

II

(Acts whose publication is not obligatory)

COMMISSION

COMMISSION DIRECTIVE

of 28 March 1989

adapting to technical progress Council Directive 76/759/EEC on the approximation of the laws of the Member States relating to direction indicator lamps for motor vehicles and their trailers

(89/277/EEC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

HAS ADOPTED THIS DIRECTIVE:

Having regard to the Treaty establishing the European Economic Community,

Article 1

The Annexes to Directive 76/759/EEC are hereby amended in accordance with the Annex to this Directive.

Having regard to Council Directive 70/156/EEC of 6 February 1970 on the approximation of the laws of the Member States relating to the type approval of motor vehicles and their trailers⁽¹⁾, as last amended by Directive 87/403/EEC⁽²⁾, and in particular Article 11 thereof,

Article 2

1. With effect from 31 March 1989, no Member State may:

Having regard to Council Directive 76/759/EEC of 27 July 1976 on the approximation of the laws of the Member States relating to direction indicator lamps for motor vehicles and their trailers⁽³⁾, as last amended by Directive 87/354/EEC⁽⁴⁾, and in particular Article 10 thereof,

- (a) — refuse, in respect of a type of vehicle, to grant EEC type approval, to issue the document referred to in the last indent of Article 10 (1) of Directive 70/156/EEC, or to grant national type approval, or
 - prohibit the entry into service of vehicles, on grounds relating to the direction indicator lamps if the latter comply with the provisions of this Directive;
- (b) — refuse to grant EEC component type approval or national component type approval in respect of the said direction indicator lamps if they comply with the provisions of this Directive, or
 - prohibit the placing on the market of direction indicator lamps if the latter bear the EEC component type-approval mark issued in pursuance of the provisions of this Directive.

Whereas, in the light of experience and in view of the current state of the art, it is now possible to make certain requirements more complete and better adapted to actual traffic conditions thus improving the safety offered to vehicle occupants and other road users;

Whereas the measures provided for in this Directive are in accordance with the opinion of the Committee for the Adaptation to Technical Progress of Directives on the Removal of Technical Barriers to Trade in the Motor Vehicles Sector;

2. With effect from 1 October 1991, Member States:

- (a) — shall no longer issue the document referred to in the last indent of Article 10 (1) of Directive 70/156/EEC in respect of a type of vehicle in which the direction indicator lamps do not comply with the provisions of this Directive,

⁽¹⁾ OJ No L 42, 23. 2. 1970, p. 1.

⁽²⁾ OJ No L 220, 8. 8. 1987, p. 44.

⁽³⁾ OJ No L 262, 27. 9. 1976, p. 71.

⁽⁴⁾ OJ No L 192, 11. 7. 1987, p. 43.

- may refuse to grant national type approval in respect of a type of vehicle in which the said direction indicator lamps do not comply with the provisions of this Directive ;
- (b) — shall no longer grant EEC component type approval in respect of direction indicator lamps if the latter do not comply with the provisions of this Directive,
- may refuse to grant national component type approval in respect of the said direction indicator lamps if they do not comply with the provisions of this Directive.

Nevertheless, this date is postponed to 1 October 1993 in the case of the EEC component type approval of category 5 direction indicator lamps.

3. With effect from 1 October 1995, Member States may prohibit the entry into service of vehicles in which the direction indicator lamps do not comply with the provisions of this Directive, as well as the placing on the market of direction indicator lamps that do not bear the type-approval mark issued in pursuance of the provisions of this Directive.

4. Notwithstanding paragraph (2) (b), Member States shall continue to recognize EEC component type approval granted for direction indicator lamps in pursuance of Directive 76/759/EEC in the case of devices intended to be mounted on vehicles already in circulation, and may also grant EEC component type approval for direction indicator lamps in pursuance of Directive 76/759/EEC provided that such devices are

intended to be used as replacement parts for vehicles in circulation and it is not technically possible for the said devices to comply with the provisions of this Directive.

Article 3

The provisions of Article 2 shall not apply if they conflict with the provisions of Article 2 (2), (3) and (4) of Commission Directive 89/278/EEC of 28 March 1989, adapting to technical progress Council Directive 76/756/EEC on the approximation of the laws of the Member States relating to the installation of lighting and light-signalling devices on motor vehicles and their trailers⁽¹⁾.

Article 4

Member States shall bring into force the provisions necessary to comply with this Directive not later than 30 September 1989. They shall forthwith inform the Commission thereof.

Article 5

This Directive is addressed to the Member States.

Done at Brussels, 28 March 1989.

For the Commission

Martin BANGEMANN

Vice-President

⁽¹⁾ See page 38 of this Official Journal.

