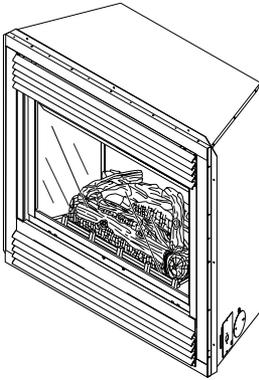
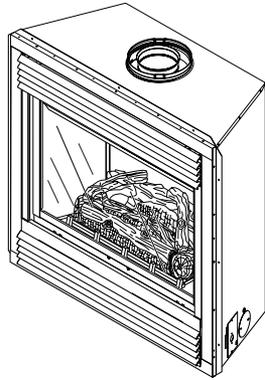




**DIRECT-VENT FIREPLACE  
OWNER'S OPERATION AND INSTALLATION MANUAL**



We recommend that our products be installed and serviced by professionals who are certified in the U.S. by NFI (National Fireplace Institute).  
[www.nficertified.org](http://www.nficertified.org)



**NATURAL GAS MODELS  
(V)CD36RN, (V)CD36RNE  
PROPANE/LP GAS MODELS  
(V)CD36RP, (V)CD36RPE**

**NATURAL GAS MODELS  
(V)CD36TN, (V)CD36TNE,  
PROPANE/LP GAS MODELS  
(V)CD36TP, (V)CD36TPE**

**⚠ 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.

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## SAFETY

**⚠ WARNING:** Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual for correct installation and operational procedures. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

**State of Massachusetts:** The installation must be made by a licensed plumber or gas fitter in the Commonwealth of Massachusetts.

**⚠ WARNING:** This product contains and/or generates chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

This appliance may be installed in an aftermarket,\* permanently located, manufactured (mobile) home, where not prohibited by local codes.

**IMPORTANT:** Read this owner's manual carefully and completely before trying to assemble, operate or service this fireplace. Improper use of this fireplace can cause serious injury or death from burns, fire, explosion, electrical shock and carbon monoxide poisoning.

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.

**⚠ DANGER:** Carbon monoxide poisoning may lead to death!

This fireplace must be installed by a qualified (certified or licensed) service person. It has a sealed gas combustion chamber that uses a coaxial pipe (pipe within a pipe and having the same center) venting system. It brings in fresh air for combustion through the outer pipe and combustion gases are exhausted through the inner pipe. If the glass door assembly and venting pipe are not properly seated, connected and sealed, carbon monoxide leakage (spillage) can occur.

\* Aftermarket: Completion of sale, not for purpose of resale, from the manufacturer

# SAFETY

## Continued

**Carbon Monoxide Poisoning:** Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness or nausea. If you have these signs, the fireplace may not be working properly. **Get fresh air at once!** Have fireplace serviced. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol and those at high altitudes.

**Propane/LP and Natural Gas:** Propane/LP and natural gas are odorless. An odor-making agent is added to the gas. The odor helps you detect a gas leak. However, the odor added to the gas can fade. Gas may be present even though no odor exists.

Make certain you read and understand all warnings. Keep this manual for reference. It is your guide to safe and proper operation of this fireplace.

 **WARNING: Any change to this fireplace or its controls can be dangerous. Do not modify this fireplace under any circumstances. Any parts removed for servicing must be replaced prior to operating fireplace.**

 **WARNING: Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this fireplace.**

 **WARNING: 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: Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns.**

**Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.**

**Do not place clothing or other flammable material on or near the appliance. Never place any objects on the appliance.**

**Do not use this fireplace to cook food or burn paper or other flammable material.**

**This fireplace reaches high temperatures. Keep children and adults away from hot surface to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surface to cool before touching.**

**Carefully supervise young children when they are in the room with fireplace.**

**Keep the area around your fireplace clear of combustible materials, gasoline and other flammable vapor or liquids. Do not run fireplace where these are used or stored.**

1. For propane/LP fireplace, do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoors. To prevent performance problems, do not use propane/LP fuel tank of less than 100 lb. capacity.
2. If you smell gas
  - shut off gas supply
  - 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.

# SAFETY

## Continued

3. Never install the fireplace
  - in a recreational vehicle
  - in windy or drafty areas where curtains or other combustible (flammable) objects can make contact with the fireplace front
  - in high traffic areas
4. Turn fireplace off and let cool before servicing, installing or repairing. Only a qualified service person should install, service or repair this fireplace. Have fireplace inspected annually by a qualified service person.
5. You must keep control compartments, burners and circulating air passages clean. More frequent cleaning may be needed due to excessive lint and dust from carpeting, bedding material, etc. Turn off the gas valve and pilot light before cleaning fireplace.
6. Have venting system inspected annually by a qualified service person. If needed, have venting system cleaned or repaired. See *Cleaning and Maintenance*, page 38.
7. Do not use any solid fuels (wood, coal, paper, cardboard, etc.) in this fireplace. Use only the gas type indicated on fireplace nameplate.
8. This appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the *National Electrical Code, ANSI/NFPA 70*.
9. Do not use fireplace if any part has been exposed to or under water. Immediately call a qualified service person to arrange for replacement of the unit.
10. Do not operate fireplace if any log is broken.
11. Do not operate fireplace with glass door removed, cracked or broken.
12. Provide adequate clearances around air openings.

## PRODUCT IDENTIFICATION

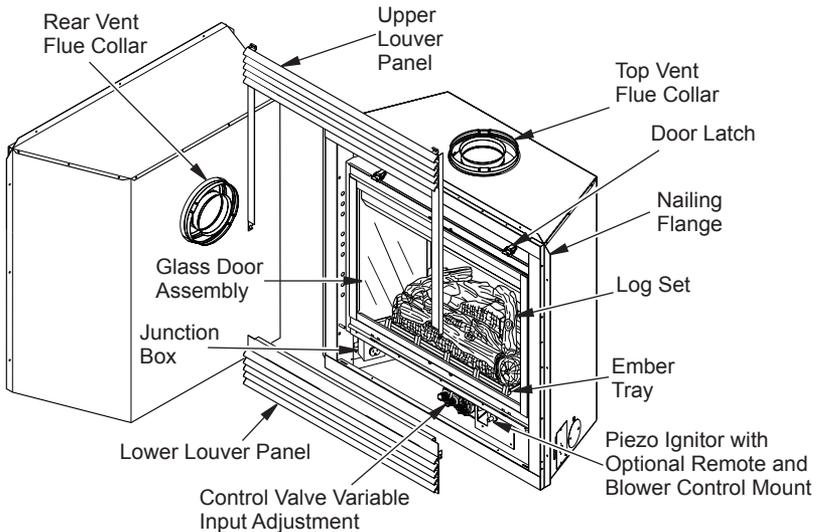


Figure 1 - Top and Rear Direct-Vent Fireplaces

## LOCAL CODES

Install and use fireplace with care. Follow all local codes. In the absence of local codes, use the current *National Fuel Gas Code ANSI Z223.1/NFPA 54\** (USA).

\*Available from:

American National Standards Institute, Inc.  
1430 Broadway  
New York, NY 10018

National Fire Protection Association, Inc.  
Batterymarch Park  
Quincy, MA 02269

## PRODUCT FEATURES

These are a few facts that can help you understand and enjoy your direct-vent fireplace:

- The CD36R dedicated rear vent is best suited for flush or corner installations when vented horizontally through an exterior wall.
- The CD36T dedicated top vent is suited for any application where height is necessary to terminate the venting system either through the roof (vertical) or to gain sufficient height and offset to vent to an outside/exterior wall (horizontal).
- The vent pipe installation is very important to allow for proper operation. You must select the appropriate unit for your application and follow the venting instructions to plan your installation.
- This fireplace may be installed in any room of your house provided all local codes and these installation instructions are followed.
- Models (V)CD36R/T are equipped with a millivolt gas control system that does not require electricity to operate. A piezo ignitor is provided to light the pilot without using matches or lighters.
- Models (V)CD36RE/TE are equipped with an electronic ignition system that requires 120VAC to operate. An electrode ignitor automatically lights the pilot flame when the fireplace is turned on.
- All models can accept an optional circulating air blower when 120 VAC connection is supplied. If you plan to install an optional blower, do not forget to wire the fireplace outlet when framing.
- Each time you turn on your fireplace, you may notice some amount of condensation on the inside of the fireplace glass. This is normal and will disappear after 10-20 minutes of operation.
- Your direct-vent gas fireplace system (fireplace and venting) is a balanced and sealed gas operating unit. It is highly efficient because it uses outside air for combustion while independently heating the indoor air.

## PRE-INSTALLATION PREPARATION

### LOCATION AND SPACE REQUIREMENTS

Determine the safest and most efficient location for your DESA Heating, LLC direct-vent fireplace. Make sure that rafters and wall studs are not in the way of the venting system. Choose a location where the heat output is not affected by drafts, air conditioning ducts, windows or doors. Figure 2 shows some common locations. Be aware of all restrictions and precautions before deciding the exact location for your fireplace and termination cap.

When deciding the location of your fireplace, follow these rules:

- Do not connect this fireplace venting to a chimney flue serving a separate solid-fuel burning fireplace or appliance.
- Due to high temperatures, do not locate this fireplace in high traffic areas, windy or drafty areas or near furniture or draperies.
- Proper clearances must be maintained.
- If your fireplace is to be installed directly on carpeting, vinyl tile or any combustible material other than wood, it must be installed on a metal or wood panel extending the full width and depth of the fireplace. See Figure 3, page 6.

- Your fireplace is designed to be used in zero clearance installations. Wall or framing material can be placed directly against any exterior surface on the back, sides or top of your fireplace, except where standoff spacers are integrally attached. If standoff spacers are attached to your fireplace, these spacers can be placed directly against wall or framing material. See framing details on page 7.
- If you plan on installing a television or entertainment center recessed above your fireplace, it is recommended that you maintain a minimum 18" above top of louver opening.

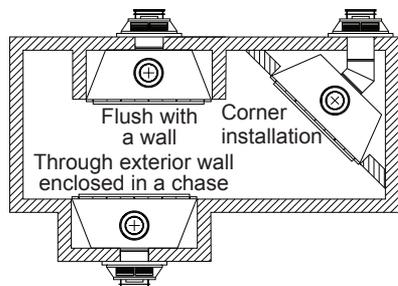


Figure 2 - Common Fireplace Locations

# PRE-INSTALLATION PREPARATION

Continued

- When locating termination cap, it is important to observe the minimum clearances shown in Figure 7, page 7.
- If recessing into a wall, you can avoid extra framing by positioning your fireplace against an already existing framing member.
- Do not recess termination cap into a wall or siding.
- You may paint the termination cap with 450° F (232° C) heat-resistant paint to coordinate with the exterior finish.
- There must not be any obstruction such as bushes, garden sheds, fences, decks or utility buildings within 24" from the front of the termination cap.
- Do not locate termination cap where excessive snow or ice build up may occur. Be sure to clear vent termination area after snow falls to prevent accidental blockage of venting system. When using snow blowers, do not direct snow towards vent termination area.

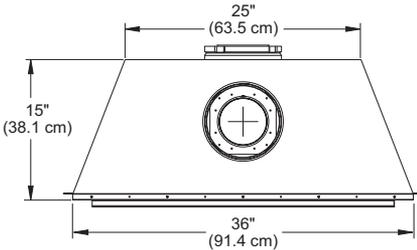


Figure 3 - Fireplace Bottom Dimensions

## PACKAGING AND REMOVAL

The (V)CD36R/T direct vent gas fireplace heater is packaged with:

- one box containing a 4-log set located on the burner in the firebox
- one bag containing the owner's manual with installation instructions, operator's guide, and warranty information
- one bag of glowing ember material
- one bag of vermiculite hearth treatments

Remove the shrink-wrap securing the 2 carton trays to the unit. Lift the top carton tray off and remove the four corner posts. Discard the bottom tray once the unit is moved into position.

*Note: On rear vent models you must remove the fiberboard collar protector located on the rear collar before installing the fireplace and venting system. See Figure 4.*

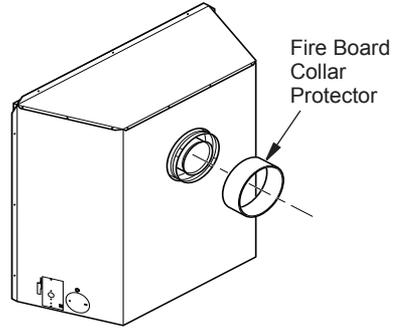


Figure 4 - Removing Collar Protector (Rear Vent Fireplace)

## CLEARANCES

Minimum clearances to combustibles for the fireplace are as follows:

*Back and sides	0"/cm
Perpendicular walls	12" (30.5 cm)
Floor	0"/cm
Ceiling to louver opening	40" (102 cm)
Front	36" (91.4 cm)
Top of Standoffs	0"/cm
Vent Surfaces	1" (26 mm) (See venting instructions for specific vent clearances.)
Mantel Clearances	(See <i>Mantel Clearances</i> for specifics on mantel clearances.)

Combustible material with a maximum thickness of 5/8" may be flush with the top front of fireplace.

**NOTICE: This fireplace is intended for use as supplemental heat. Use this fireplace along with your primary heating system. Do not install this fireplace as your primary heat source. If you have a central heating system, you may run system's circulating blower while using fireplace. This will help circulate the heat throughout the house. In the event of a power outage, you can use this fireplace as a heat source.**

# PRE-INSTALLATION PREPARATION

Continued

## FRAMING AND FINISHING

Figure 5 shows typical framing for this fireplace. Figure 6 shows framing for corner installation. All minimum clearances must be met.

For overall unit dimensions, framing allowances and vent collar locations, see unit dimensions in Figure 9, page 8.

For available accessories for this fireplace, see Accessories on page 52. If you are using a separate combustible mantel piece, refer to Figure 7 and Figure 8, page 8 for proper height and clearances. You can install noncombustible mantels at any height above the fireplace.

Note: Noncombustible mantels may discolor!

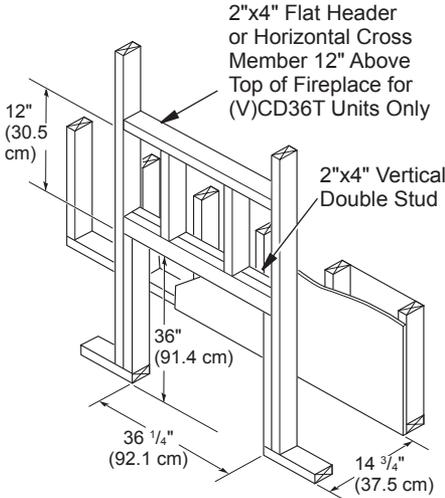


Figure 5 - Framing Clearances for Installation Against an Exterior Wall

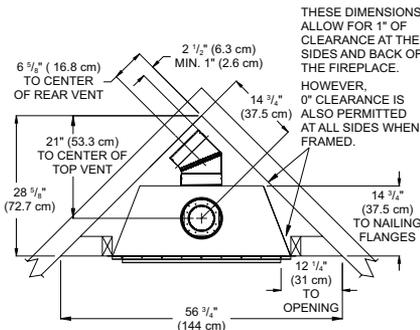
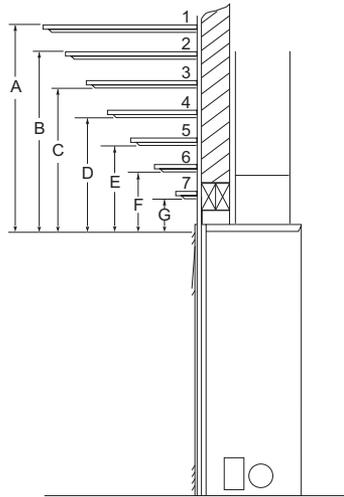


Figure 6 - Framing Clearances for Corner Installation

## MANTEL CLEARANCES

Figure 7 shows projected mantel depths at various heights above the top of the louver opening. Figure 8, page 8, shows the minimum allowable distances from various mantel components in relation to the both sides of the fireplace opening.

**WARNING:** When finishing appliance, do not overlap combustible materials onto the black front face. Brick, tile, or other non-combustible materials may be applied to the face provided that any fireplace openings are not blocked and gaps in the material used and the face are sealed with a noncombustible caulking.



Ref.	Mantel Depth	Ref.	Mantel from Top of Louver Opening
1	16" (40.6 cm)	A	14" (35.6 cm)
2	14" (35.6 cm)	A	12" (30.5 cm)
3	12" (30.5 cm)	B	10" (25.4 cm)
4	10" (25.4 cm)	C	8" (20.3 cm)
5	8" (20.3 cm)	D	6" (15.2 cm)
6	4" (10.1 cm)	F	4" (10.1 cm)
7	2" (5.1 cm)	G	2" (5.1 cm)

Figure 7 - Clearances for Combustible Mantels

# PRE-INSTALLATION PREPARATION

Continued

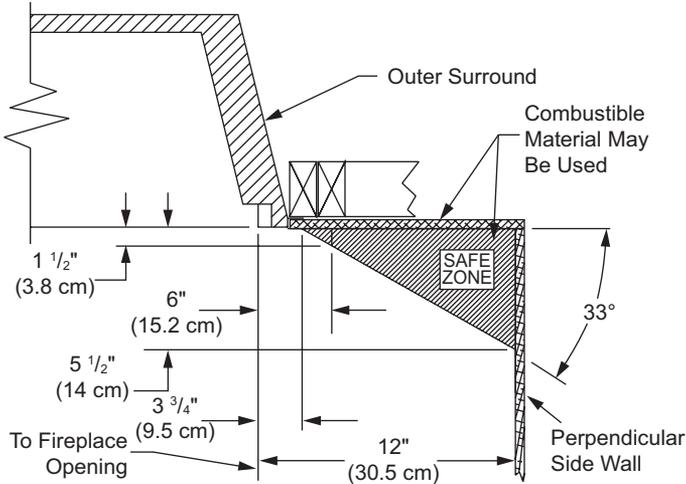


Figure 8 - Side Clearances for Combustible Materials

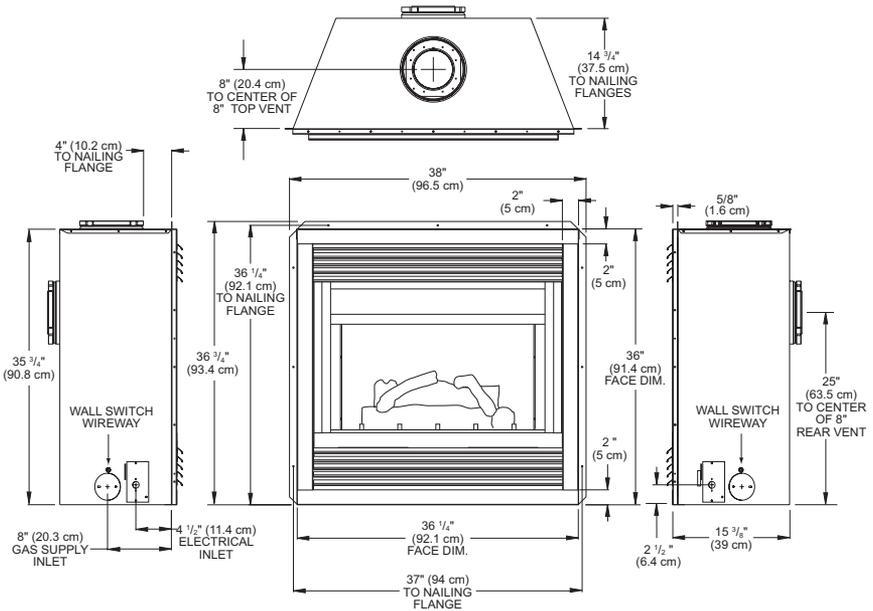
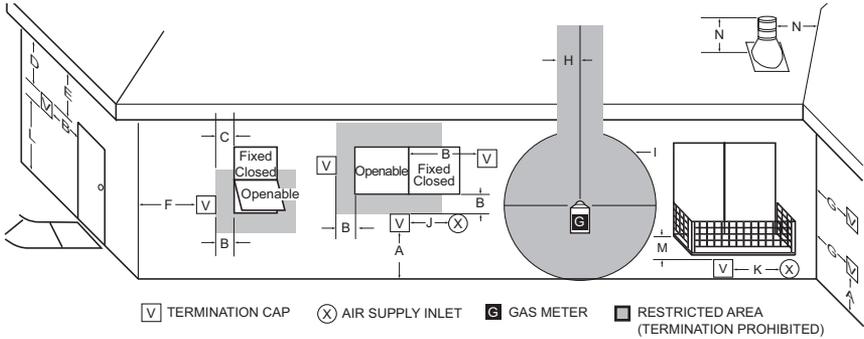


