UNITED NATIONS



ECE/TRANS/WP.29/GRE/2007/55 18 July 2007

Original: ENGLISH

ENGLISH AND FRENCH ONLY

ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

World Forum for Harmonization of Vehicle Regulations

Working Party on Lighting and Light-Signalling

Fifty-eighth session Geneva, 1-5 October 2007 Item 4(g) of the provisional agenda

REGULATION No. 48 (Installation of lighting and light-signalling devices)

<u>Interpretation of paragraph 5.7. of the Regulation</u>

Draft proposal for amendments to Regulation No. 48

Submitted by the expert from the Working Party "Brussels 1952" (GTB)

The text reproduced below was prepared by the expert from the Working Party "Brussels 1952" (GTB), in order to insert into Regulation No. 48 provisions which cover the requirements regarding electrical connections, color visibility and photometry for front or rear position lamps if such lamps are reciprocally incorporated with another lamp or function. The modifications to the current text of Regulation No. 48 are marked in **bold** or strikethrough characters.

A. PROPOSAL

Paragraph 5.7., amend to read:

- "5.7. Grouped, combined or reciprocally incorporated lamps
- 5. 7. 1. Lamps may be grouped, combined or reciprocally incorporated with one another provided that all requirements regarding colour, position, orientation, geometric visibility, electrical connections and other requirements, if any, are fulfilled.
- 5.7.1.1. The photometric and colorimetric requirements of a lamp shall be fulfilled when all other functions are switched off.

However, when a front or rear position lamp is reciprocally incorporated with one or more other function(s), the requirements regarding colour of each of these other functions shall be fulfilled when the reciprocally incorporated function(s) and the front or rear position lamps are switched on.

- 5.7.1.2. However, Where stop lamps and direction indicator lamps, are grouped, any horizontal or vertical straight line passing through the projections of the apparent surfaces of these functions on a plane perpendicular to the reference axis, shall not intersect more than two borderlines separating adjacent areas of different colour
- 5.7.2. Where the apparent surface of a single lamp is composed of two or more distinct parts, it shall satisfy the following requirements:
- 5.7.2.1. Either the total area of the projection of the distinct parts on a plane tangent to the exterior surface of the transparent material and perpendicular to the reference axis shall occupy not less than 60 per cent of the smallest quadrilateral circumscribing the said projection, or the distance between two adjacent/tangential distinct parts shall not exceed 15 mm when measured perpendicularly to the reference axis."

Paragraph 5.11., amend to read:

"5.11. The electrical connections must be such that the front and rear position lamps, the end-outline marker lamps, if they exist, the side-marker lamps, if they exist, and the rear registration plate lamp can only be switched on and off simultaneously. This condition does not apply when using front and rear position lamps, as well as side-marker lamps when combined or reciprocally incorporated with said lamps, as parking lamps and when side-marker lamps are permitted to flash.

However, when front or rear position lamps are reciprocally incorporated with another lamp/function, the respective front or rear position lamp may be switched off and substituted by such lamp/function, provided that the substituting lamp/function meets the following requirements:

- (a) geometric visibility of the respective position lamp;
- (b) minimum photometric values according to the angles of light distribution of the respective position lamp."

Paragraph 5.24., amend to read:

"5.24. Any temporary fail-safe replacement of the light-signalling function of a rear position lamp is allowed, provided that the **replacement** function in case of a failure is similar in colour, main intensity and position to the function that has ceased to operate and provided that the **replacement** device remains operational in its original safety function. During **replacement**, a tell-tale on the dashboard (see paragraph 2.18. of this Regulation) shall indicate occurrence of a temporary replacement and need for repair."

B. JUSTIFICATION

GTB has reviewed the developments in the design of front and rear lighting assemblies for automobiles with regard to the requirements for grouped, combined or reciprocally incorporated lamps in Regulation No. 48.

The proposal in paragraph 5.7.1. is intended to define provisions for photometry and colour if front or rear position lamps are reciprocally incorporated with other functions such as direction indicators.

The proposal in paragraph 5.11. is intended to permit the deactivation of front or rear position lamps reciprocally incorporated with another lamp or function, if the substituting function provides the geometric visibility and the minimum photometric values of the respective position lamp.

To provide a consistent wording of paragraph 5.24., the text has been amended accordingly.

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