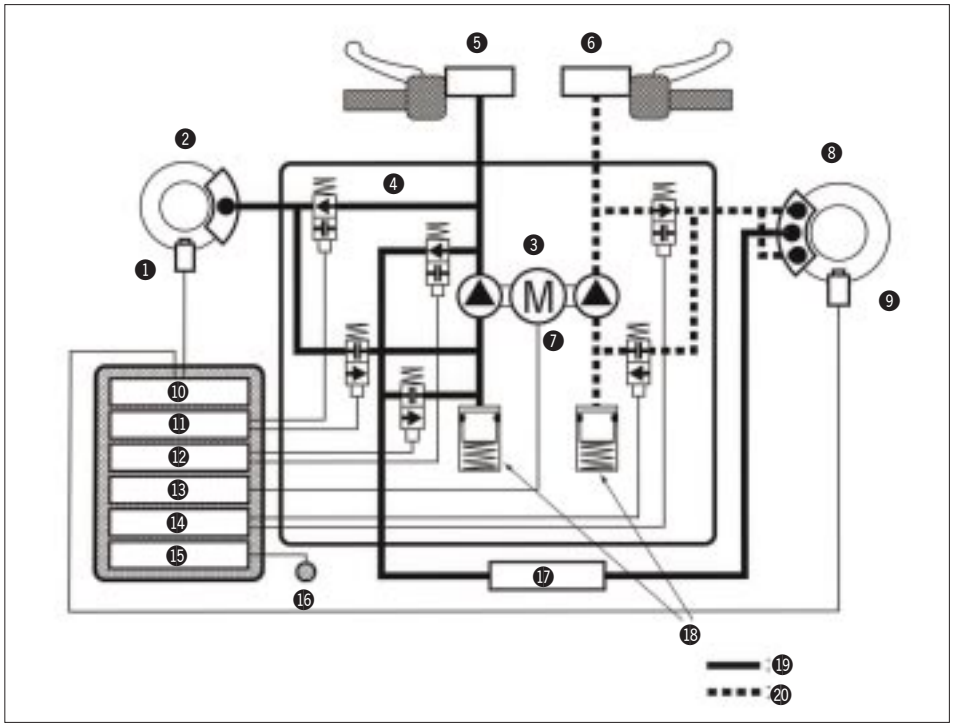
Pressure HOLD Mode

Following a predetermined decompression interval wherein the detected tyre slip is stopped, the ECU closes the drain line valve to HOLD braking force at a constant level and permit the slipping wheel to recover its rotational speed.

Antilock & Combined Brake System Diagram

❶ *Wheel speed sensor*
❷ *Rear brake calliper*
❸ *Modulator*
❹ *Solenoid valve*
❺ *Left (Combined) brake lever*
❻ *Right (front) brake lever*
❼ *Motorised pump*
❽ *Front brake calliper*
❾ *Wheel speed sensor*
❿ *Wheel speed*
⓫ *Rear brake*
⓬ *Front Combined brake*
⓭ *Pump motor*
⓮ *Front brake*
⓯ *Warning*
⓰ *Indicator lamp*
⓱ *Delay valve*
⓲ *Reservoir chamber*
⓳ *Combined brake line*
⓴ *Front brake line*

Antilock & Combined Brake System Diagram



Pressure INCREASE Mode

Once the ECU detects full wheel speed recovery, it then reopens the IN valve to reapply pressure to the calliper by way of the pump until tyre slip is again detected.

This rapid cycle of pressure DECREASE, HOLD, and INCREASE is repeated approximately 5 to 6 times per second, making possible nearly instantaneous correction of changes in wheel rotation while ensuring highly accurate control of hydraulic pressure to each of the independent sets of brake calliper pistons.

