

COUNCIL DIRECTIVE

of 17 September 1984

on the approximation of the laws of the Member States relating to the permissible sound power level of lawnmowers

(84/538/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 100 thereof,

Having regard to the proposal from the Commission ⁽¹⁾,

Having regard to the opinion of the European Parliament ⁽²⁾,

Having regard to the opinion of the Economic and Social Committee ⁽³⁾,

Whereas the technical requirements with which lawnmowers must comply under the terms of the national laws concern, *inter alia*, their noise emission; whereas these requirements differ from one Member State to another; whereas, through their disparities, they hamper trade within the European Community;

Whereas these obstacles to the establishment and operation of the common market can be reduced or even removed if the same requirements are adopted by all the Member States in place of their existing laws;

Whereas the main objective of the provisions of this Directive is to ensure protection against nuisances due to noise by reducing the inconvenience caused by the noises emitted by lawnmowers;

Whereas it is therefore necessary to determine at Community level the permissible upper limits for noise emissions from lawnmowers and a common method for measuring such emissions;

Whereas it is desirable to bring to the attention of the consumer the acoustic quality of lawnmowers; whereas an effective method of informing the consumer is to require that each lawnmower should be marked with the level of its acoustic force; whereas it is, however, pointless to require this mark on lawnmowers which are not noisy by construction, such as electric lawnmowers with a small cutting-width;

Whereas the conformity of lawnmowers with this Directive may be presumed by virtue of the certificate of conformity issued by the manufacturer, or by the importer resident in the Community; whereas the Member States must recognize such certificates as conclusive evidence, thus ensuring the free movement of lawnmowers throughout the Community;

Whereas, without prejudice to Articles 169 and 170 of the Treaty, it is advisable, within the framework of cooperation between the competent authorities of the Member States, to lay down provisions to help resolve disputes of a technical nature regarding the conformity of production models with the requirements of this Directive;

Whereas it should be expressly confirmed that those concerned must have available to them appropriate legal remedies in respect of decisions taken by the appropriate national authorities for purposes of implementing this Directive;

Whereas technical progress requires prompt adjustment of the technical requirements specified in this Directive; whereas, in order to facilitate implementation of the measures required for this purpose, a procedure should be prescribed for establishing close cooperation between the Member States and the Commission within the committee established by Article 5 of Council Directive 79/113/EEC of 19 December 1978 on the approximation of the laws of the Member States relating to the determination of the noise emission of construction plant and equipment ⁽⁴⁾, as amended by Directive 81/1051/EEC ⁽⁵⁾,

⁽¹⁾ OJ No C 86, 2. 4. 1979, p. 9.

⁽²⁾ OJ No C 127, 21. 5. 1979, p. 80.

⁽³⁾ OJ No C 247, 11. 10. 1979, p. 19.

⁽⁴⁾ OJ No L 33, 8. 2. 1979, p. 15.

⁽⁵⁾ OJ No L 376, 30. 12. 1981, p. 42.

HAS ADOPTED THIS DIRECTIVE:

Article 1

1. The purpose of this Directive is to restrict the permissible sound power level of lawnmowers by specifying upper limits and the methods for measuring such level.

2. 'Lawnmower' means all motorized equipment appropriate for the upkeep by cutting, by whatever method, of areas under grass used for recreational, decorative or similar purposes.

3. This Directive applies to mowers as referred to in paragraph 2, except for the following:

- motorized cylinder mowers,
- agricultural and forestry equipment,
- non-independent devices (e.g. drawn cylinders), with cutting devices actuated by the wheels or by an integrated drawing or carrier component,
- multi-purpose devices the main motorized components of which have an installed power of over 20 kW.

Article 2

Member States shall take all appropriate measures to ensure that lawnmowers as defined in Article 1 may not be placed on the market unless their sound power levels, as measured under the conditions specified in Annex I, do not exceed the permissible level for the cutting width of the mower as shown in the following table:

Cutting width of lawnmower (L)	Permissible sound power level in dB(A)/1 pW
$L \leq 50$ cm	96
50 cm $< L \leq 120$ cm	100
$L > 120$ cm	105

Article 3

A lawnmower's conformity with the requirements of this Directive shall be attested by the manufacturer, or by the importer domiciled in the Community, on his own responsibility, in a certificate (see model in Annex II) which shall accompany the machine and which shall be based on the report on the tests carried out on each type of lawnmower by one of the

laboratories included in a list to be drawn up by each Member State and notified to the other Member States. This certificate may be reproduced on the directions for use or on the guarantee certificate.

