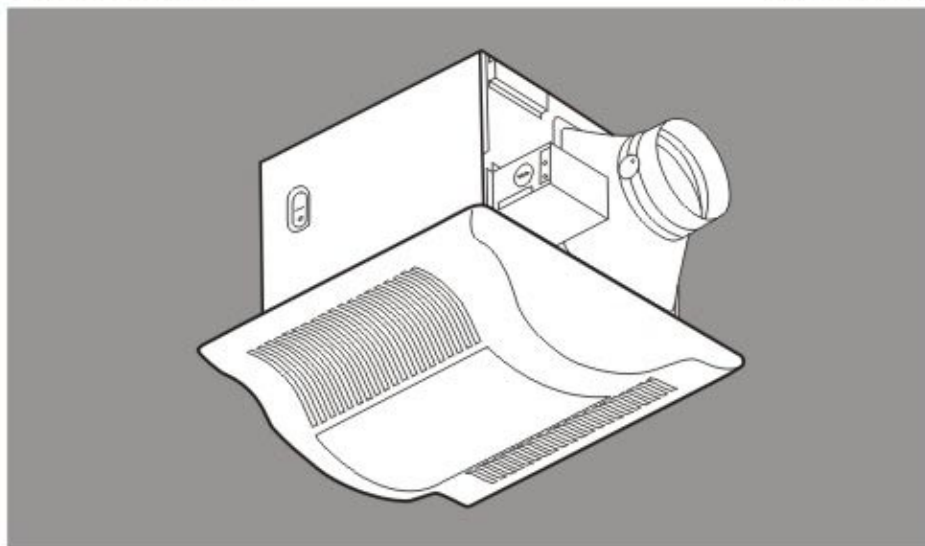


INSTALLATION INSTRUCTIONS

Ventilating Fan

FV-08VQL4
FV-11VQL4
FV-15VQL4



Panasonic®

READ AND SAVE THESE INSTRUCTIONS.

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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SUPPLIED ACCESSORIES

FV-08VQL4

FV-11VQL4

FV-15VQL4

Part name	Appearance	Quantity
Grille		1
Long screw		8
Thumb screw		1
Suspension bracket I		1
Suspension bracket II		1
Screw I M4X12		2
Screw II M4X16		2
Screw III M4X8		2

Part name	Appearance	Quantity
Machine screw M4X8		1
Suspension bracket III		1
Suspension bracket IV		1
18W Fluorescent lamp		2
4W Incandescent lamp		1
Light unit		1

DESCRIPTION

These Panasonic ceiling mount ventilating fan models use a sirocco fan with dolphin-shaped blades 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 can be quickly detached from the main unit. A damper for preventing air counterflow is provided. The blower uses a high-capacity sirocco fan developed to reduce the noise level.

The light unit is an energy-saving, lighting device which uses two 18W fluorescent lamps and produces almost the same illumination as a standard 100W incandescent lamp.

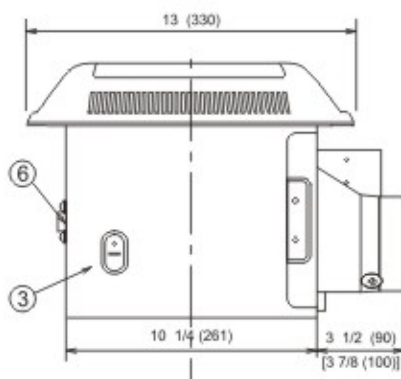
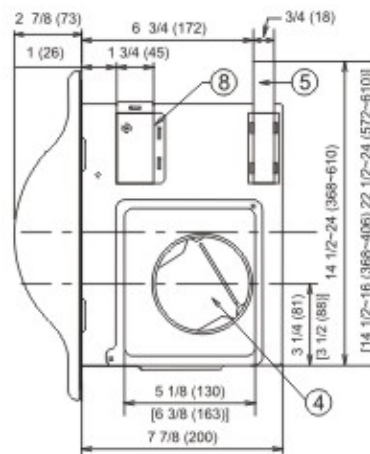
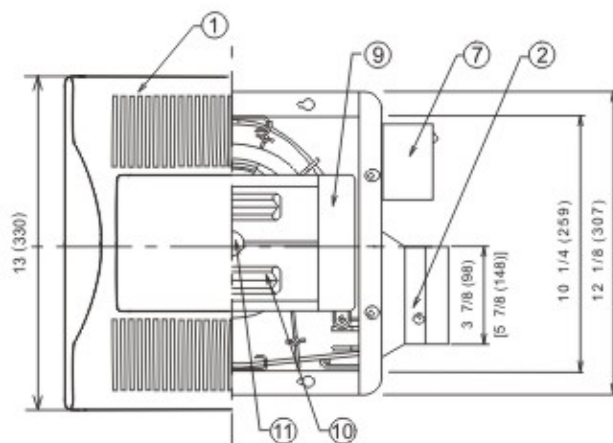
DIMENSIONS

FV-08VQL4

FV-11VQL4

FV-15VQL4

(The dimension in square brackets refers to FV-15VQL4 which is different from FV-08/11VQL4)



Unit: inches(mm)

No.	Part name	No.	Part name
1	Grille	7	Junction box cover
2	Adaptor	8	Junction box
3	Body	9	Lighting unit assy
4	Damper	10	Fluorescent lamp
5	Suspension bracket	11	Night lamp
6	Bracket cover		

(For 16 inches on center joists, only use suspension bracket I, If more than 16 inches on center, use suspension bracket I & II.)

SPECIFICATIONS

Model	Air direction	V	Hz	Duct diameter (inch)	Noise (sone)	Power consumption* (W)			Speed (RPM)	Air deliver at 0.1"WG (CFM)	Weight lb.(kg)
						Fan unit	Light unit				
							Fluorescent lamp	Night lamp			
FV-08VQL4	Exhaust	120	60	4	0.3	25	36	4	765	80	10.1 (4.6)
FV-11VQL4				4	1.0	35	36	4	890	110	10.1 (4.6)
FV-15VQL4				6	1.2	36	36	4	790	150	11.0 (5.0)

* At 0.0" Static pressure.(Pa)

Specifications are based on HVI standard.

UNPACKING

Unpack and carefully remove unit from carton.

Refer to the Supplied Accessories list to verify that all parts are present.

GENERAL SAFETY INFORMATION

1. Do not install this ventilating fan where air temperature may exceed 40°C (104°F).
2. Make certain that the electric service supply voltage is 120V, 60 Hz.
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 or light fixture.
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 suction parts with proper ventilation.
9. This unit is approved for use over a bathtub or shower when installed in a GFCI protected branch circuit.

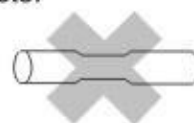


Fig. A

GENERAL SAFETY INFORMATION CONTINUED

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.

