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NAO. ELIT

F O R D

CONNECTA







Connecta. If the vehicle's name sounds electrical, it should. This futuristic concept car is powered by a very common energy source available at low cost in almost every household in the country. Electricity. More than that, its drivetrain is not some technical question mark for tomorrow but a practical design under development for Ford's new Ecostar van today. At its heart is a new battery invented by Ford for the challenges every real-world vehicle must face. One that allows frequent recharges and provides enough power and range to make the electric car a real answer to some very real environmental needs. But beyond the benefits of clean and very quiet operation, electric vehicles have to perform useful work. Because an electric powertrain works particularly well for short trips with many starts and stops, Connecta's interior space and its three doors are unlike any other van, wagon, or sedan. People do one thing again and again in short trips. They get in and out. On the driver's side there is one door but the passenger side has two unique center-opening doors with no middle pillar. Entering the people-friendly interior, with its extra headroom and legroom, is as easy as entering your house. Connecta might really be best described as the family taxi. With this function-first electric car, Ford has shown that a vehicle can serve both its owner's daily transportation needs and the need for a cleaner environment.

Beneath the Ford Connecta's folding rear seats is the Sodium-sulphur battery that enables this electric vehicle to approach the performance of conventional gasoline powered cars and trucks. It has over twice the energy storage of lead-acid batteries and is placed between the wheel wells to keep weight low for best handling and maximum interior volume. It can be recharged by normal household current or special 220 volt outlets.



Connecta's passenger side configuration features two doors that open from the center to provide the easiest possible entry and exit. An electronic interlock prevents the rear door from being opened before the front, and both doors from opening while the car is in motion. In addition to easy access, Connecta's interior has rear seats that fold forward to allow children or packages to use the space behind them. Two more rear facing seats open out of the cargo area floor. The front passenger seat is equipped with an integral child seat and the driver's side features a unique space-saving control pod. Topping this unusual interior is a double skin glass roof with a solar-powered ventilation panel.



The vehicle at the right is Ford's new urban electric van called **Ecostar**. Both Ecostar and **Connecta** share the same drivetrain and battery technology. One look inside this ordinary looking small truck and it becomes instantly obvious that a practical working electric vehicle for today's world, one capable of competing on an equal basis with conventional gasoline or diesel powered cars or trucks, is far more complex and sophisticated than any electric vehicle of the past. From its Power Electronics Center to its three phase ac drive motor (that combines both forward motion and braking functions in one compact unit) to its Sodium-sulfur battery, Ford's electric van shows just how much new engineering is required to make electrical energy a viable alternative to conventional fuels. In the very near future the Ford Ecostar will be in test fleets nationwide and other cars and trucks that share its vision will be seen in cities all over the country as alternative fuels gain acceptance. Connecta is only the first of what will be many Ford vehicles to employ this bold new step towards a cleaner future. Welcome to the world of electric vehicles and one of the most exciting times in automotive history.

Power Electronics Center.

An electronic module in the PEC manages the flow of charging electricity to the battery from the power grid (wall plug) or from regenerative braking, and converts the battery's power from 330 volt dc to 330 volt ac for the 3-phase ac drive motor, and the air conditioning, lighting and power systems.

Vehicle System Controller.

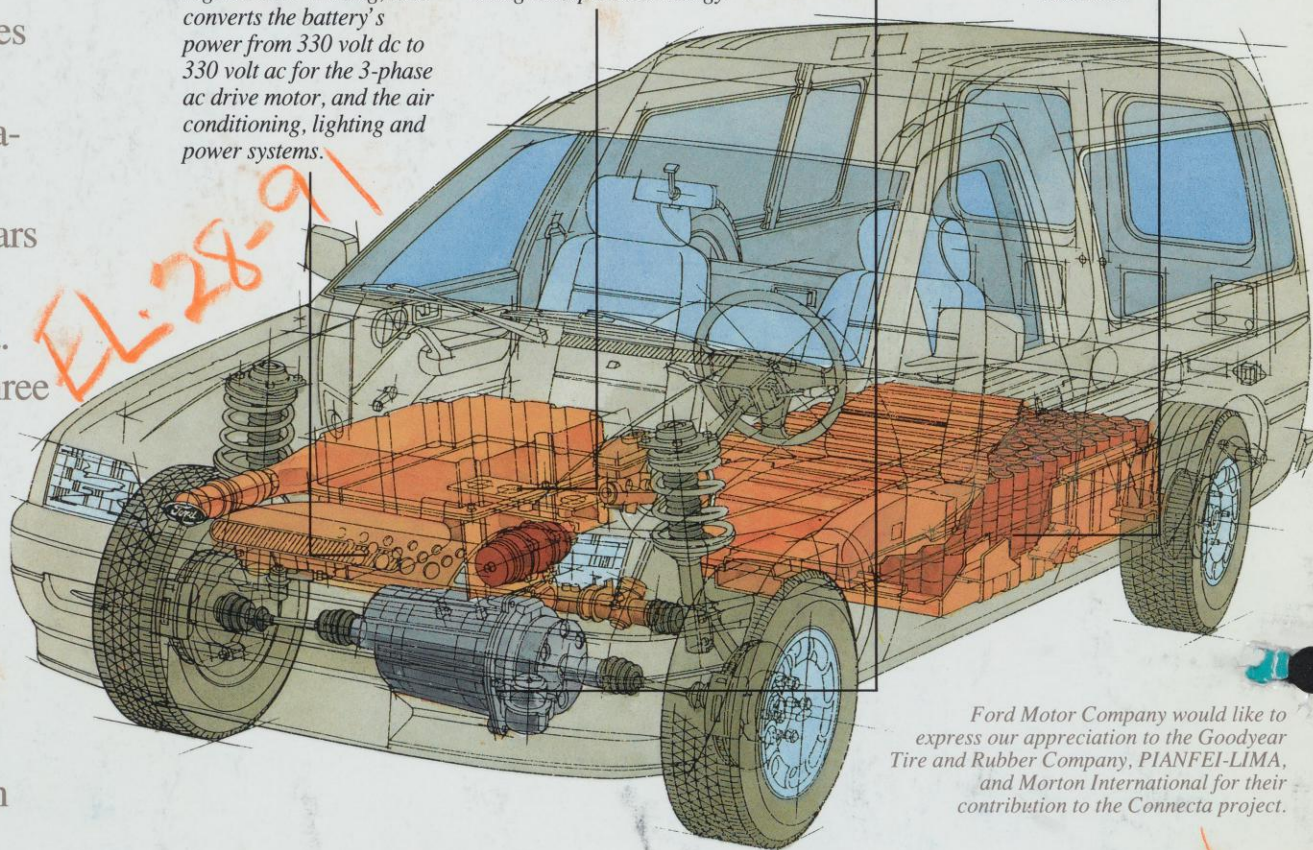
The microprocessor based controller monitors all critical vehicle functions and optimizes the complete operation of the vehicle using multiplex technology.

Drive Motor/Transaxle.

The high-speed, 3-phase ac motor delivers power to a single-speed, direct-coupled transaxle.

Sodium-sulphur Battery.

The NaS traction battery brings new performance to electric vehicles with over twice the energy storage capacity of lead-acid batteries.



Ford Motor Company would like to express our appreciation to the Goodyear Tire and Rubber Company, PIANFEI-LIMA, and Morton International for their contribution to the Connecta project.



For more information call **1-800-ALT-FUEL**

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