ANNEX

Annex 0 is amended as follows :

Items 1 and 1.1 are replaced by the following items 1 and 1.1 to 1.2.3 :

1. DEFINITIONS

1.1. The definitions set out in Directive 76/756/EEC of :

- direction indicator lamp,
 - lamp,
 - light source with regard to filament lamps,
 - independent lamps,
 - grouped lamps,
 - combined lamps,
 - reciprocally incorporated lamps,
 - device,
 - single-function lamp,
 - illuminating surface of a signalling lamp other than a reflex reflector,
 - apparent surface,
 - light-emitting surface,
 - axis of reference,
 - centre of reference,
 - single lamp,
 - two lamps or an even number of lamps
- shall apply to this Directive.

1.2. Type of direction indicator lamp

“Type of direction indicator lamp” means lamps that do not differ in such essential respects as :

1.2.1. Make or trade mark.

1.2.2. Characteristics of the optical system (luminous intensity, angle of light distribution, etc.).

1.2.3. Direction indicator category.”

The table set out in item 6.1 is replaced by the following :

Category of direction indicator (1)	Minimum intensity (cd)	Maximum intensity, in cd, when used		Total for the set of two lamps (see Annex III, item 4.3.3)
		As a single lamp	As a single lamp bearing the mark “D” (see Annex III, item 4.3.3)	
1	175	700 (2)	490 (2)	980 (2)
1 a	250	800 (2)	560 (2)	1 120 (2)
1 b	400	860 (2)	600 (2)	1 200 (2)
2 a	50	200	140	280
2 b daytime	175	700 (2)	490 (2)	980 (2)
night-time	40	120 (2)	84 (2)	168 (2)
5	0,6	200	140	280

(1) The installation of front direction indicator lamps of different categories on motor vehicles and their trailers is governed by the Directive relating to the installation of lighting and light-signalling devices (Directive 76/756/EEC).

(2) The total value of the maximum intensity of a set of two lamps is obtained by multiplying the value specified for a single lamp by a factor of 1.4.

Where two single-function lamps with the same function, regardless of whether they are identical, are grouped together in a single device such that the projections of the illuminating surface of the single-function lamps on a vertical plane perpendicular to the median longitudinal plane of the vehicle cover not less than 60 % of the smallest rectangle circumscribed by the projections of the said illuminating surfaces, the set is treated as a single lamp for the purposes of installation on a vehicle. In that case, each single-function lamp must comply with the minimum required intensity values, while the two lamps to be used simultaneously must not exceed the permitted maximum intensity values (last column in the table).

In the case of a single lamp with more than one light source :

- the lamp must comply with the minimum required intensity value in the event of failure of one light source, and
- where all the light sources are in operation, the maximum intensity specified for a single-function lamp may be exceeded on condition that it does not bear the mark “D” and the maximum specified intensity for the set of two lamps (last column in the table) is not exceeded.

After item 6.2.1, the following new item 6.2.1.1 is added:

- '6.2.1.1. Contrary to the provisions of 6.2 and 6.2.1, in the case of rearward direction indicators in category 5, a minimum value of 0,6 cd is required in all the fields specified in Annex I.'

Items 6.2.3.1 and 6.2.3.2 are replaced by the following:

- '6.2.3.1. Throughout the fields defined in the diagrams in Annex I, the intensity of the light emitted must be not less than 0,7 cd for devices in category 1 b, not less than 0,3 cd for devices in categories 1, 1 a and 2 a and for those in category 2 b (daytime), and not less than 0,07 cd for devices in category 2 b (night-time).
- 6.2.3.2. For devices in categories 1 and 2 b (night-time), the intensity of the light emitted outside the area bounded by the measurement points $\pm 10^\circ$ H and $\pm 10^\circ$ V (10° field) must not exceed the following values:

Category of indicator	Maximum values, in cd, outside the 10° field		
	Single lamp	Single lamp bearing the mark "D" (see Annex III, item 4.3.3)	Total for the set of two lamps (see Annex III, item 4.3.3)
2 b night-time	100	70	140
1	400	280	560

Between the limits of the 10° field ($\pm 10^\circ$ H and $\pm 10^\circ$ V) and those of the 5° field ($\pm 5^\circ$ H and $\pm 5^\circ$ V), the maximum values shall increase in a linear fashion up to the values defined in 6.1.

- 6.2.3.3. For devices in categories 1 a and 1 b, the intensity of the light emitted outside the area bounded by the measurement points $\pm 15^\circ$ H and $\pm 15^\circ$ V (15° field) must not exceed the following values:

Category of indicator	Maximum values, in cd, outside the 15° field		
	Single lamp	Single lamp bearing the mark "D" (see Annex III, item 4.3.3)	Total for the set of two lamps (see Annex III, item 4.3.3)
1 a	250	175	350
1 b	400	280	560

Between the limits of the 15° field ($\pm 15^\circ$ H and $\pm 15^\circ$ V) and those of the 5° field ($\pm 5^\circ$ H and $\pm 5^\circ$ V), the maximum permitted values for the light intensity shall increase in a linear fashion up to the values defined in 6.1.'

