

Warren Electric  
Heater Model  
WUH Series

## INSTALLATION AND OPERATING INSTRUCTIONS



## LENNOX BLOWER COIL UNITS

CB26UH/CBX26UH Series  
BCS2/BCS2\*\*V Series  
EFC/EFV Series  
SIZE018-060

### GENERAL

This Warren Technology electric heater is engineered, designed, and approved to be installed in the Lennox CB26UH (018-60), CBX26UH, BCS2, BCS2\*\*V (018-060) Series, multi position blower coil units and EFC/EFV (018-060) Electric Furnace Modular Systems. Before proceeding, check the heater label for correct voltage and KW requirements.

Installation and servicing of this equipment should only be performed by trained and qualified personnel. Before proceeding with the heater installation, inspect thoroughly for shipping damage. Notify the shipper immediately if any damage is found. Check all porcelain insulators for breakage and inspect heater element wire to see that none have been deformed. Clean all dirt, dust, and moisture from equipment. Check for proper clearances of live parts, between phases, and to ground. Make sure that all required barriers are in place. Check conductors run in multiple to insure that they are properly wired. Refer to the base unit installation instructions for complete unit installation details. **Verify that all elements are properly secure in their ceramic holders.**

### WARNING

Before performing service or maintenance operations on system, turn off all main power switches. There may be more than one disconnect. Turn off accessory heater power switch if applicable. Electrical shock can cause personal injury. **TAG DISCONNECT SWITCH(ES) WITH A SUITABLE WARNING LABEL.**

### HEATER INSTALLATION

#### INSTALL HEATER AS FOLLOWS:

1. Refer to the base unit installation instructions as required.
2. Remove blower section access panel of air handler.
3. Remove electric heat patch plate inside blower coil unit.
4. Carefully slide heater assembly into blower section through the air handler access opening. Secure the heater by slipping the heater plate behind the offset in the back plate of the cabinet. For **breaker models** use the (4) screws provided to secure the back plate and front of the electric heat assembly. For **terminal block models** use the (2) screws provided and then secure the terminal block plate to the blower deck with (1) screw (see Fig. 3). **Make sure that no elements are disturbed in their ceramic holders.**
5. **480V models with single point transformer** - This part can be externally mounted or internally mounted inside the air handler cabinet (see fig. 2). Autoformer wiring is color coded (see schematic for color coding) and is to be used on 480V heaters being wired into 208/240 Volt, single phase Air Handlers.
6. Remove the conduit knockout in blower cabinet for electrical connections. Install the appropriate size conduit connector. Refer to heater schematic provided.

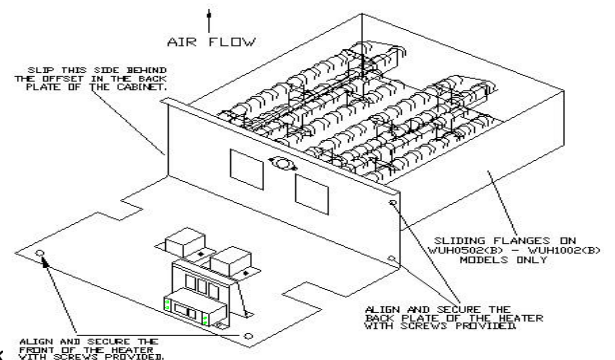


FIG. 1 - HEATER ASSEMBLY INSTALLATION

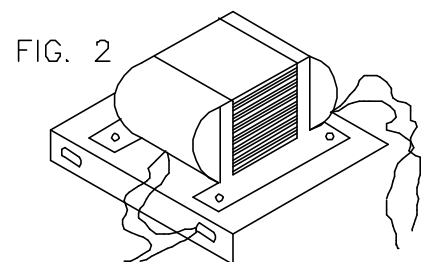


FIG. 2 - SINGLE POINT TRANSFORMER

#### HEATERS WITH CIRCUIT BREAKERS:

**NOTE: IN DOWNFLOW APPLICATIONS, CIRCUIT BREAKERS MUST BE ROTATED 180° TO THE UP POSITION.**

1. Remove circuit breaker knockout(s) in unit access panel as required.

## WARNING

Before performing service or maintenance operations on system, turn off all main power switches. There may be more than one disconnect. Turn off accessory heater power switch if applicable. Electrical shock can cause personal injury. **TAG DISCONNECT SWITCH(ES) WITH A SUITABLE WARNING LABEL.**

## ELECTRICAL CONNECTIONS

### CONNECT HEATER AS FOLLOWS:

1. All electrical connections, wire sizes and type of conduit sizes shall meet the National Electric Code, State and Local Codes. Main power supply, Minimum wire sizes, circuits, fusing, etc. is shown on schematic wiring diagrams. **NOTE: Use copper wire only.**
2. Refer to base unit instructions for recommended wiring procedures.
3. Connect heater plug to corresponding plug in the air handler.
4. Separate all wires from incoming power leads.
5. Adjust the blower speed according to the size of electric heat and air handler unit. The minimum blower setting for each blower size with any heat section in any application is **LOW**. Refer to base unit instructions for blower speed adjustment.
6. Be sure that all electrical terminal connections, clamps, screws, etc. are tight before proceeding. **Verify that there are no possible shorts to ground.**
7. Check wiring supplied with heater for specific connections and information
8. Check operation as described in start-up section. Affix Warren installer label to equipment access door.

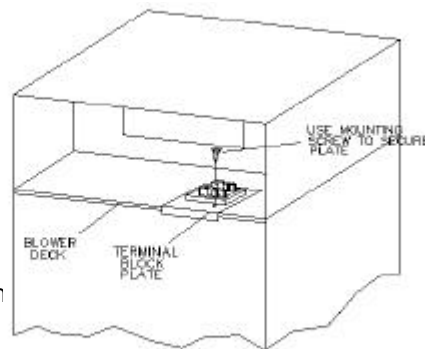


FIG. 3 - TERMINAL BLOCK INSTALLATION

## START-UP and CHECK-OUT

**CAUTION:** Before proceeding, verify that all wiring is correct per factory approved schematic. Notify factory immediately of any discrepancies.

1. Refer to base unit installation instructions as required.
2. Check for loose terminal connections.
3. Check that all circuit breaker short circuit interrupting ratings are adequate.
4. Turn on unit and heater power. Verify all electrical readings are correct per schematic.
5. Set thermostat to call for heat.
6. Check operation of heater.
7. Check that air flow across heater is at or above minimum recommended fan speed. Adjust as required.
8. Any modifications or repairs to this equipment without written permission from the factory will be done at the installer's own risk and expense.

## SERVICE

**Circuit Breakers** - Malfunction will interrupt power to the unit. *Check for cause of failure, restart.*

**Limit Switch** - Malfunction prevents heating element(s) from being energized. *Replace switch if malfunction occurs.*

**Contactors** - Malfunction will not allow heater to come on or shut off. *Replace faulty contactors. Do not attempt to replace coil or dress contacts.*

## ELECTRIC HEATER PACKAGE CONTENTS

1. Heater assembly
2. Installation Instructions
3. Installer label
4. Schematic
5. Screws

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