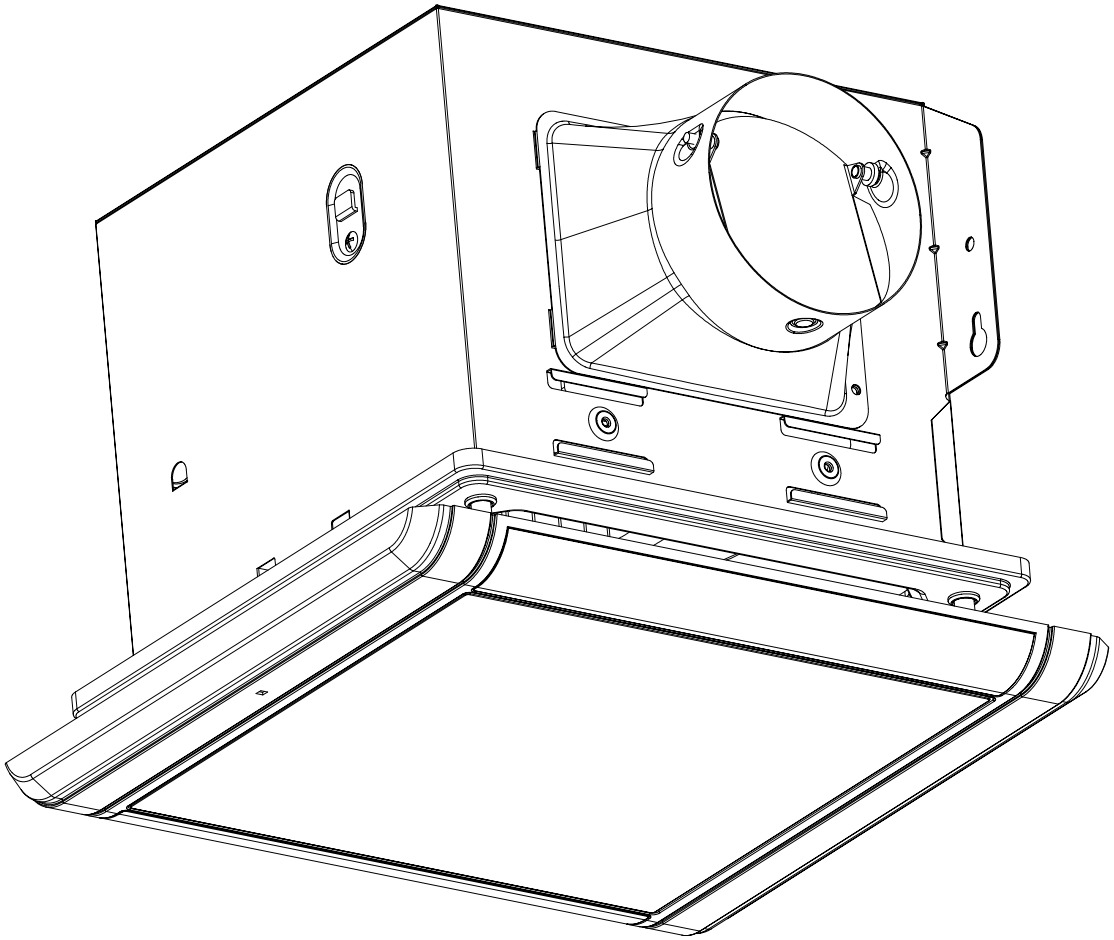
HOMEWERKS™

SmartVent BATHROOM VENTILATION FAN

MODEL 7145-80V-HS

Español p. 13



Questions, problems, missing parts? Before returning to the store, call our customer service department at 1-877-319-3757, 7:30 a.m. - 4:30 p.m., CST, Monday - Friday.