Article 4

Prior to being placed on the market, lawnmowers shall, in a clearly visible and durable fashion either directly or on a plate (such as a riveted or self-adhesive plate) permanently attached to them, bear marks identifying the manufacturer, describing the type and indicating the maximum sound power level expressed in dB(A)/1 pW, guaranteed by the manufacturer.

The model for these indications is set out in Annex III.

Article 5

1. Subject to the provisions in paragraph 2, no Member State may refuse, prohibit or restrict the sale, putting into service or use of lawnmowers on grounds relating to their sound power levels if they satisfy the requirements of this Directive and are accompanied by the certificate of conformity referred to in Article 3 and bear the indications referred to in Article 4.

2. Member States may take measures to regulate the use of lawnmowers in areas which they consider sensitive.

Article 6

Member States shall take all the necessary measures to verify that lawnmowers conform to the requirements of this Directive. Such verification shall be carried out in accordance with the technical specifications laid down in Annex IV.

Article 7

1. If a Member State in which the lawnmower is manufactured finds that the latter does not conform to the provisions of this Directive or if it is notified to this effect by another Member State, it shall take the necessary measures to ensure that the further production of like models conforms to the approved type.

The Member State in question shall inform the other Member States and the Commission of the measures taken within one month, stating the grounds for such action.

2. If a Member State disputes the failure to conform notified to it, the Member States concerned shall endeavour to settle the dispute. The Commission shall be kept informed and shall, where necessary, hold appropriate consultations for the purpose of reaching a settlement.

Article 8

Any amendments necessary in order to adapt the Annexes to this Directive to technical progress shall be adopted in accordance with the procedure laid down in Article 5 of Council Directive 79/113/EEC.

Article 9

The provisions of this Directive shall not affect the Member States' entitlement to limit, with due observance of the Treaty, and in particular Articles 30 to 36 thereof, the level of noise at the operator's position for lawnmowers for professional use with a cutting width of more than 120 cm provided that this does not involve an obligation to adapt lawnmowers which comply with this Directive to different emission standards within the meaning of Annex I to the Directive.

Article 10

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 1 July 1987 and shall forthwith inform the Commission thereof.

2. Member States shall communicate to the Commission the texts of the provisions of national law which they adopt in the field governed by this Directive.

Article 11

This Directive is addressed to the Member States.

Done at Brussels, 17 September 1984.

For the Council

The President

P. BARRY

ANNEX I

METHOD OF MEASURING AIRBORNE NOISE EMITTED BY LAWNMOWERS

SCOPE

This measuring method applies to lawnmowers. It specifies the procedures for determining their sound power level so that their conformity with requirements may be attested.

These technical procedures comply with the requirements set out in Annex I to Directive 79/113/EEC.

The provisions of Annex I to Directive 79/113/EEC shall apply to lawnmowers, with the following amendments:

4. CRITERIA TO BE USED FOR EXPRESSING RESULTS

4.1. Acoustic criteria for the environment.

The acoustic criterion for the environment of a lawnmower shall be expressed by the sound power level.

6. MEASURING CONDITIONS

6.1. Purpose of the measurement.

6.1.1. Lawnmowers designed to be equipped with a device for collecting the grass shall be tested under normal conditions of use with that device fitted.

6.1.2. The cutting device shall be adjusted to its minimum height, but shall not, however, be less than 3 cm from the ground. The grass in the test area shall be mown with this cutting device setting before any sound measurement is taken.

For the sound measurement, all grass shall be removed from the lawnmower and the grass collector shall be empty.

6.2. Operation of the sound source during measurement.

Before each sound measurement is taken, the lawnmower shall be warmed up in accordance with the manufacturer's instructions.

The sound power level of lawnmowers shall, in principle, be measured when the lawnmower is stationary without its operator being present and the cutting device and the motor are operating at maximum speed.