Item 6.2.3.3 becomes item 6.2.3.4.

Item 6.3 is replaced by the following:

- '6.3. The intensities shall be measured while the filament lamp(s) are continuously alight.'

After item 6.3, the following new item 6.4 is added:

- '6.4. In the case of devices in category 2 b, the delay between the moment the circuit is closed and the light intensity measured on the axis of reference reaches 90 % of the value determined in accordance with 6.3 above must be measured in both daytime and night-time conditions of use. The time measures for night-time conditions of use must not exceed that measured for daytime conditions of use.'

Item 6.4 becomes item 6.5.

After item 7.1, the following new item 7.2 is added:

- '7.2. Nevertheless, in the case of category 2 b indicators for which an additional system (*) is used with a view to obtaining the intensity required for night-time use, the voltage applied to the system for measuring the night-time intensity must be the same as that applied to the filament lamp for measuring the daytime intensity.'

(*) The operating and installation conditions for this additional device are laid down by specific provisions.

Item 7.2 is replaced by the following item 7.3:

- '7.3. The vertical and horizontal edges of the illuminating surface of a light-signalling device must be determined and dimensioned with respect to the centre of reference.'

Item 8 is replaced by the following :

'8. Colour of light emitted

The colour of the light emitted must be within the limits of the coordinates laid down in Annex V.'

Annex I is replaced by the following :

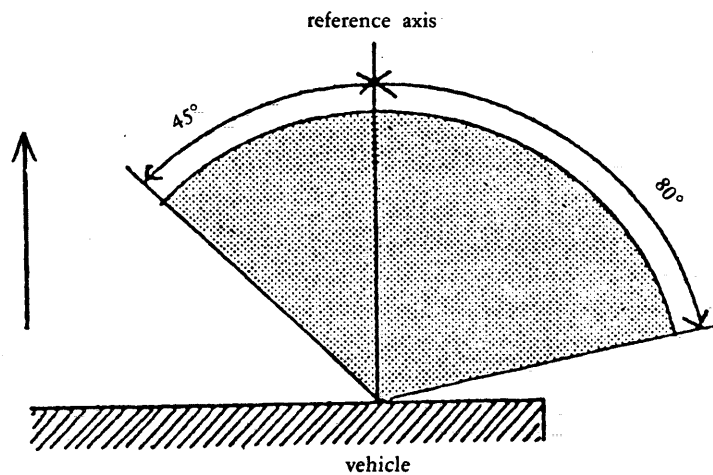
ANNEX I

CATEGORIES OF DIRECTION INDICATOR LAMPS : MINIMUM ANGLES REQUIRED FOR LIGHT DISTRIBUTION IN SPACE OF DIRECTION INDICATOR LAMPS OF THESE CATEGORIES (1)

In all cases, the minimum vertical angles of light distribution in space of direction indicator lamps are 15° above and 15° below the horizontal.

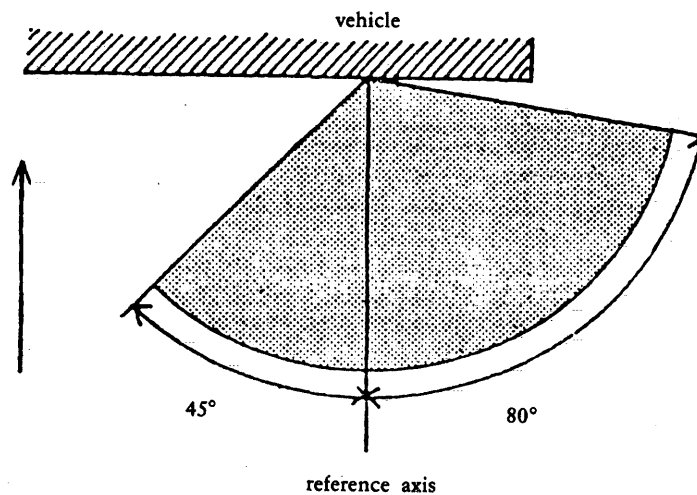
Minimum horizontal angles of light distribution in space :

Categories 1, 1 a and 1 b : Direction indicators for the front of the vehicle.



