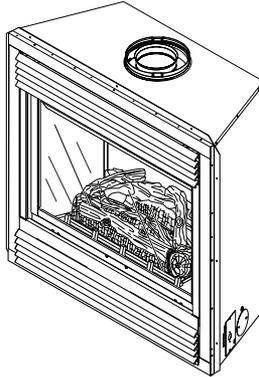


FIREPLACES AND FIREPLACE ACCESSORIES

# VEXAR

by  STYLECREST.

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



### NATURAL OR PROPANE/LP GAS MODEL CD36T-M

**⚠ 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.

For more information, visit [www.desatech.com](http://www.desatech.com)

**⚠️ 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.

This fireplace may be installed as an OEM installation in a manufactured (mobile) home and must be installed in accordance with the manufacturer's instructions and the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280 in the United States. This fireplace is only for use with the type(s) of gas indicated on the rating plate. A conversion kit is supplied with the fireplace.

This fireplace is manufactured for Stylecrest Inc. under the Vexar brand name by DESA Heating, LLC.

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## SAFETY

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

**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.

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

This fireplace must be installed by the O.E.M. builder or 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.

**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 & 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 it's 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.**

## SAFETY

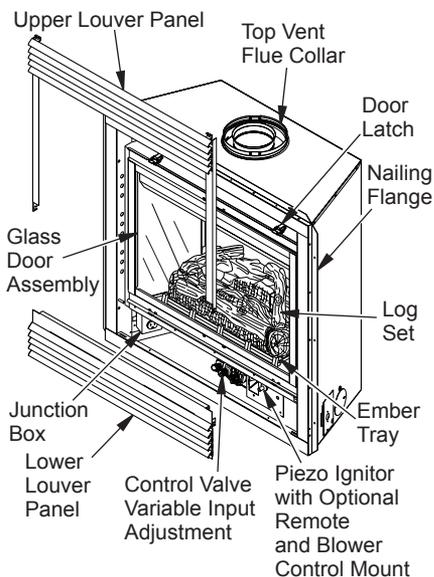
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**Carefully supervise young children when they are in the room with fireplace.**

**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 lbs. 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.
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 33.
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 - Direct-Vent Fireplace**

## LOCAL CODES

Install and use fireplace with care. Follow all local codes. In the absence to 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 dedicated top vent for this fireplace 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 vent kits and components for your application and follow the venting instructions to plan your installation.
- This fireplace may be installed in any room provided that all rules of the housing authority and these installation instructions are followed.
- This fireplace is 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.
- This model 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/Vexar 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 6.
- 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.

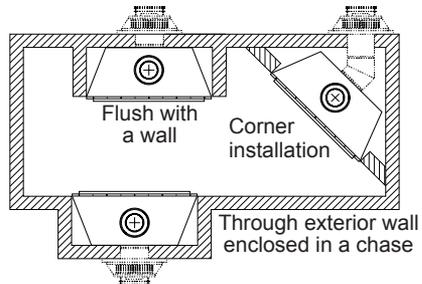
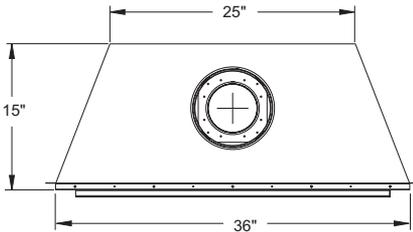


Figure 2 - Common Fireplace Locations

# PRE-INSTALLATION PREPARATION

*Continued*

- When locating termination cap, it is important to observe the minimum clearances shown in Figure 7, page 8.
- 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

This direct-vent gas fireplace heater is packaged with:

- one box containing a 4 piece 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 unit. Lift the top carton tray off and remove 4 corner posts. Discard bottom tray once unit is moved into position.

## CLEARANCES

Minimum clearances to combustibles for the fireplace are as follows:

*Back and sides	0"
Perpendicular walls	12"
Floor	0"
Ceiling to louver opening	40"
Front	36"
Top of Standoffs	0"
Vent Surfaces	(See venting instruction for specific venting clearances.)
Mantel Clearances	(See <i>Mantel Clearances</i> , page 8 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.**

## FRAMING AND FINISHING

Figure 4, page 7, shows typical framing of this fireplace. Figure 5, page 7, shows framing for corner installation. All minimum clearances must be met.

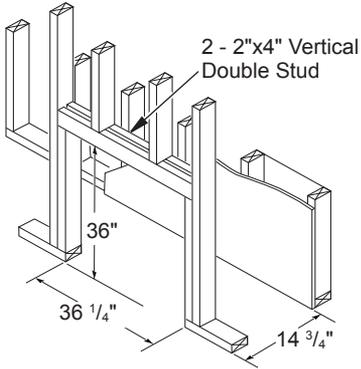
For overall unit dimensions, framing allowances and vent collar locations, see Figure 6, page 7.

For available accessories for this fireplace, see *Accessories* on page 39. If you are using a separate combustible mantel piece, refer to Figures 7 and 8, page 8 for proper height and clearances. You can install noncombustible mantels at any height above the fireplace.

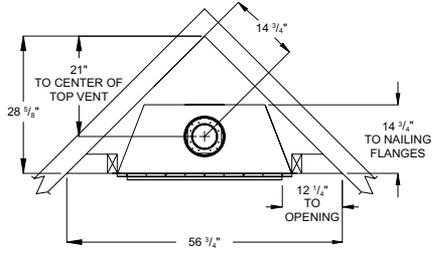
*Note: Noncombustible mantels may discolor!*

# PRE-INSTALLATION PREPARATION

Continued

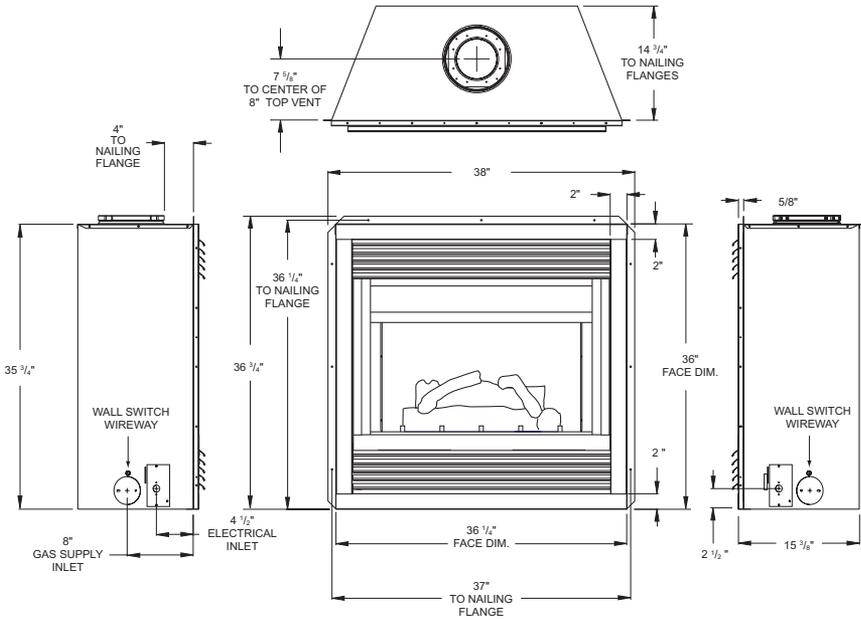


**Figure 4 - Framing Clearances for Installation Against an Exterior Wall**



These dimensions allow for 1" of clearance at the sides and back of fireplace. 0" clearance is also permitted at all sides if framed.

**Figure 5 - Framing Clearances for Corner Installation**



**Figure 6 - Unit Dimensions**

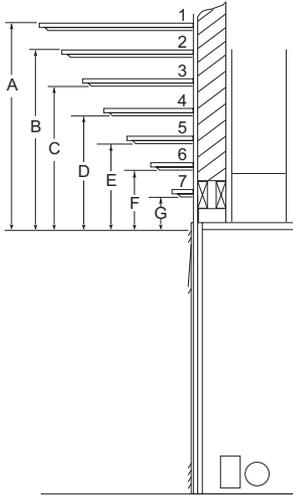
# PRE-INSTALLATION PREPARATION

*Continued*

## MANTEL CLEARANCES

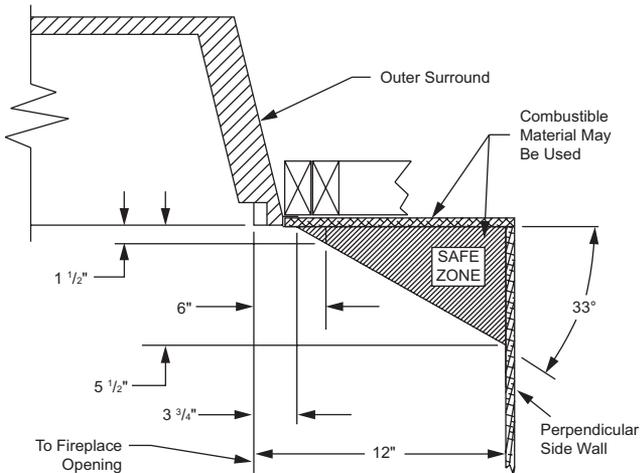
Figure 7 shows projected mantel depths at various heights above the top of the louver opening. Figure 8 shows the minimum allowable distances from various mantel components in relation to the both sides of the fireplace opening.

