# **Chromalox**®

# Installation, Operation

and

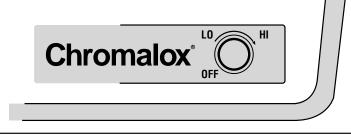
**RENEWAL PARTS IDENTIFICATION** 

SERVICE REFERENCE				
division 4	SECTION LUH			
SALES REFERENCE (Supersedes PF44	B-5) <b>PF448-6</b>			
161-057821-001				
DATE DECEMBER, 2000				

## **Thermostat Kits** Model Number LUH-TK1 (SPST) Model Number LUH-TK2 (DPST) For field installation only in LUH-02 through LUH-45 heaters

SPECIFICATIONS

- 1. Temperature Range: 40PF to 90PF.
- 2. Differential: 5PF.
- 3. Non-inductive Rating: 24V @ 25 Amperes 120V @ 25 Amperes 240V @ 25 Amperes 277V @ 22 Amperes



#### GENERAL

The following procedure contains instructions for installing thermostat kits LUH-TK1 and LUH-TK2 in LUH-02 through LUH-45 Heaters.

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**ELECTRIC SHOCK HAZARD.** Disconnect all power before installing thermostat kit. Failure to do so could result in personal injury or property damage. Heater must be installed by a qualified person in accordance with the National Electrical Code, NFPA 70.

#### **A** WARNING

Hazard of Electric Shock. Disconnect all power befor installing. This kit must be installed by a qualified person.

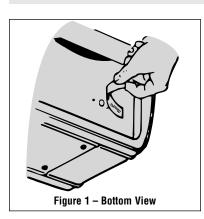
#### INSTALLATION

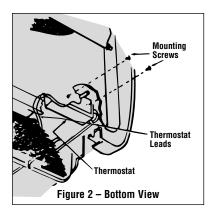
- **1.** Peel off "Chromalox" decal located at the bottom right cornerof the front of the heater. Removal of this label will reveal the thermostat shaft hole and two mounting holes which are factory drilled on all heaters. (See Figure 1).
- 2. Open hinged access door at bottom of heater and insert thermostat through the shaft hole in the front cover, assuring that thermostat leads are toward the inside of the case. (See Figure 2.) Align mounting holes and fasten with the mounting screws provided with the kit.
- **3.** Refer to specific wiring diagram figure number (from Table 1, page 2) for electrical connections of the thermostat leads and follow directions under corresponding figure number.

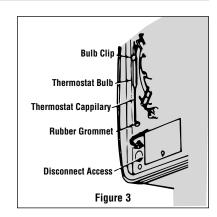
Complete all electrical connections indicated before proceeding to step 4.

- **4.** Insert bulb clip in factory drilled hole located on heater back. (See Figure 3.)
- **5.** Feed thermostat capillary (be careful not to kink or make any sharp bends) out through the factory drilled hole located on heater back directly beneath motor conduit. Snap the tip of the thermostat bulb into the bulb clip. (See Figure 3.)
- **6.** Make a lengthwise cut with knife through the rubber grommet provided and insert the grommet over the capillary.
- **7.** Install the grommet into factory drilled hole on back of heater. (See Figure 3.)
- 8. Install new label over the thermostat shaft. Install thermostat knob.

