

DIRECT VENT WALL FURNACE



INSTALLATION AND OPERATING INSTRUCTIONS

P/N 70905 REV. 02/2010

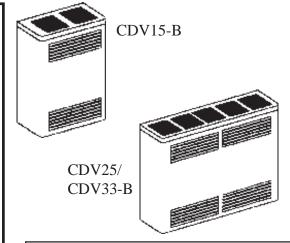


MODEL NUMBERS

NATURAL GAS	CDV155B	CDV255B	CDV335B
L.P. GAS	CDV156B	CDV256B	CDV336B

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- WHAT TO DO IF YOU SMELL GAS:
- Do not try to light any appliance.
- ➤ Do not touch any electrical switch, do not use any phone in your building.
- ➤ Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- ➤ If you cannot reach your gas supplier, call the fire department.
 - INSTALLATION AND SERVICE MUST BE PERFORMED BY A QUALIFIED INSTALLER, SERVICE AGENCY OR THE GAS SUPPLIER.



INSTALLER: Leave this manual with the appliance.

CONSUMER: Retain this manual for future reference.

The coating selected to provide longer life to the heat exchanger may smoke slightly upon initial firing. Please provide adequate ventilation if this occurs.

The appliance may be installed in an aftermarket permanently located, manufactured home (USA only) or mobile home, where not prohibited by local codes. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

WARNING: Operation of this furnace without the properly installed, furnished vent system and vent cap could result in Carbon Monoxide (CO) poisoning and possible death. For your safety, this furnace and the vent system should be inspected at least annually by a qualified service technician.

This unit is for residential use only and is not approved for installation in greenhouses, or environments involving dusty, wet, corrosive, or explosive conditions. Such conditions will invalidate the warranty and may create unsafe conditions.

Installation, maintenance, service, trouble shooting and repairs must be performed by a qualified service agency. Mr./Mrs. Homeowner, <u>DO NOT</u> attempt any of these procedures yourself as this could expose you to property damage, personal injury, or loss of life and will invalidate all warranties.

The State of Massachusetts requires that installation and service of a gas appliance be performed by a plumber or gas fitter licensed in the Commonwealth of Massachusetts.

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INTRODUCTION

THIS IS A GAS-FIRED, DIRECT VENT WALL FURNACE THAT WILL OPERATE SAFELY AND PROVIDE AN EFFICIENT SOURCE OF HEAT WHEN INSTALLED, OPERATED AND MAINTAINED AS RECOMMENDED IN THESE INSTALLATION AND OPERATING INSTRUCTIONS. READ THESE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING, SERVICING, OR USING THE APPLIANCE. IF YOU DO NOT UNDERSTAND ANY PART OF THESE INSTRUCTIONS CONSULT LOCAL AUTHORITIES, OTHER QUALIFIED INSTALLERS, SERVICE TECHNICIAN, THE GAS SUPPLIER OR THE MANUFACTURER.

SPECIFICATIONS AND DIMENSIONS

Your Direct Vent Wall Furnace is shipped complete in one carton. This carton contains the furnace, vent cap, vent tube, air inlet tube, template with rough-in dimensions, installation and operating instructions, and the thermostat with thermostat wire (if applicable). NOTE: There will be two cartons if optional vent kit or blower is purchased.

BTU/HR.	WIDTH	DEPTH	HEIGHT	GAS CONN.	TYPE GAS	MAX. WALL THICKNESS	MIN. WALL THICKNESS
15,000	18"	9-3/4"	29-3/4"	1/2"	NAT.	24"	5"
15,000	18"	9-3/4"	29-3/4"	1/2"	L.P.	24"	5"
25,000	34-1/2"	9-3/4"	31-3/4"	1/2"	NAT.	24"	5"
25,000	34-1/2"	9-3/4"	31-3/4"	1/2"	L.P.	24"	5"
33,000	34-1/2"	9-3/4"	31-3/4"	1/2"	NAT.	15"	5"
33,000	34-1/2"	9-3/4"	31-3/4"	1/2"	L.P.	15"	5"
	15,000 15,000 25,000 25,000 33,000	15,000 18" 15,000 18" 25,000 34-1/2" 25,000 34-1/2" 33,000 34-1/2"	15,000 18" 9-3/4" 15,000 18" 9-3/4" 25,000 34-1/2" 9-3/4" 25,000 34-1/2" 9-3/4" 33,000 34-1/2" 9-3/4"	15,000 18" 9-3/4" 29-3/4" 15,000 18" 9-3/4" 29-3/4" 29-3/4" 25,000 34-1/2" 9-3/4" 31-3/4" 33,000 34-1/2" 9-3/4" 31-3/4"	15,000 18" 9-3/4" 29-3/4" ½" 15,000 18" 9-3/4" 29-3/4" ½" 25,000 34-1/2" 9-3/4" 31-3/4" ½" 25,000 34-1/2" 9-3/4" 31-3/4" ½" 33,000 34-1/2" 9-3/4" 31-3/4" ½"	15,000 18" 9-3/4" 29-3/4" ½" NAT. 15,000 18" 9-3/4" 29-3/4" ½" L.P. 25,000 34-1/2" 9-3/4" 31-3/4" ½" NAT. 25,000 34-1/2" 9-3/4" 31-3/4" ½" L.P. 33,000 34-1/2" 9-3/4" 31-3/4" ½" NAT.	15,000 18" 9-3/4" 29-3/4" ½" NAT. 24" 15,000 18" 9-3/4" 29-3/4" ½" L.P. 24" 25,000 34-1/2" 9-3/4" 31-3/4" ½" NAT. 24" 25,000 34-1/2" 9-3/4" 31-3/4" ½" L.P. 24" 33,000 34-1/2" 9-3/4" 31-3/4" ½" NAT. 15"

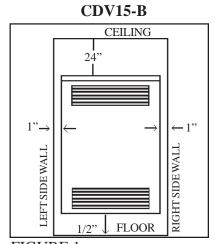
SAFETY RULES

- 1. Improper installation, adjustment, alteration, service, or maintenance can cause property damage, bodily injury, or death.
- 2. Use in other than a residential application may result in unsatisfactory performance and may void the warranty.
- 3. This appliance must be installed in accordance with local codes, if any; if not, follow the National Fuel Gas Code ANSI Z223.1/NFPA 54 or the National Gas and Propane Installation Code CSA-B149.1.
- 4. Do not install this wall furnace in a recreational vehicle or trailer.
- 5. Do not operate wall furnace unless it is connected to the supplied vent system with vent cap in place.
- 6. Check the rating label attached to the wall furnace to be sure it is equipped for the type gas you intend to use.
- 7. Never use a match, candle, flame or other source of ignition to check for gas leaks. Use only soapy water or liquid detergent.
- 8. Have your wall furnace and vent system inspected at least annually by a qualified service technician.

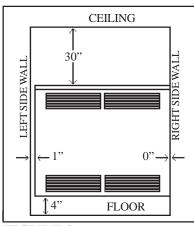
SAFETY RULES - CONT'D.

- 9. Before cleaning or servicing, turn off the gas and allow furnace to cool.
- 10. Do not operate wall furnace without outer casing in place.
- 11. Due to high temperatures, the wall furnace should be located out of traffic and away from furniture and drapes.
- 12. Children and adults should be alerted to the hazard of high surface temperature and should be kept away to avoid burns or clothing ignition.
- 13. Young children should be carefully supervised when they are in the same room with the wall furnace.
- 14. Do not place clothing or other flammable material on or near the furnace.
- 15. Installation and repair should be done by a qualified service technician. The wall furnace should be inspected before use and at least annually by a professional service technician. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burner, and circulating air passageways of the furnace be kept clean.
- 16. Do not install in a closet, alcove, or small hallway where the furnace could be isolated from the space to be heated by closing a door.
- 17. Do not put anything around the furnace or vent cap that will obstruct the flow of combustion and ventilation air.
- 18. The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the latest edition of National Electrical Code, ANSI/NFPA 70. In Canada, use CSA C22.1 Canadian Electrical Code.
- 19. Never operate this furnace without the sight glass in place or with the glass broken or missing.
- 20. If it is suspected that rising water may enter the furnace, turn off the gas immediately. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.
- 21. It is necessary to replace damaged gaskets or sealing material within the vent or air intake system. Failure to do so may result in property damage, personal injury or loss of life.
- 22. Any safety screen or guard removed for servicing must be replaced prior to operating heater.
- 23. A gas appliance must not be connected to a chimney flue serving a separate solid-fuel burning appliance.

