

A Smart New Way



**HONDA**

*CITY*



# **HONDA CITY**

## **A Smart New Way**

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# Preface

Honda introduced the City sedan in 1996, responding to the growing demand for small cars in Asian markets.

When launched, the City was a revelation, offering a spacious interior in a compact lightweight body, as well as delivering driving enjoyment with outstanding safety and environmental performance ahead of its time.

The City rapidly captured the hearts of customers in Asia and beyond. The City has sold over one million units in thirty nine countries around the world.

In 2009 the third-generation City advances to the next stage, starting its new journey on roads all over the world.

## Philosophy of the new City

Due to the challenges and development of today's automotive market, easy-to-manoevre, small, economical sedans are attracting more buyers worldwide. Given this environment, Honda's R&D team began the development of the new City by revisiting the original concept.

In many cases, light sedans are not only a first car for entry-level customers. They are also a second car for mid-size or larger vehicle owners. Honda's goal was to attract both these groups to the City.

The aim was to maintain the easy-to-manoevre size that makes a light vehicle appealing, combined with distinctive styling and a spacious cabin that is only possible with a sedan, to increase the City owner's sense of pride in their vehicle.

During development, the Honda team set high targets for every area including design, packaging, driving performance and safety, without being constrained by current standards for the light sedan segment.

Free of compromises, we drew upon the best technologies available at Honda, employing originality and ingenuity.

We created the new City by taking the values desired by our customers to the highest level. We proudly present the new City to the world, as a vehicle our customers will enjoy, regardless of its place in the market and vehicle class - it's a vehicle they can be proud of.

**Takeshi Nakamura**  
**LPL Honda City**



# Introduction

The City has been a sales success for Honda with over one million units sold in the Asia Oceania region since its debut in 1996.

The previous generation City was sold in 39 countries, ranking it alongside the Civic as one of Honda's most successful models.

Now, Honda is introducing the all-new third-generation City to Australia.

This latest model introduces new levels of styling, performance, driving dynamics and ride quality combined with outstanding packaging, functionality and versatility.

Two models are offered; the VTi and the VTi-L.

The VTi is comprehensively equipped with power windows and mirrors, central locking and an iPod ready single in-dash CD stereo with MP3 compatibility. It has a raft of safety equipment as standard - ABS brakes with Electronic Brake-force Distribution (EBD) and Brake Assist, dual front, side and curtain airbags and front seatbelt pre-tensioners.

Both models are powered by a 1.5-litre SOHC i-VTEC engine that has an output of 88kW and 145Nm (identical to the Jazz VTi and VTi-S). Fuel economy is similarly frugal, achieving a combined 6.3L/100km and just 148g/km in manual form.

The VTi-L gains tilt and telescopic steering, 16 inch alloy wheels, chrome door handles, fog lights, premium grade trim and a leather steering wheel.

Both variants are available with either a 5-speed manual or Honda's new 5-speed automatic transmission.

Like the Jazz, the City has employed the same suspension layout, (MacPherson strut front and torsion beam rear) for maximum packaging efficiency, providing high overall ride quality, sure-footed handling, agility and ultimately an enjoyable driving experience. The turning radius is 5 metres at wheel centre and Electric Power Steering (EPS) is standard across the range.

A key feature of the City is its overall interior spaciousness. It can easily accommodate five adults in comfort and has a bigger boot (506 litres VDA) than the Accord (450 litres), Accord Euro (467 litres) and even a Holden Commodore.

Honda Australia's Managing Director and CEO, Mr. Yasuhide Mizuno, said the arrival of the City has been welcomed by Honda, its dealers and customers alike.

"From my previous experience in the Asia-Oceania region, I am very confident the

new City will have universal appeal for buyers of all ages. It has the edgy styling that young people seek with plenty of room for those who frequently travel with friends. Added to that is the class-leading power, exceptional fuel economy, top-shelf quality and tremendous value-for-money that only Honda can provide. It sets a new benchmark for light sedans.”



# Main Features

## The City VTi features:

- 1.5 litre, i-VTEC EURO4 compliant engine
- 88kW@6600rpm and 145Nm@4800rpm
- 6.3L/100kms and 148g/km CO2
- Standard unleaded fuel
- 5-speed manual or 5-speed automatic transmission (unique to the segment)
- Air conditioning
- Electric Power Steering (EPS)
- Cruise control
- Dual front, side and curtain airbags
- ABS with Electronic Brake-force Distribution and Brake Assist
- Ventilated front and solid rear disc brakes
- 15 inch steel wheels with full size spare wheel
- Two speed and intermittent wipers
- Keyless entry and immobiliser system
- Body coloured door handles
- Body coloured power door mirrors
- Power windows with driver side auto up and down
- 5 x 3-point seat belts
- Rear centre headrest
- Day/night rear view mirror
- 60:40 split fold seat
- iPod ready single CD stereo with USB port, auxiliary jack and four speakers
- Roof mounted antenna
- Tilt steering wheel with audio controls
- Driver and passenger vanity mirror
- Footrest
- Front passenger seatback pocket

