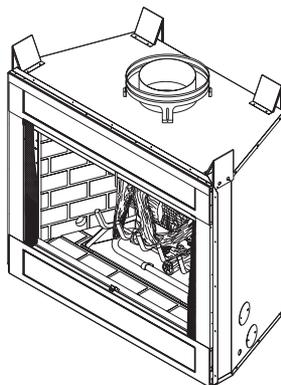


# DESA™

## B-VENT DECORATIVE GAS FIREPLACE OWNER'S OPERATION AND INSTALLATION MANUAL



**MODELS M36(B,H), M42(B,H), VM36(B,H) AND VM42(B,H)  
NATURAL GAS  
MODELS M36P(B,H), M42P(B,H), VM36P(B,H) AND VM42P(B,H)  
PROPANE/LP GAS**

**WARNING:** If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

### FOR YOUR SAFETY

- Do not store or use gasoline or any other flammable vapors or 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.

**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.**

**NOT FOR USE WITH SOLID FUEL  
CHECK LOCAL CODES PRIOR TO INSTALLATION**

### **SAVE THIS BOOK**

This book is valuable. In addition to instructing you on how to install and maintain your appliance, it also contains information that will enable you to obtain replacement parts or optional accessory items when needed. Keep it with your other important papers.

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

**This appliance is only for use with the type of gas indicated on the rating plate.**

**This appliance is not convertible for use with other gases, unless a certified kit is used.**

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

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## SAFETY INFORMATION



**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, explosions, electrical shock and carbon monoxide poisoning.



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

This fireplace is a vented product. This fireplace will not produce any gas leakage into your home if properly installed. This fireplace must be properly installed by a qualified service person. If this unit is not properly installed by a qualified service person, gas leakage 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 have been installed properly. **Get fresh air at once!** Have fireplace inspected and serviced by a qualified service person. 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 gas and natural gas are both odorless. An odor-making agent is added to each of these gases. The odor helps you detect a gas leak. However, the odor added to these gases can fade. Gas may be present even though no odor exists.

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



**WARNING:** Any change to this fireplace or its controls can be dangerous.

1. 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.
2. 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.
3. 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.
4. Never install the fireplace
  - in a recreational vehicle
  - where curtains, furniture, clothing or other flammable objects are less than 42" from the front, top or sides of the fireplace
  - in high traffic areas
  - in windy or drafty areas
5. This fireplace reaches high temperatures. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surfaces to cool before touching.
6. Carefully supervise young children when they are in the room with fireplace.
7. A hearth extension is not required with this appliance. If one is installed, it is for aesthetic purposes only and does not have to meet the standard requirements.
8. Turn fireplace off and let cool before servicing or repairing. Only a qualified service person should install, service or repair this fireplace. Have fireplace inspected annually by a qualified service person.
9. 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.
10. Have venting system inspected annually by a qualified service person. If needed, have venting system cleaned or repaired. See *Cleaning and Maintenance*, page 21.

# SAFETY INFORMATION

## Continued

11. Keep the area around your fireplace clear of combustible materials, gasoline and other flammable vapor and liquids. Do not run fireplace where these are used or stored. Do not place items such as clothing or decorations on or around fireplace.
12. Do not use this fireplace to cook food or burn paper or other objects.
13. Do not use any solid fuels (wood, coal, paper, cardboard, etc.) in this fireplace. Use only the gas type indicated on fireplace nameplate.
14. 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* or the *Canadian Electrical Code, CSA C22.1*.
15. Do not obstruct the flow of combustion and ventilation air in any way. Provide adequate clearances around air openings into the combustion chamber along with adequate accessibility clearance for servicing and proper operation.
16. Do not install fireplace directly on carpeting, vinyl tile or any combustible material other than wood. The fireplace must set on a metal or wood panel extending the full width and depth of the fireplace.
17. 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.
18. Do not operate fireplace if any log is broken.
19. Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this fireplace.
20. Provide adequate clearances around air openings.

## UNPACKING

The following items are packed inside the firebox. Remove before positioning firebox into framing.

- Transition Collar - For vent connection
- Ceramic Log Pack - Shrink-wrapped on cardboard
- Three (3) plastic bags containing lava rock, pan and ember materials
- Rear Log - Remove the two plastic quick ties from around the burner and grate
- Grate Stand - Lift off of burner pan

Check all items for any shipping damage. If damaged, promptly inform dealer or distributor where you bought the product.

Safely retain these items for later installation.

## INTRODUCTION

Models M36(P)(B,H), VM36(P)(B,H), M42(P)(B,H) and VM42(P)(B,H) are vented gas fireplaces that use a millivolt gas control valve with a millivolt ignition system. A 6" B-Type venting system and a listed type vent cap are not supplied but are required for proper operation. See venting instructions on pages 9 and 10.



**WARNING: This gas appliance must not be connected to a chimney flue servicing a solid fuel burning appliance.**

Models M36(B,H), VM36(B,H), M42(B,H) and VM42(B,H) are factory equipped for use with natural gas and must be converted when intended for use with propane/LP gas. A respective model PCBM-36 or PCBM-42 conversion kit may be purchased for simple conversion to propane/LP gas. See *Accessories*, page 31.

## BEFORE YOU BEGIN

Before beginning the installation of your appliance, read these instructions through completely. This DESA appliance and its approved components are safe when installed according to this installation manual and are operated as recommended by DESA. Unless you use DESA approved components tested for this appliance, **YOU MAY CAUSE A FIRE HAZARD!**

The DESA warranty will be voided by and DESA disclaims any responsibility for the following actions :

- A) Modification of the appliance or any of the components.
- B) Use of any component part not approved by DESA in combination with this appliance.
- C) Installation and/or operation in a manner other than instructed in this manual.
- D) The burning of anything other than the type of gas approved for use in this gas appliance.

The installation must conform with local codes or, in the absence of local codes, with the current *National Fuel Gas Code, ANSI Z223.1/NFPA 54* or with the current *CAN/CGA B149 Installation Codes*.

This appliance complies with *ANSI Z21.50-2000* and *CSA 2.22-2000 as Vented Gas Fireplaces* and is listed and tested by the *Canadian Standards Association* to the above test standards.

## INTRODUCTION

*Continued*

**⚠ WARNING:** Installation of this appliance should be done by a qualified service person well trained in the installation of such appliances. You will also need a building permit from your local Building and Safety Commissioner before installing this appliance; otherwise your insurance co. may not cover this appliance.

**NOTICE:** This appliance is not intended to be used as a primary source of heat.

**⚠ CAUTION:** Do not connect appliance before pressure testing gas piping. Damage to gas valve may result and an unsafe condition may be caused.

The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).

The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

For the purpose of input adjustment two pressure taps (for IN and OUT pressures) are provided on the gas control valve for test gauge connections to the appliance.

## SELECTING LOCATION

To determine the safest and most efficient location for your appliance, you must take into consideration the following guidelines:

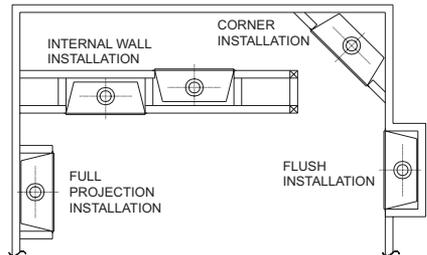
1. The location must allow for proper clearances (see *Clearances*, page 7).
2. Consider a location where heat output would not be affected by drafts, air conditioning ducts, windows or doors.
3. A location that avoids the cutting of joists or roof rafters will make installation easier. Figure 1 shows a plan view of a few common locations.

**Flush installations** are recommended where living space is limited or at a premium and since the space required to enclose the appliance would be located beyond an outside wall, this would also reduce the cutting of joists, roof rafters and such. Check local codes for any restrictions.

**Projected installations** can extend any distance into the room. A projection may be ideal for a new addition on an existing, finished wall.

**Corner installations** make use of space that may not normally be used and provides a wider and more efficient range for radiant heat transference.

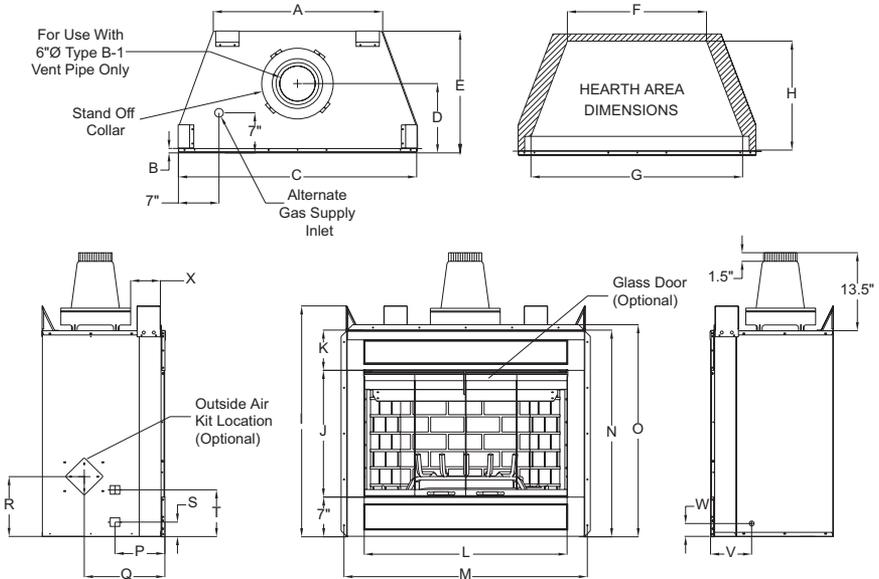
**Internal wall installations** provide a discreet option for room separation and can also be ideal as an addition to an existing wall.



