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INSIGHT

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Press Kit

At a glance

- Five-door hatchback with Honda's petrol-electric IMA system
- Australia's most affordable
 - Manufacturers List price VTi \$29,990
 - Manufacturers List price VTi-L \$33,490
- Five-star ANCAP safety rating
- Low emissions and excellent fuel economy
- Unique Eco Assist system that encourages the driver to maximise fuel economy
- Sleek design, influenced by FCX Clarity
- Practical and spacious interior to accommodate up to five occupants
- Flexible load space of 408 litres
- Generous specifications
- Front, side and full length curtain airbags standard on all models
- Vehicle Stability Assist (VSA) standard on al models
- Servicable at all 108 Honda dealerships



Key features

Insight VTi

- 1.3litre SOHC i-VTEC engine with Integrated Motor Assist (IMA)
- EURO4 compliant
- Electric Power Steering (EPS)
- Dual front, side and curtain airbags
- Vehicle Stability Assist (VSA)
- ABS brakes with EBD and Brake Assist
- Eco Assist and ECON button
- Cruise control
- Keyless entry, answerback and immobiliser
- Security alarm
- Climate control air-conditioning
- 15 inch alloy wheels (temporary spare tyre)
- Tilt and telescopic steering
- Body coloured bumper, door mirrors and handles
- Front variable/intermittent wipers
- Auto up/down front window (driver's side)
- Multi Information Display
- Seatbelt reminders
- Halogen headlights
- Six speaker audio system with CD and MP3 compatibility with steering mounted controls
- USB port and auxiliary jack
- Cloth trim
- Passenger seat back pocket
- 60/40 split fold seats
- Vanity mirror (driver)
- Five 3-point seatbelts (rear with ALR and ELR)
- Rear seat armrest with cup holder
- Steering mounted paddle shifts
- Luggage cover
- Bluetooth
- Reversing sensors

Key features

Insight VTi-L in addition to VTi

- Front auto wipers
- Side indicators on door mirror
- Auto up/down front window (driver and passenger)
- Auto on/off headlights
- Driver and front passenger seat pocket
- Leather steering wheel
- 16 inch alloy wheels
- Front fog lights
- Satellite Navigation system with integrated Bluetooth, DVD player and reversing camera

Overview

The exterior of the secondgeneration Insight blends design elements from the original Insight's aerodynamic profile, with the front design similar to the hydrogenpowered FCX Clarity. The new Insight offers a versatile and spacious interior; an adaptable cargo area and 60/40 split fold-down seats, providing extended utility. A 1.3-litre four-cylinder i-VTEC petrol-electric engine producing 72 kilowatts forms the foundation of the Integrated Motor Assist (IMA) hybrid system. The electric motor, positioned between the engine and the continuously variable transmission, adds power during acceleration and in certain cruising situations as well as re-capturing energy from the vehicle's forward momentum during braking.

The Insight introduces an all-new Ecological Drive Assist System (Eco Assist) to help drivers achieve excellent fuel economy. Eco Assist is a driver-selected fuel efficiency feature. Pressing the ECON button enhances the Insight's efficiency, altering throttle control, CVT operation, idle stop duration, air-conditioning and cruise control. Eco Assist also provides driving style coaching via a 3D background within the speedometer that changes colour to reflect how efficiently the driver is accelerating and braking. Results are continuously tracked as fuel economy ratings and are shown per drive on a lifetime basis in the form of trees and leaves that appear in the Multi-Information Display. Up to five leaves can be 'earned' when the driver achieves a fuel-efficient driving style.

The Insight features a sleek, futuristic look and flat under-body with strakes in front of the tyres to help the Insight slip through the air with minimal drag. The MacPherson strut front and torsion beam rear suspension are tuned to provide an engaging and comfortable ride, while the compact component size allows for a generous interior space. The body construction features significant use of high-strength steel, reducing weight and enhancing rigidity.

Overview

Two variants are available - the VTi and VTi-L Both have the following standard features: electric power steering, six airbags, active front headrests. Vehicle Stability Assit (VSA), ABS brakes with FBD and Brake Assist, cruise control, keyless entry, security alarm, climate control air-conditioning, tilt and telescopic steering. body coloured door handles. front variable and intermittent wipers, auto up/ down front driver window. multi information display, seatbelt reminder, halogen headlights, six speaker audio system with CD player and USB connectivity, cloth trim, passenger seat back pocket, 60/40 split seats. five threepoint seatbelts, paddle shifts, luggage cover and Bluetooth. The VTi-L receives front rain sensing wipers, side indicators on door mirrors, driver and passenger auto up/down windows, driver and front passenger seat pockets, leather steering wheel, 16 inch allow wheels, front fog lights and satellite navigation with integrated Bluetooth and DVD player.

Since the 1970s, Honda has been a pioneer in the development of lowemissions, high-fuelefficiency cars. Today, Honda continues to realise its vision of efficient, environmentally responsible transportation, delivering generous value at a competetive price.

The original Honda Civic featured Compound Vortex **Controlled Combustion** (CVCC), becoming the first vehicle in the world to comply with the US Clean Air Act without a catalytic converter. In 2001 Honda introduced the original Insight, the first petrolelectric hybrid automobile sold in Australia, which achieved 2.8 litres/100km on highway cycle, making it Australia's most fuel efficient car Honda's original Integrated Motor Assist (IMA) powertrain combined a lightweight and efficient petrol engine with an ultra-thin electric motor that supplied low-end torque and power assistance as needed. The Insight also featured a special aluminium body that weighed 40 percent less than a comparable steel body.

Having proved the effectiveness of IMA technology, Honda launched the Civic Hybrid in Japan in 2001 in the U.S. and in Australia in 2004. Along with the exceptional fuel efficiency offered by IMA, the Civic Hybrid featured the style and amenities of a sedan. Since then, Honda's hybrid technology has continued to evolve, with the Civic receiving increasingly advanced IMA technology and improved hybrid performance.

Overview

Honda Australia's research has shown that today's customers are not necessarily interested in buying a hybrid vehicle simply because it's a hybrid. They want to play their part in reducing their impact on the environment, provided it doesn't come at a high premium. They seek a car that delivers on size, style, practicality, versatility and most importantly, the fuel economy that a hybrid can deliver.

In the future, we may drive fuel cell vehicles, but with concerns over resource conservation and environmental protection growing, customers worldwide are looking for efficient, environmentally responsible transportation today. The Insight is the first in a series of new hybrid vehicles from Honda that will offer exceptional fuel efficiency, fun driving and practicality, all in a stylish package at an affordable price.

Three advances are the key to the Insight's attractive combination of features and affordable purchase price. Firstly, the new Insight is a global car, sharing platform and parts with only minor, regional variations. Honda has designed the Insight to comply with worldwide standards-with collision safety tests and emissions standards a high priority. The Insight achieves standards of guality and safety that make it world-ready and is designed for efficient high-volume manufacturing.

