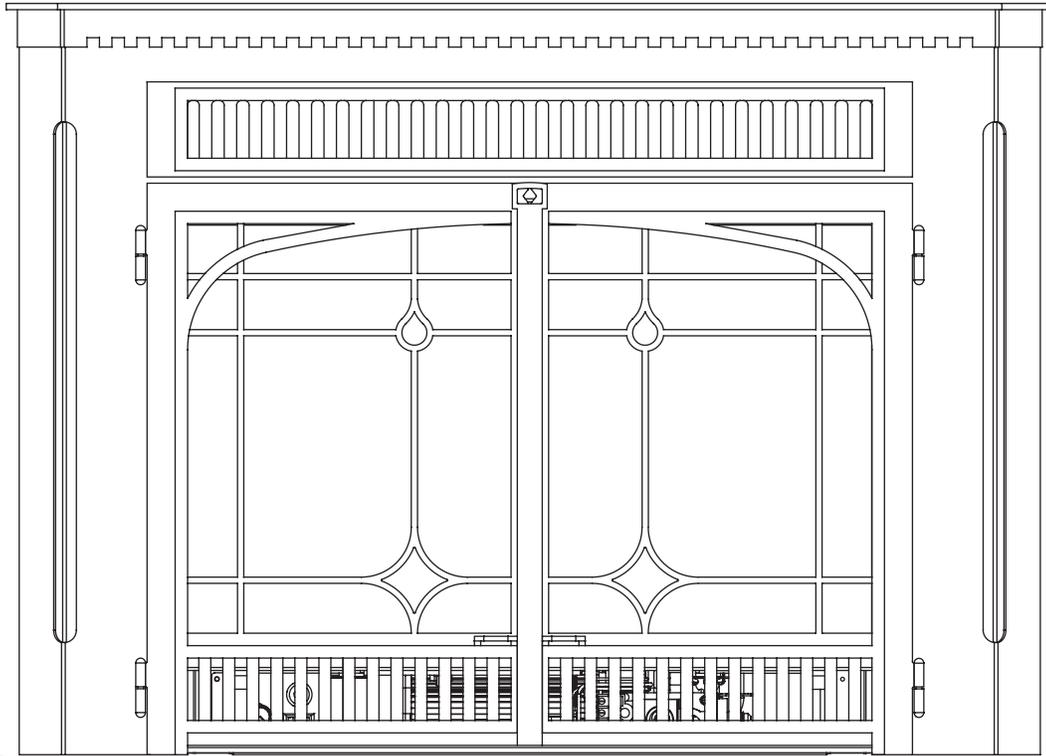


# ShadowLight XL

## Direct Vent Gas Fireplace Insert Owners Manual



R3  
4/09

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

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

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

#### FOR YOUR SAFETY:

##### WHAT TO DO IF YOU SMELL GAS

- Do not touch electrical switches.
- Do not try to light any appliance.
- Open windows.
- Extinguish any open flame.
- Do not use the 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.

**ADVERTISSEMENT:** Quiconque ne respect pas à la lettre les instructions dans le présent manuel risque de déclencher un incendie ou une explosion entraînant des dommages matériels, des lésions corporelles ou la perte de vies humaines.

L'installation et service doit être exécuté par un qualifié installer, agence de service ou le fournisseur de gaz.

Ne pas entreposer ni utiliser d'essence ni d'autres vapeurs ou liquides inflammables dans le voisinage de cet appareil ou de tout autre appareil.

**POUR VOTRE SÉCURITÉ:** Que faire si vous sentez une odeur de gaz:

- Ne pas tenter d'allumer d'appareil.
- Ne touchez à aucun interrupteur. Ne pas vous servir des téléphones se trouvant dans le bâtiment où vous trouvez.
- Evacuez la pièce, le bâtiment ou la zone.
- Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur.
- Si vous ne pouvez rejoindre le fournisseur de gaz, appelez le service des incendies.

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

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

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

**ADVERTISSEMENT:** Quiconque ne respect pas à la lettre les instructions dans le présent manuel risque de déclencher un incendie ou une explosion entraînant des dommages matériels, des lésions corporelles ou la perte de vies humaines.

