

IMPORTANT INSTRUCTIONS - OPERATING MANUAL

Models: AKF50LS, AKF80LS,
AKF100LS



Exhaust Fan with Light

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:

WARNING: TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK AND INJURY TO PERSON, OBSERVE THE FOLLOWING:

- a) Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
- b) 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.

WARNING: TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK AND INJURY TO PERSON, OBSERVE THE FOLLOWING:

- a) Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-related construction.
- b) 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.
- c) When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.

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

- d) Ducted fans must always be vented to the outdoors.
- e) This unit must be grounded.
- f) To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit.
- g) Read all instructions before installing or using exhaust fan.

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

- a) Acceptable for use over a bathtub or shower when installed in a GFCI protected branch circuit.
- b) NEVER place a switch where it can be reached from a tub or shower.

WARNING: DO NOT USE IN KITCHENS.

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)
 - 4 - Mounting Rails
 - 1 - Fluorescent Lamp
 - 1 - Instruction/Safety Sheet
2. 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. This fan will require at least 8" of clearance in the ceiling or wall, and will mount through drywall up to 3/4" thick. The fan mounts between 16" or 24" on center joists using the 4 provided mounting rails.
3. Select the most convenient electrical knockout and remove using a straight-blade screw driver (Figure 1).

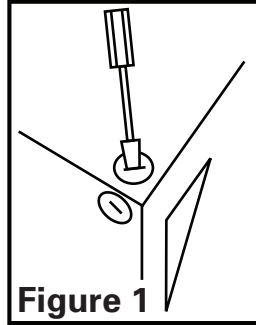


Figure 1

SECTION 2

New Construction

1. Install the rails on the housing and position the housing next to the joist. Line up housing so that it will be flush with the finished ceiling. Secure the ends of the rails with screws (not included) to the joists and slide the housing into the final position (Figure 2).

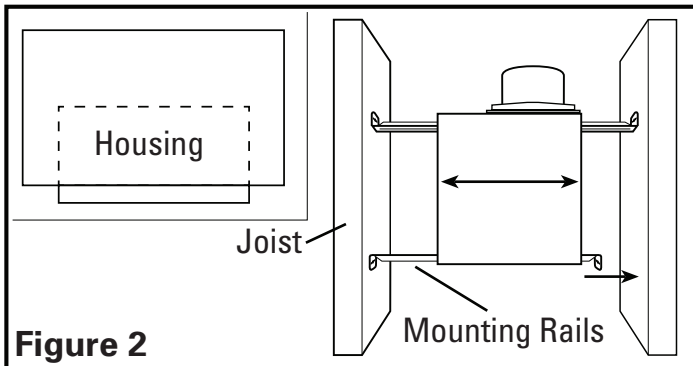


Figure 2

SECTION 3

Existing Construction

1. Set housing in position between the joist and trace an outline onto the ceiling material (Figure 3). Set housing aside and cut opening, being careful not to cut or damage any electrical or other hidden utilities. Install the rails on the housing and position the housing in the previously cut hole so that it is flush with the finished ceiling. Secure the ends of the rails to the joists (Figure 2).

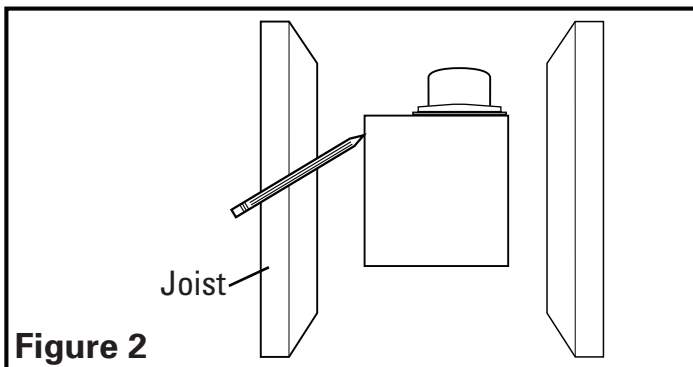


Figure 2

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 4). Secure in place using tape or screw clamp. Always duct the fan to the outside through a wall or roof cap.

