



INSTALLATION INSTRUCTIONS

AK80LS / AK110LS

READ AND SAVE THESE INSTRUCTION

IMPORTANT SAFEGUARDS

CAUTION: To reduce the risk of fire and to properly exhaust air, be sure to duct air outside - Do not vent exhaust air into spaces within walls or ceilings or into attics, crawl spaces, or garages.

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

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTIC SHOCK OR INJURY TO PERSONS OBSERVE THE FOLLOWING.

a) Use this unit only in the manner intended by the manufacturer. If you have any question, contact the manufacturer.

b) Before servicing or cleaning unit, switch power to 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.

CAUTION: For General Ventilating Use Only. Do Not Use To Exhaust Hazardous Or Explosive Materials and Vapors.

WARNING: TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, 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.

d) Ducted fans must always be vented to the outdoors.

e) If this unit is to be installed over a tub or shower, it must be marked as appropriate for the application and be connected to a GFCI (Ground Fault Circuit Interrupter) - protected branch circuit.

f) **NEVER** place a switch where it can be reached from a tub or shower

To ensure the best air and sound performance it is recommended that the largest diameter ducting is used (5" or 6"). The length of

ducting and the number of elbows should be kept to a minimum. As well to protect against condensation problems use insulated ducting. Hard ducting will provide maximum air delivery – if using flexible ducting always ensure it is pulled as tight as possible. Using a short section of flexible ducting in combination with hard ducting will reduce noise transmission.

As an added convenience for installation you do not have to remove the Fan's Blower assembly in order to install and wire this unit – You can gain access to the fan's wiring via the external wire compartment shown in fig. 1. If you choose to wire from inside the fan housing you will have to remove the fan's blower assembly and internal wiring compartment. The Blower assembly is secured in

Place with 2 hex flange nuts.

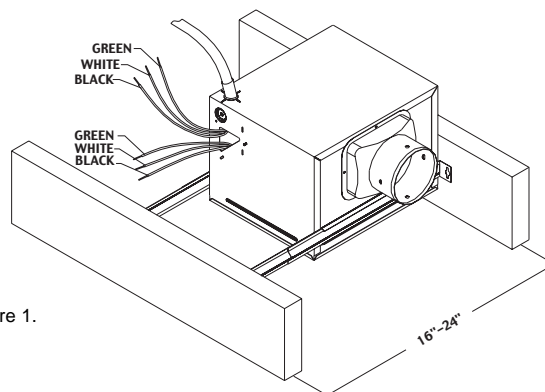


Figure 1.

MOUNTING THE HOUSING

Select the best location to mount the housing in the ceiling. This fan will require at least 8" of clearance in the ceiling will mount through drywall up to 3/4" thick. The fan housing can be mounted between 16" or 24" on center joists using the supplied 4 fan mounting rails. Figure 2 shows housing installation between 16" or 24" on center joists. Figure 3 shows housing installation directly to the joist (16" on center).

If the fan is installed in a suspended ceiling installation and mounting the fan from above is required, install the 4 fan mounting rails onto the fan housing. Pushed the rails in as tight as possible. Ensure the ends of the 4 mounting rails are evenly spaced from the edge of the housing. Use galvanized ceiling wire secured to the permanent ceiling and to the 4 mounting rail ends. Adjust the fan height so the housing will be flush with the finished ceiling.

Before cutting or drilling into any drywall check the area from above to plan the unit's wiring and duct run. Remember to keep the number of elbows and duct length to a minimum.

1. Determine the best location for the fan.
2. Select the most convenient electrical knockout and remove it.

3. Determine if you are going to use the internal or external wire compartment – remove only one of the wire covers and place it somewhere safe to be reinstalled later.
4. If the unit is being mounted in existing construction use the housing as a template to mark the necessary space on the ceiling to cut out.
5. Determine the required mounting orientation.
6. Adjust the height of the fan housing so that it is flush with the finished ceiling.

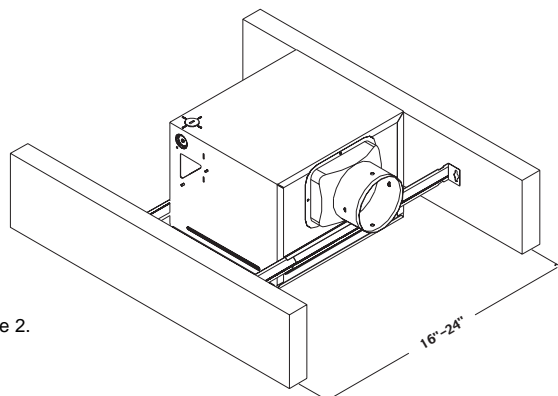


Figure 2.

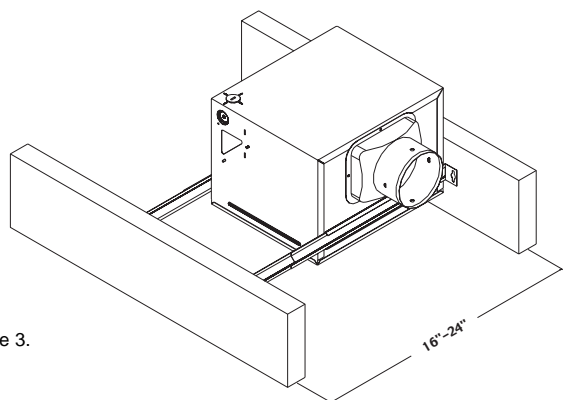


Figure 3.

DUCTING

Note: All ducting must comply with local and national building codes.

1. Connect the ducting to the fan's duct collar. Secure in place using duct tape or a screw clamp. Always duct the fan to the outside through a wall or roof cap. To ensure maximum air delivery, keep the length of duct and the number of elbows to a minimum.

ELECTRICAL WIRING

Caution: Make Sure The power Is Switched Off Before Beginning This Installation.

Note: All wiring must comply with local and national codes. You must ground this unit.

Note: It is recommended that you use a wall switch carrying the appropriate electrical ratings to control this fan. – Air-King switch model S-1

1. Run wiring from an approved wall switch carrying the appropriate electrical ratings. One neutral (white), One ground (green or bare copper), and 1 hot – Black wire for Fan Control. 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 wires.)
2. See Figure 1 - From where you have access to inside the fan's junction box, connect the white wire from the house to the white wire in the fan's Junction box – Then connect the black wire from inside the fan's Junction box to the black wire from the switch. – Connect the ground to the green ground wire inside the fan's junction box. Use approved electrical wire nuts.
3. Replace the wire cover and secure in place with the screw removed earlier.

COMPLETING THE INSTALLATION

1. To complete the installation, If you removed the blower assembly to install the housing replace the blower assembly and secure in place with the 2 nuts removed earlier, plug the blower assembly into the motor receptacle before installing the blower.
2. Install the grill onto the fan housing – It is secured in place with 2 grill springs which will fit into slots on the fan housing.
3. Turn the power back on and test your installation.

AIR KING FIVE YEAR 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, and you must contact Air King Ltd. at 1-800-465-7300 between 8:00 am and 3:30 pm EST Monday to Friday at the first sign of a defect. You will be required to present to Air King Ltd. 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 Ltd. will not be held responsible for any bodily injuries 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.