**As per VTi plus:**

- Telescopic steering
- 16 inch alloy wheels with full size spare wheel
- Chrome door handle
- Chrome exhaust
- Driver's seatback pocket
- Rear seat under-tray
- Rear armrest with cup-holder
- Upper grade seat trim and interior panels
- Leather steering wheel
- Centre console armrest
- Boot lid lining
- Fog lights
- Rear micro antenna

# Development Concept

With the City, Honda engineers set out to:

- Develop a vehicle with a strong road presence in a compact form
- Ensure a comfortable space for all passengers while maintaining an easy-to-operate size
- Provide ample performance in all driving situations

The next-generation light vehicle must achieve these attributes at the highest level. It was with this in mind that Honda began development of the all-new City.

Honda thoroughly examined a variety of data including the ratio of vehicle length to height and to wheelbase. By pursuing the ideal body balance, Honda introduced a longer wheelbase while maintaining the same vehicle length as the previous model.

In addition to the extended wheelbase, Honda's R&D team worked in minute detail, measuring down to the millimetre to make the most efficient use of space for the driver's position in the cabin. The result is class-leading interior space.

Including innovation in interior design, selection of materials and adoption of the i-VTEC engine, to achieve both high performance and low fuel consumption, Honda worked without compromise to advance each and every aspect of performance.

Finally, the City received Honda's commitment to safety and environmental performance.



# **Design Concept**

To break through the current segment benchmarks, Honda worked without compromise to advance each and every aspect of performance to satisfy market developments.

## **Exterior design**

The exterior 'Arrowshot Form' is compact with strong styling, creating an imposing look. The front-end design is powerful with the side view of the 'Arrowshot Form'. The rear has a dynamic and solid look.

## **Interior design**

The interior is an oasis of relaxation that provides the passengers with a spacious feeling. This flows through to the advanced instrument design and contrasting interior colours.

## **Smart packaging**

The City packaging achieves excellence in design. The extended wheelbase provides a spacious interior and the lower, sleeker body shape offers a refined driving position. The front and rear seats provide support to the body as well as being comfortable. The practical multi-purpose storage spaces and large capacity boot means you can take almost anything away with you. All this is complemented by a revolutionary digital audio system.



# Exterior Design

The goal was to create a car with a design that the owner can be proud of. To achieve a spacious interior within a compact body size, a dynamic 'Arrowshot' form was used. This 'Arrowshot' form reflects high tension towards the rear of the car, reminiscent of an athlete drawing back his bow to the fullest extent in order to release its energy.

## Side view

The side view displays the new City's dynamic character. Instead of a normal roof line falling towards the rear, a raised roof-line combined with a high lid for the boot shows a silhouette of pent-up energy.

Line work around the door enhances the Arrowshot form. The rear door line falls sharply down from the roof at the rear edge of the window and is connected to the negative-cambered side sill that runs towards the front bumper. The resulting wedge shape in the most eye-catching area of the side view adds a powerful accent to the Arrowshot form.

## Front and rear view

The front design captures the energy of an arrowhead flying forward. To enhance this energy flow both vertically and horizontally, two character lines are drawn towards the grille to create an appealing vertical appearance. At the same time, the grille flows to the sides in a single line with the headlights, enhancing the wide stance.

The headlights adopt a slim design with blacked out sub-reflector units. This creates a sharp impression and a tight front. The individual layout of the headlight and turn signal bulbs also contribute to the sophisticated appearance.

Honda intentionally chose a shortened rear design. The corner edges of the boot have been set forward. The visual effect of the cut off tail makes the rear look shorter and adds a dynamic, wide, solid stance. In the lower body section, a flat fender flare surface has been widened for greater stability.

The cut-off line between the rear combination lights and the boot lid adopts an upside-down Y-shape. Normally, the cut-off line adopts a Y shape to avoid any interference when opening the boot. Honda has taken a contrary approach to enhance the City's imposing stance with a clear trapezoidal form.

The rear combination lights adopt the shape of an arrow's feathers, expressing an aerodynamic appearance as if cutting through the wind. The carved pattern on the inside and outside of the lens give a high-precision look, as if there are multiple lenses.



## **Interior Design**

The City has achieved class-leading interior space. The concept for the interior design is 'Cool Lounge' to create a relaxed atmosphere.

