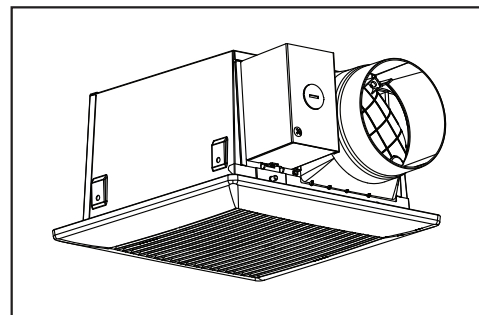


Model No. FV-0709VB1



READ AND SAVE THESE INSTRUCTIONS

Thank you for purchasing this Panasonic product. Please read these instructions carefully before attempting to install, operate or service the Panasonic product. Please carefully read the "GENERAL SAFETY INFORMATION". Failure to comply with instructions could result in personal injury or property damage. Please explain to users how to operate and maintain the product after installation and this manual should be presented to users. Please retain this manual for future references.

See page 8 for Panasonic Warranty Sheet.

GENERAL SAFETY INFORMATION

For Your Safety

To reduce the risk of injury, loss of life, electric shock, fire, malfunction, and damage to equipment or property, always observe the following safety precautions.

Explanation of symbol word panels

The following symbol word panels are used to classify and describe the level of hazard, injury, and property damage caused when the denotation is disregarded and improper use is performed.

WARNING Denotes a potential hazard that could result in serious injury or death.

CAUTION Denotes a hazard that could result in minor injury.

NOTICE Denotes a hazard that could result in property damage.

The following symbols are used to classify and describe the type of instructions to be observed.

- This symbol is used to alert users to a specific operating procedure that must be followed in order to operate this unit safely.
- This symbol is used to alert users to a specific operating procedure that must not be performed.
- This symbol is used to alert users not to disassemble the equipment.
- This symbol is used to alert users to make sure of grounding when using the equipment with the grounding terminal.



GENERAL SAFETY INFORMATION (CONTINUED)

WARNING

To reduce the risk of fire, 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, contact the manufacturer.
- 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.
- Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated 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 Association (NFPA), and the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and the local code authorities.
- When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- Ducted exhaust fans must always be vented to the outdoors.
- If this unit is to be installed over a tub or shower, it must be marked as appropriate for the application and connected to a GFCI (Ground Fault Circuit Interrupter) - protected branch circuit.
- This model is UL listed for tub and shower enclosures.
- Do not disassemble the unit for reconstruction. It may cause fire or electric shock.
- If this product is no longer to be used, it must be removed from the ceiling to prevent it from falling.
- The ceiling joist must be able to withstand a static load of at least five times the weight of the product.
- Do not install with a method which is not approved in the instructions.
- Do not use this fan with any solid-state speed control device. Solid state controls may cause harmonic distortion which can cause a humming noise in the motor.
- Install the fan at least 5 feet (1.5 m) above the floor.
- This product must be properly grounded.

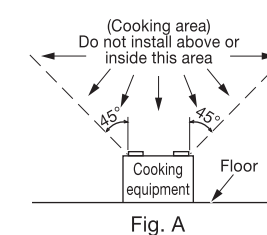
CAUTION

- Do not install this ventilating fan in a location where the interior room temperature may exceed 104 °F (40 °C).
- Make sure that the electric service supply voltage is AC 120 V 60 Hz.
- Follow all local electrical and safety codes, as well as the National Electrical Code (NEC) and the Occupational Safety and Health Administration (OSHA).
- Always disconnect the power source before working on or near the fan, motor or junction box.
- Protect the supply wiring from sharp edges, oil, grease, hot surfaces, chemicals or other objects.

2

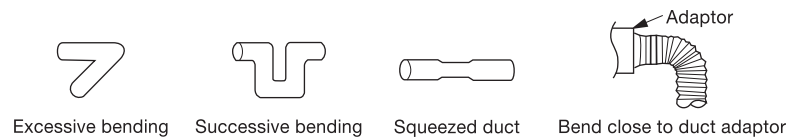
GENERAL SAFETY INFORMATION (CONTINUED)

- Do not kink the supply wiring.
- For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
- Not for use in cooking area. (Fig. A)
- The special-purpose or dedicated parts, such as mounting fixtures, must be used if such parts are provided.