Secondly, the secondgeneration Insight's IMA powertrain is more advanced and compact than ever. As compared to the IMA technology deployed in the 2006 Civic Hybrid, the Intelligent Power Unit (IPU) is 19 percent more compact and 28 percent lighter. The IPU controls the power of the IMA system. The IPU contains the energy storage module (battery), Power Control Unit (PCU), motor Electric Control Unit (ECU) and a compact cooling system. The IPU is located beneath the rear cargo area for minimal impact on interior space.

Thirdly, to produce the Insight, Honda has created assembly lines at its Suzuka Factory in Japan for the manufacture of IMA components that feature the company's most advanced equipment and manufacturing technology. providing for both the highest quality and reduced cost to maximise value. The result is a vehicle that builds upon the Honda tradition of innovation to offer not only low emissions and high fuel economy, but also exceptional performance, style and utility, all at the most affordable price.

Chassis

Key features

- MacPherson strut front suspension
- H-shaped torsion beam rear suspension
- Electric power-assisted rack-and-pinion steering (EPS)
- Power-assisted brakes
- Antilock Braking System (ABS) and Electronic Brake Distribution (EBD)
- Vehicle Stability Assist (VSA) and Creep Aid System (CAS)
- Low rolling-resistance tyres
- 15 inch alloy wheels for VTi
- 16 inch alloy wheels for VTi-L

Chassis

Key features

The Insight chassis is entirely new, but in the quest to produce an affordable car with compact dimensions, it is based on the platform used for the latest Jazz and City and as such, it shares many of its components and characteristics. From the starting point of Jazz, engineers devised a package that accommodates the hybrid system, provides space for adults to sit in comfort and allows room for the load space.

The structure of the engine compartment and front section of the car is almost identical to Jazz, with some minor alterations, but behind the front bulkhead the platform is unique to the Insight. The wheelbase is 2550mm (50mm longer than that of the Jazz). Upon this platform, front and rear suspension from the Jazz are used, which means MacPherson struts at the front and an H-shaped torsion beam at the rear to keep the load floor low, increasing luggage capacity inside. Dynamically, the goal was to achieve an enjoyable driving experience and stable handling in a range of conditions and on a mixture of road surfaces.

Chassis

Occupant comfort and sporty handling

In addition to providing a smooth, comfortable ride, the chassis of the Insight helps create a roomy interior through the use of the suspension configuration. The low vehicle height and the placement of the IMA battery and other hybrid components beneath the rear cargo area further contribute to spaciousness and the low centre of gravity. which is key to the Insight's responsive handling. Electric power-assisted rackand-pinion steering enhances driving performance, while the antilock braking system (ABS) with Electronic Brake Distribution (EBD) provides a natural, easy-to-control, linear braking feel.

MacPherson strut front suspension

MacPherson struts offer outstanding space efficiency. Fine-tuned suspension geometry secures optimum wheel alignment during turning for a solid handling feel. The axes of the suspension arm mounting points have been aligned and compliancebushing axes made parallel for enhanced ride smoothness and comfort.

H-shaped torsion beam rear suspension

In the rear, H-shaped torsion beam suspension helps free up more cabin space. A low spring lever ratio and largecapacity trailing arm bushings contribute to the Insight's smooth ride. Long trailing arms help suppress lift during cornering, while optimised roll steer and roll camber geometry deliver secure handling.

Low centre of gravity for enhanced handling

The low vehicle height of 1,435mm, the location of the battery and other hybrid components beneath the rear cargo area and other design factors result in a low centre of gravity, contributing to the new Insight's responsive, solid handling capabilities.

Chassis

Electric powerassisted rack-andpinion steering (EPS)

In combination with suspension geometry, a high steering gear ratio in the initial 90-degree rotation of the steering wheel and advanced EPS control deliver a crisp steering response to driver inputs at all speeds. The mounting method and rigidity of the new Insight's steering box complement the EPS system's high capacity and quick steering gear ratio, adding to the firm. direct steering feel. Unlike traditional hydraulically powered systems, the EPS does not draw power from the engine, further contributing to the new Insight's overall fuel efficiency.

Relocating the fuel tank

Although it shares many commonalities, perhaps the most significant difference between the Jazz and the Insight platform is the position of the fuel tank. Many are familiar with the Jazz's distinctive central tank lavout, under the front seats. which helps make the car so versatile, but on the Insight platform, the decision was taken to put the fuel tank under the rear seats. This meant that the seating for occupants could be mounted lower in the car, resulting in a lower roof. smaller crosssection area. and thus a more aerodynamic body shape.

Wheels and tyres

From an aerodynamic view, flush-surfaced dish-type wheels – like those found on the Civic Hybrid – are superior, Although spoked wheel designs are not as slippery, the Insight is fitted with a seven-spoke alloy design, to enhance the visual appeal of the car.

The VTi Insight is equipped with these 15x5.5 alloy wheels fitted with 175/65 R15 tyres. 16-inch wheels are fitted on the VTi-L model.

Vehicle Stability Assist (VSA)

All Insights are equipped with Honda's Vehicle Stability Assist (VSA) system, designed to assist the driver in maintaining control during cornering, acceleration and sudden manoeuvres by applying braking to the right or left hand wheels as necessary and managing the engine torque systems.

Warranty

The Insight has a 3 year, 100,000 kilometre warranty with service intervals at six months or 10,000 kilometres. The IMA battery warranty is 8 years unlimited kilometres.

Body

Key features

- Advanced Compatibility Engineering (ACE) body structure
- Rigid, lightweight body design
- Body designed for optimum vibration frequency control
- Advanced aerodynamic design with low vehicle height
- Slim-profile headlights
- LED brake and tail lights
- Roof-mounted antenna
- Rear window wiper/washer
- Security system with engine immobiliser

Body

Rigid, lightweight quiet and stylish

The body of the new Insight features the Advanced Compatibility Engineering (ACE) body structure in the vehicle front to help protect occupants in the event of a frontal collision. ACE also enhances rigidity, contributing to the Insight's responsive handling.

The body of the Insight makes extensive use of high-tensile steel and other light materials, helping to keep vehicle weight and fuel consumption low. The new Insight features a number of design innovations to minimise noise, vibration and harshness for a quieter, more comfortable ride. An advanced aerodynamic design not only enhances fuel efficiency, it also gives the new Insight its sleek, futuristic style-clearly identifiable as a hybrid. The distinctive 6-point front arille highlights the front bumper face that flows up and to the sides, emphasising the vehicle's stance. The taut, lean body lines that sweep back along the sharp wedge profile and taper to the aerodynamic tail are designed for superior aerodynamics and fuel efficiency and to give the Insight its stylish look.