If the cutting device cannot be separated from the driving wheels of the lawnmower, the mower shall be tested while moving and driven by an operator under the following conditions:

— *direct-drive lawnmower:*

in this case, it shall be moving at a speed such that the cutting device is operating at the maximum speed laid down by the manufacturer,

— *variable-drive lawnmower:*

in this case, the highest gear shall be selected. The lawnmower shall be moving at a speed such that the cutting device is operating at the maximum speed laid down by the manufacturer.

(a) *Lawnmowers with combustion engines:*

- The engine oil used for operating the mower during measurement shall be as specified by the manufacturer. The fuel tank shall not be more than half full.

(b) *Lawnmowers with electric motors:*

If the lawnmower is powered by battery, the battery shall be fully charged. If the lawnmower is powered by a generating unit or from the mains, the frequency of the supply current specified for the motor shall be stable at ± 1 Hz.

6.3. **Measuring site.**

The test area shall be flat and horizontal. The area, including the microphone placements, shall be covered in turf which is not wet.

6.4. **Measuring surface, measuring distance, location and number of measuring points.**

6.4.1. *Measuring surface.*

The measuring surface to be used for the test shall be a hemisphere. The radius of the hemisphere shall be determined by the width of cut of the lawnmower.

The radius shall be:

- 4 m, where the width of cut of the lawnmower to be tested is no more than 1,2 m,
- 10 m, where the width of cut of the lawnmower to be tested exceeds 1,2 m.

6.4.2. *Location and number of measuring points.*

6.4.2.1. **General.**

For the purpose of measuring the noise emitted by lawnmowers when stationary and in motion, six measuring points shall be used, i. e. points 2, 4, 6, 8, 10 and 12, arranged in accordance with section 6.4.2.2 of Annex I to Directive 79/113/EEC. When measurements are taken for stationary mowers, the centre of the hemisphere shall coincide with the projection of the geometric centre of the lawnmower to the ground, pointing from measuring point 1 towards point 5. For moving measurements, the displacement axis shall pass through the positions of measuring points 1 and 5.

7. **MEASUREMENTS**

7.1.1. *Extraneous noise.*

The measurement of the level of parasitic noise shall not be taken into consideration (7.1.1 (b)).

7.1.5. *Presence of obstacles.*

A visual check in a circular area of a radius equal to three times that of the measurement hemisphere, the centre of which coincides with that of the hemisphere, shall be adequate to ensure that the provisions of the third paragraph of section 6.3 of Annex I to Directive 79/113/EEC have been complied with.

7.2. **Measurement of the sound pressure level L_{pA} .**

The sound pressure L_{pA} shall be measured in accordance with the first paragraph of section 7.2 of Annex I to Directive 79/113/EEC. When the mower is in motion, the measuring time shall be the time which it takes to cover the distance AB (figure) at constant speed.

The sound pressure levels L_{pA} of a lawnmower shall be measured at least three times. If the sound power levels obtained from these measurements differ by more than 1 dB, further measurements shall be taken until two power levels are obtained which do not differ by more than 1 dB and the higher of which shall be the sound power level of the lawnmower.

Note: Where a sound level meter is used for measurements with the mower in motion, in most cases L_{pA} shall be equal to the level measured when the mower passes the centre of the hemisphere.

8. USE OF RESULTS

8.6.2. Acoustic properties of test area.

For these measurements, the constant C determined in accordance with section 8.6.2 of Annex I to Directive 79/113/EEC shall be between 0,5 and 2 dB with $K_2 = 0$.

