



Carnes VCDD40I-70I Ceiling Inline Fan Operation & Instructions Manual

CARNES®

MODELS
VCDD040I • VCDD050I • VCDD070I

Page 1

IN-LINE 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. To reduce the risk of fire, use only metal ductwork.
8. 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 Interrupter) - protected branch circuit.
9. Never place a switch where it can be reached from a tub or shower.
10. 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.

TABLE OF CONTENTS

This manual is divided into sections as follows:

- "TYPICAL INSTALLATION"
This section shows a common installation in new and existing, frame construction.
 - Mounting (new construction)
 - Mounting (existing construction)
 - Wiring
 - Ducting (straight-through blower discharge)
- "MOUNTING OPTIONS"
- "WIRING OPTIONS"
-Wiring Plate Position
- "DUCTING OPTIONS"
- Blower Discharge Positions
- Ducting (right angle blower discharge)
- "USE AND CARE"
- "SERVICE PARTS"
- "WARRANTY"





Carnes VCDD40I-70I Ceiling Inline Fan Operation & Instructions Manual

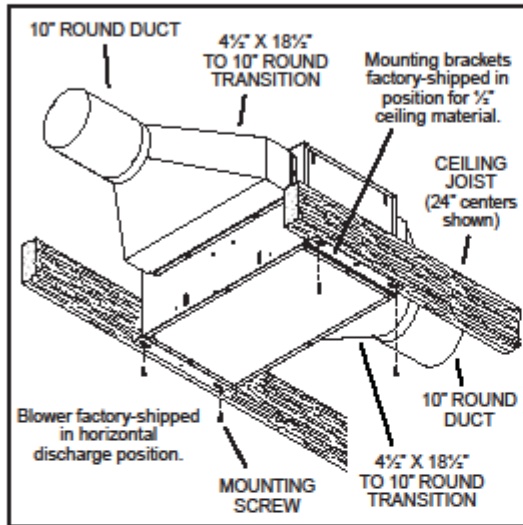
CARNES

MODELS
VCDD040I • VCDD050I • VCDD070I

Page 2

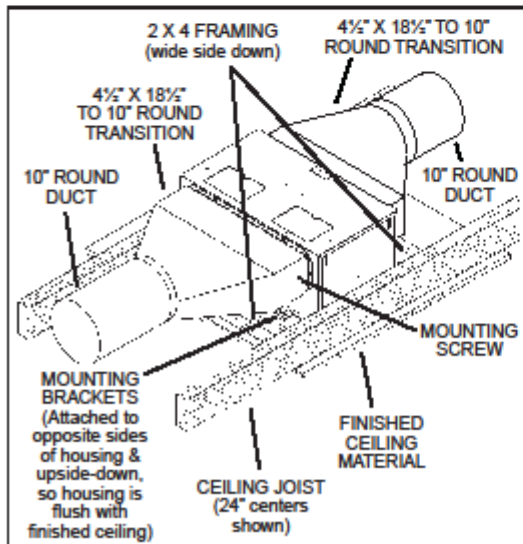
TYPICAL INSTALLATION

MOUNTING (New Frame Construction)



Factory-shipped unit installed in new construction.

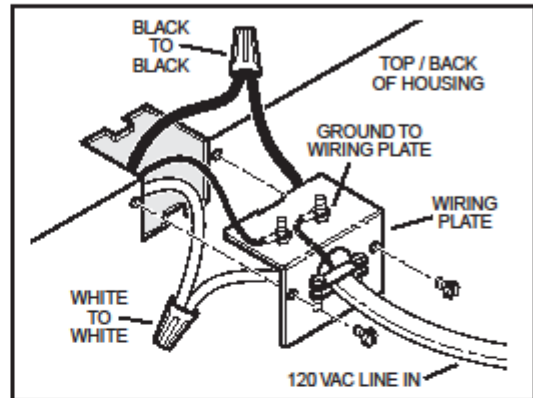
MOUNTING (Existing Frame Construction)



Factory-shipped unit installed in existing construction.

