SKYTECH
PRODUCTS GROUP

Model: FK-165-RT-M
INSTALLATION AND OPERATION INSTRUCTIONS

IF YOU CANNOT READ OR UNDERSTAND THESE INSTALLATION INSTRUCTIONS DO NOT ATTEMPT TO INSTALL OR OPERATE
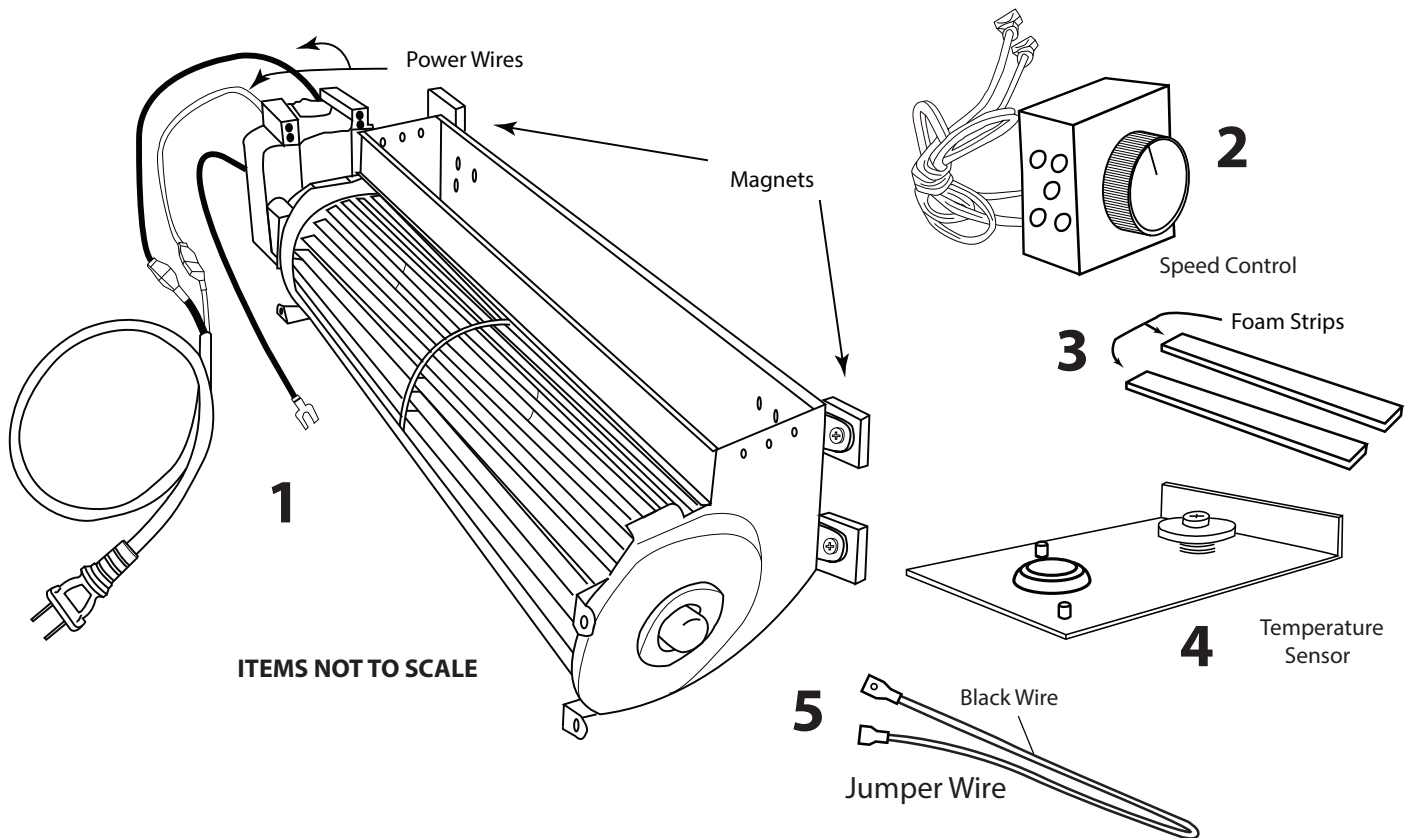
INTRODUCTION

The FK-165-RT-M fan kit has been designed to circulate room air through many hearth products in the industry. The FK-165-RT-M operates on 120VAC, 60Hz power. The fan dimensions are 12-3/4" W x 4" H x 3-1/2" D. The fan comes pre-wired and ready to install and the speed control and temperature sensor feature magnets for quick and convenient installation.

