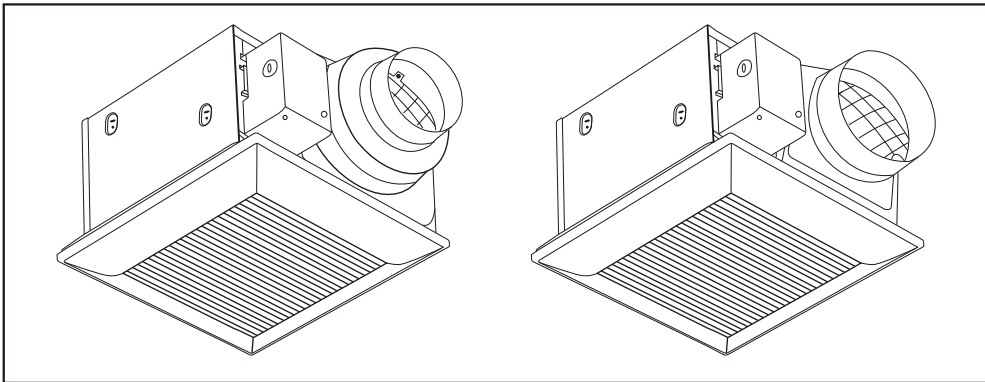


Ventilating Fan INSTALLATION INSTRUCTIONS

Model No.

FV-05VQ5
FV-08VQ5
FV-11VQ5

FV-15VQ5



READ AND SAVE THESE INSTRUCTIONS

Thank you very much for having purchased our Ventilating Fan. Please read these instructions carefully before attempting to install, operate or service the Panasonic Ventilating Fan. Failure to comply with instructions could result in personal injury and/or property damage. Please retain this booklet for future reference.

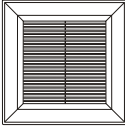
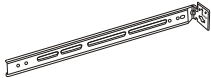
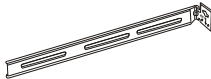
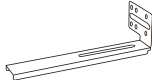

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
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UNPACKING

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
Suspension bracket I		1
Suspension bracket II		1
Suspension bracket III		1
Suspension bracket IV		1

Part name	Appearance	Quantity
Screw I (ST4.2X6)		2
Screw II (ST4.2X14)		1
Long screw (ST4.2X20)		6
Installation instructions		2
Warranty sheet		1

DESCRIPTION

These Panasonic ventilating fan models are listed by UL under UL file No. E78414.
These Panasonic ventilating fan models use 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 covering the fan body is a spring-loaded, quick remove type. A damper for preventing air counterflow is provided. The blower uses a high-capacity sirocco fan developed to reduce the noise level.

GENERAL SAFETY INFORMATION

1. Do not install this ventilating fan where interior room temperature may exceed 104°F (40°C).
2. Make sure that the electric service supply voltage is AC 120V, 60Hz.
3. Follow all local electrical and safety codes, as well as the National Electrical Code (NEC) and the Occupation Safety and Health Act (OSHA).
4. Always disconnect the power source before working on or near the fan, motor, junction box.
5. Protect the power cord from sharp edges, oil, grease, hot surfaces, chemicals or other objects.
6. Do not kink the power cord.
7. Do not install the unit where ducts are configured as shown in Fig. A.
8. Provide make up air for proper ventilation.
9. A statement to the effect that when the product is to no longer be used, it must not be left in place but removed, to prevent it from possibly falling.

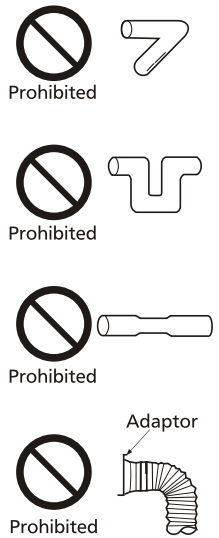


Fig. A

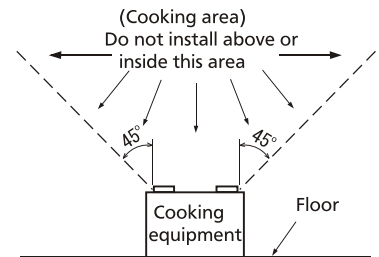


Fig. B

CAUTION:

1. For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
2. Not for use in cooking area. (Fig.B)
3. This product must be properly grounded.

