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**COUNCIL DIRECTIVE**

**of 4 March 1974**

**on the approximation of the laws of the Member States relating to certain parts and characteristics  
of wheeled agricultural or forestry tractors**

(74/151/EEC)

(OJ L 84, 28.3.1974, p. 25)

Corrected by:

► **C1** Corrigendum, OJ L 226, 18.8.1976, p. 16 (74/151)

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## COUNCIL DIRECTIVE

of 4 March 1974

on the approximation of the laws of the Member States relating to certain parts and characteristics of wheeled agricultural or forestry tractors

(74/151/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;

Having regard to the Opinion of the European Parliament <sup>(1)</sup>;

Having regard to the Opinion of the Economic and Social Committee <sup>(2)</sup>;

Whereas the technical requirements with which tractors must comply pursuant to national laws relate, *inter alia*, to the maximum permissible laden weight, the location and fitting of rear registration plates, fuel tanks, ballast weights, audible warning devices and permissible sound level and exhaust systems (silencer);

Whereas these requirements differ from one Member State to another; whereas it is therefore necessary that all Member States adopt the same requirements either in addition to or in place of their existing rules, in order, in particular, to allow the EEC type-approval procedure which was the subject of the Council Directive of 4 March 1974 <sup>(3)</sup> on the approximation of the laws of the Member States relating to the type-approval of wheeled agricultural or forestry tractors to be applied in respect of each type of tractor,

HAS ADOPTED THIS DIRECTIVE:

*Article 1*

1. 'Agricultural or forestry tractor' means any motor vehicle, fitted with wheels or ►C1 endless tracks ◄ and having at least two axles, the main function of which lies in its tractive power and which is specially designed to tow, push, carry or power certain tools, machinery or trailers intended for agricultural or forestry use. It may be equipped to carry a load and passengers.

2. This Directive shall apply only to tractors defined in the preceding paragraph which are fitted with pneumatic tyres and which have two axles and a maximum design speed of between 6 and 25 km/h.

*Article 2*

No Member State may refuse to grant EEC type-approval or national type-approval of a tractor on grounds relating to:

- the maximum permissible laden weight,
- the location and fitting of the rear registration plates,
- fuel tanks,
- ballast weights,
- audible warning devices,
- the permissible sound level and exhaust system (silencer),

is these satisfy the requirements set out in the relevant Annexes.

<sup>(1)</sup> OJ No 28, 17. 2. 1967, p. 462/67.

<sup>(2)</sup> OJ No 42, 7. 3. 1967, p. 620/67.

<sup>(3)</sup> See p. 10 of this Official Journal.

**▼B***Article 3*

No Member State may refuse the registration or prohibit the sale, entry into service or use of tractors on grounds relating to the parts and characteristics listed in Article 2 if these satisfy the requirements set out in the relevant Annexes.

*Article 4*

The amendments necessary for adapting to technical progress the requirements of the Annexes, apart from those set out at points I.1 and I.4.1.2 of Annex VI, shall be adopted in accordance with the procedure laid down in Article 13 of the Council Directive on the type-approval of wheeled agricultural or forestry tractors.

*Article 5*

1. Member States shall put into force the provisions necessary in order to comply with this Directive within eighteen months of its notification and shall forthwith inform the Commission thereof.
2. Member States shall ensure that the texts of the main provisions of national law which they adopt in the field covered by this Directive are communicated to the Commission.

*Article 6*

This Directive is addressed to the Member States.

**▼B***ANNEX I***MAXIMUM PERMISSIBLE LADEN WEIGHT**

1. The technically permissible maximum laden weight as stated by the manufacturer shall be accepted by the competent administration as the maximum permissible laden weight provided that:
  - 1.1. the results of any tests which that administration makes, in particular those in respect of braking and steering, are satisfactory.
  - 1.2. the maximum permissible laden weight does not exceed 14 metric tons and the maximum permissible weight per axle does not exceed 10 metric tons.
2. Whatever the state of loading of the tractor, the weight transmitted to the road by the wheels on the forward axle must not be less than 20 % of the unladen weight of that tractor.

