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First Drive: Zenn Electric City Car

NEW YORK - Know how special the Zenn electric car is? Here in New York, a cabdriver let me cut him off - actually waved me ahead. That would never happen in a normal vehicle. I was behind the wheel of a tiny, electric blue, $16,000 electric Zenn intended for low-speed city use with "ELECTRIC" stenciled on the side. Zenn has the potential to change how you think about cars. My first drive was impressive. However, it helps if you don't feel the need to by surrounded by vault-like doors, rich leather trim, and 10-speaker audio systems.

Zenn is a low-speed city car that runs on six 12-volt batteries today and possibly, in 2009, a new energy storage system based on capacitors. Zenn owes its existence to a careful reading of federal safety laws: If you cap the top speed at 25 mph, you are exempted from crash-testing the vehicle and you can get by with shoulder belts and no airbags, the idea being: How much trouble can you get into in a 25 mph crash?

Zenn on the road

I test drove a Zenn on New York City streets. This is the perfect place for testing: You can't go fast and the streets are clogged. The Zenn is small, at 122 inches, halfway in size between the new Smartfortwo and the Mini Cooper. There are two seats and a reasonable storage area accessed by a rear hatch. The Zenn starts off briskly and silently, since there's no internal combustion engine, and electric motors by their nature deliver maximum power at startup. Speed builds slowly. So does road noise; at 1,360 pounds, there's not much padding or noise insulation. Lift your foot off the gas, press the brake pedal, and the Zenn

regenerates electricity into the six 12-volt storage batteries, just as a hybrid does. In addition to the road noise, which sort of doubles as a speedometer (the faster you go, the louder it gets), there's a noticeabe click every time you go between throttle and brake as a solenoid engages or disengages the electric drive. Not annoying, just different.

I managed to reach the 25 mph peak several times and, as claimed, the car won't go any faster. Actually, it can, Zenn says, but it's artificially capped at 25 mph. However - wink, wink - a savvy mechanic could induce an extra 5 or 10 mph by working around the speed governor, I was told. With a 25 mph cap, the Zenn is legal on city streets in most all states where the speed limit is 35 mph. In 40 mph zones, you're getting into a gray area legally and in terms of personal safety, since 40 mph posted may be 45 mph to 50 mph actual speed, and some safety experts say speed differential is a major safety issue, more so than speed alone.

Fill 'er up - with a power cord
Range is 30 to 50 miles, depending on driving conditions and if you're using air conditioning, which is an optional extra. Plug the nearly empty Zenn in to the electric outlet in your garage, four hours later you're 80% charged, eight hours later you're fully charged. 220-volt recharging is not an option; on electric vehicles with that option, it can halve the charging time. Because electric motors are so efficient compared to gasoline engines, using electricity to recharge the Zenn is roughly equal to buying 50-cents-a-gallon gasoline. "Zenn is a car that," says one of the company's slogans, "while it runs on electricity, is fueled by optimism."

Who's a Zenn customer?
Zenn is less well-known than Tesla, the $100,000, all-electric sports car. "Tesla is high-speed, high-performance, high-cost," says Zenn CEO Ian Clifford. "We're at the other end of the spectrum." Clifford says Zenn customers want a second or third car for city commuting to fetch groceries or run to the train station. Some parents buy them as first cars for new drivers, with the speed limiter acting as its own safety device, Clifford says. He says there are some fleet sales, too, such as for campus patrol vehicles. Sales so far are about 300, Clifford says. Zenn buys the bodies from a supplier in France. It's an aluminum space frame, to save weight, with ABS plastic body panels. Final assembly is done in Toronto (Zenn's headquarters) with the addition of the front-drive electric motor and the battery modules. Zenn says it hopes to move from a chemical battery technology now to a solid state electrical storage system pioneed by EEStor of Cedar Park, Tex., using what are essentially large capacitors.

Interior fittings are Spartan. The same body is used in a tiny combustion-engine vehicle in Europe called MicroCar but there's no other relationship, says Clifford. There are three colors - blue, green, silver - and three options: sunroof, radio, and air conditioning. The instrument panel is a small center module showing speed, state of charge, and if you're in gear.

Should you buy?
If you want a cheap, all-purpose car, Zenn isn't it. It's limited by range and speed. It also requires a garage, indoor parking, or some other place with access to electricity. It also may not be constructed to your tastes in automotive fit and finish, from the tiny door handles to the barebones interior to the noise while under way. But if you want to send a message that you expect the motorcar be less of a drain on the world's resources, Zenn starts to make more sense. It may even make more sense in 2009 with the EEStor storage modules.