

Models:
GFK160B
Fan Kit



If you need clarification of any of the instructions contained here contact your dealer or the Technical Services Department at 1-800-927-6841.

The Fan Kit has been designed to circulate room air through the appliance to enhance heat output. The fan kit operates on 120VAC, 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 appliance.


A control module is provided with the fan kit which automatically turns the fan on and off at preset times and is equipped with a variable speed control to provide a quiet forced air flow at the desired speeds.


Check Contents of Shipping Carton

Compare contents of carton in Table 1 with the actual parts received. If any parts are missing or damaged, contact your dealer before starting installation. Do not install a damaged fan kit.

Installation Precautions

The Fan 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 fan.





WARNING

Shock Risk
Explosion Risk

Do NOT wire 110-120 VAC to gas control valve.

Do NOT wire 110/120 VAC to wall switch

- Incorrect wiring will damage millivolt values.
- Incorrect wiring will override IPI safety lockout and may cause explosion.






WARNING

Shock Risk
Fire Risk


Use **ONLY** optional accessories approved for this appliance.

- Using non-listed accessories voids warranty.
- Using non-listed accessories may result in a safety hazard.
- Only Hearth & Home Technologies approved accessories may be used safely.

Note: This appliance must be electrically wired and grounded in accordance with local codes or, in the absence of local codes, with **National Electric Code ANSI/NFPA 70-latest edition** or the **Canadian Electric Code CSA C22.1**.



CAUTION



Sharp Edges

- Wear protective gloves and safety glasses during installation.

Note: An arrow (➔) found in the text signifies change in content.

Description	Part Number	Qty
Fan		1
Control Module	4021-708	1
Fastener Pack	4016-048	1
Foam Tape	4021-655	2
Magnetic Tape	4021-654	2
Jumper Wire (blue)		1

Table 1 Contents of Carton

Note: You may not need all parts included with this kit.

1. Install the Fan

- Open the control access panel by pulling it up and out. See Figure 1.



Figure 1 GFK160B

- Rotate the fan so the back (with the foam strips) is flush and centered against the back of the appliance's outer shell.

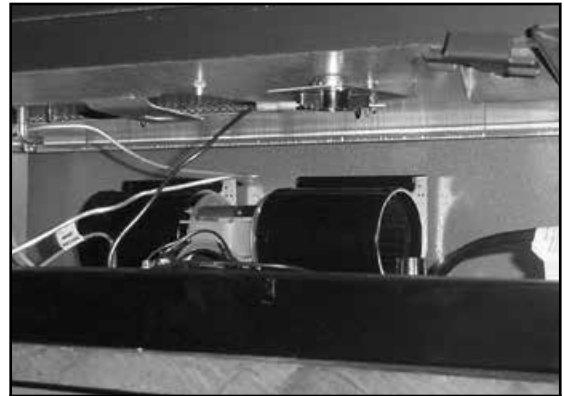


Figure 4 Positioning Fan

- Attach the foam strips as shown in Figure 2.



Figure 2 Attaching Foam Strips

2. Install the Control Module

Attach the control module to the bottom pan using the magnetic tape provided.

- Insert the fan into the appliance with the air slots up. Insert the end first to the right side of the valve assembly. Be sure to avoid pulling any of the wires out of place. See Figure 3.

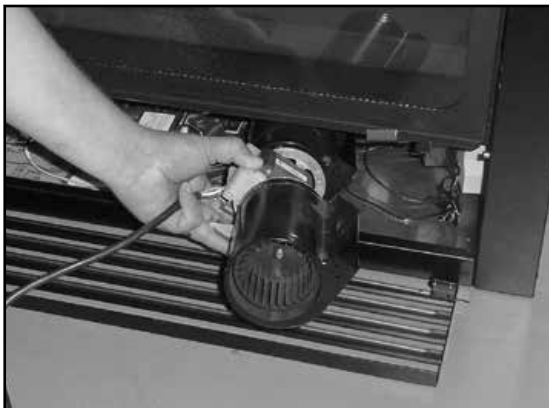


Figure 3 Insert the Fan into the Appliance (avoiding wires)

3. Wiring the Fan Control Module

Note: Fan control timer only for use on units with junction box pictured in Figure 5.

