## **FBB8-1 BLOWER INSTALLATION INSTRUCTIONS**

FOR INSTALLATION IN FIREPLACE MODELS: DVL(25,33)FP(32,72)(N,P)

## INSTRUCTIONS MUST BE LEFT WITH OWNER FOR REFERENCE AFTER INSTALLATION.

Attention: Install blower assembly before connecting gas inlet supply line

**Note:** Junction box on right side of fireplace must be pre-wired at time of fireplace installation for use with blower assembly. It is recommended that an ON/OFF wall switch be installed that will activate the power supply to the fireplace by a qualified electrician.

### Wiring

The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the *National Electrical Code, ANSI/NFPA 70*. This appliance is equipped with a three-prong [grounding] plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.

**Caution:** Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

CAUTION: ALL WIRING SHOULD BE DONE BY A QUALIFIED ELECTRICIAN AND SHALL BE IN COMPLIANCE WITH ALL LOCAL, CITY AND STATE BUILDING CODES. BEFORE MAKING THE ELECTRICAL CONNECTION, MAKE SURE THAT MAIN POWER SUPPLY IS DISCONNECTED. THE APPLIANCE, WHEN INSTALLED, MUST BE ELECTRICALLY GROUNDED IN ACCORDANCE WITH LOCAL CODES OR, IN THE ABSENCE OF LOCAL CODES, WITH THE NATIONAL ELECTRICAL CODE ANSI/NFPA 70 (LATEST EDITION).

## STANDARD MILLIVOLT VALVE MODELS

## **Junction Box Installation**

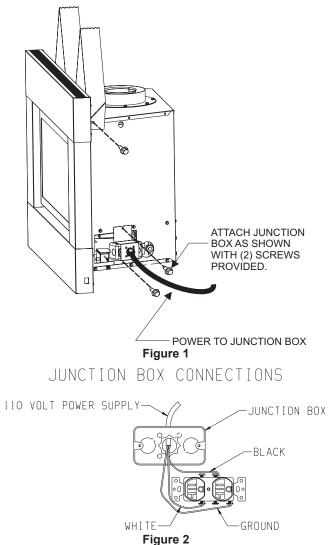
The junction box should be pre-wired during the initial installation of the fireplace. To complete the junction box wiring and installation, remove the junction box assembly from the right side of the fireplace as shown in Figure 1. Complete the wiring as shown in either Figure 2 for Millivolt valve models, or Figure 3 for the Intermittent pilot model fireplace.

**Note:** The junction box, mounting plate, duplex receptacle, cover plate and Romex connector are shipped with the fireplace.

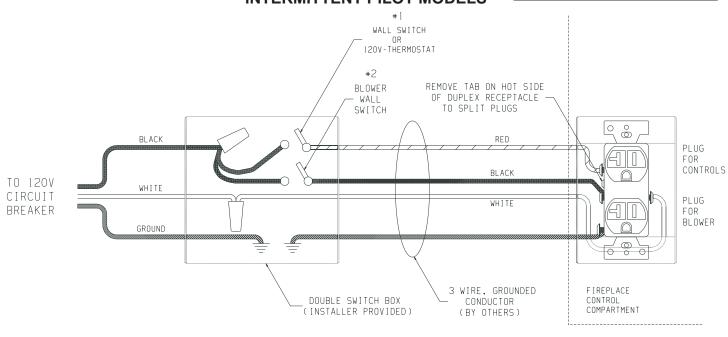
Wiring must be fed to the junction box and attached to the receptacle that is provided. Leave approximately 6" of wire in the junction box for connection.

Attach black wire to one side of the receptacle and white wire to opposite side of receptacle. The ground wire should be attached to the green (ground) screw.

Once the Junction Box/Receptacle assembly has been properly wired, reattach the junction box to the side of the fireplace so that the receptacle face is towards the inside of the fireplace. The junction box assembly is mounted with (2) screws to the outside of the fireplace outer wrap. **See Figure 1.** 



## **INTERMITTENT PILOT MODELS**



DUAL SWITCH ELECTRICAL WIRING TO FIREPLACE RECEPTACLE

#### Figure 3

- 1. To wire Junction Box Receptacle, remove the tab on the side of the receptacle (hot side) to split receptacle. This will be required to separate blower and valve circuits.
- 2. Power for switched and live sides of Duplex Receptacle must come from the same power source. (One circuit breaker on main panel must switch all power off.)
- 3. From the wall box to the fireplace, 3-wire conductors with ground is recommended.
- 4. Two wall switches must be used to activate the two receptacle plugs independently.

