

**INSTALLATION INSTRUCTIONS FOR INSTALLING A FORCED AIR KIT (BISFWK-1) AND THERMOSTAT KIT (HCTW)
FOR USE WITH WOOD-BURNING FIREPLACES LISTED IN TABLES 1 AND 2**

BISFWK-1 KIT CONTENTS

- 1 ea. Blower (BISZY)
- 1 ea. Flex Adaptor (BISAF)
- 4 ea. Clamps
- 1 ea. Variable Speed Control (VRUW),
- 1 ea. Thermo-disc (VTU)
- 1 ea. Blower Flex Adaptor (BISAVF)
- 1 ea. 5" Collar to Flex
- 1 ea. Collar Plate
- 4 ea. sheet metal screws
- 1 ea. Aluminum tape
- 1 ea. Instruction Sheet

HCTW KIT CONTENTS

- 1 ea. Thermostat
- 1 ea. Instruction Sheet

FORCED AIR STARTER KIT		
Cat. No.	Model	Where Used
BISFWK-1	BISFWK-1	Brentwood™ LV, Brentwood SP, Ladera™, Ladera-D, Ladera-CAT, Villa Vista™, Villa Vista™ CD, Montecito™, Montecito Estate™, WRT4820WS, WCT4820WS, WRT3820WS, WRT3920WS, WRT4826WH, WCT6820WS, WCT6840WS, BIS® Ultima CF, BIS Ultima-1, BIS Nova, BIS Panorama, BIS Tradition CE and BIS Tradition

Table 1

HEATING/COOLING THERMOSTAT - 120 V AC		
Cat. No.	Model	Where Used
HCTW	HCTW	Brentwood™ LV, Brentwood SP, Ladera™, Ladera-D, Ladera-CAT, Villa Vista™, Villa Vista™ CD, Montecito™, Montecito Estate™, WRT4820WS, WCT4820WS, WRT3820WS, WRT3920WS, WRT4826WH, WCT6820WS, WCT6840WS, BIS® Ultima CF, BIS Ultima-1, BIS Nova, BIS Panorama, BIS Tradition CE and BIS Tradition

Table 2

GENERAL INFORMATION

The forced air kit provides warm air distribution to another room. The thermostat kit provides control of heating and cooling.

If you encounter any problems, need clarification of these instructions or are not qualified to properly install this kit, contact your local distributor or dealer.

Read this instruction sheet in its entirety before beginning the installation.

ALL WARNINGS AND PRECAUTIONS IN THE INSTALLATION AND OPERATION MANUAL PROVIDED WITH THE APPLIANCE APPLY TO THESE INSTRUCTIONS.

SHUT DOWN THE APPLIANCE AND ALLOW IT TO COMPLETELY COOL BEFORE PROCEEDING.

Features of the forced air system

Installation in Another Room

- Allows for warm air distribution to another room.
- Can install up to 50 feet (15.2 m) of flexible pipe.
- Can provide warm air distribution to a basement, garage or attic.
- Possibility of controlling via a wall thermostat.

Components for the Connection Kit for Forced Air System

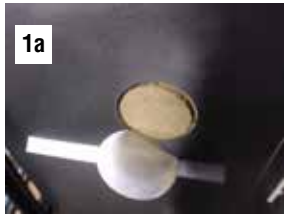
The starter kit is comprised of a variable speed blower (BISZY), an adaptor for flexible pipe (BISAF), blower to flexible pipe adaptor (BISAVF), a 5" Collar and Collar Plate, a variable speed control for the blower (VRUW) and a thermostatic control (VTU). The following optional parts are also available: wall thermostat with control box (HCTW) and a back draft damper (BISBD).

MECHANICAL INSTALLATION

- Step 1.** Locate the warm air outlet, make sure it respects the maximum distances, plan for the passage through walls, ceilings etc., when mapping out the path the duct will take.
- Step 2.** Locate the area where the flexible pipe will hook up to the appliance.
- Step 3.** Remove the outer 5-inch knockout, the insulation, and inner 5" knockout. Seal the exposed insulation with Foil Tape and attach the collar and plate with 4" sheet metal screws (*Figures 1a-e*).

These plates are located in the following places:

- On the Solana™, HE43-2 and SE36 fireplaces, on the upper left and right hand sides of the unit.
- On the Brentwood™ SP, BIS® Ultima-1, WCT4820WS, Brentwood LV, BIS Ultima CF, WRT4820WS, Montecito™, BIS Tradition CE, WCT6820WS, Villa Vista™, Villa Vista™ CD, BIS Panorama, WRT4826WH, Montecito Estate™, BIS Tradition, WCT6840WS, Ladera™, Ladera-D, Ladera-CAT, BIS Nova, WRT3820WS, WRT3920WS, Cambria™, Le Laval™ and BIS Ultra fireplaces, on the upper left and right hand sides as well as the back of the unit.