- **Robertshaw Valve (Standing Pilot)**

- Connect the black, white and red wires with 1/4 in. female connectors from the fan control module to the appliance junction box as shown in Figure 5.
- Connect the black ground wire with the ring terminal to the TP screw on the valve (center).
- Remove wall switch wire connected to valve terminal marked "TH".
- Connect the black with white stripe wire with 3/16 in. piggyback connector from fan control module to valve terminal marked "TH".
- Connect wall switch wire removed from valve terminal "TH" to the piggyback connector on the black with white stripe fan control module wire.

Note: Thermopile must be wired as shown in Figure 5.

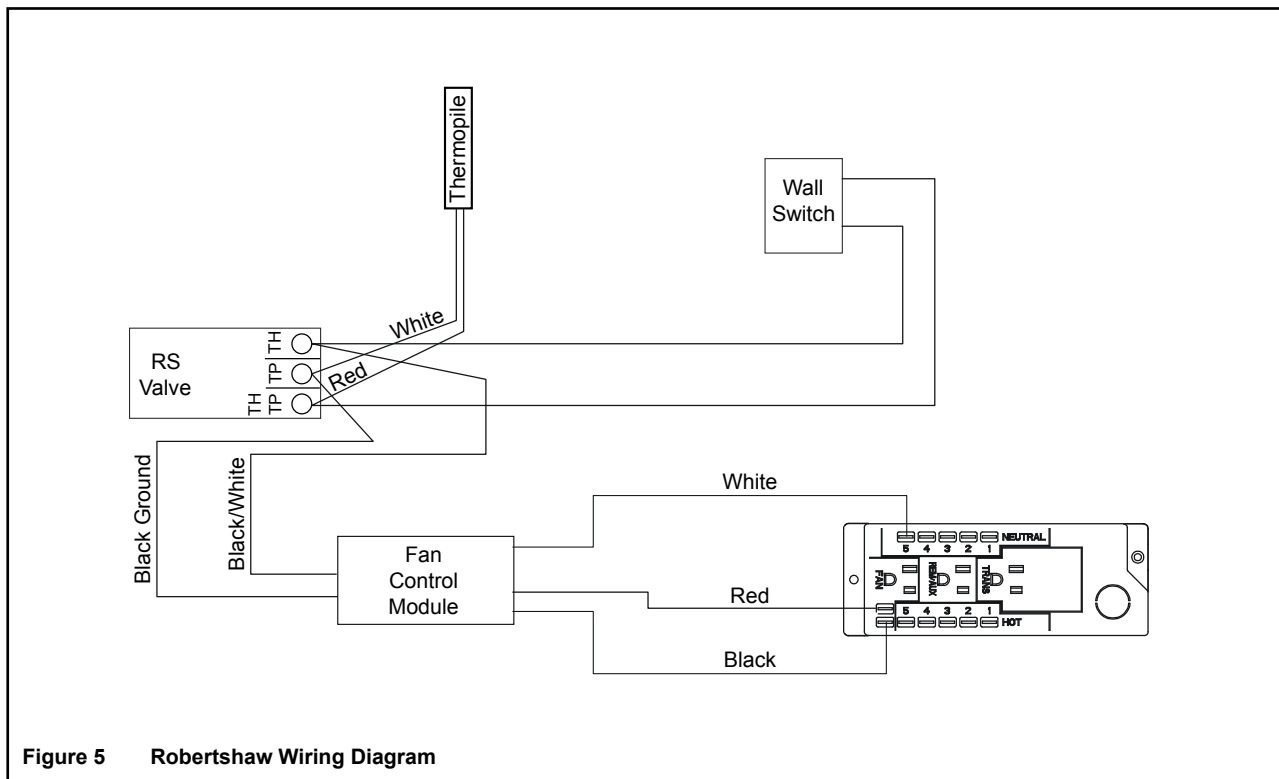


Figure 5 Robertshaw Wiring Diagram

- **Dexen Valve (IPI) ***

- Connect the black, white and red wires with 1/4 in. female connectors from fan control module to appliance junction box as shown in Figure 10.
- Connect the black ground wire to the appliance.
- Remove the green ignition control wire from the valve.
- Connect the black with white stripe wire with 3/16 in. piggyback connector from fan control module to valve.
- Connect green ignition control wire to piggyback connector on black with white stripe fan control module wire.