NOTE: Power must be provided through an approved factory installed junction box from product's manufacturer.

The speed control provided with the fan kit system will adjust the air output. The temperature sensor will automatically turn the fan ON when the internal temperature reaches 110º F, and OFF when the internal temperature cools below 90º F.

Compare Contents of your package below:
1.   F-165-1 (Fan 24-inch polarized cord attached)
2.   FK-SP Control (Speed control with knob and magnets attached at bottom for mounting)
3.   (2) Foam mounting strips (Used under fan housing to minimize vibration if necessary)
4.   FK-Sensor (Temperature Sensor and mounting plate with magnet mount)
5.   Jumper Wire (Jumper wire connects to power cord to connect items 2 and 4 to fan)

Power Wires

Magnets

1

ITEMS NOT TO SCALE

2

Speed Control

3

Foam Strips

4

Temperature Sensor

5

Black Wire

Jumper Wire

PRECAUTIONS

Please read all the instructions before proceeding with installation.   A qualified electrician should complete all wiring. Install following all local codes and in compliance with the National Electric Code ANSI/AFPA NO. 70 or CSA C22.1 for all of North America.

STEP 1: FAN INSTALLATION

The fan is mounted upright with the magnets against the back wall of the appliance (See Fig. 1)

WARNING: ***Turn electrical power OFF at the circuit breaker before beginning this installation.***

*   If this is a replacement for an old system then simply unplug the old fan system and remove it from the appliance. If its a new install simply slide it into position as shown in Fig. 2.
*   Depending on the fireplace you may need to route the fan around the pre-existing controls and brackets.

Fig. 1 Back of fan showing (4) magnets.

*   Install the new fan into the rear of the appliance where the previous fan was installed and allow the magnets to secure it into place. NOTE: In most cases it is best to center the fan for best airflow.
*   Place the fan against the back metal wall of the appliance, centering the fan for best air flow. The magnetic feet will hold to the housing in place.
*   Plug the fan to existing control or power source.
*   Find a pre-existing hole to secure the green ground wire from the fan to the firebox or slide it under a pre-existing screw from (i.e. mounting bracket, gas valve, firebox body, etc.) somewhere within reach of the green wire to provide a solid ground.
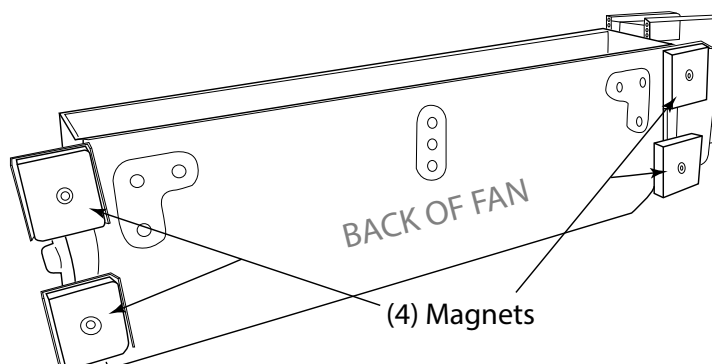
STEP 2: TEMPERATURE SENSOR & SPEED CONTROL INSTALLATION

