

E/ECE/324 } Rev.1/Add.75  
E/ECE/TRANS/505 }

20 May 1988

## **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

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#### **Addendum 75: Regulation No. 76**

Date of entry into force as an annex to the Agreement:  
1 July 1988

**UNIFORM PROVISIONS CONCERNING THE APPROVAL OF  
HEADLAMPS FOR MOPEDS EMITTING A DRIVING BEAM AND A PASSING BEAM**

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**UNITED NATIONS**



Regulation No. 76

UNIFORM PROVISIONS CONCERNING THE APPROVAL OF HEADLAMPS  
FOR MOPEDS EMITTING A DRIVING BEAM AND A PASSING BEAM

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Regulation No. 76

UNIFORM PROVISIONS CONCERNING THE APPROVAL OF HEADLAMPS  
FOR MOPEDS EMITTING A DRIVING BEAM AND A PASSING BEAM

1. SCOPE

This regulation applies to the approval of headlamps using filament lamps, producing a driving beam and a passing beam, which are provided for the equipment of mopeds 1/ and vehicles treated as such.

2. DEFINITION OF "TYPE"

Headlamps of different "types" means headlamps which differ in such essential respects as:

2.1 The trade name or mark;

2.2 The characteristics of the optical system;

2.3 The inclusion or the suppression of components capable of altering the optical effects by reflection, refraction or absorption.

2.4 A change in the colour of the beam emitted by a headlamp whose other characteristics are not changed does not constitute a change of headlamp type.

3. APPLICATION FOR APPROVAL

3.1 The application for approval shall be submitted by the holder of the trade name or mark or by his duly accredited representative.

3.2 Every application shall be accompanied by:

3.2.1 Drawings in triplicate, sufficiently detailed to permit identification of the type. The drawings must show the provided position for the approval mark and indicate the headlamps in front and cross lateral elevation, with schematic indication of the optical grooves and prisms of the lens;

3.2.2 A brief technical description stating, in particular, the category or categories of the filament lamp provided (see annex 3, paragraph 5, to this Regulation);

3.2.3 Two devices with colourless lenses. 2/

4. MARKINGS

4.1 Headlamps submitted for approval shall clearly, legibly and indelibly bear the following inscriptions:

4.1.1 The trade name or mark of the applicant;

4.1.2 The indication of the category of the provided filament lamp.

4.2 Moreover, they shall include on the lens and on the main body (the reflector being considered as main body) 3/ a space of sufficient size to accommodate the approval marking; these spaces must be shown on the drawing referred to in paragraph 3.1 above.

## 5. APPROVAL

5.1 If the two samples of a headlamp type submitted in accordance with paragraph 3 above meet the requirements of this Regulation, approval shall be granted.

5.2 An approval number shall be assigned to each type approved. Its first two digits (at present 00 for the Regulation in its original form) 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 headlamp, except in the case provided for in paragraph 2.4 above.

5.3 Notice of approval or extension or refusal of approval of a type of headlamp pursuant to this Regulation shall be communicated to the Parties to the Agreement which apply this Regulation, by means of a form conforming to the model in annex 1 to this Regulation.

5.4 Every headlamp conforming to a type approved under this Regulation shall bear in the spaces referred to in paragraph 4.2 above, in addition to the markings prescribed in paragraph 4.1:

5.4.1 An international approval mark 4/ consisting of:

5.4.1.1 A circle surrounding the letter "E" followed by the distinguishing number of the country which has granted approval; 5/

5.4.1.2 The letter R, the Regulation number and an approval number.

5.5 The markings according to paragraph 5.4 shall be clearly legible and be indelible.

5.6 Annex 2 to this Regulation gives an example of the arrangement of the approval mark.

## 6. GENERAL SPECIFICATIONS

6.1 Each device shall conform to the specifications of paragraph 7 of this Regulation.

6.2 Headlamps shall be so designed and constructed that, in normal use, despite the vibrations to which they may be subjected, their satisfactory operation continues to be ensured and they retain the characteristics prescribed by this Regulation.

6.3 The parts intended for holding the filament lamp in the reflector shall be so made that, even in darkness, the filament lamp can be mounted in no other position than the correct one.

7. SPECIAL SPECIFICATIONS

7.1 The correct position of the lens in relation to the optical system shall be unequivocally marked and be locked against rotation in service.

7.2 For the measurement of the illumination produced by the headlamp, a measuring screen as described in annex 3 of this Regulation and a standard filament lamp with a smooth and colourless bulb according to Regulation/No. 37 shall be used.

The standard filament lamp shall be adjusted to the applicable reference luminous flux according to Regulation No. 37.

7.3 The passing beam shall have a cut-off sufficiently sharp in order that satisfactory aiming can practically be achieved with its aid. The cut-off shall be substantially horizontal and as straight as possible over a horizontal length of at least  $\pm 900$  mm measured at a distance of 10 m.

When aimed according to annex 3, the headlamps shall meet the requirements specified in it.

