Model #: DSQR110MBL, DSQR110MGL, DSQR110BNL & DSQR110ORBL

Rev 2024.09.12

LIFT BRIDGE KITCHEN & BATH

INSTALLATION MANUAL AND USER GUIDE

Bathroom Ventilation Fan with LED Light

READ AND SAVE THESE INSTRUCTIONS

CONTRACTORS: THIS MANUAL STAYS WITH THE CUSTOMER

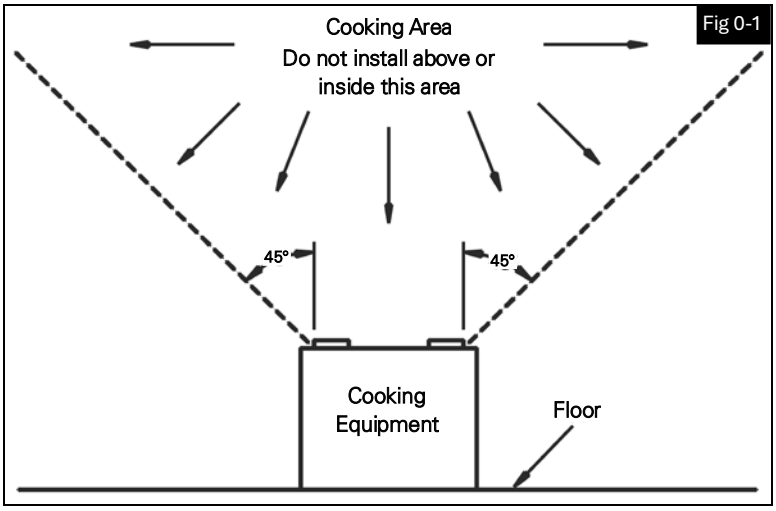
Table of Contents

GENERAL SAFETY INFORMATION AND WARNINGS

For your safety and to ensure proper performance of the unit, it is very important to read these instructions carefully before installation. Non-compliance could result in personal injury or property damage. Keep this guide for future reference. All units should be installed by a licensed electrician.

1. Electrical service supply must be 120V 60Hz.
2. Do not install where the air temperature will exceed 104°F (40°C).
3. Do not bend or kink the power wires.
4. Follow all local safety and electrical codes, as well as requirements for NEC (National Electrical Code) and OSHA (Occupational Safety and Health Act)
5. Always disconnect the power supply prior to servicing the fan, motor, or junction box.
6. Protect the electrical wires from sharp edges, oil, grease, hot surfaces, chemicals, or other objects.
7. Avoid installing the unit in locations where ducts restrict airflow significantly.
8. There should always be adequate air supply to the vented area.
9. This ventilation fan is approved for use over a bathtub or shower when installed in a GFCI-protected circuit, with controls placed out of reach from these areas.
10. Do not use unit to exhaust hazardous or explosive vapors.
11. Disconnect fan from power supply before servicing.
12. The fan component of this unit is not compatible with any solid-state control devices, such as remote controls, certain electronic timers, or dimmer switches designed for fan speed control. Mechanical timers are suitable for controlling the fan.
13. The LED light component of this unit is compatible only with LED-compatible dimmer switches.
14. This unit must be properly grounded.
15. Do not install in a cooking area (**Fig 0-1**).

Fig 0-1

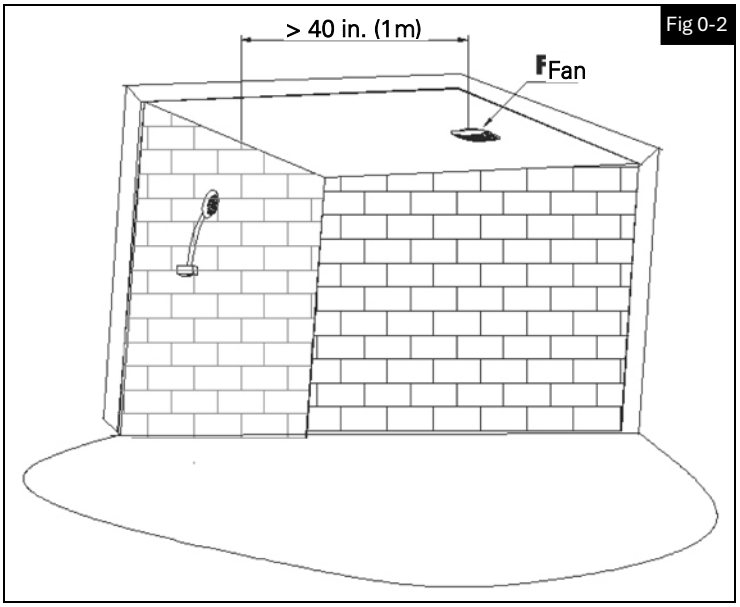


16. To reduce risk of fire and to properly exhaust air, be sure to duct air outside. Do not vent exhaust air into spaces within walls, ceilings, attics, crawl spaces or garages.
17. Installation work must be carried out by qualified person(s) in accordance with all local and safety codes, including the rules for fire-rated construction.
18. The fan is intended to be mounted at least 7 feet (2.1m) above the floor.

GENERAL SAFETY INFORMATION AND WARNINGS

19. Ensure that the installation height of the fan positions its lowest moving part at least 8 feet 2 inches (2.5m) above the floor or the exterior ground level. This requirement applies to products certified for use in Canada (CUL certified).
20. Sufficient air supply is required for proper combustion and the exhaustion of gasses through the chimney (flue) of fuel burning equipment to prevent back-drafting. See the standards of NFPA (National Fire Protection Association) and ASHRAE (American Society for Heating, Refrigeration and Air Conditioning Engineers) and your local building code authorities.
21. Do not install into a ceiling with insulation greater than R40.
22. Exercise care not to damage existing wiring when cutting or drilling into walls or ceilings.
23. Before servicing or cleaning, turn off and lock out the power supply. If locking out is not possible, clearly mark the panel with a warning tag not to turn on the power.
24. For installation over a tub or shower, maintain a distance of at least 40 in. (1m) between the fan and the tub, with the fan installed on the opposite side of the tub on the ceiling, in a GFCI-protected circuit (**Fig 0-2**).

