

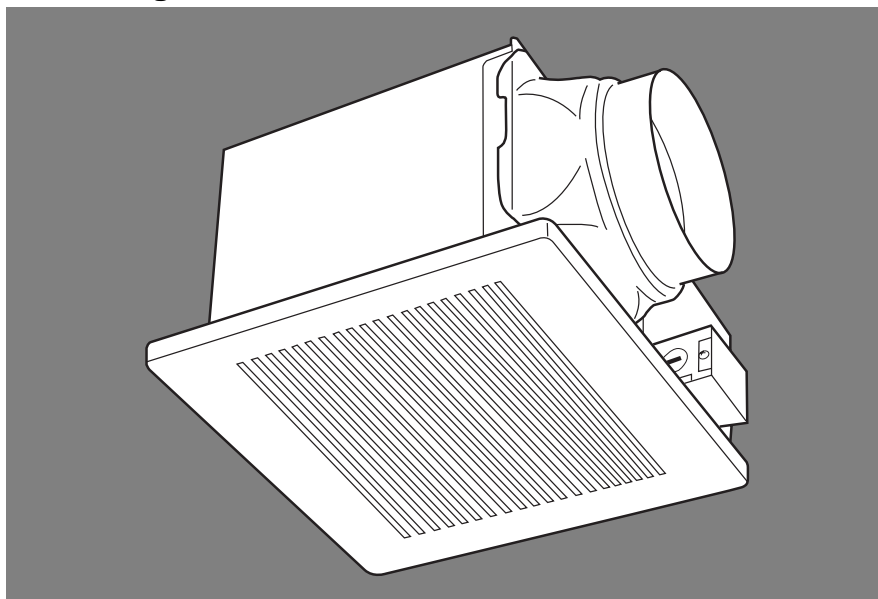
# INSTALLATION INSTRUCTIONS

Ventilating Fan

FV-20VQ3

FV-30VQ3

FV-40VQ3



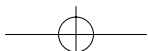
## Panasonic

### READ AND SAVE THESE INSTRUCTIONS.

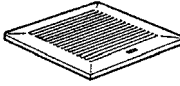







Please read these instructions carefully before attempting to install, operate or service the Panasonic Ventilating Fan. Failure to comply with instructions could result in personal injury and/or property damage. Please retain this booklet for future reference.

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# SUPPLIED ACCESSORIES

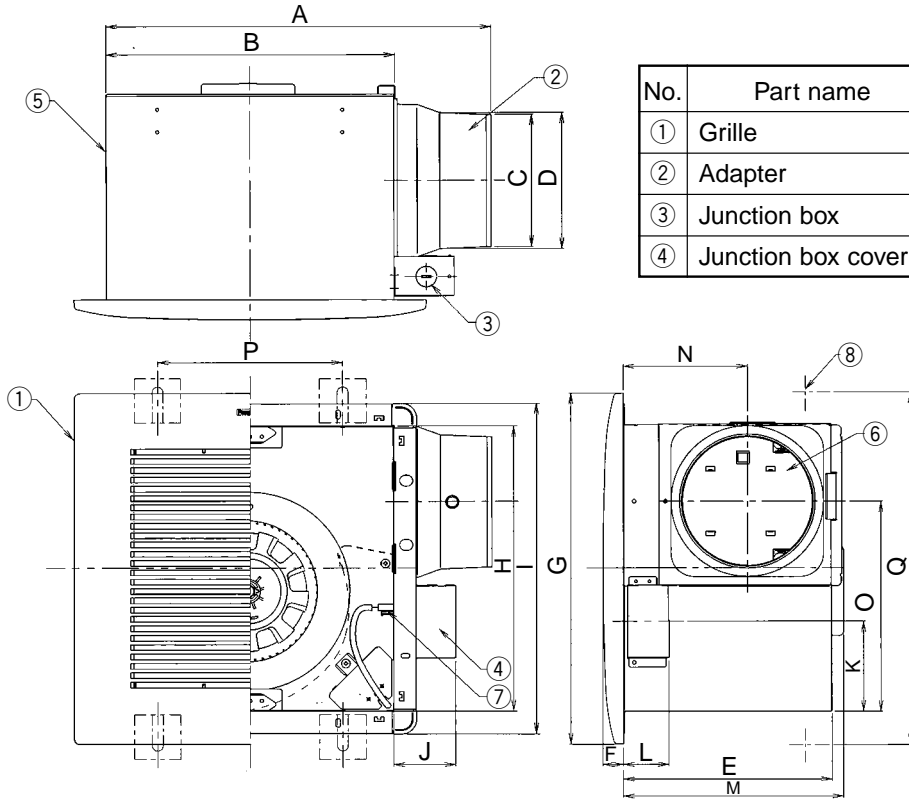
FV-20VQ3		FV-30VQ3	FV-40VQ3
Part name		Appearance	Quantity
Grille			1
Suspension bracket set	Suspension bracket		4
	Rubber 1		4
	Rubber 2		4
	Rubber 3		4
	Washer		8
	Screw		8
Long screw			6

