

27 April 2018

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## Agreement

### **Concerning the Adoption of Harmonized Technical United Nations Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these United Nations Regulations\***

(Revision 3, including the amendments which entered into force on 14 September 2017)

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#### **Addendum 128– UN Regulation No. 129**

#### **Revision 1 – Amendment 3**

Supplement 2 to the 01 series of amendments – Date of entry into force: 10 February 2018

#### **Uniform provisions concerning the approval of Enhanced Child Restraint Systems used on board of motor vehicles (ECRS)**

This document is meant purely as documentation tool. The authentic and legal binding texts is: ECE/TRANS/WP.29/2017/62.



**UNITED NATIONS**

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\* Former titles of the Agreement:  
Agreement concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor Vehicle Equipment and Parts, done at Geneva on 20 March 1958 (original version);  
Agreement concerning the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these Prescriptions, done at Geneva on 5 October 1995 (Revision 2).

*Paragraph 2.6.*, amend to read:

- "2.6.        "*Integral Universal ISOFIX*" is an ISOFIX Enhanced Child Restraint System comprising either a top-tether or a support-leg, to limit the pitch rotation of the Enhanced Child Restraint System, attached to, or supported by, the corresponding vehicle."

*Paragraph 2.16.*, amend to read:

- "2.16.        "*CRF pitch angle*" is the angle between the bottom surface of the fixture "ISO/F2 as defined in UN Regulation No. 16 (Annex 17, Appendix 2, Figure 2) and the horizontal Z plane of the vehicle as defined in UN Regulation No. 14 (Annex 4, Appendix 2), with the fixture installed in the vehicle as defined in UN Regulation No. 16 (Annex 17, Appendix 2)."

*Paragraph 2.17.1.*, amend to read:

- "2.17.1.      "*ISOFIX Vehicle seat fixture*" means a fixture, according to ISOFIX size envelopes whose dimensions are given in Figures 1 to 7 of Appendix 2 to Annex 17 to UN Regulation No. 16, used by an Enhanced Child Restraint System manufacturer to determine the appropriate dimensions of an ISOFIX Enhanced Child Restraint System and the location of its ISOFIX attachments."

*Paragraph 2.56.*, amend to read:

- "2.56.        "*Module*", is a part of an ECRS that is separate from the ISOFIX attachments and is in direct contact with the child. A module can be used whether or not as a stand-alone to restrain a child in a car. A base is allowed to accept more than one module (Module A, Module B, etc.)."

*Paragraph 4.6.*, amend to read:

- "4.6.        Marking for integral ECRS including ISOFIX connections attachments. The marking shall be located on the part of the ECRS which includes the ISOFIX attachments.

One of the following information labels shall be permanently visible to someone installing the Enhanced Child Restraint System in a vehicle:"

*Paragraph 4.6.2.*, amend to read:

- "4.6.2.        Specific Vehicle ISOFIX ECRS: If the product includes ISOFIX attachments, the following information shall be permanently visible to someone installing the restraint in a vehicle:

The ISO ISOFIX logo followed by the reference(s) that is/are appropriate for the ISOFIX size fixture(s) into which the product fits. As a minimum, a symbol consisting of a circle with a diameter of minimum 13 mm and containing a pictogram, the pictogram shall contrast with the background of the circle. The pictogram shall be clearly visible either by means of contrast colors or by adequate relief if it is moulded or embossed.



ISO/F2, ISO/R3 and ISO/L1

The Specific vehicle ISOFIX Enhanced Child Restraint System shall have a permanently attached label visible to the person installing the Enhanced Child Restraint System in the car, containing the following information:

Specific Vehicle ISOFIX 

*Paragraph 4.6.3.*, amend to read:

"4.6.3. An international approval mark as defined in paragraph 5.4.1. In case the ECRS containing module(s) this marking shall be permanently attached to the part of the ECRS which includes the ISOFIX attachments."

*Paragraph 5.4.3.1.*, amend to read:

"5.4.3.1. The words "R129" followed by a dash and the same approval number as the part of the ECRS which includes the ISOFIX attachments;"

*Paragraph 6.3.2.1.*, amend to read:

"6.3.2.1. Internal geometric characteristics

The Technical Service conducting the approval tests shall verify that the internal dimensions of the Enhanced Child Restraint System conform to the requirements of Annex 18. The minimum dimensions for shoulder breadth, hip breadth and sitting height shall be fulfilled simultaneously for any stature within the size range declared by the manufacturer. Integral Enhanced Child Restraint System shall also fulfil the minimum and maximum dimensions of shoulder height, for any stature within the size range declared by the manufacturer.

Non-integral Enhanced Child Restraint System shall also fulfil the maximum dimensions of shoulder height, for any stature within the size range declared by the manufacturer."

*Paragraph 6.3.2.2.1.*, amend to read:

"6.3.2.2.1. Integral Class Enhanced Child Restraint Systems

The maximum external dimensions for the width, height and depth of the Enhanced Child Restraint System and the locations of the ISOFIX anchorages system, with which its attachments shall engage, shall be defined by the ISOFIX Vehicle Seat Fixture as defined in paragraph 2.17.1. of this Regulation.