**Tools Needed:** 3/8" wrench or ratchet, needle-nose pliers, flashlight

Attention: If gas lines have been connected, additional tools will be needed to remove the gas line in order to gain access for the insertion of the blower assembly,

- 1. If a Decorative Front Surround assembly is installed, remove it and set aside.
- 2. Remove the Glass Door Assembly by releasing the (2) spring latches at the top and (2) spring latches at the bottom of the door frame.
- 3. Set the glass door aside in a safe place.
- Note: If the gas line has been installed, it will be necessary to shut the gas supply off and disconnect the line that attaches to the right side of the valve. To install the FBB8 Blower Assembly, the lower cavity of the fireplace must be clear of the incoming gas line.

**Blower Installation** 

- 1. Inspect the blower assembly for shipping damage prior to installation. Be sure the blower wheel spins freely.
- Locate the (4) threaded rubber blower mounts in the hardware pack. Install (2) blower mounts into the right rear threaded insert nut locations as shown in Figure 4, and the remaining (2) blower mounts into the left rear insert nut locations as shown in Figure 5. Screw the mounts into the threaded insert nuts all the way and hand tighten with moderate pressure.



Figure 4



Figure 5

 Pre-install a rubber washer and ¼-20 Wing-nut to each of the two blower mounts studs at the left side, as shown in Figure 6. Only start the wing-nuts onto the studs with approximately 2 threads or turns. This should leave an 1/8 –1/4" space between the rubber washers and the face of the blower mounts.

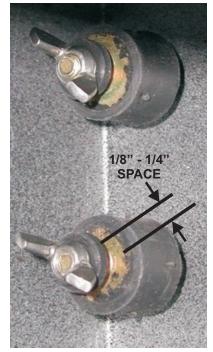


Figure 6

4. To insert the blower assembly, place the blower on its back as shown in Figure 7 and 8. Make sure the pilot tubing and wiring in the bottom cavity of the fireplace are routed to the left of the pilot connections.

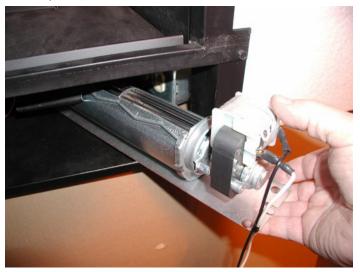


Figure 7

5. Carefully work the blower assembly rearward and to the left until the blower bracket has cleared the front flange of the fireplace bottom, and can lay flat, inside the bottom of the fireplace as shown in Figure 9.

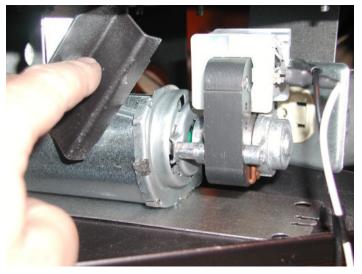


Figure 9

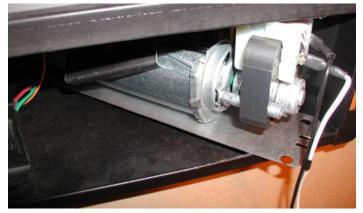


Figure 8

6. Now gently rotate the blower assembly counter-clockwise 90 degrees as you continue to move the blower assembly to the left, clearing the 2 latch brackets and pilot connections. See Figure 10.

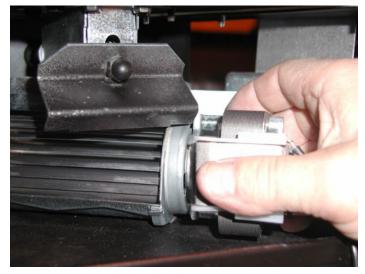


Figure 10

7. Match up the 2 slots at the left end of the blower mount plate with the 2 previously installed blower mounts in Step 3. See Figure 11. Make sure the blower mount plate is sandwiched between the blower mounts and the rubber washers. Note: It is suggested that the lower left wing nut be lightly tightened first because of space limitations to this wing nut.

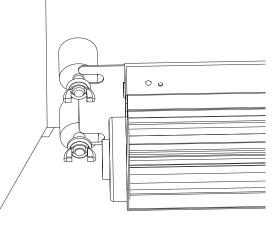


Figure 11

8. Next, align the right side holes of the blower mounting plate with the right side blower mounts and install a rubber washer and 1/4-20 Wing-nut to each of the blower mount studs to secure blower assembly. See Figure 12.

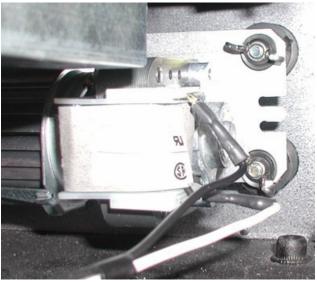


Figure 12

 Finger-tighten all (4) ¼-20 Wing-nuts equally with moderate torque. It may be necessary to use needle-nose pliers to tighten, but over-tightening should be avoided. After the blower assembly has been installed and secured, locate the Fan Control Switch on the wiring harness and install it to the (2) threaded studs at the center of the firebox bottom with (2) # 8 Keps nuts. Use a 3/8" wrench or ratchet as shown in Figure 13. Do not over-tighten.