READ AND SAVE THESE INSTRUCTIONS

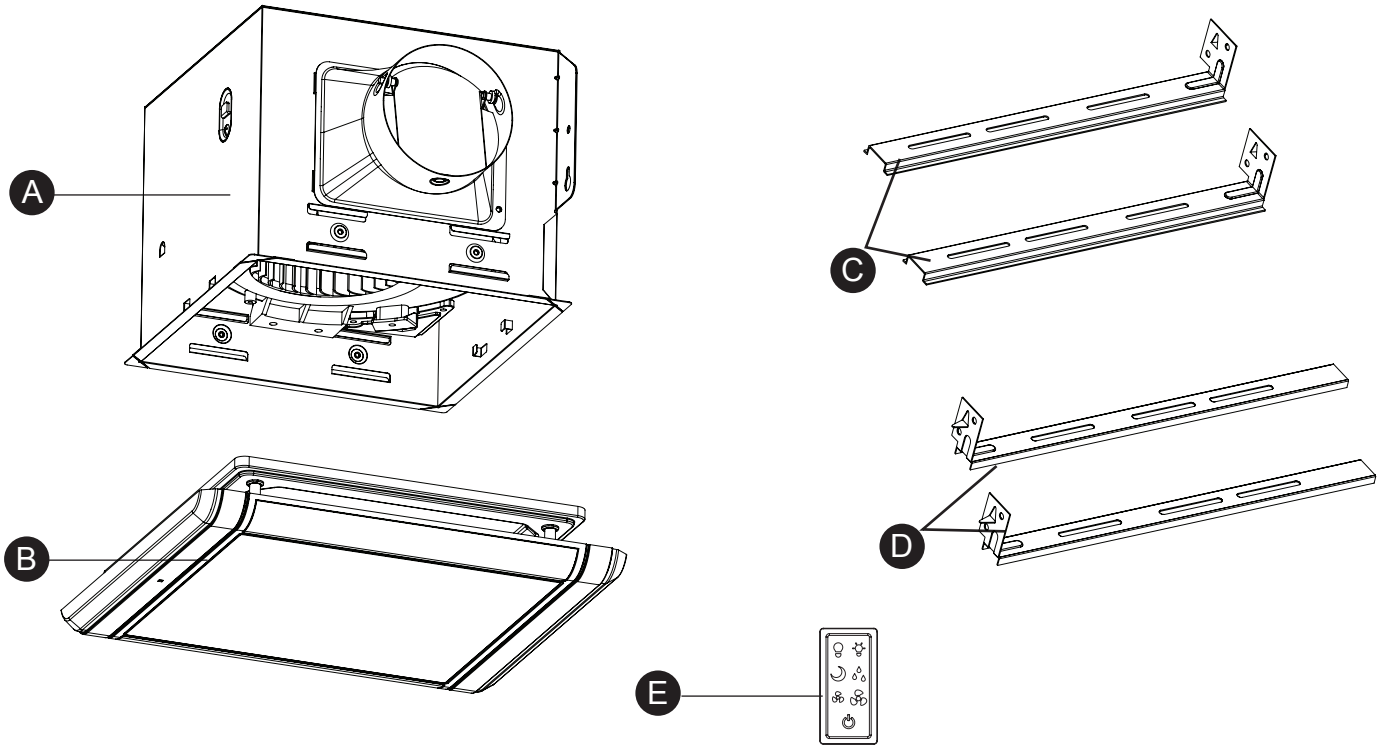
TABLE OF CONTENTS

PRODUCT SPECIFICATIONS

Airflow: 80 - 100 CFM
120V, 60Hz
Duct diameter: 4 in.
Sound output: 1.0 - 1.5 sones
Motor power consumption: 22 - 30.5W
Exhaust fan speed: 1100 average RPM

LED light power consumption: 15W
LED light brightness: 800 lumens
LED light color (CCT): 4000K Cool White
Night light colors: Blue and Amber
Weight: 9.17 lbs.

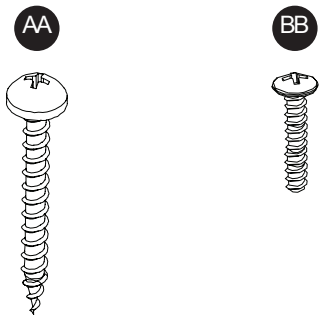
PACKAGE CONTENTS



PART	DESCRIPTION	QTY
A	Fan Housing	1
B	Grille with LED lights	1
C	Suspension Bracket	2

PART	DESCRIPTION	QTY
D	Suspension Bracket	2
E	LED Wall Switch	1

HARDWARE INCLUDED (not actual size)



Wood Screw
M4 x 30
Qty. 8

Machine Screw
M4 x 12
Qty. 4

SAFETY INFORMATION

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

- Always disconnect the power supply prior to servicing the fan, motor or junction box.
- Follow all local building, safety and electrical codes as well as NEC (National Electrical Code) and OSHA (Occupational Safety and Health Act).
- Electric Service supply must be 120 volts, 60 hertz.
- This product must properly connect to the grounding conductor of the supply circuit.
- Do not bend or kink the power wires.
- Do not use this fan with any solid state control device, such as a remote control, dimmer switch, or certain timers. Mechanical timers are not solid state devices.
- Do not install in a ceiling with insulation greater than R40.
- Duct work should be installed in a straight line with minimal bends.
- Duct work size must be the same size as the discharge and should not be reduced. Reducing the duct size may increase fan noise.

CAUTION

- **For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.**
- **Not for use in cooking areas.**
- **To reduce the risk of injury to persons, install the fan at least 7 feet (2.1m) above the floor.**

WARNING: To reduce the risk of fire, electric shock, or injury to persons, observe the following:

1. Use this unit in the manner intended by the manufacturer. If you have any questions, please call customer service.
2. Before servicing or cleaning unit, switch power 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.
3. Installation work and electrical wiring must be done by a qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
4. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent backdrafting.Follow the heating equipment manufacturer´s guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) and local code authorities.
5. When cutting or drilling into the wall or ceiling, do not damage electrical wiring and other hidden utilities.
6. Ducted fans must always be vented to the outdoors.
7. If this unit is to be installed over a tub or shower, it must be marked as appropriate for the application and be connected to a GFCI (Ground Fault Circuit Interrupter)-protected branch circuit.
8. This ventilation fan is intended to be installed at least 3 ft. 3-1/4 in. (1 m) from the showerhead when installing over a bathtub or shower. Installation within a shower stall is not recommended for this unit, unless the 3 ft. 3-1/4 in. (1 m) distance can be met.

PREPARATION

Before beginning assembly of product, make sure all parts are present. Compare parts with package contents list and hardware contents. If any part is missing or damaged, do not attempt to assemble, install or operate the product. Contact customer service for replacement parts at 1-877-319-3757, 7:30 a.m. - 4:30 p.m., CST, Monday - Friday.

Tools Required for Assembly (not included): Hammer, Flathead Screwdriver, Wire Connectors, Nails, Duct Tape, Phillips Head Screwdriver, and Utility Knife or Drywall Saw.

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

WARNING: RISK OF ELECTRIC SHOCK! Ensure the electricity to the wires you are working on is shut off. Either remove the fuse or turn off the circuit breaker before removing the existing bath fan or installing the new one.

Carefully remove unit from carton.

PREPARATION

Before removing your current ventilation unit, verify your switch box on the wall has the required supply wires necessary for this installation. These supply wires are power/black and neutral/white (refer to right side of wiring diagram below) at the switch. If you do not see both of these wires, consult a licensed electrician.

Check area above installation location to be sure that wiring can run to the planned location and that duct work can be run and the area is sufficient for proper ventilation.

Inspect duct work and wiring before proceeding with 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.

Note: Installation 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.