NOTICE

- Provide make up air for proper ventilation.
- Do not connect multiple units in parallel. If two or more units are connected to one switch in parallel, the units may not function.
- Do not install the unit where ducts are configured as shown in below:



DESCRIPTION

This product is listed by UL under UL file No. E78414. This product uses a sirocco fan driven by a capacitor motor. The motor is designed to have an extended service life with reduced energy consumption. It also incorporates a thermal-cutoff for safety. The Grille Assembly covering the Fan Body is a spring-loaded quick removal type. A damper for preventing air counter flow is provided. The blower uses a high-capacity sirocco fan developed to reduce the noise level. This product has two speeds: "I" (Standard) is low airflow and "II" (Boost) is high airflow.

UNPACKING

Unpack and carefully remove the unit from carton. Refer to the Supplied Accessories list to verify that all parts are present.

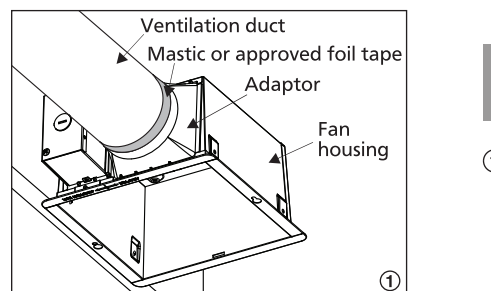
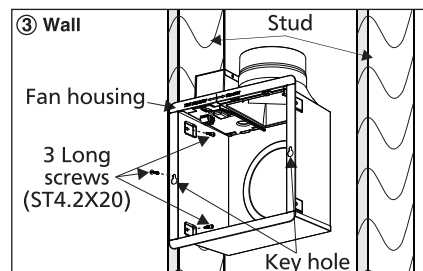
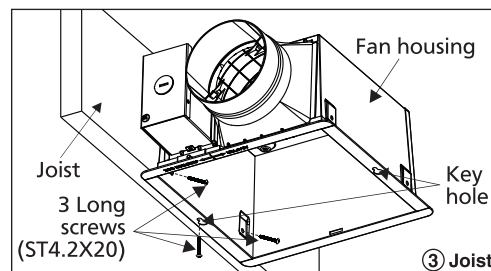
SUPPLIED ACCESSORIES

Part name	Appearance	Quantity
Grille		1
Installation instructions/Warranty sheet		1

Part name	Appearance	Quantity
Long screw (ST4.2X20)		3

3

INSTALLATION INSTRUCTIONS (CONTINUED)

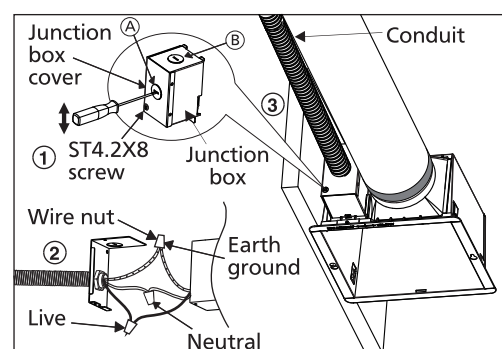


2 Install exhaust duct

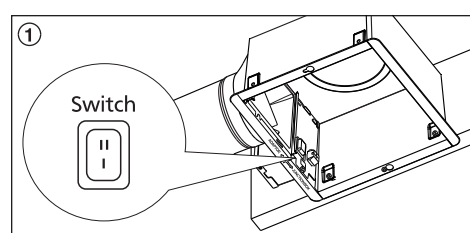
- Install the ventilation duct, secure it with a clamp and seal it with mastic or approved foil tape. A 4-inch circular duct is needed to connect it to the relevant part of the adaptor.

3 Connect wires

- Remove the junction box cover and secure conduit or strain relief to junction box cover knock-out hole (A) or (B).
- Refer to wiring diagram on page 4. Follow all the local electrical safety codes as well as the National Electrical Code (NEC). Using UL approved wire nuts, connect house power wires to ventilating fan wires.
- Affix the junction box cover to junction box.



CAUTION Mount junction box cover carefully so that lead wires are not pinched.



4 Select air volume speed

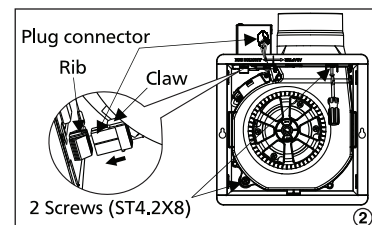
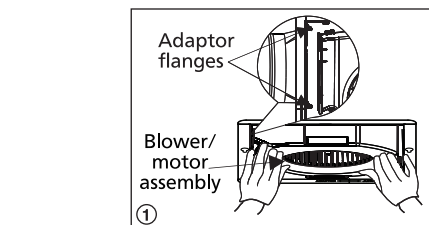
- Select the air volume speed by adjusting the switch. Factory setting is "I" (Standard) position; pressing "II" (Boost) selects the high airflow position.

