

ANSI/OPEI B71.7-2018

# American National Standard

*for Powered Consumer  
Ram-Type Log Splitters –  
Safety Specifications*

---



This is a preview of "ANSI/OPEI B71.7-2018". [Click here to purchase the full version from the ANSI store.](#)

**ANSI/OPEI B71.7-2018**

American National Standard  
for Powered Consumer  
Ram-Type Log Splitters –  
Safety Specifications

Sponsor

**Outdoor Power Equipment Institute, Inc. (OPEI)**

Approved August 8, 2018  
Published November 26, 2018

**American National Standards Institute, Inc.**

## American National Standard

Approval of an American National Standard requires review by ANSI that the requirements for due process, consensus, and other criteria for approval have been met by the standards developer.

Consensus is established when, in the judgement of the ANSI Board of Standards Review, substantial agreement has been reached by directly and materially affected interests. Substantial agreement means much more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that a concerted effort be made towards their resolution.

The use of American National Standards is completely voluntary; their existence does not in any respect preclude anyone, whether he has approved the standards or not, from manufacturing, marketing, purchasing, or using products, processes, or procedures not conforming to the standards.

The American National Standards Institute does not develop standards and will in no circumstances give an interpretation of any American National Standard. Moreover, no person shall have the right or authority to issue an interpretation of an American National Standard in the name of the American National Standards Institute. Requests for interpretations should be addressed to the secretariat or sponsor whose name appears on the title page of this standard.

**CAUTION NOTICE:** This American National Standard may be revised or withdrawn at any time. The procedures of the American National Standards Institute require that action be taken periodically to reaffirm, revise, or withdraw this standard. Purchasers of American National Standards may receive current information on all standards by calling or writing the American National Standards Institute

Published by

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

Copyright © 2018 by Outdoor Power Equipment Institute  
All rights reserved.

No part of this publication may be reproduced in any form, stored in an electronic retrieval system, or transmitted in any form or by any means (electronic, photocopying, recording, or otherwise), without prior written permission of the Outdoor Power Equipment Institute, Inc. (OPEI).

Printed in the United States of America

## Contents

	Page
Foreword .....	iii
<b>1</b> Scope .....	1
<b>2</b> Normative references .....	1
<b>3</b> Definitions .....	2
<b>4</b> Machine identification .....	3
<b>5</b> Controls .....	3
5.1 Control identification .....	3
5.2 Shut-off control device .....	3
5.3 Splitting control .....	3
<b>6</b> Operator zone .....	3
<b>7</b> Stability .....	4
7.1 Test requirements .....	4
7.2 Test procedure .....	4
7.3 Test acceptance .....	5
<b>8</b> Shields and guarding requirements .....	5
8.1 Power drives .....	5
8.2 Hot surfaces .....	6
8.3 Fuel ignition protection .....	7
8.4 Attachment of guards and shields .....	7
8.5 Pressurized hoses .....	7
<b>9</b> Hydraulic devices .....	7
<b>10</b> Engine exhaust .....	8
10.1 Spark-arresting muffler .....	8
<b>11</b> Additional requirements .....	8
<b>12</b> Servicing .....	8
<b>13</b> Electrical requirements .....	8
13.1 General .....	8
13.2 Line voltage .....	8
13.3 Low voltage battery powered circuits .....	8
<b>14</b> Safety messages .....	9
14.1 On-product safety signs .....	9
14.2 Safety instructions .....	9
14.3 Safety symbols .....	9
<b>15</b> Safety sign durability .....	9
15.1 Label requirements .....	9
15.2 Other types of safety signs considered durable .....	10
<b>Table</b>	
<b>1</b> Method for the use of the test cones .....	7
<b>Figures</b>	
<b>1</b> Test log variables .....	11

	Page
<b>2</b> Longitudinal stability test tilt table configurations .....	12
<b>3</b> Lateral stability test tilt table configurations .....	14
<b>4</b> Finger probe (power drive guards) .....	16
<b>5</b> Test cones for the determination of hot surface accessibility .....	17
<b>6</b> Safety instructions for powered consumer ram-type log splitters .....	18
<b>Annexes</b>	
<b>A</b> Rationale .....	21
<b>B</b> Bibliography .....	22
<b>C</b> Safety symbols .....	23
<b>D</b> Wood species chart .....	25

**Foreword** (This foreword is not part of American National Standard ANSI/OPEI B71.7-2018.)

ANSI B71.7 was first published in 1985, and was subsequently withdrawn in 2000.

This new standard was prepared by the Outdoor Power Equipment Institute's (OPEI) Powered Log Splitters Committee (B71.7), as part of OPEI's continuing work on standards.

A summary of the principal differences between the subject and previous edition of the standard is as follows:

<b>Section</b>	<b>Description</b>
1	Updated scope to reflect consumer ram-type log splitters only.
1	Added the effective implementation date.
2	Updated normative references.
3	Updated definitions.
4	Added machine identification requirements.
5	Updated controls section to reflect current label standards and added requirement of a shut-off control device.
7.2	Added minimum test log weight calculation for stability testing based on wedge size.
7.2.1/7.2.2	Added figures to illustrate stability test tilt table orientation(s)
8	Updated shields and guarding requirements to harmonize with current outdoor power equipment ANSI safety standards.
10.1	Updated engine exhaust section to reflect added requirement for spark-arresting muffler.
11.2	Clarified requirement for the means to stabilize a log during the initial splitting operation.
12	Added servicing instruction requirements.
13	Updated electrical requirements to harmonize with current outdoor power equipment ANSI safety standards.
14	Updated safety messaging and durability requirements to harmonize with current outdoor power equipment ANSI safety standards.

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

Suggestions for improvement of this standard are welcome, and should be forwarded to the Outdoor Power Equipment Institute, 1605 King Street, Alexandria, VA 22314, [www.opei.org](http://www.opei.org), (703) 549-7600.

The following organizations are recognized as having an interest in the subject standard, and were contacted prior to approval of this standard. Inclusion in the list does not necessarily imply that the organization/individual concurred with the submittal of the proposal to ANSI.

**Producers**

Country Home Products (DR Power)  
TEC International  
Timberwolf Manufacturing Corporation  
Champion Power Equipment

**Users**

Jimmy Eavenson, Eavenson Consulting, LLC  
Tom Wise, independent consultant  
Gerry Coons, independent consultant  
Mark Petersen, Construction Pro Tips

**General Interest**

Consumers Union  
Forensic Engineering  
Heath & Associates

# American National Standard

## for Powered Consumer Ram-Type Log Splitters – Safety Specifications

### 1 Scope

The safety specifications given in this standard are for powered consumer

- (a) hydraulic-ram log splitters
- (b) mechanical-ram log splitters

Power may be supplied by an internal-combustion engine or an electric motor.

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 the home. 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.

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 those defined in SAE J1116 or three-point hitch mounted machines.

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

ASABE/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*<sup>2</sup>

ASTM G152, *Standard Practice for Operating Open Flame Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials*<sup>3</sup>

ASTM G155, *Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Nonmetallic Materials*

<sup>1</sup> ANSI standards are available from the American National Standards Institute, 25 West 43<sup>rd</sup> St., New York, NY 10036; (212) 642-4900; [www.ansi.org](http://www.ansi.org)

<sup>2</sup> ASABE standards are available from the American Society of Agricultural and Biological Engineers, 2950 Niles Road, St. Joseph, MI 49085; (269) 429-0300; [www.asabe.org](http://www.asabe.org)

<sup>3</sup> ASTM standards are available from ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428; (610) 832-9500; [www.astm.org](http://www.astm.org)