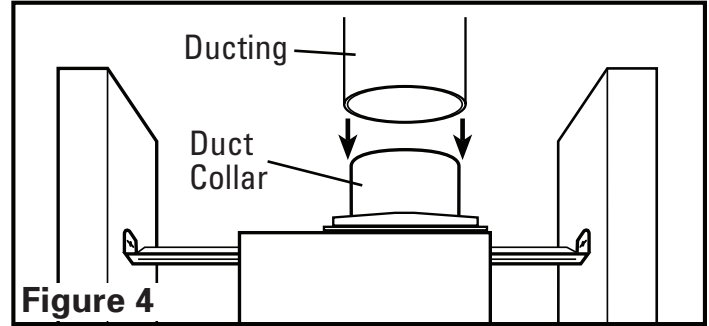


Figure 4

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.

NOTE: This unit includes a side access panel for wiring that does not require the removal of the fan's blower assembly. If you choose to wire the unit from the inside, you will need to remove the blower assembly and internal wiring compartment. Both methods are equally effective.

- 1a. **External Wire Compartment:** Remove the wire compartment cover screw and place cover in a secure place (Figure 5).

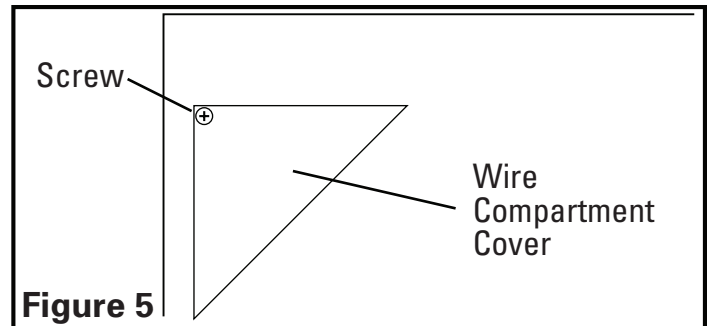


Figure 5

- 1b. **Internal Wire Compartment:** Remove the three screws holding the blower assembly in place and lift assembly out of housing (Figure 6). Remove the wire compartment cover screw and place the cover in a secure place (Figure 7).

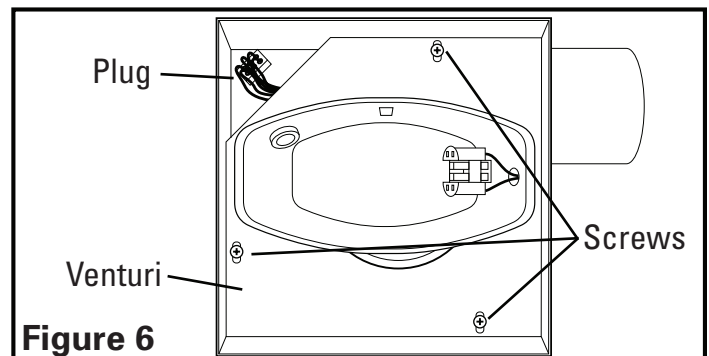
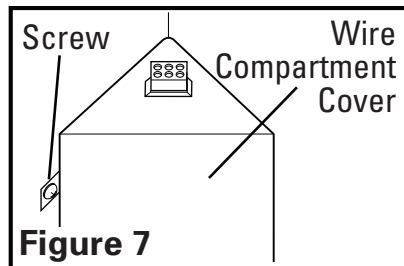
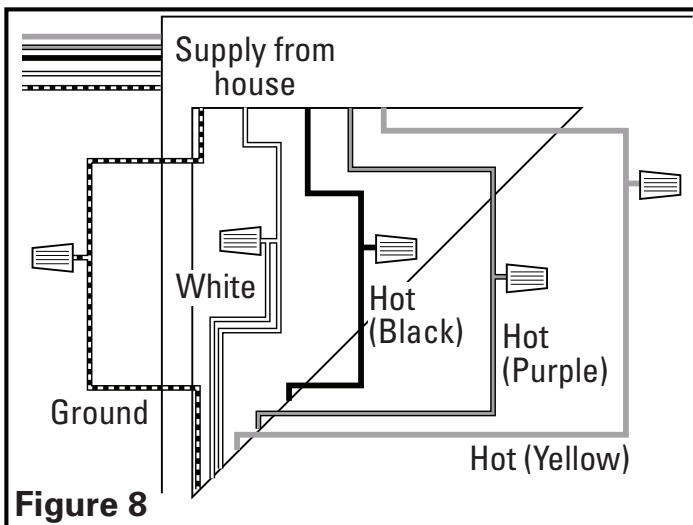