5 Insert back blower/motor

- Insert back the blower/motor assembly by sliding it into the adaptor flanges. Then press-lock the blower/motor assembly into the housing can until the blower "clicks" into place for temporary fixation. See figures at page 6.
- Secure the blower/motor assembly with 2 screws (ST4.2X8) and connect the molex plug connector from the blower to the junction box. See figure at page 6.

5

INSTALLATION INSTRUCTIONS (CONTINUED)



CAUTION

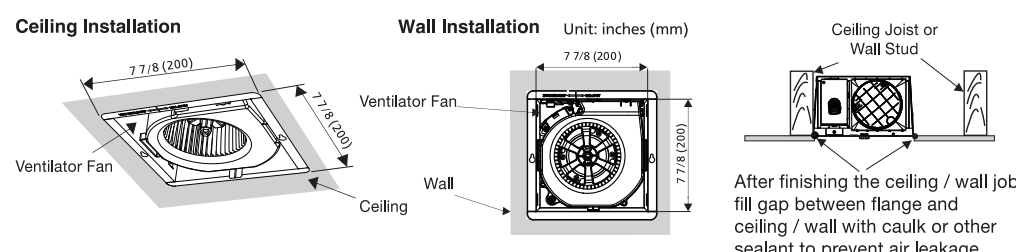
- Before turning on the fan, make sure the connector is inserted at the correct position. Failure to properly connect will result in fan not working.
- The claw of the connector must latch to the rib completely.

WARNING

- The blower/motor assembly must be tightly installed into the housing can with the 2 screws (ST4.2X8). Failure to do so will affect grounding.

6 Finish ceiling / wall work

The ceiling/wall hole should be aligned with the inside edge of the flange.



7 Install grille

- Insert the grille assembly mounting springs into the slots as shown and mount grille assembly to fan body.

MAINTENANCE (CLEANING)

WARNING

- Disconnect power source before working on unit.

CAUTION

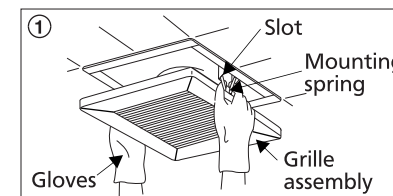
- Routine maintenance must be done every year.
- Never use gasoline, benzene, thinner or any other such as chemicals for cleaning the ventilating fan.
- Do not immerse motor in water when cleaning. Do not soak resin parts in water over 140°F (60°C).

6

MAINTENANCE (CLEANING) (CONTINUED)

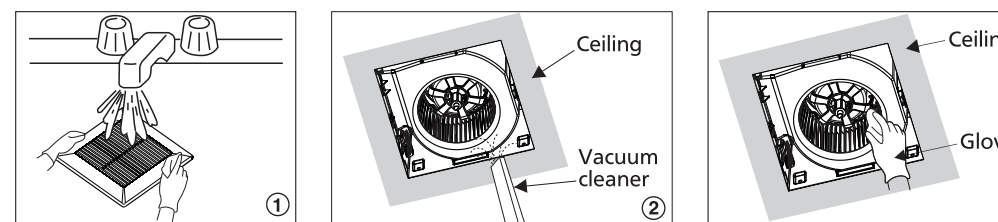
1 Remove grille

- Remove grill assembly, by squeezing the mounting springs and pulling it down carefully.



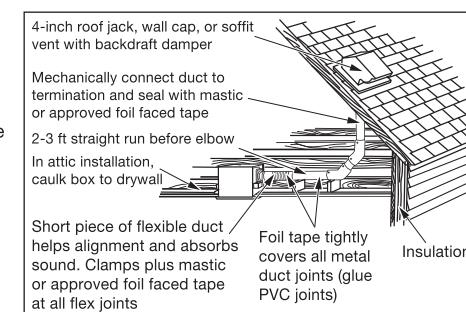
2 Clean the unit

- Wash and clean grille assembly. Use non-abrasive kitchen detergent, and then wipe dry with clean cloth.
- Remove dust and dirt from fan body using a vacuum cleaner.
- Using a cloth dampened with kitchen detergent, remove any dirt from the fan body. Wipe dry with a clean cloth.
- Replace grille assembly. See figure 1 in step 1 "Remove Grille" on page 6.