WARNING:

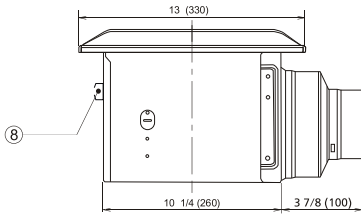
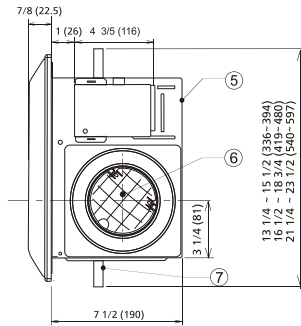
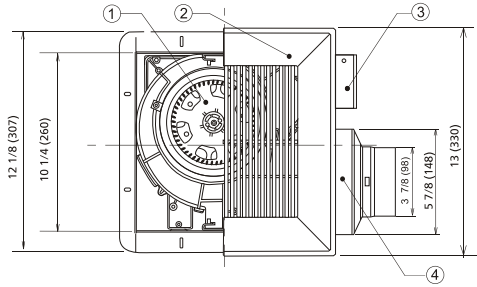
To reduce the risk of fire, electric shock or injury to persons, observe the following:

1. Use this unit only in the manner intended by the manufacturer. If you have any questions, contact to the manufacturer.
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 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 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, 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. 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. These models are UL listed for tub and shower enclosures.
9. Not to be installed in a ceiling thermally insulated to a value greater than R40. (This is required for installation in Canada only)

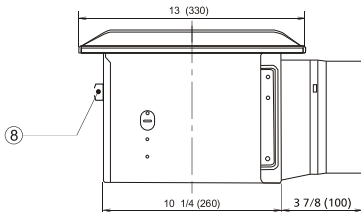
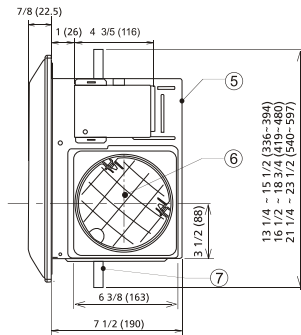
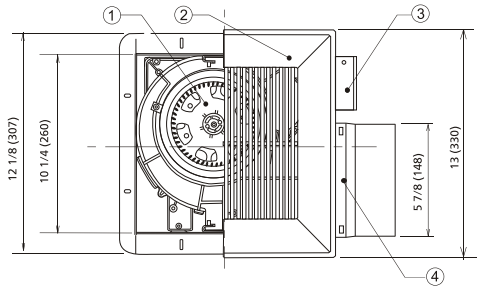
DIMENSIONS

FV-05VQ5 FV-08VQ5 FV-11VQ5

Unit: inches (mm)

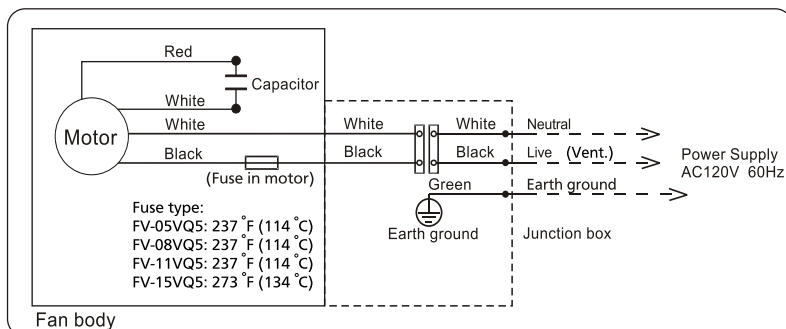


FV-15VQ5



No.	Part name	No.	Part name
1	Blade	5	Fan body
2	Grille	6	Damper
3	Junction box	7	Suspension bracket
4	Adaptor	8	Bracket cover

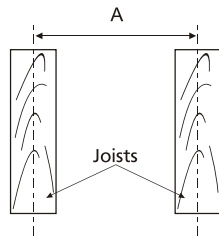
WIRING DIAGRAM



INSTALLATION I (JOIST MOUNTING - I)