## DESCRIPTION

These Panasonic ceiling mount ventilating fan models use a low noise 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 main body is a spring-loaded, quick-remove type. A damper for preventing counterflow is provided.

# DIMENSIONS

FV-20VQ3    FV-30VQ3    FV-40VQ3



No.	Part name	No.	Part name
①	Grille	⑤	Body
②	Adapter	⑥	Damper
③	Junction box	⑦	Plug connector
④	Junction box cover	⑧	Suspension bracket

Dimensions: mm (inch)

Model No.	A	B	C	D	E	F	G	H	I
FV-20VQ3	420	312	142	146	236	22	380□	309□	357□
FV-30VQ3	(16 17/32)	(12 9/32)	(5 19/32)	(5 3/4)	(9 9/32)	(7/8)	(15□)	(12 3/16□)	(14 1/16□)
FV-40VQ3	484	376	142	146	236	22	450□	374□	422□
	(19 9/16)	(14 25/32)	(5 19/32)	(5 3/4)	(9 9/32)	(7/8)	(17 11/16□)	(14 23/32□)	(16 5/8□)
Model No.	J	K	L	M	N	O	P	Q	
FV-20VQ3	66	97	50	236	138	228	175–225	338–382	
FV-30VQ3	(2 19/32)	(3 13/16)	(1 31/32)	(9 5/16)	(5 7/16)	(8)	(6 7/8–8 7/8)	(13 5/16–15 1/32)	
FV-40VQ3	66	161	50	250	138	292	235–285	403–447	
	(2 19/32)	(6 11/32)	(1 31/32)	(9 27/32)	(5 7/16)	(11 1/2)	(9 5/16–11 7/32)	(15 7/8–17 19/32)	

# SPECIFICATIONS

Model no.	Air direction	V	Hz	Power consumption (W)	Speed (RPM)	Air deliver at 0.1" WG (CFM)	Weight kg (lb.)
FV-20VQ3	Exhaust	120	60	43.5	560	200	6.2 (13.6)
FV-30VQ3				66.5	730	300	6.7 (14.7)
FV-40VQ3				119	680	400	9.6 (21.1)

\*At 0.0" Static pressure, (Pa)

# 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 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 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.

