

# Chromalox®

## *Installation Instructions* and RENEWAL PARTS IDENTIFICATION

### SERVICE REFERENCE

DIVISION 4	SECTION
SALES REFERENCE	PF205
	161-305682-001
DATE	OCTOBER, 2005

## Summer Fan Switch Kit Without Relay Model HVS-01



### GENERAL

#### **⚠ WARNING**

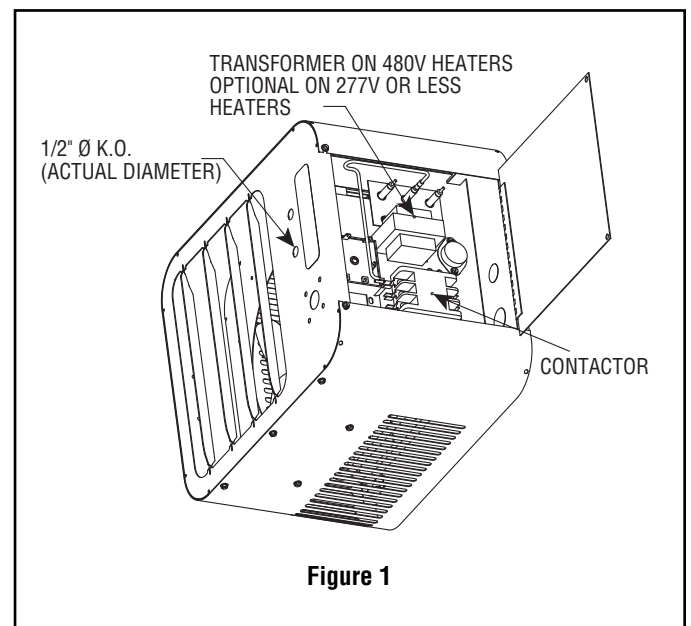
**ELECTRIC SHOCK HAZARD. Disconnect all power before installing or servicing fan switch. Failure to do so could result in personal injury or property damage. Fan switch must be installed by a qualified person in accordance with the National Electrical Code, NFPA 70.**

This fan switch kit can be used on all 208, 240 and 277 Volt HVH heaters with single or 3 phase motors for fan only operation. See Model Number list on page 2. For all 480 Volt HVH heaters, the summer fan switch and relay option must be used (see PF206).

### INSTALLATION

#### FIGURE 1

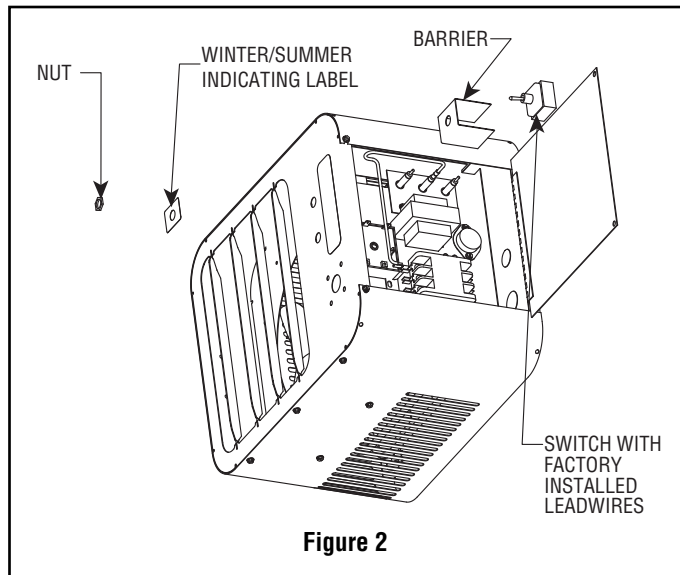
1. The HVS-01 can be used on all Chromalox HVH heaters rated 277V or less, and having an integral contactor. The HVS-01 can also be used on 480V heaters that include a transformer. Verify the voltage on the heater nameplate. Also verify that there is a contactor inside the terminal box and a transformer on 480V heaters.
2. If the fan only switch kit is to be installed in the heater, the center 1/2" K.O. located at the bottom of the heater needs to be removed using a chisel or similar tool.
3. If the fan only switch is to be remotely mounted, the switch enclosure, conduit and wiring is to be provided by others.