7.4 The beam pattern shall not present any lateral variations detrimental to good visibility.

7.5 The illumination of the screen mentioned in paragraph 7.2 shall be measured by means of a photo-receptor having a useful area comprised within a square of 65 mm side.

8. PROVISIONS CONCERNING COLOURED LENSES AND FILTERS

8.1 Approval may be obtained for headlamps emitting either colourless or selective-yellow lights with a filament lamp. Expressed in CIE trichromatic co-ordinates, the corresponding colorimetric characteristics for yellow glasses or filters are as follows:

Selective-yellow filter (screen or lens)

Limit towards red	y	$0.138 + 0.58 x$
Limit towards green	y	$1.29 x - 0.1$
Limit towards white	y	$- x + 0.966$
Limit towards spectral value	y	$- x + 0.992$

which can also be expressed as follows:

dominant wave-length	575 - 585 nm
purity factor	0.90-0.98
the transmission factor must be	0.78

The transmission factor shall be determined by using a light source with a colour temperature of 2856°K (corresponding to illuminant A of the International Commission on Illumination (CIE)).

8.2 The filter must be part of the headlamp, and must be attached to it in such a way that the user cannot remove it either inadvertently or intentionally, with ordinary tools.

8.3 Observation concerning colour

Since any approval under this Regulation is granted, pursuant to paragraph/8.1 above, for a type of headlamp emitting either colourless light or selective-yellow light, article 3 of the Agreement to which the Regulation is annexed shall not prevent the Contracting Parties from prohibiting headlamps emitting a beam of uncoloured or selective-yellow light on vehicles registered by them.

9. CONFORMITY OF PRODUCTION

Every headlamp bearing an approval mark as prescribed under this Regulation shall conform to the type approved and meet the photometric requirements of this Regulation. Nevertheless, in the case of a sample picked at random from series production, the requirements as to respectively maximum and minimum intensities of the light emitted (measured with a standard filament lamp as referred to in paragraph 7.2 above) shall be at least 80 per cent of the minimum values and not exceed 120 per cent of the maximum values specified in annex 3.

10. PENALTIES FOR NON-CONFORMITY OF PRODUCTION

10.1 The approval granted in respect of a type of headlamp pursuant to this Regulation may be withdrawn if the requirements set forth above are not met or if a headlamp bearing the approval mark does not conform to the type approved.

10.2 If a party to the Agreement which applies this Regulation withdraws an approval it has previously granted, it shall forthwith so notify the other Contracting Parties to the Agreement which apply this Regulation, by means of a copy of the approval form conforming to the model in annex 1 to this Regulation.



11. MODIFICATIONS OF A TYPE OF HEADLAMP AND EXTENSION OF APPROVAL

11.1 Every modification of the type of headlamp shall be notified to the administrative department which approved the type of headlamp. The department 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 headlamp 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 Confirmation or refusal of approval, specifying the alterations shall be communicated by the procedure specified in paragraph 5.3 above to the Parties to the 1958 Agreement applying this Regulation.

11.3 The competent 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 1 to this Regulation.

12. PRODUCTION DEFINITELY DISCONTINUED

If the holder of an approval completely ceases to manufacture a headlamp approved in accordance with this Regulation, he shall so inform the authority which granted the approval. Upon receiving the relevant communication that authority shall inform thereof the other Parties to the Agreement applying this Regulation, by means of a copy of the approval form conforming to the model in annex 1 to this Regulation.

13. NAMES AND ADDRESSES OF TECHNICAL SERVICES RESPONSIBLE FOR CONDUCTING APPROVAL TESTS AND OF ADMINISTRATIVE DEPARTMENTS

The Parties to the Agreement which apply this Regulation shall communicate to the United Nations Secretariat the names and addresses of the technical services responsible for conducting approval tests and of the administrative departments which grant approval and to which forms certifying approval or refusal, or extension or withdrawal of approval, issued in other countries, are to be sent.

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Notes

1/ As defined in the 1968 Vienna Convention on road traffic, chapter I, article 1 (m).

2/ If it is intended to manufacture the headlamps with coloured lenses, two samples of coloured lenses shall be submitted in addition for testing of the colour only.

3/ If the lens cannot be separated from the main body (the reflector being considered as main body), the provision of such a space on the lens will suffice.

4/ If different types of headlamps have an identical lens or an identical reflector, the lens and the reflector may bear the various approval marks of these types of headlamps, on condition that the approval number granted for the specific type submitted can be identified without ambiguity.

5/ One for the Federal Republic of Germany, 2 for France, 3 for Italy, 4 for the Netherlands, 5 for Sweden, 6 for Belgium, 7 for Hungary, 8 for Czechoslovakia, 9 for Spain, 10 for Yugoslavia, 11 for the United Kingdom, 12 for Austria, 13 for Luxembourg, 14 for Switzerland, 15 for the German Democratic Republic, 16 for Norway, 17 for Finland, 18 for Denmark, 19 for Romania, 20 for Poland, 21 for Portugal and 22 for the Union of Soviet Socialist Republics. Subsequent numbers shall be assigned to other countries in the chronological order in which they ratify or accede to the Agreement concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor Vehicle Equipment and Parts, and the numbers thus assigned shall be communicated by the Secretary-General of the United Nations to the Contracting Parties to the Agreement.

