



**C L E P A**  
*European Association of  
Automotive Suppliers*

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# Putting Booster Cushions into R129

# PHASE II INCLUSIONS



- Meeting 61 CLEPA received a clear statement on the scope of the work in Phase III.
- The original terms of reference of the Informal Group required Phase II to extend Regulation No. 129 to non-integral child restraints.
  - In order to progress the work the priority was given to booster seats only.
  - This left non-integral shield systems and booster cushions to be addressed
- The Chair concluded Phase III was intended for belt-attached integral systems and welcomed proposals to amend Phases I and II for non-integral shields and for booster cushions.

# BOOSTER CUSHIONS



- 1] Compatibility
  - Reference to ISO B2 fixture
- 2] Provision of equivalent protection to the child in side impact, as is provided to the adult
  - Placing child head height into the region of the 150cm tall female adult
- 3] Minimising the inappropriate use of Booster Cushions
  - Minimum child height requirement >125cm



- Height Check
  - Booster cushion to put child's head to the height of HIII 5<sup>th</sup> percentile female
  - Dynamic testing provides upper head limit
  - Build on Dorel procedure in CRS-47-09e
  - Simplify equipment for procedure
  - Assessment with Q6 dummy on test bench (or equivalent structure).

# BOOSTER CUSHIONS



HIII 5th



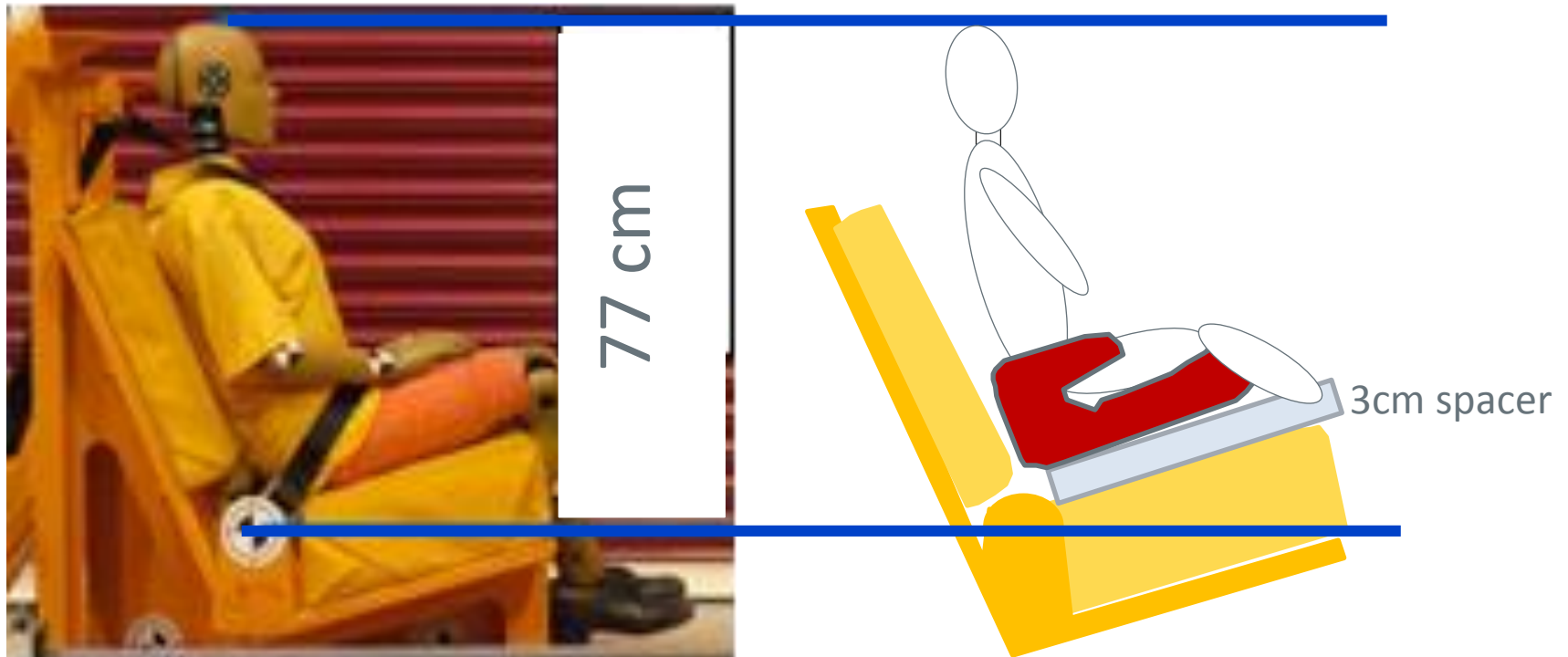
Seated height of 5<sup>th</sup> percentile child with stature 125cm is **63** cm

Seated height of Q6 is **60** cm

Need **3** cm compensation ,  
where Q6 is shorter

# SIMPLE ASSESSMENT WITH Q6 ATD

HIII 5th



# BOOSTER CUSHIONS



- Booster to require child min height of 125 cm
- Child on booster cushion to sit as minimum at HIII 5th percentile female height
- Child benefits from the same protection provided to the adult (no side impact test on cushion in R129)
- Q6 can be used on the test bench to assess minimum height of booster cushion
- Child maximum height controlled during dynamic testing