#### **ELECTRIC HEATER MODEL**

WAP SERIES

# INSTALLATION INSTRUCTIONS

FORM WAP Date: 10-12-89

#### AIR HANDLER MODEL

Arcoaire APYHA, APAHA Series Packaged Units 2-4 Tons

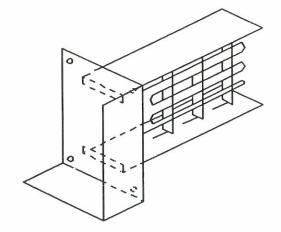
## **GENERAL**

This Warren Manufacturing Company electric heater is engineered, designed, and approved to be intalled in the Arcoaire APYHA, APAHA Packaged Units. Before proceeding, check the heater label for correct voltage and KW requirements.

Before installing the heater, inspect thoroughly for shipping damage. Notify carrier immediately if any damage is found. Check all porcelain insulators for breakage and inspect heater element wire. Clean all dirt, dust and moisture from equipment. Check for proper clearences of live parts (between phases and ground connection) and verify that all required barriers are in place. Check conductors run in multiple to insure that they are properly phased.

## HEATER INSTALLATION

- 1. Refer to base unit installation instructions as required.
- 2. Remove access panel, located at the blower section of the unit.
- **3.** Unscrew captive screw and open heater section hinged door.
- 4. Remove cover plate (save screws).
- 5. Install heater into opening and secure with the 4 screws removed from the cover plate.

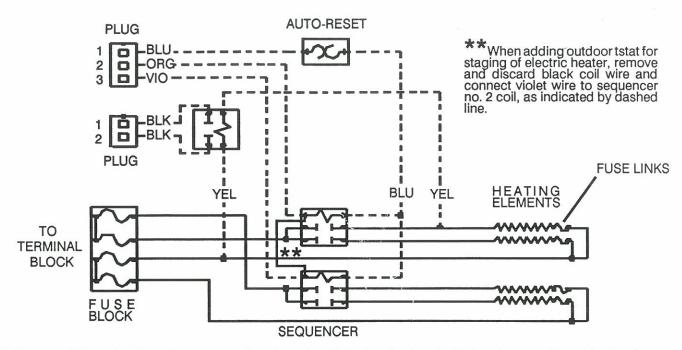


## **ELECTRICAL CONNECTIONS**

**CAUTION**: Disconnect all electrical power before proceeding. Faliure to do so may result in electrical shock. The unit must have an uninterrupted or unbroken electrical ground to minimize personal injury if an electrical fault should occur. Ground may consist of an electrical wire or approved conduit when installed in accordance with local codes and ordinances.

# USE COPPER WIRE BETWEEN DISCONNECT SWITCH(ES) AND UNIT.

- 1. All electrical connections, wire sizes and type and conduit sizes shall meet the National Electric Code, State and Local Codes. Main power supply, minimum wire sizes, circuits, fusing, etc., are shown on schematic wiring diagrams.
- 2. Refer to air handler unit instructions for recommended wiring procedures.
- 3.Connect the two wire plug to the receptacle located near the left side of the fuse block on the bottom of the control box.
- 4. Connect the three wire plug to the receptacle located in the bottom right hand corner or the control box.



- 5. Connect the single point connection terminal block wire leads to the heater fuse block.
- 6. Connect main field supplied wire to the single point terminal block.
- 7. Connect ground wire to the terminal lug.
- 8. Be sure that all electrical terminal connections, clamps, screws, etc. are tight before proceeding.
- 9. Check operation as described in start-up section.

#### START-UP and CHECK-OUT

- 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.
- Check operation of heater.
- 7. Check that air flow across heater is at or above minimum recommended fan speed. Adjust as required.
- 8. Any modification or repairs to this equipment without written permission from the factory will be

#### 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 not 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.