

Chromalox®

Installation Instructions and **RENEWAL PARTS IDENTIFICATION**

SERVICE REFERENCE

| | |
|--------------------------------------|-----------------|
| DIVISION 4 | SECTION LUH/KUH |
| SALES REFERENCE (Supersedes PF480-1) | PF480-2 |
| 161-303477-001 | |
| DATE | SEPTEMBER, 2001 |

Summer Fan Switch Kit Without Relay Model ISFS-02



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 LUH/KUH heaters with single or 3 phase motors for fan only operation. See Model Number list on page 2. **For all 480 Volt LUH/KUH heaters, the summer fan switch and relay option must be used (see PF481).**

INSTALLATION

The kit comes complete with all necessary wiring and mounting screws. A wall box plate is included for remote mounting of the selector switch and can be discarded if the switch is to be mounted on the heater.

To install on the heater, open the wiring access door located on the bottom of the heater by turning the captive latching screw 90 degrees in either direction (see Figure 1). The selector switch is to be mounted using the knockout hole on the front of the heater, located right above the Chromalox or Heatflo Label (see

Figure 2). The switch has all of the wiring already connected to the correct terminals and the three leads to be wired to other components marked by their respective terminal number, these are wire numbers 1, 3 and 9. Before installing the switch, check all the wiring connections to be sure none have gotten loose during shipping and handling.

Mount the switch with the toggle through the hole from inside the wiring compartment. Secure the switch using the on/off plate and hex nut (see Figure 3).

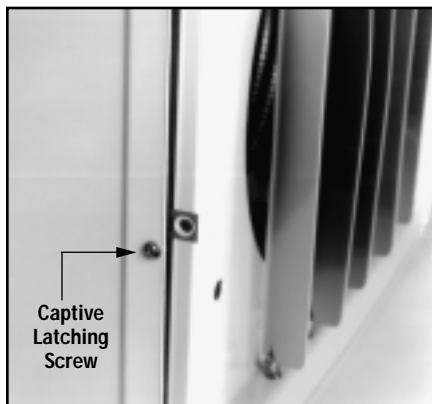


Figure 1

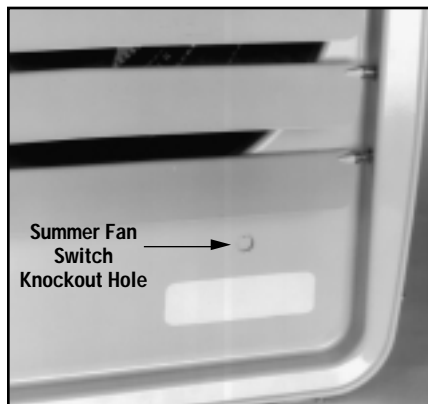


Figure 2



Figure 3

WIRING

The basic stock heater wiring diagram (Figure 4) will be changed to the finished diagram (Figure 5).

1. Remove the motor lead wires from the heater contactor terminals marked T1, T2 and T3. (Note that single phase motors will have only two lead wires.)
2. Connect the black wire (Number 1) from the switch to the T3 terminal on the heater contactor.
3. Connect black wire (Number 3) to contactor terminal marked L3.
4. Connect one of the motor leads to terminal 2 on the switch.
5. Connect the second motor lead to connector terminal marked L1.

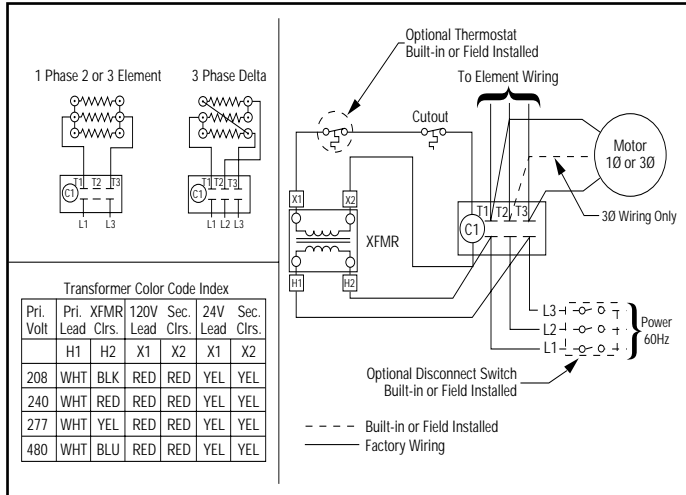


Figure 4

ADDITIONAL STEPS FOR HEATERS WITH THREE (3) PHASE MOTORS

6. Connect black wire (number 9) to contactor terminal marked L2.
7. Connect black wire (number 7) to contactor terminal marked T2.
8. Connect third motor lead wire to terminal 8 on the switch. After completion of the heater installation, when the fan circuit is first turned on, check the rotation of the fan to be sure air is moving from the back of the heater to the front. If the air is moving in the opposite direction, interchange any two motor lead connections to correct the air flow direction.