Advanced aerodynamic design with low vehicle height

Excellent aerodynamic design, including a low vehicle height and extremely flat underbody aids in performance and fuel efficiency and also gives the Insight a characteristic profile that makes it immediately identifiable. Distinctive design elements include Honda's unique six-point grille, a sharp wedge profile and aerodynamic tail.

Lightweight soundabsorption materials

Lightweight sound-absorption in the roof, carpets and dashboard help keep the cabin quiet and vehicle weight down. Plastic separators under the pillars enhance cabin quietness.

Body

Advanced windshield design

The laminated windshield glass provides heat and sound insulation to help maintain cabin quietness while reducing the need for heating and air-conditioning, conserving energy.

Body designed for optimum vibration frequency control

Each type of automobile vibration, including idling noise and cruising hum, has its own resonance frequency. To disperse these frequencies and ensure a smooth, quiet ride, the body of the new Insight is more rigid where stresses accumulate, such as the attachment points connecting the front pillar lower base stiffener, the centre pillar lower base stiffener and the side sill member.

Aerodynamic underbody design

The under-body is designed for optimal aerodynamics to enhance fuel economy. Lightweight plastic parts under the floors, the engine chamber, the fuel tank and other areas of the under-body help enhance air flow. The front spoiler and front and rear strakes help direct air flow strategically. A guide under the front bumper directs airflow into the engine chamber.



Powertrain

Key features

- Fifth-generation Integrated Motor Assist (IMA) hybrid system
- 1.3-litre i-VTEC four-cylinder engine
- High-power, lightweight, ultra-thin electric motor
- Lightweight, compact, durable battery
- Standard continuously variable transmission (CVT)
- Regenerative braking
- Drive-by-Wire throttle control

Powertrain

A balanced approach to power compactness and efficiency

Now in its fifth generation since debuting with the original Insight in 2000, Honda's Integrated Motor Assist (IMA) is a parallel hybrid powertrain that increases efficiency through power assist, energy regeneration and idle stop capabilities. The system consists of a lowfriction 1.3-litre i-VTEC fourcylinder engine that serves as the primary power source; a 10-kilowatt. lightweight. ultra-thin electric motor that provides additional power and electricity generation; a lightweight and compact battery; and a continuously variable transmission.

The combined output of the engine and motor is 72kW for responsive acceleration in the city and relaxing motoring on the highway. The Intelligent Power Unit (IPU) of the new IMA is 19 percent more compact than that of the fourth-generation system, while the powertrain's efficiency is the key to the Insight's exceptional fuel economy.

High-efficiency, lightweight, low-friction 1.3-litre SOHC i-VTEC four-cylinder engine

The heart of the Insight powertrain is the i-VTEC engine, which combines responsive performance and excellent fuel efficiency as a result of its lightweight, lowfriction and efficient design. Maximum power is 72kW @ 5800 rpm with torque of 167Nm @ 1000-1700 rpm.

Powertrain

Key features of the engine include the following:

- The i-VTEC valve control system employs a dualrocker configuration that supports both normal valve timing and cylinder idling to achieve a broad power band combined with excellent fuel efficiency.
- The lightweight engine block incorporates a thinsleeve construction, while friction-reducing measures include plateau honing, low-friction pistons, low tensile-force piston rings and an offset cylinder bore. The surfaces of the high-strength forged steel connecting rods have been hardened with a special carbon process for a more lightweight design.
- The Programmed Fuel Injection (PGM-FI) is a lightweight, compact system that ensures optimal air-fuel ratio by monitoring throttle position. engine temperature, intakemanifold pressure, intakeair mass flow atmospheric pressure, exhaust-gas oxvgen content and intakeair temperature to control fuel delivery via multi-holed injectors mounted in the intake port of the cylinder head. The intake manifold is made of lightweight, composite resin instead of aluminium for further weight savings.
- Intelligent dual and sequential ignition with two spark plugs per cylinder facilitates an intense, rapid combustion process for increased power and reduced fuel consumption and emissions.
- A subframe torque rod damper system reduces rocking and helps isolate powertrain noise and vibration from the passenger compartment. Hydraulic engine mounts and reinforcements in the engine compartment help further reduce engine noise and vibration for a more comfortable ride.
- During deceleration, Variable Cylinder Management (VCM) virtually eliminates the pumping action of the cylinders, decreasing resistance to allow the motor/generator to more efficiently generate electricity with which to charge the battery.

Powertrain

High-power, lightweight, ultra-thin DC brushless electric motor

The electric motor contributes up to 10 kilowatts at 1.500 rpm and 78 Newton metres at 1000 rpm to the Insight's powertrain, assisting in acceleration and cruising at low-to-mid vehicle speeds (depending on conditions). The motor also acts as a generator during braking, steady cruising, gentle deceleration and coasting to capture kinetic energy and recharge the battery. The ultra-compact electric motor is located between the engine and transmission.

Lightweight and compact Intelligent Power Unit (IPU)

The Intelligent Power Unit (IPU) controls the power of the IMA system. The IPU contains the energy storage module (battery), Power Control Unit (PCU), Motor Control Module (MCM) and a compact cooling system. The IPU is located beneath the rear cargo area for minimal impact on interior space.

The nickel metal hydride (Ni-MH) battery system consists of seven modules that serve power to the electric motor as it assists the engine. It also stores the electricity when the motor generates electricity during regenerative braking.

The seven-module battery system is comprised of 84 individual 1.2 volt cells for a total battery system output of 100.8 volts and a capacity of 5.75 ampere-hours. Compared to the fourthgeneration IMA battery technology in the 2006 Civic Hybrid, power output per module is 30 percent higher, allowing for a decrease in modules from 11 to 7. The changes allowed the overall IPU size to be reduced by 19 percent and overall weight by 28 percent. This decreased size and weight along with the corresponding reduced use of materials have also resulted in a battery with a lower lifetime environmental burden.

Continuously variable transmission (CVT)

The CVT offers smooth and predictable transitions and excellent low-end acceleration and low-rpm cruising. By helping the engine and IMA motor stay in their most efficient operating range, the CVT provides a fuel efficiency benefit superior to that of a conventional automatic transmission with gears and it allows for greater efficiency during regenerative braking by smoothing deceleration. The use of a lower gear ratio results in quick-reacting initial acceleration performance The start clutch control is redesigned to take full advantage of the features of the IMA system, engaging at lower roms to enhance initial acceleration and contribute to fuel efficiency.

Powertrain

'L' mode

The Insight has a transmission mode to produce more power when driving uphill or to obtain maximum engine braking when driving down steep hills. 'L' mode is activated by moving the gear lever into 'S' mode. The paddle shifts then need to be held down simultaneously. The 'L' indicator light will appear on the dash display. To remove 'L' mode, simply shift the lever back into the 'D' position or hold both paddle shifts simultaneously again for two seconds.