**⚠ 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.



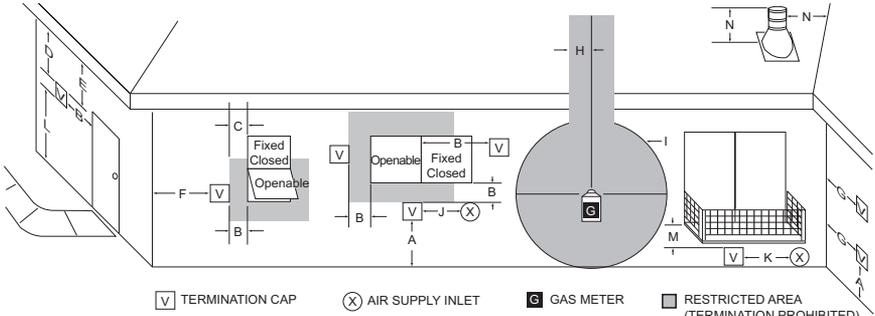
Ref.	Mantel Depth	Ref.	Mantel from Top of Louver Opening
1	16"	A	14"
2	14"	A	12"
3	12"	B	10"
4	10"	C	8"
5	8"	D	6"
6	4"	F	4"
7	2"	G	2"

**Figure 7 - Clearances for Combustible Mantels**



**Figure 8 - Side Clearances for Combustible Materials**

# LOCATION OF TERMINATION CAP



- A** = clearance above grade, veranda, porch, deck, or balcony [12" (30.5 cm) minimum]
- B** = clearance to window or door that may be opened [12" (30.5 cm) minimum]
- C** = clearance to permanently closed window [minimum 12" (30.5 cm) recommended to prevent condensation on window]
- D** = vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 24" (61cm) from the center-line of the terminal [18" (45.7 cm) minimum]
- E** = clearance to unventilated soffit [12" (30.5 cm) minimum]
- F** = clearance to outside corner (see below)
- G** = clearance to inside corner (see below)
- H** = \*not to be installed above a meter/regulator assembly within 36" (91.4 cm) horizontally from the center-line of the regulator
- I** = clearance to service regulator vent outlet [72" (182.9 cm) minimum]
- J** = clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other fireplace [12" (30.5 cm) minimum]
- K** = clearance to a mechanical air supply inlet [72" (182.9 cm) minimum]
- L** = † clearance above paved side-walk or a paved driveway located on public property [84" (213.3 cm) minimum]
- M** = clearance under veranda, porch, deck [12" (30.5 cm) minimum ‡]
- 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)
- † 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

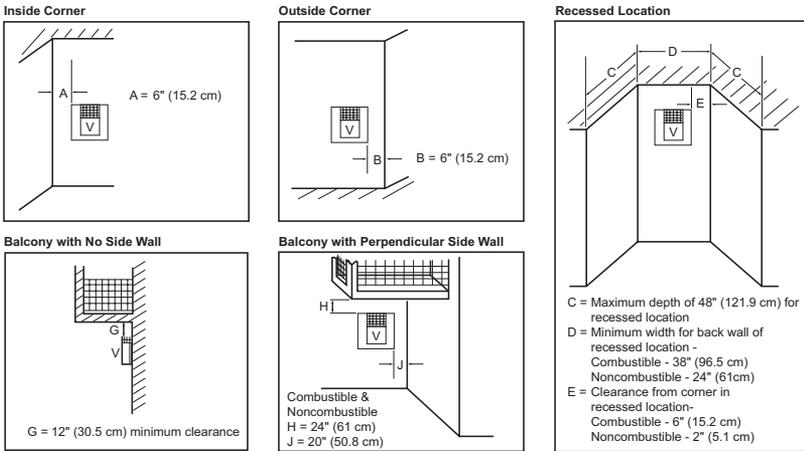


Figure 9 - Minimum Clearances for Termination Cap

## VENTING INSTALLATION

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

These models are tested and approved for use with DESA/Vexar (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.

This model is 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, ceilings or attic spaces.
- Install horizontal venting with a 1/4" rise for every 12" of run toward the termination.

**⚠ 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/Vexar
- 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 starter vent kits available for either a horizontal or a vertical installation:

- CHVK-58 Corner Horizontal Vent Kit - Intended for corner or flush installations with less than 24" of horizontal distance to the termination.
- CVVK-58 - Ceiling Vertical Vent Kit - Intended for a straight vertical installation through a ceiling with less than 9' to a roof termination.

## Horizontal Termination Installation

**IMPORTANT:** Horizontal square terminations require only inner portion of wall firestop.

1. Set fireplace in its desired location and determine the 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 14 through 18 on pages 13 and 14 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 the location of the 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 10).

*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 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 the 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 the location where vent pipe assembly will penetrate outside wall. Center of hole should line up with center-line of horizontal vent pipe. Mark the 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 (see Figure 11).

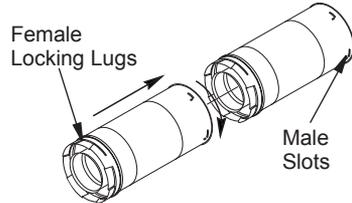
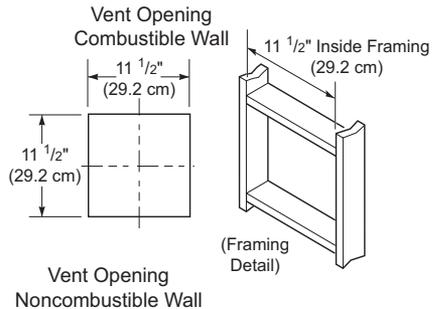


Figure 10 - Vent Pipe Connections



Vent Opening  
Noncombustible Wall

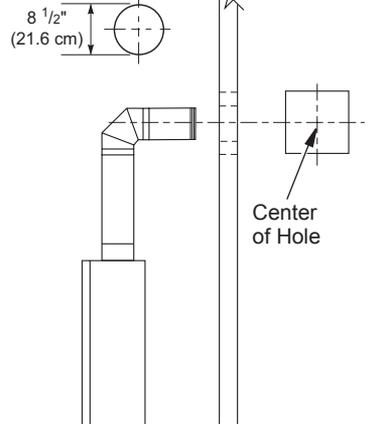


Figure 11 - Vent Opening Requirements

# VENTING INSTALLATION

Continued

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

6. **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 11 1/2" square hole and attach to exterior wall with wood screws provided (see Figure 11). Siding standoff must sit flush against exterior fascia material.

7. **Connecting Vent Cap with Horizontal Vent Pipe:** Slide wall firestop over vent pipe before connecting horizontal run to vent cap (see Figure 12).

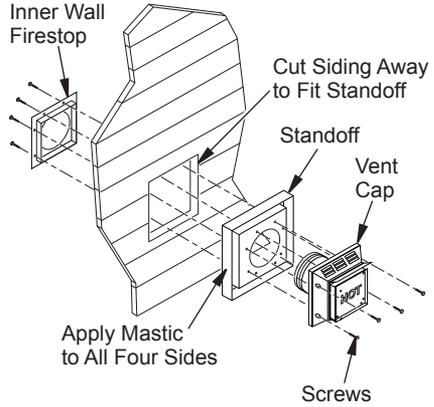
Carefully move fireplace, with vent assembly attached, toward wall and insert vent pipe into horizontal termination. Pipe overlap should be a minimum of 1 1/4".

Slide wall firestop against interior wall surface and attach with screws provided.

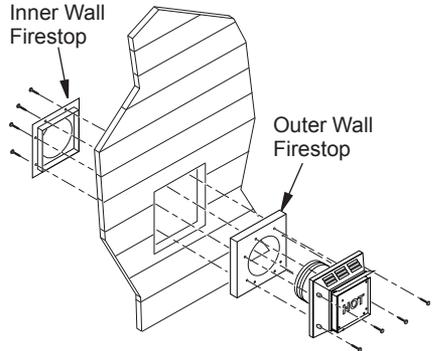
Place fireplace into position and shim with noncombustible material if needed. Nail or screw side flanges to framing to secure unit in place. **IMPORTANT:** Make sure fireplace is level before securing. If fireplace is not level it will not work properly.

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

**⚠ 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.**



**Figure 12 - Installing Siding Standoff (Combustible Exterior Wall)**



**Figure 13 - Installing Outer Wall Firestop (Combustible Exterior Wall)**

# VENTING INSTALLATION

*Continued*

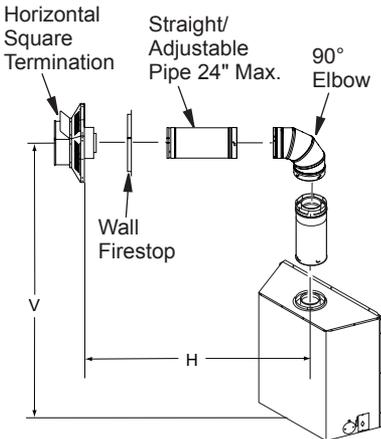
## Horizontal Termination Configurations

Figures 14 through 18 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:** Remember that a horizontal run of venting must have a 1/4" rise for every 12" of run toward the termination.

## GROUND FLOOR INSTALLATION

Recommended CHVK-58 Corner Horizontal Vent Kit:

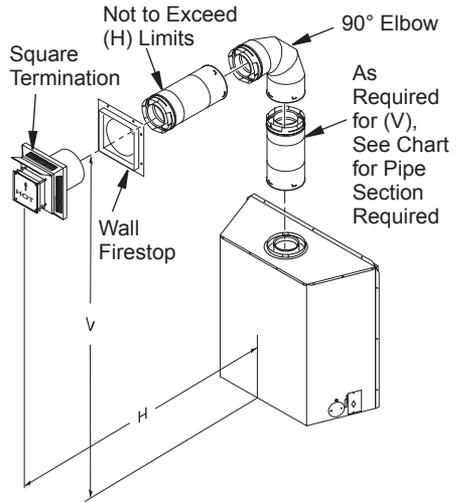
- Installation using cabinet surrounds
- Through wall using square termination (up to 24" horizontal pipe)
- Corner installation (Using one 6" vertical section, one 90° elbow and a maximum of 24" of horizontal pipe)



### Corner Installation

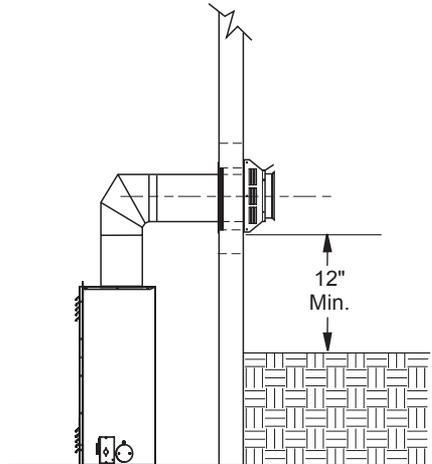
Vertical (V)	Horizontal (H)
51" Min.	32 1/2" Max

**Figure 14 - Horizontal Termination Configuration For Corner Installation Using One 90° Elbow**



Required Vertical (V)	Vertical (V) Vertical Pipe	Allowable Horizontal (H)
51"	6"	26" Max.
57 1/4" Min.	1'	30" Max.
69 1/4" Min.	2'	74" Max.
81 1/2" Min.	3'	98" Max.
94" Min.	4'	122" Max.
106" Min.	5'	146" Max.
159" Min.	9'	20' Max.

