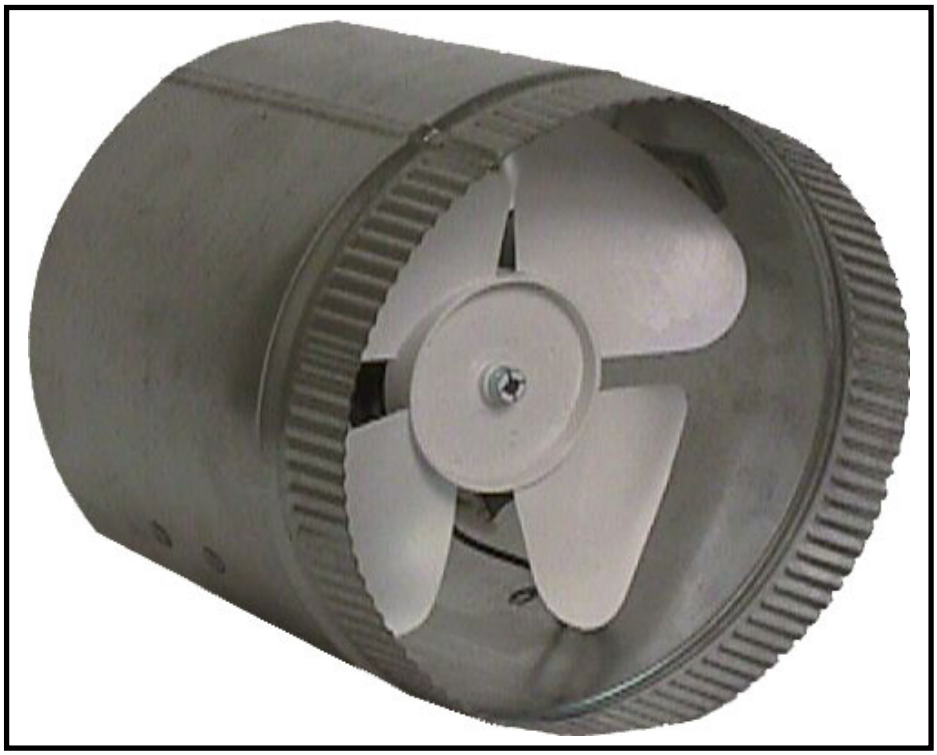
AIR BOOSTER

Model: **AB-4,5,6,8,10,12,14**



The Air Booster is designed to increase the flow of heated or cooled air in branch ducts of a heating and central air conditioning system. The Air Booster can also be used to improve the air flow of a gravity warm air furnace.

GENERAL INFORMATION

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

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

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

EXAMPLE: *Use the AB-6 Air Booster for 6" ducts, the AB-8 Air Booster for 8" ducts, the AB-10 Air Booster for 10" ducts, and the AB-12 Air Booster for 12" ducts… etc. For rectangular ducts; use the model AB-1 or AB-2 air booster.*

CAUTION: *Do not use this product on clothes dryer vent pipe. Air Booster models 4, 5, 6, and 8 should not be installed into vertical duct pipes.*

NOTE: *Installer must supply junction box.*

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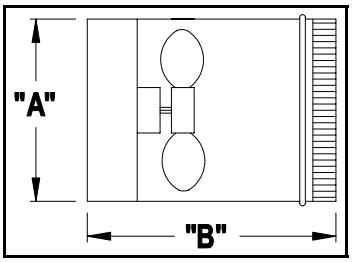
UNIT DIMENSIONS

MODEL	*"A"*	*"B"*
AB-4	4"	7-1/2"
AB-5	5"	7-1/2"
AB-6	6"	7-1/2"
AB-8	8"	7-1/2"
AB-10	10"	8-1/8"
AB-12	12"	8-1/8"
AB-14	14"	8-1/8"



ELECTRICAL DATA

MODEL	*VOLTS*	*AMPS*	*HZ*	*WATTS*	*RPM*	*THERMAL OR IMPEDANCE PROTECTION*	*MAXIMUM TEMP RATING**
AB-4	120AC	.29	60	19	3000	YES	155°
AB-5	120AC	.5	60	30	3000	YES	155°
AB-6	120AC	.6	60	35	3000	YES	180°
AB-8	120AC	.8	60	45	3000	YES	160°
AB-10	120AC	.4	60	37	1400	YES	180°
AB-12	120AC	1.1	60	91	1550	YES	180°
AB-14	120AC	1.1	60	91	1550	YES	160°

*Do not install the Air Booster where the air temperature within the duct exceeds rated temperature.

INSTALLATION INSTRUCTIONS

Locate the Air Booster in the duct pipe near the problem area. Allow adequate space for the removal of the unit for servicing or annual inspection.

