American National Standard

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

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Foreword (This foreword is not part of American National Standard ANSI/OPEI B71.1-2017.)

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/OPEI B71.1-2012. The first edition of this standard was approved and published by the American National Standards Institute in 1960. It has been revised fourteen 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.

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

Part I - General:
2 Normative references - Removed revision dates
3 Definitions - Updated

Part II - Pedestrian-Controlled Mowers:
5.4 Guards which need frequent access may be no-tools (harmonized with ANSI/OPEI B71.4)
5.5 Pressurized hydraulic hose guarding added (harmonized with ANSI/OPEI B71.4)
6.3 Stored energy safety sign (harmonized with ANSI/OPEI B71.4)
8.1 Revised label durability ASTM reference
10.1.4 Revised other openings - limited number and size
10.2.1 Moved grass catcher durability message to the instructions
10.3.6.1 Defined an operator target for grass catchers structural integrity test
10.3.7.1 Redefined operator target for thrown object test
12.1 Single-color only safety warnings are not permissible
14 Requirements added for mowers not subject to CPSC 1205 regulation

Part III - Ride-On Mowers:
16.2.2.2 Added electrical option for PTO control
17.4 Guards which need frequent access may be no-tools (harmonized with ANSI/OPEI B71.4)
17.6 Pressurized hydraulic hose guarding added (harmonized with ANSI/OPEI B71.4)
18.3 Stored energy safety sign (harmonized with ANSI/OPEI B71.4)
21.1.3 Added ROPS exemption for Out-Front Zero-Turn mowers, 400-600 kg, stability >25 degrees
21.2.4.1 Limited sudden traction test to fixed-ratio transmission units
22.1 Single-color only safety warnings are not permissible
24.1.4 Revised other openings - limited number and size
24.2 Moved grass catcher durability message to the instructions
Figures:

5. Updated figure to match text
6. Updated safety messages, eliminated duplicates, and combined pedestrian-controlled and ride-on
11(g). Figure for new operator target for grass catcher

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.

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.

Producers
Ariens Company
Jacobsen, A Textron Company
Kawasaki Motors Corporation
Scag Power Equipment

Users
Steven A. Points, independent consultant
Thomas L. Wise, independent consultant

General Interest
American Society of Agricultural and Biological Engineers (ASABE)
Consumer Product Safety Commission (CPSC)
Dan Nielsen, independent consultant
Underwriters Laboratories
American National Standard
for Consumer Turf Care Equipment –

Pedestrian-Controlled Mowers and
Ride-on Mowers –
Safety Specifications

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).

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 any time 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 Z535.4, *Product safety signs and labels*<sup>1)</sup>

<sup>1)</sup> ANSI and ISO standards available from the American National Standards Institute, 25 West 43<sup>rd</sup> Street, New York,
NY 10036; (212) 642-4900; www.ansi.org.