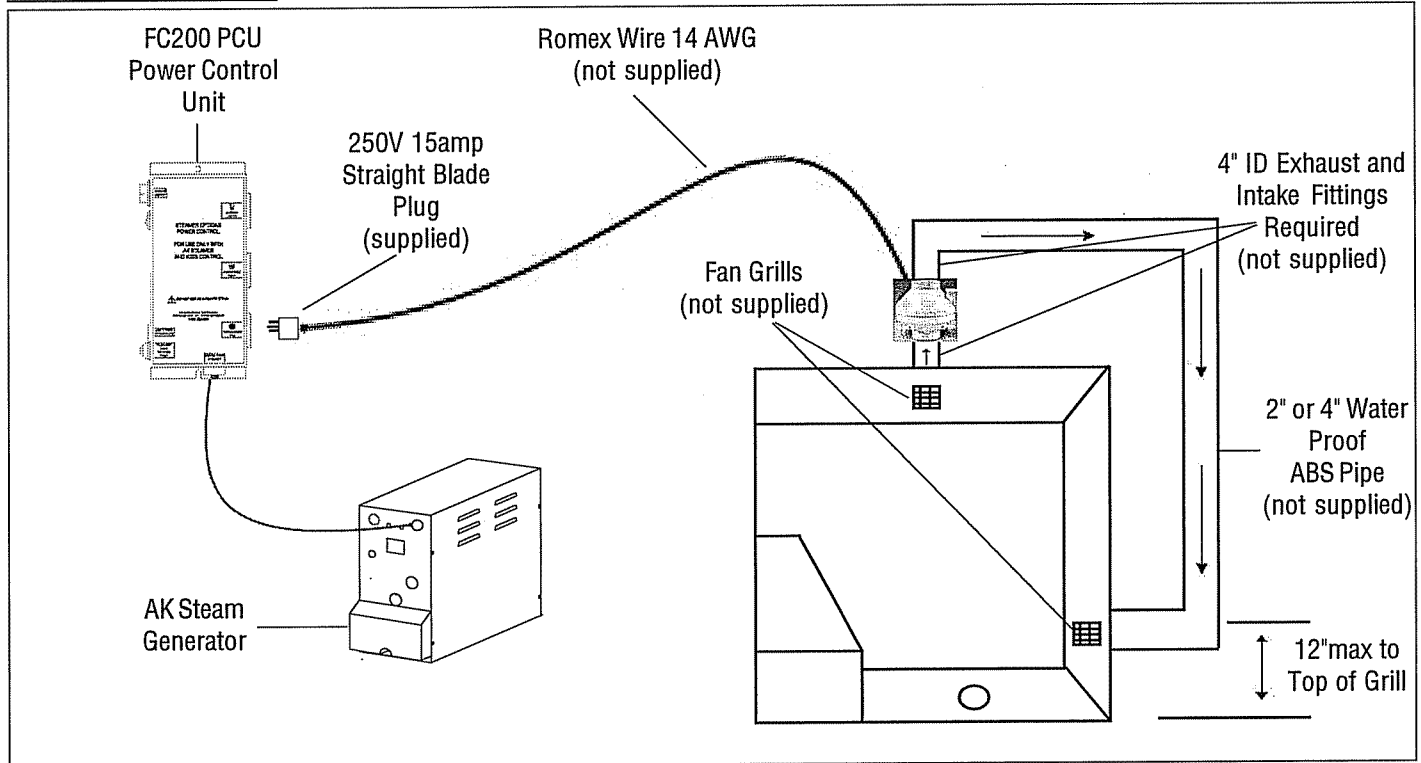


The FC230F Even Steam™ Air Circulation Fan System rotates air to keep a more even temperature inside steam rooms with ceiling heights greater than 8 feet. The fan is used in conjunction with the K200i Freedom Control which controls the fan on/off and speed function.

Installation Overview



Installing Mounting Bracket & Fan

1. When selecting fan mounting location, the following criteria should be considered: *a) mounting to minimize noise generated by fan operation; b) service accessibility; c) mount with arrow pointed up (terminal block on top) air flow can run either direction, from ceiling to floor is preferred.*

a) Mounting the fan as far as possible from the intake point will minimize fan operating noise from being transmitted back through the duct work. Insulated ABS duct work will result in much quieter operation. Manufacturer recommends a minimum 8' of insulated duct between any exhaust grill and fan for low noise level.

b) Fan location should allow sufficient access for service.

2. Using the wood screws provided, attach the mounting bracket to a support beam at the selected location. Fan mounting can be at any point along the duct and vertical mounting is recommended to reduce condensation buildup in the fan. If a horizontal installation is necessary and condensation buildup may pose a problem, wrap insulation around the fan and drill a 1/4" hole in the bottom of the housing (along with an NPT insert (by others) and drain tubing) allowing condensation to drain. All exhaust and intake fittings should be waterproof sealed, to avoid condensation water leaks.



