

# IMPORTANT INSTRUCTIONS - OPERATING MANUAL

Models: BFO50, BFO70, BFO75, BFO90,  
BFO110, BFO140, BFO175



Exhaust Fan

## READ AND SAVE THESE INSTRUCTIONS

READ CAREFULLY BEFORE ATTEMPTING TO ASSEMBLE, INSTALL, OPERATE OR MAINTAIN THE PRODUCT DESCRIBED. PROTECT YOURSELF AND OTHERS BY OBSERVING ALL SAFETY INFORMATION. FAILURE TO COMPLY WITH INSTRUCTIONS COULD RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE!

**RETAIN INSTRUCTIONS FOR FUTURE REFERENCE.**

## GENERAL SAFETY INFORMATION

When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock and injury to person, including the following:

1. Read all instructions before installing or using exhaust fan.
2. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
3. Before servicing or cleaning the unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
4. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-related construction.
5. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back drafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA) and the American Society for Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE), and the local code authorities.
6. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
7. Ducted fans must always be vented to the outdoors.
8. This unit must be grounded.
9. To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit.
10. Acceptable for use over a bathtub or shower when installed in a GFCI protected branch circuit.
11. NEVER place a switch where it can be reached from a tub or shower.

**WARNING: TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, DO NOT USE THIS FAN WITH ANY SOLID-STATE SPEED CONTROL DEVICE.**

**WARNING: DO NOT USE IN KITCHENS**

**CAUTION: FOR GENERAL VENTILATING USE ONLY. DO NOT USE TO EXHAUST HAZARDOUS OR EXPLOSIVE MATERIALS AND VAPORS.**

## SAVE THESE INSTRUCTIONS

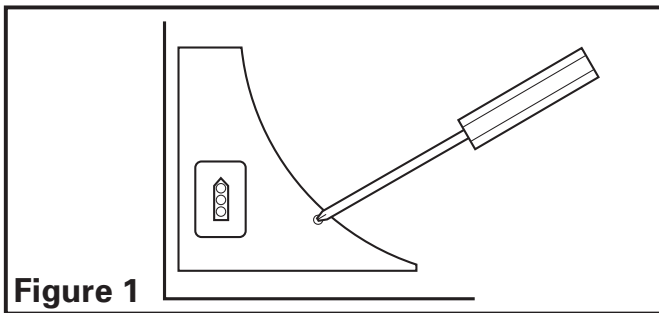
# INSTALLATION INSTRUCTIONS

**CAUTION: MAKE SURE POWER IS SWITCHED OFF AT SERVICE PANEL BEFORE STARTING INSTALLATION.**

## SECTION 1

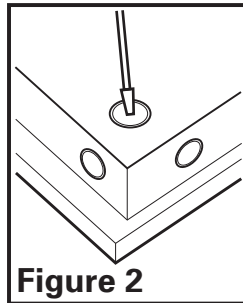
### Preparing the Exhaust Fan

1. Unpack fan from the carton and confirm that all pieces are present. In addition to the exhaust fan you should have:
  - 1 - Grill
  - 1 - Damper Assembly (attached)
  - 1 - Mounting Bracket
  - 1 - Hardware Bag
    - 1 - Electrical Connector
    - 3 - Wire Nuts
  - 1 - Instruction/Safety Sheet
2. Remove the wire compartment cover and store in the carton until needed so it does not get damaged or lost (**Figure 1**).



**Figure 1**

3. Choose the location for your fan. To ensure the best air and sound performance, it is recommended that the length of ducting and the number of elbows be kept to a minimum, and that insulated hard ducting be used. Larger duct sizes will reduce noise and airflow restrictions.
4. Select the most convenient electrical knockout and remove using a straight-blade screw driver (**Figure 2**).

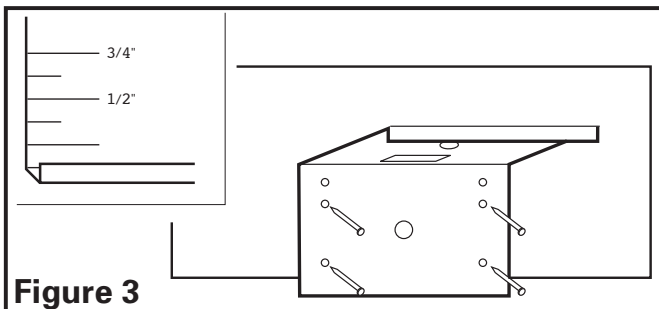


**Figure 2**

## SECTION 2

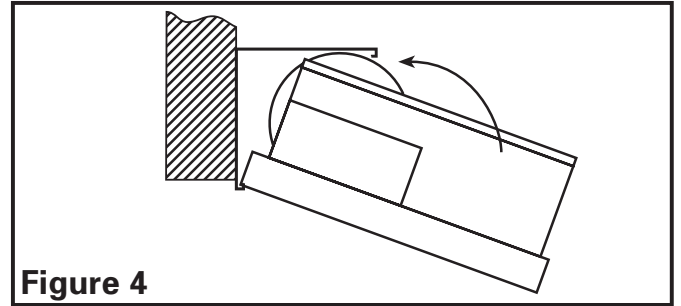
### New Construction

1. Using the gauge on the mounting bracket, line up the bracket on the joist so the bottom of the fan will be flush with the finished ceiling. Nail or screw the bracket in place securely (**Figure 3**).