L'installation et service doit être exécuté par un qualifié installer, agence de service ou le fournisseur de gaz.

Ne pas entreposer ni utiliser d'essence ni d'autres vapeurs ou liquides inflammables dans le voisinage de cet appareil ou de tout autre appareil.

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

This appliance is only for use with the type(s) of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

Cet appareil peut être installé dans un maison préfabriquée (mobile) déjà installée à demeure si les règlements locaux le permettent.

Cet appareil doit être utilisé uniquement avec les types de gas indiqués sur la plaque signalétique. Ne pas l'utiliser avec d'autres gas sauf si un kit de conversion certifié est installé.

**“In the Commonwealth of Massachusetts, this product must be installed by a licensed Massachusetts Plumber or Gas Fitter”**

### **IMPORTANT**

**The Shadowlight XL is manufactured and shipped set up for LP gas (Propane). Conversion kits (page 14) are available to convert to natural gas or back to LP gas.**

**It is important to mark the fuel label accordingly so that the value is easily identified as to which fuel it is set up for.**

**HARMAN™**  
**HOME HEATING**

Manufactured by:  
Harman Home Heating  
352 Mountain House Road  
Halifax, PA 17032

TABLE OF CONTENTS

INTRODUCTION ..... 4

SPECIFICATIONS ..... 5

OPERATION ..... 8

    How to Light the Fire ..... 9

    How to Turn Off the Fire..... 10

INSTALLATION ..... 11

    Clearances ..... 12

    Connecting to a Gas Supply ..... 13

    Converting to Natural Gas..... 15

    Converting to High Altitude ..... 17

    Venting..... 18

    Installing into a Fireplace ..... 20

    Options ..... 24

MAINTENANCE ..... 25

    Removing the Glass..... 25

    Replacing the Gasket..... 25

    Cleaning the Glass..... 25

    Cleaning the Log Set and Firebox ..... 25

    Convection Blower Service Access..... 26

WIRING DIAGRAM..... 27

PARTS LIST ..... 28

TROUBLE SHOOTING..... 30

WARRANTY ..... 34

# Introduction

The installation of the ShadowLight XL Fireplace Insert must conform with local codes, or in the absence of local codes, with National Fuel Gas Code, ANSI Z233.1 (NFPA 54). Installer l'appareil selon les codes ou règlements locaux, ou, en l'absence de tels règlements, selon les Codes d'installation CAN/CGA-B149.

The ShadowLight XL Fireplace Insert may be installed in mobile homes.

**CAUTION:** This appliance must be vented to the outside.

Installation and repair of the ShadowLight XL Fireplace Insert should be done by a qualified service person. The appliance should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners, and circulating air passageways of the appliance be kept clean. Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the appliance.

**S'ASSURER QUE LE BRÛLEUR ET LE COMPARTIMENT DES COMMANDES SONT PROPRES. VOIR LES INSTRUCTIONS D'INSTALLATION ET D'UTILISATION QUI ACCOMPAGNENT L'APPAREIL.**

When operating your Harman ShadowLight XL Fireplace Insert, respect basic safety standards.

Read these instructions carefully before you attempt to operate the heater. Failure to do so may result in damage to property or personal injury and may void the product warranty.

Consult with your local building code agency and insurance representative before you begin your installation to ensure compliance with local codes, including the need for permits and follow-up inspections.

Observing required clearances to combustible materials, proper connection to an approved venting system, and the accessibility of the gas and electrical supply must all be considered when planning the installation of a ShadowLight XL Fireplace Insert.

**Install the ShadowLight XL Fireplace Insert only in a listed solid-fuel burning factory-built fireplace or a masonry solid-fuel burning fireplace.** The Fireplace Insert and vent should be enclosed when installed in, or when passing through, a living area where children may come in contact with it. Z21.88-2002-CSA 2.33-2002, CAN/CGA 2.17.



Listed Direct Vent Gas Fireplace Heater  
*Radiateur Ventile*

**Model: ShadowLight XL Gas Fireplace Insert**

WHI #

- Homologue Pour Le Canada
- Do not remove this label.