*ANNEX II***1. SHAPE AND DIMENSIONS OF THE SPACE FOR MOUNTING REAR REGISTRATION PLATES**

The space for mounting shall comprise an even or virtually even rectangular surface with the following minimum dimensions:

- length 240 mm;
- height 165 mm.

**2. LOCATION OF THE SPACE FOR MOUNTING AND THE FIXING OF THE PLATES**

The space for mounting shall be such that, after correct fixing, the plates shall have the following characteristics:

**2.1. Position of the plate in relation to the width of the vehicle**

The centre point of the plate may not be situated to the right of the plane of symmetry of the tractor in Member States where traffic drives on the right or to the left of that plane where traffic drives on the left.

In Member States where traffic drives on the right, the left-hand edge of the plate may not be situated to the left of the vertical plane which is parallel to the plane of symmetry of the tractor and which touches the extreme outer edge of the vehicle.

In Member States where traffic drives on the left, the right-hand edge of the plate may not be situated to the right of the vertical plane which is parallel to the plane of symmetry of the tractor and which touches the extreme outer edge of the vehicle.

**2.2. Position of the plate in relation to the longitudinal plane of symmetry of the tractor**

The plate shall be perpendicular or practically perpendicular to the plane of symmetry of the tractor.

**2.3. Position of the plate in relation to the vertical plane**

The plate shall be vertical within a tolerance of 5°. However, where the shape of the tractor so requires, it may be inclined to the vertical:

- 2.3.1. at not more than 30° when the surface bearing the registration number is inclined upwards, provided that the height of the upper edge of the plate is not more than 1.20 metres from the ground;
- 2.3.2. at not more than 15° when the surface bearing the registration number is inclined downwards, provided that the height of the upper edge of the plate is more than 1.20 metres from the ground.

**2.4. Height of the plate from the ground**

The height of the lower edge of the plate from the ground shall not be less than 0.30 metres: the height of the upper edge of the plate from the ground shall be not more than 1.20 metres. However, where it is impossible in practice to comply with this latter provision, the height may exceed 1.20 metres, but it must then be as close to that limit as the constructional characteristics of the tractor allow, and must in no case exceed 2.5 metres.

**2.5. Determination of the height of the plate from the ground**

The heights given in 2.3 and 2.4 shall be measured with the tractor unladen.

**▼B***ANNEX III***TANKS FOR LIQUID FUEL**

1. Fuel tanks must be made so as to be corrosion resistant. They must satisfy the leakage tests carried out by the manufacturer at a pressure equal to double the working pressure but in any event not less than 1.3 bars. Any excess pressure or any pressure exceeding the working pressure must be automatically compensated by suitable devices (vents, safety valves etc.). The vents must be designed in such a way as to prevent any fire risk. The fuel must not escape through the fuel-tank cap or through the devices provided to compensate excess pressure even if the tank is completely overturned: a drip shall be tolerated.
2. Fuel tanks must be installed in such a way as to be protected from the consequences of an impact to the front or to the rear of the tractor; there shall be no protruding parts, sharp edges etc. near the tanks.

**▼B***ANNEX IV***BALLAST WEIGHTS**

If, in order to satisfy the provisions laid down for EEC type-approval, a tractor has to be fitted with ballast weights, these weights must be provided by the manufacturer, be made of metal, designed for fixing to the tractor, and bear the mark of the firm manufacturing them and an indication of their approximate weight in kilograms.