**Figure 3**

2. Snap the fan body into the bracket (**Figure 4**). The fan can be snapped into position with the duct collar facing to the left or the right depending which is most convenient.

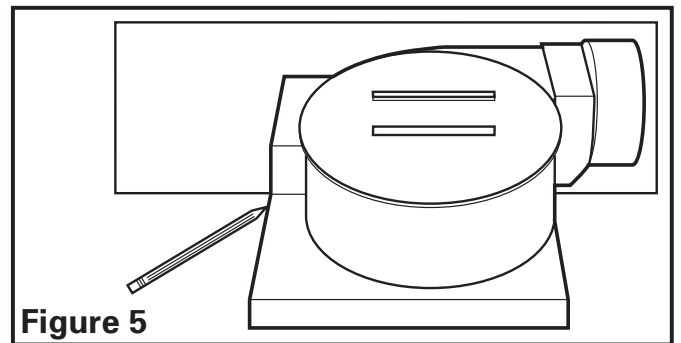


**Figure 4**

## SECTION 3

### Existing Construction

1. Position housing against the joist or stud and trace an outline of the housing onto the ceiling/wall material. Set housing aside and cut opening, being careful not to cut or damage any electrical or other hidden utilities (**Figure 5**).



**Figure 5**

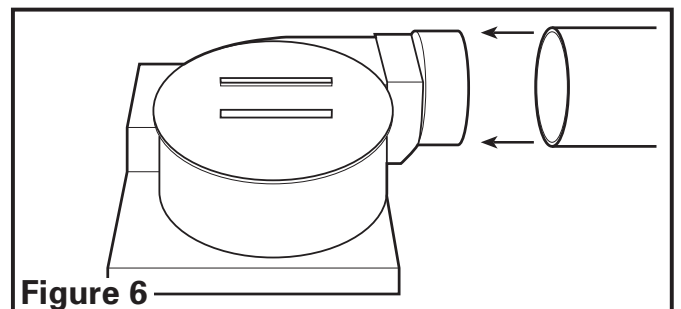
2. Line up the bracket on the joist so the bottom of the fan will be flush with the finished ceiling. Nail or screw the snap-in bracket in place securely (**Figure 3**).
3. Snap the fan body into the bracket (**Figure 4**). The fan can be snapped into position with the duct collar facing to the left or the right depending which is most convenient.

## SECTION 4

### Ducting

**CAUTION: ALL DUCTING MUST COMPLY WITH LOCAL AND NATIONAL BUILDING CODES.**

1. Connect the ducting to the fan's duct collar (**Figure 6**). Secure in place using tape or screw clamp. Always duct the fan to the outside through a wall or roof cap.



**Figure 6**

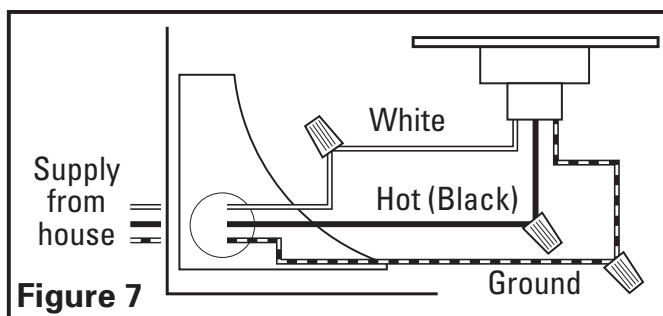
## SECTION 5

### Wiring

**CAUTION: MAKE SURE POWER IS SWITCHED OFF AT SERVICE PANEL BEFORE STARTING INSTALLATION.**

**CAUTION: ALL ELECTRICAL CONNECTIONS MUST BE MADE IN ACCORDANCE WITH LOCAL CODES, ORDINANCES, OR NATIONAL ELECTRICAL CODE. IF YOU ARE UNFAMILIAR WITH METHODS OF INSTALLING ELECTRICAL WIRING, SECURE THE SERVICES OF A QUALIFIED ELECTRICIAN.**

1. Run wiring from an approved wall switch carrying the appropriate rating. One neutral (white), one ground (green or bare copper), and one hot (black lead connected to the switch). Secure the electrical wires to the housing with an approved electrical connector. Make sure you leave enough wiring in the box to make the connection to the fan's receptacle.
2. From where you have access to inside the fan's junction box, connect the White wire from the house to the White wire from the fan's receptacle. Connect the Black wire from the wall switch to the Black wire from the fan's receptacle. Connect the ground wire from the house to the Green wire from the fan's receptacle (**Figure 7**). Use approved methods for all connections.