Figure 9 - Rear/Top Common Dimensions

# LOCATION OF TERMINATION CAP



V TERMINATION CAP    
 X AIR SUPPLY INLET    
 G GAS METER    
   RESTRICTED AREA (TERMINATION PROHIBITED)

- |  |  |
|--|--|
| <p>A = clearance above grade, veranda, porch, deck, or balcony [*12" (30.5 cm) minimum]</p> <p>B = clearance to window or door that may be opened [6" (15 cm) min. for 10,000 Btu or less; 9" (23 cm) in US if between 10,000 and 50,000, 12" (30 cm) in Canada if between 10,000 and 100,000; 12" (30 cm) in US if greater than 50,000, 36" (91 cm) in Canada if greater than 100,000]</p> <p>C = clearance to permanently closed window [minimum 12" (30.5 cm) recommended to prevent condensation on window]</p> <p>D = vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 24" (61 cm) from the center-line of the terminal [18" (45.7 cm) minimum]</p> <p>E = clearance to unventilated soffit [12" (30.5 cm) minimum]</p> <p>F = clearance to outside corner (see below)</p> <p>G = clearance to inside corner (see below)</p> <p>H = *not to be installed above a meter/regulator assembly within 36" (91.4 cm) horizontally from the center line of the regulator</p> | <p>I = clearance to service regulator vent outlet [*72" (182.9 cm) minimum]</p> <p>J = clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other fireplace [6" (15 cm) min. for 10,000 Btu or less; 9" (23 cm) in US if between 10,000 and 50,000, 12" (30 cm) in Canada if between 10,000 and 100,000; 12" (30 cm) in US if greater than 50,000, 36" (91 cm) in Canada if greater than 100,000]</p> <p>K = clearance to a mechanical air supply inlet [*In Canada, 6 ft. (1.83m) minimum; In US 3 ft. (91 cm) above if within 10 ft. (3 m) horizontally]</p> <p>L = † clearance above paved side-walk or a paved driveway located on public property [*84" (213.3 cm) minimum]</p> <p>M = clearance under veranda, porch, deck [*12" (30.5 cm) minimum ‡]</p> <p>N = clearance above a roof shall extend a minimum of 24" (61 cm) above the highest point when it passes through the roof surface and any other obstruction within a horizontal distance of 18" (45.7 cm)</p> |
|--|--|

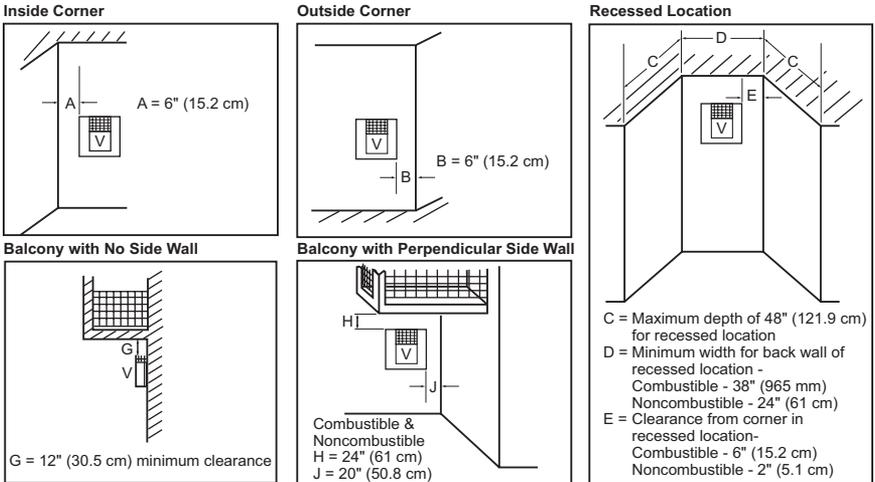
† vent shall not terminate directly above a side-walk or paved driveway which is located between two single family dwellings and serves both dwellings\*

‡ only permitted if veranda, porch, deck or balcony is fully open on a minimum of 2 sides beneath the floor\*

\* as specified in CAN/CSA B149 (.1 or .2) Installation Codes (1991) for Canada and U.S.A.

*Note: Local codes or regulations may require different clearances*

## Termination Clearances for Buildings with Combustible and Noncombustible Exteriors



**Figure 10 - Minimum Clearances for Termination Cap**

# REQUIREMENTS FOR THE COMMONWEALTH OF MASSACHUSETTS

For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

## INSTALLATION OF CARBON MONOXIDE DETECTORS

At the time of installation of the side wall horizontally vented gas fueled equipment, the installing plumber or gasfitter shall observe that a hard wired carbon monoxide detector with an alarm and battery backup is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gasfitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors.

In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

### Approved Carbon Monoxide Detectors

Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

## SIGNAGE

A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than 1/2" in size, "GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS".

## INSPECTION

The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a) 1 through 4.

EXEMPTIONS: The following equipment is exempt from 248 CMR 5.08(2)(a) 1 through 4:

- The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and
- Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

## MANUFACTURER REQUIREMENTS Gas Equipment Venting System Provided

When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

- Detailed instructions for the installation of the venting system design or the venting system components; and
- A complete parts list for the venting system design or venting system.

## Gas Equipment Venting System Not Provided

When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer:

- The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and
- The "special venting systems" shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

## VENTING INSTALLATION

**NOTICE: Read these instructions completely before attempting installation.**

These models are tested and approved for use with DESA Heating, LLC (direct-vent) pipe components and terminations.

The venting system must terminate on the outside of the structure and can not be attached to a chimney or flue system serving a separate solid fuel or gas burning appliance. A direct-vent appliance must have its own venting system. DO NOT common vent this appliance.

These models are approved to be vented either horizontally through an outside wall or vertically through a roof or chase enclosure using the following:

- When venting system terminates horizontally on an outside wall, you may install a standoff if the termination cap is to be installed directly on a combustible finish such as vinyl, wood, stucco, etc.
- Never run the vent downward as this may cause excessive temperatures which could cause a fire.
- Vent pipe air space clearances to combustibles are 1" on all sides except on the horizontal sections, which requires 2" clearance from the top of the pipe. Where the termination cap penetrates a combustible wall, 1" air space clearance is required.
- Have fireplace and selected vent components on hand to help determine the exact measurements when elbowing or offsetting. Always use wall firestops when penetrating walls and firestops when penetrating ceilings or attic spaces.
- If using a venting configuration of only horizontal venting with no vertical run, a 1/4" rise for every 12" of run toward the termination is required.

**⚠ WARNING: Read all instructions completely and thoroughly before attempting installation. Failure to do so could result in serious injury, property damage or loss of life.**

**IMPORTANT:** Do not seal vent cap to pipe. Cap must be removable for servicing.

**NOTICE: Failure to follow these instructions will void the warranty.**

**NOTICE: Do not seal termination cap to vent pipe. Cap must be removable for vent inspection and maintenance.**

### INSTALLATION PRECAUTIONS

- Wear gloves and safety glasses for protection
- Use extreme caution when using ladders or when on roof tops
- Be aware of electrical wiring locations in walls and ceilings

The following actions will void the warranty on your venting system:

- Installation of any damaged venting component
- Unauthorized modification of the venting system (Do not cut or alter vent components)
- Installation of any component part not manufactured or approved by DESA
- Installation other than as instructed by these instructions

**⚠ WARNING: This gas fireplace and vent assembly must be vented directly to the outside. The venting system must NEVER be attached to a chimney serving a separate solid fuel burning appliance. Each direct-vent gas appliance must use a separate vent system. Do not use common vent systems.**

**⚠ WARNING: Vent pipe air space clearances to combustibles are 1" on all sides except on the horizontal sections, which require 2" clearances from the top of the pipe. Where the termination cap penetrates a combustible wall, 1" air space clearance is required.**

# VENTING INSTALLATION

Continued

## INSTALLATION PLANNING

There are two basic types of direct-vent installation:

- Horizontal Termination
- Vertical Termination

### Horizontal Termination Installation

**IMPORTANT:** Horizontal square terminations require only inner portion of wall firestop. Horizontal installations using round termination require exterior portion of wall firestop (see Figure 20, page 15).

1. Set fireplace in its desired location and determine route your horizontal venting will take. Do not secure fireplace until all venting has been installed. Some installations require sliding fireplace in and out of position to make final venting connections. Figures 18 through 25 on pages 14 through 17 show different configurations for venting with horizontal termination that will help you decide which application best suits your installation. Check to see if wall studs or roof rafters are in the path of your desired venting route. If they are, you may want to adjust location of fireplace.

2. Direct vent pipe sections and components are designed with special twist-lock connections.

**Twist-Lock Procedure:** Female ends of pipes have locking lugs (indentations). These lugs will slide straight into matching slots on male ends of adjacent pipes. Push pipe sections together and twist one section clockwise approximately one-quarter turn until sections are fully locked (see Figure 11).

*Note: Horizontal runs of vent must be supported every three feet. Use wall straps for this purpose.*

3. Any straight pipe section, a 45° or 90° elbow can be used when first connecting the venting system to fireplace. Elbows are designed to twist-lock into any of four 90° positions to direct the venting system to the desired location. **IMPORTANT:** Do not attempt to alter the configuration of elbow by cutting, twisting, bending, etc.
4. Assemble desired combination of pipe and elbows to fireplace flue collar. If there are long portions of venting run, pre-assembled pipe sections may be installed as subassemblies for convenience.

5. Carefully determine location where vent pipe assembly will penetrate outside wall. Center of hole should line up with center line of horizontal vent pipe. Mark wall for a 11 1/2" x 11 1/2" square hole. Cut and frame square hole in exterior wall where vent will be terminated. If wall being penetrated is constructed of noncombustible material, such as masonry block or concrete, a 8 1/2" hole with zero clearance is acceptable (see Figure 12).

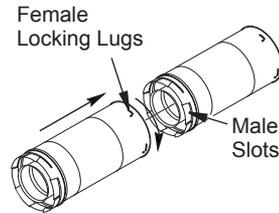


Figure 11 - Vent Pipe Connections

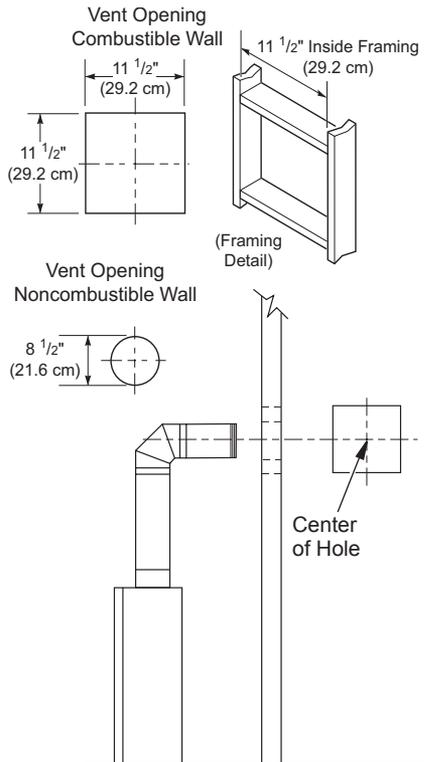


Figure 12 - Vent Opening Requirements

# VENTING INSTALLATION

Continued

**⚠ WARNING: Do not recess vent termination into any wall. This will cause a fire hazard.**

6. **Noncombustible Exterior Wall:** Position horizontal vent cap in center of 8 1/2" round hole and attach to exterior wall with four wood screws provided. Before attaching vent cap to exterior wall, run a bead of non-hardening mastic (pliable sealant) around outside edges to make a seal between it and outside wall.

*Note: Four wood screws provided should be replaced with appropriate fasteners for stucco, brick, concrete or other types of sidings (see Figure 13).*

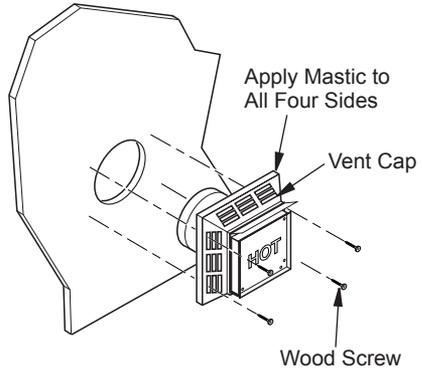
**Combustible Exterior Wall:** For vinyl siding, stucco or wood exteriors, a siding standoff may be installed between vent cap and exterior wall. Siding standoff prevents excessive heat from damaging siding materials. Siding material must be cut to accommodate standoff. Bolt vent cap to standoff. Apply non-hardening mastic around outside edge of standoff. Position standoff/cap assembly in center of the 11 1/2" square hole and attach to exterior wall with wood screws provided (see Figure 14). Siding standoff must sit flush against exterior fascia material.

7. **Connecting Vent Cap with Horizontal Vent Pipe:** Fit outer and inner wall firestop into wall before connecting horizontal run to vent cap (see Figure 15).

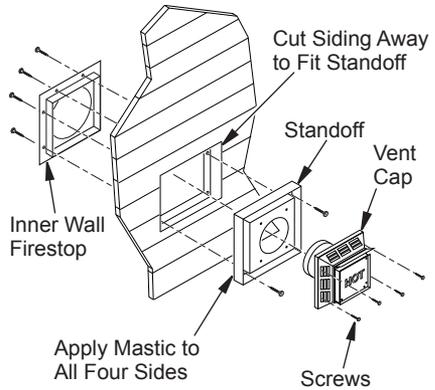
Carefully move fireplace, with vent assembly attached, toward wall and insert vent pipe into horizontal termination. The pipe overlap should be a minimum of 1 1/4".

Slide wall firestop against interior wall surface and attach with screws provided (see Figure 16, page 14). See Figure 17, page 14, for horizontal termination details.

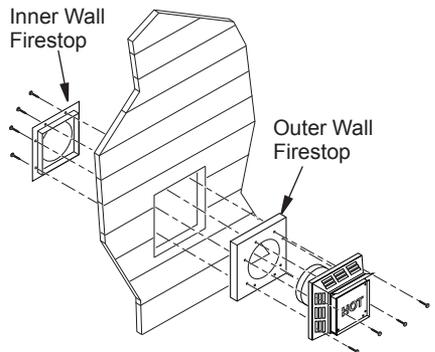
Place fireplace into position and shim with noncombustible material, if needed. Nail or screw side flanges to framing to secure unit in place. **IMPORTANT:** Make sure fireplace is level before securing. If fireplace is not level it will not work properly.



**Figure 13 - Installing Horizontal Vent Cap (Noncombustible Exterior)**



**Figure 14 - Installing Siding Standoff (Combustible Exterior Wall)**



**Figure 15 - Installing Outer Wall Firestop (Combustible Exterior Wall)**

# VENTING INSTALLATION

Continued

**NOTICE:** Do not seal termination cap to vent pipe. Cap must be removable for vent inspection and maintenance.

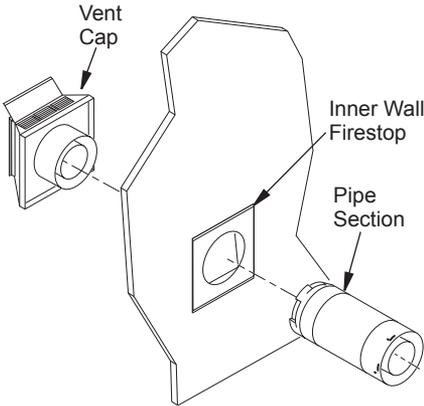


Figure 16 - Installing Inner Wall Firestop

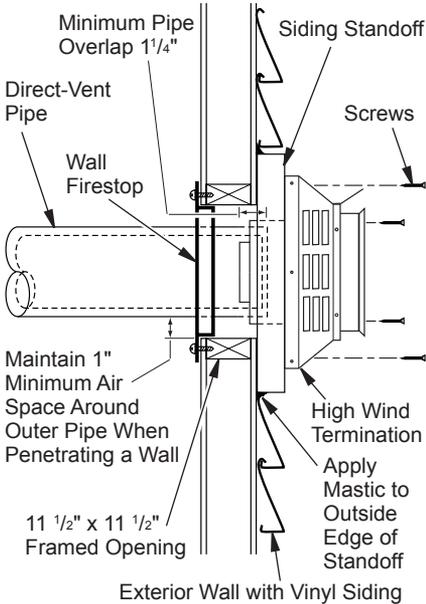


Figure 17 - Typical Horizontal Termination Cap Mounting with Additional Siding Standoff Installed

**WARNING:** Never run vent downward as this may cause excessive temperatures which could cause a fire. Operation of improperly installed and maintained venting system could result in serious injury, property damage or loss of life.

## Horizontal Termination Configurations

Figures 18 through 25 show different configurations and alternatives for venting with horizontal termination. Each figure includes a chart with critical minimum and maximum dimensions which MUST be met.

**IMPORTANT:** If using a venting configuration of only horizontal venting with no vertical run, a 1/4" rise for every 12" of run toward the termination is required.

## GROUND FLOOR INSTALLATION REAR VENT

Recommended Applications for Rear Vent Model (V)CD36R:

- Installation using cabinet surrounds
- Through wall using round or square termination (up to a maximum of 18" of horizontal pipe)
- Corner installation (Using one 45° elbow and a maximum of 18" of horizontal pipe).

