

# GFK-160A Blower System

- Installation and Operating Instructions -

## 1.0 INTRODUCTION

The GFK-160A Blower has been designed to circulate room air through the fireplace to enhance heat output. The GFK160A blower system operates on 120 VAC, 60 Hz power. This is available through a receptacle in the factory installed junction box. The junction box is located in the controls compartment of the fireplace.

A variable speed control is provided with the blower system to provide quiet forced air flow at the desired speeds. A temperature sensor switch, which automatically turns the blower ON/OFF, is also provided with this kit.

## 2.0 CHECK CONTENTS OF SHIPPING CARTON

Compare CONTENTS OF CARTON in Figure 1 with the actual parts received. If any parts are missing or damaged, contact your dealer before starting installation. Do not install a damaged blower kit.

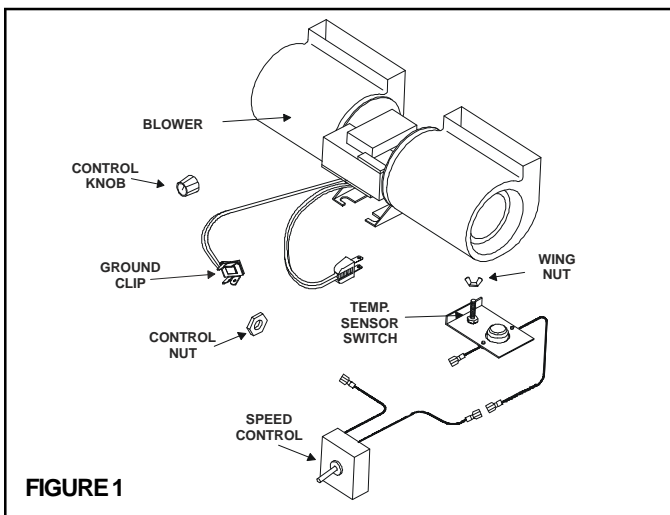


FIGURE 1

## 3.0 INSTALLATION PRECAUTIONS

The GFK-160A Blower Kit is tested and safe when installed in accordance with this installation manual. It is your responsibility to read all instructions before starting installation and to follow these instructions carefully during installation to assure maximum benefit from, and safe operation of, the blower.

This blower is carefully engineered and must be installed only as specified. If you modify it or any of its components, you may cause a fire hazard and will void the WARRANTY. In addition, such action may void the coverage provided by the owner's home insurance.

**CAUTION:** All wiring should be done by a qualified electrician and shall be in compliance with local codes and with the National Electric Code ANSI/NFPA NO. 70-current (in the United States), or with the current CSA C22.1 Canadian Electric Code (in Canada).

**WARNING: DO NOT CONNECT 110-120 VAC WIRING TO THE GAS CONTROL VALVE OF THIS FIREPLACE.**

## 4.0 INSTALLATION INSTRUCTIONS

### 4.1 INSTALLING ELECTRICAL SERVICE TO THE JUNCTION BOX

**WARNING: TURN ELECTRICAL POWER OFF AT THE CIRCUIT BREAKER BEFORE BEGINNING THIS INSTALLATION.**

1. Remove the electrical cover plate from the lower exterior of the fireplace. Remove the knock-out from the plate and attach the Romex clamp (screws to the outside). (See Figure 2). **NOTE:** Some fireplace models have a round hole through which the service wires are fed and into which the Romex clamp is attached. These models do not have a cover plate.