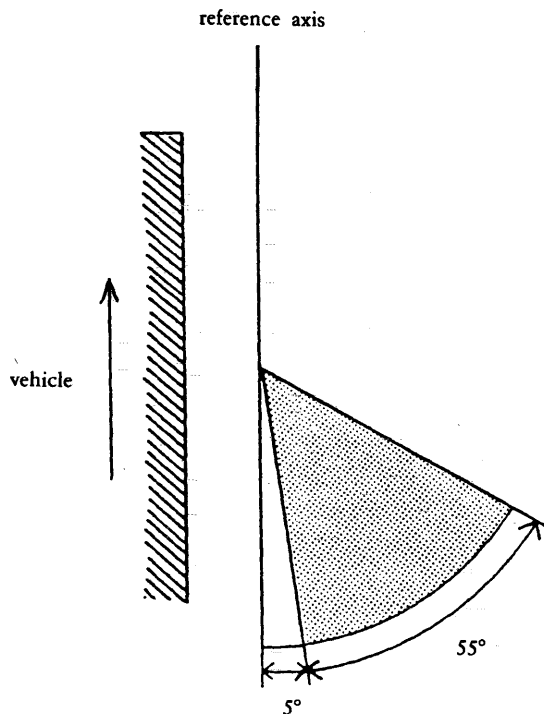
Category 2 a : Direction indicators with one level of intensity for the rear of the vehicle.

Category 2 b : Direction indicators with two levels of intensity for the rear of the vehicle.



(1) The angles shown in these diagrams correspond to devices intended to be mounted on the right-hand side of the vehicle. The arrows in these diagrams point towards the front of the vehicle.

Category 5: Side repeater indicators for use on a vehicle that is also equipped with category 1, 1 a or 1 b, and 2 a or 2 b direction indicators.



Annex II is amended as follows:

Item I is replaced by the following:

1. Device (*)
 - in category 1
 - in category 1 a
 - in category 1 b
 - in category 2 a
 - in category 2 b
 - in category 5
 which may/may not (*) be used in a two lamp unit.

After item 1, the following new item 2 is added:

2. For indicators in category 2 b, state the system used for obtaining the night-time intensity (main characteristics)

Items 2 to 12 are renumbered 3 to 13.

The following new item 14 is added after item 13:

14. Component type approval granted for replacement on vehicles in service only: yes/no (*)

Items 14 to 18 are renumbered 15 to 19.

Annex III is amended as follows:

Item 1.2.1 is replaced by the following:

- 1.2.1. An indication of which of categories 1, 1 a, 1 b, 2 or 5 the direction indicator belongs to and, if it belongs to category 2, whether it has one level of intensity (category 2 a) or two levels of intensity (category 2 b), and, furthermore, whether the direction indicator may also be used in a set of two lamps of the same category.

Item 1.2.3 is replaced by the following:

- 1.2.3. Drawings (three copies), in sufficient detail to permit identification of the type and category and showing, geometrically, the position in which the device is to be mounted on the vehicle, the axis of observation to be taken as the axis of reference in the tests (horizontal angle $H = 0^\circ$, vertical angle $V = 0^\circ$), the point to be taken as the centre of reference in the said tests, the vertical and horizontal tangents to the illuminating surface and their distance from the centre of reference of the lamp.

In the case of a category 2 b direction indicator lamp, diagram and a statement of the characteristics of the system providing the two levels of intensity.

The end of item 1.2.4 shall read :

'1.2.4 ...

In the case of a category 2b direction indicator the request must moreover be accompanied by two samples of the parts making up the system providing the two levels of intensity.'

In item 3.2, the following paragraph is added :

'Direction indicators of different categories may bear a single type-approval number where they make up a set.'

In item 3.3, second line, the words 'and other lamps' are replaced by the following : 'grouped, combined or reciprocally incorporated with other lamps,' and 'mark' is replaced by 'number'.

Item 4.2 is replaced by the following :

'4.2. This mark shall consist of a rectangle surrounding the letter "e" followed by the distinguishing number or letters of the Member State which has granted type approval :

- 1 for Germany,
- 2 for France,
- 3 for Italy,
- 4 for the Netherlands,
- 6 for Belgium,
- 9 for Spain,
- 11 for the United Kingdom,
- 13 for Luxembourg,
- 18 for Denmark,
- 21 for Portugal,
- EL for Greece,
- IRL for Ireland.

It must also include the EEC component type-approval number which corresponds to the number of the EEC component type-approval certificate issued for the type of direction indicator lamp in question (see Annex I), preceded by two figures indicating the serial number assigned to the most recent major amendment of Council Directive 76/759/EEC, on the date EEC component type approval was granted. For the present Directive, the serial number is 01.

Item 4.3.1 is replaced by the following :

'4.3.1. One or more of the symbols 1, 1 a, 1 b, 2 a, 2 b or 5 according to whether the device belongs to one or more of the categories 1, 1 a, 1 b, 2 a, 2 b or 5, as referred to in 1.2.1, placed above the rectangle.'

Item 4.3.2, second sentence, is replaced by the following :

'The arrow shall be directed outwards from the vehicle in the case of devices in categories 1, 1 a, 1 b, 2 a and 2 b and towards the front of the vehicle in the case of devices in category 5 (see Appendix 3);'

After item 4.3.2, the following new item 4.3.3 is added :—

'4.3.3. On devices that may be used as a single lamp or as part of a set of two lamps, the additional letter "D" to the right of the symbol in 4.3.1.'

