



Economic and Social Council

Distr.: General
15 March 2024

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on Passive Safety

Seventy-fifth session

Geneva, 27–31 May 2024

Item 7 of the provisional agenda

UN Regulation No. 16 (Safety-belts)

Proposal for the 10 Series of Amendments to UN Regulation No. 16 (Safety-belts)

Submitted by the Ad hoc Group on splitting UN Regulation No. 16 (Safety-belts)*

The text reproduced below was prepared by the experts of the Ad Hoc Group on splitting UN Regulation No. 16 into three new UN Regulations, separating safety-belt components and restraint systems from safety-belt installation requirements and safety-belt reminders. The modifications to the current text of the UN Regulation are marked in bold for new or strikethrough for deleted characters.

* In accordance with the programme of work of the Inland Transport Committee for 2024 as outlined in proposed programme budget for 2024 (A/78/6 (Sect. 20), table 20.5), the World Forum will develop, harmonize and update UN Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

I. Proposal

The title, amend to read:

"UN Regulation No. 16

Uniform Provisions Concerning the Approval of:

- I. ~~Safety-Belts and Restraint Systems, child restraint systems and ISOFIX child restraint systems~~ for Occupants of Power-Driven Vehicles
- II. ~~Vehicles equipped with safety-belts, safety-belt reminders, restraint systems, child restraint systems and ISOFIX child restraint systems and i-Size child restraint systems~~"

Contents, amend to read:

"Contents

Page**

Regulation

0.	Introduction	
1.	Scope	
2.	Definitions	
3.	Application for Approval	
4.	Markings	
5.	Approval	
6.	Specifications	
7.	Tests	
8.	Requirements concerning the installation in the vehicle Reserved	
9.	Conformity of Production	
10.	Penalties for Non-Conformity of Production	
11.	Modifications and Extension of Approval of the vehicle type or Safety-Belt or Restraint System Type	
12.	Production Definitively Discontinued.....	
13.	Instructions.....	
14.	Names and Addresses of Technical Services Responsible for Conducting Approval Tests, and of Type Approval Authorities	
15.	Transitional Provisions.....	

** Page numbers will be added at a later stage.

Annexes

1A	Communication concerning the approval or extension or refusal or withdrawal of approval or production definitively discontinued of a vehicle type with regard to safety belt pursuant to UN Regulation No. 16	
1B	Communication Concerning the Approval, Extension, Refusal, Withdrawal of Approval or Production Definitively Discontinued of a Type of Safety-Belt or Restraint system for Adult Occupants of Power-Driven Vehicles Pursuant to UN Regulation No. 16	
2	Arrangements of the Approval Marks.....	
3	Diagram of an Apparatus to Test Durability of Retractor Mechanism	
4	Diagram of an Apparatus to Test Locking of Emergency Locking Retractors	
5	Diagram of an Apparatus for the Dust-Resistance Test	
6	Description of the Trolley, Seat, Anchorages and Stopping Device	
7	Description of the Manikin	
8	Description of the Curve of a Trolley's Deceleration or Acceleration as a Function of Time	
9	Instructions.....	
10	Dual Buckle Test.....	
11	Abrasion and the Micro-Slip Test	
12	Corrosion Test.....	
13	Order of Tests.....	
14	Control of Conformity of Production.....	
15	Procedure to Determine the "H" point and the Actual Torso Angle for Seating Positions in Motor Vehicles.....	
	Appendix 1: Description of the 3-D "H" Point Machine.....	
	Appendix 2: Three-dimensional Reference Xsystem	
	Appendix 3: Reference data concerning seating positions	
16	Safety belt installation showing the belt types and retractor types	
17	Requirements for the installation of safety belts and restraint systems for adult occupants of power driven vehicles on forward facing seats, for the installation of ISOFIX child restraint systems and i size child restraint systems	
	Appendix 1: Provisions concerning the installation of "universal" category child restraint systems installed with the safety belt equipment of the vehicle	
	Appendix 2: Provisions concerning the installation of forward facing and rearward facing ISOFIX child restraint systems of universal and semi universal categories installed on ISOFIX or i Size positions	
	Appendix 3: Example of detailed information e.g. for child restraint system manufacturers	
	Appendix 4: Installation of 10 year manikin.....	
	Appendix 5: Provisions concerning the installation of forward facing booster seat child restraint systems of i Size and specific categories installed on vehicle seating positions or i Size seating positions.....	
18	Safety belt reminder tests.....	"

Insert new paragraph 0., to read:

"0. Introduction

During the seventy-third session of the Working Party on Passive Safety (GRSP) held in May 2023, it was decided to split UN Regulation No. 16 into three UN Regulations:

- safety-belts and restraint systems (components)
- safety-belts and child restraint systems installation (vehicle)
- safety-belt reminders (vehicle)

UN Regulation No. XXX consists of the specific requirements and approval process of safety-belts and restraint systems only. The requirements for the installation of safety-belts and restraint systems, child restraint systems, ISOFIX child restraint systems and i-Size child restraint systems and safety-belt reminders have been taken out and moved to two new UN Regulations. Therefore, it is important to define clear transitional provisions in this amendment, explaining the equivalence between approvals issued according to those two new Regulations and UN Regulation No. 16 as amended by the 09 series of amendments."

Paragraph 1. – Scope, amend to read:

"1. Scope

This Regulation applies to:

- ~~1.1.~~ Vehicles of category M, N, O, L₂, L₄, L₅, L₆, L₇ and T¹), with regard to the installation of safety belts and restraint systems which are intended for separate use, i.e. as individual fittings, by persons of adult build occupying forward facing, rearward facing and side facing seats;
- ~~1.2.~~ **1.1.** Safety-belts and restraint systems which are intended for separate use, i.e. as individual fittings, by persons of adult build occupying forward-facing, rearward-facing and side-facing seats, and are designed for installation in vehicles of category M, N, O, L₂, L₄, L₅, L₆, L₇ and T¹);
- ~~1.3.~~ Vehicles of category M₁ and N₁¹ with regard to the installation of child restraint systems and ISOFIX child restraint systems.
- ~~1.4.~~ All seating positions in vehicle categories M and N fitted with safety belt with regard to safety belt reminder.
- ~~1.5.~~ At the request of the manufacturer, it also applies to the installation of child restraint systems and ISOFIX child restraint systems designated for installation in vehicles of categories M₂ and M₃.¹
- ~~1.6.~~ **1.2.** At the request of the manufacturer, it also applies to safety-belts designated for installation on side-facing seats in vehicles of category M₃ (Class II, III or B¹).
- ~~1.7.~~ At the request of the manufacturer, it also applies to installing i-Size child restraint systems, in case i-Size seating positions are defined by the vehicle manufacturer."

