

Hybrid Race Car Planned For Endurance Series

By JONATHAN WELSH

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DETROIT – A racing team competing in the American Le Mans Series endurance-racing program plans to unveil a hybrid car today.

The car, a prototype called the Corsa Zytek Hybrid, is the result of a partnership between the Salt Lake City-based race team Corsa Motorsports and Zytek Group Ltd., a U.K. automotive engineering and electronics company with offices in Novi, Mich. It competes in a series of races in North America and Europe that range in length from just under three hours to 24 hours.

Zytek's products include components for hybrid passenger vehicles, so the technology on the racing car could trickle down to vehicles on the road in the future.

“This car represents the next step in hybrid technology, says Scott Atherton, chief executive of the American Le Mans Series. He noted that the use of hybrid power in racing highlights its potential to increase performance as well as fuel economy.



The Corsa Zytek Hybrid will compete in the American Le Mans Series.

The Zytek car's top speed is over 200 miles per hour and the electric motor adds about 50 horsepower to the 625 horsepower eight-cylinder engine that runs on fuel that is a mix of 10% ethanol and 90% gasoline which is similar to most pump fuel in the U.S.

Steve Pruitt, who heads Corsa Motorsport, says the car uses lithium-ion batteries that add relatively little weight to the car. The team had to add ballast to the car to bring it to the required minimum weight. Still, Mr. Pruitt says the batteries are the car's "Achilles' heel" because it is unclear how they will perform in the harsh conditions of endurance racing. He plans to race the car for the first time in the Petit Le Mans race Oct. 4 at the Road Atlanta track in Braselton, Ga.

Ten years ago, specialty car maker Panoz Auto Development also teamed with Zytek to develop a hybrid electric race car called the Q9 that was similar to the Corsa Zytek, says Mr. Pruitt. But its batteries weighed hundreds of pounds and the Q9 – nicknamed Sparky -- failed to qualify for a race. Mr. Pruitt says he has been calling his new car the Q10 out of respect for that early effort.

Automobile racing has long been touted as a hotbed of research and development that eventually finds its way to cars consumers can buy. But today series like NASCAR's Sprint Cup use technology that is crude compared with that found in the typical family car.

American Le Mans officials say companies that race in their series, including Volkswagen AG's Audi unit, General Motors Corp. and Honda Motor Co.'s Acura brand are developing systems that will appear in road cars within a few years. New diesel road cars from Audi and Volkswagen burn cleaner and have surprisingly high horsepower and fuel efficiency, in part because the fuel systems and engine-control electronics were developed on the track in Audi's diesel-powered R10 race cars.

The Corsa Zytec hybrid, the Audi diesels and other race cars powered by E85 are part of what the series calls the Green Challenge, which awards prizes for efficiency.

Mr. Atherton of American Le Mans says the Corsa team's effort is the beginning of widespread acceptance of hybrids. "I think hybrid power will soon be part of the automotive fabric across the board."

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