**▼B***ANNEX V***AUDIBLE WARNING DEVICE**

1. The warning device must bear the EEC approval mark prescribed by the Council Directive of 27 July 1970 on the approximation of the laws of Member States relating to audible warning devices for motor vehicles <sup>(1)</sup>.
2. **Characteristics of the Audible Warning Device when fitted to the tractor**
  - 2.1. Acoustic tests

When a tractor is type approved, the characteristics of the warning device fitted to that type of tractor shall be tested as follows:

    - 2.1.1. The sound pressure level of the device when fitted to the tractor shall be measured at a point 7 metres in front of the tractor, at a site which is open and as level as possible. The engine of the tractor shall be stopped. The effective voltage shall be that laid down in point 1.2.1. of Annex I to the Directive referred to at 1 above.
    - 2.1.2. Measurements shall be made on the 'A' weighting scale of the IEC (International Electrotechnical Commission) standard.
    - 2.1.3. The maximum sound pressure level shall be determined at a height between 0.5 and 1.5 metres above ground level.
    - 2.1.4. The said maximum must be not less than 93 dB (A).

<sup>(1)</sup> OJ No L 176, 10. 8. 1970, p. 12.



**▼B***ANNEX VI***I. PERMISSIBLE SOUND LEVELS****I.1. Limits**

The sound level of the tractors referred to in Article 1 of this Directive, when measured under the conditions set out in this Annex, may not exceed the following levels:

89 dB (A) for tractors with an unladen weight exceeding 1.5 metric tons;

85 dB (A) for tractors with an unladen weight not exceeding 1.5 metric tons.

**I.2. Measuring instruments**

The noise emitted by tractors shall be measured by means of a sound-level meter of the type described in Publication 179, 1st Edition (1965) of the International Electrotechnical Commission.

**I.3. Conditions of measurement**

Measurements shall be made on unladen tractors in a sufficiently silent and open area (ambient noise and wind noise at least 10 dB (A) below the noise being measured).

This area may take the form, for instance, of an open space of 50 metre radius having a central part of at least 20 metres radius which is practically level; it may be surfaced with concrete, asphalt, or similar material and may not be covered with powdery snow, tall grass, loose soil or ashes.

The surface of the test track shall be such as not to cause excessive tyre noise. This condition applies only to measurement of the noise made by tractors in motion.

Measurement shall be carried out in fine weather with little wind. No person other than the observer taking the readings from the apparatus may remain near the tractor or the microphone, as the presence of spectators near either the tractor or the microphone may considerably affect the readings from the apparatus. Marked fluctuations of the pointer which appear to be unrelated to the characteristics of the general sound level shall be ignored in taking readings.

**I.4. Method of measurement****I.4.1. Measurement of noise of tractors in motion (for type-approval).**

At least two measurements shall be made on each side of the tractor. Preliminary measurements may be made for adjustment purposes but shall be disregarded.

The microphone shall be situated 1.2 metres above ground level at a distance of 7.5 metres from the path of the tractor's centre line, CC, measured along the perpendicular PP' to that line (figure 1).

Two lines AA' and BB', parallel to line PP' and situated respectively 10 metres forward and 10 metres rearward of the line, shall be marked out on the test track. Tractors shall approach line AA' at a steady speed, as specified below. The throttle shall then be fully opened as rapidly as practicable and held in the fully opened position until the rear of the tractor<sup>(1)</sup> crosses line BB'; the throttle shall then be closed again as rapidly as possible.

The maximum sound level recorded shall constitute the result of the measurement.

**I.4.1.1. The test speed shall be three-quarters of the maximum speed which can be attained in the highest gear used for road movement.**

<sup>(1)</sup> If the tractor includes a trailer, this shall not be taken into account in determining when line BB' is crossed.

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## I.4.1.2. Interpretation of results

I.4.1.2.1. To take account of inaccuracies in the measuring instruments, the result obtained from each measurement shall be determined by deducting 1 dB (A) from the meter reading.

I.4.1.2.2. Measurements shall be considered valid if the difference between two consecutive measurements on the same side of the tractor does not exceed 2 dB (A).

I.4.1.2.3. The highest sound level measured shall constitute the test result. Should that result exceed by 1 dB (A) the maximum permissible sound level for the category of tractor tested, two further measurements shall be made. Three of the four measurements thus obtained must fall within the prescribed limits.

