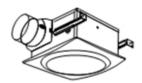
BATHROOM FAN



MODEL: VSF110D-S



WARNING

WARNING- TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, PLEASE READ THE FOLLOWING PRIOR TO INSTALLING THE FAN:

- 1. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer. 2. Before servicing or cleaning unit, switch power off at service panel to prevent power from being switched on accidentally. When the service disconnect 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 licensed person(s) in accordance with all applicable codes and standards, including fire-rated construction codes and standards. 4. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent backdraft. 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 the local code authorities.
- 5. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities. 6. Ducted fans must always be vented to the outdoors. 7. Unit is acceptable for use over a tub or shower when connected to a GFCI (Ground Fault Circuit Interrupter) protected branch circuit (ceiling installation only). 8. This unit must be grounded. 9. Not for use in kitchens. 10. Install fan at least 2.5 m (8.2 feet) above the floor. 11. 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 or ceilings or into attics, crawl spaces, or garages. This unit is appropriate for wall installation in a non-wet application. 12. WARNING: To reduce the risk of fire or electric shock, do not use this fan with any solid-state speed control device. 13. The fan must not be installed in a ceiling thermally insulated to a value greater than R40.

CAUTION

- For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
 This product is designed for installation in ceilings up to a 12/12 pitch (45 degree angle). Duct connector must point upward for wall application.
 To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit.
 Please read specification label on product for further information and requirements.
- *The manual in electronic format may be downloaded from our company website or obtained from the dealer.

CLEANING & MAINTENANCE

For quiet and efficient operation, long life, and attractive appearance - lower or remove grille and vacuum interior of unit with the dusting brush attachment.

The motor is permanently lubricated and never needs oiling.

OPERATION

User setting

The control box, located inside the fan housing, has one separate adjustment: the toggle switch, which will adjust the upper fan speed setting from 80 to 140 CFM.

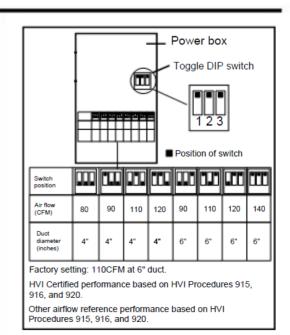
How to Work

To Turn Fan ON

Turn the Wall Switch (according to the following "CONNECT ELECTRICAL WIRING") ON.

To Turn Fan OFF

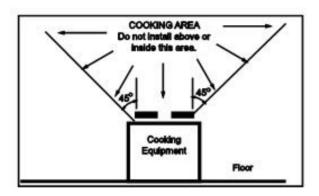
Turn the Wall Switch OFF

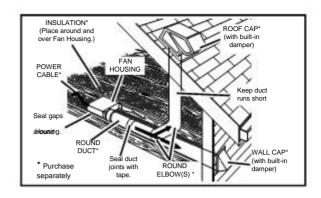


READ AND SAVE THESE INSTRUCTIONS

PLAN THE INSTALLATION

- 1. Do not use in a cooking area.
- 2. Two ways to connect ductwork to factory-shipped unit:





ASSEMBLY INSTRUCTIONS

1. Before installation, you need to know:



Note: Hanger bar (short) only can slide into channel A.

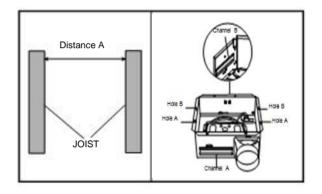
2. Mount with mounting holes and hanger bar

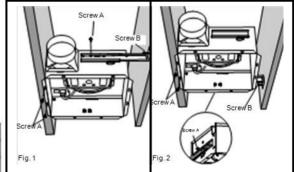
Slide one hanger bar into the channel on the housing and adjust as needed to fit between framing. Hold housing in place so that the housing contacts the bottom of the joist. Screw housing to joist through the hole A and hole B. Screw the hanger bar onto the other side of joist through the hole (refer to diagram at right).

Screw hanger bar to housing with screw A..

Hanger Bar Options

Distance A	Hanger Bar	Channel
13 1/4 in to 15 1/2 in (336mm-394mm)	Hanger bar (short)	Channel A (Fig. 1)
16 1/2 in to 18 7/8 in (419mm-480mm)	Hanger bar (long)	Channel B (Fig. 2)



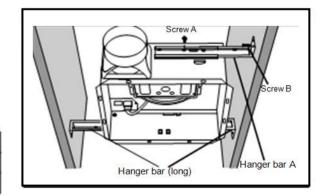


3. Mount with hanger bars only

Slide hanger bars onto housing and adjust as needed to fit between framing. Extend the hanger bars to the width of the framing. Position the fan with the hanger bar tabs wrapped around the bottom edge of the framing, holding the fan in place. Secure hanger bars to framing using one screw on each end of hanger bar (refer to diagram at right). Screw hanger bar to housing with screw A.

