

MONESSEN HEARTH SYSTEMS

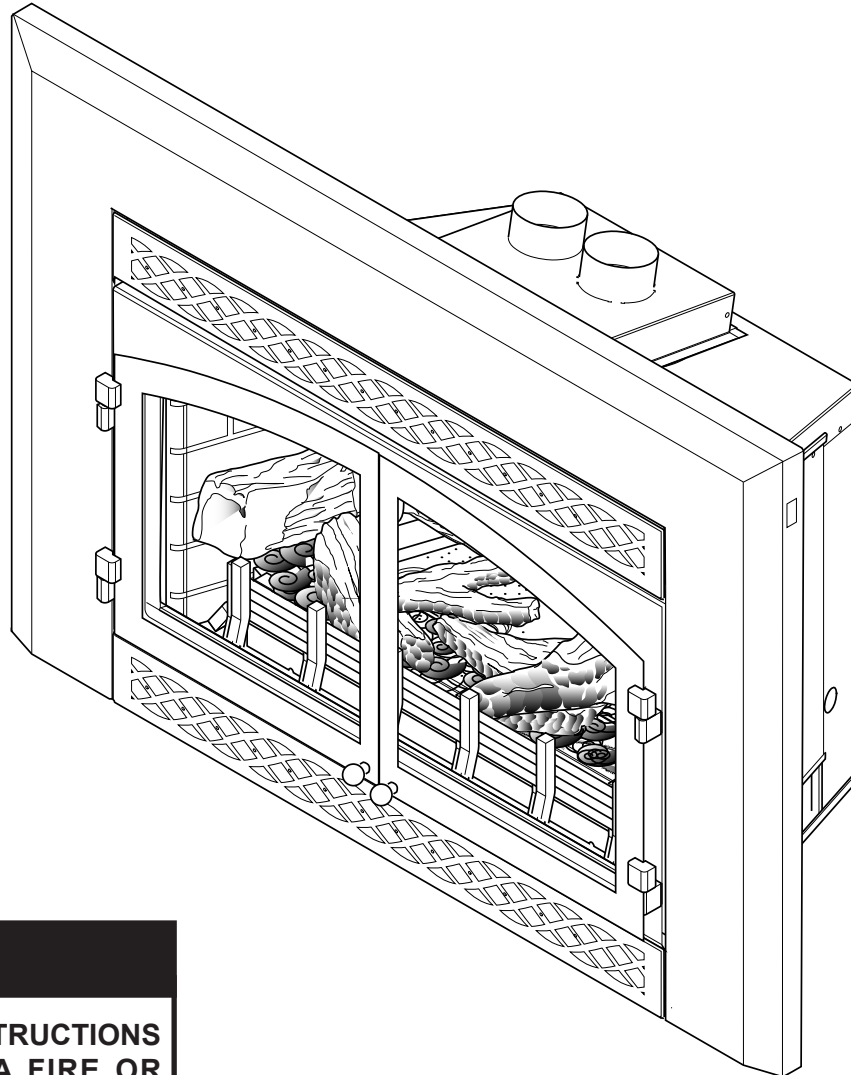
DIRECT VENT GAS INSERT

INSTALLATION AND OPERATING INSTRUCTIONS



MODELS:

IDV490NVC, IDV490PVC,
IDV380NVC, AND IDV380PVC



WARNINGS

IF THE INFORMATION IN THESE INSTRUCTIONS ARE 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.

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.

READ BEFORE INSTALLING. SAVE THESE INSTRUCTIONS

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IMPORTANT SAFETY INFORMATION

INSTALLER

Please leave these instructions with the appliance.

OWNER

Please retain these instructions for future reference.

WARNINGS

- **Read this owner's manual carefully and completely before trying to assemble, operate, or service this insert.**
 - **Any change to this insert or its controls can be dangerous.**
 - **Improper installation or use of this insert can cause serious injury or death from fire, burns, explosions, electrical shock and carbon monoxide poisoning.**
 - **Improper installation, adjustment, alteration, services or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult a qualified installer, service agency or the gas supplier.**
-
- **DUE TO HIGH TEMPERATURES, THE APPLIANCE SHOULD BE LOCATED OUT OF TRAFFIC AND AWAY FROM FURNITURE AND DRAPERIES.**
 - **CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURE AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION.**
 - **YOUNG CHILDREN SHOULD BE SUPERVISED WHEN THEY ARE IN THE SAME ROOM AS THE APPLIANCE.**
 - **CLOTHING OR OTHER FLAMMABLE MATERIAL SHOULD NOT BE PLACED ON OR NEAR THE APPLIANCE.**
 - **KEEP THE ROOM AREA CLEAR AND FREE FROM COMBUSTIBLE MATERIALS, GASOLINE, AND OTHER FLAMMABLE VAPORS AND LIQUIDS.**

This insert is a vented product. This insert must be properly installed by a qualified service person. The glass door must be properly seated and sealed. If this unit is not properly installed by a qualified service person with glass door properly seated and sealed, combustion leakage can occur.

CARBON MONOXIDE POISONING: Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, the insert may not have been installed properly. Get fresh air at once! Have the insert 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 the safe and proper operation of this insert.

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 insert, 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.

Continued on page 4

IMPORTANT SAFETY INFORMATION

Continued from page 3

4. Never install the insert
 - in a recreational vehicle
 - where curtains, furniture, clothing, or other flammable objects are less than 36" from the front, top, or sides of the insert
 - in high traffic areas
 - in windy or drafty areas
5. This insert reaches high temperatures. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Insert 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 insert.
7. Do not modify this insert under any circumstances. Any parts removed for servicing must be replaced prior to operating insert.
8. Turn insert off and let cool before servicing, installing, or repairing. Only a qualified service person should install, service, or repair the insert. Have burner system 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, pet hair, etc. Turn off the gas valve and pilot light before cleaning insert.
10. Have venting system inspected annually by a qualified service person. If needed, have venting system cleaned or repaired. See *Cleaning and Maintenance*, page 32.
11. Keep the area around your insert clear of combustible materials, gasoline, and other flammable vapor and liquids. Do not run insert where these are used or stored. Do not place items such as clothing or decorations on or around insert.
12. Do not use this insert to cook food or burn paper or other objects.
13. Never place anything on top of insert.
14. Do not use any solid fuels (wood, coal, paper, cardboard, etc.) in this insert. Use only the gas type indicated on rating plate.
15. 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*.
16. 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.
17. Do not use insert 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 insert if any log is broken.
19. Do not operate the insert with glass door removed, cracked, or broken.



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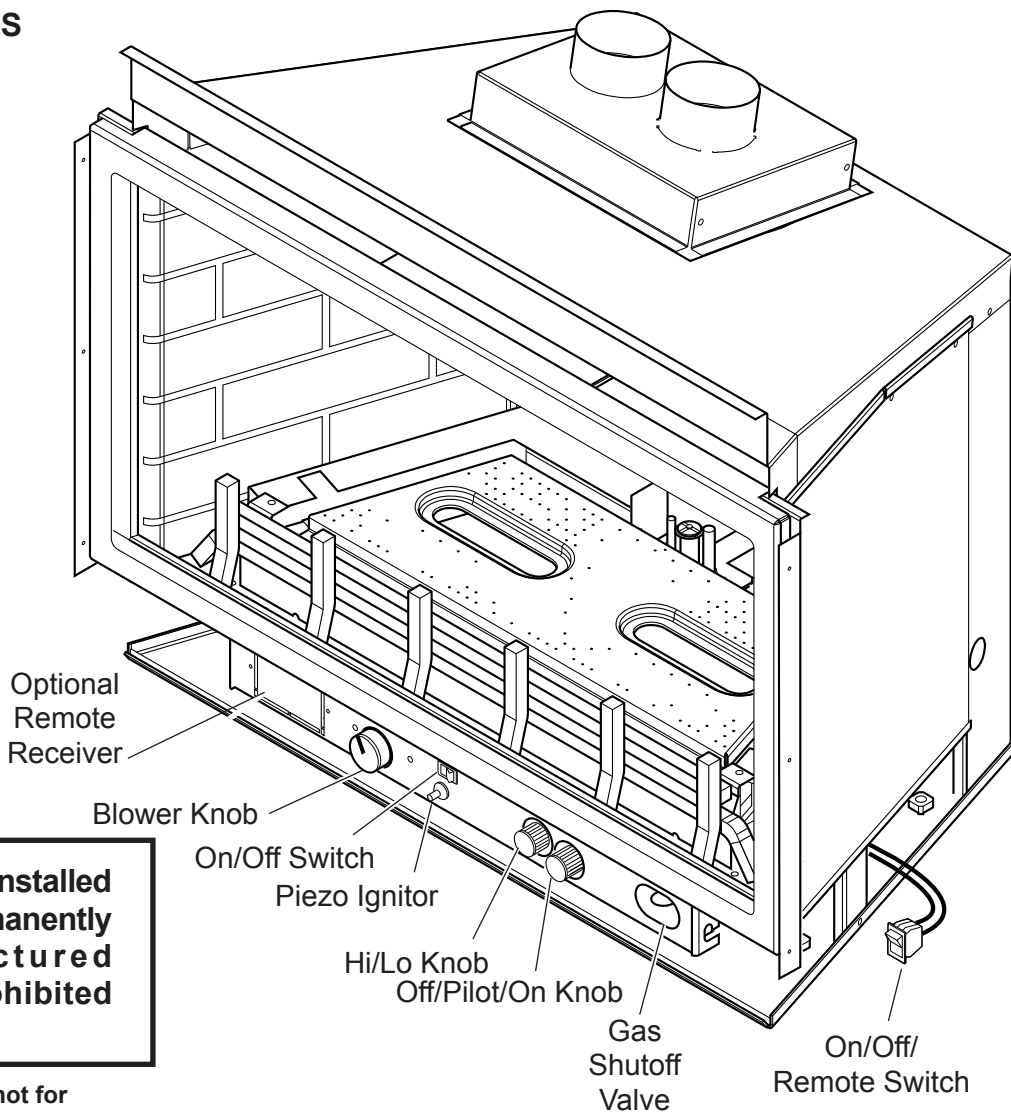
We suggest that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as Gas Specialists.

WARNING

Never connect unit to private (non-utility) gas wells. This gas is commonly known as wellhead gas.

PRODUCT SPECIFICATIONS

- This appliance has been certified for use with either natural or propane gas. See appropriate data plates.
- This appliance is not for use with solid fuels.
- The appliance is approved for bedroom or bedsitting room installations.
- The appliance must be installed in accordance with local codes if any. If none exist use the current installation code. ANSI Z223.1/NFPA 54 in the USA, CAN/CGA B149 in Canada.
- The appliance must be properly connected to a venting system.



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

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

Figure 1 - IDV490NVC, IDV490PVC, IDV380NVC, and IDV380PVC Inserts

The efficiency rating of this appliance is a product thermal efficiency rating determined under continuous operating conditions and was determined independently of any installed system.

Thermal Efficiency = up to 80%

CODE APPROVAL

These appliances have been tested by CSA and found to comply with the established standards for VENTED GAS FIREPLACE HEATERS in the USA and Canada as follows:

LISTED VENTED GAS FIREPLACE HEATER
 TESTED TO: ANSI Z21.88-2002/CSA 2.33-2002 STANDARDS

ATTENTION MASSACHUSETTS RESIDENTS:

This product must be installed by a licensed gas fitter.

PRE-INSTALLATION INFORMATION

INSTALLING ABOVE 2000 FEET

- In the USA, the appliance must be derated 4% for every 1,000 ft above 2,000 ft elevations.
- In Canada, these appliances are certified for altitudes of 0 – 2000 ft, and must be de-rated by 10 percent for installations between 2000 and 4,500 ft. (derate an additional 4% for every 1,000 ft. above 4,500 ft. elevations).

ORIFICE SIZES, PRESSURES AND BTUs

NATURAL GAS

Manifold Press: (W.C.) 3.5"
Maximum Supply Pressure 10.5"
Minimum Supply Pressure 4.5"

PROPANE GAS

Manifold Press: (W.C.) 10"
Maximum Supply Pressure 13"
Minimum Supply Pressure 11"

Model Number	IDV490NVC	IDV490PVC	IDV380NVC	IDV380PVC
	NATURAL	PROPANE	NATURAL	PROPANE
Max. Btu/hr Input	40,000	37,500	30,500	28,000
Min. Btu/hr Input	26,500	29,000	20,500	22,000
Orifice sizes (as shipped)	#30	#50	#35	#53

The IDV490NVC, IDV490PVC, IDV380NVC, and 380IDVPVC are equipped with a variable output gas control.

NOTE: IDV490NVC, IDV490PVC, IDV380NVC, and IDV380PVC inserts work without any electrical supply. Blower must be attached to 110/120 VAC.

INSTALLATION PLANNING

Plan for the installation of your insert. This includes determining the size of fireplace in which unit is to be installed, length of venting to be used, and finishing details, and whether any optional accessories (i.e. wall switch, or remote control) are desired. Consult your local building code agency to ensure compliance with local codes, including permits and inspections.

FIREPLACE AND INSERT DIMENSIONS

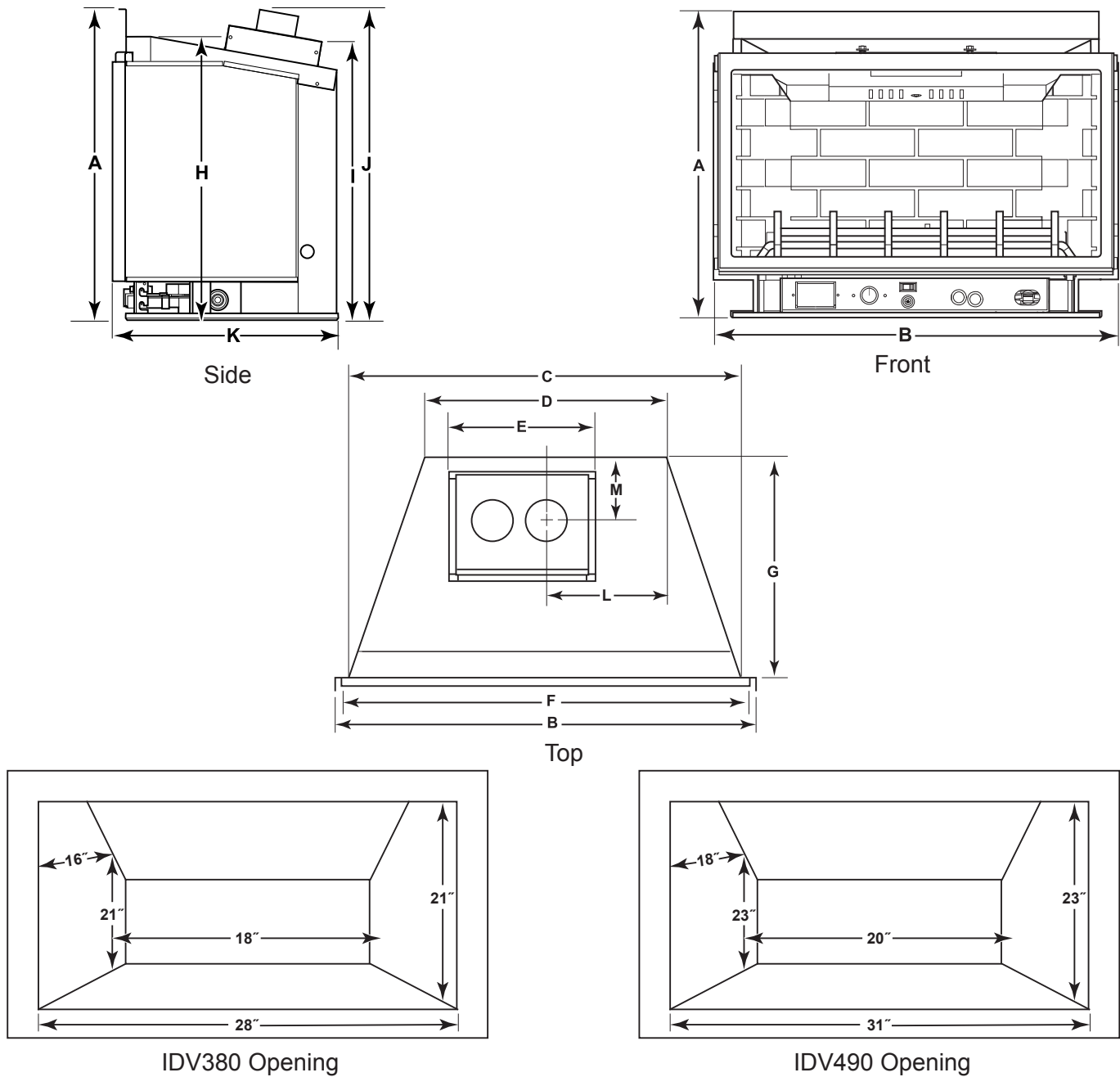


Figure 2 - External Insert Dimensions

INSERTS					
	IDV490NV/PVC	IDV380NV/PVC		IDV490NV/PVC	IDV380NV/PVC
A	24 ³ / ₄ " - 629mm	22 ³ / ₄ " - 578mm	H	22 ³ / ₄ " - 578mm	20 ³ / ₄ " - 527mm
B	33 ¹¹ / ₁₆ " - 856mm	30 ³ / ₁₆ " - 767mm	I	23 ¹³ / ₁₆ " - 605mm	21 ⁵ / ₈ " - 549mm
C	31 ¹ / ₈ " - 791mm	27 ⁵ / ₈ " - 702mm	J	24 ¹⁵ / ₁₆ " - 633mm	22 ³ / ₄ " - 578mm
D	19 ¹¹ / ₁₆ " - 500mm	17 ⁷ / ₁₆ " - 443mm	K	18 ⁵ / ₁₆ " - 465mm	16 ⁵ / ₁₆ " - 414mm
E	11 ¹ / ₂ " - 292mm	10 ³ / ₈ " - 264mm	L	9 ²⁷ / ₃₂ " - 250mm	8 ²³ / ₃₂ " - 221mm
F	33" - 838mm	29 ¹ / ₂ " - 749mm	M	5 ⁵ / ₈ " - 143mm	4 ¹ / ₂ " - 114mm
G	17 ¹ / ₂ " - 445mm	15 ⁹ / ₁₆ " - 395mm			

