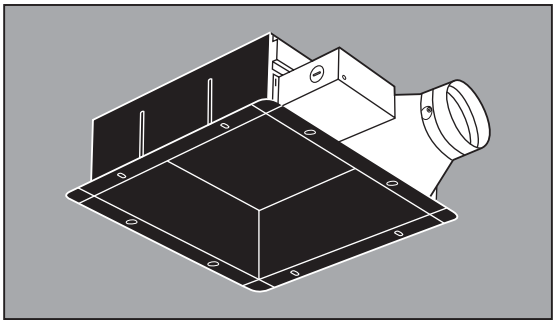
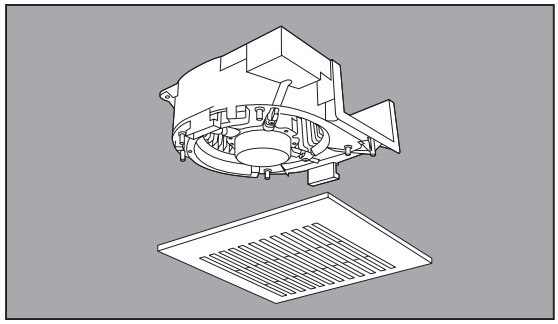
SUPPLEMENTARY INSTALLATION INSTRUCTIONS

(For Contractor Pack)

Housing Can
FV-05-08VSA1



Motor/Grille Assembly
FV-05VSB1, FV-08VSB1



Applicable to Models: FV-05VS1, FV-08VS1

Panasonic®

READ AND SAVE THESE INSTRUCTIOINS.

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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GENERAL SAFETY INFORMATION

1. Do not install this ventilating fan where air temperature may exceed 40°C (104°F).
2. Make sure 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 UL listed 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.

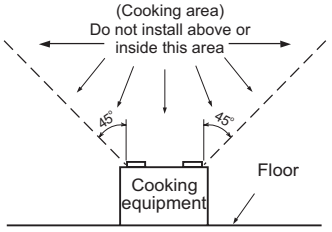


Fig. B

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 to 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. The Housing Can FV-05-08VSA1 must be installed with Motor/Grille Assembly FV-05/08VSB1 only.

E. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.

F. Ducted fans must always be vented to the outdoors.

G. These models are UL listed for tub and shower enclosures.

H. Solid state controls may cause harmonic distortion which can cause motor humming noise. To reduce the risk of fire or electric shock, do not use this unit with any solid-state control device.

I. 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.

J. NEVER place a switch where it can be reached from a tub or shower.

K. Not to be installed in a ceiling thermally insulated to a value greater than R40. (This is required for installation in Canada only.)

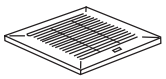
L. Install the fan at least 1.5m (5 feet) above the floor, and the fan must be installed above a counter or major appliances that serves as a barrier.

UNPACKING

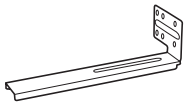
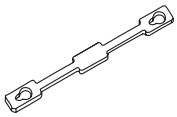
Unpack and carefully remove unit from carton.
Refer to the Supplied Accessories list to verify that all parts are present.

SUPPLIED ACCESSORIES (4 SETS)

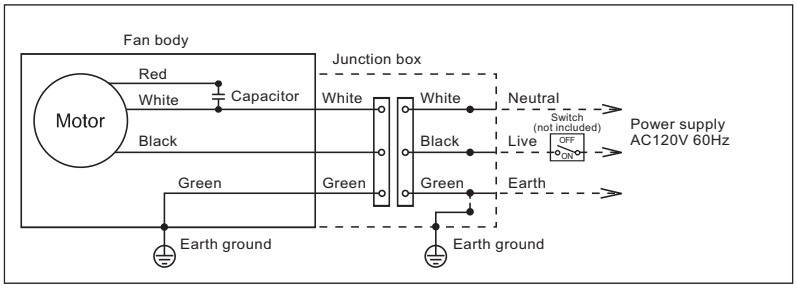
(A) For Motor / Grille Assembly of model: FV-05/08VSB1

Part name	Appearance	Quantity
Grille		4

(B) For Housing Can of model: FV-05-08VSA1

Part name	Appearance	Quantity
Long screw (ST4.2X20)		24
Thumb screw		4
Screw Ⅰ (ST4.2X8)		8
Screw Ⅱ (ST4.2X10)		8
Suspension bracket Ⅰ		4
Suspension bracket Ⅱ		4
Suspension bracket Ⅲ		4
Spacer		4