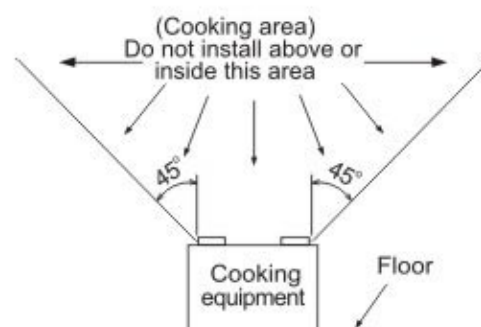


Fig. B

WARNING:

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

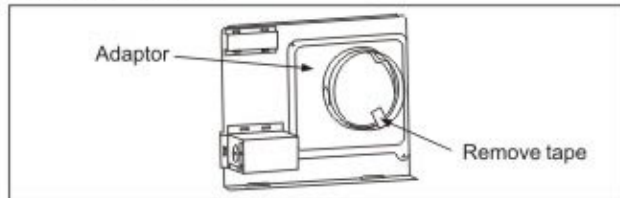
- A. Use this unit only in the manner intended by the manufacturer. If you have any questions, contact the manufacturer.
- B. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
- C. Sufficient 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 the local code authorities.
- D. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- E. Ducted fans must always be vented to the outdoors.
- F. These models are UL listed for tub and shower enclosures.
- G. Solid state controls may cause harmonic distortion which can cause motor humming noise.
- H. 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.
- I. NEVER place a switch where it can be reached from a tub or shower.
- J. Not to be installed in a ceiling thermally insulated to a value greater than R40.

INSTALLATION I (JOIST MOUNTING)

1. Disconnect plug connector from receptacle before starting installation.

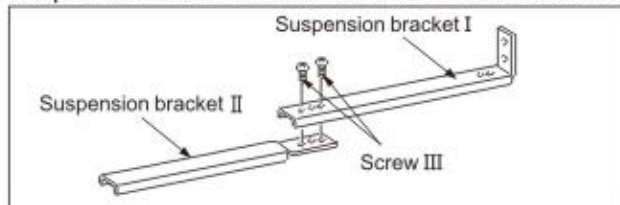
IMPORTANT:

Remove the tape from adaptor before installation. As show below:



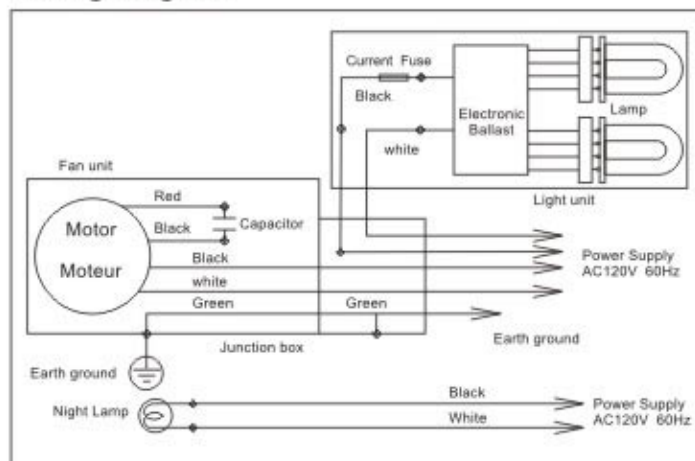
2. Remove adaptor from body and secure to ceiling joists using long screws. (Fig.1)
Keep the distance B (7/8 inch, 21.6mm) for the thickness of ceiling board.

If joist spacing A is 24 inches on center, connect suspension Brackets I and II as shown below.



3. Remove junction box cover and secure conduit to junction box knock-out hole. (Fig.2)
4. Refer to wiring diagram below.
Using wire nuts, connect house power wires to ventilating fan wires:
black to black; white to white; green to green.
Replace the junction box cover.

Wiring diagram



CAUTION:

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

5. Install circular duct (08/11VQL4 using 4 inch duct 15VQL4 using 6 inch duct) and secure it with duct tape.
6. Remove ceiling section.(Fig.3 of page 7)