Antilock Brake System Operation

A) NORMAL Brake Operation

❶ *Brake lever*
❷ *Solenoid valve: OFF*
❸ *Motor*
❹ *Pump*
❺ *Solenoid valve: OFF*
❻ *Reservoir chamber*
❼ *Brake calliper*
❽ *Brake pressure*
❾ *Time*
❿ *Brake Pressure Variation*

B) Pressure RELEASE Mode

❶ *Pump: ON*
❷ *Brake pressure*
❸ *Time*
❹ *Brake Pressure Variation*

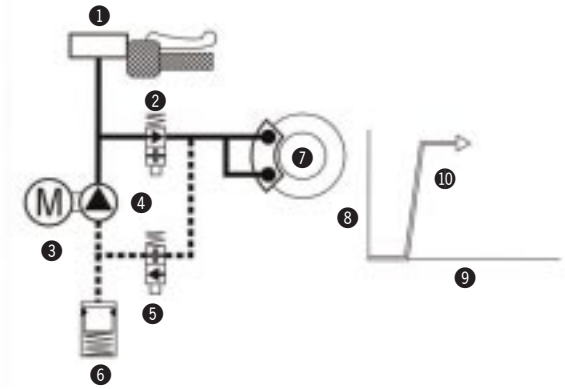
C) Pressure HOLD Mode

❶ *Pump: OFF*
❷ *Brake pressure*
❸ *Time*
❹ *Brake Pressure Variation*

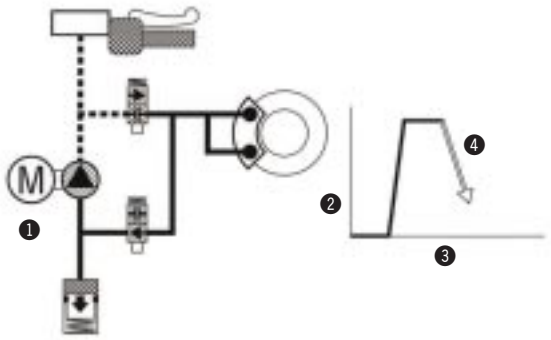
D) Pressure INCREASE Mode

❶ *Pump: ON*
❷ *Brake pressure*
❸ *Time*
❹ *Brake Pressure Variation*

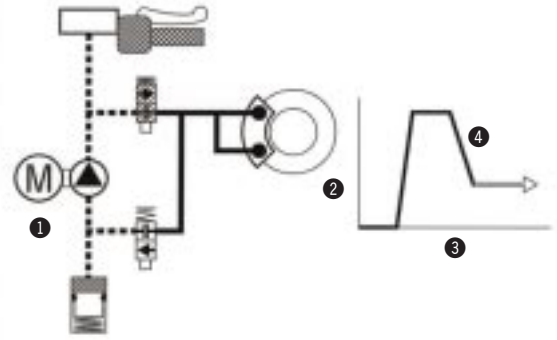
A) NORMAL Brake Operation



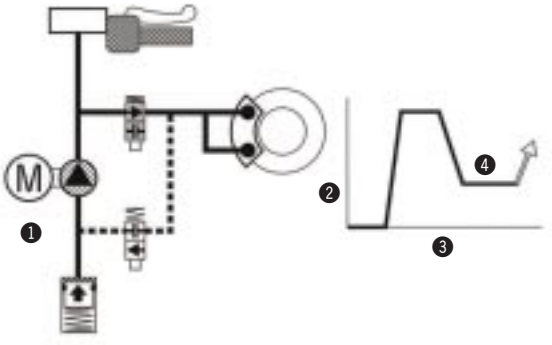
B) Pressure RELEASE Mode



C) Pressure HOLD Mode



D) Pressure INCREASE Mode



JAZZ / JAZZ ES-ABS

Chassis

While the JAZZ's CBS provides stronger, more responsive braking control than conventional linked systems, especially for riders with limited riding experience, or for those who feel uncomfortable releasing the throttle to use a standard right-hand front brake lever, the further addition of this new ABS provides smoother, faster and more confident braking control on a wider range of road surfaces, resulting in a great boost in rider confidence and control.

A self-diagnostic program designed into the ECU constantly monitors all main electronic and hydraulic ABS components. If any malfunction is detected, the system automatically shuts off and reverts to standard Combined Brake operation.

The newly developed ABS modulator integrates the hydraulic solenoids, motor and ECU into one compact, modular design that mounts under the front cowl, beneath the JAZZ's instrument panel.

Caution

Although the JAZZ's CBS and ABS provide highly effective support for most braking operations, there are still limits to the assistance the two systems can give a rider. These limits vary, and necessarily depend on tyre and road surface conditions, as well as on the rider's ability and riding behaviour. Thus, even with the addition of CBS and the JAZZ ES-ABS's new ABS, the basics of motorcycle riding remain unchanged: The rider must pay careful attention to both the motorcycle and surrounding conditions in order to judge the limits of riding safety—and then strictly observe those limits.

