

FORCED AIR CONVECTION KIT INSTRUCTIONS 94-57100

INSTALLATION INSTRUCTIONS





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This forced air kit contains the following parts:









1x

1x

60201

30414



1x





3x



30131 – Type A metal screw #10 X 1/2" Pan Quadrex



30153 – Type A self-tapping metal screw #8 X 1/2" Pan Square Tek Black



30154 – Type A metal screw

#10 X 5/8" Square



Other accessories required (not included):



AC01350 – Insulated flexible aluminized trilaminated pipe 6" x 25'



Air register

Tools required for installation:



FORCED AIR DISTRIBUTION KIT AC01340

Warning

In Canada, the connection of the forced air kit to a furnace duct is prohibited, unless local building codes allow it. This type of installation is allowed in the USA (UL 391 Standards). However, do not connect any hot air ducts to the cold air return. If the forced air kit pipe is to be connected to a furnace hot air distribution system, a backflow shutter (#6) must be installed between the forced air kit fan and the central system hot air duct. To favor an optimum air distribution, it is recommended to connect the forced air kit pipe to the furnace duct using an angled connecter oriented towards the air outlet.

If the fireplace is in a small room, the fan can be used to distribute excess heat in a determined area of the house. A certain loss of heat is to be expected more the duct length increase.



Figure 1: Forced Air Distribution Kit

INSTALLATION

1

Warm air outlet can be connected on either side or rear of the unit. Remove the knockout on the selected side.



2

If the metal tabs did not come out with the knock-out, cut or file the remaining tabs on the perimeter of the opening.



Cut out the insulation to the size of the opening.



4

Cut a notch on the perimeter of the adaptor as shown.



Align the adapter notch with the fireplace warm air outlet notch and turn until the flange is fully inserted. The adapter is well in place when its flange is completely inserted and the adapter can rotate freely.



Install the heat distribution blower in a location where, you will have access for maintenance and somewhere the fan's noise will not be disturbing.



- *Note: The heat distribution blower must be positioned at a minimum distance of 3 feet from the fireplace and outside of its enclosure.
- *Note: The length of the insulated flexible pipe between the fan and the air outlet must be no less than 12 feet.
- *Note: A minimum clearance to combustible materials of 2 inches from the heat distribution blower is required.
- *Note: The heat distribution blower can be installed horizontally, vertically or at any angle.

Connect the insulated flexible aluminized trilaminated pipe (B) to the fireplace adapter (E), then to the inlet of the heat distribution blower (A) using two clamp collars (C). Use the same procedure to secure the insulated flexible pipe to outlet of the heat distribution blower (A) and to the air register (D). Although it is not mandatory, it is recommended to use insulated flexible pipe for the entire length in order to circulate air at a sufficient temperature through the system. To obtain optimal efficiency, a maximum run of 50 feet is recommended.



PC BOARD INSTALLATION AND WIRING

*Note: Keep in mind that when installed to a decorative fireplace heat distribution blower will take longer to reach optimum efficiency as opposed to higher rated units, which may cause the fan to cicle.

1

Before installing the PC board assembly, open the bottom louver of the fireplace and remove the wire knock-out on the left hand side of the air jacket. Install the box connector (60201) and bring in the wire coming from the blower as shown in **Figure 1**.



Connect the wires comming from the heat distribution blower and from the fireplace terminal to the PC board (see step 5). Then install the assembly in the PC board housing as shown in **Figure 2**.



Figure 2

3

Secure the PC board assembly to the outside of the firebox support (see Figure 3).



Finally, the ground terminal and the thermistor are to be secured to the fireplace frame (see **Figure 4**).



5

Identify the common (white wire) on the fireplace terminal and run a white wire between that and the **ACCOM** terminal of the PC board; run a black wire from the other terminal to the **ACHOT** terminal of the PC board. Connect a green or nude wire from the **FRAME** terminal of the PC board to the frame of the fireplace. Run an 18/3 (18 AWG) cable from the PC board to the heat distribution blower terminal. Connect the white lead on **FANCOM** in the PC board and on N at the heat distribution blower terminal. Connect the black lead on **FANHOT** in the PC board and on **L** at the heat distribution blower terminal. Connect the green or nude lead on **FANFR** in the PC board and on **GROUND** at the heat distribution blower terminal (see **Figure 5**).

In the event that an optional thermostat (AC05558) is used, simply connect the 2 leads coming from the thermostat to the **TSTAT** on the PC board (see **Figure 5**).

Even though it is not supplied, it is strongly recommended to install a switch on the black lead to allow turning OFF the heat distribution blower manually before you open the fireplace doors. If the blower is running, the smoke could be drawn out of the fireplace instead of up the chimney and sparks may be drawn into the insulated flexible pipe of the forced air kit. Note that this switch will not turn the heat distribution blower ON unless the fireplace is hot enough (See Figure 6).



PC BOARD OPERATION & CONFIGURATION



- Press the "Mode" button until the desired option light turns on. Press the "select" button to save that option. Available configuration options are indicated on the display located on the top of the control.
- "Setpoint 1" is the temperature (in Fahrenheit) at which the heat distribution blower will kick in on slower speed. You may choose between "None", "110°F", "125°F" or "140°F". If "None" is selected, the heat distribution blower will not kick in until "Setpoint 2" temperature is reached.
- "Setpoint 2" is the temperature (in Fahrenheit) at which the heat distribution blower will kick in on fast speed. "Setpoint 2", will determine at what temperature (in Fahrenheit) the heat distribution blower will switch from low speed to high speed. Options for "Setpoint 2" are "175°F", "190°F" or "205°F".
- "Thermostat" allows choosing the "Cool" or "Heat" option depending where your thermostat is located. When the thermostat is located in the remote area you want to heat, the thermostat will be set in "Heat" and the heat distribution blower will be activated when the temperature drops bellow the thermostat setpoint.
- When the thermostat is located in the same room as the fireplace, the thermostat will be set in "Cool" so the heat distribution blower will kick in when the temperature in that room rises above the thermostat setpoint.
- Note: When manual mode is to be used, thermostat option on the PC board must be set on "Cool".
- Note: Configuration must be repeated after a power failure.

Notes

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