*   Find a convenient location to mount the temperature sensor. The sensor operates best when secured to the base of the burnerpan underneath the log set toward the rear of the firebox (See Fig. 2). The magnet will hold the sensor into place against the metal surface. **NOTE**: The temperature sensor <u>MUST BE</u> installed against the metal surface with the sensor towards the heated side while fire is operating.
*   Disconnect the black power cord wire from the fan and install the black jumper wire to the black power cord wire.
*   The black jumper wire will then connect to the temperature sensor (See Fig. 2).
*   Remove the speed control assembly from the plastic bag. Find a convenient location for the speed control. It should be located somewhere toward the front of the fireplace close to the louver or opening to enable the user access to turn the speed control ON and OFF.
*   The speed control has magnet strips pre-installed on the control. Simply place the control on the bottom of the metal firebox for the user. It can be easily relocated if necessary by simply lifting upward and repositioning it.
*   Connect one wire from the speed control directly to the temperature sensor.
*   Connect the other wire from the speed control into the black end of the power cord.
*   After properly wiring the fan, temperature sensor, speed control and securing the green ground wire turn the 120VAC service back **ON** at the circuit breaker and turn your speed control knob to the **ON** position.
*   Light the fireplace and turn ON the main burner.
*   The temperature sensor will activate the fan when temperature at the sensor reaches 110°F. This may take 15 to 20 minutes. After the fan turns ON you can adjust the speed of the fan with the speed control.
*   If after 30 minutes the fan does not turn ON then check wiring, ensure the speed control is turned ON and ensure temperature sensor is against the combustion chamber. If sensor is laying directly on the base (floor) of the fireplace the fan may never turn ON.

NOTE: The foam strips supplied with this fan kit can be used as a cushion to be attached on the bottom of the fan for vibration noise if needed.
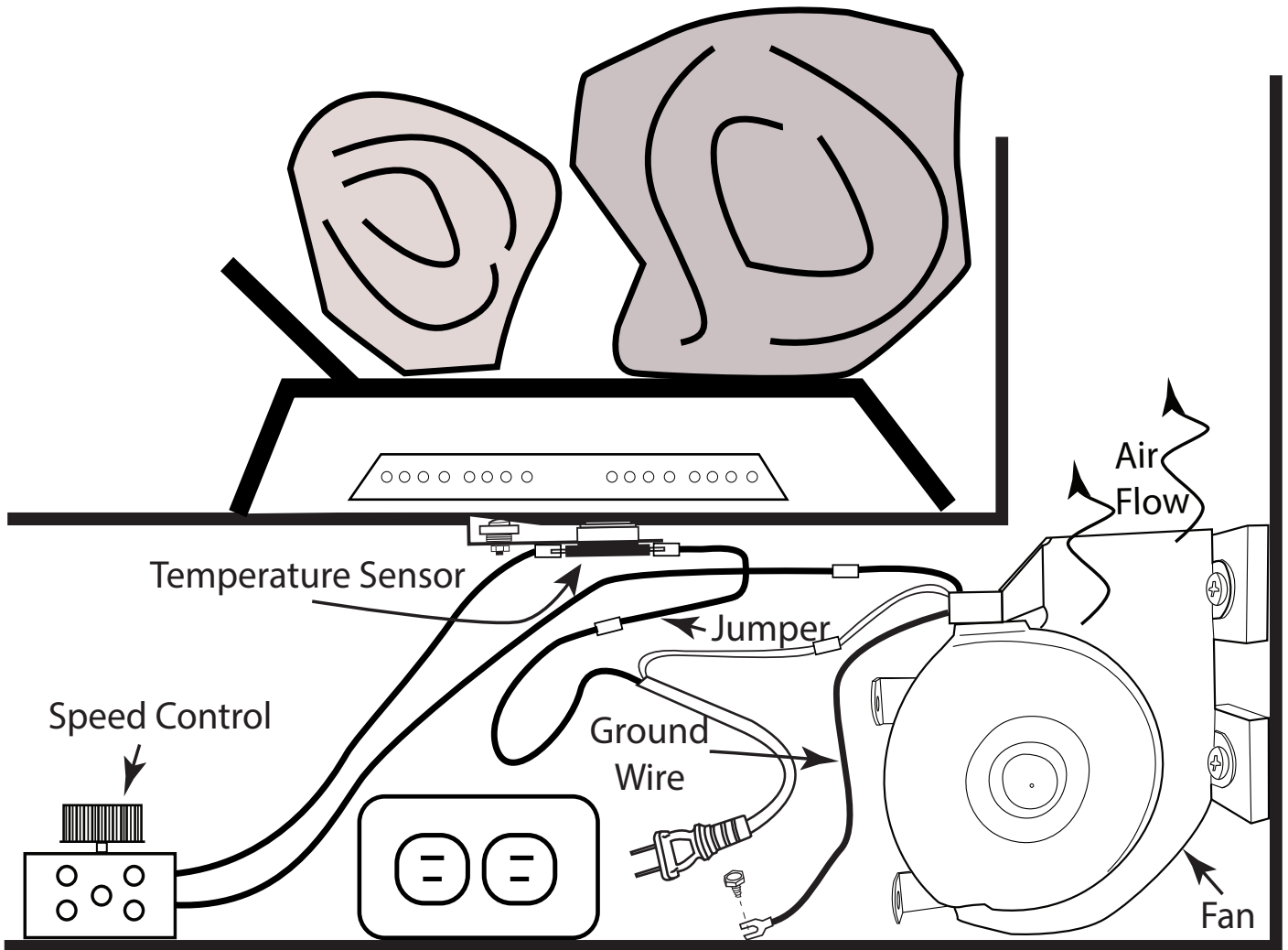
Fig. 2 Side view of a circulating fireplace showing placement of fan kit and wiring.