- Not for use with solid fuel. Not for use with air filters. *Ne doit pas être utilisée avec un combustible solide.*
- Also for use in mobile (manufactured) homes after home is sited.
- Tested to ANSI Z21.88-2002 / CSA 2.33-2002 / CAN-CGA-2.17-M91
- For use with natural gas or propane. A conversion kit, as supplied by the manufacturer, shall be used to convert this room heater to the alternate fuel. *Pour utilisation, avec le gaz naturel et le propane. Une trousse de conversion fournie par le fabricant doit être utilisée pour passer d'un combustible à l'autre.*
- Keep burner and control compartment clean. See installation and operating instructions accompanying appliance. *S'assurer que le brûleur et le compartiment des commandes sont propres. Voir les instructions d'installation et d'utilisation qui accompagnent l'appareil.*
- During repairs or maintenance of this unit, all sealing gaskets or high temperature silicone seals on the heat exchanger module must be inspected for damage and replaced, if necessary, to prevent any leakage of exhaust into the living areas.
- Electrical Rating: 115 VAC, 60 Hz, < 1.15 AMP

RATINGS	NATURAL	PROPANE
Input Rating(Btu/hr)(0-2000 ft)(0-610m)	35,000	35,000
Input Rating(Btu/hr)(2000-4500ft)(610-1375m)	34,000	34,500
Min. Input Rating(Btu/hr)	21,600	20,900
Orifices (DMS)(0-2000 ft)(0-610m)	31	50
Orifices (DMS)(2000-4500ft)(610-1375m)	33	51
Manifold Pressure (in w.c./kPa)	3.5/.87	2.5
Min. Manifold Pressure (in w.c./kPa)	1.3/.32	3.6/.9
Min. Inlet Pressure (in w.c./kPa)	5.0/1.24	11.0/2.75

**MANTEL CLEARANCE:** Combustible mantle up to 8" in depth must be at least 43" above unit base.

**CAUTION:** Do not operate the appliance with glass removed, cracked or broken. Replacement of panel(s) should be done by a licensed or qualified service person.

**CAUTIONNER:** N'orérez l'appareil avec le verre enlevé, craqué ou cassé. Le remplacement du panneau(s) devrait être fait par une personne de service qualifiée ou autorisée.

**CAUTION:** Hot while in operation. Do not touch. Severe burns may result. Keep children, clothing, furniture, gasoline and other liquids having flammable vapors away.

**ATTENTION:** Les surfaces sont chaudes en service. Ne touchez pas. Risque de brûlure grave. Tenez les enfants, les vêtements, le mobilier, l'essence et autres liquides produisant des vapeurs inflammables à distance.

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

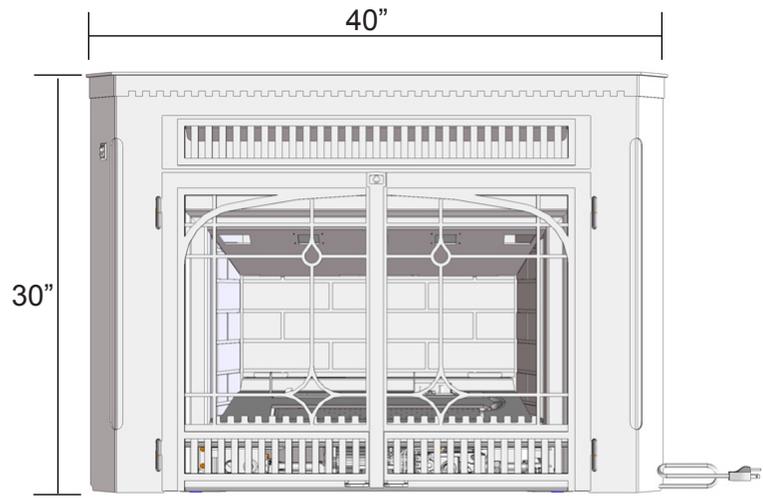
**A LABEL (LOCATED NEAR THE BURNER SYSTEM MODULE) STATES THE FUEL FOR WHICH THE HEATER IS EQUIPPED.**

