



**Economic and Social
Council**

Distr.
GENERAL

ECE/TRANS/WP.29/GRSP/2008/16
4 March 2008

Original: ENGLISH
ENGLISH AND FRENCH ONLY

ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

World Forum for Harmonization of Vehicle Regulations

Working Party on Passive Safety

Forty-third session
Geneva, 19-23 May 2008
Item 20(d) of the provisional agenda

OTHER BUSINESS

Proposal for draft amendments to Regulation No. 12
(Steering wheel)

Proposal for draft 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 clarify the test procedure of head form test in Regulations No. 12. It is based on a document without a symbol (informal document No. GRSP-42-11) distributed during the forty-second session of the Working Party on Passive Safety (GRSP). The modifications to the current text of the Regulation 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 performance of vehicles with respect to passive safety. The present document is submitted in conformity with that mandate.

A. PROPOSAL

Annex 4

Appendix, amend to read:

" Annex 4 -Appendix

(Mass: 34 - 36 kg. 50th percentile torso-shaped body block)

Rate of loading during stiffness measurement: 250 ± 5 mm/min,

Centre of gravity: 551.2 ± 6 mm from top of the bodyblock,

Moment of inertia about lateral axis through centre of gravity: 23 ± 2.3 kg × 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,~~
~~and~~ capable of measuring values in the impact direction."

Paragraph 3.3.3., amend to read:

"3.3.3. Speed:

an external speed measurement system shall be placed to record the impactor speed before the impact. The accuracy of the recording instrument should be as follows :

Accuracy:...."

Paragraph 4.3., amend to read:

"4.3. The impactor shall strike at a velocity of 24.1 km/h, **or at a speed of 19.1 km/h if it is fitted with an airbag; ...**"

B. JUSTIFICATION

Ad Annex 4, the appendix

The definition of the bodyblock is incomplete in absence of the following information, concerning the mechanical properties of the bodyblock:

- (a) Rate of loading during stiffness measurement,
- (b) Centre of gravity,
- (c) Moment of inertia.

It is proposed to adopt this information as engineering guidelines based on the Society of Automotive Engineers Standard (SAE) J944 (which has been withdrawn by SAE).

Ad Annex 5, paragraphs 3.2. and 3.3.3.

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.

Ad Annex 5, paragraph 4.3.

The modifications suggested are based on paragraph 1.4.2. of Annex 4 to Regulation No. 21 (Interior fittings).