Figure 6

NOTE: If the fan motor plug is connected to the fan housing receptacle, unplug so the blower assembly can be completely removed.



- Run wiring from an approved wall switch carrying the appropriate rating. One neutral (White), one ground (green or bare copper), and three hot (Black, Purple, Yellow) leads connected to the switch, one for each function). 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.
- From where you have chosen to access the fan's junction box, connect the White wire from the house to the two White wires from the fan. Connect one Hot (Black) wire from the wall switch to the Black wire from the fan (this is the fan control). Connect second Hot (Purple) wire from the wall switch to the Purple wire from the fan (this is the night light control). Connect the third Hot (Yellow) wire from the wall switch to the Yellow wire from the fan (this is the main light control). Connect the ground wire (green or bare copper) from the house to the Green wire from the fan (**Figure 8**). Use approved methods for all connections.



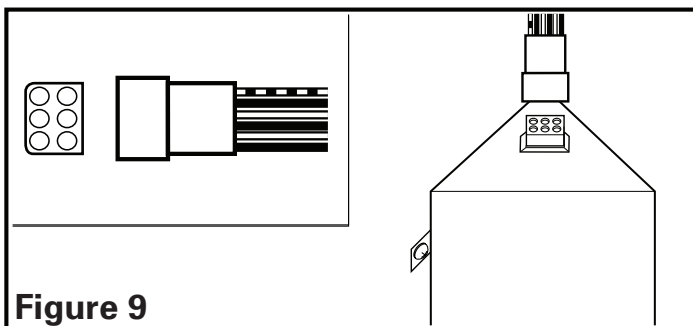
NOTE: The fan's receptacle wires might need to be pulled outside compartment for connection. Only pull the three loose wires outside of compartment. Additional wires will be present.

- Carefully tuck wires back inside wire compartment and replace wire compartment cover securing with the screw that was removed earlier.