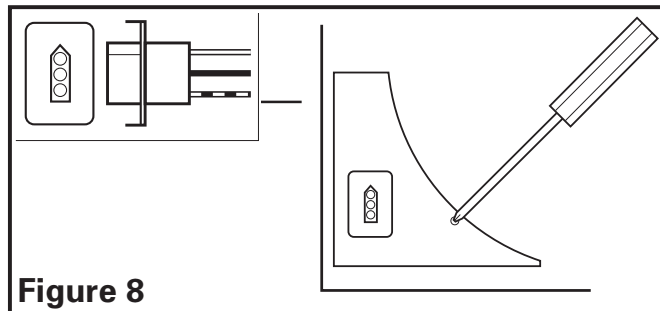


**Figure 7**

## SECTION 6

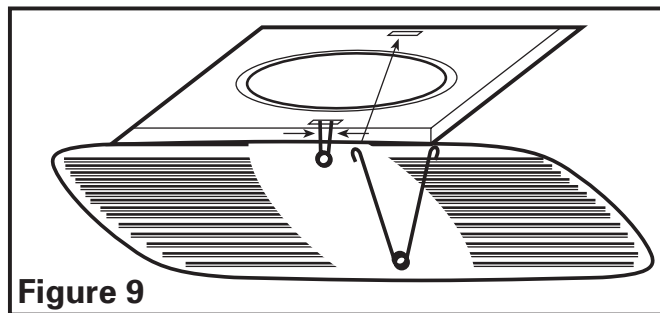
### Completing the Installation

1. Reinstall the fan's wire compartment cover. Rotate the blower wheel by hand to ensure it spins freely. Plug the fan's quick connect motor cord into the receptacle. This cord will only fit one way into the receptacle (**Figure 8**).



**Figure 8**

2. Install the grill by squeezing the two ends of the springs together and installing them up into the slots of the fan's housing. Push the grill up into position (**Figure 9**).



**Figure 9**

3. Restore power and test your installation.

## SECTION 7

### Use and Care

**CAUTION: MAKE SURE POWER IS SWITCHED OFF AT SERVICE PANEL BEFORE SERVICING THE UNIT.**

1. **Cleaning the Grill:** Remove grill and use a mild detergent, such as dishwashing liquid, and dry with a soft cloth. NEVER USE ANY ABRASIVE PADS OR SCOURING POWDERS. Completely dry grill before reinstalling. Refer to instructions in **Section 6 Finishing the Installation**, to reinstall grill.
2. **Cleaning the Fan Assembly:** Unplug the motor cord from receptacle. Wipe all parts with a dry cloth or gently vacuum the fan. NEVER IMMERSE ELECTRICAL PARTS IN WATER. Plug the motor cord back in and restore power.

## Troubleshooting Guide

Trouble	Probable Cause	Suggested Remedy
1. Fan does not operate when the switch is on.	1a. A fuse may be blown or a circuit tripped. 1b. Connector plug from motor is not plugged in. 1c. Wiring is not connected properly.	1a. Replace fuse or reset circuit breaker. 1b. Turn off power to unit. Remove Grill and plug motor into receptacle in housing. Restore power to unit. 1c. Turn off power to unit. Check that all wires are connected.
2. Fan is operating, but air moves slower than normal.	2. Obstruction in the exhaust ducting.	2. Check for any obstructions in the ducting. The most common are bird nests in the roof cap or wall cap where the fan exhausts to the outside.
3. Fan is operating louder than normal.	3a. Motor is loose. 3b. Fan blade is hitting housing of unit.	3a. Turn off power to unit. Remove grill and check that all screws are fully tightened. Restore power to unit. 3b. Call your dealer for service.

## LIMITED WARRANTY

All products manufactured by Air King Limited are warranted for one year from the date of purchase against defects in workmanship and/or material. In addition, all ventilating/exhaust fans, heaters, combination fan lights and/or heaters, and range hoods are guaranteed for five years from the date of purchase against defects in workmanship and/or material.

This warranty does not cover any labor or shipping costs or the cost of replacement components as part of routine maintenance such as: range hood grease filters, charcoal filters or combination charcoal/grease filters; replacement light bulbs in range hoods or bathroom fan/light/bulb heater combinations. As well, any damage or failure caused by abuse, misuse, abnormal usage, faulty installation, or improper maintenance will not be covered by this warranty.