Joist situation:

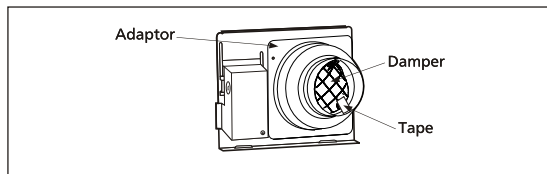
Spacing A is 16 inches (406 mm) to 24 inches (609 mm) on center joists



1. If the spacing A is 16 inches (406 mm) to 24 inches (609 mm) on center joists, please follow the installation step as below.

IMPORTANT:

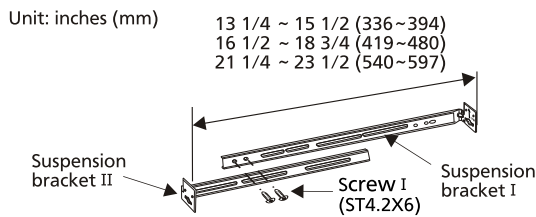
Remove the tape from damper and adaptor before installation. As shown below:



2. Insert the suspension bracket I and II into the fan body. (Select the suspension bracket connection holes as shown below) (Fig.1)

Suspension bracket connect method:

Suspension bracket I and II connect with screw I as shown below:



3. Install the suspension bracket and the flange of fan body to joists by using long screws (ST4.2X20) and secure it to the fan body by using screw II (ST4.2X14). (Fig.2)

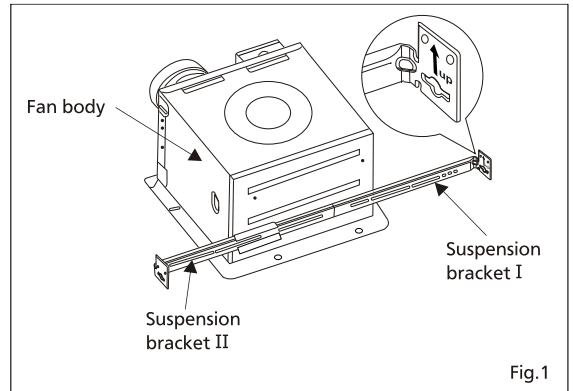


Fig.1

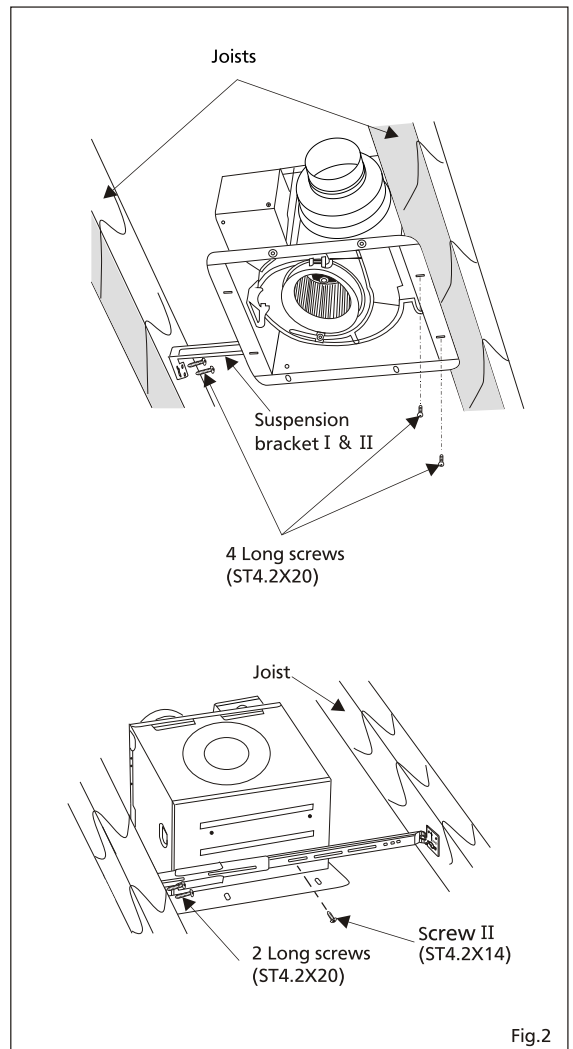
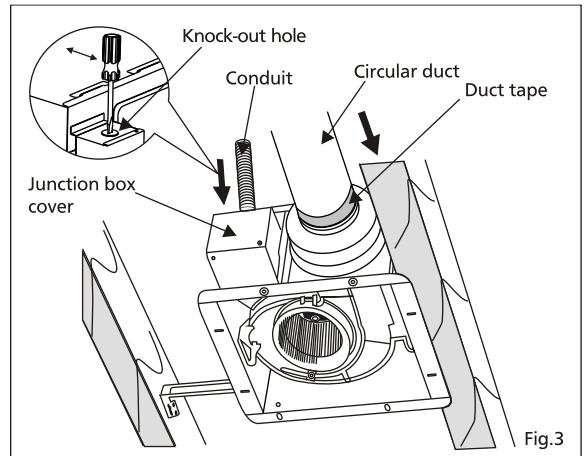