Item 4.6 is replaced by the following :

'4.6. Examples of the EEC component type-approval mark for an independent lamp are shown in Appendix 1.'

Item 4.7 is replaced by the following :

'4.7. Where a single EEC component type-approval number is issued, as under 3.3, for a type of lighting and light-signalling device comprising a direction indicator lamp that is grouped, combined or reciprocally incorporated with other lamps, one EEC component type-approval mark only may be affixed, consisting of :

- a rectangle surrounding the letter "e" followed by the distinguishing number or letters of the Member State which has granted the type approval,
- the EEC component type-approval number and, where necessary, the appropriate arrow.'

After item 4.7, the following new items are added :

- '4.7.1. This EEC component type-approval mark may be placed anywhere on lamps that are grouped, combined or reciprocally incorporated, provided that :
 - 4.7.1.1. it is visible when the lamps have been installed ;
 - 4.7.1.2. no light-transmitting component of the grouped, combined or reciprocally incorporated lamps may be removed without the EEC component type-approval mark being removed at the same time.
- 4.7.2. The identification symbol for each lamp corresponding to each Directive in pursuance of which EEC component type approval was granted, together with the two figures given in point 4.2., final indent, and where necessary, the additional letter "D" must be indicated :
 - 4.7.2.1. either on the appropriate light-emitting surface ;
 - 4.7.2.2. or in a group, such that each of the grouped, combined or reciprocally incorporated lamps may be clearly identified.'

After item 4.8, the following new item 4.9 is added :

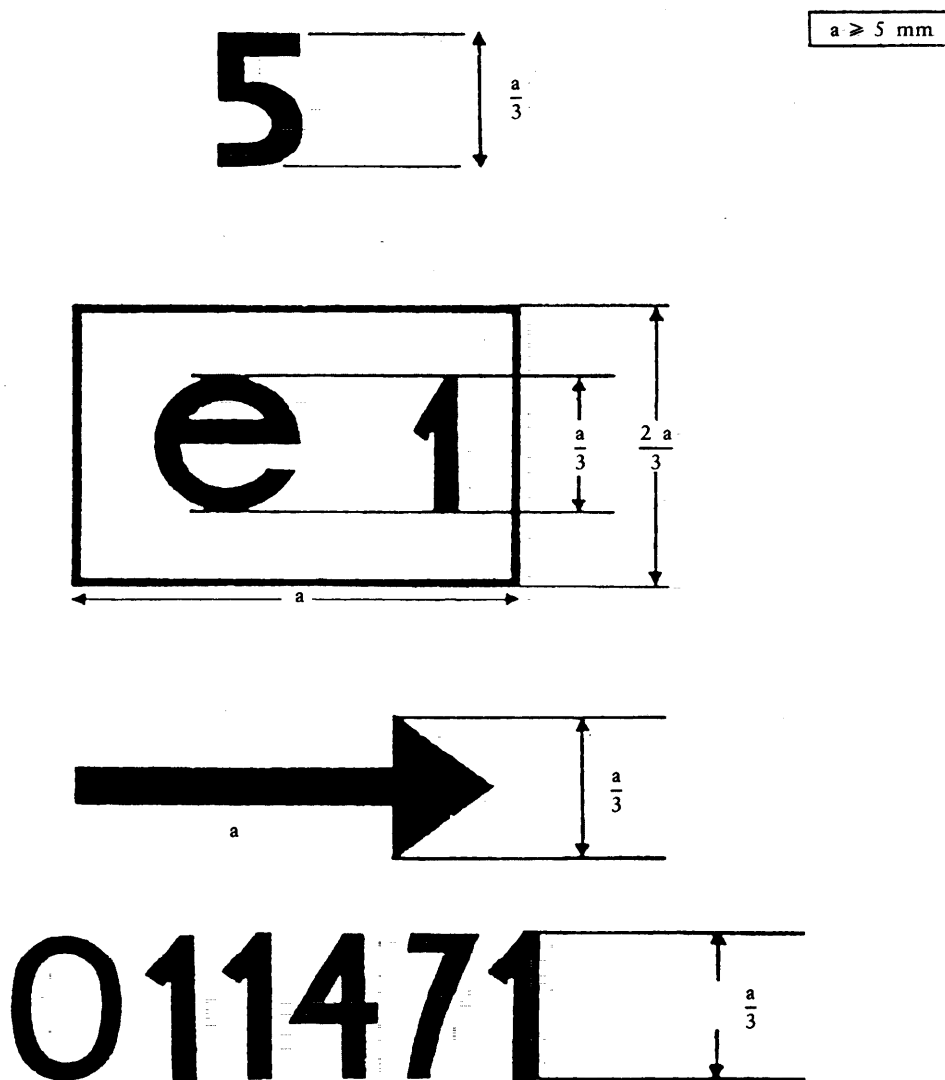
- '4.9. Examples of an EEC component type-approval mark for a lamp that is grouped, combined or reciprocally incorporated with other lamps are shown in Appendix 2.'