Honda designed all interior features, from the instrument panel to the door sides using unconstrained lines and sharp, strong shapes. Colours and materials were specifically selected to complete a space that instantly relaxes the occupant as soon as they get into the car.

The City adopts an integrated design from the instrument panel right through to the door. A strong contrast between the positive face, the upper tensioned part of the instrumental panel, and negative face, the lower part with the deep camber, has been achieved to provide a wide and embracing feeling.

### **Advanced meter design**

The instrument panel meters feature a brushed silver/gunmetal surface finish with a rich metallic tone. The speedometer has illuminated, 3-D markers and outer ring, further reinforcing the futuristic look.

### **Colour and materials**

'Solid and smooth' was the development theme for the interior colour. While using a single colour scheme, differences in tone were optimised with a variety of materials to create a cool contrast. The colours also contribute to the spacious and relaxing feel.

The fabric is purple-black with blue and red overtones. The seat fabric is woven with an embossed finish. The side of the seat features a suede-like material with bluish double stitches running along the side supporter and cushion.

### **Smart packaging**

The City was designed with the most efficient use of space in mind.

The Arrowshot form design concept contributed to achieving a distinctive road presence and huge interior space.

## CITY Dimensions (VTi model)

(mm)

<b>Length</b>	4410
<b>Width</b>	1695
<b>Height</b>	1470
<b>Wheel Base</b>	2550
<b>Front Track</b>	1490
<b>Rear Track</b>	1475

## Comparative Dimensions (VTi models)

(mm)	City	Jazz	Civic
<b>Length</b>	4410	3900	4550
<b>Width</b>	1695	1695	1750
<b>Height</b>	1470	1525	1435
<b>Wheel Base</b>	2550	2500	2700
<b>Front Track</b>	1490	1492	1500
<b>Rear Track</b>	1475	1475	1530

The overall length of the City is 4,410mm. Most importantly the wheelbase is 2,550mm achieving the optimum design balance. In addition, the extended wheelbase contributes to a larger interior, increasing the distance between front and rear passengers.

### Improved visibility

To reduce blind spots when turning, thinner A-pillars were designed. The door mirrors are also larger for improved all-round visibility.

### Front seats support comfortable driving and riding

To increase seat comfort, special attention has been paid to the shape of the side bolsters and the cushion padding. Honda also tuned the springs and cushion padding so the occupant's lower back sinks into the seat and is held in place. The backrest has been designed to support upper body movement when turning.

## **Comfortable driving position**

Besides greater seat comfort, the City also has a more optimised driving position. It is equipped with tilt and telescopic steering with adjustment ranges of 40mm in each direction (VTi-L only). The driver's seat is also height adjustable within a 50mm range.

## **Rear seat comfort with reclining seatback**

The City also offers the best in passenger comfort. Both variants have an armrest and 60/40 split fold seats in the rear, with the VTi-L gaining built-in cup-holders. The rear head restraints have been integrated into the seat back for better rearward visibility.

## **High efficiency air conditioning system**

Cooling performance has been improved by increasing airflow and reducing fan noise. In addition to the front air outlets, rear air outlets at the leg zone contribute further to cooling efficiency. Filters are used to reduce outside odours.

## **Revolutionary digital audio system**

The stereo system is compatible with the iPod® and most other MP3 players and digital audio sources. A USB port and auxiliary jack are located on the centre console panel. All operations from song selection to volume adjustment, radio program selection and time adjustment are controlled using four buttons and a rotary selector.

When connected to an MP3 player, the central rotary selector provides the same control features as the thumbwheel on the iPod® unit, for example. The display panel features a large Liquid Crystal Display (LCD) for improved visibility even from the rear seat. To achieve the highest-quality sound, Honda opted for a high-power 45W x 4 channel amplifier, four PP cone-type speakers with neodymium magnets and two hard dome tweeters. A Digital Signal Processor (DSP) graphic equaliser matches the cabin's sound characteristics.

## **Practical, easy to use 506 litre boot**

The boot has been developed for optimal balance between maximum capacity and practical use. The boot has a 506 litre capacity, which is more than the Accord Euro and Holden Commodore.

The boot is also able to house the largest Coleman's 'Esky' available. The Esky was used to design the ideal boot opening.

## **Practical, convenient multi-purpose storage spaces**

The City has been designed to meet the needs of daily life, providing a variety of convenient, multi-purpose storage areas.

