

# Safety Standard for Automotive Service and Maintenance Products

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**AN AMERICAN NATIONAL STANDARD**



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**ASME ASP-2010**

# **Safety Standard for Automotive Service and Maintenance Products**

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# FOREWORD

This ASME Standard, Safety Standard for Automotive Service and Maintenance Products, has been developed under the policies and procedures as outlined by the ASME Codes and Standards development committees. This Standard had its beginning in April 2007 when the ASME Committee for Portable Automotive Lifting Devices (PALD) recognized the need to develop a standard for PALD-related equipment not covered under the ASME PALD Standard.

As a result, an ASME PALD subcommittee was appointed by members currently serving on the ASME PALD Committee to propose a new standard for these products. This subcommittee then drafted a basic scope and outline of this new Standard and petitioned the ASME Council of Codes and Standards for permission to proceed with the development of this Standard to cover equipment described in the Charter of the ASME PALD Committee as follows:

The charter of the ASME PALD Committee on Safety Standards for Portable Automotive Lifting Devices, hereafter called the Standards Committee, shall be the standardization of safety and performance requirements for portable automotive lifting devices and related equipment. These codes or standards may include requirements for safety, health, design, quality, testing, production, construction, measurement, maintenance, performance, or operation of equipment or qualification of personnel.

The Committee determined that the format of this Standard would be structured similar to that of the ASME PALD Standard, that is, one Standard with multiple Parts covering the different types of automotive service and maintenance products that would be included. Each of these Parts would include guidelines as to design, marking, identification, testing, operation, inspection, and maintenance.

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.

This Standard was approved by the American National Standards Institute on February 3, 2010.



# ASME PALD COMMITTEE

## Safety Standard for Automotive Service and Maintenance Products

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

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# PREFACE

## 1 GENERAL

This Standard is one of many safety standards on various subjects that have been formulated under the general auspices of The American Society of Mechanical Engineers (ASME). 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, suppliers, purchasers, and operators of the equipment. If adopted for governmental use, the references to other national standards in this Standard may be changed to refer to the corresponding regulations of the governmental authorities.

The use of automotive service and maintenance products is subject to certain hazards that cannot be precluded by mechanical means, but only by the exercise of intelligence, care, and common sense. It is therefore essential to have personnel involved in the use and operation of equipment who are careful, competent, trained, and qualified in the safe operation of the equipment and its proper use when servicing motor vehicles and their components. Examples of hazards are dropping, tipping, flying, or slipping of components caused primarily by improperly securing or containing loads, overloading, and off-centered loads; using the equipment on other than hard, level surfaces; and using the equipment for a purpose for which it was not designed.

The PALD Subcommittee fully realizes the importance of proper size, strength, and stability as safety factors in the design of this equipment. This equipment is used on various vehicles and their components, under variable working conditions. These conditions have been considered to provide safety and flexibility. The requirements given in this Standard must be interpreted accordingly, and judgment should be used in determining their application.

## 2 MANDATORY AND ADVISORY RULES

Mandatory rules of this Standard are characterized by use of the word *shall*. If a provision is of an advisory nature, it is indicated by use of the word *should* and is a recommendation to be considered, the advisability of which depends on the facts in each situation.

## 3 SI (METRIC) CONVERSIONS

This Standard contains SI (metric) units as well as U.S. Customary units. The values stated in U.S. Customary units are to be regarded as the standard. The SI units in the text have been directly (soft) converted from the U.S. Customary units.

## 4 PROPOSING REVISIONS

Comments on the requirements of this Standard and suggestions for its improvement, based on experience in its application, may be sent to the PALD Subcommittee. Suggestions for changes to the Standard should be submitted to the Secretary of the Committee on Automotive Service and Maintenance Products, ASME, Three Park Avenue, New York, NY 10016-5990, and should be in accordance with the following format:

- (a) Cite the specific part or section and paragraph designation.
- (b) Indicate the suggested change (addition, deletion, revision, etc.).
- (c) Briefly state the reason or evidence for the suggested change.
- (d) Submit suggested changes to more than one paragraph in the order in which the paragraphs appear in the Standard.

