

# Chromalox®

## *Installation, Operation* and **RENEWAL PARTS IDENTIFICATION**

### SERVICE REFERENCE

DIVISION 4	SECTION LUH
SALES REFERENCE	PF204-1
	161-305676-001
DATE	JANUARY, 2007

## Thermostat Kits

**Model Number HVH-TK5**

**Model Number HVH-TK6**

**For field installation in HVH-02 through HVH-50 heaters**

### SPECIFICATIONS

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



### GENERAL

The following procedure contains instructions for installing thermostat kits HVH-TK5 and HVH-TK6 in HVH-02 through HVH-50 Heaters.

### **⚠ WARNING**

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

### INSTALLATION

#### Step 1

1. Verify that the thermostat kit is compatible with your heater. HVH-TK-6 is a DPST line voltage thermostat, it can be used on 1Ø, 240V max. up to 25A and 1Ø, 277V up to 22A heaters. HVH-TK-5 is a SPST is a thermostat used in conjunction with a contactor.
2. Peel off "Chromalox" label located on the bottom front corner of the heater. Removal of the label will reveal the holes for mounting the thermostat (See Figure 1).
3. Carefully remove the KO on the bottom side of heater.

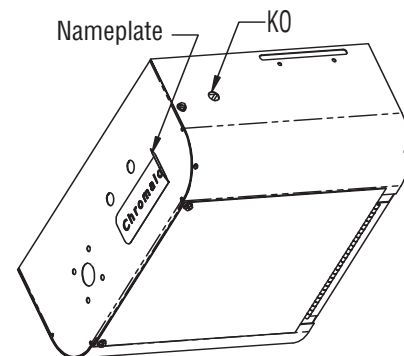


Figure 1

## INSTALLATION (cont'd.)

### Step 2 (Figure 2)

1. Remove (2) screws on cover and open cover.
2. Feed thermostat capillary (be careful not to kink or make any sharp bends) out through the hole made in step 1.
3. Mount body of thermostat to front of heater case using the (2) 6-32 flat head screws (not location of leadwires shown in illustration). Attach new label and knob provided with TK kit.

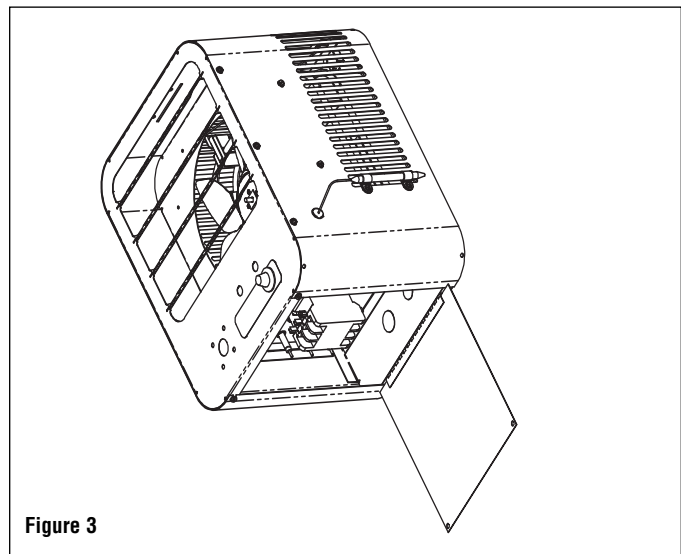
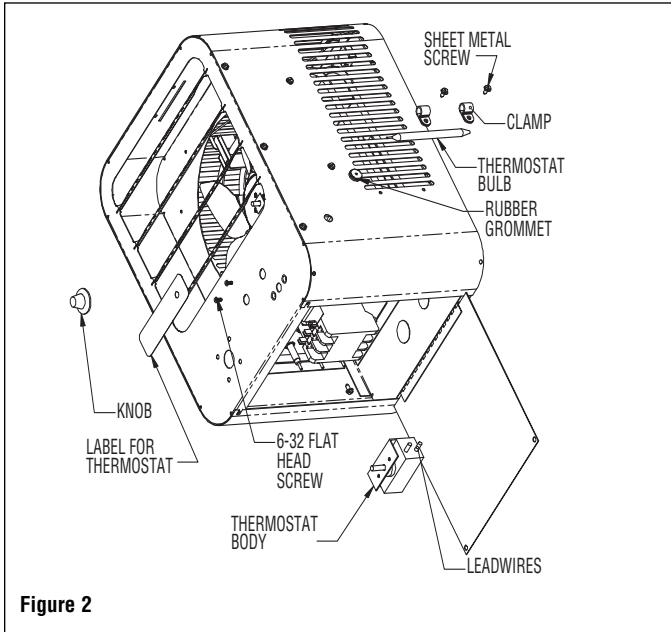