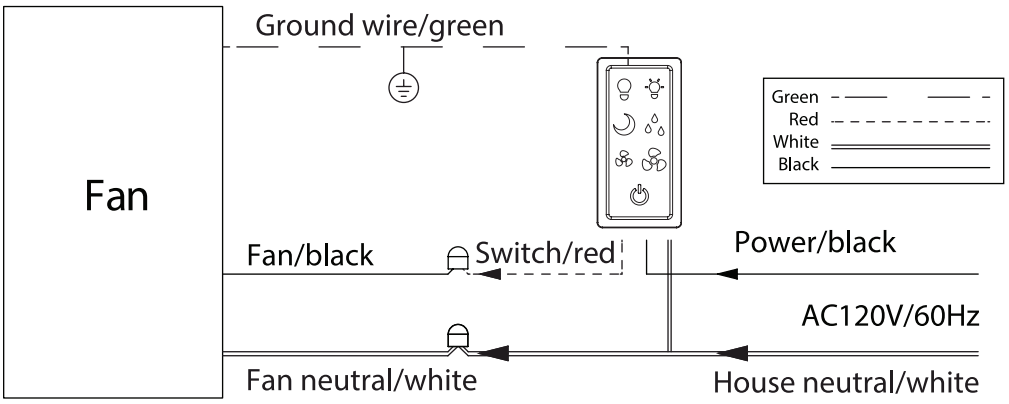
DIMENSION REQUIREMENTS

Ceiling Opening (L)	Ceiling Opening (W)	Ceiling Opening (H)
9-1/4 in.	9-1/4 in.	8-1/4 in.

Housing Dimension (L)	Housing Dimension (W)	Housing Dimension (H)
9 in.	9 in.	7-13/16 in.

WIRING DIAGRAM

All wiring must be connected for full functionality. Do not use metal wall plate with switch.



ATTENTION:

The switch included with this ventilation fan requires a neutral wire connection. If a neutral line is not present, one must be run by a qualified electrician.

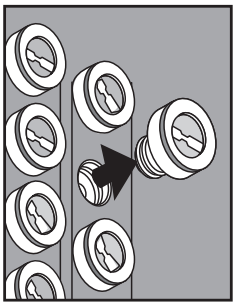
NOTE: This switch is intended to only operate independently with this bath fan. Connections to other electrical fixtures are prohibited and could cause electrical issues.

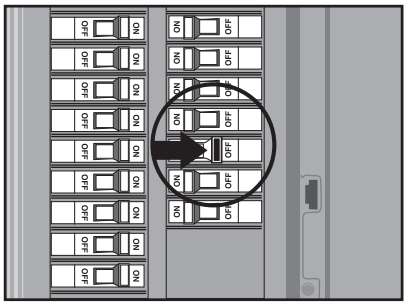
If you require assistance, please call 1-877-319-3757 before attempting switch installation.

NEW CONSTRUCTION INSTALLATION INSTRUCTIONS

BEFORE INSTALLATION

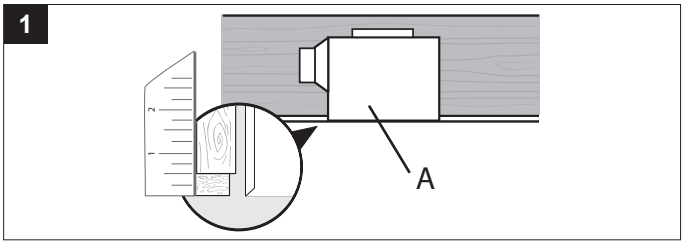
WARNING: RISK OF ELECTRIC SHOCK! Ensure the electricity to the wires you are working on is shut off. Either remove the fuse or turn off the circuit breaker before removing the existing bath fan or installing the new one.



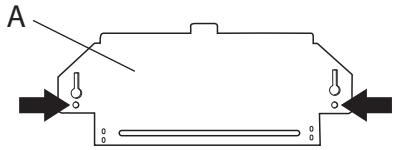


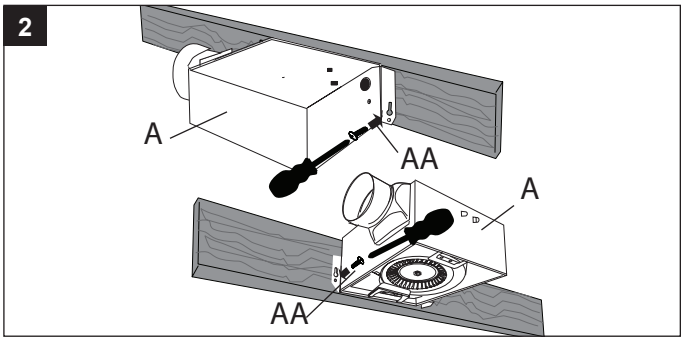
1. **Installation Without Suspension Brackets**

   Place the fan housing (A) next to a ceiling joist or wall stud. The fan housing (A) should be level and perpendicular to the joist or wall stud. Allow for thickness of ceiling board or drywall used in your application. DO NOT flush mount to joist or wall stud. Bottom of fan housing (A) should be flush with the ceiling board or drywall.

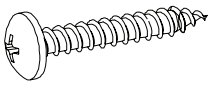


2. Mount fan housing (A) to the joist or wall stud using wood screws (AA) where indicated by arrows outside the fan body (A).



