THE VANCOUVER SUN
DRIVING
www.driving.ca
SECTION E

AUTOMOTIVE NEWS IN BRIEF | E3
AUTO TALK SOUNDS OFF ON ROAD NOISE | E4

EDITOR LINDA BATES 604-605-2371 FAX: 604-605-2521
FRIDAY, MAY 6, 2005
E-mail lbates@png.canwest.com

Hybrid is a conscience-saver

TECHNOLOGY | Honda's latest offering is good for the environment

BY DEREK MCNAUGHTON

The first question many people have when considering a hybrid car is whether the extra initial cost can be recovered, over the years, by savings on gasoline.

The answer? No — unless you kept the car for about 10 years and rolled up the kilometres delivering pizzas or passengers. And by the time you made up the savings, the car would be worn out.

Don't get us wrong: Gasoline-electric cars make sense. They reduce emissions, cut our dependence on oil and ease our conscience. They make us feel as though we're doing something for the environment, even if it's not by the tonne.

And with automakers committing to cut greenhouse gas emissions from the cars they sell in Canada by 5.3 megatonnes a year by 2010, we're certain to see more of them.

Whether hybrids are the future of the automobile or the answer to our motoring problems remains to be seen, however, as hydrogen technology continues to make gains. For now at least, gasoline-electric hybrids are a smart, sensible alternative and getting simpler by the year.

Which is how Honda's 2005 Accord Hybrid might best be described. This is a complex car made simple. Only a tiny Hybrid badge on the trunk lid, different rims, a narrow rear spoiler and a slightly different instrument cluster reveal to the driver and outside world that this isn't your average Accord.

In fact, stand on the gas and this five-seater shoots out of the driveway faster than the regular Accord V-6. From a standstill, 100 kilometres an hour comes up in the 255 h.p. Hybrid in just under seven seconds, a few tenths of a second quicker than the EX sedan.

There's a good growl to the engine, too, though torque steer can be felt tugging on the steering wheel as the front tires squeal all the way up to second gear.

Honda estimates fuel consumption will be as miserly as the smaller Civic, averaging 7.9 litres per 100 kilometres in the city and 5.9 on the highway, although we weren't able to match that on our test.

Inside the Hybrid, the only differences to the dashboard are a little bar

See **ENGINE SHUTS** E3

PAUL WILLIAMS/CANWEST NEWS SERVICE/OTTAWA CITIZEN

On the road, the Accord Hybrid feels and drives like the standard sedan; transition from electric-assist to internal combustion works effortlessly.

The Specs

Type: Gas-electric four-door sedan, front-wheel drive

Seats: Five

Price, base and as tested: $36,990 plus $1,280 freight

Power source: 3.0-litre V-6 and brushless 144-volt DC motor/generator; 255 h.p. at 6,000 r.p.m., 232 ft.-lbs. of torque at 5,000 r.p.m.

Transmission: 5-speed auto

Brakes: Disc/disc with ABS

Notable standard features: Power driver's seat, leather-trimmed seats, heated front seats, speed-synchronized wipers, six-CD in-dash changer

Consumer Reports predicted reliability: Better than average (gas-engine Accord)

Fuel consumption, L/100 km (m.p.g.): City: 7.9 (35), Highway: 5.9 (48)

Warranty, yrs./km: Basic 3/60,000, powertrain 5/100,000, battery 8/130,000

'Car guy' takes green route, buys hybrid

Ex-owner of a 500-h.p. Mercedes switches to a gas-electric Honda Accord

AUTO-BIOGRAPHY

BY DEREK SPRATT

Buying a 2005 Honda Accord hybrid was a seminal event in my 'car guy' life. To family and friends my decision to sell a 2004 Mercedes E55 with its 500hp engine and convert to a green machine seemed illogical. How could someone like myself who has spent almost all of his life being identified strongly with performance cars give up and compromise so much relating to the status and general enjoyment offered by owning and driving high performance vehicles?

To explain my sudden change of heart, I need to talk about my childhood where cars were revered material positions in our household. Saturday mornings after soccer were devoted to the weekly automotive detailing sessions — complete with scrubbing the white-walls with a brush and Ajax, cleaning the inside windows, and polishing the chrome trim. Once the work was done, we would head out for 0-60 mph acceleration sprints on the highway to clean the carbon out of the engines. It all just seemed so natural to be part of the automotive culture in the 1960s.

As soon as I could afford my first car after engineering school, I started on an unending process of searching for more performance in each vehicle I owned — wider wheels and tires, more power, suspension and audio upgrades, you name it. I raced my cars on weekends in auto slalom events and up at Westwood Raceway during club events. By the mid 1980s I was also drag racing some of my cars. I was fortunate enough in the early 1990s to make some money as a result of my involvement in local technology

See **'BEST DECISION** E3

IAN LINDSAY/VANCOUVER SUN FILES

Derek Spratt of Intrinsyc software loves his brand new Honda Accord Hybrid, which he says has lots of power while being miserly on fuel.

Engine shuts off when hybrid comes to a stop

From E1

graph below the main gauge cluster that shows when the battery is giving or taking electricity, and a small icon showing how much charge is left in the battery.

This simple setup is in stark contrast to Ford and Toyota hybrids, where complicated monitors illustrate, in cartoon fashion, whether the engine is sipping gasoline or pinching electricity — fun for the first few hours, then tedious.

Honda's hybrid technology is further set apart in that it doesn't use the battery's electricity to exclusively propel the car. The battery merely feeds the electric motor that will assist the gasoline engine.

Out on the road, the Accord Hybrid feels and drives almost like the standard sedan.

The major difference is that the Hybrid's engine shuts off when the car comes to a stop at traffic lights and stop signs.