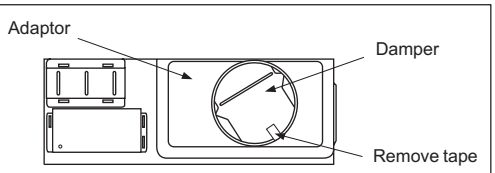
WIRING DIAGRAM



INSTALLATION I (JOIST MOUNTING-I)

1. Before installation, secure the fan body to adaptor by using thumb screw. (Fig.1)

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



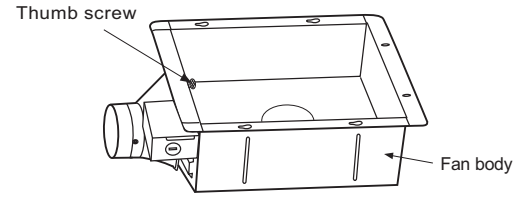
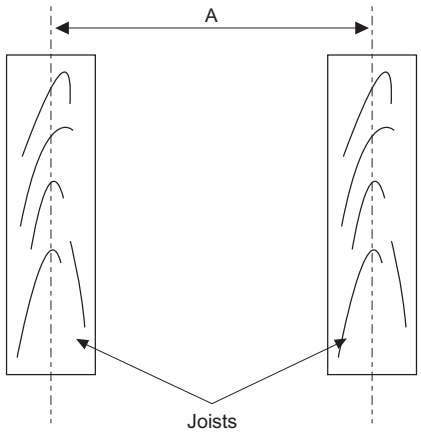


Fig.1

2. Insert the supension bracket into the fan body and adaptor. (Select the suspension bracket as shown below)



Spacing a on center joists	Insert suspension bracket
12 inches	Refer to Fig. 2-1
16 inches	Refer to Fig. 2-2
19.2 inches vertical joists	Refer to Fig. 2-3
24 inches	Refer to Fig. 2-4

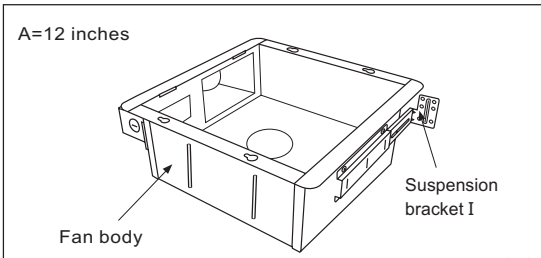


Fig.2-1

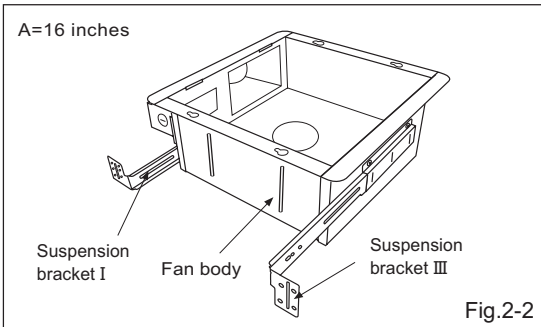


Fig.2-2

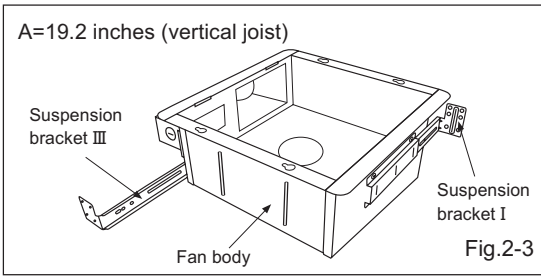


Fig.2-3

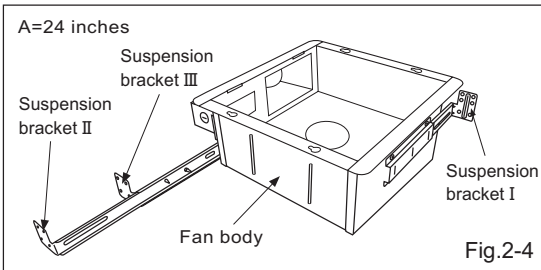
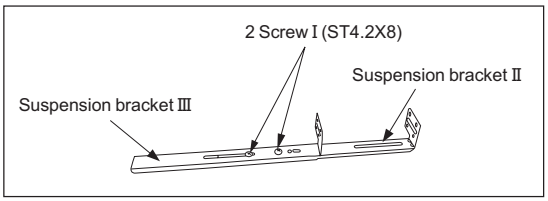