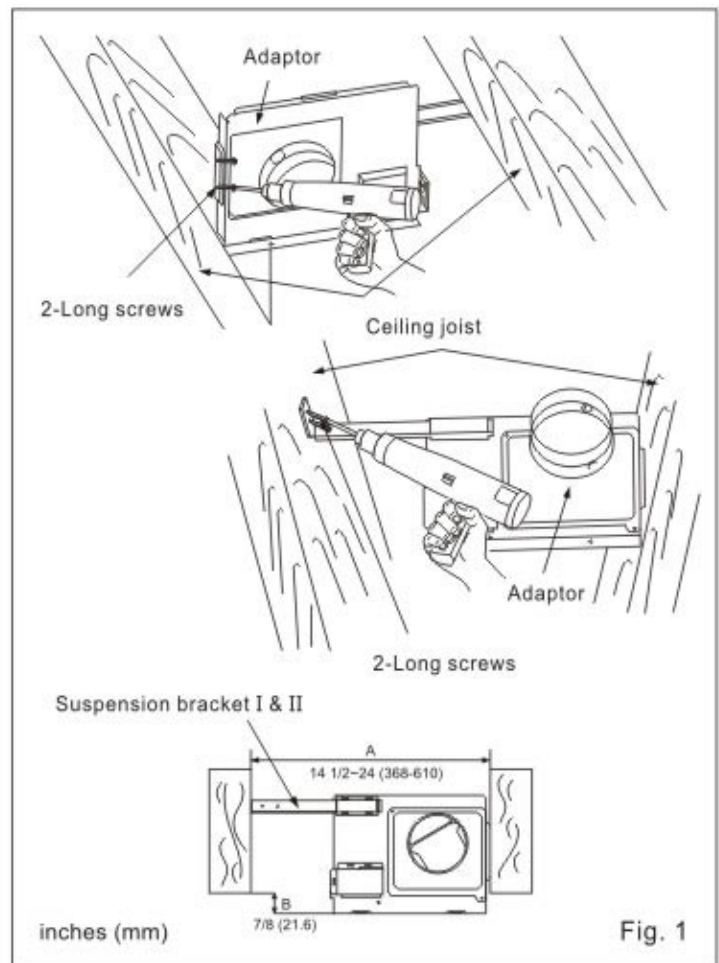


Fig. 1

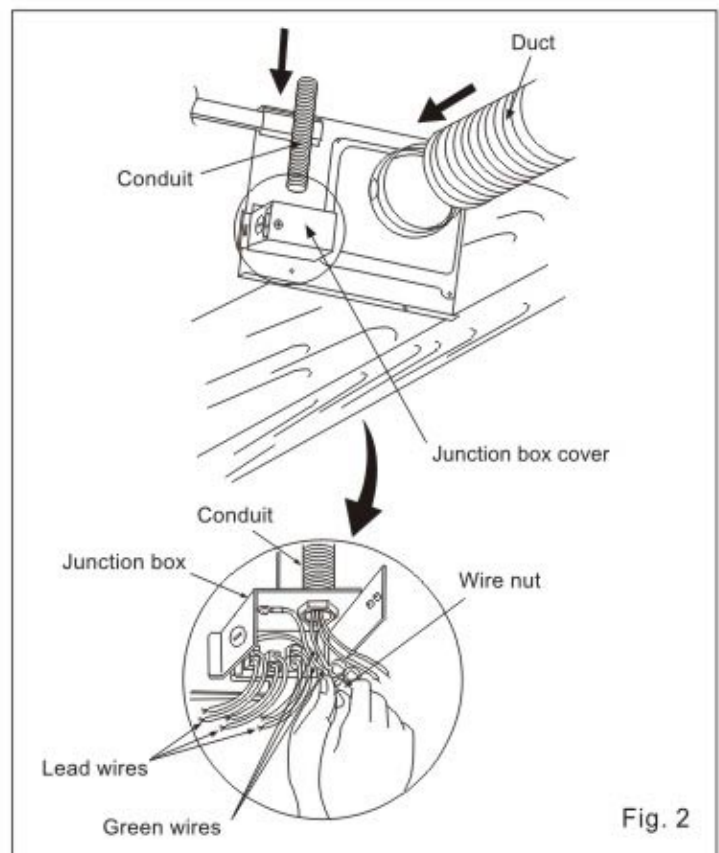


Fig. 2

INSTALLATION I (JOIST MOUNTING) CONTINUED

7. Insert fan body into ceiling. (Fig.4)

IMPORTANT:

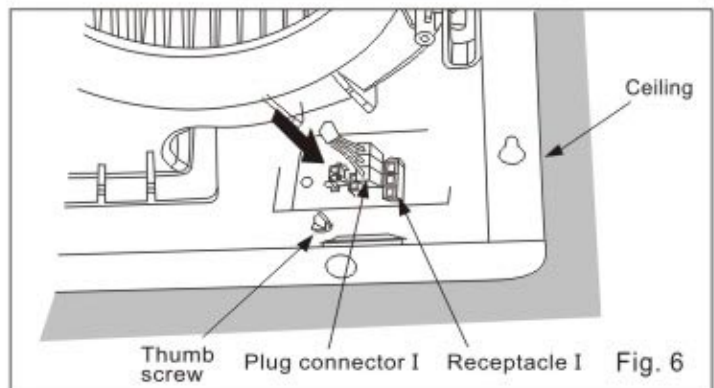
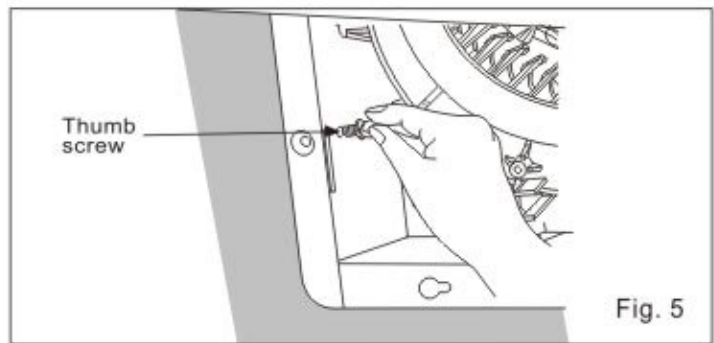
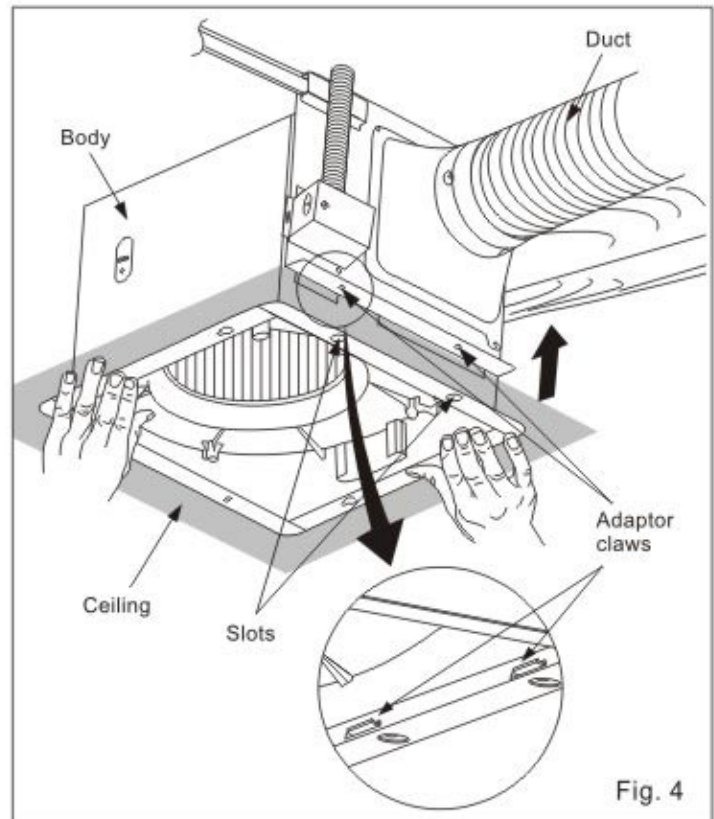
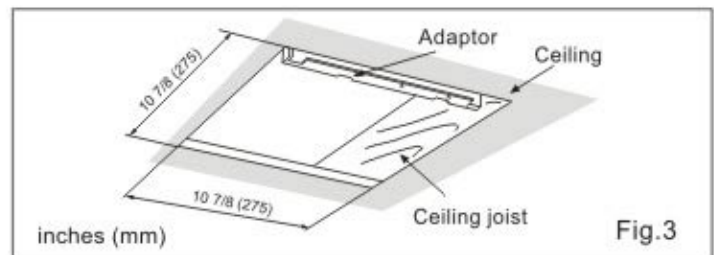
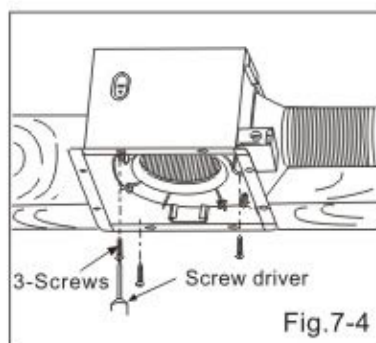
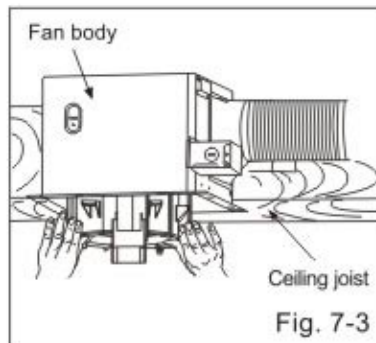
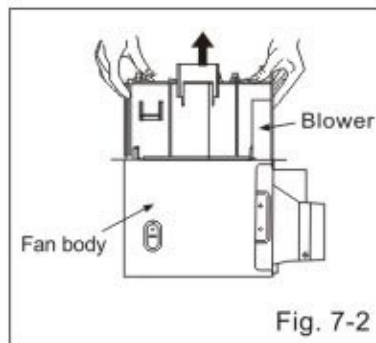
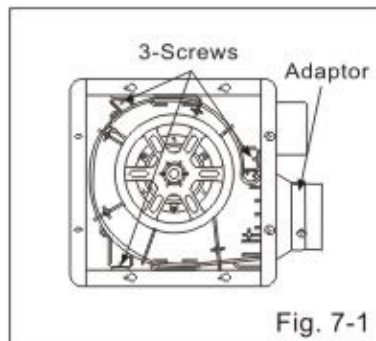
Make sure that adaptor claws are properly inserted into body slots.