CLEARANCES



CDV25 / CDV33-B



ALL VENT CAPS

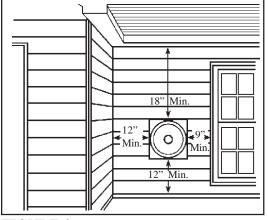
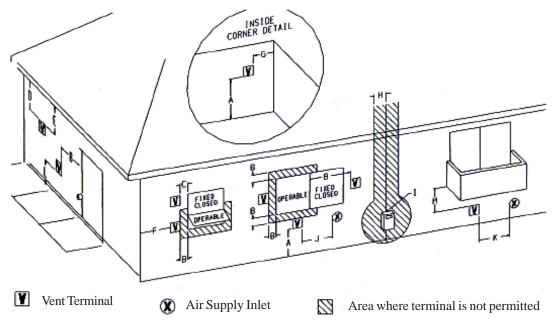


FIGURE 1

FIGURE 2

FIGURE 3

- 1. When the wall furnace is installed directly on carpeting, tile or other combustible material other than wood flooring, the furnace shall be installed on a metal or wood panel extending the full width and depth of the furnace.
- 2. <u>RESIDENTIAL GARAGE INSTALLATION</u>: Gas utilization equipment in residential garages shall be installed so that all burners and burner ignition devices are located not less than 18 inches (46cm) above the floor. Such equipment shall be located, or protected so it is not subject to damage by a moving vehicle. Use care in selecting a good location within the garage. DO NOT locate the appliance where heated air will be directed onto a nearby parked vehicle. Paint may discolor or rubber may harden and crack. DO NOT allow heated discharge air to blow directly onto open or closed containers of paint, gasoline or other liquids having flammable vapors.



VENT TERMINAL CLEARANCES

REFERENCE LETTER TO DRAWING	CANADIAN INSTALLATIONS 1	U.S. INSTALLATIONS ²
A = Clearance above grade, veranda, porch, deck, or balcony	12 Inches (30 cm)	12 Inches (30 cm)
B = Clearance to window or door that may be opened	12 Inches (30 cm)	9 Inches (23 cm)
C = Clearance to permanently closed window	12 Inches (30 cm)	9 Inches (23 cm)
D = Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 Feet (61 cm) from the center line of the terminal	18 Inches (46 cm)	18 Inches (46 cm)
E = Clearance to unventilated soffit	18 Inches (46 cm)	18 Inches (46 cm)
F = Clearance to outside corner	12 Inches (30 cm)	12 Inches (30 cm)
G = Clearance to inside corner	12 Inches (30 cm)	12 Inches (30 cm)
H = Clearance to each side of center line extended above meter/regulator assembly	3 Feet (91 cm) within a height 15 Feet (4.5m) above the meter/ regulator assembly	Clearance in accordance with local installation codes and the requirements of the gas supplier
I = Clearance to service regulator vent outlet	3 Feet (91 cm)	Clearance in accordance with local installation codes and the requirements of the gas supplier
J = Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliance	12 Inches (30 cm)	12 Inches (30 cm)
K = Clearance to a mechanical air supply inlet	6 Feet (1.83 m)	3 Feet (91 cm) above if within 10 Feet (3 m) horizontally
L = Clearance above paved sidewalk or paved driveway located on public property	7 Feet (2.13m) A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single family dwellings and serves both dwellings	Clearance in accordance with local installation codes and the requirements of the gas supplier
M = Clearance under veranda, porch, deck, or balcony	12 Inches (30 cm) permitted only if veranda, porch, deck, or balcony is fully open on a minimum of two sides	Clearance in accordance with local installation codes and the requirements of the gas supplier

In accordance with the current CSA-B149.1 Natural Gas and Propane Installation Code
 In accordance with the current ANSI Z223.1 / NFPA 54 National Fuel Gas Code

LOCATION

- 1) The wall furnace must be installed on an outside wall.
- 2) For most efficient performance, locate furnace as centrally as possible in the area to be heated and where occupants may move about freely without coming into contact with the grille.
- 3) If the furnace is installed in a basement, a 12" clearance must be maintained between ground level and the bottom of the vent cap. Do not install furnace where vent cap will terminate in a window well or any other opening below ground level.

INSTALLATION

Failure to follow these instructions carefully could result in poor performance, property damage, personal injury or death.

STEP 1. LOCATE VENT OPENING. Locate wall studs and center 9" vent opening a minimum of 22" for CDV15 or 24-1/8" for CDV25/33 above the floor. To locate furnace at minimum clearance from floor, remove template from carton and set on floor at location desired. On model CDV15, position template no closer than 1" from either side wall. For model CDV25/33, position template 1" minimum from a left side wall or 0" from a right side wall. Check outside wall to be sure there is proper clearances around the vent cap. See Figure 3. Next, mark and cut out the vent openings on both the inside and outside walls (be sure to keep the holes level). See Figure 5. If a higher location on the wall is desired, raise bottom of template to desired height, make sure template is level and centered between studs, mark and cut out vent openings.

STEP 2. ROUGH-IN GAS SUPPLY. Install a ½" diameter gas supply line. This line can enter through the floor, side, or rear wall. For location of gas connection to valve, see Fig. 4. The gas supply line must have an individual manual shut off valve located outside the cabinet, accessible from the room where the heater is installed. Install a drip leg immediately ahead of the gas valve and provide a 1/8" N.P.T. plugged tapping, accessible for test gauge connection, immediately upstream of the gas supply connection. The furnace and the individual shut off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2" psig (3.5kPa). The furnace must be isolated from the gas supply piping system by closing the individual manual shut off valve during any pressure testing of the gas piping system at test pressures equal to or less than 1/2" psig (3.5kPa).

STEP 3. INSTALLING FURNACE – 5" TO 9" WALLS. Use only the exhaust tube, air intake tube, wall thimble extension, and vent terminal provided with furnace. Do not attempt to lengthen the exhaust or air intake tubes, this could cause an imbalance in the furnace resulting in poor performance and pilot outage, see Figure 6. Extend the telescoping wall thimble extension (surrounding the wall thimble assembly) to approximately 9 inches. Center the wall thimble assembly in the 9 inch opening and attach to inside wall using eight (8) screws. The wall thimble extension should extend through the opening and be adjusted so end of wall thimble extension is even with outside wall. Install furnace flush to wall by sliding exhaust tube and air intake tube through the wall thimble assembly. Secure the furnace to the wall with screws through each of the four holes in the mounting brackets located on the back of the furnace. These holes are spaced so as to allow the screws to enter into studs that are on 16 inch centers. On certain types of wall, anchors (not provided) may be required. Slide the vent terminal onto the exhaust tube and the air intake tube. Secure vent terminal and vent terminal spacer plate to wall providing a slight downward slope to the vent tubes. This will prevent water from entering. Anchors (not provided) may be required. Caulk around vent terminal spacer plate with putty provided. See Figure 7. NOTE: Some framing may be necessary to provide a flat surface for the vent terminal spacer plate to butt against, so rain cannot enter through cut out.

INSTALLING FURNACE - 9 TO 15" WALLS (CDV15/CDV25-B). For 9"

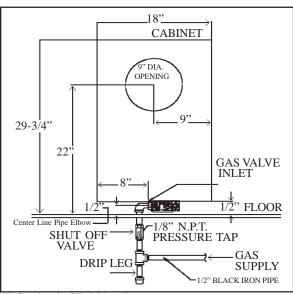
to 15" wall use Vent Kit No. VK1525/9-15-B. Do not attempt to lengthen the exhaust tube, air intake tube, or wall thimble extension provided with furnace or the VK1525/9-15-B Vent Kit. Disconnect the air intake tube, and the exhaust tube from the back of the furnace and discard. See Figure 6. Replace with exhaust tube and air intake tube from Kit No. VK1525/9-15-B. Discard the 5" telescoping wall thimble extension that surrounds the wall thimble assembly. Center the wall thimble assembly in the 9" opening and attach to inside wall using eight (8) screws. Install furnace flush to wall by sliding exhaust tube and air intake tube through the wall thimble assembly. Secure the furnace to the wall with screws through each of the four holes in the mounting brackets located on the back of the furnace. These holes are spaced so as to allow the screws to enter into studs that are on 16-inch centers. On certain types of wall, anchors (not provided) may be required. From outside the building install the thick wall thimble extension, Part No. 43835, supplied in Vent Kit No. VK1525/9-15-B by sliding it through the cut out and over the wall thimble assembly. The wall thimble extension should be even with the outside wall (some trimming may be necessary). Slide the vent terminal onto the exhaust tube and the air intake tube. Secure vent terminal and vent terminal spacer plate to wall providing a slight downward slope to the vent tubes. This will prevent water from entering. Anchors (not provided) may be required. Caulk around the vent terminal spacer plate with putty provided. See Figure 7. NOTE: Some framing may be necessary to provide a flat surface for the vent terminal spacer plate to butt against, so rain cannot enter through cut out.

