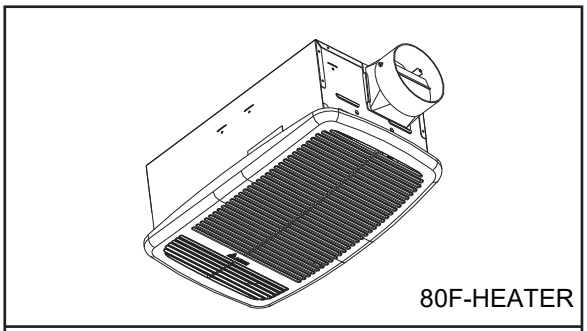
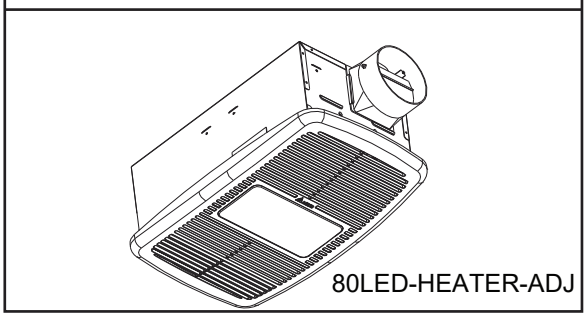
VENTILATION FAN WITH LIGHT AND HEATER

MODELS 80F-HEATER / 80LED-HEATER-ADJ



80F-HEATER



80LED-HEATER-ADJ

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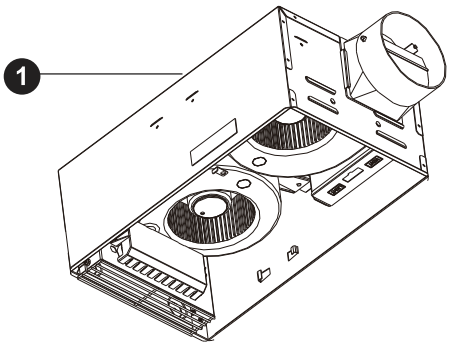
READ AND SAVE THESE INSTRUCTIONS

Please read and understand this entire manual before attempting to assemble, operate, or install the product.

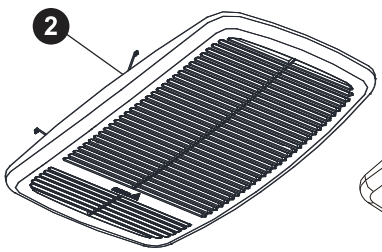
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www.deltabreez.com
Manufactured by Delta Electronics, Inc.
Distributed by Delta Electronics (Americas) Ltd.
46101 Fremont Blvd, Fremont, CA 94538, U.S.A

MFG MODELS
VHB080F4A1 / VHB080F4LED2-A

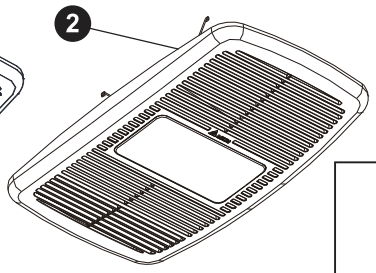
PACKAGE CONTENTS



PART	DESCRIPTION	QTY
❶	Fan Body	1
❷	Grille Assembly	1
❸	Suspension Bracket I	2
❹	Suspension Bracket II	2



FOR MODEL 80F-HEATER



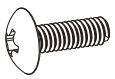
FOR MODEL 80LED-HEATER-ADJ





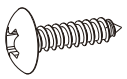
HARDWARE CONTENTS

Ⓐ



Short Machine Screw (M4x12 mm) Qty.4

Ⓑ



Wood Screw(Ø 4x14 mm) Qty.8

IMPORTANT INSTRUCTIONS

When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

- Read all instructions before installing or using this heater.
- Extreme caution is necessary when heater fan is used by or near unattended children, and / or persons with disabilities or limitations.
- Do not operate heater if it malfunctions. Disconnect power at service panel and have heater inspected by reputable electrician before reusing.
- Do not use outdoors.
- To disconnect heater, turn controls to off, and turn off power to heater circuit at main disconnect panel.
- Do not insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric shock or fire, or damage the heater.
- To prevent a possible fire, do not block air intakes or exhaust in any manner.
- A heater has hot and arcing or sparking parts inside. Do not use it in areas where gasoline, paint, or flammable vapors or liquids are used or stored.
- Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock or injury to persons.