**Figure 1 - Possible Locations for Installing Appliance**

# PRODUCT SPECIFICATIONS

<b>GAS RATING - NATURAL</b>		
	<b>M36(B,H), VM36(B,H)</b>	<b>M42(B,H), VM42(B,H)</b>
Max. Input Rating:	40,000 Btu/Hr	45,000 Btu/Hr
Manifold Pressure:	3.5 in. WC (.87 kPa)	3.5 in. WC (.87 kPa)
Minimum Supply Pressure:	4.5 in. WC (1.12 kPa)	4.5 in. WC (1.12 kPa)
Maximum Supply Pressure:	10.5 in. WC (2.66 kPa)	10.5 in. WC (2.66 kPa)
Orifice Size:	# 30	# 29
<b>GAS RATING - PROPANE/LP</b>		
	<b>M36P(B,H), VM36P(B,H)</b>	<b>M42P(B,H), VM42P(B,H)</b>
Max. Input Rating:	40,000 Btu/Hr	45,000 Btu/Hr
Manifold Pressure:	10 in. WC (2.49 kPa)	10 in. WC (2.49 kPa)
Minimum Supply Pressure:	11 in. WC (2.74 kPa)	11 in. WC (2.74 kPa)
Maximum Supply Pressure:	13 in. WC (3.23 kPa)	13 in. WC (3.23 kPa)
Orifice Size:	# 52	# 50



Model 36		Model 42		Model 36		Model 42		Model 36		Model 42	
A	29"	36"	I	40 1/4"	44 1/4"	Q	13 7/8"	14"			
B	5/8"	5/8"	J	21"	24"	R	10 1/2"	12 1/2"			
C	41"	48"	K	8"	9"	S	2 1/2"	2 1/2"			
D	12"	14"	L	34 3/4"	42"	T	8 1/8"	8 1/8"			
E	21 1/4"	23"	M	42"	49"	U	11"	12 3/4"			
F	22 1/4" (24" w/o Brick)	29 1/4" (31" w/o Brick)	N	36"	40"	V	7"	7"			
G	32 5/8" (34" w/o Brick)	39 1/2" (41 1/4" w/o Brick)	O	37"	41"	W	2 1/4"	2 1/4"			
H	15 3/4" (16 3/4" w/o Brick)	17 3/4" (18 3/4" w/o Brick)	P	8 5/8"	10 1/2"	X	5"	4 1/2"			

**Figure 2 - Appliance Dimensions**

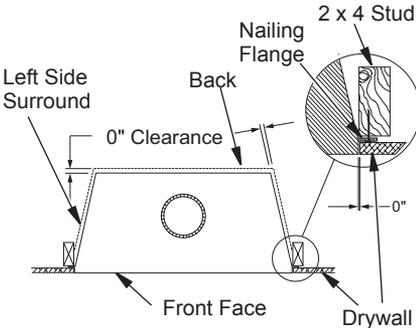
# PRE-INSTALLATION PREPARATION

## CLEARANCES

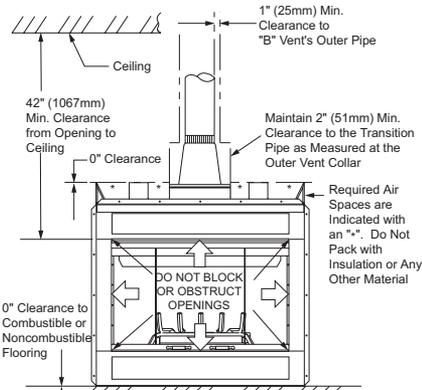
Minimum clearances to combustibles are:

- Back and Sides of Outer Surround . . . 0" min.
- Drywall to Sides of Front Face  
(Nailing Flanges) . . . . . 0" min.
- "B" Vent Surfaces . . . . . 1" min.
- Ceiling to Opening . . . . . 42" min.
- Floor . . . . . 0" min.
- Perpendicular Wall . . . . . See Figure 6

**CAUTION: Do not block required air spaces with insulation or any other material. Do not obstruct effective opening of appliance with any type of facing material.**



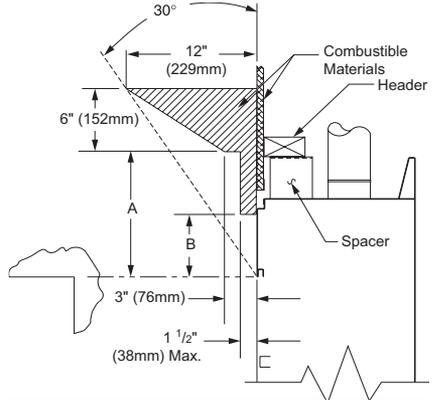
**Figure 3 - Minimum Clearances (Top View)**



**Figure 4 - Minimum Clearances (Front View)**

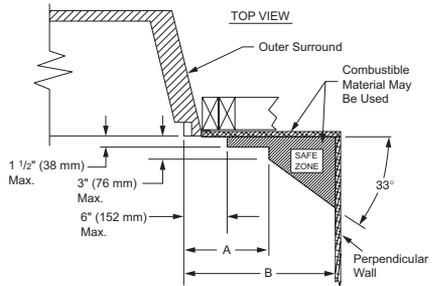
# MANTEL CLEARANCES AND WALL DETAILS

A combustible mantle shelf may be installed a maximum 12" (229 mm) from the wall. Figures 5 and 6 show the minimum allowable distances from various combustible mantle components in relation to the fireplace opening.



	M36(B,H), M36P(B,H) VM36(B,H), VM36P(B,H)	M42(B,H), M42P(B,H) VM42(B,H), VM42P(B,H)
A	14" (356 mm)	15" (381 mm)
B	8" (203 mm)	9" (229 mm)

**Figure 5 - Mantel Clearances - Side View (Cross Section)**



	M36(B,H), M36P(B,H) VM36(B,H), VM36P(B,H)	M42(B,H), M42P(B,H) VM42(B,H), VM42P(B,H)
A	9" (229 mm)	6" (152 mm)
B	12" (305 mm)	9" (229 mm)

**Figure 6 - Side Clearances - Top View (Cross Section)**

# PRE-INSTALLATION PREPARATION

*Continued*

## FRAMING

1. Frame appliance enclosure as illustrated in Figures 7 and 8.

**Note:** If a wall covering is used to line the enclosure, then all measurements must be from the surface of the covering.

2. Place the appliance into the framing and secure it.

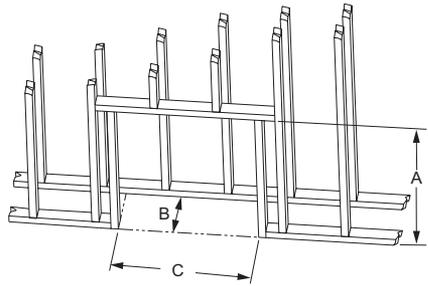
**Note:** If appliance is to be raised above floor level, a platform must be built to support the appliance.

3. Install the supply line to the appliance using a 1/2" NPT black iron gas line terminating 2 5/16" above the bottom of the appliance. The gas line must be installed through the lower left side access point or alternate access hole in the bottom of the appliance (see Figure 19, page 13).

4. Repack insulation around the gas line to cover any remaining openings in the conduit sleeve. Prepare the incoming gas line with teflon tape or pipe joint compound and hook-up incoming gas line to the flexible gas line.

**Note:** If 1/2" NPT black iron pipe does not mate with fitting at the end of flexible gas line, remove fitting and replace with a 37 degree flare 3/4"-12, 1/2" NPT (female) fitting.

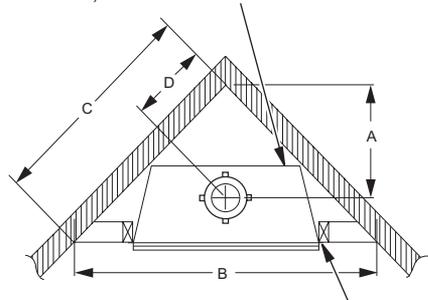
**⚠ WARNING:** When finishing appliance, do not overlap combustible material onto the black front face. Brick, tile or other non-combustible materials may be applied to the face provided that any gap is between the material used and the face is caulked with a noncombustible caulking.



	M36(B,H), M36P(B,H) VM36(B,H), VM36P(B,H)	M42(B,H), M42P(B,H) VM42(B,H), VM42P(B,H)
A	40 3/8" (1020 mm)	44 3/8" (1121 mm)
B	21 3/8" (543 mm)	23 1/8" (587 mm)
C	41 1/4" (1048 mm)	48 1/4" (1226 mm)

**Figure 7 - Rough Opening for Installing in Wall**

These Dimensions Allow for a 3/4" Clearance at Sides and Back of Fireplace. However, 0" Clearance is Permitted



3/4" Clearance Not Required at Nailing Flanges

	M36(B,H), M36P(B,H) VM36(B,H), VM36P(B,H)	M42(B,H), M42P(B,H) VM42(B,H), VM42P(B,H)
A	24 1/2" (622.3 mm)	27 9/16" (700.1 mm)
B	73 7/8" (1876.4 mm)	83 7/8" (2130.4 mm)
C	52 3/16" (1326 mm)	59 5/16" (1506.6 mm)
D	17 1/4" (438.2 mm)	19 1/2" (495.3 mm)

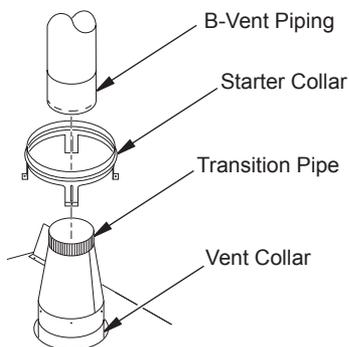
**Figure 8 - Corner Installation Guidelines**

## PRE-INSTALLATION PREPARATION

*Continued*

### INSTALLING TRANSITION PIPE AND STARTER COLLAR

The transition pipe and starter collar shown in Figure 9 are supplied with the fireplace, unattached and ready for installation. Remove the starter collar and set aside. Slide the transition pipe over the vent collar and attach with a minimum of three screws. Replace the starter collar over the transition pipe and attach using four screws located on the leg stands (five used on the model M42). To install B-vent piping, slide the first piece of B-vent over the transition pipe and attach with either a minimum of two screws or other means approved by the vent manufacturer.



**Figure 9 - Installing Transition Pipe and Starter Collar**

### VENTING INSTALLATION

A B-type venting system must be connected to the appliance for venting to the outside of the building. The following section is provided as a guide to a standard B-type vent installation.

The following section is provided as a guide to a standard B-type vent installation.

Standing codes requirements concerning B-type vent installations may vary within your state, province or local codes jurisdiction. Therefore, it is recommended that you check with your local building codes for specific requirements or in absence of local codes, follow Section 7.0 of the current *National Fuel Gas Code ANSI Z223.1/NFPA 54* and in Canada with *CAN/CGA B149 for Category I systems using double wall B-1 vent pipe*.

This gas appliance must be vented to the outdoors only and may not be terminated into an attic space or into a chimney flue servicing a solid-fuel burning appliance.

This appliance may be vented through a manufactured chimney system or a masonry chimney using a B-vent adapter or a chimney liner system if all are listed, inspected and approved by local codes and/or building authorities.

The examples shown in Figure 10, page 10 are typical of most B-vent installations and codes practices.

**Example 1:** Shows the minimum allowable system height and lateral offset for a 60° degree or greater inclination. Code specifies that offsets at 60° degrees or greater are considered horizontal and must follow the 75% percent rule for lateral to total vertical system height. Codes also allows only one offset in the total system when at 60° degrees or greater. The total vertical height in this example represents the minimum height of 8 feet and therefore the allowable lateral is 6 feet when the 75% percent rule applies. If the lateral length must exceed 75% then the system must be sized in accordance with the Category I venting tables.

