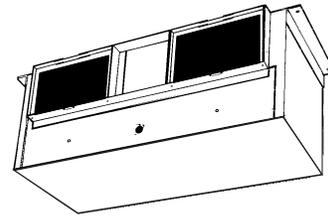


IN-LINE CABINET VENTILATORS



READ AND SAVE THESE INSTRUCTIONS

WARNING

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

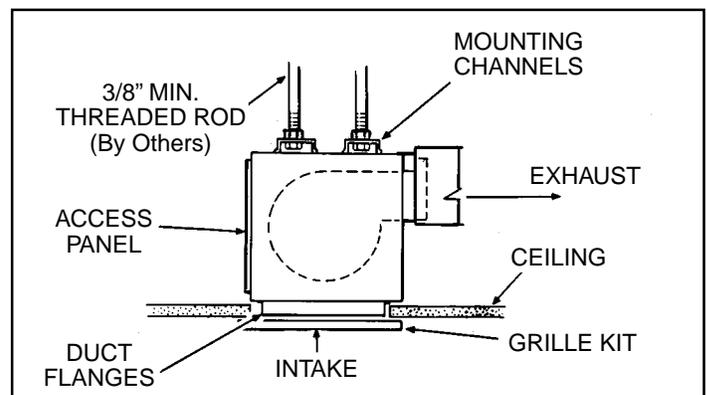
1. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer at the address or telephone number listed in the warranty.
2. Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power 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 a qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
4. 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.
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. This unit must be grounded.

CAUTION

1. For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
2. To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit.
3. Please read specification label on product for further information and requirements.

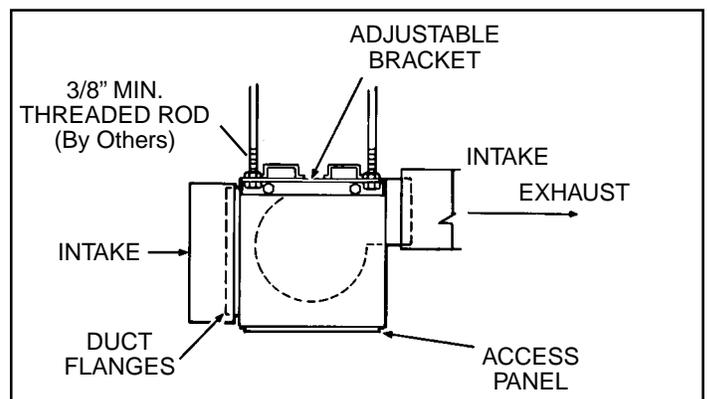
PLAN INSTALLATION

MOUNTING (*Right-angle Discharge*)



Factory shipped ready to be installed as a ceiling ventilator with right-angle discharge.

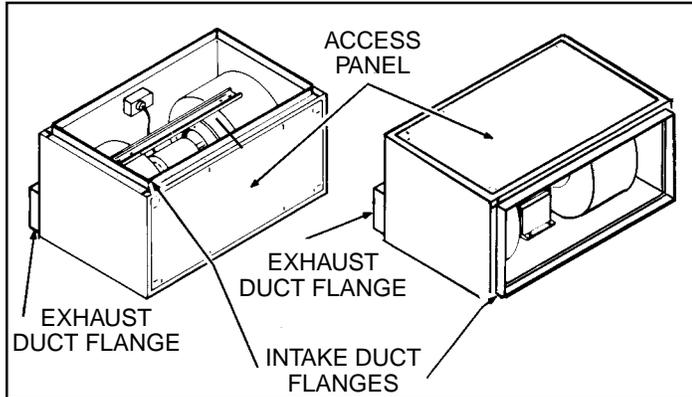
MOUNTING (*In-line Configuration*)



Converted for in-line applications.

PLAN INSTALLATION (cont.)

CONVERTING FROM RIGHT-ANGLE TO IN-LINE



Remove and reverse duct flanges and access panel positions on housing.

