

ANSI/OPEI B71.8-2016

American National Standard

*Powered Walk-Behind Rotary Tillers
and Hand-Supported Cultivators –
Safety Specifications*



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ANSI/OPEI B71.8-2016

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ANSI/OPEI B71.8-1996
(R2005)

American National Standard

**Powered Walk-Behind Rotary Tillers
and Hand-Supported Cultivators –
Safety Specifications**

Sponsor

Outdoor Power Equipment Institute, Inc. (OPEI)

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American National Standard

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Foreword (This foreword is not part of American National Standard ANSI/OPEI B71.8-2016.)

This standard is a revision of *American National Standard for Outdoor Power Equipment – Powered Walk-Behind Rotary Tillers and Hand-Supported Cultivators - Safety Specifications*, ANSI/OPEI B71.8-1996 (R2005). This standard was first published in 1986, and the current standard is the 3rd edition.

The present revision was prepared by the Outdoor Power Equipment Institute's (OPEI) Tillers Committee (B71.8), as part of OPEI's continuing work on standards.

A summary of the principal changes included in this revision are as follows:

- Revised Scope to (a) clarify this standard is applicable irrespective of the type of power source, and (b) does not apply to cultivator attachments covered by the applicable ANSI/OPEI B175 standards;
- Revised definition for hand-supported cultivator;
- Added machine identification requirements;
- Revised starting stabilization requirements for hand-supported cultivators;
- Added an operator zone emergency stop control requirement for machines with a powered reverse function;
- Revised the rear tine shielding requirements;
- Revised hot exhaust surface requirements;
- Added ANSI/UL 969 as an alternative to ASTM label durability requirements;
- Removed fuel tank overfill and fuel line pull test, covered by applicable ANSI/OPEI standards (Annex B);
- Added use of symbols as an alternative to text for on-product safety warnings;
- Revised list of required operator manual safety warnings.

Consensus for this standard was achieved by the use of the Canvass Method. The annexes in this standard (A and B) are informative and not considered part of this standard.

Suggestions for improvement of the standard will be welcome. They should be sent to the Outdoor Power Equipment Institute, 341 South Patrick Street, Alexandria, VA 22314 or www.opei.org, (703) 549-7600.

The following organizations are recognized as having an interest in the standardization of safety requirements for powered walk-behind rotary tillers and hand-supported cultivators and were contacted prior to the approval of this revision of the standard. Inclusion in the list does not necessarily imply that the organization concurred with the submittal of the proposal to ANSI.

Producers

Husqvarna
MTD Products Inc.
Techtronic Industries Power Equipment
TEC International

Users

Briggs & Stratton Corporation
The Toro Company

General Interest

American Society of Agricultural and Biological Engineers (ASABE)
Dan Nielsen, independent consultant
Mark Siemens, University of Arizona
Stuart Birrell, Iowa State

American National Standard

Powered Walk-Behind Rotary Tillers and Hand-Supported Cultivators – Safety Specifications

1 Scope

The requirements provided in this standard are for powered walk-behind rotary tillers and hand-supported cultivators. This standard is intended to provide safety and design requirements to help ensure uniform operator environments, exclusive of the power source. This standard shall apply to machines specifically marketed for consumer / personal use.

This standard does not apply to commercial or agricultural machines or machines primarily for agricultural purposes such as defined in ANSI/SAE J1116 or SAE J1150. This standard does not apply to tractor mounted or drawn tillers or to cultivator attachments which are adaptations of, or accessories to, handheld string trimmers and brushcutters covered by the applicable ANSI/OPEI B175 standards. This standard is not intended to completely cover electrical requirements.

The effective implementation date of this standard shall be two (2) years after the publication date and shall apply to all products built after that date. Manufacturers may also comply with the requirements of this standard anytime after the publication date.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this American National Standard. All standards are subject to revision, and parties to agreements based on this American National Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

ANSI/ASAE S304.5, *Graphical Symbols for Operator Controls on Agricultural Equipment*¹

ANSI/NEMA Z535.4, *Product safety signs and labels*

ANSI/UL 82, *Standard for Electric Gardening Appliances*

ANSI/UL 969, *Standard for Marking and Labeling Systems*

ASTM G152, *Standard Practice for Operating Open Flame Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials*²

ASTM G155, *Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials*

ISO 3767-1, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment – Symbols for operator controls and other displays – Part 1: Common symbols*³

ISO 3767-1 / Amd 1, *Additional symbols*

ISO 3767-1 / Amd 2, *Additional symbols concerning the engine emissions system and diesel exhaust fluid*

¹ ANSI standards available from the American National Standards Institute, 25 West 43rd St., New York, NY 10036; (212) 642-4900; www.ansi.org

² ASTM standards available from ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428; (610) 832-9500; www.astm.org

³ ISO standards are available from the American National Standards Institute, 25 West 43rd St., New York, NY 10036; (212) 642-4900; www.ansi.org