**Figure 15 - Horizontal Termination Configuration with Vertical Rise and One 90° Elbow**



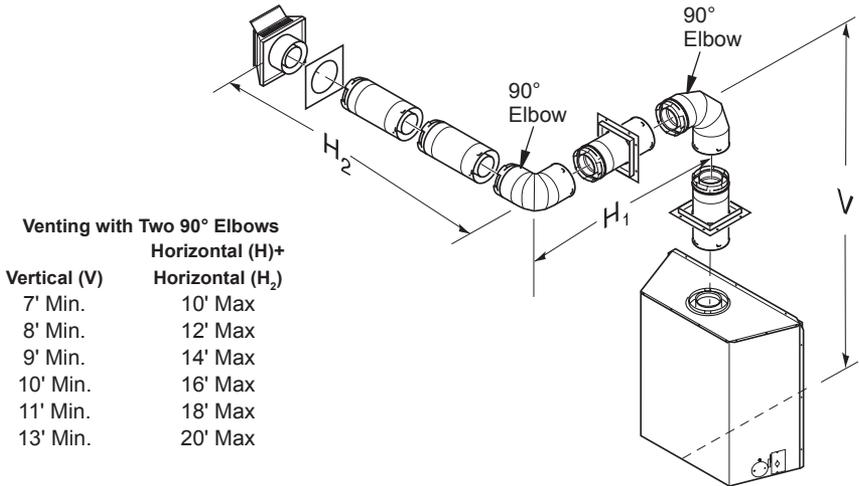
**Figure 16 - Square Termination Clearance at Ground Floor Installation**

# VENTING INSTALLATION

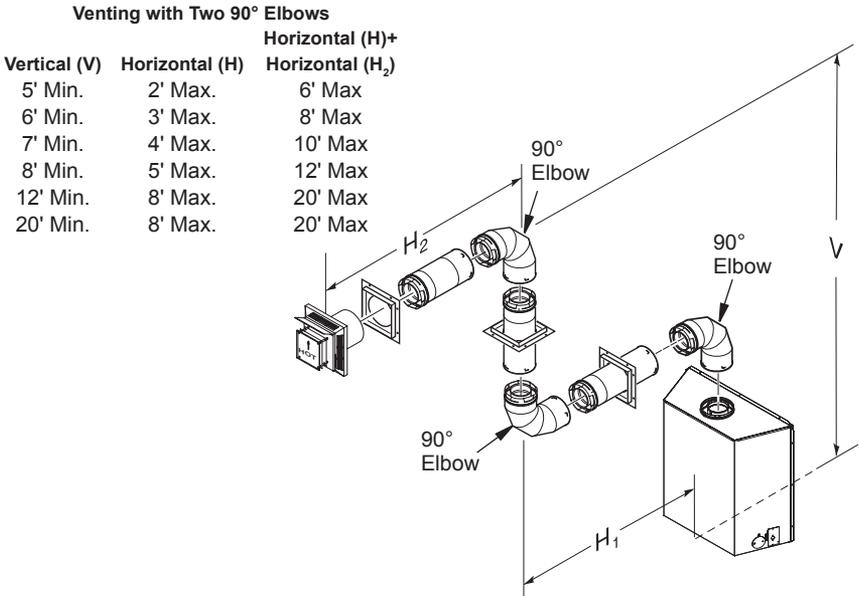
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## HORIZONTAL VENT INSTALLATIONS USING MULTIPLE 90° ELBOWS

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



**Figure 17 - Horizontal Termination Configuration For Venting Using Two 90° Elbows**



**Figure 18 - Horizontal Termination Configuration for Venting Using Three 90° Elbows**

# VENTING INSTALLATION

Continued

## INSTALLATION FOR VERTICAL TERMINATION

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

1. 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 19) 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.

2. 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.

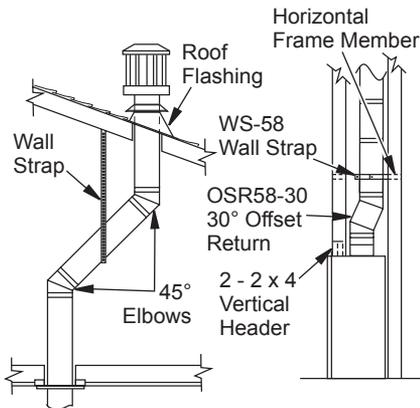


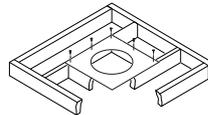
Figure 19 - 45° and 30° Offset with Wall Strap

## Flat Ceiling Installation

1. Cut a 10 3/4" square hole in the ceiling using locating hole as a center point. Opening should be framed to 10 3/4" x 10 3/4" inside dimensions, as shown in Figure 11 on page 11, using framing lumber the same size as the ceiling joists. If area above ceiling is an insulated ceiling or an attic space, you must use firestop thimble and special firestop included with the kit from top side to prevent insulation from contacting vent pipe (see *Thimble Installation*, page 16). 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 20).
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 10, page 11).
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 10 3/4" x 10 3/4" hole must be measured on the horizontal. Actual length may be larger depending on pitch of roof. There must be a 1" clearance from vent pipe to combustible materials. Frame opening as shown in Figure 11, page 11.
4. Connect a section of pipe and extend up through the 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 19). Whenever possible, use 45° elbows instead of 90° elbows. The 45° elbow offers less restriction to the flow of flue gases and intake air.

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.

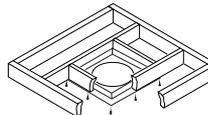


Figure 20 - Installing Firestop

# VENTING INSTALLATION

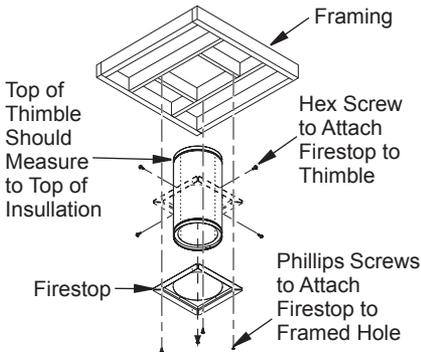
## Continued

- 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 19, page 15. There must be a 1" clearance from the vent pipe to combustible materials.
- Continue to add pipe sections until height of vent cap meets the minimum building code requirements described in Figure 9 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.*
- 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 the enclosure with standard construction material. Make sure and meet the minimum allowable clearances to combustibles. Do not fill any of required air spaces with insulation.*

### Thimble Installation

- Plumb and locate knockout area for vent pipe.
- Cut and frame ceiling joist to dimensions shown in Figure 11, page 11.
- Determine where firestop plate should be attached to thimble by test-fitting thimble into framing. Thimble should be at or above height of insulation.



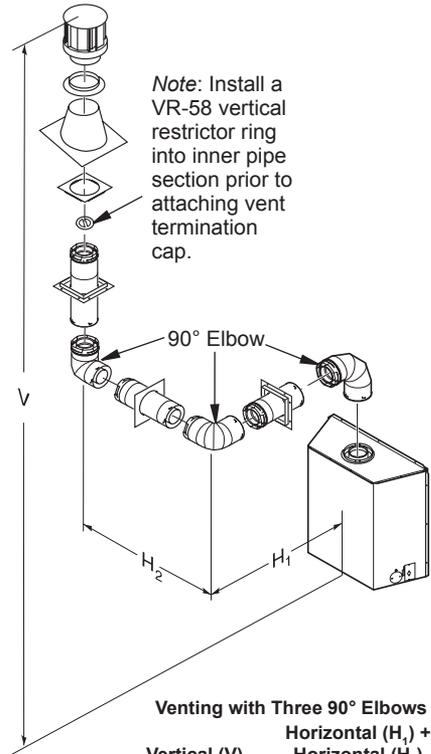
**Figure 21 - Installing Thimble with Firestop**

- Attach thimble into firestop plate using 4 hex screws provided (see Figure 21).
- Refit assembly into opening and attach to framing with 8 Phillips screws provided (see Figure 20, page 15).
- Thimble installation is ready to receive vent pipe. Follow venting installation instructions.

### Vertical Termination Configurations for Top Vent

Figures 22 through 25 show four different configurations for vertical termination.

### VERTICAL VENT INSTALLATIONS USING MULTIPLE 90° ELBOWS

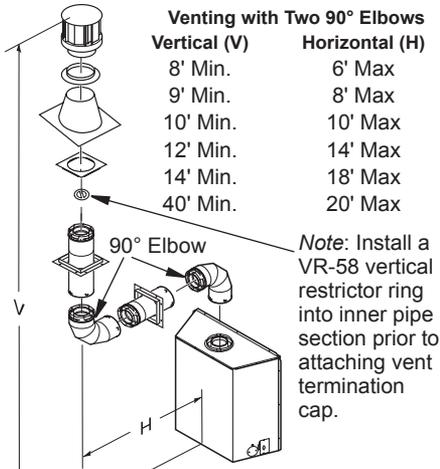


Vertical (V)	Horizontal (H <sub>1</sub> ) + Horizontal (H <sub>2</sub> )
8' Min.	5' Max
10' Min.	8' Max
12' Min.	11' Max
14' Min.	14' Max
16' Min.	17' Max
18' Min.	20' Max
40' Min.	20' Max

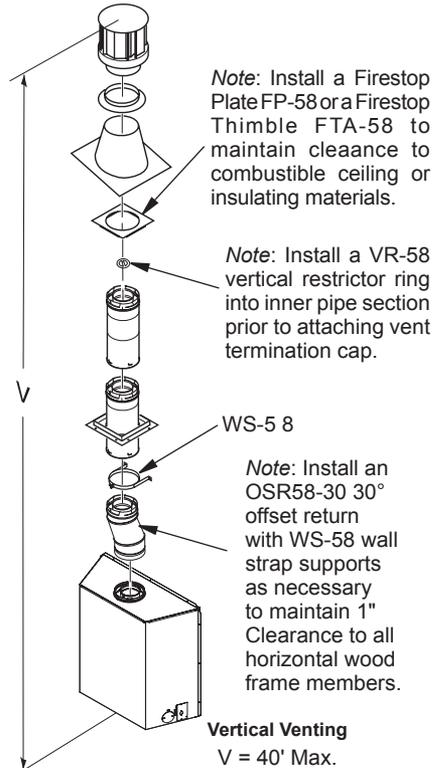
**Figure 22 - Vertical Venting Configuration using Three 90° Elbows (Vertical Round High Wind Termination)**

