

REGULATION No. 17
(Strength of seats)

Alignment to gtr No. 7 head restraints

This text refers to ECE/TRANS/WP.29/GRSP/2008/24 which was based on ECE/TRANS/WP.29/GRSP/2008/11
The modifications now proposed to ECE/TRANS/WP.29/GRSP/2008/24 are marked in bold.

PROPOSAL

Proposal for paragraph 5.5.1., amend to read:

"5.5.1.5. **At designated seating positions incapable of seating the test dummy** specified **under** paragraph 5.8. of this Regulation, the applicable head restraint shall conform to either paragraph 5.5.1.1.1., or 5.5.1.2.1, or 5.5.1.3.1., or 5.5.1.4.1. of this Regulation, as appropriate."

Proposal for paragraph 5.8., amend to read:

"5.8. Dynamic performance requirements:

5.8.1. When tested during forward acceleration **or deceleration** of the dynamic test platform, in accordance with Annex 9, at each designated seating position equipped with a head restraint, the head restraint shall **limit** the maximum rearward head O.C. (occipital condyle) horizontal movement relative to T1 (First Thoracic Vertebra) to [xx] mm for the dummy;"

Amend proposal for Annex 9 as follows:

Proposal for paragraph 2 amend to read:

"2. TEST CONDITIONS

The test procedure described in this annex is to be performed using any or all of the following, **as appropriate:**"

- 2.1. A full vehicle including at least the seat to be tested and all necessary seat and head restraint equipment, **as well as all necessary equipment for the activation of dynamic head restraints.**
- 2.2. A vehicle body in white including at least the seat to be tested and all necessary seat and head restraint equipment, **as well as all necessary equipment for the activation of dynamic head restraints.**
- 2.3. A seat equipped with its head restraint and all necessary attachment hardware, as well as all necessary equipment for the activation of dynamic head restraints."

Proposal for paragraph 3 amend to read:

"3. TEST EQUIPMENT

- 3.1. An acceleration or deceleration test sled
- 3.2. Test dummy
- 3.2.1. **The dummy shall be a BioRID II 50th percentile male test dummy.**
- 3.3. Film targets, as described in Figure 9-1 and Table 9-1, shall be applied on both sides of the head, T1 bracket and seat back.

Diagram remains

Figure 9-1 Video motion target placements

Table 9-1 Video motion target placement description

Table remains

- 3.4. A camera shall be mounted
- 3.5. Equipment for measuring and recording sled accelerations."

Proposal for paragraph 4.2 amend to read:

- "4.2. When a full vehicle is used, remove the **tyres**, wheels, fluids, and all"

Proposal for paragraph 4.4.2 amend to read:

- "4.4.2. Using any control that primarily moves the entire seat vertically, place the seat in the lowest position. Using any control that primarily moves the entire seat in the fore and aft directions, place the seat midway between the **most** forward and **most**

rearward position. If an adjustment position does not exist midway between **those** positions, the closest adjustment position to the rear of the midpoint shall be used."

Proposal for paragraph 4.4.4 amend to read:

"4.4.4. If the head restraint is adjustable, adjust the top of the head restraint to a position midway between the lowest position of adjustment and the highest position of adjustment. If an adjustment position midway between the lowest and the highest position does not exist, adjust the head restraint to the position determined by the next process. If a hard locking position exists **within** 10 mm vertically upwards from the geometric **mid-position**, this shall be the test position. If no hard locking position exists within 10 mm vertically upwards from the geometric **mid-position** then the next hard locking position down shall be the test position."

Proposal for paragraph 4.7.10.1.1. amend to read:

"4.7.10.1.1. Tip the head **fore/aft** no more than ± 1 degree from level in order to meet the backset requirement."

Proposal for paragraph 4.9. amend to read:

"4.9. All tests specified in this Annex shall be conducted at an ambient temperature of 22 ± 3 °C **and a relative humidity of between 10% and 70%. The dummy and seat being tested shall be soaked at this temperature for at least 3 hours prior to the test.**"

Renumber proposed paragraph 4.10 to read 4.11.

Insert new paragraph 4.10. to read:

"**4.10. Active elements (e.g. Active head restraint, Seat belt pretensioner) which operate in a rear impact situation shall be in an armed condition. For each element that requires a trigger, the time to fire (TTF) should be specified by the vehicle manufacturer.**"

Proposal for paragraph 5.1.1.2. amend to read:

"5.1.1.2. **T₀** definition
For pulse P1, the **T₀** (T_{zero}) shall be defined"

Proposal for paragraph 5.1.1.4. amend to read:

"5.1.1.4. shall be defined as $dT = T_{end} - \mathbf{T_0}$."

Proposal for paragraph 5.24. amend to read:

"5.2. (in 3rd sub-paragraph)

..... generates traces at each **side** as follows:

(a)