¹ As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.7, para. 2 - <https://unece.org/transport/standards/transport/vehicle-regulations-wp29/resolutions>

Paragraph 2. – Definitions, amend to read:

"2. Definitions

2.1. ~~Safety belt (seat belt, belt)~~

"Safety-belt (seat-belt, belt)" means ~~a~~An arrangement of straps with a securing buckle, adjusting devices and attachments which is capable of being anchored to the interior of a power-driven vehicle and is designed to diminish the risk of injury to its wearer, in the event of collision or of abrupt deceleration of the vehicle, by limiting the mobility of the wearer's body. Such an arrangement is generally referred to as a "belt assembly", which term also embraces any device for absorbing energy or for retracting the belt.

The arrangement can be tested and approved as a safety-belt arrangement or as a restraint system.

2.1.1. ~~Lap belt~~

"Lap belt" means ~~a~~A two-point belt which passes across the front of the wearer's pelvic region.

2.1.2. ~~Diagonal belt~~

"Diagonal belt" means ~~a~~A belt which passes diagonally across the front of the chest from the hip to the opposite shoulder.

2.1.3. ~~Three-point belt~~

"Three point belt" means ~~a~~A belt which is essentially a combination of a lap strap and a diagonal strap.

2.1.4. ~~S-type belt~~

"S-type belt" means ~~a~~A belt arrangement other than a three-point belt or a lap belt.

2.1.5. ~~Harness belt~~

"Harness belt" means ~~an~~ A S-type belt arrangement comprising a lap belt and shoulder straps; a harness belt may be provided with an additional crotch strap assembly.

2.2. ~~Belt type~~

"Belt type": Belts of different "types" are belts differing substantially from one another; the differences may relate in particular to:

2.2.1. Rigid parts (buckle, attachments, retractor, etc.);

2.2.2. The material, weave, dimensions and colour of the straps; or

2.2.3. The geometry of the belt assembly.

2.3. ~~Strap~~

"Strap" means ~~a~~A flexible component designed to hold the body and to transmit stresses to the belt anchorages.

2.4. ~~Buckle~~

"Buckle" means ~~a~~A quick-release device enabling the wearer to be held by the belt. The buckle may incorporate the adjusting device, except in the case of a harness belt buckle.

2.5. ~~Belt adjusting device~~

"Belt adjusting device" means ~~a~~A device enabling the belt to be adjusted according to the requirements of the individual wearer and to the position of

the seat. The adjusting device may be part of the buckle, or a retractor, or any other part of the safety-belt.

2.6. ~~Pre-loading device~~

"Pre-loading device" means ~~a~~An additional or integrated device which tightens the seat-belt webbing in order to reduce the slack of the belt during a crash sequence.

2.7. "Reference zone" means the space between two vertical longitudinal planes, 400 mm apart and symmetrical with respect to the H-point, and defined by rotation from vertical to horizontal of the head-form apparatus, described in UN Regulation No. 21 Annex 1. The apparatus shall be positioned as described in that annex to UN Regulation No. 21 and set to the maximum length of 840 mm.

2.8. "Airbag assembly" means a device installed to supplement safety-belts and restraint systems in power-driven vehicles, i.e. system which, in the event of a severe impact affecting the vehicle automatically deploys a flexible structure intended to limit, by compression of the gas contained within it, the gravity of the contacts of one or more parts of the body of an occupant of the vehicle with the interior of the passenger compartment. Any such described deployed structure shall not be considered as a rigid part.

2.9. "Passenger airbag" means an airbag assembly intended to protect occupant(s) in seats other than the driver's in the event of a frontal collision.

~~2.10. "Child restraint" means a safety device as defined in UN Regulation No. 44 or UN Regulation No. 129.~~

~~2.11. "Rearward facing" means facing in the direction opposite to the normal direction of travel of the vehicle."~~

Paragraphs 2.12. to 2.15., renumber as 2.10. to 2.13. and amend to read:

~~2.12.~~ 2.10. **Attachments**

"Attachments" means ~~p~~Parts of the belt assembly including the necessary securing components, which enable it to be attached to the belt anchorages.

~~2.13.~~ 2.11. **Energy absorber**

"Energy absorber" means ~~a~~Device designed to disperse energy independently of or jointly with the strap and forming part of a belt assembly.

~~2.14.~~ 2.12. **Retractor**

"Retractor" means ~~a~~Device to accommodate part or the whole of the strap of a safety-belt.

~~2.14.1.~~ 2.12.1. **Non locking retractor (type 1)**

"Non-locking retractor (type 1)" means ~~a~~A retractor from which the strap is extracted to its full length by a small external force and which provides no adjustment for the length of the extracted strap.

~~2.14.2.~~ 2.12.2. **Manually unlocking retractor (type 2)**

"Manually unlocking retractor (type 2)" means ~~a~~A retractor requiring the manual operation of a device by the user to unlock the retractor in order to obtain the desired strap extraction and which locks automatically when the said operation ceases.

~~2.14.3.~~ 2.12.3. **Automatically locking retractor (type 3)**

"Automatically locking retractor (type 3)" means ~~a~~A retractor allowing extraction of the strap to the desired length and which, when the buckle is

fastened, automatically adjusts the strap to the wearer. Further extraction of the strap is prevented without voluntary intervention by the wearer.

