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HOUSE BILL NO. 819

Offered January 8, 2014

Prefiled January 7, 2014

A BILL to amend and reenact § 46.2-1001.1 of the Code of Virginia, relating to labeling required on converted electric vehicles.

Patron—Lopez

Referred to Committee on Transportation

Be it enacted by the General Assembly of Virginia:**1. That § 46.2-1001.1 of the Code of Virginia is amended and reenacted as follows:****§ 46.2-1001.1. Special equipment required for converted electric vehicles.**

In addition to any other equipment required by this chapter, no converted electric vehicle may be registered in or operated on the highways of the Commonwealth without the following:

1. Orange-colored high voltage cables and high voltage markings on all conduit containing high voltage cables. No high voltage cables may be attached to the chassis of the vehicle in such a way as to cause the chassis to be used to ground the electric current;

2. A breaker or fuse in the high voltage circuit that contains the traction battery pack and the motor controller. Such breaker or fuse must be rated to interrupt the expected maximum current at or above the battery pack voltage;

3. An externally mounted switch to open the high voltage circuit in case of an emergency. Such switch must be located where the fuel tank filler cap was located prior to conversion. Any cover protecting the switch must be able to be opened from the outside of the vehicle;

4. Traction batteries mounted in secure nonconductive enclosures that provide for limited access. Multiple enclosures may be used but must be connected by high voltage cables encased in conduit made of metal, composite, or other materials of comparable strength, crush, and abrasion resistance to metal or composite;

5. If batteries other than lead acid batteries are used as traction batteries, a temperature monitoring system that monitors the temperature of at least one battery in each battery enclosure. Such system must warn the driver of the vehicle if the temperature of the battery is rising rapidly or is above safe levels;

6. Conduit made of metal, composite, or other materials of comparable strength, crush, and abrasion resistance to metal or composite, encasing any high voltage cables running under or outside of the vehicle. Such conduit must be secured to the vehicle chassis and must not violate the ground clearance provisions of § 46.2-1063;

7. A vacuum system and pump, or comparable equipment, to maintain proper brake function and capacity, as required by this chapter; and

8. Labeling on three sides of the vehicle identifying such vehicle as "CONVERTED ELECTRIC." Each label shall be at least six inches long and consist of lettering at least ~~three inches~~ *one inch* tall.

At such time as the federal government establishes minimum equipment and safety standards, including any related to synthetic vehicle sounds, for converted electric vehicles, to the extent that such standards are different from the standards established by this section, the federal standards shall apply to converted electric vehicles in the Commonwealth. If any federal standard conflicts with a standard set forth by this section, the stricter standard shall prevail.

INTRODUCED

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