

You can make a clean escape as Ford unveils hybrid SUV

By ANN M. JOB - THE ASSOCIATED PRESS

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The vehicle Americans love and hate -- the sport utility -- is getting greener.

By summer's end, Ford Motor Co. will launch the 2005 Escape Hybrid, the first SUV powered by a gasoline-electric hybrid powerplant.

The manufacturer's suggested retail price, including destination charge, starts at \$26,970 for a two-wheel-drive model with a continuously variable transmission -- making this the top-of-the-line Escape compact SUV.

Indeed, the starting price is \$7,115 more than a base two-wheel-drive Escape with four-cylinder gas engine and manual transmission.

Nonetheless, Ford officials predict strong demand because this five-passenger hybrid generates virtually no smog-producing emissions, has the acceleration of a V-6 but is much more fuel efficient, and still provides versatile cargo hauling, towing and off-road capability.

In addition, the Escape is the first hybrid vehicle on the market from a U.S.-based automaker.

Current gas-electric hybrids are all cars from Japan-based automakers -- the Toyota Prius five-door hatchback, Honda Civic sedan and Honda Insight two-seater.

The Escape "is the most fuel-efficient SUV in the world," declared Jim Padilla, chief operating officer at Ford.

But don't look for the 50- or 60-mile-per-gallon government fuel economy ratings that the smaller, lighter-weight Toyota and Honda hybrids have.

While declining to give final fuel economy numbers for the Escape Hybrid just yet, Ford officials have talked generally about the vehicle "getting up to 35 mpg" in city driving and as much as 40 mpg on the highway.

This would be better than the 19 and 25 mpg, respectively, for a four-cylinder-powered, gas-only Escape with automatic transmission, and the 18 and 23 mpg respectively, for a gas-only, V-6-powered automatic Escape.

In my test Escape Hybrid -- a four-wheel-drive model that topped out at more than \$32,000 with options -- I managed, with a lot of slow driving, coasting and general nerve-racking traffic-dodging maneuvers on flat streets, to eke out 40 mpg in city traffic.

On the other hand, when I took the vehicle off-road on a pretty rigorous, hilly dirt trail, I got just 13.1 mpg.

The Escape Hybrid uses a revised version of Ford's 2.3-liter Duratec four-cylinder engine and pairs it with a 70-kilowatt, permanent magnet, AC synchronous electric motor.

The only transmission is a continuously variable unit that the driver operates like an automatic, and there's a 330-volt nickel-metal hydride battery pack that stores excess energy for use later and powers the electric system.

The hybrid SUV drives like a normal vehicle, with the engine controls deciding when the vehicle should be using electric power, or gas power, or both. All a driver does is drive.

But he or she can feel and hear, at times, the vehicle's workings. For example, at slow speeds, there was a slight "bump" feel and sound as the Escape gas engine kicked in to add to the electric power in the test vehicle. An engineer explained that the sensation comes because the gas power has to join the electric power that already has the wheels moving.

The four-cylinder engine also can get noisy in aggressive highway driving, and on occasion, I heard unexpected sounds that I learned had to do with a fan that helps keep the proper temperature for the nickel-metal hydride battery pack at the back of the vehicle.

The Escape Hybrid's gas engine can produce a maximum 133 horsepower and 129 foot-pounds of torque at 4,500 rpm, while the electric motor has maximum 94 horses and instantaneous torque from startup.

The result is a maximum combined hybrid horsepower of 155, compared with the 153 horses in a regular four-cylinder Escape, and the 200 horsepower in a V-6-powered Escape.

But the real change is in acceleration; the Escape Hybrid can zip forward quite responsively.

On the outside of the SUV, there's little to show this is a different kind of Escape. The only obvious signs are the badging, unique wheels and the subtle battery pack vent that's in the glass window at the side of the rear cargo area.

Inside the Escape Hybrid, the display screen in the middle of the dashboard draws immediate attention. Its graphics display and constant fuel economy calculations aren't as flashy as those in the Prius but serve to remind riders that stretching every bit of gas is a key benefit.

Note, though, this display is paired with a navigation system, operates only when the radio is on and is a \$1,850 option. In the hybrid cars on the market, fuel-economy and energy-flow graphic displays, sans navigational system, are standard equipment.

In the Escape, there's also a standard battery monitor in the instrument panel and a special part of the tachometer that indicates when this Escape is in "green mode," or operating via electric power only. The Escape Hybrid can travel up to 25 miles an hour solely using the electric motor.

At the back of the vehicle, there's a bit less cargo room because of the need to fit the vehicle's electric battery pack, composed of 250 D-sized cells in a sealed unit, under the cargo floor.

So, while a regular Escape offers 29.3 cubic feet of storage space behind the rear seats and maximum 66.3 cubic feet if the rear seats aren't used by passengers, the corresponding numbers in the hybrid are 27.6 and 65.5 cubic feet, respectively.

The hybrid's fuel tank also is smaller -- 15-gallon capacity vs. 16.5 gallons in a gas-only Escape.