8. Secure fan body to adaptor using thumb screw. (Fig.5)

9. Plug connector to receptacle. (Fig.6)

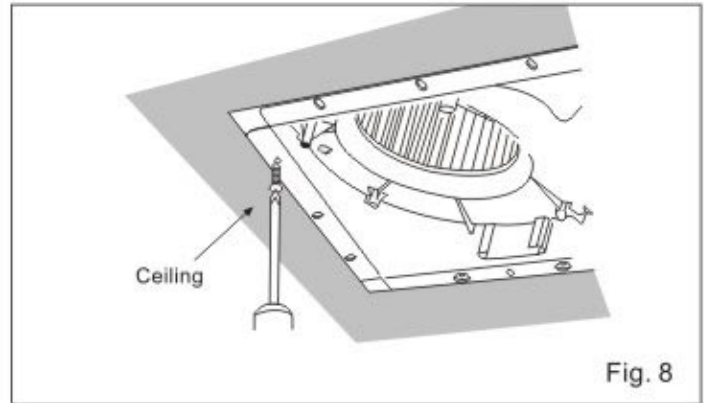
When mounting body and blower separately

1. Loosen 3 screws (but do not remove them from blower). (Fig.7-1)
2. Remove blower section. (Fig.7-2)
3. Remove adaptor from fan body and secure to ceiling joists as in Fig.1 of page 6.
4. Insert fan body (without blower section) into ceiling. (Fig.4)
5. Secure the adaptor and fan body using thumb screw. (Fig.5)
6. Insert the blower into the fan body. (Fig.7-3)
7. Secure the blower. (Fig.7-4)

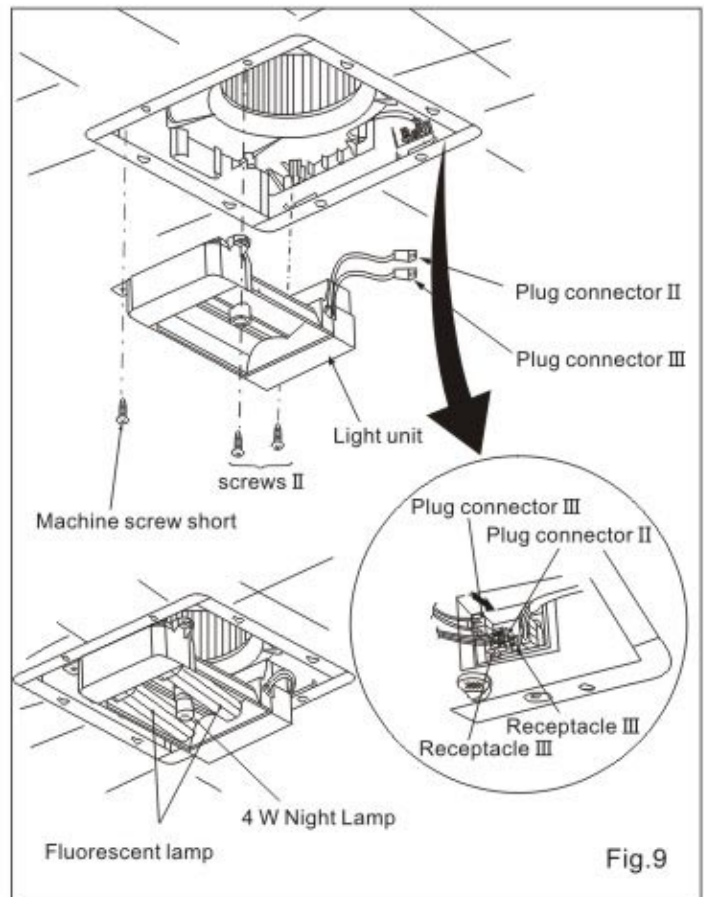


INSTALLATION I (JOIST MOUNTING) CONTINUED

10. Secure fan body to ceiling joists using long screws (M4X30) in vertical direction. (Fig.8)

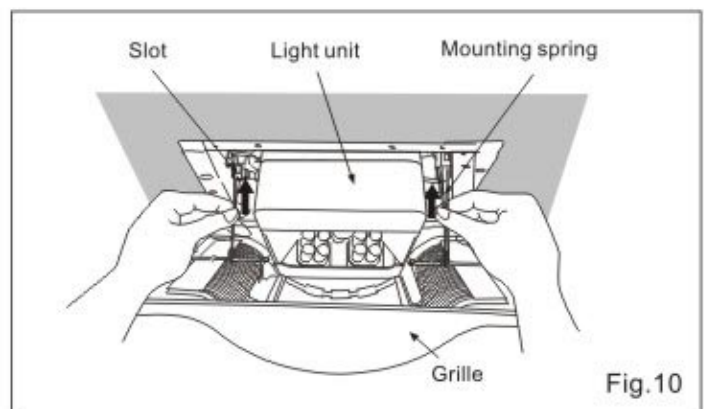


11. Insert the plug connector II and plug connector III into the receptacle II and receptacle III respectively, and attach the light unit to the fan unit with 2 screws II (M4X16) and 1 machine screw (M4X8). (Fig.9)

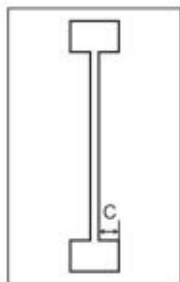


12. Insert the fluorescent lamps and screw the night lamp into the light unit.(Fig.9)

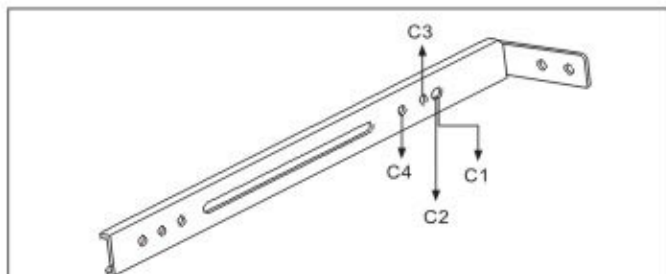
13. Attach the grille to the fan unit.(Fig.10)



INSTALLATION II (I - JOIST MOUNTING)



4 kind of I-joist inches (mm)	
C1	9/16 (14.3)
C2	11/16 (17.5)
C3	31/32 (24.6)
C4	1 17/32 (38.9)



Suspension bracket IV
The suspension bracket IV can accomodate different kind of I-joists.

