MODEL L-30

HARWIL CORPORATION
541 KINETIC DRIVE, OXNARD, CA 93030
TEL: (805) 988-6800

INSTALLATION AND OPERATING INSTRUCTIONS

The L-30 liquid level switch is supplied with a 1½" or 1¼" x 1" bushing, threaded in place with 2 to 3 wraps of Teflon tape, which must be intact or renewed if the bushing and switch are separated before assembly in the tank. Care must be taken when threading the bushing into plastic or metal fittings. Apply a minimum of 2 to a maximum of 3 wraps of Teflon tape to the threads of the bushing–this is especially important if the unit is to be used in metal fittings where coarse METAL THREADS could gall plastic if not lubricated. The plastic bushing CAN BE CRACKED if the main body of the flow switch is tightened into it FIRST. Cracking will not occur if the bushing is FIRST tightened into the pipe or tank fitting and THEN the L-30 body is tightened into the bushing.

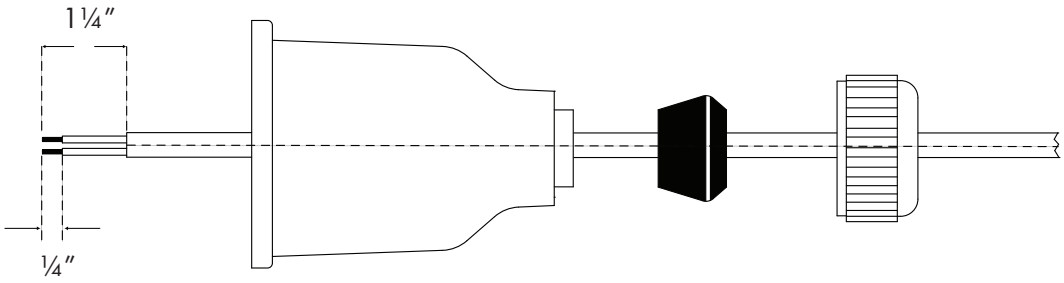
Thus:

1. Teflon tape thread and tighten plastic bushing into pipe or tank fitting.
2. Teflon tape thread and tighten L-30 switch into a PLASTIC bushing by applying a wrench to the hexagonal section. Repeat steps 1 and 2 until the ARROW on the body points UPWARD and threads are leak tight.

Plumber's tools, such as pipe wrenches, are not recommended. If possible, use a "rigid" type wrench where the smooth jaws closely fit the hexagonal section.

ELECTRICAL WIRING

1. Remove the gland nut, grommet, and switch cover.
2. Strip the outer jacket of the electrical cord back approximately 1¼". Strip the insulation from individual conductors back approximately ¼".
3. Slip on terminals are supplied with each switch. Remove from switch terminals and crimp on or solder them to the electrical leads.
4. Feed the electrical cable through the gland nut, grommet, and switch cover as shown.



5. Apply slip on terminals to appropriate contacts of the microswitch. Slide the cover down the cable and fasten it to the body of the switch with the four screws provided. Push the grommet into the tapered end of the cover. Hold the cable jacket to prevent rotation and thread the gland nut firmly onto the cover.

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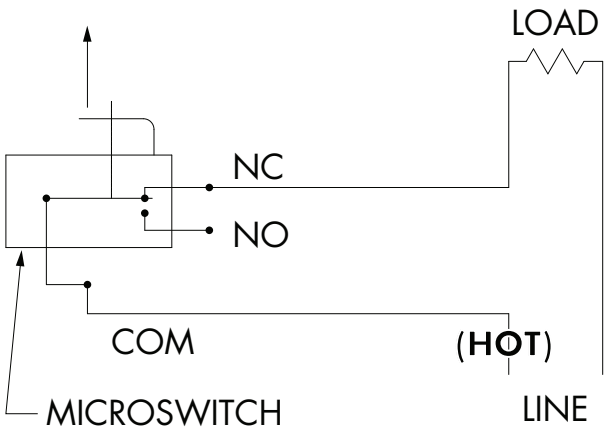
LOW LIQUID LEVEL ALARM

Fig 1: Wiring schematic for power applied to load when liquid level is less than set point (power to load interrupted when level increases to above set point).

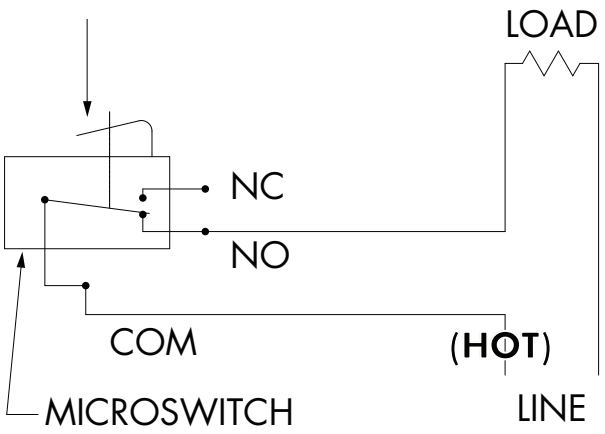
Decreasing liquid level moves actuator in direction shown.



HIGH LIQUID LEVEL ALARM

Fig 2: Wiring schematic for power applied to load when liquid level is greater than set point (power to load interrupted when level decreases to below set point).

Increasing liquid level moves actuator in direction shown.



Microswitch actuation point may be monitored by an audible click or with an ohmmeter before connecting line power to the switch terminals or by monitoring the voltage supplied to the load through the microswitch.

BREAKDOWN OF PARTS DIAGRAMS ON FOLLOWING PAGES