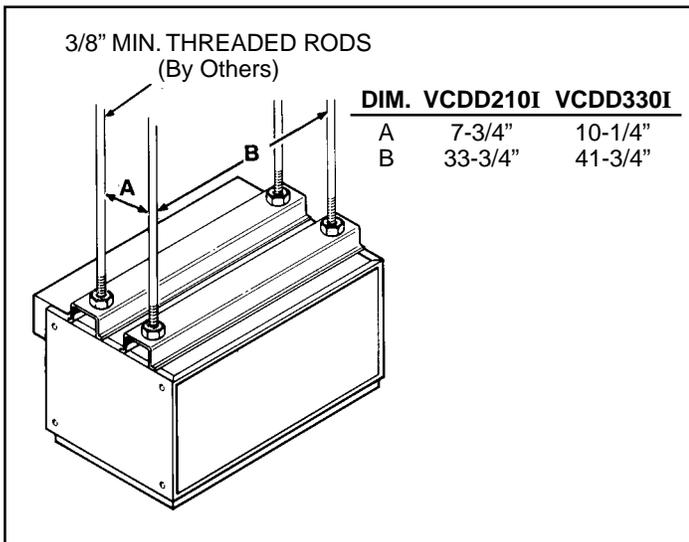
For correct intake and exhaust duct size, see Table 1.

TABLE 1

MODEL	INTAKE DUCT SIZE	EXHAUST DUCT SIZE
VCDD210I	12-3/8" x 35-3/4"	7-3/4" x 33-3/4"
VCDD330I	14-1/2" x 43-1/2"	9-3/4" x 41-3/8"

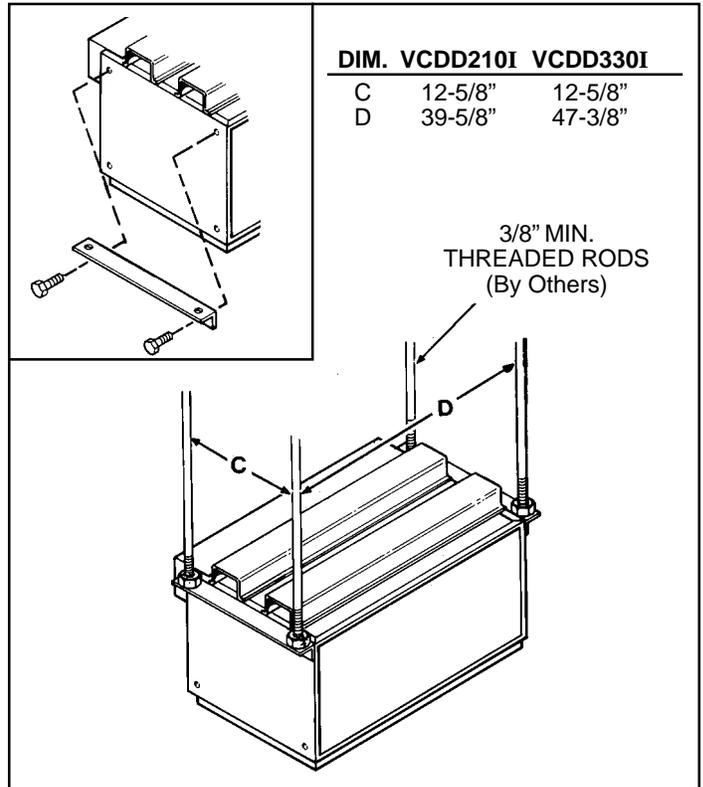
MOUNTING OPTIONS

Provide solid support to minimize sound levels. There are two basic mounting methods for these units.



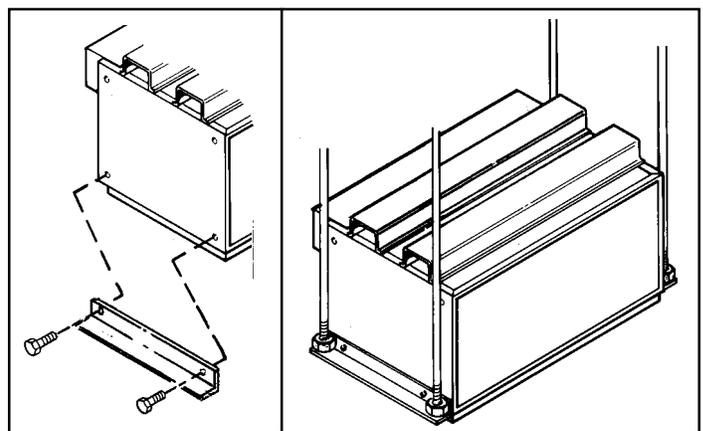
Typical mounting with threaded rod through mounting channels on top of housing.

