Economic Commission for Europe
Inland Transport Committee
World Forum for Harmonization of Vehicle Regulations

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1958 Agreement – Consideration of draft amendments to existing Regulations submitted by GRSP

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

Submitted by the Working Party on Passive Safety *

The text reproduced below was adopted by the Working Party on Passive Safety (GRSP) at its fifty-sixth session (ECE/TRANS/WP.29/GRSP/56, para. 31). It is based on GRSP-56-18 as reproduced in Annex IV to the report. It is submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) and to the Administrative Committee AC.1 for consideration.

* In accordance with the programme of work of the Inland Transport Committee for 2012–2016 (ECE/TRANS/224, para. 94 and ECE/TRANS/2012/12, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.
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.

Live parts shall be protected against direct contact and shall comply with paragraphs 5.1.1.1. and 5.1.1.2. 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 paragraphs 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 60 V DC or equal or below 30 V AC (rms) within 1 s 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."

Paragraphs 5.1.1.4. to 5.1.1.5.3., renumber as paragraphs 5.1.1.3. to 5.1.1.4.3.