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Working Party on Passive Safety

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Item 9 of the provisional agenda

Regulation No. 12 (Steering mechanism)

Proposal for Supplement 4 to the 03 series of amendments to Regulation No. 12

Submitted by the expert from India*

The text reproduced below was prepared by the expert from India in order to complete the information regarding the body-block. It is based on a document without symbol (GRSP-46-18) distributed during the forty-sixth session of the Working Party on Passive Safety (GRSP). The modifications to the current text of Regulation No. 12 are marked in bold or strikethrough characters.

* In accordance with the programme of work of the Inland Transport Committee for 2006–2010 (ECE/TRANS/166/Add.1, 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

Annex 4,

Insert a new paragraph 2.3.1., to read:

- “2.3.1. Following are non mandatory additional guidelines for mechanical properties of the bodyblock**
- (a) Rate of loading during stiffness measurement: 250 ± 50 mm/min,**
 - (b) Centre of gravity: 551.2 ± 6 mm from top of the bodyblock,**
 - (c) Moment of inertia about lateral axis through centre of gravity: 23 ± 2.3 kg x m².”**

Annex 5,

Paragraph 3.2., amend to read:

- “3.2. The head form shall be fitted with two accelerometers ~~and a speed measuring device,~~ all capable of measuring values in the impact direction.”**

II. Justification

Annex 4,

Paragraph 2.3.1.,

The definition of the bodyblock is incomplete in the absence of the following information:

- 3.1.1. Rate of loading during stiffness measurement,
- 3.1.2. Centre of gravity,
- 3.1.3. Moment of inertia

It is proposed to adopt these guidelines based on SAE J944 (which is withdrawn by SAE)

Annex 5,

Paragraph 3.2.,

In all the head impact tests, speed measuring device is not a part of headform. It is an external stationary system with optical / non optical beams being used popularly.
