This document is meant purely as a documentation tool and the institutions do not assume any liability for its contents

►<u>B</u>

# **COUNCIL DIRECTIVE**

# of 24 June 1980

on the approximation of the laws of the Member States relating to the operating space, access to the driving position and the doors and windows of wheeled agricultural or forestry tractors (80/720/EEC)

(OJ L 194, 28.7.1980, p. 1)

Amended by:

		Official Journal		
		No	page	date
► <u>M1</u>	Council Directive 82/890/EEC of 17 December 1982	L 378	45	31.12.1982
► <u>M2</u>	Commission Directive 88/414/EEC of 22 June 1988	L 200	34	26.7.1988

### **COUNCIL DIRECTIVE**

## of 24 June 1980

# on the approximation of the laws of the Member States relating to the operating space, access to the driving position and the doors and windows of wheeled agricultural or forestry tractors

## (80/720/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 (<sup>1</sup>),

Having regard to the opinion of the European Parliament (<sup>2</sup>),

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

Whereas the technical requirements which tractors must satisfy pursuant to national laws relate inter alia to the operating space, access to the driving position (means of entry and exit), and the doors and windows;

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 forms the subject of Council Directive 74/150/EEC of 4 March 1974 on the approximation of the laws of the Member States relating to the type-approval of wheeled agricultural or forestry tractors (4), as amended by Directive 79/694/EEC (5), to be introduced in the case of each type of tractor,

HAS ADOPTED THIS DIRECTIVE:

# Article 1

'Agricultural or forestry tractor' means any motor vehicle fitted 1. with wheels or 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.

## ▼M1

2. This Directive shall apply only to tractors defined in paragraph 1 which are equipped with pneumatic tyres and which have at least two axles, a maximum design speed of between 6 and 30 km/h and a minimum fixed or variable drive-axle track width of 1 150 mm or more.

# ▼B

# Article 2

No Member State may refuse EEC type-approval or national typeapproval of a tractor or refuse or prohibit the sale, registration, entry into service or use of a tractor on grounds relating to:

# ▼<u>B</u>

<sup>(&</sup>lt;sup>1</sup>) OJ No C 25, 29. 1. 1979, p. 30. (<sup>2</sup>) OJ No C 127, 21. 5. 1979, p. 80. (<sup>3</sup>) OJ No C 227, 10. 9. 1979, p. 34. (<sup>4</sup>) OJ No L 84, 28. 3. 1974, p. 10.

<sup>&</sup>lt;sup>(5)</sup> OJ No L 205, 13. 8. 1979, p. 17.

- the operating space,

- access to the driving position (means of entry and exit),

— doors and windows,

where these comply with the requirements of Annex I.

## Article 3

Any amendments necessary to adapt the requirements of Annex I to technical progress shall be adopted in accordance with the procedure laid down in Article 13 of Directive 74/150/EEC.

## Article 4

1. Member States shall bring into force the provisions necessary in order to comply with this Directive within 18 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 5

This Directive is addressed to the Member States.

ANNEX I

#### I. Operating space

1.1. 'Operating space' means the minimum volume of space between any fixed parts of the structure which is available to the driver of the tractor to enable him to operate the tractor from his seat in any way required with complete safety.

'Seat reference point' means the reference point determined by the method described in Appendix 1.

'Reference plane' means the plane parallel to the median longitudinal plane of the tractor passing through the seat reference point.

- I.2. The width of the operating space must be at least 900 mm, from 400 to 900 mm above the reference point and over a length of 450 mm forward of this point (see Figures 2 and 3).
- I.3. Vehicle parts and accessories must not hamper the driver when driving the tractor.
- I.4. For all positions of the steering column and the steering wheel  $\blacktriangleright$  M2 with the exception of those intended solely for entry and exit  $\blacktriangleleft$ , the clearance between the base of the steering wheel and the fixed parts of the tractor must be at least 50 mm; in all other directions this clearance must be at least 80 mm from the rim of the steering wheel, as measured from outside the area occupied by the steering wheel (see Figure 2).
- I.5. The rear wall of the cab from 300 to 900 mm above the seat reference point must be a minimum of 150 mm behind a vertical plane which is perpendicular to the reference plane and passes through the reference point (see Figures 2 and 3).