Fig 0-2



25. This unit is not intended for direct connection to rigid metal ducting. For flexible ducting use only.
26. Ductwork should be installed in as straight a line as possible, with minimum bends.
27. Ductwork size must not be smaller than the unit's discharge outlet (4 in.)
28. This unit is equipped with a built-in thermal cut-off for safety and to prolong the life of the motor.

Use this unit only in the manner intended by the manufacturer. If you have any questions, please contact Customer Support at:

Email: support@StrategicRetailSolutions.com
Phone: (888) 930-8528
Website: www.StrategicRetailSolutions.com/#contact

INCLUDED PARTS AND ACCESSORIES

Part #	Part Name	Qty	Photo
1	Bath Fan Housing	1	
2	Grille w/ Integrated LED Light	1	
3	Glass Shade	1	
4	30mm Screw (M4*30)	8	
5	12mm Screw (M4*12)	4	
6	12” Suspension Bracket	2	
7	14” Extension Bracket	2	
8	Grille & Shade Mounting Hardware	1	

REQUIRED TOOLS AND SUPPLIES

- Safety glasses
- Ducting Supplies
  - 4-inch round ducting
  - Elbows (if needed)
  - Foil duct tape
  - 4-inch clamp
- Switch(es) to operate fan and lights
- Phillips screwdriver or drill
- Tape measure
- Utility knife or saw for cutting drywall
- Wire cutter/stripper
- Wire nuts
- Ladder

SPECIFICATIONS AND DIMENSIONS

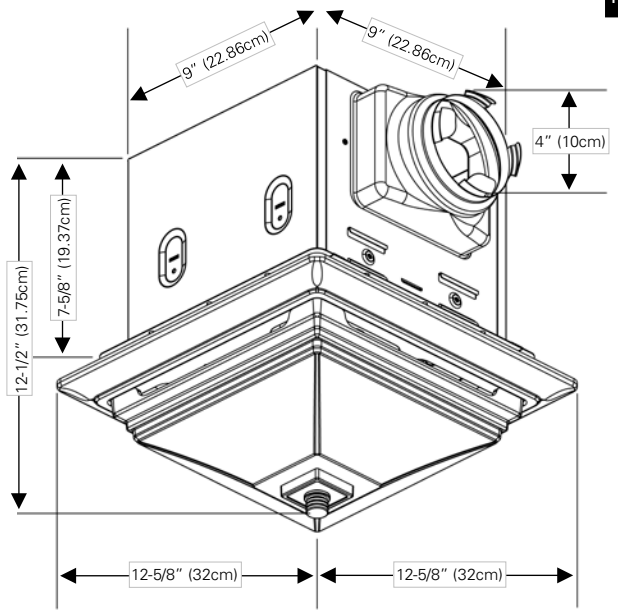
Specifications

- Electrical Service Requirements: 120v / 60 Hz
- LED Lights Power Consumption: 14 Watts
- Fan Unit Power Consumption: 30 Watts
- Amperage: 0.24/0.37A
- Air CFM: 110 CFM
- Maximum Room Size: 125 sq. ft.
- Noise Level: 1.2 Sones

Dimensions

- Ceiling Opening (Depth): **8 in.** (20.32cm)
- Ceiling Opening (W × L): **9-1/8 in. × 9-1/8 in.** (23.18cm × 23.18cm)
- Housing (Depth): **7-5/8 in.** (19.37cm)
- Housing (W × L): **9 in. × 9 in.** (22.86cm × 22.86cm)
- Grille Dimensions: **12-5/8 in × 12-5/8 in.** (32cm × 32cm)
- Duct Diameter: **4 in.** (10cm)

Fig 0-3



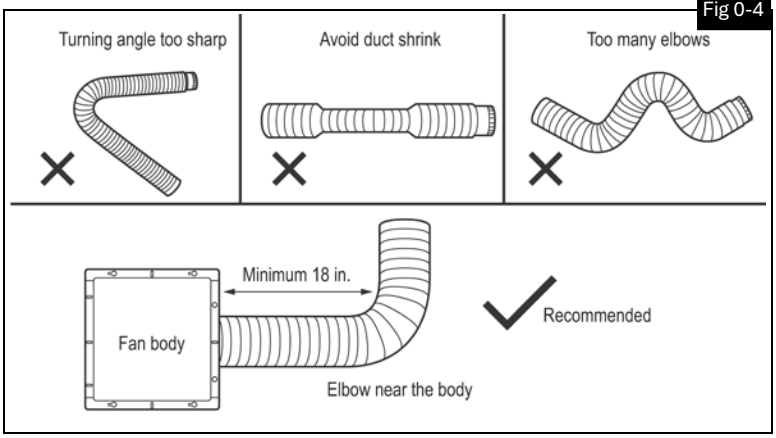
NOTE: The **Ceiling Opening** dimensions provided here are meant to serve only as a guideline to begin the installation process. For an optimal fit, we recommend making precise measurements and cuts tailored to the specific dimensions of the bath fan housing. The goal is to minimize any gaps around the housing for a clean and secure installation.

PLANNING YOUR INSTALLATION

When installing the ventilation fan into a new construction site, install the main body of the fan and ductwork during the rough-in construction of the building. Once the finished ceiling is installed, proceed with the grille installation. Refer to the dimensions specified in this manual to determine the correct hole size for the ceiling.

The performance, noise level, and energy efficiency of this fan are significantly influenced by the ducting route to the building's exterior. For optimal performance, opt for the shortest and most direct ducting route. Use 4-in. ducting as recommended in this manual and do not reduce the ducting to a smaller diameter. Insulating the ducts can minimize energy loss and prevent mold growth. Be aware that using existing ductwork may result in the fan not achieving its intended airflow rate. Additionally, avoid locations requiring duct configurations like those depicted in **Fig 0-4**, as they can adversely affect the fan's operation.

