

INTERNATIONAL STANDARD

ISO
3767-3

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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

*Tracteurs, matériels agricoles et forestiers, matériel à moteur pour jardins
et pelouses — Symboles pour les commandes de l'opérateur et autres
indications —*

Partie 3: Symboles pour matériel à moteur pour jardins et pelouses



Reference number
ISO 3767-3:1995(E)

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 3767-3 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 14, *Operator controls, operator symbols and other displays, operator manuals*.

This second edition cancels and replaces the first edition (ISO 3767-3:1988), of which it constitutes a technical revision and expansion.

ISO 3767 consists of the following parts, under the general title *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Symbols for operator controls and other displays*:

- Part 1: *Common symbols*
- Part 2: *Symbols for agricultural tractors and machinery*
- Part 3: *Symbols for powered lawn and garden equipment*
- Part 4: *Symbols for forestry machinery*
- Part 5: *Symbols for manual portable forestry machinery*

Annex A forms an integral part of this part of ISO 3767.

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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

1 Scope

This part of ISO 3767 establishes symbols for use on operator controls and other displays on powered lawn and garden equipment as defined in ISO 5395.

NOTE 1 The foreword lists other parts of this International Standard where symbols for specific forms of machinery and equipment may be found.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 3767. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 3767 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 3461-1:1988, *General principles for the creation of graphical symbols — Part 1: Graphical symbols for use on equipment*.

ISO 3767-1:1991, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Symbols for operator controls and other displays — Part 1: Common symbols*.

ISO 4196:1984, *Graphical symbols — Use of arrows*.

ISO 5395:1990, *Power lawn-mowers, lawn tractors, lawn and garden tractors, professional mowers, and lawn and garden tractors with mowing attachments — Definitions, safety requirements and test procedures*.

ISO 7000:1989, *Graphical symbols for use on equipment — Index and synopsis*.

IEC 417:1973, *Graphical symbols for use on equipment — Index, survey and compilation of the single sheets*, and its supplements (IEC 417A:1974, IEC 417B:1975, IEC 417C:1977, IEC 417D:1978, IEC 417E:1980, IEC 417F:1982, IEC 417G:1985, IEC 417H:1987, IEC 417J:1990, IEC 417K:1991, IEC 417L:1993).

3 Definition

For the purposes of this part of ISO 3767, the definition given in ISO 3767-1 applies.

4 General

4.1 Symbols shall be as shown in succeeding clauses of this part of ISO 3767. However, symbols, which are shown in outline form of this part of ISO 3767, may be shaded in actual use for enhanced clarity of reproduction and improved visual perception by the operator, except as otherwise noted for individual symbols.

4.2 Limitations inherent in some reproduction and display technologies may require increased line thickness or other minor modifications of symbols. Such modifications are acceptable provided the symbol remains unchanged in its basic graphical elements and is easily discernible by the operator.

4.3 Additionally, to improve the appearance and perceptibility of a graphical symbol, or to coordinate with the design of the equipment to which the symbol is applied, it may be necessary to change the line thickness or round the corners of a symbol. The graphic designer is normally free to make such changes, provided that the essential perceptual characteristics of the symbol are maintained. See ISO 3461-1:1988, subclause 10.2.

4.4 For actual use, all symbols shall be reproduced large enough to be easily discernible by the operator. See ISO 3461-1 for guidelines on the proper sizing of symbols. Symbols shall be used in the orientation shown in this part of ISO 3767 unless otherwise noted for individual symbols.

4.5 Most symbols are constructed using a building-block approach in which various symbols and symbol elements are combined in a logical manner to produce new symbols.

4.6 If a symbol shows a machine or parts of a machine from a side view, a machine moving from right to left across the symbol grid area shall be assumed. If a symbol shows a machine or parts of a machine from an overhead view, a machine moving from bottom to top across the symbol grid area shall be assumed.

4.7 Symbols on controls and displays shall have good contrast to their background. A light symbol on a dark background is preferred for most controls. Displays may use either a light symbol on a dark

background or a dark symbol on a light background, depending upon which alternative provides the best visual perception. When a symbol image is reversed (for example, from black-on-white to white-on-black and vice versa), it shall be done for the entire symbol.

4.8 Symbols shall be located on or adjacent to the control or display that is being identified. Where more than one symbol is required for a control, the symbols shall be located in relation to the control such that movement of the control toward the symbol shall effect the function depicted by that symbol.

4.9 Arrows used in symbols shall conform to the requirements of ISO 4196. ISO 3461-1 shall be consulted for the general principles of creating symbols.

4.10 ISO/IEC registration numbers are shown for symbols in this part of ISO 3767. Registration numbers below 5000 refer to ISO 7000. Registration numbers above 5000 refer to IEC 417.