**Example 2:** Shows a multiple offset each at 45° degrees of inclination. Multiple offsets are permitted if they do not exceed 45° degrees of inclination. The total lengths of the two offsets are not required to meet the 75% percent allowable rule.

**Example 3:** Shows a single offset at 45° degrees of inclination and therefore the lateral length at 10 feet of offset does not have to meet the 75% percent rule.

In each case the offsets must be supported and firestops must be positioned wherever the vent must pass through a sub-floor, ceiling joist or an attic overhang. The vent pipe must terminate vertically into a listed type vent cap and extend a sufficient height through an approved roof flashing, roof jack or a roof thimble. At all points the listed clearances must be maintained.

Vent terminations must be located in accordance with height and proximity rules of NFPA No. 54 or CAN/CGA B149. These rules apply to vents at 12 in. diameter or less and require a minimum height in accordance with the roof pitch and a minimum of 8 ft. distance from a vertical wall or obstruction (see Figure 11, page 10).

If venting horizontally through a side wall becomes necessary, a listed thimble approved for use with B-type vent must be used. Check with your local codes before venting through a side wall.

Some codes areas allow the use of existing B-type vent systems if the system is at or above the recommended diameter of the flue; in this case 6".

The flue connection must be made using listed

# VENTING INSTALLATION

Continued

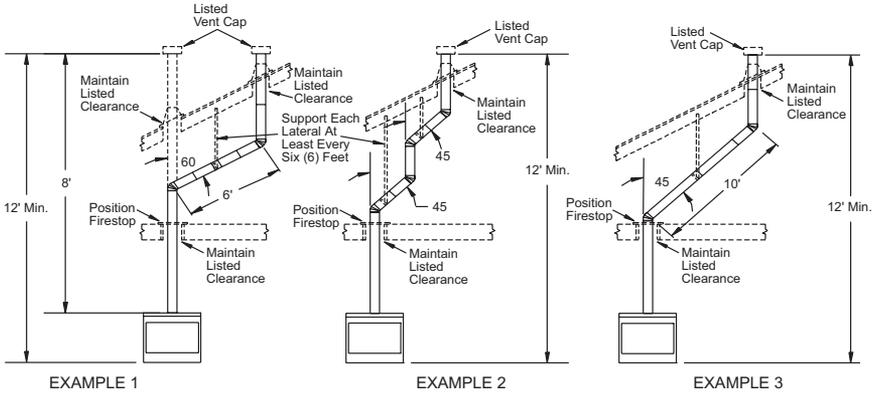
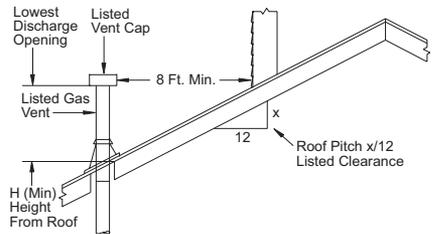


Figure 10 - Typical B-Vent Configuration

B-type connectors and the existing system must be code inspected for damage and proper installation. It is not recommended that this appliance be common vented with an existing gas burning appliance. However, if it becomes necessary to common vent this appliance, the venting system must be sized and configured in accordance with the common venting guides Appendix G of the current *National Fuel Gas Code ANSI Z223.1/NFPA 54* and in Canada with *CAN/CGA B149*.

**Note:** Before connecting this appliance to an existing vent system or a common venting system consult with your local architect, planner or building official.

**⚠ WARNING: This appliance must be properly connected to a system and must not be connected to a chimney flue servicing a separate solid fuel burning appliance.**



Roof Pitch	H (Min.) Ft.	m
Flat to 6/12	1.0	ax0.30
6/12 to 7/12	1.25	0.38
Over 7/12 to 8/12	1.5	0.46
Over 8/12 to 9/12	2.0	0.61
Over 9/12 to 10/12	2.5	0.76
Over 10/12 to 11/12	3.25	0.99
Over 11/12 to 12/12	4.0	1.22
Over 12/12 to 14/12	5.0	1.52
Over 14/12 to 16/12	6.0	1.83
Over 16/12 to 18/12	7.0	2.13
Over 18/12 to 20/12	7.5	2.27
Over 20/12 to 21/12	8.0	2.44

Figure 11 - B-Vent Terminations

## VENTING INSTALLATION

*Continued*

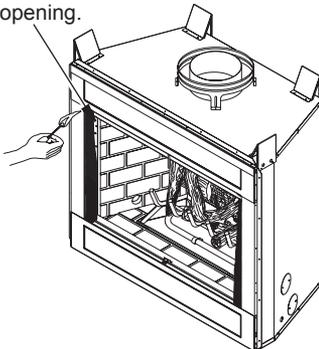
### CHECKING FOR PROPER VENTING

After completing and checking the electrical, gas and vent connections, follow the lighting instructions and allow the main burner to run for approximately 5 minutes. Hold a lighted match or cigarette near the top edge of the fireplace opening and play it along the entire length of the opening (see Figure 12). Proper venting should tend to draw the flame or smoke into the appliance. Improper venting or escaping of spillage of burned gas, is indicated when the match flickers or goes out. Smoke from a cigarette will also tend to disperse away from the appliance.

If the appliance is found to be improperly venting, shut it off and notify your installer or a qualified service agency to inspect the venting system.

**NOTICE: This appliance is equipped with a vent safety shutoff switch which will shut down the appliance in the case of a venting problem. Do not bypass the vent safety switch. If the appliance should shut down, contact a qualified installer, service agency or your gas supplier to have the vent inspected before operating.**

Check this area along the entire top edge of the fireplace opening. Smoke or flame should be drawn into the appliance opening.



**Figure 12 - Checking for Spillage**

## INSTALLATION

### WALL SWITCH INSTALLATION

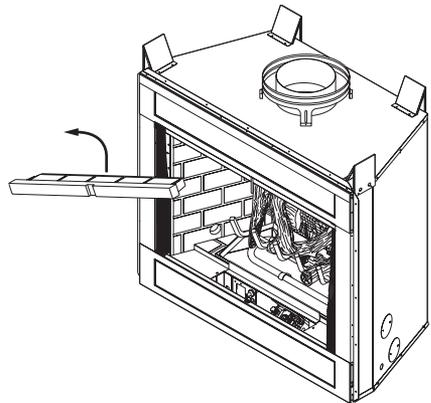
The installation of a wall switch allows you to activate the gas control valve without the normal household electricity since the valve operates on millivolt current supplied by the heat generated by the thermopile. To install the wall switch:

1. Remove the front refractory access panel by lifting up and angling out of the firebox opening (see Figure 13).
2. Use wire and connectors provided. Attach red wire to terminal marked TH/TP on control valve. Attach white wire to blade connector on open end of safety circuit wiring (see *Wiring Diagram*, page 22).

**Note:** If any of the original wire from the unit control must be replaced, use the same type or a higher rated wire (25 ft. maximum length).

**⚠ WARNING: Do not wire remote wall switch to main power supply (Standard 120v household current).**

3. Locate wall switch in a convenient location.
4. After wire connections are complete, replace refractory access panel.



**Figure 13 - Removing Front Refractory Access Panel**

# INSTALLATION

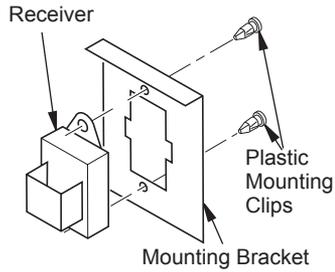
*Continued*

## OPTIONAL WIRELESS HAND-HELD REMOTE CONTROL INSTALLATION

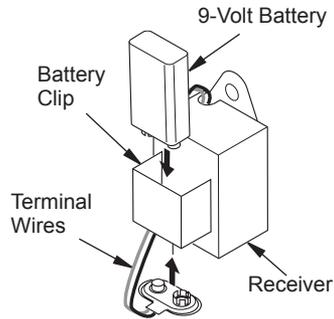
**Note:** If using optional wireless hand-held remote control, the wall switch is no longer operational.

### Installing Receiver

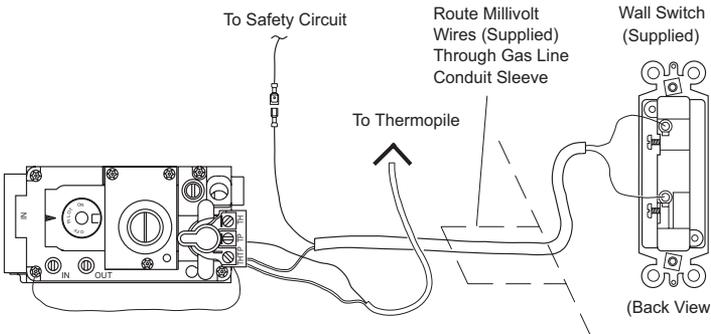
1. Remove the front refractory access panel by lifting up and angling out of the firebox opening (see Figure 13, page 11) to expose controls.
2. Disconnect wall switch wires from TH and TH/TP terminals on control valve (see Figure 14).
3. Install remote receiver unit onto mounting bracket using the two plastic mounting clips (see Figure 15).
4. Connect wires to control circuit. Connect white wire to terminal marked TH/TP on control valve. Connect red wire to male blade connector provided at open end of safety circuit wiring (see *Wiring Diagram*, page 22).
5. Locate the battery clip mounted on the back of the receiver (see Figure 16).
6. Slide 9-volt battery (not included) through the clip. **Note:** Only use alkaline battery.
7. Attach the terminal wires to the battery (see Figure 16).
8. Replace refractory brick access panel.



**Figure 15 - Installing Remote Receiver (Shown from Rear of Mounting Bracket)**



**Figure 16 - Installing Battery in Receiver**



**Note:** If any of the original wire as supplied must be replaced, use 18 AWG TYPE CL2 (UL) 105 C (25 ft. length MAXIMUM) or equivalent.

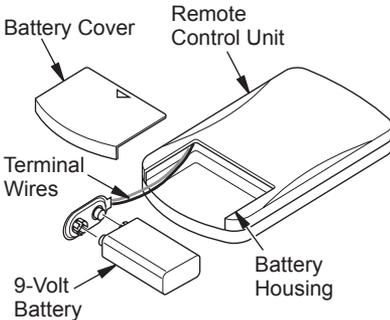
**Figure 14 - Wall Switch Wiring Diagram**

# INSTALLATION

*Continued*

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

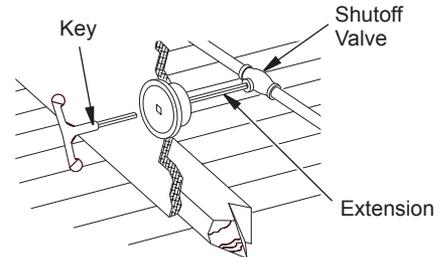
1. Remove battery cover on back of remote control unit.
2. Attach terminal wires to the battery (not included). Place battery into the battery housing.  
**Note:** Only use alkaline battery.
3. Replace battery cover onto remote control unit.