Suddenly, the cabin becomes eerily quiet. It's as if the car has just stalled, but the headlights stay bright. The fan slows marginally, and a little green light on the dash begins to flash "Auto Stop."

The engine stays off as long as the driver's foot is on the brake. As soon as the foot comes off, the engine runs again, instantaneously.

What's remarkable is that the motor doesn't seem to need starting, and it's the same when starting the car in the morning — turn the key and the engine just comes on, seemingly without ever turning over.

This transition from electric-assist to internal combustion works effortlessly thanks to a thin sheaf of a motor-generator that lives between the engine and transmission.

Honda calls it Integrated Motor Assist. We call it intelligent.

The IMA system does most of its work by contributing 100 ft-lbs of torque under acceleration so the gasoline engine doesn't have to work so hard.

Perhaps its fanciest trick, however, is its ability to capture the energy of motion that would normally be lost as heat to the brakes during deceleration, sending the energy back to the battery in the rear so it can be stored and used again.

The battery, even lighter, smaller and more efficient than that in the Civic Hybrid, still consumes a few cubic feet of trunk space, bringing the total available cargo area down to .32 cubic metres (11.2 cubic feet).

The battery and its cooling system also prevent the rear seat backs from folding forward, making it difficult to haul longer items.

There is still room for a compact spare tire, however. Curb weight on the Hybrid is only 52 kilograms (114.64 pounds) more than the EX.

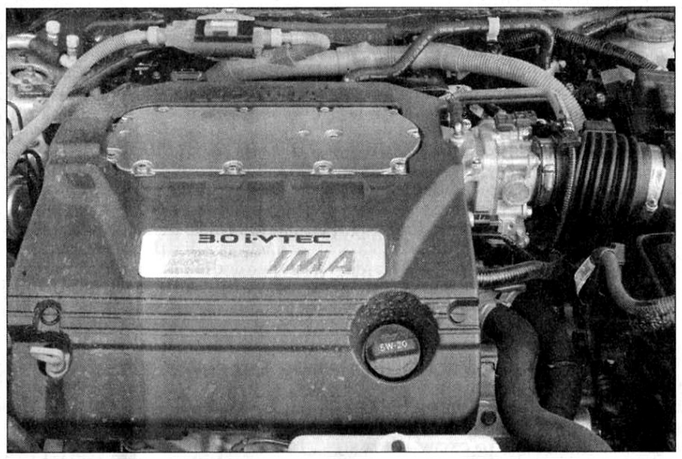

PHOTO BY PAUL WILLIAMS/CANWEST NEWS SERVICE/OTTAWA CITIZEN

The 2005 Honda Accord Hybrid has two motors. That means it doesn't burn fuel or spew exhaust when it's stopped, but it can still win a stoplight drag race.

Another fuel-saving trick on the Hybrid is its ability to send the rear bank of three cylinders on holiday when power is not required, say, when coasting, cruising along the highway or decelerating.

A green "ECO" light on the dash comes on when the engine goes into this half-time mode, called Variable Cylinder Management.

In our silver press car, however, there was an ever-so-slight vibration that could be felt when the engine was in the inherently rough three-cylinder mode, though other reviewers say it's not noticeable.

Electronic engine mounts and an "anti-noise system" played through the stereo speakers are designed to compensate for the transition to three cylinders, but the setup did not feel as seamless as intended, nor as smooth as the gasoline-only V-6.

The only other objection about this Accord is the hard front seats, which give good support but offer little in the way of comfort.

At the end of the day, however, Honda engineers have managed to package highly complicated hybrid technology into a car that hardly seems any different than a regular Honda sedan.

They have made the complex seem simple — always a hallmark of leadership.

The only hurdle now is to make the price of the V-6 Hybrid —$36,990 —the same as a regular Accord EX — $33,600 — so there's no penalty for anyone who wants a new car and help save the environment, too.

Ottawa Citizen

'Best decision I've made'

From E1

companies, so I stepped up to expensive European sports cars. By the late 1990s I was also fabricating pure race cars, and at one point put licence plates on a 1400 hp '67 Chevelle that we managed to pass through Air Care. It still seemed natural to me.

But there was a change underway in my life that was creating a counter-current to my 'car guy' hobby. I now had three young boys in my family, and as they grew up, they saw their car-crazed dad was out of step with global warming and environmental issues. At some point they openly started to challenge my cherished belief system. I took the initiative to look at the Toyota Prius hybrid in 2002 but just couldn't see myself driving it — I needed real performance as well as room in the back for the kids. So I kept going on the gas guzzler performance path for another two years.

Like many people I began reading more and more about hybrid vehicle technology in the automotive press, and realized that at some point there would be a shift from Prius and Civic type economy models to larger and more well equipped mainstream vehicles. The 2005 Honda Accord hybrid really caught my eye this fall when I read that it could sprint from 0-60 mph in 6 seconds while getting almost 1,100 kilometres on a tank of 87 octane gas. The combination of a standard 240hp V6 engine and an electric motor/generator with its additional 15hp and 100ft-lbs of torque was the no-compromise approach that got me hooked.

Now here I am as the proud new owner of a green machine swearing that I'm a permanent convert to the hybrid ranks. I'm saving the world, and getting my kicks behind the wheel at the same time. Some of my friends may think I've got a screw or two loose upstairs, but in all honesty I feel like this is perhaps the best decision I've made in a long long time. I'm excited about this car, and lots of people that I've shown it off to have been equally excited as well. If my informal polls are any indication, there will be a lot more hybrid owners out there in the next few years. Having your cake and eating it too is a nice feeling.

Derek Spratt