The Appendix is replaced by the following Appendices 1, 2 and 3 :

Appendix 1

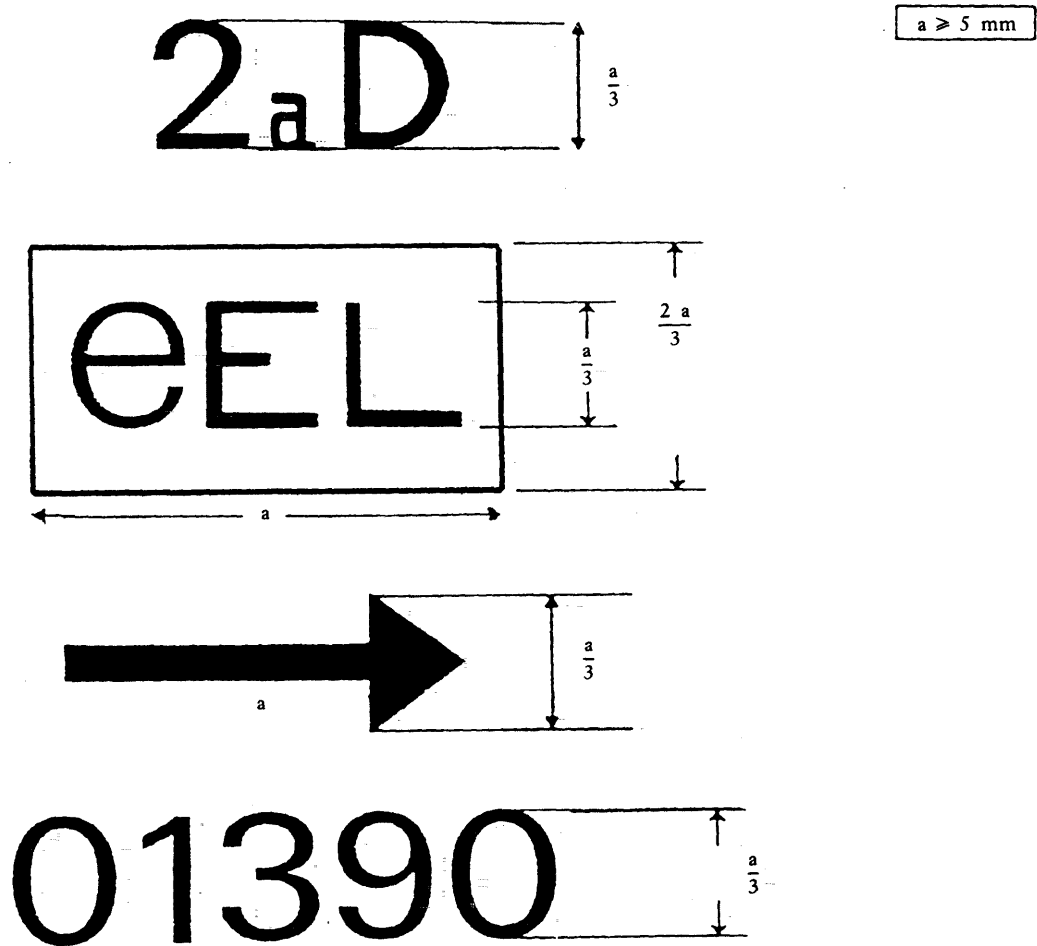
EXAMPLES OF EEC COMPONENT TYPE-APPROVAL MARKS

Figure 1



The device bearing the EEC component type-approval mark shown above is a direction indicator lamp in category 5, EEC type-approved in Germany (e 1) under the number 011471. The arrow shows in what position this device, which can be mounted only on one side of the vehicle, is to be mounted. The arrow is pointing towards the front of the vehicle.

