

ANSI/ITSDF B56.6-2016

(Revision of ANSI/ITSDF B56.6-2011)



SAFETY STANDARD FOR ROUGH TERRAIN FORKLIFT TRUCKS

AN AMERICAN NATIONAL STANDARD

INDUSTRIAL TRUCK STANDARDS DEVELOPMENT FOUNDATION

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FOREWORD

(This foreword is not part of ANSI/ITSDF B56.6-2016)

In response to requests from manufacturers and users, the B56 Committee established the B56.6 Subcommittee to create the Standard. The first Subcommittee meeting was held December 5, 1974.

Six Subcommittee meetings were held for preparation of the standard, and a proposed standard dated March 25, 1976 was presented to Sectional Committee members for study. The first edition of the standard was approved and published in 1978 as an American National Standard.

In August 1982, the B56.6 Subcommittee began working on a revision to the 1978 standard. The revised standard was subsequently approved by the B56 Committee and the sponsor. The American National Standards Institute approved the standard on January 23, 1987.

Following approval by the B56 Committee and ASME, and after public review, ASME B56.6-1992 was approved by ANSI on December 15, 1992.

The 2002 edition incorporates changes made in the B56.6a-1994 and B56.6b-1998 supplements, as well as additional revisions. It was approved for issuance as an American National Standard on April 9, 2002.

On September 1, 2005, management of the B56 Standards Committee and its subcommittees was transferred from ASME to the Industrial Truck Standards Development Foundation. This Standard was reaffirmed by the B56 Standards Committee after references to ASME were changed to ITSDF.

The 2011 reaffirmation was approved by the American National Standards Institute on August 26, 2011.

The 2016 edition of ANSI/ITSDF B56.6 was approved as a revision of ANSI/ITSDF B56.6-2011 by the American National Standards Institute on April 11, 2016.

This Standard shall become effective 1 year after its respective Date of Issuance. Part III applies only to trucks manufactured after the effective date.

Safety codes and standards are intended to enhance public health and safety. Revisions result from committee consideration of factors such as technological advances, new data, and changing environmental and industry needs. Revisions do not imply that previous editions were inadequate.

ITSDF STANDARDS COMMITTEE ROSTER B56 Powered and Nonpowered Industrial Trucks

(The following is the roster of the Committee at the time of approval of this Standard.)

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J. E. Johnson, *Vice Chair*
C.F. Merther, *Secretary*

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Rick Curtin, Terex
Joe Dobrowolski, Superior Fabrication
Sonny Lenaers, JLG Industries

ANSI/ITSDF B56.6-2016

SUMMARY OF CHANGES

Following approval by the ITSDF B56 Committee and after public review, ANSI/ITSDF B56.6-2016 was approved as a revision of ANSI/ITSDF B56.6-2005 on April 11, 2016. Areas of changed wording are indicated by the margin note "16." Sections with changes include 5.15 Elevating Personnel, 6.2 General, 6.5 Operator Care of the Rough Terrain Forklift Truck, 8.10.5 Load Handling Symbols, 8.15 Protective Structures, Table 3 Overhead Guard Impact Test Load, 8.24 Personnel Work Platforms for Elevating Personnel, and Part IV Glossary of Commonly Used Words and Phrases.

ERRATA ISSUED 9 May 2017:

Editorial errors were made in ITSDF B56.6-2016. This version has been corrected. The corrected version of the standard was posted 9 May 2017 on www.itsdf.org.

<i>Page</i>	<i>Location</i>	<i>Change</i>
43	8.24.6.2	Referenced paragraph should be 8.24.6.1, not 8.24.7.1
44	8.24.6.2(h)(2)	Referenced paragraph should be 8.24.6.1, not 8.24.7.1
44	8.24.6.3	Referenced paragraph should be 8.24.6.1, not 8.24.7.1
44	8.24.6.3(h)(1)	Referenced paragraph should be 8.24.6.1, not 8.24.7.1

SPECIAL NOTE:

The interpretations to ITSDF B56.6 are included in this edition as a separate section for the user's convenience. The interpretations are not part of this edition or of the Standard itself.

POWERED AND NONPOWERED INDUSTRIAL TRUCKS

B56 SERIES INTRODUCTION

GENERAL

This Standard is one of a series that have been formulated with the Industrial Truck Standard Development Foundation as Sponsor in accordance with the Accredited Organization method, the procedures accredited by the American National Standards Institute, Inc., and the following scope:

Establishment of the safety requirements relating to the elements of design, operation, and maintenance; standardization relating to principal dimensions to facilitate interchangeability, test methods, and test procedures of powered and nonpowered industrial trucks (not including vehicles intended primarily for earth moving or over-the-road hauling); and maintenance of liaison with the International Organization for Standardization (ISO) in all matters pertaining to powered and nonpowered industrial trucks.

One purpose of the Standard is to serve as a guide to governmental authorities having jurisdiction over subjects within the scope of the Standard. It is expected, however, that the Standard will find a major application in industry, serving as a guide to manufacturers, purchasers, and users of the equipment.