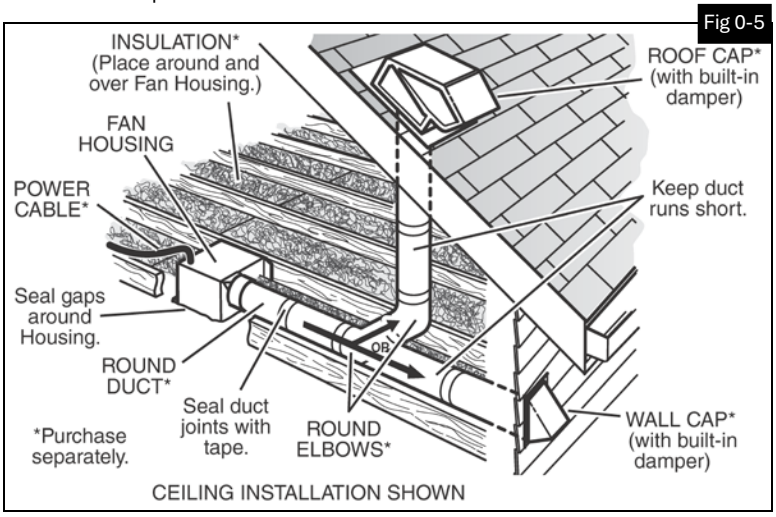
Fig 0-4



For optimal efficiency, we recommend insulating both the ductwork and fan housing to minimize heat loss. Ensure all gaps around the housing are sealed with caulk or a similar sealant to prevent air leakage.

While the use of rigid metal ducting is advised for reducing static pressure losses and enhancing airflow, it should follow the shortest possible path to the exterior, as shown in **Fig 0-5**. Note that a direct connection of this unit to rigid metal conduit is not intended. Use flexible ducting for connections directly to the fan, which can then be integrated into rigid ducting as necessary for your installation setup.

Fig 0-5



FAN HOUSING INSTALLATION, STEP 1

NOTE: This step is only required if the drywall is already installed. For new construction installation, skip to **Step 2**.

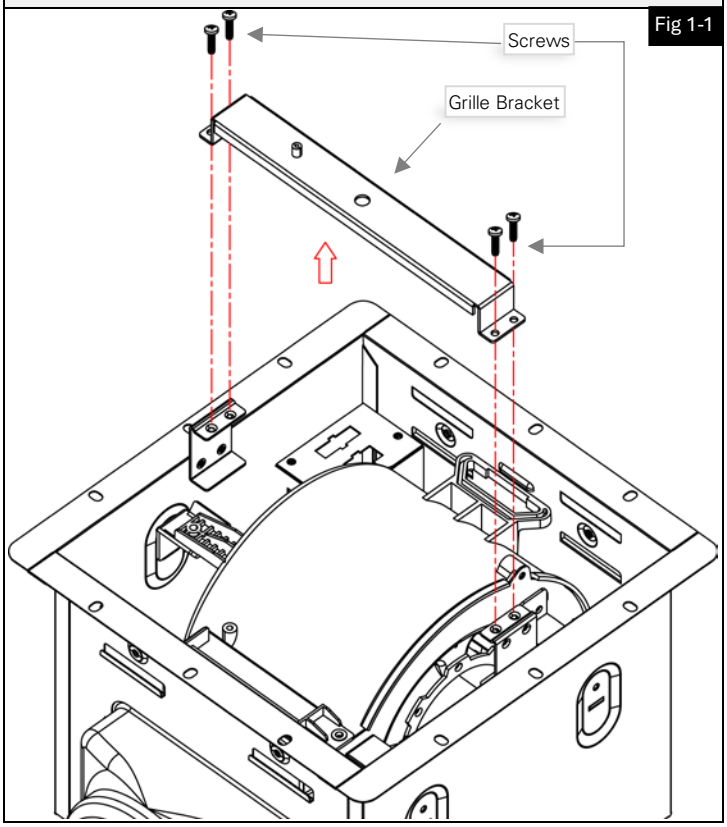
When installing this bath fan into an existing location, we recommend removing the internal components from the fan's housing to simplify the installation process. After removing the following three components, you can then proceed to install the housing into the installation opening:

- Grille Bracket (4 screws)
- Motor Unit (3 screws)
- Duct Port (1 screw)

Though it should slide out easily, use caution when removing the motor unit and ensure that the aluminum duct flap is in the 'closed' position.

Step 1-A: Detach the grille bracket via 4 screws.

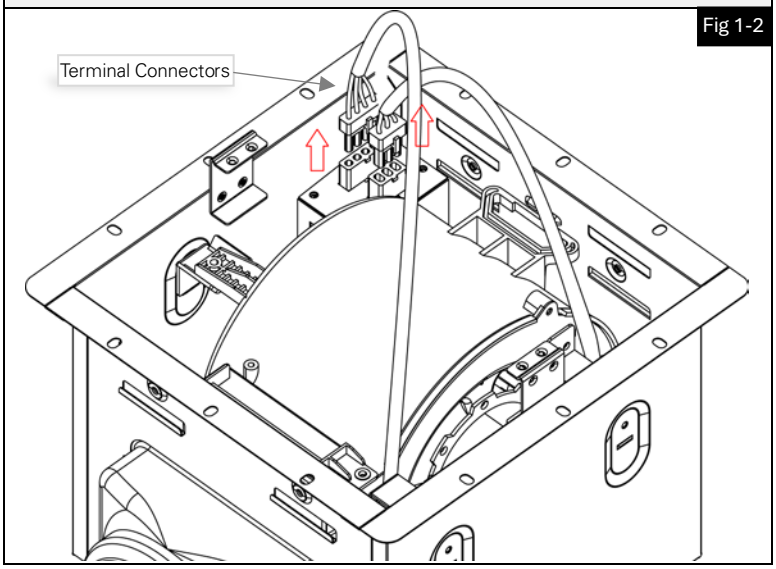
Fig 1-1



FAN HOUSING INSTALLATION, STEP 1 (cont.)