GENERAL INSTALLATION INFORMATION

The following factors should be taken into consideration:

- This insert should have sufficient access for its safe operation and maintenance.
- The flow of combustion and ventilation air must not be obstructed.
- Minimum clearances to combustibles, such as mantels, **must be maintained**. See *Figures 3 and 4, pages 9 and 10*.
- Never obstruct the front opening of the insert.
- Do **not** install in the vicinity where gasoline or other flammable liquids may be stored.
- These units can be installed in a bedroom. See National Fuel Gas Code ANSI Z233.1/NFPA 54 (current edition), the Uniform Mechanical Code (current edition), and Local Building Codes for specific installation requirements.

IMPORTANT: Your direct vent insert was designed to be installed in an existing wood burning fireplace. The location and clearances are subject to local building codes.

INSERT APPLICATIONS

Before installing the gas fireplace insert, consider the functioning needs of the fireplace. Confirm the size of the fireplace cavity, the design of the chimney, and the availability of the gas supply and electricity for the insert fan.

IMPORTANT: Your direct vent insert is designed to be only vented vertically with a minimum height of 10 feet.

When the unit is installed into a woodburning fireplace, the minimum distance the mantel can be placed above the fireplace is governed by local building codes applicable to woodburning fireplaces. Consult local authorities having jurisdiction for these clearances. The underside of the mantel will become warm. Use only finishes which are heat resistant and do not discolor.

CLEARANCES

MINIMUM FIREPLACE SIZE/CLEARANCES TO COMBUSTIBLES

WARNING The dimensions shown in *Figures 4 and 5, pages 9 and 10*, are minimum clearances to maintain when installing this heater. Follow these instructions carefully to ensure safe installation. Failure to follow instructions exactly can create a fire hazard.

Maintain the following minimum clearances for service and maintenance. See *pages 9 and 10*.

INSERT CLEARANCES

No combustibles (ie: drapes, doors) may be within, or swing within, 36" of the front of the inset.

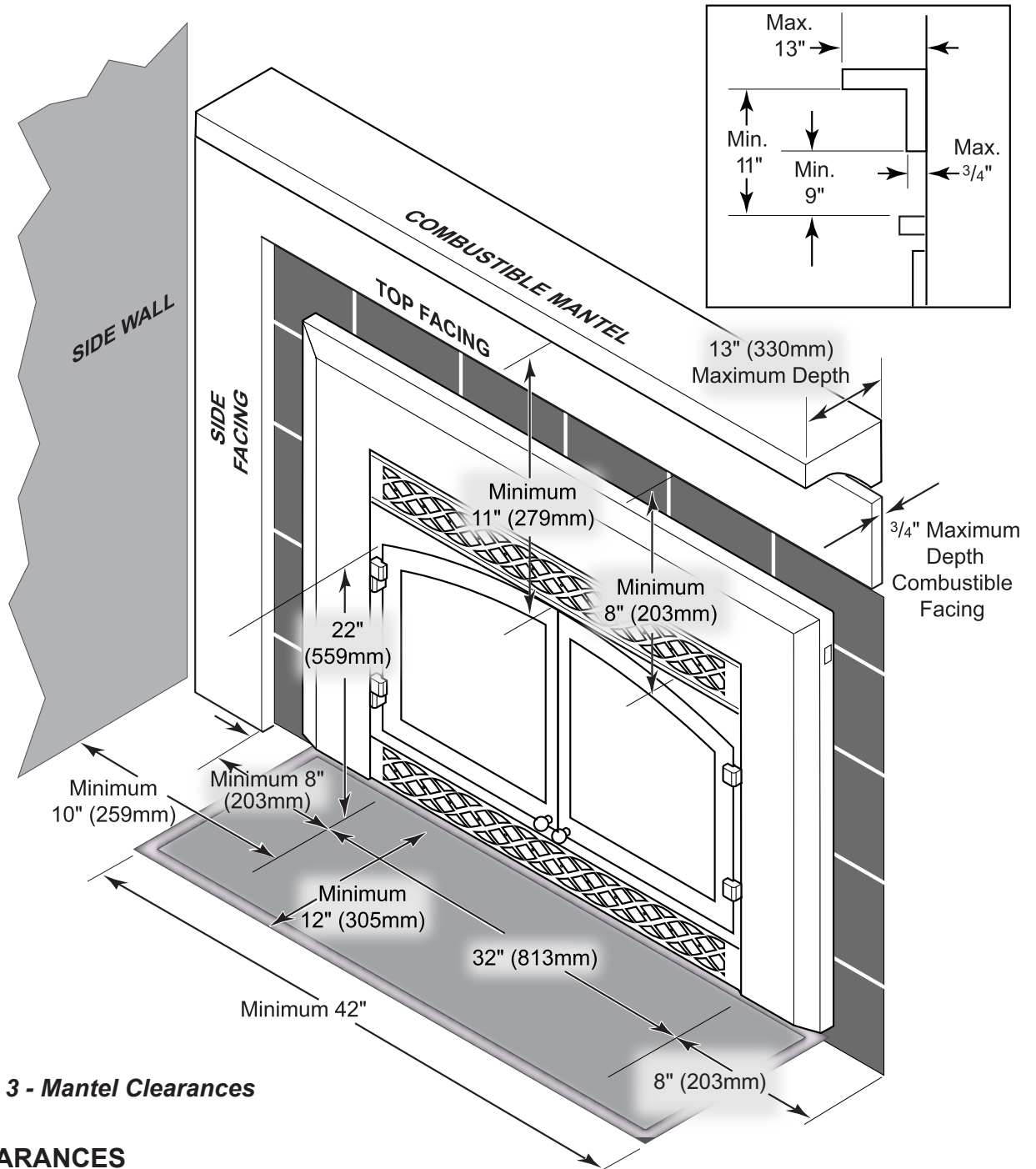


Figure 3 - Mantel Clearances

MANTEL CLEARANCES

NOTE: The combustible area above the facing must not protrude more than 3/4" from the facing. If it does, it is considered a mantel and must meet the mantel requirements shown above.

HEARTH REQUIREMENTS

The insert must be installed on a non-combustible hearth extending a minimum of 12" from the fireplace opening (local codes may require a larger hearth). The hearth must also extend to both sides of the face (see the table on page 7).

INSTALLATION

INSERT PLACEMENT

- Insert must be placed within a code-conforming masonry fireplace or a tested and listed zero-clearance (UL-127, solid fuel) fireplace. Repair any fireplace damage prior to installation.
- Because the insert uses a circulation blower, clean the fireplace, smoke shelf, and chimney before installing.
- This heater may be placed in a bedroom. Please be aware of the large amount of heat this appliance produces when determining a location.

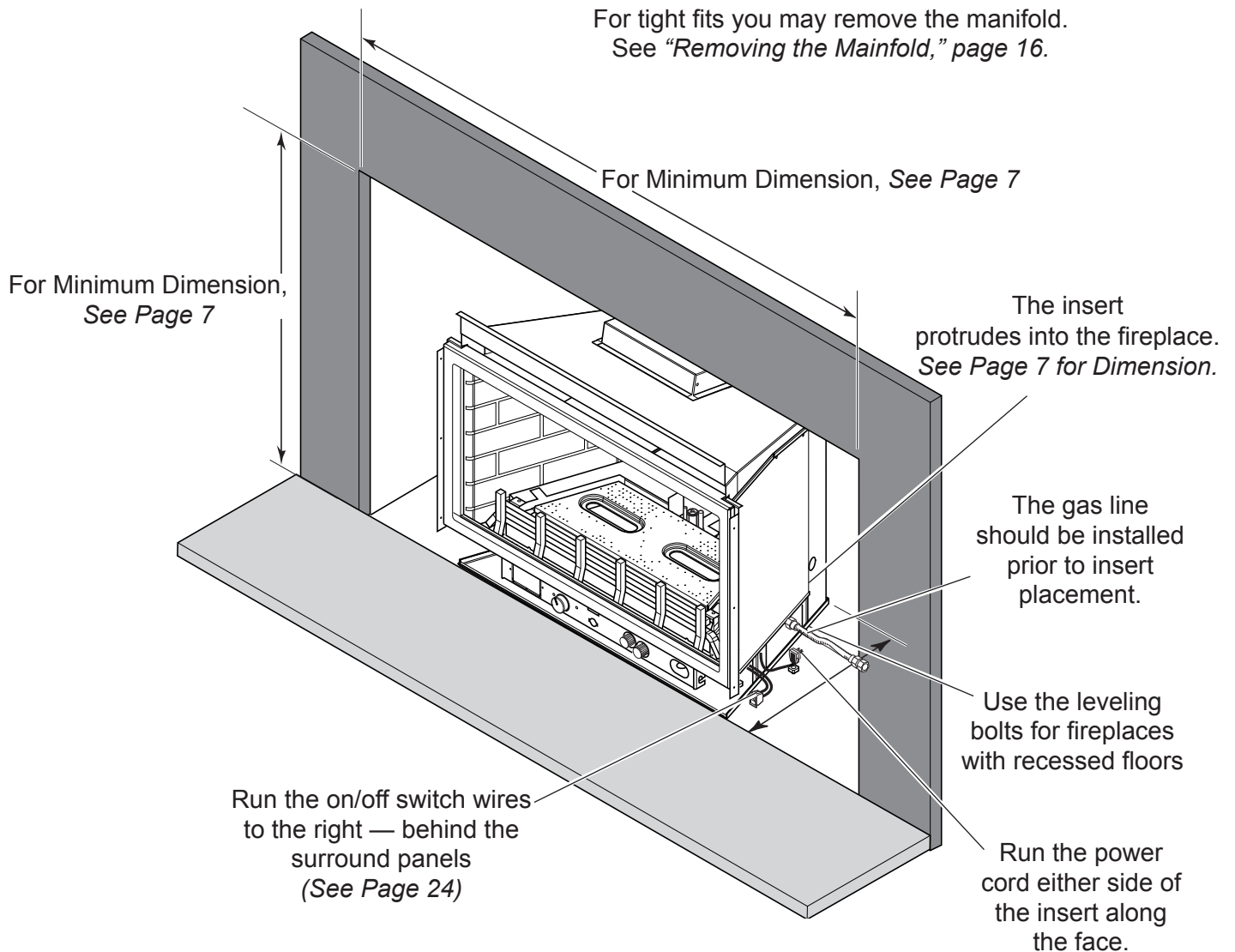


Figure 4 - Insert Placement

ZERO-CLEARANCE (METAL) FIREPLACE REQUIREMENTS

- The damper and grate must be removed.
- The smoke shelf, internal baffles, screen, refractory, and metal or glass doors may be removed (if applicable).

WARNING

- **Installer must attach red warning plate to the inside of the firebox of fireplace with screws supplied.**
- **Do not cut any sheet metal parts of the fireplace in which this gas fireplace insert is installed. THIS IS STRICTLY PROHIBITED!**
- **If factory-built fireplace has no gas access hole(s) provided, drill a 1.5" (37.5mm) or less through lower sides or bottom of firebox. You must plug the access hole with noncombustible insulation after gas supply line has been installed.**
- **If your factory-built fireplace has air passages on the face for zero capabilities, DO NOT BLOCK THESE PASSAGES!**

- Do not remove or alter the insulation or any structured rigid frame members (metal sides, floor, door frame, face of the fireplace, etc.).

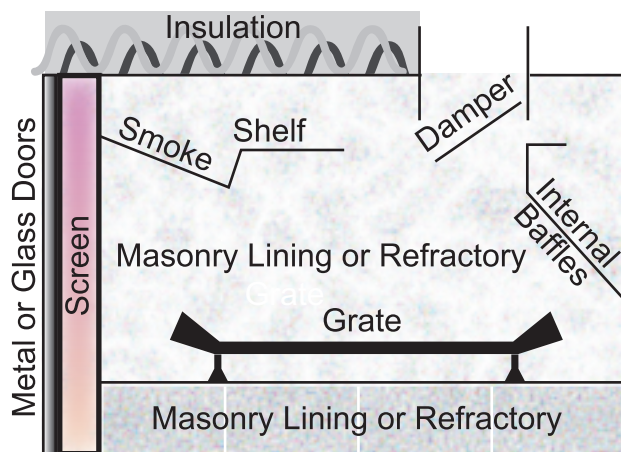


Figure 5 - Metal Fireplace Zero-Clearance Requirements

IMPORTANT: Please review the following carefully.

It is normal for inserts fabricated of steel to give off some expansion and/or contraction noises during the start up or cool down cycle. Similar noises are found with your furnace heat exchanger or car engine.

It is not unusual for your insert to give off some odor the first time it is burned. This is due to the curing of the paint and any undetected oil from the manufacturing process.

Please ensure that your room is well-ventilated. OPEN ALL WINDOWS DURING INITIAL BURN OFF/ CURING PHASE.

Burn your insert for a least six (6) hours on “HIGH” the first time you use it. Place fan in the “OFF” position during this time.

VENT INSTALLATION

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. Operation of improperly installed and maintained venting systems could result in serious injury, property damage or loss of life.

NOTICE

Failure to follow these instructions will void the warranty.

INSTALLATION PRECAUTIONS

Consult local building codes before beginning the installation. The installer must make sure to select the proper vent system for installation. Before installing vent kit, the installer must read this insert manual and vent kit instructions.

Only a qualified installer/service person should install venting system. The installer must follow these safety rules:

- Wear gloves and safety glasses for protection.
- Use extreme caution when using ladders or when on rooftops.
- 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.
- Installation of any component part not manufactured or approved by Monessen.
- Installation other than permitted by these instructions.