# Powertrain

## Engine

- 1.5 litre i-VTEC engine 88kW and 145Nm for smooth cruising in all speed ranges
- i-VTEC technology for better engine performance, fuel efficiency and environmental performance

## Transmission

- 5-speed manual or optional 5-speed automatic transmission to fully exploit the i-VTEC engine performance

## Chassis

- Tuned for precise handling and supple ride
- Electric Power Steering for greater steering feel
- Linear feel brakes

## Body

- High-rigidity body to assist ride comfort, vehicle stability and noise reduction

## Safety

- ABS with EBD and Brake Assist
- Honda's Advanced Compatibility Engineering (ACE) body technology
- Reducing the occupant injury index while securing a strong survival zone
- Further advanced self-protection and reduced damage to other vehicles
- Pedestrian injury-reduction body with impact-absorbing structures
- Driver and passenger side and curtain airbag system, front seatbelts with load-limiting pre-tensioners

## Environment

- Superior exhaust emission processing performance
- Reduced environmental impact
- Over 90% recyclability
- Fuel consumption indicator promotes fuel efficient driving



# Engine

The 1.5 litre SOHC i-VTEC engine delivers plenty of torque and offers smooth cruising throughout all speed ranges. Intake valve timing and valve lift settings switch to meet both low and high speed driving requirements. Optimised valve overlap in the low, mid and high speed ranges enhances intake and exhaust efficiency for excellent performance.

## Improved output

Aiming to achieve class-leading power, intake and exhaust efficiency were meticulously developed with the switch to four valves. Adjusting the engine in a variety of ways has allowed this new model to maintain excellent low-rpm torque performance. This results in class-leading 88kW @ 6,600rpm and 145Nm @ 4,800rpm.

## Increased intake valve diameter

With their significant contribution to improvements in engine output, the intake valves were completely re-examined. Having a new four-valve configuration, the engine uses larger 28 mm diameter intake valves resulting in a reduction in pumping losses and improving maximum output.

## Improved coolant flow

To suppress engine knock (abnormal combustion), which has a large impact on low rpm torque; the coolant flow in the water jacket was carefully examined. The dual-flow structure of the cylinder head and block was modified into a single-flow structure and flows into the cylinder block before the cylinder head to improve cooling efficiency. Thanks to the limited temperature increases in the combustion chamber, anti-knock performance is considerably improved for superior low-rpm torque.

## Modified piston head configuration

Attention was given to residual gas and turbulent energy as factors influencing the occurrence of engine knock. After simulation of the distribution of these two factors, a combustion chamber configuration that would suppress the engine knock was developed. The piston head shape was redesigned and given greater compactness thanks to thicker piston head edges, to prevent residual gas accumulation and clear away knock-occurrence environment resulting in improved low rpm torque.

## **Adoption of intake manifold with torque-boosting resonator chamber**

A resonator chamber has been adopted into the intake manifold to combine the pulse waves generated in each to create a resonant effect for a large amount of intake air. The capacity and passage shape in the i-VTEC engine have been adjusted, resulting in a linear torque curve at around 3,500 rpm delivering smoother driving performance.

## **Application of Drive-by-Wire (DBW)**

The amount that the accelerator pedal is pressed down is transmitted to a computer through an electronic signal for direct operation of the throttle valve. This Drive-by-Wire (DBW) technology is used for linear output in line with the acceleration rate.

## **High-strength cracked connecting rod**

The high-strength cracked connecting rod made of hot-forged, high-tension steel improves fatigue strength by about 50%. This allows a 17% reduction in the connecting rod's cross-sectional area to provide about a 1 kg weight reduction, including the crank balance weight. In addition, the reduced connecting rod weight makes it possible to respond at even higher revolutions because of the reduced inertial force.

## **High-strength aluminium rocker arm**

Higher-strength aluminium material is used for the L-shaped primary rocker arm. Ensuring rocker arm strength allows greater freedom for layout. Switching in the low- and high-rpm ranges is possible thanks to the VTEC mechanism, which contributes to increased output and reduced weight.

## **Improved fuel efficiency**

Starting with friction reduction, improved fuel economy has been achieved.

## **Adoption of a patterned piston coating (Honda proprietary technology)**

By modifying the shape of the area around the piston skirt and adjusting the surface configuration, both friction and piston slap noise have been reduced. At the same time, the surface uses the patterned piston coating designed by Honda, which ensures improved oil retention, leading to even greater friction reduction.



## **Auxiliary belt drive system with auto-tensioner**

The auto-tensioner adopted for the auxiliary belt drive system stabilises belt tension and absorbs variations by automatically regulating tension in accordance with load. This means lower belt tension in the case of a low load and less friction resistance, leading to improved fuel economy.

## **Cylinder head integrated with exhaust manifold and high thermal resistance catalytic converter**

A cylinder head integrated with the exhaust manifold has been adopted and is attached directly to the high thermal resistance catalytic converter underneath. Highly thermal resistant material was used for the area supporting the catalyst, fibre distortion is suppressed and the thermal resistance is significantly higher. This results in an increase of 40 degrees in the maximum operating temperature of the catalyst, which contributes to a reduction in fuel consumption in the high-speed and high-load ranges to offer real fuel economy improvements.