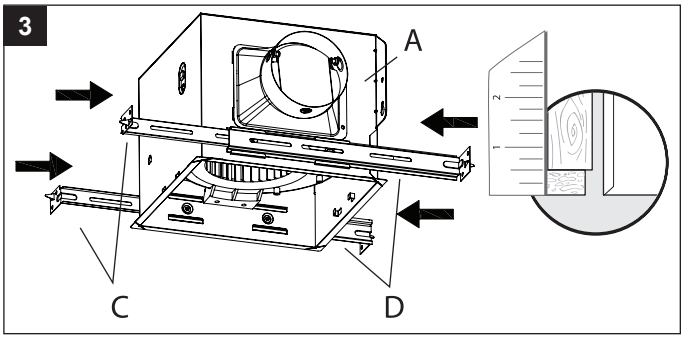


Hardware Used

AA	Wood screws		x 2

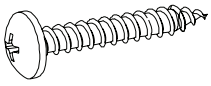
3. **Installation With Suspension Brackets**

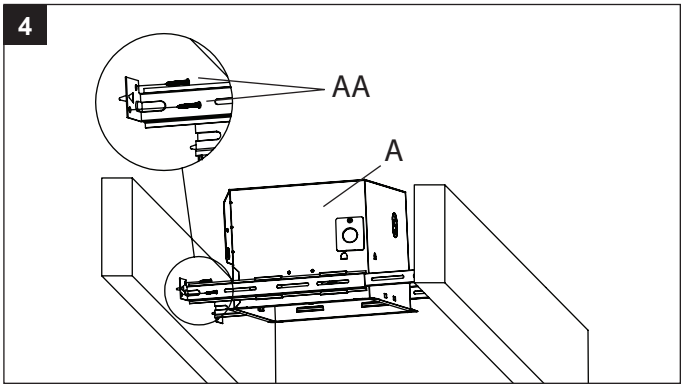
   Insert suspension brackets (C and D) onto fan housing (A). Position the fan housing (A) so the edge of fan is flush with the ceiling board or drywall. Do not flush mount the fan housing (A) with the ceiling joist or wall stud.



4. Secure the fan housing (A) to the ceiling joists or wall studs using wood screws (AA) (included).

Hardware Used

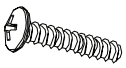
AA	Wood screws		x 8

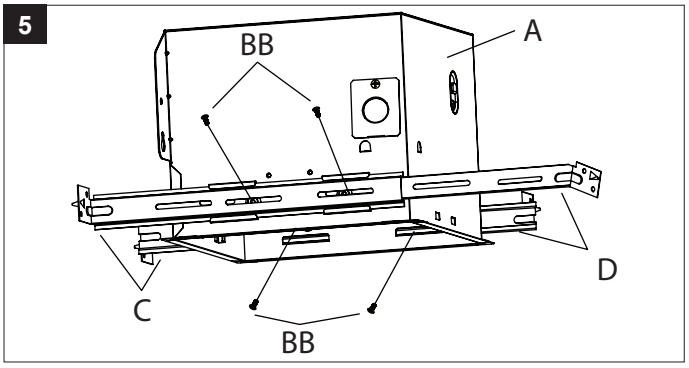


NEW CONSTRUCTION INSTALLATION INSTRUCTIONS (continued)

5. Secure the suspension brackets (C and D) to the fan housing (A) using machine screws (BB) (included).

Hardware Used

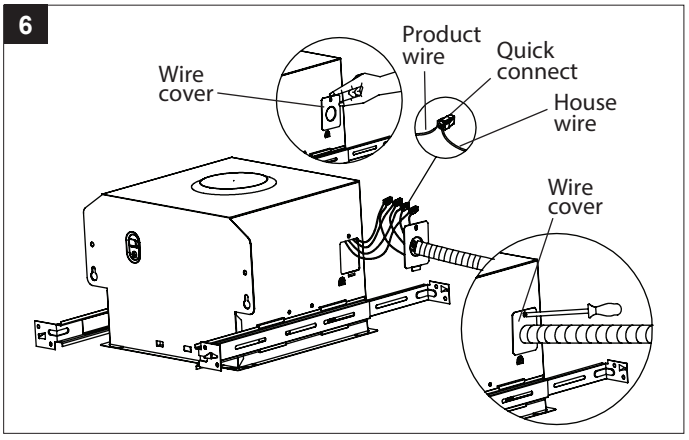
BB	Machine screws		x 4



6. Remove the wiring cover. Pull the house wires through the wiring cover hole. Using the attached quick connectors, connect 120v house wiring to the fan as shown in the wiring diagram on page 5. 12-18 AWG is the smallest conductor that should be used for branch circuit wiring.

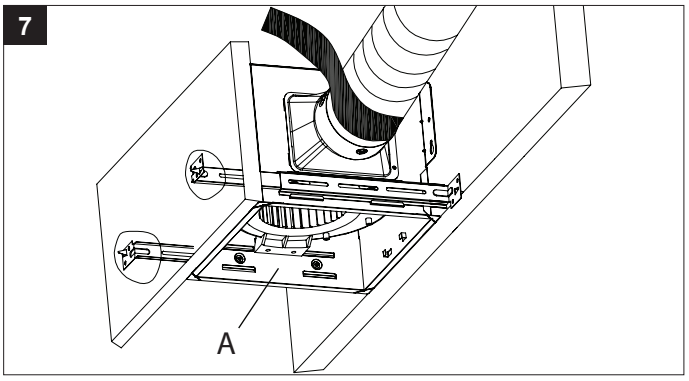
   Carefully push the connected wires back into the wiring box housing. Reattach the wiring box cover.

   CAUTION: If the house electrical wires do not match the colors from the fan wiring diagram on page 5, you must determine what each house wire represents before connecting. You may need to consult an electrical contractor to determine safely.

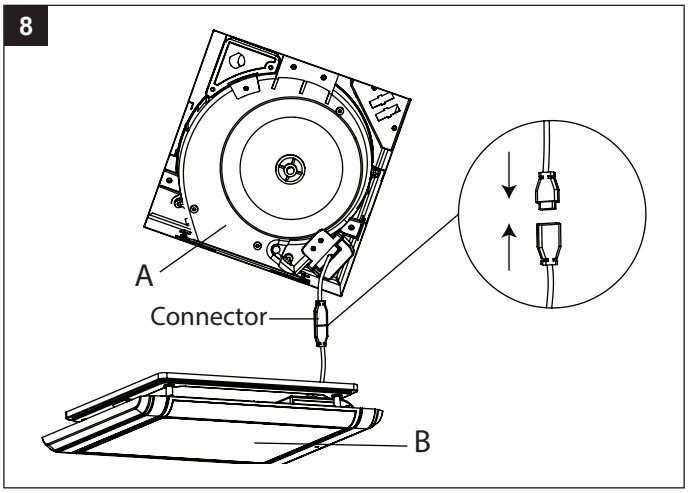


7. Connect a 4 in. circular duct (not included) and vent to the outside. Secure it with duct tape (not included) or a clamp (not included) to make the connection secure and airtight.