Fig.2-4

If spacing A on center joists is 24 inches, connect suspension bracket Ⅱ and Ⅲ(C4 mark to C4 mark) as shown below :



INSTALLATION I (JOIST MOUNTING-I) CONTINUED

3. Install the suspension bracket and the flange of fan body to joists by using long screws (ST4.2X20) according to Fig. 3.

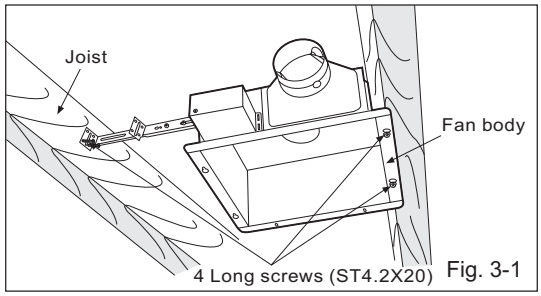


Fig. 3-1

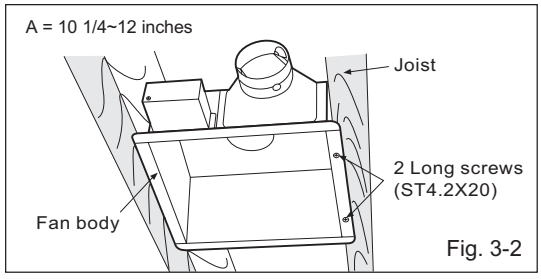


Fig. 3-2

4. Install the suspension bracket to joists by using long screws (ST4.2X20) and secure it to the fan body by using screw Ⅱ (ST4.2X10). (Fig. 4)

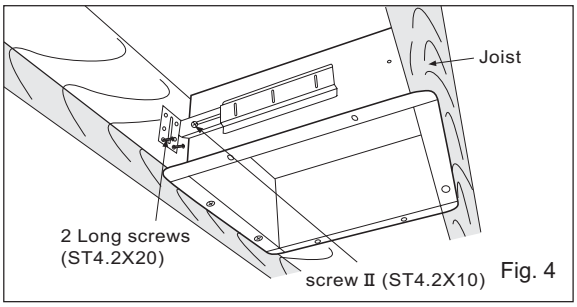


Fig. 4

5. Remove junction box cover and secure conduit or stress relief to junction box knock-out hole. (Fig. 5)

6. Refer to wiring diagram (page 3).
   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. (Fig. 5)

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

7. Install a circular duct and secure it with duct tape or clamps.

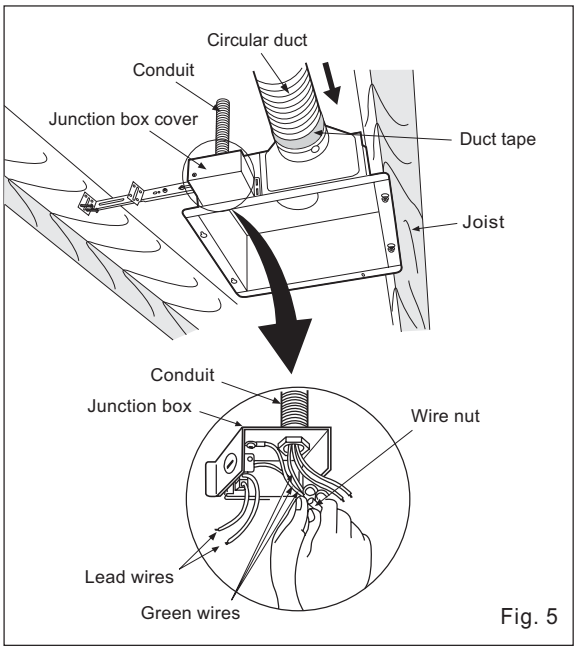
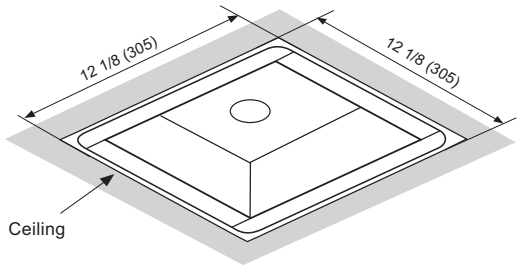


