



**Economic and Social
Council**

Distr.

RESTRICTED

TRANS/WP.29/561

30 April 1997

ENGLISH

Original: ENGLISH
and FRENCH

ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

Working Party on the Construction of Vehicles

DRAFT SUPPLEMENT 1 TO THE 03 SERIES OF AMENDMENTS
TO REGULATION No. 44
(Child restraints)

Note: The text reproduced below was adopted by the Administrative Committee (AC.1) of the amended 1958 Agreement at its fifth session, following the recommendation by the Working Party at its one-hundred-and-eleventh session. It is based on document TRANS/WP.29/R.789, not amended (TRANS/WP.29/534, paras. 74 and 136).

The distribution of documents of the Inland Transport Committee and its subsidiary bodies is limited. They are distributed only to governments, to specialized agencies and to governmental and non-governmental organizations which take part in the work of the Committee and of its subsidiary bodies, and should not be given to newspapers or periodicals.

Insert a new paragraph 7.1.4.1.8., to read:

"7.1.4.1.8. During the dynamic tests, the standard safety-belt used to install the child restraint shall not become disengaged from any guide or locking device utilised for the test conducted."

Paragraph 7.2.1.7., amend to the value of "5,000 opening and closing cycles" to read "5,000 \pm 5 opening and closing cycles".

Paragraph 7.2.2.7., amend the value of "5,000 cycles" to read "5,000 \pm 5 cycles".

Paragraph 8., amend to read (inserting a new footnote +/-):

"8. DESCRIPTION OF TESTS +/-

+/- Tolerances on dimensions unless otherwise stated, not valid for boundaries

Range of dimensions (mm)	less than 6	above 6 to 30	above 30 to 120	above 120 to 315	above 315 to 1000	above 1000
\pm Tolerance (mm)	0.5	1	1.5	2	3	4

Angular tolerances unless otherwise stated: $\pm 1^{\circ}$

Paragraph 8.1.1.1., amend the value of "50 hours" to read "50 \pm 0.5 hours".

Paragraph 8.1.1.2., amend to read:

"..... then allowed to dry at room temperature of 18 to 25°C for 24 \pm 1 hours before inspection in accordance with paragraph 7.1.1.2. above."

Paragraph 8.1.3.6.3.2., amend the tension value of "250 \pm 50N" to read "250 \pm 25N".

Paragraph 8.2.1.1.2., amend the tension value of "200N" to read "200 \pm 2N".

Paragraph 8.2.1.3.2., amend to read:

"..... at a traverse speed of 100 \pm 20 mm/min until the required values are reached."

Paragraph 8.2.2.1.1., amend to read:

"..... at a rate of 100 \pm 20 mm/min and the maximum force measured to the nearest integer value of N after the first 25 \pm 5 mm of strap movement."

Paragraph 8.2.3.3., amend to read:

"..... one end of which bears a load of 50 \pm 0.5N (guided in a manner"

Paragraph 8.2.3.5., amend to read:

"8.2.3.5. 20 ± 2 pre-test cycles shall then be completed and
1,000 ± 5 cycles shall then be completed at a frequency of
30 ± 10 cycles per minute, the total amplified being"

Paragraph 8.2.5.1.2., amend to read:

"..... The speed of traverse shall be 100 ± 20 mm/min. The free
length"

Paragraph 8.2.5.2.1.1., amend to read:

"8.2.5.2.1.1. The strap shall be kept for 24 ± 1 hours in an atmosphere having
a temperature of 23° ± 5°C and a relative humidity of 50 ± 10
per cent. If the test is"

Paragraph 8.2.5.2.2.2., amend to read:

"8.2.5.2.2.2. After exposure, the strap shall be kept for a minimum of
24 hours in an atmosphere having a temperature of 23° ± 5°C and a
relative humidity of 50 ± 10 per cent. The breaking load"

Paragraph 8.2.5.2.3.1., amend to read:

"8.2.5.2.3.1. The strap shall be kept for a minimum of 24 hours in an
atmosphere having a temperature of 23° ± 5°C and a relative
humidity of 50 ± 10 per cent."

Paragraph 8.2.5.2.3.2., amend to read:

"8.2.5.2.3.2. The strap shall then be kept for 90 ± 5 minutes on a plain
surface in a low-temperature chamber in which the air
temperature is -30 ± 5°C. It shall then be folded and the fold
shall be loaded with a weight of 2 ± 0.2 kg previously cooled to
-30 ± 5°C. When the strap has been kept under load for
30 ± 5 minutes in the same"

Paragraph 8.2.5.2.4.1., amend to read:

"8.2.5.2.4.1. The strap shall be kept for 180 ± 10 minutes in a heating-
cabinet atmosphere"

Paragraph 8.2.5.2.5.1., amend to read:

"8.2.5.2.5.1. The strap shall be kept fully immersed for
180 ± 10 minutes in distilled water,"

Paragraph 8.2.5.2.6.1., amend to read:

"..... shall be kept for a minimum of 24 hours before testing
in an atmosphere having a temperature of 23° ± 5°C and a
relative humidity of 50 ± 10 per cent. The room temperature
....."