**Figure 17 - Installing Battery in Hand-Held Remote Control Unit**

DESA recommends that a black iron gas line be routed from the gas source, through a sediment trap (shown in Figure 20) and into the appliance. Once connected through the appliance, a flexible gas line may be used for ease of installation to gas control valve (see Figure 21, page 14).

Before connecting the black iron gas line to the inside of the appliance a sediment trap must be included outside the appliance between the gas line and the gas shutoff valve. It must extend down three (3) inches beyond the center of the pipe. Prepare incoming black iron gas line with teflon tape or pipe joint compound (Check with local building codes).



**Figure 18 - Manual Shutoff Valve Installation**

## Figure 18 - Manual Shutoff Valve Installation

## GAS LINE HOOK-UP

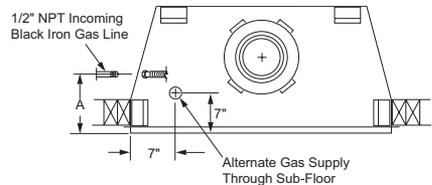
**WARNING:** Gas line hookup should be done by your gas supplier or a qualified service person.

**WARNING:** Before you proceed, make sure your gas supply is OFF.

A manual shutoff valve has been included in the appliance's gas supply system. You may consider installing an extra gas shutoff valve outside the appliance's enclosure (check with local codes) where it can be accessed more conveniently with a key through a wall as shown in Figure 18.

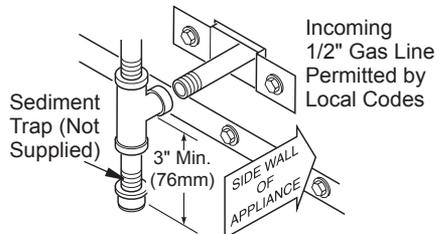
In conformance with local codes, route a 1/2" NPT gas line to the appliance through hole in left side of firebox or sub-floor as shown in Figure 19.

**CAUTION:** Do not kink flexible gas line.



	M36(B,H), M36P(B,H) VM36(B,H), VM36P(B,H)	M42(B,H), M42P(B,H) VM42(B,H), VM42P(B,H)
A	8 5/8" (219 mm)	10 1/2" (267 mm)

**Figure 19 - Routing Incoming Gas Line**



**Figure 20 - Sediment Trap**

## INSTALLATION

*Continued*

**CAUTION:** Compounds used on threaded joints of gas piping shall be resistant to the action of Liquefied Petroleum (LP or propane) and should be applied lightly to ensure excess sealant does not enter the gas line.

**WARNING:** All gas piping and connections must be tested for leaks after the installation is completed.

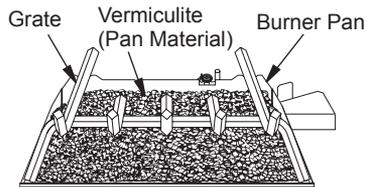
After ensuring that the gas valve is on, apply a commercial leak detection solution to all connections and joints. If bubbles appear, leaks can be detected and corrected.

Do not use an open flame for leak testing and do not operate any appliance if a leak is detected.

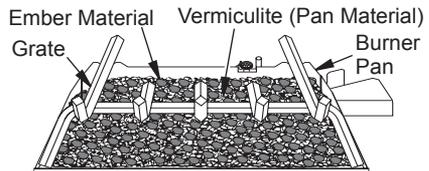
Complete your gas installation by connecting incoming gas line with flexible gas line. Secure tightly with wrench but **DO NOT OVERTIGHTEN**.

## EMBER AND PAN MATERIAL PLACEMENT

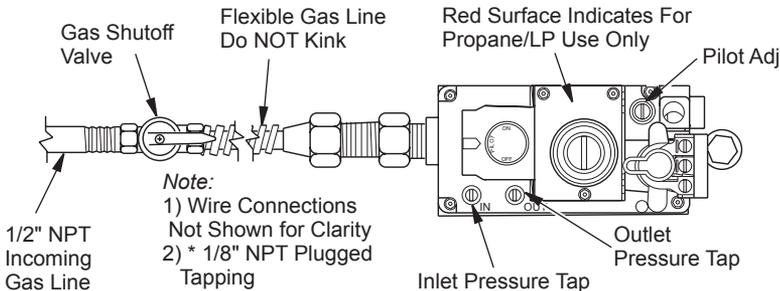
1. Open the bag(s) of vermiculite and fill the entire burner pan until the burner tube is completely covered (see Figure 22).
2. Smooth the pan material just even with edges of the burner pan.
3. Remove the ember material from the bag and flatten small amounts into quarter size pieces and lay on top of the surface of the pan material (see Figure 23).
4. Place just enough to cover the entire surface and leave about a 1/2 inch gap under the lower grate members to allow air to flow (see Figure 24, page 15).



**Figure 22 - Fill Entire Burner Pan with Vermiculite**



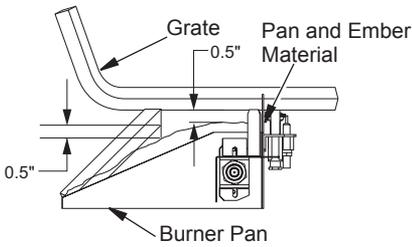
**Figure 23 - Ember Material on Surface of Pan Material (Vermiculite)**



**Figure 21 - Connecting Flexible Gas Line to Millivolt Valve**

## INSTALLATION

*Continued*

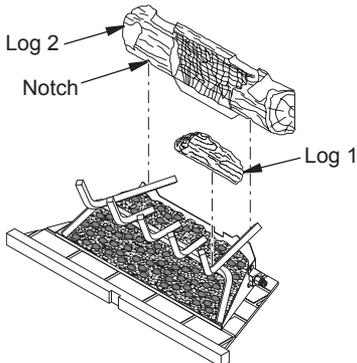


**Figure 24 - Pan and Ember Material Clearances**

### LOG PLACEMENT FOR M36, M36P, VM36 AND VM36P MODELS

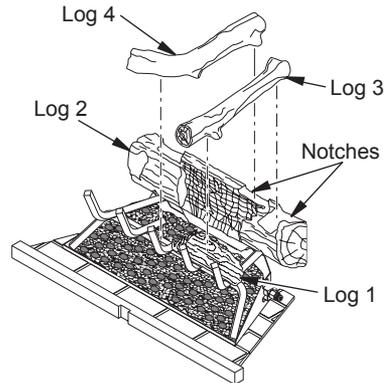
1. Place small front right log (log 1) on right front of grate as shown in Figure 25.
2. Place large back log (log 2) onto grate making sure notches rest over grate as shown in Figure 25.
3. Place log 3 into notch on log 2, resting the front end on top of log 1 (see Figure 26).
4. Place the upper end of log 4 into the notch on log 2 as shown in Figure 26. Rest the lower end of log 4 onto the middle grate finger as shown in Figure 27.
5. Place the upper end of log 5 into notch on the left of log 2 (see Figure 27). Rest the lower end of log 5 on the grate as shown in Figure 28.
6. Insert the lower end of log 6 between the first two grate fingers as shown in Figure 28 and position the upper end of log 6 into the notched area on the front of log 2 as shown in Figure 28.

As an option to enhance the look of the hearth, you may place the lava rock provided around the front and sides of the burner.

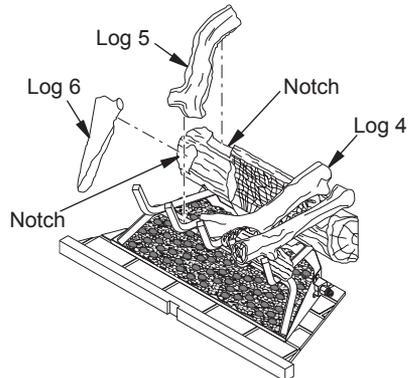


**Figure 25 - Installing Logs 1 and 2**

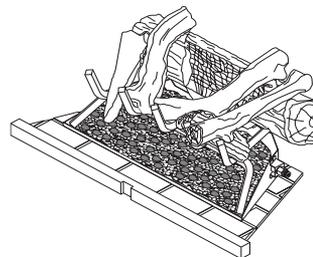
**NOTICE: Do not put lava rock inside the burner pan or around the air mixer fitting. Placing lava rock inside the burner pan or blocking the openings of the propane/LP air-mixer could cause performance problems.**



**Figure 26 - Installing Logs 3 and 4**



**Figure 27 - Installing Logs 5 and 6**



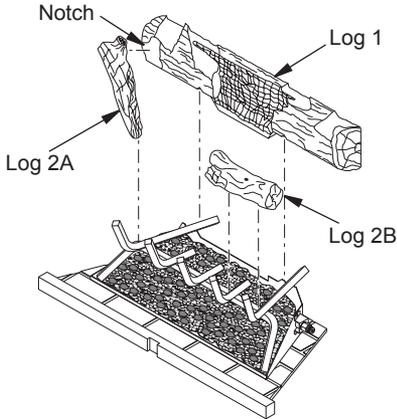
**Figure 28 - Logs Installed for M36, M36P, VM36 and VM36P Models**

# INSTALLATION

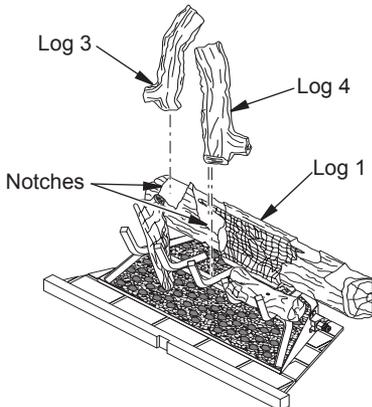
*Continued*

## LOG PLACEMENT FOR M42, M42P, VM42 AND VM42P MODELS

1. Place large back log (log 1) onto grate making sure notches rest over grate (see Figure 29).
2. Insert lower end of log 2A between the first two grate fingers and position the upper end into the notch on the front of log 1. See Figure 29. Place log 2B on the front right side of grate as shown in Figure 29.
3. Place log 3 into notch on top left of log 1, resting the lower end on the left two grate fingers (see Figure 30).
4. Place the upper end of log 4 into the notch on log 1 as shown in Figure 30. Rest the lower end of log 4 on the middle grate finger as shown in Figure 31.



