

2007 Escape Hybrid Overview

2007 Highlights

- Four available packages combine appearance, infotainment and safety features
- Three new exterior colors are available
- Outstanding fuel economy achieving 36 mpg in city driving
- Acceleration performance is similar to a V-6, but with a smaller, gas engine
- “Full” hybrid system is able to run on gasoline engine, electric battery power or both together
- Offers 8-year/100,000-mile warranty on Hybrid-related components

Overview

The Ford Escape Hybrid is still the cleanest and most fuel-efficient SUV in the world, combining the fuel economy and emissions benefits of a “full” hybrid with the go-anywhere capability, toughness and spaciousness of the Ford Escape – America’s favorite small SUV.

For 2007, The Escape Hybrid offers customers the choice of four new packages, combining a fresh look with infotainment and safety features and three new exterior colors.

The Escape Hybrid is a “full” hybrid, meaning it automatically switches between pure electric power, pure gasoline engine power or combined operation to maximize efficiency and performance. Its gasoline engine and electric motor work in concert, providing performance similar to that of a V-6 engine. In less demanding situations, the Escape Hybrid can run on its electric motor alone, (at speeds up to 25 mph) its gasoline engine alone or the most efficient combination of the two.

Full hybrids achieve their greatest improvement in fuel economy during stop- and -go driving, when the electric motor is most efficient. In fact, the Escape Hybrid provides approximately 80 percent better fuel economy in city driving than the conventional V-6 Escape. Escape Hybrid can travel more than 400-500 miles in city driving on a single tank of gasoline.

The Escape Hybrid offers four-wheel-drive and towing capability of up to 1,000 pounds when properly equipped.

Escape Hybrid is available in either FWD or Intelligent 4WD. It is produced at Ford’s Kansas City Assembly Plant in Claycomo, Mo.

Design and Equipment

The Escape Hybrid looks like the traditional Escape, the best-selling compact sport utility, with a few key differences. The Escape Hybrid features unique badging that uses the Ford road and leaf insignia, with standard 16-inch wheels and a discreet battery cooling vent in the driver’s side rear quarter window. Escape Hybrid is available with a special appearance package that features body-color door handles and silver bumper covers, body-side cladding and wheel lip moldings.



For 2007, three new exterior colors are added to the Escape Hybrid lineup. They include Dune Pearl Clearcoat Metallic, Tungsten Grey Clearcoat Metallic and Vista Blue Clearcoat Metallic.

Escape Hybrid’s Silver Appearance Package includes silver metallic fascias, bodyside cladding and wheel lip moldings, and the Leather Comfort Group includes a leather-wrapped steering wheel and leather-trimmed seats.

A Premium Package combines a monochromatic exterior in five colors with Premium leather-trimmed seats, leather-wrapped steering wheel, heated front seats and side mirrors, Reverse Sensing System, navigation system and hybrid energy flow display with Audiophile stereo, 110-volt power outlet, cargo area retractable cover and floor mats.

Like the traditional Escape, Escape Hybrid offers seating for up to five and includes the same 60/40 split folding rear seat. Efficient packaging of the hybrid technology (locating the battery pack at the rear load floor, for example) means that interior versatility is preserved. Even with a full complement of five passengers, cargo room behind the second row seat is still an ample 27.6 cubic feet.

The maximum cargo space can be expanded to over 65 cubic feet, if desired. The roof rack is capable of holding up to 100 pounds of cargo.

A unique gauge package features an economy indicator with “green zone” that shows when the vehicle is operating on battery power. A separate gauge displays levels of charge and assist for the battery pack. An optional navigation system features an Audiophile stereo system, a unique energy flow diagram that displays hybrid system operation and a fuel economy screen that displays instant and average fuel economy.

Escape Hybrid also offers a 110-volt AC power outlet, perfect for a television, radio, air pump, electric razor or even holiday lights at the campsite.

Powertrain and Chassis

The Escape’s hybrid powertrain system consists of a half-dozen key components engineered to provide a seamless flow of power:

- A unique 2.3-liter four-cylinder gasoline engine features Atkinson-cycle combustion for improved efficiency and produces 133 horsepower at 6,000 rpm.
- A 70-kWatt (equivalent to 94 horsepower) electric traction motor provides an added boost to the drive wheels when maximum acceleration is desired.
- A generator-motor recharges the batteries, starts the engine and helps regulate how the two propulsion channels blend together in the transaxle.
- A special electronically controlled, continuously variable transmission (eCVT) harnesses internal combustion and electric power sources to drive the front wheels in a FWD Escape or all four wheels with the optional Intelligent 4WD System™.
- A 330-volt nickel-metal-hydride battery pack located and sealed at the rear load floor stores electrical energy.
- An electronic vehicle system controller manages charging, drive assist and engine-starting functions. This device shuts the engine down during coasting and at stoplights to save fuel. It also converts the traction motor into a generator during braking to help recharge the batteries.

The combined output of both the gas and electric motors is 155 horsepower, and the powertrain provides 0-60 acceleration performance similar to the conventional Escape with 200-horsepower V-6 engine.

The generator-motor provides power boosts during heavy load situations, helping Escape Hybrid



accelerate briskly to speed. In addition to fuel-free operation, electric motors deliver maximum torque at low rpm, so they are an ideal complement to gasoline engines that generate peak power at higher rpm.

The electric power-assisted steering system allowed Ford engineers to easily tune the amount of steering assist independent of engine and vehicle speed, giving the Escape Hybrid a very easy steering effort at parking-lot speeds, while retaining Escape's hallmark crisp steering feel while driving.

The optional Intelligent 4WD System, available on all Escape models, is fully computer-controlled and provides maximum traction as driving conditions vary. Its operation is so seamless that most drivers will never notice that it has engaged.

Benefits for Driver and Environment

The front-wheel-drive Ford Escape Hybrid achieves 36 mpg on the EPA city cycle; the conventional V-6-powered Ford Escape has a city fuel economy rating of 20 mpg.

It is an extremely clean vehicle to operate – an amazing 99.4 percent cleaner, on average, than an unregulated vehicle. Escape Hybrid meets strict Super Ultra Low Emissions Vehicle (SULEV II) and in California and states adopting California Emission Standards, Advanced Technology Partial Zero Emissions Vehicle (AT-PZEV) standards.

Major Features and Options

Escape Hybrid is offered in front-wheel-drive or with the Intelligent 4WD System for confident traction in all conditions. The available Safety Package features side air bags and Ford's Safety Canopy™ air curtain system with rollover detection.

Options include a 320-watt, satellite-capable Audiophile audio system with six-disc in-dash CD changer, 110-volt AC outlet, moonroof, retractable cargo cover and a Hybrid Energy Audio and Navigation System.

Milestones

- 2004 The 2005 Ford Escape Hybrid is the world's first hybrid-electric SUV as well as the first hybrid built in North America
- 2005 Ford Escape Hybrid is named 2005 North American Truck of the Year