INSTALLING FURNACE - 15" TO 24" WALLS (CDV15/CDV25-B). For

15" to 24" wall use only Vent Kit No. VK1525/15-24-B. Do not attempt to lengthen the exhaust tube, air intake tube, or wall thimble extension provided with furnace. The VK1525/15-24-B Vent Kit has a one inch restrictor in the exhaust tube which is necessary for proper and safe operation of this furnace. Do not use any other vent kit. Disconnect the air intake tube and the exhaust tube from the back of the furnace and discard, see Figure 6. Install the exhaust tube and air intake tube from Vent Kit No. VK1525/15-24-B. Discard the 5" telescoping wall thimble extension that surrounds the wall thimble assembly. Center the wall thimble assembly in the 9" opening and attach to inside wall using eight (8) screws. Install furnace flush to wall by sliding exhaust tube and air intake tube through the wall thimble assembly. Secure the furnace to the wall with screws through each of the four holes in the mounting brackets located on the back of the furnace. These holes are spaced so as to allow the screws to enter into studs that are on 16-inch centers. On certain types of walls, anchors (not provided) may be required. From outside the building install the wall thimble extension, Part No. 43730, supplied in Vent Kit No. VK1525/15-24-B by sliding it through the cut out and over the wall thimble extension. For walls 15" to 19" the wall thimble extension, air intake tube, and the exhaust tube must be trimmed even with the outside wall. Slide the vent terminal onto the exhaust tube and into the air intake tube. Secure vent terminal and vent terminal spacer plate to wall providing a slight downward slope to the vent tubes. This will prevent water from entering. Anchors (not provided) may be required. Caulk around the vent terminal spacer plate with putty provided, see Figure 7. NOTE: Some framing may be necessary to provide a flat surface for the vent terminal spacer plate to butt against, so rain cannot enter through the cut out.

INSTALLING FURNACE - 9 TO 15" WALLS (CDV33-B). For 9" to 15" wall use Vent

Kit No. VK33/9-15-B. Do not attempt to lengthen the exhaust tube, air intake tube, or wall thimble extension provided with furnace or the VK33/9-15-B Vent Kit. Disconnect the air intake tube, and the exhaust tube from the back of the furnace and discard. See Figure 6. Replace with exhaust tube and air intake tube from Kit No. VK33/9-15-B. Discard the 5" telescoping wall thimble extension that surrounds the wall thimble assembly. Center the wall thimble assembly in the 9" opening and attach to inside wall using eight (8) screws. Install furnace flush to wall by sliding exhaust tube and air intake tube through the wall thimble assembly. Secure the furnace to the wall with screws through each of the four holes in the mounting brackets located on the back of the furnace. These holes are spaced so as to allow the screws to enter into studs that are on 16-inch centers. On certain types of wall, anchors (not provided) may be required. From outside the building install the thick wall thimble extension, Part No. 43835, supplied in Vent Kit No. VK33/9-15-B by sliding it through the cut out and over the wall thimble assembly. The wall thimble extension should be even with the outside wall (some trimming may be necessary). Slide the vent terminal onto the exhaust tube and the air intake tube. Secure vent terminal and vent terminal spacer plate to wall providing a slight downward slope to the vent tubes. This will prevent water from entering. Anchors (not provided) may be required. Caulk around the vent terminal spacer plate with putty provided. See Figure 7. NOTE: Some framing may be necessary to provide a flat surface for the vent terminal spacer plate to butt against, so rain cannot enter through cut out.



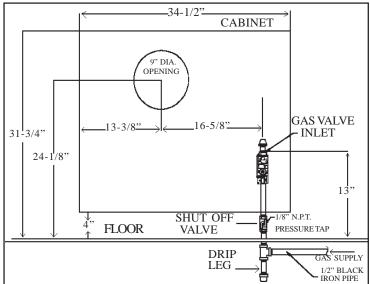


FIG. 4 / CDV15-B

FIG. 4 / CDV25/33-B

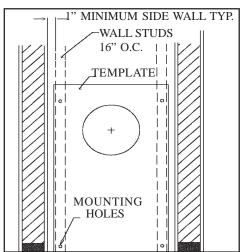


FIG. 5 / CDV15-B

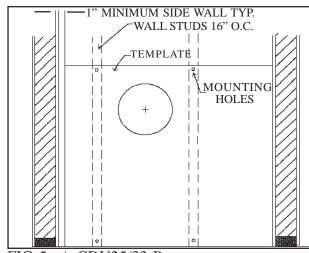
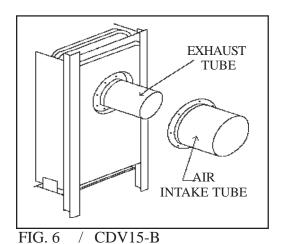
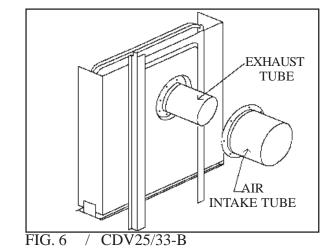


FIG. 5 / CDV25/33-B





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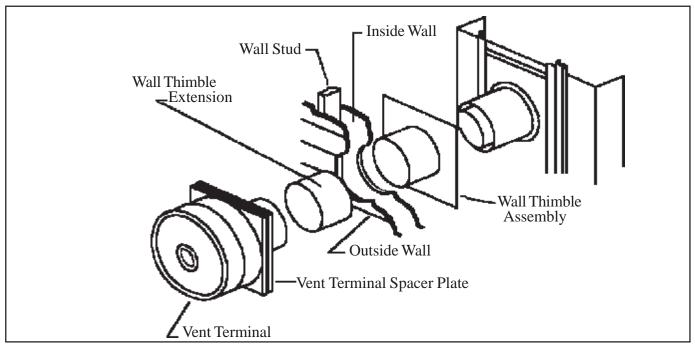


FIGURE 7

GAS CONNECTION

Make gas connection between manual shut off valve and furnace valve with approved connectors. Compounds used on threaded joints of gas piping shall be approved for use with L.P gas. The gas lines must be checked for leaks by the installer with soapy water or liquid detergent, <u>never an open flame</u>. If connections are not exposed, a pressure test must be run. Be sure to disconnect the gas supply line from the appliance valve before pressure testing. The manifold pressure is pre-set at the factory and should be 3.5" w.c. for Natural Gas and 10" w.c. for L.P. Gas. The minimum inlet pressure for Natural Gas is 4.5" w.c. and 11" w.c. for L.P. Gas, "for purpose of input adjustment". The maximum inlet pressure should never exceed 7.0" w.c. on Natural Gas or 14" w.c. on L.P. Gas.

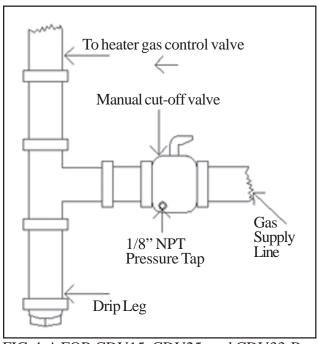


FIG. 4-A FOR CDV15, CDV25, and CDV33-B

LIGHTING INSTRUCTIONS / MILLIVOLT (SELF GENERATING)

MODELS: CDV155B, CDV156B, CDV255B, CDV256B, CDV335B, CDV336B

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

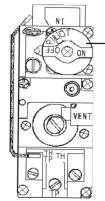
WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.

- ➤ If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

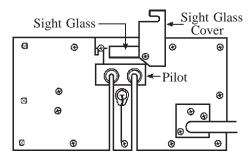
- 1. STOP! Read the information on the safety label.
- 2. Set thermostat to lowest setting.
- 3. "Turn off all electric power to the appliance".
- 4. Remove cabinet.
- 5. Push in gas control knob slightly and turn clockwise of "OFF".



Gas Control Knob

NOTE: Knob can not be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.

- 6. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information on the safety label. If you don't smell gas, go to the next step.
- 7. Open sight glass cover.
- Locate red piezo ignitor button inside gas control compartment. Locate pilot behind sight glass. (Follow metal pilot tube from gas control).