~~2.14.4.~~ **2.12.4.** Emergency locking retractor (type 4)

"Emergency locking retractor (type 4)" means aA retractor which during normal driving conditions does not restrict the freedom of movement by the wearer of the safety-belt. Such a device has length adjusting components which automatically adjust the strap to the wearer and a locking mechanism actuated in an emergency by:

~~2.14.4.1.~~ **2.12.4.1.** Deceleration of the vehicle (single sensitivity).

~~2.14.4.2.~~ **2.12.4.2.** A combination of deceleration of the vehicle, movement of the webbing or any other automatic means (multiple sensitivity).

~~2.14.5.~~ **2.12.5.** ~~Emergency locking retractor with higher response threshold (type 4N)~~

"Emergency locking retractor with higher response threshold (type 4N)" means aA retractor of the type defined in paragraph ~~2.14.12.4.~~, but having special properties as regards its use in vehicles of categories M₂, M₃, N₁, N₂ and N₃.²

~~2.14.6.~~ **2.12.6.** ~~Belt adjustment device for height~~

"Belt adjustment device for height" means aA device enabling the position in height of the upper pillar loop (directly connected to the vehicle or the rigid seat structure) of a belt to be adjusted according to the requirements of the individual wearer and the position of the seat. Such a device may be considered as a part of the belt or a part of the anchorage of the belt.

~~2.14.7.~~ **2.12.7.** ~~Flexible shoulder adjustment device for height~~

"Flexible shoulder adjustment device for height" means aA device for adjusting to the shoulder height of the individual wearer, where the adjusting part is not directly attached to the vehicle construction (e.g. pillar) or the seat construction (e.g. the rigid seat structure), but where the adjusting of the shoulder part:

- (a) Is realized via shifting over a flexible construction; and
- (b) Is not interfering the routing of the lap belt.

~~2.15.~~ **2.13.** ~~Belt anchorages~~

"Belt anchorages" means pParts of the vehicles structure or seat structure or any other part of the vehicle to which the safety-belt assemblies are to be secured."

Paragraph 2.16., shall be deleted

~~2.16.~~ ~~Vehicle type as regards safety belts and restraint systems~~

~~Category of power driven vehicles which do not differ in such essential respects as the dimensions, lines and materials of components of the vehicle structure or seat structure or any other part of the vehicle to which the safety-belts and the restraint systems are attached."~~

Paragraphs 2.17. to 2.28., renumber as paragraphs 2.14. to 2.25. and amend to read:

~~2.17.~~ **2.14.** ~~Restraint system~~

"Restraint system" means aA system for a specific vehicle type or a type defined by the vehicle manufacturer and agreed by the Technical Service consisting of a seat and a belt fixed to the vehicle by appropriate means and

² As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.7, para. 2 - <https://unece.org/transport/standards/transport/vehicle-regulations-wp29/resolutions>

consisting additionally of all elements which are provided to diminish the risk of injury to the wearer, in the event of an abrupt vehicle deceleration, by limiting the mobility of the wearer's body.

~~2.18.~~ **2.15. Seat**

"Seat" means a structure which may or may not be integral with the vehicle structure complete with trim, intended to seat one adult person. The term covers both an individual seat or part of a bench seat intended to seat one person.

~~2.18.1.~~ **2.15.1.** "A *front passenger seat*" means any seat where the "foremost H-point" of the seat in question is in or in front of the vertical transverse plane through the driver's R-point.

~~2.18.2.~~ **2.15.2.** "*Forward-facing seat*" means a seat which can be used while the vehicle is in motion and which faces towards the front of the vehicle in such a manner that the vertical plane of symmetry of the seat forms an angle of less than +10° or -10° with the vertical plane of symmetry of the vehicle.

~~2.18.3.~~ **2.15.3.** "*Rearward-facing seat*" means a seat which can be used while the vehicle is in motion and which faces towards the rear of the vehicle in such a manner that the vertical plane of symmetry of the seat forms an angle of less than +10° or -10° with the vertical plane of symmetry of the vehicle.

~~2.18.4.~~ **2.15.4.** "*Side-facing seat*" means a seat which can be used while the vehicle is in motion and which faces towards the side of the vehicle in such a manner that the vertical plane of symmetry of the seat forms an angle of 90° (±10°) with the vertical plane of symmetry of the vehicle.

~~2.19.~~ **2.16. Group of seats**

"Group of seats" means either a bench-type seat or seats which are separate but side by side (i.e. fixed so that front seat anchorages of one of these seats are in line with the front of the rear anchorages of the other or between the anchorages of the other seat) and accommodate one or more seated adult persons.

~~2.20.~~ **2.17. Bench seat**

"Bench seat" means a structure complete with trim, intended to seat more than one adult person.

~~2.21.~~ **2.18. Adjustment system of the seat**

"Adjustment system of the seat" means the complete device by which the seat or its parts can be adjusted to a position suited to the morphology of the seated occupant; this device may, in particular, permit of:

~~2.21.1.~~ **2.18.1.** Longitudinal displacement;

~~2.21.2.~~ **2.18.2.** Vertical displacement;

~~2.21.3.~~ **2.18.3.** Angular displacement.

~~2.22.~~ **2.19. Seat anchorage**

"Seat anchorage" means the system by which the seat assembly is secured to the vehicle structure, including the affected parts of the vehicle structure.