WARNING

This insert must be vented to the outside. The venting system must NEVER be attached to a chimney serving a separate solid fuel burning appliance. Each gas appliance must use a separate vent system. Do not use common vent systems.

VENT REQUIREMENTS

WARNING

- Make sure the exhaust pipe on heater connects to exhaust portion of cap. Attach flex liners. See *Figure 6*.
- Do not crimp or rupture liner when bending it into chimney offsets.

- The exhaust vent must reline the entire length of chimney and terminate above chimney top.
- Vent must meet all vent manufacturer's requirements when installed.
- Make sure you have the following before installing 490 unit:
 - 4" and 3" UL 1777 Listed gas liner for air inlet and exhaust
 - Vertical termination kit (AI42TK43A)
- Make sure you have the following before installing 380 unit:
 - 3" and 3" UL 1777 Listed gas liner for air inlet and exhaust
 - Vertical termination kit (AI31TK33A)

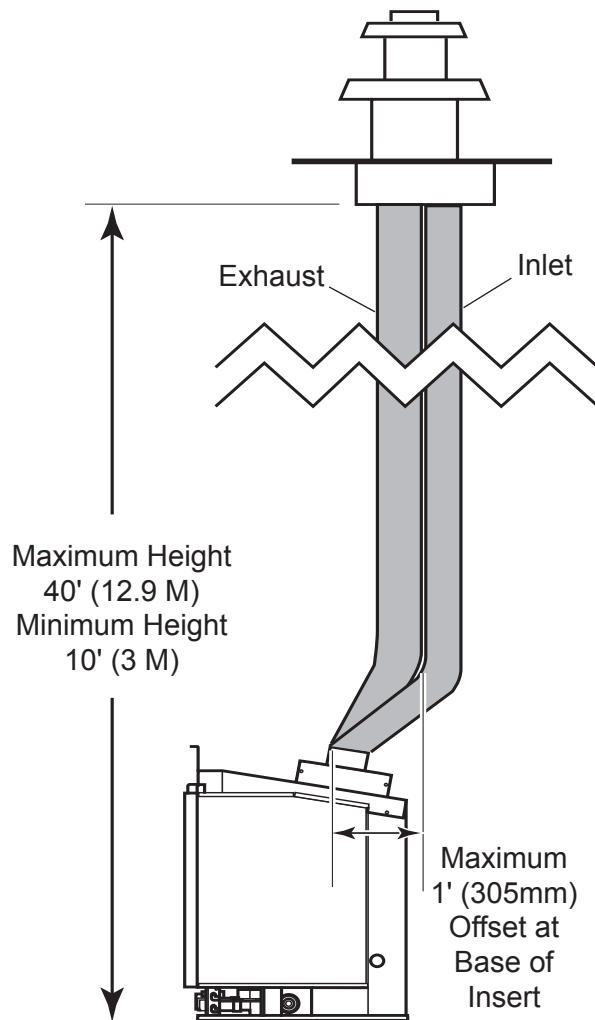


Figure 6 - Venting Unit

VENT INSTALLATION

ALTITUDE CONSIDERATIONS

This heater has been tested at altitudes ranging from sea level to 4,500 feet (USA), 0-2000 feet (Canada). In this testing, heater with standard orifice burns correctly with just an air shutter adjustment. If you need to resize orifice for use at high altitude, contact your dealer.

WARNING

Failure to adjust air shutter properly may lead to improper combustion which can create a safety hazard. Consult your dealer or installer if you suspect an improperly adjusted air shutter

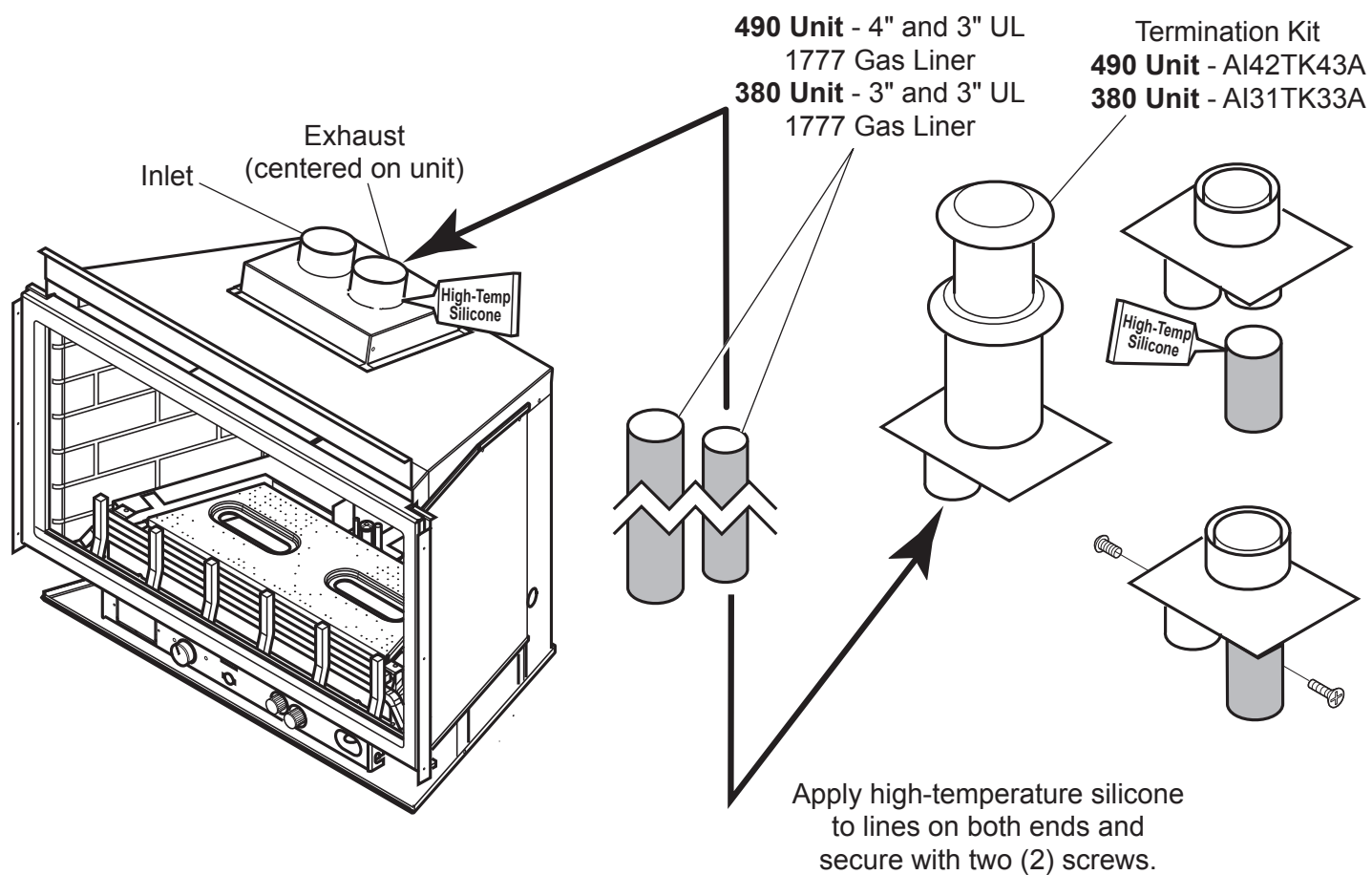


Figure 7 - Connecting Exhaust Pipe to Heater

VENT CONFIGURATIONS

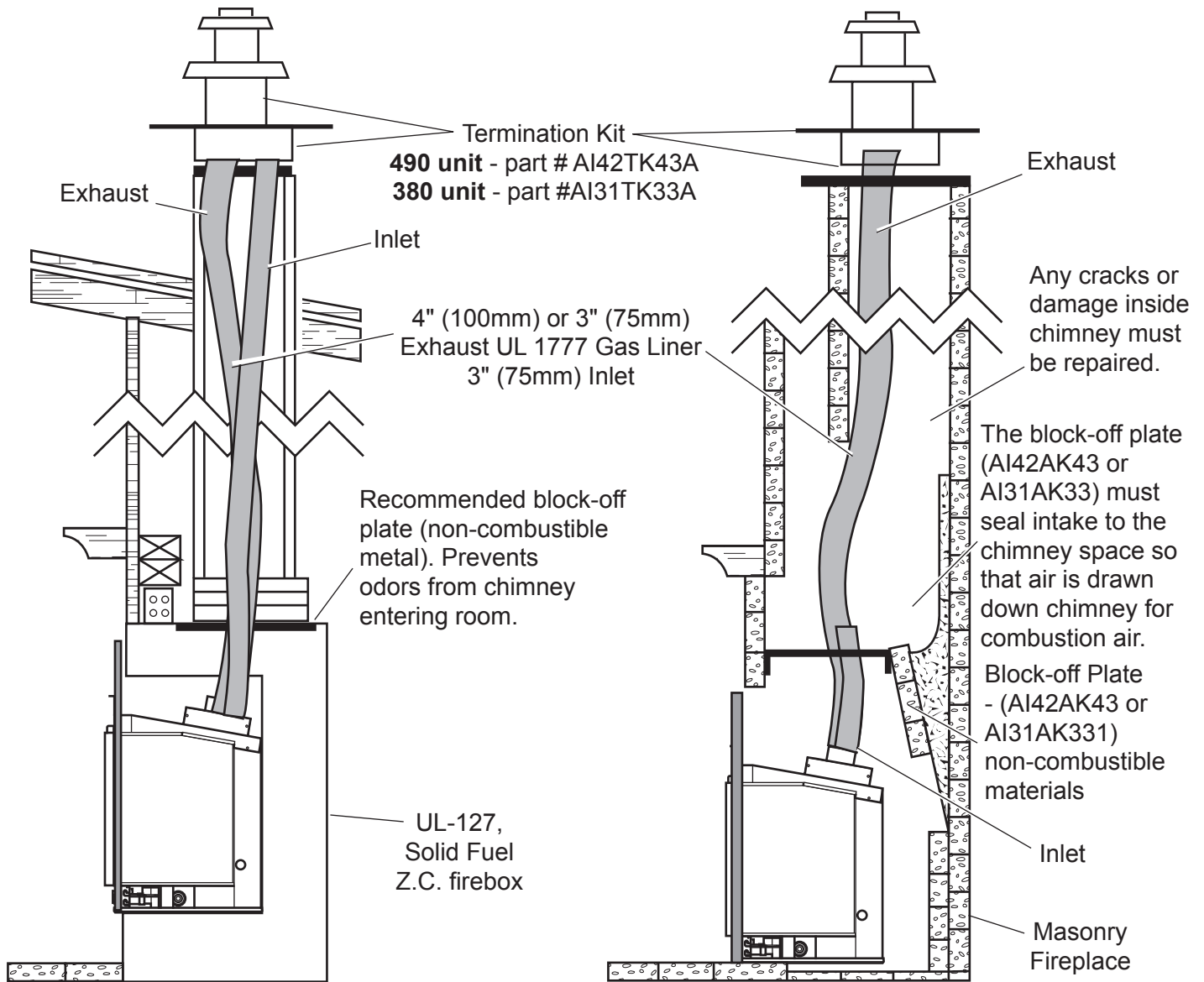


Figure 8 - Inlet and Exhaust Reline

Figure 9 - Exhaust Only Reline

NOTE: You may use either reline configuration with a masonry or zero-clearance fireplace.

VENT INSTALLATION

MANIFOLD REMOVAL AND INSTALLATION

The manifold is shipped attached to insert. It may be removed to allow tight installation. Manifold may be loosened and rotated for desired pipe location.

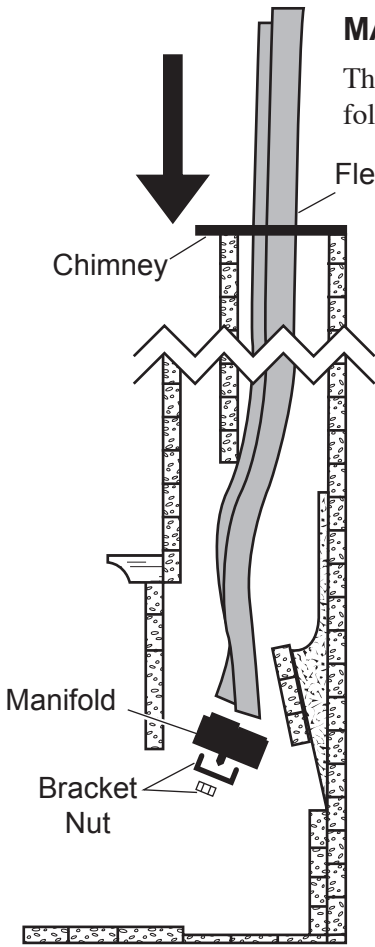


Figure 10 - Placing Manifold Into Fireplace

5. Place manifold in an upright position. Have someone pull on the excess flex vent. *Figure 12*. Temporarily attach flex vent to top of chimney. Leave some extra slack in flex vent.

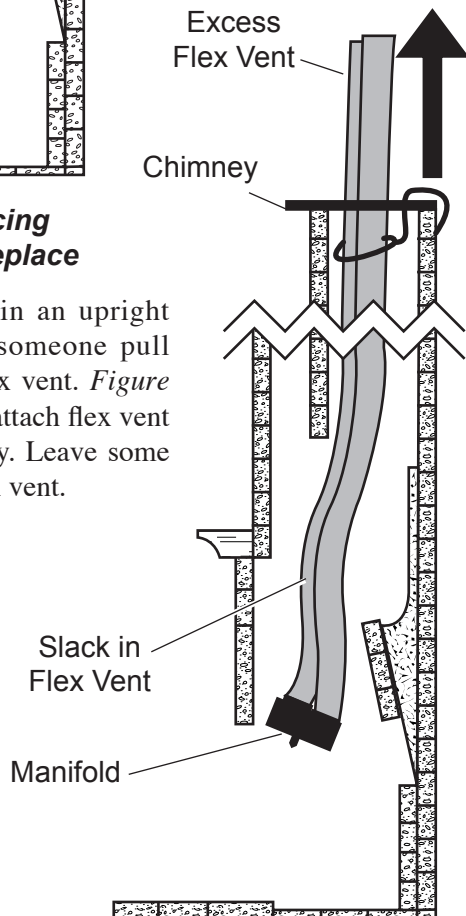


Figure 12 - Pulling On Excess Flex Vent

1. Remove brick liner and baffle.
2. Remove manifold. Place manifold in fireplace.
3. Route flex vent through chimney from above. *See Figure 10*. Leave an extra 3" (914mm) at the top.
4. Attach flex vent to manifold. *See Figure 11*. Seal with silicone and attach with screws.

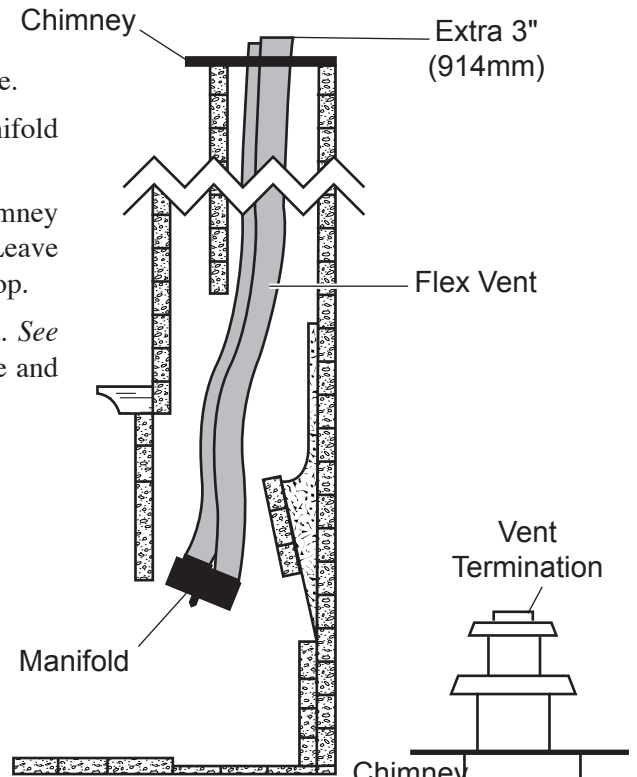


Figure 11 - Attaching Flex Vent to Manifold

6. Slide insert into place. Guide the manifold over the insert until it is fully in place. *Figure 13*.
7. Remove any slack from flex vent. Attach manifold to insert. *Figure 13*.
8. Remove any excess slack in flex line. Attach vent termination. *Figure 13*.