Regenerative braking

The Insight's regenerative braking system intelligently apportions braking power between the hydraulic brakes and the electric motor to extract even more electricity from the vehicle's kinetic energy. Less reliance on the traditional braking system and reduced engine pumping losses translate into greater electrical regeneration and improved fuel efficiency.

Automatic idle stop

The Insight automatically turns off the petrol engine during complete stops under normal operating conditions. This feature allows the vehicle to use even less fuel and emit fewer emissions than a conventional automobile. The system uses the IMA electric motor to restart the engine.

Drive-by-Wire™ throttle control

Continuously optimising the ratio of movement between the throttle pedal and the throttle butterfly valve in the intake manifold, Drive-by-Wire optimises engine response and IMA operation to match driving conditions and driver expectations for throttle input response. The system uses a highly responsive DC motor to change the throttle position quickly and precisely.

Powertrain

IMA Hybrid System

Honda's IMA hybrid system is now 10 years old, having made its debut in the original Insight back in 2000. IMA stands for Integrated Motor Assist, which means that an electric motor assists the petrol engine for increased power when needed. The electric motor is located between the petrol engine and the transmission.

This system has been used successfully in the Insight and the Civic Hybrid. Over the years the system has evolved and become smaller, more lightweight and cheaper to produce – the latest version in the new Insight is the most advanced IMA technology introduced by Honda to date. This modified i-VTEC unit from the Civic Hybrid has been further enhanced with lessons learned from the Jazz incorporated to improve fuel economy.

The low friction, pattern coated piston design has been combined with a new catalyst design to optimise its already economical design. These measures, along with a more stabilised combustion process help make the engine incredibly fuel efficient. However, the really clever part happens during deceleration, when the engine's cylinders have their feet up. During this idle time. combustion in all four cylinders is stopped and each pot is sealed shut. This means the engine is not working as hard to pump fuel or air, so it's immediately more efficient. In addition, virtually everything possible has been done to the engine to reduce friction. including an offset crankshaft/ connecting rod design. plateau honing of the cylinders for a smoother surface and a second low friction piston ring. On its own, the engine produces 73kW and 167Nm of torque, but the key to hybrid systems is the support given by the electric motor that can help boost performance as well as keep emissions and fuel consumption to a minimum.



Powertrain

Why IMA?

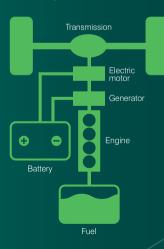
While all hybrid cars have both an internal combustion engine and an electric motor, there are three main types of technology offered by different manufacturers. The first is the Series Hybrid, which is driven solely by an electric motor. A combustion engine is used to generate electricity to power the motor. The second type is called a Parallel Hybrid, which uses the petrol engine as the main source of power to drive the car. The electric motor assists the engine, and at times even powers the car on its own. This is the system used by Honda hybrids – the system we call Integrated Motor Assist.

Combined Hybrid

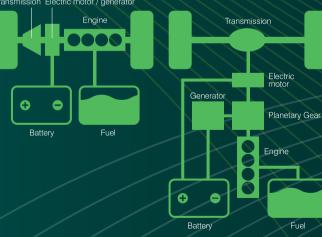
The other kind of hybrid is known as Series Parallel or Combined Hybrid. This is the type used by the Toyota Prius, and as you've probably guessed by the name, it uses elements of both the parallel and series hybrid systems. This system has two electric motors and an engine, and each can be used independently of one another.

Each system has its advantages and disadvantages, but the biggest benefit of a parallel system, like IMA, is that it's much smaller and lighter than the others. It also tends to be much cheaper to produce. Honda has focussed on optimising the parallel system over the past decade, which helped it bring Insight to market at a lower price.

Series Hybrid



Parallel Hybrid Transmission Electric motor / generator



Econ button

A few years ago, while monitoring customer use of the Jazz, the Insight development team found that there were significant differences in the fuel economy achieved from one driver to another. For example, at an average speed of 30km/h, there were differences of up to 21 per cent in the actual fuel economy being recorded by different drivers. With this in mind, the engineers tweaked the car's management system in an attempt to minimise the effect of varying driving styles on fuel economy. When the tests were repeated, the least efficient drivers improved their results, and the difference between all the results was reduced to 12 per cent.

Honda has taken these learnings into the development of Insight, and the result is the ECON button. When activated by the driver, this button tells the car's management system to adopt specific settings to improve fuel consumption. It does this without affecting overall safety levels or the general usability of the car.

When the ECON button is depressed, the Insight enters 'economy' mode, resulting in the following:

- Power output is limited and torque is reduced by four per cent (except when driver pushes the throttle to the floor)
- Smoother CVT shift pattern
- Throttle control is modified. At any engine speed, there is an optimum throttle angle, which if maintained, results in the best fuel efficiency. But some drivers

apply a more on/off approach to throttle control, often pressing the accelerator down too far. To counteract this, the system 'smoothes out' driver input by maintaining the throttle opening to match the speed and conditions. The driver can override the system at any time, to perform an emergency manoeuvre, for example

- Greater regenerative brake
 energy is captured
- Air-conditioning operates less frequently in the recirculation mode
- The fan blower power is reduced more frequently to limit the system's consumption of energy
- During Idle Stop mode (the engine turns off when the car is stationary), the air-conditioning shuts down





Eco Assist



57km/h

Eco Assist

While the petrol-electric IMA system is already incredibly efficient in its use of fuel, there are driving styles and techniques that can be employed to take greatest advantage of the hybrid technology.

Driving as smoothly as possible, without heavy acceleration or braking, reduces excessive fuel consumption and allows the high-power battery to remain charged, which in turn means it can power the electric motor to support the engine more regularly, resulting in greater fuel economy. And driving without a heavy right foot generally equals better fuel consumption anyway. That may sound easy in theory, but in practice it can be tricky to change the way you've been driving, in some cases for decades. We're not expecting everyone to know how to drive like an eco-warrior - or indeed to have to monitor the way they drive to get more kilometres from a tank of fuel Instead Honda has developed some useful technology to help Insight owners become more efficient behind the wheel. We call it Eco Assist.

The great thing about Eco Assist is that it's not a fixed set of rules to follow, or a limit on what you can and can't do as a driver. It's a simple system that rewards the driver if they adopt an economic driving style.

Together with the ECON button Eco Assist can be used to achieve high fuel economy and thus minimise harmful exhaust emissions. During driving, there are two main elements to the system: an 'Eco drive bar' indicator within the black and white Multi Info Display (MID), and an ambient meter behind the digital speedometer display. Both instruments are synchronised, to give 'real time' information on the consumption of fuel and provide guidance on how you should alter your driving style.









Eco Assist

The 'eco drive bar' in the MID is a solid bar symbol that moves to either side of a central line. The idea is to drive in a way that keeps the bar in the centre and away from the shaded/dotted areas on either side.

