

Proposal for Supplement 4 to the 07 series of amendments to Regulation No. 14 (Safety-belt anchorages)

I. Proposal:

Insert a new paragraph 5.4.3.8., to read:

- "5.4.3.8. In the case of a safety belts installed in vehicles category M2 and M3 and designed to restraint adult and children, the vehicle must fulfil the following conditions:**
- (a) The position of the upper belt effective anchorage must be permanently marked in the vehicle or seat to define the children position or the adult position.**
 - (b) The effective upper belt anchorage must fulfil the requirements of paragraph 5.4.3.1 to 5.4.3.6. in the adult conditions defined by the manufacturer. If movement of the height adjuster is automatic the checking of the provisions defined in the paragraph 5.4.3.1 to 5.4.3.6 will be performed with the 50% percentile HYBRID III dummie installed in the seat with the safety belt fastened.**
 - (c) The restraint system must be approved according to Regulation No.44.04 for the groups of masses defined by the manufacturer."**

Paragraph 5.3.8. to 5.3.9. (former), renumber as paragraph 5.3.9. to 5.3.10.

II. Justification:



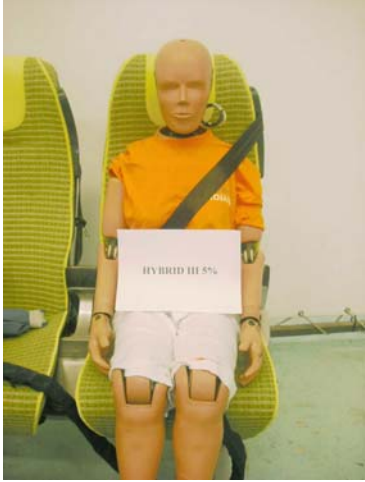

1. Introduction.

All age safety belt system

Summary:

This system, created to be installed in bus seats, allocates automatically the upper anchorage safety belt in the level of the occupant's shoulder. The effective upper anchorage is over the level of C point (according to point 5.1.4 of UN ECE R14/07) if the occupant is an Hybrid III 5th percentile or higher. This system also allows to the upper safety belt anchorage to go below the C point, working safely with children of groups II and III according to UN ECE R44/04

Positions of the effective upper belt anchorage for different ages:

<p>Hybrid III 50th percentile</p>  <p>A front view of a Hybrid III 50th percentile crash test dummy seated in a yellow chair. The dummy is wearing an orange t-shirt and white shorts. A black seatbelt is worn across the chest. A white sign with the text "HYBRID III 50%" is held in front of the dummy's chest.</p>	 <p>A side view of the Hybrid III 50th percentile crash test dummy seated in a yellow chair. The dummy is wearing an orange t-shirt and white shorts. A black seatbelt is worn across the chest. A white sign with the text "HYBRID III 50%" is held in front of the dummy's chest.</p>
<p>Hybrid III 5th percentile</p>  <p>A front view of a Hybrid III 5th percentile crash test dummy seated in a yellow chair. The dummy is wearing an orange t-shirt and white shorts. A black seatbelt is worn across the chest. A white sign with the text "HYBRID III 5%" is held in front of the dummy's chest.</p>	 <p>A side view of the Hybrid III 5th percentile crash test dummy seated in a yellow chair. The dummy is wearing an orange t-shirt and white shorts. A black seatbelt is worn across the chest. A white sign with the text "HYBRID III 5%" is held in front of the dummy's chest.</p>
<p>Child dummy P10</p>	



Child dummy P6



Child dummy P3



Seats with a combined restraint systems adequate to restrain the children and the adults have appeared in the European market. In the children position these systems don't fulfil with the effective upper belt anchorage height requirements defined in

the Regulation No.14. This document demonstrates that is not a problem of safety of this systems and the modification proposed try to allow the approval of this systems to improve the safety of the children in vehicle M2 and M3.

2. Conclusion:

Even tough this effective upper anchorage can go below C point, which is not allowed in UN ECE R14/07, in the case of a normal use it remains always over it.

