

ANSI/ILTVA Z135-2012

# American National Standard

*for Personal Transport Vehicles –  
Safety and Performance Specifications*

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**ANSI/ILTVA Z135-2012**

Revision and redesignation of  
ANSI/NGCMA Z135-2004

American National Standard  
for Personal Transport Vehicles –  
Safety and Performance Specifications

Secretariat

**International Light Transportation Vehicle Association, Inc. d/b/a  
National Golf Car Manufacturers Association (“NGCMA”)**

Approved March 27, 2012

**American National Standards Institute, Inc.**

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**Foreword** (This foreword is not part of American National Standard ANSI/ILTV A Z135-2012.)

This standard was developed to establish safety specifications for the design and operation of electric- and internal-combustion-engine-powered personal transport vehicles ("PTVs"), with respect to speed, acceleration, stability, braking systems, operational controls, electrical systems, lighting, fuel systems, and general configurations. A specified safety warning label lists the major safety and precautionary operating measures to be observed. Safety codes and standards are intended to enhance public health and safety.

The standard was prepared by the Engineering Specifications Committee of the International Light Transportation Vehicle Association sponsor of ANSI/ILTV A Z135-2012. This standard applies to PTVs manufactured subsequent to its publication.

Requests for changes to, or information concerning, this standard shall be considered by the Sponsor. They should be sent to the International Light Transportation Vehicle Association, c/o Fred L. Somers, Jr., Suite 1200, Two Ravinia Drive, Atlanta, Georgia 30346-2130.

Consensus for this standard was developed by use of the Canvass Method. The following persons, recognized as having an interest in the standardization of PTVs, were contacted prior to the approval of this standard. Inclusion in this list does not necessarily imply that all organizations or representatives concurred with the submittal of the proposed standard to ANSI.

William J. Bagaria, Ph.D (Independent Professional Engineer)	David Hatlem (Bollinger Insurance)	Todd L. Sauey (Columbia Par Car)
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The Engineering Specifications Committee, which was responsible for the writing of this standard, had the following personnel:

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(E-Z-GO Textron)

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## General introduction

ILTV A issues written replies to inquiries concerning interpretations of technical aspects of this standard. Interpretations are published on the ILTV A Web site at <http://www.ILTV A.org> as they are issued, and will also be published within the next edition of the standard.

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This code or standard was developed under procedures accredited as meeting the criteria for American National Standards. The Standards Committee that approved the code or standard was balanced to assure that individuals from competent and concerned interests have had an opportunity to participate. The proposed code or standard was made available for public review and comment that provides an opportunity for additional public input from industry, academia, regulatory agencies, and the public-at-large.

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ILTV A accepts responsibility for only those interpretations of this document issued in accordance with the established ILTV A procedures and policies, which precludes the issuance of interpretations by individuals.

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## American National Standard

# for Personal Transport Vehicles – Safety and Performance Specifications

## PART I

### INTRODUCTION

#### 1 Scope and purpose

##### 1.1 Scope

This standard provides safety and performance specifications relating to personal transport vehicles, (PTVs), driven by electric motors or internal combustion engines to be operated on designated roadways, or within a closed community where permitted by law or by regulatory authority rules. This standard does not apply to golf cars, which are covered by ANSI/ILTV A Z130.1.

##### 1.2 Purpose

The purpose of this standard is to promote safety in the design, manufacture, maintenance and operation of PTVs. This standard may be used as a guide by regulatory authorities desiring to formulate safety rules and regulations. This standard is also intended for voluntary use by others associated with manufacturing, maintaining or utilizing PTVs. This standard is intended to apply to vehicles conforming to the definition of a PTV regardless of date of original manufacture, but Part III shall only apply to PTVs newly manufactured one year or more after the date of this standard.<sup>1</sup>

#### 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 of this standard, the editions indicated were valid. However, all publications and standards are subject to revision and obsolescence. Accordingly, users are encouraged to investigate the possibility of applying the most recent editions of the standards referenced herein.

ANSI Z535.1, *Safety colors*. See § 9.2.1.

ANSI Z535.3, *Criteria for Safety Symbols*. See § 9.2.1.

ANSI Z535.4, *Product Safety Signs and Labels*. See § 9.2.1.

ANSI/ILTV A Z130.1, *Golf Cars – Safety and Performance Specifications*. See § 5.7.

ANSI/NFPA 30, *Flammable and Combustible Liquids Code*. See § 7.3.

ANSI/NFPA 58, *Storage and Handling of Liquefied Petroleum Gases*. See § 7.4.

Appendix B, "NIST Special Publication 811: *Guide for the Use of the International System of Units (SI)*". National Institute of Standards and Technology (March 2008). See § 4.3.

NASA RP-1024 (N79-11734), *Anthropometry Source Book, Volume 1: Anthropometry for Designers*<sup>2</sup> See § 9.7.1.

<sup>1</sup> Nothing herein is to be construed as applying to hybrid electric vehicles, i.e., where the internal combustion engine of a conventional vehicle is combined with the battery and electric motor of an electric vehicle.

<sup>2</sup> Available from National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.