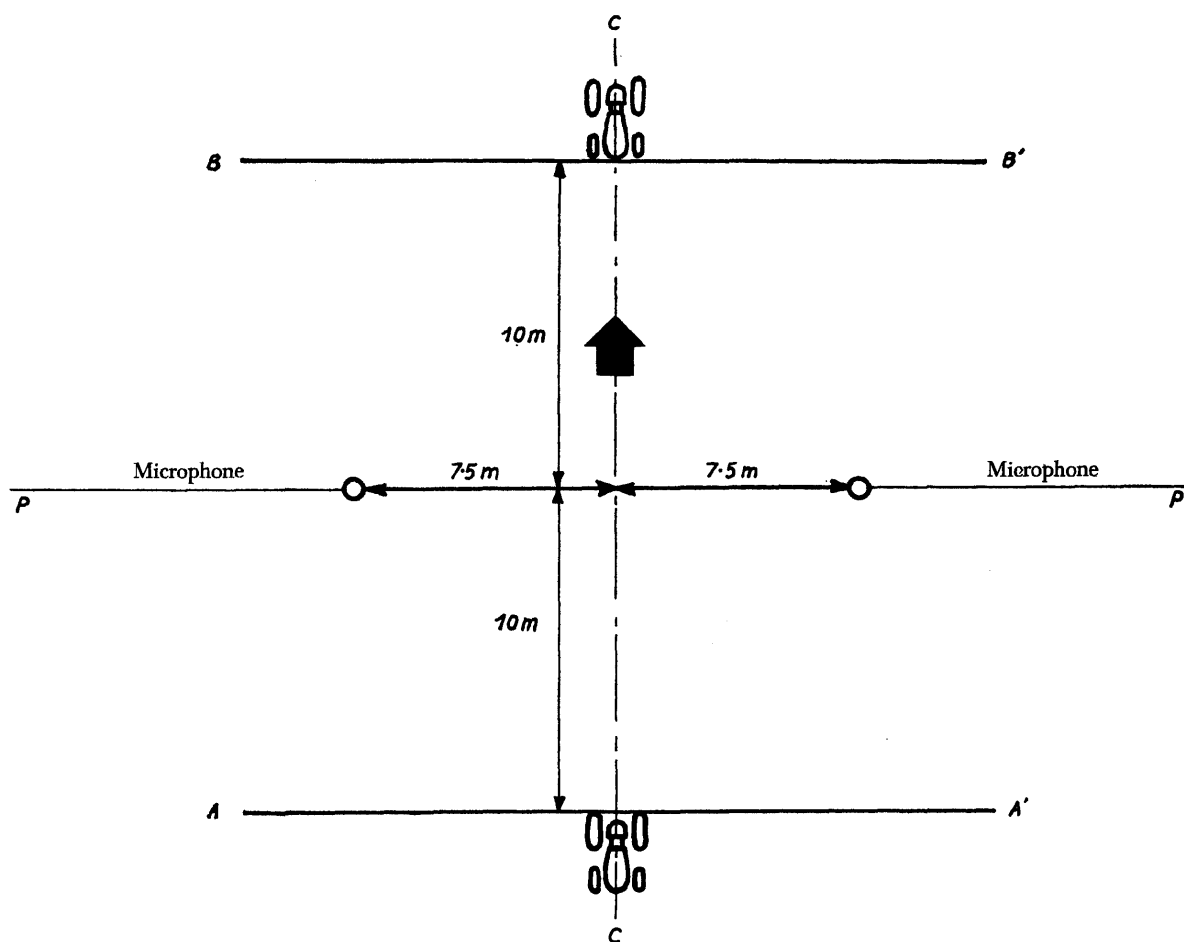
**Measuring positions for tractors in motion**

Figure 1

I.4.2. Measurement of noise of stationary tractors (not required for type-approval).

