

Hybrid Heaven: NEW CARS ARE CLEANER AND COOLER THAN EVER

By Patricia Xavier, University of Central Florida



>> **honda insight**



>> **ford escape hybrid**

Hybrid technology offers drivers better fuel savings and cleaner emissions

James Dean rebelled in his Mercury. Steve McQueen was a daredevil in his Mustang. And James Bond charmed onlookers in his Aston Martin.

From the time the T-Model roared into hearts and driveways of the country at the turn of the 20th century, automobiles became a mainstay of American culture. The thrill of the open road, roaring engines and the promise of adventure justified generations of car owners to continue to carve out their own niche in automotive history.

In the 21st century the growing popularity of hybrid cars took America's love affair with the automobile to a new level. Hybrids are fitted with two sources of power, usually a gasoline engine and an electric motor. The combination is designed to cut down on fuel consumption and carbon dioxide emission. As the speed of the car slows the electric motor takes over and stops using gas.

Critics and government groups such as the Environmental Protection Agency deemed hybrids the



>> **toyota prius**

A LOOK INSIDE



Honda Insight



Ford Escape Hybrid



Toyota Prius



most environmentally friendly and energy-efficient vehicles in the world. Recently, demand for these types of vehicles began flooding the market.

Hybrids joined the mainstream by selling more than 52,000 vehicles nation wide this year and it's estimated there are more than 100,000 on the roads currently. Carmakers project those numbers to double yearly and car dealers across the country are having trouble keeping them in stock. One likely reason for the surge is the sky rocketing cost of gas. Ford, Toyota, and Honda are some of the automotive giants to have jumped on the hybrid craze.

TOYOTA PRIUS

In 2003, the Toyota Prius spent 10 months outselling every other car in the U.S. This year, Toyota increased the market output of its hybrid by 50 percent and the world's third largest automaker projects sales in excess of 78,000 units. The Prius boasts of 80 percent fuel efficiency. Getting an impressive 52 mpg in the city and 45 mpg on the highway propelled sales of more than 120,000 units on three continents.

The five-passenger car has a price tag of about \$20,000. Consumers reported little difference in how the engines of the hybrid and regular fuel vehicles perform. Capping an impressive year, the Prius was named the 2004 North American Car of the Year by Motor Trend, an industry magazine, and by automotive journalists.

FORD ESCAPE

After the success of the Toyota Prius, Ford built the first hybrid sport utility vehicle. While a price tag has not been made public, the Ford Escape Hybrid should hit showrooms by the end of the year. Aimed at the loyal SUV driver, the car will be able to operate in either full battery mode or full gas mode and get 35-40 mpg in the city. According to Valerie Thomison, a customer relations manager at Sun State Ford in Orlando, the car goes into full battery mode anytime drivers go slower than 25 mph.

"People are looking to be greener and more economic," she said. "Hybrids give an alternative to those daily drivers who are looking to save money in the long run."

Thomison adds that consumers seeking hybrids range from college students, grandparents, and the affluent to the middle class.

HONDA INSIGHT

Another hybrid, the Honda Insight (base price of about \$21,380), gets an estimated 61 miles per gallon in the city, and 68 on the highway, which is comparatively higher than vehicles with conventional engines.

Waiting lists for the vehicles are long and some customers are waiting months to purchase their choice of hybrids. Companies like Ford are targeting regions with dense driving conditions. States like California, New York and Florida are also giving incentives such as tax credits and rebates to drivers of hybrids.

According to a press release from the Internal Revenue Service, taxpayers who purchase the 2005 Toyota Prius may claim a tax deduction of \$2,000. California leaders have even proposed a law that would allow owners of hybrids not to pay for parking. Thomison said that these incentives, coupled with rising gas prices, are helping make hybrids more attractive to consumers. But she adds that there are drawbacks. Hybrids are comparatively more expensive and may suit some drivers more than others.

"Because of the way the technology is geared in a car like the Escape Hybrid, if the majority of driving is done on the highway, motorists are not going to see the kind of fuel saving that you would see in start and stop traffic," Thomison said. "At high speeds it's a gasoline engine and that's why Ford and other companies are targeting cities with a lot of traffic."

Trends and technology with hybrids also change fast. Recharging electric batteries, once a necessity, has become a thing of the past. Batteries are now designed to automatically recharge whenever the gas engine is running or when the brakes are applied. The aesthetics of the hybrid is also changing. Toyota, Ford and others designed their hybrids to look like regular vehicles and that's just what customers like Susan McGill, a Toyota Prius owner, say they want.

"My Prius doesn't look like a hybrid, and it drives like a sedan so it definitely surpassed my expectations," she said.

McGill, a software engineer in Orlando, said she bought her hybrid after watching a speech in which Vice President Dick Cheney talked about the necessity of drilling for oil in natural preserves. Although she purchased her vehicle before the attacks of 9/11, most of her friends began driving hybrid models after the attacks.

"Since the war in Iraq and with credit to my environmental consciousness, it makes me feel good to know I'm not driving for Mid-east oil," said McGill.

The next few years should determine whether hybrid vehicles end up as a short-lived trend or if their emergence marks another historic turning point in America's automotive history. Who knows, maybe next time America goes to the movies Tom Cruise will be driving the first hybrid Porsche Cabriolet. **YM**