1a. Remove Outer 5" Knockout.



1b. Remove 5" round piece of Insulation.



1c. Remove Inner 5" Knockout.

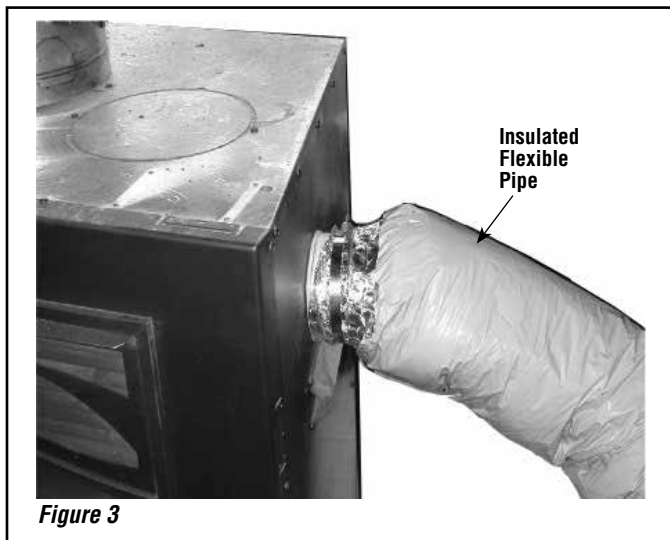
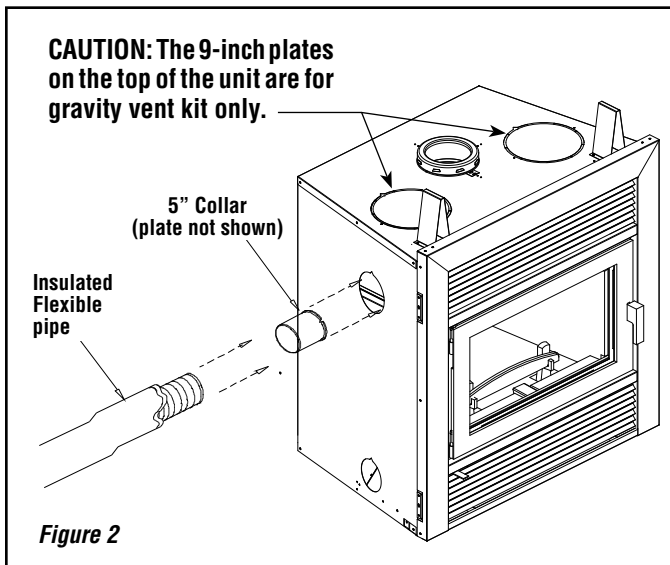


1d. Seal the exposed insulation with Foil tape.



1e. Attach the collar and plate with 4 sheetmetal screws. In some instances there may not be pre-drilled capture holes.

Figure 1

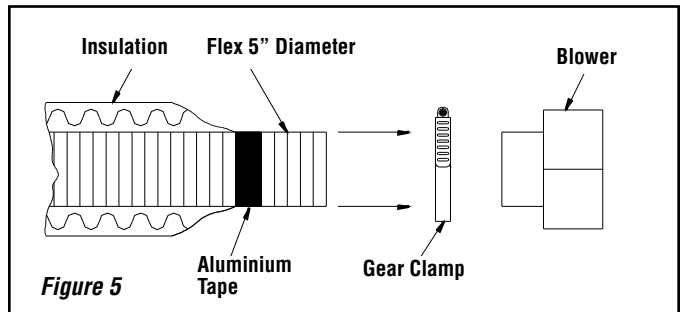


Step 4. Using a gear clamp, install the flexible pipe to the adaptor (**Figure 3**). **CAUTION: Make sure the plastic casing of the flexible pipe does not touch the fireplace.**

Step 5. Bring the flexible pipe to the desired room; this room may be located on an upper or a lower floor. Please note that the maximum allowable length of flexible pipe is 50 feet from the fireplace. Seeing that the pipe is insulated, it may be installed with zero clearance to combustible materials.

Step 6. To install the blower, place the four (4) anti-vibration rubbers in the holes of the support plate of the blower and screw the blower to a solid base. The blower may be installed either horizontally or vertically but must be easily accessible for maintenance as well as for the electrical installation (**Figure 4**).

Step 7. With the second tightening collar, install the flexible pipe to the round central inlet of the blower (**Figure 4**).