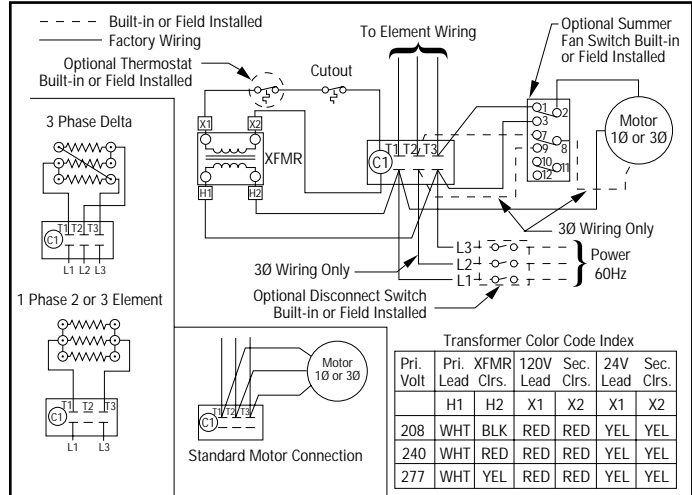


Figure 5

ISFS-02 Kit vs. Applicable Heater Model Number

| MODEL | MODEL | MODEL | MODEL |
|-------------------|-------------------|----------------|----------------|
| LUH-D-02-81-34-00 | LUH-D-10-81-34-00 | KUH-C-02-81-00 | KUH-C-10-81-34 |
| LUH-D-02-21-34-00 | LUH-D-10-83-34-00 | KUH-C-02-21-00 | KUH-C-10-83-34 |
| LUH-D-02-71-35-00 | LUH-D-10-21-34-00 | KUH-C-02-71-00 | KUH-C-10-21-34 |
| | LUH-D-10-23-34-00 | | KUH-C-10-23-34 |
| LUH-D-04-81-34-00 | | KUH-C-04-81-00 | |
| LUH-D-04-83-34-00 | LUH-D-12-83-34-00 | KUH-C-04-83-34 | KUH-C-12-83-34 |
| LUH-D-04-21-34-00 | LUH-D-12-23-34-00 | KUH-C-04-21-00 | KUH-C-12-23-34 |
| LUH-D-04-23-34-00 | | KUH-C-04-23-34 | |
| LUH-D-04-71-35-00 | LUH-D-15-83-34-00 | KUH-C-04-71-00 | KUH-C-15-83-34 |
| | LUH-D-15-23-34-00 | | KUH-C-15-23-34 |
| LUH-D-05-81-34-00 | | KUH-C-05-81-00 | |
| LUH-D-05-83-34-00 | LUH-D-20-23-34-00 | KUH-C-05-83-34 | KUH-C-20-23-34 |
| LUH-D-05-21-34-00 | | KUH-C-05-21-00 | |
| LUH-D-05-23-34-00 | LUH-D-30-83-34-00 | KUH-C-05-23-34 | KUH-C-30-83-34 |
| LUH-D-05-71-35-00 | LUH-D-30-23-34-00 | KUH-C-05-71-00 | KUH-C-30-23-34 |
| | | | KUH-C-35-23-34 |
| LUH-D-07-81-34-00 | LUH-D-35-23-34-00 | KUH-C-07-81-34 | KUH-C-40-23-34 |
| LUH-D-07-83-34-00 | | KUH-C-07-83-34 | |
| LUH-D-07-21-34-00 | LUH-D-40-23-34-00 | KUH-C-07-21-34 | |
| LUH-D-07-23-34-00 | | KUH-C-07-23-34 | |
| LUH-D-07-71-35-00 | | KUH-C-07-71-30 | |

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