   Finish ceiling work. Ceiling hole should be aligned with edge of the fan housing (A).



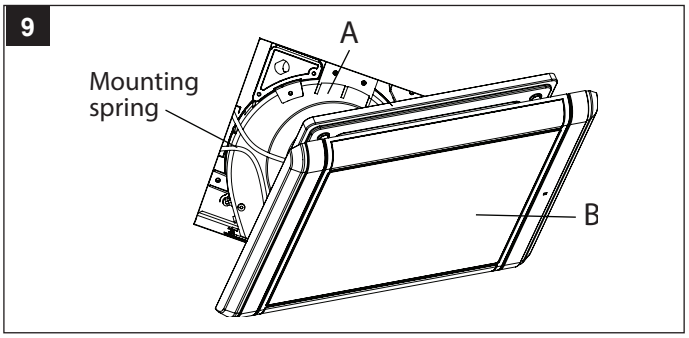
8. Plug the connector attached to the grille (B) into the connector on the fan housing (A).



NEW CONSTRUCTION INSTALLATION INSTRUCTIONS (continued)

9. Attach the grille (B) by pinching the mounting springs and inserting into the narrow rectangular slots in the fan housing (A).

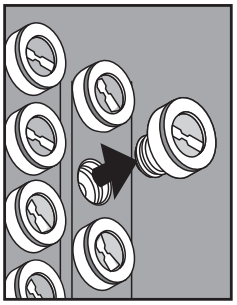
   Turn on the power source. If you hear any abnormal sound or vibration, please refer to the Troubleshooting Guide on page 12.

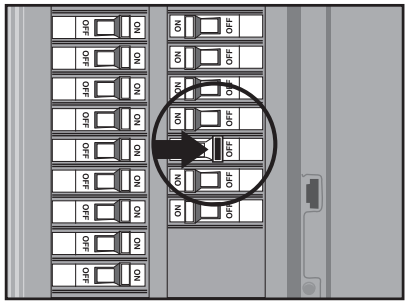


EXISTING CONSTRUCTION INSTALLATION INSTRUCTIONS

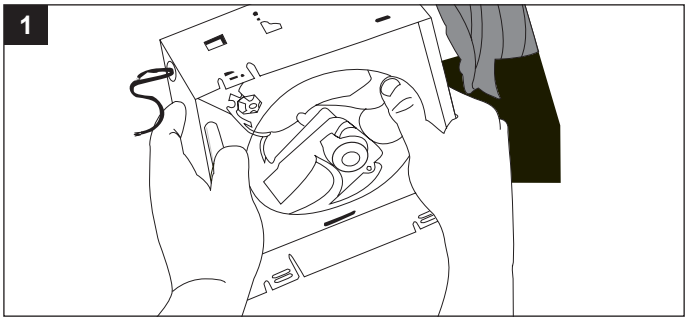
BEFORE INSTALLATION

WARNING: RISK OF ELECTRIC SHOCK! Ensure the electricity to the wires you are working on is shut off. Either remove the fuse or turn off the circuit breaker before removing the existing bath fan or installing the new one.

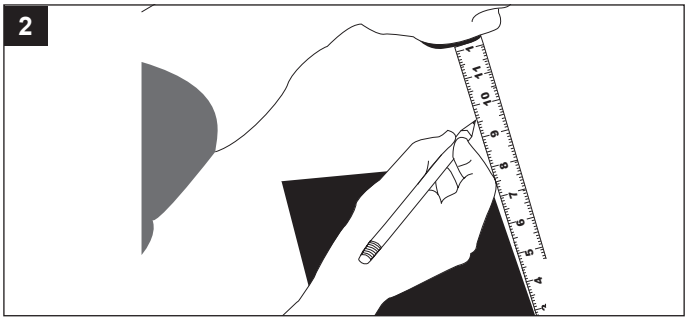




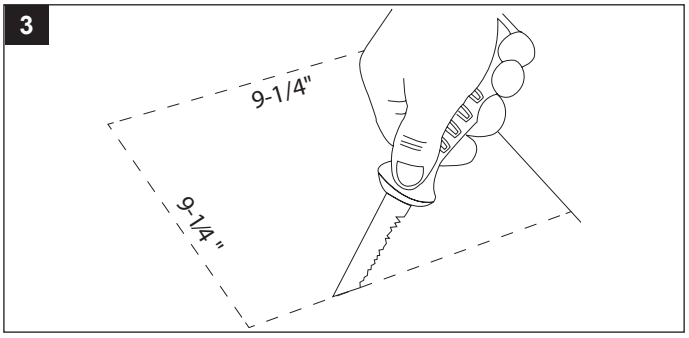
1. Remove existing fan.



2. Measure the opening to ensure it is large enough to accommodate the new fan housing (9-1/4 in. x 9-1/4 in.).



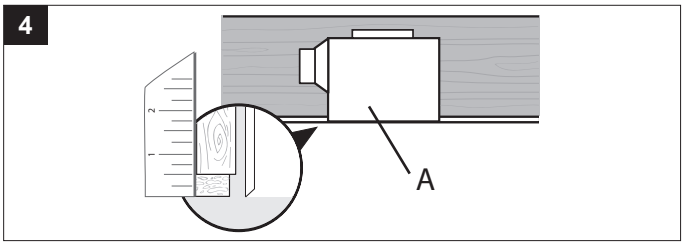
3. If the opening is not large enough for the new fan housing, cut a 9-1/4 in. x 9-1/4 in. opening for the fan housing (A).



