

REGULATION No. 17
(Strength of seats)

Proposal for draft amendments to ECE/TRANS/WP.29/GRSP/2009/7

This document is a amendment to ECE/TRANS/WP.29/GRSP/2009/7 from the expert from EC and Japan. Amendments to the current proposal are indicated in bold or strikethrough characters.

A. PROPOSAL

Annex 9

Paragraph 4.4.1., amend to read:

"4.4.1 **According to paragraph 2 of Annex 4**, the seat shall have already been set to give the design torso angle ± 1 degree measured on the H-Point machine fitted with HRMD (see Annex 5)."

Paragraphs 4.4.5. and 4.4.6., amend to read:

"4.4.5. Adjust the pelvis angle to ~~26.5 degrees from horizontal (± 2.5 degrees)~~ **the actual torso angle recorded by the procedure specified in paragraph 4.4.1 plus 1.5 ± 2.5 degrees.**

4.4.6. Position the test dummy's H-Point 20 ± 10 mm forward and 0 ± 10 mm vertically of the H-Point location measured under the condition specified in paragraph 2.12 of Annex 4, while keeping the pelvis angle ~~at 26.5 ± 2.5 degrees~~ **within the range specified in paragraph 4.4.5."**

Paragraph 4.4.11.1., amend to read:

"4.4.11.1. If the test dummy reference backset is different **more than ± 2 mm** from the HRMD backset, obtained by the procedure specified in paragraph 2.12 of Annex 4, **plus 15 mm**, then do the following:"

Paragraph 4.5., amend to read:

"4.5. BioRID II dummy.

The following checks shall be made before putting the dummy in the seat for testing. The tests shall be conducted with a BioRID II **level G** dummy built with mould 2 jacket. The dummy shall comply with both spine stature and dynamic response specifications before the test."

Paragraph 4.5.3.1.2., amend to read:

"4.5.3.1.2. Rotate the complete arm assembly so it points forward and is horizontal. Twist the arm so the elbow cannot rotate downward. Adjust the shoulder yoke rotation ~~hexagonal nut bolt~~ so the arm is suspended at 1g."

Paragraph 5.2., amend to read:

"....."

Where:

T1(X(t)) = Instantaneous $\Theta \in T1$ X position.

T1(Z(t)) = Instantaneous $\Theta \in T1$ Z position.

....."

Table 9-3, correct the unit "ms" to read "s".

Annex 10

Paragraph 4.2.2., amend to read:

"4.2.2. ~~S is the maximum thickness of the lower edge of the head restraint (within 25 mm of the head restraint lower edge) measured perpendicular to the torso line between TH and TS- from line P.~~

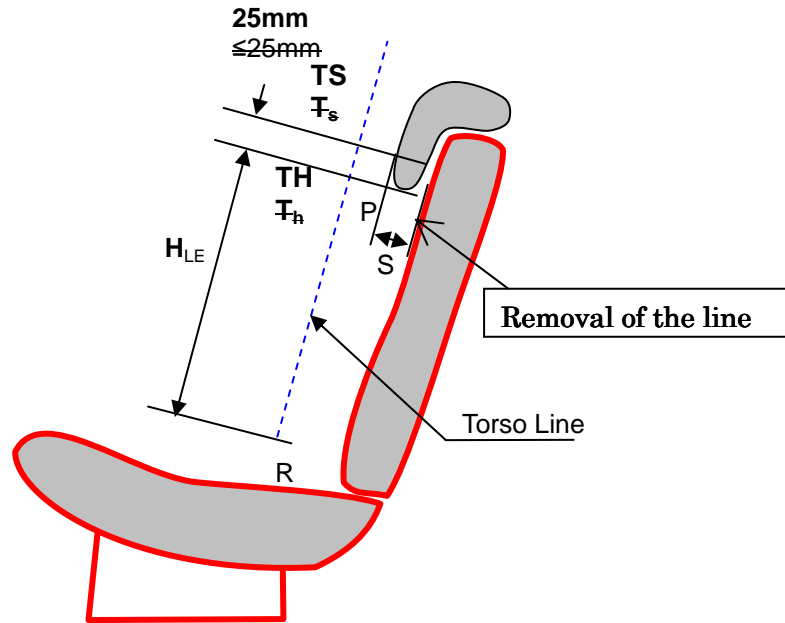
S is the minimum distance between line P and seat back, in the range between 250 mm and 460 mm upward from R-point along the torso line, measured perpendicular to the torso line."

Paragraph 4.2.3., amend to read:

"4.2.3. ~~P is a line parallel to the torso line which intersects the head restraint at TS.~~

P is a line parallel to torso line and tangent to most anterior portion of head restraint, in the range from TS to TH."

Figure 10-1, amend to read:



Annex 13 (New) - Appendix 1

The footnote */, amend to read:

"/ For details of the construction of the 3-D H-point machine refer to Society of Automotive Engineers (SAE), 400 Commonwealth Drive, Warrendale, Pennsylvania 15096, United States of America. (SAE J826 1995 version). The machine corresponds to that described in ISO Standard 6549-1999."

Paragraph 2, amend to read:

2. Lower leg segments are connected to the seat pan assembly at the T-bar joining the knees, which is a lateral extension of the adjustable thigh bar. Quadrants are incorporated in the lower leg segments to measure knee angles. Shoe and foot assemblies are calibrated to measure the foot angle. Two spirit levels orient the device in space. Body element weights are placed at the corresponding centres of gravity to provide seat penetration equivalent to a 76 kg male. All joints of the 3-D H-point machine should be checked for free movement without encountering noticeable friction."

Figure 1, amend to read:

Figure 1 - 3-D H-point machine elements designation

Figure 2, amend to read:

Figure 2 - Dimensions of the 3-D H-point machine elements and load distribution

B. JUSTIFICATION

The purposes of these amendments are for clarification of requirements to the original proposal (ECE/TRANS/WP.29/GRSP/2009/7).