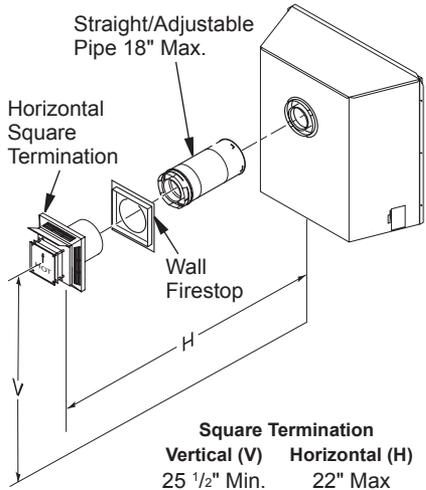
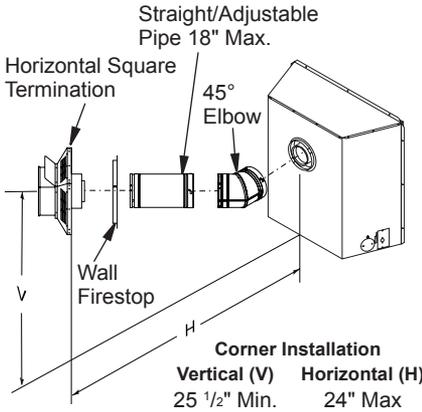


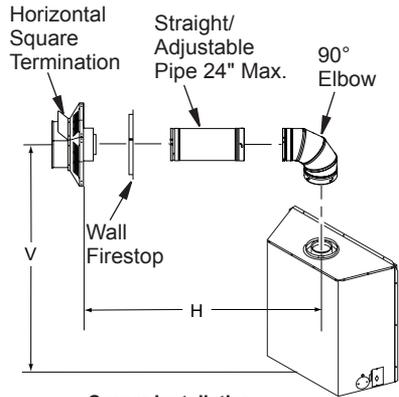
Figure 18 - Horizontal Termination Configuration for Flush Installation (Model (V)CD36R)

# VENTING INSTALLATION

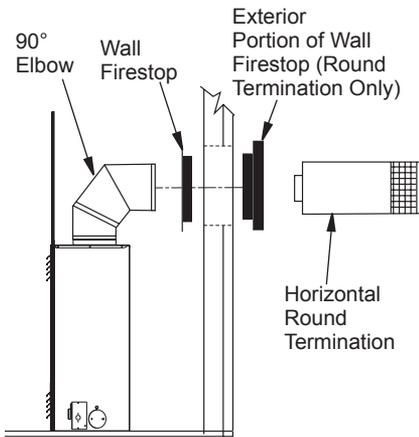
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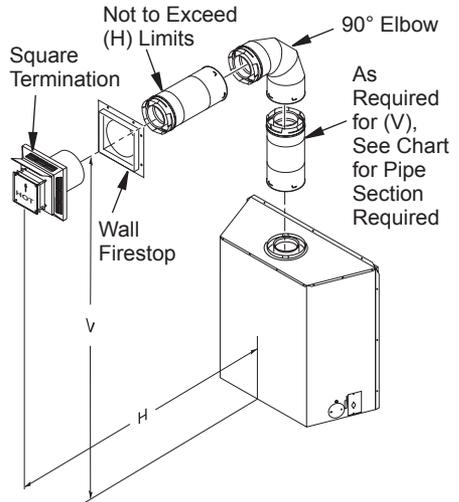
**Figure 19 - Horizontal Termination Configuration for Corner Installation (Model (V)CD36R)**



**Figure 21 - Horizontal Termination Configuration For Corner Installation Using One 90° Elbow (Model (V)CD36T)**



**Figure 20 - Horizontal Termination Configuration Round Termination (Model (V)CD36T)**



Required Vertical (V)	Vertical (V) Vertical Pipe	Allowable Horizontal (H)
45 1/2"	None	26" Max.
57 1/4" Min.	1 ft.	30" Max.
69 1/4" Min.	2 ft.	74" Max.
81 1/2" Min.	3 ft.	98" Max.
94" Min.	4 ft.	122" Max.
106" Min.	5 ft.	146" Max.
159" Min.	9 ft.	20' Max.

**Figure 22 - Horizontal Termination Configuration with Vertical Rise and One 90° Elbow (Model (V)CD36T)**

## GROUND FLOOR INSTALLATION

Recommended Applications for Rear Vent Model (V)CD36T:

- Installation using cabinet surrounds
- Through wall using round or square termination (up to 24" horizontal pipe)
- Corner installation (Using one 90° elbow and a maximum of 24" of horizontal pipe)

# VENTING INSTALLATION

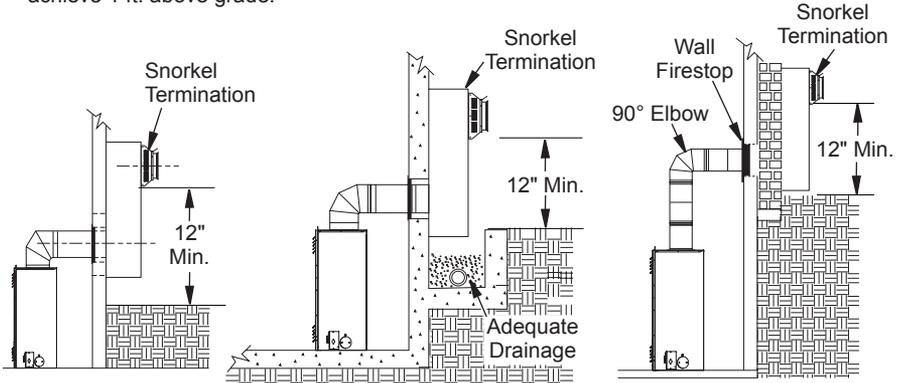
*Continued*

## SNORKEL TERMINATION INSTALLATION

Recommended Applications Models (V)CD36R and (V)CD36T:

- Installations requiring vertical rise on building exterior.
- Installation using snorkel termination to achieve 1 ft. above grade.

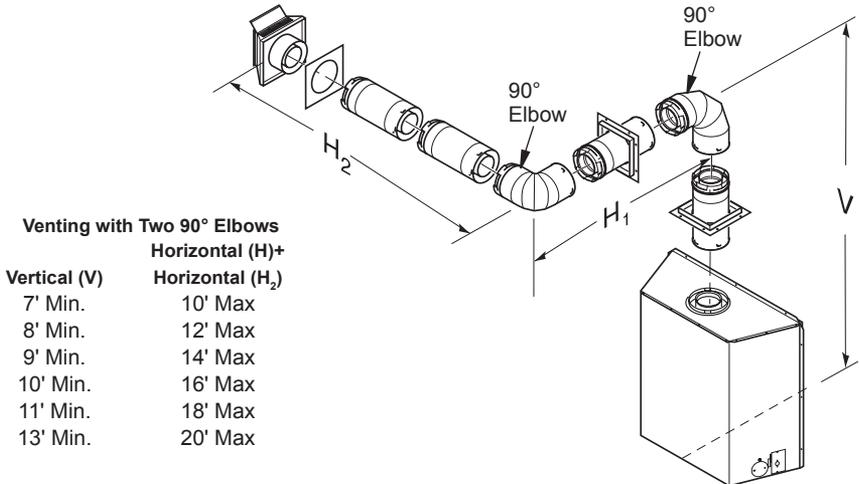
Snorkel terminations are available for installations requiring a vertical rise on the exterior of the building. If installing snorkel below grade you must provide proper drainage to prevent water from entering snorkel (see Figure 23). Do not back fill around snorkel termination.



**Figure 23 - Snorkel Termination Configuration For Below Ground Installation**

## HORIZONTAL VENT INSTALLATIONS USING MULTIPLE 90° ELBOWS (V)CD36T TOP VENT

The following configurations show the minimum vertical rise requirements for a horizontal system using two 90° elbows.



**Figure 24 - Horizontal Termination Configuration For Venting Using Two 90° Elbows (Model (V)CD36T)**

# VENTING INSTALLATION

Continued

## Venting with Two 90° Elbows

Vertical (V)	Horizontal (H)	Horizontal (H) <sub>2</sub>
5' Min.	2' Max.	6' Max
6' Min.	3' Max.	8' Max
7' Min.	4' Max.	10' Max
8' Min.	5' Max.	12' Max
12' Min.	8' Max.	20' Max
20' Min.	8' Max.	20' Max

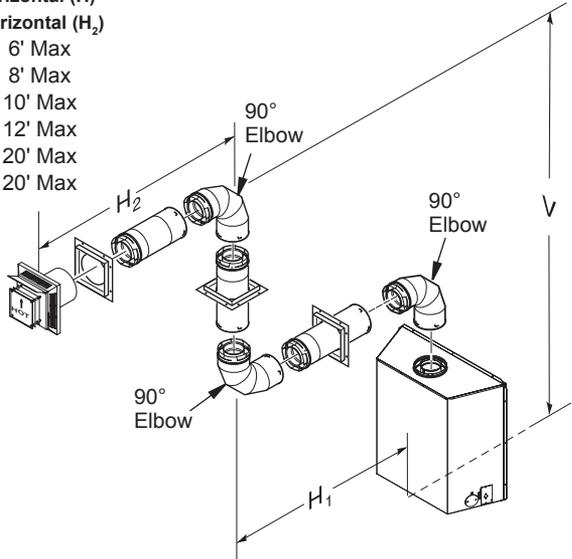


Figure 25 - Horizontal Termination Configuration for Venting Using Three 90° Elbows (Model (V)CD36T)

## INSTALLATION FOR VERTICAL TERMINATION

Note: Vertical restrictor must be installed in all vertical installations.

- Determine the route your vertical venting will take. If ceiling joists, roof rafters or other framing will obstruct the venting system, consider an offset (see Figure 26) to avoid cutting load bearing members.

Note: Pay special attention to these installation instructions for required clearances (air space) to combustibles when passing through ceilings, walls, roofs, enclosures, attic rafters, etc. Do not pack air spaces with insulation. Also note maximum vertical rise of the venting system and any maximum horizontal offset limitations.

**(V)CD36T Series Only:** When installing the OSR58-30 offset, it must be turned 20° off center line (see Figure 27, page 18). This will give you the 1" clearance to horizontal framing members that are a minimum of 12" above fireplace.

- Set fireplace in desired location. Drop a plumb line down from ceiling to position

of fireplace exit flue. Mark center point where vent will penetrate ceiling. Drill a small locating hole at this point.

Drop a plumb line from inside of roof to locating hole in ceiling. Mark center point where vent will penetrate roof. Drill a small locating hole at this point.

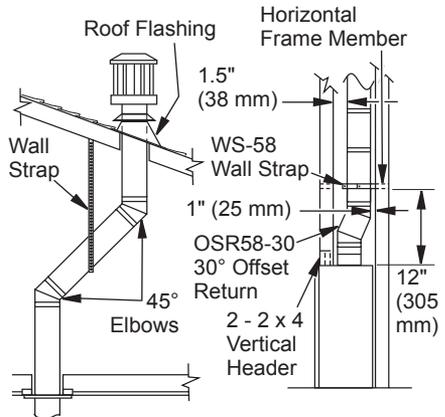
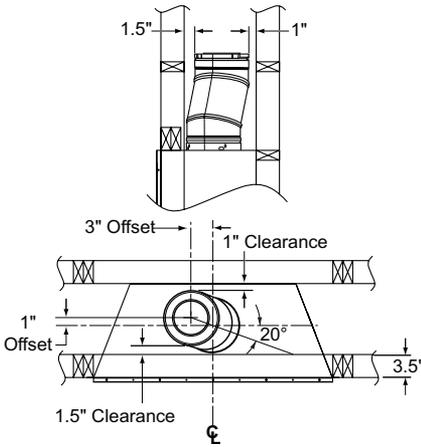


Figure 26 - 45° and 30° Offset with Wall Strap

# VENTING INSTALLATION

Continued



**Figure 27 - OSR58-30 Offset and Return for (V)CD36T Series Units**

## Flat Ceiling Installation

1. Cut a  $11 \frac{1}{2}$ " square hole in ceiling using locating hole as a center point. The opening should be framed to  $11 \frac{1}{2}$ " x  $11 \frac{1}{2}$ " (292 mm x 292 mm) inside dimensions, as shown in Figure 12 on page 11 using framing lumber the same size as ceiling joists. If area above ceiling is an insulated ceiling or an attic, nail firestop from top side. This prevents loose insulation from falling into required clearance space. If area above ceiling is a living space, install firestop below framed hole. Firestop should be installed with no less than three nails per side (see Figure 28).
2. Assemble desired lengths of pipe and elbows necessary to reach from fireplace flue up through firestop. Be sure all pipe and elbow connections are fully twist-locked (see Figure 11, page 12).
3. Cut a hole in the roof using locating hole as a center point. (Cover any exposed open vent pipes before cutting hole in roof.) The  $11 \frac{1}{2}$ " x  $11 \frac{1}{2}$ " hole must be measured on the horizontal; actual length may be larger depending on pitch of roof. There must be a 1" clearance from the vent pipe to combustible materials. Frame opening as shown in Figure 12, page 12.
4. Connect a section of pipe and extend up through hole.

*Note: If an offset is needed to avoid obstructions, you must support vent pipe every 3 feet. Use wall straps for this purpose (see Figure 26, page 17). Whenever possible, use 45° elbows instead of 90° elbows. The 45° elbow offers less restriction to the flow of flue gases and intake air.*

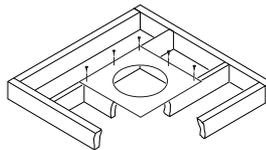
5. Place flashing over pipe section(s) extending through roof. Secure base of flashing to roof and framing with roofing nails. Be sure roofing material overlaps top edge of flashing as shown in Figure 26, page 17. There must be a 1" clearance from vent pipe to combustible materials.
6. Continue to add pipe sections until height of vent cap meets the minimum building code requirements described in Figure 10 on page 9.

*Note: You must increase vent height for steep roof pitches. Nearby trees, adjoining rooflines, steep pitched roofs and other similar factors may cause poor draft or down-drafting in high winds. Increasing vent height may solve this problem.*

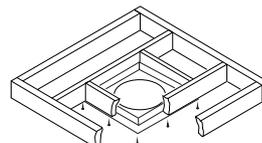
7. Twist-lock vent cap onto last section of vent pipe.

*Note: If vent pipe passes through any occupied areas above the first floor, including storage spaces and closets, you must enclose pipe. You may frame and sheetrock enclosure with standard construction material. Make sure and meet minimum allowable clearances to combustibles. Do not fill any required air spaces with insulation.*

If area above is an attic or insulated area, install firestop above framed hole.



If area above is a living space, install firestop below framed hole.



**Figure 28 - Installing Firestop**

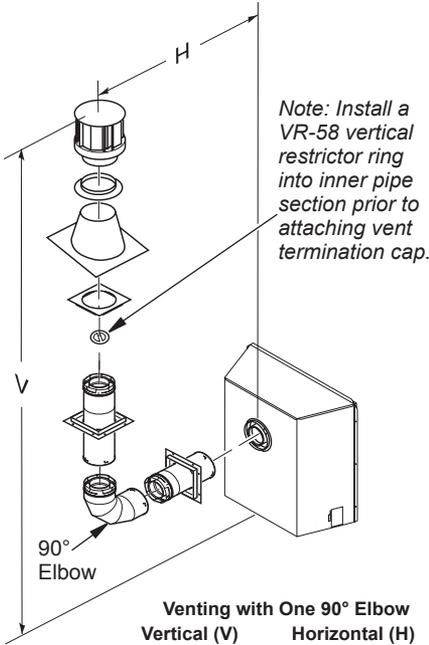
# VENTING INSTALLATION

Continued

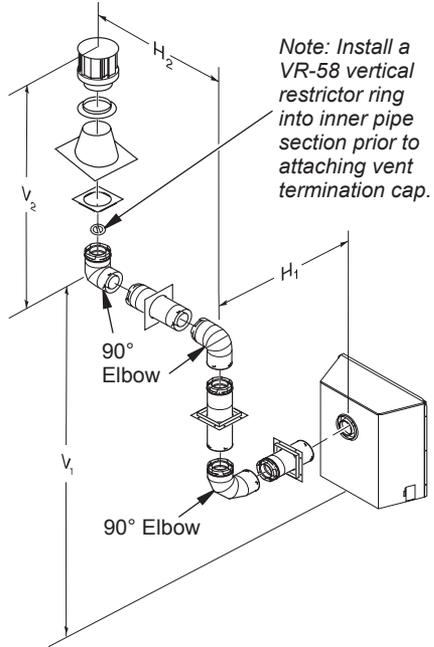
## Vertical Termination Configurations for Rear Vent

Figures 29 and 30 show two different configurations for vertical termination.

### VERTICAL VENT INSTALLATIONS USING MULTIPLE 90° ELBOWS (V)CD36R REAR VENT



**Figure 29 - Vertical Venting Configuration using One 90° Elbow (Model (V)CD36R with Vertical Round High Wind Termination)**



### Venting with Two 90° Elbows

Vertical (V <sub>1</sub> )	Horizontal (H <sub>1</sub> )	Vertical (V <sub>1</sub> )+ Vertical (V <sub>2</sub> )	Horizontal (H) + Horizontal (H <sub>2</sub> )
8' Min.	2' Max.	12' Min.	8' Max
8' Min.	2' Max.	14' Min.	11' Max
8' Min.	2' Max.	16' Min.	14' Max
8' Min.	2' Max.	18' Min.	17' Max
8' Min.	2' Max.	20' Min.	20' Max
8' Min.	2' Max.	40' Max.	20' Max

Note: Vertical (V<sub>1</sub>) + Vertical (V<sub>2</sub>) = 40' Max.  
Max. Horizontal Above 20' Vertical = 20'

**Figure 30 - Vertical Venting Configuration using Three 90° Elbows (Model (V)CD36R with Vertical Round High Wind Termination)**

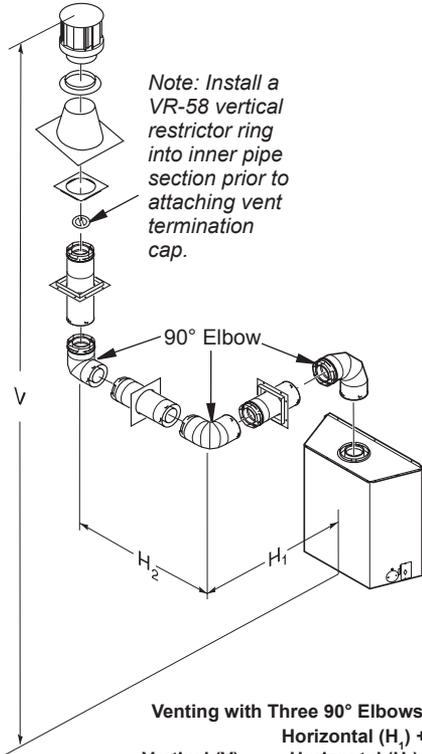
# VENTING INSTALLATION

*Continued*

## Vertical Termination Configurations for Top Vent

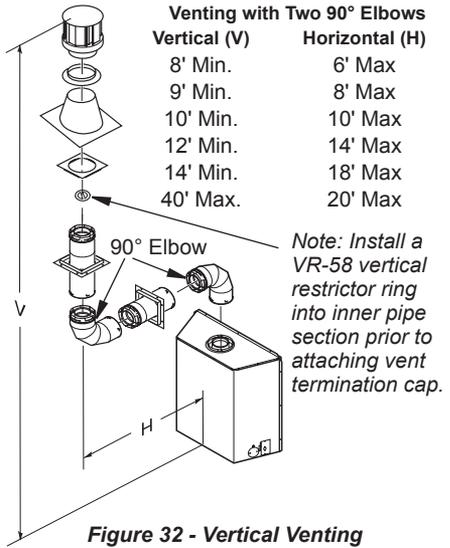
Figures 31 and 34 show four different configurations for vertical termination.