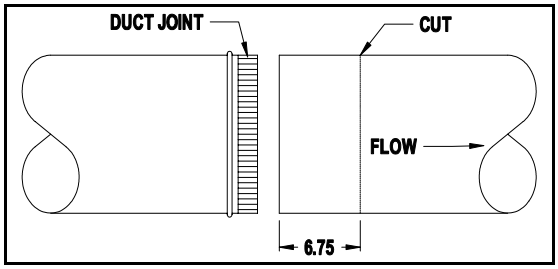


Figure 1

FOR METAL DUCT PIPE 1

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 Air Booster 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.
4. Remove center knockout from the installer supplied outlet box bottom. (See Figure 3A) Before installing the Air Booster into the duct pipe, fasten the user supplied outlet box onto the unit housing. (See Figure 3B)

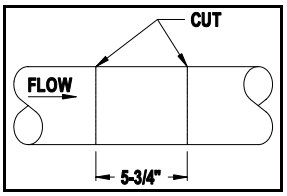


Figure 2

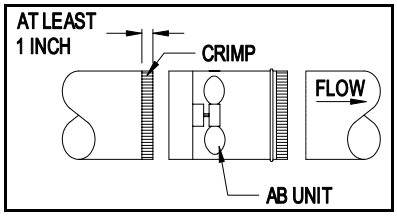


Figure 3

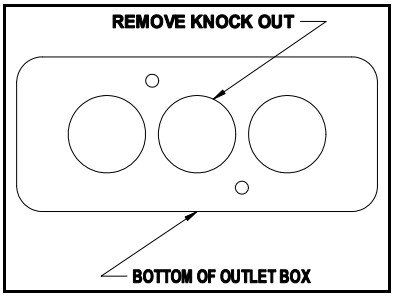


Figure 3A

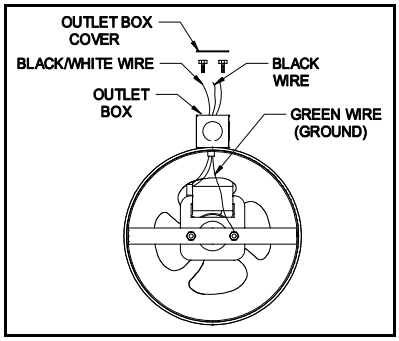


Figure 3B

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 Air Booster 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.

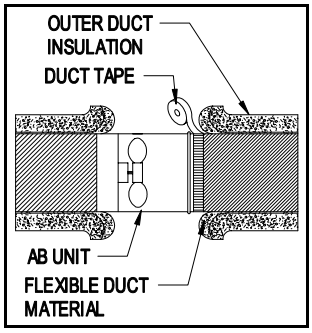


Figure 4

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 Air Booster 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 National Electrical Code and any local code requirements. All wiring connections should be within an electrical junction box.

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

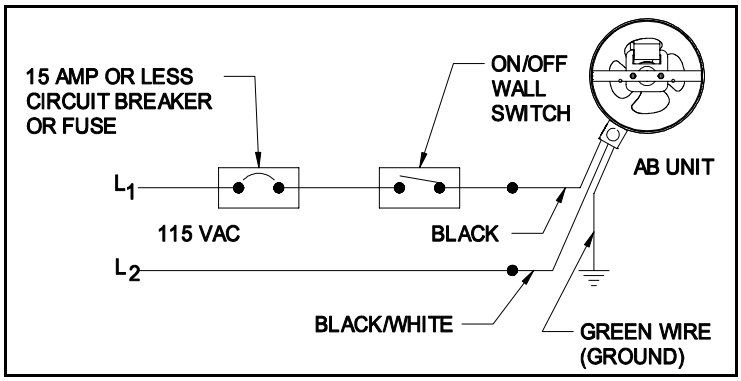


Figure 5

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

Controlling the Air Booster through a central heating/air conditioning forced air system. This method allows for automatic operation of the Air Booster unit. The Air Booster is wired in parallel with the appliance blower motor. This operates the Air Booster whenever the appliance blower operates.

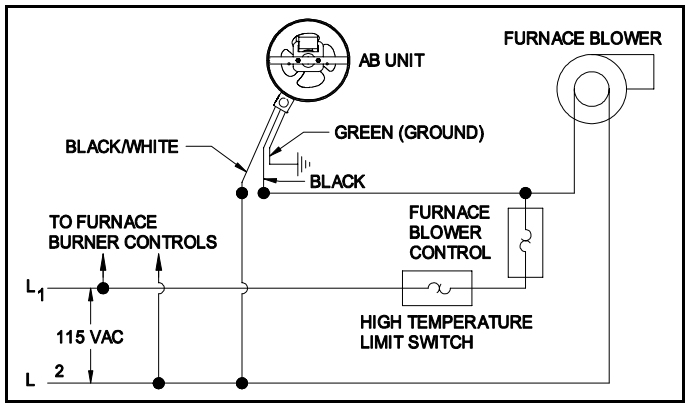


Figure 6

CAUTION: *DO NOT wire the Air Booster to an appliance blower 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 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 7 for wiring diagram)

Controlling the Air Booster through a Field Controls ABA-1 Air Booster Activator, for automatic control of the Air Booster without wiring directly to the appliance blower motor.

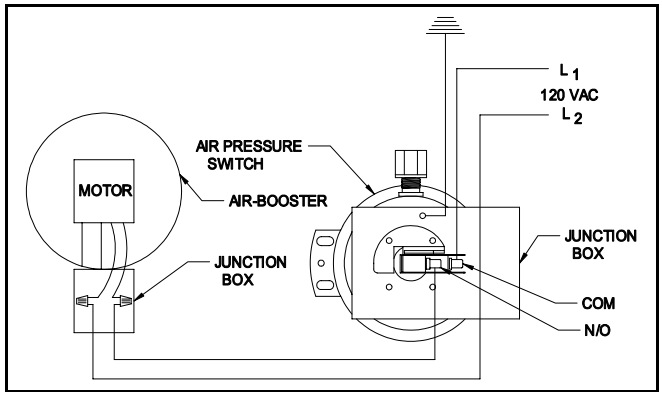


Figure 7

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

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