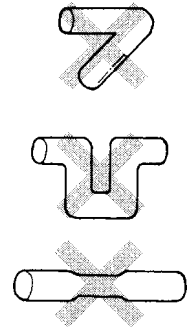


Fig. A

## 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.

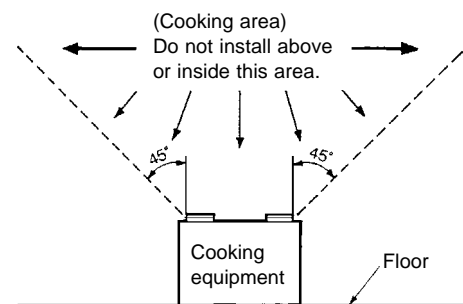


Fig. B

## 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. If this unit is to be installed over a tub or shower, it must be marked as appropriate for the application.
- G. Do not use this unit with any solid-state control device.
- H. Before servicing or cleaning unit, switch power off at service panel and lock the "service disconnecting mains" to prevent power from being switched on accidentally. When the service disconnecting mains 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 (SUSPENDED CEILING)

1. Disconnect plug connector from receptacle before starting installation.
2. Assemble suspension bracket and rubber 1 to body. (Fig. 1)
3. Suspend body with anchor bolts. (not supplied) (Fig. 2)
4. Remove junction box cover and secure conduit to junction box knockout hole. (7/8 inch) (Fig. 3)
5. Refer to wiring diagram  
Using wire nuts, connect house power wires to ventilating fan wires (Fig. 3): black to black; white to white; green to greens.  
Replace junction box cover.

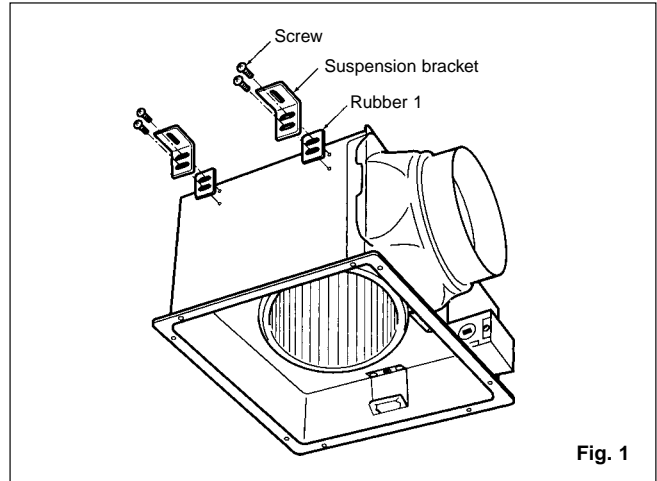


Fig. 1

## CAUTION

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

## Wiring Diagram

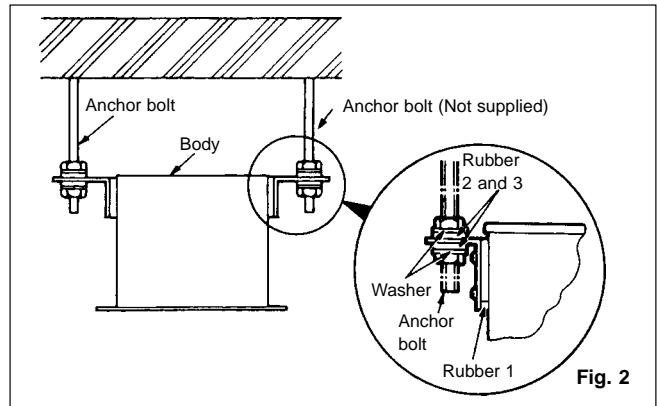
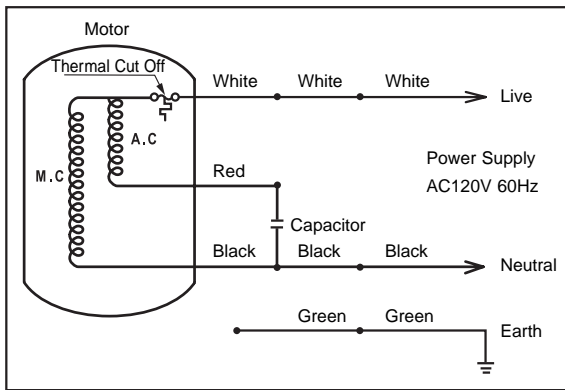