Fig. 5

INSTALLATION I (JOIST MOUNTING-I) CONTINUED

8. Finish ceiling work. Ceiling hole should be aligned with the edge of the flange. (Fig. 6)

9. Follow the Fig. 12-3, 12-4 (page 9) and Fig. 7 (page 8) of the original installation instruction to complete the motor/grille assembly installation.



inches (mm)

Fig. 6

INSTALLATION II (JOIST MOUNTING-II)

1. Disconnect plug connector from receptacle and remove adaptor from fan body before starting installation.

2. Insert the suspension bracket into the adaptor and secure it to joists by using long screws (ST4.2X20). (Fig. 7)

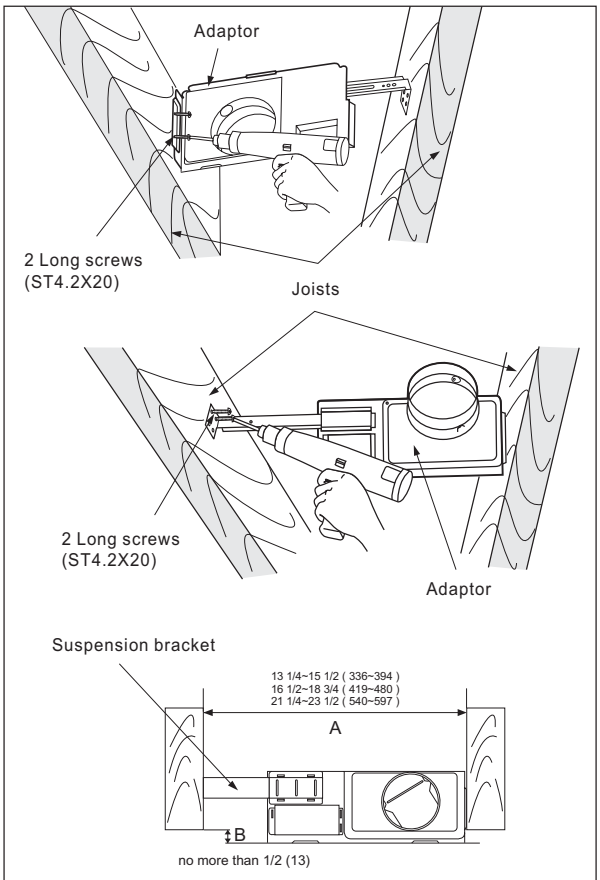
CAUTION:
Ensure that distance B is no more than 1/2 inch (13 mm).

If spacing A between joists is 21 1/4 to 23 1/2 inches, connect suspension bracket II and III (C4 mark to C4 mark) according to page 4. Select the suspension bracket according to spacing A as shown below.

Spacing A between Joists 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)
suspension bracket	suspension bracket I	suspension bracket III	suspension bracket II & III

3. Follow step 5 to 7 of the Installation I (page 5) to complete the duct work and wiring.

4. Insert the suspension bracket into fan body (refer to step 2 of Installation I, page 4).



inches (mm)

Fig. 7

INSTALLATION Ⅱ (JOIST MOUNTING-Ⅱ) CONTINUED

5. Insert the fan body into joists. (Fig. 8)

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

6. Secure the fan body to adaptor by using thumb screw.

7. Secure the suspension bracket to joists by using long screws (ST4.2X20) and secure it to fan body by using screw Ⅱ (ST4.2X10) in vertical direction. (Fig. 9)

