

American National Standard

*for Small Off-Road Ground-Supported
Outdoor Power Equipment –
Gasoline Fuel Systems –
Performance Specifications and
Test Procedures*



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ANSI/OPEI B71.10-2008

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American National Standard

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Contents

	Page
Foreword	ii
1 Scope	1
2 Normative References	1
3 Terms and Definitions	1
4 Performance Specifications	2
4.1 Construction	2
4.2 Fuel Tank Integrity	2
4.3 Resistance to Stress Cracking	2
4.4 Fuel Line	2
4.5 Corrosion Resistance	2
4.6 Installation	3
5 Test Procedures	3
5.1 Fuel Tank Leak Test	3
5.2 Fuel Tank Cyclic Pressure Integrity Test	3
5.3 Fuel Tank Elevated Temperature Fuel Soak Test (for Injection-Molded HDPE Fuel Tanks) [Standard Test Method for Elevated Temperature Fuel Exposure Test to Measure the Resistance to Fuel-Induced Slow Crack Growth of Injection-Molded High-Density Polyethylene Fuel Tank Materials and Designs]	4
5.4 Fuel Line Assembly Tensile Test	6
Annexes	
A Rationale	7
B Bibliography	9

Foreword (This foreword is not part of American National Standard ANSI/OPEI B71.10-2008.)

This standard is the first edition of the *American National Standard for Small Off-Road Ground-Supported Outdoor Power Equipment - Gasoline Fuel Systems - Performance Specifications and Test Procedures*.

NOTE: The effective date of ANSI/OPEI B71.10-2008 shall be one year after the approval date of this standard.

There are two annexes in this standard. Both of them are informative and are not considered part of this standard.

Suggestions for improvement of the standard will be welcomed. They should be sent to the Outdoor Power Equipment Institute, 341 South Patrick Street, Alexandria, VA 22314.

The following organizations, recognized as having an interest in the standardization of safety requirements for walk-behind mowers and ride-on machines with mowers, were contacted prior to the approval of this standard. Inclusion in the list does not necessarily imply that the organization concurred with the submittal of the proposal to ANSI.

Mr. Bruce Huhmann - Consumer
Mr. Jeffrey Jansen - Consumer
Mr. Steve Scholten - Consumer
Mr. Art Lucht - Consumer
Ariens Company (Mr. Fred Moreaux) - Producer
Briggs and Stratton Co. (Mr. Thomas Wise) - Producer
Consumer Product Safety Commission (Ms. Susan Bathalon) - General Interest
Design Services Inc. (Mr. Joe Oliver) - General Interest
Eaton Corp. (Mr. Vaughn Mills) - Producer
Kelch (Mr. Michael Holz) - Producer
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Walbro Engine Management (Mr. Mark Swanson) - Producer

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1 Scope

This standard describes performance based test procedures applicable to the gasoline fuel systems for ground-supported outdoor power equipment with spark ignition engines less than 1 liter displacement.

NOTE: The tests described in this standard involve the use of hazardous materials, operations, and equipment. This standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

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.

EPA CFR 40 Section 90.1, *Protection of Environment, Control of Emissions from Nonroad Spark-Ignition Engines at or Below 19 Kilowatts*

ANSI/OPEI B71.3- 2005, *Outdoor Power Equipment – Snow Throwers – Safety Specifications*

NFPA 497-2004, *Recommended Practice for the Classification of Flammable Liquids, Gases, or Vapors and of Hazardous (Classification) Locations for Electrical Installations in Chemical Process Areas*

NFPA 70-2005 *National Electrical Code®*

3 Terms and Definitions

For the purposes of this document, the following terms and definitions apply.

3.1 Fuel Tank

A storage vessel that is an integral part of the product that is used to supply fuel to engines regulated by EPA CFR40 Section 90.1. This is distinct from separate fuel storage vessels.

3.2 Operator Zone

The space on or near the machine where the operator is normally stationed to control the machine functions.

3.3 Fuel System

The system includes the fuel tank, the filler cap, fuel line (tubing or hose), and any fuel sensor or other components that are connected to the tank or involved in supplying fuel to the engine. It does not include carburetors and fuel pumps, but does include the fuel line connections to these components.