This wall must have a width of at least 300 mm on either side of the seat reference plane (see Figure 3).

I.6. The manual controls must be located in relation to one another and to the other parts of the tractor so that no danger of injury to the operator's hands arises from their operation.

Where the force required to operate a control exceeds 150 N, a clearance of 50 mm will be considered adequate and where the force is between 80 N and 150 N, a clearance of 25 mm will suffice. Any clearance will be accepted in relation to controls where the operating force required is less than 80 N (see Figure 3).

Alternative locations for the controls which achieve equally satisfactory safety standards are acceptable.

I.7. No ▶<u>M2</u> rigid ◄ point on the roof must be less than 1 050 mm from the seat reference point in a section situated forward of a vertical plane passing through the reference point and perpendicular to the reference plane (see Figure 2). ▶<u>M2</u> The padding may extend downwards to 1 000 mm above the seat reference point. ◄

# ▼<u>M2</u>

1.8. The radius of curvature of the surface between the rear panel of the cab and the roof of the cab may extend up to a maximum of 150 mm.

#### ▼B

# II. Access to the driving position (means of entry and exit)

- II.1. It must be possible to use the means of entry and exit without danger. Wheel hubs, hub caps or wheel rims are not acceptable as steps or rungs.
- II.2. The points of access to the driving position and to the passenger seat must be free of any parts liable to cause injury. Where an obstruction such as a clutch pedal is present, a step or footrest must be provided to ensure safe access to the driving position.
- II.3. Steps, integral foot recesses and rungs must have the following dimensions:

depth clearance:	150 mm minimum,
width clearance:	250 mm minimum,
	(Values lower than this minimum width are authorized only where justified as being necessary on tech- nical grounds. Where this is the case, the aim must be to achieve the greatest possible width clearance. It must not, however, be less than 150 mm.)
height clearance:	120 mm minimum,
distance between surface of two steps:	300 mm maximum (see Figure 4).

- II.4. The upper step or rung must be easily identifiable and accessible for a person leaving the vehicle. The vertical distance between successive steps or rungs must as far as possible be equal.
- II.5. Appropriate handholds must be provided for all the means of entry and exit.
- II.6 The lowest foothold must not be more than 550 mm above the ground when the tractor is fitted with the largest tyre size recommended by the manufacturer (see Figure 4). Steps or rungs must be designed and constructed in such a way that feet will not slip on them.

#### III. Doors, windows and emergency exits

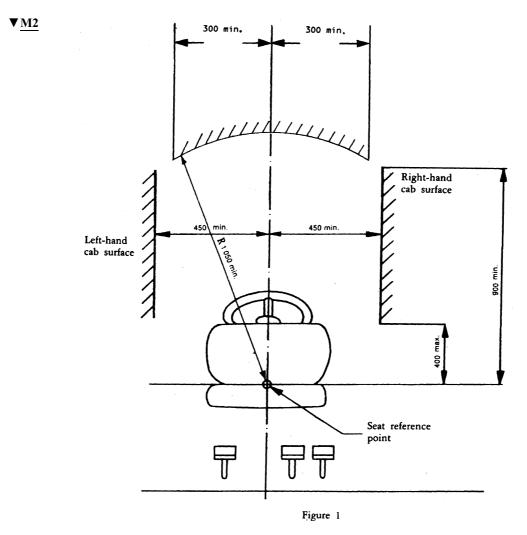
- III.1. The devices operating the doors and windows must be designed and installed in such a way that they neither constitute a danger to the driver nor impede him while driving.
- III.2. The opening angle of the door must permit entry and exit without danger.
- III.3. Ventilation windows  $\blacktriangleright \underline{M2}$  if any  $\blacktriangleleft$  must be easily adjustable.
- III.4. Cabs normally have a door on each side.
- III.5. Two-door cabs must have one extra exit constituting an emergency exit.

Single-door cabs must have two extra exits constituting emergency exits.