When driving smoothly, and thus efficiently, the bar stays near the centre of the indicator, shifting slightly right during gradual acceleration and slightly to the left when braking gently. During these conditions, the ambient meter behind the speed display glows a green colour to show optimum economical driving performance. Under greater acceleration or when braking moderately, the bar in the MID shifts more towards either end of the scale, showing the use of more fuel, and the ambient meter glows a green/blue colour.

With aggressive acceleration, or sudden braking, the indicator bar will head to the right or left, deep into the shaded areas of the scale to show major fuel consumption and the ambient meter turns blue respectively. In order to achieve the best economy, the driver should aim to keep the bar in the centre, and the display glowing green as much as possible throughout each journey. To help motivate Insight drivers during each journey, another display above the bar indicator grants rewards for more efficient driving. If performing well, small trees will 'grow' above the bar to show the driver's ecoprogress.

Also, by pressing the Info button on the steering wheel and scrolling through the MID displays, drivers can not only look at their average fuel economy of the current trip, but can also retrieve their average of the last three journevs.

Points make prizes

Once a journey is over, and the ianition is turned off. the black and white 'Eco guide' in the MID changes to an 'eco score' display. Now, the tree symbols at the top report on the driver's performance during the last drive, while the bar and symbols at the bottom of the display show a lifetime score. This is shown in three 'ranks' with the fully grown tree and flower to the right of the bar showing the best score. If the driver's rank has improved since the last journey, a recognition symbol is also displayed, with wreathes and trophy symbols reflecting good progress. Conversely, if the driving style is worse and the lifetime score and rank decreases the leaves of the plant disappear.



Exterior



Exterior

Although the design team started with a clean sheet of paper they faced many challenges in creating the exterior appearance of the Insight.

On the one hand, as a low emission hybrid car it had to express environmental credentials – it had to look like a 'green' car – but on the other hand it had to appear dynamic and fun to drive; part of Honda's key design principles. Above all, in line with the positioning of Insight, the design had to appeal to a broad range of people. "We wanted the car to be widely accepted," says Creative Chief Designer, Motoaki Minowa. "If we just created an environmentallyfriendly car it could have looked dull, or boring. We wanted to insert a sporty factor to make the car more appealing – and after all, sportiness is in Honda's DNA."

While the 'greenness' of the car may have challenged the sporty direction of the overall design, in some areas it actually helped the dynamic cause. Because the newly-developed IMA system is more compact, it meant the nose of the car could be shorter, creating a snubbed, more aggressive look to the front end. Some onlookers at the unveil of the Concept at the Paris Motor Show even likened the profile of the car to a Lamborghini Countach because of that compressed engine compartment. "That is a big compliment," says Mr Minowa.

"When I was young, that is the car that made me decide to follow a career in car design. It was one of my favourites. But the real reason I am so happy with that comment is that most people in car design say you cannot make a sporty car with a short nose. However, Lamborghini did it with the Countach, and I like to think I've achieved it with this Insight." Another important factor that led (and to some extent restricted) the exterior design was the body style itself. To appeal to as many people as possible, a five-door layout was chosen and this brought its own challenges, particularly when optimising the aerodynamics of the car, and creating enough headroom for passengers in the rear.

Exterior

"The reason we chose a fivedoor hatchback was that we wanted the car to be popular in Europe," says Yasunari Seki, Large Project Leader. "American Honda – the biggest market – asked us to build a car with a boot, but we rejected that idea, because to compete with other green cars and sell more in Europe, it had to be a five-door hatchback. Of course, aerodynamically it is also a more favourable shape." One thing that didn't restrict the area of design was the budget, even though the rest of the project was so concerned with reducing costs. If anything, the development team spent more money getting the appearance of the car right. Adding an extra window to the rear quarter, for example, was costly, but was essential in creating a sleeker look. "The car had to be stylish and make its owner feel proud," says Mr Minowa. Many will have noticed the similarity in the overall shape and look of the Insight to its fuel cell cousin, the FCX Clarity. As well as the aerodynamic advantages of this shape, Mr Minowa says there's a definite reason for mimicking the bodystyle of the advanced hydrogen-powered car. "We intentionally tried to make the Insight look like a baby version of the Clarity," he says. "There are some design treatments and colouring effects we have taken from the FCX, but basically the car's shape is very similar. FCX Clarity is the leader, the most advanced car, the ultimate clean car - and we want the Insight to follow that lead. In a way, because the new Insight takes design cues from the old car and from the FCX, it is bridging the gap between the past and the future."

Exterior

Lights

The Insight adopts slim, projector-style headlights in a four-light cluster. The headlight's low beam has blue detailing and the indicators are located in the lower bumper face. At the rear, the Insight uses LEDs for the taillights and stop lamps. LEDs consume less power, which aids fuel economy. But rather than just replacing bulbs with LEDs, the designers attempted to 'spread the light' through the design of the taillight unit and the use of reflective surfaces.



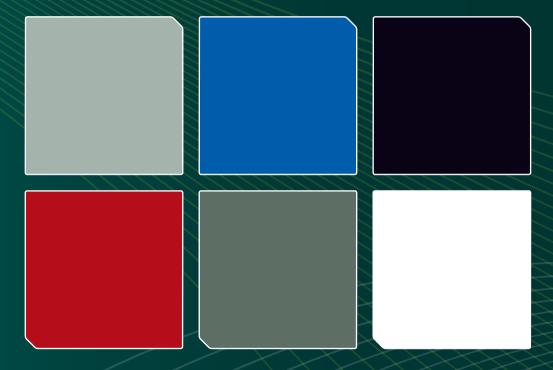




Exterior

Paint

There are six exterior paint colours: Alabaster Silver, Cerulean Blue, Crystal Black, Milano Red, Polished Metal, Spectrum White.



Exterior

Aero Athlete

While there were many considerations and factors that affected the exterior design, it was aerodynamics that most governed the shape and look of the Insight. Making the car as slippery as possible exaggerates the already frugal hybrid technology on board the Insight, increasing fuel economy. So the design team set about creating a shape that had minimal drag. Elsewhere we've spoken about the similarity in the exterior design to that of the FCX Clarity, but that likeness is closest when the two cars are viewed in profile. It's clear that the rear sections of these two cars are almost identical in shape - and for good reason. Firstly, the line from the centre of the roof to the top of the boot lid is at the optimum angle for controlling the flow of air off the top of the car, with minimum turbulence. The top half of the body tapers in towards the rear of the car, which also helps the air flow travel smoothly over the top. Stable air flow over this section helps the car pass through the air with minimal drag.





Exterior

Aero Athlete

"The concept for the main shape of the car is called 'Aero Athlete'," says Mr Minowa. "It reflects a sporty, lean body with no fat, the tension of muscles and nothing unnecessary added." The shape of the tailgate is also very important – again, compare the Insight's boot to that of the FCX Clarity, or CR-Z, or even the original Insight. They all share the same shape and lines to help the aerodynamics. "We learnt a lot about aerodynamics from the first Insight," says Mr Minowa, Creative Chief Designer. "From the B-pillar back the two cars are very similar, but we couldn't have radical optimisations like the covered wheels, for example, as this Insight had to have more appeal."