- 9. Turn gas control knob counterclockwise \(\subseteq \tau^* \) to "PILOT".
- 10. Push in gas control knob and hold in. Immediately begin a series of pushing and releasing the red piezo ignitor button, while observing the pilot through the sight glass. Continue to spark until pilot is lit. Continue to hold the gas control knob in for about one (1) minute after the pilot is lit. Release the gas control knob and it will pop back up. Pilot should remain lit. If pilot goes out, repeat steps 4 thru 9.
- If knob does not pop up when released, STOP and immediately call your service technician or gas supplier.
- ➤ If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
- 11. Close sight glass cover.
- 12. Turn gas control knob counterclockwise to "ON".
- 13. Replace cabinet.
- 14. "Turn on all electric power to the appliance".
- 15. Set thermostat to desired setting.

TO TURN OFF GAS TO APPLIANCE

- 1. Set the thermostat to it's lowest setting.
- 2. "Turn off all electric power to the appliance if service is to be performed".
- 3. Open cabinet door.
- 4. Push in gas control knob slightly and turn clockwise \(\to \) to "OFF". Do not force.
- 5. Close cabinet door.

P/N 91251 03/07

PILOT ADJUSTMENT

Locate pilot adjustment cap on valve and remove. See Figure 8. Pilot flame should surround the top 3/8 to ½ inch of powerpile or thermocouple, see Figure 9. To increase pilot flame, turn pilot adjustment screw, see Figure 8, counterclockwise. To decrease pilot flame, turn screw clockwise. After a proper pilot flame is established replace pilot adjustment cap, be sure gasket located on bottom of cap head is in place. The gas supply to the pilot is unregulated. When line pressure exceeds 7" w.c. Natural Gas, 11" w.c. L.P. Gas, pilot adjustment must be made.

TO REMOVE MAIN BURNER FOR INSPECTION AND CLEANING

- 1. Remove outer casing.
- 2. Disconnect gas supply to valve.
- 3. Remove 11 screws holding burner door to heat exchanger and lift out complete burner, valve assembly.
- 4. After inspecting burner, place back into heat exchanger. Be sure door gasket is not damaged and will effect a proper seal or pilot outage will occur.
- 5. Tighten screws holding burner door to heat exchanger.
- 6. Connect gas supply back to valve.
- 7. Install front panel and follow lighting instructions.

NOTE: The furnace and all components must be inspected at least annually by a qualified service technician. This should include the burner, heat exchanger, and vent system. Be sure that the flow of combustion and ventilation air are not obstructed.

BURNER ORIFICE

This appliance is orificed at the factory for elevations up to 2,000 ft. If installed above 2,000 ft., the BTU input must be reduced 4% per 1,000 ft. See the following orifice chart for the proper orifice for a specific elevation. Orifice change must be completed by a qualified installer or service technician.

NATURAL GAS SPECIFIC ELEVATIONS

MODEL NUMBER	0 TO 2,000'	2,000° 4,000°	4,000° 6,000°	6,000° 8,000°	8,000' 10,00'
CDV155B	48	49	50	51	52
CDV155B CDV255B	2.45mm	49	42	43	44
CDV335B	2.75mm	37	38	40	42

ORDER KIT #49800 44-1 HIGH ALTITUDE KIT

L.P. GASSPECIFIC ELEVATIONS

MODEL	OTO	2,000'	4,000'	6,000'	8,000'
NUMBER	2,000'	4,000'	6,000'	8,000'	10,00'
CDV156B	1.2mm	56	57	59	60
CDV256B	1.55mm	54	54	55	55
CDV336B	1.65mm	51	52	52	53

ORDER KIT #49800 44-1 HIGH ALTITUDE KIT

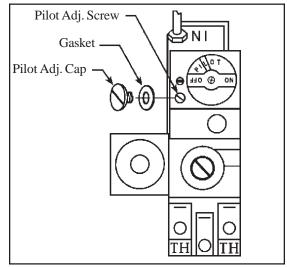


FIGURE 8

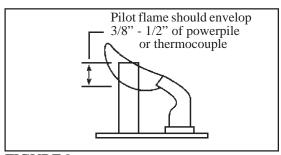
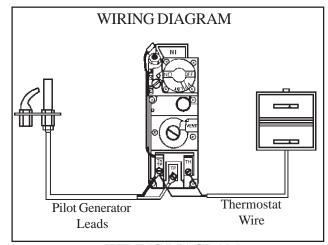


FIGURE 9

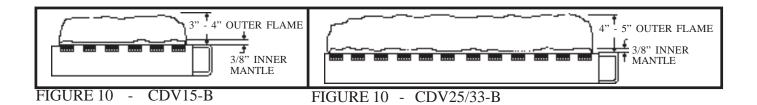


WIRING DIAGRAM

CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

PROPER BURNER FLAME

The burner flame may be observed by raising the sight glass cover. A proper flame will have a dark blue inner mantle that sits right on top of the burner with a lighter blue outer mantle rising over the burner, see Figure 10. There may be some yellow where the pilot flame and burner flame meet. There is no primary air adjustment on the burner, and proper flame is assured since the correct manifold pressure and orificing has been done at the factory.



THERMOSTAT INSTALLATION

FOR CDV155B, CDV156B, CDV255B, CDV256B, CDV335B, CDV336B MODELS ONLY

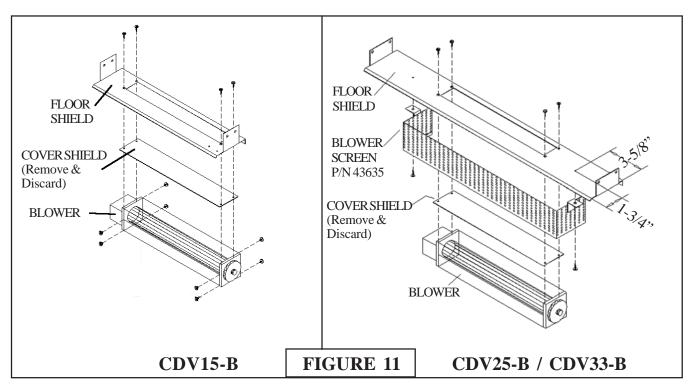
Follow the instructions included with the thermostat. If the thermostat is to be wall mounted, select a location in the same room as the heater, approximately five feet above the floor on an inside wall where it won't be affected by heat or cold sources such as direct sunlight, televisions, fireplaces, hidden hot or cold water pipes, drafts, etc. The thermostat must not be placed in an adjacent room. The furnace is equipped with a self-generating control system; never connect to a 24-volt transformer or household electric system. Do not splice or attempt to use more thermostat wire than is supplied. Connect thermostat wires to thermostat and mount thermostat to wall, run wire to furnace, securing with insulated staples provided, and connect to valve terminals marked TH, see Figure 8.

MODEL <u>DVB-3</u> OPTIONAL BLOWER KIT INSTALLATION INSTRUCTIONS INSTALL ONLY ON CDV15-B / CDV25-B / CDV33 –B SERIES

- **STEP 1**. REMOVE OUTER CASING
- STEP 2. REMOVE FLOOR SHIELD FROM BOTTOM OF HEATER AND DISCONNECT PIEZO WIRE.
- **STEP 3**. REMOVE AND DISCARD COVER SHIELD. SAVE SCREWS.
- **STEP 4**. ATTACH BLOWER TO BOTTOM OF FLOOR SHIELD USING SCREWS SAVED IN STEP 3. NOTE: BLOWER MOTOR SHOULD BE ON OPPOSITE END FROM PIEZO.
- <u>STEP 5</u>. FOR MODELS CDV25/33-B, SECURE P/N 43635 WIRE GUARD TO BOTTOM OF HEAT SHIELD USING TWO (2) #8X1/2" SCREWS PROVIDED. SEE FIGURE 11.
- STEP 6. CONNECT PIEZO WIRE AND ATTACH FLOOR SHIELD TO HEATER. SLIDE THE WHITE CABLE CLAMP (PROVIDED) OVER BOTH MOTOR LEAD WIRES AND THE POWER CORD. SECURE TO LEFT SIDE OF HEATER WITH THE FRONT SCREW USED TO SECURE THE FLOOR SHIELD.
- STEP 7. ATTACH THE JUNCTION BOX TO LEFT SIDE OF WRAPPER USING FOUR #8X1/2" SCREWS PROVIDED.
- **STEP 8.** PLUG POWER CORD INTO A 115 VOLT GROUNDED OUTLET.
- STEP 9. REPLACE OUTER CASING AND FOLLOW LIGHTING INSTRUCTIONS TO PLACE HEATER IN OPERATION.