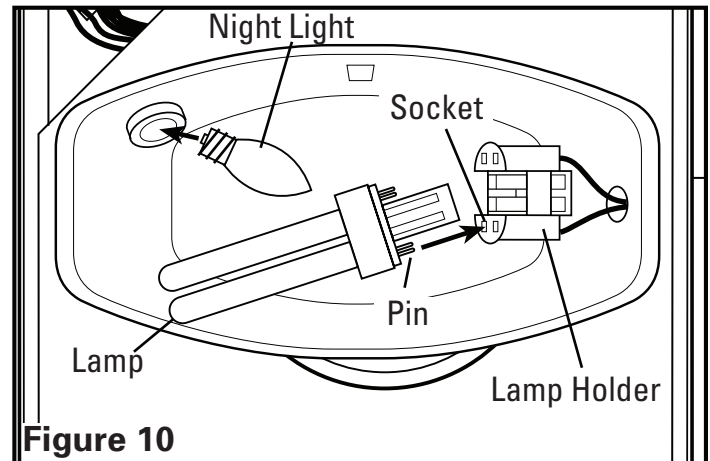
SECTION 6

Completing the Installation

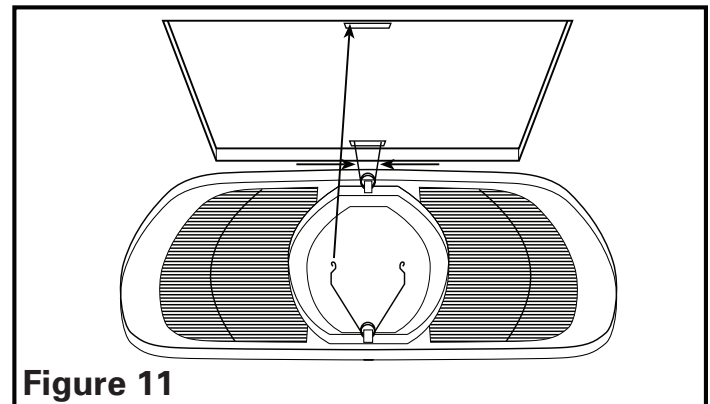
- If the fan's blower assembly was removed during the wiring process, reinstall the blower by reversing the directions in *Step 1b* in **Section 5 Wiring**.
- Plug the fan's quick connect motor cord into the receptacle. This cord will only fit one way into the receptacle (**Figure 9**).



- Install the included 26 watt fluorescent lamp into the lamp holder by lining up the pins on the lamp base to the socket of the lamp holder and pressing towards the lamp holder until the lamp snaps into place and is firmly seated in the lamp holder. Install a 4 watt maximum type C7 (candelabra base) night light (not included) into the side lamp holder (**Figure 10**).



- Install the grill by squeezing the two ends of the springs together and installing them up into the slots on the fan's housing. Push the grill up into position (**Figure 11**).



- Restore power and test your installation.

SECTION 7

Use and Care

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

- 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.
- Cleaning the Fan Assembly:** Wipe all parts with a dry cloth or gently vacuum the fan. NEVER IMMERSE ELECTRICAL PARTS IN WATER.

CAUTION: ALLOW BULBS TO COOL BEFORE REPLACING.

- Changing the Lamp: Disconnect power to the unit. Remove grill by pulling downward on grill and squeezing grill springs together to release from housing (**Figure 11**).

Fluorescent Bulb: Remove lamp by gently rocking lamp back and forth while applying outward pressure to release the lamp from the base. Replace with Air King model 26WFL or a compatible CFM26W/GX24q/35 lamp.

Sylvania model: CF26DD/E/835

GE model: F26DBXT4SPX35/4P

Phillips model: PL-C 26W/835/4P/ALTO

Night Light: Unscrew night light bulb from socket and replace with a 4 watt maximum type C7 (candelabra base) night light bulb.

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. 1d. Motor has stopped operating.	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. 1d. Replace motor.
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

WHAT THIS WARRANTY COVERS: This product is warranted against defects in workmanship and/or materials.

HOW LONG THIS WARRANTY LASTS: This warranty extends only to the original purchaser of the product and lasts for one (1) year from the date of original purchase or until the original purchaser of the product sells or transfers the product, whichever first occurs.

WHAT AIR KING WILL DO: During the warranty period, Air King will, at its sole option, repair or replace any part or parts that prove to be defective or replace the whole product with the same or comparable model.

WHAT THIS WARRANTY DOES NOT COVER: This warranty does not apply if the product was damaged or failed because of accident, improper handling or operation, shipping damage, abuse, misuse, unauthorized repairs made or attempted. This warranty does not cover shipping costs for the return of products to Air King for repair or replacement. Air King will pay return shipping charges from Air King following warranty repairs or replacement.

