

No. 4789. 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 1958¹

ENTRY INTO FORCE of Regulations No. 56 (*Uniform provisions concerning the approval of headlamps for mopeds and vehicles treated as such*) and No. 57 (*Uniform provisions concerning the approval of headlamps for motor cycles and vehicles treated as such*) as annexes to the above-mentioned Agreement

The said Regulations came into force on 15 June 1983 in respect of Italy and the Netherlands, in accordance with article 1 (5) of the Agreement.

Regulation No. 56

UNIFORM PROVISIONS CONCERNING THE APPROVAL OF HEADLAMPS FOR MOPEDS AND VEHICLES TREATED AS SUCH

1. SCOPE

This Regulation applies to the approval of headlamps using filament lamps, producing one single passing beam, which are provided for the equipment of mopeds* 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 reflexion, refraction or absorption. A change in the colour of the beams emitted by headlamps whose other characteristics are not changed does not constitute a change of headlamp type. The same approval number shall accordingly be assigned to such headlamps.

3. APPLICATION FOR APPROVAL

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

- 3.1. 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 headlamp in front and in cross lateral elevation, with schematic indication of the optical grooves and prisms of the lens;

* As defined in the 1968 Convention on Road Traffic, chapter I, article 1 (*m*) (E/CONF.56/16/Rev.1).

¹ United Nations, *Treaty Series*, vol. 335, p. 211; for subsequent actions, see references in Cumulative Indexes Nos. 4 to 14, as well as annex A in volumes 915, 917, 926, 932, 940, 943, 945, 950, 951, 955, 958, 960, 961, 963, 966, 973, 974, 978, 981, 982, 985, 986, 993, 995, 997, 1003, 1006, 1010, 1015, 1019, 1020, 1021, 1024, 1026, 1031, 1035, 1037, 1038, 1039, 1040, 1046, 1048, 1050, 1051, 1055, 1059, 1060, 1065, 1066, 1073, 1078, 1079, 1088, 1092, 1095, 1097, 1098, 1106, 1110, 1111, 1112, 1122, 1126, 1130, 1135, 1136, 1138, 1139, 1143, 1144, 1145, 1146, 1147, 1150, 1153, 1156, 1157, 1162, 1177, 1181, 1196, 1197, 1198, 1199, 1205, 1211, 1213, 1214, 1216, 1218, 1222, 1223, 1224, 1225, 1235, 1237, 1240, 1242, 1247, 1248, 1249, 1252, 1253, 1254, 1255, 1256, 1259, 1261, 1271, 1273, 1275, 1276, 1277, 1279, 1284, 1286, 1287, 1291, 1293, 1294, 1295, 1299, 1300, 1301, 1302, 1308, 1310, 1312, 1314 and 1316.

- 3.2. A brief technical description stating, in particular, the class of the filament lamp provided;
- 3.3. Two devices with colourless lenses.*
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 identification 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)** a space of sufficient size to accommodate the approval marking; these spaces must be shown on the drawings referred to in paragraph 3.1 above.
5. APPROVAL
- 5.1. If the devices 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 amendment 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.
- 5.3. Notice of approval or refusal of approval of a type of headlamp 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 and of an attached drawing supplied by the applicant for approval, if possible on a scale of 1:1, and in a format not larger than A 4 (210 × 297 mm).
- 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 marking prescribed in paragraph 4.1.
 - 5.4.1. An international approval mark*** consisting of:
 - 5.4.1.1. A circle surrounding the letter "E" followed by the distinguishing number of the country which has granted approval;†
 - 5.4.1.2. An approval number.
 - 5.5. The markings according to paragraph 5.4 shall be clearly legible and indelible.
 - 5.6. Annex 2 to this Regulation gives an example of the arrangement of the approval mark.

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

** 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.

*** 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.

† 1 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 and 21 for Portugal. Subsequent numbers shall be assigned to other countries in the chronological order in which they ratify the Agreement concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor Vehicle Equipment and Parts, or in which they accede to that Agreement, and the numbers thus assigned shall be communicated by the Secretary-General of the United Nations to the Contracting Parties to the Agreement.