~~2.23.~~ **2.20. Seat type**

"Seat type" means a category of seats which do not differ in such essential respects as:

~~2.23.1.~~ **2.20.1.** The shape, dimensions and materials of the seat structure;

~~2.23.2.~~ **2.20.2.** The types and dimensions of the seat lock adjustment and locking systems;

- ~~2.23.3.~~ **2.20.3.** The type and dimensions of the belt anchorage on the seat, of the seat anchorage and of the affected parts of the vehicle structure.
- ~~2.24.~~ **2.21.** ~~Displacement system of the seat~~
"Displacement system of the seat" means a device enabling the seat or one of its parts to be displaced angularly or longitudinally, without a fixed intermediate position (to facilitate access by passengers).
- ~~2.25.~~ **2.22.** ~~Locking system of the seat~~
"Locking system of the seat" means a device ensuring that the seat and its parts are maintained in any position of use.
- ~~2.26.~~ **2.23.** ~~Enclosed buckle release button~~
"Enclosed buckle-release button" means a buckle-release button such that it shall not be possible to release the buckle using a sphere having a diameter of 40 mm.
- ~~2.27.~~ **2.24.** ~~Non-enclosed buckle release button~~
"Non-enclosed buckle-release button" means a buckle-release button such that it shall be possible to release the buckle using a sphere having a diameter of 40 mm.
- ~~2.28.~~ **2.25.** ~~Tension reducing device~~
"Tension-reducing device" means a device which is incorporated in the retractor and reduces the tension of the strap automatically when the safety-belt is fastened. When it is released, such a device switches off automatically."

Paragraphs 2.29. to 2.54., shall be deleted.

3. Application for Approval

Paragraphs 3.1. to 3.2., shall be deleted

Paragraphs 3.2.1. to 3.2.3., amend to read:

- ~~3.2.1.~~ **3.1.** The application for approval of a type of safety-belt shall be submitted by the holder of the trade mark or by his duly accredited representative. In the case of restraint systems, the application for approval of a type of restraint system shall be submitted by the holder of the trade mark or by his representative or by the manufacturer of the vehicle in which it is to be installed or by his representative.
- ~~3.2.2.~~ **3.2.** It shall be accompanied by:
- ~~3.2.2.1.~~ **3.2.1.** A technical description of the belt type, specifying the straps and rigid parts used and accompanied by drawings of the parts making up the belt; the drawings shall show the position intended for the approval number and the additional symbol(s) in relation to the circle of the approval mark. The description shall mention the colour of the model submitted for approval, and specify the vehicle type(s) for which this belt type is intended. In the case of retractors, installation instructions for the sensing device shall be provided; and for pre-loading devices or systems a full technical description of the construction and function including the sensing, if any, describing the method of activation and any necessary method to avoid inadvertent activation shall be provided. In the case of a restraint system the description shall include: drawings of the vehicle structure and of the seat structure, adjustment system and attachments on an appropriate scale showing the sites of the seat anchorages and belt anchorages and reinforcements in sufficient detail; together with a specification of the materials used which may affect the strength of the seat anchorages and belt anchorages; and a technical description of the seat anchorages and the belts anchorages; and a technical description of

the seat anchorages and the belt anchorages. If the belt is designed to be fixed to the vehicle structure through a belt adjustment device for height, the technical description shall specify whether or not this device is considered as a part of the belt;

- ~~3.2.2.2.~~ **3.2.2.** Six samples of the belt type, one of which is for reference purposes;
- ~~3.2.2.3.~~**3.2.3.** A ten-metre length of each type of strap used in the type of belt;
- ~~3.2.2.4.~~ **3.2.4.** The Technical Service conducting the type-approval tests shall be entitled to request further samples.
- ~~3.2.3.~~ **3.3.** In the case of restraint systems, two samples which may include two of the samples of belts required under paragraphs ~~3.2.2.2.~~ **3.2.2.** and ~~3.2.2.3.~~**3.2.3.** above at the option of the manufacturer, either a vehicle representative of the vehicle type to be approved, or the part or parts of the vehicle considered essential by the Technical Service conducting approval tests for testing the restraint system shall be submitted to the Service."

Paragraph 4., Markings, amend to read:

"4. Markings

The samples of a belt type or type of restraint system submitted for approval in conformity with the provisions of paragraphs ~~3.2.2.2.~~ **3.2.2.**, ~~3.2.2.3.~~ **3.2.3.** and ~~3.2.2.4.~~ **3.2.4.** above shall be clearly and indelibly marked with the manufacturer's name, initials or trade name or mark."

5. Approval

Paragraph 5.1., amend to read:

- "5.1. A certificate conforming to the model specified in **Annex 1** paragraphs ~~5.1.1.~~ ~~or 5.1.2.~~ below shall be attached to the type approval certificate:
- ~~5.1.1.~~ Annex 1A for applications referred to in paragraph 3.1.;
- ~~5.1.1.~~ Annex 1A for applications referred to in paragraph 3.1.;
- ~~5.1.2.~~ Annex 1B for applications referred to in paragraph 3.2."

Paragraph 5.2., shall be deleted.

Paragraph 5.3., renumber and amend to read:

- ~~5.3.~~ **5.2.** Safety-belt type
- ~~5.3.1.~~ **5.2.1.** If the samples of a type of belt which are submitted in conformity with the provisions of paragraph ~~3.2.~~ **3.1.** above meet the requirements of paragraphs 4., ~~5.3.~~ **5.2.** and 6. of this Regulation, approval shall be granted.
- ~~5.3.2.~~ **5.2.2.** An approval number shall be assigned to each type approved. Its first two digits (at present ~~08~~ **10** corresponding to the ~~08~~ **10** series of amendments) shall indicate the series of amendments incorporating the most recent major technical amendments made to the Regulation at the time of issue of the approval. The same Contracting Party may not assign the same number to another type of belt or restraint system.
- ~~5.3.3.~~ **5.2.3.** Notice of approval or of extension or refusal of approval of a type of belt or restraint system, pursuant to this Regulation, shall be communicated to the Contracting Parties to the 1958 Agreement which apply this Regulation by means of a form conforming to the model in Annex ~~1B~~ **1** to this Regulation.