PRACTICAL GUIDE TO INSTALLATION

Properly insulate the area around the fan to minimize building heat loss and gain. Loose fill or batt insulation can be placed directly over the fan housing in the attic. Our fans do not create excessive heat, that is a common problem with recessed light fixtures or some competitor's fan/light combinations. Our efficient, cool-running motors do not create enough ambient heat to be subjected to these limitations. The ducting from this fan to the outside of the building has a strong effect on the air flow, noise and energy use of the fan. Use the shortest, straightest duct routing possible for best performance, and avoid installing the fan with smaller ducts than recommended. Insulation around the ducts can reduce energy loss and inhibit mold growth. Fans installed with existing ducts may not achieve their rated air flow.



SPECIFICATIONS

Speed	Air direction	Voltage (V)	Frequency (Hz)	Duct diameter (inches)	Air volume at 0.1" WG (CFM)	Noise (sones)	Speed (rpm)	Power consumption (W)	Weight lb. (kg)
I (Standard)	Exhaust	120	60	4	70	0.7	907	17.8	4.4/2.0
II (Boost)	Exhaust	120	60	4	90	1.5	1019	22	

HVI Certified performance based on HVI Procedures 915, 916, 920.

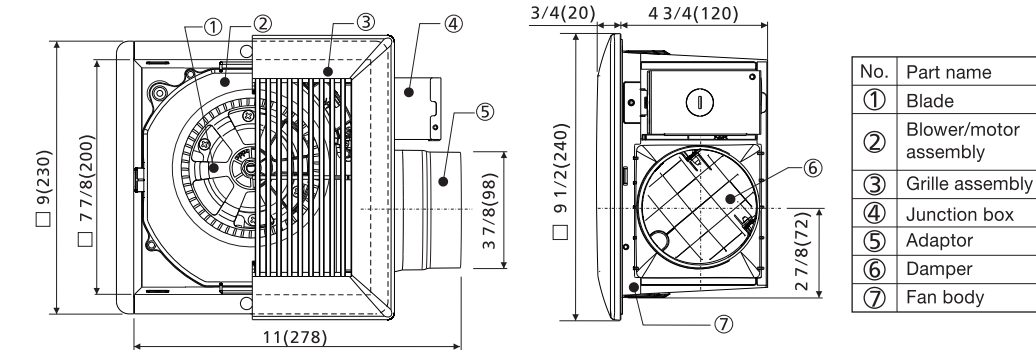
PRODUCT SERVICE

Warning Concerning Removal of Covers. The unit should be serviced by qualified technicians only. Your product is designed and manufactured to ensure a minimum of maintenance. Should your unit require service or parts, call Panasonic Call Center at 1-866-292-7299 (USA).

Panasonic Corporation of North America
Two Riverfront Plaza, Newark, NJ 07102
www.panasonic.com

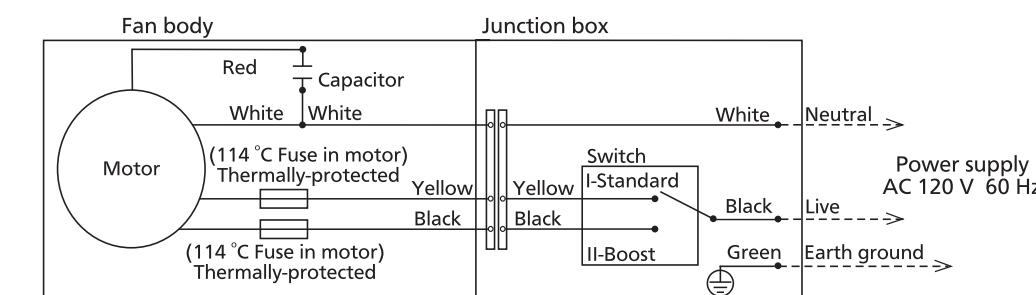
DIMENSIONS

Unit: inches (mm)



No.	Part name
①	Blade
②	Blower/motor assembly
③	Grille assembly
④	Junction box
⑤	Adaptor
⑥	Damper
⑦	Fan body

WIRING DIAGRAM



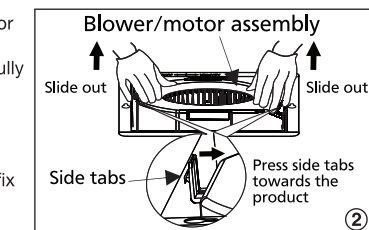
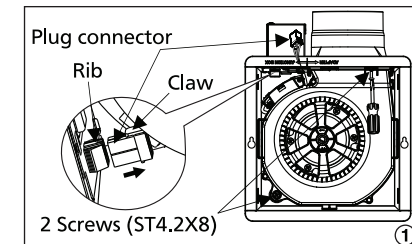
INSTALLATION INSTRUCTIONS

CAUTION

- Please wear gloves during the installation work as follows.