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 S category of Regulation No. 37¹ shall be used.

The standard filament lamp shall be adjusted to the applicable reference luminous flux according to values prescribed for these lamps in Regulation No. 37.

- 7.3. The 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 ± 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 on the screen mentioned in paragraph 7.2 above 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 an uncoloured 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 $y \geq 0.138 + 0.58x$

Limit towards green $y \leq 1.29x - 0.1$

Limit towards white $y \leq -x + 0.966$

Limit towards spectral value $y \leq -x + 0.992$

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 2,854°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.

¹ United Nations, *Treaty Series*, vol. 1073, p. 337.

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 the 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.

In case the sample, that is controlled, is made up of only one sample and the control gives unsatisfactory results, the control of conformity must be repeated on five additional devices.

At least four devices of this new sample must meet the requirements of this Regulation.

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 had previously granted, it shall forthwith so notify the other Contracting Parties applying this Regulation, by means of a copy of the approval form bearing at the end, in large letters, the signed and dated annotation "APPROVAL WITHDRAWN".

11. PRODUCTION DEFINITELY DISCONTINUED

If a 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 bearing at the end, in large letters, the signed and dated annotation "PRODUCTION DISCONTINUED".

12. 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 withdrawal of approval, issued in other countries, are to be sent.

Annex 1

(Maximum format: A 4 (210 × 297 mm))



NAME OF ADMINISTRATION

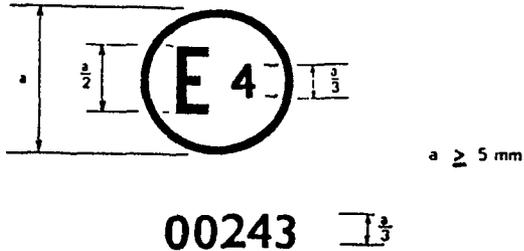
Communication concerning the approval (or refusal or withdrawal of approval or production definitely discontinued) of a type of headlamp pursuant to Regulation No. 56

- Approval No.
- 1. Headlamp type
- 2. Headlamp emitting, with a colourless lamp, a colourless beam/a selective yellow beam* .
- 3. Trade name or mark
- 4. Manufacturer's name and address
- 5. If applicable, name and address of manufacturer's 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*
- 11. Place
- 12. Date
- 13. Signature
- 14. The attached drawing No. ... bearing the approval number shows the headlamp.

* Strike out what does not apply.

Annex 2

ARRANGEMENT OF APPROVAL MARK



The headlamp bearing the above approval mark has been approved in the Netherlands (E 4) under No. 00243. The approval number indicates that the approval was granted in accordance with the requirements of this Regulation in its original form.

