SLOVENSKI STANDARD
oSIST prEN IEC 62841-4-11:2024

01-julij-2024

Elektromotorna ročna orodja, prenosna orodja ter stroji za trato in vrt - Varnost - 4-11. del: Posebne zahteve za obrezovalnike

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4-11: Particular requirements for edgers

Ta slovenski standard je istoveten z: **prEN IEC 62841-4-11:2024**

ICS:

25.140.20	Električna orodja	Electric tools
65.060.70	Vrtnarska oprema	Horticultural equipment

oSIST prEN IEC 62841-4-11:2024 **en,fr,de**

116/753/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER:	
IEC 62841-4-11 ED1	
DATE OF CIRCULATION:	CLOSING DATE FOR VOTING:
2024-05-10	**2024-08-02**
SUPERSEDES DOCUMENTS:	
116/703/NP, 116/744/RVN	

IEC TC 116 : SAFETY OF MOTOR-OPERATED ELECTRIC TOOLS

SECRETARIAT:	SECRETARY:
United States of America	Mr Joseph Harding
OF INTEREST TO THE FOLLOWING COMMITTEES:	PROPOSED HORIZONTAL STANDARD: ☐ Other TC/SCs are requested to indicate their interest, if any, in this CDV to the secretary.

FUNCTIONS CONCERNED:

☐ EMC ☐ ENVIRONMENT ☐ QUALITY ASSURANCE ☒ SAFETY

☒ SUBMITTED FOR CENELEC PARALLEL VOTING	☐ NOT SUBMITTED FOR CENELEC PARALLEL VOTING
Attention IEC-CENELEC parallel voting The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting. The CENELEC members are invited to vote through the CENELEC online voting system.	

This document is still under study and subject to change. It should not be used for reference purposes.

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

Recipients of this document are invited to submit, with their comments, notification of any relevant “In Some Countries” clauses to be included should this proposal proceed. Recipients are reminded that the CDV stage is the final stage for submitting ISC clauses. (SEE AC/22/2007 OR NEW GUIDANCE DOC).

TITLE:

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4-11: Particular requirements for edgers

PROPOSED STABILITY DATE: 2029

NOTE FROM TC/SC OFFICERS:

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

_____

ELECTRIC MOTOR-OPERATED HAND-HELD TOOLS, TRANSPORTABLE TOOLS AND LAWN AND GARDEN MACHINERY – SAFETY –

Part 4-11: Particular requirements for edgers

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
6) All users should ensure that they have the latest edition of this publication.
7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
9) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC had received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at https://patents.iec.ch. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 62841-4-11 has been prepared by IEC technical committee 116: Safety of motor-operated electric tools. It is an International Standard.

The text of this International Standard is based on the following documents:

Draft	Report on voting
116/XXX/FDIS	116/XXX/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

This document is to be used in conjunction with the first edition of IEC 62841-1:2014.

This document supplements or modifies the corresponding clauses in IEC 62841-1:2014, so as to convert it into the IEC Standard: Particular requirements for edgers.

Where a particular subclause of IEC 62841-1:2014 is not mentioned in this document, that subclause applies as far as reasonable. Where this document states "addition", "modification" or "replacement", the relevant text in IEC 62841-1 is to be adapted accordingly.

The following print types are used:

– requirements: in roman type;

– *test specifications: in italic type;*

– notes: in small roman type.

The terms defined in Clause 3 are printed in **bold typeface**.

Subclauses, notes, tables and figures which are additional to those in IEC 62841-1:2014 are numbered starting from 101.

Subclauses, notes, tables and figures in Annex K which are additional to those in the main body of this document are numbered starting from 301.

A list of all parts in the IEC 62841 series, published under the general title *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

The National Committees are requested to note that for this publication the stability date is 2029. THIS TEXT IS INCLUDED FOR THE INFORMATION OF THE NATIONAL COMMITTEES AND WILL BE DELETED AT THE PUBLICATION STAGE.

NOTE The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations can need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 36 months from the date of publication.