- ~~5.3.4.~~ **5.2.4.** In addition to the marks prescribed in paragraph 4. above, the following particulars shall be affixed in a suitable space to every belt conforming to a type approved under this Regulation:
- ~~5.3.4.1.~~ **5.2.4.1.** An international approval mark consisting of:
- ~~5.3.4.1.1.~~ **5.2.4.1.1.** A circle surrounding the letter "E" followed by the distinguishing number of the country which has granted approval.³
- ~~5.3.4.1.2.~~ **5.2.4.1.2.** An approval number;
- ~~5.3.4.2.~~ **5.2.4.2.** The following additional symbol(s):
- ~~5.3.4.2.1.~~ **5.2.4.2.1.** The letter "A" for a three-point belt, the letter "B" for a lap belt and the letter "S" for special-type belts.
- ~~5.3.4.2.2.~~ **5.2.4.2.2.** The symbols referred to in paragraph ~~5.3.4.2.1.~~ **5.2.4.2.1.** above shall be supplemented by the following additional markings:
- ~~5.3.4.2.2.1.~~ **5.2.4.2.2.1.** The letter "e" for a belt with an energy absorption device;
- ~~5.3.4.2.2.2.~~ **5.2.4.2.2.2.** The letter "r" for a belt incorporating a retractor followed by the symbol (1, 2, 3, 4 or 4N) of the retractor used, in accordance with paragraph ~~2.14.~~ **2.12.** of this Regulation, and the letter "m" if the retractor used is an emergency locking retractor with multiple sensitivity;
- ~~5.3.4.2.2.3.~~ **5.2.4.2.2.3.** The letter "p" in the case of safety-belts with a pre-loading device;
- ~~5.3.4.2.2.4.~~ **5.2.4.2.2.4.** The letter "t" in the case of a safety-belt with a retractor incorporating a tension-reducing device;
- ~~5.3.4.2.2.5.~~ **5.2.4.2.2.5.** Belts fitted with a type 4N retractor shall also bear a symbol consisting of a rectangle with a vehicle of category M₁ crossed out, indicating that the use of this type of retractor is prohibited in vehicles of that category.
- ~~5.3.4.2.2.6.~~ **5.2.4.2.2.6.** If the safety-belt is approved following the provisions of paragraphs 6.4.1.3.3. and 6.4.1.3.4. of this Regulation, it shall be marked with the word "AIRBAG" in a rectangle.
- ~~5.3.4.2.3.~~ **5.2.4.2.3.** The symbol referred to in paragraph ~~5.3.4.2.1.~~ **5.2.4.2.1.** above shall be preceded by the letter "Z" when the safety-belt is part of a restraint system.
- ~~5.3.5.~~ **5.2.5.** The approval mark prescribed in paragraph ~~5.3.4.~~ **5.2.4.** above may not be replaced by a Unique Identifier (UI) as referred to in Schedule 5 of the 1958 Agreement.
- ~~5.3.6.~~ **5.2.6.** Annex 2, ~~paragraph 2.~~ to this Regulation gives examples of arrangements of the approval mark.
- ~~5.3.7.~~ **5.2.7.** The particulars referred to in paragraph ~~5.3.4.~~ **5.2.4.** above shall be clearly legible and be indelible, and may be permanently affixed either by means of a label or by direct marking. The label or marking shall be resistant to wear.
- ~~5.3.8.~~ **5.2.8.** The labels referred to in paragraph ~~5.3.6.~~ **5.2.7.** above may be issued either by the Type Approval Authority which has granted the approval or, subject to that Authority's authorization, by the manufacturer."

³ See the footnote to paragraph 5.2.4.1. of this Regulation.

Paragraph 6.1.1., amend to read:

"6.1.1. Each sample submitted in conformity with paragraphs ~~3.2.2.2.~~ **3.2.2.**, ~~3.2.2.3.~~ **3.2.3.** and ~~3.2.2.4.~~ **3.2.4.** above shall meet the specifications set forth in paragraph 6. of this UN Regulation."

Paragraph 6.2.5.3.1., amend to read:

"6.2.5.3.1. An emergency locking retractor, when tested in accordance with paragraph 7.6.2. below, shall satisfy the conditions below. In the case of a single sensitivity, according to paragraph ~~2.14.4.1.~~ **2.12.4.1.** of this Regulation, only the specifications regarding deceleration of the vehicle are valid."

Paragraph 6.4.1.2.3., amend to read:

"6.4.1.2.3. In the case of a belt intended for use with a belt adjustment device for height, as defined in paragraph ~~2.14.6.~~ **2.12.6.** above, the test shall be carried out with the device adjusted in the most unfavourable position(s) chosen by the Technical Service responsible for testing. However:"

Paragraph 7.4.1., amend to read:

"7.4.1. Conditioning of straps for the breaking-strength test

Samples cut from the strap referred to in paragraph ~~3.2.2.3.~~ **3.2.3.** above shall be conditioned as follows:"

Paragraph 7.7.1., amend to read:

"7.7.1. The belt assembly shall be mounted on a trolley equipped with the seat and the general anchorages as defined in Annex 6, Figure 1, to this Regulation. However, if the belt assembly is intended for a specific vehicle or for specific types of vehicle, the distances between the manikin and the anchorages shall be determined by the Technical Service conducting the tests, either in conformity with the instructions for fitting supplied with the belt or in conformity with the data supplied by the manufacturer of the vehicle. If the belt is equipped with a belt adjustment device for height such as defined in paragraph ~~2.14.6.~~ **2.12.6.** above, the position of the device and the means of securing it shall be the same as those of the vehicle design.

In that case, when the dynamic test has been carried out for a type of vehicle it need not be repeated for other types of vehicle where each anchorage point is less than 50 mm distant from the corresponding anchorage point of the tested belt. Alternatively, manufacturers may determine hypothetical anchorage positions for testing in order to enclose the maximum number of real anchorage points."

Paragraphs 8., amend to read:

"8. Requirements concerning the installation in the vehicle Reserved"

Paragraphs 8.1. to 8.4.6.4., shall be deleted.

Paragraphs 9. to 9.1., amend to read:

"9. Conformity of Production

The conformity of production procedures shall comply with those set out in the Agreement, Schedule 1 (E/ECE/TRANS/505/Rev.3), with the following requirements:

- 9.1. Every ~~vehicle type or~~ safety-belt or restraint system approved under this Regulation shall be so manufactured as to conform to the type approved by meeting the requirements set forth in paragraphs 6., ~~and 7. and 8.~~ above."