Fig. 2

6. Install circular duct (6 inch) and secure it with tape.
7. Finish ceiling work. Ceiling hole should be aligned with fan opening.
8. Connect plug connector to receptacle.
9. Insert mounting springs into slots as shown and mount grille to fan body. (Fig. 4)

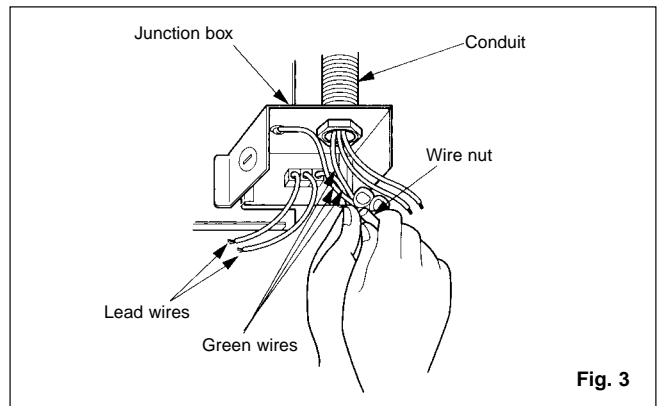


Fig. 3

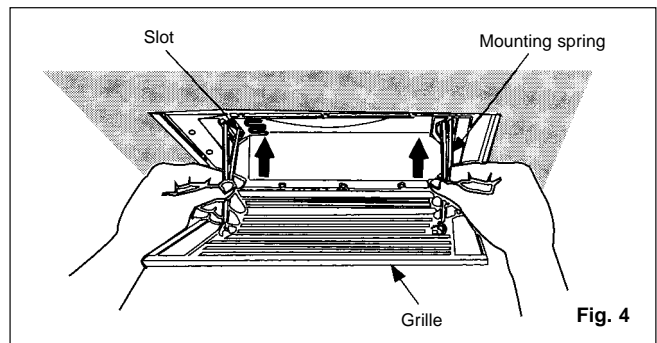
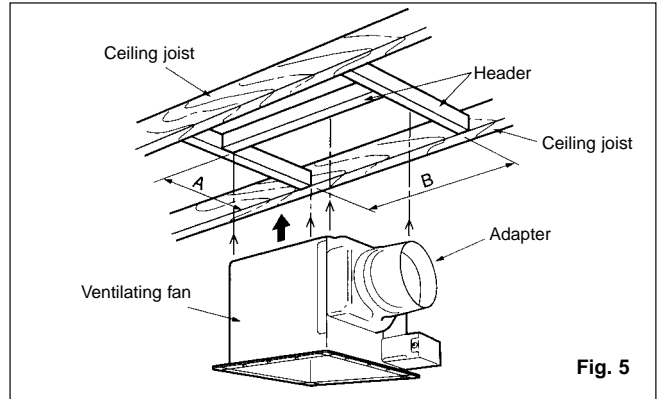


Fig. 4

# INSTALLATION II (WOODEN HEADER)

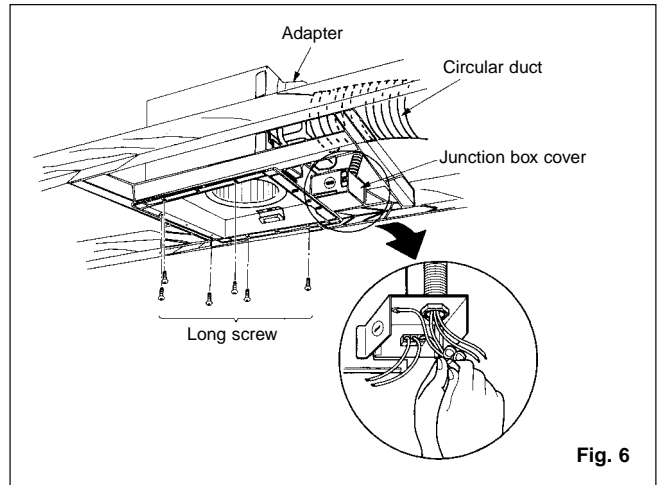
1. Install header between ceiling joists using nails or screws. (Fig. 5)
2. Install the ventilating fan to the header with long screws. (Figs. 5 & 6)