Fig.2

INSTALLATION I (JOIST MOUNTING - I) CONTINUED

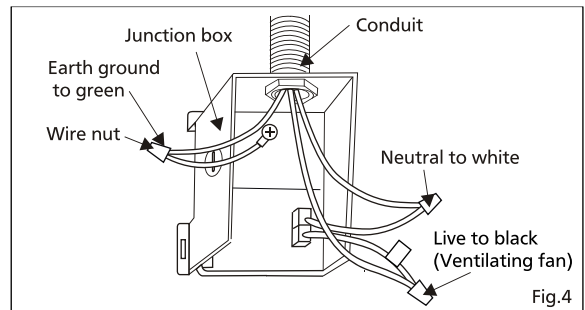
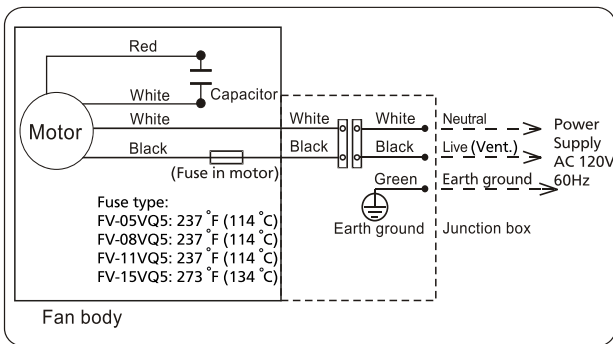
4. Install a circular duct and secure it with clamps, or wire ties and seal it with mastic or approved duct tape. 4 inches circular duct or 6 inches circular duct is needed to connect to relevant part of common adapter. (Fig.3)
5. Remove junction box cover and secure conduit or stress relief to junction box knock-out hole. (Fig.3)
6. Refer to wiring diagram below.
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. (Fig.4)



CAUTION:

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

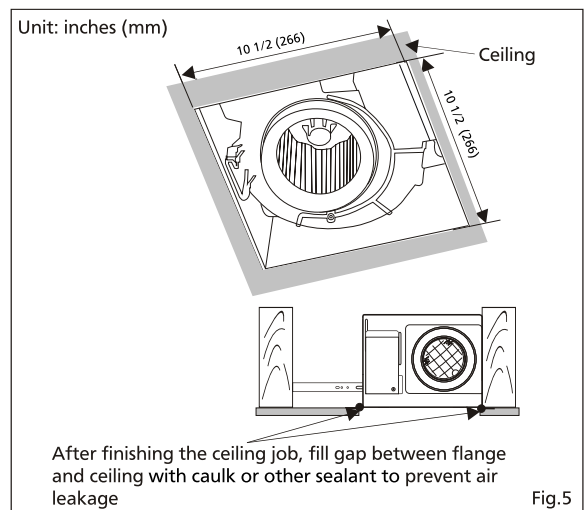
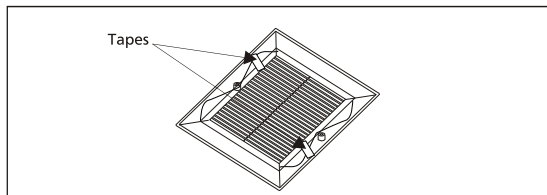
WIRING DIAGRAM