Figure 3

### Step 4

1. For TK-6 Thermostat kits, wire one blue lead of thermostat to terminal block pole "L1" and the other blue lead to terminal block pole "L2". Connect incoming power wiring to the black leads with wire nuts provided by others. See figure 4 for line voltage thermostat. See figure 8 for control voltage thermostat.

For TK-5 thermostat kits with an internally provided control circuit, remove white jumper wire on terminal block between poles "C1" and "C2". Connect blue wire of thermostat to pole "C1" and black wire to "C2". See figures 5, 6 or 7.

For TK-5 thermostat kits with an externally provided control circuit, remove white jumper wire on terminal block between poles "C2" and "C3". Connect blue wire of thermostat to pole "C2" and black wire to "C3". See figure 7.

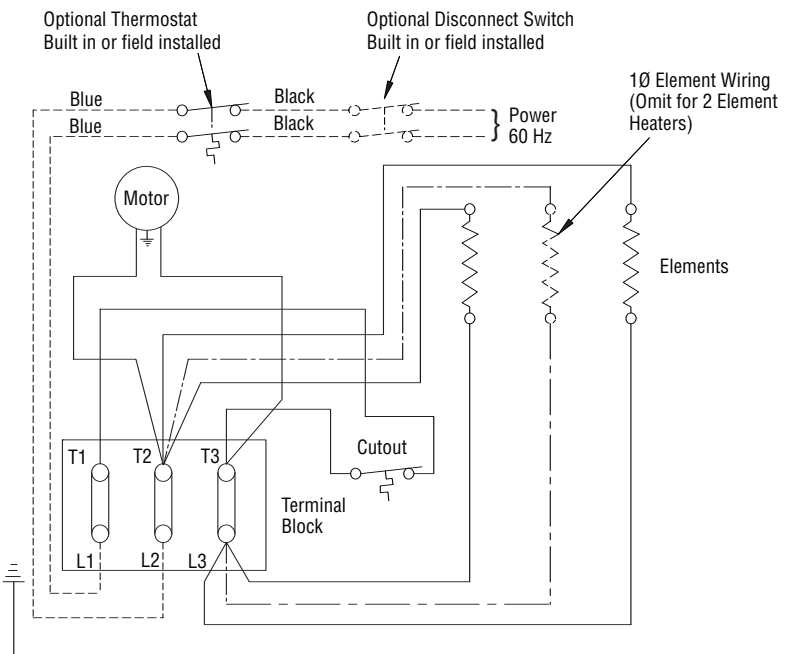
### Step 3 (Figure 3)

1. Attach thermostat bulb to case using the (2) clamps and screws.
2. Make a slit in the rubber grommet and insert the grommet over the capillary.
3. Install the grommet into the hole in the case.