- **SAVE THESE INSTRUCTIONS.**

SAFETY INFORMATION

Please read and understand this entire manual before attempting to assemble, operate or install the product.

- Follow all local safety and electrical codes as well as NEC (National Electrical Code) and OSHA (Occupational Safety and Health Act).
- This unit must be properly grounded.
- Always disconnect the power supply prior to servicing the fan, motor or junction box.
- Do not bend or kink the power wires. Protect from sharp edges, oil, grease, hot surfaces, chemicals or other objects.
- Do not install where the room air temperature will exceed 40ºC (104ºF).
- Do not install over a tub or mount in a shower stall enclosure.
- Do not use to exhaust hazardous or explosive vapors.
- Do not install in a cooking area.
- Do not install this fan vertically in a wall.
- Use this unit in the manner intended by the manufacturer. If you have any questions, please call the manufacturer (customer service number located on last page).
- Installation work must be carried out by a qualified person(s) in accordance with all local and safety codes including the rules for fire-rated construction. For use in non-fire rated installations only.
- Sufficient air supply is required for proper combustion and the exhaustion of gases 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 the local building code authorities.
- Exercise care to not damage existing wiring when cutting or drilling into walls or ceilings.
- Fans should always be vented to the exterior and in compliance with local codes.
- Do not use this fan with an solid state control device .
- Prior to service or cleaning this unit, shut off power supply at the panel and lock to prevent the power from being turned on. If the panel cannot be locked, clearly mark the panel with a warning tag to prevent the power from being turned on.
- Do not install in a ceiling with insulation greater than R40. (This is required for installations in Canada only.)
- Duct work should be installed in a straight line with minima bends.
- Duct work size must be a minimum of the discharge and should not be reduced. Reducing the duct size can increase fan noise.
- This ventilating bath fan is intended for residential use only in 1-2 family dwellings.
- Never place a switch where it can be reached from a tub or shower.
- Make sure that the electric service supply voltage is AC 120 V, 60 Hz.
- Always disconnect the power source before working on or near the unit.
- This unit is designed and tested to be a supplemental heater for use with a timer or a switch. It is not intended to be used as a primary source of heat, or controlled by a thermostat.
- To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc., off fan body.
- Provide a separate 15 AMP circuit.
- This product is designed for ceiling installation only. Do not mount this product in a wall.
- Install in ceiling only, at least 6 in. from any wall.
- Do not install less than 8 ft. (2.4 m) from the floor.

PREPARATION

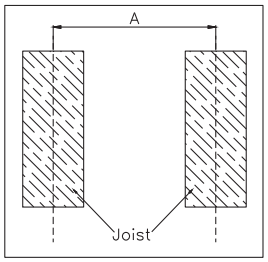
Tools Required for Assembly (not included): Hammer, Flathead Screwdriver, Wire Nuts, Nails, Duct Tape, Phillips Head Screwdriver, Utility Knife

Helpful Tools (not included): Electric Drill, Drill Bits

WARNING: Turn off electricity at breaker box before beginning installation.

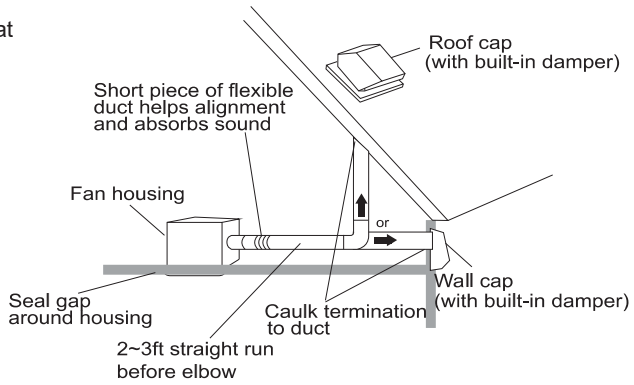
- Before installation, provide inspection and future maintenance access at a location that will not interfere with installation work.
- You may need the help of a second person to install this fan: one person on the attic side and one on the room side.
- Remove ceiling section using dimensions provided below. Be careful to cut hole exactly. If hole is too big, the fan grille will not hide it.
- Determine the distance between your joists.

Spacing A on center joists
16.0 inches
19.2 inches
24.0 inches



Note: Installations may vary depending on how the previous bath fan was installed. Supplies necessary for the installation of your bath fan are not all included. However, most are available at your local home improvement or hardware store.