9. DATA TO BE RECORDED

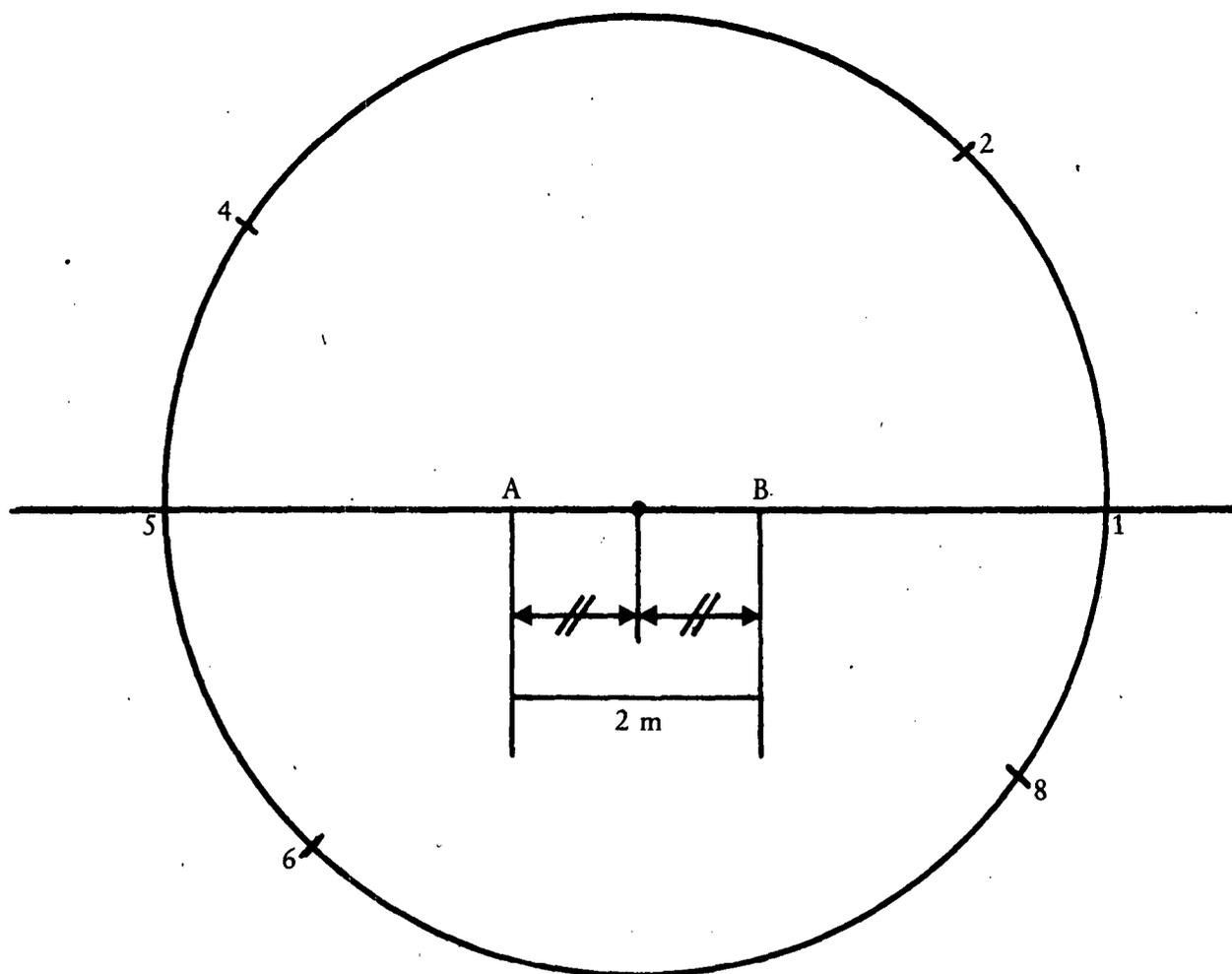
9.1. Sound source under test:

- (f) width of cut;
- (g) speed of rotation of the cutting device.

9.4. Acoustic data

- (b) delete 'area S of measuring surface in m^2 ';
- (c) place, date and time of measurements.

Appendix



Figure

ANNEX II

MODEL CERTIFICATE OF CONFORMITY ISSUED BY THE MANUFACTURER

I, the undersigned,
.....
(Name and address)

certify that the lawnmower:

- 1. Category
(Combustion engine, electrical, etc.)
- 2. Make
- 3. Type
- 4. Serial No

conforms to the specifications of Directive 84/538/EEC

Guaranteed sound power level dB (A)

- type of cutting device
- width of cut cm
- speed of rotation of the cutting device rpm

Done at,
(Date)