Figure 13

11. Plug the power cord into the junction box receptacle as shown in Figure 14.



Figure 14

12. Position the Rheostat (Speed) Control to the right front corner of the fireplace bottom. See Figure 15.



#### Figure 15

- 13. Use the plastic adhesive backed wire retainers to route and secure the wiring to the bottom of the fireplace.
- 14. Check with a flashlight that all wiring is positioned away from the bottom of the firebox and blower, and that the blower wheel spins freely.
- 15. Attach, or re-attach the gas line and test for leaks.
- 16. Re-install the Glass Door assembly with all (4) Spring latches.
- 17. Install the Decorative Surround panel assembly.
- 18. Blower installation is complete.

#### **Blower Motor**

The Blower motor does not have oiling holes. Do not attempt to oil the blower motor.

#### **Blower Wheel**

The blower wheels and motor will collect lint over time and will require periodic cleaning. If the air output decreases or the noise level increased it may indicate a dirty blower wheel. First unplug the blower power cord or turn off power to the fireplace. Use a small brush attachment on a vacuum cleaner to reach back to the blower area. Gently clean the blower wheel and motor, taking care not to bend the blades of the blower wheel.

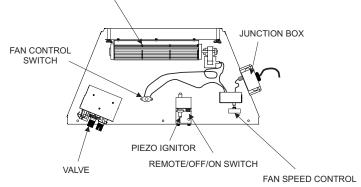
### Operation

The optional blower operates as follows:

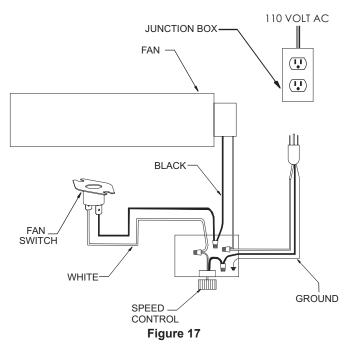
From a cold start, the temperature activated fan control switch will normally take 5-10 minutes to heat up and energize the blower. Once the blower is energized, adjust the blower speed control as desired, then replace the surround kit assembly.

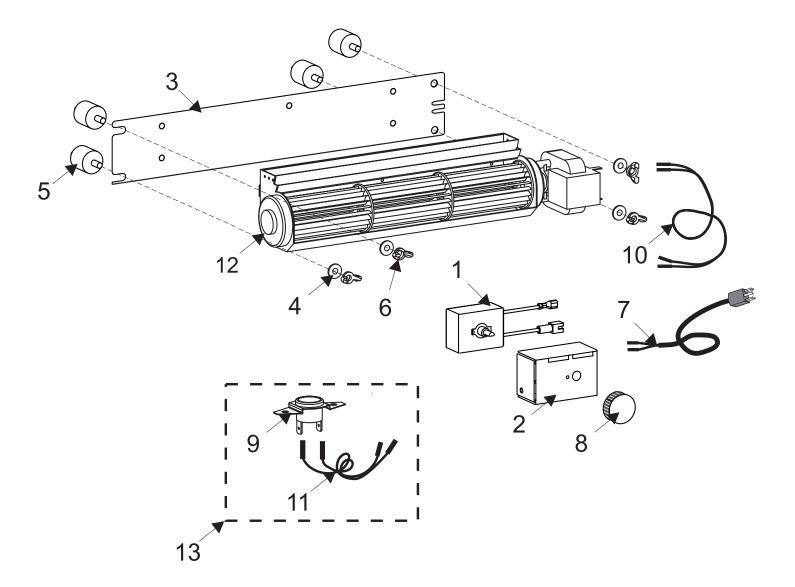
When the fireplace is shut off, it may take 30-40 minutes for the heated unit to dissipate (cool down) enough for the blower to shut off automatically. NOTICE: The blower shut off times will vary depending on the blower speed and BTU input.

FBB8 BLOWER ASSEMBLY









Index Number	Part Number	Description	Quantity Supplied
1	18879	RHEOSTAT ASSEMBLY	1
2	23003	BRACKET, RHEOSTAT	1
3	28013	BRACKET, BLOWER	1
4	R10861	WASHER, RUBBER	4
5	R10856	SPACER, VIBRATION (BLOWER MOUNT)	4
6	R1123	1⁄4-20 WING NUT	4
7	R3529	CORD SET	1
8	R4192	KNOB, RHEOSTAT	1
9	R7649	CONTROL, FAN L120-20	1
10	R7831	WIRE HARNESS – BLOWER	1
11	R7912	WIRE HARNESS – FAN CONTROL	1
12	R9927	BLOWER ASSEMBLY	1
13	31920	SWITCH ASSEMBLY	1



Empire Comfort Systems Inc. 918 Freeburg Ave. Belleville, IL 62220

If you have a general question about our products, please e-mail us at info@empirecomfort.com. If you have a service or repair question, please contact your dealer.

# www.empirecomfort.com