And towing capacity is reduced to 1,000 pounds vs. 1,500 pounds in a four-cylinder-powered Escape and 3,500-pounds in a V-6-powered model.

The Escape Hybrid has the same three-year/36,000-mile bumper-to-bumper warranty that other Escapes have. But hybrid-specific parts such as the battery pack are covered by a 100,000-mile/eight-year warranty.

Ford officials look for 20,000 hybrid sales in the coming year, with production constrained initially by battery availability.

The National Highway Traffic Safety Administration gives the 2005 Escape four out of five stars for driver and front-passenger protection in frontal crash testing.

In side crash testing, the Escape earned five out of five stars for protection of front- and rear-seat passengers. No rollover rating was provided.

The most recent safety recall of the Escape came in April, when nearly 322,000 SUVs from the 2001, 2002 and 2003 model years were recalled because engine control modules for the 3-liter V-6 needed to be reprogrammed to prevent possible stalling.

In addition, the 2001 Escape was the subject of four other safety recalls, ranging from faulty cruise control on 1,193 vehicles to potential front safety belt problems in 132,243 SUVs.

4WD BASE PRICE: \$19,265 for base XLS 2WD with manual transmission; \$19,405 for XLS 2WD with automatic; \$21,015 for XLS 4WD with manual transmission; \$21,155 for XLS 4WD with automatic; \$22,955 for XLT 2WD; \$23,895 for XLT Sport 2WD; \$24,615 for Limited 2WD; \$24,705 for XLT 4WD; \$25,645 for XLT Sport 4WD; \$26,365 for Limited 4WD; \$26,380 for 2WD Hybrid; \$28,005 for 4WD Hybrid

AS TESTED: \$32,240

TYPE: Front-engine, front-wheel-drive, five-passenger, compact sport utility vehicle

ENGINE: 2.3-liter, double overhead cam, Atkinson cycle, inline four-cylinder mated to 70-kilowatt, permanent magnet, AC synchronous electric motor

MILEAGE: Estimated 35 miles per gallon (city), 40 mpg (highway)

LENGTH: 174.9 inches

WHEELBASE: 103.1 inches

CURB WT.: 3,792 pounds

BUILT AT: Kansas City, Mo.

OPTIONS: Audiophile and navigation system (includes energy flow graphic, fuel economy display, AM-FM audiophile radio with six-CD player and nav system) \$1,850; appearance package (includes silver-colored metallic fascias, bodyside cladding and wheel lip moldings) \$625; safety package (includes side curtain airbags with rollover sensor and side-mounted airbags) \$595; leather comfort group (includes leather-trimmed bucket seats and leather-trimmed steering wheel) \$575

DESTINATION CHARGE: \$590

A smoggy dilemma

[Bakersfield Californian, Editorial, Friday, July 2, 2004](#)

Sen. Dean Florez faces a dilemma. He rightfully worries that a U.S. Supreme Court decision opening the border to Mexican trucks will hamper California's effort to clean its polluted air.

He introduced legislation that would make Mexican trucks abide by state emissions standards. The dilemma is that it would no doubt face a formidable legal challenge if it becomes state law.

The Supreme Court brushed off legal arguments that the U.S. Transportation Department must conduct an air-quality study before Mexican trucks go beyond the 20-mile commercial zones.

The court said such a requirement would violate the North American Free Trade Agreement, which prohibits the United States Canada and Mexico from imposing trade barriers. The court ruled that it would be a violation of NAFTA if any state kept out trucks from Canada or Mexico.

Still, Florez introduced his legislation, realizing the potential for increased pollution due to the court ruling. He said he won't let uncertainties stop California from taking steps to protect its environment.

California is the smoggiest state in the union -- partially because of heavy-duty diesel truck emissions. Big rigs account for just 4 percent of vehicle traffic in California, but cause 40 percent of all nitrogen oxide emissions, which help form ozone.

The court edict will allow an estimated 30,000 additional Mexican trucks on California highways. The problem is that many of those Mexican trucks produce dirtier emissions than U.S. models.

Legislation by Assemblywoman Fran Pavley, D-Agoura Hills, would require all trucks entering California to meet federal emissions standards for their model years. She chose the less stringent federal standards -- as opposed to California standards in the Florez bill -- because she believes that would better protect her legislation in legal challenges.

Both legislators commendably are responding to a real threat of dirtier air in the state. Rob Ogelsby, legislative director of the California Air Resources Board, said Mexican trucks could add up to 50 tons of nitrogen oxides per day from the San Joaquin Valley to Southern California.

Gail Ruderman, an attorney with the Natural Resources Defense Council, said both Pavley and Florez's plans have merit. But he told the *Sacramento Bee* that both bills face serious legal hurdles.

Florez expressed his frustrations: "It seems as though we will be operating in the dark. We don't have real numbers. We don't have any way of even understanding the impact" of more Mexican trucks traveling throughout California.

It may not be possible, but it would be a worthy effort if the Bush administration found ways within the confines of NAFTA to ensure that Mexican trucks -- failing at least federal emission standards -- don't enter the United States to pollute the air.