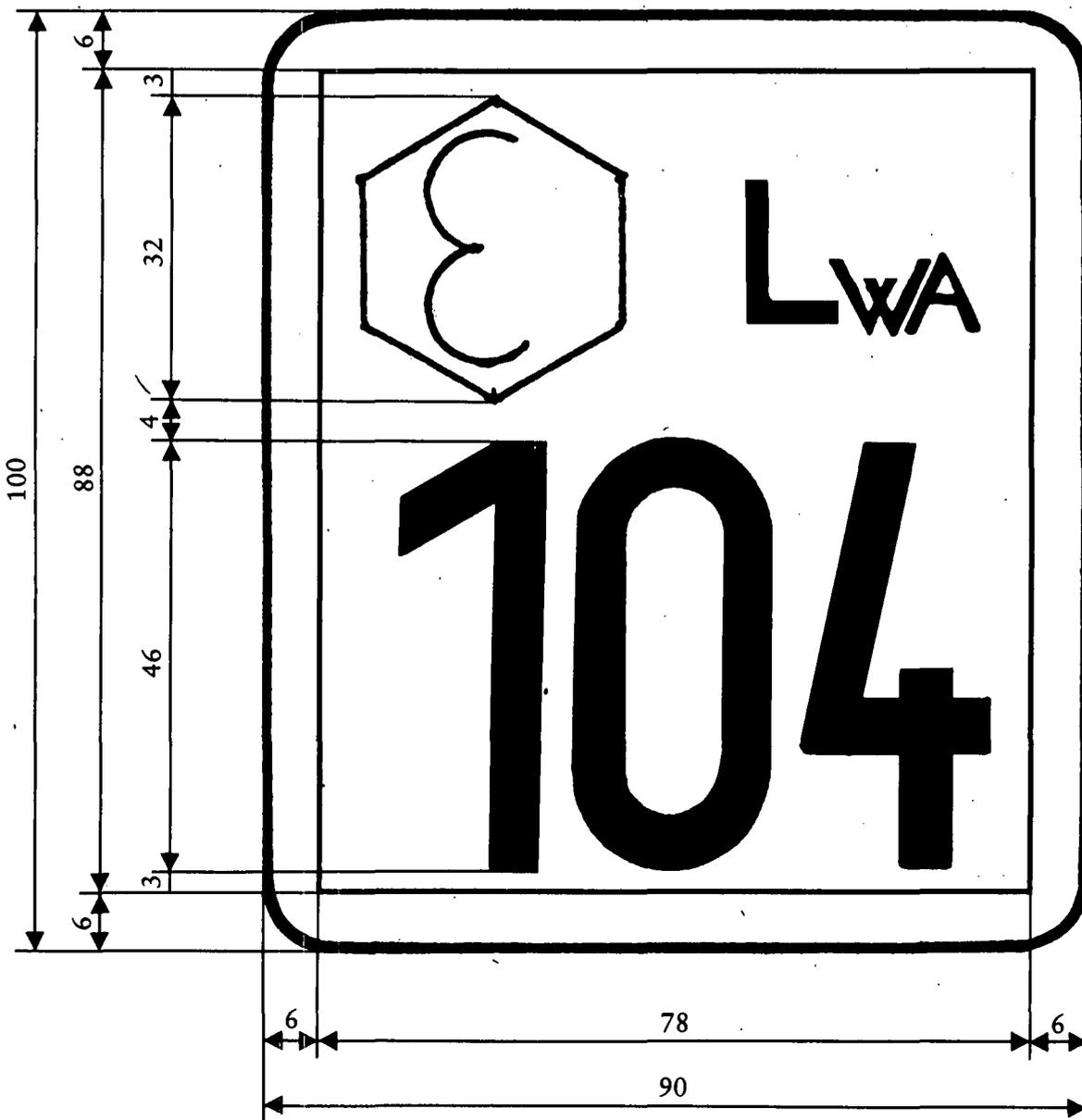
.....
(Signature)

.....
(Position)



ANNEX III

MODEL FOR MARK FOR SOUND POWER LEVEL



ANNEX IV

TECHNICAL PROCEDURES FOR CHECKING THAT MOWERS CONFORM TO THE REQUIREMENTS OF THE DIRECTIVE

Where possible, the conformity of mowers to the requirements of this Directive shall be verified by means of spot checks.