

## 2010 HONDA INSIGHT



The new Insight is very different from the first, two-seater generation; it now claims to seat five. The fifth-generation IMA hybrid system consists of a 1.3-litre, four-cylinder gasoline engine and an electric motor. A continuously variable transmission is the only one available. This Insight is based on a modified version of the Fit platform and is offered as a hatchback sedan, in LX and EX trim levels.

### **Interior and trunk**

The front seats are easy to access and comfortable for most people. However, there's no lumbar adjustment and some drivers may not appreciate the bulge of the integrated lumbar support. Headroom and legroom are relatively generous, and the driving position is good.

The slope of the roof can make it difficult to get in and out of the back. The bench seat is more or less comfortable for two adults. The seat cushion is higher in the middle section and not even comfortable for a child. Legroom is adequate, but headroom is very limited for tall people. The 70/30-split backrest slopes up a bit towards the front when folded.

Trunk capacity is relatively modest; the cargo floor is high because some of the components of the hybrid system are placed underneath. The liftgate doesn't have a handle, and tall people have to be careful not to hit their head on the latch.

### **Convenience and safety features**

Cabin finish is very good whereas the quality of materials is no more than adequate. Some of the plastics look cheap, especially on the top of the dashboard. Though soundproofing could be better as far as road noise is concerned, it's acceptable for this type of car. Cabin storage is good.

The glove compartment is lighted but at night, several controls are not. However, like the gauges, the controls are well displayed. Air conditioning is efficient, but its efficiency diminishes in Econ mode, which favours fuel economy by reducing the operating time of the A/C compressor, among other things. Honda claims that in Econ mode, fuel efficiency improves up to 7 percent.

Safety equipment includes six airbags (dual front, side and curtain), antilock brakes, and five head restraints. The front restraints are active. Stability control is available only in EX trim. Like several other Honda vehicles, the Insight uses the advanced compatibility engineering (ACE) body structure that enhances occupant safety in the event of a head-on crash with a higher or lower vehicle. Visibility is good in all directions except on a three-quarter-rear angle, because of the C-pillars, and to the rear, because of the hatch's horizontal bar. When you look in the rear view mirror, you can see the reflection of pavement markings in the hatch window, which is distracting. Visibility for many drivers is hampered by the width of the A-pillars. Headlight intensity is a bit lacking in the low-beam position.

In U.S. government crash tests, the Insight obtained five stars out of five for driver protection, and four stars for front-passenger protection, in case of a frontal impact. It obtained five stars for front-occupant protection, and four stars for rear-passenger protection, in a side crash. It is rated four stars for rollover resistance. The Insurance Institute for Highway Safety awarded the Insight a Good rating, its highest, for driver protection in a frontal offset impact as well as for the protection of all occupants in the side impact and rear impact crash tests.

### **Engine and transmission**

The 1.3-litre four-cylinder engine and electric motor produce 98 horsepower and 123 pound-feet of torque, delivering very modest acceleration. It's enough to keep up with traffic as long as you keep a firm foot on the accelerator. Needless to say, passing requires plenty of preparation. With the transmission in sport mode, performance is a little less lethargic. The engine is noisy in heavy acceleration. The gasoline engine never stops running with the fan in the Defrost or Defrost/Head setting. In the other settings, the engine shuts down at a stop if the battery is sufficiently charged. In certain conditions, the vehicle can run just on the electric motor. That happens infrequently and not for long. Honda's engineers have updated the battery, making it 19 percent smaller and 28 percent lighter while increasing output by 30 percent.

It's clear that the goal with this powertrain is fuel economy. The background lighting of the speedometer turns from blue to green to signal the driver that he's driving efficiently. According to Honda, staying in the green zone as much as possible can improve fuel economy by up to 14 percent. A fuel efficiency score is displayed each time the engine is switched off. Both displays guide the driver towards better fuel economy. When the driver pushes the Econ button, the computer modifies the performance parameters of the air conditioner, engine, cruise control and idle stop system.