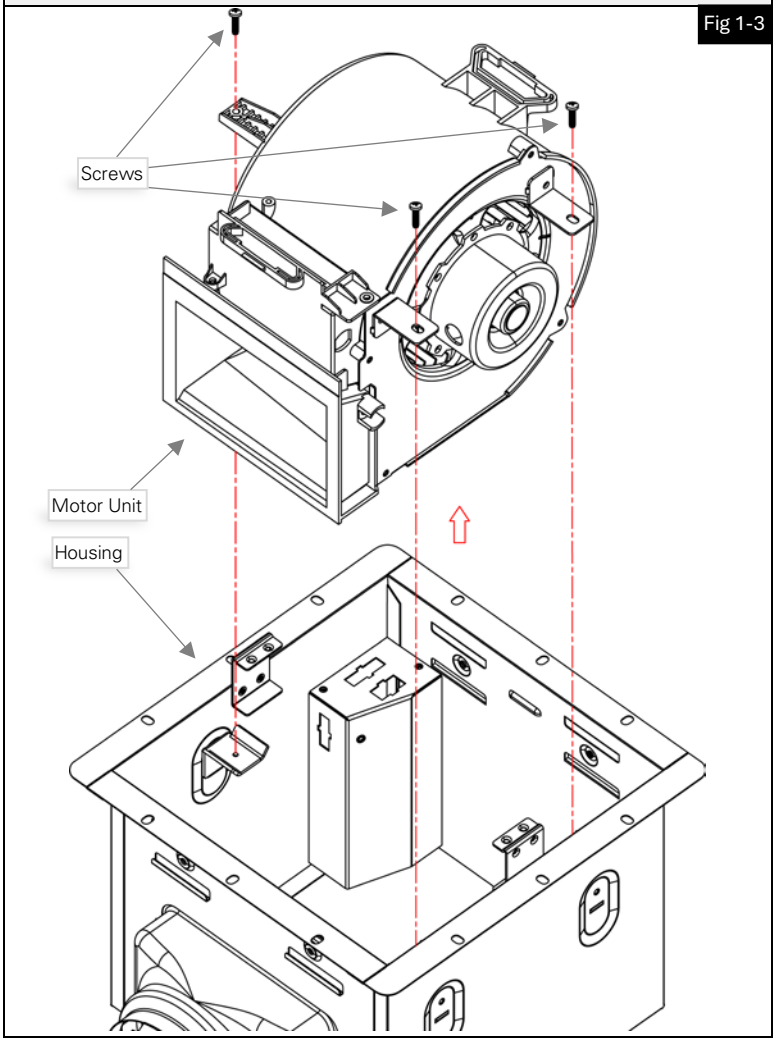
Step 1-B: Unplug the two white terminal connectors from the junction box (**Fig 1-2**).

Fig 1-2



Step 1-C: Detach motor unit from the housing via 3 screws (**Fig 1-3**).

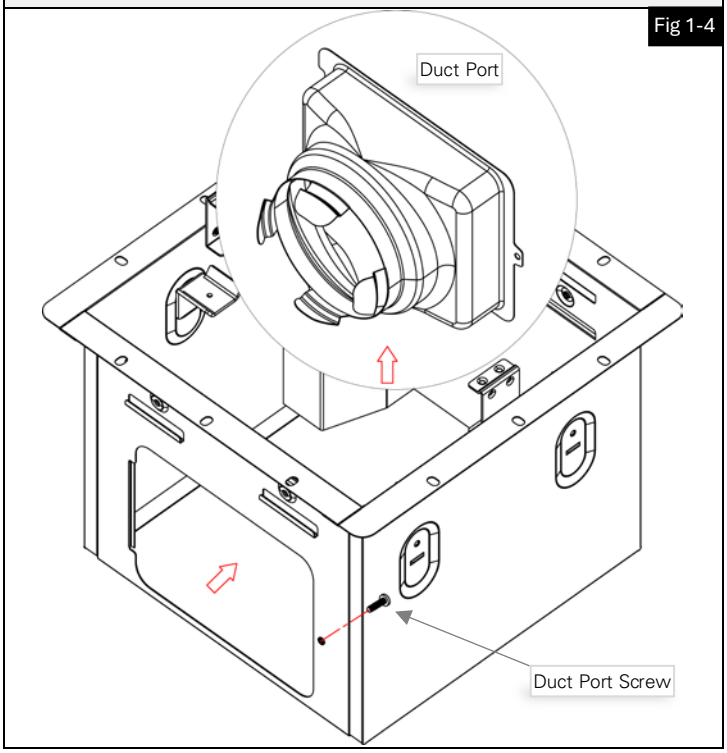
Fig 1-3



FAN HOUSING INSTALLATION, STEP 1 (cont.)

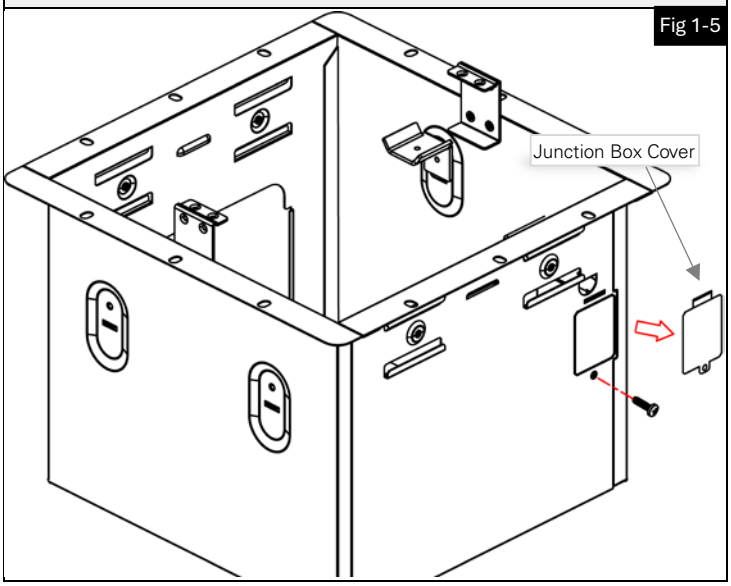
Step 1-D: Detach the duct port from inside the housing (**Fig 1-4**).

Fig 1-4



Step 1-E: Detach the junction box cover from the outside of the housing (**Fig 1-5**).

Fig 1-5



Once the housing is disassembled and the installation hole is prepared, there are two installation methods that will be described next. Depending on your configuration, you can choose either **Step 2 (Method 1)** or **Step 2 (Method 2)**. Method 1 outlines a typical installation process that requires access from both the bathroom below and the attic/crawlspace from above. Two people are recommended for this approach. Method 2 outlines an approach that doesn't require attic/crawlspace access but does require a specific joist and wiring configuration.