9. Replace baffle and brick liner.

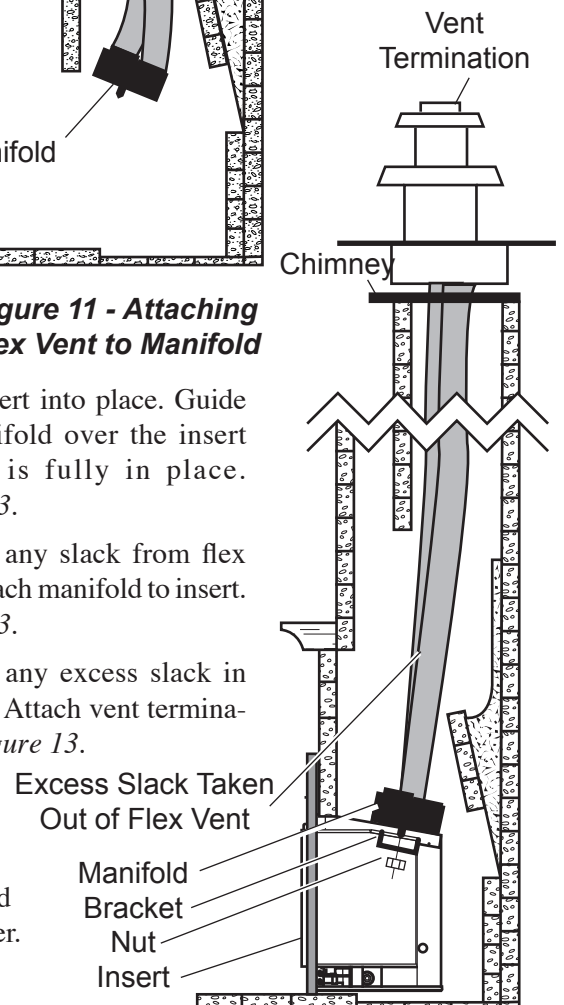


Figure 13 - Sliding Insert Into Place

CHECK GAS TYPE

Use proper gas type for the insert you are installing. If you have conflicting gas type, do not install insert. See dealer where you purchased the insert for proper insert according to your gas type.

INSTALLING GAS PIPING TO INSERT LOCATION

WARNING

A qualified installer or service person must connect appliance to gas supply. Follow all local codes.

CAUTION

For propane/LP units, never connect insert directly to the propane/LP supply. This burner system requires an external regulator (not supplied). Install the external regulator between the burner system and propane/LP supply.

INSTALLATION ITEMS NEEDED

Make sure you have the items listed below before installing appliance.

- External regulator (supplied by installer)
- Piping (check local codes)
- Sealant (resistant to propane/LP gas)
- Test gauge connection*
- Sediment trap (optional but recommended)
- Tee joint
- Pipe wrench
- approved flexible gas line with gas connector (if allowed by local codes — not provided)

* 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 dealer.

For propane/LP connections 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 13 inches of water. If you do not reduce incoming gas pressure, burner system regulator damage could occur. Install external regulator with the vent pointing down as shown in *Figure 27*. Pointing the vent down protects it from freezing rain or sleet.

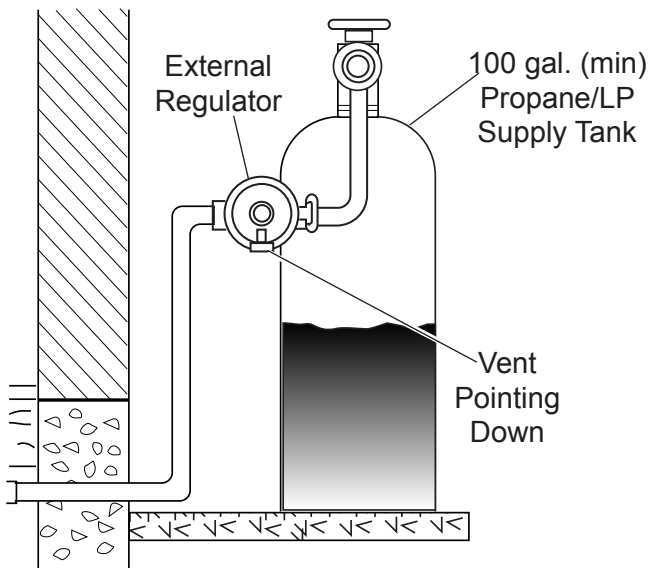


Figure 14 - External Regulator with Vent Pointing Down (Propane/LP Only)

CAUTION

Use only new black iron or steel pipe. Internally tinned copper or copper tubing can be used per National Fuel Code, section 2.6.3, providing gas meets hydrogen sulfide limits, and where permitted by local codes. Gas piping system must be sized to provide minimum inlet pressure (listed on data plate) at the maximum flow rate (BTU/hr). Undue pressure loss will occur if the pipe is too small.

When using copper or flex connectors use only fittings approved for gas connections. The gas control inlet is 3/8" NPT.

INSERT INSTALLATION

WARNING

Only persons licensed to work with gas piping may make the necessary gas connections to this appliance.

CAUTION

A manual shutoff valve is factory installed upstream of the appliance. Union tee and plugged $\frac{1}{8}$ " NPT pressure tapping point should be installed upstream of the appliance. See *Figure 15*.

NOTE : The gas line connection may be made using $\frac{1}{2}$ " rigid tubing or an approved flex connector. Since some municipalities have additional local codes it is always best to consult your local authorities and the current edition of the National Fuel Gas Code ANSI.Z223.1, NFPA54. In Canada CAN/CGA-B149 (1 or 2) Installation Code.

A listed manual shutoff is factory installed upstream of appliance. Union tee and plugged $\frac{1}{8}$ " NPT pressure tapping point should be installed upstream of the appliance. See *Figure 15*.

IMPORTANT: The main gas valve is for turning on or shutting off the gas to the insert.

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

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

CAUTION

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 15*. Locate sediment trap/drip leg where it is within reach for cleaning. Install in piping system between fuel supply and burner system. 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 the burner system gas controls. If sediment trap/drip leg is not installed or is installed wrong, burner system may not run properly.

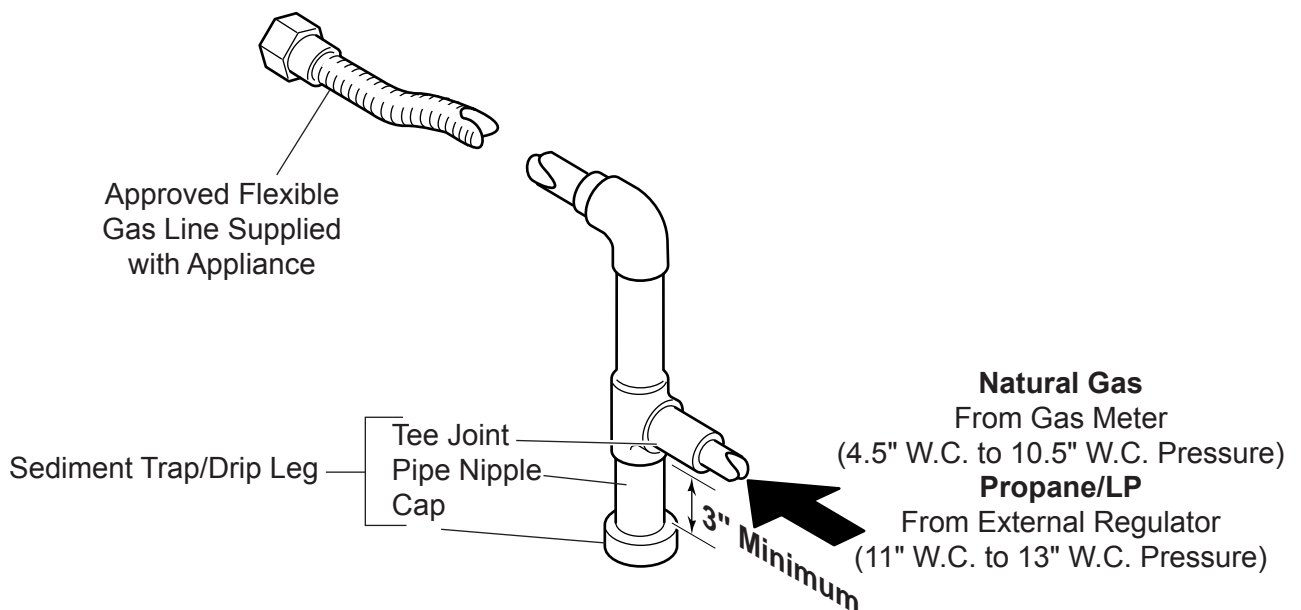


Figure 15 - Gas Connection

CHECKING GAS PRESSURE

1. Check gas type. The gas supply must be the same as stated on the appliance's rating decal. If the gas supply is different from the fireplace, STOP! Do not install the appliance. Contact your dealer immediately.
2. Install and attach 30" (762mm) flex line provided with on this appliance to $\frac{1}{2}$ " gas line.
3. After completing gas line connection, purge air from gas line and test all gas joints from the gas meter to the fireplace for leaks. Use a soap and water solution or a gas sniffer.
4. To adjust flame height, turn HI/LO knob to HI to get maximum pressure to burner. Turn HI/LO knob to LO to get minimum pressure.
5. To check gas pressures at valve, turn captured screw counter clockwise 2 or 3 turns and then place tubing to pressure gauge over test point. Turn unit to high. See *Figure 16*. After taking pressure reading, be sure and turn captured screw clockwise firmly to reseal. Do not over torque. Check test points for gas leaks with a soap and water solution or an electronic gas leak detector.

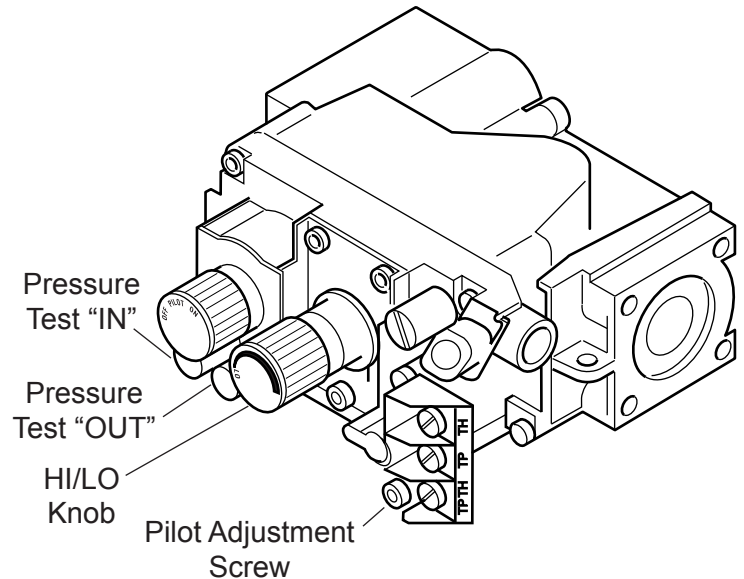


Figure 16 - Gas Pressure Check at Gas Valve

WARNING

Do not use open flame to check for gas leaks.

ELECTRICAL INSTALLATION

ELECTRICAL WIRING

This insert will work without any electrical supply. Electricity is only needed to operate blower.

WARNING

Electrical connections should only be performed by a qualified, licensed electrician. Main power must be off when connecting to main electrical power supply or performing service. All wiring shall be in compliance with all local, city, and state codes. The 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 (latest edition)* and *Canadian Electrical Code, CSA C22.1*.

CAUTION

Label all wires before disconnecting when servicing controls. Wiring errors can cause improper and dangerous operation.

Verify proper operation after servicing.

REMOTE WALL MOUNTED SWITCH

A remote wall switch and up to fifteen (15) feet of 18 Ga. wire may be used with this appliance. Attach the wall switch in a junction box at the desired location on the wall. See Figure 17.

NOTE: Extended lengths of wire may cause the fireplace not to function properly. Longer length of wire is permitted if the wire is made out of larger gauge (diameter) wire. Always check with local code.

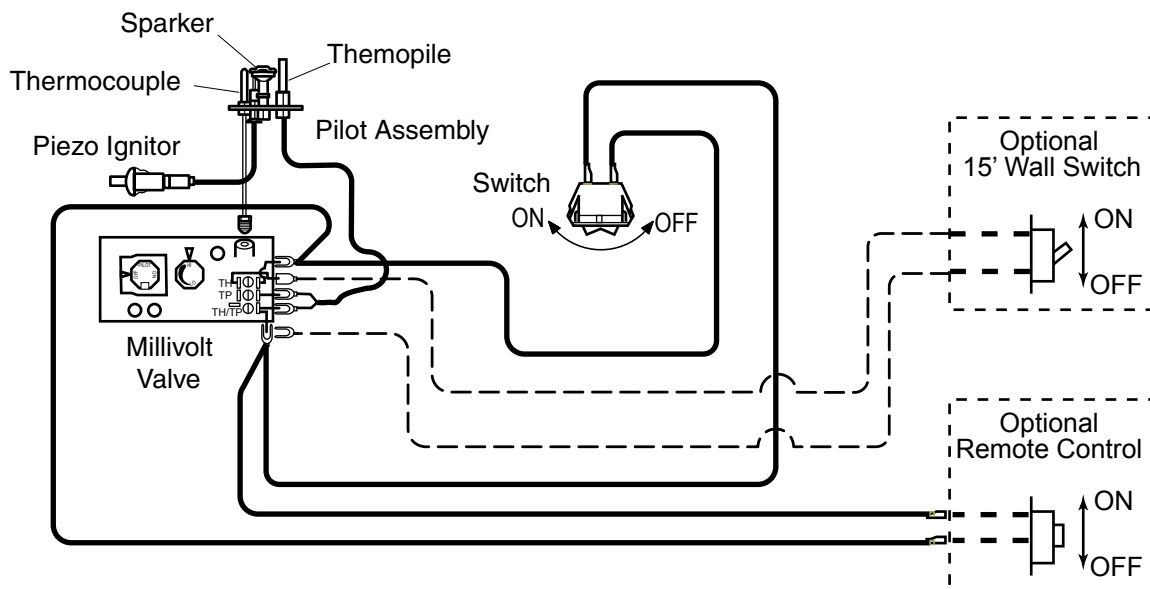


Figure 17 - Wiring Diagram for Wall Switch

Before you begin — This unit is supplied with seven (7) ceramic fiber logs. Do not handle these logs with your bare hands. **Always wear gloves to prevent skin irritation from ceramic fibers.** After handling the logs, wash your hands gently with soap and water to remove any traces of fibers.

WARNING

The positioning of the logs is critical to the safe and clean operation of this heater. Sooting and other problems may result if the logs are not properly and firmly positioned in the appliance. Never add additional logs or embellishments such as pine cones or vermiculite to the heater. Only use the logs supplied with the unit.

Failure to position the parts in accordance with diagrams below or to use only parts specifically approved for this heater may result in property damage or personal injury.

