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# INTERNATIONAL STANDARD

## Household and similar electrical appliances – Safety – Part 2-94: Particular requirements for scissors type grass shears

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INTERNATIONAL ELECTROTECNICAL COMMISSION

# HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

## Part 2-94: Particular requirements for scissors type grass shears

## FOREWORD

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International Standard IEC 60335-2-94 has been prepared by subcommittee 61F: Safety of hand-held motor-operated electric tools, of IEC technical committee 61: Safety of household and similar electrical appliances.

The text of this standard is based on the following documents:

| FDIS | Report on voting |
|---|---|
| 61F/704/FDIS | 61F/712/RVD |

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

This third edition cancels and replaces the second edition, published in 2002. Is constitutes a technical revision. The main updates concern mechanical hazards, construction, endurance and resistance to rusting.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This part 2 is to be used in conjunction with the latest edition of IEC 60335-1 and its amendments. It was established on the basis of the fourth edition (2001) of that standard.

NOTE 1 When “Part 1” is mentioned in this standard, it refers to IEC 60335-1.

This part 2 supplements or modifies the corresponding clauses in IEC 60335-1, so as to convert that publication into the IEC standard: Safety requirements for scissors type grass shears.

When a particular subclause of Part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. When this standard states "addition", "modification", or "replacement", the relevant text in Part 1 is to be adapted accordingly.

NOTE 2 The following numbering system is used:

– subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;

– unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;

– additional annexes are lettered AA, BB, etc.

NOTE 3 The following print types are used:

– requirements: in roman type;

– *test specifications: in italic type*;

– notes: in small roman type.

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

A bilingual version of this publication may be issued at a later date.

# INTRODUCTION

It has been assumed in the drafting of this International Standard that the execution of its provisions is entrusted to appropriately qualified and experienced persons.

This standard recognizes the internationally accepted level of protection against hazards such as electrical, mechanical, thermal, fire and radiation of appliances when operated as in normal use taking into account the manufacturer's instructions. It also covers abnormal situations that can be expected in practice.

This standard takes into account the requirements of IEC 60364 as far as possible so that there is compatibility with the wiring rules when the appliance is connected to the supply mains. However, national wiring rules may differ.

If an appliance within the scope of this standard also incorporates functions that are covered by another part 2 of IEC 60335, the relevant part 2 is applied to each function separately, as far as is reasonable. If applicable, the influence of one function on the other is taken into account.

This standard is a product family standard dealing with the safety of appliances and takes precedence over horizontal and generic standards covering the same subject.

An appliance that complies with the text of this standard will not necessarily be considered to comply with the safety principles of the standard if, when examined and tested, it is found to have other features that impair the level of safety covered by these requirements.

An appliance employing materials or having forms of construction differing from those detailed in the requirements of this standard may be examined and tested according to the intent of the requirements and, if found to be substantially equivalent, may be considered to comply with the standard.

# HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

## Part 2-94: Particular requirements for scissors type grass shears

## 1 Scope

This clause of Part 1 is replaced by the following.

This standard deals with the safety of electric powered **hand-held scissors type grass shears** with a maximum cutting width of 200 mm designed primarily for cutting grass, their **rated voltage** being not more than 250 V for a.c. or 50 V d.c.

The term “grass shear” within this standard means “electric powered scissors type grass shear”.

So far as is practicable, this standard deals with the common hazards presented by **grass shears** which are encountered by all persons in the normal use and reasonably foreseeable misuse.

NOTE 101 Attention is drawn to the fact that in many countries, additional requirements are specified by the national health authorities, the national authorities responsible for the protection of labour, the national water supply authorities and similar authorities.

Requirements for chargers are covered by IEC 60335-2-29.

EMC and environmental aspects except for noise have not been considered in this standard.

## 2 Normative references

This clause of Part 1 is applicable except as follows.

*Addition:*

IEC 60320, *Appliance couplers for household and similar general purposes*

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

ISO 3744:1994, *Acoustics – Determination of sound power levels of noise sources using sound pressure – Engineering method in an essentially free field over a reflecting plane*

ISO 3767-1:1998, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment – Symbols for operator controls and other displays – Part 1: Common symbols*

ISO 3767-3: 1995, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment – Symbols for operator controls and other displays – Part 3: Symbols for powered lawn and garden equipment*

ISO 8662-1:1988, *Hand-held portable power tools – Measurement of vibrations at the handle - – Part 1: General*

ISO 11201:1995, *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 11684: 1995, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment – Safety signs and hazard pictorials – General principles*

ISO/TR 11688-1:1995, *Acoustics – Recommended practice for the design of low-noise machinery and equipment – Part 1: Planning*

ISO 12100-1, *Safety of machinery – Basic concepts and general principles for design – Part 1: Basic terminology, methodology*

ISO 13852:1996, *Safety of machinery – Safety distances to prevent danger zones being reached by the upper limbs*

EN 12449:1999, *Copper and copper alloys – Seamless, round tubes for general purposes*