7. Finish ceiling work. Ceiling hole should be aligned with the inside edges of the flange. (Fig.5)

IMPORTANT:

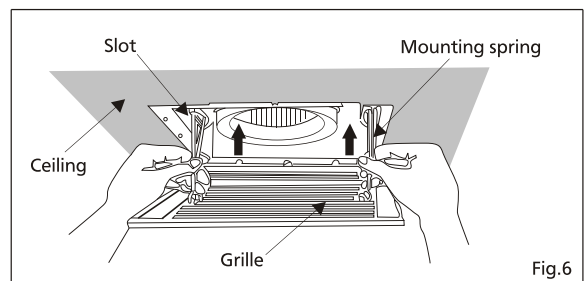
Remove the tapes from louver and springs before installation. As shown below:



8. Insert mounting springs into slots as shown and mount grille to fan body. (Fig.6)

Notes:

Suitable for use with solid-state speed controls. Solid-state speed controls may cause harmonic distortion which can cause a motor humming noise.



INSTALLATION II (SUSPENSION BRACKETS MOUNTING)

Joist situation:

Spacing A is 16 inches (406 mm) to 24 inches (609 mm) on center joists

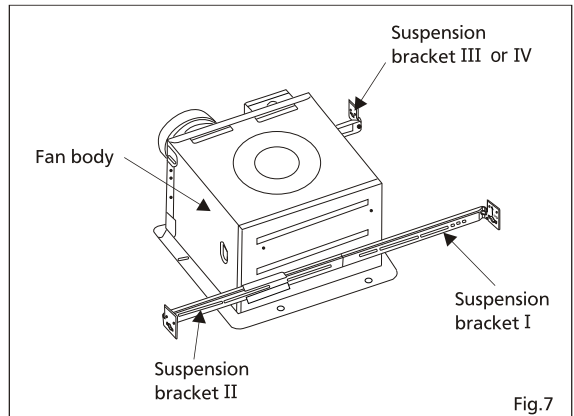
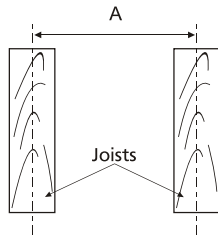


Fig.7

1. If the spacing A is 16 inches (406 mm) to 24 inches (609 mm) on center joists, please follow the installation step as below.

2. Insert the suspension bracket I and II into the fan body and suspension bracket III or IV into the adaptor. (Select the suspension bracket connection holes as shown below) (Fig.7, Fig.8)

Suspension bracket connect method:

Suspension bracket I and II connect with screw I as shown below:

Unit: inches (mm)
 13 1/4 ~ 15 1/2 (336~394)
 16 1/2 ~ 18 3/4 (419~480)
 21 1/4 ~ 23 1/2 (540~597)

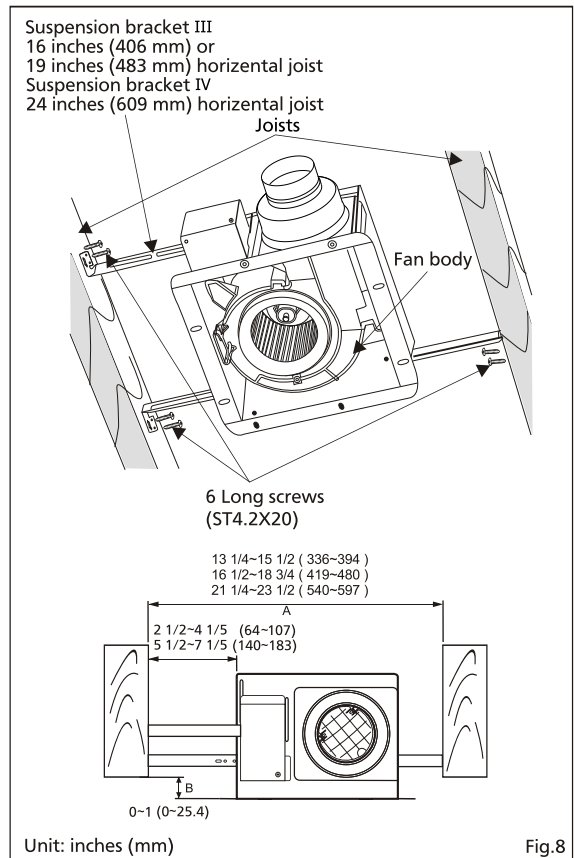
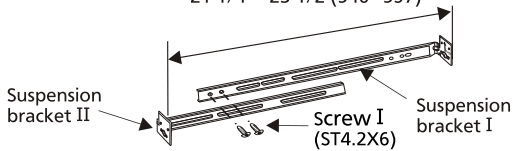