INSTALLING LOGS AND ROCK WOOL (EMBER MATERIAL) IN FIREBOX

1. Open front door of firebox. *See Page 31.*
2. Break up rock wool (ember material) into dime-sized pieces. Place evenly across burner surface. *See Figure 18.* Do not exceed 1" depth of coverage.
3. Carefully remove seven (7) logs from wrapping.
4. Place rear log (#1) against back of firebox. *See Figure 19.*

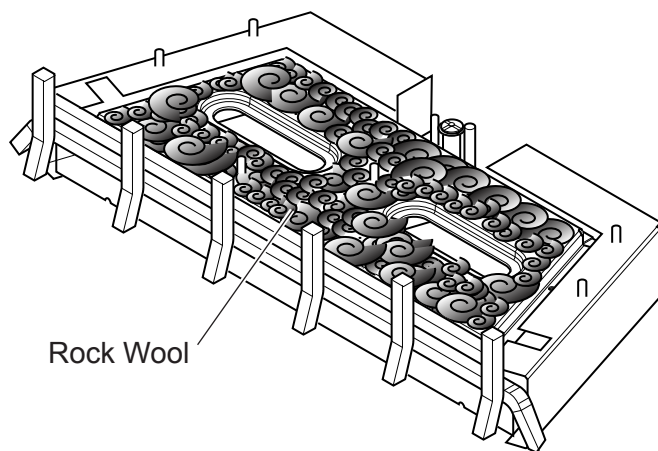


Figure 18 - Rock Wool Placement

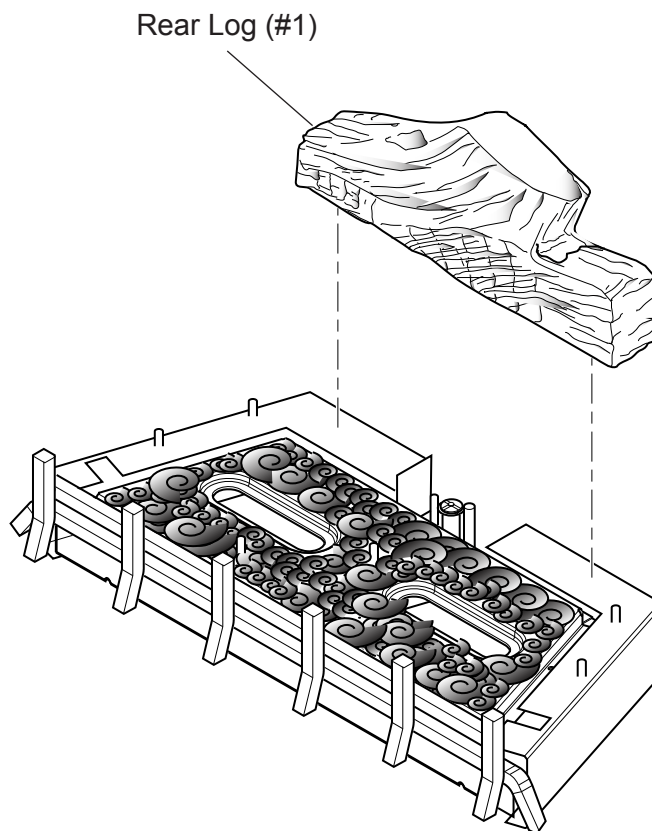


Figure 19 - Installing Rear Log #1

LOG PLACEMENT

Left Front Log (#2)

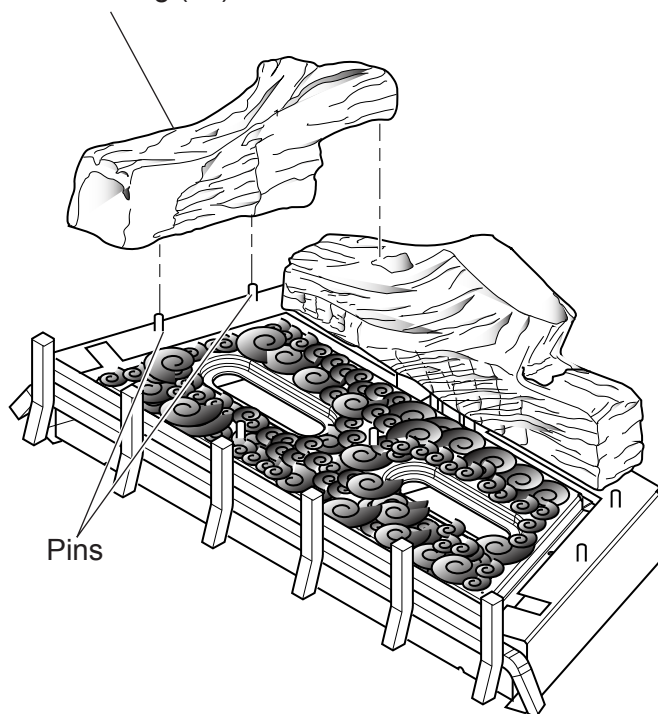


Figure 20 - Installing Left Log #2

5. Line up the holes in the bottom of the left base log (#2) with two (2) pins on the left side of insert. Install left base log. See *Figure 20*.
6. Line up holes in bottom of right base log (#3) on two (2) pins to the right of rear log (#1). See *Figure 21*.

Right Base Log (#3)

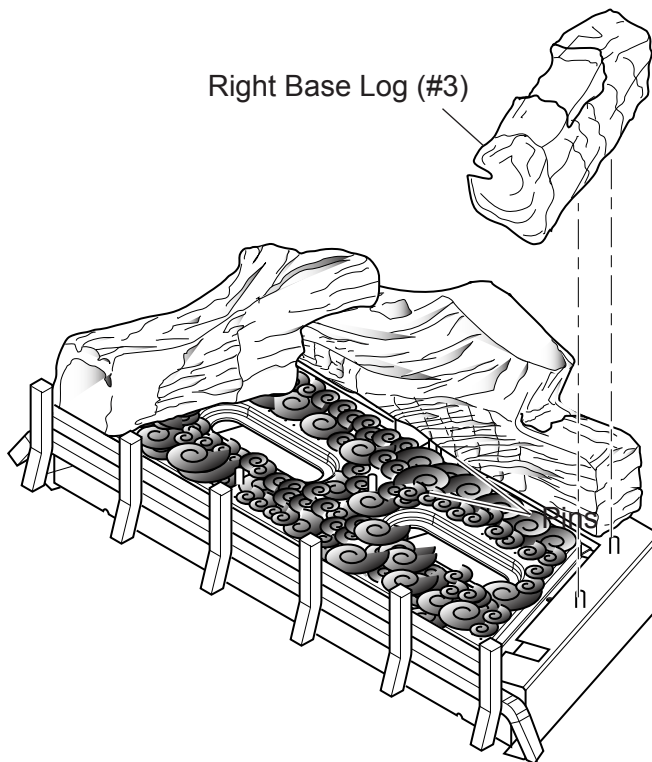


Figure 21 - Installing Right Log #3

Left Center Log (#4)

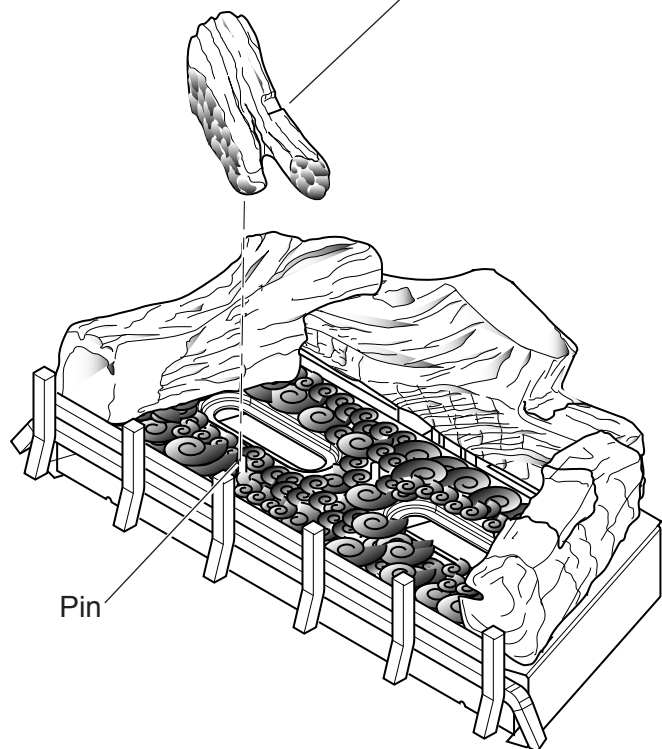


Figure 22 - Installing Left Center Log #4

7. Line up hole in bottom left center log (#4) with pin on burner. See *Figure 22*.

8. Set right center log (#5) on center pin to the left of right base log. See Figure 23.
9. Place one end of right top log (#6) on cutout of right base log (#3). Line up other end on right center log (#5). See Figure 24.
10. Lay top “Y” log (#7) across rear log (#1) and center logs (#4 and #5). Log #1 and log #4 have cutouts for log #7. See Figure 25

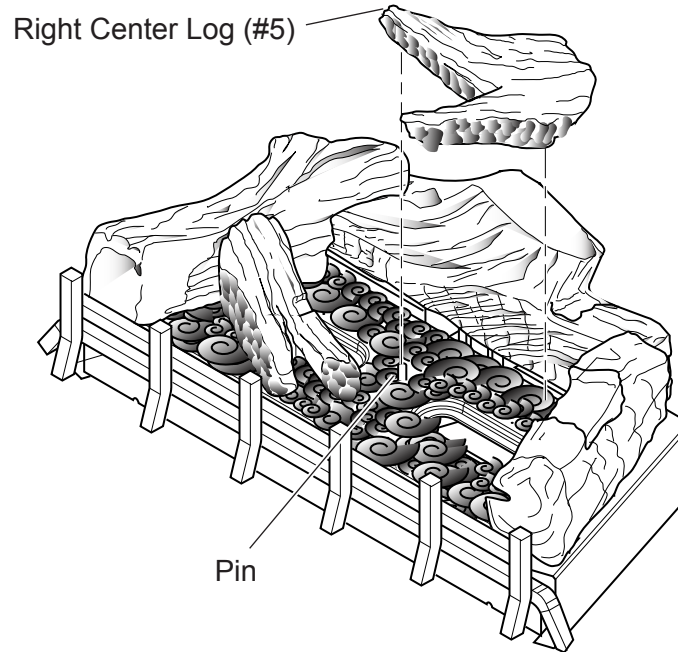


Figure 23 - Installing Right Center Log #5

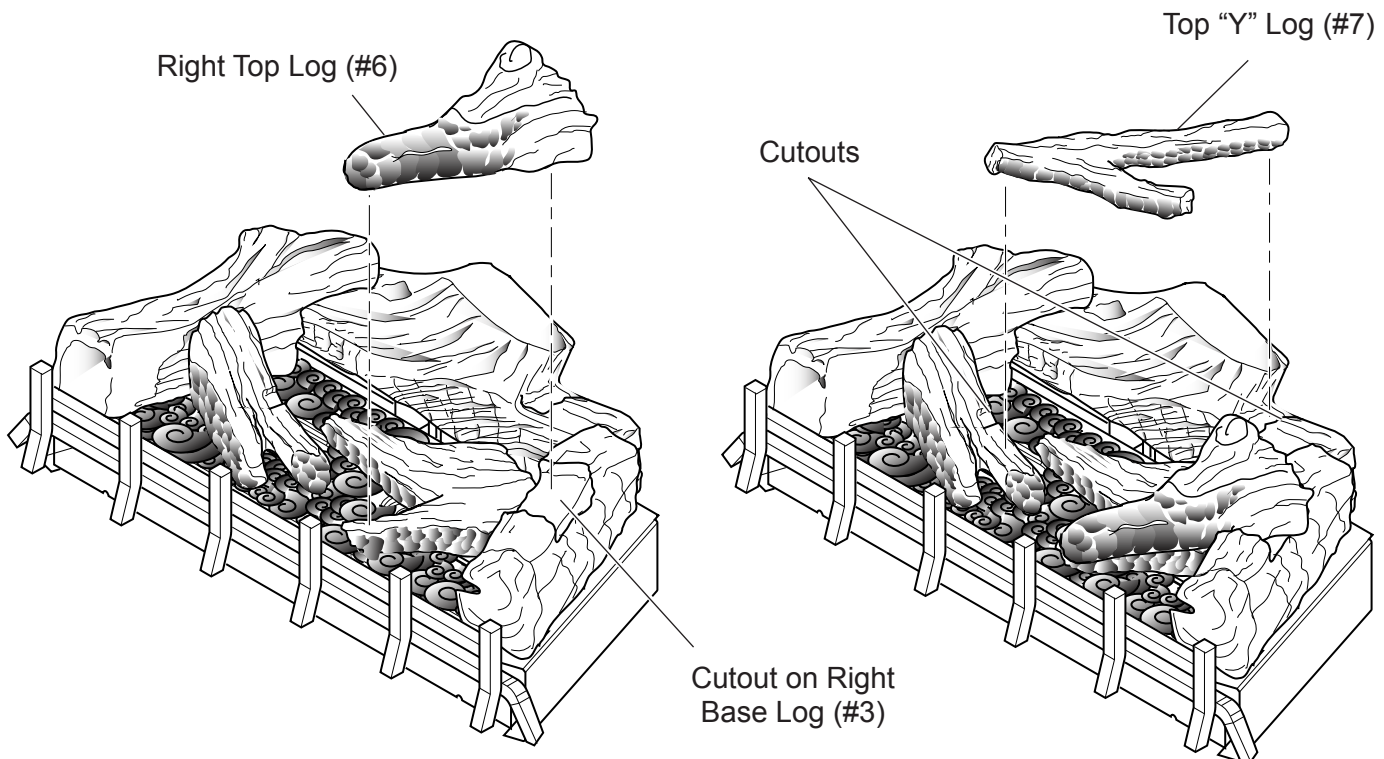


Figure 24 - Installing Right Top Log #6

Figure 25 - Installing "Y" Log #7

SURROUND INSTALLATION

INSTALLING FACING

1. Remove glass. *See Page 31.*
2. Line up plain or beveled surround with unit opening.
3. Attach surround to unit with six (6) screws provided. *See Figures 26 and 27.*
4. Install glass.