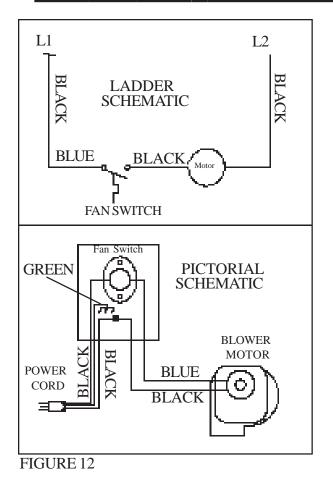
THE UNIT MUST BE ELECTRICALLY GROUNDED ACCORDING TO THE NATIONAL ELECTRICAL CODE ANSI/NFPANO. 70-1987. THIS APPLIANCE IS EQUIPPED WITH A THREE- PRONG GROUNDING PLUG. FOR YOUR PROTECTION AGAINST SHOCK HAZARD, THIS APPLIANCE SHOULD BE PLUGGED DIRECTLY INTO A PROPERLY GROUNDED THREE-PRONG RECEPTACLE. DO NOT CUT OR REMOVE THE GROUNDING PRONG FROM THIS PLUG.

NOTE: THIS BLOWER ASSEMBLY IS EQUIPPED WITH A TEMPERATURE ACTIVATED FAN SWITCH THAT WILL AUTOMATICALLY CYCLE THE BLOWER ON WHEN THE HEAT EXCHANGER HAS REACHED A PREDETERMINED TEMPERATURE. ONCE THE BURNER SHUTS OFF, THIS SWITCH WILL CYCLE THE BLOWER OFF AFTER THE HEAT EXCHANGER COOLS TO THE FAN SWITCH DIFFERENTIAL SETTING. THIS BLOWER WILL NOT OPERATE UNLESS THE MAIN BURNER IS IN USE.



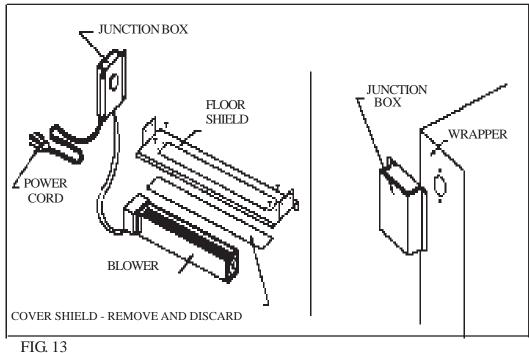
FEBRUARY 2008 P/N 70925

MODEL <u>DVB-3</u> OPTIONAL BLOWER KIT (Cont'd.) INSTALLATION INSTRUCTIONS INSTALL ONLY ON CDV15-B / CDV25-B / CDV33 –B SERIES



	PART
PART DESCRIPTION	<u>NO.</u>
Blower Housing w/Motor	70201
& Blower	
Junction Box	43610
Junction Box Cover	43620
Fan Switch 120 Degree	70110
Cord Set	80202
Cover Plate	43078
Blower Screen CDV25/33-B	43635

If any of the original wire supplied with this appliance has to be replaced, it must be replaced with type 105 degree C wire or its equivalent.

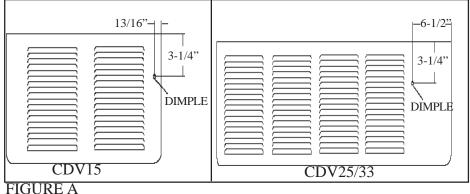


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OPTIONAL BBSK INSTALLATION INSTRUCTIONS

- STEP 1) LOCATE DIMPLE AT RIGHT REAR OF THE CABINET TOP. SEE FIGURE A.
- STEP 2) USING DIMPLE AS A LOCATOR, DRILL A 1/2" HOLE.
- STEP 3) STRAIGHTEN THE CAPILLARY TUBE. **DO NOT KINK THE CAPILLARY TUBE OR SENSING**
 - **BULB**. SEE FIGURE B.
- STEP 4) FROM TOP OF HEATER, INSTALL SENSING BULB DOWN AND UNDER THE GAS CONTROL VALVE SO THAT THE CAPILLARY TUBE IS BETWEEN THE BACK OF THE HEATER AND THE WALL. SLIDE WHITE CABLE CLAMP (PROVIDED) ONTO SENSING BULB AND SECURE TO THE
 - BOTTOM OF THE GAS VALVE USING THE 10-24X3/8" SCREW PROVIDED.
- STEP 5) SECURE THE CONTROL SWITCH (SEE FIGURE B) TO THE RIGHT SIDE OF THE INNER WRAPPER USING PREPUNCHED HOLES AND TWO #8 SCREWS PROVIDED. SEE FIGURE C. NOTE:
 - SWITCH MUST BE INSTALLED TO BE OUTSIDE THE WRAPPER.
- STEP 6)

 RUN THE TWO CONTROL WIRES FROM THE SWITCH DOWN THE RIGHT OUTSIDE OF WRAP-PER. CONNECT ONE WIRE TO THE "TH" TERMINAL AND ONE TO THE "THPP" TERMINAL ON THE GAS VALVE. SEE FIGURE D. SLIDE A WHITE CABLE CLAMP (PROVIDED) OVER BOTH WIRES AND SECURE TO WRAPPER USING SCREW THAT SECURES THE FLOOR SHIELD.
- STEP 7) IF HEATER IS NOT INSTALLED TO WALL, FOLLOW INSTRUCTIONS TO DO SO.
- STEP 8) REMOVE AND DISCARD THE LIGHTING INSTRUCTIONS SUPPLIED WITH HEATER. REPLACE WITH LIGHTING INSTRUCTION SUPPLIED IN BBSK KIT.
- STEP 9) PLACE CABINET ONTO HEATER, THE CONTROL ROD SHOULD EXTEND UP THROUGH THE ½" HOLE IN TOP OF CABINET.
- STEP 10) PLACE THE CONTROL KNOB ONTO THE CONTROL ROD AND SECURE BY PUSHING DOWN.
- STEP 11) FOLLOW THE LIGHTING INSTRUCTIONS TO PLACE THE HEATER IN OPERATION.



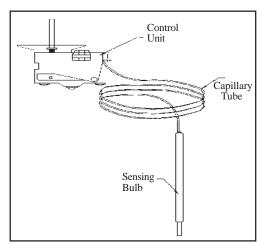
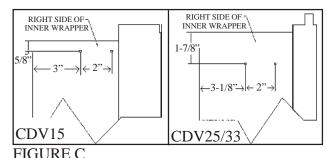
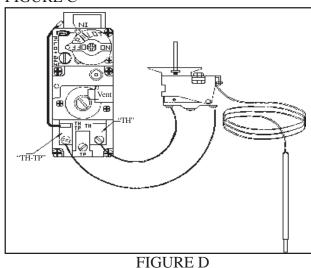


FIGURE B





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LIGHTING INSTRUCTIONS for Optional BBSK

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

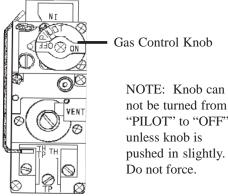
WHAT TO DO IF YOU SMELL GAS:

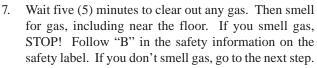
- > Do not try to light any appliance.
- > Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.

- > If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

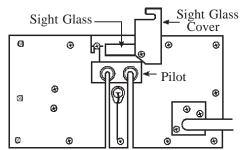
LIGHTING INSTRUCTIONS

- 1. STOP! Read the information on the safety label.
- 2. Set temperature control knob located on top of cabinet to lowest setting.
- 3. Turn off all electric power to the appliance.
- 4. Remove temperature control knob by pulling straight up.
- 5. Remove cabinet.
- 6. Push in gas control knob slightly and turn clockwise to "OFF".





- 8. Open sight glass cover.
- Locate red piezo ignitor button inside gas control compartment. Locate pilot behind sight glass. (Follow metal pilot tube from gas control).



- 10. Turn gas control knob counterclockwise \(\subseteq \tau^* \) to "PILOT".
- 11. Push in gas control knob and hold in. Immediately begin a series of pushing and releasing the red piezo ignitor button, while observing the pilot through the sight glass. Continue to spark until pilot is lit. Continue to hold the gas control knob in for about one (1) minute after the pilot is lit. Release the gas control knob and it will pop back up. Pilot should remain lit. If pilot goes out, repeat steps 4 thru 9.
- ➤ If knob does not pop up when released, STOP and immediately call your service technician or gas supplier.
- If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
- 12. Close sight glass cover.
- 13. Turn gas control knob counterclockwise to "ON".
- 14. Replace cabinet.
- 15. Replace temperature control knob.
- 16. Turn on all electric power to the appliance.
- 17. Set temperature control knob to desired setting.