The lower body sections are much wider, which also helps the aerodynamic qualities, and provides a stable, wide stance – giving the car a more masculine appearance.







Interior



Interior

The Insight has been designed to accommodate five passengers, cleverly packaged within an aerodynamic shell. Within this sleek exterior, the Insight still boasts headroom and tandem distances among the best in class.

An inviting and airy interior has been created with clever designs that give an increased sense of space, and practicality. Convex shapes have been used wherever possible to reduce mass of the interior plastics and create a sense of space, particularly where passengers sit. This moves away from the traditional interior design rules that usually dictate concave surfaces. In the Insight for instance, the front dash is split into two distinct sections.

The lower section is convex and curves away from the driver and front seat passenger giving a greater sense of space and leg room while the upper section surrounds the front occupants, the driver in particular, to create a cockpit-style cabin.

Special attention was paid to outward visibility. Forward visibility is excellent thanks to slim A-pillars. large front door window surfaces that do not require a separate pillared front quarter window. and the same cabin-forward design used for the latest Jazz. Equally, the integrated window in the boot enables. good low, rearward visibility, allowing the driver to see a low post, or child behind the vehicle. In addition, retractable rear headrests and rear three guarter lights increase rearward visibility.

Modern hybrid style and comfort

The interior of the new Insight provides a superior level of comfort to all occupants. With its two-tier instrument panel and Multi-Information Display, the convex cockpit provides a secure, enclosed feeling. making it easy for drivers to focus on road and vehicle conditions simultaneously. At the same time, front and rear passengers experience a modern, expansive and comfortable cabin offering exceptional versatility. The interior is futuristic and stylish, with amenities including power windows, mirrors and door locks: standard air-conditioning; tilt and telescopic steering column and seat height adjustment and an audio system with USB/MP3 connectivity and auxiliary jack.

Interior

Advanced cockpit with two-tier instrument panel and Multi-Information Display

The instrument panel features a sculpted design to create the appearance of depth and expansiveness. In the Multi-Information Display, large 3D meters and tightly clustered controls ensure quick recognition and intuitive operation for a combination of functionality and visual appeal.



Interior

Audio system

The Insight features a sixspeaker audio system with CD, an auxiliary jack and USB connectivity for iPods and other MP3 players. Other audio features include speed-sensitive volume control, which automatically adjusts the volume based on vehicle speed and CD/ MP3 text readout with a welcome screen that can be customised. The radio data system shows supplemental programming information from participating radio stations while also offering search-bygenre capability.



Interior

Air-conditioning

In automotive air-conditioning units there is a cooling circuit involved that delivers a refrigerant to a condenser and evaporator thus delivering cool air to the cabin. This process involves a compressor and with it associated thermal, mechanical and pumping losses, which affect fuel consumption.

To improve the thermal efficiency of the airconditioning system on the Insight, the low pressure cold pipe encloses the high pressure hot refrigerant pipe, with a scroll type groove on the outside – which means the cold refrigerant on its way back to the engine bay helps cool the warm refrigerant travelling to the cabin. The indentation on the outside of the inner pipe is in a spiral arrangement, which increases the surface area and therefore the efficiency of the heat transfer between the outer and inner tubes. This principle improves the thermal efficiency of the airconditioning system and as a result, less effort is required from the compressor, resulting in improvements to fuel consumption.

Air-conditioning in 'Idle Stop' mode

When driving the Civic Hybrid, during 'Idle Stop' mode, the air-conditioning can still be operated, thanks to an extra electric motor powered by the high-power battery pack. This function has not been included on the Insight, Instead, to keep the occupants comfortable. the length of the idle stop time is limited. Once the cabin temperature rises by four degrees Celsius for 90 seconds, the engine will automatically start again from idle stop. However, when ECON button is pressed, a longer idle stop time is set for improved efficiency.



Interior

Satellite Navigation

The voice-activated satellite navigation system in the VTi-L is a touch-screen unit utilising a fully updateable DVD for all data. The Insight's system allows the user to find a wide range of places of interest, including restaurants, petrol stations, airports and Honda service centres.

The majority of points of interest include phone numbers where appropriate for added convenience. Where it is available, the Honda navigation system works with traffic information to alert drivers to potential delays and navigate a route round them.





Interior

Bluetooth

Bluetooth hands free technology is available as standard in the Insight. This technology allows mobile phone calls to be made safely on the move. A series of speakers and microphones installed in the car can connect to any Bluetooth-enabled communications device, even in a bag or briefcase located in the boot

Packaging

Key features

- Generous cargo space
- Intelligent Power Unit (IPU) located under rear cargo area
- Low vehicle height
- Excellent outward visibility
- Five-door versatility and functionality
- 60/40 split fold-down rear seats
- Spacious and comfortable

The Insight has a comfortable interior, including generous headroom and legroom for occupants and abundant cargo space along with the superior versatility of a fivedoor vehicle. The placement of the Intelligent Power Unit (IPU) beneath the rear cargo area frees up extra interior space, allows for more seating configuration flexibility and contributes to low vehicle height and a low centre of gravity. This component placement also provides lower

seating for plenty of headroom and visibility. The Insight's packaging features a convenient fivedoor design with a large tailgate for easy access to cargo while the 60/40 split rear seats fold down to create a large, flat cargo space, making multiple interior configurations possible. In addition, the Insight has many storage compartments, pockets and six cup holders.

Packaging

Versatility

As the Insight will bring hybrid technology to a completely new audience, its design had to be versatile enough to meet the demanding requirements of such a varied customer base. Be it transporting the children, grandchildren, grandparents or carrying shopping to gardening equipment, the Insight can fit it all in.

Load space

In terms of boot for your buck, the Insight stacks up well. Relocating the smaller, more compact IPU (high-power battery pack) under the floor of the cargo area means there is 408 litres of luggage space. For larger loads, the 60:40 split folding rear seats fold down to open up a 584 litre flat load area. As in the latest Jazz, integrated headrests mean the rear seats drop down easily, without needing to remove the headrests or adjust the front passenger seat.

The luggage cover can be pulled taught to conceal the boot contents.





Packaging

Cabin storage

The designers have squeezed every millimeter of possible storage space out of the Insight. There are six cup holders spread throughout the cabin – two integrated into the wide and spacious door bins, two in the rear doors and two cup holders ahead of the gear stick. In front of the front cup holders there is a detachable partition box useful for storing sunglasses, mobile phones and other smaller items. The armrest storage box between the driver and front passenger houses the USB port and an iPod pocket. As well as room for CDs, keys and other items better kept out of sight, there's a rubber band on the underside of the lid to hold sunglasses in place. Storage recesses for smaller items can be found in each of the doors behind the electric window buttons. Another concealed space directly below the audio system can hold key fobs, cards and smaller items best kept away from prying eyes. All models feature a passenger seatback pocket.