ANY AND ALL WARRANTIES, EXPRESSED OR IMPLIED (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY), LAST ONE YEAR FROM THE DATE OF ORIGINAL PURCHASE OR UNTIL THE ORIGINAL PURCHASER OF THE PRODUCT SELLS OR TRANSFERS THE PRODUCT, WHICHEVER FIRST OCCURS AND IN NO EVENT SHALL AIR KING'S LIABILITY UNDER ANY EXPRESS OR IMPLIED WARRANTY INCLUDE (I) INCIDENTAL OR CONSEQUENTIAL DAMAGES FROM ANY CAUSE WHATSOEVER, OR (II) REPLACEMENT OR REPAIR OF ANY HOUSE FUSES, CIRCUIT BREAKERS OR RECEPTACLES. NOTWITHSTANDING ANYTHING TO THE CONTRARY, IN NO EVENT SHALL AIR KING'S LIABILITY UNDER ANY EXPRESS OR IMPLIED WARRANTY EXCEED THE PURCHASE PRICE OF THE PRODUCT AND ANY SUCH LIABILITY SHALL TERMINATE UPON THE EXPIRATION OF THE WARRANTY PERIOD.

Some states and provinces do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so these exclusions or limitations may not apply to you. This warranty gives you specific legal rights. You may also have other rights which vary from state to state and province to province. Proof of purchase is required before a warranty claim will be accepted.

CUSTOMER SERVICE:

Toll-Free (800) 465-7300

Our Customer Service team is available to assist you with product questions, service center locations, and replacement parts. They can be reached Monday through Friday, 8am-4pm Eastern. Please have your model number available, as well as the type and style (located on the label inside of your product).

Please do not return product to place of purchase.

www.airkinglimited.com

PARTS FOR DISCONTINUED, OBSOLETE AND CERTAIN OTHER PRODUCTS MAY NOT BE AVAILABLE. DUE TO SAFETY REASONS, MANY ELECTRONIC COMPONENTS AND MOST HEATER COMPONENTS ARE NOT AVAILABLE TO CONSUMERS FOR INSTALLATION OR REPLACEMENT.

