Electric Heater Model WCP Series	INSTALLATION INSTRUCTIONS Date: 2-10-00	Air Handler Model Evcon Self-Contained Heat Pumps & Air Conditioners

GENERAL

This Warren Technology electric heater is designed to be installed in the Evcon Self-Contained Heat Pumps & Air Conditioners. The WCP heater comes in two parts; a control plate and an element section. Before proceeding, check the heater label for correct voltage and KW requirements. Refer to base unit installation instructions as required.

CAUTION: If installing the unit in conjunction with an existing heating system, an interlock device must be installed to prevent simultaneous operation.

WARNING: Use of other than specified duct materials may pose a fire hazard. Use sheet metal or U.L. 181 listed flexible duct.

HEATER INSTALLATION

CAUTION: Disconnect all electric power before proceeding. Failure 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.

1. Remove blower assembly access panel and blower transition cover (save the two screws).
2. Insert heater element section into blower duct of the unit and secure using the two screws remove in Step 1.
3. Remove control compartment access panel.
4. Route the heater element section wiring through the protective bushing and secure it with wire ties to keep it clear of the fan blades.
5. Install heater control plate in the unit electrical control compartment.

ELECTRICAL CONNECTIONS

1. All electrical connections, wire sizes and type and conduit sizes shall comply with the National Electric Code and State and Local Codes. Recommended minimum wire sizes, circuit fusing, etc. are listed on the corresponding schematic diagram. **USE COPPER CONDUCTORS ONLY.**
2. Make all wire spliced connections inside air handler unit. Separate all wires from incoming power leads. Route wires away from uninsulated parts.
3. Factory branch circuit wiring and fusing is in accordance with the National Electrical Code maximum of 48 amps per circuit. Heaters with factory installed fuses or circuit breakers may be installed on a branch circuit protection by either a fuse or a circuit breaker. For all other heater, the branch circuit must be protected by a fuse or a circuit breaker supplied by others.
4. Connect heater wiring as shown in the corresponding schematic diagram. All connections should be made inside the air handler.

   - **BLACK** blower motors lead is to be connected to fan relay open spade connection, marked "**COM**" on the relay body.
   - Heater sequencer and fan relay, control voltage common **BLUE** lead is to be connected to the common on the transformer of the air-conditioning unit.
   - **GREEN** lead from the thermostat "**G**" fan terminal is to be connected to fan relay control voltage open spade connection.
   - **WHITE** lead from the thermostat "**W**" heat terminal is to be connected to the "**#5**" terminal on heat sequencer.
   - **RED** blower motor leads and red heater leads are to be connected to load side of the terminal block, **T2** connections point.
   - **ORANGE** lead from heater to be connected on sequencer terminal **#2.**

- **BLACK** lead from heater to be connected on sequencer terminal **#4.**

5. The WCP series heater comes equipped with a fan control relay for use with a Heat-Cool Thermostat.
6. Be sure that all electrical terminal connections, clamps, screws, etc. are tight before replacing the access panels.

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. Check that all fuse and circuit breaker short circuit interrupting ratings are adequate.
2. With thermostat set to the "Off" position, turn on unit and heater power.
3. Set thermostat to call for heat and check operation of heater. **NOTE:** There is an inherent delay before the blowers and first element will energize.
4. Check for proper thermostat operation.
5. Check that air flow across heater is at or above minimum recommended fan speed. Adjust as required.
6. Any modification or repair to this equipment without written permission from the factory will be done at the installer's own risk and expense.