# **EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM**

DRAFT EN 13684:2018

prA1

July 2020

ICS 65.060.70

#### **English Version**

# Garden equipment - Pedestrian controlled lawn aerators and scarifiers - Safety

Matériel de jardinage - Aérateurs et scarificateurs à conducteur à pied - Sécurité

Gartengeräte - Handgeführte Rasen-Bodenbelüfter und Vertikutierer - Sicherheit

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 144.

This draft amendment A1, if approved, will modify the European Standard EN 13684:2018. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning: This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents		Page	
Euroj	opean foreword3		
1	Modification to 5.13.2.2, Test equipment	4	
2	Modification to 5.13.2.3, Test method	5	
3	Modification to 5.18.2, Stability test procedure	5	
4	Modification to B.2.2, Preparation	5	
5	Modification to C.6, Measurement uncertainty	5	
6	Modification to E.4, Test procedure	6	
7	Modification to Annex ZA	7	
Anne	x ZA (informative) Relationship between this European Standard and the essential requirements of Directive 2006/42/EC aimed to be covered	8	

# **European foreword**

This document (EN 13684:2018/prA1:2020) has been prepared by Technical Committee CEN/TC 144 "Tractors and machinery for agriculture and forestry", the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

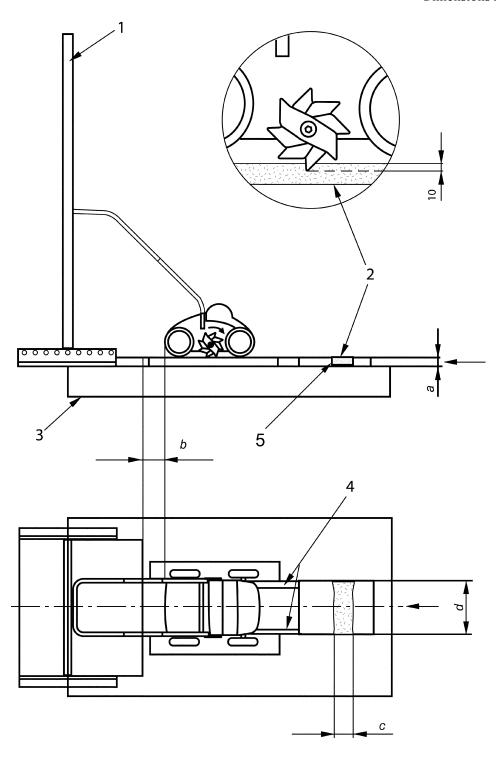
This document has been prepared under a standardization request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

# 1 Modification to 5.13.2.2, Test equipment

Replace Figure 6 with the following: "

Dimensions in millimetres



## Key

- operator target area 1 000 mm wide  $\times$  2 000 mm high. a Material: Kraft paper 225 g/m<sup>2</sup>
- 2 mixture of sand and gravel (50:50)
- 3 base (supporting frame)

- $(18 \pm 1) \text{ mm}$
- b minimal distance
- c diameter of tine tip circle + 10 mm

- 4 frame (loose) d at least equal to the width of cut
- 5 tray

Figure 6 — Thrown object test rig for rear discharge scarifiers with rigid tines"

#### 2 Modification to 5.13.2.3, Test method

Add a new paragraph at the end of the subclause to read:

"The distance "b" in Figure 6 between the base of the operator target area and the rear of the machine is necessary to allow the tray to fully move underneath the length of the machine deck. The settings of the machine shall allow this distance to be minimal."

## 3 Modification to 5.18.2, Stability test procedure

Replace the text of 5.18.2 with the following: "

#### 5.18.2.1 Preparation

#### 5.18.2.1.1 Ballast and tanks

No ballast, except as required for normal operation, shall be added to the machine. Scarifier attachments and tine assemblies shall be placed in its most unfavourable position allowed by the instruction handbook. Any fluid tanks shall be either full or empty, whichever is the most unfavourable condition.

#### 5.18.2.1.2 Tyres

The machine shall be equipped with the tyre size and wheel track-width setting that gives the most unfavourable test condition. Pneumatic tyres shall be inflated to the maximum pressure recommended in the instruction handbook for normal operation. Stability requirements shall apply for all tyre combinations at all wheel track-width settings recommended in the instruction handbook.

#### **5.18.2.2 Testing**

Place the machine in any normal position of use on a place inclined at an angle of  $10^{\circ}$  to the horizontal. If, however, the machine is such that, were it to be tilted through an angle of  $10^{\circ}$  when standing on a horizontal plane, a part of it not normally in contact with the supporting surface would touch the horizontal plane, the machine is placed on a horizontal support and tilted in the most unfavourable direction through an angle of  $10^{\circ}$ . For the test the machine is prevented from sliding.

## 5.18.2.3 Test acceptance

The machine shall not tip over or the requirements for single axle machines shall be fulfilled.".

#### 4 Modification to B.2.2, Preparation

*Replace the text of l) with the following:* 

"reinsert all fuel tanks and container caps securely".

#### 5 Modification to C.6, Measurement uncertainty

Replace the text with the following:

"When measuring the emission sound pressure level at the operator position, tests shall be repeated to attain the required grade of accuracy, and until three consecutive A-weighted results give values within not more than 2 dB. The arithmetic average of these shall be the measured A-weighted emission sound pressure level of the machine.

The measurement uncertainties shall be determined according to EN ISO 4871:2009.".

## 6 Modification to E.4, Test procedure

Replace the 1st paragraph with the following:

Measurements shall be carried out on a level surface consisting of 19 mm plywood covered with coconut matting rectangles firmly fixed to the plywood (see Figure E.1). The coconut matting rectangles shall be a minimum of 500 mm on each side. The figure shows nails to attach the matting. Nails are an acceptable method of attaching although nails are not required as the only means of attachment to the plywood. The nail pattern shown in Figure E.2 is a suggested pattern for 500 mm squares of matting. Any portion of coconut matting showing a worn area where there is evidence of 50 % or more reduction in the height or number of fibres shall be replaced.

The coconut matting shall weigh approximately 7 000 g/m² and shall have approximately 20 mm high fibres with general vertical orientation embedded in a PVC base.

The minimum surface size shall be at least 0,75 m larger on all sides than the area enclosed by the ground contacting points of the ground support system of the machine.

Dimensions in millimetres, approximate

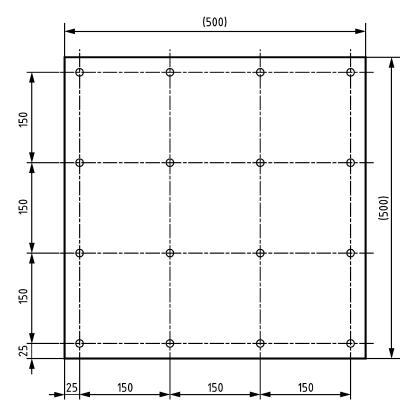


Figure E.1 — Example of base, nail plan