**Figure 29 - Installing Logs 1, 2A and 2B**

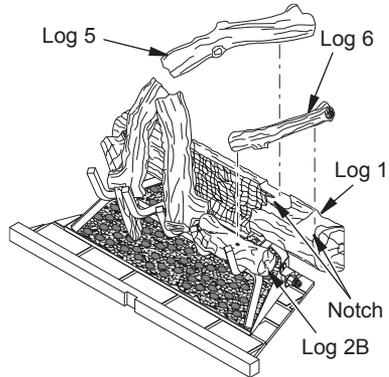


**Figure 30 - Installing Logs 3 and 4**

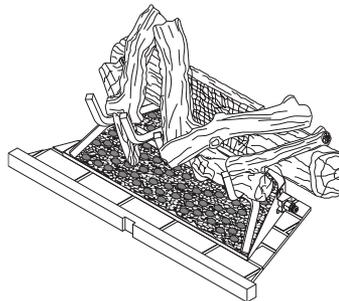
5. Place the upper end of log 5 into the notch on the top inner right of log 1 (see Figure 31). Rest the lower end of log 5 on the middle grate finger as shown in Figure 32.
6. Place log 6 into the notch on the top right of log 1 (see Figure 31). Rest the lower end of log 6 on top of log 2B (see Figure 32).

As an option to enhance the look of the hearth, you may place the lava rock provided around the front and sides of the burner pan.

**NOTICE: Do not put lava rock inside the burner pan or around the air mixer fitting. Placing lava rock inside the burner pan or blocking the openings of the propane/LP air-mixer could cause performance problems.**



**Figure 31 - Installing Logs 5 and 6**



**Figure 32 - Logs Installed for M42, M42P, VM42 and VM42P Models**

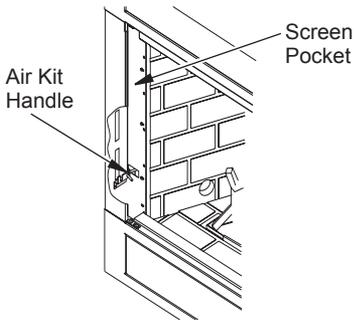
## INSTALLATION

*Continued*

### COMBUSTION AIR KIT MODEL AK4 (OPTIONAL)

The outside air kit may be installed on the left side of the fireplace only. The vent can be installed through any outside wall a minimum of three feet below fireplace termination cap. The handle to operate the damper door for the outside air inlet will be located inside the left “screen pocket” of the firebox (see Figure 33). Pull the handle to open or push to close.

**CAUTION: Air inlet ducts are not to terminate in attic space.**

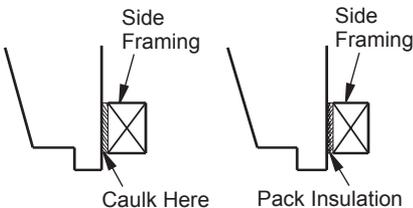


**Figure 33 - Air Kit Handle Location**

### APPLIANCE ENCLOSURE

Before finishing the enclosure around the appliance, inspect all joints around the outer surround. Any gaps between the nailing flanges and the framing should be sealed with noncombustible insulation or caulking.

If the appliance is mounted on a raised platform, it must be a continuous surface and not on blocks without a solid surface. This will prevent the entry of cold air by means of conduction through the total bottom of the appliance (see Figure 34).



**Figure 34 - Sealing Between Appliance and Framing**

### INSTALLING OPTIONAL GLASS DOOR ACCESSORY

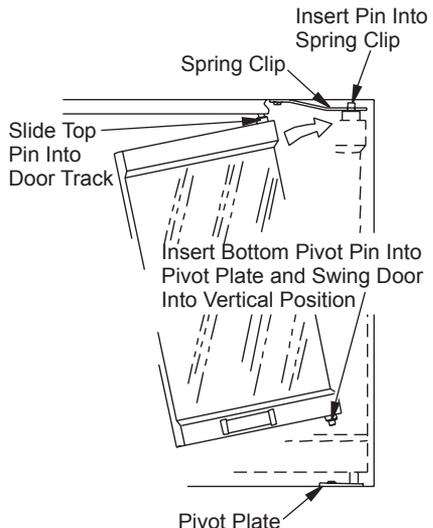
**CAUTION: Use only glass doors certified for use with this appliance.**

**Note:** Glass door may be heavy for some individuals. If this is the case, please request help from someone else.

The M36, VM36, M42 and VM42 B-vent fireplaces are approved for use with optional bi-fold glass doors (see *Accessories*, page 31). The glass panels may be ordered and installed anytime after the fireplace installation is complete.

Follow these steps to install left and right panels:

1. With the handle at the bottom, completely fold the panel on its hinges.
2. With the handle facing the center of the firebox opening, insert the lower pivot pin on the glass door panel into the hole in pivot plate on the bottom edge of the fireplace opening (see Figure 35).
3. Keeping the folded door tilted, slide the upper two pins into the guide track found under the upper facial edge of the firebox opening.
4. Tilt the glass assembly fully vertical until the outer pivot pin snaps into the mounting hole in the upper spring clip (see Figure 35).
5. Once the top and bottom pins are secured, unfold the door into the closed position.



**Figure 35 - Installing Optional Glass Door**

# INSTALLATION

## Continued

6. Repeat the process for the opposite door assembly.
7. To adjust the doors, slide them partially open. Using a screwdriver, loosen the hold-down screws in the spring clip (see Figure 36) and pivot plate.
8. Close both doors until evenly joined at the middle and note the gap at the outer edges of the face.
9. Reopen one door at a time and retighten the upper and lower hold-down screws.
10. Repeat the process until both doors are evenly joined, spaced and working freely.

**CAUTION:** The glass panels become very hot while the appliance is operating. Do not attempt to adjust or clean the glass doors until the appliance has fully cooled.

The doors may be removed for replacement or cleaning as follows:

1. Partially open the door and press up on the upper spring clip with a screw driver until the outer top pivot pin is free of the clip.
2. Fully fold the frame assembly and slide the upper edge towards the center of the firebox opening until the guide pins are free of the frame rail (see Figure 37).

**CAUTION:** Always operate the appliance with the doors either fully opened or fully closed. Operating the appliance with the doors partially open can result in improper venting of flue products.

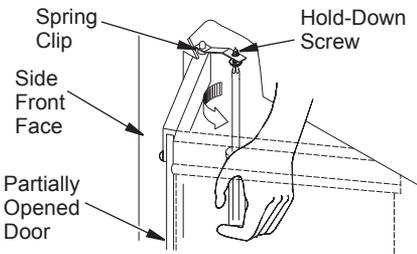


Figure 36 - Adjusting Glass Doors

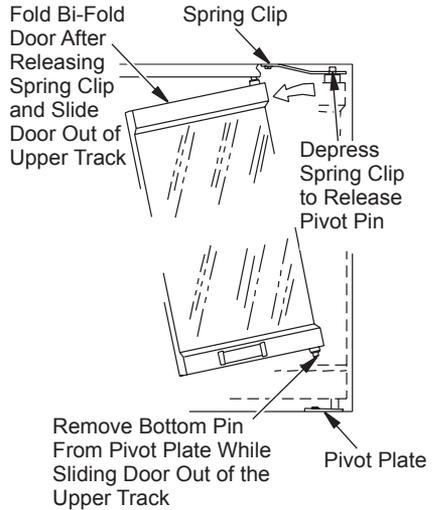


Figure 37 - Removing Glass Doors

## OPENING VENT DAMPER

Vent damper must be locked in the full open position before operating the fireplace. If vent damper is not open, fireplace will not light.

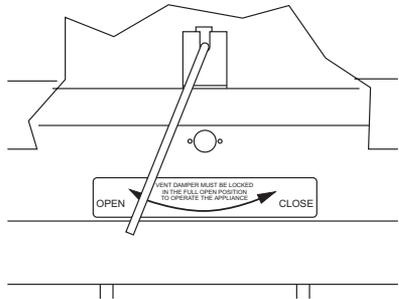


Figure 38 - Opening Vent Damper

## OPERATING FIREPLACE

**FOR YOUR SAFETY  
READ BEFORE LIGHTING**

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

A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.

B. **BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

### WHAT TO DO IF YOU SMELL GAS

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

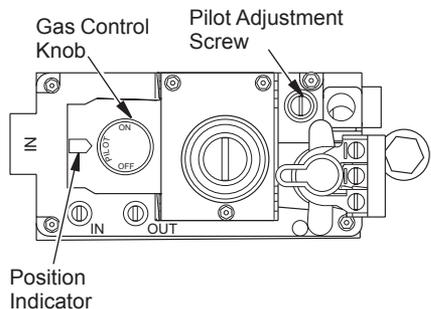
C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician or gas supplier. Force or attempted repair may result in a fire or explosion.

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

**NOTICE: During initial operation of new heater, burning logs will give off a paper-burning smell. Orange flame will also be present. Open damper or window to vent smell. This will only last a few hours.**

1. **STOP!** Read the safety information, column 1.
2. Turn wall switch to the OFF position.
3. Turn off all electric power to the appliance.
4. Fully open glass doors if installed.
5. Remove front refractory brick access panel.
6. Turn gas control knob clockwise to the OFF position (see Figure 39).
7. 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.
8. Turn control knob counterclockwise to the PILOT position.
9. Push in the knob all the way and hold in. Immediately light the pilot manually. Continue to hold the control knob in for about (1) minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 9.
  - If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
  - If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
10. Turn gas control knob counterclockwise to "ON". Knob can be turned to "ON" only if the control knob is popped out.
11. Replace front refractory brick access panel.
12. Fully close glass doors if installed.
13. Turn on all electric power to the appliance.



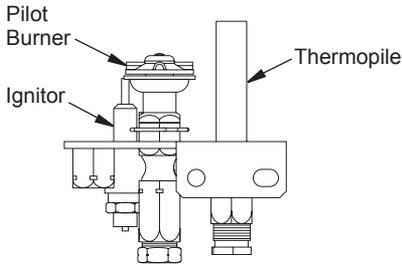
**Figure 39 - Control Knob in the PILOT position**

## OPERATING FIREPLACE

*Continued*

### TO TURN OFF GAS TO APPLIANCE

1. Turn off the wall switch.
2. Turn off all electric power to the appliance if service is to be performed.
3. Fully open glass doors if installed.
4. Remove front hearth brick and control access panel.
5. Turn gas control knob clockwise to "OFF". Do not force.
6. Replace front refractory brick access panel.
7. Fully close glass doors if installed.