## **Lightweight plastic engine head cover**

In pursuit of a lightweight design, a plastic head cover was adopted, reducing the weight by 1 kg compared to an aluminium cover and contributing to improved fuel efficiency.

## **Improved environmental performance**

Honda always considers future environmental regulations and wherever possible introduces them prior to legislation.

## **Realisation of high-precision air-fuel ratio control**

In a shift from the conventional two oxygen sensors, the City features dual air-fuel ratio control with an LAF (Linear Air-Fuel ratio) and an oxygen sensor in addition to an air flow sensor. This allows an even higher level of precision for an accurate air-fuel ratio control. The amount of precious metals in the catalyst is reduced while excellent cleaning performance is achieved for exhaust emissions.



# Transmission

The 5-speed manual and 5-speed automatic transmissions thoroughly exploit the performance of the i-VTEC engine. Along with the optimised setting of the Drive-by-Wire (DBW) system, both transmissions deliver powerful starting acceleration and comfortable cruising at all speeds.

## Gear Ratios

<b>Gears</b>	<b>Manual</b>	<b>Automatic</b>
1st	3.461	2.995
2nd	1.869	1.678
3rd	1.235	1.066
4th	0.948	0.760
5th	0.809	0.551
Rev	3.307	1.956
Final	4.294	4.562



## **Chassis**

The chassis provides solid road holding and a supple ride.

### **MacPherson strut front suspension**

An optimised compliance bush placement with a larger capacity makes lower bush springs possible to provide a supple riding feel. The tilted kingpin axis was also rotated rearward allowing for an enlarged caster angle and increased caster offset that improve straight-line stability.

### **H-shaped torsion beam rear suspension**

A reduced spring lever ratio and increased trailing arm bush capacity provide a more supple ride. In addition, the amount of roll steer and roll camber has been further optimised to ensure solid handling.

### **High capacity Electric Power Steering (EPS) for smooth steering feel**

High capacity EPS with increased motor capacity and modified steering gearbox mount configuration result in a steady and direct steering feel. The combination of further optimised suspension geometry and even more intelligent EPS control delivers a natural, stress-free and relaxing steering feel throughout the entire speed range.

### **Linear brake feel**

The front brakes use large diameter discs while the brake master cylinder has been made longer with a smaller diameter. This allows for a more powerful brake booster and lower pedal ratio for an easy-to-operate and linear brake feel.



## **Body**

The rigid body provides superior ride comfort, vehicle stability and noise reduction. The body structure is the defining element for the design, vehicle performance and ride comfort of the City.

To achieve the goal of enhancing the highly rigid body while maintaining a light weight, Honda brought its creativity and originality to bear on the structure and design to create a high-performance body rather than relying on additional members.

### **A quiet interior**

The body's reinforced joint construction and fully-integrated floor cross-section contribute to reducing acceleration and engine noise intrusion. The extensive use of sound-absorbing material in the roof lining and around the rear body, combined with the more efficient use of sound-deadening material further improve sound insulation.





# Safety

From active to passive safety; Honda continues the relentless effort for even better performance.

The City was developed to offer superior fundamental vehicle performance in driving, cornering and braking with many active safety features to help prevent accidents. Additionally, advanced passive safety technology including Honda's Advanced Compatibility Engineering (ACE®) body offers both enhanced self-protection and better compatibility in collisions with other vehicles.

A pedestrian-injury reduction body design helps protect head and leg areas in the event of a collision.

The City is equipped with active safety features to support the driver's operation of the vehicle while providing a greater sense of security.

## **ABS with EBD and Brake Assist**

This system works to prevent wheel lock in an emergency braking situation or when braking on slippery road surfaces. ABS stabilises the vehicle while braking so the driver has better control. Electronic Brake-force Distribution (EBD) electronically distributes the brake force to front and rear wheels in accordance with vehicle load for optimum braking balance at all times. Lastly, the Brake Assist system helps the driver when braking, leading to increased brake force in emergency situations.

## **Passive safety to protect occupants in case of an accident**

Honda's unique G-Force Control Technology controls impact energy in the event of a collision and limits injuries. Honda has enhanced collision safety through real-world collision research, including car-to-car crash testing at the world's first indoor omni directional crash test facility.

To protect occupants in a collision, Honda has worked to enhance self-protection while striving to reduce damage to the other vehicle.

## **Reducing occupant injury while securing a strong survival zone**

Through Honda's internal crash barrier and other comprehensive tests, the City reduces occupant injury and ensures a strong survival zone in full frontal impact tests at 55km/h, offset frontal impact tests at 64km/h, side impact tests at 50km/h

and rear impact tests at 50km/h. By conducting car-to-car collision tests to Honda's own independent standards (2-ton class or lower passenger vehicles on the other side with a collision speed of both vehicles at 50km/h, 50% front offset collision), Honda strives to enhance occupant protection by understanding the dynamics of accidents in the real world.

