|  |  |
| --- | --- |
|  | E/ECE/TRANS/505/Rev.3/Add.147/Amend.2 |
|  |  | 3 November 2020 |

**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[[1]](#footnote-2)\*

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

**\_\_\_\_\_\_\_\_\_**

 **Addendum 147 – UN Regulation No. 148**

 Amendment 2

Supplement 2 to the original version of the Regulation – Date of entry into force: 25 September 2020

 Uniform provisions concerning the approval of light-signalling devices (lamps) for power-driven vehicles and their trailers

This document is meant purely as documentation tool. The authentic and legal binding text is: ECE/TRANS/WP.29/2020/32.

**\_\_\_\_\_\_\_\_\_**

**UNITED NATIONS**

*Paragraph 3.3.4.5.,* amend to read:

"3.3.4.5. In the case of lamps with light source module(s) on the light source module(s) bear marking of:

(a) The trade name or mark of the applicant;

(b) The specific identification code of the module; This specific identification code shall comprise the starting letters “MD” for “MODULE” followed by the approval mark without the circle as prescribed in paragraph 3.3.2. or by the UI without the truncated circle as prescribed in paragraph 3.3.3**.**

 In case several non-identical light source modules are used, followed by additional symbols or characters;

 The approval mark or the UI does not have to be the same as the one on the lamp in which the module is used, but both marks shall be from the same applicant;

(c) The rated voltage or the range of voltage."

*Paragraph 5.6.11.*, amend to read:

"5.6.11. For direction indicator lamps of categories 1, 1a, 1b, 2a, 2b, 11, 11a, 11b, 11c or 12 the flash may be produced by sequential activation of their light sources if the following conditions are met:

(a) Each light source, after its activation, shall remain lit until the end of the ON cycle;

(b) The sequence of activation of the light sources shall produce a signal which proceeds in a uniform progressive manner from inboard towards the outboard edge of the light emitting surface;

(c) It shall be one signal with no interruption and no vertical oscillations (e.g. not more than one change of direction along the vertical axis). The distance between two adjacent/tangential distinct parts of the light emitting surface of the sequential direction indicator shall not exceed 50mm, when measured perpendicularly to the reference axis, instead of the values defined in paragraph 5.7.2. of UN Regulation No. 48 or paragraph 5.7.2. of UN Regulation No. 86 or paragraph 5.6.2. of UN Regulation No. 53. These interruptions of the signal shall not create any overlap in the vertical axis between the different parts, from inboard towards the outboard of the vehicle, and shall not be used for any other lighting or light signalling functions;

(d) The variation shall finish no more than 200ms after the beginning of the ON cycle;

(e) The orthogonal projection of the light emitting surfaces of the direction indicator in the direction of the axis of reference shall be circumscribed by a rectangle on a plane normal to the axis of reference and having its longer sides parallel to the H-plane. The ratio of the horizontal to the vertical sides shall not be less than 1.7.

Compliance to the conditions mentioned above shall be verified in flashing mode."

*Paragraph 5.7.1., table 9, footnote 1,* shall bedeleted.

*Annex 3*

*Paragraph 2.1., figure A3-I,* amend to read:

# "Figure A3-I:

# **Standard light distribution for front and rear position-, parking-, end-outline marker-, stop- and direction indicator lamps**

**V**

10°

5°

0°

5°

10°

**100**

**70**

**70**

**90**

**90**

**35**

**35**

**20**

**20**

**20**

**20**

**20**

**20**

**20**

**20**

**10**

**10**

**10**

**10**

0°

5°

10°

15°

20°

5°

10°

15°

20°

**H**

…"

*Paragraph 3.2., figure A3-X,* amend to read:

"3.2. Category 1b - wide plate (520 x 120 mm)

Figure A3-X

**Measuring points for plate size 520 x 120 mm**

**a**

**e**

**a**

**a**

**e**

**c**

**c**

a =

c =

e =

25 mm

100 mm

70 mm

**a**

**c**

**c**

"

1. \* 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). [↑](#footnote-ref-2)