

Warren Electric Heater Model 208/240/60/1 WSS Series 277/60/1 208/240/60/3 480/60/3	INSTALLATION INSTRUCTIONS FORM WSS Date: 12-22-06	Unit Model Carrier 50SS/50SX Series Carrier 50HS/50HX Series Bryant 555A/557A Series Bryant 655A/657A Series
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GENERAL

This Warren Technology electric heater series is engineered, designed, and listed to be installed in the Carrier 50SS/50HS 018-060 and Bryant 555A/655A 018-060 Series Packaged Air Conditioners and Heat Pumps. Before proceeding, verify 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 phased.

HEATER INSTALLATION

Horizontal Air Flow

1. Open all electrical disconnects before beginning any service work.
2. Install ductwork. Refer to base unit installation instructions for complete duct installation details.
3. Remove blower / control box access.
4. Remove the electric heater and control plate from the packaging. Place control plate in unit control box, sliding tabs in the rear of the plate into slots provided in the base unit. Using screws provided, fasten control plate in place. Route heater control wire(s) into base unit control.
5. Install heater assembly on top of blower housing (See Figure 1). Ensure that the tabs on the heater assembly (marked horizontal) engage the correct slots on the blower housing. Secure heater assembly with screws provided.
6. Route heater high voltage wires through the notch in the control cavity and secure with wire tie provided.

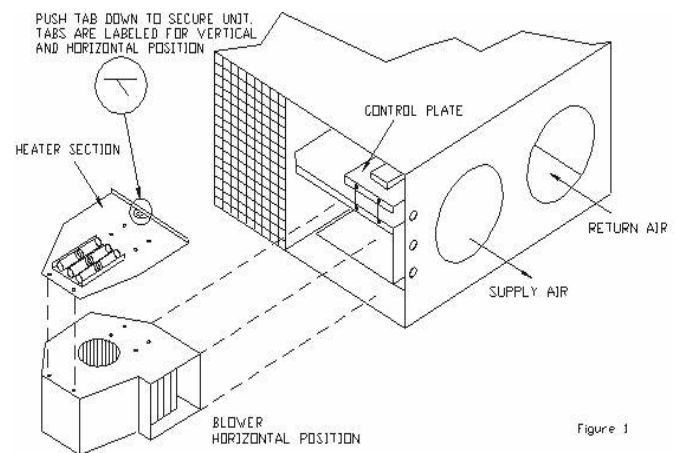


Figure 1

Vertical Air Flow

1. Open all disconnects before beginning any service work.
2. Referring to the base unit installation instructions, prepare the unit for vertical air flow.
3. If unit ductwork is to be attached to vertical duct flange, attach ductwork at this time.
4. If base unit insulation has been disturbed, secure with aluminum tape before proceeding.
5. Remove the electric heater and control plate from the packaging. Place control panel in unit control box, sliding tabs on rear of the plate into slots provided in the base unit. Using screws provided, fasten control plate in place. (Note: Fused models include an accessory access door, which should be placed before fastening screws). Route heater control wire(s) into base unit control box.
6. Install heater assembly on top of blower housing before reinstalling blower for vertical air flow. Ensure that the tabs on the heater assembly (marked vertical) engage the correct slots on the blower housing. Secure heater assembly with self tapping screws provided (See Figure 2).
7. Referring to base unit installation instructions, install the blower housing in the vertical configuration. In the correct position the blower motor should be nearest the original horizontal duct opening.

- Route heater high voltage wires through the notch in the control cavity and secure as needed.

ELECTRICAL CONNECTIONS

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

- 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.

- Refer to air handler unit instructions for recommended wiring procedures.
- Connect low voltage wires as shown in heater schematic diagram.
- Connect power wiring as shown in heater wiring diagram. All connections should be made inside the air handler and comply with National Electric 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.
- Make all wire spliced connections inside air handler unit. Separate all wires from incoming power leads.
- Be sure that all electrical terminal connections, clamps, screws, etc., are tight before proceeding.
- Check wiring diagram supplied with heater for specific connections and information.
- Check operation as described in Start-Up section.

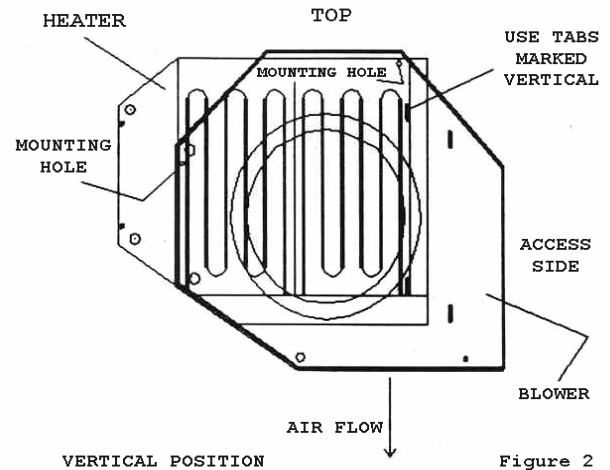


Figure 2

START-UP AND CHECK-OUT

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

- Refer to base unit installation instructions as required.
- Check for loose terminal connections.
- Check that all fuse and circuit breaker short circuit interrupting ratings are adequate.
- Turn on unit and heater power.
- Set thermostat to call for heat.
- Check operation of heater.
- Check that air flow across heater is at or above minimum recommended fan speed. Adjust as required.
- Any modifications or repairs to the equipment without written permission from the factory will be done at the installer's own risk and expense.

MINIMUM AIRFLOW FOR SAFE ELECTRIC HEATER OPERATION							
SIZE	018	024	030	036	042	048	060
Air Conditioners	700	700	875	1100	1225	1400	1750
Heat Pumps	700	800	1000	1300	1300	1600	1750

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.

Contactors - 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.