





Typical 10-015, 10-065, S3406

Typical L17, L74, L64, L68

Low level switch configuration

(Diagram indicates mode of switch when float is at low position) Electrical continuity will be through the black and white wires when the float is at its lowest point of travel. Electrical continuity will be btwenn the black and red wires at other positions of the float.



WARNING

Improper selection, misuse, age, or malfunction of components used in systems can cause failure in various modes. The system designer is warned to consider the failure modes of all component parts and to provide adequate safeguards to prevent personal injury or damage to equipment or property in the event of such failure modes. System designers and end users are cautioned to consult instruction sheets and specifications available from the factory. The system designer/end user is responsible for verifying that all requirements for the applications are met.

Application

Low level switch provides a signal source for user's electrical system or warning device to indicate oil level in the reservoir has reached its "low" level. This reduces the possibility of the reservoir running dry and the subsequent loss of lubricant delivery. Low level switches can be used in lubricators having 1, 2, and 5 gallon reservoirs.

Specifications

Liquid level control switch Maximum temperature: 175°F (80°C) Resistive load: 3 volt-amperes AC/DC Inductive load: .25 amperes maximum Contact protector(s) Capacitor: 1 MFD, 600 volts Resistor: 100 ohms, 1/4 watt Control relay (as required) DPDT, 120 volt, 50/60 Hz, 10 amperes

WARNING

Contact protectors are not factory pre-wired and must be wired during field installation, either at a terminal block or other suitable location as shown in the wiring diagrams. Do not exceed current rating of switch.





Low liquid level control switches For use with 10-015, 10-065, L17, L74, L64, L68

Installation

Type 10-009, 10-015, and 10-065 Lubricators

Separate reservoir and lubricator head assembly. Remove one of the filter plugs (preferably the rear one) from the lubricator head. Place 5/8" long hex head screw (furnished in kit) in screw hold immediately adjacent to the selected filler plug hole (switch installation prevents access to standard slotted head screw for tightening). Install switch adapter (6a, Figure 2) with gasket (7) in the selected filler plug hole and tighten securely. Feed level switch wires and upper end of level switch tube (see Figure 1) upward through switch adapter from under side of head. Install compression sleeve (2, Figure 2) and tube nut (3), allowing approximately 1/8" of tube to protrude past back of nut and then tighten sufficiently to hold tube in place. Align switch tube in as near a vertical position as possible without contact between the switch tube and float with any part of the lubricator (oil cup, siphon tube, reservoir wall) and then fully tighten the tube nut. If tightening the nut causes contact between the tube and oil cup, bend tube slightly by hand (use care to avoid kinking tube) to eliminate all contact. Install reservoir and tighten screws to 20-to-30 inch-pounds torque. Assemble conduit fittings as instructed below.

Type L74, L64, L68, L17 Lubricators

Remove screws securing reservoir to reservoir adapter and remove reservoir. Do not remove reservoir adapter from lubricator head assembly. With type L68 and L17 lubricators, remove one of the pipe plugs (preferably that under outlet port of lubricator head) from reservoir adapter. With type L74 and L64 lubricators, a special intermediate adapter and six extra long screws are furnished with the level switch (see Figure 3). Apply a good grade of thread sealant to pipe threads on switch adapter (6b, Figure 2) and install in port reservoir adapter (L68, L17 lubricators) or intermediate adapter (L74, L64 lubricators) and tighten securely. Feed level switch wires and leg of switch tube through switch adapter from inside to outside. Install compression sleeve (2) and tube nut (3), allowing approximately 1/8" of tube to protrude past back of nut and then tighten nut sufficiently to hold tube in place. Align switch tube in as near a vertical position as possible without contact between the switch float and siphon tube or reservoir side and then fully tighten tube nut. Install reservoir and tighten screws to 20-to-30 inch-pounds torque. Assemble conduit fittings as instructed below.

Conduit Fittings (As Required)

Place fitting sleeve (5) on switch adapter (6a, 6b) and secure with retaining ring (4). Screw conduit fitting (1) onto sleeve and tighten securely.

Relay use

The use of the control relay is mandatory with liquid level switches when power requirements exceed 10 watts. The liquid level switches contain reed type hermetically sealed contacts and are limited to 3 Volt-amps DC & AC - resistive load; 0.25 Amps maximum inductive load. It is imperative that these switch contacts are not overloaded. They are only adequate to energize the control relay provided or low-watt warning lights.

Parts (from illustrations)

- 1. Electrical housing
- 2. Sleeve
- 3. Nut
- 4. Ring
- 5. Sleeve adapter
- 6a. Adapter
- 6b. Adapter
- 7. Gasket (use with item 6a)
- 8. Switch (low level only)
- 9. Intermediate adapter
- 10. Screw (6 required)
- 11. Gasket

NOTE: Tube between switch and conduit fitting assembly not shown, tube length and shape will vary depending on type of lubricator, reservoir size and type switch.



Intermediate adapter installation for L64 and L74 (Figure 2)



Type L17, L64, L68, L74 lubricators



WARNING

Improper selection, misuse, age or malfunction of components used in systems can cause failure in various modes. The system designer is warned to consider the failure modes of all component parts and to provide adequate safeguards to prevent personal injury or damage to equipment or property in the event of such failure modes. System designers and end users are cautioned to consult instruction sheets and specifications available from the factory. The system designer/end user is responsible for verifying that all requirements for the application are met.

WARRANTY

The products described herein are warranted subject to seller's Standard Terms and Condition of Sale, available at seller's website.