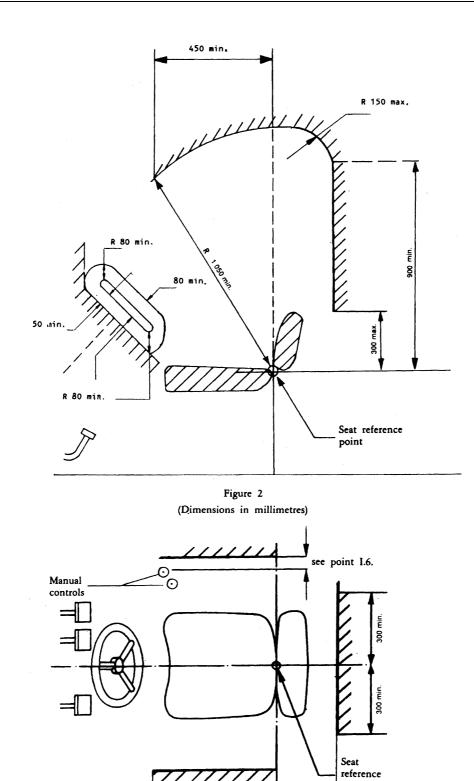
Each of the three exits must be on a different cab wall (the term 'wall' may include the roof). Windscreens and side, rear and roof windows may be regarded as emergency exits if provision is made to open them  $\blacktriangleright \underline{M2}$  or to move them  $\blacktriangleleft$  quickly from inside the cab.

The surrounds of emergency exits must present no danger on exit.

Emergency exits must have the minimum dimensions required to circumscribe an ellipse with a minor axis of 440 mm and a major axis of 640 mm.



(Dimensions in millimetres)



7777

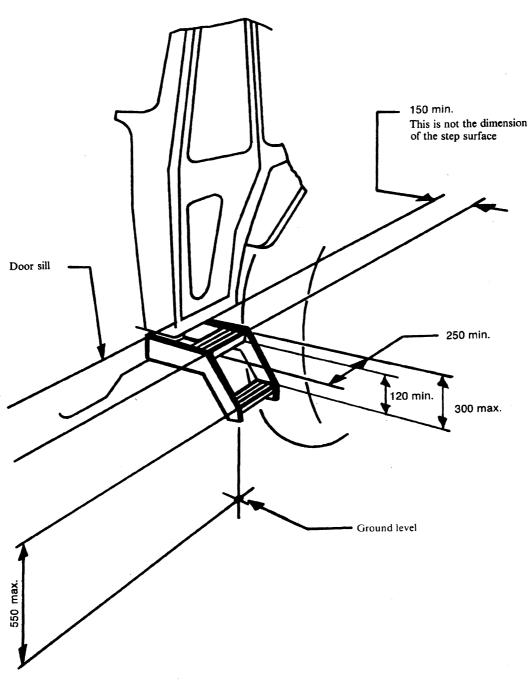
450 min.

Figure 3 (Dimensions in millimetres) point

150 min.

▼<u>M2</u>

(Dimensions in mm)



▼<u>M2</u>

Figure 4

## Appendix 1

# METHOD OF DETERMINING THE SEAT REFERENCE POINT (S)

#### 1. Definition of the reference point (S)

'Seat reference point' (S) means the point of intersection in the median longitudinal plane of the seat between the tangential plane at the base of the padded backrest and a horizontal plane. This horizontal plane intersects the lower surface of the seat 150 mm in front of the seat reference point (S).

## 2. Positioning of the seat

The seat must be set in the rearmost longitudinal position and at the mid-point of the height adjustment range. Seats having a suspension system, whether or not adjustable according to the driver's weight, must be set at the mid-point of the suspension travel.