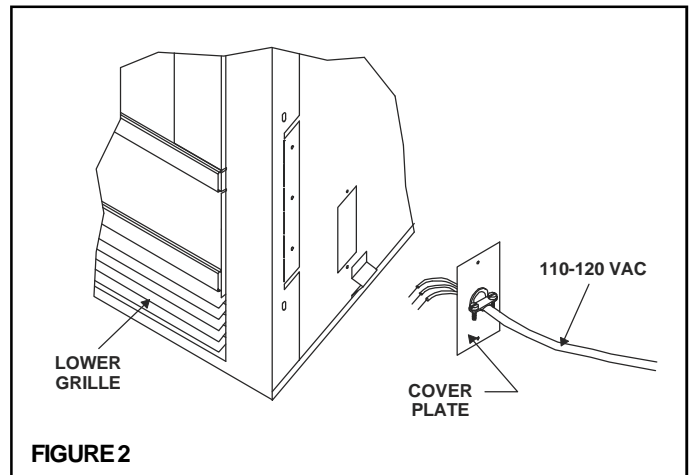
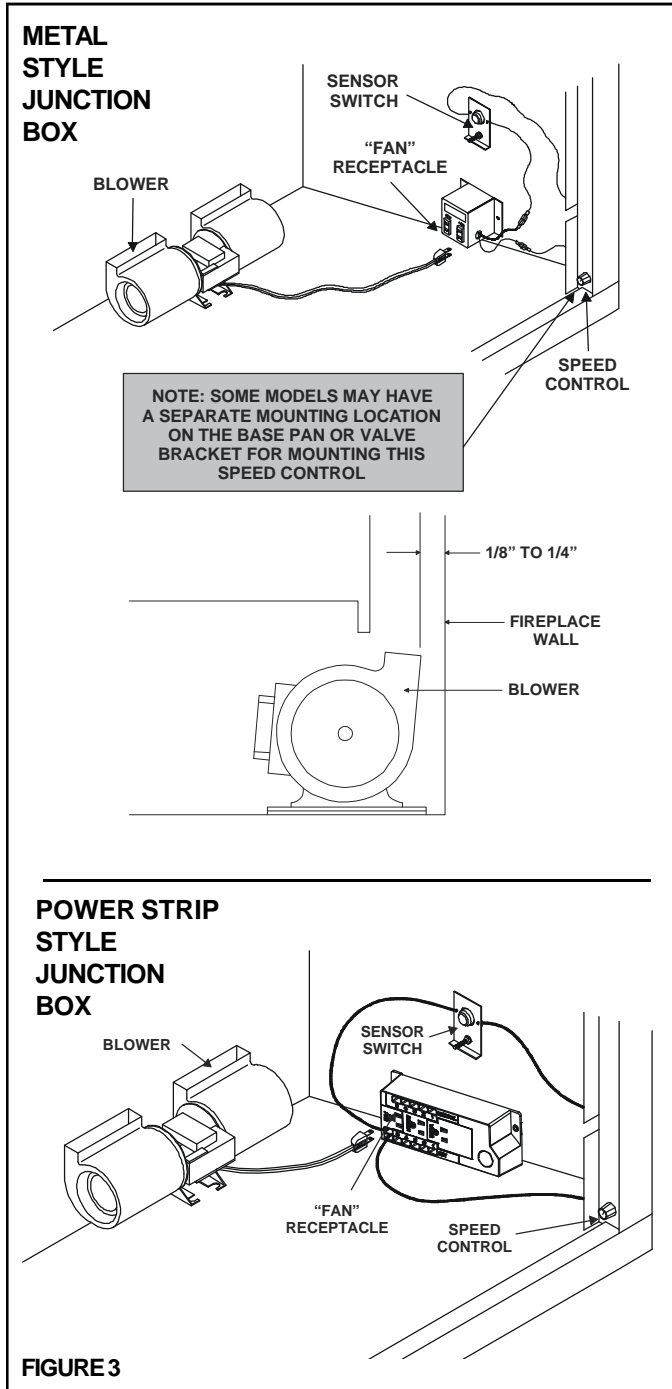


FIGURE 2

2. Feed the 110-120 VAC electrical service wires through the Romex clamp and secure the wires to the clamp. Reattach the cover plate to the outside of the fireplace.
3. Access the controls compartment of the fireplace to locate the Junction Box.
4. Using the wire nuts, attach the black wire to the black service wire, the white wire to the white service wire, and the service ground wire to the ground stud of the junction box.
5. Attach the junction box to the side of the unit. Insert the rear tab of the box into the rectangular slot in the outer wrap of the firebox. Push the front end of the box tightly against the side of the unit, and secure the box with a sheet metal screw (note the hole in the front end tab).

## 4.2 INSTALLING THE BLOWER

Position the blower all the way to the rear and center in the fireplace. Pull the blower forward 1/8" to 1/4" from the back wall of the fireplace (Figure 3). Plug the blower cord into the blower receptacle **FAN** on the junction box. Attach the ground wire to the bottom of the junction box or to a good accessible metal grounded source. Note: You can attach this to the firebox leg.