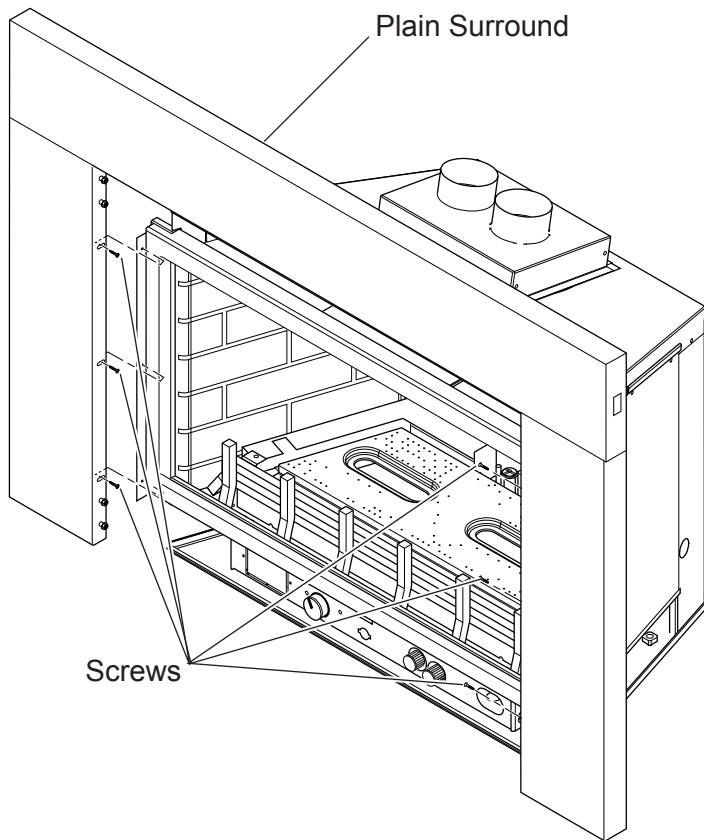


Figure 26 - Installing Plain Surround

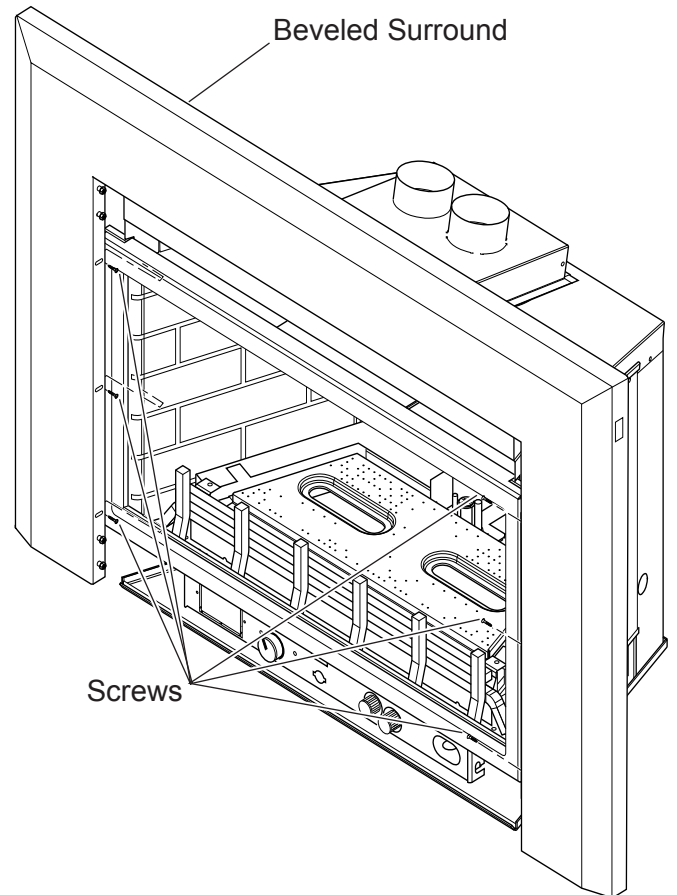


Figure 27 - Installing Beveled Surround

INSTALLING ON/OFF SWITCH

1. After installing surround, disconnect the on/off switch from wires leading from heater.
2. Insert switch into hole in upper right side of the trim. *See Figure 28.*
3. Reattach wires. *See Figure 28.*

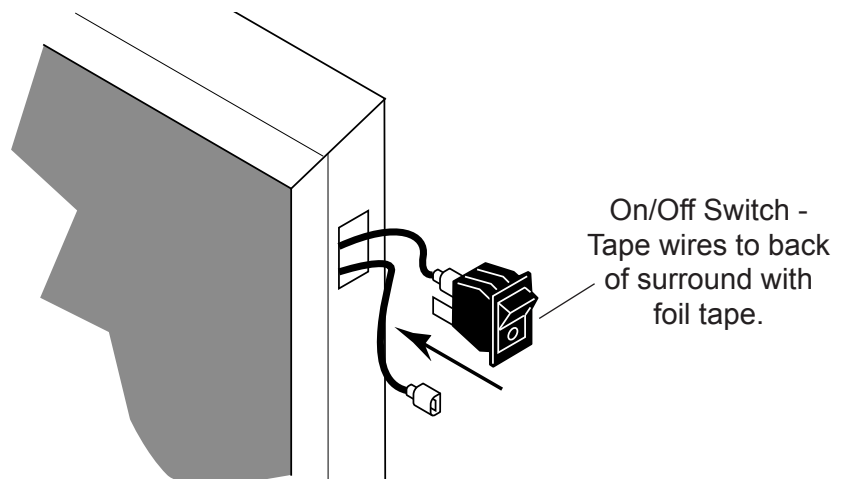


Figure 28 - Installing On/Off Switch

FILIGREE PANELS AND CABINET DOOR FRAME INSTALLATION

INSTALLING FILIGREE PANELS AND CABINET DOOR FRAME

1. Slide cabinet door frame on to front of unit. Make sure the four (4) hooks of the cabinet door frame are inside four slots on front of unit. *See Figure 29.*
2. Slide top filigree panel on to four (4) shoulder screws located on the top of the surround. Slide bottom filigree panel on to four (4) shoulder screws located on the bottom of the surround. *See Figure 30.*

NOTICE

Remove all fingerprints from facing with a 50/50 vinegar and water solution before lighting the heater. Any fingerprints left on the facing will be permanent when heater is lit.

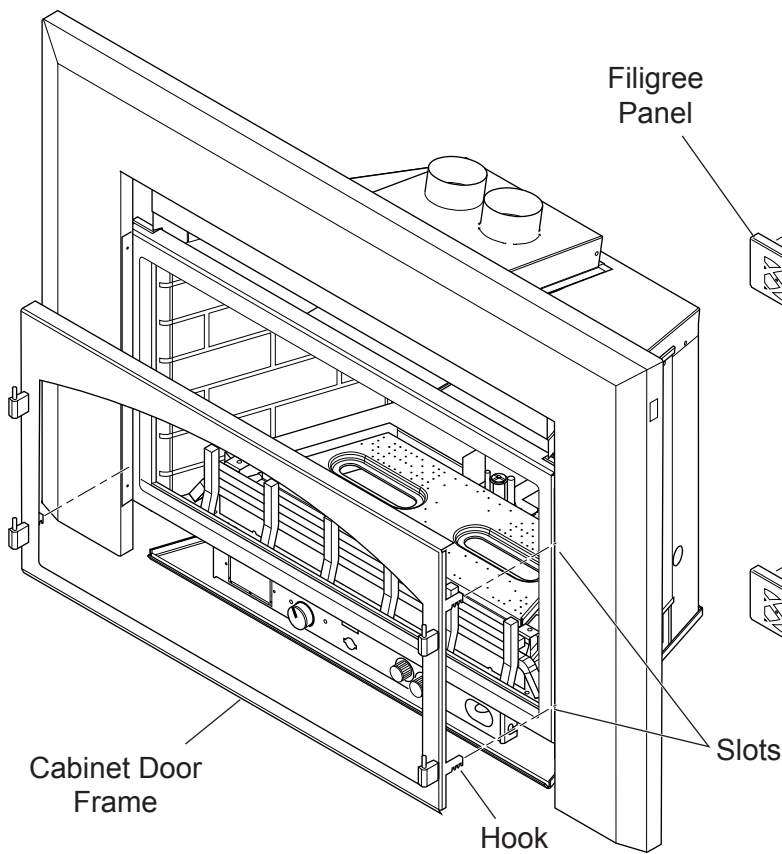


Figure 29 - Installing Cabinet Door Frame

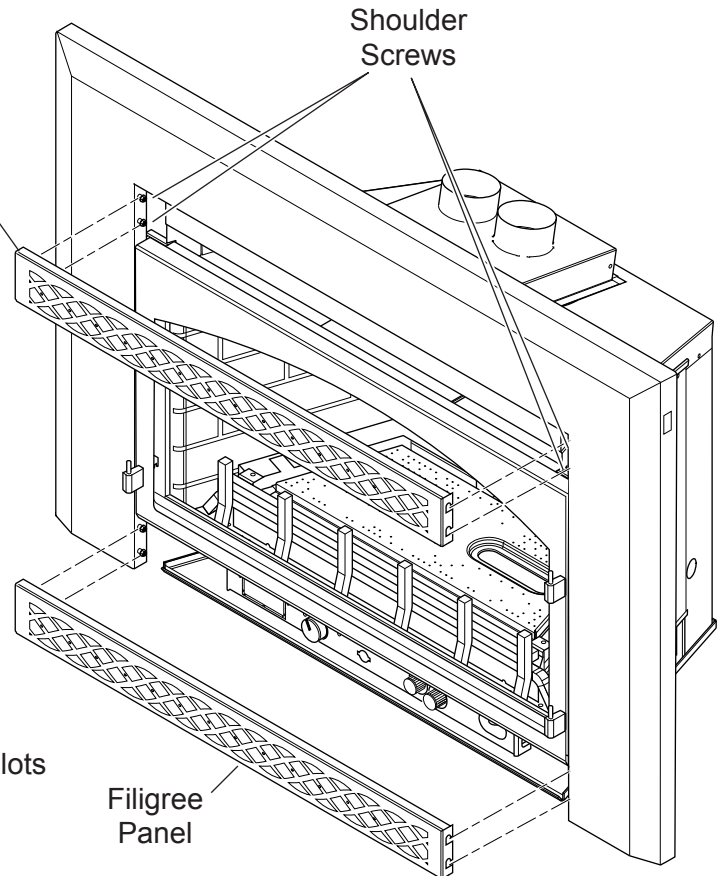


Figure 30 - Installing Filigree Door Panels

DOOR INSTALLATION

INSTALLING DOORS

Slide one door onto hinges. Repeat for other door. See *Figure 31*.

NOTICE

Remove all fingerprints from facing with a 50/50 vinegar and water solution before lighting the heater. Any fingerprints left on the facing will be permanent when heater is lit.

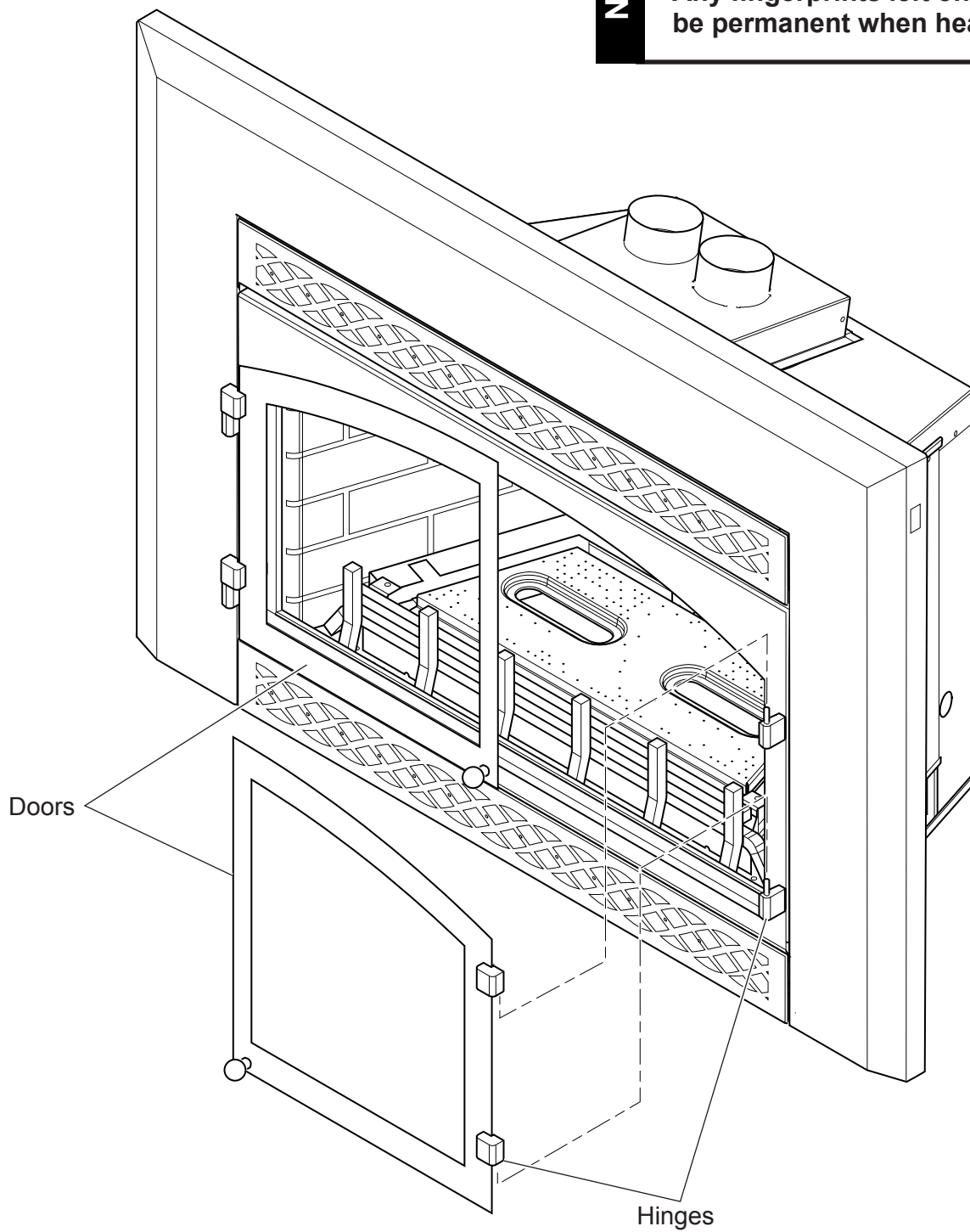


Figure 31 - Installing Doors

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 is equipped with a pilot piezo ignition system. Follow these instructions exactly to light pilot.
- B. BEFORE OPERATING 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:

- Turn off all gas to the appliance.
 - Open windows.
 - Do not attempt to light any appliance.
 - Do not touch any electric switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in, or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it. Call a qualified service technician. Force or attempted repair may result in a fire or explosion.
 - D. Do not use this appliance if any part of it 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 that has been under water.

LIGHTING PILOT FOR THE FIRST TIME**INITIAL LIGHTING**

Purge air from the supply line as follows:

- Open main shutoff valve.
- Unscrew main pressure test point.
- Leave inlet test screw open until gas comes in.
- When gas is flowing, tighten inlet screw immediately.

WARNING

Never use an open flame to check for gas leak.

LEAK TESTING

1. Follow the pipe from the gas supply line connection to the gas valve. Check connection for leaks with soap and water mixture.
2. Next check for gas leaks at the burner thread inlet with soap and water mixture.
3. Check the pilot for gas leaks with soap and water mixture.

Continued on next page

OPERATING INSTRUCTIONS

LIGHTING PILOT FOR THE FIRST TIME

LEAK TESTING (continued)

You may check for gas leaks with the following methods only:

- Soap and water solution
- An approved leak testing spray
- Electronic sniffer

Check for gas leaks in each of the following locations:

- Pipe from the gas supply line connection to the gas valve
- Burner thread inlet
- Pilot
- Each joint or connection
- Field made joints
- Factory made joints
- All joints on valve and control body

NOTE: Remove any excessive pipe compound from the connections. Excessive pipe compound can set off electronic sniffers.

WARNING


If using a soap and water solution to test for leaks, **DO NOT** spray solution onto control body.

LIGHTING PILOT

WARNING

The control has an interlock device that does not allow the lighting of the insert up to the moment the safety device of the flame has not interrupted the gas flow. After that period of time (when the magnet is closed), it is possible to start the lighting operation.

The gas control knob is designed to be operated by hand. **DO NOT** use any tools during this operation. Damaged knobs may result in serious injury.

1. Depress and turn knob counterclockwise  to pilot position.
2. Push pilot knob in and hold in while pressing piezo ignitor several times until pilot ignites. Continued to hold pilot knob in for several seconds after ignition. Release and check that pilot continues to burn.

If the pilot does not stay lit, repeat steps 1 and 2.

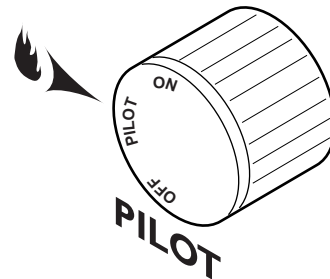


Figure 32 - Pilot Position

WARNING


If the knob does not “pop” out to its original position when released, turn off gas to appliance and contact qualified service technician.

LIGHTING BURNER

MAIN BURNER SWITCH

The “ON/OFF” switch for the main burner can be found on the right side of insert surround. This switch allows you to turn on and to turn off the main burner without using the gas valve knob. Make sure the button is in the “ON” position to light the main burner. *See Figure 33.*

LIGHTING THE BURNER

Depress and turn the knob counterclockwise  to the “ON” position. *See Figure 34.* It will take less than four (4) seconds for the burner to ignite.