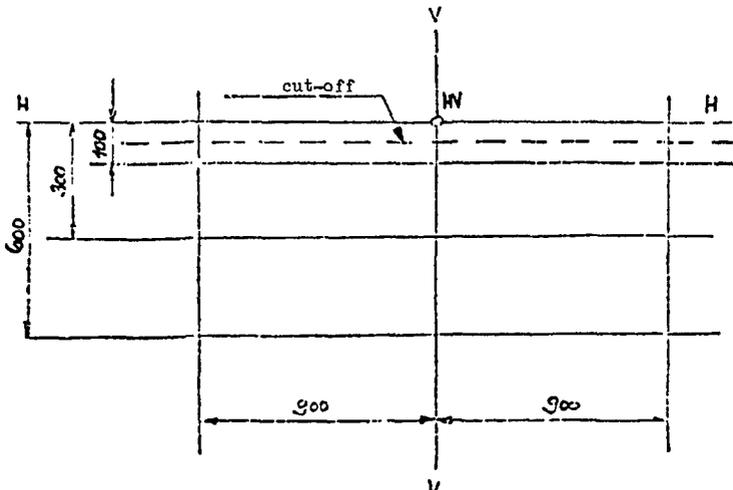
NOTE

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 MEASUREMENTS

1. For measurements, the measuring screen shall be located at a distance of 10 m in front of the headlamp and perpendicular to a line joining the filament of the lamp and the point HV; the line H-H shall be horizontal. For lamps with transverse filament, the filament shall be as horizontal as possible during the measurements.
2. Laterally, the headlamps shall be so aimed that the beam is as symmetrical as possible with reference to the line V-V.
3. Vertically, the headlamp shall be so aimed that the illumination in point HV is 2 lx. Under those conditions, the cut-off shall be situated between the line H-H and the line H-100 mm.
4. When aimed according to paragraphs 2 and 3 above, the illumination shall meet the following values:
 - 4.1. On the line H-H and above: 2 lx max.;
 - 4.2. On a line situated 300 mm below H-H and over a width of 900 mm in both sides of the vertical line V-V: not less than 8 lx;
 - 4.3. 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.

Measuring Screen

(dimensions in mm for 10 m distance)

*Regulation No. 57*UNIFORM PROVISIONS CONCERNING THE APPROVAL OF HEADLAMPS
FOR MOTOR CYCLES AND VEHICLES TREATED AS SUCH

1. SCOPE

This Regulation applies to the approval of headlamps using filament lamps which are provided for the equipment of motor cycles 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 class of headlamp as defined in paragraph 4.1.4 below;
- 2.3. The characteristics of the optical system;
- 2.4. The inclusion or the suppression of components capable of altering the optical effects by reflexion, refraction or absorption. A change in the colour of the beams emitted by headlamps whose other characteristics are not changed does not constitute a change of headlamp type. The same approval number shall accordingly be assigned to such headlamps.

3. APPLICATION FOR APPROVAL

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

Any application shall be accompanied by:

- 3.1. 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 headlamp in front and cross lateral elevation, with schematic indication of the optical grooves and prisms of the lens;
- 3.2. A brief technical description stating, in particular, the category or categories of the filament lamp provided (see annex 3, paragraph 6, to this Regulation);
- 3.3. Two samples with colourless lenses.*

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. Externally and/or on the lens, the visible indication of the headlamp class when installed on the vehicle. There are two classes, A and B, identified by particular photometric provisions (see annex 3);
 - 4.1.3. On the back of the headlamp the indication of the S₁ and/or S₂ category of the admitted filament lamp;

* 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.

4.1.4. The markings are listed in the following table:

<i>Class of headlamp Exterior marking</i>	<i>Indication of the category of filament lamp</i>
MA	S ₁
MA	S ₂
MB	S ₁
MB	S ₂
MB	S ₁ /S ₂

4.2. Moreover, they shall include on the lens and on the main body (the reflector being considered as main body)* 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 shall not assign the same number to another type of headlamp.

5.3. Notice of approval 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 and of an attached drawing supplied by the applicant for approval, if possible on a scale of 1:1, and in a format not exceeding A 4 (210 × 297 mm).

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** consisting of:

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

5.4.1.2. An approval number.

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

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

* 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.

** 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.

*** 1 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 and 21 for Portugal. Subsequent numbers shall be assigned to other countries in the chronological order in which they ratify the Agreement concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor Vehicle Equipment and Parts, or in which they accede to that Agreement, and the numbers thus assigned shall be communicated by the Secretary-General of the United Nations to the Contracting Parties to the Agreement.

6. GENERAL SPECIFICATIONS

- 6.1. Each sample 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.
- 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 S category of Regulation No. 37¹ shall be used.

The standard filament lamp shall be adjusted to the applicable reference luminous flux according to values prescribed for these lamps in 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 as straight and horizontal as possible over a horizontal length of at least ± 1,500 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 an uncoloured 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	$y \geq 0.138 + 0.58x$
Limit towards green	$y \leq 1.29x - 0.1$
Limit towards white	$y \geq -x + 0.966$
Limit towards spectral value	$y \leq -x + 0.992$

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 2,854°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.

¹ United Nations, *Treaty Series*, vol. 1073, p. 337.

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. TRANSITORY PROVISIONS

Until 1 October 1984 approvals can be granted for headlamps of class A. After 1 October 1984, approvals granted for headlamps of class A shall cease to be valid.

