

Models AK80, AK90, AK110 & AK130 Bathroom Fan

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IMPORTANT SAFEGUARDS

- **WARNING:** Disconnect the power before beginning this installation
- **WARNING:** To reduce the risk of fire or electric shock or injury to persons observe the following:
 - Do not use this fan with any solid-state speed control device.
 - Use this unit only in the manner intended by the manufacturer.
 - Before servicing or cleaning the unit, switch power off at the service panel. 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.
 - Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
 - When cutting or drilling into wall or ceiling, do not damage electrical wiring or other hidden utilities.
 - Ducted fans must always be vented to the outside.
 - Do not install this fan in a ceiling thermally insulated to a value greater than R-40
- **WARNING:** Do not use in kitchens.
- **WARNING:** 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 manufacturers guidelines and safety standards such as those published by National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and local code authorities.
- **CAUTION:** For general ventilating use only. Do not use to exhaust explosive materials and vapors.
- Acceptable for use over tub or shower when installed in a GFCI protected branch circuit.
- Never place a switch where it can be reached from the tub or shower.

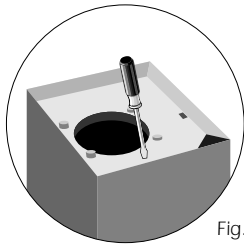


Fig. 1

Before beginning this installation remove the fans blower housing (which includes the motor, blade, bracket and venturi) assembly by removing the screw which secures the venturi housing to the fan housing (fig. 1). Place this assembly and the grill in the carton until needed so they do not get damaged.



Fig. 2

Mounting the Housing: New Construction

Using the Hanging Brackets (refer to fig. 2)

1. Insert the hanging brackets in the slots provided in the housing.
2. Remove the electrical cover (which holds the fans receptacle) and place it somewhere handy. Select the most convenient electrical knockout and remove it, then locate the fan housing

between the joists so that the bottom of the fan housing is even with the planned finished ceiling.

3. Use screws or nails (not provided) to secure the hanger bars to the ceiling joists.

Mounting the Housing: Existing Construction

1. Determine the desired location for the fan.
2. Drill a small hole through the ceiling at the chosen location and stick the end of a coat hanger through the hole into the attic to help locate the spot in the attic.
3. Check the chosen area from above to be certain that the wiring can be installed and that the installation will not interfere with any existing wiring. Remove the electrical compartment cover (which holds the fans receptacle) and place it somewhere handy. Select the most convenient electrical knockout and remove it.
4. From above, position the housing between ceiling joists, and use the housing as a template to mark the required cut out in the ceiling.
5. After cutting out the required area, install the housing using the hanging brackets as described above.

Ducting

NOTE: All ducting must comply with local building codes.

1. Connect the correct ducting to the fan, secure in place using duct tape or a screw clamp. Always duct these fans to the outside through the wall or roof cap. To ensure maximum air delivery keep the length of duct and 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.

1. Run wiring from the wall switch (not provided) to the housing electrical compartment, 1 neutral (white), 1 ground (green or bare copper), and 1 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 fans receptacle).
2. From where you have access to inside the fans junction box, connect the white wire from the house to the white wire of the fans receptacle, then connect the black wire from the fan switch to the black wire of the fans receptacle (use approved electrical connectors). Connect the ground wire to the green ground screw in the fans junction box. Replace the fans wire compartment cover.

Completing the Installation

1. After you have installed the housing in the ceiling, run ducting from the unit to the outside and have made the necessary electrical connections you can reinstall the venturi and blower in the fan housing (fig. 3). Plug the fans blower assembly into the fans receptacle and secure the blower housing with the screw removed earlier. Rotate the blower wheel by hand to ensure it revolves freely.
2. To install the grill, squeeze the two ends of each spring fastener together and insert each into the slots on the venturi. Push the grill up to the ceiling.

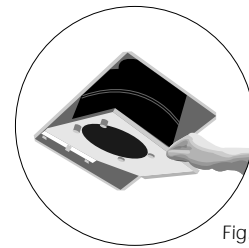


Fig. 3