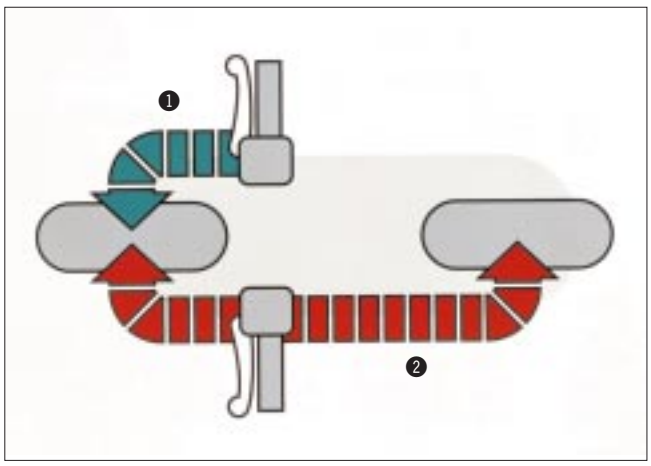
CBS+ABS Operation

❶ *Front brake + ABS*
❷ *Combined Brake System + ABS*

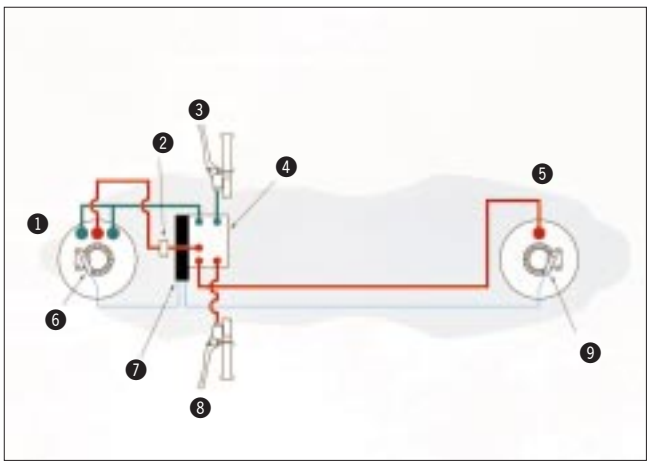
CBS+ABS System Diagram

❶ *Front brake*
❷ *Delay valve*
❸ *Right brake lever*
❹ *ABS modulator*
❺ *Rear brake*
❻ *Front wheel speed sensor*
❼ *ECU*
❽ *Left brake lever*
❾ *Rear wheel speed sensor*

CBS+ABS Operation



CBS+ABS System Diagram



Equipment

Fully Integrated Instrument Panel

The JAZZ's cleanly integrated cockpit area is highlighted by a large, one-piece instrument panel that takes on the high-tech look of an expensive sports car, as accentuated by the large metal rings around the two central meters. The panel features a large-face speedometer and electronic tachometer bracketed by a fuel gauge and a coolant temperature gauge, and underlined by a row of high-visibility indicator lights. A large digital LCD clock is built into the base of the tachometer, and the entire display is illuminated in a soothing, high-visibility reddish light when riding at night.

photo: prototype

Equipment

Handy Parking Brake

The JAZZ also features a large cable-operated parking brake lever that is conveniently mounted on the right-side interior panel. Pulling back on its large, contoured handle sets the brake, and a simple slap on its top with the palm of the hand instantly releases it. Its cable-actuated hydraulic piston is the same type of parking brake mechanism used in automobiles, and is especially useful when stopped at intersections on hills or when paying tolls. The JAZZ's brake system is also equipped with an auto-assist mechanism that automatically keeps the brake pads in adjustment.

Motorcycle-Type Controls

The JAZZ's tall, widely spaced handlebars provide a comfortable ride and effortless control. Shrouded in an attractive, one-piece moulded resin cover, the bars are topped by a rugged-looking set of sport bike handles and switch pods, and a pair of large, Super Sport-type rectangular rear-view mirrors that provide a wide, blur-free view of surrounding traffic conditions without having to strain to look.