TO TURN OFF GAS TO APPLIANCE

- 1. Set the temperature control knob to it's lowest setting.
- 2. Remove temperature control knob.
- 3. Turn off all electric power to the appliance if service is to be performed.
- 4. Remove cabinet.
- 5. Push in gas control knob slightly and turn clockwise \(\to \) to "OFF". Do not force.
- 6. Replace cabinet.
- 7. Replace temperature control knob.

P/N 91285 03/07

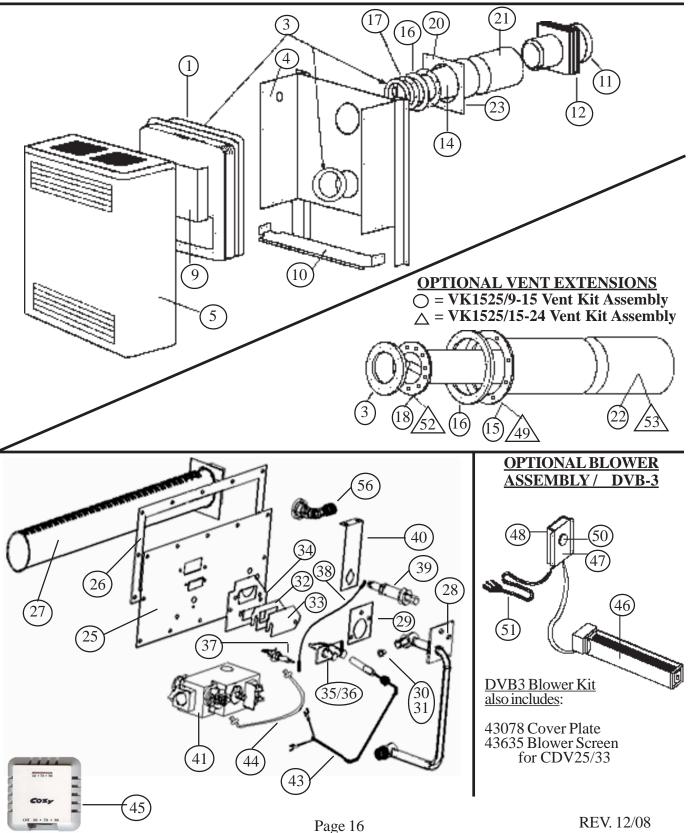
MODEL NUMBERS MILLIVOLT

NAT. GAS CDV155B <u>L.P. GAS</u> CDV156B

DIRECT VENT WALL FURNACE PARTS LIST

Prices and specifications subject to change without notice. All prices are F.O.B. factory.

COZY DIRECT VENT WALL FURNACE - CDV15-B



HOW TO PROPERLY ORDER PARTS: In addition to part description and part number, please give model number, serial number, and type of gas used. This information can be found on the rating plate located in control compartment.

MODEL NUMBERS	NAT. L.P.	CDV155B CDV156B			
MODEL NUMBERS					
DADE DECCRIPTION	REF.	PART		LIST	
PART DES CRIPTION	NO.	NUMBER		RICE	
Heat Exchanger	1	42565	\$	197.70	
Vent Exhaust Tube Gasket	3	70062		2.20	
Wrapper Assembly w/Comb. Air Pan	4	43051		105.20	
Cabinet	5	42555		135.00	
Front Heat Shield	9	43081	\$	8.70	
Bottom Heat Shield	10	43075	\$	6.60	
Vent Cap & Spacer Plate	11 & 12	43145		124.00	
Air Intake Tube Assy. (5-9" Wall) 6-3/4" Dia.	14	43200		17.00	
Air Intake Tube Assembly (9-15" Wall)	15	43810	\$	24.30	
Air Intake Tube Assembly (15-24" Wall)	49	43705	\$	26.30	
Air Intake Tube Gasket	16	70061	\$	3.90	
Vent Exhaust Tube Assy. (5-9" Wall) 4-3/16" Dia.	17	43209		19.40	
Vent Exhaust Tube Assembly (9-15" Wall)	18	43820	\$	22.90	
Vent Exhaust Tube Assembly (15-24" Wall)	52	43717	\$	26.10	
Wall Thimble Assembly (5 - 9" Wall)	20	43230		13.90	
Wall Thimble Extension (5-9" Wall)	21	43236	\$	5.10	
Wall Thimble Extension (9-15" Wall)	22	43835	\$	11.20	
Wall Thimble Extension (15-24" Wall)	53	43730	\$	16.50	
Wall Thimble Gasket	23	70066	\$	1.80	
Burner Access Door	25	43247	\$	8.80	
Heat Exchanger Door Gasket	26	70060	\$	10.40	
Main Burner	27	70005	\$	47.20	
M anifold	28	70031	\$	19.70	
M anifold Gasket	29	70065	\$	1.40	
Main Burner Orifice, Natural Gas	30	70040	\$	3.80	
Main Burner Orifice, L.P. Gas	31	70041		3.80	
Sight Glass Assembly	32	43252	\$	7.20	
Sight Glass Cover	33	43258	\$	1.70	
Sight Glass/Pilot Burner, Gasket	34	70064		1.40	
Pilot Burner Q350A1529, Natural Gas	35	70007	\$	8.80	
Pilot Burner Q350A1537, L.P. Gas	36	70008	\$	8.80	
Electrode	37	70052	\$	8.70	
Electrode Wire	38	70051		3.00	
Piezo Sparker	39	80016		6.40	
Piezo Sparker Bracket	40	43263		3.00	
Valve, MV, Robertshaw 7000M VRLC, Nat. Gas for CDV155	41	70090	\$	151.10	
Valve, MV, Robertshaw 7000M VRLC, Nat. Gas for CDV155	41	70090		160.80	
Valve, MV, Dexen 6003, Natural Gas for CDV155	41	84085		151.10	
Valve, MV, Dexen 6003LP, L.P. Gas for CDV156	41	84086		160.80	
Generator, Q313A for CDV155 / CDV156	43	70098		35.90	
Pilot Tubing w/fittings	44	70012		7.30	
Thermostat	45	74592		22.30	
Thermostat Wire	N/A	74518		1.50	
Insulated Staples	N/A	74209		1.40	
Air Pan Assembly w/Gasket for CDV15	N/A	43059	\$	20.20	
90 Degree Elbow	56	70352		11.90	
Vent Terminal Shield	N/A	34950	\$	67.6	
Blower Housing w/Motor & Blower	46	70201	\$	118.6	
Junction Box	47	43610		4.7	
Junction Box Cover	48	43620	\$	5.7	
Fan Switch 120 Degrees	50	70110	\$	7.0	
Cord Set	51	80202	\$	4.7	
Cover plate	N/A	43078	\$	2.7	

ATIN: CONTRACTORS and SERVICE TECHNICIANS, we only sell parts through our wholesalers, but the prices listed above are for your convenience. For prompt parts service, contact the wholesaler from which you purchased your Cozy heater. NOTE: parts and schematic drawings on current models are shown at www.cozyheaters.com.

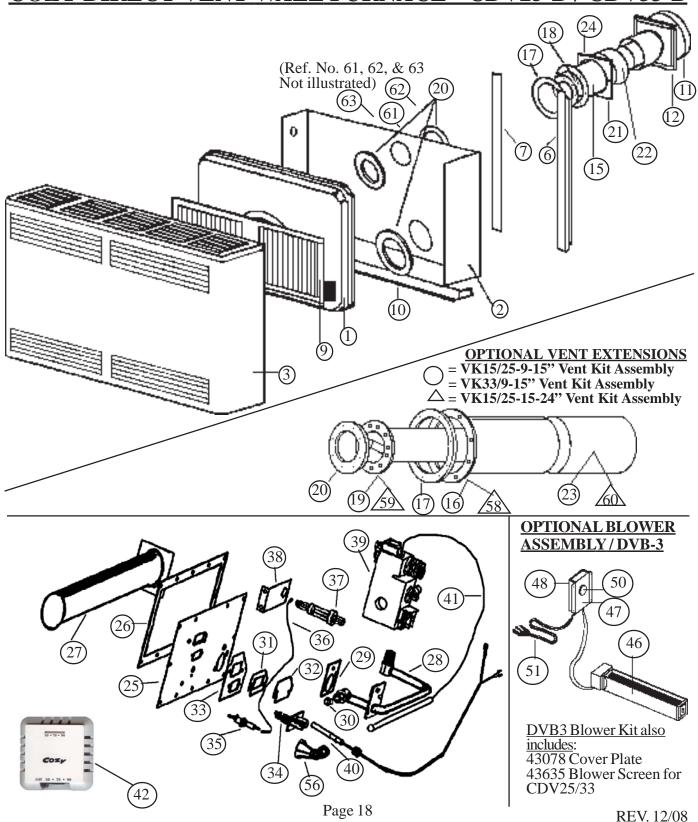
MODEL NUMBERS

DIRECT VENT WALL FURNACE PARTS LIST

NATURAL GAS
CDV255B
CDV335B
CDV336B

Prices and specifications subject to change without notice. All prices are F.O.B. factory.

