

**Models AK863L & AK863FL
Bathroom Fan/Light**

IMPORT

ANT 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 outdoors. 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 hazardous or 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 reach from the tub or shower.

Before beginning the installation, remove the light reflector by removing the bolt which connects it to the fans venturi, and remove the fans motor/blade/bracket and venturi assembly by removing the screw next to the receptacle. Place this assembly and the grill in the carton until needed so they do not get damaged.

Mounting the Housing: New Construction

Using the Hanging Brackets

1. Insert the hanging brackets in the slots provided in the housing.
2. Select the most convenient electrical knockout and remove it, then locate the fan housing between joists so that the bottom of the fan housing is level with the planned finished ceiling.
3. Use screws or nails (not provided) to secure the hanger bars to the ceiling joists.

Using the Housing Mounting Tabs

1. Locate the fan housing next to a ceiling joist.
2. Select the most convenient electrical knockout and remove it, then use wood screws (not provided) through the keyhole slots in the housing mounting tabs to loosely attach the housing to the ceiling joist.
3. Adjust the position so that it will be flush with the planned finished ceiling, then tighten the screws in the slots to secure the housing in place.

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. 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 make sure that the wiring can be installed and that the installation will not interfere with any existing wiring. Then select the most convenient electrical knockout and remove it.

4. From above, position the housing depending on the type of mounting you choose, hanging bracket or fan housing tabs (see sections above). For hanging brackets, place the housing between ceiling joists; if using the mounting tabs, place the housing next to the ceiling joist. Use the round 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 or housing mounting tabs as described previously.

Ducting

NOTE: All ducting must comply with local building codes.

1. Connect the correct ducting to the fan (AK863L & AK863FL come complete from the factory with a 4" duct collar) 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 delivery keep the length of duct and number of elbows to a minimum.

Electrical Wiring

CAUTION: Make sure the power is switched off before making this installation.

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

1. Run wiring from the wall switches (not provided) to the housing junction box, 1 neutral (white), 1 ground (green or bare copper wire), and 3 hot (leads connected to the switches). The wires from the switches should be black (fan), red (light) and yellow (night light). Secure the electrical wire to junction box using an approved electrical connector (make sure you leave enough wiring in the box to make the connection to the fan and light receptacles).
2. (Refer to Fig. 1) 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 and the white wire of the lights receptacle. Connect the one black wire from the fan switch to the black wire of the fans receptacle, then connect the red wire from the light switch to the red wire from the light receptacle. Connect the yellow wire from the night light switch to the yellow conductor of the light receptacle (use approved electrical conductors). Connect the ground wire to the green ground screw in the fans junction box.

Completing the Installation

1. After you have installed the housing in the ceiling, run ducting from the unit to the outside and have made all the necessary electrical connections you can install the venturi assembly back into the unit. Take care not to pinch any electrical wires between the venturi and the fans scroll. Secure the venturi in place with the screw removed earlier. Rotate the blower wheel by hand to ensure it revolves freely. Replace the light reflector and secure it to the motor frame with the nut removed earlier.
2. Install lamps 100 watt maximum for incandescent light (AK863L), or a 26 watt fluorescent (AK863FL) and 7 watt maximum for night light.
3. 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.

Cleaning and Changing Lamps

1. Pull the grill assembly away from the ceiling.
2. Squeeze the grill assembly springs together and remove carefully from the fan housing the expose the light housing.
3. Clean the grill and lens using a mild soap and water solution. Do not use abrasives to clean the grill or lens.
4. Replace any blown lamps and reinstall the grill flat against the ceiling.