## VERTICAL VENT INSTALLATIONS USING MULTIPLE 90° ELBOWS (V)CD36T TOP VENT



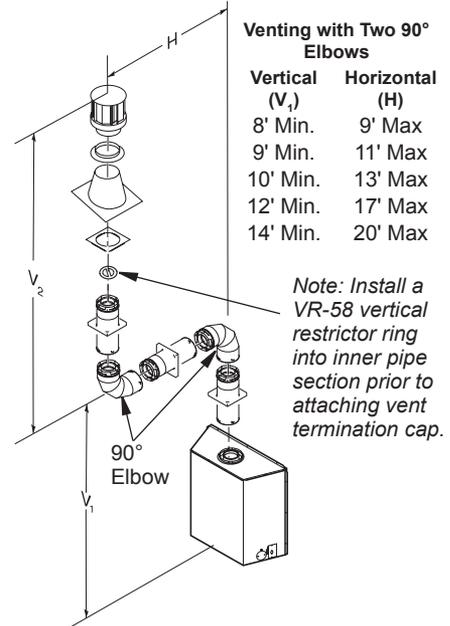
Vertical (V)	Horizontal (H <sub>1</sub> ) + Horizontal (H <sub>2</sub> )
8' Min.	5' Max
10' Min.	8' Max
12' Min.	11' Max
14' Min.	14' Max
16' Min.	17' Max
18' Min.	20' Max
40' Max.	20' Max

**Figure 31 - Vertical Venting Configuration using Three 90° Elbows (Model (V)CD36T with Vertical Round High Wind Termination)**



Vertical (V)	Horizontal (H)
8' Min.	6' Max
9' Min.	8' Max
10' Min.	10' Max
12' Min.	14' Max
14' Min.	18' Max
40' Max.	20' Max

**Figure 32 - Vertical Venting Configuration Using Two 90° Elbows (Model (V)CD36T with Vertical Round High Wind Termination)**



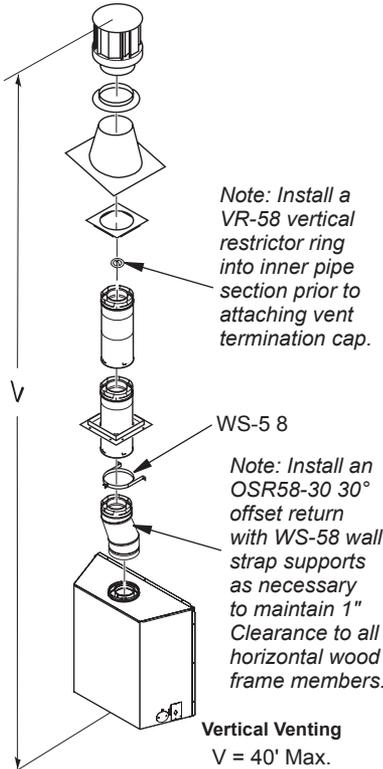
Vertical (V <sub>1</sub> )	Horizontal (H)
8' Min.	9' Max
9' Min.	11' Max
10' Min.	13' Max
12' Min.	17' Max
14' Min.	20' Max

*Note: Vertical (V<sub>1</sub>) + Vertical (V<sub>2</sub>) = 40' Max. Max. Horizontal Above 14' Vertical = 20'*

**Figure 33 - Vertical Venting Configuration Using Two 90° Elbows (Model (V)CD36T with Vertical Round High Wind Termination)**

# VENTING INSTALLATION

*Continued*



**Figure 34 - Vertical Venting Configuration with No Horizontal Run (Model (V)CD36T with Vertical Round High Wind Termination)**

## PARTS LIST FOR VENTING KITS AND COMPONENTS

### DESA (5"/8") Pipe & Vent Kits

Number	Description
P58-6	6" Section Double Wall Pipe, Galvanized
P58-12	12" Section Double Wall Pipe, Galvanized
P58-24	24" Section Double Wall Pipe, Galvanized
P58-36	36" Section Double Wall Pipe, Galvanized
P58-48	48" Section Double Wall Pipe, Galvanized
PA58-712	Adjustable 7"-12" Section Double Wall Pipe, Galvanized
E58-45	45° Elbow, Galvanized
E58-90	90° Elbow, Galvanized

Number	Description
VKG-58	Ground Floor Vent Kit, Galvanized (Includes: 45° Elbow, 7"-12" Adjustable Pipe, Wall Firestop, Horizontal Square Termination, 16 Screws)
VKGR-58	Ground Floor Vent Kit (Cottage Rear Vent) (Includes: 7"-12" Adjustable Pipe, Wall Firestop, Horizontal Square Termination, 12 Screws)
VKB-58	Basement Vent Kit, (Includes: 45° Elbow, 7"-12" Adjustable Pipe, Wall Firestop, Horizontal Square Termination, 4' Pipe, 90° Elbow, 20 Screws)
VKS-58	Snorkel Vent Kit, (Includes: 45° Elbow, 7"-12" Adjustable Pipe, Wall Firestop, 36" Snorkel Termination, 4' Pipe, 1' Pipe, 90° Elbow, 26 Screws)
VKRT-58	Roof Vent Kit (Cottage Top Vent) (Includes: 7"-12" Adjustable Pipe, Flue Restrictor, Vertical High Wind Termination, 2' Pipe, 4' Pipe, Firestop, Storm Collar, Roof Flashing [0/6 - 6/12], 26 Screws)
VKC-58	Corner Vent Kit, Galvanized (Includes 45° Elbow, 7"-12" Adjustable Pipe, Wall Firestop, Horizontal Square Termination, 6" Pipe, 90° Elbow, 18 Screws)
HHTK-58	High Wind Round Horizontal Termination Kit (Includes Round Termination, Wall Firestop, 45° Elbow)
HHT-58	High Wind Round Horizontal Termination Kit, Galvanized
HTS-58	Horizontal Square Termination, Galvanized
HTKS-58	Horizontal Square Termination Kit (Includes: Square Termination, Wall Firestop, 45° Elbow)
VT-58	Vertical Round Termination, Galv.
ST-58-14	14" Snorkel Termination, Galv.
ST-58-36	36" Snorkel Termination, Galv.
SC-58	Storm Collar, Galvanized
WF-58	Wall Firestop, Galvanized
RF-58-6	Roof Flashing - 0 to 6/12 Pitch, Galvanized
RF-58-12	Roof Flashing - 6/12 to 12/12 Pitch, Galvanized
VR-58	Vertical Restrictor, Galvanized
S-58	Vinyl Siding Standoff, Galvanized
WS-58	Wall Strap
CS-58	Cathedral Ceiling Support
FP-58	Firestop Plate
SF-58	Stucco Flashing - For use with HTS-58
RF-58	Flat Roof Flashing
OSR58-30	30° Offset Return

# FIREPLACE INSTALLATION

## ELECTRICAL SUPPLY CONNECTION

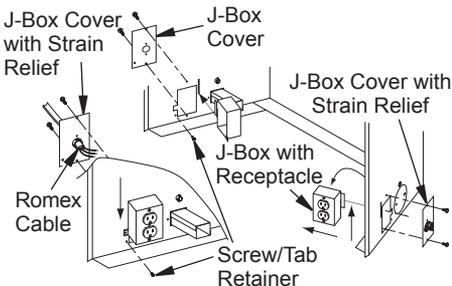
**⚠ CAUTION:** Disconnect the electrical power to the supply circuit before attempting to connect or service this appliance.

**⚠ WARNING:** This appliance, when installed must be electrically grounded in accordance with local code or in the absence of local code, with the current *National Electric Code, ANSI/NFPA 70*.

A pre-wired junction box receptacle with strain relief is provided on the right side of the cabinet for hard wiring the unit to a 15 Amp, 120VAC, 60Hz grounded branch circuit. If the installation demands that the electrical supply be connected from the left side, the entire receptacle box can be relocated to the left side by following these instructions:

*Note: If you do not need to relocate the junction box, to connect the electric supply follow steps 8 through 11 only:*

1. Remove 2 screws and outer cover with strain relief bushing on right side of cabinet (see Figure 35).
2. Remove inner retaining screw on junction box mounting tab.
3. Slide junction box up until screw mounting tab is lined up to notch in outer cabinet.
4. Swing the junction box out and slip retaining flange out through the slot in outer cabinet.



**Figure 35 - Relocating Junction Box Receptacle and Electrical Supply Connection**

5. Remove two screws and outer cover on the left side of the outer cabinet.
6. Reinsert junction box retaining flange through slot now on the left side and swing screw mounting tab back through notch as before.
7. Slide the junction box down till mounting tab holes line up and replace the inner retaining screw.
8. With junction box cover removed, pull the end of 3-wire Romex supply line through universal strain relief bushing on cover (see Figure 35).
9. Strip back the outer Romex to about 4" and connect black, white and green wires accordingly using 3 wire nut connectors.
10. Tuck tailing wires into junction box and replace junction box cover using 2 remaining screws.
11. Tighten down strain adjustment on universal bushing until Romex sheathing is secured.

The electrical connection is now complete.

## INSTALLING OPTIONAL BLOWER ACCESSORIES

**NOTICE:** If installing blower in an existing fireplace with gas connections, shut off gas supply and disconnect heater from gas supply. Contact a qualified service person to do this.

**⚠ WARNING:** If there is a duplex electrical outlet installed in the right side of the bottom of the fireplace base area, be sure that the electrical power to the outlet is turned off before proceeding with blower installation. Failure to do this may result in serious injury.

### Model BK Installation

Follow all instructions provided in the blower accessory kit.

1. Attach power cord to blower motor by firmly pushing two female terminals at end of power cord onto two spade terminals on blower motor (see Figure 36, page 23).

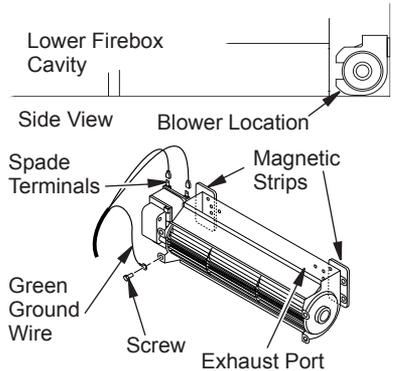
# FIREPLACE INSTALLATION

*Continued*

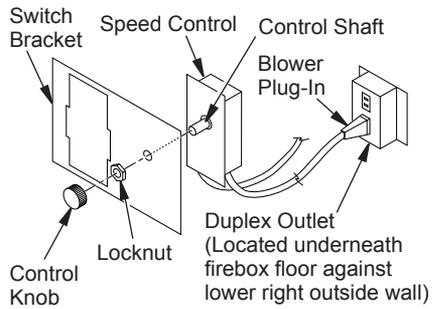
2. Attach green ground wire from power cord to blower housing using screw provided (see Figure 36). Tighten screws securely.
3. Place blower against lower rear wall of firebox outer wrapper with exhaust port directed upward. The blower will fit inside back opening and be held in position against back wall by magnets (see Figure 36).
4. Be certain that all wire terminals are securely attached to terminals on blower motor and that the screw retaining green ground wire is tight.
5. Mount speed control box by placing plastic control shaft through opening in switch bracket (see Figure 37) or ignition module bracket (see Figure 38).
6. While supporting speed control, secure control shaft with lock nut by pushing and turning lock nut with pliers clockwise until it is tight against front panel. Place control knob provided on shaft.
7. Turn on power to duplex outlet if previously turned off per the warning in column 2, page 22.
8. Plug in blower power cord.
  - a. If your firebox is installed as a free-standing unit with an accessory mantel, determine whether the power cord will exit left side or right side of firebox. Route power cord through exit hole and plug power cord into a wall receptacle near firebox.
  - b. If your firebox installation is recessed and/or pre-wired, plug power cord into duplex outlet provided. Refer to your firebox owner's manual for instructions on wiring duplex outlet.

**CAUTION: Never touch blower wheel while in operation.**

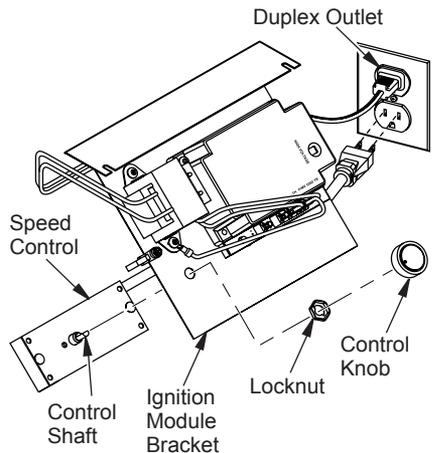
9. Check to make sure that power cord is completely clear of blower wheel and that there are no other foreign objects in blower wheel. Turn blower on and check for operation. Turn blower off by turning knob fully counterclockwise before continuing.
10. Peel off backing paper and stick supplied wiring diagram decal on firebox bottom approximately 12" in front of blower (see Figure 39, page 24).



**Figure 36 - Blower Model BK**



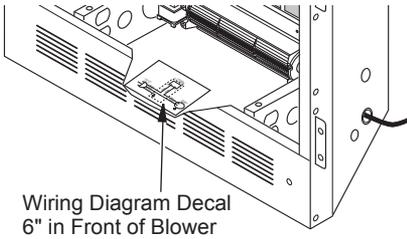
**Figure 37 - Attaching Speed Control to Firebox (Millivolt Models)**



**Figure 38 - Attaching Speed Control to Firebox (Electronic Models)**

# FIREPLACE INSTALLATION

Continued



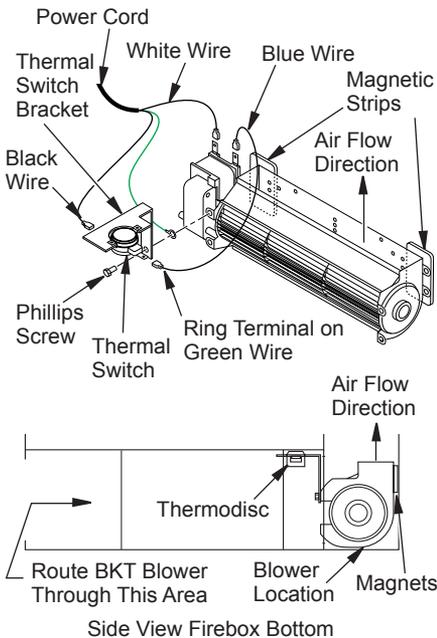
Wiring Diagram Decal  
6" in Front of Blower

**Figure 39 - Location of Wiring Diagram Decal (Model May Vary From Illustration)**

## Model BKT Installation

*Note: When installing BKT thermostatically-controlled blower, you must first secure the thermal switch bracket to blower if it has not already been factory installed.*

1. Place green ground wire with ring terminal between bottom hole on thermal switch bracket and top ear hole on blower assembly. Insert Phillips screw into all three pieces and tighten securely (see Figure 40).



**Figure 40 - Blower Model BKT**

2. Connect wire harness and power cord terminals. Connect blue jumper wire to blower motor terminal and right side terminal of thermal switch. Connect black wire to left side of thermal switch and white wire to other remaining blower motor terminal.

*Note: The power cord outer insulation sleeve may have to be stripped slightly to allow enough wire length to reach and make all connections. DO NOT trim excessive length away. Just enable enough to make all connections securely.*

3. Place blower against lower rear wall of firebox outer wrapper with exhaust port directed upward and thermodisc positioned up near fireplace bottom. Thermodisc must be oriented near fireplace bottom as shown in Figure 40 in order to sense temperature and properly operate. Blower will be held in position against back wall by magnets incorporated onto blower housing (see Figure 40).
4. Be certain that all wire terminals are securely attached to terminals on blower motor and thermal switch and that the screw for thermodisc bracket and green ground wire is tight.
5. Mount speed control box by placing plastic control shaft through opening in switch bracket (see Figure 37, page 23) or ignition module bracket (see Figure 38, page 23).
6. While supporting speed control, secure control shaft with lock nut by pushing and turning lock nut with pliers clockwise until it is tight against mounting plate. Place control knob provided on shaft (see Figure 37 or 38, page 23).
7. Check to make sure that power cord is completely clear of blower wheel and that there are no other foreign objects in blower wheel. Also double check all wire leads and make sure wire routing is not pinched or in a precarious position. Correct accordingly.
8. Turn on power to duplex outlet if previously turned off per warning in column 2, page 22.
9. Plug in blower power cord to duplex outlet.

# FIREPLACE INSTALLATION

Continued

- The blower will only run when speed control knob is in the ON position and thermal switch senses temperature after fireplace begins to heat up. Blower speed can be adjusted by rotating control knob. To turn off, turn knob fully counterclockwise until it clicks off. If blower is ON and has been running with fireplace operating, blower will continue to run for a short time after fireplace has been turned off. As thermal switch cools down, blower shuts down automatically.
- Peel off backing paper and stick supplied wiring diagram decal on firebox bottom approximately 12" in front of blower (see Figure 39, page 24).

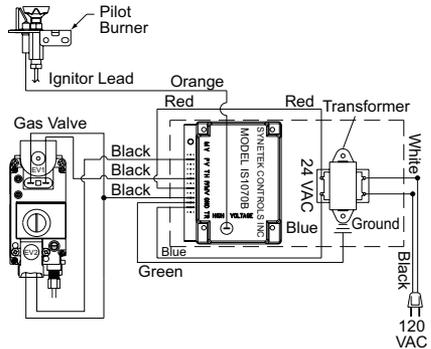


Figure 43 - Electronic Ignition Wiring Diagram

## WIRING DIAGRAMS

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

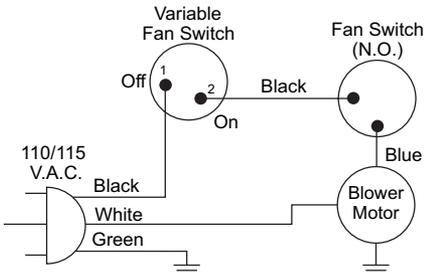


Figure 41 - Blower Wiring Diagram for Thermostat-Controlled Models

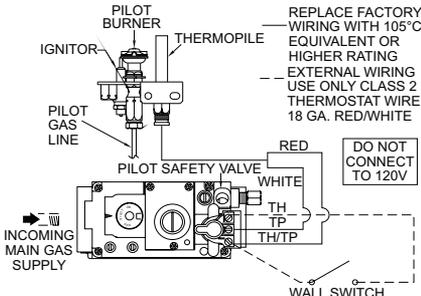


Figure 42 - Millivolt Ignition Wiring Diagram

## INSTALLING OPTIONAL WALL MOUNT SWITCH - GWMS2

- Connect one terminal of 25 ft. wire for wall switch to TPTH terminal on valve. Connect remaining wire terminal to TH terminal on valve. Make sure wire terminals are in positions on unit as pictured in Figure 44. If wires are not connected as shown switch will not work.
- Route 25 foot wire through openings provided on sides of burner system to a convenient location to mount your switch.
- Connect one bare wire end to each terminal of GWMS2 wall switch.
- Install wall switch and cover in wall.