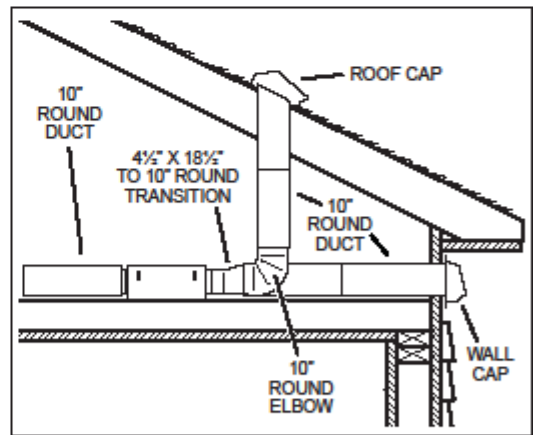
TYPICAL INSTALLATION

WIRING



Ventilator can be wired from outside of housing. Use UL approved connectors to wire per local codes.

DUCTING (Straight-through blower discharge)



Two ways to connect ductwork to a factory-shipped unit.

NOTE: Make sure the shipping tape is removed from the damper flap and that damper flap opens and closes freely inside the ductwork. Use duct tape to make ductwork connections secure and air-tight.





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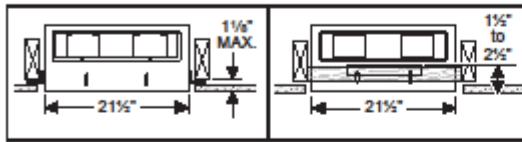
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MODELS
VCDD040I • VCDD050I • VCDD070I

Page 3

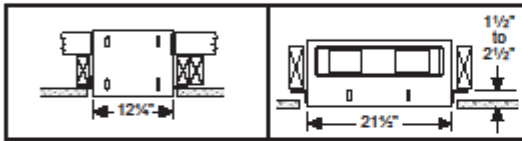
MOUNTING OPTIONS

¼-20 hex nuts secure mounting brackets to housing. Loosen and re-tighten or remove and replace nuts as necessary for desired mounting bracket position.



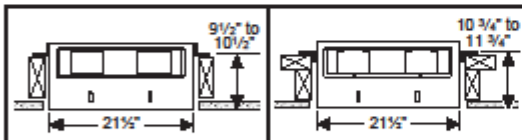
Mounting brackets in factory-shipped position. (Outlet parallel to joists.) (New construction)

Mounting brackets flipped over and mounted to outlet sides of housing. (Outlet parallel to joists.) (Existing construction)



Mounting brackets mounted to outlet sides of housing. (Outlet perpendicular to joists.) (New construction)

Mounting brackets flipped over to give approx. 1" more clearance. (Outlet parallel to joists.) (New construction)

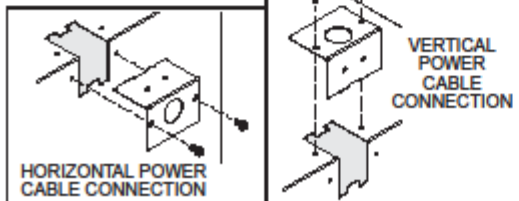


Mounting brackets mounted to top of sides of housing. (Outlet parallel to joists.) (New or existing construction)

Mounting brackets flipped over and mounted to top of sides of housing. (Outlet parallel to joists.) (New or existing construction)

WIRING OPTIONS

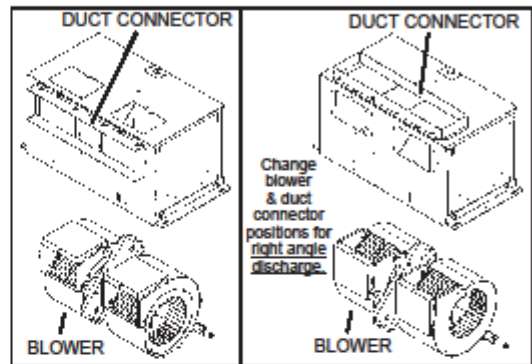
WIRING PLATE POSITION



Wiring plate mounts to side or top of housing.