# VENTING INSTALLATION

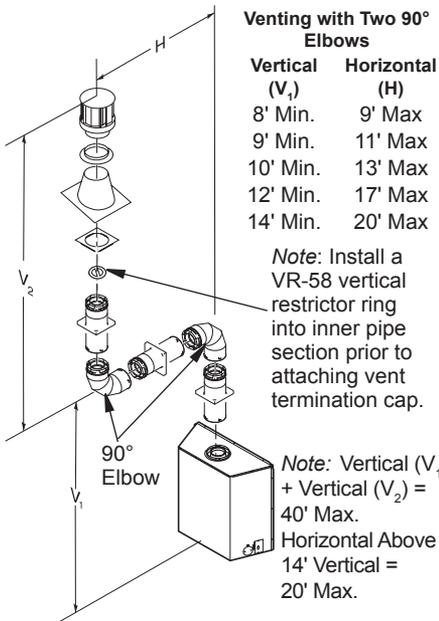
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**Figure 23 - Vertical Venting Configuration Using Two 90° Elbows (Vertical Round High Wind Termination)**



**Figure 25 - Vertical Venting Configuration with No Horizontal Run (Vertical Round High Wind Termination)**



**Figure 24 - Vertical Venting Configuration Using Two 90° Elbows (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

# VENTING INSTALLATION

*Continued*

## Number Description

CVVK-58	Ceiling Vertical Vent Kit (Includes: 30° Offset Return, 7"-12" Adjustable Pipe, Flue Restrictor, Vertical High Wind Termination, 3' Pipe, 4' Pipe, Firestop Plate, Firestop Thimble, Storm Collar, Roof Flashing [0/12 - 6/12], 38 Screws)
CHVK-58	Corner Horizontal Vent Kit, (Includes 90° Elbow, 7"-12" Adjustable Pipe, Wall Firestop, Horizontal Square Termination, 6" Pipe, 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, Galvanized
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

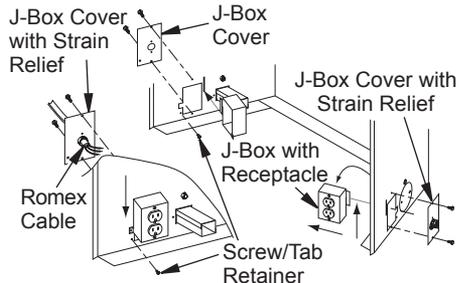
**⚠ CAUTION:** Disconnect the electrical power to the supply circuit before attempting to connect or service this appliance.

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

*Note: If you do not need to relocate the junction box to connect 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 26).
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 junction box out and slip retaining flange out through slot in outer cabinet.



**Figure 26 - Relocating Junction Box Receptacle and Electrical Supply Connection**

# FIREPLACE INSTALLATION

*Continued*

5. Remove two screws and outer cover on left side of the outer cabinet.
6. Reinsert junction box retaining flange through slot now on left side and swing screw mounting tab back through notch as before.
7. Slide junction box down till mounting tab holes line up and replace inner retaining screw.
8. With junction box cover removed, pull end of 3-wire Romex supply line through universal strain relief bushing on cover (see Figure 26, page 18).
9. Strip back 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

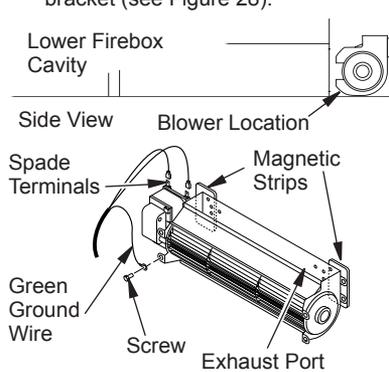
**NOTICE:** If installing blower in an existing fireplace with gas connections, shut off gas supply and disconnect heater from gas supply. Contact a qualified service person to do this.

**⚠ 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.

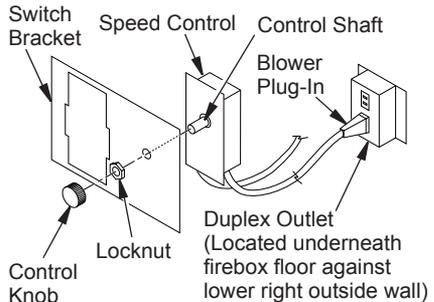
## Model BK Installation

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 27).
2. Attach green ground wire from power cord to blower housing using screw provided (see Figure 27). Tighten screws securely.
3. Place blower against lower rear wall of firebox outer wrapper with exhaust port directed upward. Blower will fit inside the back opening and be held in position against back wall by magnets (see Figure 27).
4. Be certain that all wire terminals are securely attached to terminals on blower motor and that screw retaining green ground wire is tight.
5. Mount speed control box by placing plastic control shaft through opening in switch bracket (see Figure 28).



**Figure 27 - Blower Model BK**



**Figure 28 - Attaching Speed Control to Firebox (Millivolt Models)**

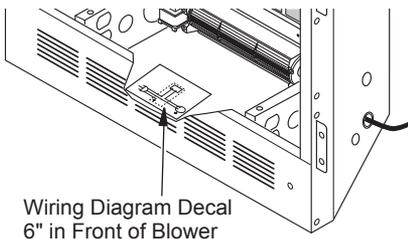
# FIREPLACE INSTALLATION

## Continued

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 on page 19.
8. Plug in blower power cord.
  - a. **If your firebox is installed as a freestanding unit with an accessory mantel**, determine whether 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 prewired**, 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 the 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 29).



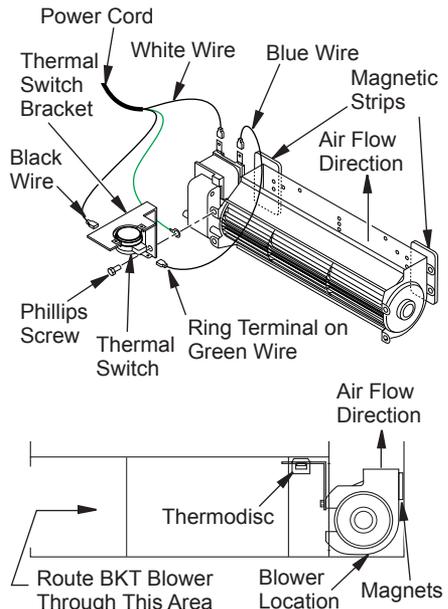
**Figure 29 - Location of Wiring Diagram Decal (Model May Vary From Illustration)**

## Model BKT Installation

*Note: When installing BKT thermostatically-controlled blower, you must first secure 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 30).
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.*



Side View Firebox Bottom

**Figure 30 - Blower Model BKT**

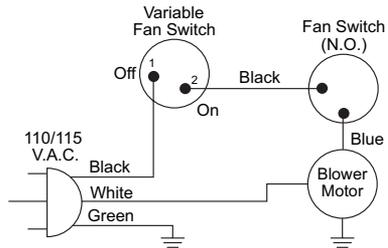
# FIREPLACE INSTALLATION

*Continued*

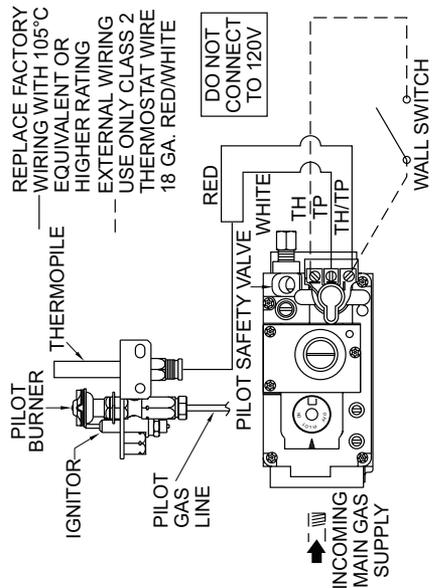
3. Place blower against lower rear wall of firebox outer wrapper with exhaust port directed upward and thermodisc positioned up near the fireplace bottom. Thermodisc must be oriented near fireplace bottom as shown in Figure 30, page 20, in order to sense temperature and properly operate. Blower will be held in position against back wall by magnets incorporated onto blower housing (see Figure 30, page 20).
4. Be certain that all wire terminals are securely attached to terminals on blower motor and thermal switch and that 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 28, page 19).
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 28, page 19).
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 1, page 19.
9. Plug in blower power cord to duplex outlet.
10. Blower will only run when speed control knob is in the ON position and the thermal switch senses temperature after fireplace begins to heat up. The 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.
11. Peel off backing paper and stick supplied wiring diagram decal on firebox bottom approximately 12" in front of blower (see Figure 29, page 20).

## 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 31 - Blower Wiring Diagram for Thermostat-Controlled Models**



**Figure 32 - Millivolt Ignition Wiring Diagram**

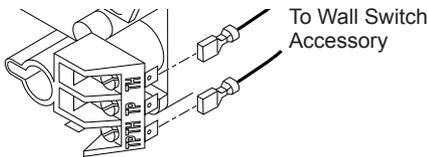
# FIREPLACE INSTALLATION

*Continued*

## INSTALLING OPTIONAL WALL MOUNT SWITCH - GWMS2

1. 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 that wire terminals are in positions on unit as pictured in Figure 33. If wires are not connected as shown switch will not work.
2. Route 25 ft. wire through openings provided on the sides of burner system to a convenient location to mount your switch.
3. Connect one bare wire end to each of terminal of GWMS2 wall switch.
4. Install wall switch and cover in the wall.

