

Air King[®]

Ventilation Products

Installation Instructions and User Guide

Models DRLC702, DRLC703, and DRLC709

Exhaust Fan with Light Decorative Round Trim



READ AND SAVE THESE INSTRUCTIONS

Important Safety Instructions

CAUTION: The equipment covered by these instructions should be installed and serviced only by competent personnel utilizing proper safety practices and procedures. These instructions are written for such personnel and are not intended as a substitute for adequate training and experience in safe procedures for this type of equipment.

Warning: Disconnect the power at service panel before beginning this installation.

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. Acceptable for use over tub or shower when installed in a GFCI protected branch circuit.

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 electric shock or injury to persons, observe the following:

- Use this unit only in the manner intended by the manufacturer. If you have any questions, please contact the manufacturer.
- 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.
- Do not install this fan in a ceiling thermally insulated to a value greater than R-40
- Installation work and electrical wiring must be done by qualified, competent, trained person(s) in accordance with all applicable codes and standards using proper safety practices, including fire-related construction.
- 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 Agency (NFPA) and the American Society for Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE), and the local code authorities.
- When cutting or drilling into a wall or ceiling, ALWAYS identify hidden electrical wiring and other hidden utilities in advance, to avoid damage.
- Ducted fans must always be vented to the outdoors.
- NEVER place a switch where it can be reached from the tub or shower.

Caution: For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.

Warning: Do not use in kitchens.

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 restriction.

Before beginning this installation remove the fan's venturi assembly, which is secured in place with one screw through the venturi. This is a captive screw and will stay installed in the venturi. Keep the venturi assembly and grill/lens/light reflector assembly in the carton until needed so they do not get damaged or lost.

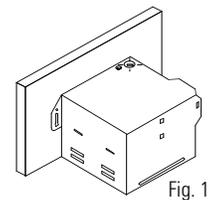


Fig. 1

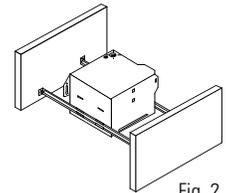


Fig. 2

Mounting the Housing

Select the best location to mount the housing in the ceiling. This fan will require at least 6" of clearance in the ceiling, and will mount through drywall up to 3/4" thick. The fan can be mounted directly to the joist using the two mounting tabs on the sides of the housing or between 16" on center joists using the 4 provided mounting rails. 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 duct length and number of elbows to a minimum.

- Determine the best location for the fan.
- Select the most convenient electrical knockout and remove it.
- 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.
- Locate the housing next to the joist and adjust the height so the housing is level with the finished ceiling. If the unit is being installed in new construction, use the drywall thickness gauge to line up the bottom of the joist with the appropriate drywall thickness indicated (fig. 1). Secure the housing directly to the joist through the two holes and two keyhole slots provided.
- If mounting the housing between joists install the side rails (fig. 2) on the housing. Position the housing next to the joist and adjust the height so it is flush with the drywall. Secure the ends of the slide rails to the joists – you can then move the housing into the final position.

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 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 number of elbows to a minimum.

Electrical Wiring

WARNING: POWER MUST BE PROVEN DISCONNECTED BEFORE STARTING INSTALLATION, INSPECTION OR MAINTENANCE! FAILURE TO DO SO MAY CAUSE SERIOUS INJURY, DEATH AND/OR PROPERTY DAMAGE.

Caution: Make sure power is switched off at service panel before beginning this installation.

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

Note: The unit can be controlled with a standard single wall switch for on/off control of both fan and light, or a standard double wall switch for independent on/off control of the fan and light.

1. Run wiring from an approved wall switch carrying the appropriate rating. One neutral (white), one ground (green or bare copper), and two hot (black leads connected to the switch). Secure

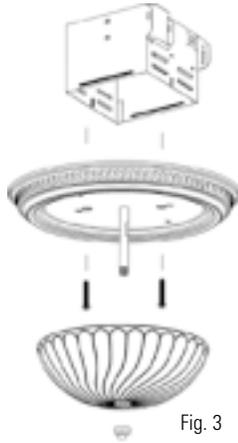


Fig. 3

- 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 and light receptacle.
2. From where you have access to inside the fan's junction box, connect the white wire from the house to both the fan's white wire and the light's white wire. Connect one black wire from the double switch to the fan's black wire and the other black wire from the double switch to the light's black wire. If you are using a single switch to control both fan and light, connect both fan and light's white wire to the house white wire, and both fan and light's black wire to the switch black wire. Connect the ground wire from the house to the fan's green ground. Use approved electrical wire nuts.

Completing the Installation

1. To complete the installation, reinstall the fan's venturi assembly. With the venturi at approximately a 45 degree angle, hook the two tabs on the venturi into the slots on the housing and secure in place by tightening down the venturi screw. Rotate the blower wheel by hand to ensure it revolves freely. Now plug the fan motor into the appropriate receptacle.
2. To install the grill/lens/light reflector assembly, first remove the glass lens from the grill base by loosening the top nut. The glass lens will then lift off the center rod. (fig 3.)
3. Using the two #8 screws (packaged with the grill & Lens) secure the grill base to the housing by installing the screws through the 2 holes in the grill base and into the lances on the side of the housing. (fig 3). Remember to plug the lamp holder into the appropriate receptacle before securing the grill base in place.
4. Once the grill base is secure install the bulbs (2 x 60 watt max) and reinstall the glass lens, securing in place using the spacer and top nut. (fig 3)
5. Turn the power back on and test your installation.

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.	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.
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, is 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.