The continuously variable transmission functions smoothly and allows the engine to operate at optimal rpm levels. In manual mode, you can shift seven "gears".

## On the road

In general, the suspension delivers a smooth ride, although some uneven surfaces set off a firm, well-felt reaction. Road holding is adequate, but no more. The Insight reaches its handling limits too quickly to distinguish itself on a slalom course. Like many very aerodynamically efficient cars, the Insight is very sensitive to side winds.

The power steering is well tuned, stable, precise and relatively quick. It provides no road feedback. The turning circle is small. The brakes are powerful and resist well to fade but do not deliver linear braking in normal driving.

## Inspection

At a CAA-Quebec technical inspection centre, we saw that the Insight is structurally quite sturdy. There is almost no rust protection, apart from the fact that several joints are sealed. In fact, our test vehicle showed signs of corrosion on the aluminum oil pan and on the coupling between the engine and the transmission. Debris can get through the big opening under the front bumper and damage the air-conditioner condenser. The overhead camshaft of the engine is chain driven.

## Conclusion

The new Insight demonstrates Honda's know-how at every turn: powertrain design, special materials for the frame and body, smaller yet more powerful battery, engine performance display, advanced aerodynamics, etc. Still, we obtained the same fuel economy with the 2006 Civic Hybrid, which is more comfortable, more spacious and sells for practically the same price as the EX version. We're guessing it won't be easy to persuade consumers to buy an Insight, especially in EX trim.

**PROS:** comfortable front seating, serious construction, smooth ride, fuel economy, powerful brakes, performance display

**CONS:** visibility, very sensitive to side winds, access to the back, headroom in back (tall people), trunk a bit small, reflections from hatch window

## 2010 HONDA INSIGHT

**Engine:** 8-valve, 1.3-litre 4-cylinder, electric motor

**Horsepower:** 98 hp at 5,800 rpm

**Torque:** 123 lb-ft from 1,000 to 1,500 rpm

**Transmission:** continuously variable transmission (CVT)

**Suspension:** independent/semi-independent

**Brakes:** disc/drum

**Wheelbase:** 255 cm

**Length:** 437.6 cm

**Width:** 169.4 cm

**Height:** 142.7 cm

**Weight:** 1,244 to 1,250 kg

**Tires:** P175/75R15

**Maximum towing capacity:** forbidden

**Airbags:** dual front, plus two side and two curtain airbags

**Fuel consumption with EX version:**

Natural Resources Canada rating:

City: 5 L/100 km (56 mpg)

Highway: 4.6 L/100 km (61 mpg)

Test result: 6 L/100 km (47 mpg)

Test temperature: 16°C to 24°C

**CO<sub>2</sub> emissions:** 2,313 kg/20,000 km

**Fuel tank capacity:** 40 litres

**Fuel requirement:** regular grade gasoline

**Acceleration:**

0–100 km/h: 12.3 seconds

60–100 km/h: 9 seconds

**Competition:** Honda Civic Hybrid, Toyota Prius

**Warranty:**

- Full basic coverage: 3 years/60,000 km
- Powertrain: 5 years/100,000 km and 8 years/130,000 km on certain components of the hybrid system
- Surface corrosion: 3 years/unlimited km
- Perforation damage: 5 years/unlimited km
- Emissions control system: 3 years/60,000 km (full coverage); 8 years/130,000 km (catalytic converter, electronic control module, onboard diagnostic system).

**Factory replacement parts:**

- Rear bumper: \$993
- Front brake disc: \$93
- Brake pads: \$75
- Muffler: \$333
- Front fender: \$458

**Price according to trim level:**

- LX: \$23,900
- EX: \$27,500

**Main options:** none

**Price as tested:** \$27,500

**Freight and preparation:** \$1,395

**Dealers:** Quebec: 61      Canada: 204