

Oops Zap Spark Boom



State Farm Insurance Company is warning potential rescuers of accident victims about the hazards of hybrid vehicles.

Hybrid vehicles carry large capacity batteries capable of storing large amount of current. Accident conditions can expose battery contacts to the chassis and body of the vehicle. These batteries can produce between 144 and 650 volts. That is enough voltage to electrocute rescue workers. Also chemicals, including acid, may escape. These chemicals can react with their surroundings and form explosive gases.

State Farm is running a national campaign to inform firefighters and emergency medical services workers. A broadcast is available on State Farm's Internet site.

Buyers of these not-real-time-ready vehicles appear pleased to pay manufacturers thousands of dollars extra for the privilege of testing their products. Perhaps drivers need an additional insurance policy rider to cover them when their oh-so-cute and environmentally friendly toy kills a rescue worker attempting to do his job.

Info source: <http://www.globalnewscast.com/GoToStories-3073/Oops-zap-spark.htm>

CURRENT HYBRIDS

- **The 2001-2003 Toyota Prius has a 274-volt nickel-metal hydride battery pack.**
- **The 2004 Toyota Prius has a 201-volt nickel-metal hydride battery pack. (This vehicle has a step-up transformer that increases the under-hood voltage to 500 volts)**
- **The 2000-2002 Honda Insight has a 144-volt nickel-metal hydride battery pack.**
- **The 2003 Honda Civic has a 144-volt nickel-metal hydride battery pack.**
- **The 2004 GM hybrid pickup has a 42-volt lead-acid battery pack.**
- **The 2004 Ford Escape Hybrid has a 300-volt nickel-metal hydride battery pack.**

The threshold for voltage that can be fatal, is about 60 volts, but as little as 20 Volts could be fatal if the skin is wet. Hybrids use a dual voltage system: 12 volts for most of the car and high voltage (HV) for the drive motor(s) and related systems. The HV is what you need to respect. Wear safety gloves and work in teams. The Toyota Prius has over 500 volts, a lethal amount; and both Honda hybrids come equipped with 144 volts as standard equipment. The Ford Escape is equipped with 300 Volts. Always wear the proper safety gloves and equipment during the process of de-powering the system

Info source: AIRBAGS AND HYBRIDS Todd Hoffman hoffman@ev1.net
<http://www.volunteerfd.org/airbag/>