**IMPORTANT:** Do not use any other wire than that provided with the GWMS2 wall switch kit. Do not exceed 15 feet of distance from valve connection. Using wire of higher gauge or turns or exceeding the minimum distance will increase resistance at control valve causing unreliable performance of fireplace controls.

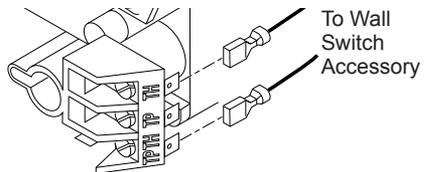


Figure 44 - Connecting Wall Switch to Control Valve

# FIREPLACE INSTALLATION

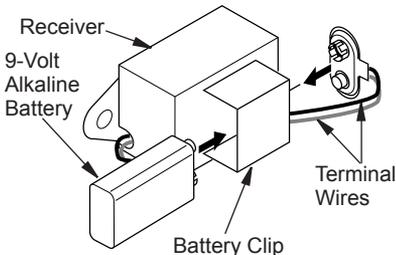
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## INSTALLING OPTIONAL WIRELESS HAND-HELD REMOTE CONTROL FOR MILLIVOLT IGNITION - HRC100 AND HRC200 SERIES

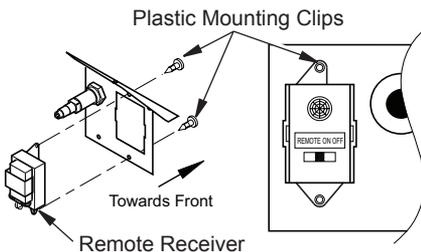
**NOTICE: Use only alkaline batteries (not included).**

### Installing Remote Receiver

1. Open bottom louver and locate switch bracket on right side.
2. Locate battery clip mounted on back of receiver. Slide a 9-volt alkaline battery (not included) through clip
3. Attach terminal wires to battery. (see Figure 45).
4. Connect wires from receiver to TH and TPTH to control valve (see Figure 44, page 25).
5. Locate two plastic mounting clips provided with kit.
6. Use clips to mount receiver on remote mounting bracket as shown in Figure 46.



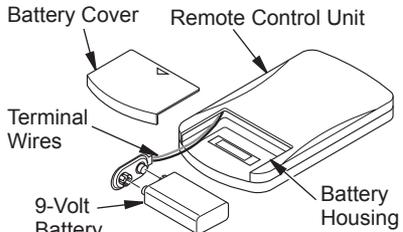
**Figure 45 - Attaching Alkaline Battery to Receiver**



**Figure 46 - Mounting Remote Receiver to Bracket**

### Installing 9-Volt Alkaline Battery in Hand-Held Remote Control Unit

1. Remove battery cover on back of remote control unit.
2. Attach terminal wires to a 9-volt alkaline battery (not included). Place battery into battery housing.
3. Replace battery cover onto remote control unit.

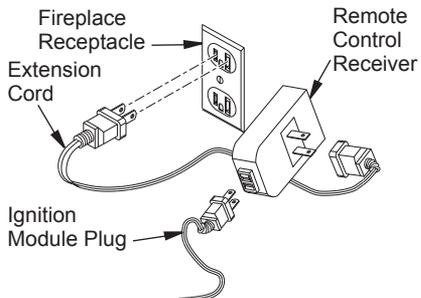


**Figure 47 - Installing Battery in Hand-Held Remote Control Unit**

## INSTALLING OPTIONAL WIRELESS HAND-HELD REMOTE CONTROL FOR ELECTRONIC IGNITION

### Installing and Activating Remote Receiver

1. Open bottom louver and locate plug receptacle. Plug receptacle is located either on right or left side of cabinet.
2. The WRC model receiver does not require a battery. To install receiver plug short extension cord into fireplace receptacle. Plug receiver unit into extension cord. Plug ignition module plug into receiver unit (see Figure 48).
3. Activate remote handset battery by removing insulating tab on back of handset (see Figure 49, page 27). Battery is included pre-installed.

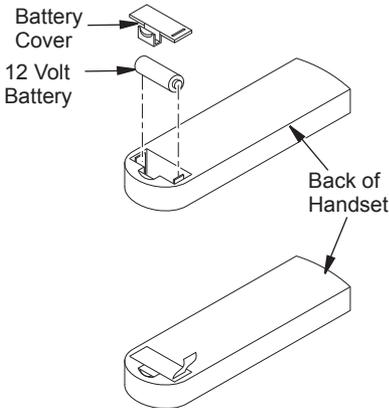


**Figure 48 - Connecting WRC Remote Control Electronic**

# FIREPLACE INSTALLATION

*Continued*

- Once battery is activated unit is ready to use.
- Replace bottom louver panel.



**Figure 49 - Installing Battery Into Handset WRC**

## HIGH ALTITUDE INSTALLATION

Your DESA Heating, LLC direct-vent fireplace has been tested and approved in the USA for elevations from 0-2000 feet (610 m).

High altitude models as indicated by the letter suffix (-HA) are equipped with specific gas controls for installation above 4000 feet.

**IMPORTANT:** Fireplaces when factory equipped for use at high altitude can not be converted for use with propane/LP gas. When installing a non-high altitude fireplace at an elevation above 2000 feet (610 m) (in the USA), you may need to decrease the input rating by changing the existing burner orifice to a smaller size. Reduce input 4% for each 1000 feet (305 m) above sea level. Check with your local gas company for proper derate procedure and orifice size.

Consult your local gas company to help determine the proper orifice for your location.

For assistance with any high altitude installation call DESA Heating, LLC at 1-866-672-6040.

## CHECK GAS TYPE

Use proper gas type for the fireplace unit you are installing. If your gas supply is not correct, do not install fireplace. See retailer where you purchased the fireplace for proper fireplace according to your gas type or to purchase gas conversion kit (see [Accessories](#), page 52).

## INSTALLING GAS PIPING TO FIREPLACE LOCATION

**⚠ WARNING: A qualified service person must connect fireplace to gas supply. Follow all local codes.**

**⚠ CAUTION: For propane/LP units, never connect fireplace directly to the propane/LP supply. This heater requires an external regulator (not supplied). Install the external regulator between the fireplace and propane/LP supply.**

## Installation Items Needed

Before installing fireplace, make sure you have the items listed below.

- external regulator (supplied by installer)
- piping (check local codes)
- sealant (resistant to propane/LP gas)
- equipment shutoff valve \*
- test gauge connection \*
- sediment trap
- tee joint
- pipe wrench
- approved flexible gas line with gas connector (if allowed by local codes)

\* A CSA design-certified equipment shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the CSA design-certified equipment shutoff valve from your retailer.

For propane/LP connection only, the installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11" and 14" of water. If you do not reduce incoming gas pressure, fireplace regulator damage could occur. Install external regulator with the vent pointing down as shown in Figure 50, page 28. Pointing vent down protects it from freezing rain or sleet.

# FIREPLACE INSTALLATION

Continued

**CAUTION:** Use only new, black iron or steel pipe. Internally-tinned copper tubing may be used in certain areas. Check your local codes. Use pipe of 1/2" diameter or greater to allow proper gas volume to fireplace. If pipe is too small, undue loss of volume will occur.

Installation must include an equipment shutoff valve, union and plugged 1/8" NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from fireplace (see Figure 51).

**IMPORTANT:** Install main gas valve (equipment shutoff valve) in an accessible location. The main gas valve is for turning on or shutting off the gas to the appliance.

Check your building codes for any special requirements for locating equipment shutoff valve to fireplaces.

Apply pipe joint sealant lightly to male NPT threads. This will prevent excess sealant from going into pipe. Excess sealant in pipe could result in clogged fireplace valves.

**WARNING:** Use pipe joint sealant that is resistant to liquid petroleum (LP) gas.

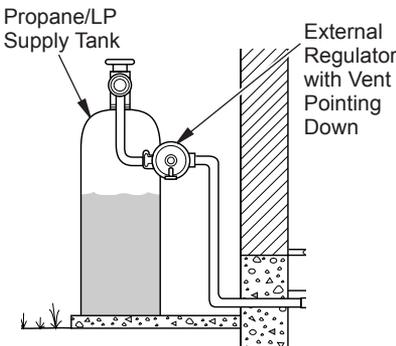


Figure 50 - External Regulator with Vent Pointing Down (Propane/LP Only)

We recommend that you install a sediment trap/drip leg in supply line as shown in Figure 51. Locate sediment trap/drip leg where it is within reach for cleaning. Install in piping system between fuel supply and fireplace. Locate sediment trap/drip leg where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into fireplace gas controls. If sediment trap/drip leg is not installed or is installed wrong, fireplace may not run properly.

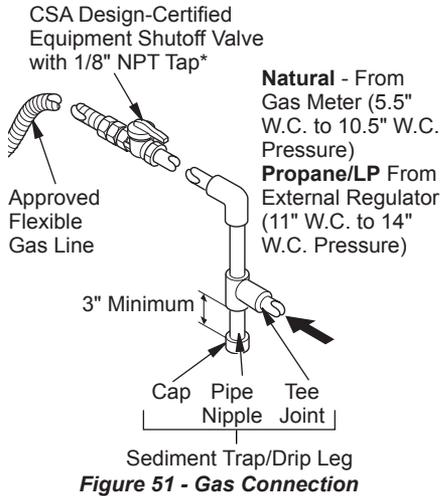


Figure 51 - Gas Connection

\* The CSA design-certified equipment shutoff valve may be supplied with the appliance or you can purchase it from your retailer.

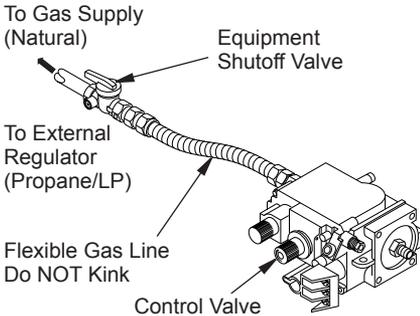
## CONNECTING FIREPLACE TO GAS SUPPLY

### Installation Items Needed

- 5/16" hex socket wrench or nut-driver
  - sealant (resistant to propane/LP gas, not provided)
1. Open lower louver door panel by gently pulling forward.
  2. Route flexible gas line (provided by installer) from equipment shutoff valve to fireplace. Route flexible gas supply line through one of the access holes on side of fireplace.
  3. Attach flexible gas line from gas supply to control valve (see Figure 52, page 29).
  4. Check all gas connections for leaks. See Checking Gas Connections, page 29.

# FIREPLACE INSTALLATION

*Continued*



**Figure 52 - Connecting Flexible Gas Line to Millivolt Valve**

## CHECKING GAS CONNECTIONS

**⚠ WARNING: Test all gas piping and connections, internal and external to unit, for leaks after installing or servicing. Correct all leaks at once.**

**⚠ WARNING: Never use an open flame to check for a leak. Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak. Correct all leaks at once.**

### PRESSURE TESTING GAS SUPPLY PIPING SYSTEM

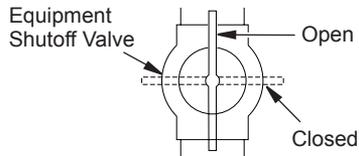
**Test Pressures In Excess Of 1/2 PSIG (3.5 kPa)**

1. Disconnect fireplace and its individual equipment shutoff valve from gas supply piping system. Pressures in excess of 1/2 psig (3.5 kPa) will damage fireplace gas regulator.
2. Cap off open end of gas pipe where equipment shutoff valve was connected.
3. Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas fireplace or opening main gas valve located on or near gas meter for natural gas fireplace or using compressed air.
4. Check all joints of gas supply piping system. Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak. Retighten all fittings.

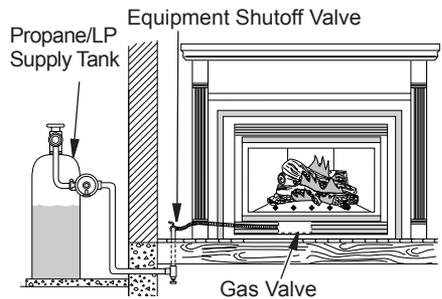
5. If leaks still exist, turn off gas supply and call a qualified service person.
6. Reconnect fireplace and equipment shutoff valve to gas supply. Check reconnected fittings for leaks.

### Test Pressures Equal To or Less Than 1/2 PSIG (3.5 kPa)

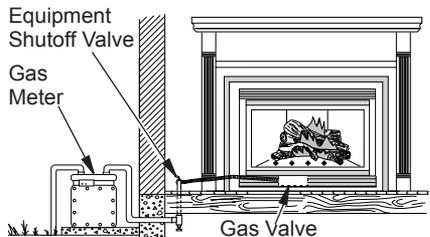
1. Close equipment shutoff valve (see Figure 53).
2. Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas fireplace or opening main gas valve located on or near gas meter for natural gas fireplace or using compressed air.
3. Check all joints from propane/LP supply tank or gas meter to equipment shutoff valve (see Figure 54 or Figure 55). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak. Retighten all fittings.
4. If leaks still exist, turn off gas supply and call a qualified service person.



**Figure 53 - Equipment Shutoff Valve**



**Figure 54 - Checking Gas Joints for Propane/LP Gas Fireplace**



**Figure 55 - Checking Gas Joints for Natural Gas Fireplace**

# FIREPLACE INSTALLATION

Continued

## PRESSURE TESTING FIREPLACE GAS CONNECTIONS

1. Open equipment shutoff valve (see Figure 53, page 29).
2. Open propane/LP supply tank valve for propane/LP fireplace or main gas valve located on or near gas meter for natural gas fireplace.
3. Make sure control knob of fireplace is in the OFF position.
4. Check all joints from equipment shutoff valve to gas valve (see Figure 54 or Figure 55 on page 29). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak. Retighten all fittings
5. If leaks still exist, turn off gas supply and call a qualified service person.
6. Light fireplace (see *Operation*, page 32). Check all other internal joints for leaks.
7. Turn off fireplace (see *To Turn Off Gas to Appliance*, page 33 or 36 depending on model).

## REMOVING/REPLACING GLASS DOOR

**CAUTION:** Do not operate this fireplace with a broken glass door panel or without the glass door panel securely in place. For replacement part information see *Replacement Parts*, page 45.

**CAUTION:** Wear gloves and safety glasses while handling or removing broken glass. Do not remove if glass is hot. Keep children and pets away from glass.

**WARNING:** If fireplace has been running, turn off and unplug fireplace. Let cool before removing glass door or louvers.

### Removing Lower Louver Access Panel

1. Grasp lower louver panel and pull up until hanger brackets release from door pins (see Figure 56).
2. Swing louver panel out until it clears fireplace opening.

3. Pull entire panel out until bottom tabs are free of slot openings in lower face frame.

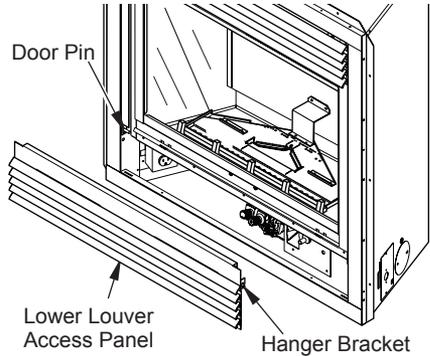


Figure 56 - Removing Lower Louver Access Panel

### Removing Top Louver Trim Panel

1. Grasp two hanger brackets at bottom and pull up until hanger brackets release from door pins (see Figure 57).
2. Swing out bracket ends until upper panel tabs can be angled out of slot openings in upper face frame.
3. Pull entire louver trim panel out of face frame.

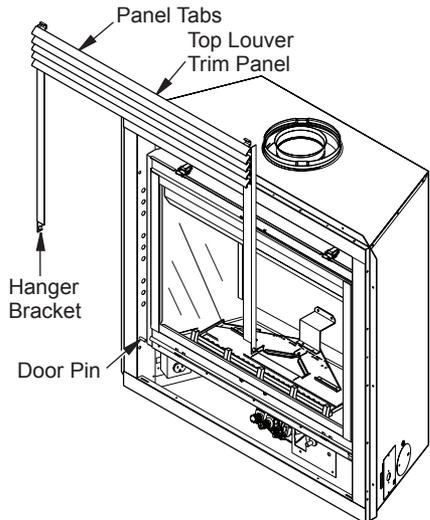


Figure 57 - Removing Top Louver Trim Panel

# FIREPLACE INSTALLATION

Continued

**⚠ WARNING:** If fireplace has been running, turn off and let cool before accessing or servicing the unit.

**⚠ WARNING:** Handle glass door panel with care. Do not strike, slam, or otherwise abuse glass. Do not operate fireplace with glass door removed, cracked, or broken.

## Removing Glass Door

If replacement of glass is necessary, the entire assembly, glass and frame, must be replaced. If glass is broken, wear gloves and tape remaining fragments onto frame.

1. Remove lower louver panel (see Removing Lower Louver Access Panel and Figure 56, page 30).
2. Remove top louver trim panel (see Removing Top Louver Trim Panel and Figure 57, page 30).
3. Hold glass frame with one hand and with other hand unlock two door latches found on top of firebox to release tension on door frame (see Figure 58).
4. Unhook locking clasp from tabs on door frame. With both hands swing door panel out while pivoting lower frame on lower retaining bracket.
5. Lift lower frame tabs out from positioning slots found on lower frame retaining bracket (see Figure 58).

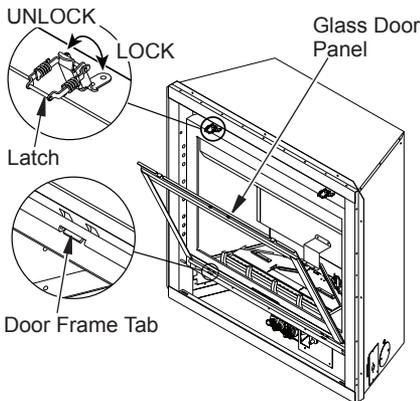


Figure 58 - Removing/Replacing Glass Door

6. Remount new frame in reverse order by placing positioning tabs on glass frame into slots in retaining bracket then swinging door into sealed position and locking two latches in place.
7. Replace top louver panel. Replace lower louver panel.

## INSTALLING LOGS, LAVA ROCK AND GLOWING EMBERS

A 4 piece ceramic log set comes packed inside unit firebox. Removal of glass door is necessary to unpack and assemble logs and add hearth treatments. Follow steps under Removing/Replacing Glass Door, page 30 to access logs and burner.

Assemble logs and add burner treatments as follows:

1. Position base log onto burner log mounts (see Figure 59). *Note:* Cut out on bottom should fit over mounts and base log should be positioned against rear panel.
2. Position holes on bottom of rear log over pins on base log (Figure 59).
3. Position top left log and top right log onto rear log and base log as shown in (see Figure 59).