COZY DIRECT VENT WALL FURNACE - CDV25-B / CDV33-B



HOW TO PROPERLY ORDER PARTS: In addition to part description and part number, please give model number, serial number, and type of gas used. This information can be found on the rating plate located in control compartment.

	NAT.	CDV255B		CDV335B CDV336B			
MODEL NUMBERS	L.P.	CDV256B			336		
PART DESCRIPTION	REF. NO.	PART NO.		LIST PRICE	PART NO.		LIST PRICE
Heat Exchanger Kit, INCLUDES	1	42763	\$	320.00	42763	\$	320.00
Wrapper (Ref. # 2), Right and Left Leg (Ref. # 6	& 7), AND	12100	_		12.00	_	
Comb. Air Pan Assembly w/Gaskets (Ref. # 63)							
Cabinet	3	42755	\$	212.30	42755	\$	212.30
Leg, Right	6	43495		10.80	43495	\$	10.80
Leg, Left	7	43494	\$	10.80	43494	\$	10.80
Front Heat Shield Assembly	9	43481	\$	26.40	43481	\$	26.40
Bottom Heat Shield Assembly	10	43473	\$	11.80	43473	\$	11.80
Vent Cap with Spacer Plate	11 & 12	43145	\$	124.00	43145	\$	124.00
Air Intake Tube Assy. (5-9" Wall) 6-3/4"Dia.	15	43200	\$	17.00	43200	\$	17.00
Air Intake Tube Assy. (9-15" Wall)	16	43810		24.30	43810	\$	24.30
Air Intake Tube Assy. (15-24" Wall)	58	43705	\$	26.30	N/A		N/A
Air Intake Tube Gasket	17	70061	\$	3.90	70061	\$	3.90
Vent Exhaust Tube Assy. (5-9" Wall) 4-3/16" dia.	18	43530	\$	20.20	43539	\$	14.00
Vent Exhaust Tube Assy. (9-15" Wall)	19	43820		22.90	43828	\$	20.40
Vent Exhaust Tube Assy. (15-24" Wall)	59	43717	\$	26.10	N/A		N/A
Vent Exhaust Tube Gasket (Requires 4)	20	70062	\$	2.20	70062	\$	2.20
Wall Thimble (5-9" Wall)	21	43552	\$	15.70	43552	\$	15.70
Wall Thimble Extension (5-9" Wall)	22	43236		5.10	43236	\$	5.10
Wall Thimble Extension (9-15" Wall)	23	43835		11.20	43835	\$	11.20
Wall Thimble Extension (15-24" Wall)	60	43730		16.50	N/A		N/A
Wall Thimble Gasket	24	70066		1.80	70066	\$	1.80
Burner Access Door	25	43247		8.80	43247	\$	8.80
Burner Access Door Gasket	26	70060	\$	10.40	70060	\$	10.40
Burner	27	70006		58.30	70006	\$	58.30
Manifold	28	70032	\$	20.70	70032	\$	20.70
Manifold Gasket	29	70065		1.40	70065	\$	1.40
Main Burner Orifice (Nat. Gas)	30	70048		3.80	70047	\$	3.80
Main Burner Orifice (L.P. Gas)	30	70039	\$	3.80	70049	\$	3.80
Sight Glass Assembly	31	43252	\$	7.20	43252	\$	7.20
Sight Glass Cover	32	43258	\$	1.70	43258	\$	1.70
Sight Glass/Pilot Burner, Gasket	33	70064		1.40	70064	\$	1.40
Pilot Burner Q350A1529 (Nat. Gas)	34	70007	\$	8.80	70007	\$	8.80
Pilot Burner Q350A1537 (L.P. Gas)	34	70008		8.80	70008		8.80
Electrode Electrode Wire	35 36	70052		8.70 3.00	70052 70051	\$	8.70
	37	70051 80016	\$	6.40	80016		3.00 6.40
Piezo Sparker Piezo Sparker Bracket	38	43263		3.00	43263	\$	3.00
Valve, MV, Robertshaw 7000M VRLC-Nat. Gas	39	70090		151.10	70090	\$	151.10
Valve, MV, Robertshaw 7000M VRLC-Ivat. Gas	39	70090		160.80	70090	\$	160.80
Valve, MV, Robertshaw 7000W VREC-E.F. Gas	39	84085	\$	151.10	84085	\$	151.10
Valve, MV, Dexen 6003LP, L.P. Gas	39	84085		160.80	84085		160.80
Pilot Generator, TP75 Millivolt	40	70098		35.90	70098	\$	35.90
Pilot Tubing w/fittings	41	70038		7.30	70038		7.30
Thermostat, Millivolt	42	74592		22.30	74592		22.30
Thermostat Wire	N/A	74518		1.50	74518		1.50
Insulated Staples	N/A	74209		1.40	74209	\$	1.40
Gasket, Air Pan Top & Bottom (15-1/4x1)	61	*70074		1.40	*70074		1.40
Gasket, Air Pan Sides (25x1)	62	*70073		1.40	*70073		1.40
90 Degree Elbow	56	70352		11.90	70352	\$	11.90
Vent Terminal Shield	N/A	34950		67.60	34950		67.60
Blower Housing w/M otor & Blower	46	70201		118.60	70201		118.60
Junction Box	47	43610		4.70	43610	\$	4.70
Junction Box Cover	48	43620		5.70	43620	\$	5.70
Fan Switch 120 degree	50	70110		7.00	70110		7.00
Cord Set	51	80202		4.70	80202	\$	4.70
Cover Plate	N/A	43078		2.70	43078		2.70
Blower Screen	N/A	43635		22.00	43635		22.00
Left Air Intake Baffle	N/A	43528		4.10	43528		4.10
Right Air Intake Baffle	N/A	43526		3.40	43526		3.40

ATTN: CONTRACTORS and SERVICE TECHNICIANS, we only sell parts through our wholesalers, but the prices listed above are for your convenience. For prompt parts service, contact the wholesaler from which you purchased your Cozy heater. NOTE: Parts & schematic drawings on <u>current models</u> are shown at <u>www.cozyheaters.com</u>.

TROUBLE SHOOTING CHART

For use by a qualified installer or service technician.

SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
Flame too large	1. Defective operator section of valve.	1. Replace valve.
	2. Burner orifice too large.	2. Check with local gas company for proper oriifce
	2 16: 4 11 1 1 2 2 2 2 2 2	- size and replace.
X7.11 1 CI	3. If installed above 2,000 ft.	3. See burner orifice section, Page 10.
Yellow burner flame	1. Clogged burner ports.	1. Remove main burner and check for obstructions in
		throat, ports, and orifices. Clean - but do not
	2. Obstanting on 1 and 1	enlarge ports or orifices.
	2. Obstruction around vent cap.	2. Make sure area around vent cap is clear, be sure
Gas odor	1. Gas leak.	vent system is sealed. 1. See Page 1.
Delayed Ignition	Gas leak. Pilot flame too small.	See Fage 1. Adjust pilot flame.
Delayed Igilition		 Adjust phot frame. Clean burner ports (do not enlarge).
	2. Burner ports clogged at pilot.3. Low gas pressure.	3. Check gas supply pressure.
	Low gas pressure. Pilot decreases in size when	Check gas supply pressure. Supply piping is too small. Consult local gas
	main burners come on.	
Failure to Ignite	Main gas off.	company or competent installer. 1. Open all manual gas valves.
Tanuic to ignite	2. Thermostat not set high enough	 Open an manual gas varves. Set thermostat to higher temperature.
	to call for heat.	2. Set thermostat to ingher temperature.
	3. Clogged burner orifice.	3. Clean burner orifice, (do not enlarge).
	4. Thermostat wired wrong or defective.	4. Check wiring, jump across thermostat terminals
	i. Thermostat wheat wrong of defective.	at valve, if valve opens - re-check wires, replace
		thermostat.
	5. Defective valve.	5. Replace valve.
Burner won't	Defective or damaged thermostat	Can be checked by removing wire from valve
turn off	wire, or thermostat.	terminal. If valve goes off, replace wire or
	,	thermostat.
	2. Thermostat location.	2. Follow instructions, check location.
	3. Defective or sticking valve.	3. Clean or replace valve.
	4. Excessive gas pressure.	4. Contact utility supplying gas.
Incorrect gas	Gas input not checked.	1. Re-check gas input.
input	2. Clogged orifice.	2. Clean orifice with a smooth wood toothpick,
-		do not enlarge.
Not enough heat	Furnace undersized.	1. This is especially true when a dwelling or room
		is enlarged. Have the heat loss calculated and
		compare to furnace output. Your gas company can
		supply you with this information. If furnace is
		undersized, replace with correct size unit.
	2. Thermostat set too low.	2. Raise temperature setting.
	3. Incorrect supply pressure.	3. Check supply pressure.
Too much heat	1. Thermostat set too high.	1. Lower temperature setting.
	2. Combination control valve stuck open.	2. Replace combination control valve.
Pilot and main	1. Weak powerpile or thermocouple.	Check millivoltage and replace if low.
burner go out	2. Input too high.	2. Check input rate.
during normal	3. Cover around pilot lighter hole not	3. Tighten wing nuts securing cover and sight glass.
operation	air tight.	Check and replace gasket if needed.
	4. Vent tubes not properly installed	4. Follow instructions. Check both exhaust and
	or sealed.	air intake tubes, and vent cap. Be sure all
		gaskets are in place and properly sealed. Use
		only tubes and vent cap supplied. Do not alter
		vent tubes or cap.
	5. Incorrect vent tubes.	5. Replace with correct tubes.