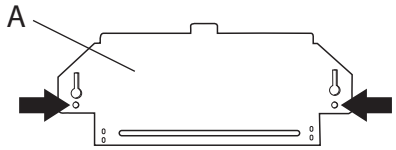
EXISTING CONSTRUCTION INSTALLATION INSTRUCTIONS (continued)

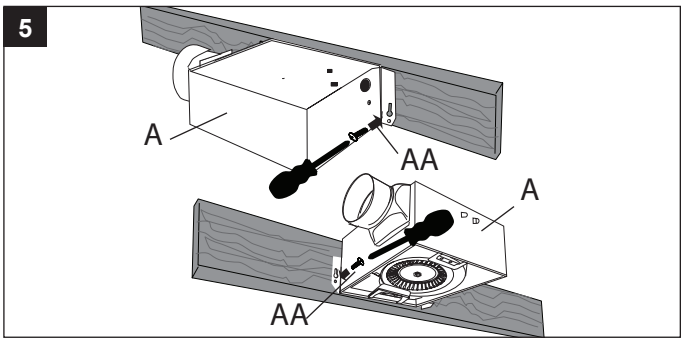
4. **Installation Without Suspension Brackets**

   Place the fan housing (A) next to a ceiling joist or wall stud. The fan housing (A) should be level and perpendicular to the joist or wall stud. Allow for thickness of ceiling board or drywall used in your application. DO NOT flush mount to joist or wall stud. Bottom of fan housing (A) should be flush with the ceiling board or drywall.

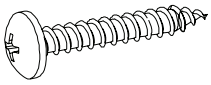


5. Mount fan housing (A) to the joist or wall stud using wood screws (AA) where indicated by arrows outside the fan body (A).



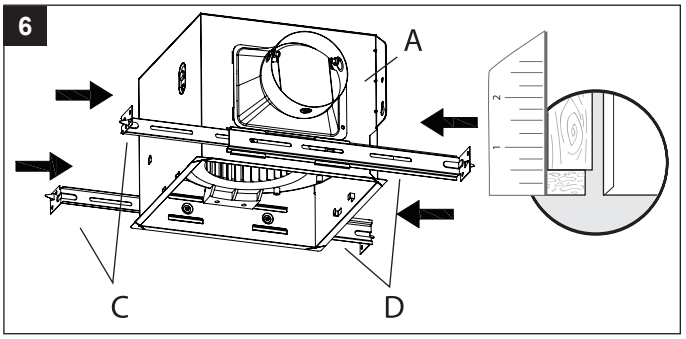


Hardware Used

AA	Wood screws		x 2

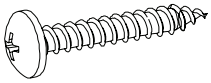
6. **Installation With Suspension Brackets**

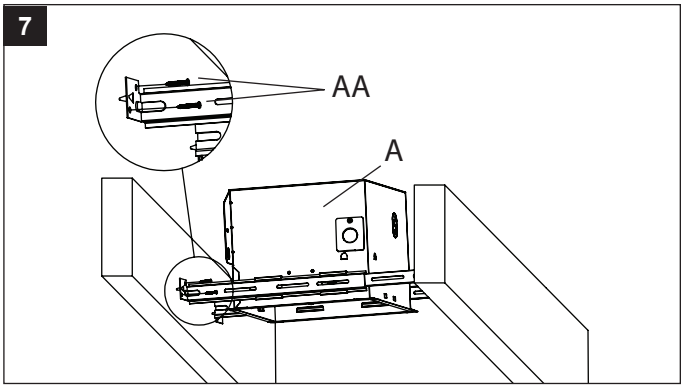
   Insert suspension brackets (C and D) onto the fan housing (A). Position the fan housing (A) so the edge of fan is flush with the ceiling board or drywall. Do not flush mount the fan housing (A) with the ceiling joist or wall stud.



7. Secure the fan housing (A) to the ceiling joists or wall studs using wood screws (AA) (included).

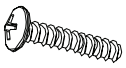
Hardware Used

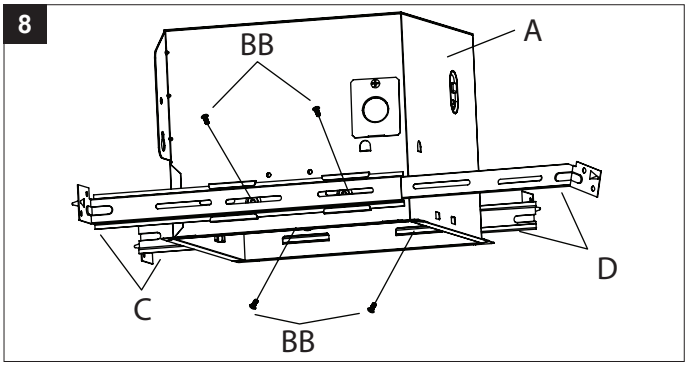
AA	Wood screws		x 8



8. Secure the suspension brackets (C and D) to the fan housing (A) using machine screws (BB) (included).

Hardware Used

BB	Machine screws		x 4

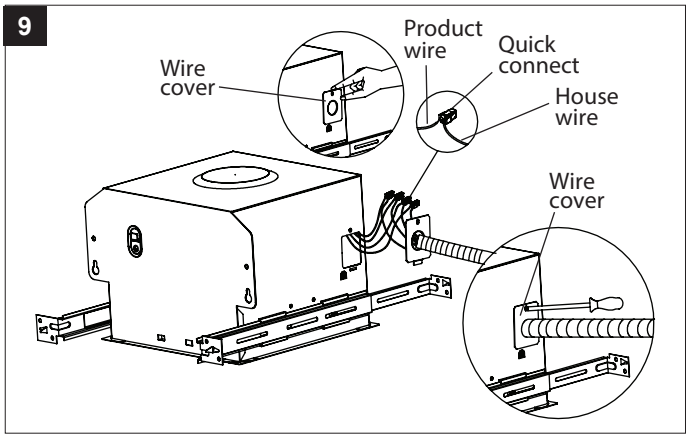


EXISTING CONSTRUCTION INSTALLATION INSTRUCTIONS (continued)

9. Remove the wiring cover. Pull the house wires through the wiring cover hole. Using the attached quick connectors, connect 120v house wiring to the fan as shown in the wiring diagram on page 5. 12-18 AWG is the smallest conductor that should be used for branch circuit wiring.