Hangar Bar A Option

Distance A	Hanger Bar A	
14 in to 23 1/2 in (356mm-597mm)	Hanger bar (short)	
21 1/4 in to 23 1/2 in (540mm-597mm)	Hanger bar (long)	

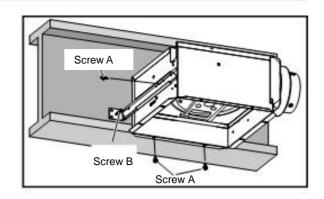


READ AND SAVE THESE INSTRUCTIONS

ASSEMBLY INSTRUCTIONS

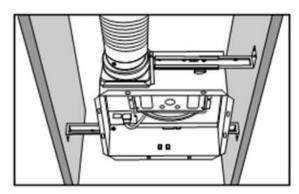
4. MOUNT TO I JOIST

Slide one hanger bar (long) into channel B on the housing and adjust as needed to fit between framing. Hold housing in place so that the housing contacts the bottom of the joist. Screw housing to joist through hole D and hole C. Screw the hangar bar onto the other side of joist through the hole (refer to diagram at right). Screw hangar bar to housing with screw A.



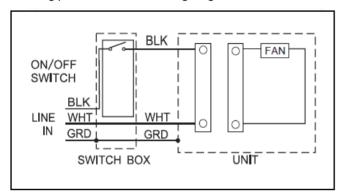
5. INSTALL ROUND DUCTWORK

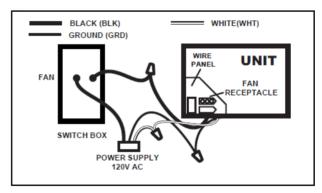
Connect the round ductwork (not included) to the damper/duct connector, and run the ductwork to a roof or wall cap (not included). Using duct tape (not included), secure all the ductwork connections so that they are air tight Insulated flexible duct is recommended for the quietest possible installation. If rigid duct is used, a short (1-3 feet) section of insulated flexible duct will ensure quiet operation.



CONNECT ELECTRICAL WIRING

Run 120 V AC house wiring to the location of the fan. Use only UL-approved connectors (not included) to attach the house wiring to the wiring plate. Refer to the wiring diagram and connect the wires as shown.

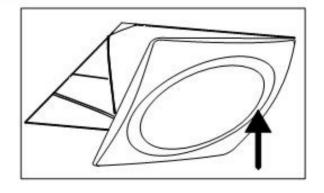




INSTALL GRILLE

Install ceiling material to complete ceiling construction. Then, cut around the fan housing.

To attach the grille assembly to the fan housing, pinch the grille springs on the sides of the grille assembly and position the grille into the housing with the grille springs in the appropriate slots. Gently push the grille assembly towards the ceiling to secure.



READ AND SAVE THESE INSTRUCTIONS

SERVICE PARTS

PART	PART NAME	Qty.
1	Grille Assembly (includes part 2)	1
2	Grille Spring	2
3	Power box	1
4	Motor Plate	1
5	Motor	1
6	Blower Wheel	1
7	Wire Panel / Harness Assembly	1
8	Hanger Bar Kit (long)	3
9	Wiring plate	1
10	Housing	1
11	Hanger Bar Kit (short)	1
12	Damper / Duct Connector	1
а	Nut, Hex Lock	4
b	Washer	4
С	Screw	1
d	Isolator	4
е	Screw	1

^{*} Blower Assembly includes part 6, 5, d, 4, c, b, a. Replacement installation:

Remove the screw (part c), then take out the motor plate (part 4) from the housing (part 10) by pushing down the rib in the plate while pulling out on the side of the housing. Replace the broken parts.

WARNING: Before replacing, be sure to turn off power at power source.



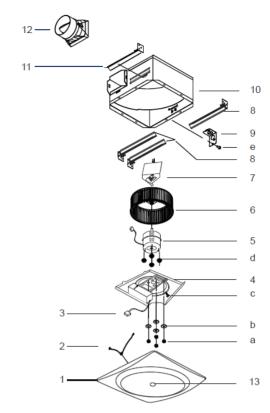
This warranty covers all defects in workmanship or materials for: The mechanical and electrical parts contained in this product for a per must keep and be able to provide your original sales receipt as proof of original retail purchaser of this product only. The manufacturer will rep defective in normal household use for a period of 72 months.

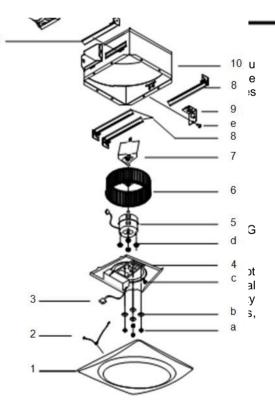
THIS WARRANTY DOES NOT COVER:

- Damages from improper installation.
- · Damages from shipping.
- Damages from misuse, abuse, accident, alteration, lack of proper care
- Damages from service by persons other than a licensed electrician.
- Does not cover any labor or transportation charges related to the repair

THIS LIMITED WARRANTY IS GIVEN IN LIEU OF ALL OTHER WARR. THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PAF

The remedy provided in this warranty is exclusive and is granted in lie cover incidental or consequential damages. Some states do not all damages, so this limitation may not apply to you. Some states do not lasts, so this limitation may not apply to you. This warranty gives you sp which vary from state to state.





READ AND SAVE THESE INSTRUCTIONS