ELECTRIC MOTOR-OPERATED HAND-HELD TOOLS, TRANSPORTABLE TOOLS AND LAWN AND GARDEN MACHINERY – SAFETY –

Part 4-11: Particular requirements for edgers

1 Scope

IEC 62841-1:2014, Clause 1 is applicable, except as follows:

Addition:

This document applies to

– **walk-behind edgers** and **walk-beside edgers** having a **blade-tip circle** diameter of not more than 305 mm, and where the plane of the **blade-tip circle** is designed to operate at not more than 15° from the vertical, equipped with a

- **cutting accessory**; and/or
- **cutting means** with one or more **cutting elements** pivotally mounted on a generally circular drive unit and have a kinetic energy for each single **cutting element** of greater than 10 J.

and

– **hand-held edgers** having at least one ground-support having a **blade-tip circle** diameter of not more than 305 mm, equipped with a

- **cutting accessory**; and/or
- **cutting means** with one or more **cutting elements** pivotally mounted on a generally circular drive unit and have a kinetic energy for each single **cutting element** of greater than 10 J.

NOTE 101 Machines having **cutting elements** with a kinetic energy not exceeding 10 J are considered to be lawn edge trimmers and are covered by IEC 62841-4-4.

This document does not apply to

– lawn trimmers, lawn edge trimmers, grass trimmers, brush cutters and brush saws;

– scissor type edgers and brush cutters; and

– machines equipped with metallic **cutting accessories** consisting of more than one piece, e.g. pivoting chains or flail blades;

NOTE 102 Lawn trimmers, lawn edge trimmers, brush cutters and brush saws are covered by IEC 62841-4-4.

NOTE 103 Scissor type edgers and brush cutters will be covered by a future part of IEC 62841.

2 Normative references

IEC 62841-1:2014, Clause 2 is applicable, except as follows:

Replacement of undated normative reference for ISO 3744:

ISO 3744:2010, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure. Engineering methods for an essentially free field over a reflecting plane*

Addition:

IEC 60664-3:2016, *Insulation coordination for equipment within low-voltage systems – Part 3: Use of coating, potting or moulding for protection against pollution*

IEC 60664-4:2005, *Insulation coordination for equipment within low-voltage systems – Part 4: Consideration of high-frequency voltage stress*

IEC 62841-1:2014, *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 1: General requirements*

ISO 354:2003, *Acoustics – Measurement of sound absorption in a reverberation room*

ISO 683-4:2016, *Heat-treatable steels, alloy steels and free-cutting steels – Part 4: Free-cutting steels*

ISO 11789:1999, *Powered edgers with rigid cutting means — Definitions, safety requirements and test procedures*

ISO 11201:2010, *Acoustics – Noise emitted by machinery and equipment – Measurement of emission sound pressure levels at a work station and at other specified positions – Engineering method in an essentially free field over a reflecting plane*

ISO 22868:2021, *Forestry and gardening machinery – Noise test code for portable hand-held machines with internal combustion engine – Engineering method (Grade 2 accuracy)*

3 Terms and definitions

IEC 62841-1:2014, Clause 3 is applicable, except as follows:

Addition:

3.101
blade-tip circle
path described by the outermost point of the **cutting means** or **cutting accessory** cutting edge as it rotates about its shaft axis

Note 101 to entry: See Figure 107 and Figure 112.

3.102
cutting accessory
rigid cutting device made of metallic or non-metallic material

3.103
cutting element
single freely pivoting non-metallic cutter

3.104
cutting head
support and retention system for the **cutting means**

3.105
cutting means
assembly of freely pivoting non-metallic cutter(s) that rotates about an axis normal to the cutting plane, used to provide the cutting action by one or more **cutting elements**

3.106
debris deflector
additional guarding made of flexible material fitted to the unit as an extension of the guard to protect the operator from thrown debris

3.107
depth of cut
vertical location of the **blade-tip circle** relative to the surface level

3.108
edger
grass/soil trimming machine where the **cutting means** or **cutting accessory** operates in a plane approximately perpendicular to the ground

Note 101 to entry: See Figure 101 for an example **hand-held edger**, Figure 102 for an example of a **walk-behind edger,** Figure 103 for an example of a **walk-beside edger**.

3.109
guide handle
the front **handle** of a **hand-held** machine by which the operator partially supports the machine

Note 101 to entry: See Figure 101.

3.110
handle
structure that enables the operator to hold and control the unit during operation

3.111
hand-held edger
edger that is supported by hand, possibly assisted by wheel(s) or skids

Note 101 to entry: See Figure 101 for an example of a **hand-held edger**.

