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EUROPEAN NEW CAR
ASSESSMENT PROGRAMME

Technical Bulletin

Child Restraint Systems for Installation Checks

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TB 012

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1. Introduction

From 2013 onwards, Euro NCAP has used a selection of popular Child Restraint Systems (CRS) to assess the vehicle's ability to safely and correctly accommodate child restraints. This list contains a sample of widely available, well performing child seats that represent most common types of products available on the European market. The list will be checked annually and updated if seats are no longer available on the market. Each update will occur at the start of the year preceding the year of application.

Euro NCAP does not assess or rate the child seats individually, and although the child restraint systems on the installation list are generally recommended, there are other seats available on the market that provide equal protection.

1.1 Definitions

R129 child statures

45-75 cm: Birth to approx. 12 months
45-105 cm: Birth to approx. 4 years
61-105 cm: approx. 4 months to 4 years
76-105 cm: approx. 15 months to 4 years
100-135 cm: approx. 4 years to 8 years
100-150 cm: approx. 4 years to 12 years

R129 CRS definitions

i-Size universal ISOFIX
i-Size booster seat
specific vehicle ISOFIX
specific vehicle booster seat
Universal Belted
Specific vehicle Belted
Universal booster cushion
Specific vehicle booster cushion

2. Child Restraint Systems for Installation Checks

2.1 CRS for Installation Assessment

The CRS to be used in the installation assessment are detailed below. Each CRS will be installed using the installation mode detailed.

CRS	Approval	Description & installation		
1 Maxi-Cosi Pebble 360	R129 40cm-83cm	Universal Belted Belt mounted, integral infant carrier Rearward facing Approval No: 030063	B _ _ _	ISO R2
2 Britax Römer Kidfix i-Size	R129 100cm-150cm	i-Size booster seat Belt mounted booster seat 8 th adjustment position up from bottom, lowest position is #1 Approval No: E1 129R03/04 0061 01	B _ _ _ 135cm stature	ISO B2
3 Cybex Solution Z i-Fix	R129 100cm-150cm	Specific vehicle booster seat Belt mounted, without linear side impact protection Highest adjustment position Approval No: 030036	B _ _ _ 150cm stature	ISO B3
4 Cybex Solution Z i-Fix	R129 100cm-150cm	Specific vehicle booster seat ISOFIX mounted, without linear side impact protection 8 th adjustment position up from bottom, lowest position is #1 Approval No: 030036	B I _ _ 135cm stature	ISO B3
5 Cybex Solution Z i-Fix	R129 100cm-150cm	Specific vehicle booster seat ISOFIX mounted, without linear side impact protection Highest adjustment position Approval No: 030036	B I _ _ 150cm stature	ISO B3
6 Maxi-Cosi Pearl 360 & FamilyFix 360 base	R129 40cm-105cm	i-Size universal ISOFIX ISOFIX mounted with support leg Rearward facing Approval No: 030062	_ I L _	ISO R2
7 Maxi-Cosi Pearl 360 & FamilyFix 360 base	R129 100cm-150cm	i-Size universal ISOFIX ISOFIX mounted with support leg Forward facing Approval No: 030062	_ I L _	ISO F2X
8 BeSafe iZi Kid X2 i-Size	R129 61cm-105cm ≤18.0kg	i-Size universal ISOFIX ISOFIX mounted with support leg, without SIP+ Rearward facing Approval No: 129R-000002	_ I L _	ISO R2

<p>9 Britax Römer Trifix² i-size</p>	<p>R129 76cm- 105cm</p>	<p>i-Size universal ISOFIX ISOFIX mounted with top-tether Forward facing Approval No: 129R-010015</p>	<p>_ I _ S</p>	<p>ISO F2X</p>
<p>10 BeSafe iZi Flex FIX i-Size</p>	<p>R129 100cm- 135cm</p>	<p>i-Size universal ISOFIX ISOFIX mounted Height adjustment set up from the bottom with five complete rotations of the adjustment, lowest position is #1. Approval No: 129R-02-000017</p>	<p>B I _ _ 135cm stature</p>	<p>ISO B2</p>

3. Child Restraint Systems for Dynamic Testing

For both child dummies, the requirements detailed in the Euro NCAP COP Assessment protocol, Section 3.1.3 relating to stature, CRS adjustment and integrated CRS must be followed.

3.1 Q6 Dummy

- 3.1.1 The Q6 dummy will be placed in a forward facing CRS only, rearward facing CRS are NOT accepted.
- 3.1.2 The vehicle manufacturer may recommend a CRS for the Q6.
- 3.1.3 Any belt guides, such as SecureGuard, shall only be used providing there is clear information in the vehicle handbook instructing the user to install the CRS with the guide.
- 3.1.4 Any additional adjustments, such as side impact extensions, shall only be used providing there is clear information in the vehicle handbook instructing the user of their use and required position.
- 3.1.5 Where the vehicle manufacturer does not recommend a FWF CRS for a six year old child, the front MPDB and Side AE-MDB impacts will be performed with the Q6 dummy seated in a CRS chosen by the Secretariat from Section 2 (above). It will be installed using the ISOFIX anchorages and adult belt.
- 3.1.6 Where the vehicle offers no ISOFIX anchorages, the Q6 dummy will be seated in a CRS chosen by the Secretariat from Section 2 (above) installed using the adult belt only.

3.2 Q10 Dummy

- 3.2.1 The vehicle manufacturer may recommend a booster cushion for a ten year old child (either stand-alone or as part of a booster seat with detachable backrest).
- 3.2.2 Where the vehicle manufacturer recommends to the public the use of the high back version, the tests will be performed with either the booster cushion only (backrest removed) or a booster cushion from the list below.
- 3.2.3 Any belt guides, such as the SecureGuard, shall only be used providing there is clear information in the vehicle handbook instructing the user to install the CRS with the guide.
- 3.2.4 Any additional adjustments, such as side impact extensions, shall only be used providing there is clear information in the vehicle handbook instructing the user of their use and required position.
- 3.2.5 Where the vehicle manufacturer does not recommend booster cushion, the front MPDB and Side MDB impacts will be performed with the Q10 dummy seated on a booster cushion (only) selected from the list below by the vehicle manufacturer, where no selection is made the Secretariat will choose at random.
- 3.2.6 Q10 Dummy CRS

If a CRS in the list below is fitted with a shoulder belt position guide or clip, it must NOT be used under any circumstance.

- **Graco Booster Basic** – approval number E11-0444165

The adjustable arm rest shall be positioned to the highest position.

- **Nania/OSANN UP** - approval number ECE R44: E2 – 049047

- **Peg Perego Viaggio 2-3 Shuttle** – approval number ECE R44.04: E24 - 0000256

4. Additional Information

4.1 CRS Manufacturer Contacts

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