## 3. Device for determining the seat reference point (S)

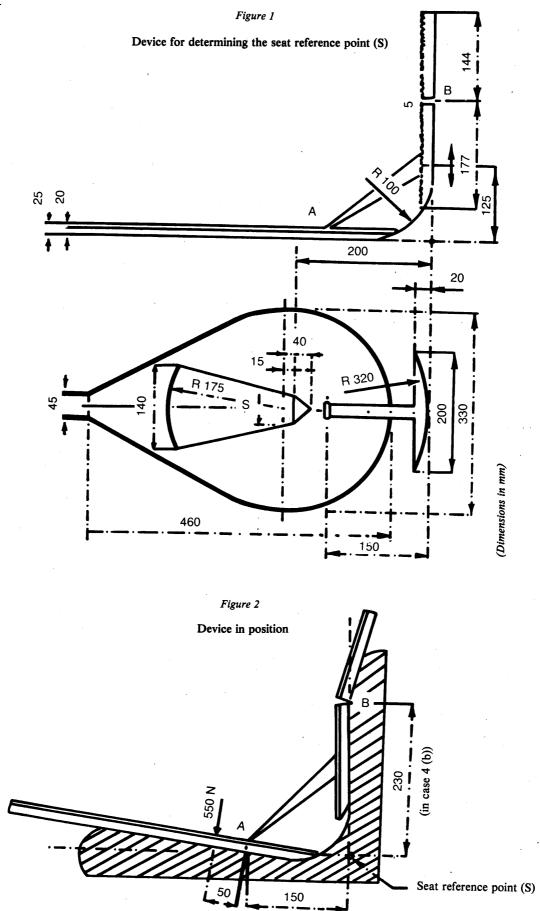
The device illustrated in Figure 1 consists of a seat pan board and backrest boards. The lower backrest board must be hinged in the region of the ischium humps (A) and the loin (B), the hinge (B) being adjustable in height.

## 4. Method of determining the seat reference point (S)

The seat reference point (S) must be obtained by using the device illustrated in Figures 1 and 2, which simulates loading by a human occupant. The device must be positioned on the seat. It must then be loaded with a force of 550 N at a point 50 mm in front of hinge (A) and two parts of the backrest lightly pressed tangentially against the padded backrest.

If it is not possible to determine definite tangents to each area of the padded backrest (below and above the lumbar region) the following procedure must be adopted:

- (a) where there is no possibility of defining the tangent to the lowest possible area, the lower part of the backrest board in a vertical position must be lightly pressed against the padded backrest;
- (b) where there is no possibility of defining the tangent to the highest possible area, if the lower part of the backrest board is vertical, the hinge (B) must be fixed at a height of 230 mm above the seat reference point (S). The two parts of the backrest board in a vertical position must then be lightly pressed tangentially against the padded backrest.



▼<u>B</u>

## ANNEX II

# MODEL

Name of administration

# ANNEX TO THE EEC TYPE-APPROVAL CERTIFICATE FOR A TRACTOR TYPE WITH REGARD TO THE OPERATING SPACE, ACCESS TO THE DRIVING POSITION (MEANS OF ENTRY AND EXIT) AND DOORS AND WINDOWS

(Articles 4 (2) and 10 of Council Directive 74/150/EEC of 4 March 1974 on the approximation of the laws of the Member States relating to the EEC type-approval of wheeled agricultural or forestry tractors)

EE	C type-approval No			
١.	Component(s) or characteristic(s)			
	<ul> <li>operating space,</li> <li>access to the driving position (means of entry and exit),</li> <li>doors and windows</li> </ul>			
2.	Make of tractor or business name of manufacturer			
3.	Type and commercial description of tractor			
4.	Manufacturer's name and address			
5.	If applicable, name and address of manufacturer's authorized representative			
6.	Description of component(s) and/or characteristic(s) mentioned under 1 above			
	· · · · · · · · · · · · · · · · · · ·			
7.	Date of submission of tractor for EEC type-approval			
8.	Technical service conducting the type-approval tests			
9.	Date of report issued by that service			
10.	Number of report issued by that service			
11.	EEC-type approval for the operating space, access to the driving position (means of entry and exit) and the doors and windows is granted/refused ( $^{1}$ ).			
	Place			
13.	Date			
14.	Signature			
15.	The following documents, bearing the EEC type-approval number indicated above, are annexed to this certificate:			
	dimensional drawing,			
	exploded view or photograph of the cab and/or means of entry and exit.			
	The data must be supplied to the competent authorities of the other Member States if they so request.			
16.	Remarks			
( <sup>1</sup> )	Delete where inapplicable.			