3.112
maximum speed
highest output speed attainable under all conditions of **normal use**, including no load

3.113
operator presence sensor
device to detect the presence of an operator’s hand

3.114
shaft
structural part of the machine that distances the **cutting means** or **cutting accessory** from the **handles**

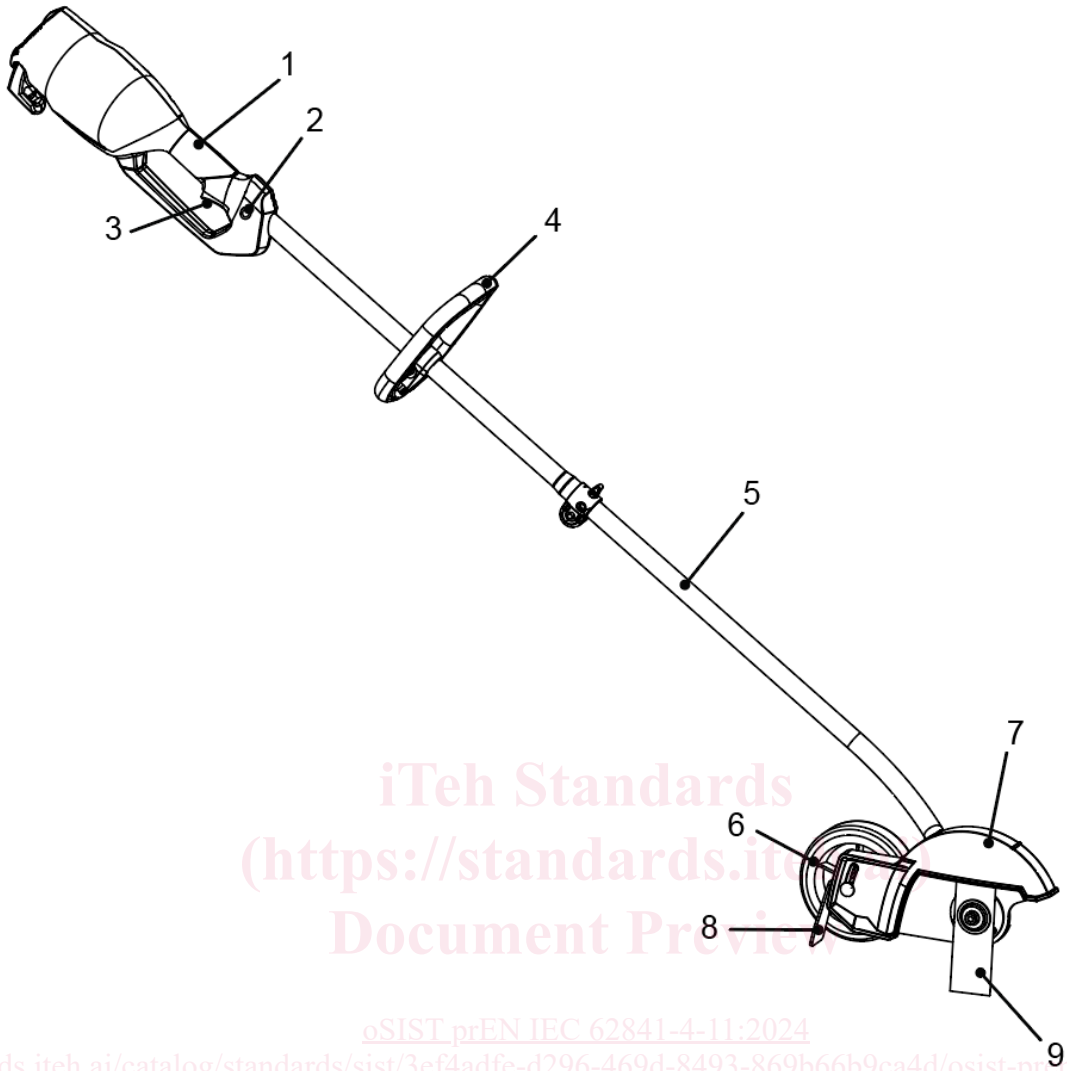
3.115
walk-behind edger
edger normally controlled by an operator walking behind the **handle** of a ground-supported machine

Note 101 to entry: See Figure 102 for an example of a **walk-behind edger**.

3.116
walk-beside edger
edger normally controlled by an operator walking beside the **handle** of a ground-supported machine

Note 101 to entry: See Figure 103 for an example of a **walk-beside edger**.