Mount Bracket



Mount Fan

Installing Mounting Bracket & Fan (continued)

3. Attach fan to the mounting bracket with the sheet metal screws provided. Wiring box should be positioned for easy access. Bracket is provided with rubber vibration isolation grommets to prevent the transmission of sound through the structure. Be careful not to overtighten. Also, care should be taken not to strip the plastic housing. Screws are self tapping and do not require pilot holes. However, pilot holes (no larger than 3/32") are recommended.

4. Connect duct work to inlet and outlet of fan using CB clamps or duct tape. When using insulated duct, it is recommended that the inner vinyl core be clamped or taped to the inlet and outlet and that the vapor barrier surrounding the insulation be duct taped to the fan housing.

Warnings

DO NOT CONNECT POWER SUPPLY until fan is completely installed. Make sure electrical service to the fan is unplugged.

1. This unit has rotating parts and safety precautions should be exercised during installation, operation and maintenance.

2. WARNING: To reduce the risk of fire, electrical shock, or injury to persons-observe the following:

- a.** Use this unit only in the manner intended by the manufacturer. If you have questions, contact the factory.
- b.** Before servicing or cleaning, unplug power supply to prevent fan from being switched on accidentally.

c. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.

d. When cutting or drilling into wall or ceiling, do not damage electrical wires or other hidden utilities.

e. Acceptable for use over a bathtub or shower.

GUARDS MUST BE INSTALLED WHEN FAN IS WITHIN REACH OF PERSONNEL OR WITHIN SEVEN (7) FEET OF WORKING LEVEL OR WHEN DEEMED ADVISABLE FOR SAFETY.

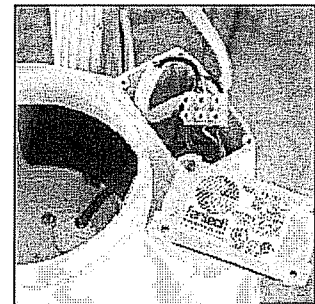
Electrical Connection

1. Remove the screws securing the terminal box cover plate located on the side of the fan. All fan motor connections are pre-wired to an electrical terminal strip. A 3/8" romex type cable restraint connector will be needed to secure the wiring through the knockout provided on the side of the terminal box.

2. Bring incoming electrical service through the romex connector and the fan knockout. Be sure to place the connector nut over the wiring coming into the terminal box. There are two open ports on the terminal strip. Using a small regular screwdriver, tighten the neutral (white) wire of the incoming supply under the open terminal strip port labeled "N". Tighten the line (black) wire of the incoming supply under the open terminal strip port labeled "L". Since the fan motor is isolated within a plastic housing, grounding is not necessary.

3. Secure the romex connector. Secure the incoming supply with the romex connector. Replace the fan terminal box cover. All fan motor and capacitor connections have been pre-wired from the factory.

4. Connect the 250V 15 amp straight blade plug (supplied) to the supply end of the Romex Wire. Connect the plug to the FC200 PCU Power Control Unit connected to the generator at the labeled location.



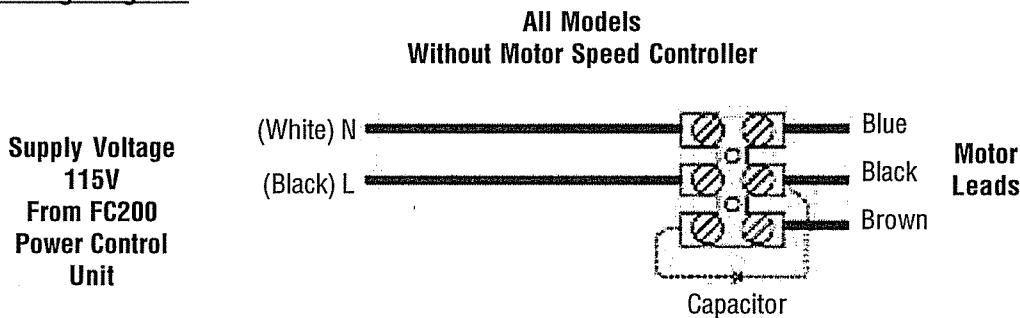
Romex wiring - Top View

Troubleshooting

If fan fails to operate, please check the following:

1. Consult wiring diagram (see below) to insure proper connection.
2. Check motor lead wiring, capacitor leads and incoming supply leads to insure definite contact.
3. If possible, use a meter to test for continuity across the fan motor leads. In order to do this, the capacitor must be disconnected (do not test the capacitor - it will not meter continuity). If motor leads show continuity, consult factory for a replacement capacitor.

Wiring Diagram



Maintenance Instructions

Since fan bearings are sealed and provided with an internal lubricating material, no additional lubrication is necessary.



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