OPERATION PROCEDURES

The fan will not turn ON until the temperature sensor obtains 110º F on the surface of the hearth product if the temperature sensor is installed. Likewise, when the fire is turned OFF, the fan will continue to run until the hearth product cools down to 90º F.
Warning: Various conditions can contribute to the length of time the fan will turn ON or turn OFF. The fan can always be turned OFF with the speed control knob.

TROUBLESHOOTING

The fan should turn ON automatically. If not, check speed control to ensure the knob is turned ON. The time frame will vary depending on location of the temperature sensor inside the product. If the sensor is mounted directly against the burnerpan of the product it should turn ON in approximately 15-20 minutes. If the sensor is laying on the floor of the product it may take up to 30 minutes or more. If the fan does not come turn ON at all move the temperature sensor closer to an area where it can warm up an activate the fan.

MAINTENANCE

Cleaning on a semi-annual basis is required to keep the warranty in place. Dust or dirt must be removed from the fan blades, air inlets and blower outlet for the fan kit to maintain the efficiency of the system. Carefully use a vacuum with a brush to remove any dust. If unable to reach fan with a vacuum remove the fan from the appliance for easier cleaning.

TWO YEAR LIMITED WARRANTY

SKYTECH II warrants this Fan system for two years or 24 months from the date of purchase to the original owner. This warranty is NOT transferable to another person. Should any part fail because of defective workmanship or material from the original date of purchase SKTECH II will repair or replace the part at SKYTECH II option.

Damage to the Fan system caused by accident, misuse, abuse, or installation error, whether by a contractor, service company, or owner is not covered by this warranty. Modification of the Fan System will void the warranty.

The owner must provide a bill of sale, to verify purchase date and establish warranty period. SKYTECH II is not responsible for: Travel expenses, Diagnostic costs, and Service labor to repair the defective Fan system. Freight charges will not be covered on warranty parts or Fan systems.

This warranty does not cover claims, which do not involve defective workmanship or materials.

IN NO EVENT SHALL SKYTECH II BE LIABLE FOR INCIDENTAL AND CONSEQUENTIAL OCCURRENCES, INCLUDING THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS, ARE LIMITED TO THE DURATION OF THE THIS WRITTEN WARRANTY. THIS WARRATNY SUPERSEDES ALL OTHER ORAL OR WRITTEN WARRANTIES.

Some states do not allow the exclusion or limitation of incidental and consequential damages or limitation on how long an implied warranty lasts, so the above limitation may not apply to you. This warranty gives you specific rights and you may have other rights, which vary from state, province, and nation.

Warranty claims process will start with all information; SKYTECH II will reserve the right to physically inspect the product for defects, by authorized representatives.

For Technical Questions Call: 1-(855) 498-8324

For Sales: 1-(888) 672-8929
www.skytechpg.com

Skytech Products Group
9230 Conservation Way
Ft. Wayne, IN 46809

Recognized component according to UL 1004-1 and UL 1004-3 and CSA C22.2 No. 100-04 and CSA C22.2 No 77-95 R2004