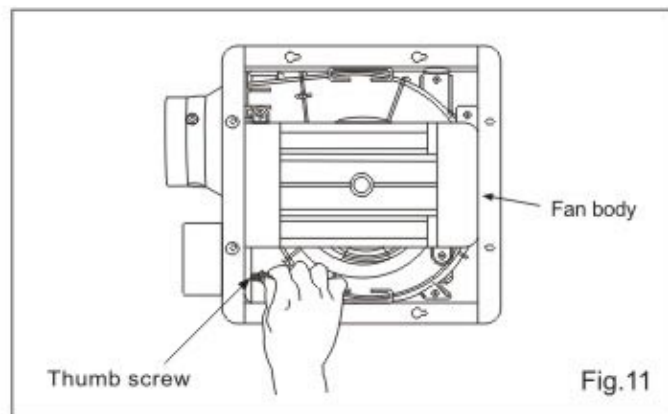


Fig.11

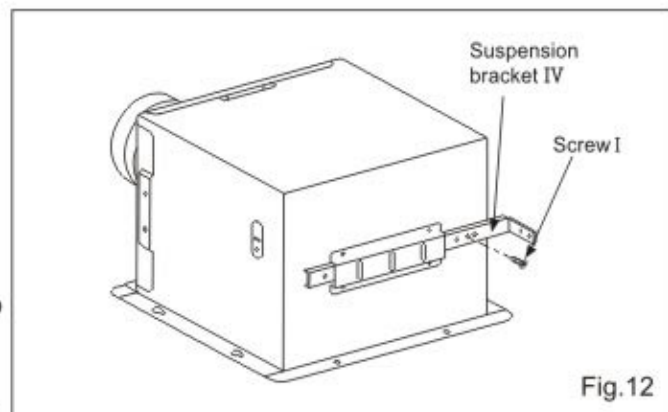


Fig.12

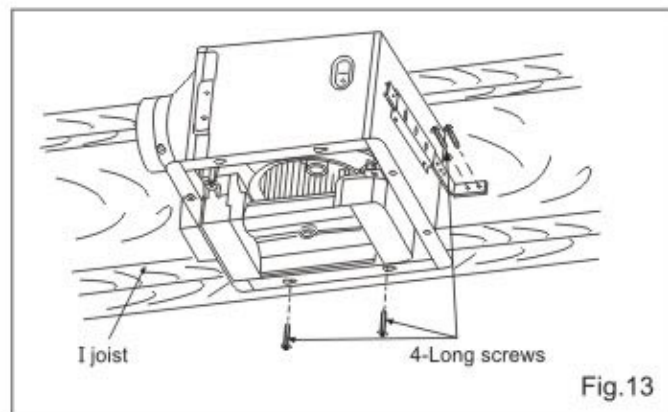


Fig.13

1. Before installation, secure fan body to adaptor by thumb screws (Fig.11). Fix the lighting unit to fan body (refering to Fig.9 of page 8).
2. Connect the suspension bracket IV to fan body. (Fig.12) (Select the hole by checking I-joist size fix the screw to the frame hole.)
3. Connect the ventilating fan to the I-joist. (Fig.13)
4. Inspect duct work and wiring following the procedures described in Installation I.
5. Finish ceiling work. Ceiling hole should be aligned with edge of the flange. (Fig.20 of page 11)
6. Insert the fluorescent lamps and screw the night lamp into the light unit.(Fig.9 of page 8)
7. Mount the grille to fan body. (Fig.10 of page 8)

INSTALLATION III (BETWEEN JOIST MOUNTING INSTALLATION)

1. Before installation, secure fan body to adaptor by thumb screws (Fig.11). Fix the lighting unit to fan body (refering to Fig.9 of page 8).
2. Insert the suspension bracket into bracket cover of adaptor side and the back of the fan body. (Fig.14)

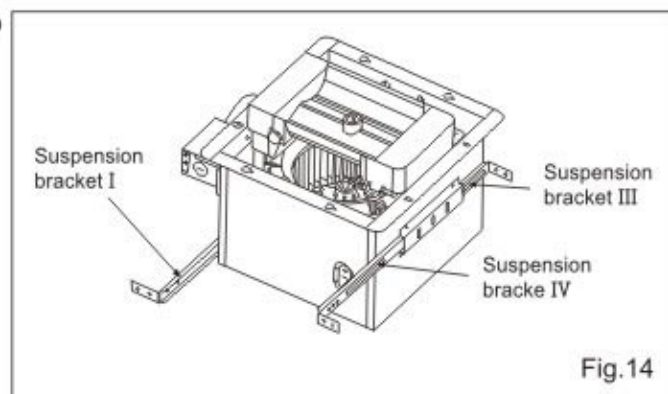


Fig.14

INSTALLATION III (BETWEEN JOIST MOUNTING INSTALLATION)

3. Insert the fan body between joist.
Make sure the fan body is level and square (perpendicular) with the joists.
Keep the flange and joists on the same level. (Fig.15)
4. Secure the suspension brackets with the long screws.
(Fig.16, Fig.17)
5. Secure the suspension bracket III & IV to the fan body using short screw I.(Fig. 17)
6. Inspect duct work and wiring following Fig.2 of page 6.
7. Insert the fluorescent lamps and screw the night lamp into the light unit.(Fig.9 of page 8)
8. Finish ceiling work and mount the grille to fan body.
(Fig.3 of page 7, Fig.10 of page 8.)