The PALD Subcommittee will consider each suggested change in a timely manner according to its procedures.

## 5 INTERPRETATIONS

Upon request, the PALD Subcommittee will render an interpretation of any requirement of the Standard. Interpretations can be rendered only in response to a written request sent to the Secretary of the PALD Subcommittee at the address shown above.

The request for interpretation should be clear and unambiguous. It is further recommended that the inquirer submit any request using the following format:

- Subject: Cite the applicable part or section and paragraph number, and provide a concise description.
- Edition: Cite the applicable edition of the pertinent standard for which the interpretation is being requested.
- Question: Phrase the question as a request for an interpretation of a specific requirement suitable for general understanding and use, not as a request for approval of a proprietary design or situation. The inquirer also may include any plans or drawings that are necessary to explain the question; however, they should not contain proprietary names or information.



Requests that are not in this format will be rewritten in this format by the Committee before being answered, which may inadvertently change the intent of the original request.

ASME procedures provide for reconsideration of any interpretation when or if additional information that might affect an interpretation is available. Further, persons aggrieved by an interpretation may appeal to the cognizant ASME committee or subcommittee. ASME does not “approve,” “certify,” “rate,” or “endorse” any item, construction, proprietary device, or activity.



# SAFETY STANDARD FOR AUTOMOTIVE SERVICE AND MAINTENANCE PRODUCTS

## Part 1 Introduction

### 1-1 SCOPE

The scope of this Standard is the standardization of safety and performance requirements for automotive service and maintenance products including, but not limited to

- (a) shop presses
- (b) oil filter crushers
- (c) strut spring compressors
- (d) oil and antifreeze handlers
- (e) portable hydraulic power kits

This Standard may include requirements for safety and health; design, production, construction, maintenance, performance, or operation of mechanical, hydraulic, or pneumatically powered equipment; and qualification of personnel. Safety and construction requirements for electrical equipment are included in UL 201, "Standard for Safety for Garage Equipment," and UL 2089, "Standard for Safety for Vehicle Battery Adapters." As deemed necessary by this Subcommittee, additional equipment classified as PALD-related equipment can be added as the need arises to ensure the safe operation of the equipment by the end user.

### 1-2 APPLICATION

This Standard applies to the design, construction, marking, operation, maintenance, and owner or operator inspection of the listed automotive service and maintenance equipment, used during automotive service and maintenance of components, vehicles, or both. Operation and maintenance instructions in this Standard are intended for general application. The equipment manufacturer or supplier shall be consulted for specific operation and maintenance instructions.

This Standard does not apply to lifting devices covered under the ASME Standard for Portable Automotive Lifting Devices (PALD).

### 1-3 PURPOSE

This Standard is designed to

(a) guard against and mitigate injury to workers, and otherwise provide for the protection of life, limb, and property by prescribing safety requirements

(b) provide direction to purchasers, owners, employers, supervisors, and others concerned with, or responsible for, its application

(c) guide governmental and other regulatory bodies in the development, promulgation, and enforcement of appropriate safety directives

### 1-4 DEFINITIONS

*alteration*: any change to an automotive service and maintenance product (ASMP) other than maintenance, repair, or replacement.

*appointed*: assigned specific responsibilities by the employer or the employer's representative.

*approved*: accepted as satisfactory by a duly constituted administrative or regulatory authority.

*ASMP*: any one of the various types of automotive service and maintenance products listed in the scope of this Standard.

*authorized*: approved by a duly constituted administrative or regulatory authority.

*authorized personnel*: persons who have been instructed in the operation or maintenance or both of the ASMP and designated by the owner to use or maintain the equipment.

*controls, operating*: the mechanisms that must be manipulated by the operator to govern the starting, stopping, direction of motion, acceleration, speed, and retardation of the moving member(s) of the ASMP.

*cylinder*: a means by which force is transmitted to an object by hydraulic or air pressure. The word "ram" can be used interchangeably for cylinder. Unless otherwise specified, these two words are treated as synonyms.

*designated*: selected or assigned by the employer or the employer's representative as being competent to perform specific duties.

*electric power source*: a device that utilizes electricity as the force- or delivery-transmitting medium.

