Economic Commission for Europe
Inland Transport Committee
World Forum for Harmonization of Vehicle Regulations

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1958 Agreement – Consideration of draft amendments
to existing Regulations submitted by GRE

Proposal for Supplement 18 to Regulation No. 23 (Reversing lamps)

Submitted by the Working Party on Lighting and Light-Signalling *

The text reproduced below was adopted by the Working Party on Lighting and Light-Signalling (GRE) at its sixty-sixth session to introduce manoeuvring lamps. It is based on ECE/TRANS/WP.29/GRE/2011/60, as amended by Annex II to the report (ECE/TRANS/WP.29/GRE/66, para. 21). It is submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) and to the Administrative Committee (AC.1) for consideration.

* In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/208, para. 106, ECE/TRANS/2010/8, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.
The title of the regulation, amend to read:
"Uniform provisions concerning the approval of reversing and manoeuvring lamps for power-driven vehicles and their trailers"

Paragraph 0, the scope, amend to read:

"Scope

This Regulation applies to:

(a) Reversing lamps for vehicles of categories M, N, O, and T; ¹
(b) Manoeuvring lamps for vehicles of categories M and N.

Insert a new paragraph 1.2., to read

"1.2. "Manoeuvring lamp" means a lamp used to provide supplementary illumination to the side of the vehicle to assist during slow manoeuvres;"

Paragraphs 1.2. (former) to 1.4., renumber as paragraphs 1.3. to 1.5.

New paragraph 1.4., (former paragraph 1.3.), amend to read:

"1.4. "Reversing/manoeuvring lamps of different types” … change of type."

Paragraphs 2.2. to 2.2.1., amend to read:

"2.2. For each type of reversing lamp or manoeuvring lamp, the application shall be accompanied by:

2.2.1. Drawings, in triplicate, in sufficient detail to permit identification of the type of the reversing lamp or a manoeuvring lamp and showing in what geometrical position(s) the … approval mark;

In addition the mounting height and the orientation of the reference axis of the manoeuvring lamp(s) shall be indicated in the drawing in relation to the ground, the vertical and the longitudinal axis."

Paragraph 3, amend to read:

"3. Markings

The samples of a type of reversing lamp or manoeuvring lamp submitted for approval shall:

Paragraphs 4.1. to 4.3., amend to read:

"4.1. If the two samples of a type of reversing lamp or a manoeuvring lamp meet the requirements of this Regulation, approval shall be granted.

4.2. An approval number shall be assigned to each type approved. The same Contracting Party shall not assign the same number to another type of reversing lamp or manoeuvring lamp covered by this Regulation. Notice of approval or of extension … Annex 1 to this Regulation.

¹ As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.), document ECE/TRANS/WP.29/78/Rev.2, para. 2
4.3. Every reversing lamp or manoeuvring lamp conforming to a type approved under this Regulation shall bear … in paragraphs 3.1., 3.2. and 3.3. or 3.5. respectively:"

"Paragraphs 4.3.2. to 4.3.4., amend to read:

"4.3.2. An additional symbol … shown in Annex 2 to this Regulation.

On devices meeting the requirements of this Regulation in respect of the manoeuvring lamps an additional symbol consisting of letters M and L, arranged as shown in Annex 2 to this Regulation.

4.3.3. The first two digits … symbols "AR" or "ML".

4.3.4. On reversing lamps of which …"

"Paragraph 4.6., amend to read:

"4.6. The mark … is mounted on the vehicle.

In the case of a manoeuvring lamp:

(a) A space large enough to accommodate the approval mark on the lens or on its protective housing, which shall be legible when the device has been mounted on the vehicle, shall be provided. Other components of the device shall bear the name of the manufacturer and a means of identification. In case of limited space for the approval mark(s) it shall be placed on a part of the vehicle which is permanently connected to the manoeuvring lamp or on the vehicle data plate;

(b) The space for the approval mark shall be shown on the drawings referred to paragraph 2.2. above or indicated in the application for approval."

"Paragraph 4.7., amend to read:

"4.7. Annex 2 gives … in which the letters A and R or M and L are mingled."

