



Honda Insight Hybrid for all

Review | The word "hybrid" almost has a magic ring to it. When just hearing this word, politicians and environmentalists become enthusiastic. Corporations want to show their green side and buy lots of these cars with both an internal combustion engine and an electric engine. But that combination requires sophisticated technology, making hybrid cars expensive. But now Honda introduces the Insight, which should make hybrid technology available to all.

With the Insight Honda wants to take away barriers that make other hybrid cars less attractive. The first of those is the high price. To make the Insight inexpensive, Honda chooses relatively simple technology.

The idea behind a hybrid car is that a traditional internal combustion engine (either petrol or diesel) is efficient at long distances and at constant speed. In city traffic, with many stops and accelerations, an electric motor is more suitable. A hybrid car therefore has two engines which, depending on the situation, share the work load efficiently.



Integrated Motor Assist

Honda uses that same concept in a less complex way. The petrol engine is always the main power source. Only when necessary the electric engine gives a little "push" to make lighter work for the petrol engine. When accelerating or climbing, the 14 HP / 78 Nm strong electric motor assists the petrol engine. In real life this saves as much fuel as a more complicated hybrid, which can also run on electricity alone for longer distances.

Of course the electricity has to be generated. To do this, Honda chooses a traditional method: when braking or coasting the energy that would normally be wasted, is now converted into electricity. This "free" electricity is later used to power the electric motor.

But that isn't the only thing that makes the Insight fuel efficient. As soon as the vehicle comes to a full stop, the petrol engine is turned off. As soon as the accelerator is pressed again, the engine starts automatically. However, this doesn't happen as smooth and unnoticeable as with competing cars, but the Insight is a lot less expensive. Also the automatic gearbox (CVT) noticeably shifts and constantly searches for the perfect ratio.



Eco-Assist

The Insight does more than just simplifying existing technology. Honda also wants to make driving economically fun by introducing "eco-assist": a small arsenal of displays, animations and special effects! That starts with the familiar trip computer, which now keeps score of the last three trips. The purpose: to provide an incentive to make every drive more economic than the previous one.

The background of the speedometer is illuminated either in blue or green ("ambient meter") depending on the driving style. Driving fast speeds is allowed, just as long as that speed is build up gently.



Most educational is a graph bar that grows in one direction when accelerating too fast and to the other side when braking too hard. The latter may seem illogical: but braking hard is a sign that the driver didn't anticipate traffic properly. Also the batteries have more time to charge when braking carefully. In short: the smoother the driving style, the more economic.



When driving economically long enough, trees appear in the display. At first these only have branches, but in due time leaves and even flowers will grow on these trees. Those who save fuel long enough, will eventually be awarded by a trophy in the display!

Thanks to "eco-assist" the promised fuel consumption of 4,4 litres per 100 km (4,6 litres for the luxury model driven here) should be a reality for everyone. After a

long drive in the city the trip computer reported an average consumption of 4,8 litres per 100 km. A longer test drive over highways led to an average consumption of 4,6 litres per 100 km.

Handling

The performance of the 1.3 litre four cylinder petrol engine is good. When extra power is required, the "ECON"-function can be switched off temporary and that gives a welcome extra push in the back (4% more torque).

The other driving characterises aren't remarkable and that is a good thing. It means that the Insight drives just as well as any other car in this price range, and the driver doesn't sacrifice anything to save fuel. Even better: because the batteries are placed low in the car, the centre of gravity is low and that gives the Insight above average handling.



Space

With some other hybrid cars, the batteries required for a hybrid-system go at the expensive of the cabin space. As mentioned above the batteries are placed very low in the Insight, so interior space is comparable to any other car this size.

Beneath the streamlined exterior the Insight offers room for four adults (the space in the front is fine, the space in the back is average to poor) and their luggage. The back seats can be folded, after which the boot grows from 408 to 1,017 litres. In short: this is the

hybrid car for the whole family!



Conclusion

Does the Honda Insight bring hybrid-technology within reach of the general public! Yes, without a doubt. The Insight has none of the drawbacks of other hybrid cars. That starts with the price, which thanks to simplified hybrid technology is pleasantly low. Still the Insight drives like every other car, while being much more economic.

For those who appreciate it, the Insight offers a wide range of gadgets which lift driving economically to a true sport.

Finally the technology is constructed so that it doesn't take up precious cabin space. In short: Honda succeeded in its goal: the Insight takes away all barriers and makes driving a hybrid car possible for all! ■



Specifications

Honda Insight ES-T

Size and weight



Length x width x height	440 x 170 x 143 cm
Wheelbase	255 cm
Kerb weight	1.116 kg
Trailer	unknown
Trailer - braked	unknown
Fuel capacity	40 l
Luggage space	408/1017 l
Tyre size	185/55R16

Engine and performance



Capacity	1339 cc
Cylinders / valves	4/2
Max power	88 PS @ 5800 rpm
Max torque	121 Nm @ 4500 rpm
Drive	front wheels
Acceleration 0 - 62 mph	12.5 secs
Top speed	182 km/h
Average mileage	4.6 l / 100 km
Mileage urban	4.7 l / 100 km
Mileage extra urban	4.5 l / 100 km
CO2 emissions	105 gr / km

Price

Price	Â£ 18,390
Price base model	Â£ 15,490