



Model: FK-165-RT

INSTALLATION AND OPERATION INSTRUCTIONS

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

INTRODUCTION

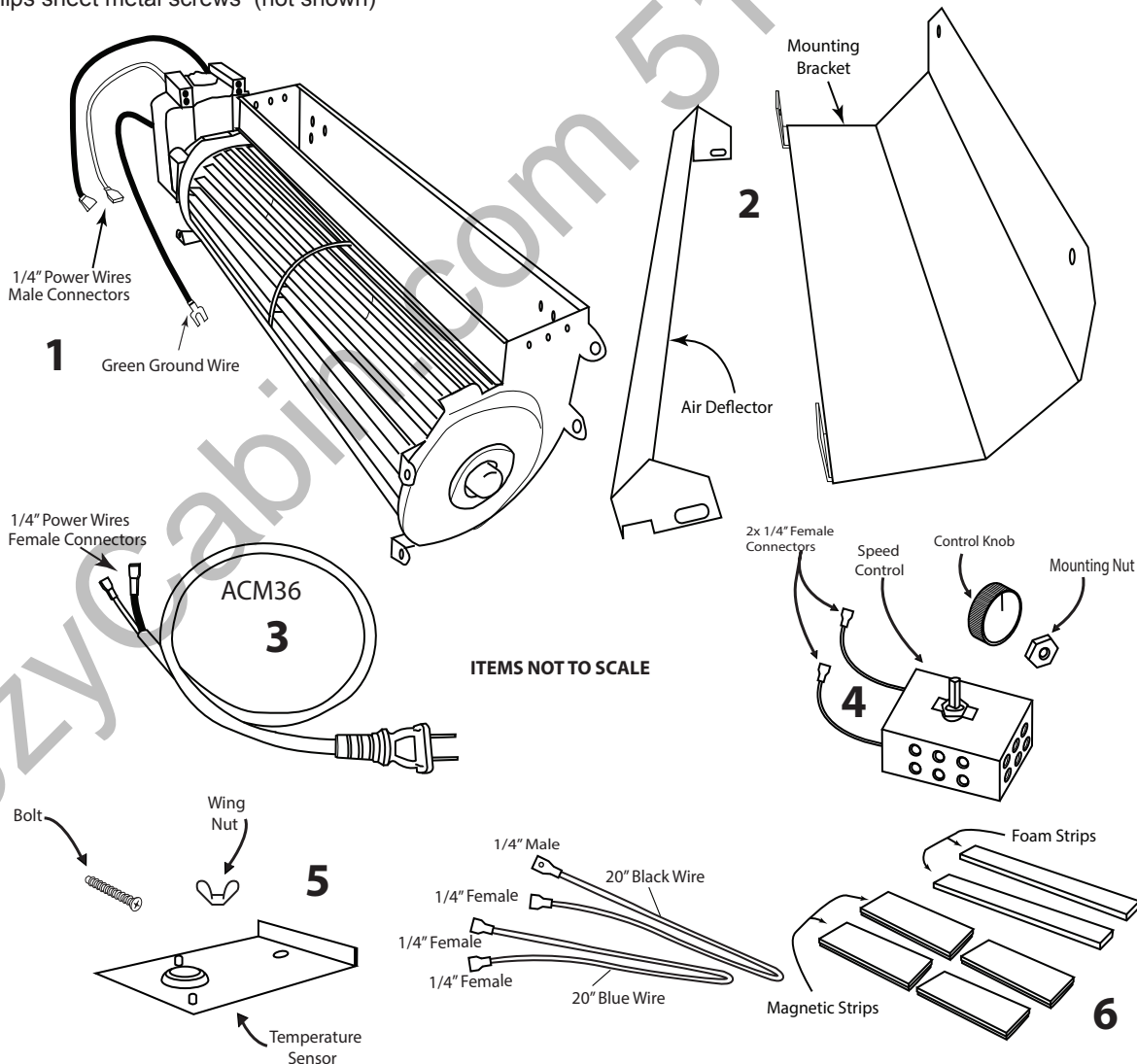
The FK-165-RT fan kit has been designed to circulate room air through many hearth products in the industry. The FK-165-RT operates on 120VAC, 60Hz power. The fan dimensions are 12-3/4" W x 4" H x 3-1/2" D.