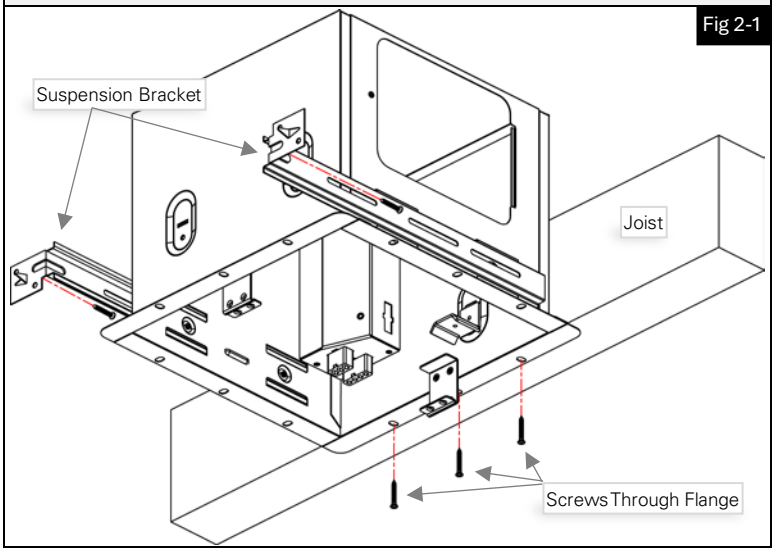
STEP 2 (METHOD 1): TYPICAL INSTALLATION

If you are attaching the housing directly to a joist, proceed with **Step 2-A**. If you are unable to attach directly to a joist, go to **Step 2-B**.

Step 2-A: Direct Joist Mount

1. Insert housing into the installation opening and secure the housing flange to the joist using included 30mm screws (Part #4).
2. Slide suspension brackets (Part #6) into the channels on side of housing and secure to joist. If spacing between joists is greater than 16", add extension brackets (Part #7) (**Fig 2-1**).
3. Proceed to #4 of this step.

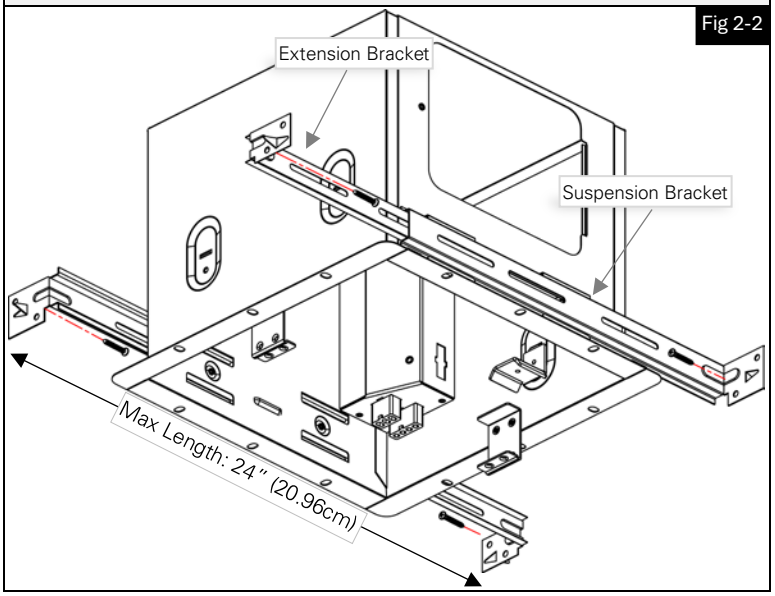
Fig 2-1



Step 2-B: Suspension Bracket Mount

1. Slide the bath fan housing into the installation opening (**Tip:** reattaching the duct port at this stage will help stabilize the housing).
2. Slide suspension brackets (Part #6) and extension brackets (Part #7) into the channels on side of housing. Secure brackets to joists on both sides using included 30mm screws (Part #4) (**Fig 2-2**).
3. Proceed to #4 of this step.

Fig 2-2

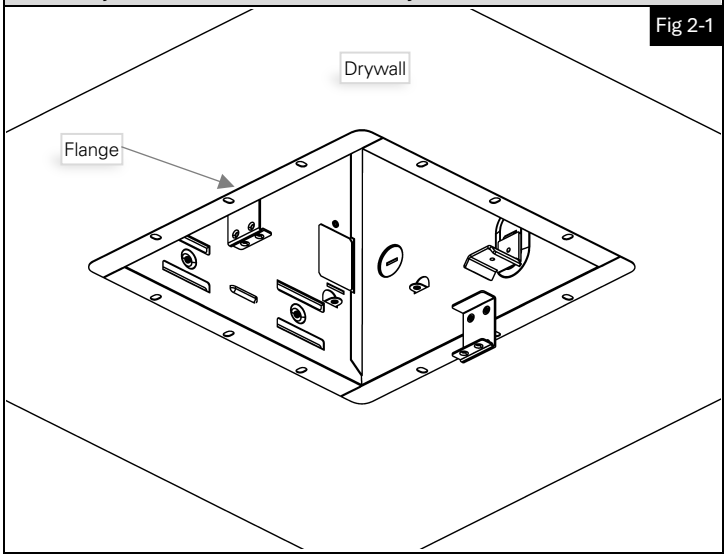


STEP 2 (METHOD 1): TYPICAL INSTALLATION (cont.)

4. Secure suspension brackets to fan housing using included 12mm machine screws (Part #5).
5. Re-install the duct port into the housing using the appropriate screw and secure 4-in. flexible ducting onto the duct port using a 4-in. clamp, foil duct tape, or a combination of both.
6. Re-install the motor unit using the three appropriate screws.
7. Proceed with the installation of house wiring into the bath fan housing's junction box as outlined in **Step 3.**

NOTE: The housing flange must be installed to the outside of the drywall and visible from the room below. If you are installing into a new construction, leave adequate space between the flange and the joists to accommodate the drywall around the fan.

Fig 2-1



STEP 2 (METHOD 2): ALTERNATE INSTALLATION (NO ATTIC ACCESS REQUIRED)

This method outlines an approach that does not require attic/crawlspace access but does require a specific joist and wiring configuration. For this method to work, the following conditions should be met:

- **Wooden Support Frame:** Instead of using the supplied metal suspension brackets, you would instead install wooden support beams parallel to each other and perpendicular to the joists.
- **Sufficient Wiring Slack:** Ensure there is ample slack in the house wiring to allow for it to be pulled down through the installation hole and connected to the wiring in the bath fan housings junction box.
- **Flexible Ducting:** The 4 in. flexible ducting is long enough to be pulled through the bath fan housing's duct port hole and secured to the duct port.

If these conditions are met, you may be able to avoid having to access the bath fan from your attic or crawlspace.

STEP 2 (METHOD 2): ALTERNATE INSTALLATION (cont.)