Model No.	mm (inch)	
	A	B
FV-20VQ3	315	454
FV-30VQ3	(12 13/32)	(17 7/8)
FV-40VQ3	380	518
	(15)	(20 13/32)

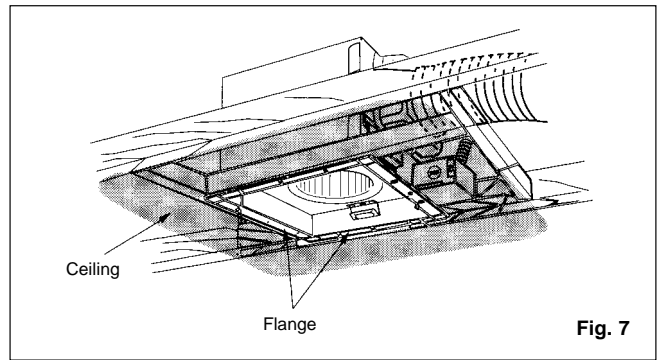
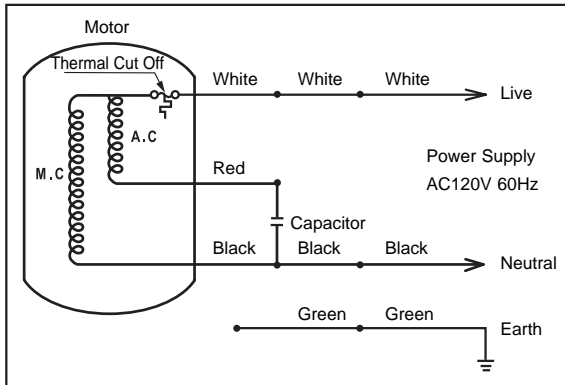


3. Insert the circular duct to the adapter.  
Remove the junction box cover and secure conduit to junction box knockout hole. (7/8 inch) (Fig. 6)
4. Refer to wiring diagram.  
Using wire nuts, connect house power wires to ventilating fan wires: black to black; white to white; green to green. Replace junction box cover.

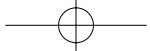
**CAUTION**  
Mount junction box cover carefully so that lead wires are not pinched.



## Wiring Diagram



5. Finish ceiling work. Ceiling hole should be aligned with the edge of the flange. (Fig. 7)
6. Mount grille to fan body. (Fig. 4 of page 5).



## INSTALLATION III (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 II. 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, ensure there is sufficient space available (no obstruction or interference).