## I.4.2.1. Position of sound-level meter

Measurements shall be made at point X (shown in figure 2) at a distance of 7 metres from the nearest surface of the tractor.

The microphone shall be situated 1.2 metres above ground level.

## I.4.2.2. Number of measurements

At least two measurements shall be made.

## I.4.2.3. Tractor test conditions

The engine of a tractor without a speed governor shall be run at three-quarters of the rpm speed at which, according to the tractor manufacturer, it develops its maximum power. The rpm speed of the engine shall be measured by means of an independent instrument, e.g. a roller bed and a tachometer. If the engine is fitted with a governor preventing the engine from exceeding the speed at which it develops

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its maximum power, it shall be run at the maximum speed permitted by the governor.

Before taking any measurements, the engine shall be brought to its normal running temperature.

#### I.4.2.4. Interpretation of results

All sound-level readings recorded shall be given in the report.

The method used to calculate the engine power shall also be shown where possible. The state of loading of the tractor must also be given.

The measurements shall be considered valid if the difference between two consecutive measurements on the same side of the tractor does not exceed 2 dB (A).

The maximum figure recorded shall constitute the result of the measurement.

#### Measuring positions for stationary tractors

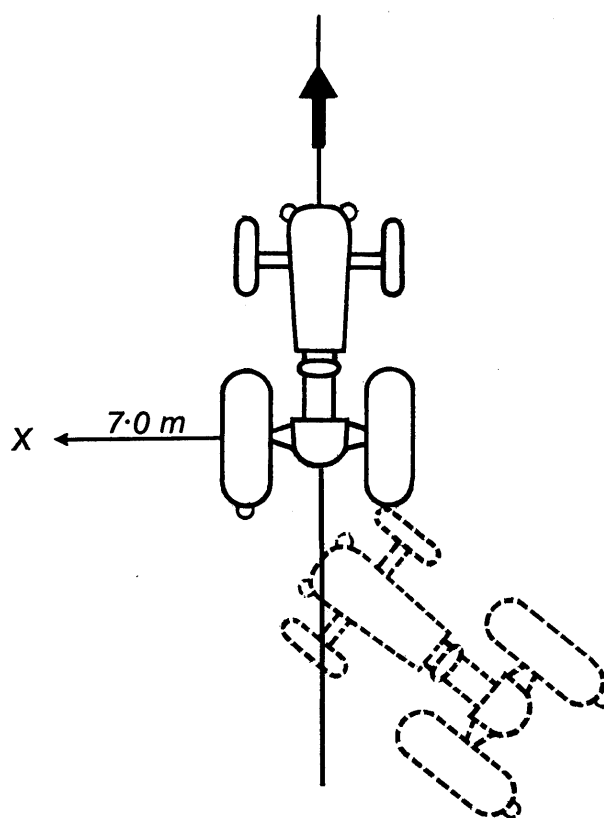


Figure 2

## II. EXHAUST SYSTEM (SILENCER)

- II.1. If the tractor is fitted with a device designed to reduce the exhaust noise (silencer), the requirements of this Item II shall apply. If the inlet of the engine is fitted with an air filter which is necessary in order to ensure compliance with the permissible sound level, the filter shall be considered to be part of the silencer, and the requirements of this Item II shall also apply to that filter.
- II.2. A drawing of the exhaust system must be annexed to the tractor type-approval certificate
- II.3. The silencer must be marked with a reference to its make and type which is clearly legible and indelible.
- II.4. The use of fibrous absorbent material is permitted in the construction of silencers only if the following conditions are fulfilled:
  - II.4.1. The fibrous absorbent material may not be placed in those parts of the silencer through which gases pass;

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- II.4.2. Suitable devices must ensure that the fibrous absorbent material is kept in place for the whole time that the silencer is being used;
- II.4.3. The fibrous absorbent material must be resistant to a temperature at least 20 % higher than the operating temperature (degrees C) which may occur in the region of the silencer where those fibrous absorbent materials are situated.