

INSTALLATION INSTRUCTIONS FOR IN-LINE DUCT FAN MODEL # 1950104

INSTALLATION

The PowerAir Fan is not designed for installation in the main air supply ducts. Locating the Power Air Fan near the outlet end of a problem branch duct will provide the best performance. The Power Air Fan is designed to operate in round ducts 6-inches in diameter or larger and rectangular ducts 6-inches wide by 6-inches deep or larger.

CAUTION: Do not install the PowerAir Fan where the air temperature within the duct exceed 180°F. The PowerAir Fan should not be installed into vertical duct pipes.

1. Locate the PowerAir Fan in the duct pipe near the problem area. Allow adequate space for the removal of the unit for servicing or annual inspection.
2. With masking tape, attach template provided to the duct surface. Make sure the arrows on the template point in the direction of the desired air flow. After the template has been secured to the duct pipe, cut a slot in the pipe along the indicated lines on the template. Then remove the remainder of the template from the pipe. (See Figure 1A or 1B)
3. Insert the PowerAir Fan into the slot, making sure the fan blade points in the direction of the air flow. Position the PowerAir Fan so the fan blade does not rub against the inside surface of the duct. Mark on the duct the location of the 6-hole positions in the base plate. Remove the PowerAir Fan and drill 1/8-inch diameter holes through the duct pipe where indicated.
4. Insert the Power Air Fan into the cut slot of the duct pipe. Make sure the fan blade is pointed toward the outlet of the duct. Secure the Power Air Fan onto the duct with the sheet metal screw provided. (See Figure 3A or 3B)

*** WARNING :** Never expose your Power Air™ in-line duct fan to temperature over 140° (60°C).

UNIT WIRING INSTRUCTIONS

ELECTRICAL DATA

VOLTS	AMPS	Hz	WATTS	RPM	THERMAL OR IMPEDANCE PROTECTION	CUBIC FEET PER MINUTE
115 V	.36	60	25	3000	YES	220

A permanent wiring method must be used for power connection. It is recommended that a minimum size of 14 AWG wire for electrical supply connections and wiring should be suitable for 90°C temperature. The PowerAir™ Fan should be wired with an overcurrent protection device (fuse or circuit breaker) rated 15 amperes or less. Wiring method should be in accordance with the Canadian Electrical Code and any local code requirements. It is advisable that all electrical hook-up should be done by a licensed electrician.

CAUTION: Disconnect electrical power before wiring. Do not route electrical wiring along heated duct pipes.

WIRING METHOD No. 1

Controlling the PowerAir Fan through a standard on/off wall switch. (See Figure 4 for wiring diagram) This method allows for manual control of the PowerAir Fan unit in the area desired.

WIRING METHOD No. 2

Controlling the PowerAir Fan through a central heating/air conditioning forced air system. (See Figure 5 for wiring diagram) This method allows for automatic operation of the PowerAir Fan unit. The PowerAir Fan is wired in parallel with the appliance blower motor. This operates the PowerAir Fan whenever the appliance blower operates.

CAUTION: Do not wire the PowerAir Fan to an appliance blower motor if: The appliance motor is not rated for 115 volts AC single phase & operating at 60 cycles The blower motor control is a variable speed tap type, solid state speed control or any of the type of controls not designed for dual motor control. Consult appliance manual for this information.

WIRING METHOD No.3 (See Figure 6 for wiring diagram)

Controlling the PowerAir Fan through a Waterline PowerAir Activator(optional), for automatic control of the PowerAir Fan without wiring directly to the appliance blower motor.

NOTE: All wire splice connections should be made within an electrical junction box.

MAINTENANCE

CAUTION: Disconnect electrical power supply before performing maintenance.

Periodic removal and cleaning of the PowerAir Fan unit is recommended for forced central heating/air conditioning systems. Annual removal and cleaning of the Power Air Fan unit is recommended for gravity warm air heating systems not equipped with a return air filter.

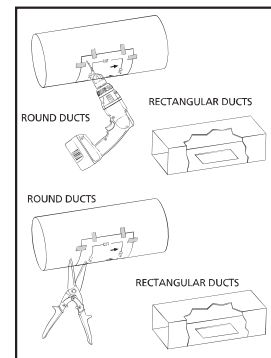


Figure 1A

Figure 1B

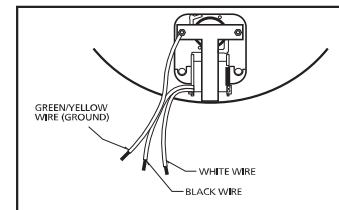


Figure 2B

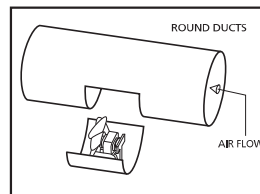


Figure 3A

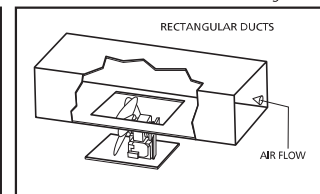


Figure 3B

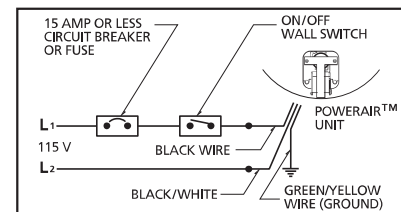


Figure 4

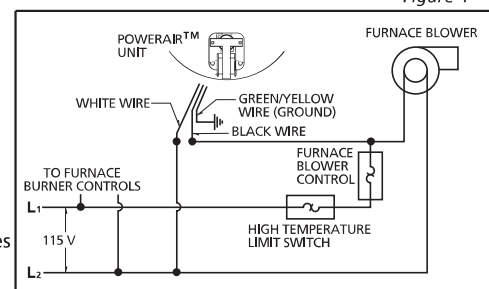


Figure 5

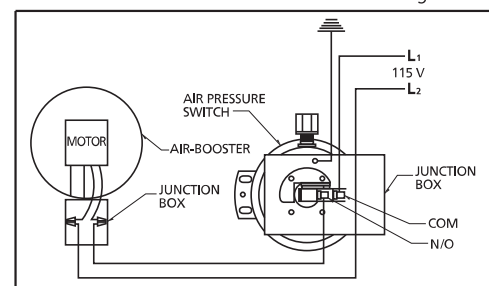


Figure 6