Step 8. Install the flexible adaptor (BISAVF) to the square outlet of the blower using four self-tapping screws and use a tightening collar to install the pipe (*Figure 7*). Bring the second flexible pipe to the warm air distribution outlet.

- Purchase, from your hardware store, an adapter from ø5in. flexible pipe to any chosen air distribution outlet.
- Install the pipe with a tightening collar.



Figure 7

Thermostat

If you are using a thermostat, install it in the room where the warm air is being sent. It is preferable to install the thermostat at the opposite end of the room so that the thermostat is not in direct contact with the warm air. Do not install the thermostat in the same room as the fireplace unless you are using it as a cooling thermostat. This may be useful to activate the fans to send the warm air towards another room once the temperature is too high in the room where the fireplace is installed (*see Note for Installing a Cooling Thermostat*).

Thermostatic Control

The thermostatic control (VTU) allows for the blower to work when fireplace temperatures reach a certain point. This control is easy to install: because of its magnets, all you need to do is place it on the bottom right hand side of the firebox (*Figure 8*).

NOTE: For visual purpose, the right side panel has been removed.



Figure 8

Electrical Installation

! WARNING

All electrical connections and grounds must be in accordance with local codes and regulations, and, in absence of these, the CSA C22.1 Canadian code, or in the United States, the ANSI/NFPA 70 national electrical code.

1. In order to avoid electrical shock, all connections between 2 wires must be placed in a metallic box. It is preferable to use one electric conductor between each element of the system.
2. Unless otherwise indicated, every electrical wiring not supplied by the manufacturer must be 14-gauge minimum.
3. All electrical wiring coming in or out of the fireplace must pass through the fireboxes electrical box.

1. Basic Electrical Connection

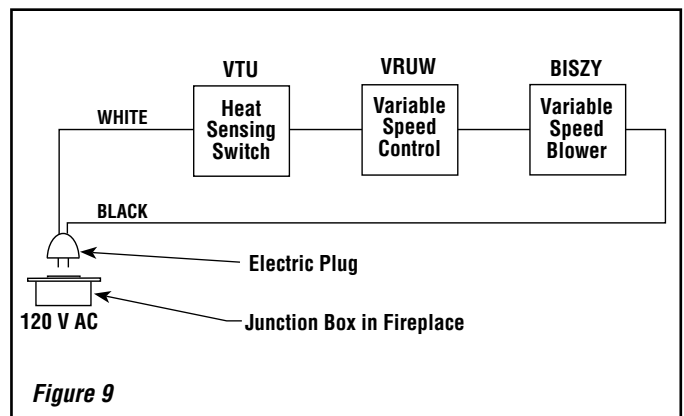


Figure 9

For a basic electrical connection, use any terminal in the following order:

- A. Install a standard 120V receptacle in the fireplace's junction box.
- B. Starting with the white wire provided in the starter kit, connect a wire to the terminal of the thermostatic control.

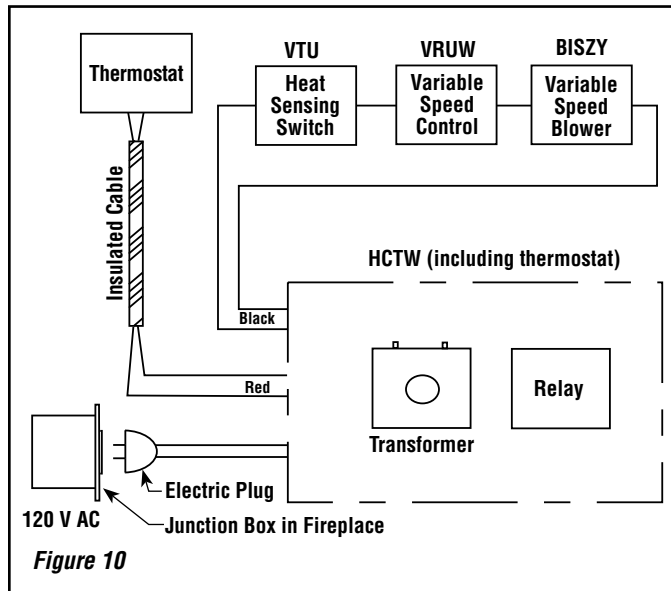
! WARNING

In order to prevent electrical shock, completely finish and verify the connections of the electrical system before plugging it in.