Honda's Green Heritage

1972 The CVCC engine is developed for the Civic – a low-emission petrol engine that meets strict US regulations

1993 Honda wins prestigious World Solar Challenge Darwin to Adelaide with the solar-powered Type Dream car

1999 Honda launches the Insight, a petrol-electric hybrid car capable of 2.8l/100kms on the combined cycle, with emissions of just 80g/km of CO₂ **2003** Civic IMA hybrid sedan is launched, using 5.2l/100kms **1996** Honda EV Plus electric vehicle – capable of carrying four adults nearly 140miles on a single charge – is presented to the public

2006 New Civic Hybrid goes on sale with fuel economy of 4.6l/100kms (combined) and emissions of 109 grams CO₂ **1997** Honda unveils the Civic GX, which runs on natural gas and is available to buy in America. It becomes the world's cleanest car

2007 A lightweight hybrid sports car concept, named CR-Z, is revealed at the Tokyo Motor Show, and a version is confirmed for production

2008 The hydrogen fuel cell powered Honda FCX Clarity rolls off the production line in Japan, and leasing of these zero emission vehicles starts in the USA 2009 Reviving the Honda Insight name, a much more affordable hybrid car making cleaner motoring technology available to more people

Honda's Green Initiatives

 In 1956, founder Soichiro Honda said:
 "After materials are carried into the factory, nothing but products should be carried out."

 We don't just make clean engines, we make clean engines cleanly. What's more, we've been doing it for years.
 For instance:

- A cogeneration system installed at Kumamoto Factory in July 2006 completed the transition to natural gas at all Honda's factories in Japan. The cogeneration unit provides efficient electric generation, while the cogeneration unit's exhaust gas produces steam and hot water, used in the Kumamoto's motorcycle painting operations. The result is a reduction of approximately 1,039 tonnes of CO₂ emissions in 2007 alone.
- In Guangzhou, the Zengcheng Factory, which began production in September 2006, features an industry first: 100 per cent recycling of water. Achieving zero emissions of waste water, the facility has saved an estimated 170,000 tonnes of water so far.

In 1989 we swapped from lead-based paint to waterbased paint, which seems like a small detail, but when you use as much as we do, the details count. Fortunately it caught on.

✤ Honda's Type Dream Solar Car was the winner of the prestigious World Solar Challenge in 1993. But we weren't content with such an impressive achievement, so we tweaked the technology and repeated the feat in 1996. ★ It doesn't need a genius to work out that our recordbreaking Solar Car didn't work so well on duller days. But we put the experience to good use and started designing extra efficient and thin-film solar panels for houses and factories.

* Fourteen of our factories, including Suzuka where the Jazz and Insight are built, have been equipped with the next-generation thin-film solar panels, producing electricity with zero CO_2 emissions.

Honda's Green Initiatives

* We developed the Home Energy Station as a potential solution to the hydrogen infrastructure problem. It runs on natural gas and refuels not only the FCX Clarity, but can heat and power the home.

✤ The hydrogen-powered FCX Clarity is the world's first zero-emission fuel cell production car. It's currently on special lease in the US and Japan and emits only water from its exhaust.

* Since 1976 Honda has planted roughly half a million trees around its factories, absorbing over 4000 tonnes of CO_2 and making over 3000 tonnes of oxygen. Honda initiated a beach clean-up project to help reduce pollution of some of our seashores. A specially developed and lightweight beach cleaner is towed by an ATV, allowing us to clean around 20 beaches a year in Japan.

Considering the potential of a global food shortage in future, Honda chose rice as a research subject over six years ago. Since then we have been at the forefront of identifying genes that significantly increase the yield of rice plants.

- A gene named Gn1a helps to increase the number of grains while another gene, sd1, can now be isolated to reduce the height of the plants, making them less likely to topple over and spoil.
- Koshihikari rice bred with both these genes demonstrates a 23 per cent increase in crop yields. Since then we've also discovered a gene that dramatically improves the regeneration ability of rice, making it much easier to breed new varieties that surpass the potential of Koshihikari.

★ To confront the rapid deforestation in China, Honda is supporting the Desert Planting Volunteer Association in its Joyful Forest Initiative, which aims to cultivate forest in the desert.

✤ Since 2003, Honda has been helping Brazilian people conduct their own environmental education initiatives. The projects include river clean-ups and art and craft workshops to re-use PET bottles and newspapers.



FEATURES	Insight VTi	Insight VTi-L
POWERTRAIN		, ,
Engine	SOHC &	SOHC &
	Integrated Motor Assist(IMA)	Integrated Motor Assist(IMA)
	Inline 4 cylinder	Inline 4 cylinder
Capacity (cc)	1339	1339
Compression ratio	10.8	10.8
Bore x stroke (mm)	73 x 80	73 x 80
Emission - Australian standards	Euro 4	Euro 4
- International standards	Euro 5	Euro 5
Automatic transmission	CVT with grade logic control	CVT with grade logic control
- Paddle switch		$ \cdot $
Creep Aid System for incline-start-off assist		
Fuel type	Unleaded (RN91)	Unleaded (RN91)
- E10 Suitable		$\langle \cdot \rangle / \langle \cdot \rangle / \langle \cdot \rangle \rangle$
Fuel supply system	Honda Programmed	Honda Programmed
- Fuel Injection (PGM-FI)	Fuel Injection (PGM-FI)	
Drive by wire throttle (DBW)	\bullet	
Maximum power - Petrol Engine	65 kW @ 5800 rpm	65 kW @ 5800 rpm
Maximum torque - Petrol Engine	121 Nm @ 4500 rpm	121 Nm @ 4500 rpm
Maximum power - Integrated Motor assist (IMA)	10 kW @ 1500 rpm	10 kW @ 1500 rpm
Maximum torque - Integrated Motor assist (IMA)	78 Nm @ 1000 rpm	78 Nm @ 1000 rpm
Maximum power - Petrol Engine + IMA	72 kW @ 5800 rpm	72 kW @ 5800 rpm
Maximum torque - Petrol Engine + IMA	167 Nm @ 1000-1700 rpm	167 Nm @ 1000-1700 rpm