Wind Protection Airflow

photos: prototype

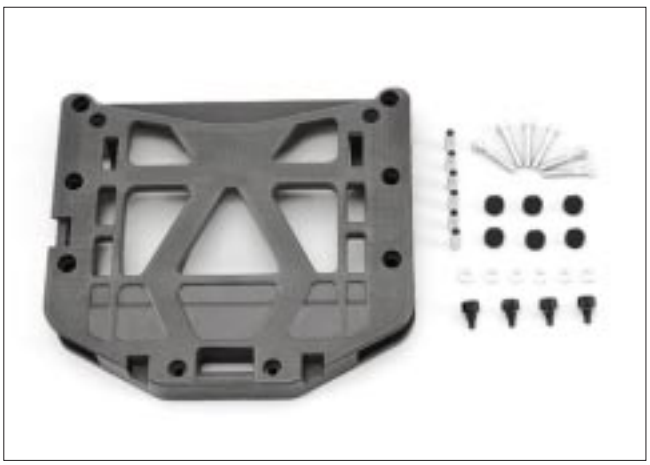
JAZZ / JAZZ ES-ABS

Optional Equipment

The JAZZ and JAZZ ES-ABS both feature a wide selection of optional parts and equipment that enhance both their style and their range of operating versatility.

- Chrome floortunnel trim protects tunnel sides from shoe and boot scratches while adding a dash of elegance.
- Stainless steel floorstep trim contributes to the JAZZ's sporty looks.
- A set of 3 black rubber scuff pads attach to the top of the floor-tunnel to provide excellent protection against scratches and scuffs. All feature a large 'HONDA' logo moulded into their top surfaces.
- A sturdy rear carrier bolts onto the top of the rear spoiler for greater carrying convenience.
- A large-capacity (45-litre) luxury top-box features body-matched colour panels and a built-in carrying handle. Its quick-detach mounting hardware allows the box to be removed and carried away with ease, or locked in place for added security.
- A lightweight, ruggedly made inner bag fits securely and conveniently inside the top box. A built-in zipper lets the bag be expanded from 21 to 33 litres in capacity.

photo: prototype



JAZZ / JAZZ ES-ABS

Optional Equipment

- A handy front pocket holds A4-size files with ease. Comes with an adjustable shoulder strap and a carrying handle.

- Sparkling chrome-plated handlebars and buffed aluminium handlebar mounts emphasise the JAZZ's sport riding-oriented performance.

- Side air deflectors attach to the outer bodywork edges to further extend its range of protection against the elements.

- Heated handlebar grips ensure greater comfort on cold days. A handy control switch provides easy temperature adjustment.

JAZZ / JAZZ ES-ABS

Specifications

Specifications		**JAZZ / JAZZ ES-ABS (ED-type) (95/1/EC-values)**
Engine		Liquid-cooled 4-stroke OHC single
Bore × Stroke		72.7 × 60mm
Displacement		249cm^3
Compression Ratio		10.5 : 1
Carburettor		30mm CV type (VE3BA)
Max. Power Output		14.1kW/ 7,000min^{-1}
		14kW/ 7,000min^{-1}*
Max. Torque		20.6Nm/6,000min^{-1}
		20.5Nm/5,500min^{-1}*
Ignition		Fully transistorised electronic **with Auto Idle-Stop function***
Starter		Electric
Transmission		V-Matic
Dimensions	(L×W×H)	2,210 × 760 × 1,360mm
Wheelbase		1,545mm
Seat Height		720mm
Ground Clearance		130mm
Fuel Capacity		12 litres
Wheels	Front	13M/C × MT2.75 cast aluminium
	Rear	12 × MT3.50 cast aluminium
Tyres	Front	110/90–13M/C 56L (tubeless)
	Rear	130/70–12 62L (tubeless)
Suspension	Front	33mm hydraulic telescopic fork, 100mm cushion stroke
	Rear	Unit swingarm with dual conventional dampers, 120mm cushion stroke
Brakes	Front	240mm hydraulic disc with Combined three-piston calliper, drilled rotor, sintered metal pads **and ABS***
	Rear	220mm hydraulic disc with single-piston calliper, sintered metal pads **and ABS***
Dry Weight		159kg **(164kg)***

(* : JAZZ ES-ABS)

All specifications are provisional and subject to change without notice.