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



**Figure 33 - Connecting Wall Switch to Control Valve**

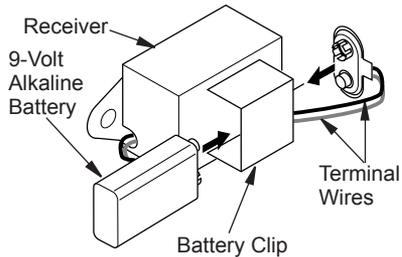
## INSTALLING OPTIONAL WIRELESS HAND-HELD REMOTE CONTROL FOR MILLIVOLT IGNITION - HRC100 AND HRC200 SERIES

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

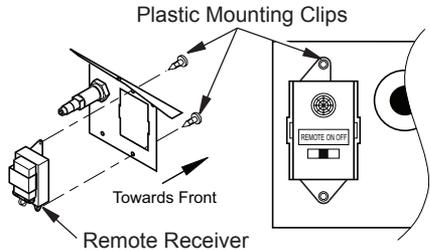
### Installing Remote Receiver

1. Open bottom louver and locate switch bracket on the right.
2. Locate battery clip mounted on back of the receiver. Slide a 9-volt alkaline battery (not included) through clip.
3. Attach terminal wires to battery (see Figure 34).

4. Connect wires from receiver to TH and TPTH to control valve (see Figure 33).
5. Locate the two plastic mounting clips provided with kit.
6. Use the clips to mount receiver on remote mounting bracket as shown in Figure 35.



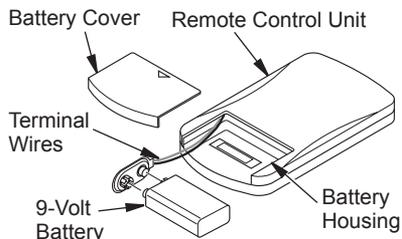
**Figure 34 - Attaching Alkaline Battery to Receiver**



**Figure 35 - 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 36 - Installing Battery in Hand-Held Remote Control Unit**

# FIREPLACE INSTALLATION

*Continued*

## 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 fireplace for proper fireplace according to your gas type or to purchase gas conversion kit (see *Accessories*, page 39).

## 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 37. Pointing the vent down protects it from freezing rain or sleet.

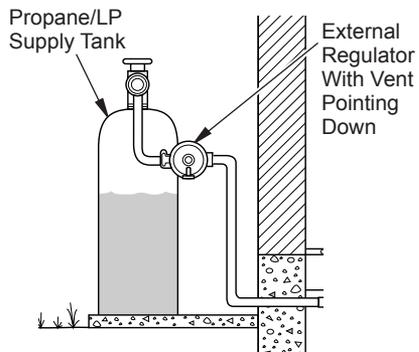
**⚠ CAUTION:** Use only new, black iron or steel pipe. Internally-tinned copper tubing may be used in certain areas. Check your local codes. Use pipe of 1/2" diameter or greater to allow proper gas volume to fireplace. If pipe is too small, undue loss of volume will occur.

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 38, page 24).

**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.



**Figure 37 - External Regulator with Vent Pointing Down (Propane/LP Only)**

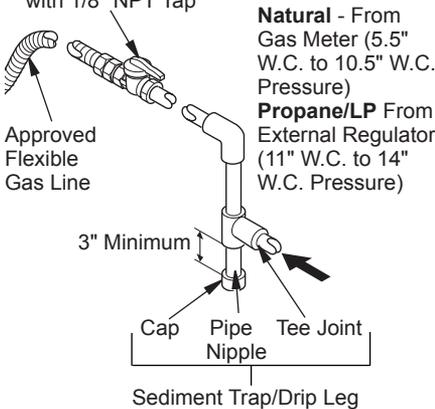
# FIREPLACE INSTALLATION

*Continued*

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

We recommend that you install a sediment trap/drip leg in supply line as shown in Figure 38. 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.

CSA Design-Certified  
Equipment Shutoff Valve  
with 1/8" NPT Tap\*



Sediment Trap/Drip Leg  
**Figure 38 - Gas Connection**

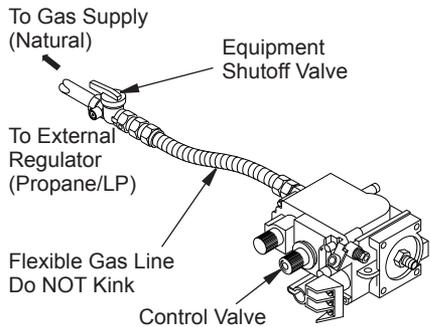
\* The CSA design-certified equipment shutoff valve may be supplied with the appliance or you can purchase it from your retailer.

## 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 39).
4. Check all gas connections for leaks. See Checking Gas Connections.



**Figure 39 - 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.

# FIREPLACE INSTALLATION

## Continued

4. Check all joints of gas supply piping system. Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak. Correct all leaks at once.
5. 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 40).
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 41, for propane/LP or Figure 42, for natural gas). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak. Correct all leaks at once.

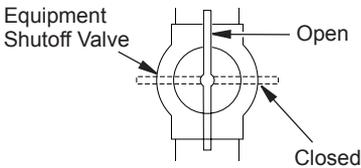


Figure 40 - Equipment Shutoff Valve

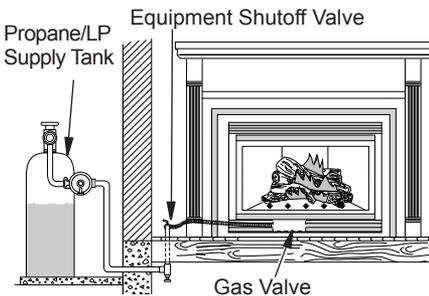


Figure 41 - Checking Gas Joints for Propane/LP Gas Fireplace

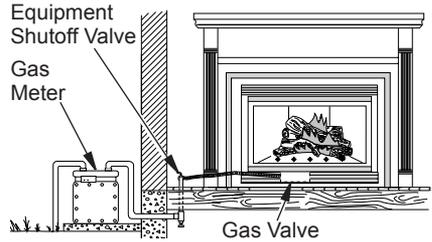


Figure 42 - Checking Gas Joints for Natural Gas Fireplace

### PRESSURE TESTING FIREPLACE GAS CONNECTIONS

1. Open equipment shutoff valve (see Figure 40).
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 41 for propane/LP or Figure 42 for natural gas). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak. Correct all leaks at once.
5. Light fireplace (see *Operation*, page 28). Check all other internal joints for leaks.
6. Turn off fireplace (see *To Turn Off Gas to Appliance*, page 28).

### 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 38.

**⚠ 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.

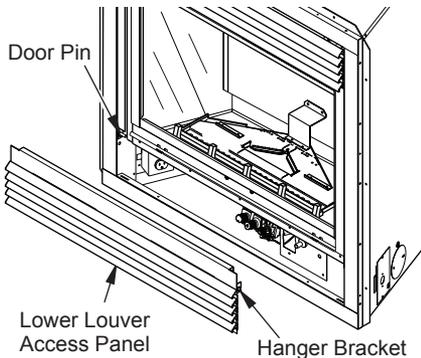
# FIREPLACE INSTALLATION

*Continued*

**⚠ 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 43).
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.



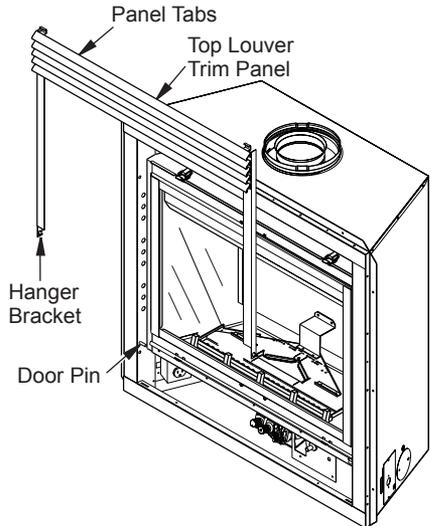
**Figure 43 - Removing Lower Louver Access Panel**

## Removing Top Louver Trim Panel

1. Grasp two hanger brackets at bottom and pull up until hanger brackets release from door pins (see Figure 44).
2. Swing out bracket ends until upper panel tabs can be angled out of slot openings in the upper face frame.
3. Pull entire louver trim panel out of face frame.

**⚠ 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.



**Figure 44 - Removing Top Louver Trim Panel**

## Removing Glass Door

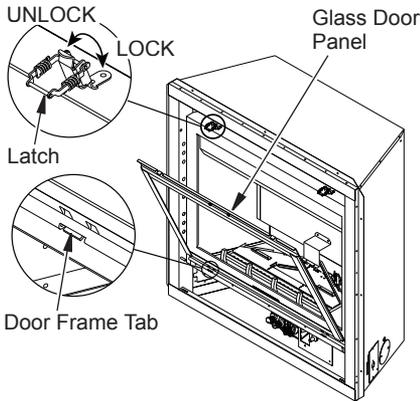
If replacement of glass is necessary, the entire assembly, glass and frame, must be replaced. If glass is broken, wear gloves and tape the remaining fragments onto frame.

1. Remove lower louver panel (see [Removing Lower Louver Access Panel](#) and Figure 43).
2. Remove top louver trim panel (see [Removing Top Louver Trim Panel](#) and Figure 44).
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 45, page 27).
4. Unhook locking clasp from tabs on door frame and with both hands swing door panel out while pivoting lower frame on the lower retaining bracket.
5. Lift lower frame tabs out from positioning slots on lower frame retaining bracket (see Figure 45, page 27).

# FIREPLACE INSTALLATION

*Continued*

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



**Figure 45 - Removing/Replacing Glass Door**

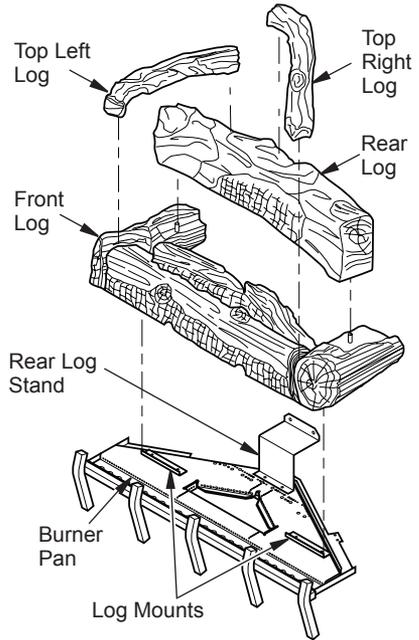
## INSTALLING LOGS, LAVA ROCK AND GLOWING EMBERS

A 4 piece ceramic log set comes packed inside the unit firebox. Removal of glass door is necessary to unpack and assemble the logs and add hearth treatments. Follow steps under Removing/Replacing Glass Door, page 25 to access the logs and burner.