2. Inspect wiring to make sure it matches the appropriate wiring diagram.
3. Close heater cover and reattach screws.

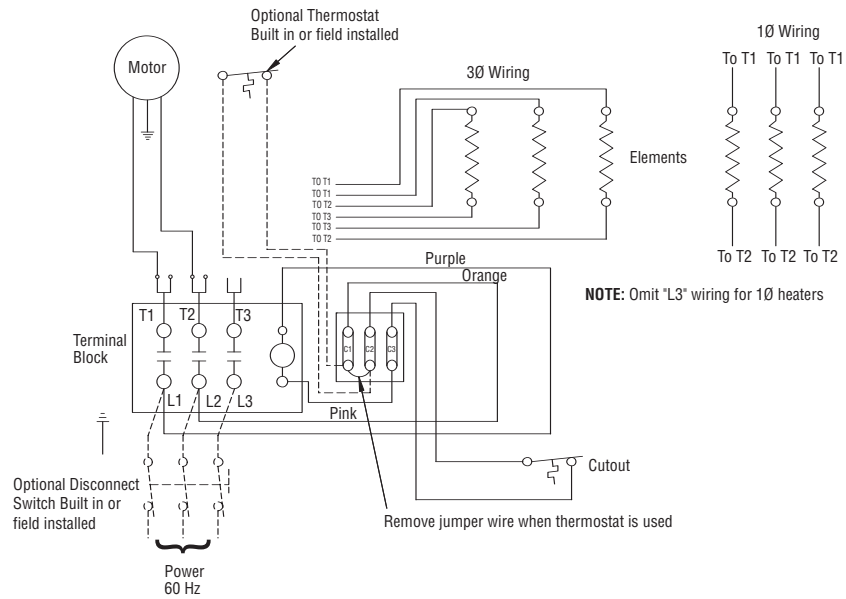
## WIRING DIAGRAMS

Figure 4  
208-277V 1Ø — 2.6 & 5 kW

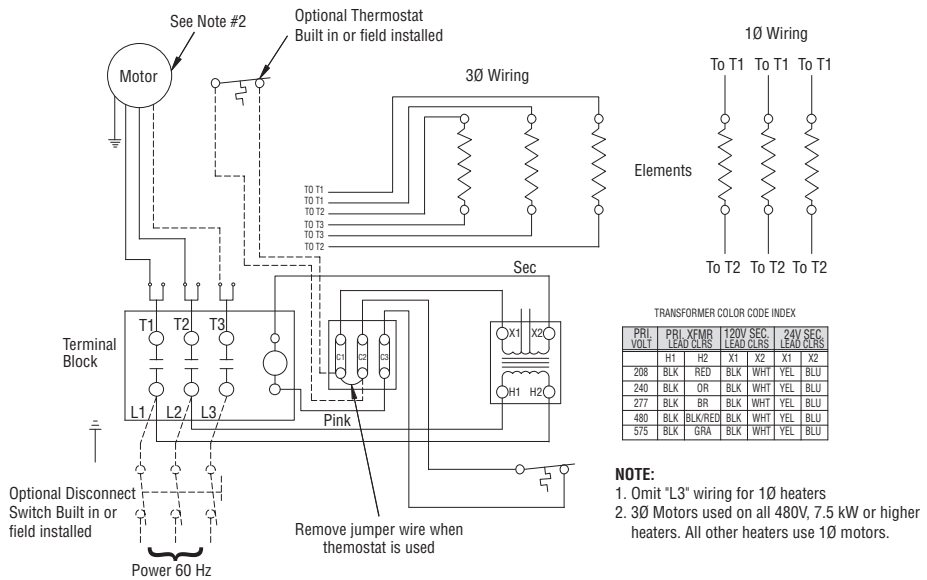


# WIRING DIAGRAMS (cont'd.)

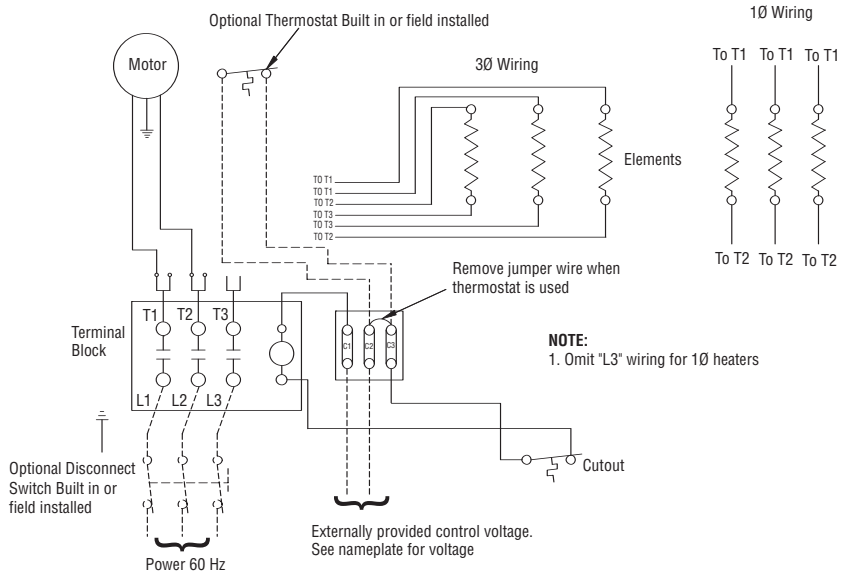
**Figure 5**  
208-277V 1Ø or 3Ø with contactor



**Figure 6**  
208-480V 1Ø or 3Ø  
with contactor and transformer

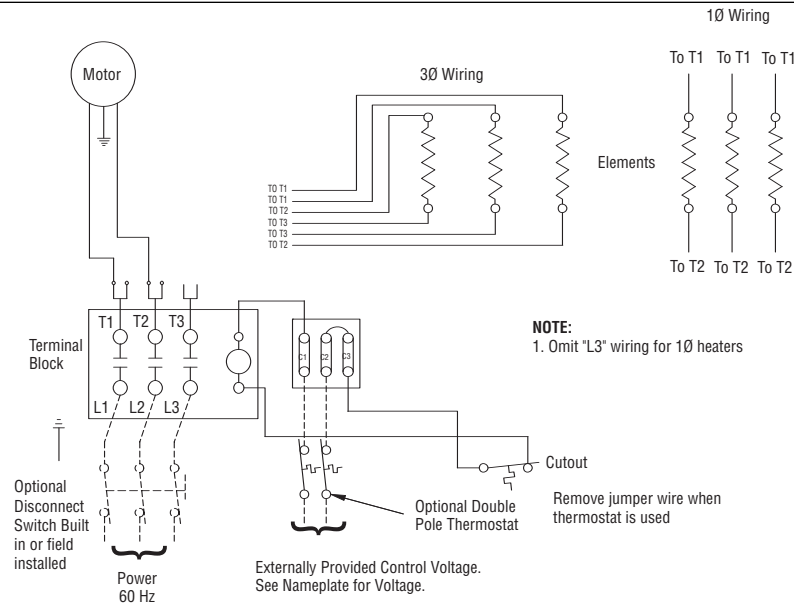


**Figure 7**  
1Ø or 3Ø with optional external 24  
or 120V control using single  
pole thermostat



## RENEWAL PARTS IDENTIFICATION

**Figure 8**  
**1Ø or 3Ø with optional external 24**  
**or 120V control using double**  
**pole thermostat**



## RENEWAL PARTS IDENTIFICATION

	HVH-TK-5 Components KiT Part Number*	HVH-TK-6 Components Kit Part Number*
Thermostat	300-304349-100	300-049197-004
Screws	248-049282-021 (2)	248-049282-021 (2)
Rubber Grommet	135-075436-008	135-075436-008
Label Decal	170-049279-016	170-049279-016
Bulb Clip	059-075500-002	059-075500-002
Knob	169-049278-001	169-049278-001

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

### Limited Warranty:

Please refer to the Chromalox limited warranty applicable to this product at  
[http://www.chromalox.com/customer-service/policies/terms\\_of\\_sale.aspx](http://www.chromalox.com/customer-service/policies/terms_of_sale.aspx).

# Chromalox®

**PRECISION HEAT AND CONTROL**

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