- (a) i-Size Forward facing Enhanced Child Restraint Systems shall fit within the ISO/F2X size envelope for a reduced-height forward-facing toddler CRS;
- (b) i-Size Rearward facing Enhanced Child Restraint Systems shall fit within the ISO/R2 size envelope for a reduced-size rearward-facing toddler CRS;
- (c) Specific vehicle ISOFIX Enhanced Child Restraint Systems shall fit:

- (i) In vehicle(s) specified in a list or
- (ii) At least in one of the ISO (R1, R2X, R2, R3, F2X, F2, F3, L1, L2) size envelopes as described in Annex 17 Appendix 2 of UN Regulation No. 16.
- (d) Shall fit at least in one of ISO (R1, R2, R3, F2, F2X, F3, L1, L2) size envelope as described in Annex 17 Appendix 2 of UN Regulation No. 16."

*Paragraph 6.3.5.1.*, amend to read:

"6.3.5.1. Support-leg and support-leg foot geometrical requirements

The support leg, including its attachment to the Enhanced child restraint systems and the support-leg foot shall lie completely within the support leg dimension assessment volume (see also figures 1 and 2 of annex 19 of this Regulation), which is defined as follows:

- (a) In width by two planes parallel to the X'-Z' plane separated by 200 mm, and centered around the origin; and
- (b) In length by two planes parallel to the Z'-Y' plane and positioned at distances of 585 mm and 695 mm forward of the origin along the X' axis; and
- (c) In height by a plane parallel to the X'-Y' plane, positioned at a distance of 70 mm above the origin and measured perpendicular to the X'-Y' plane. Rigid, non-adjustable parts of the support leg shall not extend beyond a plane parallel to the X'-Y' plane, positioned at a distance of 285 mm below the origin and perpendicular to the X'-Y' plane.

The support-leg may protrude the support-leg dimension assessment volume, providing it remains within the volume of the relevant CRF."

*Paragraph 6.6.4.1.6.2.*, amend to read:

"6.6.4.1.6.1.1. Without the anti-rotation device in use, unless:

- (a) A mechanism or
  - (b) A visual and audible warning signal
- is provided to prevent incorrect use of the anti-rotation device.

6.6.4.1.6.1.2. Without the shoulder strap positioner in use, unless:

- (a) A mechanism or
  - (b) A visual and audible warning signal
- is provided to prevent incorrect use of the shoulder strap positioner."

*Paragraph 7.2.8.*, amend to read:

"7.2.8. The complete seat, or the component fitted with ISOFIX attachments (e.g. ISOFIX base) if it has a release button, is attached rigidly to a test rig in such a way that ISOFIX attachments are vertically aligned as shown in Figure 3. A 6 mm diameter bar, 350 mm long, shall be attached to the ISOFIX attachments. A mass of 5 kg shall be attached to the extremities of the bar."

*Paragraph 7.2.8.2.*, amend to read:

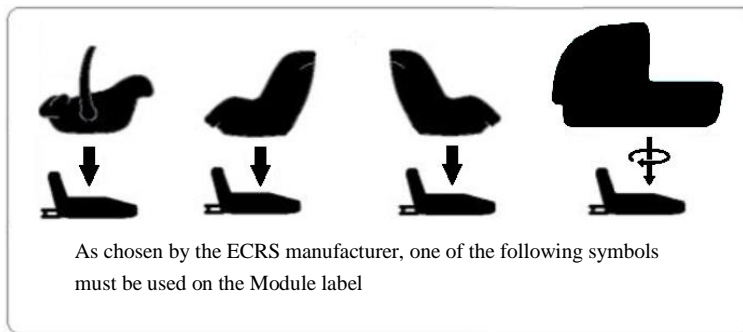
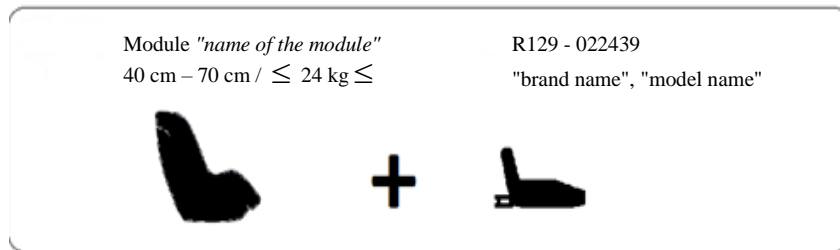
"7.2.8.2. The ISOFIX attachments ... of 25 mm."

Paragraph 7.2.8.4., amend to read:

"7.2.8.4. The ISOFIX attachments opening force to be measured shall be that needed to disengage the first attachment."

Annex 2, Arrangements of the module mark in combination with an approval mark, the figures, to be deleted and insert new figures, to read:

"...



..."

Annex 8,

Paragraph 1.1., amend to read:

"1.1. The dummies prescribed in this Regulation are described in this annex, in technical drawings<sup>1</sup> and in the user manuals. The abdominal pressure sensors prescribed in this Regulation are described in this annex, in technical drawings and in the user manuals.

<sup>1</sup> The configurations of each dummy or abdominal pressure sensors are described and deposited in a transitory way on the website of the informal working group on Child Restraint Systems: <https://www2.unece.org/wiki/display/trans/Q-Dummy+drawings>"

Annex 21, amend to read:

**"Annex 21**

"...

Load application device II

...

<i>Stretch length</i>	<i>(+/- 5 mm)</i>					
	Q 0	Q 1	Q 1,5	Q 3	Q 6	Q 10
Main belt (A)	1740 mm	1850 mm	1900 mm	2000 mm	2000 mm	2100 mm
Hip belt (B)	530 mm	560 mm	600 mm	630 mm	660 mm	800 mm
Lower dimension (C)	125 mm	150 mm	150 mm	170 mm	200 mm	200 mm
Mid dimension (D)	270 mm	300 mm	350 mm	380 mm	380 mm	400 mm

..."

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