Los Angeles County Sheriff's Department

SAFETY BULLETIN

Field Operations Support Services, (323) 526-5760



Safety Bulletin #19

DATE: January 26, 2004

ELECTRIC & HYBRID VEHICLE HAZARDS

New fuel or engine technologies, such as powerful electric batteries used in electric and hybrid vehicles, pose unexpected risks to law enforcement and other first responders.

A firefighter from Montgomery County, Maryland, noticed something strange recently when he approached a wrecked car. The engine appeared to be off and the injured driver had her foot on the brake. The firefighter was unaware that the engine was still running on silent electric power and could have surged forward, hitting rescuers or bystanders.

The car was a Toyota Prius, a gasoline-

electric hybrid vehicle that uses battery power at low speeds. These hybrid vehicles are completely silent when stopped or at low speeds.

In addition to running silently, the battery in a hybrid packs enough voltage to kill a person -- more than 500 volts

in the 2004 Prius, compared with 12 volts in the standard car battery. In the Prius, the battery is in an unexpected spot, behind the rear seat.

Both Toyota and Honda, the only companies currently selling hybrids, win high praise from rescue workers for marking high-voltage parts with attention-grabbing blaze orange and for engineering their cars with safety in mind. For instance, the powerful batteries are



On Toyota and Honda hybrid vehicles, the high-voltage wires and cables are orange, covered with orange plastic shielding or orange tape. Never casually handle any orange wiring or the orange components connected to it!

not grounded to the frame, so there is little danger someone could be electrocuted by simply touching a wrecked car.

Other vehicle manufacturers will soon be entering the market of hybrid vehicles. For

example, Lexus has scheduled the release of a hybrid RX330 SUV later this year. It is important that all personnel who may come into contact with a hybrid vehicle are aware of these dangers and take appropriate precautions. Take a few minutes to examine the vehicles you approach to determine if it is an electric or hybrid vehicle. Be cognizant of the high voltage and use caution around the cables and battery.

For questions regarding this bulletin, contact Field Operations Support Services at (323) 526-5760.