#### Warren Electric Heater Model

WQE Series

208/240/60/1 277/60/1 208/240/60/3 480/60/3

# INSTALLATION INSTRUCTIONS

Date: 1-15-93

#### Unit Model

Carrier 50QQ/EE Series Bryant 542G/559G Series

### **GENERAL**

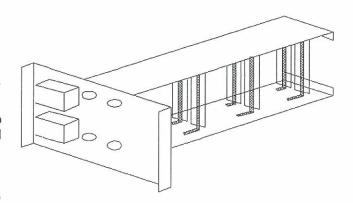
This Warren Manufacturing Company electric heater is engineered, designed, and listed to be installed in the Carrier 50QQ/EE Series and Bryant 542/559G Series. Before proceeding, check the heater label for correct voltage and KW requirements.

Installation and servicing should be performed by trained service personnel. Before installing the heater, 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 barrier are in place. Check conductors run in multiple to insure that they are properly phased.

## HEATER INSTALLATION

- 1. Refer to the base unit installation instructions as required.
- 2. Remove the blower access panel of air handler.
- 3. Remove internal cover plate. Save sheet metal screws. Discard cover plate.
- 4. Install heater assembly into blower access opening of unit so that the mounting plate of the heater is flush with base unit and heating elements are not in contact with any object.
- 5. Secure with sheet metal screws from cover plate.

**NOTE:** Heat resistant duct connector (or sheet metal sleeves) must extend 24" from heater element.



## **ELECTRICAL CONNECTIONS**

CAUTION: Disconnect All Electrical Power Before Proceeding. Failure To Do So May Result In Electrical Shock.

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 digrams.

NOTE: Use copper wire only.

- 2. Refer to air handler unit instructions for recommended wiring procedure.
- 3. Connect low voltage wires as shown in heater schematic diagram.
- 4. Connect power wiring as shown in heater wiring diagram. All connections should be made inside the air handler and comply with National Electrical Codes, State and Local Codes. Heaters with factory installed fuses or circuit breakers may be installed on a branch circuit protected by either a fuse or a circuit breaker. For all other heaters, the branch circuit must be protected by a fuse or a circuit breaker supplied by others.
- 5. Make all wire spliced connections inside air handler unit. Separate all wires from incoming power leads.

- 6. Be sure that all electrical terminal connections, clamps, screws, etc. are tight before proceeding.
- 7. Check wiring diagram supplied with heater for specific connections and information.
- 8. Check operation as described in the Start-Up section.

# 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 fuse and circuit breaker short circuit interrupting ratings are adequate.
- 4. Turn on unit and heater power.
- 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**

Fuses / Circuit Breaker - Malfunction will interrupt power to unit. Check for cause of failure, correct and replace fuses or reset circuit breaker.

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

Contactor - Malfunction will cause heater to not come on or shut off. Replace faulty contactor. Do not attempt to replace coil or dress contacts.

Fan Relay - Malfunction will cause fan to not come on or not shut off. Replace faulty relay. Do not attempt to replace coil or dress contacts.