8. Follow step 5 to 9 of installation Ⅰ (page 5~page6) to complete the installation work.

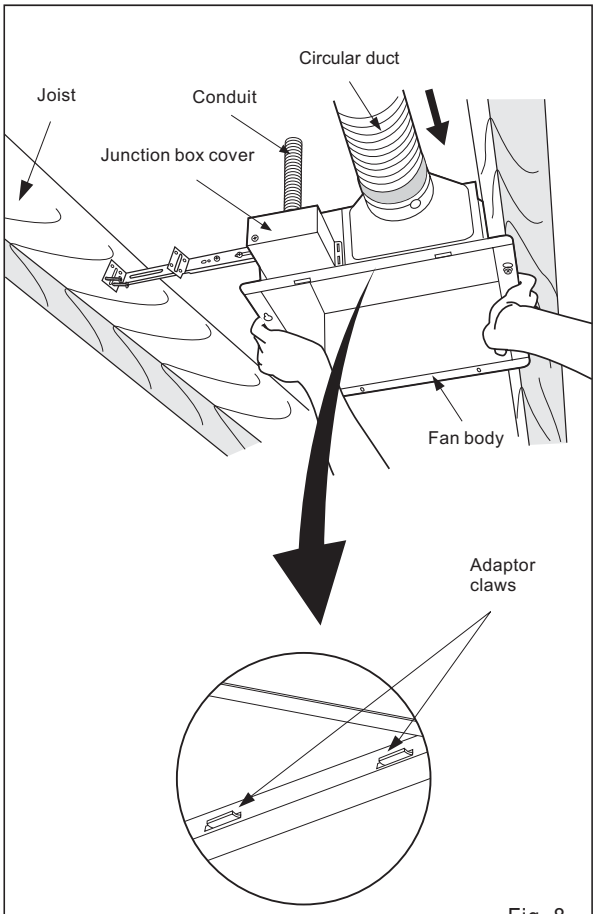


Fig. 8

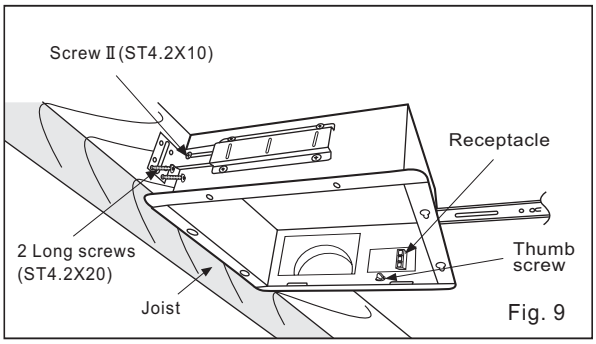
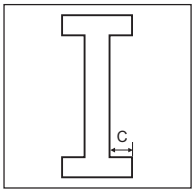
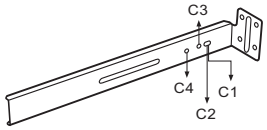


Fig. 9

INSTALLATION Ⅲ (I-JOIST MOUNTING)



4 kinds 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 Ⅲ
The suspension bracket Ⅲ can comply with different kinds of I-joist.

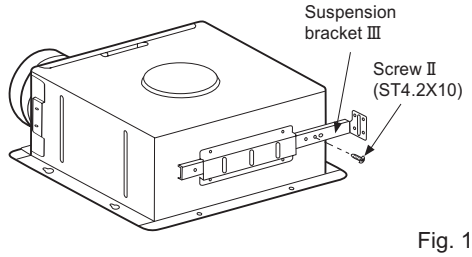


Fig. 10

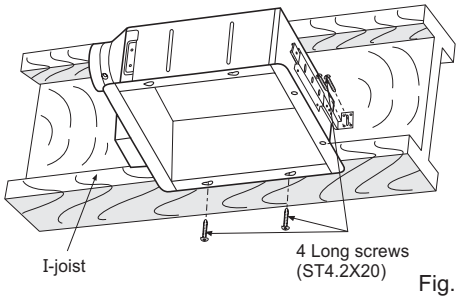
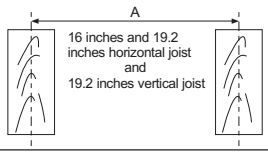


Fig. 11

1. Before installation, Secure the fan body to adaptor by using thumb screw. (Fig. 1 of page 4)
2. Connect the suspension bracket Ⅲ to fan body. (Fig. 10) (Select the hole by checking I-joist size fix the screw to the frame hole.)
3. Connect the fan body to the I-joist. (Fig. 11)
4. Follow step 5 to 9 of installation I (page 5~page 6) to complete the installation work.