1. Securely install two support beams perpendicular to the joists and parallel to each other, with an exact spacing of 9 inches apart. This precise gap is essential for directly attaching the bath fan housing to the beams. Use face-mount joist hangers to attach the support beams to the house joists. Ensure the wooden support beams do not exceed a height of 2 inches to avoid obstructing the duct port.
2. Pull the house wiring through the installation opening and connect it to the junction box in the bath fan housing, following the instructions provided in **STEP 3** of this manual.
3. Slide the bath fan housing into the installation opening. Use the included 30mm screws to attach it securely to the wooden support beams, making sure to utilize both the screw holes on the vertical surfaces aligned with the support beams (**Fig 2-3**) and those on the flange (**Fig 2-4**).

Fig 2-3

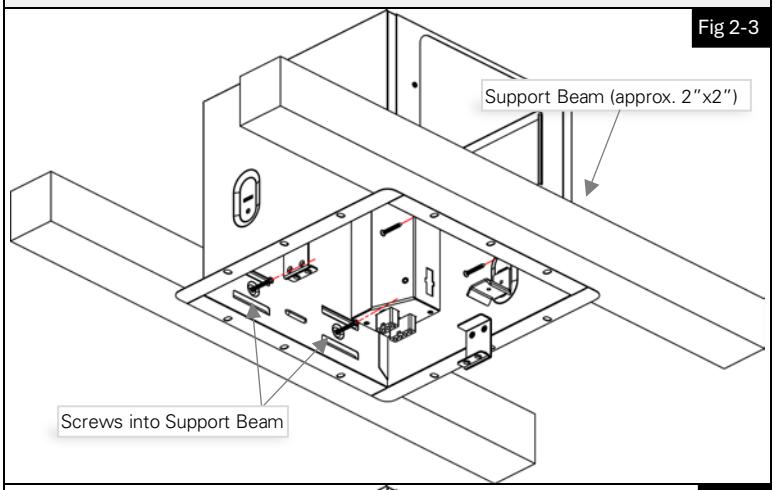
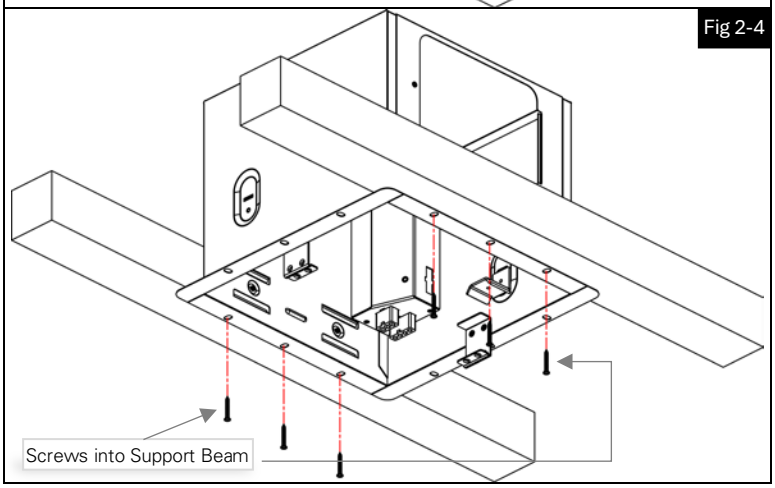


Fig 2-4



STEP 2 (METHOD 2): ALTERNATE INSTALLATION (cont.)

4. Pull the flexible 4-in. ducting through the duct port hole on the bath fan housing and secure it to the duct port using a screw clamp and/or foil duct tape (**Fig 2-5**).
5. Re-install the duct port into the housing using the provided screw (**Fig 2-6**).
6. Re-install the bath fan motor and grille bracket into the housing using the provided screws (Reverse of **Step 1-C**).
7. Re-plug the two white terminal connectors into the appropriate slots

Fig 2-5

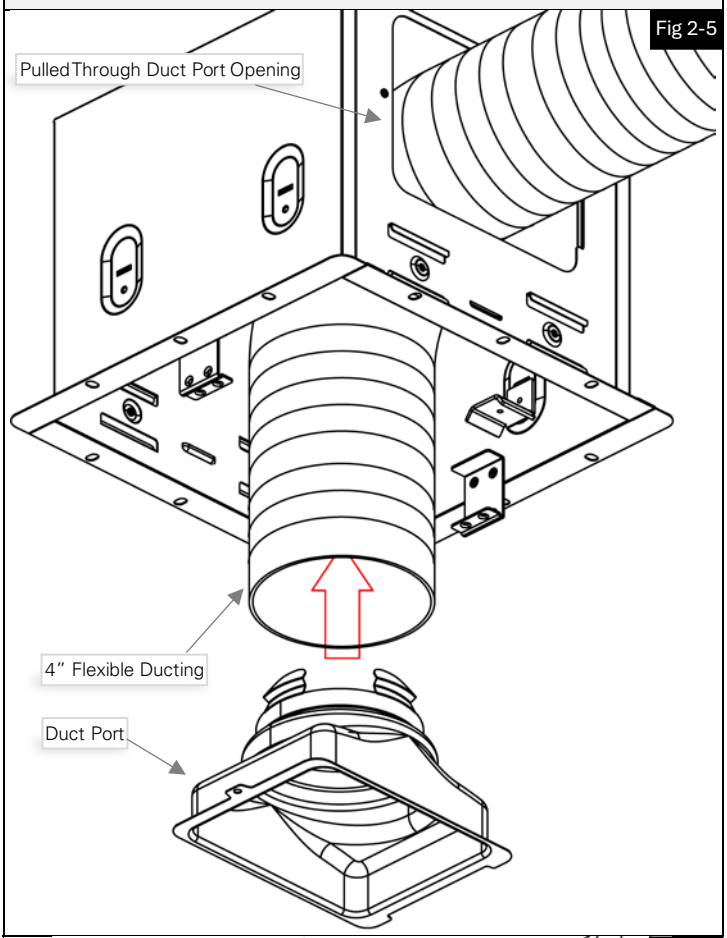
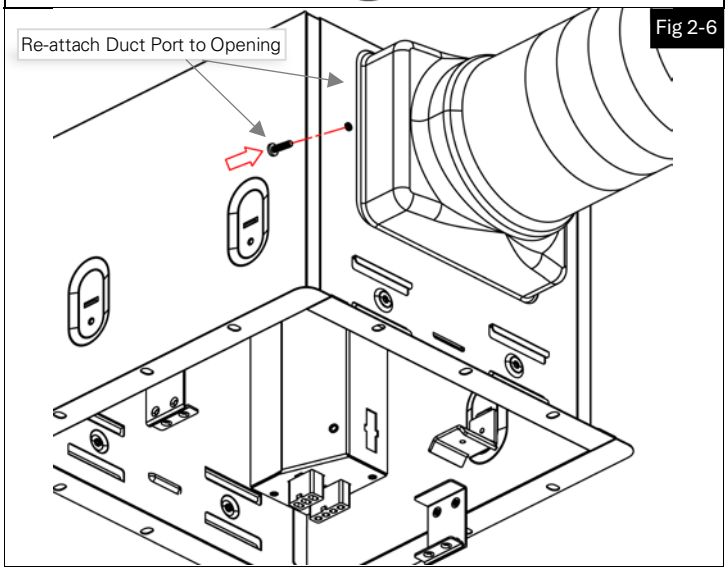


