

INSTALLATION INSTRUCTIONS FOR IN-LINE DUCT FAN MODEL # 1950101

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.

FOR METAL DUCT PIPE

1. Separate the duct at a joint near the problem area and cut 6-3/4" off the end of the duct pipe. (See Figure 1)
2. An alternative method is to cut a 5-3/4" section out of the duct pipe. (See Figure 2) Then crimp the end of the duct pipe with at least 1" crimp. (See Figure 3)
3. Install the PowerAir Fan unit with the crimped end pointing toward the problem area. (See Figure 3) Secure the unit with sheet metal screws and seal joints with duct tape. Support the unit with an acceptable hanging method.

FOR FLEXIBLE DUCT

1. Cut and separate the flexible duct. Fold back the outer insulation on the duct to expose the flexible duct material. (See Figure 4)
2. Insert the Power Air unit, with the crimped end pointing toward the problem area, into the flexible duct and secure with duct tape (See Figure 4)
3. Support the unit with acceptable hanging method. Then re-install outer insulation and secure with duct tape. Allow room for installation of an electrical junction box.

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

UNIT WIRING INSTRUCTIONS

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 (194°F) 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 (CE)Code and any local code requirements. All wiring connections should be within an electrical junction box. 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. Unit should be grounded.

WIRING METHOD No.1 (See Figure 5 for wiring diagram)

Controlling the PowerAir Fan through a standard ON/OFF wall switch. This method allows for manual control of the PowerAir Fan unit in the area desired.

WIRING METHOD No.2 (See Figure 6 for wiring diagram)

Controlling the PowerAir Fan through a central heating/air conditioning forced air system. 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 PowerAir Fan to an appliance motor if:

1. The appliance blower motor is not rated for 120 volts AC single phase and operating at 60 cycles.
2. The blower motor control is a variable speed 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

Controlling the PowerAir Fan through a Waterline PA-PS PowerAir Activator (Optional) for automatic control of the Air Booster without wiring directly to the appliance blower motor.(See Part No. 1950105)

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 PowerAir Fan unit is recommended for gravity warm air heating systems not equipped with a return air filter.

GENERAL INFORMATION

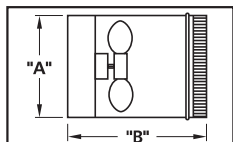
The PowerAir Fan should be installed in branch ducts serving individual rooms, where proper air flows cannot be achieved.

The Power Air Fan is not designed for installation in the main supply ducts. Locating the Power Air Fan near the outlet end of a problem branch will provide the best performance.

The Power Air Fan is designed to operate in round metal or flexible type ducts.

UNIT DIMENSIONS

MODEL	"A"	"B"
1950101	5"	7-1/2"



ELECTRICAL DATA

MODEL	VOLTS	AMPS	HZ	WATTS	RPM	THERMAL OR IMPEDANCE PROTECTION	MAXIMUM TEMP RATING*	CFM
1950101	115V	0.24 A	60	14	2400	YES	169°	170

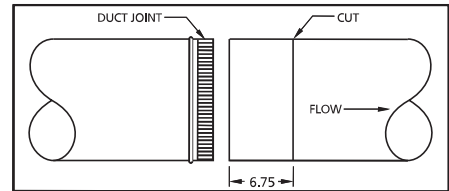


Figure 1

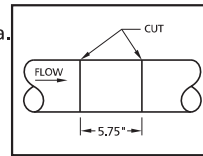


Figure 2

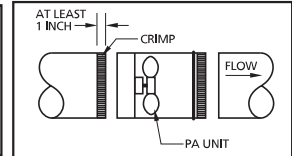


Figure 3

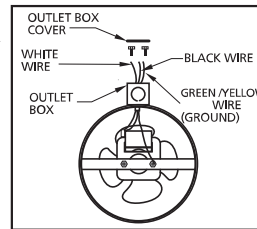


Figure 3B

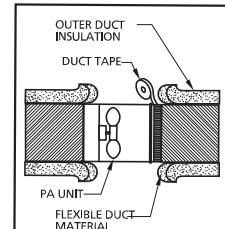


Figure 4

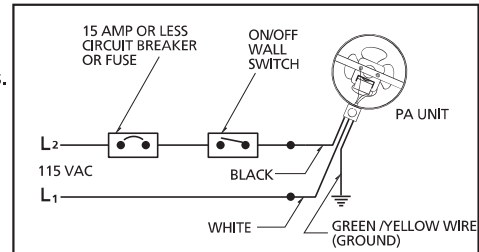


Figure 5

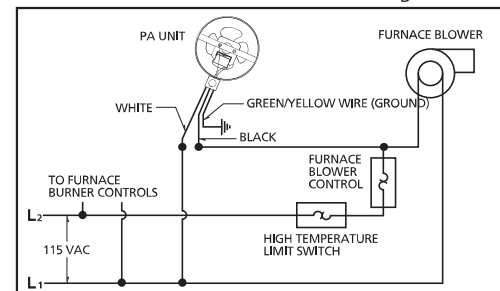


Figure 6