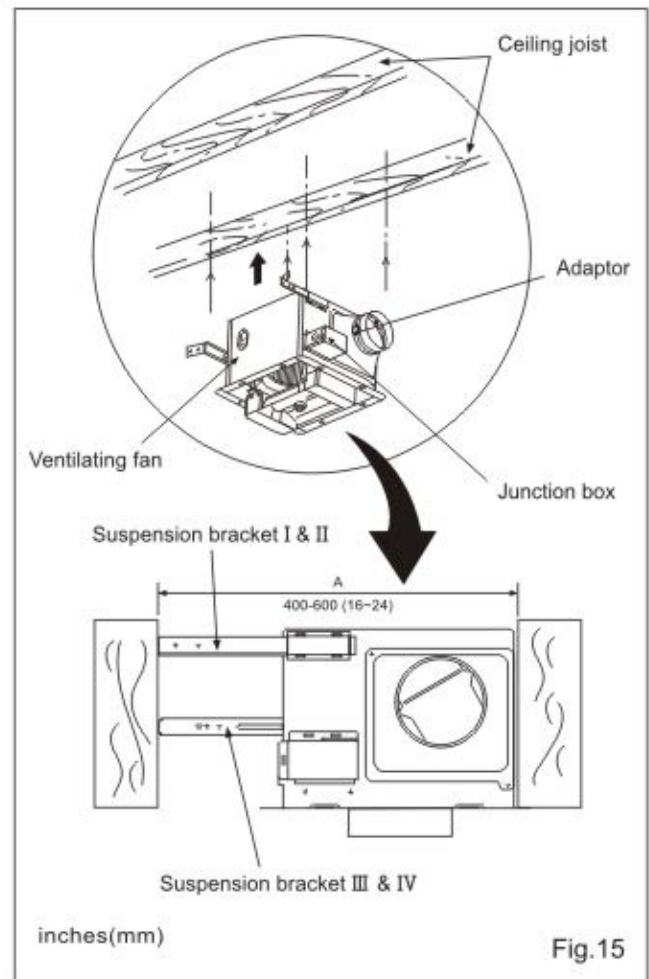


Fig.15

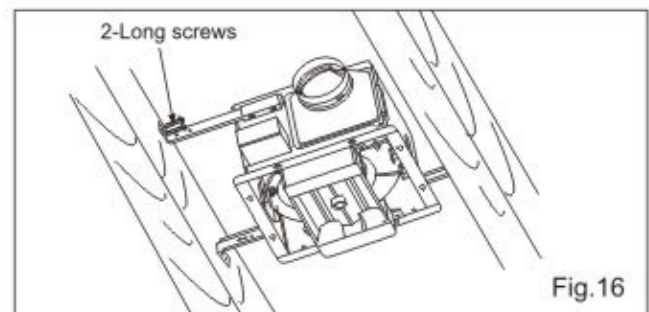


Fig.16

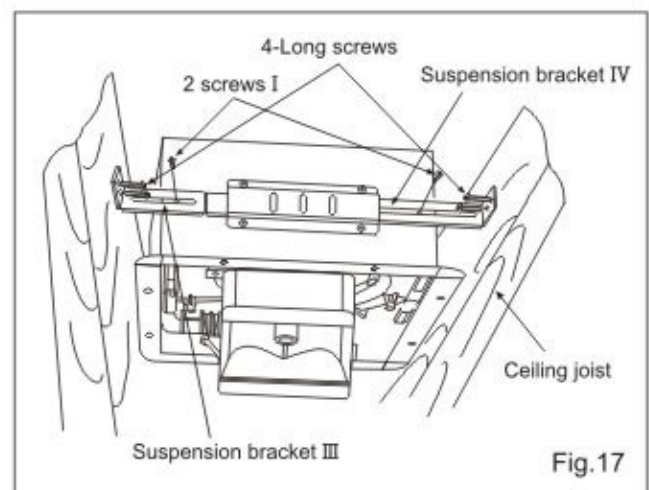


Fig.17

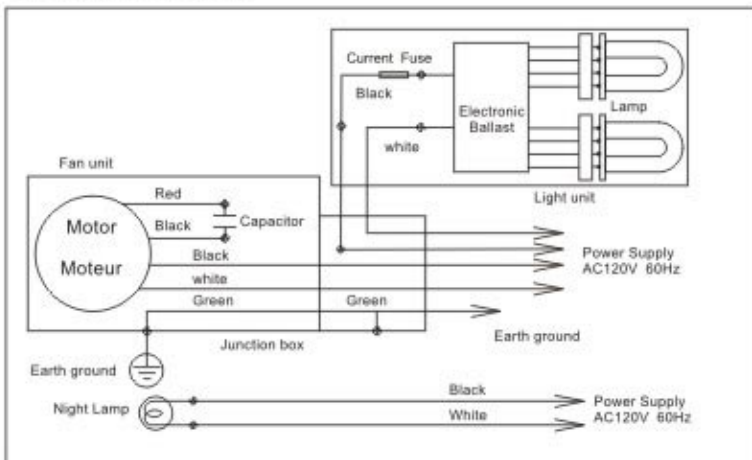
INSTALLATION IV (WOODEN HEADER)

1. Before installation, secure fan body to adaptor by thumb screws (Fig.11 of page 9). Fix the lighting unit to fan body (referring to Fig.9 of page 8).
2. Install header between ceiling joists using nails or screws.
3. Install the ventilating fan and secure with screws. (Fig.18, Fig.19)
4. Connect the circular duct to the adaptor.
Remove the junction box cover and secure conduit to junction box knockout hole (7/8 inch). (Fig.19)
5. Refer to wiring diagram.
Using wire nuts, connect house power wires to ventilating fan wires:
black to black; white to white; green to greens.
Replace the junction box cover.

CAUTION:

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

Wiring diagram



6. Finish ceiling work. Ceiling hole should be aligned with edge of the flange. (Fig.20)
7. Insert the fluorescent lamps and screw the night lamp into the light unit.(Fig.9 of page 8.)
8. Attach the grille to the fan unit.(Fig.10 of page 8)