MOUNTING OPTIONS



Mounting with threaded rod through adjustable mounting brackets located at top of housing.

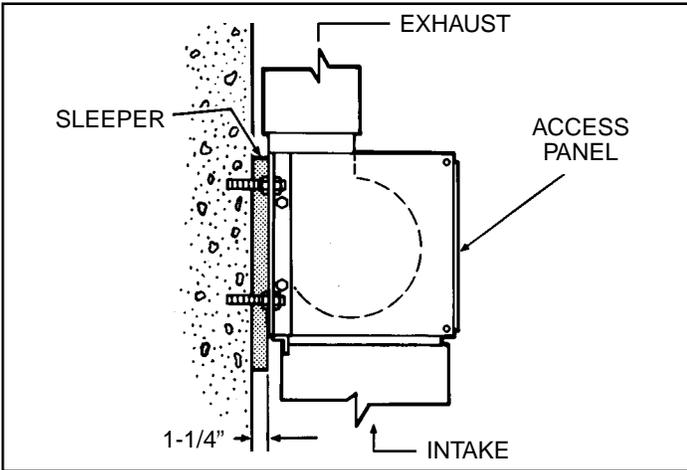
Mounting brackets can be bolted to housing ends in a variety of configurations. Use screws and nuts provided in parts bag.



Mounting with threaded rods through adjustable mounting brackets located at bottom of housing.

If installing unit as a ceiling ventilator, make sure that either duct flanges or housing will be flush with finished ceiling. Duct flanges may be removed and discarded if they interfere with a ceiling installation.

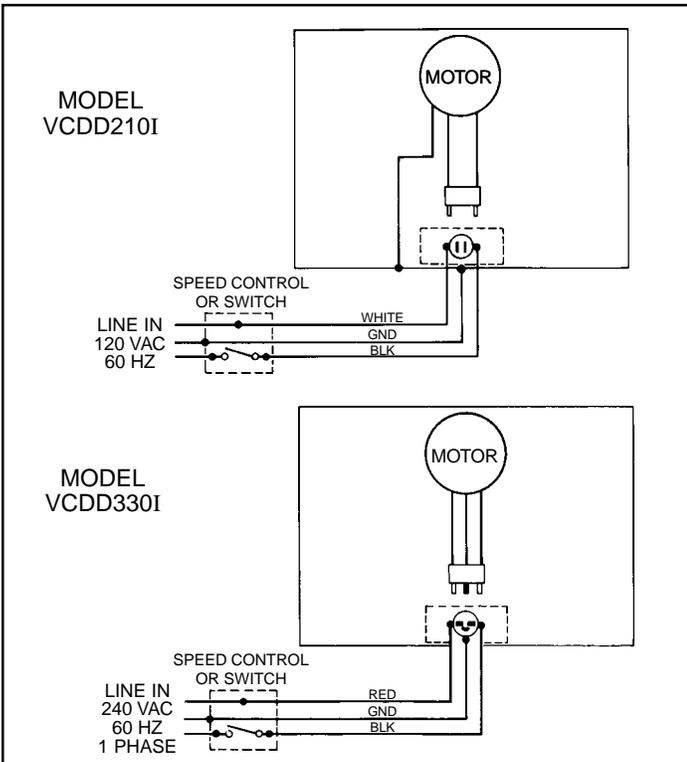
MOUNTING OPTIONS



Typical wall mounting with 3/8" threaded fasteners (by others) through mounting brackets.

ELECTRICAL CONNECTIONS

Connect electrical power cable to housing with proper connector for type of cable used. Provide 6" leads inside wiring box.

