DOREL JUVENILE
Care for Precious Life

#### Booster Cushion Stature Range Definition

Proposal of an evaluation method













#### Tentative booster thickness

- According to the table given by document referenced CRS-46-03e (head position), there is some tentative booster thickness.
- In order to avoid a design restriction, Dorel propose the following method to determine the head position.



# Head position limit

- When installed on booster cushion, the top child head position in the size range claimed by the CRS manufacturer must be positioned bellow top head position given by HIII 95<sup>th</sup> male.
- The lower head position in the size range must be positioned above the top head position given by HIII 5<sup>th</sup> female





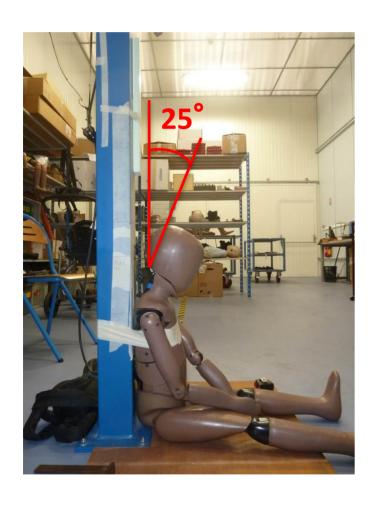
HIII 5th female

HIII 95th male



# Proposition of a measuring device

Adaptation of the existing measuring device including a Q6 head, keeping the same head angle between measuring device & dummy





Q6 in sitting position

Adapting measuring device with Q6 head



## Proposition

- Measure the head position from declared stature and check if are between 770 [885] mm limit from Cr.
- Adaptation of the measuring device (Annex of R129)















# Test Methodology

- Place the adapting measuring device in the booster.
- Position the top head position of the test device to the minimum declare stature and measure top head position from Cr.
- Position the top head position of the test device to the maximum declare stature and measure top head position from Cr.

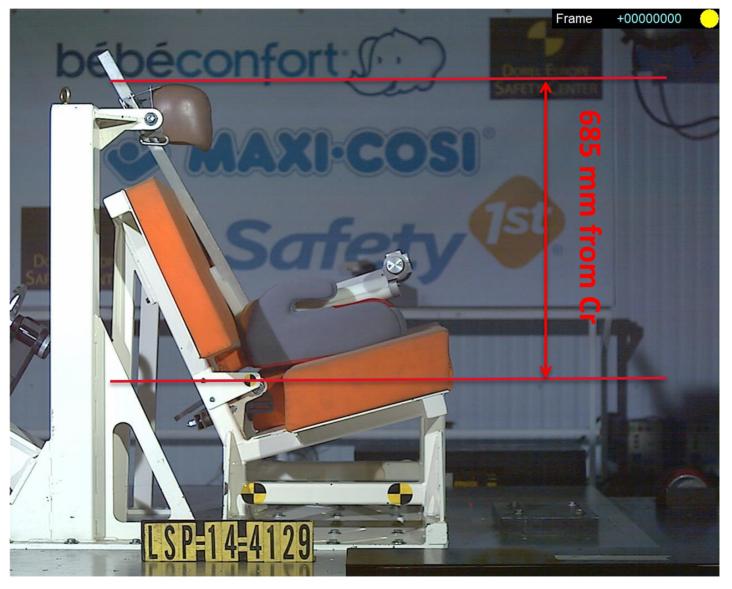
- Example: for a 125 cm to 150 mm stature declare and according to the table given in annex 18:
  - The sitting height is 63 cm for stature of 125 cm (5<sup>th</sup>)
  - The sitting height is 81.1 cm for stature of 150 cm (95<sup>th</sup>)



#### Example for stature of 125 cm

• The top head position is placed at a sitting height of 63 cm







#### Example for stature of 150 cm

• The top head position is placed at a sitting height of 81.1 cm

