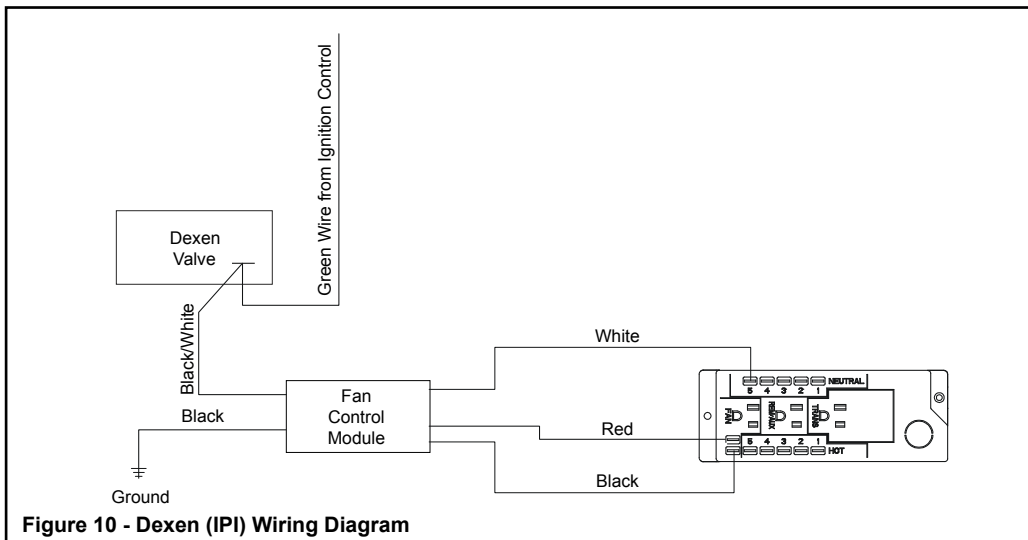


Figure 10 - Dexen (IPI) Wiring Diagram

*Includes Intellifire-Plus when using RC100. Fan timer. **Not Used with RC200 or RC300.**

- **SIT Valve**

- Connect the black, white and red wires with 1/4 in. female connectors from fan control module to appliance junction box as shown in Figure 11.
- Connect the black ground wire with the ring terminal to the TP screw on the valve (center).
- Connect blue jumper wire between fan control wire (black with white stripe) and valve. Plug 1/4 in. female end of blue jumper wire to the back side of valve wiring block marked TH.

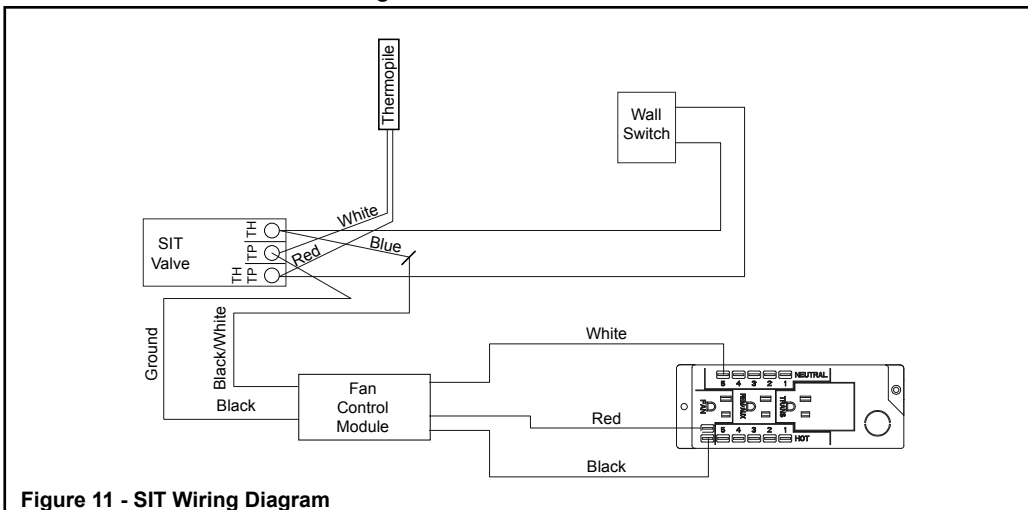


Figure 11 - SIT Wiring Diagram

➔ 6. Recommended Fan Control Set-up Procedure

Note: The test sequence works only during the first (approximately) seven minutes after power-up.

- With burner and pilot extinguished:
- Turn control knob clockwise to activate control.
- Press and hold test button on the control module.
 - Fan will turn on.
 - Adjust fan speed to the desired speed using the control knob.
 - Release test button. Fan will stop.
- Fan control is now fully operational and will operate automatically each time appliance is used.
- Operates with APPROXIMATELY a 7-minute delay to turn on and a 12-minute delay to turn off.