## **Further advanced self-protection and reduced damage to the other vehicle**

In real-world car-to-car collisions, one vehicle usually sustains more damage due to differences in vehicle weight, body construction and rigidity. To reduce the damage to other vehicles in a collision, the Honda City has Advanced Compatibility Engineering (ACE) body technology.

## **Honda's Advanced Compatibility Engineering (ACE) body technology**

To protect occupants during a collision while reducing the amount of damage to the other vehicle, it is essential to disperse energy efficiently in the engine compartment over a larger body surface. Honda aims to bring collision safety performance to even higher levels by preventing the impact-absorbing area of the other vehicle from slipping over or under, dispersing shock during a collision. As a result, the City achieves target values in collision tests due to the highly efficient absorption of energy in the engine compartment and dispersal of the load.

A load-dispersing frame with a newly-designed lower member on the exterior at the main frame has been adopted at the engine compartment and around the front floor area. Along with preventing slipping of the impact-absorbing areas of the other vehicle during a collision, the frame spreads the impact over a larger area for very efficient absorption of impact energy, significantly reducing the load on the cabin.

While the main frame is constructed using tailored blank welding for steel plates of two thicknesses, the cross-section configuration is polygonal. This controls the impact load with the appropriate placement of the beats directed towards the front and back, for highly efficient impact absorption in the engine compartment.

## **Newly designed dashboard lower cross-member**

To disperse the impact energy from the main frame structure to the floor on the side of the vehicle not involved in the collision, the lower dashboard cross-member has a boomerang-like shape. This allows the impact energy to be more efficiently dispersed and absorbed.

## **Pedestrian injury reduction body with impact energy-absorbing structures**

The City adopts energy-absorbing structures in the front area of the body, which is the most likely area to injure a pedestrian. Beyond domestic legal requirements, Honda has introduced our own unique standards to also help reduce injuries around the legs:

- **Bonnet** - the space between the bonnet and the engine provides room for the bonnet to deform and absorb impact
- **Bonnet hinges** - the bonnet hinges have an easy-to-bend design to help absorb impact
- **Front guards** - easy-to-bend brackets that attach the guards absorb impact
- **Wipers** - the felt down-type pivot was devised to absorb impact
- **Front bumper** - an optimised bumper beam design allows space between the bumper's face and its beam for absorbing impact
- **Windscreen support structure** - the easy-to-bend windscreen base supporting structure helps absorb impact

## **Dual front, side and full-length curtain airbags, 3-point seatbelts for all with load-limiting pre-tensioners (front only)**

When sensors detect an impact that exceeds a preset threshold during a frontal collision, the airbags are instantly deployed then gradually deflate to reduce head and chest injuries.

At the same time, when seatbelt load exceeds a certain preset threshold, the front seatbelts with load-limiting pre-tensioner immediately rewind and tighten, then loosen again to reduce chest and shoulder injuries (airbags function as intended only when seatbelts are properly fastened).

## **Head injury-reducing interior**

The interior roof side and pillars are impact-absorbing structures designed to reduce head injuries when involved in an accident.



# Environmental Responsibility

Honda has long supported the reduction of our impact on the environment. Efforts are not only limited to cleaner exhaust emissions but also towards the gradual elimination of harmful materials used in the manufacturing process.

## Superior exhaust emission processing performance

In addition to the adoption of an airflow sensor, one LAF sensor has been matched with one oxygen sensor for an even more precise, double control of the air/fuel ratio. This allows the achievement of Euro-4 emission requirements for a higher level of emission processing performance despite the lower content of rare metal within the catalytic converter.

## Reduced environmental impact

Wherever possible, Honda has reduced or eliminated the use of lead, hexavalent chromium, PVC (polyvinyl chloride), cadmium and other substances of concern.

## Over 90%\* recyclability

In addition to the adoption of easy-to-recycle designs, recyclability has been improved on all plastic and rubber parts.