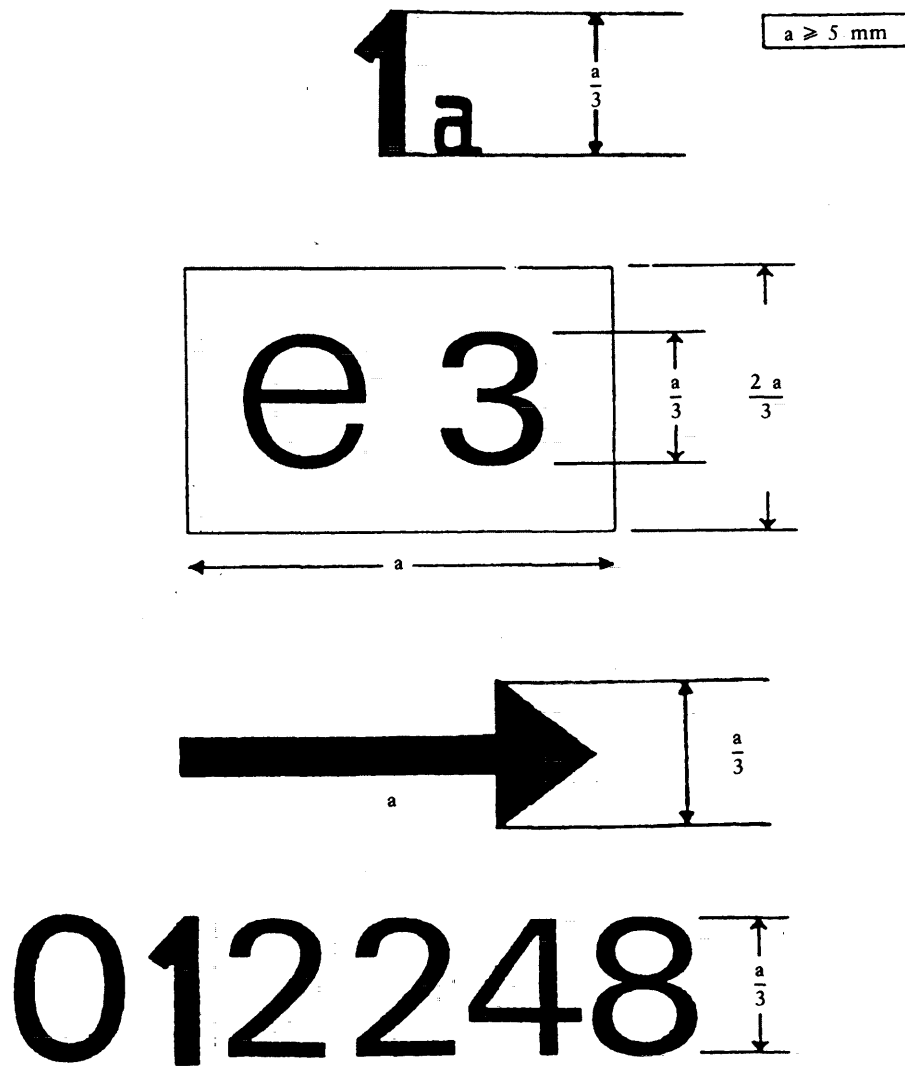
Figure 2



The device bearing the EEC component type-approval mark shown above is a direction indicator lamp in category 2 a, EEC type-approved in Greece (e EL) under the number 01390, which may also be used as part of a set of two lamps (letter 'D').

The arrow is pointing towards the outside of the vehicle.

Figure 3



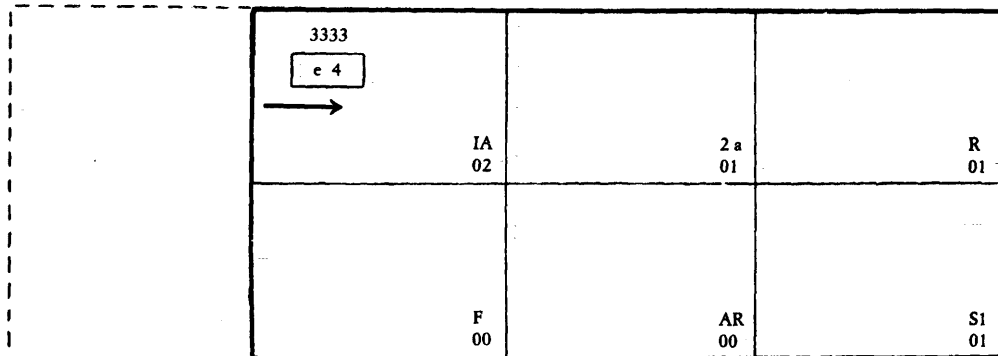
The device bearing the EEC component type-approval mark shown above is a direction indicator lamp in category 1 a (for use at a distance of between 20 mm and 40 mm from the headlamp), EEC type-approved in Italy (e 3) under the number 012248.

The arrow is pointing towards the outside of the vehicle.