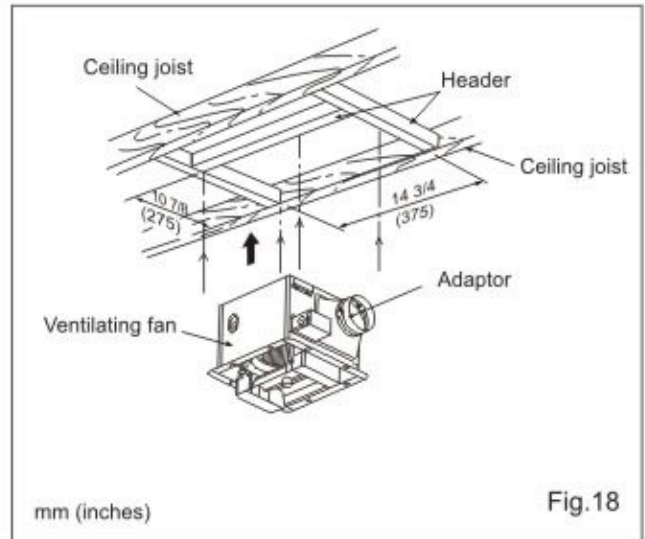


Fig.18

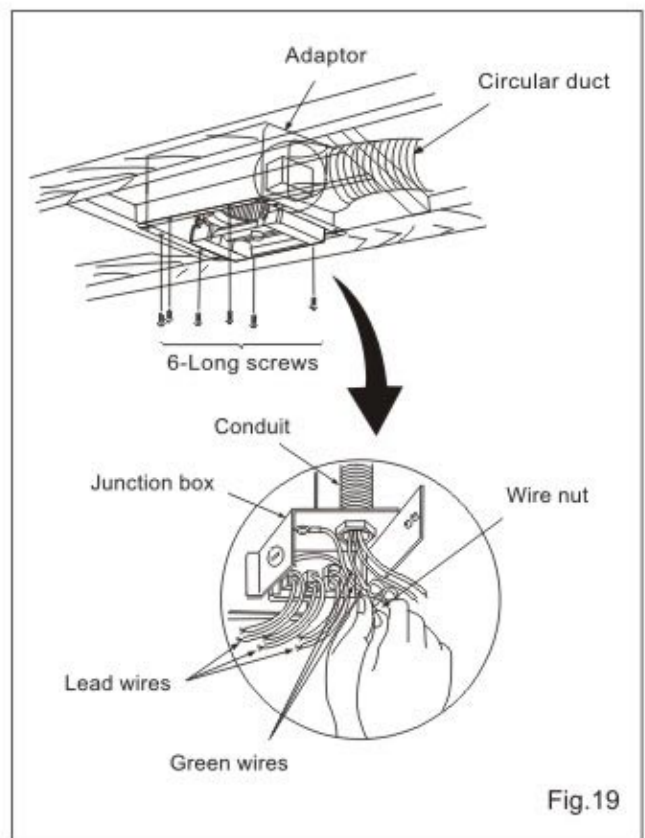


Fig.19

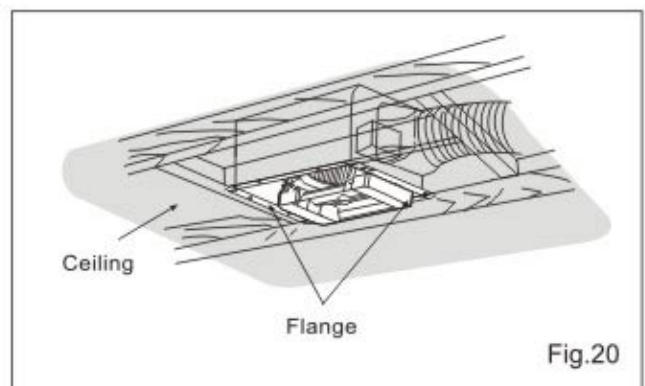


Fig.20

INSTALLATION V (IN EXISTING CONSTRUCTION)

1. Installation in existing construction.

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

- (1) To install the ventilating fan, follow the procedures described in Installation I. Take the following precautions before installation.

CAUTION:

Check area above planned installation location to be sure that:

1. Duct work can be installed and that area is sufficient for proper ventilation.
2. Wiring can be run to planned location.
3. No wiring or other obstructions will interfere with installation.

- (2) Inspect duct work and wiring before proceeding with installation.

- (3) Plan suitable location for ventilating fan. (next to ceiling joist)

- (4) Before installation, provide inspection and maintenance access at a location that will not interfere with installation work shown in installation I.

- (5) First, remove ceiling section according to Fig.3 of page 7.

- (6) Install ventilating fan.

2. Installation from accessible area above fan location.

- (1) Inspect duct work and wiring before proceeding with installation.

- (2) Remove ceiling section according to Fig.3 of page 7.

- (3) Install ventilating fan.

MAINTENANCE I (CLEANING)

WARNING:

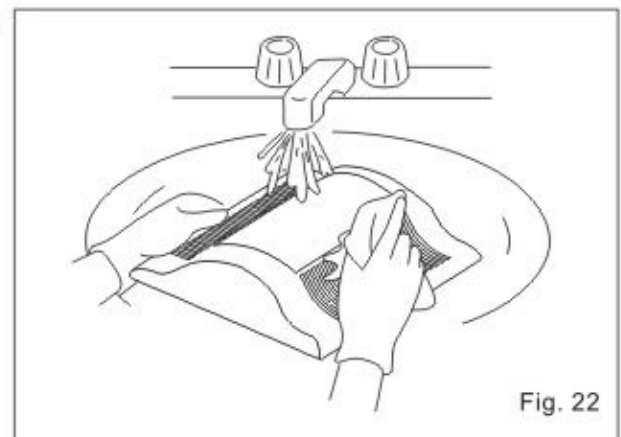
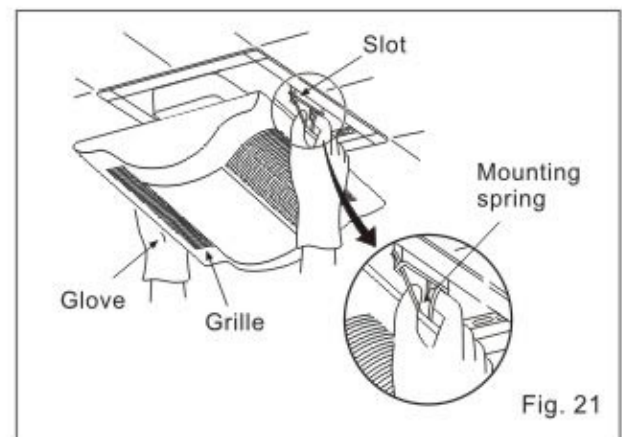
Disconnect power source before working on unit. Routine maintenance must be done every year.

CAUTION:

1. Never use petrol, benzene, thinner or any other such chemicals for cleaning the ventilating fan.
2. Do not allow water to enter motor.
3. Do not immerse resin parts in water over 60°C.