Paragraphs 10.1. and 10.2., amend to read:

- "10.1. The approval granted in respect of a ~~vehicle or~~ a type of belt or restraint system may be withdrawn if the requirement laid down in paragraph 9.1. above is not complied with, or if the safety-belt(s) or restraint system(s) selected have failed to pass the checks prescribed in paragraph 9.2. above.
- 10.2. If a Contracting Party to the Agreement applying this Regulation withdraws an approval it has previously granted, it shall forthwith so notify the other Contracting Parties applying this Regulation by means of a communication form conforming to the model in Annex 1A ~~or Annex 1B~~ to this Regulation ~~(as appropriate).~~"

Paragraph 11. to 11.4., renumber and amend to read:

"11. Modifications and Extension of Approval of the ~~vehicle type or Safety-Belt or Restraint System~~ Type

- 11.1. Every modification of the ~~vehicle type or the~~ belt or restraint system ~~or both~~ which affects its technical performance and/or documentation as required in this Regulation shall be notified to the Type Approval Authority which approved the ~~vehicle type or~~ safety-belt or restraint system type. The Authority may then either:
- 11.1.1. Consider that the modifications made are unlikely to have an appreciable adverse effect and that in any case the ~~vehicle or~~ safety-belt or restraint system still complies with the requirements; or
- 11.1.2. Require a further test report from the Technical Service responsible for conducting the tests.
- ~~11.2. Without prejudice to the provisions of paragraph 11.1. above, a variant of the vehicle whose mass in the running order is less than that of the vehicle subjected to the approval test shall not be regarded as a modification of the vehicle type.~~
- ~~11.3.~~ 11.2. Confirmation or refusal of approval, specifying the alterations, shall be communicated by the procedure specified in paragraph 5.2.3. ~~or 5.3.3.~~ of this Regulation to the Parties to the Agreement applying this Regulation.
- ~~11.4.~~ 11.3. The Type Approval Authority issuing the extension of approval shall assign a series number for such an extension and inform thereof the other parties to the 1958 Agreement applying this Regulation by means of a communication form conforming to the model in Annex 1A ~~or 1B~~ to this Regulation."

Paragraph 12., amend to read:

"12. Production Definitively Discontinued

If the holder of the approval completely ceases to manufacture a device approved in accordance with this Regulation, he shall so inform the Type Approval Authority which granted the approval. Upon receiving the relevant communication that Authority shall inform thereof the other Parties to the 1958 Agreement applying this Regulation by means of a communication form conforming to the model in Annex 1A ~~or 1B~~ to this Regulation."

Paragraphs 15.6.3. and 15.6.4., shall be deleted.

Insert new paragraphs 15.7. to 15.7.5., to read:

- [**"15.7. As from the official date of entry into force of the 10 series of amendments, no Contracting Party applying this Regulation shall refuse to grant approvals or refuse to accept type-approvals under this Regulation as amended by the 10 series of amendments.**
- 15.7.1. As from 1 September [2027], Contracting Parties applying this Regulation shall not be obliged to accept type approvals issued according to the preceding series of amendments, first issued after 1 September [2027].**
- 15.7.2. Contracting Parties applying this Regulation shall continue to accept type-approvals of vehicles, safety-belts, and restraint systems according to any of the preceding series of amendments, first issued before 1 September [2027], provided the transitional provisions in these respective previous series of amendments foresee this possibility.**
- 15.7.3. Notwithstanding the transitional provisions above, Contracting Parties whose application of this Regulation comes into force after the date of entry into force of the most recent series of amendments are not obliged to accept UN type approvals which were granted in accordance with any of the preceding series of amendments to this Regulation.**
- 15.7.4. Contracting Parties applying this Regulation may grant type-approvals of vehicles, safety-belts, and restraint systems according to any preceding series of amendments to this Regulation.**
- 15.7.5. Contracting Parties applying this Regulation shall continue to grant extensions of existing approvals of vehicles, safety-belts, and restraint systems to any preceding series of amendments to this Regulation⁴."**

⁴ Contracting Parties may continue to extend type approvals granted under the previous Revision 2 to the 1958 Agreement by using the former format of the approval number for such extensions.

Annex 1A, shall be deleted.

Annex 1B (former), renumber to Annex 1 and amend to read:

"Annex 1B

Communication

(Maximum format: A4 (210 x 297 mm))



issued by: Name of administration:

Concerning:² Approval granted
 Approval extended
 Approval refused
 Approval withdrawn
 Production definitively discontinued

of a type of safety-belt or restraint system for adult occupants of power-driven vehicles pursuant to UN Regulation No. 16.

Approval No. Extension No.

1. Restraint system (with)/three-point belt/lap belt/special type belt/fitted (with) energy absorber/retractor/device for height adjustment of the upper pillar loop/flexible shoulder adjustment device for height³
2. Trade name or mark
3. Manufacturer's designation of the type of belt or restraining system
-
4. Manufacturer's name.....
5. If applicable, name of his representative
6. Address
7. Submitted for approval on
8. Technical Service responsible for conducting approval tests
-
9. Date of test report issued by that Service.....
10. Number of test report issued by that Service
11. Type of device: deceleration/acceleration²

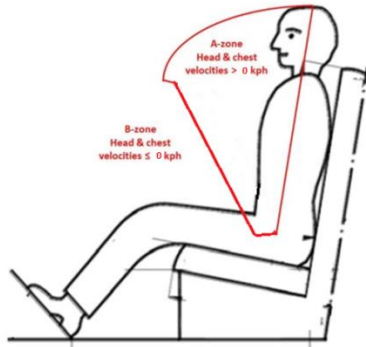
¹ Distinguishing number of the country which has granted/extended/refused/withdrawn approval (see approval provisions in the Regulation).

² Strike out what does not apply.

³ Indicate which type.