*Figure 40 - Pilot*

### OPTIONAL HAND-HELD REMOTE OPERATION

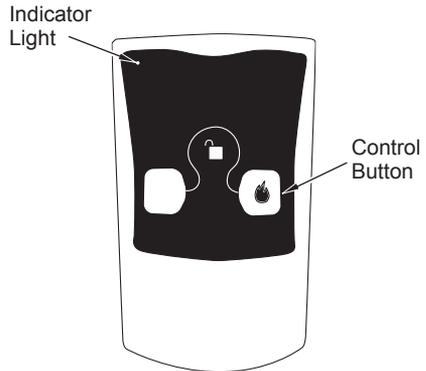
**Note:** The receiver and hand-held remote control kit must be purchased separately (see *Accessories*, page 31). Follow installation instructions on page 10 of this manual.

1. After lighting, let pilot flame burn for about one minute. Turn control knob to ON position. Slide the selector switch to the REMOTE position. **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.

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

2. Press the control button on the hand-held remote to turn the burner on. Press the control button again to turn burner off (see Figure 41).

3. **To Lock** press both buttons on remote control until light stops flashing. Remote 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.
4. **To Unlock** press both buttons together on remote control until light stops flashing. The remote is now unlocked.



*Figure 41 - On/Off Hand-Held Remote Control Unit HRC100*

## 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. The pilot is located on the back right hand side of the burner.

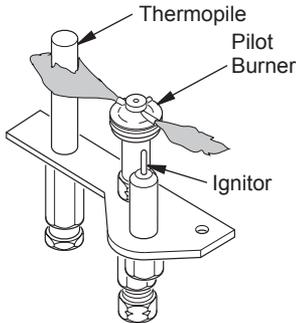
The height of the thermopile must be 3/8" to 1/2" above the pilot flame. The flame from the pilot burner must extend beyond the thermopile.

If your pilot assembly does not meet these requirements:

- Turn the adjustment screw marked pilot clockwise to decrease or counterclockwise to increase the flame to proper size (see Figure 39, page 19). Do not remove the adjustment screw.
- see *Troubleshooting*, page 19

## INSPECTING BURNERS

*Continued*



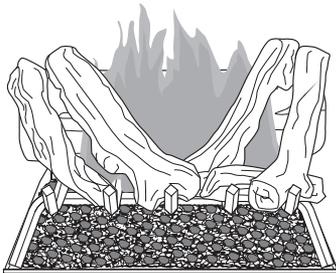
**Figure 42 - Correct Pilot Flame Pattern**

### BURNER FLAME PATTERN

Burner flames will be steady; not lifting or floating. Flames should go up through the middle of logset. Flames should not "spill" to the edges of the pan or sides of the logset.

Figure 43 shows a typical flame pattern. If burner flame pattern differs from that described:

- turn appliance off (see *To Turn Off Gas to Appliance*, page 20)
- see *Troubleshooting*, page 23



**Figure 43 - Typical Flame Pattern**

## CLEANING AND MAINTENANCE

**⚠ WARNING:** Installation and repair should be done by a qualified service person. The appliance should be inspected before each use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, pet hair, etc. It is imperative that the control compartments, burners and circulating air system be kept clean.

**⚠ WARNING:** The logs can be hot. Handle only when cool.

**⚠ WARNING:** Turn off gas and electrical power before servicing appliance.

**⚠ WARNING:** Failure to keep the primary air opening(s) of the burner(s) clean may result in sooting and property damage.

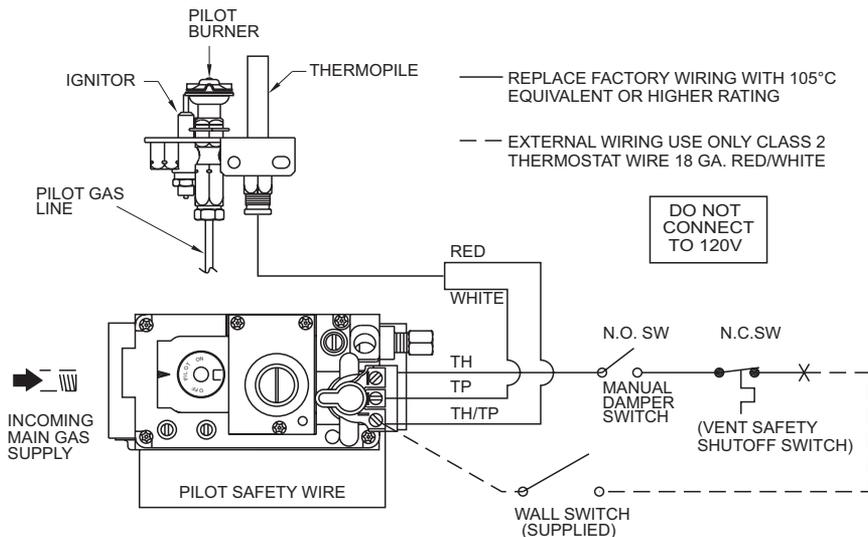
### PILOT AND BURNER

- Remove logs and ember material before cleaning burner 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 log placement information on page 12 to properly replace logs.
- Use a vacuum cleaner to remove any carbon buildup on logs.
- Replace log(s) if broken. See *Replacement Parts*, page 22.
- Replace ember material periodically as needed. See *Replacement Parts*, page 22.

## WIRING DIAGRAM



### SERVICE HINTS

#### When Gas Pressure Is Too Low

- pilot will not stay lit
- burner will have delayed ignition
- fireplace will not produce specified heat
- propane/LP gas supply may be low if using propane/LP gas

If using propane/LP gas, you may feel your gas pressure is too low. If so, contact your local propane/LP gas supplier.

### TECHNICAL SERVICE

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

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

### 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's Technical Service Department at 1-866-672-6040 for referral information.

When calling DESA, have ready

- your name
- your address
- model and serial numbers of your fireplace
- how fireplace was malfunctioning
- type of gas used (propane/LP or natural gas)
- 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 at 1-866-672-6040 for referral information.

When calling DESA, have ready

- model number of your fireplace
- the replacement part number

## TROUBLESHOOTING

**Note:** Before troubleshooting the system, make sure the gas shutoff valve is ON. 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
Pilot will not light	<ol style="list-style-type: none"> <li>1. No gas supply or shutoff valve is OFF</li> <li>2. Air in gas line</li>   <li>3. Construction debris clogging pilot orifice</li> <li>4. Low gas pressure</li> <li>5. Control valve knob is not on the PILOT position</li> <li>6. Kinked pilot line</li> <li>7. Bad valve</li> <li>8. Vent damper not fully open</li> </ol>	<ol style="list-style-type: none"> <li>1. Check to see if you have gas supply</li> <li>2. Hold regulator control valve in the PILOT position for 2 to 3 minutes to purge air. If you smell gas stop and wait for a few minutes before trying to light the fireplace</li> <li>3. Remove debris and dirt, inspect and clean any other possible obstructions</li> <li>4. Contact your gas supplier</li> <li>5. Refer to section on pilot lighting</li> <li>6. Have a qualified technician replace pilot line</li> <li>7. Replace regulator valve (see <i>Accessories</i>, page 31)</li> <li>8. Open vent damper until fully locked in OPEN position</li> </ol>
Pilot will not stay lit	<ol style="list-style-type: none"> <li>1. Loose wiring on thermopile to regulator valve. No millivolt current is being sent back to regulator</li> <li>2. If valve knob and wall switch are in the ON position, probable defective regulator valve</li> <li>3. Vent damper not fully open</li> </ol>	<ol style="list-style-type: none"> <li>1. Check wiring connections. Refer to wiring diagram shown in <i>Wall Switch Installation</i>, page 11</li> <li>2. Have a qualified technician replace valve</li> <li>3. Open vent damper until fully locked in OPEN position</li> </ol>
No gas to burner, although wall switch and valve are set to the ON position	<ol style="list-style-type: none"> <li>1. Wall switch wires defective or too long</li> <li>2. Thermopile not generating sufficient voltage</li> </ol>	<ol style="list-style-type: none"> <li>1. Check electrical connections</li> <li>2. See <i>Pilot will not stay lit</i>, above</li> </ol>
Frequent pilot outage	<ol style="list-style-type: none"> <li>1. Pilot flame may be too low, causing safety pilot to “drop out”</li> <li>2. Improper venting or excessive blockage</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean and adjust pilot flame for maximum flame impingement on thermopile</li> <li>2. Have the vent system inspected, including the termination cap. Remove any restriction or obstruction</li> </ol>

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## TROUBLESHOOTING

*Continued*

<b>OBSERVED PROBLEM</b>	<b>POSSIBLE CAUSE</b>	<b>REMEDY</b>
Pilot goes out when wall switch is ON	1. Millivolt output on thermopile too high	1. Replace thermopile
Spark ignitor will not light pilot after repeated triggering of red button	1. Defective ignitor (no spark at electrode) 2. Defective pilot or misaligned electrode at pilot (spark at electrode) 3. No gas or low gas pressure 4. If using propane/LP gas, no propane/LP gas in tank	1. Check for spark at the electrode and pilot; if no spark and electrode wire is properly connected, replace ignitor 2. Using a match, light pilot. If pilot lights, turn off pilot and trigger the red button again. If pilot lights, an improper gas/air mixture caused the improper lighting and a longer purge period is recommended. If pilot will not light, check gap at electrode and pilot. Gap should be 1/8" to have a strong spark. If okay, replace pilot 3. A) Check remote shut off valves from fireplace. Usually there is a valve near the fireplace and sometimes there is a valve near the main. There can be more than one (1) valve between the fireplace and main B) Low pressure can be caused by a variety of situations such as bent line, or gas supplier 4. Check propane/LP supply and contact local propane/LP supplier
Fireplace produces a clicking/ticking noise just after burner is lit or shut off	1. Metal expanding while heating or contracting while cooling	1. This is common with most fireplaces. If noise is excessive, contact qualified service person