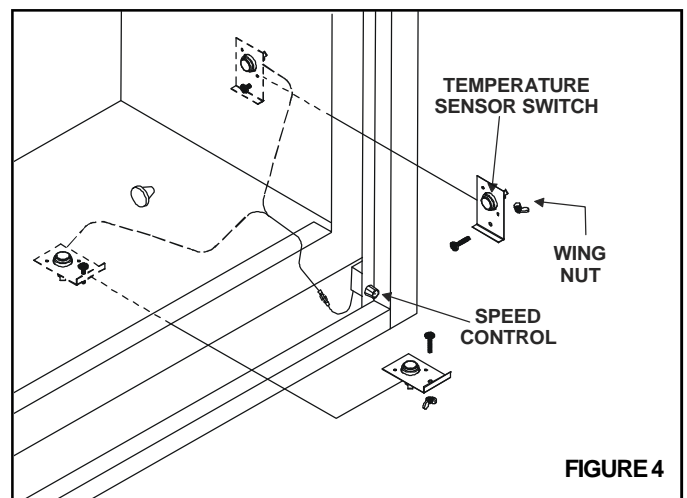
## 4.3 INSTALLING THE SPEED CONTROL AND SENSOR SWITCH

1. Remove the knob and locknut from the variable speed control. Slide the control behind the fireplace wall, in the lower right front corner, with the stem sticking out of the pre-punched hole. Attach the locknut tightly and reattach the knob on the stem.

**NOTE:** Some models may have a separate mounting location on the base pan or valve bracket for mounting this speed control.

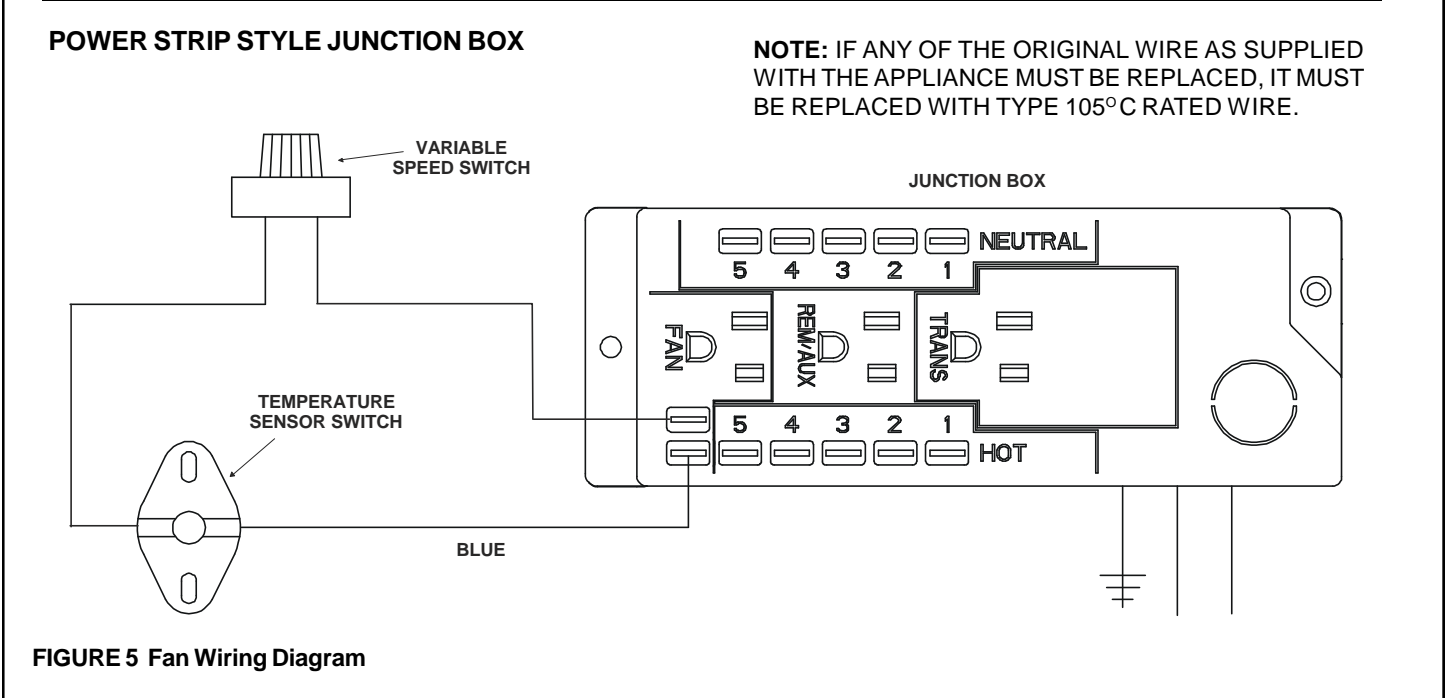
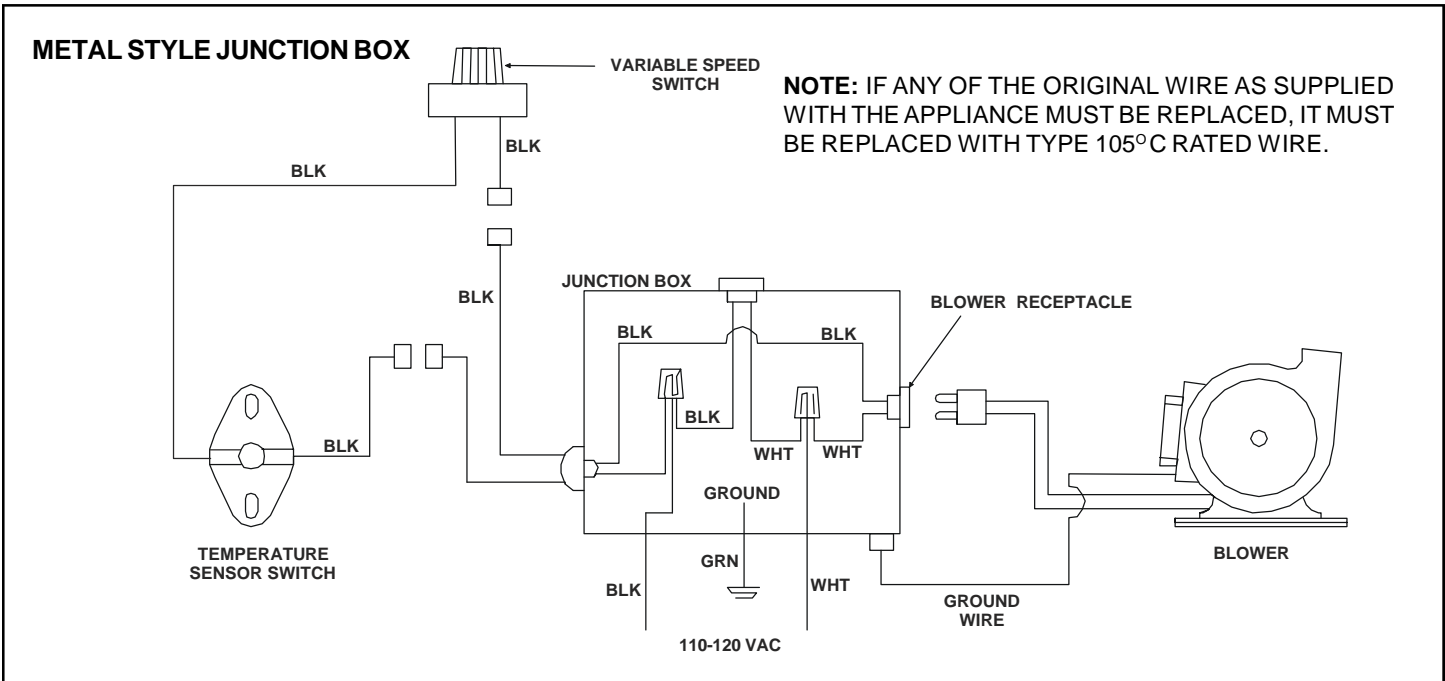
2. Slide the temperature sensor switch/bracket assembly onto the weld stud on the outside of the combustion chamber. Secure the bracket assembly with the wing nut provided. See Figure 4.