- 12. Approval granted/refused/extended/withdrawn² for fixation to the general anchorage positions as defined in Annex 6, Figure 1, to this Regulation/for use in a specific vehicle or in specific types of vehicles.⁴
- 12.1. In case a restraint system has been granted/extended approval, those can be used for particular types of vehicles compatible with the following dimensional conditions: no interior part in a quoted A-zone as shown below (Figure 1):

Figure 1
Title of the Figure



- 13. Position and nature of the marking
- 14. Place
- 15. Date.....
- 16. Signature.....
- 17. Annexed to this communication is a list of documents in the approval file deposited at Type Approval Authorities having delivered the approval and which can be obtained upon request."

⁴ If a safety-belt is approved following the provisions of paragraph 6.4.1.3.3. of this Regulation, this safety-belt shall only be installed in an outboard front seating position protected by an airbag in front of it, under the condition that the vehicle concerned is approved to UN Regulation No. 94, 01 series of amendments or its later version in force.
If a safety-belt is approved following the provisions of paragraph 6.4.1.3.4. of this Regulation, this safety-belt shall only be installed in a seating position protected by an airbag in front of it.

Annex 2, amend to read:

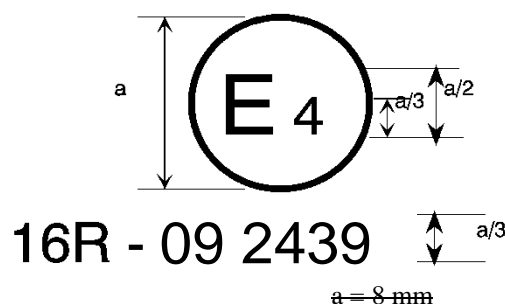
"Annex 2

Arrangements of the Approval Marks

2. ~~Arrangements of the vehicle approval marks concerning the installation of safety belts~~

Model A

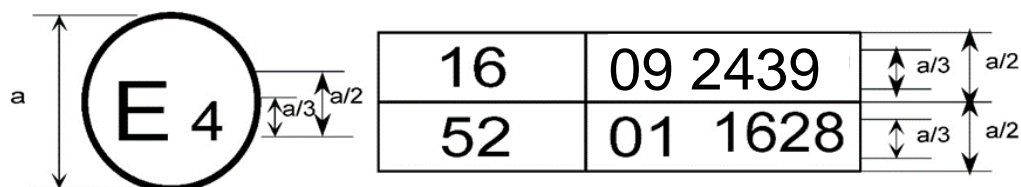
(See paragraph 5.2.4. of this Regulation)



The above approval mark affixed to a vehicle shows that the vehicle type concerned has, with regard to safety belts, been approved in the Netherlands (E 4) pursuant to UN Regulation No. 16. The approval number indicates that the approval was granted according to the requirements of UN Regulation No. 16 as amended by the 09 series of amendments.

Model B

(See paragraph 5.2.5. of this Regulation)

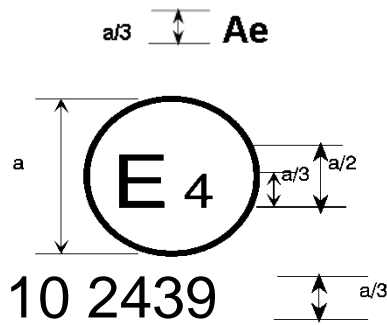


$a = 8 \text{ mm min.}$

The above approval mark affixed to a vehicle shows that the vehicle type concerned has been approved in the Netherlands (E 4) pursuant to UN Regulations Nos. 16 and 52⁹. The approval numbers indicate that, at the dates when the respective approvals were given, UN Regulation No. 16 included the 09 series of amendments and UN Regulation No. 52 the 01 series of amendments.

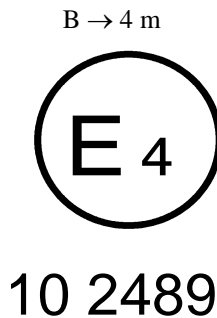
⁹ The second number is given merely as an example.

- 2- 1. Arrangements of the safety-belt approval marks (see paragraph 5.32.5. of this Regulation)



a = 8 mm min.

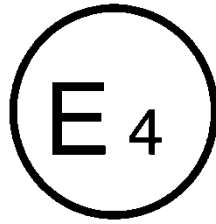
The belt bearing the above approval mark is a three-point belt (“A”), fitted with an energy absorber (“e”) and approved in the Netherlands (E 4) under the number ~~09~~102439, this Regulation already incorporating the ~~06, 07, 08 or 09~~ 10 series of amendments at the time of approval.



The belt bearing the above approval mark is a lap belt (“B”), fitted with a retractor, type 4, with multiple sensitivity (m) and approved in the Netherlands (E 4) under the number ~~09~~102489, this Regulation already incorporating the ~~06, 07, 08 or 09~~ 10 series of amendments at the time of approval.

Note: The approval number and additional symbol(s) shall be placed close to the circle and either above or below the “E” or to left or right of that letter. The digits of the approval number shall be on the same side of the “E” and orientated in the same direction. The additional symbol(s) shall be diametrically opposite the approval number. The use of roman numerals as approval numbers should be avoided so as to prevent any confusion with other symbols.

Se



10 22439

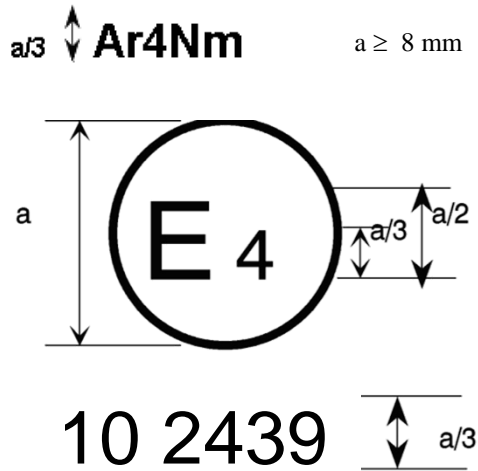
The belt bearing the above approval mark is a special type belt (“S”), fitted with an energy absorber (“e”) and approved in the Netherlands (E 4) under the number ~~09~~1022439, this Regulation already incorporating the ~~06, 07, 08 or 09~~ 10 series of amendments at the time of approval.