Paragraph 8.2.5.2.6.2., the table, replace by the following new table:

"

	Load (N)	Cycles per minute	Cycles (No.)
Type 1 procedure	10 ± 0.1	30 ± 10	$1,000 \pm 5$
Type 2 procedure	5 ± 0.05	30 ± 10	$5,000 \pm 5$

"

Paragraph 8.2.6.1., amend to read:

"..... and a force equal to twice (± 5 per cent) the mass of the heaviest dummy of group I shall be applied for at least one second. The lower"

Paragraph 8.2.6.2., amend to read:

"..... be attached to a mass of 5.25 ± 0.05 kg. There shall be 650 ± 40 mm of free webbing between the mass and the point where the webbing leaves the frame. The lock-off shall be fully applied and a mark made on the belt where it enters the lock-off. The mass shall be raised and released so that it falls freely over a distance of 25 ± 1 mm. This shall be repeated 100 times ± 2 at a frequency of 60 ± 2 cycles per minute to simulate the jerking"

Paragraph 8.2.7., amend to read:

".....
The webbing must be cycled for a total distance of not less than 150 mm through the adjuster. This movement shall be such that at least 100 mm of webbing on the side of the reference line towards the free end of the webbing and the remainder of the moving distance (approx. 50 mm) on the integral harness side of the reference line moves through the adjuster. If the length"

Paragraph 8.3.2., amend the values of "150 mm" to read " 150 ± 5 mm" (twice) and the value of "500 mm" to read " 500 ± 5 mm".

Annex 5,

Figure 1, amend the value of "F = 10N" to read " $F = 10 \pm 0.1$ N" (twice).

Figure 2, amend the value of "F = 5N" to read " $F = 5 \pm 0.05$ N" (twice).

Figure 3, amend the value of "F = 50N" to read " $F = 50 \pm 0.5$ N".

Annex 6,

Paragraph 3.2.2., amend the value of "5,000N" to read " $5,000 \pm 50$ N".

Annex 6-Appendix 1,

Figure 2, replace by the following new figure 2:

Figure 2:
Dimensions of the aluminium bottom-plate."

Figure 4, replace by the following new figure 4:

"

Figure 4:
3-Dimensional view of seat"

Annex 6-Appendix 2, Figures 2 and 3, replace by the following new figures 2 and 3:

Figure 2:
Stopping device olive-shaped knob

Figure 3:
Stopping device olive-shaped knob

Annex 6-Appendix 3 (former Appendix 4), the existing Figure, renumber as Figure 1 and replace by the following:

Annex 13,

Paragraph 2., amend the value of "33 mm" to read "33 ± 0.5 mm".

Paragraph 6., amend the value of "1300 mm" to read "1300 ± 5 mm".

Annex 15, introduce the following additional explanatory notes:

"Paragraph 2.10.1.

A quick adjuster can also be a device with a rotation shaft and spring similar to a retractor with a manual release. The adjuster should be tested to the requirements of paragraphs 7.2.2.5. and 7.2.3.1.3.

Paragraph 6.1.2.

For rearward-facing child restraints the correct position of the top of the restraint relative to the child dummy head is ensured by installing the largest dummy, for which the device was specified, in the most reclined configuration, and making sure that a horizontal line at the eye height passes below the top of the seat.

Paragraph 7.1.2.1. and annexes 17 and 18

Either energy absorbing material, or the integral material of the child restraint structure can be tested for compliance with Annex 17 and 18, where the structure is not homogenous, or if there is likely to be varying performance over the child restraint system structure, the testing organization will determine the worst case for testing compliance. The energy absorbing material may form the whole or part of the child restraint system cover.

Paragraph 7.1.3.

The overturning test will be conducted using the same installation procedure and parameters as those defined for the dynamic test.

Paragraph 7.1.3.1.

Stopping of the rig during the overturning is not allowed.

Paragraph 7.1.4.2.2.

The wording of this paragraph refers to accelerations representing tensile loads in the spine of the dummy.

Paragraph 7.2.4.4.

Items which may be disassembled or unthreaded and where incorrect re-assembly is probable for an untrained user and could result in a dangerous configuration shall not be allowed."

Annex 17,

Paragraph 3.3., amend the value of "100 mm" to read "100 -0/+5mm".

Annex 20, replace by the following:

"Annex 20
Typical buckle strength test device

_____"