PILOT POSITION

Depress and turn knob to pilot position to keep burner off while maintaining the pilot light. *See Figure 35.*

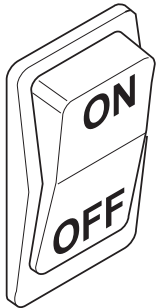


Figure 33 - On/Off Switch

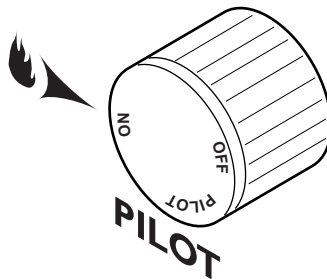


Figure 34 - On Position

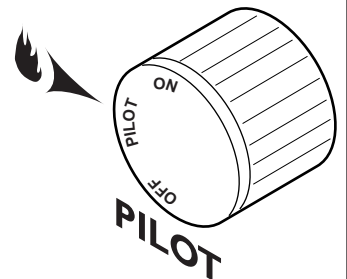


Figure 35 - Pilot Position

TO TURN OFF GAS

Depress and turn knob clockwise  to “OFF” position. *See Figure 36.*

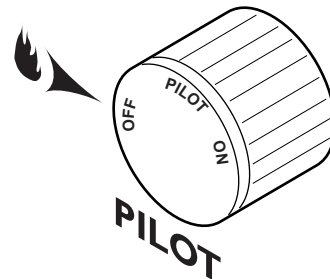
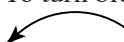
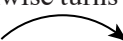


Figure 36 - Off Position

ADJUSTING BLOWER SPEED

The internal blower helps transfer heat from heater into room. It will not turn on until heater is up to temperature (approximately 10 minutes after starting).

To turn blower off, turn knob all the way counter-clockwise . One click clockwise turns blower to high speed. Turning knob clockwise  from high position decreases speed of blower. *See Figure 37.*

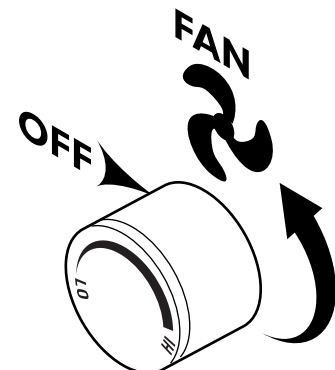


Figure 37 - Blower Knob

AIR SHUTTER ADJUSTMENT (NATURAL GAS ONLY)

ADJUSTING THE AIR SHUTTER

The venturi of the burner is equipped with an air shutter. The opening of the venturi has been set at $\frac{1}{4}$ " for Natural Gas and fully open for Propane installation at sea level. The burner on Natural Gas Models may be adjusted for high altitude as follows:

- To increase air mixture, open the shutter more. This will reduce soot formation. *See Figure 38.*
- To decrease air mixture, close the shutter. Flames will be more yellow. *See Figure 39.*

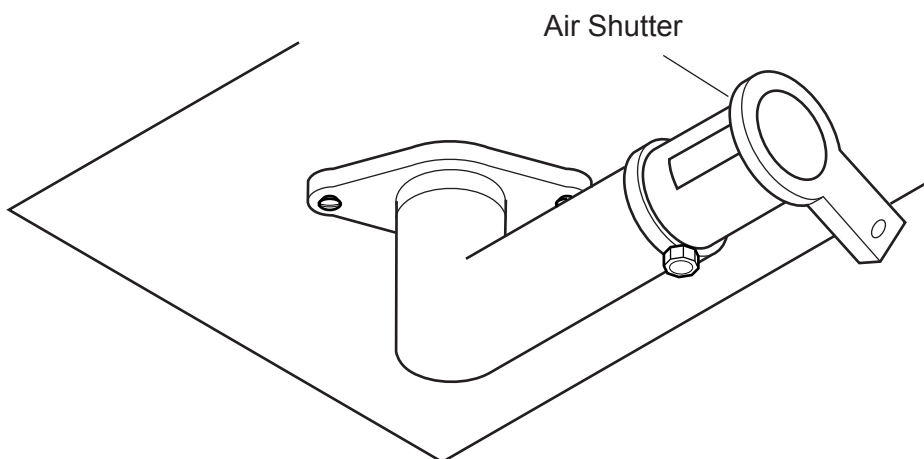


Figure 38 - Push Adjustment Lip Up to Open Air Shutter

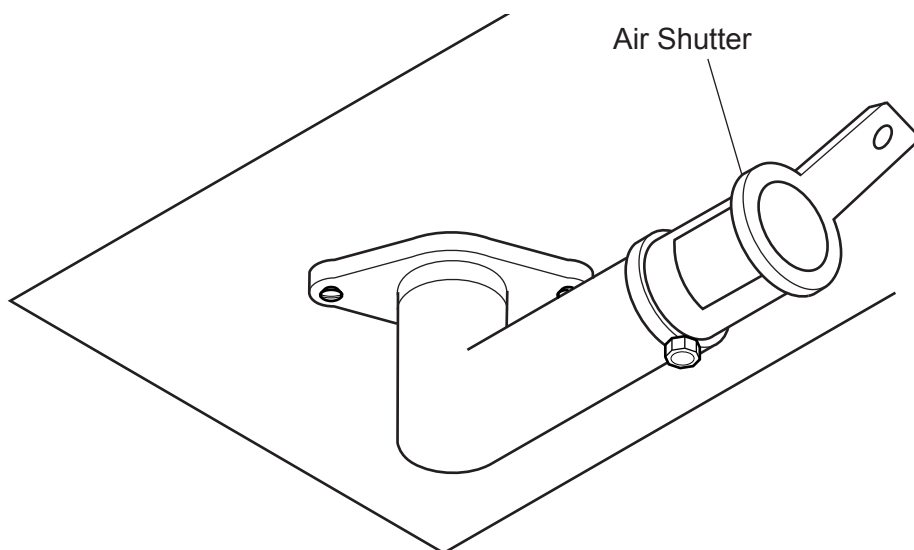


Figure 39 - Pull Adjustment Lip Down to Close Air Shutter

CAUTION

Always use gloves when handling broken glass.

WARNING

Make sure the glass panel edges do not touch any metal parts during thermal expansion.

1. Put on gloves. Remove glass frame from insert by releasing two latches on bottom of insert and lifting the door up and off the unit. *See Figure 40.*
2. Carefully remove broken glass.
3. Slide new glass frame back down onto insert and fasten two latches. *See Figure 40.*

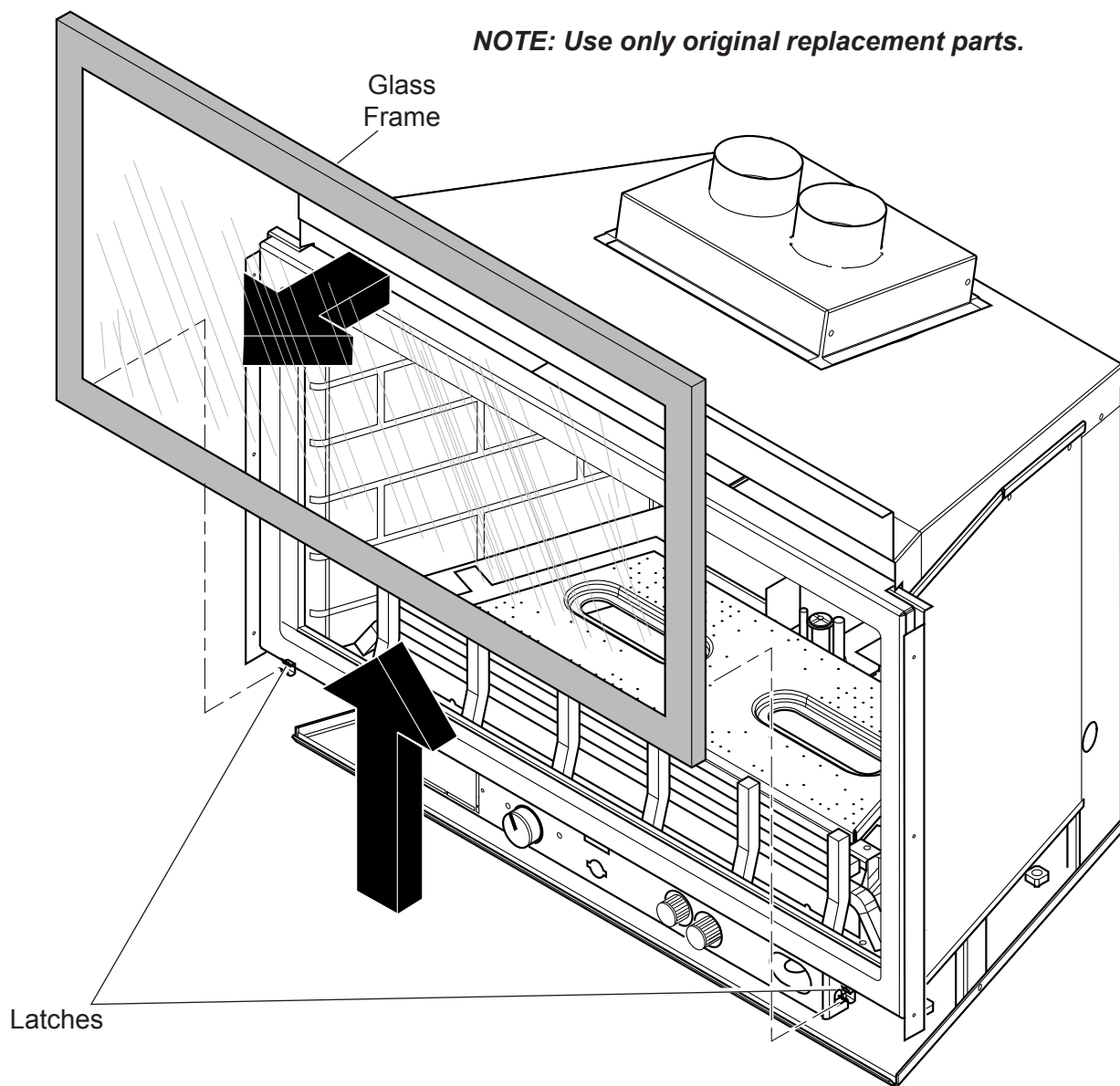


Figure 40 - Removing Door

CLEANING AND MAINTENANCE

Make sure the gas valve knob is in the “OFF” position. Wait at least five (5) minutes before starting maintenance.

VENTING SYSTEM

A qualified agency should examine the venting system annually.

CLEANING GLASS

Clean the ceramic glass periodically. Condensation will sometimes form on the glass during a cold startup. This is normal for all gas fireplaces and inserts. This condensation often attracts dust and lint to the surface of the glass. The initial paint curing of the appliance can also leave a slight film on the glass. This is a temporary problem.

You should clean the glass after the first two weeks of use. After that, you should clean the glass no more than two or three times a season. Use a mild glass cleaner to clean the door. Do not use abrasive cleaners. They will damage the glass surface.

CAUTION

Let glass cool before cleaning. Do not clean glass when it is hot. Damage could occur.

PILOT AND BURNER FLAMES

Visually check pilot and burner flames periodically. See *Figure 41* for typical burner flame. See *Figure 42* for typical pilot flame.

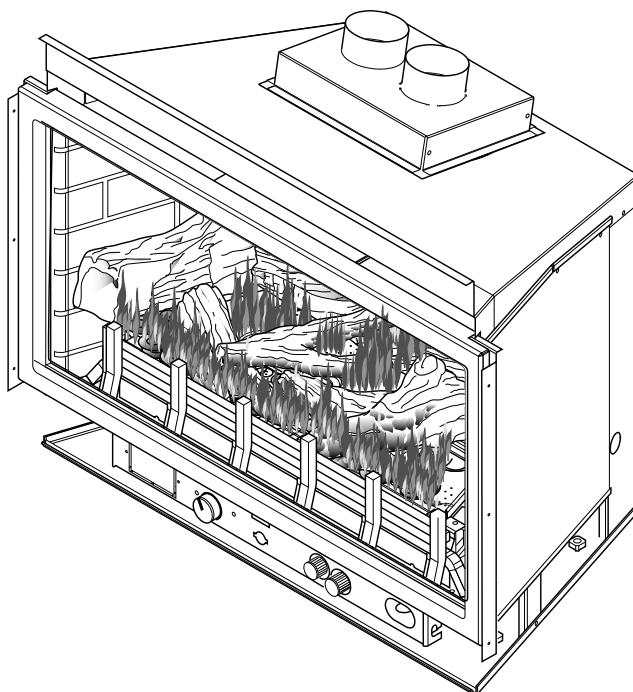


Figure 41 - Typical Burner Flame

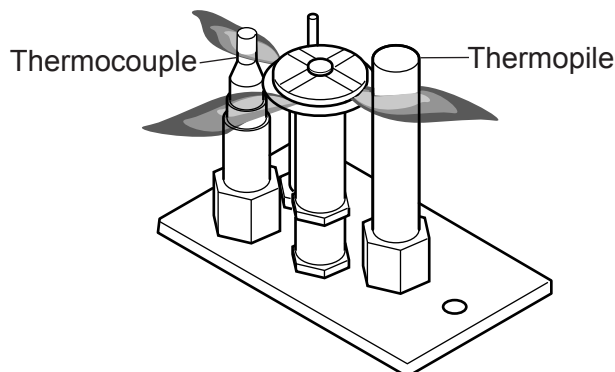


Figure 42 - Typical Pilot Flame

FIREBOX CLEANING**WARNING**

- Let logs cool before cleaning. Logs reach high temperatures.
- Make sure that clearances to combustibles leave enough room for maintenance and service.
- Carefully reassemble and reseal insert properly after any cleaning or servicing.

1. Carefully remove log set, and embers from combustion chamber.
2. Vacuum burner compartment thoroughly.
3. Vacuum any dust off logs.
4. Remove any lint from main burner and pilot.
5. Carefully replace log set, and embers in their correct positions. *See pages 21 through 23 .*
6. Replace door.
7. Relight pilot. *See page 28.*
8. Turn on main burners.

MAINTAINING YOUR HEATER'S APPEARANCE

Fingerprints or other marks left on optional gold or nickel surface may become etched in place if they are not wiped clean prior to turning stove on. Clean gold or nickel with a 50/50 vinegar and water solution and soft cloth.

NOTE: *Make sure heater is cool before cleaning. Using cleaners other than a 50/50 vinegar and water solution may leave a film that becomes permanently etched into the gold or nickel.*

MAINTENANCE

YEARLY SERVICE PROCEDURE

Failure to inspect and maintain heater may lead to improper combustion and a potentially dangerous situation. A qualified technician should do the following once a year.

1. Check pilot flame. Flame should touch approximately $\frac{3}{8}$ " of the top of thermopile and touch top of thermocouple. See *Figure 43*. If not, contact dealer for service.
2. Turn gas control knob to "OFF" position to shut off gas to heater. See step "To Turn Off Gas", page 29. Let heater cool for 15 minutes. Remove faceplate (see instructions included with face plate) and glass. See *Page 31*.
3. Carefully remove log set. If logs are severely deteriorated, replace logs. Check logs for sooting. A small amount of soot along bottom of logs is normal. If excessive sooting is found, heater must be adjusted. Contact dealer where you bought heater.
4. Clean burner and burner ports. See *Figure 44*.
5. Replace log set and rock wool per instructions on pages 21-23. Replace glass. Make sure gasket along perimeter of glass contacts face of firebox and forms an airtight seal. Realign if airtight seal is not formed. Replace glass and glass frame if damaged.
6. Inspect area behind face plate. Clean if necessary. Check gas control valve and all gas lines. If damaged, do not use heater. Contact your dealer.
7. Start pilot and turn on main burner. Flames should be orange/yellow and not touch top of firebox. If pilot or main burners do not burn correctly, contact your dealer for service. Monitor blower operation.