- Proper insulation around the fan to minimize building heat loss and gain.
- Do not install over a tub or mount in a shower stall enclosure.
- Locate unit away from heating or cooling sources.
- The fan will operate most efficiently when located where the shortest possible duct run and minimum number of elbows will be needed.
- Use a roof cap or wall cap that has a built-in damper to reduce backdrafts.
- External timer/dimmer switch can be used. Please contact Delta Breez customer service and consult with a licensed electrician for compatibility.



DIMENSION REQUIREMENTS

Ceiling Opening (L)	Ceiling Opening (W)	Ceiling Opening (H)
14-5/8 in.	8-1/2 in.	5-1/2 in.

Housing Dimension (L)	Housing Dimension (W)	Housing Dimension (H)
14-3/8 in.	8-1/4 in.	5-1/2 in.

WARNING

Be careful to cut hole exactly. If the hole is too big, the fan grille will not hide it.

ASSEMBLY INSTRUCTIONS

Unpacking

Carefully remove unit from carton. Remove the foam in the housing. Refer to the Package Contents list on page 2 to verify that all parts are present.

Installing the unit

Installing the fan body in an existing building requires an accessible area (attic or crawl space) above the planned installation location and existing duct and wiring.

CAUTION: Check area above installation location to ensure that:

- Duct work can be run and the area is sufficient for proper ventilation.
- Wiring can be run to the planned location.
- No wiring or other obstructions can interfere with installation.

WARING:

- To reduce the risk of fire, do not store or use gasoline or other flammable vapors and liquids in the vicinity of the heater.

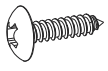
1. Mounting the fan between the joists
   a. Insert either the 12 in. suspension brackets ❹ or 14 in. suspension brackets ❸ to the duct side and back of the fan body ❶ , depending on the distance between the joists.
   b. Insert the fan body ❶ between joists. Make sure the fan body is level and perpendicular with the joist, and flush with ceiling surface.
   c. Allow for thickness of the ceiling board used in your application. Fan body ❶ should be flush with ceiling board.
   d. Secure the suspension brackets to joists with the wood screws Ⓑ .
   e. Secure the suspension brackets to fan body ❶ with the short machine screws Ⓐ.
   f. Remove tap before connecting the duct as shown in Figure 1-2.

