

Implementation of
ISO 7918:1995

Forestry machinery — Portable brush cutters and grass trimmers — Cutting attachment guard dimensions

ICS 65.060.80

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee AGE/29, Forestry machinery, upon which the following bodies were represented:

Agricultural Engineers Association
Arboricultural Association
Consumers' Association
Department of Trade and Industry (Consumer safety unit, CA Division)
Forestry Commission
Health and Safety Executive
Hire Association Europe
Institution of Agricultural Engineers Incorporated
National Farmers Union
Co-opted members

This British Standard, having been prepared under the direction of the Engineering Sector Board, was published under the authority of the Standards Board and comes into effect on 15 July 1996

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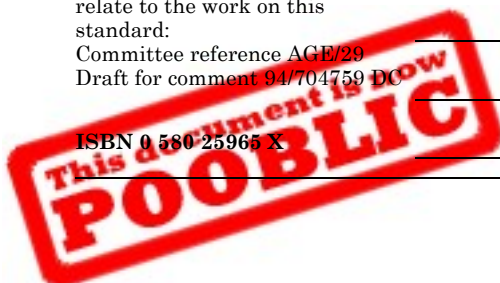
The following BSI references relate to the work on this standard:

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National foreword

This British Standard reproduces verbatim ISO 7918:1995 and implements it as the UK national standard.

This British Standard is published under the direction of the Engineering Sector Board whose Technical Committee AGE/29 has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international committee any enquiries on interpretation, or proposals for change, and keep UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the ISO title page, pages ii to iv, pages 1 to 4, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

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INTERNATIONAL
STANDARD

ISO
7918

Second edition
1995-10-01

**Forestry machinery — Portable brush-
cutters and grass-trimmers — Cutting
attachment guard dimensions**

*Matériel forestier — Débroussailleuses et coupe-herbe portatifs —
Dimensions du protecteur du dispositif de coupe*



Reference number
ISO 7918:1995(E)



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 7918 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 17, *Manually portable forest machinery*.

This second edition cancels and replaces the first edition (ISO 7918:1985), which has been extended to include guards for types of blades other than circular saw-blades, as well as cutting attachment guards for other brush-cutters and grass-trimmers.

Annex A of this International Standard is for information only.



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Introduction

This International Standard was developed in response to a worldwide demand for guidance for proper dimensioning of guards to the cutting attachment of portable brush-cutters and grass-trimmers.

The purpose is to establish the design criteria to ensure a measure of safety for the operator being protected from unintentional contacts with the cutting attachment.

The required dimensions are based on a normal operating situation during forestry work.

Another aspect when designing a cutting attachment guard is its strength. The required strength is given, together with the test method, in ISO 8380^[1].

1 Scope

This International Standard specifies minimum dimensions for cutting attachment guards of portable hand-held combustion engine, brush-cutters (including brush-saws) and grass-trimmers, for use primarily in forestry.

Lawn-trimmers as defined in ISO 10518^[2] are excluded.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this international standard are encouraged to investigate the possibility of applying the most recent editions of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 7113:1991, *Forestry Machinery — Portable brush-saws — Saw blades*.

ISO 11806:—¹⁾, *Manually portable forestry machinery — Brush cutters and grass trimmers — Safety requirements and testing*.

3 Definitions

For the purposes of this International Standard, the definitions given in ISO 11806 apply.

4 Requirements and minimum dimensions

The cutting attachment guard shall cover a sector, at the back of the cutting attachment, as given in

- Figure 1 for brush-saws,
- Figure 2 for brush-cutters other than brush-saws, and
- Figure 3 for grass-trimmers.

The lower back edge of the guard shall be rounded to avoid hooking when the unit is moving over stumps or other obstacles and shall cover the cutting attachment as given in Figure 1, Figure 2 and Figure 3 respectively.

The required guard dimensions will also depend on the thrown object test and the requirements given in ISO 11806.

5 Additional requirements for saw-blade guards

Saw blade dimensions are specified in ISO 7113.

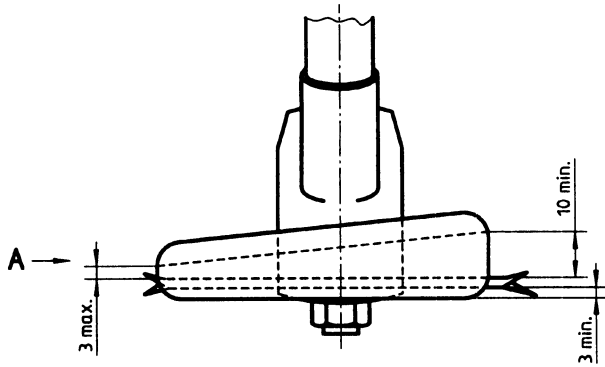
The radial clearance between the saw-blade teeth and the guard shall be not more than 4 mm where the blade enters the guard and shall thereafter increase up to at least 10 mm at the discharge point [see Figure 1 b)].