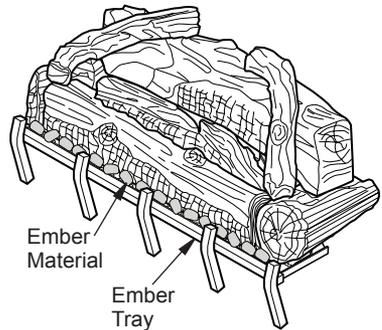
Assemble logs and add burner treatments as follows:

1. Position base log onto burner log mounts (see Figure 46). *Note: Cut out on the bottom should fit over mounts and base log should be positioned against rear panel.*
2. Position holes on the bottom of rear log over pins on base log see Figure 46).
3. Position top left log and top right log onto rear log and base log as shown in (see Figure 46).

4. Open bag of ember materials.
5. 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 47).
6. Replace glass door and louver panels. See Removing/Replacing Glass Door, page 25.



**Figure 46 - Installing Logs**



**Figure 47 - Applying Ember Material**

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

## 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.

- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.  
**WHAT TO DO IF YOU SMELL GAS**
  - Do not try to light any appliance.
  - Do not touch any electric switch; do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

### LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above.
2. Open lower louver panel.
3. Turn off all electric power to fireplace.
4. Push in gas control knob slightly and turn clockwise ↻ to OFF.
5. 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.

6. The pilot is located by the main burner and should not require accessing for lighting.
7. Turn gas control knob counterclockwise ↻ to PILOT (see Figure 45).
8. Push in gas control knob all the way and hold. Immediately light pilot by repeatedly pressing 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 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.
9. Turn on all electric power to fireplace.
10. Turn gas control knob counterclockwise ↻ to ON.
11. This valve is equipped with a HI/LO feature. Set fireplace input as desired.
12. Close lower louver panel.
13. To leave pilot lit and shut off burners only, turn control knob clockwise ↻ to the PILOT position or set selector switch in the OFF position.

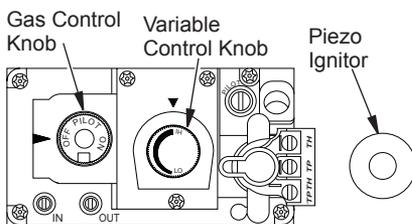


Figure 48 - Control Valve

### TO TURN OFF GAS TO APPLIANCE

1. Open lower louver panel.
2. Set selector switch in the OFF position to prevent draining battery.
3. Turn off all electrical power to appliance if service is to be performed.
4. Push in gas control knob slightly and turn clockwise ↻ to OFF.
5. Close lower louver panel.

# OPERATION

*Continued*

## MANUAL LIGHTING PROCEDURE

1. Remove glass door (see *Removing/Replacing Glass Door*, page 25).
2. Follow steps 1 through 8 under *Lighting Instructions*, page 28.
3. Depress gas control knob and light pilot with match.
4. 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*, page 28.
5. Replace glass door (see *Removing/Replacing Glass Door*, page 25).

## OPTIONAL HAND-HELD REMOTE OPERATION

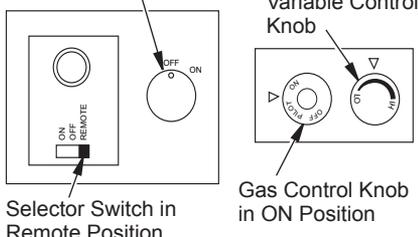
*Note: All remote control accessories must be purchased separately (see *Accessories*, page 39). Follow instructions included with the remote control.*

**NOTICE: You must light the pilot before using the hand-held remote control unit. See *Lighting Instructions*, page 28.**

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 the selector switch to the REMOTE position (see Figure 49).

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

Blower Control Knob  
(Optional Accessory)



**Figure 49 - Setting the Selector Switch, Gas Control Knob and Variable Control Knob for Remote Operation**

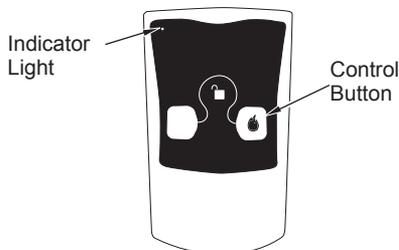
**IMPORTANT:** Do not leave the selector switch in the REMOTE or ON position when the pilot is not lit. This will drain the battery.

## ON/OFF SERIES MODEL HRC100

Hold the control button on the hand-held remote until burner turns on. Hold the control button again until burner turns off (see Figure 47).

**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 50 - 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 51, page 30). 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.

## OPERATION

### Continued

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 the hand-held remote in the AUTO mode close to the fireplace. The radiant heat from the 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.*

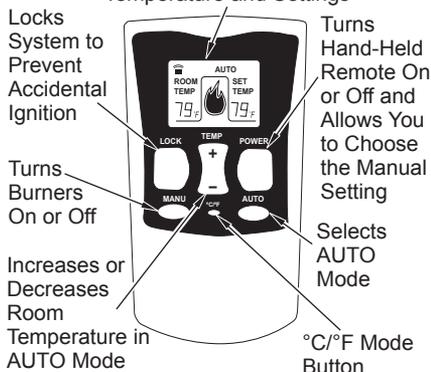
### Safety Features

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.

### Digital Display Shows Temperature and Settings



**Figure 51 - Thermostat Hand-Held Remote Control Unit HRC200**

### 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.

### 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 fireplace as instructed in *Lighting Instructions* on page 28. 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 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 the 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. 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. Fireplace may run for several minutes before the blower turns on. After heater modulates to pilot position, 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 the louvers of the 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 Figure 52.

If your pilot assembly does not meet these requirements:

- turn fireplace off (see [To Turn Off Gas to Appliance](#), page 28)
- see [Troubleshooting](#), page 35

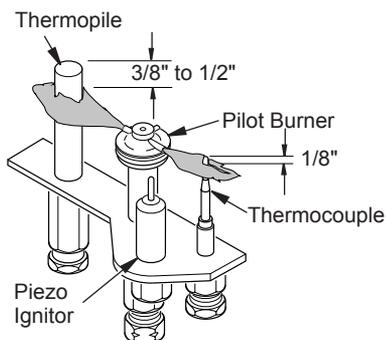


Figure 52 - Pilot Assembly (Millivolt)

### 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 53 shows a typical flame pattern.

If burner flame pattern differs from that described:

- turn fireplace off (see [To Turn Off Gas to Appliance](#), page 28)
- see [Troubleshooting](#), page 35

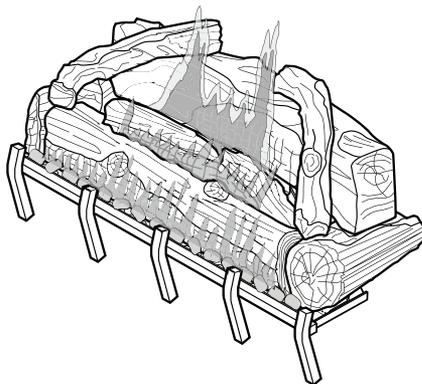


Figure 53 - Typical Flame Pattern

## CONVERSION INSTRUCTIONS

**The conversion kit must be installed by a qualified service agency.**

The conversion kit is packaged with the unit. Please check contents before beginning this conversion.

Before proceeding, make sure gas control valve is in the OFF position, all electrical power to appliance is off and fireplace is cool to the touch. Remove glass door to access the log and burner assembly as follows:

1. Remove lower louver panel (see [Removing Lower Louver Access Panel](#), page 26).
2. Remove top louver trim panel (see [Removing Top Louver Trim Panel](#), page 26).
3. Remove glass door panel (see [Removing Glass Door](#), page 25).

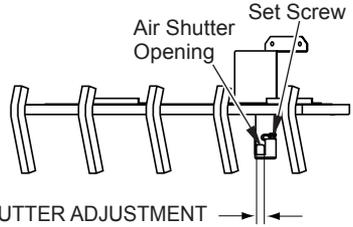
### BURNER ORIFICE CONVERSION

1. Remove top, rear and base logs, see Figure 54, page 32.
2. Remove two screws holding pilot bracket to rear of burner pan. (see Figure 54, page 32).
3. Remove two screws holding rear log stand to rear panel of firebox (see Figure 54, page 32).
4. Expose main burner orifice by lifting burner pan assembly off orifice mount.
5. Use a 1 1/8" wrench on bulkhead fitting and an 11/16" wrench to remove main burner orifice (see Figure 55, page 32).
6. Apply thread sealant to make end of the #55 main burner orifice included with kit and remount orifice into bulkhead fitting.

# CONVERSION INSTRUCTIONS

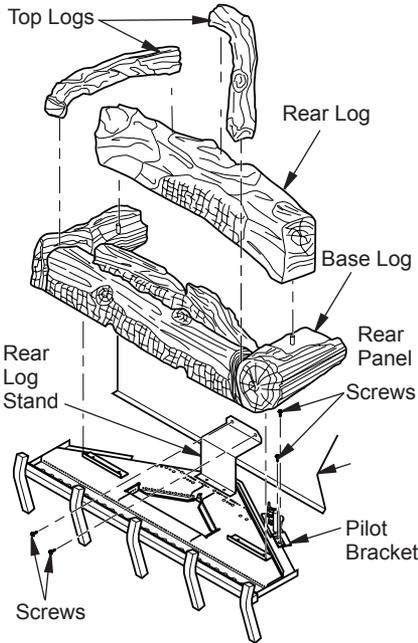
*Continued*

- Loosen set screw on main burner air shutter, rotate to fully open, and retighten set screw (see Figure 56).
- Reposition burner with air shutter placed over orifice mount and replace two screws on rear log stand and two screws at pilot assembly.