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. F-165-1 (Fan with 2 female connectors & ground wire with fork connection)
2. Air Deflector and Mounting bracket
3. ACM24 (24-inch polarized cord)
4. FK-SP Control (Speed control with control knob and mounting nut)
5. FK-Sensor (Temperature Sensor and mounting plate with wing nut and bolt)
6. (2) Magnetic and (2) Foam mounting strips
7. (6) Phillips sheet metal screws (not shown)



PRECAUTIONS

Please read all the instructions before proceeding with installation. **NOTE:** Not all parts included are required.

CAUTION: 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.

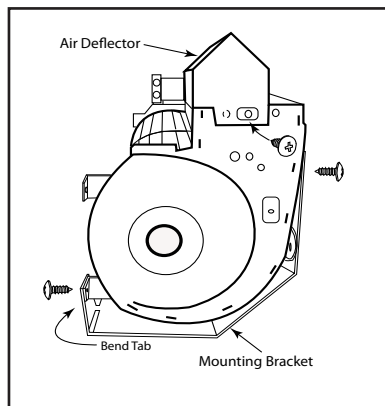


Fig. 1 Deflector installation.

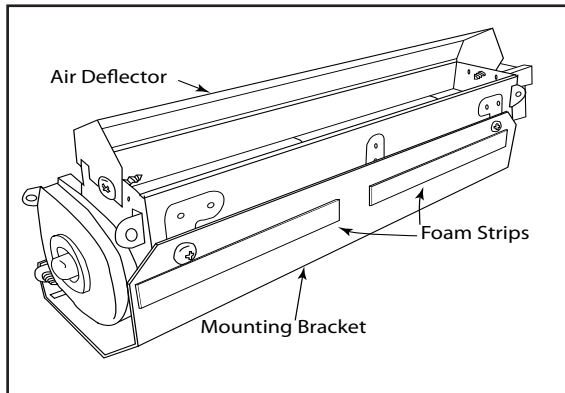


Fig. 2 Installing foam strips.

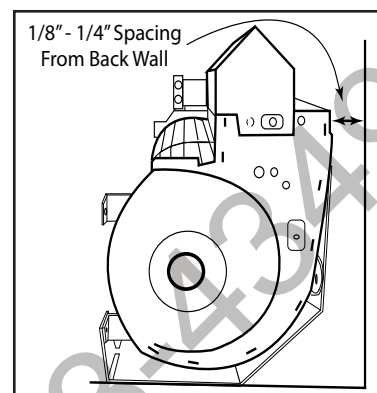


Fig. 3 Spacing from wall.

INSTALLATION

NOTE: *Novus appliances do not require the use of the air deflector.*

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

1. Unplug the old fan system and remove it from the appliance. In some cases the existing mounting bracket may be used. If not use the mounting bracket supplied with this fan kit.
2. Mount the air deflector on the F-165-1 fan. See Fig 1. The deflector sits on top of the fan as shown and secures to the middle hole of the fan on each side. **NOTE:** Some installations may not require the deflector.
3. If using the mounting bracket supplied with the F-165-1 bend the tabs as shown in Fig 1. **NOTE:** In some installations you may use the existing mounting bracket from the appliance. Secure the mounting bracket for the fan in (4) places using the supplied sheet metal screws mating to the aligned holes on the fan housing.
4. Peel the protective covering from the foam strips and place them to the mounting bracket as shown in Fig 2.
5. Cut the magnets in half using tin snips as shown on front page. Peel the protective coating from the magnets place them on the bottom of the mounting bracket as shown in Fig 4.
6. If necessary secure (attach) the ACM24 wires to the F165-1 fan by matching colors, black to black and white to white.
7. Install the new F-165-1 fan housing in the rear of the appliance where the previous fan was installed.
8. Pull the fan housing slightly away from the back metal wall (1/8" to 1/4") of the appliance. The magnetic feet will hold to the housing in place. Fig 3
9. Attach the F-165-1 fan ground (green) wire to an accessible ground source.
10. Attach fan to existing control or power source.

