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DOCUMENT

ULC/ORD-C343-75 (R2020)

GUIDE FOR THE INVESTIGATION OF PUMPS FOR OIL-BURNING APPLIANCES

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FOREWORD

Certification organizations are periodically requested to promptly provide certification services for devices, constructions, materials and systems where Canadian recognized Standards do not currently exist or are not entirely applicable. Accordingly, the certification organization utilizes its experience, existing specifications and requirements in related areas, together with assistance from its advisory councils to develop and prepare Other Recognized Documents (ORDs) for use in conducting the necessary tests and evaluation investigation.

Underwriters Laboratories of Canada has prepared many ORDs in response to requests from, and in conjunction with, industry, code writing bodies, regulatory agencies and others prior to promulgating a certification program. In many instances such documents have become published ULC Standards and subsequently National Standards of Canada. It is the intention of Underwriters Laboratories of Canada to continue this practice, as appropriate.

Comments on the content of this ORD should be directed to the Head Office of Underwriters Laboratories of Canada, 7 Underwriters Road, Toronto, Ontario, Canada, M1R 3A9.

NOTE: These Other Recognized Documents are accepted under the National Standards System of Canada. Reference may be made to the Document ″Guidelines for the Development and Maintenance of Other Recognized Documents (ORDs)″, published by the Standards Council of Canada located at 270 Albert Street, Suite 200, Ottawa, Ontario, CANADA, KIP 6N7.

GUIDE FOR THE INVESTIGATION OF PUMPS FOR OIL-BURNING APPLIANCES

PREFACE

This is the First Edition of the Other Recognized Document for Guide For The Investigation Of Pumps For Oil-burning Appliances, ULC/ORD-C343-75 (R2020).

Only metric SI units of measurement are used in this ORD. If a value for measurement is followed by a value in other units in parentheses, the second value may be approximate. The first stated value is the requirement.

In Canada, there are two official languages, English and French. All safety warnings must be in French and English. Attention is drawn to the possibility that some Canadian authorities may require additional markings and/or installation instructions to be in both official languages.

This First Edition ORD has now been Reaffirmed.

Attention is drawn to the possibility that some of the elements of this ORD may be the subject of patent rights. Neither Underwriters Laboratories of Canada, nor ULC Standards, shall be held responsible for identifying any or all such patent rights.

Requests for interpretation of this ORD should be sent to the ULC Mark Program Owner of Underwriters Laboratories of Canada. The requests should be worded in such a manner as to permit a “yes” or “no” answer based on the literal text of the requirement concerned.

ORDs are valid for use by Certification Bodies for certifications for up to 5 years from date of initial validation, or revalidation, unless superseded or withdrawn.

This ORD is intended to be used for conformity assessment.

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In Replying
Please Refer to ULC Subject C343-1975

GUIDE

FOR

THE INVESTIGATION

OF

PUMPS FOR OIL-BURNING APPLIANCES

GENERAL

1. Scope

1.1 These requirements cover pumps that are intended to be used as part of oil-burning appliances or installed in fuel-oil piping systems serving such equipment. Oil-burning appliance pumps are classified as either automatic or power-operated.

1.2 Requirements for the installation and use of oil-burning appliance pumps are included in the Standard for the Installation of Oil-Burning Equipment, NFPA No. 31.

2. General

2.1 A component of a pump for oil-burning appliances shall comply with the requirements for that component, except that such requirements may be modified if appropriate for the particular application.

3. Glossary

3.1 For the purpose of this Guide, the following definitions apply.

3.2 AUTOMATIC PUMPS - Assemblies that automatically pump oil from the supply tank and deliver this oil by gravity under a constant head to an oil-burning appliance and which have automatic means to prevent the abnormal discharge of oil. These pumps are designed for installation at least 1 foot above the top of the supply tank and are arranged to stop pumping automatically in case of total breakage of the oil supply line between the pump and the appliance.

3.3 DIFFERENTIAL PRESSURE - The difference in pressure, as measured in pounds per square inch gauge (psig) at the discharge port, between the value obtained with the pump operating and after shutdown.

3.4 NORMAL OPERATING PRESSURE - The pressure at which the pump is normally operated on the appliance.

3.5 POWER-OPERATED PUMPS - Pumps for use in the assembly of power-operated oil burners, or for use as oil-transfer pumps.

3.6 RATED PRESSURE - The minimum and maximum operating pressures recommended by the manufacturer of the pump.

3.7 REGULATED PRESSURE - The minimum and maximum operating pressures obtainable by adjustment of the pressure-regulating valve.

CONSTRUCTION

4. Assembly

4.1 An automatic pump shall include all the components necessary for its normal function when used as intended.

4.2 A pump in which electrical components are located within a fluid-containing compartment or space is to be subjected to appropriate examination and tests to evaluate the probability of failures likely to create a hazard, giving due consideration to the voltage involved, materials used, construction employed, etc. Contacts or other mechanisms likely to cause an arc within a space containing or likely to contain a hazardous fluid are to be avoided.

4.3 The construction of a pump shall be such that parts can be readily assembled after being dismantled to the extent needed for normal care.