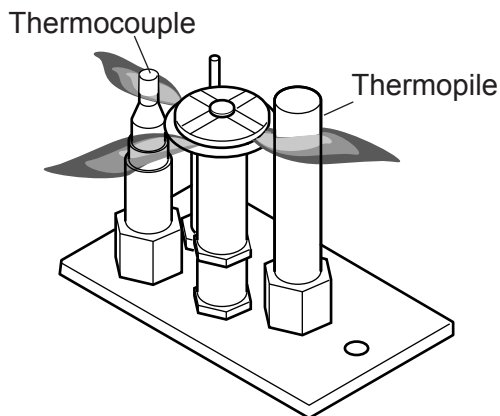


Figure 43 - Before taking unit apart, check pilot flame. Flame should touch thermocouple and thermopile

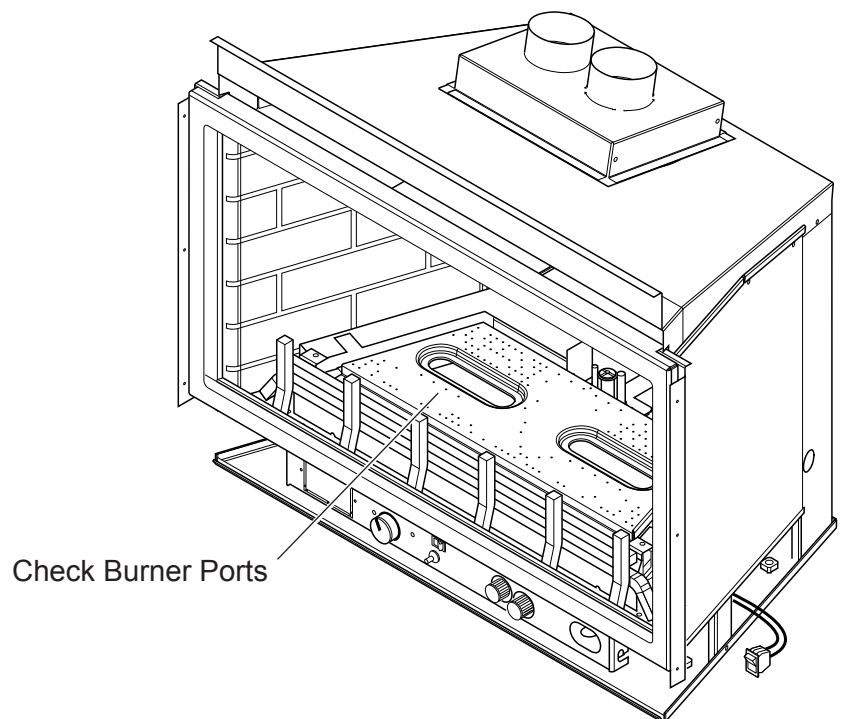
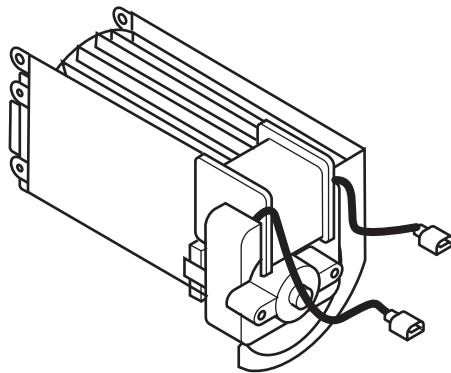


Figure 44 - Checking Burner Ports and Burners

BLOTS ACCESSORY PARTS LIST:

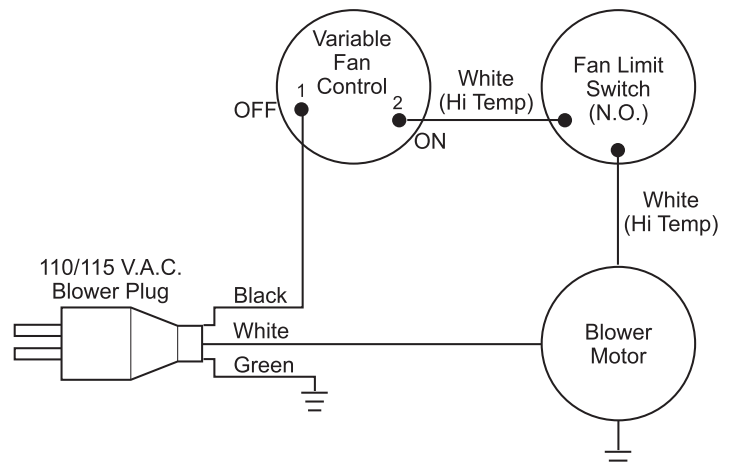
DESCRIPTION	QTY	PART NUMBER
Blower	1	54D0281
PARTS NOT SHOWN		
Thermostat Bracket	1	26D3320
Thermostat	1	49D0130
Speed Control	1	26D0746
Wire Harness	1	41D0203

NOTE: *Unplug power cord before servicing. The blowers are attached to insert bottom and back with Velcro. To remove blower for servicing, pull away from Velcro and disconnect wires.*

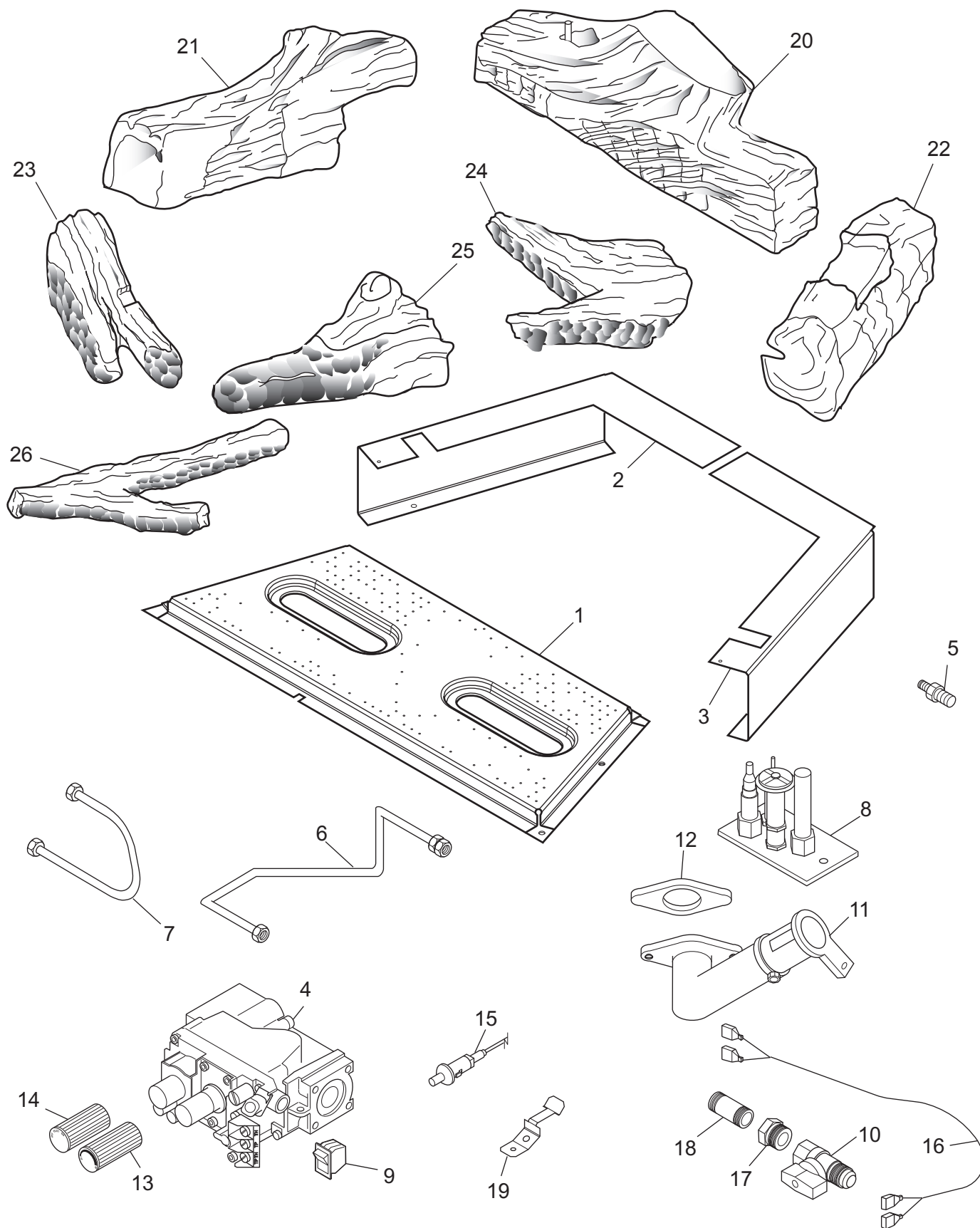


CAUTION

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



REPLACEMENT PARTS



REPLACEMENT PARTS

REPLACEMENT PARTS ARE AVAILABLE THROUGH YOUR RETAILER

			IDV490VN/PVC		IDV380NV/PVC	
Item	Description	QTY	Natural	Propane	Natural	Propane
1	Burner Assembly	1	57D0502	57D0502	57D0022	57D0022
2	Left Log Support Bracket	1	57D0548	57D0548	57D0076	57D0076
3	Right Log Support Bracket	1	57D0550	57D0550	57D0078	57D0078
4	SIT 820 Nova Valve	1	37D0117	37D0118	37D0117	37D0118
5	Injector	1	57D0679	57D0680	58D0102	20H3143
6	Tube from Valve	1	57D0566	57D0566	57D0111	57D0111
7	Tube to Venturi	1	57D0567	57D0567	57D0112	57D0112
8	Pilot Assembly	1	37D0018	37D0019	37D0018	37D0019
9	Rocker Switch	1	32D0232	32D0232	32D0232	32D0232
10	Shutoff Valve	1	23D6046	23D6046	23D6046	23D6046
11	Venturi	1	45D0059	45D0059	45D0059	45D0059
12	Burner Gasket	1	45D0032	45D0032	45D0032	45D0032
13	Hi/Lo Knob Extension	1	43D0095	43D0095	43D0095	43D0095
14	ON/OFF Knob Extension s	1	43D0094	43D0094	43D0094	43D0094
15	Piezo Igniter	1	14D0503	14D0503	14D0503	14D0503
16	ON/OFF Wire Harness	1	48D0163	48D0163	48D0163	48D0163
17	Hex bushing 1/2"x3/8"	1	57D0007	57D0007	57D0007	57D0007
18	Nipple, 3/8"x1.50"	1	P1012	P1012	P1012	P1012
19	Disk Bracket	1	26D3320	26D3320	26D3320	26D3320
Logs						
20	Rear Log	1	57D0613	57D0613	57D0160	57D0160
21	Left Log	1	57D0614	57D0614	57D0161	57D0161
22	Right Log	1	57D0615	57D0615	57D0162	57D0162
23	Left Center Log	1	57D0616	57D0616	57D0163	57D0163
24	Right Center Log	1	57D0617	57D0617	57D0164	57D0164
25	Right Top Log	1	57D0618	57D0618	57D0165	57D0165
26	"Y" Log	1	57D0619	57D0619	57D0166	57D0166
Available Not Shown						
	Left Brick Liner	1	26D7150	26D7150	26D7146	26D7146
	Rear Brick Liner	1	26D7152	26D7152	26D7148	26D7148
	Right Brick Liner	1	26D7151	26D7151	26D7147	26D7147
	Glass Door Assembly	1	57D0505	57D0505	57D0027	57D0027
Blower Parts						
	Blower Right	1	54D0281	54D0281	54D0281	54D0281
	Blower Snap Disc	1	49D0130	49D0130	49D0130	49D0130
	Speed Control	1	26D0746	26D0746	26D0746	26D0746
	Blower Wire Harness	1	26D0619	26D0619	26D0619	26D0619
	Wire Harness	1	41D0203	41D0203	41D0203	41D0203

WARNING

Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

TROUBLESHOOTING

WARNING

Turn appliance OFF and allow to cool before servicing. Only a qualified service person should service and repair the heater.

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

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Piezo ignitor will not light the pilot after repeated pressing of piezo ignitor.	<ol style="list-style-type: none">1. Defective ignitor2. Misaligned spark electrode	<ol style="list-style-type: none">1. Check connections to ignitor. Replace ignitor if ignitor connections are good, but there is no spark.2. Check for spark arcing from the electrode to pilot. Adjust and retighten.
Pilot will not stay lit.	<ol style="list-style-type: none">1. Defective thermocouple. Loose thermocouple2. Air in gas line3. No gas	<ol style="list-style-type: none">1. Check for proper connection of thermocouple to rear of valve.2. Bleed line. Contact dealer3. Check shutoff valve and gas supply (LPG tank)
Burner will not light when valve and burner switch are both on.	<ol style="list-style-type: none">1. Defective switch2. Defective thermopile3. Thermostat set too low/defective	<ol style="list-style-type: none">1. Check switch connections. Jump wires at switch.2. Check connections to valve. Contact dealer.3. Turn up thermostat to start unit. Check thermostat connections.
Glass fogs up	<ol style="list-style-type: none">1. Normal condition	<ol style="list-style-type: none">1. Allow appliance to warm up. Glass will clear. Additives in the gas may dirty glass. Clean glass when cool.
Blue flames	<ol style="list-style-type: none">1. Normal during start up	<ol style="list-style-type: none">1. Flames will yellow as appliance heats up.
Sooting	<ol style="list-style-type: none">1. Flame impingement	<ol style="list-style-type: none">1. Check log position. Open shutters to increase primary air.

INSTALLATION RECORDS

THE FOLLOWING INFORMATION MUST BE RECORDED BY THE INSTALLER FOR WARRANTY PURPOSES AND FUTURE REFERENCE.

MONESSEN HEARTH SYSTEMS

Model: _____

<p>Name of Owner:</p> <p>Address:</p> <p>Phone:</p>	<p>Name of Installer:</p> <p>Address:</p> <p>Phone:</p>
<p>Name of Dealer:</p> <p>Address:</p> <p>Phone:</p>	

**Manufactured by
MONESSEN HEARTH SYSTEMS
149 Cleveland Drive
Paris, Kentucky 40361, U.S.A.**

LIMITED LIFETIME WARRANTY POLICY

LIFETIME WARRANTY

The following components are warranted for life to the original owner, subject to proof of purchase: Firebox, Combustion Chamber, Heat Exchanger, Grate and Stainless Steel Burners.

FIVE YEAR WARRANTY

The following components are warranted five (5) years to the original owner, subject of proof of purchase: Ceramic Fiber Logs.

BASIC WARRANTY

Monessen Hearth Systems (MHS) warrants the components and materials in your gas appliance to be free from manufacturing and material defects for a period of two years from date of installation. After installation, if any of the components manufactured by MHS in the appliance are found to be defective in materials or workmanship, MHS will, at its option, replace or repair the defective components at no charge to the original owner. MHS will also pay for reasonable labor costs incurred in replacing or repairing such components for a period of two years from date of installation. Any products presented for warranty repair must be accompanied by a dated proof of purchase.

This Limited Lifetime Warranty will be void if the appliance is not installed by a qualified installer in accordance with the installation instructions. The Limited Lifetime Warranty will also be void if the appliance is not operated and maintained according to the operating instructions supplied with the appliance, and does not extend to (1) firebox/burner assembly damage by accident, neglect, misuse, abuse, alterations, negligence of others, including the installation thereof by unqualified installers, (2) the costs of removal, reinstallation or transportation of defective parts on the appliance, or (3) incidental or consequential damage. All service work must be performed by an authorized service representative.

This warranty is expressly in lieu of other warranties, express or implied, including the warranty of merchantability of fitness for purpose and of all other obligations or liabilities. MHS does not assume for it any other obligations or liabilities in connection with sale or use of the appliance. It states that do not allow limitations on how long an implied warranty lasts, or do not allow exclusion of indirect damage, those limitations of exclusions may not apply to you. You may also have additional rights not covered in the Limited Lifetime Warranty.

MHS reserves the right to investigate any and all the claims against the Limited Lifetime Warranty and decide upon method of settlement.

For information about this warranty, contact:

**Technical Services
Monessen Hearth Systems
149 Cleveland Drive
Paris, Kentucky 40361**