Basic Electrical Connection (con't)

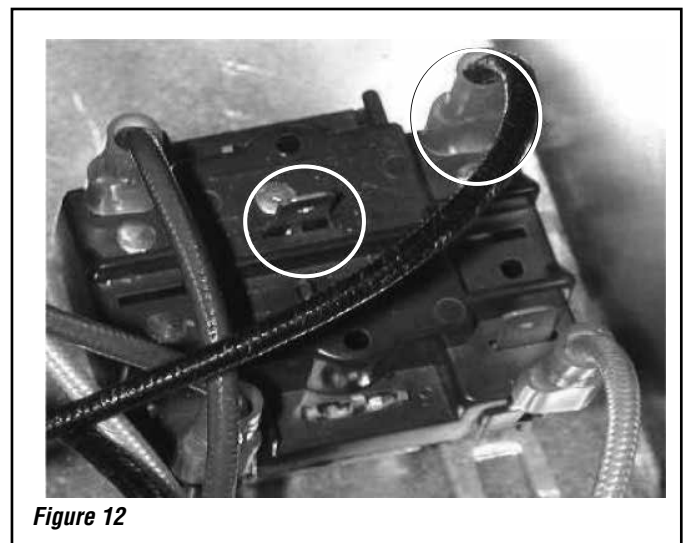
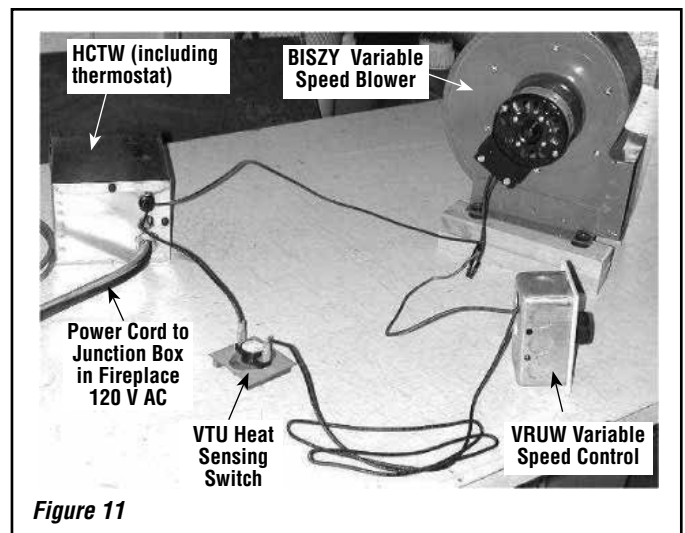
- C. Connect the second terminal of the thermostatic control (VTU) to one of the two wires of the variable speed control (VRUW).
- D. Connect the second wire of the variable speed controls (VRUW) to the blower (BISZY).
- E. Finally, from the blower (BISZY), go back into the fireplace and connect that wire to the black wire of the electrical plug.
- F. Make sure that no wires are in contact with the hearth and that the whole system is safe prior to plugging in the wire.

2. Electric Connection with Thermostat



When installing a thermostat, you have received a control box including a transformer and a relay. This electrical box will allow you to make a 24V system that is parallel with the 120V system; it is essential that the following steps be followed in order to avoid an electrical surge on the system.

- A. Install an electrical socket of 120V in the fireplace's electrical box.
- B. Open the cover of the control box. Connect the red wires of the control box to an insulated container with 18-2 wire minimum. The connections must be inside the control box. Pass the insulated conductor through the metallic grommet. Pass the conductor through the electrical box of the fireplace, and then connect the other end to the thermostat terminals.
- C. Connect the black wire with quick connect to a terminal of the thermostatic control (VTU) (**Figure 8**).
- D. From the second terminal of the thermostatic control, pass a single conductor wire, through the fireplace's electric box up to a wire of the variable speed control (VRUW) (**Figure 8**).
- E. From the second wire of the variable speed control (VRUW) to the blower (BISZY).
- F. Finally, from the blower (BISZY), return to the fireplace and connect that wire to the second black conductor. The connection must be made inside the box.
- G. Securely fasten the control box to the exterior of the fireplace (**Figure 8**).
- H. Make sure that no wires are in contact with the hearth and that the whole system is safe prior to plugging in the wire.



3. Note for Installing a Cooling Thermostat

In order for the thermostat to work as a cooling thermostat, you must:

- A. Ensure that all connecting electrical sources with this system are unplugged.
- B. Open the control box by removing the four screws on the side of the box.
- C. Locate the wire connected to terminal #3 of the relay (the terminal numbers are etched in the relay box).
- D. Disconnect this wire from the terminal #3 and reconnect it to the terminal #2 (**Figure 12**).
- E. Ensure that no other wire was disconnected while completing this operation.
- F. Close the cover of the control box.

Innovative Hearth Products (IHP) reserves the right to make changes at any time, without notice, in design, materials, specifications, prices and also to discontinue colors, styles and products. Consult your local distributor for fireplace code information.

