



**Model: FK-180-RT**

**INSTALLATION AND OPERATION INSTRUCTIONS**

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

**INTRODUCTION**

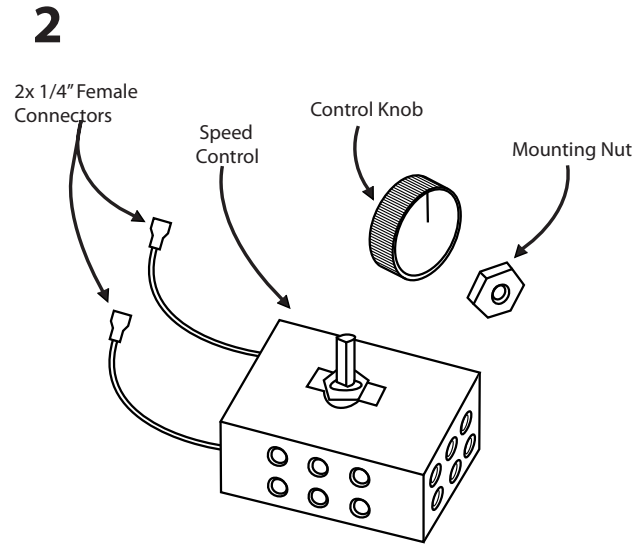
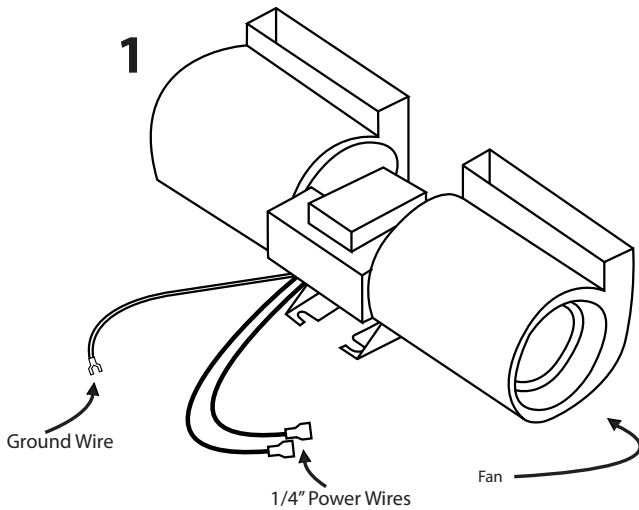
The FK-180-RT fan kit has been designed to circulate room air through many hearth products in the industry. The FK-180-RT operates on 120VAC, 60Hz power.

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

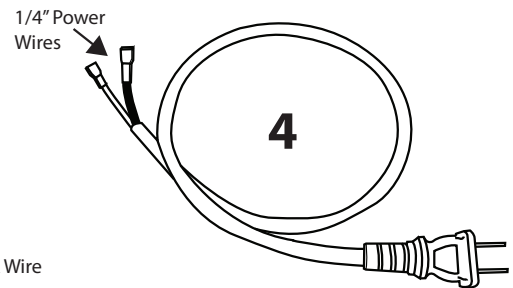
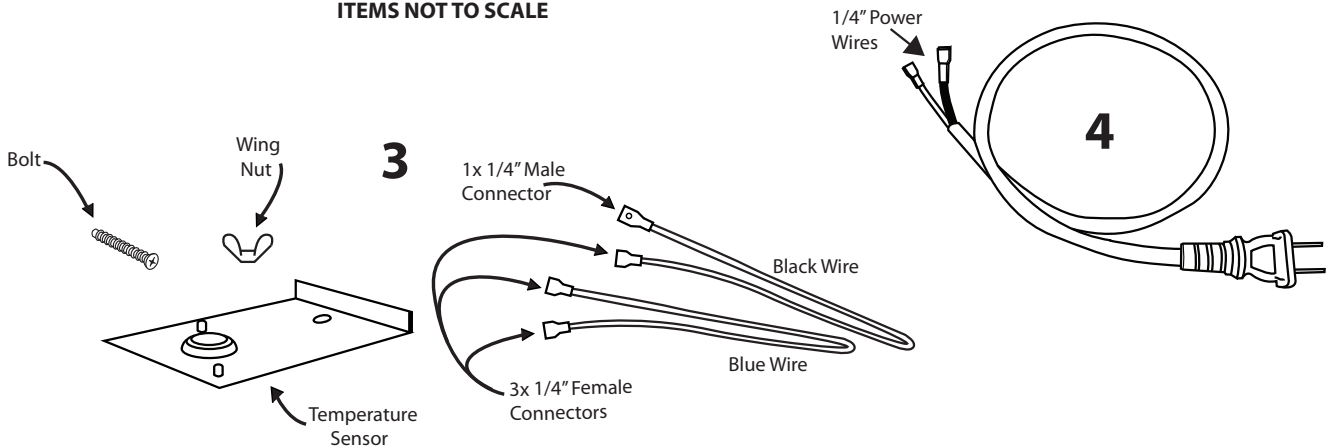
A speed control is provided with the fan kit system to adjust the air output. The temperature sensor will automatically turn the Fan ON when the internal temperature reaches 110° F, and OFF when the internal temperature cools below 90° F.

Compare Contents of your package below:

1. FK-180-1 (Fan with 2 female connectors & ground wire with fork connection)
2. FK-SP Control (Speed control with control knob and mounting nut)
3. FK-Sensor (Temperature Sensor and mounting plate with wing nut and bolt)
4. ACM24 (24-inch polarized cord)



**ITEMS NOT TO SCALE**



## PRECAUTIONS

Please read all instructions, for this fan kit and the hearth product.

