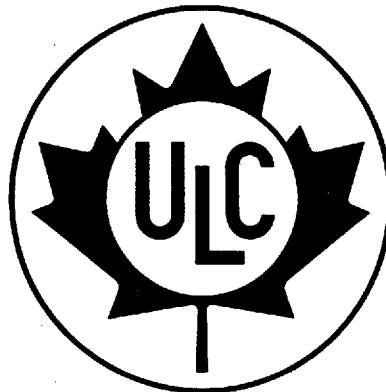




GUIDE
FOR
THE INVESTIGATION
OF
CONSTANT-LEVEL OIL VALVES

UNDERWRITERS' LABORATORIES OF CANADA

GUIDE
FOR
THE INVESTIGATION
OF
CONSTANT-LEVEL OIL VALVES

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In Replying
Please Refer to

ULC Subject C352-1975

GUIDE
FOR
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OF
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GENERAL

1. Scope

1.1 These requirements cover constant-level oil valves that are intended to be used in fuel-oil handling or burning equipment. They also apply to constant-level valves intended for use at or near a supply tank to maintain a constant head of oil for gravity feed to burner equipment requiring uniform oil pressure to be maintained in its supply line.

1.2 The constant-level oil valves may include manually or automatically operated metering valves to regulate the flow of oil to an appliance and may include thermostatic and electrical control features.

1.3 Requirements for the installation and use of constant-level valves are included in the Standard for the Installation of Oil-Burning Equipment, NFPA No. 31.

2. General

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

2.2 The spacings in a device (such as a control, receptacle, relay, snap switch, terminal block, etc.) supplied as part of a valve assembly, other than a device in a safety-control circuit, shall be not less than the minimum spacings required for the class of device in question or not less than the spacings required for temperature-indicating and -regulating equipment, whichever are smaller. In a device which is part of a safety-control circuit, spacings are judged under the requirements for safety controls, CSA C22.2 No.24.

2.3 The electrical clearance resulting from the assembly of parts into the complete equipment, including clearance to grounded metal or enclosure, are judged under the spacing requirements for temperature-indicating and -regulating equipment, CSA C22.2 No. 24.

CONSTRUCTION

3. Assembly

3.1 A constant-level oil valve shall include all the components necessary for its normal function when used as intended. The components shall be planned for assembly as a unit.

3.2 The construction of a constant-level valve shall be such that parts can be readily reassembled after being dismantled to the extent needed for normal care.

3.3 Convenient means shall be provided for the purpose of making any necessary field adjustment.

3.4 A constant-level oil valve intended for use in an appliance or to be mounted at a location other than at the supply tank shall incorporate an automatic shutoff device to guard against the hazard of float or float-valve failure and an integral strainer at the oil inlet.

3.5 A constant-level oil valve intended for use without an automatic shutoff device shall be oil-tight and be provided with a connection for a vent line.

3.6 A constant-level oil valve intended for use in an appliance shall be constructed to withstand the effects of vibration and rough handling.

3.7 Screws or bolts used to attach parts that are intended for normal care or servicing shall be capable of holding the parts upon the application of the torques indicated in Table 1, after removal and replacement.

T A B L E 1

MAXIMUM TORQUE REQUIREMENT FOR SCREWS

Screw Size	Torque, Pound-Inches
No.8	20
No.10	25
1/4 inch	100
5/16 inch	200
3/8 inch	350