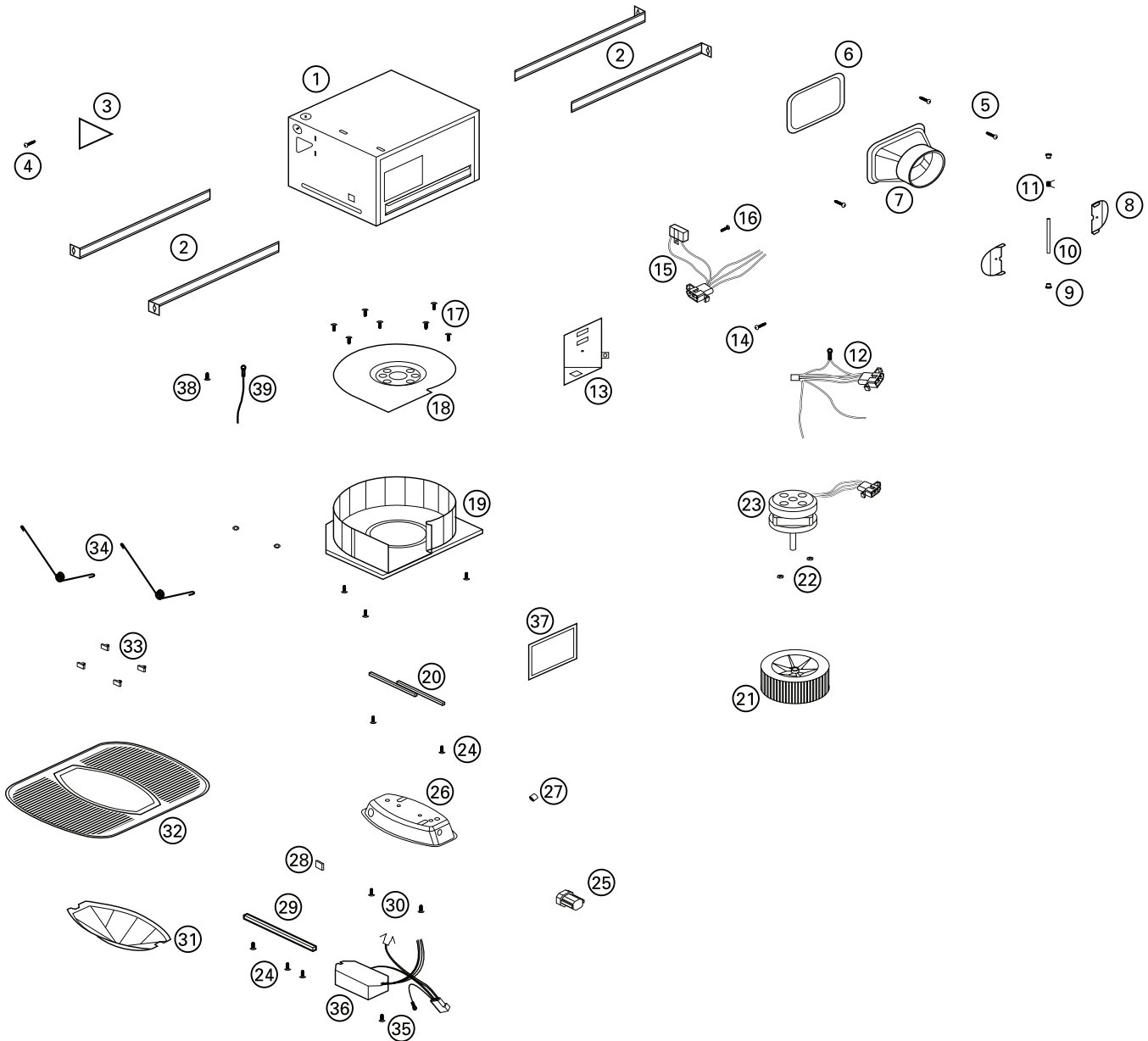
Installer: _____

Installation Date: _____

Place of Purchase: _____

Model Number: _____

REPLACEMENT PARTS DIAGRAM



#	Qty.	Description	Replacement Part #
1	1	Fan Housing	5S1202033
2	4	Mounting Rails	5S1299002
3	1	External Wire Cover	5S1202007
4	1	Screw	5S1999010
5	3	Screw	5S1999010
6	1	Gasket - Collar	5S1202029
7	1	Metal Collar	5S5202002
8	2	Damper	5S5202006
9	2	Bushing	5S5202003
10	1	Rod	5S5202005
11	1	Spring	5S5202004
12	1	Light Harness	5S1202088
13	1	Internal Wire Cover	5S1202089
14	1	Screw	5S1999010
15	1	Motor Cap Harness - AKF50LS	5S2202031
	1	Motor Cap Harness - AKF80LS	5S2202007
	1	Motor Cap Harness - AKF100LS	5S2202012
16	1	Screw	5S1999009
17	7	Blower Screws	5S2202004
18	1	Motor Plate	5S2202005
19	1	Venturi	5S2202006

#	Qty.	Description	Replacement Part #
20	1	Reflector Support Bracket	5S1202036
21	1	Blower Wheel	5S2202003
22	2	Screw	5S2202002
23	1	Motor	5S2202001
24	5	Screw	5S1202037
25	1	26 Watt Lamp Holder	5S1202090
26	1	Light Reflector	5S1202015
27	1	Bushing	5S1202018
28	1	Clip	5S1202017
29	1	Ballast Mounting Bracket	5S1202091
30	2	Screw	5S1202040
31	1	Glass Lens	5S5202001
32	1	Grill	5S1202020
33	4	Lens Clips	5S1202021
34	2	Grill Springs	5S1202092
35	1	Reflector/Ballast/Ground	5S1202093
36	1	26 Watt Ballast Harness	5S1202042
37	1	Outlet Gasket	5S1202043
38	1	#10 Ground Screw	5S1999002
39	1	14 ga Ground Wire	5S1999003