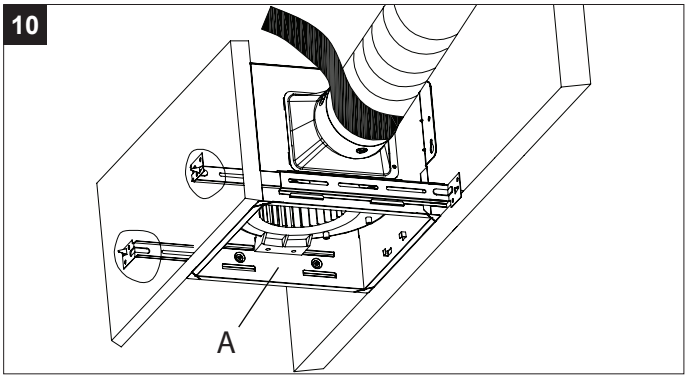
   Carefully push the connected wires back into the wiring box housing. Reattach the wiring box cover.

   CAUTION: If the house electrical wires do not match the colors from the fan wiring diagram on page 5, you must determine what each house wire represents before connecting. You may need to consult an electrical contractor to determine safely.

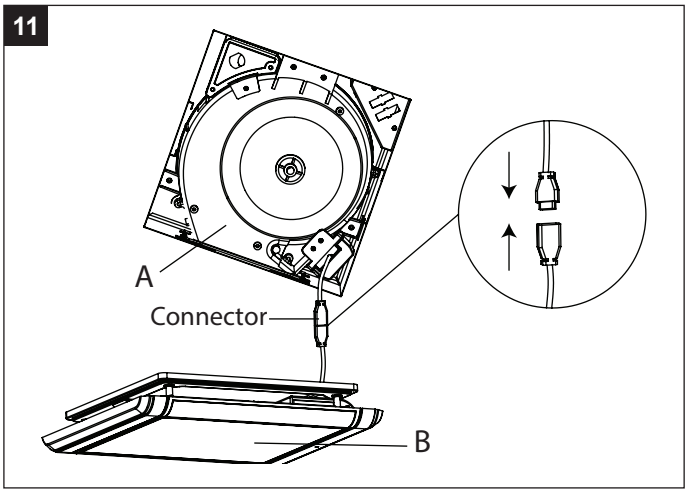


10. Connect a 4 in. circular duct (not included) and vent to the outside. Secure it with duct tape (not included) or a clamp (not included) to make the connection secure and airtight.

    Finish ceiling work. Ceiling hole should be aligned with edge of the fan housing (A).

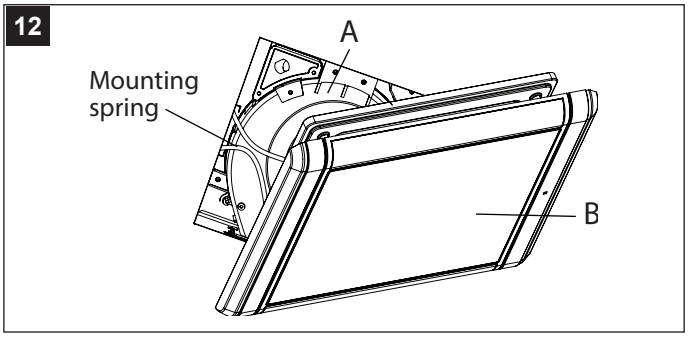


11. Plug the connector attached to the grille (B) into the connector on the fan housing (A).



12. Attach the grille (B) by pinching the mounting springs and inserting into the narrow rectangular slots in the fan housing (A).

    Turn on the power source. If you hear any abnormal sound or vibration, please refer to the Troubleshooting Guide on page 12.

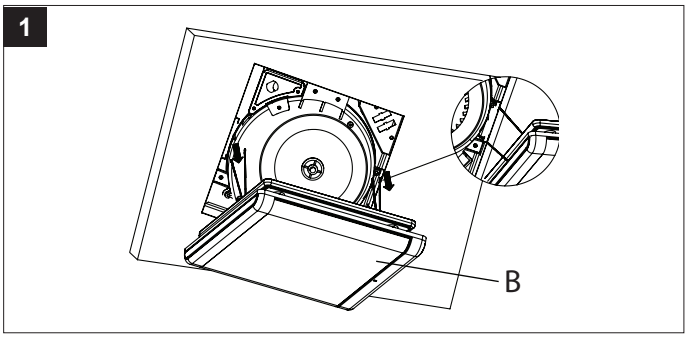


CARE AND CLEANING

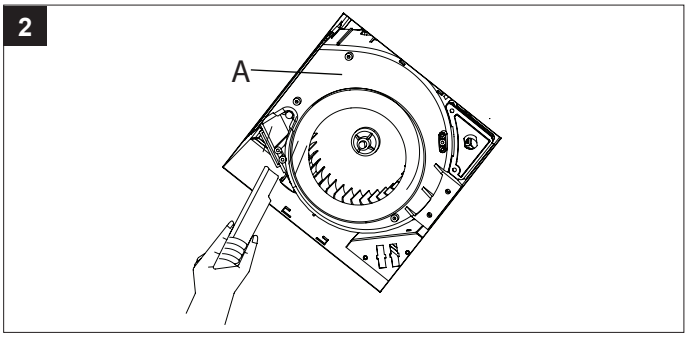
CAUTION: Before attempting to clean the fixture, disconnect the power to the fixture by turning the breaker off or removing the fuse from the fuse box.