Hardware

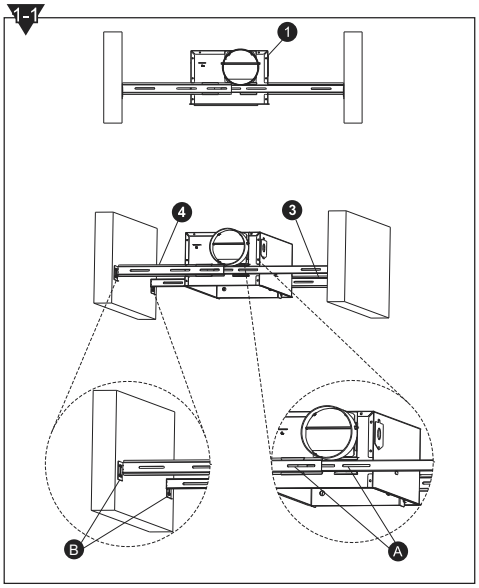
Ⓐ Short Machine Screw (M4x12 mm) Qty.4



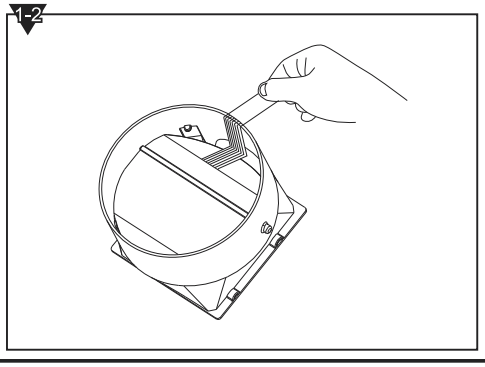
Ⓑ Wood Screw (Ø 4x14 mm) Qty.8



1-1



1-2



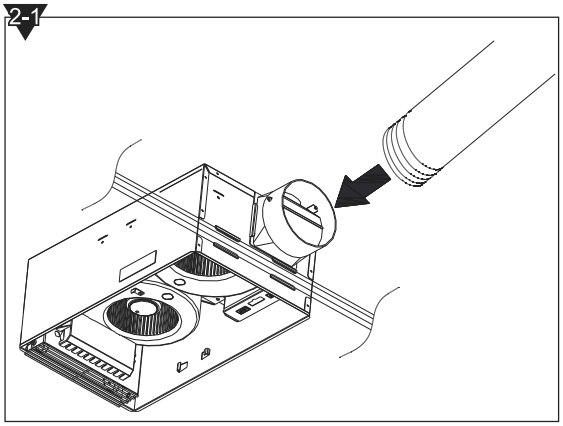
ASSEMBLY INSTRUCTIONS

2. Connecting the duct

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

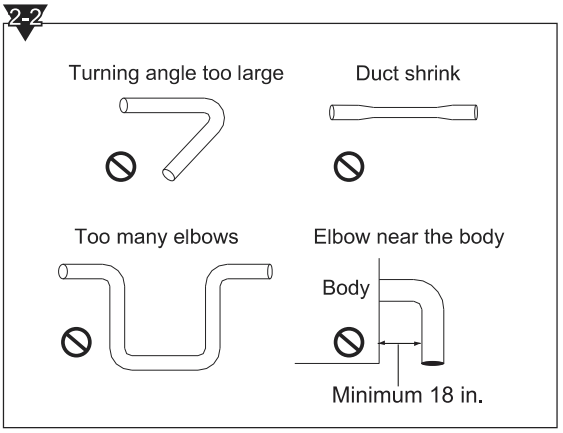
a. Insert the duct into the duct connector and tape all duct work connections to make them secure and air tight.

2-1



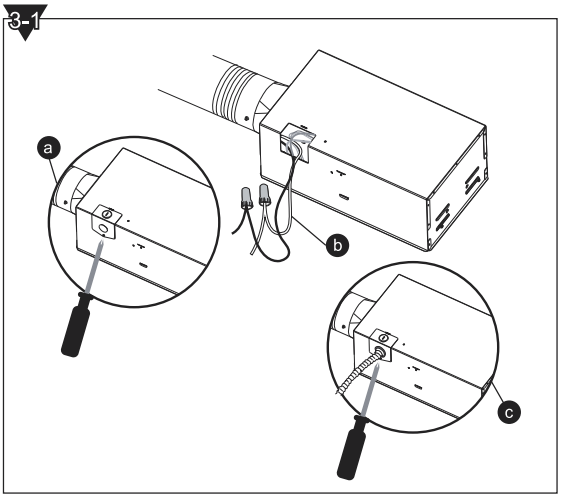
b. Do not install the unit where ducts are configured as shown in Figure 2-2. Install the duct with a gradient of 1°-2° to the outside.

2-2



3. Remove the fan junction box cover ⓐ. Using wire nuts (not supplied), connect house wires to fan wires ⓑ as shown in the wiring diagram on page 8. Reattach fan junction box cover ⓒ.

3-1



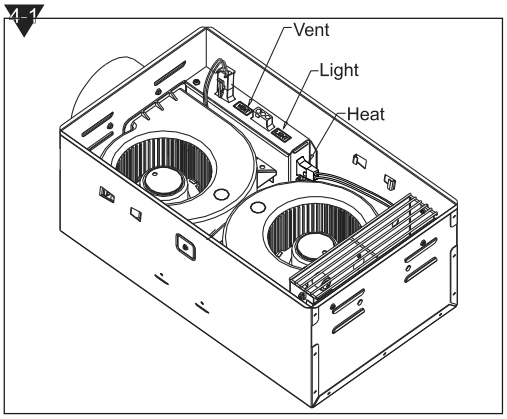
ASSEMBLY INSTRUCTIONS

4. Completing the Installation

a. Check the plug from the fan into the receptacle marked “Vent”

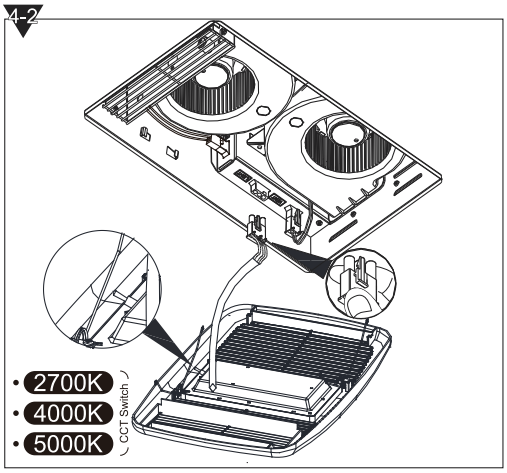
Check the plug from the heating unit into the receptacle marked “Heat”