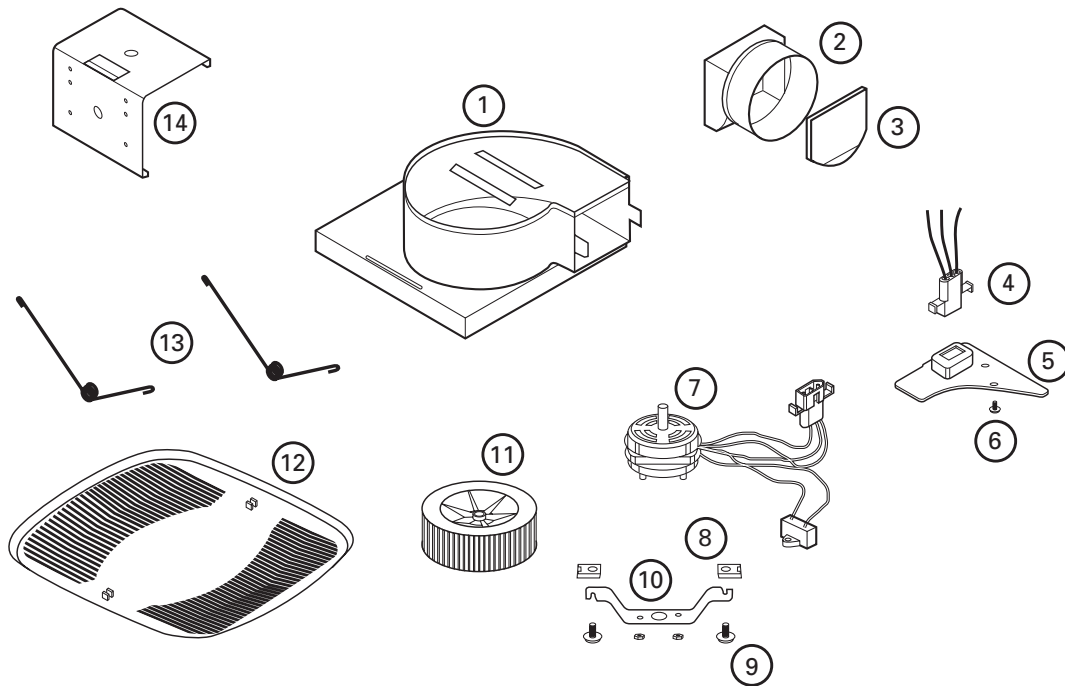
In order to make a claim on this warranty, you must be the original consumer of the product. You will be required to present to Air King the original bill of sale showing: date of purchase, place of purchase and model purchased. Failure to meet these requirements will void your warranty.

Air King will not be held responsible for any bodily injury or damages to personal property or real estate whether caused directly or indirectly by the product. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages and some states do not allow limitations on how long an implied warranty lasts, so these exclusions or limitations may not apply to you. This warranty gives you specific legal rights and you may have other rights which vary from state to state and province to province.

## FOR PARTS OR TECHNICAL ASSISTANCE

Please call: 1-800-465-7300, **MONDAY THROUGH FRIDAY, BETWEEN THE HOURS OF 8 AM AND 4:00 PM EST.**  
**PLEASE DO NOT RETURN PRODUCT TO PLACE OF PURCHASE.**

Reference the type and style of product (located on label inside of the product) when you call.  
 For more information please visit our website: [www.airkinglimited.com](http://www.airkinglimited.com)



#	Qty.	Description	Replacement Part #
1	1	Fan Housing	5S2205001
2	1	Collar	5S2205002
3	1	Damper	5S2205003
4	1	Polarized Nylon Receptacle 3P	5S2205004
5	1	Wire Cover	5S2205005
6	1	Screw	5S2205006
7	1	Motor - BFQ50	5S2299011
	1	Motor - BFQ70	5S2299012
	1	Motor - BFQ75	5S2299012
	1	Motor - BFQ90	5S2299001

#	Qty.	Description	Replacement Part #
7	1	Motor - BFQ110	5S2205008
	1	Motor - BFQ140	5S2299002
	1	Motor - BFQ175	5S2299013
8	2	Clip	5S2205009
9	2	Screw	5S2205010
10	1	Motor Bracket	5S2299003
11	1	Blower Wheel	5S2299004
12	1	Grill	5S2205011
13	2	Grill Springs	5S2205012
14	1	Snap In Bracket	5S2205013

Installer: \_\_\_\_\_

Installation Date: \_\_\_\_\_

Place of Purchase: \_\_\_\_\_

Model Number: \_\_\_\_\_