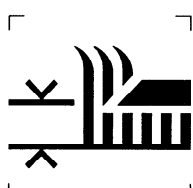
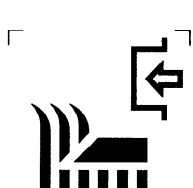
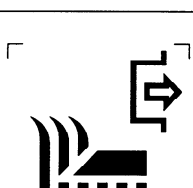
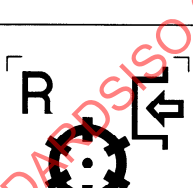
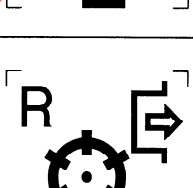
4.11 Symbols in this part of ISO 3767 are presented within the outer limits of a 24 mm square grid (32 % of original size on the ISO graphics grid). Corner marks delimit the corners of the 75 mm square graphics grid from ISO 3461-1. Corner marks are not part of the symbol itself, but are provided to ensure consistent presentation of all symbol graphics.

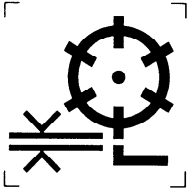
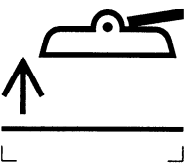
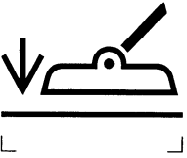
5 Colour

When used on illuminated displays, the following colours have the meanings indicated:

- red: failure or serious malfunction; requires immediate attention;
- yellow or amber: outside normal operating limits;
- green: normal operating condition.

6 Grass cutting equipment symbols

Symbol number	Symbol form/shape	Symbol description/application	ISO/IEC registration number
6.1		Cutting element — Basic symbol	0949
6.2		Cutting element — Height adjustment	0950
6.3		Cutting element — Engage	2109
6.4		Cutting element — Disengage	2110
6.5		Cylinder — Reverse drive — Engage	2111
6.6		Cylinder — Reverse drive — Disengage	2112

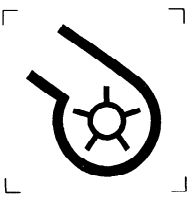
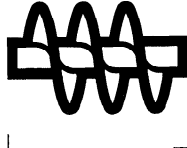
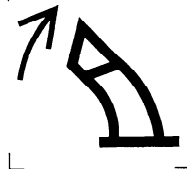
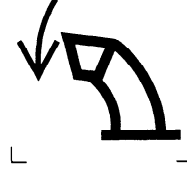
Symbol number	Symbol form/shape	Symbol description/application	ISO/IEC registration number
6.7		Cylinder — On-cut adjustment	2113
6.8		Cutting unit — Basic symbol [Attachment (support) arm may be shown in any direction.]	2114
6.9		Cutting unit — Raise [Attachment (support) arm may be shown in any direction.]	2115
6.10		Cutting unit — Lower [Attachment (support) arm may be shown in any direction.]	2116
6.11		Cutting unit — Hold [Attachment (support) arm may be shown in any direction.]	2117
6.12		Cutting unit — Float [Attachment (support) arm may be shown in any direction.]	2118

Symbol number	Symbol form/shape	Symbol description/application	ISO/IEC registration number
6.13		Cutting unit — Transport position — Basic symbol [Attachment (support) arm may be shown in any direction.]	2119
6.14		Cutting unit — Raise to transport position [Attachment (support) arm may be shown in any direction.]	2120
6.15		Cutting unit — Lower from transport position [Attachment (support) arm may be shown in any direction.]	2121

7 Tiller symbols

Symbol number	Symbol form/shape	Symbol description/application	ISO/IEC registration number
7.1		Tiller tines — Basic symbol	2122

8 Snow thrower symbols

Symbol number	Symbol form/shape	Symbol description/application	ISO/IEC registration number
8.1		Snow thrower — Impeller — Basic symbol	2123
8.2		Snow thrower — Collector auger — Basic symbol	2124
8.3		Snow thrower — Discharge chute — Height adjustment — Up	2125
8.4		Snow thrower — Discharge chute — Height adjustment — Down	2126
8.5		Snow thrower — Discharge chute — Rotate left	2127
8.6		Snow thrower — Discharge chute — Rotate right	2128

Annex A

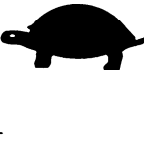
(normative)

General symbols from other parts of ISO 3767

A.1 Scope

This annex repeats symbols, extracted from other parts of ISO 3767, which are applicable to powered lawn and garden equipment. Additional symbols from other parts of ISO 3767, which are not shown in this annex, may also be used as appropriate.

A.2 General symbols

Symbol number	Symbol form/shape	Symbol description/application	ISO/IEC registration number
A.2.1		Power Take-Off (PTO)	1572 Extracted from ISO 3767-1
A.2.2		Emergency stop [NOTE — Colours to be used with this symbol should be, whenever possible, a white border, red background and white letters.]	Extracted from ISO 3767-5
A.2.3		Fast	Application example Extracted from ISO 3767-1
A.2.4		Slow	Application example Extracted from ISO 3767-1