- See safety information before proceeding. Routine maintenance should be done at least once a year.
- Never use solvents, thinner or harsh chemicals for cleaning the fan.
- Do not allow water to enter the motor.
- Do not immerse metal parts in water.
- Do not immerse resin parts in water more than 140°F.

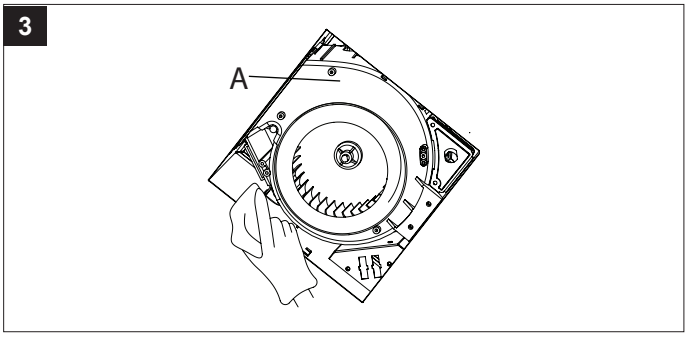
1. Remove grille (B) by squeezing springs and pulling down. Wipe grille with a damp cloth.



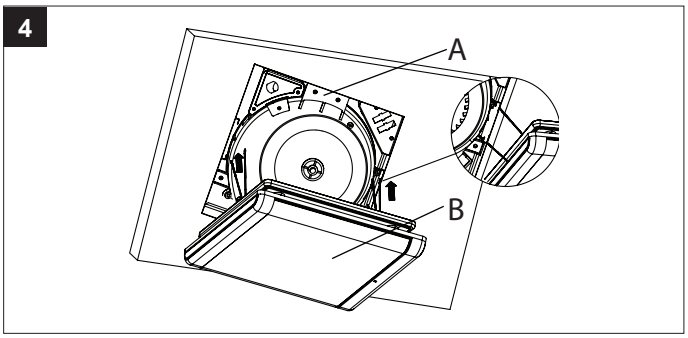
2. Remove dust and dirt from the fan housing (A) with a vacuum cleaner.



3. Wipe the fan housing (A) with a damp cloth and wipe dry.



4. Replace the grille (B) and turn on the power source.



TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
The fan seems louder than it should.	The CFM is too great.	Be sure the CFM rating on the fan matches the square footage of your room.
	The damper is damaged or not working properly.	Check the damper to ensure it is opening and closing properly. If the damper has become damaged, please call Customer Service.
	The bend in the duct is too close to the fan discharge.	Be sure you do not have any sharp bends in the duct within 18 in. of the fan discharge.
	The fan discharge is reduced to fit a smaller duct.	Use the recommended size ducting to reduce fan noise.
	The fan body is not attached securely.	Be sure the fan is securely attached to the ceiling joists.
The fan has an abnormal sound or vibration.	Fan body is not attached securely.	Be sure the fan housing is securely attached to the ceiling joists or wall studs.
	The grille is not attached securely.	Be sure the grille is pushed upward until it is gently, but firmly attached to the fan housing.
	The circular duct is not secured to the duct connector.	Be sure the duct tape or clamp is secured for an airtight connection.
The fan is not clearing humidity from the room.	There is insufficient airflow intake in the room.	Be sure a door or window is slightly ajar or open to allow airflow. The fan is not able to draw air out of the room without enough airflow.
	There is insufficient CFM. **NOTE:** Using a tissue is not the correct method for determining if the fan is operating properly. If the fan clears steam from the room within approximately 15 minutes of completing your shower, then the fan is operating properly.	Be sure the CFM rating of the fan matches the square footage of your room.
The fan keeps running even though the humidity level is lower than 60% RH. NOTE: Our sensor tolerance is +/-10% RH.	Outdoor humidity is back drafting into the fan.	Continue to let fan run since it is good to keep venting the house and the electric cost is minimal (estimated at less than $10 per year).
	If the light on the grille is red, the fan is in full speed mode and not humidity sensing mode and will not shut off automatically.	Turn the fan off when not in use.

LIMITED 3-YEAR WARRANTY

If the fan fails due to a defect in materials or workmanship at any time during the first three (3) years of ownership, the manufacturer will replace it free of charge, postage-paid at their option. This warranty does not cover products that have been abused, altered, damaged, misused, cut or worn. This warranty does not cover use in commercial applications. Use only manufacturer-supplied genuine warranty repair replacement parts to repair this fan. Use of non-genuine repair parts will void your warranty. The manufacturer DISCLAIMS all other implied or express warranties including all 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 legal rights, and you may have other rights that vary from state to state.

This warranty is limited to the replacement of defective parts only. Labor charges and/or damage incurred during installation, repair, replacement as well as incidental and consequential damages connected with the above are excluded. Any damage to this product as a result of neglect, misuse, accident, improper installation or use other than the purpose SHALL VOID THIS WARRANTY.

Shipping costs for return product as part of a claim on the warranty must be paid for by the customer. Inquiries regarding warranty claims can be directed to 1-877-319-3757, 7:30 a.m. - 4:30 p.m., CST, Monday - Friday.

The device has been evaluated to meet general RF exposure requirement,
The device can be used in portable exposure condition without restriction

Federal Communication Commission (FCC) Radiation Exposure Statement
Power is so low that no RF exposure calculation is needed.

FCC statements:
This device complies with part 15 of the FCC rules.
Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.
NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications or changes to this equipment. Such modifications or changes could void the user's authority to operate the equipment.