**NOTE:** The weld stud is located either on the lower right side or the bottom of the combustion box.



**NOTE:** THE SWITCH/BRACKET ASSEMBLY **MUST** BE INSTALLED SO THAT THE SENSOR SWITCH IS TOWARDS THE TOP OF THE UNIT.

3. Connect the variable speed control and the temperature sensor switch to the junction box with the wires provided. See Figure 5 for the wiring diagram that matches the style of junction box on the fireplace.
4. Turn the 110-120 VAC service "ON" at the circuit breaker and turn the speed control switch to the "ON" position.



**FIGURE 5 Fan Wiring Diagram**

**5.0 RECOMMENDED OPERATING PROCEDURES**

Ignite the fire in the fireplace with the variable speed control switch in an "ON" position. The fan will automatically turn on when the temperature sensor switch closes at approximately 110° F. Heated air should be delivered at the outlet grille. The fan will continue to operate after the fireplace is turned OFF until the sensor switch opens.

Various conditions (such as fireplace model, type of fireplace installation, outside air temperature vs. inside air temperature) can contribute to the length of the time the blower remains on after the fireplace is turned OFF. The blower can be turned off manually with the speed control switch.

**WARNING: NEVER CONTACT BLOWER WHEEL (VANES) DURING BLOWER OPERATION.**

**6.0 MAINTENANCE**

Periodically check the fireplace grilles and remove any dust, dirt or obstructions.

**7.0 REPLACEMENT PARTS AND CUSTOMER SERVICE**

Replacement parts and service may be obtained through your dealer.

**Hardware Bag: SRV107-570A**