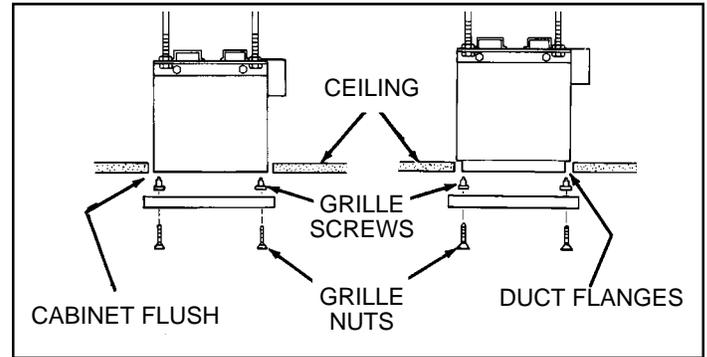


ACCESSORIES

MODEL	DAMPER KIT	GRILLE KIT	SPEED CONTROL	VIBRATION HANGER
VCDD210I	D100	G102	72V / 72W	V104
VCDD330I	D101	G103	75V	V104

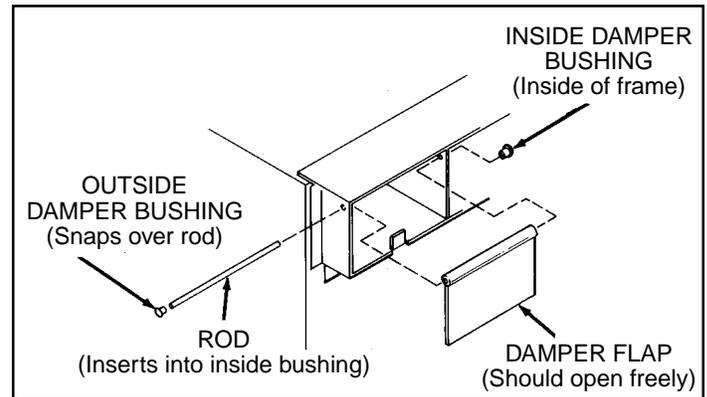
ACCESSORY INSTALLATIONS

If ventilator will discharge directly outside, install a damper kit to prevent backdrafts. A grille kit is available for applications where ventilator is installed with direct or remote room air intake.



Snap screw bushings into square openings around intake opening. Install grille with screws provided.

NOTE: If duct flanges around intake opening interfere with installation, remove them. Make sure that housing is flush with finished ceiling when ventilator is mounted.



Install damper flap using rod provided.

USE AND CARE

Ventilator is designed for continuous operation. If desired, it may be controlled using an on/off switch or a solid-state, variable speed control. Follow wiring instructions packed with control, and adhere to all local and state codes, and the National Electrical Code.

WARNING: To reduce the risk of electric shock, disconnect from power supply before servicing.

To clean grille: Use appropriate vacuum attachment or remove grille and clean with a soft cloth and mild soap or detergent. Dry grille thoroughly before reinstalling.

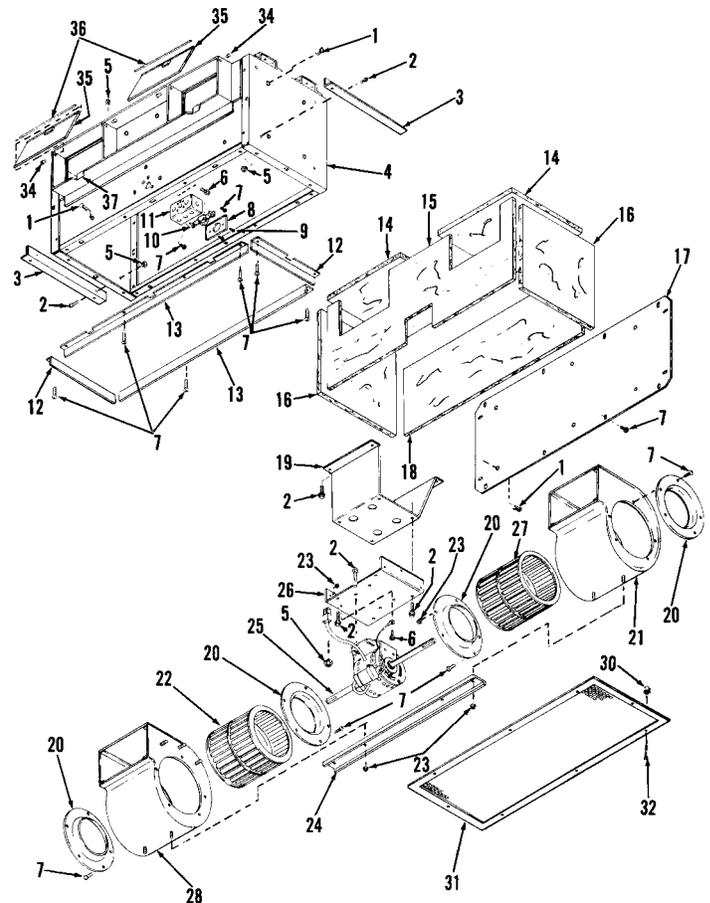
To clean blower assembly: Remove either access panel or ceiling grille. Unplug blower assembly. Provide safe support for blower assembly. Remove blower mounting screws and lift blower assembly out of housing. Gently vacuum housing and blower motor. Vacuum or gently wash blower wheels and housings. **DO NOT ALLOW WATER TO ENTER MOTOR.** Make sure blower assembly is completely dry before reinstalling. Replace blower assembly in housing and plug assembly in. Replace grille and/or access panel.