MAINTENANCE INSTRUCTIONS

For proper and safe operation keep furnace and furnace area clean. At regular intervals turn control valve to off, let cool and clean inside control compartment and under heater. To clean front panel use only a damp cloth, do not use any kind of solvent or cleaning fluid that could leave a residue or invisible coating that would burn or give off fumes when furnace is turned on.

Have the furnace checked, cleaned, and repaired by a qualified service technician. Check venting system, pilot, and burner operation prior to use each year.

Follow a regular service and maintenance schedule for safe and efficient operation.

Do not obstruct combustion and ventilation air. Examine the venting system as a routine part of the safety performance check on an annual basis.

If the air intake tube or the exhaust tube is removed, follow Step 3 of the installation section for re-assembly. Be sure to check gaskets and replace if there is any sign of damage.

If the heat exchanger is removed, check the heat exchanger intake gasket and replace if there is any sign of damage. Be sure the gasket is in place when the heat exchanger is replaced.

Failure to replace any gasket that has been damaged may result in property damage, personal injury or loss of life.

WARNING

THIS IS A GAS-FIRED APPLIANCE. KEEP THE AREA CLEAR OF GASOLINE AND OTHER FLAMMABLE VAPORS AND LIQUIDS. ALL COMBUSTIBLE MATERIAL MUST BE KEPT CLEAR OF THIS AREA TO AVOID FIRE OR EXPLOSION.

SERVICE RECORD

IMPORTANT SAFETY BULLETIN ON YOUR GAS CONTROL AND PILOT LIGHT SYSTEM FOR HEATING EQUIPMENT

WHAT YOU DON'T KNOW CAN HURT YOU.

Your pilot light system has been designed for safe and reliable operation. Although safety mechanisms are built-in, the potential for hazard exists. This information is intended to help you avoid these hazards.

YOUR GAS CONTROL AND PILOT LIGHT SYSTEM

Your gas control and pilot light system has a safety device whose purpose is to shut-off the gas supply to the appliance if the pilot light goes out. If you have trouble lighting the pilot or keeping it lit, it may mean that this safety device is warning you that there is a problem with your system. Inspection and repairs or replacement must be made by a trained gas service technician.



TAMPERING IS DANGEROUS

The pilot safety system may also not work if you do not follow the lighting instructions carefully or if you tamper with the gas control that you use to light the pilot. Tampering with the gas control, particularly with tools, can damage the safety mechanism in the control and can allow gas to leak. This can result in a fire or explosion causing property damage, personal injury or death.

IF YOU SMELL GAS, DON'T LIGHT IT



IF YOU CAN'T LIGHT IT, DON'T FIGHT IT!







THIS IS NOT AN ADVERTISEMENT

WHAT TO DO IF YOU SMELL GAS ...

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

Installation and service must be performed by a qualified installer, service agency or the gas supplier.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

CRITICAL SAFETY POINTS TO REMEMBER.

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- Your gas has been odorized so that you can smell it. Always smell around for gas before lighting your appliance.
- Sniff for L.P.-gas at floor level. LP-gas is heavier than air and may temporarily exist at floor level.



- If you smell gas, do not attempt to light the pilot. Do not cause a spark by turning on or off electrical switches or appliances or by using the phone. Turn off the gas to the appliances and call your gas supplier from another location.
- If your gas control has gotten wet as the result of flooding or other wetting, it must be replaced immediately by a trained gas service technician. Water can lead to damage of the internal safety mechanism in the gas control and can create a hazardous condition.

LIMITED WARRANTY

The Louisville Tin & Stove Co. warrants to the original user the accompanying product for the period specified herein, provided said product is installed, operated, maintained, serviced, and used according to the instructions and specifications accompanying the product. AS OUTLINED IN OUR INSTRUCTIONS, ANY WARRANTY CONSIDERATIONS ARE CONTINGENT ON INSTALLATION BY **OUALIFIED** (CONTRACTOR). SELF-INSTALLER INSTALLATION IS PROHIBITED AND WILL INVALIDATE YOUR WARRANTY.

If within a period of one year from the date of installation of the product, any part supplied by the manufacturer proves to be defective due to workmanship or material, it will replace such part, provided parts have not been subjected to misuse, alteration, neglect, or accidents. The term of the warranty for the heat exchanger and burners is covered in Table A below. Any claim not made within ten (10) days after the expiration of the warranty period shall be deemed waived by the user.

The manufacturer shall have no liability or be required to perform any obligation under this warranty unless, when requested, the user returns, at the user's expense, the component or product claimed defective, to the manufacturer for inspection, to enable the manufacturer to determine if the claimed defect is covered by this warranty.

No charges for freight, labor or other expenses incurred in the repair, removal, or replacement of any product or component claimed to be defective, will be paid by the manufacturer to the user, and the manufacturer will not be liable for any expenses incurred, by the user, in remedying any defect in the product.

Service under this warranty is the responsibility of the installer. In the event service under this warranty is needed, the user of the product

shall request such service directly from the installer. If the user is unable to locate the installer, the user should write directly to the manufacturer, and the name of an alternative service source will be supplied.

The product safety registration card (packed inside the appliance) must be completed and returned to the factory.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED (WHETHER WRITTEN OR ORAL). **IMPLIED** WARRANTY MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR **PURPOSE** IS **EXPRESSLY** LIMITED TO THE DURATION THE EXPRESS. MANUFACTURER'S WRITTEN WARRANTY.

UNDER NO CIRCUMSTANCES SHALL THE MANUFACTURER BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR EXPENSES ARISING DIRECTLY OR INDIRECTLY FROM ANY COMPONENT OR FROM THE USE THEREOF. THE REMEDIES SET FORTH HEREIN SHALL BE THE EXCLUSIVE REMEDIES AVAILABLE TO THE USER AND ARE IN LIEU OF ALL OTHER REMEDIES.

SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

SOME STATES DO NOT ALLOW THE-EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY, FROM STATE TO STATE.

TABLE A

	Warranty Period		
Product	Heat Exchanger/Tubes	Burners	
Cozy Gas Fired Floor Furnace	10 Years	10 Years	
Cozy Gas Fired Wall Furnace	10 Years	10 Years	
Cozy Gas Fired Vented Console Heater	10 Years	10 Years	
Cozy Gas Fired Direct Vent Heater	10 Years	10 Years	
Cozy Gas Fired Counterflow Furnace	10 Years	10 Years	
Cozy Gas Fired Counterflow Direct Vent Furnace	10 Years	10 Years	
Cozy Gas Fired Mobile Home Direct Vent Furnace	10 Years	10 Years	
Cozy Gas Fired Hi-Efficient Direct Vent Wall Furnace	10 Years	10 Years	
Cozy Gas Fired Direct Vent Baseboard Heater	10 Years	10 Years	
Cozy Fan-Type, Direct Vent Through-The-Wall Gas Heater	10 Years	10 Years	
Cozy Blue Flame Vent Free Heater	N/A	10 Years	
Cozy Infra-Red Vent Free Heater	N/A	N/A	

LOUISVILLE TIN & STOVE COMPANY

737 S. 13TH STREET - LOUISVILLE, KY. 40210