4-1



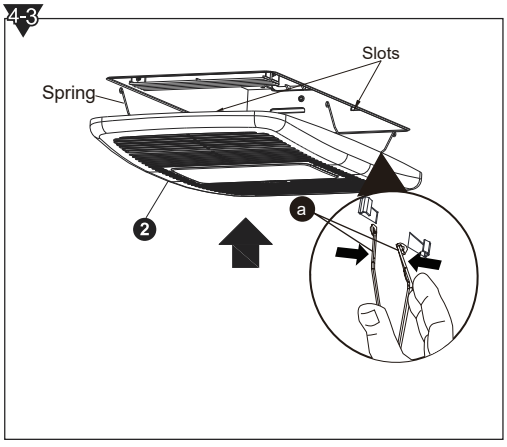
b. Plug the Light Connector into the receptacle marked “Light” (For model 80LED-HEATER-ADJ)
Using the switch on the back of grille, choose the color temperature you want for your LED. You can choose from 2700K warm white, 4000K cool white, and 5000K daylight white.

4-2



c. Attach grille ❷ by pinching mounting springs ⓐ and insert into the narrow rectangular slots in fan body.

4-3

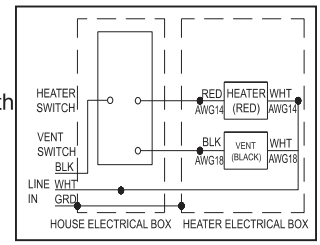


WIRING INSTRUCTIONS

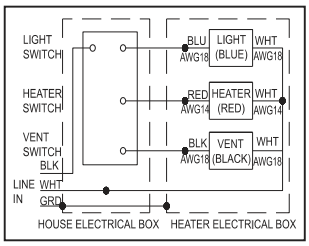
CAUTION:

- Make sure power is switched off at service panel before starting installation.
- All electrical connections must be made in accordance with local codes, ordinances, or national electrical code. If you are unfamiliar with methods of installing electrical wiring, secure the services of a qualified electrician.

Model: 80F-HEATER



Model: 80LED-HEATER-ADJ

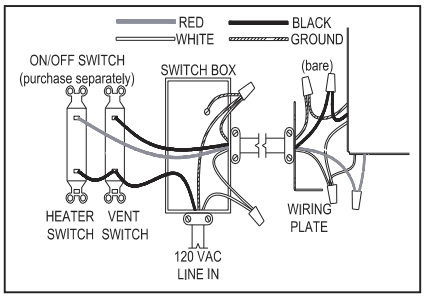


WARNING:

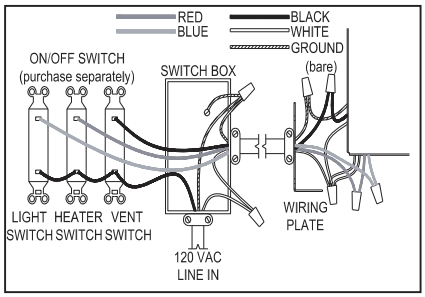
- This unit must be wired on a separate 15 amp circuit.
- If your house wires do not match these colors, you must determine what each house wire represents before connecting and you may need to consult an electrical contractor to determine this safely.

1. Follow all local electrical and safety codes.
2. Never place a switch where it can be reached from a tub or shower.
3. Using wire nuts (not included), connect house power wires to fan wires.
4. 14 AWG (2.1 mm^2) is the smallest conductor that may be used for branch-circuit wiring. Each power wire (light, fan, heater) must have its own switch to operate independently.
5. For supply connections, use wire rated for at least 90ºC. See wiring diagram for wire size.

Model: 80F-HEATER



Model: 80LED-HEATER-ADJ



OPERATING INSTRUCTIONS

WARNING:

This unit must be properly installed before it is used. Follow instructions for cleaning, user-maintenance and operations recommended by the manufacturer, such as lubrication or non lubrication. Any other servicing should be performed by an authorized service representative.

1. Turn on the light switch to turn on the LED light. (For model 80LED-HEATER-ADJ)
2. Turn on the vent switch to operate the fan mode.
3. Turn on the heat switch to operate the heater mode.