Fig.8

3. Install the suspension bracket to joists by using long screws (ST4.2X20) (Fig.8) and secure it to the fan body by using screw II (ST4.2X14). (Fig.9)

INSTALLATION II (SUSPENSION BRACKETS MOUNTING) CONTINUED

4. Follow steps 4 to 8 of installation I (page 6) to complete the installation work.

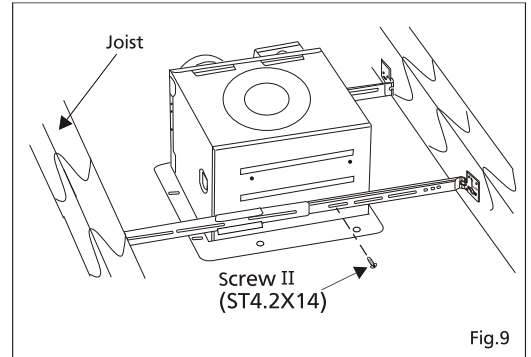
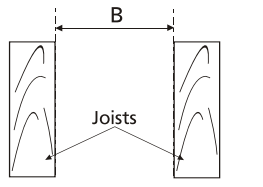


Fig.9

INSTALLATION III (JOIST MOUNTING - II)

Joist situation:

Spacing B is
10 1/2 inches (266 mm) to
11 1/2 inches (292 mm)
on joists



1. If the spacing B is 10 1/2 inches (266 mm) to 11 1/2 inches (292 mm) on joists, please follow the installation step as below.
2. Secure 4 long screws (ST 4.2X20) at flange of frame. (Fig.10)
3. Follow steps 4 to 8 of installation I (page 6) to complete the installation work.

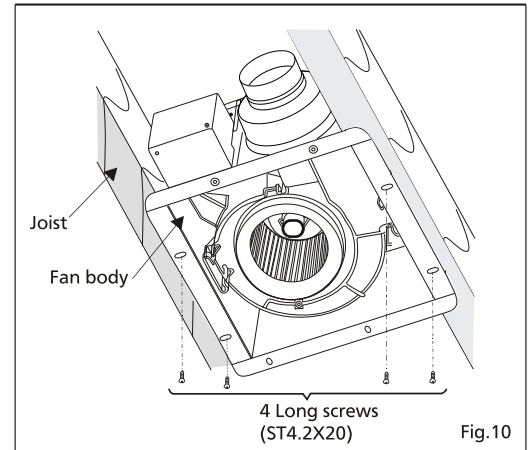


Fig.10

MAINTENANCE (CLEANING)

WARNING:

Disconnect power source before working on unit. Routine maintenance must be done every year.

CAUTION:

1. Never use gasoline, benzene, thinner or any other such chemicals for cleaning the ventilating fan.
2. Do not immerse motor in water when cleaning.
3. Do not soak resin parts in water over 140°F (60°C).