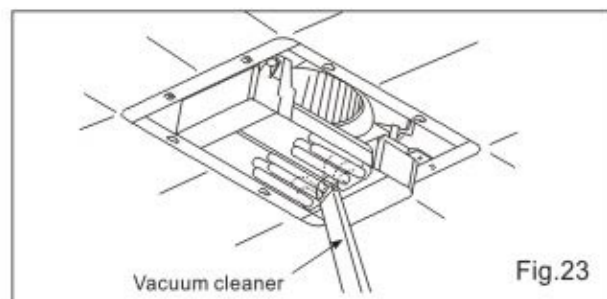
1. Remove grille. (Squeeze mounting spring and pull down carefully.) (Fig.21)

2. Wash and clean grille. (Use non-abrasive kitchen detergent, wipe dry with new cloth.) (Fig.22)

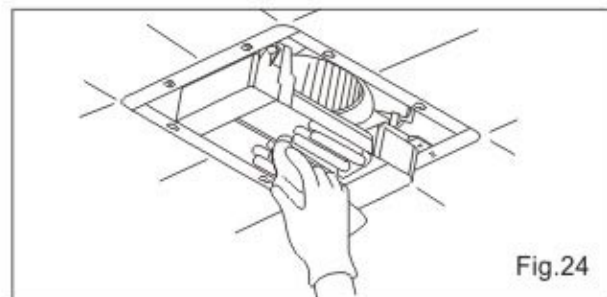


MAINTENANCE I CONTINUED (CLEANING)

3. Remove dust and dirt from fan body using a vacuum cleaner. (Remove bulbs if necessary.) (Fig.23)



4. Using a cloth dampened with kitchen detergent, remove any dirt from fan body. Wipe dry with new cloth. (Fig.24)

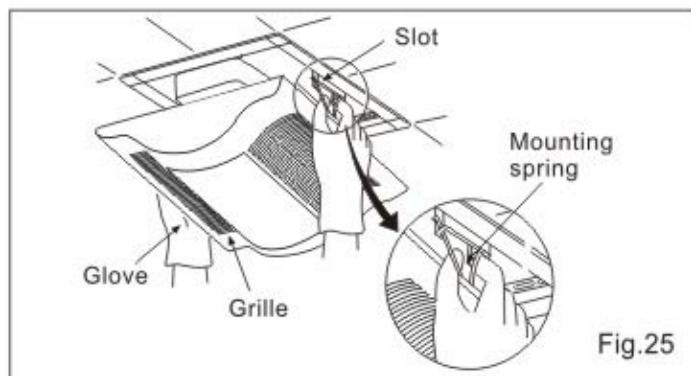


5. Replace bulbs and grille.

MAINTENANCE II (REPLACEMENT OF LAMP)

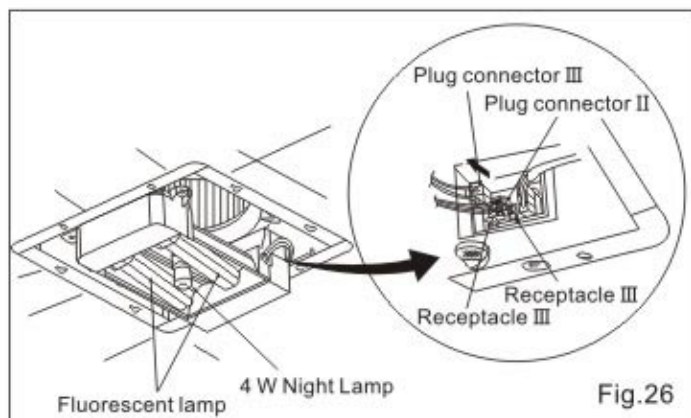
WARNING:

1. Disconnect power source before working on unit.
2. The lamp's glass is fragile. Please handle with care. To remove lamp, grasp at base and move back and force to loosen. Do not pull hard on the lamp or you may break the glass.
3. 4W night lamp has threaded base. Remove by turning counterclockwise.

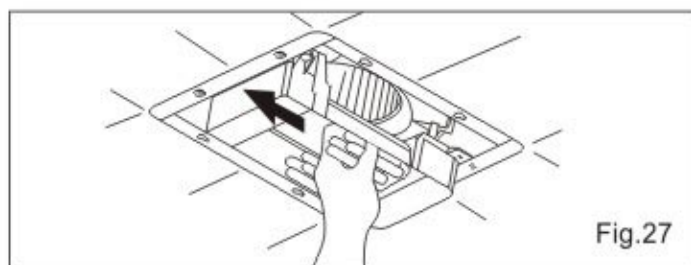


1. Remove grille. (Squeeze mounting spring and pull down) (Fig.25)

2. Disconnect the connector II or connector III of light unit. (Fig.26)



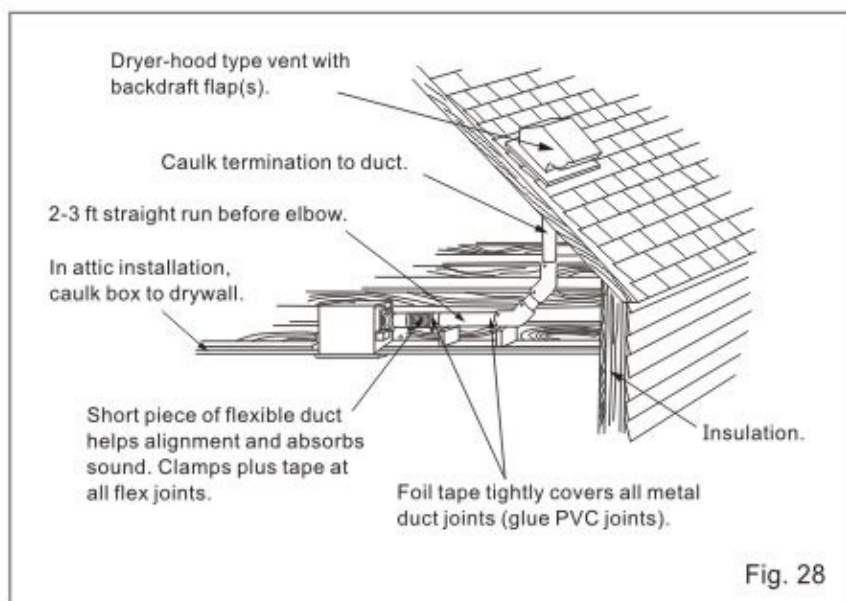
3. Change the fluorescent bulbs (Panasonic FDS 18E27/4, 18W or FDS18E35/4, 18W or FDS18E42/4, 18W) or the 4W incandescent lamp, connect the connector II or connector III and replace the grille. (Fig.27)



PRACTICAL GUIDE TO INSTALLATION

Proper insulation around the fan to minimize building heat loss and gain. (Fig.28)

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 bulbs do not create enough ambient heat to be subjected to these limitations.



PRODUCT SERVICE

Warning Concerning Removal of Covers.

The unit should be serviced by qualified technicians only. No service information is provided for customers. Your product is designed and manufactured to ensure a minimum of maintenance. However, should your unit ever require service, a nationwide system of factory service centers and AUTHORIZED INDEPENDENT SERVICE CENTERS is maintained to support your product's warranty.

(In the U.S.A., call 1-866-292-7292 to locate the Panasonic Authorized Service Center nearest you.)

PANASONIC CONSUMER ELECTRONICS COMPANY

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