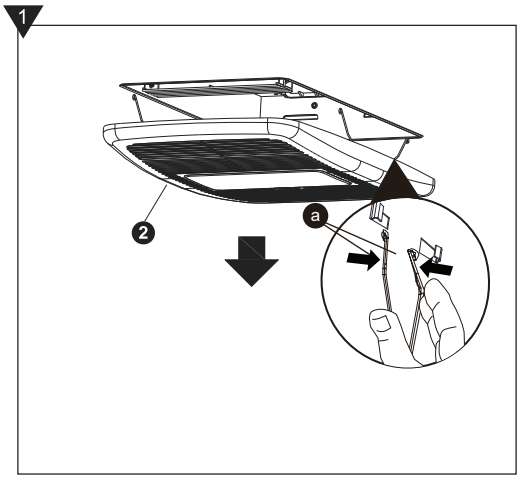
CARE AND MAINTENANCE

Routine maintenance must be done every year.

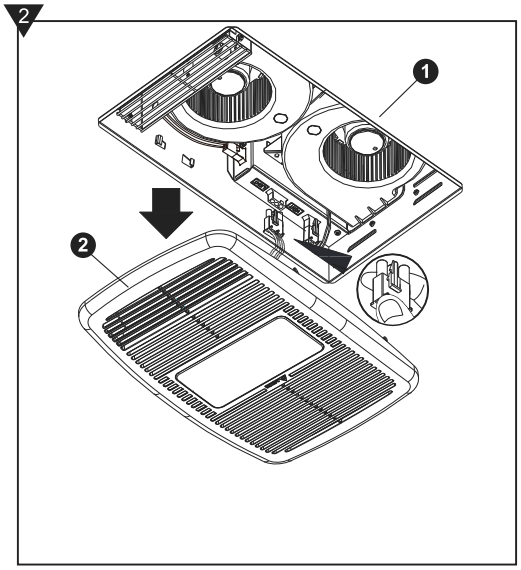
CAUTION:

- Make sure power is switched off at service panel before servicing the unit.

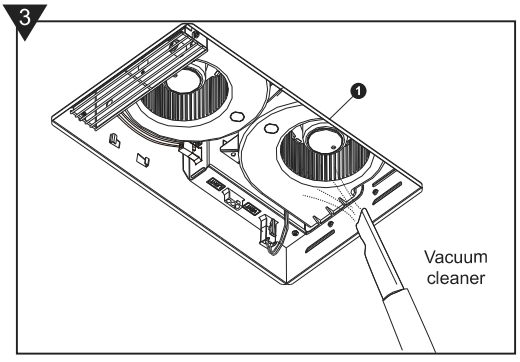
1. Squeeze springs and pull down.



2. Remove Grille Assembly ❷ .



3. Remove dust and dirt from the Fan Body ❶ with a vacuum cleaner.
   Do not use abrasive cloths, steel wool pads, or scouring powders. Never use solvents, thinner or harsh chemicals when cleaning the fan.
   Please refer to Completing the Installation.
   Follow the steps on pages 7 to assemble grille back.