***\* In-house calculations based on Japan's "New cars recyclability: definition and calculation method guidelines", (JAMA 1998)***



# CITY Specifications

FEATURES	VTi	VTi-L
<b>Powertrain</b>		
<b>Engine</b>	SOHC i-VTEC In line 4 Cylinder	SOHC i-VTEC In line 4 Cylinder
<b>Displacement (cc)</b>	1497	1497
<b>Maximum power</b>	88kW @ 6600rpm	88kW @ 6600rpm
<b>Maximum torque</b>	145Nm @ 4800rpm	145Nm @ 4800rpm
<b>Compression ratio</b>	10.4	10.4
<b>Bore x stroke (mm)</b>	73 x 89.4	73 x 89.4
<b>Emission standard</b>	Euro 4	Euro 4
<b>Manual transmission</b>	5 Speed	5 Speed
<b>Automatic transmission</b>	5 Speed	5 Speed
<b>Fuel type</b>	Unleaded (RN91)	Unleaded (RN91)
<b>Fuel supply system</b>	Honda Programmed Fuel Injection (PGM-FI)	Honda Programmed Fuel Injection (PGM-FI)
<b>Drive by wire throttle (DBW)</b>	✓	✓
<b>Gear ratios - Manual transmission</b>		
1st	3.461	3.461
2nd	1.869	1.869
3rd	1.235	1.235
4th	0.948	0.948
5th	0.809	0.809
Rev	3.307	3.307
Final	4.294	4.294
<b>Gear ratios - Automatic transmission</b>		
1st	2.995	2.995
2nd	1.678	1.678
3rd	1.066	1.066
4th	0.760	0.760
5th	0.551	0.551
Rev	1.956	1.956
Final	4.562	4.562
<b>Chassis</b>		
<b>Body type</b>	Monocoque	Monocoque
<b>Front suspension</b>	MacPherson strut	MacPherson strut
<b>Rear suspension</b>	Torsion beam axle	Torsion beam axle
<b>Stabiliser bars</b>	Front & rear	Front & rear

	<b>VTi</b>	<b>VTi-L</b>
<b>Steering system type</b>	Electric power steering	Electric power steering
<b>Front brakes</b>	Ventilated disc	Ventilated disc
<b>Rear brakes</b>	Solid disc	Solid disc
<b>Exterior</b>		
<b>Body coloured bumpers</b>	Impact absorbing	Impact absorbing
<b>Door handles</b>	Body coloured	Chrome plated
<b>Exhaust</b>	Single	Single (Chrome)
<b>Fog lights</b>	-	✓
<b>Headlights</b>	Halogen	Halogen
<b>Keyless entry</b>	✓	✓
<b>Powered body coloured door mirrors</b>	✓	✓
<b>Rear window demister</b>	✓	✓
<b>Wipers - Front</b>	2-Speed & intermittent	2-Speed & intermittent
<b>Interior</b>		
<b>Accessory power outlet (12v)</b>	✓	✓
<b>Air conditioning</b>	✓	✓
<b>Aluminium finish centre /console panel</b>	✓	✓
<b>Aluminium finish door inner lining, handle &amp; switch panel</b>	✓	✓
<b>Comprehensive interior illumination</b>	✓	✓
<b>Cruise control</b>	✓	✓
<b>Cup holders</b>	x7	x7
<b>Digital clock</b>	✓	✓
<b>Door pockets</b>	Front x 2	Front x 2
<b>Driver's footrest</b>	✓	✓
<b>Driver seat arm rest</b>	-	✓
<b>Driver seat height adjustment</b>	✓	✓
<b>Dust &amp; pollen filter</b>	✓	✓
<b>Glove box</b>	✓	✓
<b>Head restraints</b>	x5	x5
<b>Lights-on warning</b>	✓	✓
<b>Low fuel warning</b>	✓	✓
<b>Multi information display</b>	✓	✓
<b>Power windows</b>	✓	✓
- Auto up/down	Driver	Driver



	VTi	VTi-L
<b>Seats</b>		
- Front	Fully reclining	Fully reclining
- Rear	60 / 40 split with fold down	60 / 40 split with fold down
<b>Seat back pocket</b>	Front passenger	Driver & front passenger
<b>Seat trim material</b>	Cloth	Premium cloth
<b>Seatbelt height adjuster</b>	Front	Front
<b>Steering column</b>	Tilt adjustment	Tilt & telescopic adjustment
<b>Steering wheel</b>	Urethane	Leather wrapped <sup>+</sup>
<b>Rear seat centre arm rest</b>	✓	With cup holders
<b>Rear seat under tray</b>	-	✓
<b>Tachometer</b>	✓	✓
<b>Trunk lid lining</b>	-	✓
<b>Vanity mirror</b>	Driver & front passenger	Driver & front passenger
<b>Windows</b>	Heat absorbing	Heat absorbing
<b>Safety</b>		
<b>Advanced Compatibility Engineering (ACE)</b>	✓	✓
<b>Airbags SRS</b>		
- Front	Driver & front passenger	Driver & front passenger
- Side	Driver & front passenger	Driver & front passenger
- Full length curtain	✓	✓
<b>Anti-lock Braking System (ABS)</b>	✓	✓
<b>Brake Assist</b>	✓	✓
<b>Central locking</b>	✓	✓
<b>Child proof door locks</b>	✓	✓
<b>Child safety seat anchorages</b>	x3	x3
<b>Emergency Brake-force Distribution (EBD)</b>	✓	✓
<b>Hazard warning lights</b>	✓	✓
<b>High mounted stop light</b>	✓	✓
<b>Honda G-Con technology</b>	✓	✓
<b>Immobiliser system</b>	✓	✓
<b>Progressive crumple zones</b>	Front & rear	Front & rear
<b>Rear view mirror</b>	Day/Night	Day/Night
<b>Seat belt pre-tensioner with double load limiter</b>	Front	Front