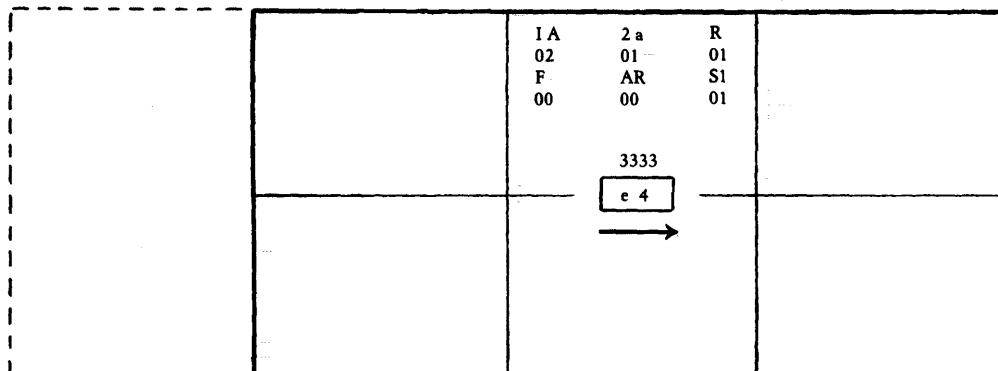
Appendix 2

Examples of simplified marking for grouped, combined or reciprocally incorporated lamps where two or more lamps form part of the same set

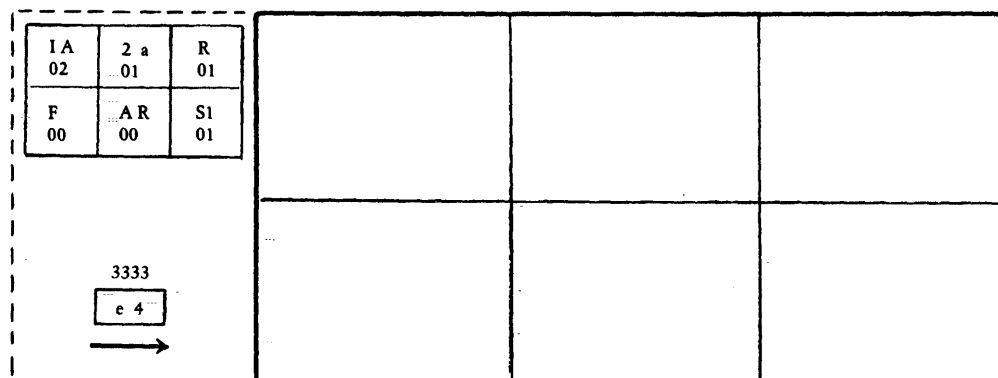
Model A



Model B



Model C

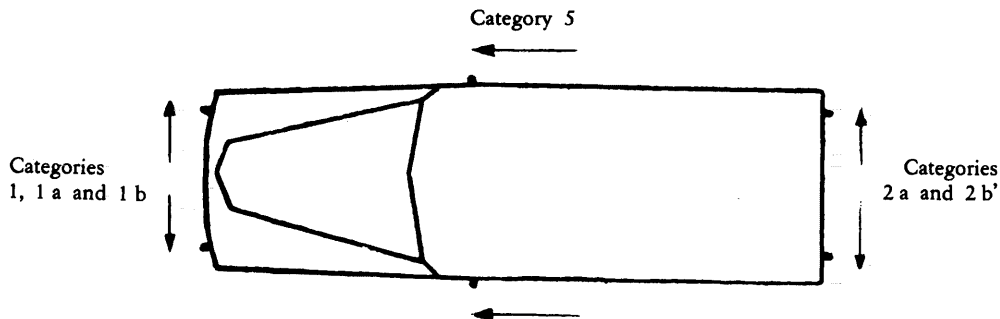


Note: In the above examples the vertical and horizontal lines depict the general arrangement of a lamp cluster and do not form part of the component type-approval mark. The three examples of EEC component type-approval marks shown above, namely models A, B and C, represent three possible alternatives for marking a lighting device where two or more lamps form part of the same set of grouped, combined or reciprocally incorporated lamps. They show that the device in question was EEC type-approved in the Netherlands (e 4) under the numer 3333 and consists of:

- a class I a reflex reflector, EEC type-approved in pursuance of Directive 76/757/EEC;
- a category 2 a rear direction indicator, EEC type-approved in pursuance of the provisions of this Directive;
- a red rear position (side) lamp (R), EEC type-approved in pursuance of Directive 76/758/EEC;
- a rear fog lamp (F), EEC type-approved in pursuance of Directive 77/538/EEC;
- a reversing lamp (AR), EEC type-approved in pursuance of Directive 77/539/EEC;
- a stop lamp (S1), EEC type-approved in pursuance of Directive 76/758/EEC.

Appendix 3

Direction in which the arrows on the EEC component type-approval mark point, according to the category of device



Annex IV is amended as follows:

Items 2.2 to 2.2.2 are replaced by the following:

- '2.2. Inside the field of light distribution in space described in section 2, which is diagrammatically represented by a grid, the light distribution should be approximately uniform, i.e. the luminous intensity in each direction of a part of the field bounded by the lines of the grid must reach not less than the lowest minimum percentage value given on the lines of the grid surrounding the direction in question.'

Annex V is amended as follows:

'2854 K' is replaced by '2856 K'.

In the German, Dutch, ... versions, the abbreviation for the International Commission on Illumination must read 'CIE'.