

September 25, 2008

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SUBJECT 328

OUTLINE OF INVESTIGATION

FOR

GASOLINE AND OIL BURNING TORCHES

Issue Number: 2

SEPTEMBER 25, 2008

Summary of Topics

This Second issue of the Outline of Investigation for Gasoline and Oil Burning Torches, Subject 328, includes revisions for pressure gauges in 12.3, 13.5, and 13.9.

The UL Foreword is no longer located within the UL Standard. For information concerning the use and application of the requirements contained in this Standard, the current version of the UL Foreword is located on ULStandardsInfoNet at: <http://ulstandardsinfo.net/ulforeword.html>

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INTRODUCTION

1 Scope

1.1 These requirements cover gasoline and oil burning torches used in preheating and cutting operations.

2 General

2.1 Components

2.1.1 Except as indicated in 2.1.2, a component of a product covered by this outline shall comply with the requirements for that component.

2.1.2 A component is not required to comply with a specific requirement that:

- a) Involves a feature or characteristic not required in the application of the component in the product covered by this outline, or
- b) Is superseded by a requirement in this outline.

2.1.3 A component shall be used in accordance with its rating established for the intended conditions of use.

2.1.4 Specific components are incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions.

2.1.5 A product shall be formed and assembled so that it will have the strength and rigidity necessary to resist the abuses to which it is likely to be subjected, without resulting in a risk of fire or injury to persons due to total or partial collapse with resulting reduction of spacings, loosening or displacement of parts, or other defects.

2.1.6 Hose and hose assemblies for gasoline use shall comply with the Standard for Hose and Hose Assemblies for Dispensing Flammable Liquids, UL 330.

2.1.7 Hose and hose assemblies for oil use shall comply with the Standard for Hose and Hose Assemblies for Dispensing Flammable Liquids, UL 330 except for the Ultraviolet Light and Water Exposure Test and the Immersion Test shall be conducted in accordance with 2.1.8.

2.1.8 For hose components that come in contact with oil or grease, the tensile strength and ultimate elongation of specimens that have been immersed in IRM 903 oil at $100 \pm 2^\circ\text{C}$ ($212 \pm 3.6^\circ\text{F}$) for $70 \pm 1/2$ hours shall not be less than 40 percent of the corresponding properties of specimens that have not been immersed in the test liquid.

2.1.9 Regulators, when provided, shall comply with the Standard for Compressed Gas Regulators, UL 252.

2.1.10 Low pressure gauges, when provided on regulators, shall comply with Standard for Compressed Gas Regulator Accessories, UL 252A.

2.1.11 High pressure gauges, when provided, shall comply with the Standard for Gauges, Indicating Pressure, for Compressed Gas Service, UL 404.

2.1.12 A pressure vessel, when provided, shall be constructed in accordance with the ASME Boiler and Pressure Vessel Code, Section VIII, Rules for Construction of Pressure Vessels, Division I, and shall be marked with the pressure vessel symbol.

2.1.13 Non-pressurized tanks, when provided, shall comply with the Standard for Metal Safety Cans, UL 30.

2.2 Units of measurement

2.2.1 Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

2.3 Undated references

2.3.1 Any undated reference to a code or standard appearing in the requirements of this outline shall be interpreted as referring to the latest edition of that code or standard.

CONSTRUCTION

3 Materials

3.1 Devices of this type shall be constructed of materials that are compatible with the gas or gases with which they are used. Metal parts shall be inherently corrosion resistant or protected to resist corrosion.

4 Assembly

4.1 A torch unit consists of a valve body assembly burner tube, orifice(s), and burner head(s). A torch unit may also incorporate an integral container assembly that may be refillable.