10. 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. Compliance with this provision shall be verified in accordance with annex 4 of this Regulation.

11. PENALTIES FOR NON-CONFORMITY OF PRODUCTION

11.1. 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.

11.2. If a Party to the Agreement which applies this Regulation withdraws an approval it had 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 bearing at the end, in large letters, the signed and dated annotation "APPROVAL WITHDRAWN".

12. PRODUCTION DEFINITELY DISCONTINUED

If a 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 bearing at the end, in capital letters, the signed and dated annotation "PRODUCTION DISCONTINUED".

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 withdrawal of approval, issued in other countries, are to be sent.

Annex 1

(Maximum format: A 4 (210 × 297 mm))



NAME OF ADMINISTRATION

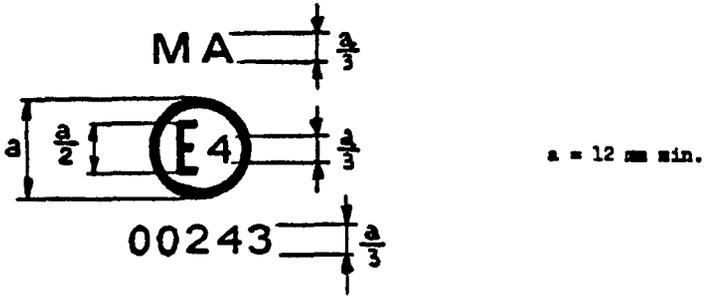
Communication concerning the approval (or refusal or withdrawal of approval or production definitely discontinued) of a type of headlamp pursuant to Regulation No. 57

- Approval No.
1. Headlamp submitted for approval as type MA/MB*
2. Headlamp emitting, with a colourless lamp, a colourless beam/a selective yellow beam*
3. Trade name or mark
4. Manufacturer's name and address
5. If applicable, name and address of manufacturer's 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*
11. Place
12. Date
13. Signature
14. The attached drawing No. ... bearing the approval number shows the headlamp.

* Strike out what does not apply.

Annex 2

ARRANGEMENT OF APPROVAL MARK



The headlamp bearing the above approval mark has been approved in the Netherlands (E 4) under No. 00243. The approval number indicates that the approval was granted in accordance with the requirements of this Regulation 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