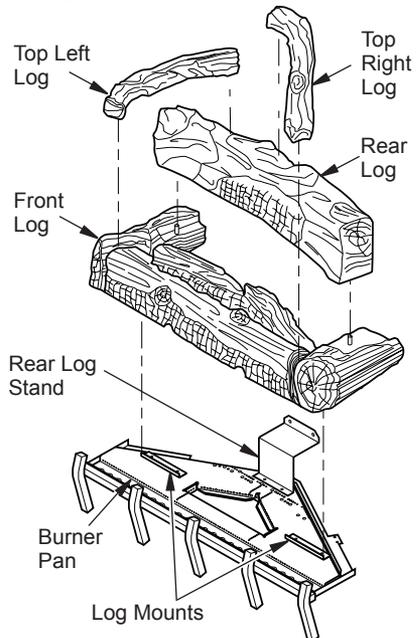


Figure 59 - Installing Logs

# FIREPLACE INSTALLATION

Continued

**WARNING:** The glass door must be securely in place before running this fireplace. Do not run this fireplace if glass is missing or broken.

- Open bag of ember materials.
  - Break apart about quarter sized pieces and place a single layer along full length of ember tray to hide bottom edge of base log (see Figure 60).
  - Replace glass door and lower panels.
- See *Removing/Replacing Glass Door*, page 30.

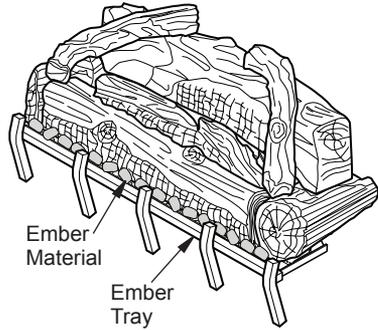


Figure 60 - Applying Ember Material

## OPERATION

**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.

- This appliance is equipped with an ignition device which automatically lights the pilot. Do not light pilot by hand.
- 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.
- 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.
  - 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.

## MILLIVOLT MODELS

**LIGHTING  
INSTRUCTIONS**

- STOP! Read the safety information above.
- Open lower louver panel.
- Turn off all electric power to fireplace.
- Push in gas control knob slightly and turn clockwise to OFF (see Figure 61).
- 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 above. If you don't smell gas go to the next step.

- Pilot is located by main burner and should not require accessing for lighting.
- Turn gas control knob counterclockwise to PILOT.

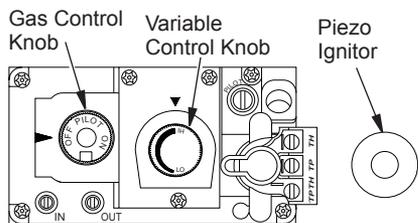


Figure 61 - Control Valve

## OPERATION *Continued*

### MILLIVOLT MODELS

- Push in gas control knob all the way and hold. Immediately light pilot by repeatedly pressing the piezo spark ignitor until a flame appears. Continue to hold for about one (1) minute after pilot is lit. Release gas control knob and it will pop back. Pilot should remain lit. If it goes out, repeat steps 5 through 8.
  - If gas control knob does not pop up when released, stop, turn off gas supply and immediately call your service technician or gas supplier.
  - If pilot will not stay lit after several tries, turn gas control knob to OFF and call your service technician or gas supplier.
- Turn on all electric power to fireplace.
- Turn gas control knob counterclockwise to ON.
- This valve is equipped with a HI/LO feature. Set fireplace input as desired.
- To leave pilot lit and shut off burners only, turn gas control knob clockwise to the PILOT position. Set wall switch or HRC selector switch to the OFF position.
- Close lower louver panel.

### TO TURN OFF GAS TO APPLIANCE

- Open lower louver panel.
- Set wall switch to the OFF position or the HRC selector switch (when equipped) to prevent draining the battery.
- Turn off all electric power to appliance if service is to be performed.
- Push in gas control knob slightly and turn clockwise to OFF.
- Close lower louver panel.
- Close equipment shutoff valve (see Figure 53, page 29).

### MANUAL LIGHTING PROCEDURE

- Remove glass door (see *Removing/Replacing Glass Door*, page 30).
- Follow steps 1 through 8 under *Lighting Instructions*, page 32.
- Press gas control knob and light pilot with match.

- Keep gas control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release gas control knob. Follow steps 9 through 12 under *Lighting Instructions*, column 1.
- Replace glass door (see *Removing/Replacing Glass Door*, page 30).

### OPTIONAL HAND-HELD REMOTE OPERATION

*Note: All remote control accessories must be purchased separately (see *Accessories*, page 52). Follow instructions included with the remote control.*

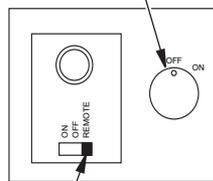
**NOTICE: You must light the pilot before using the hand-held remote control unit. See *Lighting Instructions*, page 30.**

After lighting, let pilot flame burn for about one minute. Turn control knob to ON position. Adjust flame adjustment knob anywhere between HI and LO. Slide selector switch to the REMOTE position (see Figure 62).

*Note: Burner may light if hand-held remote was on when selector switch was last turned off. You can now turn burner on and off with hand-held remote control unit.*

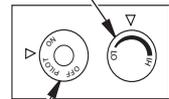
**IMPORTANT:** Do not leave selector switch in the REMOTE or ON position when pilot is not lit. This will drain the battery.

Blower Control Knob  
(Optional Accessory)



Selector Switch in Remote Position

Variable Control Knob



Gas Control Knob in ON Position

**Figure 62 - Setting the Selector Switch, Gas Control Knob and Variable Control Knob for Remote Operation**

## OPERATION *Continued*

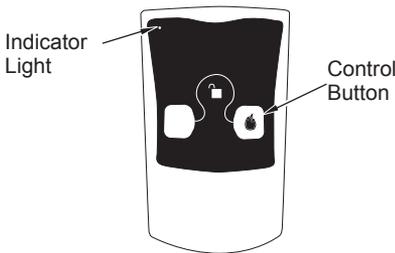
### MILLIVOLT MODELS

#### ON/OFF SERIES MODEL HRC100

Hold control button on the hand-held remote until burner turns on. Hold the control button again until burner turns off (see Figure 63).

TO LOCK press both buttons on hand-held remote control until light stops flashing. Hand-held remote control is now locked. If the fire is on it will be turned off automatically. In the locked state, the light will not light up when any button is pressed.

TO UNLOCK press both buttons together on hand-held remote control until the light stops flashing. The hand-held remote is now unlocked.



**Figure 63 - On/Off Hand-Held Remote Control Unit HRC100**

#### THERMOSTAT SERIES MODEL HRC200

The hand-held remote can be operated using either the manual mode (MANU) or thermostatic mode (AUTO) (see Figure 64). To select Fahrenheit/Centigrade mode display, carefully press the °C/°F mode button with the end of a paper clip or similar blunt object.

##### Manual Mode

1. Press the POWER and LOCK buttons together to turn on the hand-held remote control.
2. Press the MANU button to turn on the fireplace.
3. Press the POWER and LOCK buttons together to turn off the fireplace.

##### Auto (Thermostatic) Mode

1. Press the POWER and LOCK buttons together to turn on the hand-held remote control.
2. Press AUTO button to select this mode.
3. Set the desired room temperature by pressing the TEMP + or - buttons.
4. Press the POWER and LOCK buttons together to turn off the fireplace

*Note: Do not leave hand-held remote in the AUTO mode close to the fireplace. The radiant*

*heat from fireplace will turn off the fireplace. Ideally, place the hand-held remote in the center of the room facing towards the fireplace.*

*Note: Do not hold the hand-held remote for a long time. Body temperature will affect its operation in the AUTO mode.*

##### Safety Features

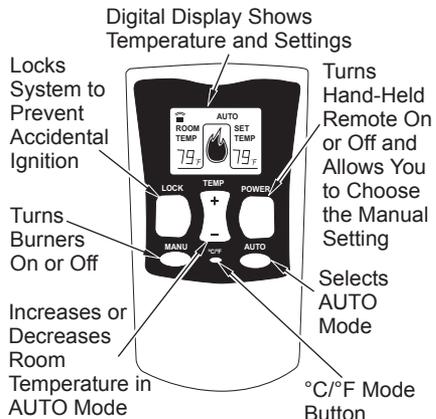
When away from home for an extended period of time or as a child safety feature to prevent accidental ignition of the fireplace, the receiver ON/OFF/REMOTE switch should be in the OFF position.

##### Auto Shutoff Feature

1. If the average room temperature reaches a range of 82° F (28° C) to 92° F (33° C), the hand-held remote control will perform a safety override and shut the fireplace off. This feature is not available in the MANU mode.
2. The receiver continuously receives signals from the hand-held remote to control the room temperature. If the hand-held remote is misplaced, obstructed or for any reason cannot transmit to the receiver, the receiver will shut off the fireplace. This will occur in 8 or more minutes depending upon location of remote transmitter and strength of batteries.

##### Key Pad Lock Feature

This feature allows the user to lock/unlock the keypad on the hand-held remote in the MANU or AUTO mode to prevent inadvertent operation (i.e. children operating the hand-held remote control, etc.). The keypad is locked in either on or off. Press the POWER and LOCK buttons together to turn the unit on or off.



**Figure 64 - Thermostat Hand-Held Remote Control Unit HRC200**

## OPERATION *Continued*

### MILLIVOLT MODELS

#### OPERATING OPTIONAL GWMT1 - WALL MOUNTED THERMOSTAT

**⚠ WARNING: Do not connect the thermostat to a power source. Electrical shock and/or a fire hazard will occur.**

Light the fireplace as instructed in *Lighting Instructions* on page 32. Set wall thermostat to desired temperature.

This thermostat has been electronically calibrated at the factory and requires no adjustment or leveling.

Upon installation, the thermostat must be allowed to stabilize at room temperature for a minimum of 30 minutes for proper operation.

To turn the fireplace off, adjust thermostat to the lowest setting and turn the gas control knob back to PILOT. The pilot will remain lit.

**IMPORTANT:** To turn the pilot off, turn the gas control knob on the heater to the OFF position.

#### OPERATING OPTIONAL BLOWER ACCESSORY

Locate blower controls by opening lower louver panel on fireplace. Blower controls are located on right side of switch bracket to left just inside louver panel.

The BK manual blower and BKT thermostatically-controlled blower have an ON setting and an OFF setting. The blower will only run when the switch is in the ON position. In the OFF position, blower will not operate.

*Note for BKT Only: If you are using BKT blower with optional thermostat (wall mounted or remote control) for the fireplace, your fireplace and blower will not turn on and off at the same time. The fireplace may run for several minutes before blower turns on. After heater modulates to the pilot position, the blower will continue to run. The blower will shut off after firebox temperature decreases.*

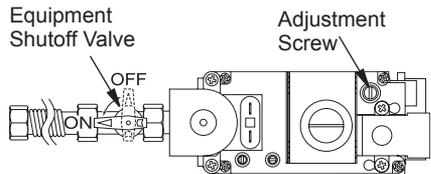
The blower helps distribute heated air from the fireplace. Periodically check louvers of firebox and remove any dust, dirt or other obstructions that will hinder the flow of air.

### ELECTRONIC IGNITION MODELS

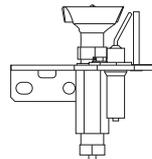
#### LIGHTING INSTRUCTIONS

1. STOP! Read the safety information on page 32.
2. Turn off all electrical power to fireplace.
3. Turn wall switch to the OFF position.
4. Open lower louver panel.
5. Turn equipment shutoff valve clockwise ↻ to the OFF position (see Figure 65). 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 page 32. If you don't smell gas go to the next step.
7. Turn equipment shutoff valve counter-clockwise ↻ to the ON position. Do not force.
8. Close lower louver panel.
9. Turn on all electric power to fireplace.
10. Turn wall switch to the ON position.
11. Visually locate the pilot. The ignitor should begin to spark and the main burner should ignite once flame appears at pilot.

- When lighting appliance for the first time each season, it may take several attempts before the supply gas can reach the pilot and main burner.
- If the appliance will not stay lit after several attempts, follow the instructions *To Turn Off Gas To Appliance*, page 36, and call your service technician or gas supplier.



**Figure 65 - Turning Equipment Shutoff Valve to the OFF Position**



**Figure 66 - Pilot**

## OPERATION *Continued*

### ELECTRONIC IGNITION MODELS

**NOTICE:** During initial operation of a new heater, the burning of residues from the manufacturing process of the firebox and logs will produce a paper-burning smell and orange flames. Open a window for the first few hours of operation to adequately vent this smell.

#### TO TURN OFF GAS TO APPLIANCE

1. Turn off wall switch.
2. Turn off all electric power to appliance if service is to be performed.
3. Open lower louver panel.
4. Turn equipment shutoff valve clockwise  to OFF. Do not force.
5. Close lower louver panel.

#### OPTIONAL WIRELESS REMOTE OPERATION

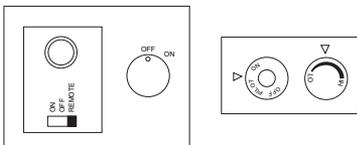
*Note: The WRC receiver and hand-held remote control kit must be purchased separately (see Accessories, page 52). Follow installation instructions included with the remote control.*

1. Turn equipment shutoff valve to ON position. You can now turn burner on and off with the-held remote unit.

**IMPORTANT:** Be sure to press the ON/OFF buttons on hand-held remote control unit for up to 3 seconds to assure proper operation.

2. Press the ON/OFF button to turn burner on and off.

**IMPORTANT:** Do not leave selector switch in the REMOTE or ON position when the pilot is not lit. This will drain the battery.



**Figure 67 - Setting the Selector Switch, Gas Control Knob and Variable Control Knob for Remote Operation**

#### OPERATING OPTIONAL GWMT1 - WALL MOUNTED THERMOSTAT

**⚠ WARNING:** Do not connect the thermostat to a power source. Electrical shock and/or a fire hazard will occur.

Light the fireplace as instructed in Lighting Instructions on page 35. Set wall thermostat to desired temperature.

This thermostat has been electronically calibrated at the factory and requires no adjustment or leveling.

Upon installation, thermostat must be allowed to stabilize at room temperature for a minimum of 30 minutes for proper operation.

To turn fireplace off, adjust thermostat to the lowest setting and turn gas control knob back to PILOT. The pilot will remain lit.

**IMPORTANT:** To turn pilot off, turn gas control knob on heater to the OFF position.

#### OPERATING OPTIONAL BLOWER ACCESSORY

Locate blower controls by opening lower louver panel on fireplace. Blower controls are located on the right side of switch bracket to the left just inside louver panel.

The BK manual blower and BKT thermostatically-controlled blower have an ON setting and an OFF setting. The blower will only run when switch is in the ON position. In the OFF position, blower will not operate.

**Note for BKT Only:** *If you are using BKT blower with optional thermostat (wall mounted or remote control) for the fireplace, your fireplace and blower will not turn on and off at the same time. The fireplace may run for several minutes before blower turns on. After heater modulates to the pilot position, the blower will continue to run. The blower will shut off after the firebox temperature decreases.*

The blower helps distribute heated air from the fireplace. Periodically check louvers of firebox and remove any dust, dirt or other obstructions that will hinder the flow of air.

# INSPECTING BURNERS

Check pilot flame pattern and burner flame patterns often.

## PILOT ASSEMBLY

The pilot assembly is factory preset for the proper flame height. Alterations may have occurred during shipping and handling. Call a qualified service person to readjust the pilot if necessary.

The position and pattern of the pilot flames in relation to the sensing devices should be as shown in Figures 68 and 69 depending on model.

If you pilot assembly does not meet these requirements:

- turn fireplace off (see [To Turn Off Gas to Appliance](#), page 33 or 36 depending on model)
- see [Troubleshooting](#), page 39

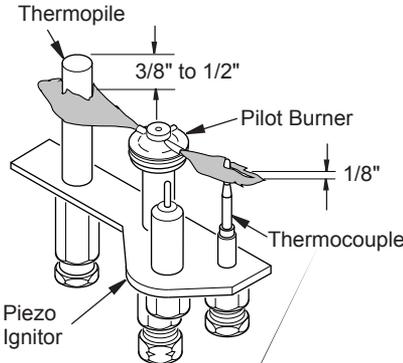


Figure 68 - Pilot Assembly (Millivolt)

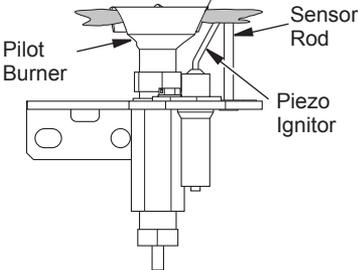


Figure 69 - Pilot Assembly (Electronic)

## BURNER FLAME PATTERN

Burner flames will be steady; not lifting or floating. Flame patterns will be different from unit to unit and will vary depending on installation type and weather conditions.

If the vent configuration is installed incorrectly, the flames will lift or "ghost". This can be dangerous. Inspect the flames after installation to ensure proper installation and performance. Figure 68 shows a typical flame pattern.

If burner flame pattern differs from that described:

- turn fireplace off (see [To Turn Off Gas to Appliance](#), page 33 or 36 depending on model)
- see [Cleaning and Maintenance](#), page 38

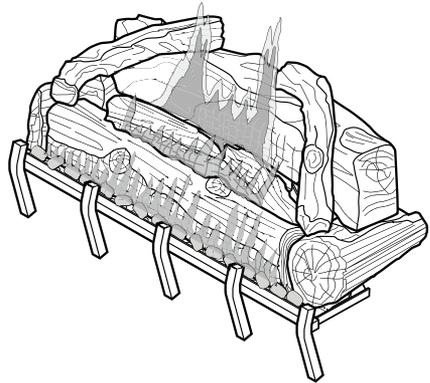


Figure 70 - Typical Flame Pattern

## CLEANING AND MAINTENANCE

**⚠ WARNING:** Turn off fireplace and let cool before cleaning.

**⚠ CAUTION:** You must keep control areas, burners and circulating air passageways of fireplace clean. Inspect these areas of fireplace before each use. Have fireplace inspected yearly by a qualified service person. Fireplace may need more frequent cleaning due to excessive lint from carpeting, bedding material, pet hair, etc.

### GLASS DOOR

**⚠ WARNING:** Handle glass door panel with care. Do not strike, slam or otherwise abuse glass. Do not operate fireplace with the glass door unlatched, removed, cracked or broken.

**⚠ WARNING:** Do not use abrasive cleaners as this may damage glass. Use a nonabrasive household glass cleaner to clean glass. Do not clean glass when hot.

Glass must be cleaned periodically. During start-up it is normal for condensation to form on the inside of the glass causing lint, dust and other airborne particles to cling to the glass surface. During initial start-up a slight film may form on the glass due to paint curing. The glass should be cleaned several times with a non-ammonia, nonabrasive household cleaner and warm water after the first two weeks of operation. Thereafter, clean the glass two or three times during each heating season, depending on the usage and circumstances present. Refer to [Removing/Replacing Glass Door](#), page 29 of this manual when removing glass door for cleaning.