ZSe

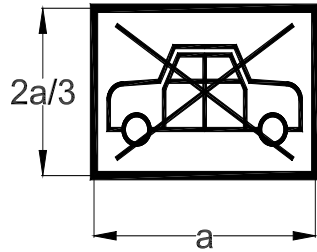


10 24391

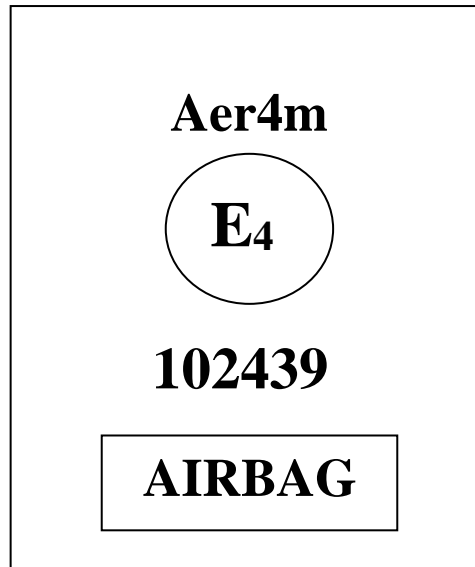
The belt bearing the above approval mark is part of a restraint system (“Z”), it is a special type belt (“S”) fitted with an energy absorber (“e”). It has been approved in the Netherlands (E 4) under the number ~~09~~1024391, this Regulation already incorporating the ~~06, 07, 08 or 09~~ 10 series of amendments at the time of approval.



$a = 8 \text{ mm min.}$



The belt bearing this type approval mark is a three-point belt (“A”) with a multiple-sensitivity (“m”) type 4N (“r4N”) retractor, in respect of which type approval was granted in the Netherlands (“E 4”) under number ~~09~~**10**2439, this Regulation already incorporating the ~~06, 07, 08 or 09~~ **10** series of amendments at the time of approval. This belt shall not be fitted to vehicles of category M₁.



The safety-belt bearing this type approval mark is a three-point belt (“A”) fitted with an energy absorber (“e”), approved as meeting the specific requirements of paragraph 6.4.1.3.3. or 6.4.1.3.4. of this Regulation, and with a multiple-sensitivity (“m”) type 4 (“r4”) retractor, in respect of which type approval was granted in the Netherlands (“E 4”) under the approval number ~~09~~**102439**. The first two digits indicate that the Regulation already incorporated the ~~06, 07, 08 or 09~~ **10** series of amendments at the time of the approval. This safety-belt has to be fitted to a vehicle equipped with an airbag in the given seating position.

Annex 6, paragraph 3.1., amend to read:

“3.1. In the case of a belt equipped with a belt adjustment device for height as defined in paragraph ~~2.14.6.~~ **2.12.6.** of this Regulation, this device shall be secured either to a rigid frame, or to a part of the vehicle on which it is normally mounted which shall be securely fixed on the test trolley.”

Annex 9, paragraph 2., shall be deleted.

Annex 9, (former) paragraphs 3. And 4., renumber to paragraphs 2. and 3.

Annex 13, amend to read:

"Annex 13**Order of Tests**

Paragraphs	Test	Samples															
		Belt or restraint system No.					Strap No.										
		1	2	3	4	5	1	2	3	4	5	6	7	8	9	10	11
4./6.1.2./6.1.3./ 6.2.1.1./6.2.2./ 6.2.3.1./6.3.1.1.	Inspection of belt or restraint system	X															
2.21./2.22. 2.19./2.20. /6.2.2.2.	Inspection of buckle	X	X	X	X	X											
6.2.2.6./6.2.2.7./ 7.5.1./7.5.5.	Buckle strength test			X													
6.2.3.3./7.5.1.	Strength test on adjusting device (and where necessary retractors)			X													
6.2.4./7.5.2.	Strength test on attachments (and where necessary on retractors)			X													
6.2.2.3./7.5.3.	Low-temperature test on buckle	X	X														
6.2.1.4./7.5.4.	Low-temperature impact test on rigid parts	X	X														
6.2.3.2./6.2.3.4./ 7.5.6.	Ease of adjustment				X												
	Conditioning/ testing of belt or restraint system before dynamic test																
6.2.2.4.	Durability of buckle	X	X														
6.2.1.2./7.2.	Corrosion resistance of rigid parts	X	X														
	Conditioning of retractors																
6.2.5.2.1./6.2.5.3.1./ 6.2.5.3.3./7.6.2.	Locking threshold	X	X														
6.2.5.2.2./6.2.5.3.4./ 7.6.4.	Retracting force	X	X														
6.2.5.2.3./6.2.5.3.3./ 7.6.1.	Durability	X	X														
6.2.5.2.3./6.2.5.3.3./ 7.2.	Corrosion	X	X														

Paragraphs	Test	Samples																
		Belt or restraint system No.					Strap No.											
		1	2	3	4	5	1	2	3	4	5	6	7	8	9	10	11	
6.2.5.2.3./6.2.5.3.3./7.6.3.	Dust	X	X															
6.3.1.2./7.4.3.	Testing of strap width						X	X										
	Strap strength test after																	
6.3.2./7.4.1.1./7.4.2.	Room conditioning						X	X										
6.3.3./7.4.1.2./7.4.2.	Light conditioning								X	X								
6.3.3./7.4.1.3./7.4.2.	Low-temperature conditioning										X	X						
6.3.3./7.4.1.4./7.4.2.	Heat conditioning												X	X				
6.3.3./7.4.1.5./7.4.2.	Water conditioning															X	X	
6.2.3.2./7.3.	Micro-slip test				X	X												
6.4.2./7.4.1.6.	Abrasion test				X	X												
6.4.1./7.7.	Dynamic test	X	X															
6.2.2.5./6.2.2.7./7.8.	Buckle-opening test	X	X															
7.1.4.	Retention of strap sample																	X

"

Annex 16, 17 and 18, shall be deleted.