For convenience, Standards of Powered and Nonpowered Industrial Trucks have been divided into separate volumes:

Safety Standards

- B56.1 Low Lift and High Lift Trucks
- B56.5 Guided Industrial Vehicles and Automated Functions of Manned Industrial Vehicles
- B56.6 Rough Terrain Forklift Trucks
- B56.8 Personnel and Burden Carriers
- B56.9 Operator Controlled Industrial Tow Trucks
- B56.10 Manually Propelled High Lift Industrial Trucks

Standardization Standards

- B56.11.1 Double Race or Bi-Level Swivel and Rigid Industrial Casters
- B56.11.4 Hook-Type Forks and Fork Carriers for Powered Industrial Forklift Trucks
- B56.11.5 Measurement of Sound Emitted by Low Lift, High Lift, and Rough Terrain Powered Industrial Trucks
- B56.11.6 Evaluation of Visibility From Powered Industrial Trucks
- B56.11.7 Liquefied Petroleum Gas (LPG) Fuel Cylinders (Horizontal or Vertical) Mounting – Liquid Withdrawal – for Powered Industrial Trucks
- B56.11.8 Safety Standard for Seat Belt (Lap-Type) Anchorage Systems for Powered Industrial Trucks

Safety standards that were previously listed as B56 volumes but now have different identification due to a change in standards development assignments are as follows:

- NFPA 505 Fire Safety Standard for Powered Industrial Trucks – Type Designations, Areas of Use, Maintenance and Operation (formerly B56.2)
- UL 583 Standard for Safety for Electric-Battery-Powered Industrial Trucks (formerly B56.3)
- UL 558 Standard for Safety for Internal Combustion Engine-Powered Industrial Trucks (formerly B56.4)

If adopted for governmental use, the references to other national codes and standards in the specific volumes may be changed to refer to the corresponding governmental regulations.

The use of powered and nonpowered industrial trucks is subject to certain hazards that cannot be completely eliminated by mechanical means, but the risks can be minimized by the exercise of intelligence, care, and common sense. It is therefore essential to have competent and careful operators, physically and mentally fit, and thoroughly trained in the safe operation of the equipment and the handling of the loads. Serious hazards are overloading, instability of the load, obstruction to the free passage of the load, collision with objects or pedestrians, poor maintenance, and use of equipment for a purpose for which it was not intended or designed.

Suggestions for improvement of these Standards, especially those based on actual experience in their application, shall be submitted to the Secretary of the B56 Committee, ITSDF, 1750 K Street NW, Suite 460, Washington DC 20006.

Comments shall be written in accordance with the following format:

- (a) specify paragraph designation of the pertinent volume;
- (b) indicate suggested change (addition, deletion, revision, etc.);
- (c) briefly state reason and/or evidence for suggested change;
- (d) submit suggested changes to more than one paragraph in the order in which they appear in the volume.

The appropriate B56 Subcommittee will consider each suggested revision at its first meeting after receipt of the suggested revision(s).

SAFETY STANDARD FOR ROUGH TERRAIN FORKLIFT TRUCKS

Part I Introduction

1 SCOPE

This Standard defines the safety requirements relating to the elements of design, operation, and maintenance of rough terrain forklift trucks. These trucks are intended for operation on unimproved natural terrain as well as the disturbed terrain of construction sites.

2 DEFINITION

A *rough terrain forklift truck* is defined as a wheeled-type truck designed primarily as a fork truck with a vertical mast and/or a pivoted boom, variable reach or of fixed length, which may be equipped with attachments. This truck is intended for operation on unimproved natural terrain as well as the disturbed terrain of construction sites. This definition excludes machines designed primarily for earth moving, such as loaders and dozers, even though their buckets and blades are replaced with forks, and machines designed primarily as over-the-road trucks equipped with lifting devices.

3 PURPOSE

The purpose of this Standard is to promote safety through the design, construction, application, operation, and maintenance of rough terrain forklift trucks. This Standard may be used as a guide by governmental authorities desiring to formulate safety rules and regulations. This Standard is also intended for voluntary use by others associated with manufacture or utilizing rough terrain forklift trucks.

4 INTERPRETATION

4.1 Mandatory and Advisory Rules

To carry out the provisions of this Standard, all items in Parts II and III are mandatory except those including the word *should*, which are recommendations.

4.2 Classification of Approved Trucks

The word *approved* means the classification or listing of trucks as to fire, explosion, and/or electric shock hazard by a nationally recognized testing laboratory, i.e., a laboratory qualified and equipped to conduct examinations and tests such as those prescribed by Underwriters Laboratories, Incorporated.

4.3 Requests for Interpretation

The B56 Committee will render an interpretation of any requirement of this Standard. Interpretations will be rendered only in response to a written request sent to the Secretary of the B56 Committee, ITSDF, 1750 K Street NW, Suite 460, Washington DC 20006. The request for interpretation shall be in the following format.

Subject: Cite the applicable paragraph number(s) and provide a concise description.

Edition: Cite the applicable edition of the pertinent standard for which the interpretation is being requested.