INSTALLATION Ⅳ (BETWEEN JOIST MOUNTING)

1. Before installation, Secure the fan body to adaptor by using thumb screw. (Fig.1 of page 4)
2. Insert the suspension bracket into the bracket cover of adaptor side and the back of the fan body. (Fig.12) (select the suspension bracket according to spacing A as shown right)



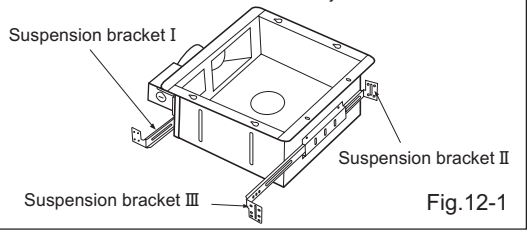


Fig.12-1

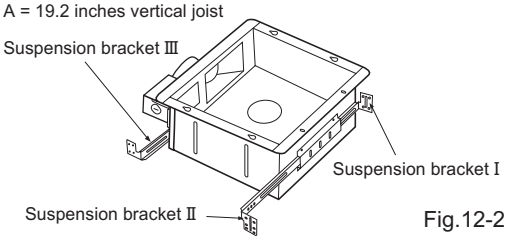


Fig.12-2

INSTALLATION Ⅸ (WALL INSTALLATION-Ⅲ)

This installation method is only for 12-inch and 24-inch joists.

1. Before installation, Secure the fan body to adaptor by using thumb screw. (Fig.1 of page 4)

2. Remove the backing paper from the spacer, attach the spacer to the flange of the fan body. The holes on the spacer should line up with the holes on the flange. (Fig. 24)

3. Secure the suspension bracket into bracket cover of the adaptor (for 24-inch joists, refer to Fig. 2 on page 4). Secure the suspension bracket I into bracket cover at the back of the fan body (for 12-inch joists, Fig. 25-2).

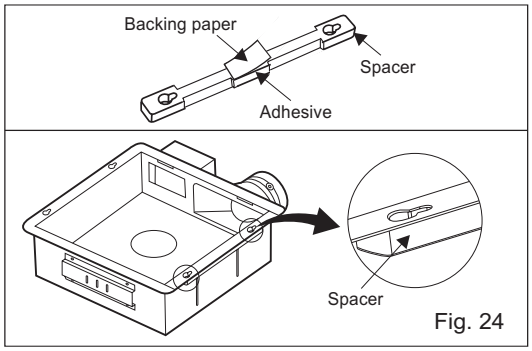


Fig. 24

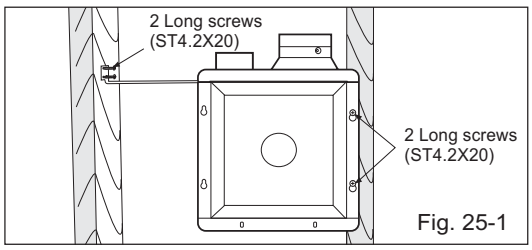


Fig. 25-1

4. Secure the suspension bracket to the wall stud using long screws (ST4.2X20). Secure the fan body and spacer to stud using long screws (ST4.2X20). (Fig. 25)

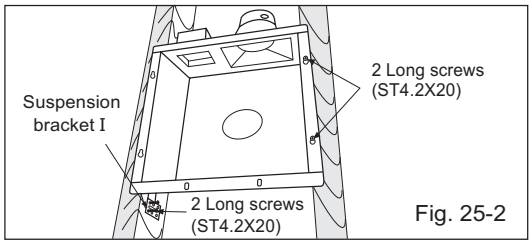


Fig. 25-2

6. Refer to the Fig. 12-3, 12-4 (page 9) and Fig. 7 (page 8) of the original installation instruction to complete the motor/grille assembly installation.

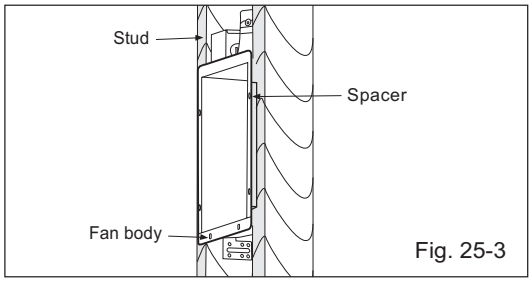


Fig. 25-3

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 Customer call center.)

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