

ANSI/OPEI B71.1-2012

# American National Standard

*for Consumer Turf Care Equipment –  
Pedestrian-Controlled Mowers  
and Ride-On Mowers –  
Safety Specifications*

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**ANSI/OPEI B71.1-2012**

Revision and redesignation of  
ANSI B71.1-2003

American National Standard  
for Consumer Turf Care Equipment –  
Pedestrian-Controlled Mowers  
and Ride-On Mowers –  
Safety Specifications

Sponsor

**Outdoor Power Equipment Institute, Inc.**

Approved April 23, 2012

**American National Standards Institute, Inc.**

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Published by

**American National Standards Institute, Inc.  
25 West 43rd Street, New York, NY 10036**

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Printed in the United States of America

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**Foreword** (This foreword is not part of American National Standard ANSI/OPEI B71.1-2012.)

This standard is a revision of American National Standard for Consumer Turf Care Equipment - Walk-Behind Mowers and Ride-On Machines with Mowers - Safety Specifications, ANSI B71.1-2003. The first edition of this standard was approved and published by the American National Standards Institute in 1960. It has been revised thirteen times since initial publication, including this revision.

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

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

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

- Hot surface requirements revised to use ISO cones;
- Revised on-product safety messages to the most critical message;
- Added requirements for large pedestrian-controlled machines;
- Revised guarding requirements for operator location and rotating engine screens;
- Broadened scope of ROPS requirements for ride-on machines;
- Added requirements for lever-steer park brake and non-powered foot attachment lift;
- Changed lateral stability test to last uphill tire for lift-off;
- Added allowance for machine stability with positive upstop;
- Exempted lever-steer machines from dynamic stability requirement;
- Revised run-in time for blade stop test;
- Added insertion force for foot probe test;
- Eliminated single-color molded-in safety warning on discharge chute;
- Harmonized figures with ANSI B71.4;
- Made numerous editorial and text clarifications and updated references.

Consensus for this standard was achieved by use of the Canvass Method. This standard contains annexes that are all informative and are not considered requirements of this standard.

Suggestions for improvement of the standard are welcome. They should be sent to the Outdoor Power Equipment Institute, 341 South Patrick Street, Alexandria, VA 22314, or [www.opei.org](http://www.opei.org)

The following organizations, recognized as having an interest in the standardization of safety requirements for pedestrian-controlled mowers and ride-on mowers, 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.

Alamo Group  
Ariens Company  
American Society of Agricultural and Biological Engineers (ASABE)  
Briggs & Stratton Corporation  
Christopherson, Herman P. (independent consultant)  
Consumers Union  
Consumer Product Safety Commission (CPSC)  
Gruenberger, Lawrence M. (independent consultant)  
Husqvarna  
Kubota Tractor Corporation  
MTD Products, Inc.  
Scag Power Equipment, Inc.  
SGS Consumer Testing Services  
Underwriters Laboratories, Inc. (UL)  
ValleyCrest Landscape Companies

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for Consumer Turf Care Equipment –

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**Part I: General**

**1 Scope**

The safety specifications given in this standard are for powered

- (a) reel and rotary pedestrian-controlled lawn mowers,
- (b) reel and rotary ride-on lawn mowers,
- (c) ride-on lawn tractors with mower attachments,
- (d) ride-on lawn and garden tractors with mower attachments, and
- (e) lever-steer and zero-turn ride-on mowers.

These specifications are intended to provide safety requirements and to help ensure uniform operator environments. They are intended to apply to products specifically intended as consumer products for the personal use of a consumer around a house. These specifications are not intended to apply to commercial products customarily used by hired operators or to products designed primarily for agricultural purposes such as defined in SAE J1116. They are not intended to cover sulky-type units, pedestrian-controlled tractors, flail mowers or sickle bar mowers, and are not intended to completely cover electrical requirements. This standard applies to all aftermarket parts, attachments and accessories. Any manufacturer of aftermarket parts, attachments and accessories is responsible for ensuring compliance to this standard. Safety specifications in this standard apply only to a configuration of attachments/implements/accessories approved by their respective manufacturers.

The U.S. Consumer Product Safety Commission (CPSC) has promulgated a mandatory standard relating to certain aspects of pedestrian-controlled power lawn mower operations (SAFETY STANDARD FOR WALK-BEHIND POWER LAWN MOWERS, CPSC 16 CFR PART1205). A copy of the CPSC mandatory standard is contained in Annex C. The CPSC standard contains requirements for products sold in the US by manufacturers of consumer pedestrian-controlled lawn mowers that meet any of the following criteria:

- a) Cutting width between 305 mm (12 inches) and 762 mm (30 inches)
- b) Mass less than 90.7 kg (200 pounds)
- c) Engine horsepower less than 6 kW (8 hp).

**2 Normative references**

The following standards contain provisions, which through reference in this text, constitute provisions of this American National Standard. At the time of publication, the editions indicated were valid. 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.

ASABE/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*<sup>1</sup>

ASABE/ISO 3767-2:1991, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment - Symbols for operator controls and other displays – Part 2: Symbols for agricultural tractors and machinery*

<sup>1</sup> ASABE standards available from the American Society of Agricultural and Biological Engineers, 2950 Niles Road, St. Joseph, MI 49085; (269) 429-0300; www.asabe.org.