# 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.

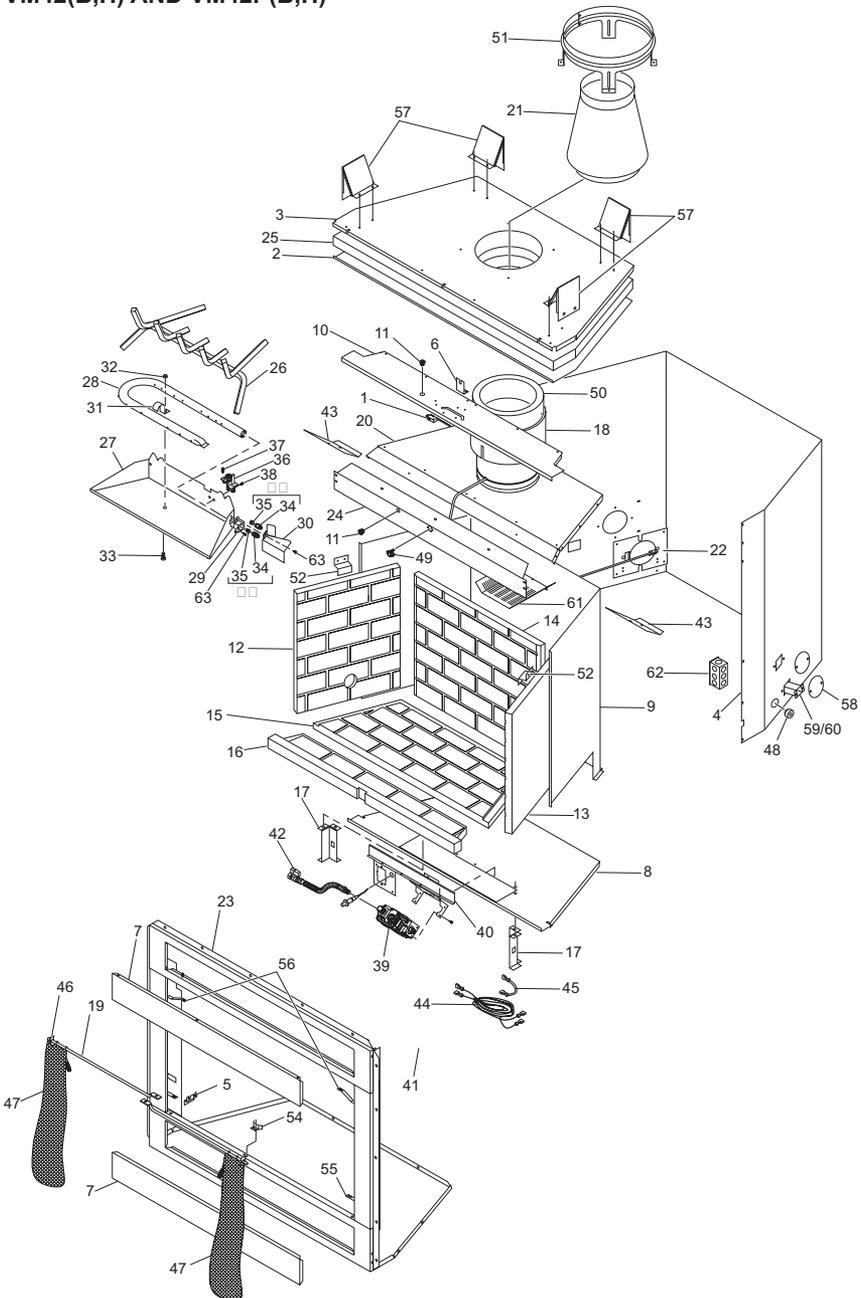
*IMPORTANT:* Operating fireplace where impurities in air exist may create odors. Cleaning supplies, paint, paint remover, cigarette smoke, cements and glues, new carpet or textiles, etc., create fumes. These fumes may mix with combustion air and create odors.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Fireplace produces unwanted odors	<ol style="list-style-type: none"><li>1. Fireplace burning vapors from paint, hair spray, glues, etc. (See <i>IMPORTANT</i> statement above)</li><li>2. For propane/LP gas, low fuel supply</li><li>3. Gas leak. <b>See Warning statement at top of page</b></li></ol>	<ol style="list-style-type: none"><li>1. Ventilate room. Stop using odor causing products while fireplace is running</li><li>2. Contact local propane/LP supplier</li><li>3. Locate and correct all leaks (see <i>Gas Line Hook-Up</i>, page 13)</li></ol>
Gas odor even when control knob is in OFF position	<ol style="list-style-type: none"><li>1. Gas leak. <b>See Warning statement at top of page</b></li><li>2. Control valve defective</li></ol>	<ol style="list-style-type: none"><li>1. Locate and correct all leaks (see <i>Gas Line Hook-Up</i>, page 13)</li><li>2. Replace control valve</li></ol>
Gas odor during combustion	<ol style="list-style-type: none"><li>1. Foreign matter between control valve and burner</li><li>2. Gas leak. <b>See Warning statement at top of page</b></li></ol>	<ol style="list-style-type: none"><li>1. Take apart gas tubing and remove foreign matter</li><li>2. Locate and correct all leaks (see <i>Gas Line Hook-Up</i>, page 13)</li></ol>
Dark residue on logs or inside of fireplace	<ol style="list-style-type: none"><li>1. Improper log placement</li><li>2. Air holes at burner inlet blocked</li><li>3. Burner flame holes blocked</li><li>4. Improper venting or excessive blockage</li><li>5. Excessive amounts of embers and pan material</li></ol>	<ol style="list-style-type: none"><li>1. Properly locate logs</li><li>2. Clean out air holes at burner inlets. Periodically repeat as needed</li><li>3. Remove blockage or replace burner</li><li>4. Have the vent system inspected, including the termination cap. Remove any restrictions or obstruction</li><li>5. Clear excess embers until a minimum gap of 1/2" remains under the grate</li></ol>

# ILLUSTRATED PARTS BREAKDOWN

## MODELS

M36(B,H), M36P(B,H), M42(B,H), M42P(B,H), VM36(B,H), VM36P(B,H),  
VM42(B,H) AND VM42P(B,H)



## PARTS LIST

This list contains replaceable parts used in your heater. When ordering parts, follow the instructions listed under *Replacement Parts* on page 22 of this manual.

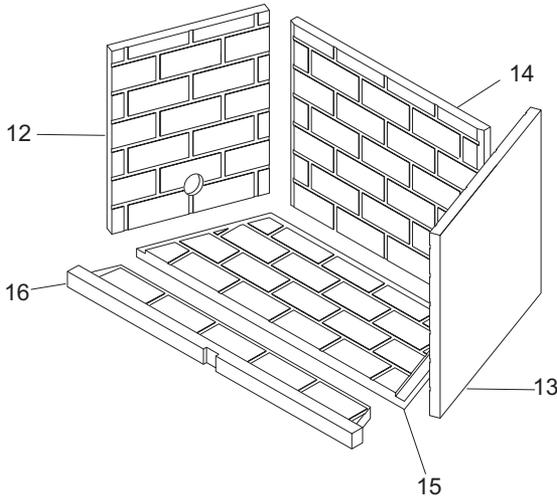
KEY NO.	M36(B,H) VM36(B,H)	M42(B,H) VM42(B,H)	DESCRIPTION	QTY	KEY NO.	M36(B,H) VM36(B,H)	M42(B,H) VM42(B,H)	DESCRIPTION	QTY
1	14153	14153	Micro Switch	1	35	901064-03	901064-08	Orifice (NG)	1
2	**	**	Insulation Pan	1		901065-13	901065-12	Orifice (LP)	1
3	**	**	Fireplace Top Assembly	1	36	108084-01	108084-01	Pilot (NG)	1
4	**	**	Fireplace Surround	1		108084-03	108084-03	Pilot (LP)	1
5	106642-01	106642-01	Air Rod Retainer	1	37	108085-01	108085-01	Pilot Orifice (NG)	1
6	106643-01	106643-01	Damper Rod Retainer	1		108085-02	108085-02	Pilot Orifice (LP)	1
7	106651-01	107805-01	Panel Closure	2	38	11102	11102	Screw, #8-32 x 3/8	2
8	**	**	Firebox Bottom	1	39	14512	14512	Gas Control Valve (NG)	1
9	**	**	Firebox Surround	1		14513	14513	Gas Control Valve (LP)	1
10	106657-02	107811-02	Air Separator	1	40	107741-01	107741-01	Valve Bracket	1
11	11408	11408	Bushing	2	41	14261	14261	Piezo Ignitor	1
12	See page 28		Left Refractory	1	42	111288-02	111288-02	Manual Valve w/ Flex Hose	1
13	See page 28		Right Refractory	1	43	108769-01	108769-02	Extension Deflector	2
14	See page 28		Rear Refractory	1	44	108005-01	108005-01	Wire Harness	1
15	See page 28		Bottom Rear Refractory	1	45	108005-02	108005-02	Wire Harness	1
16	See page 28		Bottom Front Refractory	1	46	11418	11418	Push-On Nut	2
17	**	**	Firebox Support Leg	2	47	12105	107840-01	Screen	2
18	106687-01	106887-02	Damper Can Collar	1	48	14123	14123	Strain Relief	1
19	106691-01	107839-01	Screen Rod	2	49	14574	106543-01	Limit Switch	1
20	**	**	Firebox Top Assembly	1	50	**	**	Collar Insulation	1
21	106699-01	106699-01	Transition 6" B-Vent Collar	1	51	20023	20488	Starter Collar	1
22	106703-01	106703-01	Air Kit Door Assembly	1	52	20027	20027	Brick Liner Retainer	2
23	**	**	Firebox Face	1	53	20042	20042	Air Kit Cover	1
24	106948-02	107823-02	Smoke Deflector	1	54	20088	20088	Door Stop	1
25	**	**	Fireplace Top Insulation	1	55	20089	20089	Pivot Clip	2
26	107796-01	107796-02	Grate Assembly	1	56	20090	20090	Spring Clip	2
27	107742-01	107742-02	Burner Pan	1	57	20280	20280	Top Spacer	4
28	107795-01	107831-01	Burner Tube	1	58	**	**	Gas Knockout Cover	4
29	107748-01	107748-01	Burner Bracket	1	59	**	**	Gas Conduit	1
30	107985-01	107985-02	Pilot Shield	1	60	**	—	Gas Conduit	1
31	901681-01	901681-01	Burner Clamp	1	61	22912	22924	Draft Diverter	1
32	11209	11209	Nut, #10-24	1	62	24353	24353	Box Assembly	1
33	11147	11147	Screw, #10-24 x 1/2	1	63	11165	11165	Screw, #10 x 5/8 Mod. Tr. Blk. Ox	2
34	901066-01	901066-01	Brass Air Mixer (NG)	1					
	901066-02	901066-02	Brass Air Mixer (LP)	1					
<b>PARTS AVAILABLE NOT SHOWN</b>									
						901155-01	901155-01	Vermiculite Bag	1
						901156-01	901156-01	Pan Material	1
						901157-01	901157-01	Lava Rock	1
						22180	22180	Wall Switch Kit	1

\*\* Not a field replaceable part.