Insert a new paragraph 6.1., to read:

"6.1. Intensity of the light specifications for reversing lamps"

Paragraphs 6.1. (former) to 6.5., renumber as paragraphs 6.1.1. to 6.1.5.

Insert new paragraphs 6.2. to 6.2.2., to read:

"6.2. Intensity of the light specifications for manoeuvring lamps

6.2.1. The intensity shall not exceed 500 candelas in all directions in which the light can be observed, when installed in any mounting position specified by the applicant

6.2.2. The device must be so designed that the light emitted directly towards the side, the front or the rear of the vehicle does not exceed 0.5 cd within the angular field as defined below.

(a) The vertical minimum angle $\varphi_{\text{min}}$ (in degree) is:

$$\varphi_{\text{min}} = \arctan \left( \frac{1-\text{mounting height}}{10} \right); \text{where } h \text{ is mounting height in m}$$

(b) The vertical maximum angle $\varphi_{\text{max}}$ (in degree) is:

$$\varphi_{\text{max}} = \varphi_{\text{min}} + 11.3.$$
The measurement shall be limited to a horizontal angle ranging from +90°
to -90° with respect to the line which cuts the reference axis and which is
perpendicular to the vertical longitudinal plane of the vehicle.

The measurement distance shall be in minimum 3 m.”

Paragraph 8., amend to read:

"8. Colour of light emitted

In the case of reversing lamps the colour of the light emitted inside the field
of the light distribution grid defined at paragraph 2. of Annex 3 shall be
white.

In the case of manoeuvring lamps the colour of the light emitted inside the
field of the whole light distribution shall be white.

To check these colorimetric characteristics, the test procedure described in
paragraph 7. of this Regulation shall be applied. Outside this field no sharp
variation of colour shall be observed.

However, for lamps …"

Paragraph 10.1., amend to read:

"10.1. The approval granted in respect of a type of reversing lamp or manoeuvring
lamps pursuant to this Regulation may be withdrawn if the foregoing
requirements are not complied with or if the reversing lamp or manoeuvring
lamps bearing the mark referred to in paragraphs 4.3.1. and 4.3.2. does not
conform to the type approved.”

Paragraph 11., amend to read:

"11. Production definitively discontinued

If the holder of the approval completely ceases to manufacture a type of
reversing lamp or manoeuvring lamps approved in accordance with this
Regulation, …"
Annex 1, amend to read:

"Annex 1

Communication

... of a type of reversing lamp pursuant to Regulation No. 23
Approval No. ........... Extension No. .......

of a type of manoeuvring lamp pursuant to Regulation No. 23
Approval No. ........... Extension No. .......

1. Trade name or mark of the device: .................................................................

...

9. Concise description

...

Geometrical conditions of installation and relating variations; if any: ......................
For a type of manoeuvring lamp pursuant to Regulation No. 23 paragraph 6.2.2.
Maximum mounting height: .................................................................

10. ...

11. Comments

In the case of a reversing lamp, this device shall be installed on a vehicle only as part of a pair of devices: yes/no? .................................................................

..."
Annex 2, amend to read:

"Annex 2

Examples of arrangements of approval marks

...

Figure 4
Marking for a manoeuvring lamps

\[
\text{ML} \quad \uparrow \downarrow \quad a/3
\]

\[
\text{a} \quad \text{E} \quad a/2 \quad a/3
\]

002207 \quad \uparrow \downarrow \quad a/3 \quad a = 5 \text{ mm min}

The device bearing the approval mark shown above is a manoeuvring lamp approved in Germany (E1) pursuant to Regulation No. 23 under approval number 2207.

The approval number indicates that the approval was granted in accordance with the requirements of Regulation No. 23 in its original form.

Note: The approval number and additional symbol shall be placed close to the circle and either above or below the letter "E" or to the left or right of that letter. The digits of the approval number and of the production serial number shall be on the same side of the letter "E" and face the same direction. The use of Roman numerals as approval numbers should be avoided so as to prevent any confusion with other symbols."

Annex 3

Paragraph 1. amend to read:

"1. Measurement methods general"

Paragraph 2, amend to read:

"2. For reversing lamps the measuring Points expressed in degrees of angle with the axis of reference and values of the minimum intensities of the light emitted"