1 Mount the fan housing

- Remove the 2 screws (ST4.2X8) and disconnect the molex plug connector from the blower to the junction box.
- Remove the blower/motor assembly by pressing the side tabs and carefully sliding it out of the housing.
- Affix the fan housing to the joist (joist mounting) or to the stud (wall mounting) with 3 long screws (ST4.2X20) by affixing first 1 screw on the bottom of the joist (joist mounting) or in front of the stud (wall mounting), hang up the fan housing through the key hole, tighten the screw, then affix the other 2 screws. See figures on page 5.



4

Panasonic Ventilating Fan Limited Warranty

Panasonic Corporation of North America ("the Warrantor") will, at its sole discretion, replace this product with new parts or exchange this product, free of charge, in the USA, in the event of defects in material or workmanship in accordance to the following:

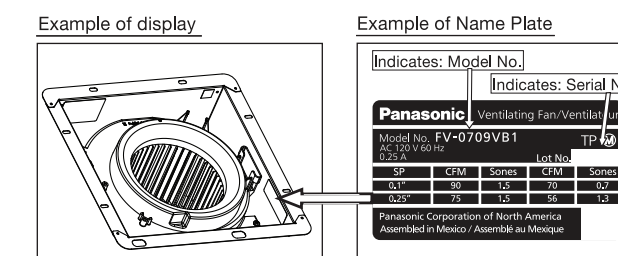
ALL Parts: For period of 3 years (36 months) Including AC motors.

Service in the USA, can be obtained during the warranty period by contacting the selling Distributor or Panasonic Customer Call Center at 1-866-292-7299, toll free.

This warranty does not cover labor charges for removal and installation of parts. This warranty is extended only to the original purchaser of a new product, which was not sold "as is", who purchased the product either directly from the Warrantor or from the Warrantor's authorized resellers (including authorized retail and Internet-based sellers), unless otherwise prohibited by law.

This warranty only applies to products purchased in the United States.

To claim warranty proof of purchase date will be required, in addition to fan model and serial number as shown in the photos below.



This warranty only covers failures due to defects in materials or workmanship that occur during normal use and does not cover shipping damages, whether visible or concealed, normal wear or cosmetic damage. The warranty does not cover failures that are caused by products and peripherals not supplied by the Warrantor, or failures which result from accident, misuse, abuse, negligence, mishandling, misapplication, alteration, modification, faulty installation, improper setups or adjustments, improper or lack of maintenance, alterations or modifications, power line surge, improper line voltage, lightning damage, or damage that is attributable to acts of God.

LIMITS AND EXCLUSIONS

There are no express warranties except as listed above. THE WARRANTOR SHALL NOT BE LIABLE FOR INCIDENTAL CONSEQUENTIAL, OR PUNITIVE DAMAGES, INCLUDING, WITHOUT LIMITATION, LOSS OF GOODWILL PROFITS OR REVENUE, LOSS OF USE OF THIS PRODUCT OR ANY ASSOCIATED EQUIPMENT, COST OF SUBSTITUTE PRODUCT, DOWNTIME COST, OR CLAIMS OF ANY PARTY DEALING WITH BUYER FOR SUCH DAMAGES, RESULTING FROM THE USE OF THIS PRODUCT OR ARISING FROM BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE OR ANY OTHER LEGAL THEORY, EXCEPT AS EXPRESSLY PROVIDED ABOVE. THERE IS NO WARRANTY OR ANY OTHER KIND, EXPRESS OR IMPLIED, THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitation may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

If a problem with this product develops during or after the warranty period, you may contact your Distributor or Panasonic Customer Call Center. If the problem is not handled to your satisfaction, then write to Panasonic Corporation of North America at the address indicated above.

Customer Services Directory	Accessory Purchases
Obtain Product Information and Operating Assistance, locate your nearest distributor by visiting our Web site at: us.panasonic.com/ventfans	Purchase Parts and Accessories for Panasonic Ventilation Products by visiting our Website:
or send your request by E-mail to: ventfans@us.panasonic.com	Consumers: www.buypanasonicparts.com or send your request by Email to: nppcparts@us.panasonic.com . You may also contact us directly at 1-800-332-5368 (Monday-Friday 8am to 6pm, EST).
You may also contact us directly at: 1-866-292-7299 Monday-Friday 9 am - 6 pm, EST.	Distributors: Send your request by Email to: pstcparts@us.panasonic.com . You may also contact us directly at 1-866-292-7299 Monday-Friday 10am to 6pm, EST
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Printed in Mexico
P0123-0 709VB1420

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