## WIRING

**FIGURE 2**

1. Remove back from the indicating label and place over the hole-made in step 1 on the previous page, the word "winter" needs to face towards the louvers.
2. Install the barrier over the threads of the switch and insert the 1/2" hole from inside the terminal box. Secure switch in place with the nut provided.
3. Wire switch into heater wiring (See Diagram 1).
4. Inspect wiring for loose connections and make sure it matches Diagram 2.
5. Close cover and reattach screws.

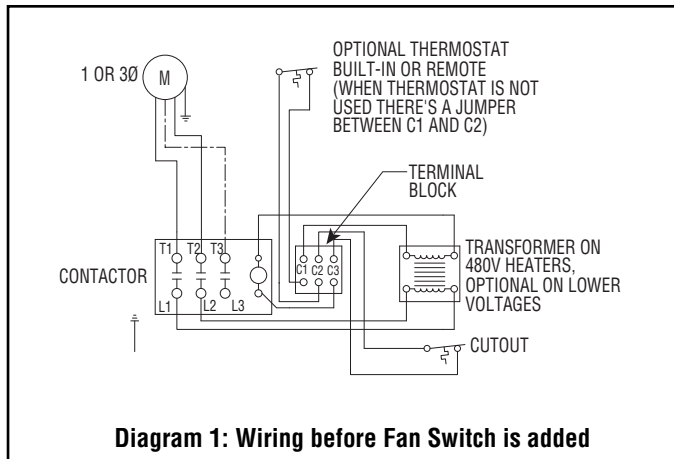


**Figure 2**

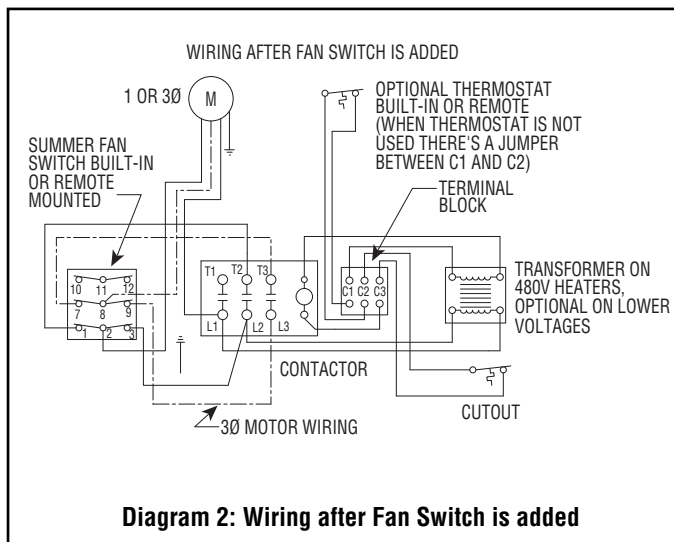
**DIAGRAM 1**

1. The element wiring is not affected by addition of the fan only switch and therefore not shown. The after wiring diagram supplements the wiring diagram mounted on the inside of the terminal box cover.
2. Remove the motor lead wires from the heater contactor terminals marked T1, T2 and T3 (if applicable).
3. Connect the black wire from switch terminal 1 to the T2 terminal on the heater contactor.
4. Connect the black wire from switch terminal 3 to the L2 terminal on the heater contactor.
5. Connect one of the motor leads to terminal 2 on the switch.
6. Connect second motor lead to connector marked L1. Additional steps for heaters with 3Ø motors

7. Connect black wire from switch terminal 9 to the L3 terminal on the heater contactor.
8. Connect black wire from switch terminal 7 to the T3 terminal on the heater contactor.
9. Connect third motor lead wire to terminal 8 on the switch. After completion of the switch installation, when the fan circuit is first turned on, check rotation of the fan blade to be sure the air is moving out the front of the heater. If the air is moving in the opposite direction, interchange any two motor lead connections to correct the air flow direction.



**Diagram 1: Wiring before Fan Switch is added**



**Diagram 2: Wiring after Fan Switch is added**

**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>.

**Chromalox**<sup>®</sup>  
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