The axial clearance between the saw-blade (excluding teeth) and guard shall not exceed 3 mm where the blade enters the guard and shall thereafter increase up to at least 10 mm at the discharge point [see Figure 1 a)].

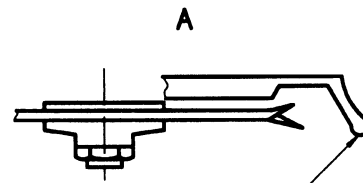
¹⁾ To be published.



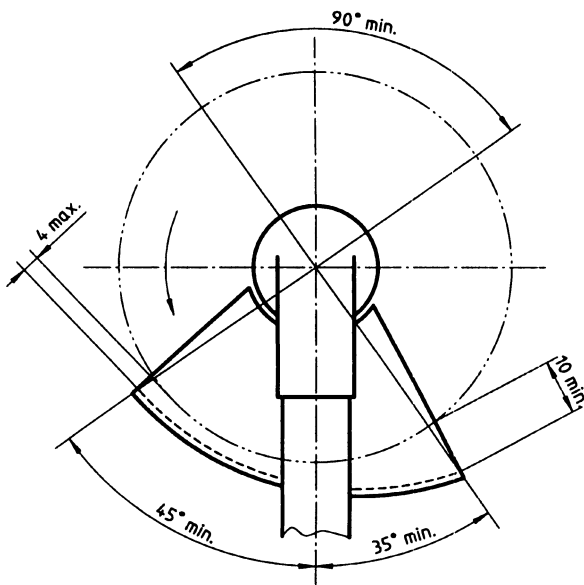
Dimensions in millimetres



a) Axial clearance



Rounded edges to avoid hooking

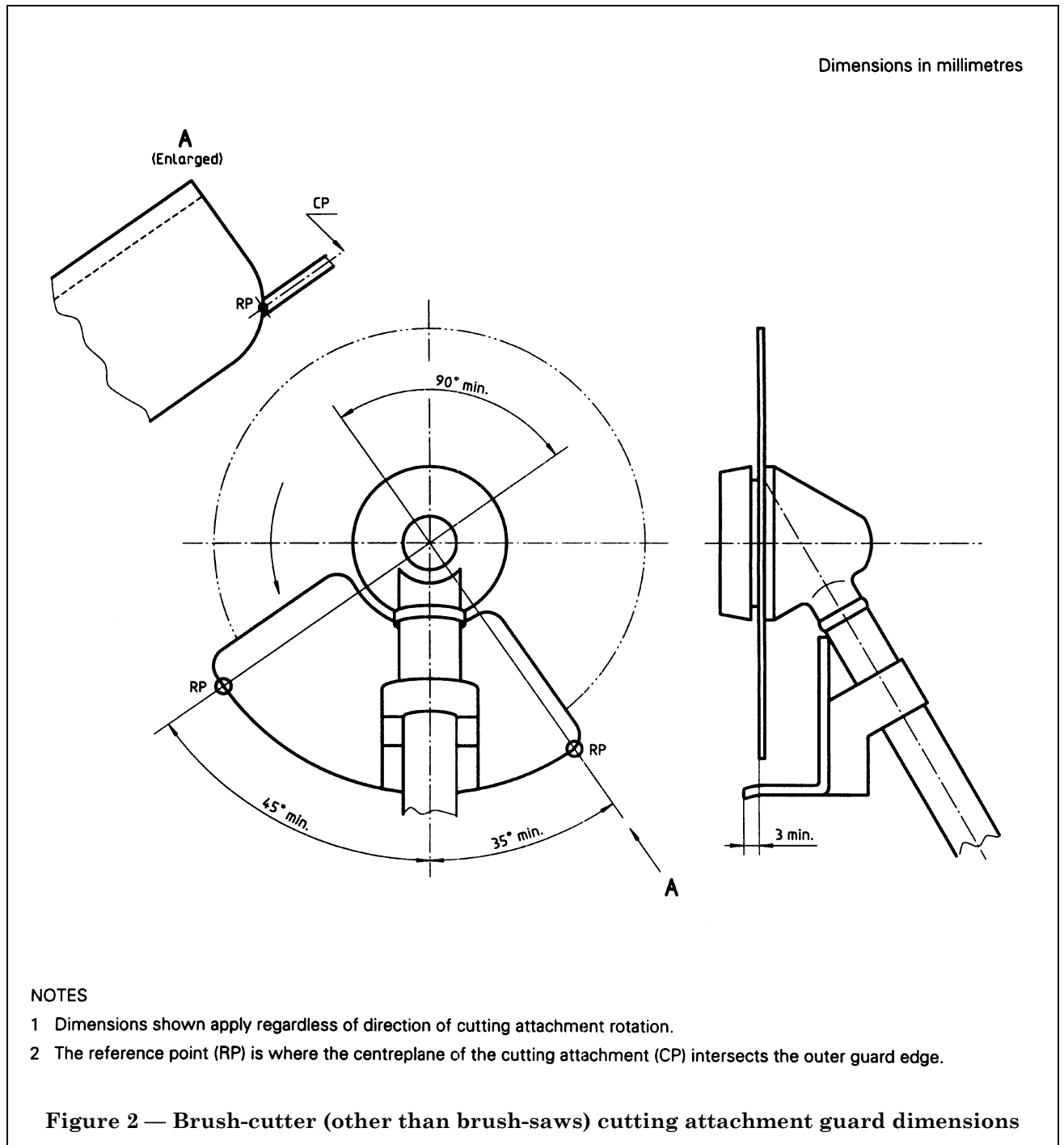


b) Radial clearance

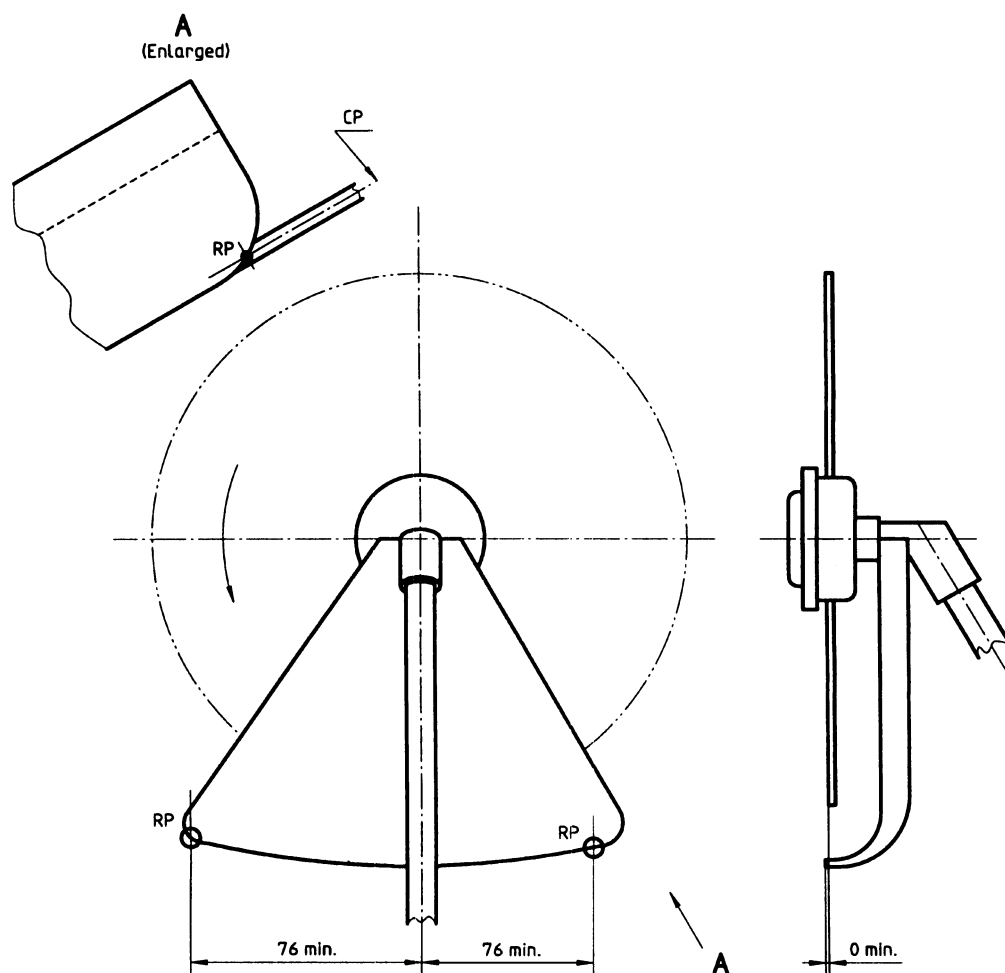
NOTE — Where the saw-blade rotation is in the opposite direction, the dimensions 4 max. and 10 min., and 3 max. and 10 min. respectively, are inverted.

Figure 1 — Brush-saw-blade guard

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Dimensions in millimetres



NOTES

- 1 Dimensions shown apply regardless of direction of cutting attachment rotation.
- 2 The reference point (RP) is where the centreplane of the cutting attachment (CP) intersects the outer guard edge.

Figure 3 — Grass-trimmer cutting attachment guard dimensions

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Annex A (informative)

Bibliography

[1] ISO 8380:1993, *Forestry machinery — Portable brush-cutters and grass-trimmers — Cutting attachment guard strength.*

[2] ISO 10518:1991, *Powered walk-behind and hand-held lawn trimmers and lawn edge trimmers — Mechanical safety requirements and test methods.*

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