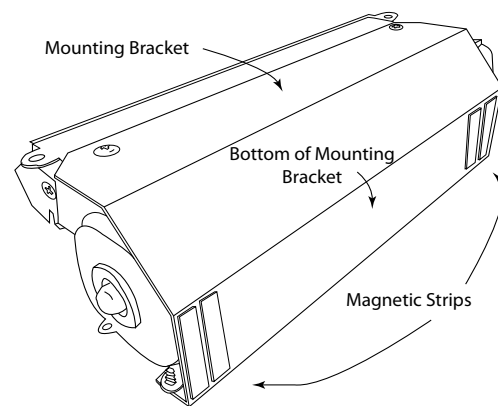


Fig. 4 Magnet placement

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/chamber 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. 5)

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

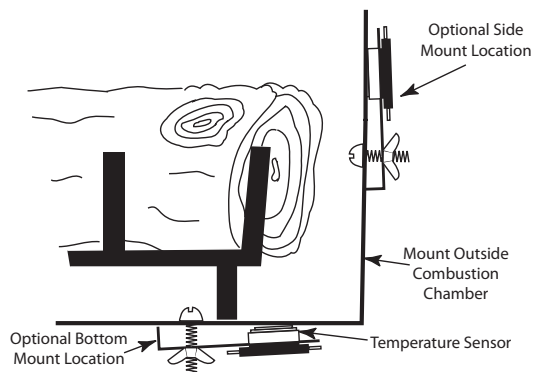


Fig. 5 Mounting Temperature Sensor

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. 6)
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 (Fig. 7) the FK-165-RT turn the 120VAC service to **ON** at the circuit breaker and turn your speed control to **ON**. **Note:** The temperature sensor will activate the fan when temperature at the sensor reaches 110°F. This may take 15 to 20 minutes. If after 30 minutes the fan does not turn ON then check wiring, ensure 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:** Blue wire can be use as an extension if needed.

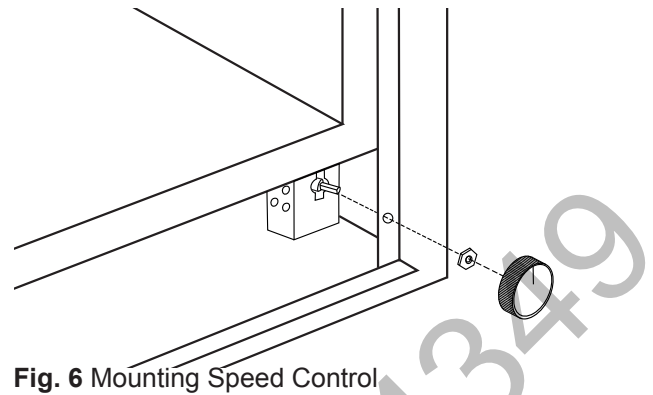


Fig. 6 Mounting Speed Control

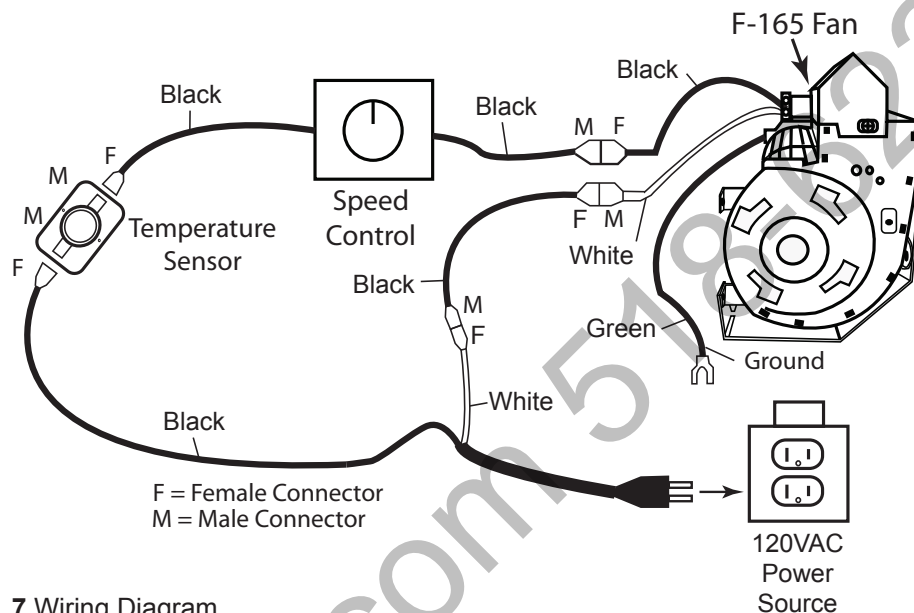


Fig. 7 Wiring Diagram

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 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 and 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.



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

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 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, 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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