Motor is permanently lubricated. Do not oil or disassemble motor.

SERVICE PARTS

KEY NO.	MODEL VCDD210I PART NO.	QTY.	MODEL VCDD330I PART NO.	QTY.	DESCRIPTION
1	99420466	27	99420466	27	Insulation Clip
2	99170261	16	99170261	18	#5/16 - 18 x 1/2 Serrated Hex Head Screw
3	98006462	2	98006462	2	Mounting Bracket
4	97008107	1	97008108	1	Cabinet Body
5	93260447	12	93260447	14	#5/16 - 18 Lock Nut
6	99150471	2	----	--	#10-32 x 1/2 Green Ground Screw
7	99150490	42	99150490	44	#10B x 3/8 Serrated Pan Head Screw
8	99270658	1	99270658	1	Outlet Box Cover
9	99160319	2	99160319	2	#6-32 x 3/8 Machine Screw
10	99270656	1	99270657	1	Receptacle
11	99270659	1	99270659	1	Outlet Box
12	98006364	2	98006376	2	Duct Inlet Flange - short
13	98006363	2	98006375	2	Duct Inlet Flange - long
14	99500335	2	99500339	2	Bottom Panel
15	99500333	1	99500337	1	Insulation
16	99500334	2	99500338	2	Back Panel Insulation
17	98006699	1	98006700	1	End Panel
18	99500336	1	99500340	1	Insulation
19	97007450	1	97007451	1	Access Panel
20	98006475	4	98006476	4	Access Panel Insulation
21	97007453	1	97007455	1	Blower Platform
22	99020172	1	99020174	1	Venturi Ring
23	99260477	10	99260477	12	Right Hand Scroll
24	98006365	1	98006377	1	Blower Wheel - clockwise
25	99080194	1	99080195	1	1/4-20 Lock Nut
26	98006381	1	98006382	1	Blower Support Channel
27	99020173	1	99020175	1	Motor
28	97007452	1	97007454	1	Blower Platform
29	G-102	1	G-103	1	Blower Wheel - counter-clock- wise
30	99420470	8	99420470	8	Left Hand Scroll
31	98006477	1	98006478	1	Grille Kit (contains Key Nos. 30, 31 & 32)
32	99150472	8	99150472	8	Grille Nut
33	D-100	1	D-101	1	Grille
34	99100379	4	99100379	4	#8-18 x 1 1/4 Grille Screw
35	98006479	2	98006480	2	Damper Kit (contains Key Nos. 34, 35, 36 & 37)
36	98006481	2	98006472	2	Damper Bushing
37	99760002	2	99760002	2	Damper Flap
**	97007448	1	97007448	1	Damper Rod
					Damper Flap Magnet
					Parts Bag (contains 4 ea. of Key Nos. 2 & 5)

SERVICE PARTS



Order replacement parts by PART NO. - not by KEY NO.

** Not Shown