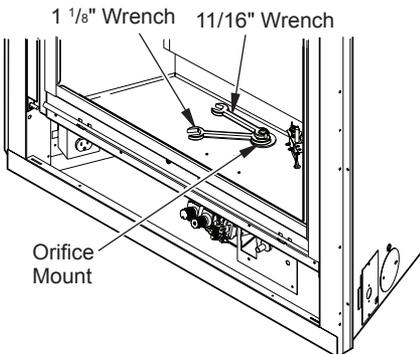


**AIR SHUTTER ADJUSTMENT**  
 Fully Open = Propane/LP Gas  
 1/4" Open = Natural Gas

**Figure 56 - Adjusting Air Shutter**



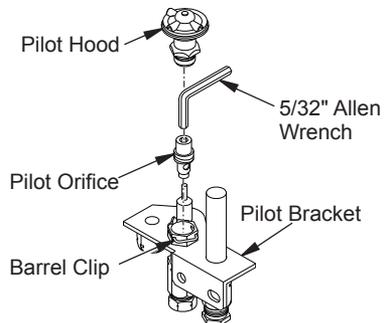
**Figure 54 - Removing Logs and Burner Assembly**



**Figure 55 - Removing Main Burner Orifice**

## PILOT ORIFICE CONVERSION

- Remove pilot hood by pulling up until it disengages from barrel. Do not remove retainer clip (see Figure 57).
- Remove pilot orifice from inside barrel using 5/32" allen wrench to unscrew orifice.
- Replace pilot orifice with LP orifice supplied with kit. The number 30 is stamped on the sleeve for identification. Insert small end of new pilot orifice into barrel and thread until tight with allen wrench.
- Line up notch on pilot hood to positioning tab on barrel receiver and snap into position. **IMPORTANT:** Be careful not to bend or kink aluminum tubing during conversion. Make sure pilot hood and orifice are properly mated and aligned after finishing the conversion.



**Figure 57 - Converting Pilot Orifice**

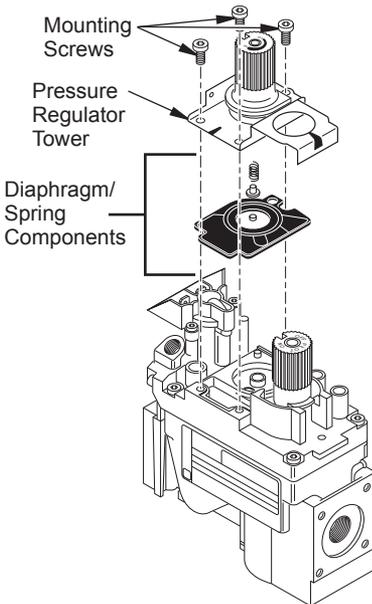
# CONVERSION INSTRUCTIONS

*Continued*

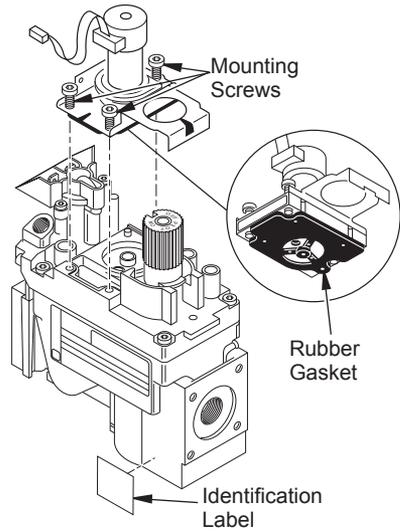
## GAS CONTROL CONVERSION

Convert gas control by swapping out valve regulator portion of gas valve.

1. Using a Torx T20 or slotted screwdriver, remove and discard three mounting screws, pressure regulator tower, and diaphragm/spring components (see Figure 58).
2. Insure that rubber gasket is properly positioned on new pressure regulator assembly. Install LP pressure regulator assembly to valve using the new mounting screws supplied with the kit. Tighten screws securely (approximately 25 in-lbs.) (see Figure 59).
3. Install identification label enclosed with gas valve regulator to valve body, where it can easily be seen (see Figure 59).



**Figure 58 - Removing Mounting Screws, Regulator, Tower, and Diaphragm/Spring Components**



**Figure 59 - Installing Pressure Regulator Assembly**

## 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.

# CLEANING AND MAINTENANCE

*Continued*

**⚠ 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 25 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 38). 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 25). 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 38 for detail on ordering). No

substitutions may be made. See [Removing/Replacing Glass Door](#), page 25 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.

## LOGS

- If you remove logs for cleaning, refer to [Installing Logs, Lava Rock and Glowing Embers](#), page 27, 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 38.
- Replace ember material periodically as needed. See [Replacement Parts](#) on page 38.

## 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 the vent cap and shine a flashlight into the 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

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is no spark at pilot	<ol style="list-style-type: none"> <li>1. Ignitor electrode not connected to ignitor cable</li> <li>2. Ignitor cable pinched or wet</li> <li>3. Piezo ignitor nut is loose</li> <li>4. Broken ignitor cable</li> <li>5. Bad piezo ignitor</li> <li>6. Ignitor electrode broken</li> <li>7. Ignitor electrode positioned wrong</li> </ol>	<ol style="list-style-type: none"> <li>1. Reconnect ignitor cable</li> <li>2. Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry</li> <li>3. Tighten nut holding piezo ignitor. Nut is located behind the mounting bracket</li> <li>4. Replace ignitor cable</li> <li>5. Replace piezo ignitor</li> <li>6. Replace pilot assembly</li> <li>7. Tighten electrode. Replace if necessary</li> </ol>
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 <a href="#">Cleaning and Maintenance</a>, page 33) or replace pilot assembly</li> <li>7. Replace gas regulator</li> </ol>

# TROUBLESHOOTING

*Continued*

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
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 shut-off valve</li> <li>4. A) Contact local natural or propane/LP gas company B) Clean pilot (see <a href="#">Cleaning and Maintenance</a>, page 33) 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 <a href="#">Cleaning and Maintenance</a>, page 33) 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>
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 <a href="#">Cleaning and Maintenance</a>, page 33) 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 <a href="#">Cleaning and Maintenance</a>, page 33) 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 <a href="#">Cleaning and Maintenance</a>, page 33) or replace burner orifice</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
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 log set so flame does not excessively impinge on it</li> <li>2. Inspect opening at base of 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 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>
Fireplace produces unwanted odors	<ol style="list-style-type: none"> <li>1. Gas leak. <b>See Warning statement above</b></li> </ol>	<ol style="list-style-type: none"> <li>1. Locate and correct all leaks (see <i>Checking Gas Connections</i>, page 24)</li> </ol>
Fireplace shuts off in use	<ol style="list-style-type: none"> <li>1. High or gusting winds</li> <li>2. Low line pressure</li> <li>3. Pilot is partially clogged</li> <li>4. Inner vent pipe leaking exhaust gases into system</li> <li>5. Glass is too loose and air tight gasket leaks in corners after usage</li> <li>6. Bad thermopile or thermocouple</li> <li>7. Vent cap improperly installed or blocked</li> </ol>	<ol style="list-style-type: none"> <li>1. Fireplace has been tested for up to 40 mph winds. However, extreme conditions may occur. See <i>Lighting Instructions</i> on page 28</li> <li>2. Check local propane/LP or natural gas company</li> <li>3. Clean pilot (see <i>Cleaning and Maintenance</i>, page 33)</li> <li>4. Locate and correct all vent connections (see <i>Installation Planning</i>, page 11)</li> <li>5. Tighten or replace glass door (see <i>Removing/Replacing Glass Door</i>, page 25)</li> <li>6. Replace faulty components</li> <li>7. Check for proper installation or remove debris or blockage</li> </ol>

# TROUBLESHOOTING

*Continued*

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Gas odor even when control knob is in OFF position	1. Gas leak. <b>See Warning statement on page 37</b>	1. Locate and correct all leaks (see <u><a href="#">Checking Gas Connections</a></u> , page 24)
Gas odor during combustion	1. Gas leak. <b>See Warning statement on page 37</b>	1. Locate and correct all leaks (see <u><a href="#">Checking Gas Connections</a></u> , page 24)
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><a href="#">Installing Logs, Lava Rock, and Glowing Embers</a></u> , page 27) 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 best glowing effect over the visible areas

## SPECIFICATIONS

### CD36T-M Natural Gas

- 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)
- Orifice Size (Main Burner): #44 DMS (0.086")
- Minimum Inlet Supply Pressure: 5.5" w.c. (1.1 kPa)
- Firebox Dimensions (HxWxD) (Flanges and Standoffs Not Included in Measurement): 35 3/4"x 36 1/4" x 14 3/4"

### CD36T-M Propane/LP Gas

- 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) (Flanges and Standoffs Not Included in Measurement): 35 3/4"x 36 1/4" x 14 3/4"

## 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

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

## 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.

## TECHNICAL SERVICE

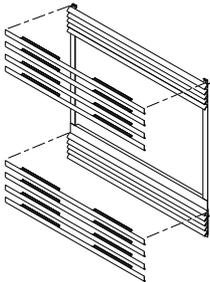
You may have further questions about installation, operation, or troubleshooting. If so, contact DESA Heating, LLC at 1-866-672-6040. When calling please have your model and serial numbers of your heater ready.

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

## 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 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.



### LOUVER TRIM KITS (ROLLED LOUVERS ONLY)

**LTC36B** - Rolled Louver Trim Kit - Brushed Brass

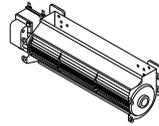
**LTC36P** - Rolled Louver Trim Kit - Platinum

### WALL MOUNTED THERMOSTAT CONTROL KIT - GWMT1

Allows easy wall access for thermostatic operation of your fireplace.

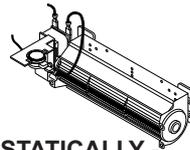
### WALL MOUNTED ON/OFF SWITCH GWMS2

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.