Fig 2-6



STEP 3: WIRING CONFIGURATION

This bath fan features separate wiring for both the fan unit and the LED light kit with each set of non-ground (black & white) wires clearly labelled as '**Fan Connection**' and '**Light Kit Connection**'. For optimal use, we recommend connecting the fan unit and LED light kit to separate switches (**Fig 3-1 & Fig 3-2**). However, if only one switch is available, you can wire the fan and light kit together, provided it is not a dimmer switch. If fitting all connections within the bath fan's junction box is difficult, using an external junction box is permissible. Ensure wires are not left dangling or unsecured outside the fan unit. Should your home's electrical setup not align with the fan's specifications, seeking advice from a qualified electrician is strongly recommended.

- **Green wires** are ground wires. House grounds may be green or bare.
- **White wires** are neutral. They carry power back to the service panel.
- **Black wires** are hot. They carry power from the panel to the fan.

Fig 3-1

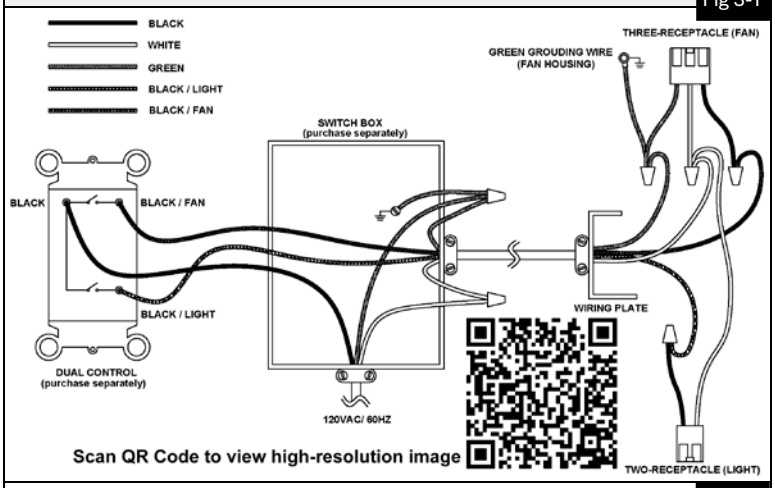
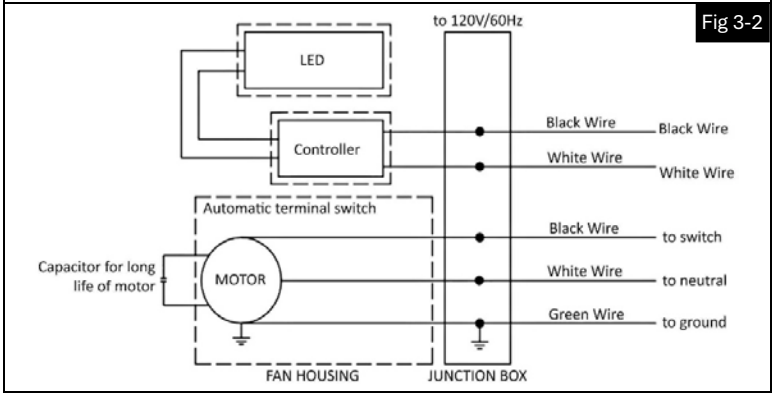


Fig 3-2



STEP 4: FAN TESTING

After finishing the wiring installation, we recommend conducting a test of the fan unit before continuing with the grille and glass shade installation. This will help confirm proper operation of both the damper and fan unit.

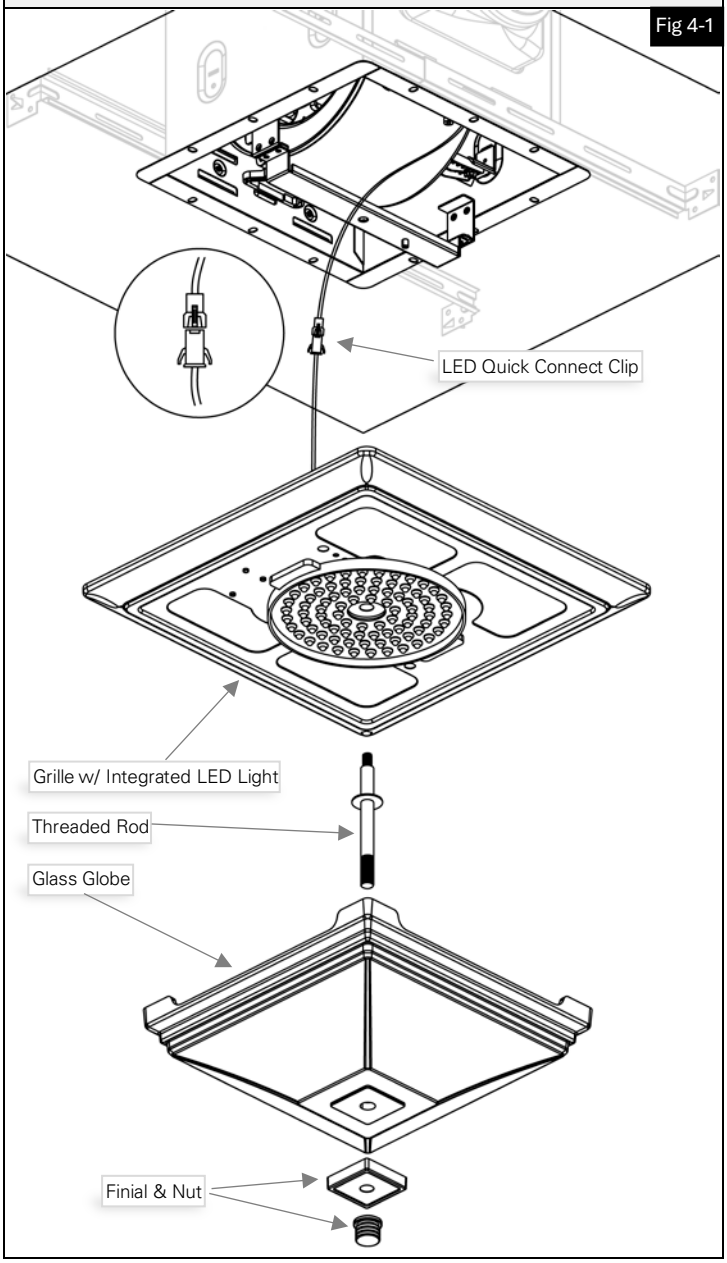
1. Inspect the damper by manually opening and closing it. You can do so by pressing on the weighted counterbalance arm inside the housing. It should close freely once released.
2. Turn the fan on and inspect the fan blade for any irregularities and ensure that it is pulling air into the ducting.