Annex 1

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



1/

Communication concerning:  
approval  
refusal of approval  
extension of approval  
withdrawal of approval  
production definitely  
discontinued 2/

of a type of headlamp pursuant to  
Regulation No. 76

- Approval No. .... Extension No. ....
1. Headlamp type .....
  2. Headlamp emitting, with a colourless lamp, a colourless beam/a selective yellow beam 2/ .....
  3. Trade name or mark .....
  4. Manufacturer's name and address .....
  5. If applicable, name and address of his representative .....
  6. Submitted for approval on .....
  7. Technical service responsible for conducting approval tests .....
  8. Date of report issued by that service .....
  9. Number of report issued by that service .....
  10. Approval granted/refused/extended/withdrawn 2/ .....
  11. Place .....
  12. Date .....
  13. Signature .....
  14. The attached drawing No. ... bearing the approval number shows the headlamp.

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1/ Name of administration.  
2/ Strike out what does not apply.



Annex 2

ARRANGEMENT OF THE APPROVAL MARK



a = 5 mm min.

The headlamp bearing the above approval mark has been approved in the Netherlands (E 4) pursuant to Regulation No. 76 under approval number 00243. The first two digits of the approval number indicate that the approval was granted in accordance with the requirements of Regulation No. 76 in its original form.

Note

The approval number must 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 must be on the same side of the "E" and face in the same direction. The use of Roman numerals as approval numbers should be avoided so as to prevent any confusion with other symbols.

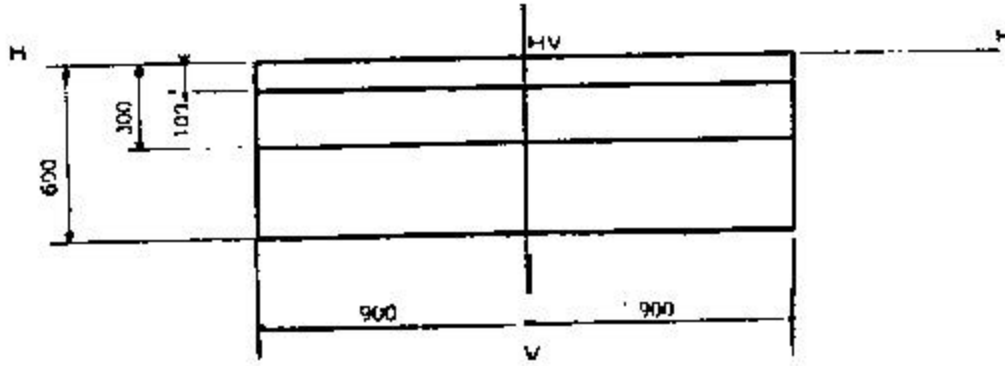


Annex 3

PHOTOMETRIC TESTS

1. For measurements, the measuring screen shall be located at a distance of 10 m in front of the headlamp and perpendicular to the line joining the filament for driving beam of the lamp and the point V; the line H-H shall be horizontal.
2. PROVISIONS CONCERNING PASSING BEAMS
  - 2.1 Laterally, the headlamp shall be so aimed that the beam is as symmetrical as possible with reference to the line V-V.
  - 2.2 Vertically, the headlamp shall be so aimed that the cut-off is situated 100 mm below the line H-H.
  - 2.3 When aimed according to paragraphs 2.1 and 2.2 above, the illumination shall meet the following values:
    - 2.3.1 On the line H-H and above: 2 lx max.
    - 2.3.2 On a line situated 300 mm below H-H and over a width of 900 mm on both sides of the vertical line V-V: not less than 8 lx.
    - 2.3.3 On a line situated 600 mm below the line H-H and over a width of 900 mm on both sides of the vertical line V-V: not less than 4 lx.
3. PROVISIONS CONCERNING DRIVING BEAMS
  - 3.1 The headlamp, when aimed according to paragraphs 2.1 and 2.2 above, shall meet the following conditions for the driving beam.
    - 3.1.1 The point of intersection (HV) of line H-H and V-V shall be situated within the isolux 80 per cent of maximum illumination.
    - 3.1.2 The maximum illumination ( $E_{max}$ ) of the driving beam shall be at least 50 lux.
    - 3.1.3 Starting from point HV, horizontally to the right and left, the illumination of the driving beam shall be not less than  $E_{max}/4$  up to a distance of 0.90 m.

4. MEASURING SCREEN



(Dimensions in mm for 10 m distances)

5. Double filament lamp for mopeds of the category S4 should be used in accordance with requirements of Regulation No./37 (sheets S4/1 and S4/2).
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