**⚠ WARNING:** Only parts supplied by the manufacturer should be used when replacing broken or damaged glass door panel (see [Replacement Parts](#), page 45). This glass door panel is a complete unit. No substitute materials may be used.

**⚠ CAUTION:** Wear gloves and safety glasses while handling or removing broken glass. Do not remove if glass is hot. Keep children and pets away from glass.

If glass has been broken, carefully remove glass door (see [Removing/Replacing Glass Door](#), page 30). Vacuum all glass pieces with a shop vac.

**⚠ CAUTION:** Do not vacuum if pieces are hot.

Use only the tempered glass door replacement intended for this fireplace (see [Replacement Parts](#), page 45 for detail on ordering). No substitutions may be made. See [Removing/Replacing Glass Door](#), page 29 for instructions for replacing glass door.

**⚠ WARNING:** Do not operate fireplace with the glass door unlatched, removed, cracked or broken.

### PILOT AND BURNERS

- Remove ember material before cleaning burners and replace when cleaning is complete.
- Burner and controls should be cleaned with compressed air to remove dust, dirt or lint.
- Use a vacuum cleaner or small, soft bristled brush to remove excess dust, dirt or lint.

# CLEANING AND MAINTENANCE

*Continued*

## LOGS

- If you remove logs for cleaning, refer to *Installing Logs, Lava Rock and Glowing Embers*, page 31, to properly replace logs.
- Use a vacuum cleaner to remove any carbon buildup on logs.
- Replace log(s) if broken. See *Replacement Parts* on page 45.
- Replace ember material periodically as needed. See *Replacement Parts* on page 45.

## VENTING SYSTEM

Conduct annual inspection of the venting system following these guidelines:

1. Check areas of venting system that are exposed to the weather for corrosion (rust

spots or streaks and, in extreme cases, holes). Have these items replaced immediately by a qualified service person.

2. Remove vent cap and shine a flashlight into vent. Remove any foreign material.
3. Check for evidence of excessive condensation. Continuous condensation can cause corrosion of caps, pipes and fittings and can be caused by having excessive lateral runs, too many elbows or exterior portions of the system being exposed to cold weather.
4. Inspect joints to verify that no pipe section or fitting has been disturbed and loosened. Check mechanical supports such as wall straps for rigidity.

## TROUBLESHOOTING



**WARNING:** Turn off heater and let cool before servicing. Only a qualified service person should service and repair heater.



**CAUTION:** Never use a wire, needle or similar object to clean pilot. This can damage pilot unit.

*Note: All troubleshooting items are listed in order of operation.*

The two most common causes of a malfunctioning gas appliance are:

1. Loose wiring connections
2. Construction debris clogging the pilot and/or gas control valve filter

## MILLIVOLT IGNITION

### OBSERVED PROBLEM

### POSSIBLE CAUSE

### REMEDY

When ignitor button is pressed, there is no spark at pilot

1. Ignitor electrode not connected to ignitor cable
2. Ignitor cable pinched or wet
3. Piezo ignitor nut is loose
4. Broken ignitor cable
5. Bad piezo ignitor
6. Ignitor electrode broken
7. Ignitor electrode positioned wrong

1. Reconnect ignitor cable
2. Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry
3. Tighten nut holding piezo ignitor. Nut is located behind the mounting bracket
4. Replace ignitor cable
5. Replace piezo ignitor
6. Replace pilot assembly
7. Tighten electrode. Replace if necessary

# TROUBLESHOOTING

*Continued*

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is spark at pilot but no ignition	<ol style="list-style-type: none"><li>1. Gas supply turned off or equipment shutoff valve closed</li><li>2. Gas control knob not in PILOT position</li><li>3. Gas control knob not pressed in while in PILOT position</li><li>4. Air in gas lines when installed</li><li>5. Depleted gas supply (propane/LP models only)</li><li>6. Pilot is clogged</li><li>7. Gas regulator setting is not correct</li></ol>	<ol style="list-style-type: none"><li>1. Turn on gas supply or open equipment shutoff valve</li><li>2. Turn gas control knob to PILOT position</li><li>3. Press in gas control knob while in PILOT position</li><li>4. Continue holding down control knob. Repeat igniting operation until air is removed</li><li>5. Contact local propane/LP gas company</li><li>6. Clean pilot (see <i>Cleaning and Maintenance</i>, page 38) or replace pilot assembly</li><li>7. Replace gas regulator</li></ol>
Pilot lights but flame goes out when control knob is released	<ol style="list-style-type: none"><li>1. Gas control knob not fully pressed in</li><li>2. Gas control knob not pressed in long enough</li><li>3. Equipment shutoff valve not fully open</li><li>4. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by one or both of the following: A) Low gas pressure B) Dirty or partially clogged pilot</li><li>5. Thermocouple connection loose at control valve</li><li>6. Thermocouple damaged</li><li>7. Control valve damaged</li></ol>	<ol style="list-style-type: none"><li>1. Press in gas control knob fully</li><li>2. After pilot lights, keep gas control knob pressed in 30 seconds</li><li>3. Fully open equipment shutoff valve</li><li>4. A) Contact local natural or propane/LP gas company B) Clean pilot (see <i>Cleaning and Maintenance</i>, page 38) or replace pilot assembly</li><li>5. Hand tighten until snug, then tighten 1/4 turn more</li><li>6. Replace pilot assembly</li><li>7. Replace control valve</li></ol>
Burner does not light after pilot is lit	<ol style="list-style-type: none"><li>1. Burner orifice clogged</li><li>2. Inlet gas pressure is too low</li><li>3. Thermopile leads disconnected or improperly connected</li><li>4. Thermopile is defective</li></ol>	<ol style="list-style-type: none"><li>1. Clean burner (see <i>Cleaning and Maintenance</i>, page 38) or replace burner orifice</li><li>2. Contact local propane/LP or natural gas company</li><li>3. Reconnect leads to TP and TPTH terminals on control valve</li><li>4. Replace thermopile</li></ol>

# TROUBLESHOOTING

*Continued*

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Delayed ignition burner	<ol style="list-style-type: none"> <li>1. Manifold pressure is too low</li> <li>2. Burner porting or orifice clogged</li> </ol>	<ol style="list-style-type: none"> <li>1. Contact local propane/LP or natural gas company</li> <li>2. Clean burner (see <i>Cleaning and Maintenance</i>, page 38) or replace burner orifice</li> </ol>
Burner backfiring during combustion	<ol style="list-style-type: none"> <li>1. Burner orifice is clogged or damaged</li> <li>2. Damaged burner</li> <li>3. Gas regulator defective</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean burner (see <i>Cleaning and Maintenance</i>, page 38) or replace burner orifice</li> <li>2. Replace damaged burner</li> <li>3. Replace gas control</li> </ol>
Slight smoke or odor during initial operation	<ol style="list-style-type: none"> <li>1. Residues from manufacturing processes and logs curing</li> </ol>	<ol style="list-style-type: none"> <li>1. Problem will stop after a few hours of operation</li> </ol>
Heater produces a whistling noise when burner is lit	<ol style="list-style-type: none"> <li>1. Turning gas control knob to HI position when burner is cold</li> <li>2. Air in gas line</li> <li>3. Dirty or partially clogged burner orifice</li> </ol>	<ol style="list-style-type: none"> <li>1. Turn gas control knob to LO position and let warm up for a minute</li> <li>2. Operate burner until air is removed from line. Have gas line checked by local propane/LP or natural gas company</li> <li>3. Clean burner (see <i>Cleaning and Maintenance</i>, page 38) or replace burner orifice</li> </ol>
Glass soots	<ol style="list-style-type: none"> <li>1. Flame impingement on logs</li> <li>2. Debris around burner air mixer</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust the log set so the flame does not excessively impinge on it</li> <li>2. Inspect the opening at the base of the burner to see that it is not packed with any type of material</li> </ol>
Fireplace produces a clicking/ticking noise just after burners are lit or shut off	<ol style="list-style-type: none"> <li>1. Metal expanding while heating or contracting while cooling</li> </ol>	<ol style="list-style-type: none"> <li>1. This is normal. If noise is excessive, contact qualified service person</li> </ol>
Remote does not function	<ol style="list-style-type: none"> <li>1. Battery is not installed or battery is power is low</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace 9-volt batteries in receiver and hand-held remote control</li> </ol>

# TROUBLESHOOTING

*Continued*



**WARNING: If you smell gas**

- Shut off gas supply.
- 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.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Fireplace produces unwanted odors	1. Gas leak. <b>See Warning statement above</b>	1. Locate and correct all leaks (see <u><i>Checking Gas Connections</i></u> , page 29)
Fireplace shuts off in use	1. High or gusting winds 2. Low line pressure 3. Pilot is partially clogged 4. Inner vent pipe leaking exhaust gases into system 5. Glass is too loose and air tight gasket leaks in corners after usage 6. Bad thermopile or thermocouple 7. Vent cap improperly installed or blocked	1. Fireplace has been tested for up to 40 mph winds. However, extreme conditions may occur. See <u><i>Lighting Instructions</i></u> , page 32 2. Check local propane/LP or natural gas company 3. Clean pilot (see <u><i>Cleaning and Maintenance</i></u> , page 38) 4. Locate and correct all vent connections (see <u><i>Installation Planning</i></u> , page 12) 5. Tighten or replace glass door (see <u><i>Removing/Replacing Glass Door</i></u> , page 30) 6. Replace faulty components 7. Check for proper installation or remove debris or blockage.
Gas odor even when control knob is in OFF position	1. Gas leak. <b>See Warning statement above</b>	1. Locate and correct all leaks (see <u><i>Checking Gas Connections</i></u> , page 29)
Gas odor during combustion	1. Gas leak. <b>See Warning statement above</b>	1. Locate and correct all leaks (see <u><i>Checking Gas Connections</i></u> , page 29)
Dark residue on logs or inside of fireplace	1. Improper log placement 2. Air holes at burner inlet blocked 3. Burner flame holes blocked 4. Improper venting or excessive blockage 5. Excessive amounts of embers and pan material	1. Properly locate logs (see <u><i>Installing Logs, Lava Rock, and Glowing Embers</i></u> , page 31) 2. Clean out air holes at burner inlets, Periodically repeat as needed 3. Remove blockage or replace burner 4. Have vent system inspected, including termination cap. Remove any restrictions or blockage 5. Clear excess embers from around rear main ports. Use a minimum of one layer of smaller ember pieces to achieve the best glowing effect over visible areas

# TROUBLESHOOTING

## ELECTRONIC IGNITION

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Ignitor will not spark or pilot will not light	1. No gas supply, or shutoff valve is OFF	1. Check to see if you have gas supply and that equipment shutoff valve is opened
	2. Air in gas line	2. Repeat lighting procedure several times to purge all air out of lines. If after repeated attempts appliance does not light, call for qualified service and repair
	3. Construction debris clogging pilot orifice	3. Remove debris and dirt, and inspect and clean any other possible obstructions
	4. Low gas pressure	4. Contact your gas supplier to check pressure
	5. Kinked pilot line	5. Have a qualified technician replace pilot line
	6. Control valve is not opening	6. Replace control valve (Refer to <i>Replacement Parts</i> , page 45)
	7. No power to unit or the ignition module	7. Check that main power is on and that wire connections are made correctly to the ignition model (see <i>Wiring Diagrams</i> , page 25). Check for 24 VAC at the secondary side of the transformer. If 24 VAC is present, and the module does not operate, have the module replaced otherwise have the transformer replaced
Pilot will not stay lit	1. Loose wiring on ignitor wire to ignition module and/or poor ground to ignition module	1. Check wiring connection. Refer to wiring diagram (see <i>Wiring Diagrams</i> , page 25) and/or check ground wire to ignition module
	2. Pilot flame too low to sense	2. Clean and adjust pilot burner and check gas supply and inlet pressure to unit <i>Note:</i> Have a qualified technician replace pilot assembly if broken or corroded
Frequent outage of main burner and pilot after complete ignition sequence.	1. Pilot flame may be too low to sense flame causing ignition module to shut down	1. Clean and adjust pilot flame for maximum flame across sensor rod.
	2. Improper venting, excessive blockage, or high wind conditions. Over drafting of straight (no offset) vertical vent systems over 15 feet in height	2. Have vent system inspected, including the termination cap. Remove any restriction or obstruction. Add restrictor plate model VR-58 in straight vertical systems over 15 feet (if not previously installed)

## TROUBLESHOOTING

*Continued*



**WARNING: If you smell gas**

- Shut off gas supply.
- 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.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Fireplace produces a clicking/ticking noise just after burner is lit or shut off	1. Metal expanding while heating or contracting while cooling	1. This is normal with most fireplaces. If noise is excessive, contact qualified service person
Slight smoke or odor during initial operation	1. Residues from manufacturing processes and logs curing	1. Problem will stop after a few hours of operation
Gas odor even when control knob is in OFF position	1. Gas leak. <b>See Warning statement at top of page</b> 2. Control valve defective	1. Locate and correct all leaks (see <u>Checking Gas Connections</u> , page 29) 2. Replace gas control valve
Glass soots	1. Flame impingement on logs and burner 2. Gas leak. <b>See Warning statement at top of page</b>	1. Adjust the log set that the flame does not excessively impinge on log surfaces 2. Inspect the opening at the base of the burner to see that it is NOT packed with any type of material
Dark residue on logs or inside of fireplace	1. Improper log placement 2. Air holes at burner inlet blocked 3. Burner flame holes blocked 4. Improper venting or excessive blockage 5. Excessive amounts of embers and pan material	1. Properly locate logs (see <u>Installing Logs, Lava Rock, and Glowing Embers</u> , page 31) 2. Clean out air holes at burner inlets. Periodically repeat as needed 3. Remove blockage or replace burner 4. Have the vent system inspected, including the termination cap. Remove any restrictions or blockage 5. Clear excess embers from around the rear main ports. Use a minimum of one layer of smaller ember pieces to achieve the best glowing effect over the visible areas
Remote does not function	1. Battery is not installed or battery is power is low	1. Replace 12-volt battery in hand-held remote control

## SPECIFICATIONS

### (V)CD36RN and (V)CD36TN

- Rating: 15,000/21,000 Btu/hr
- Gas Type: Natural Gas Only
- Ignition: Millivolt
- Manifold Pressure: below 2000 ft. elevation - 3.5" w.c. (0.87 kPa), above 2000 ft. elevation - 3.8" (0.94 kPa)
- Orifice Size (Main Burner): #44 DMS (0.086")
- Minimum Inlet Supply Pressure: 5.5" w.c. (1.1 kPa)
- Firebox Dimensions\* (HxWxD): 35 ¾"x 36 ¼" x 14 ¾" (90.8 x 92 x 37.5 cm)

### (V)CD36RP and (V)CD36TP

- Rating: 13,000/20,000 Btu/hr
- Gas Type: Propane/LP Gas Only
- Ignition: Millivolt
- Manifold Pressure: 10.0" w.c. (2.5 kPa)
- Orifice Size (Main Burner): #55 DMS (0.052")
- Minimum Inlet Supply Pressure: 11.0" w.c. (2.7 kPa)
- Firebox Dimensions\* (HxWxD): 35 ¾"x 36 ¼" x 14 ¾" (90.8 x 92 x 37.5 cm)

\* Flanges and Standoffs Not Included in Measurement

### (V)CD36RNE and (V)CD36TNE

- Rating: 21,000 Btu/hr
- Gas Type: Natural Gas Only
- Ignition: Electronic
- Manifold Pressure: below 2000 ft. elevation - 3.5" w.c. (0.87 kPa), above 2000 ft. elevation - 3.8" (0.94 kPa)
- Orifice Size (Main Burner): #44 DMS (0.086")
- Minimum Inlet Supply Pressure: 5.5" w.c. (1.1 kPa)
- Firebox Dimensions\* (HxWxD): 35 ¾"x 36 ¼" x 14 ¾" (90.8 x 92 x 37.5 cm)

### (V)CD36RPE and (V)CD36TPE

- Rating: 20,000 Btu/hr
- Gas Type: Propane/LP Gas Only
- Ignition: Electronic
- Manifold Pressure: 10.0" w.c. (2.5 kPa)
- Orifice Size (Main Burner): #55 DMS (0.052")
- Minimum Inlet Supply Pressure: 11.0" w.c. (2.7 kPa)
- Firebox Dimensions\* (HxWxD): 35 ¾"x 36 ¼" x 14 ¾" (90.8 x 92 x 37.5 cm)

## REPLACEMENT PARTS

*Note: Use only original replacement parts. This will protect your warranty coverage for parts replaced under warranty.*

### PARTS UNDER WARRANTY

Contact authorized dealers of this product. If they can't supply original replacement part(s), call DESA Heating, LLC at 1-866-672-6040.

When calling DESA Heating, LLC, have ready:

- your name
- your address
- model and serial numbers of your heater
- how heater was malfunctioning
- purchase date

### SERVICE HINTS

#### When Gas Pressure Is Too Low

- pilot will not stay lit
- burners will have delayed ignition
- fireplace will not produce specified heat
- propane/LP gas supply might be low (propane/LP units only)

You may feel your gas pressure is too low. If so, contact your local gas supplier.

Usually, we will ask you to return the part to the factory.

### PARTS NOT UNDER WARRANTY

Contact authorized dealers of this product. If they can't supply original replacement part(s), call DESA Heating, LLC at 1-866-672-6040 for referral information. A list of authorized dealers can be found by visiting [www.desatech.com](http://www.desatech.com).