#### **INSTALLATION**



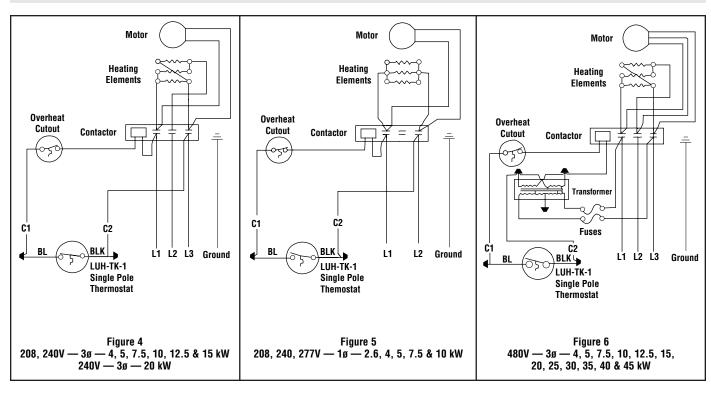




### WIRING DIAGRAMS

Model No.	Volts	Phase	kW	Thermostat Kit No.	Wiring Diagram Figure No.	Built-in Contactor	Built-in Transformer
LUH-D-02-81 LUH-D-02-21 LUH-D-02-71	208 240 277	1 1 1	2.6 2.6 2.6	LUH-TK-1 LUH-TK-1 LUH-TK-1	5 5 5	YES YES YES	NO NO NO
LUH-D-04-81 LUH-D-04-83 LUH-D-04-21 LUH-D-04-23 LUH-D-04-71	208 208 240 240 277	1 3 1 3 1	4 4 4 4 4	LUH-TK-1 LUH-TK-1 LUH-TK-1 LUH-TK-1 LUH-TK-1 LUH-TK-1	5 4 5 4 5	YES YES YES YES YES YES	NO NO NO NO NO
LUH-D-04-43 LUH-D-05-81 LUH-D-05-83 LUH-D-05-21 LUH-D-05-23 LUH-D-05-71 LUH-D-05-43	480 208 208 240 240 277 480	3 1 3 1 3 1 3	4 5 5 5 5 5 5 5	LUH-TK-1 LUH-TK-1 LUH-TK-1 LUH-TK-1 LUH-TK-1 LUH-TK-1 LUH-TK-1	6 5 4 5 4 5 6	YES YES YES YES YES YES YES YES	YES NO NO NO NO YES
LUH-D-07-81 LUH-D-07-83 LUH-D-07-21 LUH-D-07-23 LUH-D-07-71 LUH-D-07-43	208 208 240 240 277 480	1 3 1 3 1 3	7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5	LUH-TK-1 LUH-TK-1 LUH-TK-1 LUH-TK-1 LUH-TK-1 LUH-TK-1 LUH-TK-1	5 4 5 4 5 6	YES YES YES YES YES YES YES	NO NO NO NO YES
LUH-D-10-81 LUH-D-10-83 LUH-D-10-21 LUH-D-10-23 LUH-D-10-43	208 208 240 240 480	1 3 1 3 3	10 10 10 10 10 10	LUH-TK-1 LUH-TK-1 LUH-TK-1 LUH-TK-1 LUH-TK-1 LUH-TK-1	5 4 5 4 6	YES YES YES YES YES YES	NO NO NO YES
LUH-D-12-83 LUH-D-12-23 LUH-D-12-43	208 240 480	3 3 3	12.5 12.5 12.5	LUH-TK-1 LUH-TK-1 LUH-TK-1	4 4 6	YES YES YES	NO NO YES
LUH-D-15-83 LUH-D-15-23 LUH-D-15-23	208 240 480	3 3 3	15 15 15	LUH-TK-1 LUH-TK-1 LUH-TK-1	4 4 6	YES YES YES	NO NO YES
LUH-D-20-23 LUH-D-20-43	240 480	3 3	20 20	LUH-TK-1 LUH-TK-1	4 6	YES YES	NO YES
LUH-D-25-43 To LUH-D-45-43	480	3	25 - 45	LUH-TK-1	6	YES	YES
Heaters with Optional External 120V Controls	All Voltages	1	2.6, 4, 5, 7.5, 10	LUH-TK-1 LUH-TK-2	8 10	YES	NO
Heaters with Optional External 120V Controls	All Voltages	3	4, 5, 7.5, 10, 12, 12.5, 15, 20, 25, 30, 35, 40, 45	LUH-TK-1 LUH-TK-2	9 11	YES	NO

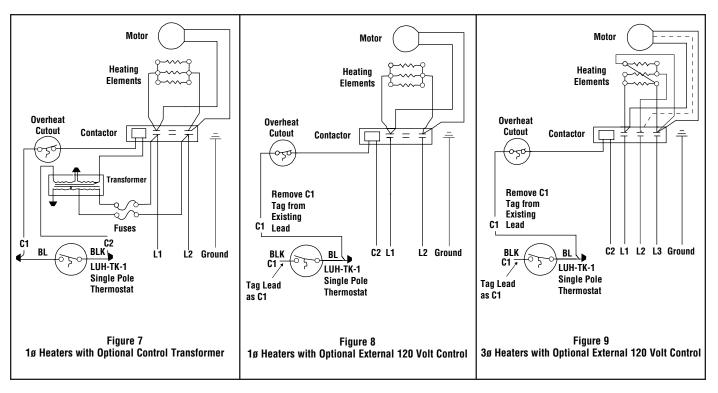
#### WIRING DIAGRAMS



Connect single pole thermostat blue lead (BL) to heater lead C1 and black lead (BLK) to C2 using wire nut provided.

Connect single pole thermostat blue lead (BL) to heater lead C1 and black lead (BLK) to C2 using wire nuts provided.

Connect single pole thermostat blue lead (BL) to heater lead C1 and black lead (BLK) to C2 using wire nuts provided.



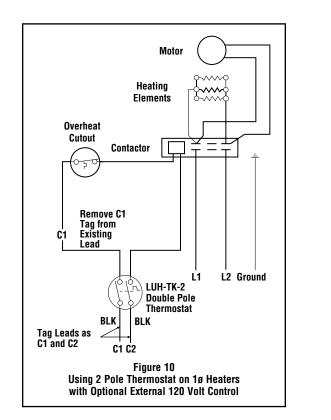
Connect single pole thermostat blue lead (BL) to heater lead C1 and black lead (BLK) to C2 using wire nuts provided.

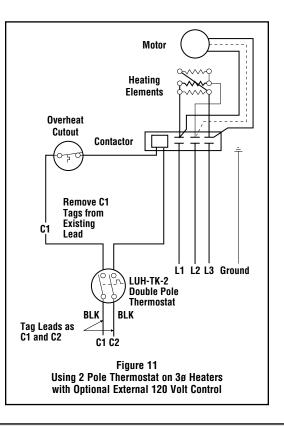
Connect single pole thermostat blue lead (BL) to heater lead C1 using the wire nut provided. Remove the C1 wire marker from the heater lead and attach to thermostat black lead (BLK).

Connect single pole thermostat blue lead (BL) to heater lead C1 using the wire nut provided. Remove the C1 wire marker from the heater lead and attach to thermostat black lead (BLK).

	LUH-TK-1 Components KiT Part Number*	LUH-TK-2 Components Kit Part Number*
Thermostat	300-049197-003	300-049197-004
Screws	248-049282-021 (2)	248-049282-021 (2)
Rubber Grommet	135-075436-008	135-075436-008
Label Decal	170-049279-002	170-049279-002
Bulb Clip	059-304558-001	059-304558-001
Knob	169-049278-001	169-049278-001
Wire Nuts	070-075468-004 (2)	070-075468-004 (2)

\*Number in Parentheses () indicates the quantity of that part required.





#### WARRANTY AND LIMITATION OF REMEDY AND LIABILITY

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