

Carnes VCDD10I-30I Ceiling Inline Fan **Operation & Instructions Manual**

MODELS • VCDD010I • VCDD015I VCDD020I • VCDD025I • VCDD030I

IN-LINE **VENTILATORS**





Page 1

READ AND SAVE THESE INSTRUCTIONS

WARNING



TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR IN-JURY 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 Con-ditioning Engineers (ASHRAE), and the local code authorities.
- When cutting or drilling into wall or ceiling, do not damage elec-trical wiring and other hidden utilities.
- 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
- 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
- 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 VCDD10I-30I Ceiling Inline Fan Operation & Instructions Manual

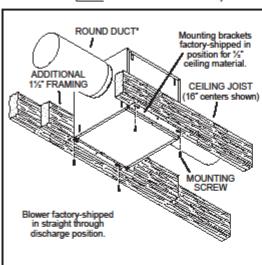


MODELS • VCDD010I • VCDD015I VCDD020I • VCDD025I • VCDD030I

Page 2

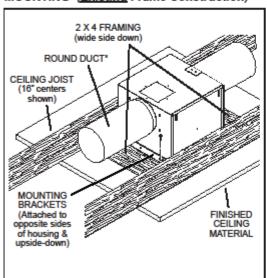
TYPICAL INSTALLATION

MOUNTING (New Frame Construction)



Factory-shipped unit installed in new construction.

MOUNTING (Existing Frame Construction)

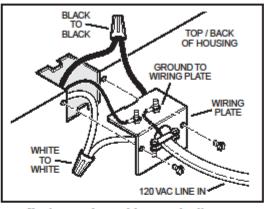


Factory-shipped unit installed in existing construction.

* VCDD010I & VCDD015I use 6" round duct. VCDD020I, VCDD025I & VCDD030I use 8" round duct.

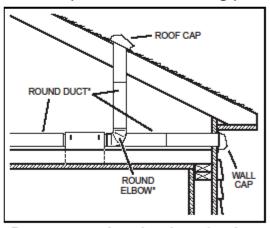
TYPICAL INSTALLATION

WIRING



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

DUCTING (Horizontal blower discharge)



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

VCDD010I & VCDD015I use 6" round duct. VCDD020I, VCDD025I & VCDD030I use 8" round duct.

IMPORTANT:

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

Remove shipping ring from blower inlet Remove the shipping ring from the blower inlet <u>before</u> operating the ventilator.















Carnes VCDD10I-30I Ceiling Inline Fan Operation & Instructions Manual

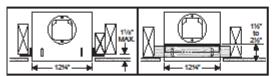
CARNES

MODELS • VCDD010I • VCDD015I VCDD020I • VCDD025I • VCDD030I

Page 3

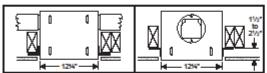
MOUNTING OPTIONS

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



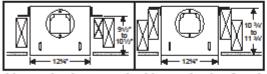
Mounting brackets in factory-shipped position. (Outlet parallel to joists.) (New construction)

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)

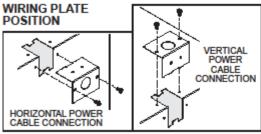
Mounting brackets flipped over to give approx. I" more clearance. (Outlet parallel to joists.) (New construction)



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)

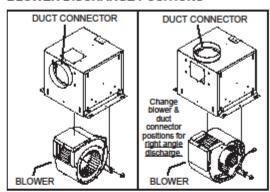
WIRING OPTIONS



Wiring plate mounts to side or top of housing.

DUCTING OPTIONS

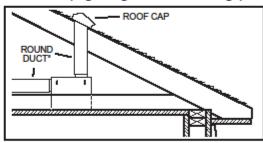
BLOWER DISCHARGE POSITIONS



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

Blower and duct connector in <u>right angle discharge</u> position.

DUCTING (Right angle blower discharge)



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

* VCDD010I & VCDD015I use 6* round duct. VCDD020I, VCDD025I & VCDD030I use 8* round duct.

USE AND CARE

Ventilator is designed for continuous operation. If desired, it may be controlled using an on/off switch or an electronic, 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.

















Carnes VCDD10I-30I Ceiling Cabinet Fan Operation & Instructions Manual



MODELS • VCDD010I • VCDD015I VCDD020I • VCDD025I • VCDD030I

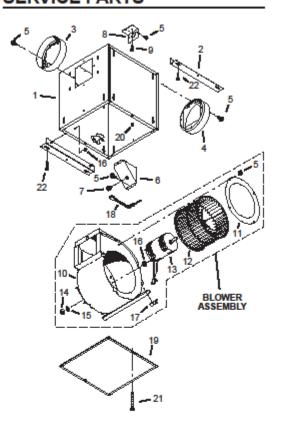
Page 4

SERVICE PARTS

| | _ | |
|--|----------------------|---|
| KEY NO. | PART NO. | DESCRIPTION |
| 1 | 97014735 | Housing Assembly (VCDD010I & VCDD015I) |
| | 97014736 | Housing Assembly (VCDD020I, VCDD025I, & VCDD030I) |
| 2 | 97014728 | Mounting Bracket (2 reg.) |
| 3 | 97014760 | Damper Assembly (6" dlá.) |
| | 97014761 | Damper Assembly (8" dla.) Duct Connector (6" dla.) |
| 4 | 99390098 | Duct Connector (6" dia.) |
| 5 | 99390099 99150415 | Duct Connector (8" dia.) Screw, 8-18 x ¼ (12 req.)" |
| 6 | 98005513 | Wire Box Cover |
| 7 | 99400035 | Strain Relief Bushing |
| 8 | 98005512 | Wiring Plate |
| 9 10 | 99150471 97014774 | Ground Screw, 10-32 x ½ (2 req.) Scroll Assembly (VCDD010I & VCDD015I) |
| 10 | 97014775 | Scroll Assembly (VCDD020I, VCDD025I, |
| | | & VCDD030I) |
| 11 | 98009399 | Inlet Ring |
| 12 13 | 99110805 99080481 | Blower Wheel Motor (VCDD010I) |
| 13 | 99080482 | Motor (VCDD015I) |
| | 99080483 | Motor (VCDD020I) |
| | 99080484 | Motor (VCDD025I) |
| 14 | 99080485 | Motor (VCDD030I) |
| 15 | 99260558 99250959 | Lock Nut, 8-32 (4 req.)" Washer (4 req.)" |
| 16 | 99100491 | Grommet (4 req.) |
| | | Blower Assembly, Complete |
| | | (Includes Key Nos. 5 & 10-16) |
| | 97014800 97014801 | (VCDD010I) (VCDD015I) |
| | 97014802 | (VCDD020I) |
| | 97014803 | (VCDD025I) |
| 4-7 | 97014804 | (VCDD030I) |
| 17 18 | 99260477 97006039 | Nut, %-20 (6 req.)" Wire Harness |
| 19 | 98009417 | Access Panel |
| 20 | 99420470 | Cover Nut (2 req.) |
| 21 | 99150472 | Cover Mounting Screw (2 reg.) |
| 22 | 99150591 | Screw, 10-16 x 7/8 (4 req.)* |
| Colorado de Caracida de Caraci | | |

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

SERVICE PARTS



CARNES 448 S. MAIN STREET VERONA, WISCONSIN 53593

11238











