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Collective amendments – Regulations Nos. 12, 94 and 95

Draft supplements to Regulations Nos. 12, 94 and 95

Submitted by the expert from the International Organization of Motor Vehicle Manufacturers*

The text reproduced below was prepared by the expert from the International Organization of Motor Vehicle Manufacturers (OICA) proposing provisions for the coupling systems for charging the Rechargeable Energy Storage System (REESS). It is based on a document without a symbol (GRSP-52-01) distributed during the fifty-second session of the Working Party on Passive Safety (GRSP) (see ECE/TRANS/WP.29/GRSP/52, para. 57). The modifications to the text of the UN Regulation are marked in bold for new or strikethrough for deleted characters.

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In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/208, para. 106 and ECE/TRANS/2010/8, 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.

I. Proposal

A. Proposal for Supplement 3 to the 04 series of amendments to Regulation No. 12 (Protection of drivers against the steering mechanism in the event of impact

Paragraph 5.5.1., amend to read:

"5.5.1. Protection against electrical shock

. . .

In the case that If the test is performed under the condition that part(s) of the high voltage system are not energized, the protection against electrical shock shall be proved by either paragraph 5.5.1.3. or paragraph 5.5.1.4. for the relevant part(s).

For the coupling system for charging the REESS, which is not energized during driving conditions, at least one of the four criteria specified in paragraphs 5.5.1.1. to 5.5.1.4. shall be met."

B. Proposal for Supplement 5 to 02 series of amendments to Regulation No. 94 (Protection of occupants against frontal collision)

Paragraph 5.2.8.1., amend to read:

"5.2.8.1. Protection against electrical shock

. . .

In the case that If the test is performed under the condition that part(s) of the high voltage system are not energized, the protection against electrical shock shall be proved by either paragraph 5.2.8.1.3. or paragraph 5.2.8.1.4. for the relevant part(s).

For the coupling system for charging the REESS, which is not energized during driving conditions, at least one of the four criteria specified in paragraphs 5.2.8.1.1. to 5.2.8.1.4. shall be met."

C. Proposal for Supplement 4 to the 03 series of amendment to Regulation No. 95 (Protection of occupants against lateral collision)

Paragraph 5.3.6.1., amend to read:

"5.3.6.1. Protection against electrical shock

. . .

In the case that If the test is performed under the condition that part(s) of the high voltage system are not energized, the protection against electrical shock shall be proved by either 5.3.6.1.3. or 5.3.6.1.4. for the relevant part(s).

For the coupling system for charging the REESS, which is not energized during driving conditions, at least one of the four criteria specified in paragraphs 5.3.6.1.1. to 5.3.6.1.4. shall be met."

II. Justification

- 1. Paragraph 5.5.1. of UN Regulation No. 12, paragraph 5.2.8.1. of UN Regulation No. 94 and paragraph 5.3.6.1. of UN Regulation No. 95 allow the possibility that systems which are energized during normal driving may not be energized during impact tests. In such a case, only "direct/indirect protection" or "isolation resistance" can be chosen to demonstrate that the system is safe.
- 2. A coupling system for charging the REESS is designed for not being energized during driving. Accordingly, it means that the system should not be energized during the impact test. Therefore all four possible safety measures can be chosen to demonstrate that the system will not be dangerous. To clarify this and to avoid any misunderstanding, the proposed amendments to the above mentioned paragraphs of UN Regulation No. 12, UN Regulation No. 94 and UN Regulation No. 95 are deemed necessary.

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