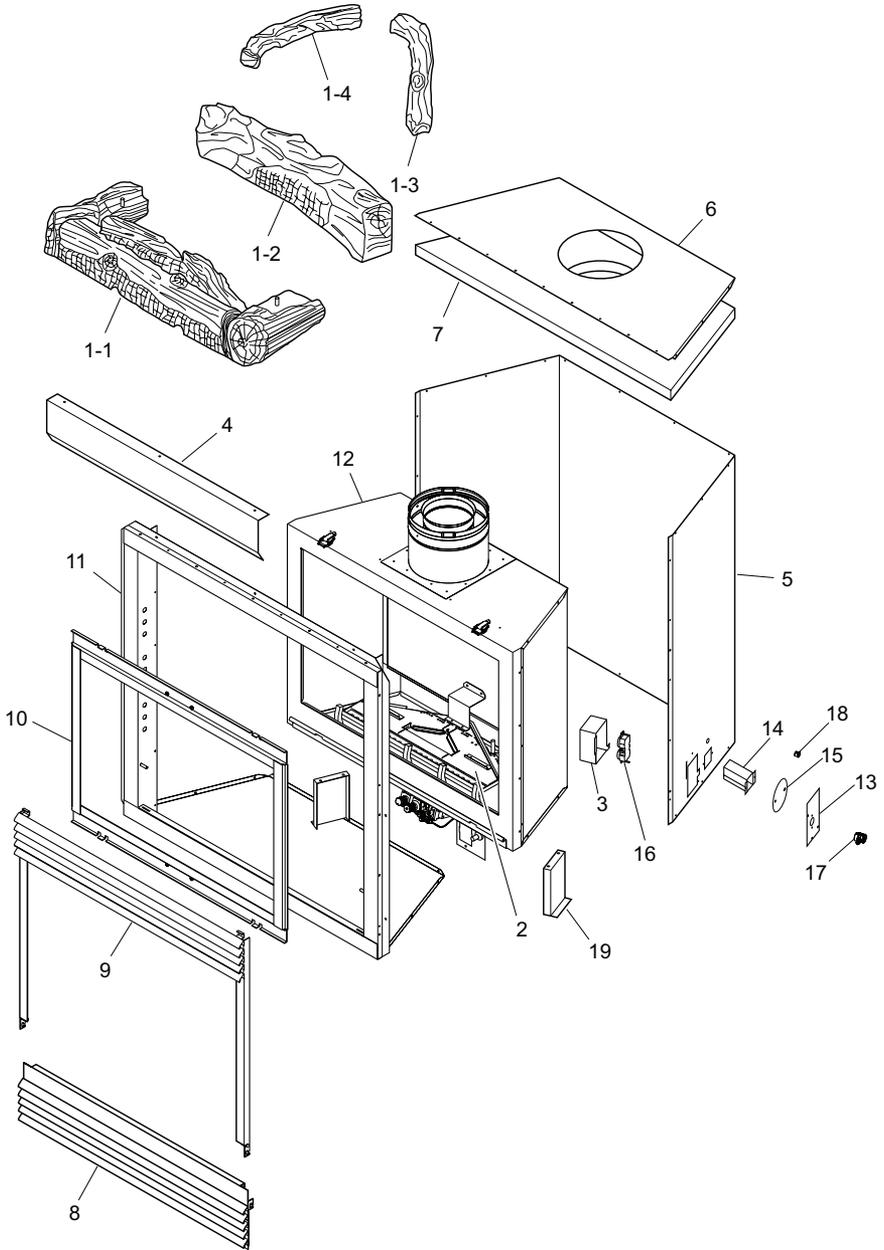


### RECEIVER AND HAND-HELD ON/OFF REMOTE CONTROL KIT - HRC100 SERIES

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

# PARTS

## FIREPLACE ASSEMBLY FOR MODEL CD36T-M



## PARTS

### FIREPLACE ASSEMBLY FOR MODEL CD36T-M

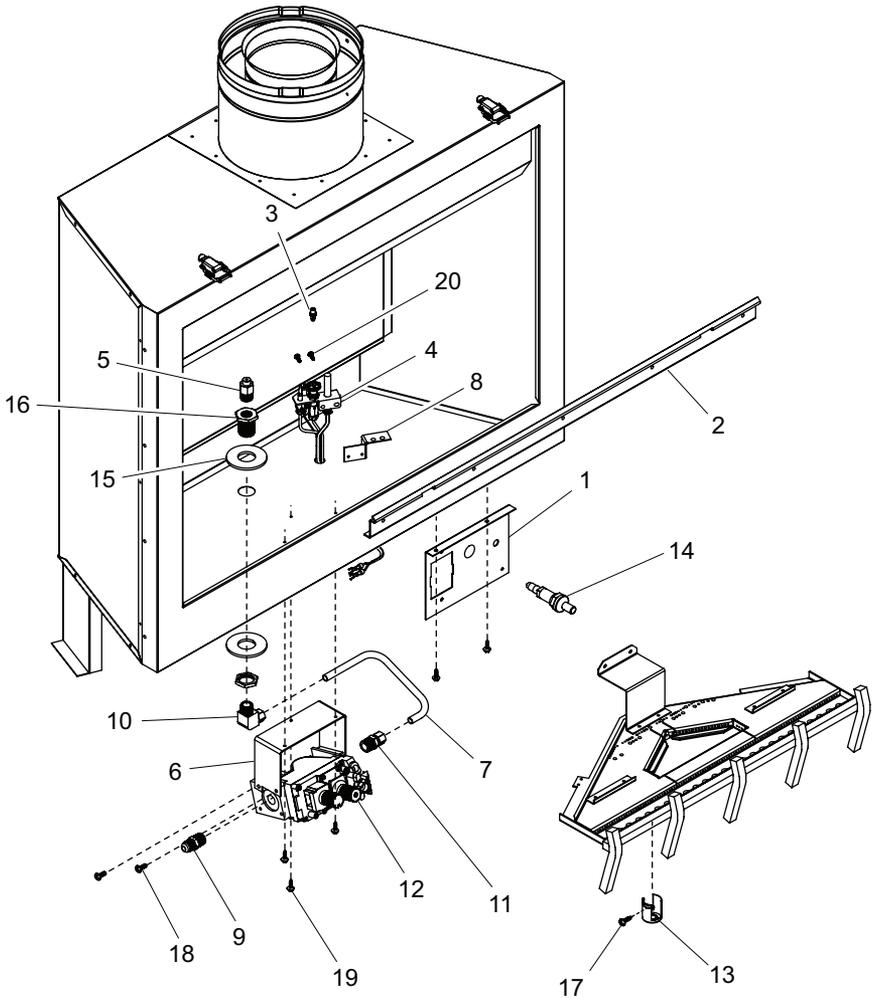
This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under Replacement Parts on page 38 of this manual.

KEY			
NO.	PART NO.	DESCRIPTION	QTY.
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	1
3	114889-01	Junction Box Duplex Plug	1
4	114880-01	Heat Deflector	1
5	114875-02	Fireplace Surround	1
6	114876-02	Fireplace Top	1
7	116016-02	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	114867-01	Face Assembly	1
12	**	Firebox Assembly Complete	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
	118532-01	LP Gas Conversion Kit	1

\*\* Not a field replaceable part.

# PARTS

## BURNER ASSEMBLY FOR MODEL CD36T-M



## PARTS

### BURNER ASSEMBLY FOR MODEL CD36T-M

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under Replacement Parts on page 38 of this manual.

KEY NO.	PART NO.	DESCRIPTION	QTY.
1	116317-01	Remote Ignitor Bracket	1
2	114886-01	Door Retainer Bracket	1
3	108085-01	Pilot Orifice #51 - Natural Gas	1
	108085-02	Pilot Orifice #30 - Propane/LP Gas	1
4	108084-02	Pilot Assembly - Natural Gas	1
	108084-03	Pilot Assembly - Propane/LP Gas	1
5	27206	Burner Orifice #44 - Natural Gas	1
	26482	Burner Orifice #55 - Propane/LP Gas	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	Control Valve Millivolt - Natural Gas	1
	14390	Control Valve Millivolt - Propane/LP Gas	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

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# WARRANTY

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## 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.

## DESA HEATING, LLC LIMITED WARRANTIES

### New Products

**Standard Warranty:** DESA Heating, LLC warrants this new product and any parts thereof to be free from defects in material and workmanship for a period of two (2) years from the date of first purchase from an authorized dealer provided the product has been installed, maintained and operated in accordance with DESA Heating, LLC's warnings and instructions.

For products purchased for commercial, industrial or rental usage, this warranty is limited to 90 days from the date of first purchase.

### Factory Reconditioned Products

**Limited Warranty:** DESA Heating, LLC warrants factory reconditioned products and any parts thereof to be free from defects in material and workmanship for 30 days from the date of first purchase from an authorized dealer provided the product has been installed, maintained and operated in accordance with DESA Heating, LLC's warnings and instructions.

### Terms Common to All Warranties

The following terms apply to all of the above warranties:

Always specify model number and serial number when contacting the manufacturer. To make a claim under this warranty the bill of sale or other proof of purchase must be presented.

This warranty is extended only to the original retail purchaser when purchased from an authorized dealer, and only when installed by a qualified installer in accordance with all local codes and instructions furnished with this product.

This warranty covers the cost of part(s) required to restore this product to proper operating condition and an allowance for labor when provided by a DESA Heating, LLC Authorized Service Center or a provider approved by DESA Heating, LLC. Warranty parts must be obtained through authorized dealers 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.

Travel, handling, transportation, diagnostic, material, labor and incidental costs associated with warranty repairs, unless expressly covered by this warranty, are not reimbursable under this warranty and are the responsibility of the owner.

Excluded from this warranty are products or parts that fail or become damaged due to misuse, accidents, improper installation, lack of proper maintenance, tampering, or alteration(s).

This is DESA Heating, LLC's exclusive warranty, and to the full extent allowed by law; this express warranty excludes any and all other warranties, express or implied, written or verbal 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 new products and 30 days on factory reconditioned products from the date of first purchase. DESA Heating, LLC makes no other warranties regarding this product.

DESA Heating, LLC's liability is limited to the purchase price of the product, and DESA Heating, LLC shall not be liable for any other damages whatsoever under any circumstances including indirect, incidental, or consequential damages.

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

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

For information about this warranty contact:



118531 01

NOT A UPC



DESA Heating, LLC  
2701 Industrial Drive  
Bowling Green, KY 42101  
www.desatech.com  
1-866-672-6040

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