330



331

332 **Key**

333 1 **handle**

334 2 lock-off device

335 3 **power switch**

336 4 **guide handle**

337 5 **shaft**

338 6 support wheel (depth wheel)

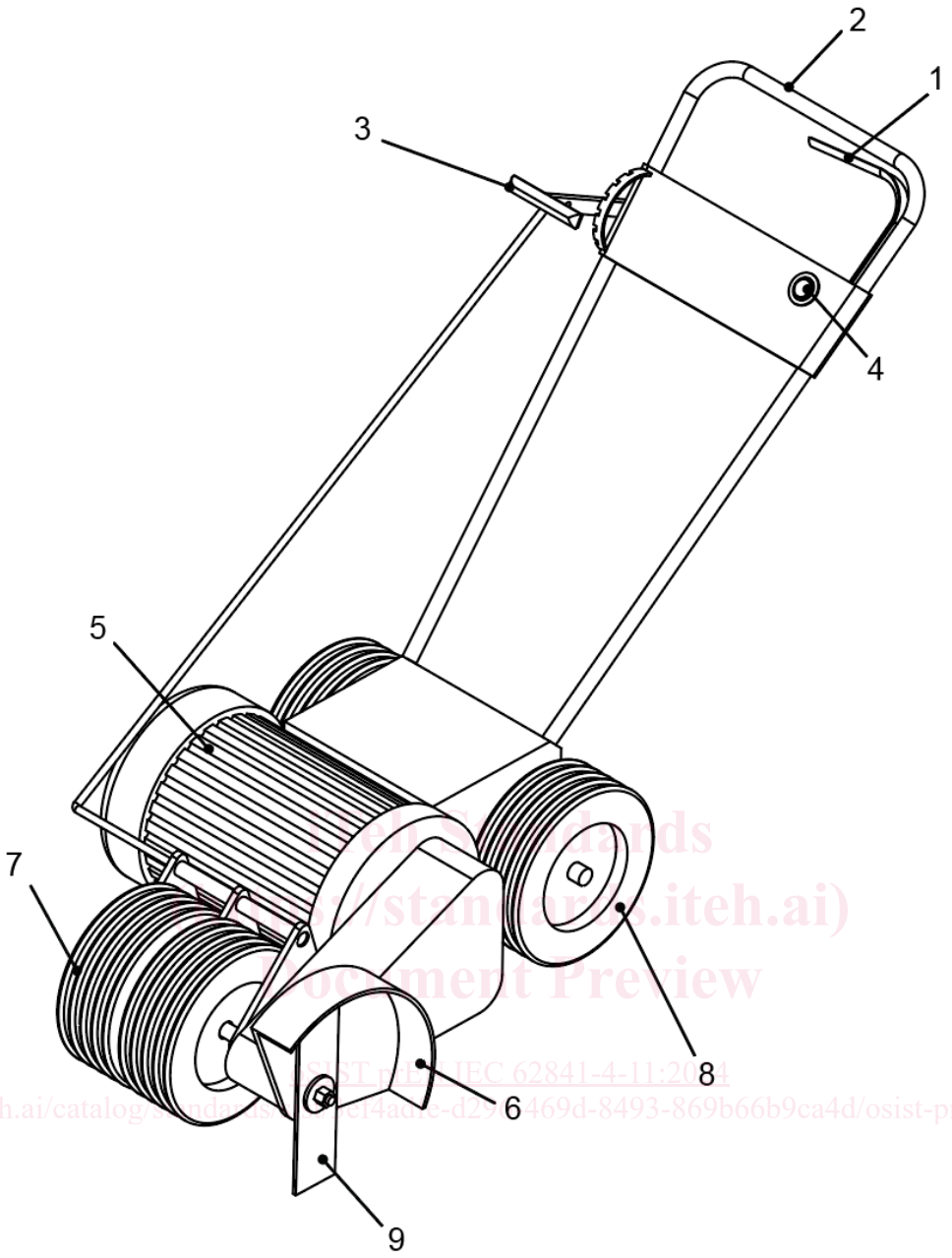
339 7 **guard**

340 8 **debris deflector**

341 9 **cutting accessory**

342 **Figure 101 – Example of a hand-held edger**

343



344

345

346 **Key**

347 1 **power switch**

348 2 **handle**

349 3 height adjustment

350 4 lock-off device

351 5 motor