## MAINTENANCE

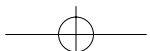
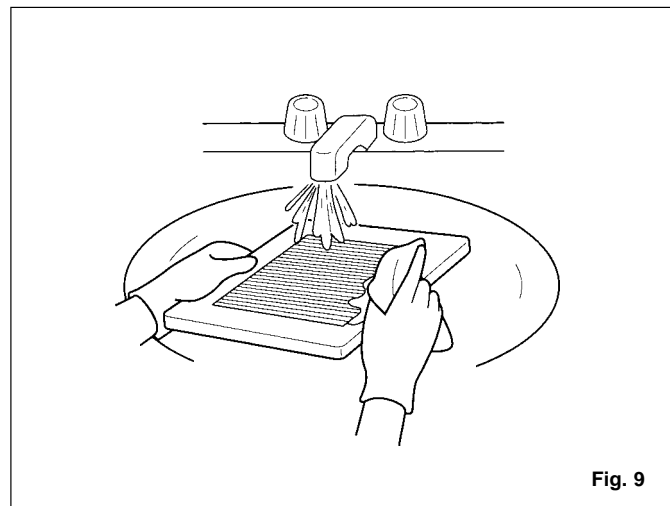
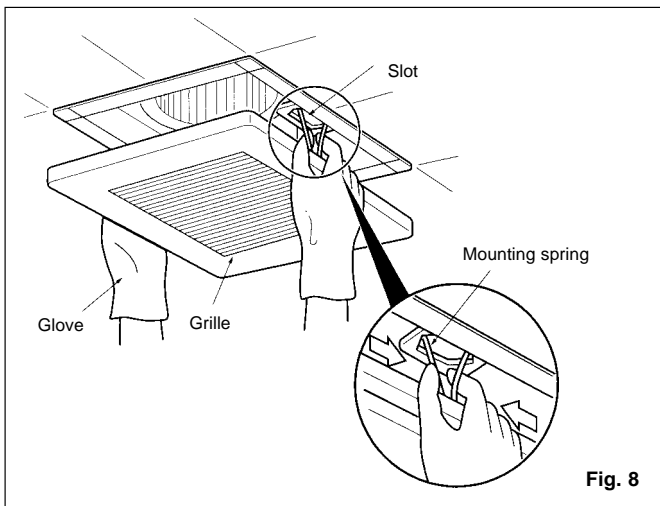
### WARNING

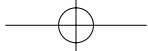
Disconnect power source before working on unit. Routine maintenance of the fan must be done every year.

### 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 (140°F).

1. Remove grille. (Squeeze mounting spring and pull down.) (Fig. 8)
2. Wash and clean grille. (Use non-abrasive kitchen detergent.) Wipe dry with new cloth. (Fig. 9)



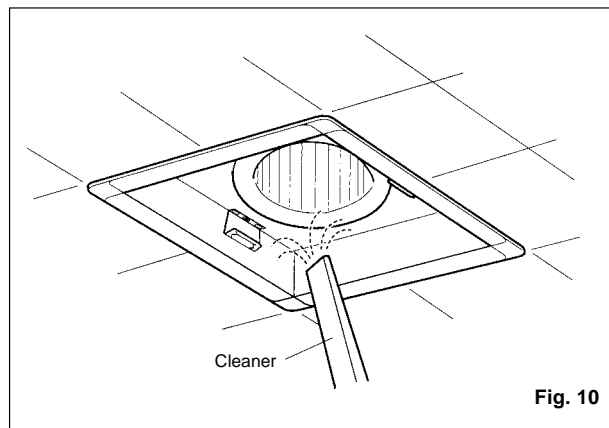


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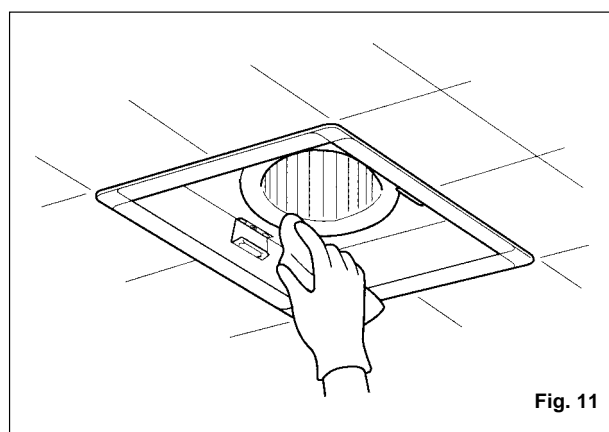
## MAINTENANCE (CONT.)

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3. Remove dust and dirt from fan body using a vacuum cleaner. (Fig. 10)



4. Using a cloth dampened with kitchen detergent, remove any dirt from fan body. Wipe dry with new cloth. (Fig. 11)
5. Replace grille.



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## PRODUCT SERVICE

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### Warning Concerning Removal of Covers.

This 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 CENTER are 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.)

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