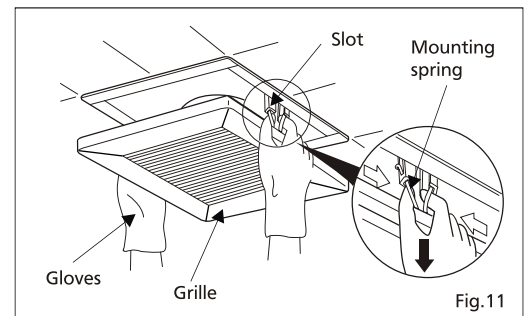
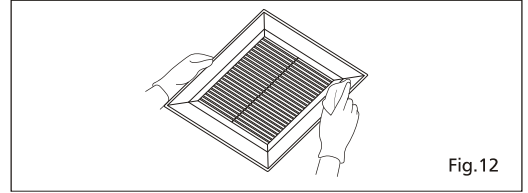


Fig.11

1. Remove grille. (Squeeze mounting spring and pull down carefully) (Fig.11).

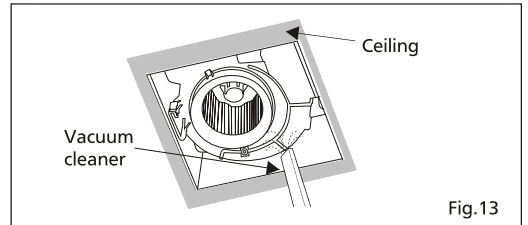
MAINTENANCE (CLEANING) CONTINUED

2. Clean grille. (Don't put into hot water. Use non-abrasive kitchen detergent, wipe dry with clean cloth) (Fig.12)

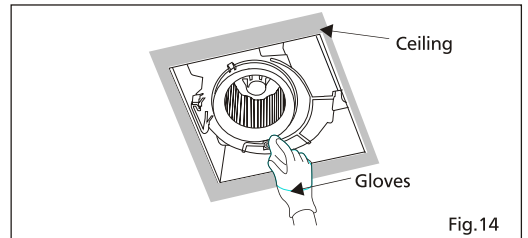


3. The grille should be dry after cleaning.

4. Remove dust and dirt from fan body using a vacuum cleaner. (Fig.13)



5. Using a cloth dampened with kitchen detergent, remove any dirt from fan body. Wipe dry with clean cloth. (Fig.14)

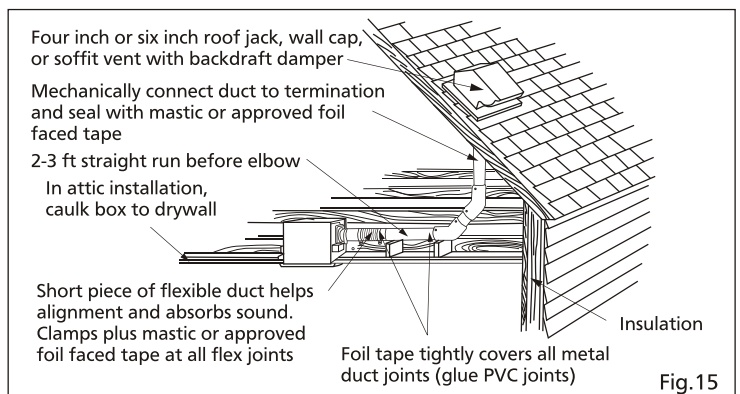


6. Replace grille.

PRACTICAL GUIDE TO INSTALLATION

Properly insulate the area around the fan to minimize building heat loss and gain. (Fig. 15)

Loose fill or batt insulation can be placed directly over the fan housing in the attic. Panasonic fans and fan/light combination units do not create excessive heat that is a common problem with recessed light fixtures or some competitors' fan/light combinations. Our efficient, cool-running motors and our fluorescent lamp do not create enough ambient heat to be subjected to these limitations.



SPECIFICATIONS

Model No.	Air direction	Voltage (V)	Frequency (Hz)	Duct diameter (inches)	Noise (sones)	Power consumption (W)	Speed (rpm)	Air volume at 0.1"WG (CFM)	Weight lb.(kg)
FV-05VQ5	Exhaust	120	60	4 or 6	<0.3	11.0	730	50	9.9 (4.5)
FV-08VQ5	Exhaust	120	60	4 or 6	<0.3	14.5	815	80	9.9 (4.5)
FV-11VQ5	Exhaust	120	60	4 or 6	<0.3	22.0	960	110	9.9 (4.5)
FV-15VQ5	Exhaust	120	60	6	<0.3	28.5	700	150	11.2 (5.1)

HVI Certified performance based on HVI Procedures 915,916,and 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 1-866-292-7292 (USA) or 1-800-669-5165 (Canada).

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