352 6 **guard**

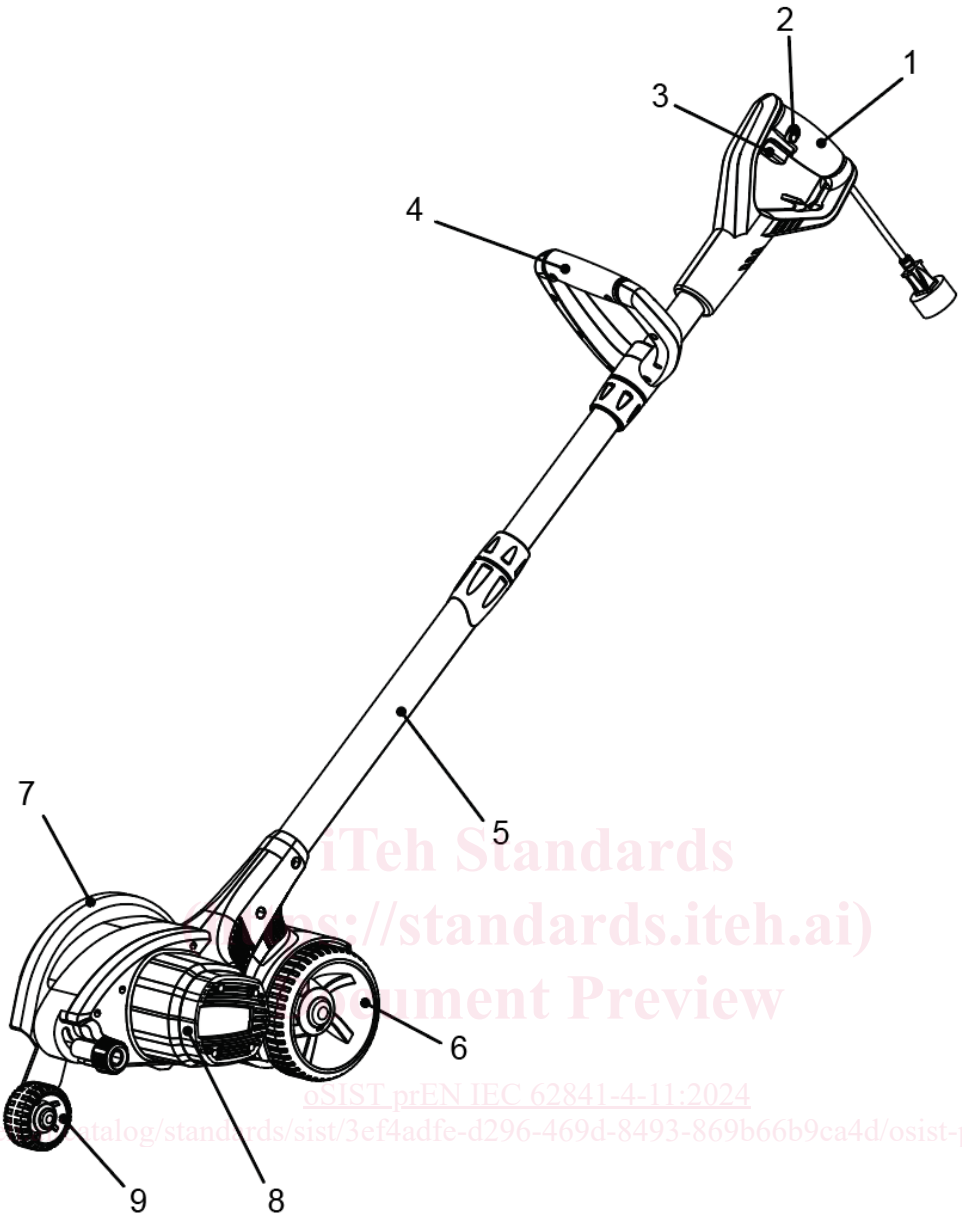
353 7 height adjustment wheel

354 8 ground support wheel

355 9 **cutting accessory**

356 **Figure 102 – Example of a walk-behind edger**

357



Key

1 **handle**
2 lock-off device
3 **power switch**
4 **guide handle**
5 **shaft**
6 ground support wheel
7 **guard**
8 motor
9 height adjust wheel

Figure 103 – Example of a walk-beside edger

4 General requirements

IEC 62841-1:2014, Clause 4 is applicable.