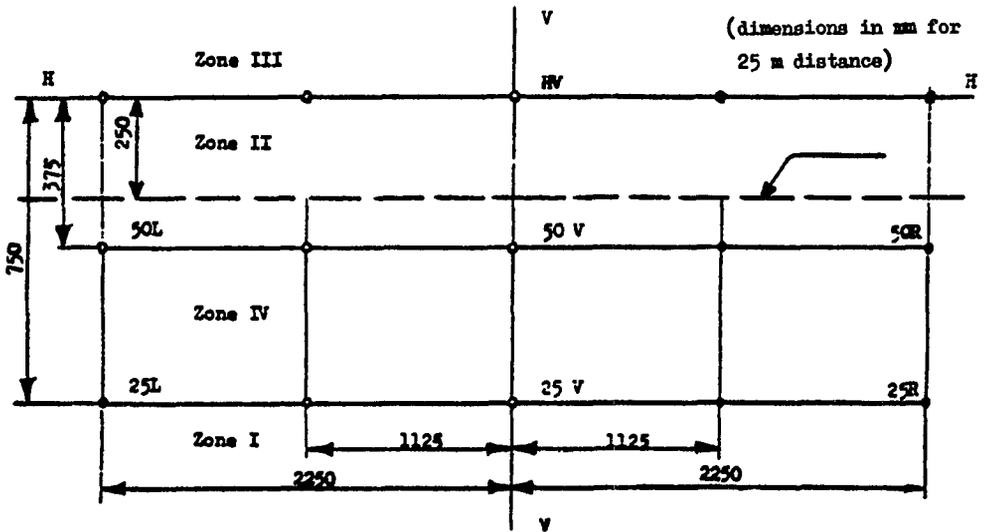
PHOTOMETRIC TESTS

1. For measurements, the measuring screen shall be located at a distance of 25 m in front of the headlamp and perpendicular to the line joining the filament of the lamp and the point HV; the line H-H shall be horizontal.
2. Laterally, the headlamp shall be so aimed that the beam centre of the driving beam is on the vertical line V-V.
3. Vertically, the headlamp shall be so aimed that the "cut-off" of the passing beam is situated 250 mm below the line H-H.
4. The headlamp when aimed according to paragraphs 2. and 3. above, similar to the conditions of the driving beam, shall meet the following conditions:
 - 4.1. The luminous centre of the driving beam shall be situated not more than 0.6° above or below the line H-H;
 - 4.2. The illumination of the driving beam shall attain its maximum value E_{\max} in the centre of the entire beam pattern and decrease laterally continuously;
 - 4.3. The maximum illumination (E_{\max}) of the driving beam shall meet the following minimum values:
 - 4.3.1. 25 lux for class A headlamps;
 - 4.3.2. 32 lux for class B headlamps;
 - 4.4. The illumination produced by the driving beam shall meet the following values:
 - 4.4.1. The point of intersection (HV) of lines H-H and V-V shall be situated within the isolux 90 per cent of maximum illumination;
 - 4.4.2. Starting from point HV, horizontally to the right and left, the illumination of the driving beam shall be not less than:
 - 10 lux for class A headlamps;
 - 12 lux for class B headlamps
 up to a distance of 1.125 m, and not less than:
 - 2.5 lux for class A headlamps;
 - 3 lux for class B headlamps
 up to a distance of 2.25 m;
 - 4.5. The illumination produced by the passing beam shall meet the following values:

<i>Measuring point</i>	<i>Class A headlamp</i>	<i>Class B headlamp</i>
Any point on and above the line H-H	≤ 0.7 lux	
Any point on the line 50L-50R except 50 V*	≥ 1 lux	≥ 1.5 lux
Point 50 V	≥ 2 lux	≥ 3 lux
Any point on the line 25L-25R	≥ 2 lux	≥ 3 lux
Any point in zone IV	≥ 1 lux	≥ 1.5 lux

* Intensity $\frac{50 R}{50 V} = 0.25$ minimum.

5. Measuring screen



6. For the filament lamps, categories S₁ or S₂ according to Regulation No. 37 shall be used.

Annex 4

VERIFICATION OF CONFORMITY OF PRODUCTION OF HEADLAMPS

1. Headlamps bearing an approval mark shall conform to the approved type.
2. The requirement of conformity shall be deemed satisfied from a mechanical and geometrical standpoint if the discrepancies do not exceed inevitable manufacturing errors.
3. As regards photometric performance, the conformity headlamps of the series will not be contested if, during photometric tests of any headlamp, selected at random and equipped with a standard (reference) lamp,
 - 3.1. None of the values measured deviates unfavourably by more than 20 per cent from the prescribed value (for zone III, the maximum unfavourable deviation may be 0.3 lux),
 - 3.2. Or if
 - 3.2.1. For the passing beam, the prescribed values are met with a tolerance of 0.2 lux on line HH and with a tolerance of 0.1 lux in at least one point of the area delimited on the measuring screen (at 25 m) by a circle 15 cm in radius around points 50L, 50V, 50R, 25L, 25V, 25R and in the entire area of zone IV which is not more than 37.5 cm above line 25R and 20L,*
 - 3.2.2. And if, for the driving beam, HV being situated within the isolux 0.75 E_{\max} , a tolerance of 20 per cent is observed for the photometric values.
 4. If the results of the tests described in paragraph 3. above do not satisfy the requirements, the tests for the headlamp in question shall be repeated with another standard (reference) lamp.
 5. If by this repeated test the headlamp fails to comply with the requirement, the production shall be deemed not to conform to the originally approved type of lamp.

Authentic texts: English and French.

Registered ex officio on 15 June 1983.

* The determination of the ratio of the illumination $\frac{50L}{50V}$ and $\frac{50R}{50V}$ provided for in paragraph 4.5 of annex 3 of this Regulation is solely for the purpose of seeing whether the type of headlamp has the desired characteristics; no such check need be made during verification of conformity of production.