

Proposal for Supplement 2 to the 02 series of amendments to Regulation No. 100 (Battery electric vehicle safety)

The modifications to the existing text of the Regulation are marked in bold for new or strikethrough for deleted characters.

I. Proposal

Paragraph 5.1. to 5.1.1.3., amend to read:

"5.1. Protection against electrical shock

These electrical safety requirements apply to high voltage buses under conditions where they are not connected to external high voltage power supplies.

5.1.1. Protection against direct contact

Protection against direct contact with live parts is also required for vehicles equipped with any REESS type approved under Part II of this Regulation.

~~The protection against direct contact with the live parts,~~ **Live parts shall be protected against direct contact and** shall comply with paragraphs 5.1.1.1. and 5.1.1.2. ~~These protections (solid insulator, barrier, enclosure, etc.)~~ **Barriers, enclosures, solid insulators and connectors** shall not be able to be opened, ~~separated,~~ disassembled or removed without the use of tools.

However, connectors (including the vehicle inlet) are allowed to be separated without the use of tools, if they meet one or more of the following requirements:

- a) **They comply with 5.1.1.1. and 5.1.1.2. when separated, or**
- b) **They are located underneath the floor and are provided with a locking mechanism, or**
- c) **They are provided with a locking mechanism. Other components, not being part of the connector, shall be removable only with the use of tools in order to be able to separate the connector, or**
- d) **The voltage of the live parts becomes equal or below dc 60V or equal or below ac 30V (rms) within 1s after the connector is separated.**

5.1.1.1. For protection of live parts inside the passenger compartment or luggage compartment, the protection degree IPXXD shall be provided.

5.1.1.2. For protection of live parts in areas other than the passenger compartment or luggage compartment, the protection degree IPXXB shall be satisfied.

~~5.1.1.3. Connectors~~

~~Connectors (including vehicle inlet) are deemed to meet this requirement if:~~

- ~~(a) They comply with 5.1.1.1. and 5.1.1.2. when separated without the use of tools, or~~

- ~~(b) They are located underneath the floor and are provided with a locking mechanism, or~~
- ~~(c) They are provided with a locking mechanism and other components shall be removed with the use of tools in order to separate the connector, or~~
- ~~(d) The voltage of the live parts becomes equal or below DC 60V or equal or below AC 30V (rms) within one second after the connector is separated."~~

Paragraph 5.1.1.4., renumber as 5.1.1.3.

Paragraph 5.1.1.5., renumber as 5.1.1.4.

Paragraphs 5.1.1.5.1 to 5.1.1.5.3., renumber as 5.1.1.4.1. to 5.1.1.4.3.