FEATURES	Insight VTi	Insight VTi-L
POWERTRAIN		
Fuel consumption - combined (litres/100km)*		
- automatic transmission	4.6	4.6
Fuel consumption - urban (litres/100km)*		
- automatic transmission	4.9	4.9
Fuel consumption - Extra urban (litres/100km)*		
- automatic transmission	4.5	4.5
CO ₂ emmision (g/Km)		
- automatic transmission	109	109
Econ Switch for Super Economy Mode		$\bigcirc $
Ecological Drive Assist Programme for improved fuel economy		$ \bullet $
Auto-Stop fuel saver		$\bullet \bullet $
Drive Efficiency Rating	$\bigcirc / / / / / / / / / / / / / / / / / / /$	$ \bullet $
Instant Fuel Economy Monitoring System with ECO Drive Bar	$ \bullet $	\bullet
Economy History - last 3 drives + current drive fuel economy		$\bullet \bullet $
CHASSIS		
Front suspension	Mcpherson strut	Mcpherson strut
Rear suspension	Torsion Beam Axle	Torsion Beam Axle
Power Steering	Electric	Electric
Stabiliser bars	Front & rear	Front & rear
Front brakes	Ventilated disc	Ventilated disc
Rear brakes	Drum	Drum



	In sight \/Ti	
FEATURES	Insight VTi	Insight VTi-L
EXTERIOR		
Body coloured & powered door mirrors		with turn indicators
Door handles	Body coloured	Body coloured
Fog lights	0	\bullet
Headlights	Halogen	Halogen
- auto on/off	*	
- beam height adjustment		
Keyless entry		
Wipers - Front	Variable Intermittent	Rain Sensing (Automatic)
- Rear		
INTERIOR		
Accessory power outlet (12v)	Front	Front
Air conditioning		
Climate Control	Climate Control	Centre console
Central locking	\bullet	
Coat hanger x2	\bullet	
Comprehensive interior illumination	•	
Cruise control	• \ \ \	
Cup holders		
- number of cup holders	4	4
- number of bottle holders		4
Digital clock	•	



FEATURES	Insight VTi	Insight VTi-L
INTERIOR		
		Einet
Door pockets	Front	Front
Driver's footrest		
Dust & pollen filter		•
Front seat arm rest	\bullet	
Front seat height adjustment - Manual	Driver	Driver
Glovebox	\bullet	
Grab rail x 4		
Head restraints - Adjustable	5	5
Lights-on warning		$\bullet \bullet $
Low fuel warning	$(\bullet) = (\bullet) $	
Multi information display		
- Instant fuel economy		
- Average fuel economy		
- Average vehicle speed		
- Distance to empty	$\bullet \land \land$	$\bullet / / / / / / / / / / / / / / / / / / /$
- Outside temperature display		
- Odometer		
- Trip meter		///////////////////////////////////////
- Seat belt reminder		
- Speed alarm		
- Time travelled		



FEATURES	Insight VTi	Insight VTi-L
INTERIOR		
Power windows		
- auto up/down	Driver	Driver & Front Passenger
Rear seat centre arm rest w cup holders		
Rear seat heating ventilation		
Seats - front	Fully reclining	Fully reclining
Seats - rear	60 / 40 split fold	60 / 40 split fold
Seat back pocket	Front passenger	Driver & Front passenger
Seat trim material	Cloth	Cloth
Seatbelt height adjuster	Front	Front
Steering column	Tilt & telescopic adjustment	Tilt & telescopic adjustment
Steering wheel	Urethane	Leather wrapped ⁺
Ticket/card holder (driver only)	()))))))))))))))))))	
Tonneau cover	\bullet	\bullet
Vanity mirror	Driver & front passenger	Driver & front passenger
Windows	Heat absorbing	Heat absorbing
SAFETY		
Advanced Compatibility Engineering (ACE) body design	•	\bullet
Active headrest	Driver & front passenger	Driver & front passenger
Airbags SRS - front	Driver & front passenger	Driver & front passenger
Airbags SRS - side with OPDS	Driver & front passenger	Driver & front passenger
Airbags SRS - full length curtain	•	\bullet



FEATURES	Insight VTi	Insight VTi-L
SAFETY		
Anti-lock Braking System (ABS)		
Child proof rear door locks		
Child safety seat anchorages	3	3
Electronic Brake-force Distribution (EBD)		
Hazard warning lights		
High mounted stop light		
Honda G-Con technology		
Immobiliser system		
Progressive crumple zones	Front & rear	Front & rear
Rear parking sensor		
Rear view mirror	Day/night	Day/night
Reversing Camera	×	0
Seat belt pretensioner	Front	Front
Seat belt reminder	Driver & all passenger	Driver & all passenger
Seat belts 3 point ELR	Front	Front
Seat belts 3 point ELR/ALR	Rear	Rear
Security alarm system	$\bullet (\) \)$	$\overline{\mathbf{A}}$
Transmission shift lock		()))))))))))))))))))
Vehicle Stability Assist (with traction control)	•	\bullet
Windscreen	Laminated	Laminated



FEATURES	Insight VTi	Insight VTi-L
DIMENSIONS/WEIGHTS/CAPACITIES	insight vit	
Overall length (mm)	4405	4405
Overall width (mm)	1695	1695
Overall height (mm)	1435	1435
Wheelbase (mm)	2550	2550
Tread (mm)		
- Front	1495	1480
- Rear	1485	1470
Head room (mm)		
- Front	984	984
- Rear	913	913
Ground clearance (mm)		
- non-load	135	135
- Full load	125	125
Kerb weight (kg) - automatic transmission	1205	1215
Maximum Permissible Weight - automatic transmission	1650	1650
Fuel tank capacity (litres)	40	40
Turning radius at wheel center (metres)	5.17	5.17
Boot capacity (litres in VDA standard)		
- rear seat up	408	408
- rear seat down - load to window	584	584
Seating capacity	5	5



FEATURES	Insight VTi	Insight VTi-L	
TYRES & WHEELS			
Wheel size	15 x 5.5J	16 x 6J	
Tyre size	175/65 R15	185/55 R16	
Wheel type	Alloy	Alloy	
Spare wheel type	Temporary	Temporary	
AUDIO / SATELITE NAVIGATION SYSTEM			
AM/FM radio, CD with MP3			
AntennaMicro	Micro		
Auxiliary jack		0	
Bluetooth Connectivity			
Front door speakers	2	2	
Front Tweeters	2	2	
Rear door speakers	2	2	
Satelite Navigation with SUNA trafic management system	×	\mathbf{O}	
& DVD player			
Speed-sensitive volume compensation (SVC)			
Steering wheel mounted audio controls			
USB Connectivity	•	\bullet	



FEATURES	Insight VTi	Insight VTi-L
WARRANTY		
WARRANTI		
Vehicle - 3 year or 100,000 km warranty	\bullet	
Battery - 8 years unlimited km warranty		
COLOUR GUIDE		
Exterior Interior	Interior	
Alabaster Silver (M)	Black	Black
Cerulean Blue (M)	Black	Black
Crystal Black (P)	Black	Black
Milano Red	Black	Black
Polished Metal (M)	Black	Black
Spectrum White (P)	Black	Black

* The fuel consumption figures quoted are based on ADR81/02 test results

- + Leather interior includes some PVC vinyl material
- Standard feature
- × Not available
- Optional