If the damper and fan blade are functioning correctly yet airflow appears restricted, there may be an obstruction in the ducting itself.

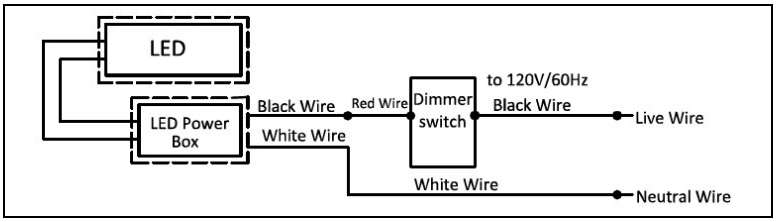
STEP 5: GRILLE AND GLASS SHADE INSTALLATION

1. Before attaching grille (**Part #2**) to the housing, plug the LED power box's quick connect clip into the LED light panel connector.
2. Position the grille on the fan housing and line up the nub on the grille mounting bracket so it aligns with the secondary hole on the grille.
3. Using the threaded rod from **Part #8**, screw the bolt through the grille and into the grille bracket, using the flat washer and lock washer.
4. Insert the glass globe over the threaded rod and secure it in place using the finial & nut set from **Part #8**.

Fig 4-1



LED LIGHT PANEL CONFIGURATION



Color Temperature Operating Instructions

The included LED light allows you to cycle through color temperatures of 3000K, 4000K and 5000K using only your wall switch. Quickly toggle the power on and off at 1-second intervals to switch between these color temperatures. The LED light's built-in memory function will save your selected color temperature if the light is turned off for a minimum of **10 seconds**, preventing unintentional changes during normal use.

Dimming Operation Instructions

The brightness of the LED light can be adjusted via the dimmer switch's knob or slider. Some dimmer switch models have a sensitivity dial built into its housing which may need to be adjusted for optimal performance. Please refer to the dimmer switch manual for specific instructions.

NOTE: The fan blower is not compatible with a dimmer switch. If you are using a dimmer switch for the LED light, the fan blower must be wired to a separate switch.

CLEANING AND MAINTENANCE

Cleaning the unit periodically is advisable since dust, mold, grease, and other dirt particles can affect the conductivity of the air in the unit. Routine maintenance should be done at least once a year.

1. Clean glass shade with a soft towel or paper towels and glass cleaner (avoid harsh detergent).
2. Clean inside of unit with a vacuum cleaner. Do not use liquid cleaner as the motor should not come into contact with any liquid.

WARNING: Disconnect power supply before servicing. See SAFETY INFORMATION **(Page 2)** before proceeding.

CAUTION:

- Do not use gasoline, benzene, paint thinner or any other such chemical for cleaning the fan.
- Never allow water to enter the motor.
- Never immerse resin parts in water over 140° F (60° C)
- Only use a GFCI protected branch circuit when using over a bathtub or shower.

WARRANTY INFORMATION

This *Lift Bridge Kitchen & Bath* bath fan with related model numbers:

- DSQR110MBL
- DSQR110MGL
- DSQR110BNL
- DSQR110ORBL

is covered by a 5-year limited warranty. The manufacturer warranties the bath fan motor and all other parts/components on this bath fan present at the time of shipment from the factory to be free from defects in workmanship and material for 5 years after the date of purchase by the original purchaser, when properly installed and under normal conditions of use. To obtain warranty service, you must register your product as directed below. This warranty does not cover products that have been abused, altered, damaged or misused. The manufacturer *DISCLAIMS* all other implied or express warranties including warranties of merchantability and/or fitness for a particular purpose. As some states do not allow exclusions or limitations on an implied warranty, the above exclusions and limitations may not apply. This warranty gives you specific rights, and you may have other rights that vary from state to state.
This warranty covers only the repair or replacement of parts that are found to be defective. The amount covered for these repairs or replacements will not be more than the original purchase price. Additionally, instead of repair or replacement, the manufacturer may choose to refund the amount paid for the product as a complete resolution of a warranty claim.
Any costs or changes related to installation, repair, replacement, or damages associated with these actions are not covered by this warranty.

CUSTOMER SUPPORT

For Customer Support, you may use one of three means to contact us:

Email: Support@StrategicRetailSolutions.com
Website: www.StrategicRetailSolutions.com/#contact
Phone: (888) 930-8528

PRODUCT REGISTRATION

To streamline any possible warranty claims on your bath fan, we recommend registering it to make the process smoother. You can register through either of the following methods:

1. Fill out the registration form on our website (*recommended*):

   www.StrategicRetailSolutions.com/#registration

2. Fill out the warranty registration form below and mail it to this address:

   Strategic Retail Solutions
   Attn: Bath Fan Registration
   P.O. Box 528
   Sheboygan, WI 53082

Name:_____

Address:_____

City:_____ **State:**_____ **Zip:**_____

Phone:(____)_____**Purchase Date:**___/___/_____

Model Number (Circle One):

DSQR110MBL | DSQR110MGL | DSQR110BNL | DSQR110ORBL