DUCTING OPTIONS

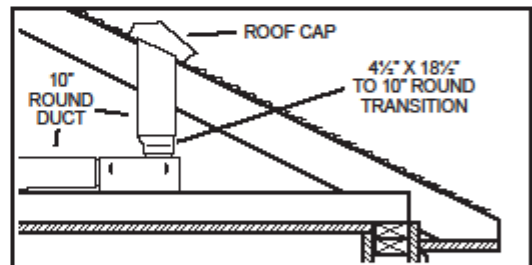
BLOWER DISCHARGE POSITIONS



Blower and duct connector in straight-through discharge position. (Factory shipped)

Blower and duct connector in right angle discharge position.

DUCTING (Right angle blower discharge)



Typical ductwork connection to a ventilator converted to right angle discharge.

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 blower assembly: Remove access panel, unplug blower from housing, remove blower mounting nuts, and carefully remove blower from housing. Use appropriate vacuum attachment or a soft cloth and mild soap or detergent to clean blower discharge area and wheel. DO NOT ALLOW WATER TO ENTER MOTOR. Make sure blower assembly is completely dry before reinstalling.

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





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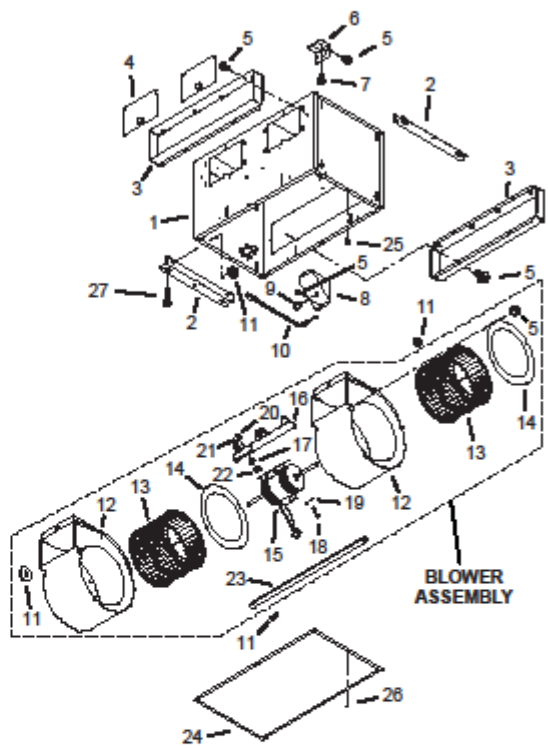
MODELS
VCDD040I • VCDD050I • VCDD070I

Page 4

SERVICE PARTS

KEY NO.	PART NO.	DESCRIPTION
1	97014744	Housing Assembly
2	97014728	Mounting Bracket (2 req.)
3	98009449	Duct Connector (2 req.)
4	97014822	Damper Flap Assembly (2 req.)
5	99150415	Screw, 8-18 x 1/4 (18 req.)*
6	98005512	Wiring Plate
7	99150471	Ground Screw, 10-32 x 1/2 (2 req.)
8	98005513	Wire Box Cover
9	99400035	Strain Relief Bushing
10	97006039	Wire Harness
11	99260477	Nut, 1/2-20 (12 req.)*
12	97014745	Scroll Assembly (2 req.)
13	99110805	Blower Wheel, (2 req.)
14	98009399	Inlet Ring (2 req.)
15	99080498	Motor (VCDD040I)
	99080487	Motor (VCDD050I)
	99080488	Motor (VCDD070I)
16	97014794	Motor Mounting Bracket
17	99100497	Rubber Isolator (4 req.)
18	99160380	Screw, 10-24 x 7/8 (4 req.)*
19	99250399	Washer (4 req.)*
20	99260306	Nut, Hex 10-24 (4 req.)*
21	99250254	Washer (4 req.)*
22	93260456	Nut, Hex Flange 3/8-18
23	98009461	Scroll Mounting Channel Blower Assembly, Complete (Includes Key Nos. 5 & 11-23)
	97014817	(VCDD040I)
	97014819	(VCDD050I)
	97014821	(VCDD070I)
24	98009464	Access Panel
25	99420470	Access Panel Nut (4 req.)
26	99150472	Access Panel Mounting Screw (4 req.)
27	99150591	Screw, 10-16 x 7/8 (4 req.)

SERVICE PARTS



Order replacement parts by PART NO. - not by KEY NO.
* Standard hardware - may be purchased locally.

CARNES
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