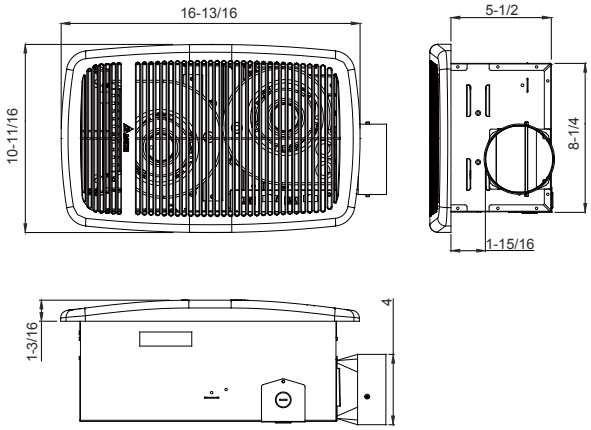


TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
The fan is not turning on	1. Power off 2. Faulty switch 3. Faulty wire connection	1. Make sure power supply is on. 2. Test or replace switch. 3. Check wire in switch box.
The fan seems louder than it should	1. CFM 2. Damper not working properly or damaged 3. Bend in duct too close to fan discharge 4. Fan discharge reduced to fit smaller duct 5. Fan body not securely attached	1. Be sure the CFM rating on the fan matches the size of your room. 2. Check damper to ensure it is opening and closing properly. If the damper has become damaged, please call Customer Service. 3. Be sure you do not have any sharp bends in duct closer than 18 in. to the fan discharge. 4. Use recommended size ducting to reduce fan noise. 5. Be sure the fan is securely attached to your ceiling joists.
The fan is not clearing the room	1. Insufficient intake airflow within room 2. Insufficient CFM	1. Be sure a door or window is slightly ajar or opened to allow airflow. The fan is not able to draw air out of the room without enough airflow to draw in from. 2. Be sure the CFM rating on the fan matches the requirements for your room size.
The light is not turning ON	1. Power off 2. Faulty switch 3. Faulty wire connection	1. Make sure power supply is on. 2. Test or replace switch. 3. Check wire in switch box.

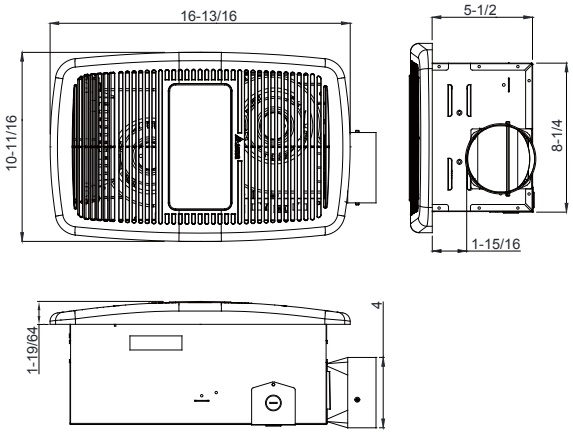
DIMENSIONS

Model: 80F-HEATER / VHB080F4A1



Unit: inch

Model: 80LED-HEATER-ADJ / VHB080F4LED2-A



Unit: inch

PRODUCT SPECIFICATIONS

SPECIFICATIONS		
Model No.	80F-HEATER / VHB080F4A1	80LED-HEATER-ADJ / VHB080F4LED2-A
Airflow @ 0.1 in. WG	80 CFM	80 CFM
Noise	1.5 Sones	1.5 Sones
Voltage	120V	120V
Hertz	60Hz	60Hz
Power Consumption	1314W	1327W
Duct Diameter	4 in.	4 in.
Weight	9.81 lbs.	10.4 lbs.

TYPE IC INHERENTLY PROTECTED.
THERMALLY PROTECTED L.

Dimension	
Ceiling opening-length	14-5/8 in.
Ceiling opening-width	8-1/2 in.
Ceiling opening-height	5-1/2 in.
Housing dimension-length	14-3/8 in.
Housing dimension-width	8-1/4 in.
Housing dimension-height	5-1/2 in.

WARRANTY

DELTA ELECTRONICS THREE YEAR LIMITED WARRANTY

Delta Electronics Inc. (“Delta Electronics”) warrants to the original consumer purchaser in the USA that the Breez ventilation fan products will be free from defects in material or workmanship. This warranty is limited to three (3) years from the original date of purchase.

Limitations and Exclusions

1. During the warranty period, a replacement for any defective product will be supplied free of charge for installation by the consumer. The warranty provided herein does not cover charges for labor or other costs incurred in the troubleshooting, repair, removal, and installation service.
2. All returns of defective parts or products must include the product model number, and must be made through an authorized Delta Electronics distributor. Authorized returns must be shipped prepaid. Repaired or replacement products will be shipped by Delta Electronics F.O.B. shipping point.
3. Delta Electronics shall not be liable for any indirect, incidental, consequential, punitive, or special damages arising out of or in connection with products use or performance, regardless of the form of action whether in contract, tort (including negligence), strict product liability or otherwise.
4. This warranty does not extend to fluorescent lamp starters and tubes.
5. The warranty does not cover if user does not comply with manufacturer’s installation manual.
6. To qualify for warranty service, you must notify Delta Electronics at the address or telephone number below.
7. Delta Electronics shall have no liability to the original owner-user with respect to any defect caused by abuse, misuse, neglect, improper transportation or storage, improper testing, improper installation, improper operation, improper use, improper maintenance, improper repair, improper alteration, improper modification, tampering or accident of products or parts thereof, or unusual deterioration or degradation of products or parts thereof due to a physical environment beyond the requirements of products’ specifications.

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1-877-685-4384-Customer Sales Support
www.deltabreez.com
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Distributed by Delta Electronics (Americas) Ltd.
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