When calling DESA Heating, LLC, have ready:

- model and serial numbers of your heater
- the replacement part number

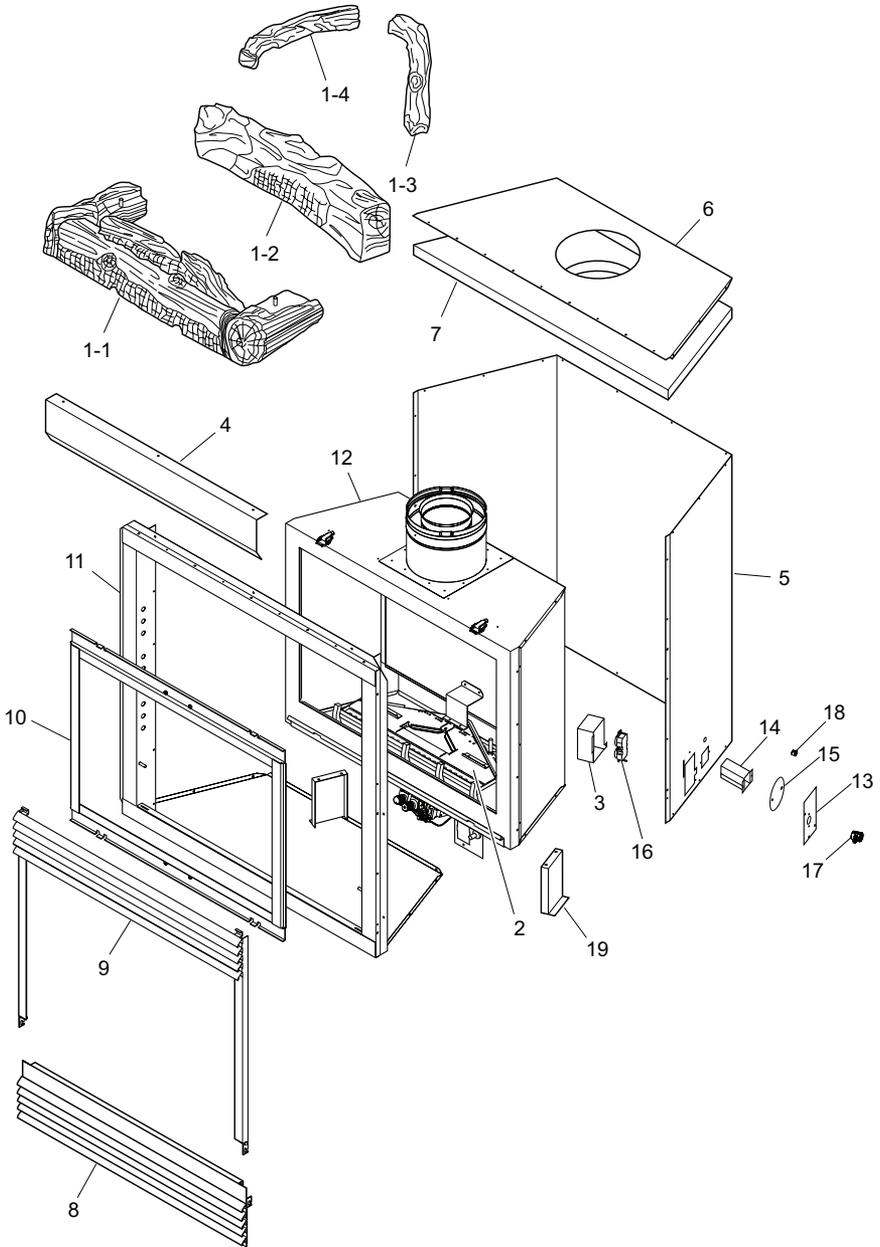
### TECHNICAL SERVICE

You may have further questions about installation, operation, or troubleshooting. If so, contact DESA Heating, LLC at 1-866-672-6040. When calling please have your model and serial numbers of your heater ready.

You can also visit DESA Heating, LLC's web site at [www.desatech.com](http://www.desatech.com).

# PARTS

FIREPLACE ASSEMBLY FOR MODELS (V)CD36RN, (V)CD36RP, (V)CD36TN,  
(V)CD36TP (V)CD36RN-HA, (V)CD36TN-HA



## PARTS

### FIREPLACE ASSEMBLY FOR MODELS (V)CD36RN, (V)CD36RP, (V)CD36TN, (V)CD36TP (V)CD36RN-HA, (V)CD36TN-HA

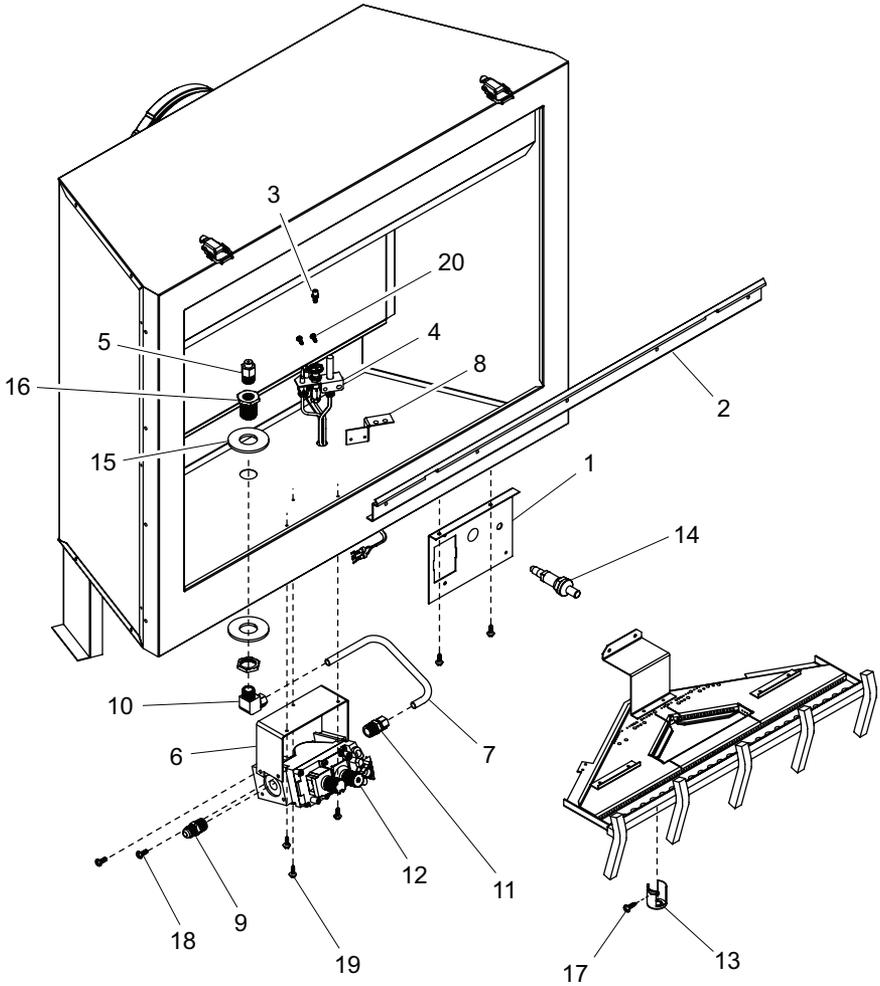
This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under Replacement Parts on page 45 of this manual.

KEY NO.	PART NO.	DESCRIPTION							QTY.
			(V)CD36RN	(V)CD36RN-HA	(V)CD36RP	(V)CD36TN	(V)CD36TN-HA	(V)CD36TP	
1	116108-01	Log Set	•	•	•	•	•	•	1
1-1	116109-01	Burner Base Log	•	•	•	•	•	•	1
1-2	116110-01	Rear Log	•	•	•	•	•	•	1
1-3	111802-05	Right Top Log	•	•	•	•	•	•	1
1-4	111802-04	Left Top Log	•	•	•	•	•	•	1
2	115615-01	Burner Assembly Complete (See pages 49 an 51)	•	•	•	•	•	•	1
3	114889-01	Junction Box Duplex Plug	•	•	•	•	•	•	1
4	114880-01	Heat Deflector	•	•	•	•	•	•	1
5	114875-01	Fireplace Surround	•	•	•	•	•	•	1
	114875-02	Fireplace Surround			•	•	•	•	1
6	114876-01	Fireplace Top	•	•	•	•	•	•	1
	114876-02	Fireplace Top				•	•	•	1
7	**	Fireplace Top Insulation	•	•	•	•	•	•	1
	**	Fireplace Top Insulation				•	•	•	1
8	114873-01	Louver Bottom Assembly	•	•	•	•	•	•	1
9	114872-01	Louver Top Assembly	•	•	•	•	•	•	1
10	114871-01	Glass Door Assembly	•	•	•	•	•	•	1
11	**	Face Assembly	•	•	•	•	•	•	1
12	**	Firebox Assembly Complete (NG)	•	•					1
	**	Firebox Assembly Complete (NG)				•	•		1
	**	Firebox Assembly Complete (LP)			•				1
	**	Firebox Assembly Complete (LP)					•	•	1
13	110973-01	Cover Junction Box	•	•	•	•	•	•	2
14	24460	Gas Conduit Assembly	•	•	•	•	•	•	2
15	21171	Gas Knock-Out Cover	•	•	•	•	•	•	2
16	14418	Duplex Plug Receptacle	•	•	•	•	•	•	1
17	14123	Bushing Universal Strain Relief	•	•	•	•	•	•	1
18	11408	Bushing 0.5" Electric	•	•	•	•	•	•	2
19	26290	Firebox Leg	•	•	•	•	•	•	2
<b>PARTS AVAILABLE - NOT SHOWN</b>									
	25580	Ember Bag Assembly	•	•	•	•	•	•	1
	27253	Notice Label	•	•	•	•	•	•	1
	55240	Vent Label	•	•	•	•	•	•	1

\*\* Not a field replaceable part.

## PARTS

BURNER ASSEMBLY FOR MODELS (V)CD36RN, (V)CD36RP, (V)CD36TN,  
(V)CD36TP (V)CD36RN-HA, (V)CD36TN-HA



## PARTS

### BURNER ASSEMBLY FOR MODELS (V)CD36RN, (V)CD36RP, (V)CD36TN, (V)CD36TP (V)CD36RN-HA, (V)CD36TN-HA

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under Replacement Parts on page 45 of this manual.

KEY NO.	PART NO.	DESCRIPTION	(V)CD36RN	(V)CD36RN-HA	(V)CD36RP	(V)CD36TN	(V)CD36TN-HA	(V)CD36TP	QTY.
1	116317-01	Remote Ignitor Bracket	•	•	•	•	•	•	1
2	114886-01	Door Retainer Bracket	•	•	•	•	•	•	1
3	108085-01	Pilot Orifice #51	•		•				1
	108085-02	Pilot Orifice #30			•			•	1
	108085-03	Pilot Orifice #62		•			•		1
4	108084-02	Pilot Assembly	•			•			1
	108084-05	Pilot Assembly		•			•		1
	108084-03	Pilot Assembly			•			•	1
5	27206	Burner Orifice #44	•	•		•	•		1
	26482	Burner Orifice #55			•			•	1
6	26808	Valve Bracket	•	•	•	•	•	•	1
7	24389	Tube 3/8" Dia. x 11" Aluminum	•	•	•	•	•	•	1
8	24360	Pilot Bracket	•	•	•	•	•	•	1
9	14500	Fitting 3/8" MPT x 1/2" Flare	•	•	•	•	•	•	1
10	14399	Fitting Brass Elbow 3/8" MPT x 3/8" Comp. Tube	•	•	•	•	•	•	1
11	14396	Fitting Brass Straight 3/8" MPT x 3/8" Comp. Tube	•	•	•	•	•	•	1
12	14389	Gas Control Valve Millivolt	•			•			1
	117370-01	Gas Control Valve Millivolt		•			•		1
	14390	Gas Control Valve Millivolt			•			•	1
13	14299	Air Shutter	•	•	•	•	•	•	1
14	14261	Ignitor Piezo	•	•	•	•	•	•	1
15	11226	Washer, Flat 7/8" ID x 2" OD x 1/8" Thick	•	•	•	•	•	•	2
16	11214	Fitting Bulkhead w/ Nut Brass	•	•	•	•	•	•	1
17	11187	Screw, #8 x 1/4" PPH	•	•	•	•	•	•	1
18	11107	Screw, #10-32 x 1/4" PPH Zinc	•	•	•	•	•	•	4
19	11105	Screw, #10 x 1/2" HWH LGM Zinc	•	•	•	•	•	•	10
20	11102	Screw, #8 x 3/8" PPH F Zinc	•	•	•	•	•	•	2



## PARTS

### BURNER ASSEMBLY FOR MODELS (V)CD36RNE, (V)CD36TNE, (V)CD36RPE, (V)CD36TPE

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under Replacement Parts on page 45 of this manual.

KEY NO.	PART NO.	DESCRIPTION					QTY.
			(V)CD36RNE	(V)CD36TNE	(V)CD36RPE	(V)CD36TPE	
1	116719-01	Gas Valve Wire Harness (MV/PV)	•	•	•	•	1
2	116719-02	Gas Valve Wire Harness (MV)	•	•	•	•	1
3	116719-03	Gas Valve Wire Harness (PV)	•	•	•	•	1
4	116316-01	Ignition Module Bracket	•	•	•	•	1
5	114886-01	Door Retainer Bracket	•	•	•	•	1
6	111059-03	Ground Wire Harness	•	•	•	•	1
7	110286-01	Ignition Module Synetek	•	•	•	•	1
8	108863-01	Plug 24" Supply Connect	•	•	•	•	1
9	108867-01	Pilot Orifice BL14LP	•	•	•	•	1
	108867-02	Pilot Orifice BL22N	•	•	•	•	1
10	108866-01	Pilot Assembly PSE	•	•	•	•	1
	108866-02	Pilot Assembly PSE	•	•	•	•	1
11	27206	Burner Orifice #44	•	•	•	•	1
	26482	Burner Orifice #55	•	•	•	•	1
12	26808	Valve Bracket	•	•	•	•	1
13	24389	Tube 3/8" Dia. x 11" Aluminum	•	•	•	•	1
14	24360	Pilot Bracket	•	•	•	•	1
15	14569	Gas Control Valve Millivolt	•	•	•	•	1
	14570	Gas Control Valve Millivolt	•	•	•	•	1
16	14500	Fitting 3/8" MPT x 1/2" Flare	•	•	•	•	1
17	14399	Fitting Brass Elbow 3/8" MPT x 3/8" Comp. Tube	•	•	•	•	1
18	14396	Fitting Brass Straight 3/8" MPT x 3/8" Comp. Tube	•	•	•	•	1
19	14299	Air Shutter	•	•	•	•	1
20	14129	Transformer, 24V Class 2	•	•	•	•	1
21	11404	Cable, Tie 8.5" #10 Screwdown	•	•	•	•	1
22	11226	Washer, Flat 7/8" ID x 2" OD x 1/8" Thick	•	•	•	•	2
23	11214	Fitting Bulkhead w/ Nut, Brass	•	•	•	•	1
24	11201	Nut, #8-32 Hex Zinc	•	•	•	•	4
25	11186	Screw, #8-32 x 1" PPH	•	•	•	•	2
26	11187	Screw, #8 x 1/4" PPH	•	•	•	•	1
27	11109	Screw, #8-32 x 1/2" PPH	•	•	•	•	2
28	11107	Screw, #10-32 x 1/4" PPH Zinc	•	•	•	•	4
29	11105	Screw, #10 x 1/2" HWH LGM Zinc	•	•	•	•	11
30	11102	Screw, #8 x 3/8" PPH F Zinc	•	•	•	•	2

## ACCESSORIES

**NOTE: All accessories may not be available for all fireplace models.**

Purchase these accessories from your local dealer. If they can not supply these accessories, either contact your nearest Parts Central or call DESA Heating, LLC at 1-866-672-6040 for information. You can also write to the address listed on the back page of this manual.

### PROPANE/NATURAL GAS CONVERSION KIT

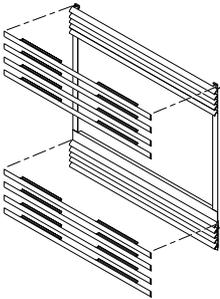
*Note: Not Intended For Use With High-Altitude Models (V)CD36RN-HA or (V)CD36TN-HA*

**PCDM-36RT** - Propane/LP Gas, Millivolt Models

**NCDM-36RT** - Natural Gas - Millivolt Models

**PCDE-36RT** - Propane/LP Gas, Electronic Models

**NCDE-36RT** - Natural Gas, Electronic Models



### ROLLED LOUVER TRIM KITS

**LTC36B** - Brushed Brass

**LTC36P** - Platinum

### REMOTE CONTROL KIT - WRC SERIES

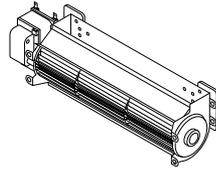
Standard ON/OFF electronic remote control kit.

### WALL MOUNTED THERMOSTAT CONTROL KIT - GWMT1

Allows easy wall access for thermostatic operation of your fireplace.

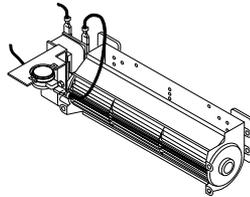
### WALL MOUNTED ON/OFF SWITCH GWMS2

Allows burner system to be turned on and off with a wall switch.



### MANUAL BLOWER KIT - BK

Manual variable control blower accessory provides better heat distribution. Complete installation and operating instructions included in this manual.



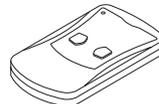
### THERMOSTATICALLY - CONTROLLED BLOWER KIT - BKT

Provides better heat distribution Blower turns off and on automatically, as needed. Complete installation and operating instructions included in this manual.



### RECEIVER AND HAND-HELD THERMOSTAT REMOTE CONTROL KIT - HRC200 SERIES

Allows fireplace to be operated manually or thermostatically-controlled mode. You can adjust your heat settings and turn the fireplace on or off without leaving the comfort of your easy chair. A wall mount docking station is included.



### RECEIVER AND HAND-HELD ON/OFF REMOTE CONTROL KIT HRC100 SERIES

Allows the fireplace to be turned on and off conveniently. A wall mount docking station is included.







# WARRANTY

## KEEP THIS WARRANTY

Model (located on product or identification tag) \_\_\_\_\_

Serial No. (located on product or identification tag) \_\_\_\_\_

Date Purchased \_\_\_\_\_

Keep receipt for warranty verification.

Always specify model and serial numbers when communicating with the factory.

The only warranty applicable is our standard written warranty. We make no other warranty, expressed or implied.

### LIMITED WARRANTY

### DIRECT-VENT FIREPLACE

DESA Heating, LLC warrants this product to be free from defects in materials and components for two (2) years from the date of first purchase, provided that the product has been properly installed, operated and maintained in accordance with all applicable instructions. To make a claim under this warranty the Bill of Sale must be presented.

This warranty is extended only to the original retail purchaser. This warranty covers the cost of part(s) required to restore this heater to proper operating condition and an allowance for labor when provided by a DESA Heating, LLC Authorized Service Center. Warranty part(s) MUST be obtained through authorized retailers of this product and/or DESA Heating, LLC who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty. The heater MUST be installed by a qualified installer in accordance with all local codes and instructions furnished with the unit.

This warranty does not apply to parts that are not in original condition because of normal wear and tear or parts that fail or become damaged as a result of misuse, accidents, lack of proper maintenance or defects caused by improper installation. Travel, diagnostic cost, labor, transportation and any and all such other costs related to repair will be the responsibility of the owner.

TO THE FULL EXTENT ALLOWED BY THE LAW OF THE JURISDICTION THAT GOVERNS THE SALE OF THE PRODUCT; THIS EXPRESS WARRANTY EXCLUDES ANY AND ALL OTHER EXPRESSED WARRANTIES AND LIMITS THE DURATION OF ANY AND ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO TWO (2) YEARS ON ALL COMPONENTS FROM THE DATE OF FIRST PURCHASE; AND DESA HEATING, LLC'S LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND DESA HEATING, LLC SHALL NOT BE LIABLE FOR ANY OTHER DAMAGES WHATSOEVER INCLUDING INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow a limitation on how long an implied warranty lasts or an exclusion or limitation of incidental or consequential damages, so the above limitation on implied warranties or exclusion or limitation on damages may not apply to you.

This warranty gives you specific legal rights and you may also have other rights that vary from state to state.

For information about this warranty write:



Desa Heating, LLC  
2701 Industrial Drive  
P.O. Box 90004  
Bowling Green, KY 42102-9004  
www.desatech.com  
1-866-672-6040



116035 01  
NOT A UPC

116035-01  
Rev. J  
11/07