	VTi	VTi-L
<b>Seat belt reminder</b>	✓	✓
<b>- front passengers</b>		
<b>Seat belts 3 point ELR</b>	Front	Front
<b>Seat belts 3 point ELR/ALR</b>	Rear	Rear
<b>Security alarm system</b>	✓	✓
<b>Side impact protection</b>	✓	✓
<b>Steering column</b>	Collapsible	Collapsible
<b>Transmission shift lock (A/T only)</b>	✓	✓
<b>Windscreen</b>	Laminated	Laminated

### Dimensions/Weights/Capacities

<b>Overall length (mm)</b>	4410	4410
<b>Overall width (mm)</b>	1695	1695
<b>Overall height (mm)</b>	1470	1470
<b>Wheelbase (mm)</b>	2550	2550

#### Track (mm)

- Front	1490	1475
- Rear	1475	1460

#### Interior dimensions (mm)

- Length	1886.8	1886.8
- Width	1389	1389
- Heights	1228.9	1228.9

#### Head room (mm)

- Front	1000	1000
- Rear	940	940

#### Leg room (mm)

- Front	1063	1063
- Rear	910	910

#### Shoulder room (mm)

- Front	1351	1351
- Rear	1338	1338

#### Hip room (mm)

- Front	1315	1315
- Rear	1290	1290

#### Ground clearance (mm)

- non-load	150	150
- full-load	110	110

#### Kerb weight (kg)

- manual transmission	1110	1125
- automatic transmission	1145	1160

<b>Maximum permissible weight</b>	1540	1580
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	VTi	VTi-L
<b>Fuel tank capacity (litres)</b>	42	42
<b>Fuel consumption - combined (litres/100km)*</b>		
- manual transmission	6.3	6.3
- automatic transmission	6.6	6.6
<b>Fuel consumption - urban (litres/100km)*</b>		
- manual transmission	7.9	7.9
- automatic transmission	8.9	8.9
<b>Fuel consumption - extra urban (litres/100km)*</b>		
- manual transmission	5.3	5.3
- automatic transmission	5.3	5.3
<b>CO2 emission (g/km)</b>		
- manual transmission	148	148
- automatic transmission	156	156
<b>Maximum turning radius at wheel centre (metres)</b>	5.0	5.0
<b>Maximum towing capacity (kg)</b>		
- trailer with brakes	800 (M/T & A/T)	800 (M/T & A/T)
- trailer without brakes	450 (M/T & A/T)	450 (M/T & A/T)
- down force / tongue load	70	70
<b>Boot capacity (litres)</b>	506	506
<b>Seating capacity</b>	5	5
<b>Tyres &amp; Wheels</b>		
<b>Wheel size</b>	15 x 5.5J	16 x 6J
<b>Tyre size</b>	175/65 R15	185/55 R16
<b>Wheel type</b>	Steel	Alloy
<b>Spare wheel type</b>	Full size	Full size
<b>Audio System</b>		
<b>AM/FM radio, CD with MP3, WMA &amp; DSP graphic equaliser</b>	✓	✓
<b>Antenna</b>	Centre rod type	Micro type
<b>Auxiliary jack</b>	✓	✓
<b>iPod Integrated #</b>	✓	✓
<b>USB compatibility</b>	✓	✓
<b>Front door speakers</b>	x2	x2
<b>Rear door speakers</b>	x2	x2
<b>Speed-sensitive volume compensation (SVC)</b>	✓	✓
<b>Steering wheel mounted audio controls</b>	✓	✓

**VTi****VTi-L****Colour Guide**

<b>Exterior</b>	<b>Interior</b>	<b>Interior</b>
<b>Taffeta White</b>	Black	Black
<b>Alabaster Silver (M)</b>	Black	Black
<b>Crystal Black (P)</b>	Black	Black
<b>Deep Lapis Blue (M)</b>	Black	Black
<b>Hananero Red (P)</b>	Black	Black

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

+ Leather interior includes some PVC vinyl material

# Only iPod Nano and 5th generation iPod are integrated

✓ Standard feature

- Not available

Specifications correct as at 09/01/2009