## ILLUSTRATED PARTS BREAKDOWN

### BRICK LINERS FOR MODELS

M36(B,H), M36P(B,H), VM36(B,H) AND VM36P(B,H)

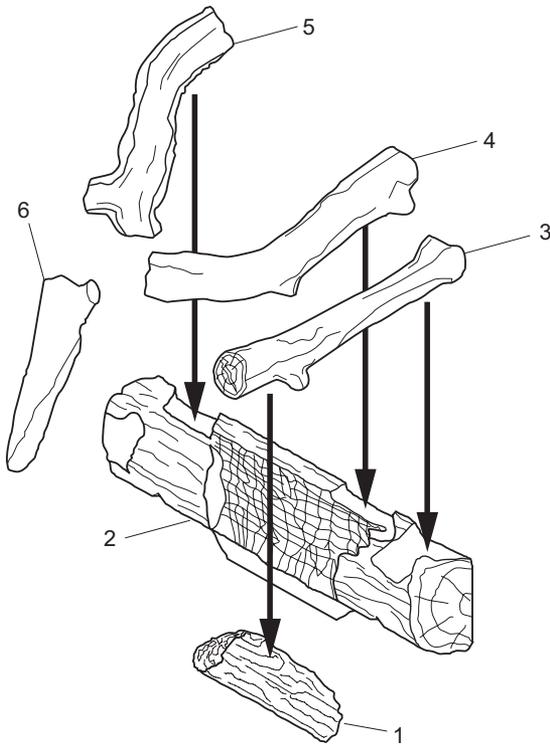


KEY NO.	M36(B,H) VM36(B,H)	M42(B,H) VM42(B,H)	DESCRIPTION	QTY
12	106658-02	107812-02	Left Refractory, Std. Brick (M36B/M42B)	1
	108164-02	108169-02	Left Refractory, Herringbone (M36H/M42H)	1
	106658-01	107812-01	Left Refractory, Std. Brick (VM36B/VM42B)	1
	108164-01	108169-01	Left Refractory, Herringbone (VM36H/VM42H)	1
13	106659-02	107814-02	Right Refractory, Std. Brick (M36B/M42B)	1
	108165-02	108170-02	Right Refractory, Herringbone (M36H/M42H)	1
	106659-01	107814-01	Right Refractory, Std. Brick (VM36B/VM42B)	1
	108165-01	108170-01	Right Refractory, Herringbone (VM36H/VM42H)	1
14	106660-02	107816-02	Rear Refractory, Std. Brick (M36B/M42B)	1
	108166-02	108171-02	Rear Refractory, Herringbone (M36H/M42H)	1
	106660-01	107816-01	Rear Refractory, Std. Brick (VM36B/VM42B)	1
	108166-01	108171-01	Rear Refractory, Herringbone (VM36H/VM42H)	1
15	106661-02	107818-02	Bottom Rear Refractory, Std. Brick (M36B/M42, M36B/M42B)	1
	108167-02	108172-02	Bottom Rear Refractory, Herringbone (M36H/M42H)	1
	106661-01	107818-01	Bottom Rear Refractory, Std. Brick (VM36/VM42, VM36B/VM42B)	1
	108167-01	108172-01	Bottom Rear Refractory, Herringbone (VM36H/VM42H)	1
16	106662-02	107820-02	Bottom Front Refractory, Std. Brick (M36/M42, M36B/M42B)	1
	108168-02	108173-02	Bottom Front Refractory, Herringbone (M36H/M42H)	1
	106662-01	107820-01	Bottom Front Refractory, Std. Brick (VM36/VM42, VM36B/VM42B)	1
	108168-01	108173-01	Bottom Front Refractory, Herringbone (VM36H/VM42H)	1

## ILLUSTRATED PARTS BREAKDOWN

### LOGSETS FOR MODELS

M36(B,H), M36P(B,H), VM36(B,H) AND VM36P(B,H)

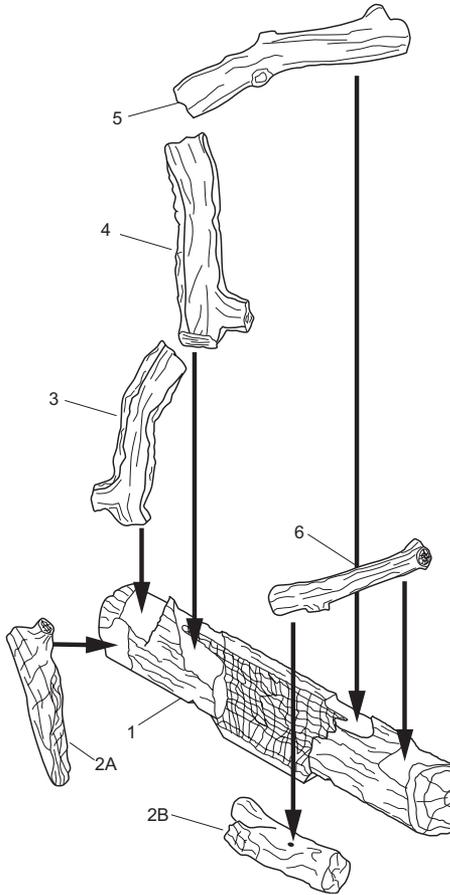


KEY NO.	PART NUMBER	DESCRIPTION	QTY.
-	107999-01	Log Set	
1	108724-01	Right Front 9" Split Log	1
2	901098-01	Rear Log	1
3	108720-01	Top Right Log - 11 3/4"	1
4	108721-01	Top Right Log - 16"	1
5	108722-01	Top Left Log - 13 1/2" Y-Log	1
6	108723-01	Top Left Log - 11"	1

## ILLUSTRATED PARTS BREAKDOWN

LOGSETS FOR MODELS

M42(B,H), M42P(B,H), VM42(B,H) AND VM42P(B,H)



KEY NO.	PART NUMBER	DESCRIPTION	QTY.
-	107999-02	Log Set	
1	901098-02	Rear Log	1
2A	108723-01	Left Front Log - 11"	1
2B	108839-01	Right Front Log - 15 3/4" Round	1
3	108722-01	Top Left Log - 13 1/2" Y-Log	1
4	108838-01	Inside Top Left Log - 15 3/4" Split	1
5	108721-01	Inside Top Right Log - 16"	1
6	108720-01	Top Right Log - 11 3/4"	1

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## ACCESSORIES

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

Purchase these firebox accessories from your local dealer. If they can not supply these accessories, call DESA's Sales Department at 1-866-672-6040 for information. You can also write to the address listed on the back page of this manual.

### AIR KIT - AK4

Optional kit helps offset the negative pressure of ten existing in today's tightly constructed homes.

### REMOTE CONTROL KITS

**RC** - Standard On/Off Millivolt Remote Control Kit

**HRC100** - Hand-Held Remote Control Kit

**GWMT1** - Wall-Mount Remote Control Kit

### PROPANE CONVERSION KITS

**PCBM-36** - Propane Conversion Kit for 36" B-Vent Millivolt Fireplace

**PCBM-42** - Propane Conversion Kit for 42" B-Vent Millivolt Fireplace

### EXTRUDED ALUMINUM BI-FOLD

#### GLASS DOORS

**BD36** - 36" Black Finish

**BD36B** - 36" Brushed Brass Finish

**BD36P** - 36" Platinum Finish

**BD42** - 42" Black Finish

**BD42B** - 42" Brushed Brass Finish

**BD42P** - 42" Platinum Finish

#### BRICK LINER

(For **M36(B,H)**, **M36P(B,H)**, **M42(B,H)** and **M42P(B,H)**)

**BL36** - 36" Refractory Standard Brick Liner Kit

**BL42** - 42" Refractory Standard Brick Liner Kit

**BL36H** - 36" Refractory Herringbone Brick Liner Kit

**BL42H** - 42" Refractory Herringbone Brick Liner Kit

(For **VM36(B,H)**, **VM36P(B,H)**, **VM42(B,H)** and **VM42P(B,H)**)

**BL36S** - 36" Refractory Standard Brick Liner Kit

**BL42S** - 42" Refractory Standard Brick Liner Kit

**BL36HS** - 36" Refractory Herringbone Brick Liner Kit

**BL42HS** - 42" Refractory Herringbone Brick Liner Kit

### BLOWER KIT

**BK** - Squirrel Cage Blower With Speed Control

**BK3E** - Triple Fan Blower System

### PERIMETER TRIM

**PT36** - 36" Perimeter Trim - Black

**PT36B** - 36" Perimeter Trim - Brushed Brass

**PT36PB** - 36" Perimeter Trim - Polished Brass

**PT36P** - 36" Perimeter Trim - Platinum

**PT42** - 42" Perimeter Trim - Black

**PT42B** - 42" Perimeter Trim - Brushed Brass

**PT42PB** - 42" Perimeter Trim - Polished Brass

**PT42P** - 42" Perimeter Trim - Platinum

### LOUVER TRIM (Rolled Louvers Only)

**LT36B** - 36" Louver Trim Kit - Brushed Brass

**LT36P** - 36" Louver Trim Kit - Platinum

**LT36PB** - 36" Louver Trim Kit for VM36(B,H) - Polished Brass

**LT42B** - 42" Louver Trim Kit - Brushed Brass

**LT42P** - 42" Louver Trim Kit - Platinum

**LT42PB** - 42" Louver Trim Kit for VM42(B,H) - Polished Brass

### FACE/LOUVER PANEL KITS

**SP36, SP42** - Smooth Faced Panel Kit- Black

**SL36, SL42** - Stamped Louver Panel Kit- Black

**RL36, RL42** - Rolled Louver Kit- Black

**FP36, FP42** - Filigree Panel Kit- Black

**FP36B, FP42B** - Filigree Panel Kit- Brushed Brass

**FP36P, FP42P** - Filigree Panel Kit- Platinum

**FP36PB, FP42PB** - Filigree Panel Kit- Polished Brass

### FIRE CRACKLE - CF6-A

Creates the sound of a real burning fire.

# WARRANTY INFORMATION

## KEEP THIS WARRANTY

Model _____
Serial No. _____
Date Purchased _____

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

We reserve the right to amend these specifications at any time without notice. The only warranty applicable is our standard written warranty. We make no other warranty, expressed or implied.

### LIMITED WARRANTY VENT-FREE FIREBOX

DESA warrants this product to be free from defects in materials and components for four (4) years from the date of first purchase, provided that the product has been properly installed, operated and maintained in accordance with all applicable instructions. To make a claim under this warranty the Bill of Sale or cancelled check must be presented.

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

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

TO THE FULL EXTENT ALLOWED BY THE LAW OF THE JURISDICTION THAT GOVERNS THE SALE OF THE PRODUCT; THIS EXPRESS WARRANTY EXCLUDES ANY AND ALL OTHER EXPRESSED WARRANTIES AND LIMITS THE DURATION OF ANY AND ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO FOUR (4) YEARS ON ALL COMPONENTS FROM THE DATE OF FIRST PURCHASE; AND DESA'S LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND DESA HEATING PRODUCTS SHALL NOT BE LIABLE FOR ANY OTHER DAMAGES WHATSOEVER INCLUDING INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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

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

For information about this warranty write:



2701 Industrial Drive  
P.O. Box 90004  
Bowling Green, KY 42102-9004  
[www.desatech.com](http://www.desatech.com)



108795 01

NOT A UPC

108795-01  
Rev. N  
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