Caution: All wiring should be completed by a qualified electrician. 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.

## INSTALLATION

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

1. Remove old fan system.
2. Plug the ACM24 (polarized plug) wires into the FK-180-1 fan by matching the colors.
3. Find the approved Electrical Junction Box within the hearth product.
4. Position the fan housing in the rear of the hearth product.
5. Pull the fan housing slightly away from the metal back wall (1/8" to 1/4"). The magnetic feet will hold the housing in place. (See Fig. 2)
6. Attach the green ground wire from the fan to an accessible ground source.
7. Plug the fan into the approved electrical junction box.

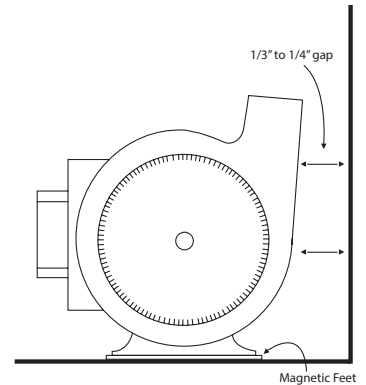


Fig. 2 Mounting Fan

## SPEED CONTROL AND TEMPERATURE SENSOR

1. Find the temperature sensor mounting location. Sensor operates best when secured to the base of the burnerpan or outside of the combustion casing of the hearth product. If the sensor is not a part of this installation then omit this step.
2. Place the temperature sensor bracket into location. Using the bolt and wing nut, tighten against the metal surface. (See Fig. 3)

**NOTE:** The temperature sensor and bracket **MUST BE** installed flat on the metal surface with the sensor towards the fire.

3. Remove the speed control, knob, and nut from the plastic bag. Locate the area for installation on this hearth product. Check the hearth product's instruction manual for proper location.
4. Place the stem of the speed control into the hole for the control. Place the mounting nut over the plastic stem and tighten. (See Fig. 4)

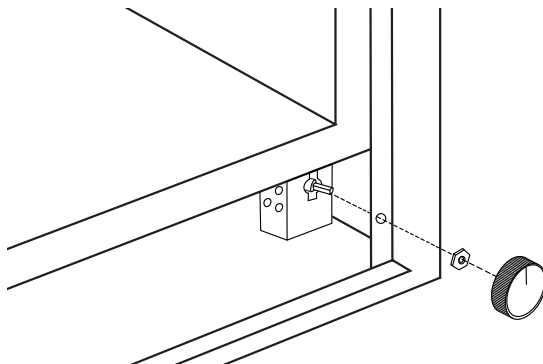


Fig. 4 Mounting Speed Control

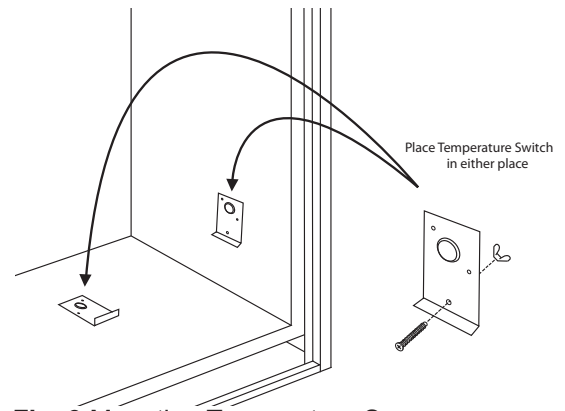


Fig. 3 Mounting Temperature Sensor

5. Place knob over the plastic stem with proper alignment.
6. Complete the connection of the speed control and temperature sensor. (See Fig. 5)
7. After properly wiring the FK-180-RT turn the 120VAC service to **ON** at the circuit breaker and turn your speed control to **ON**.

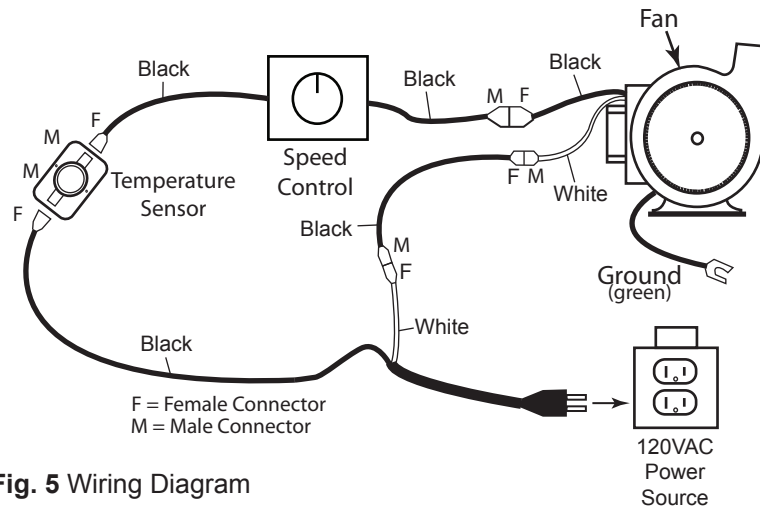


Fig. 5 Wiring Diagram

## **OPERATION PROCEDURES**

The fan will not turn ON until the temperature sensor obtains 110°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 90°F.

**Warning: Various conditions can contribute to the length of time the fan will remain ON or OFF. The fan can always be turned OFF with the speed control knob.**

## **TROUBLESHOOTING**

The fan should turn ON automatically. If not, check the 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 burner pan 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.

## **ONE YEAR LIMITED WARRANTY**

SKYTECH II warrants this Fan system for one year or 12 months from the date of purchase or installation 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 SKYTECH 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, cancelled check or a payment record should be kept 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 WARRANTY 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.

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