Manufactured by Harman Home Heating

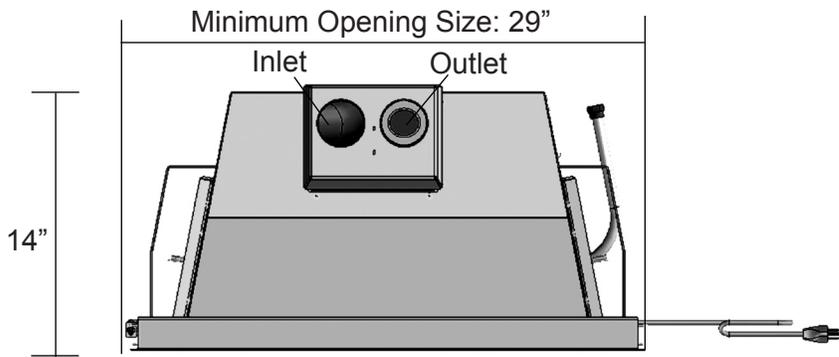
352 Mountain House Road, Halifax, PA 17032

20 Airport Road, West Lebanon, NH 03784

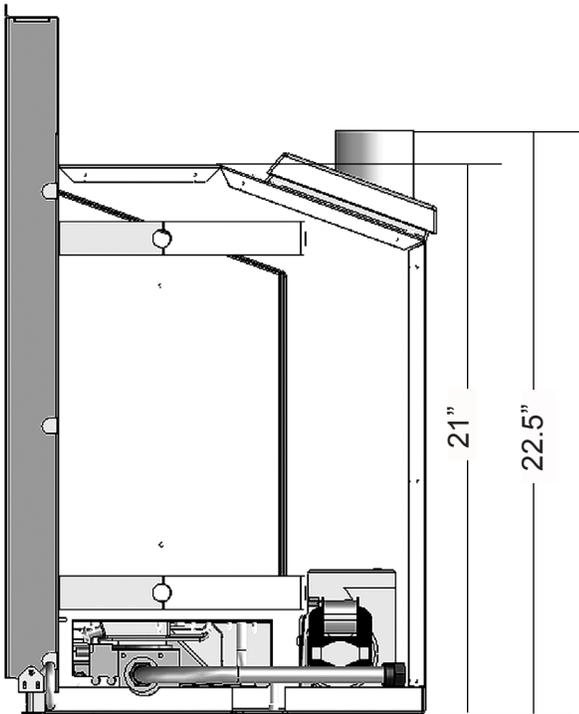
**SAFETY LABEL**



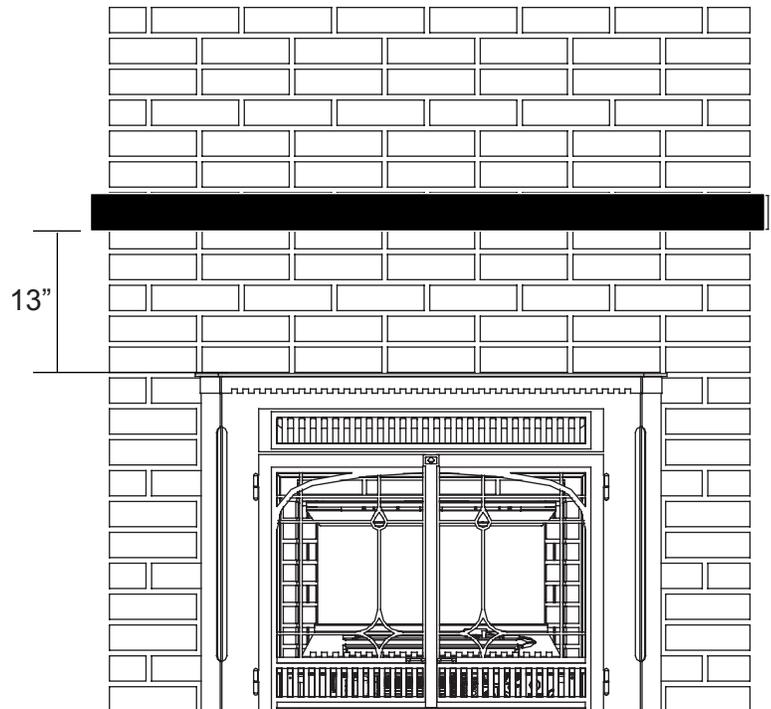
Front View



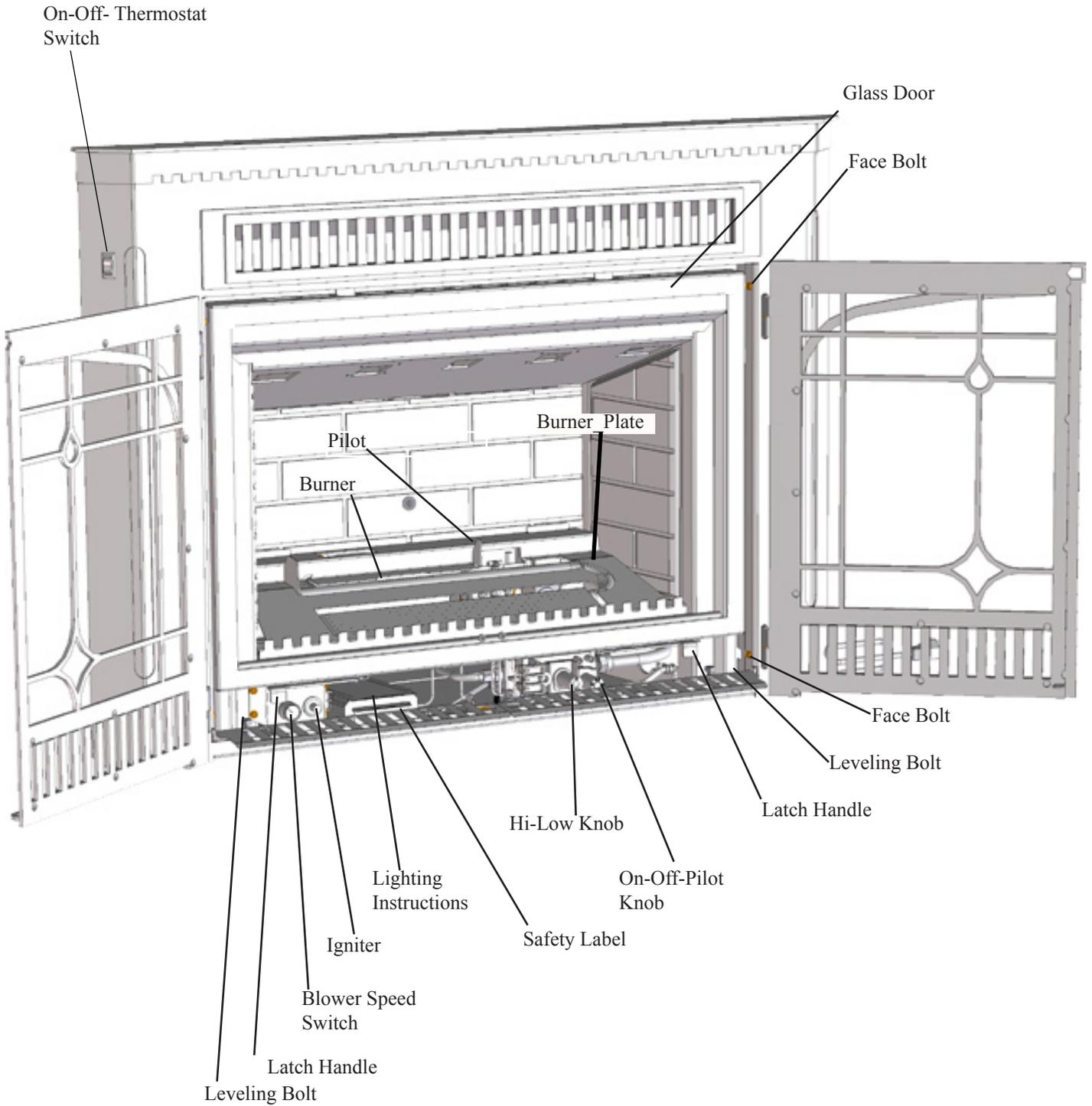
Top View

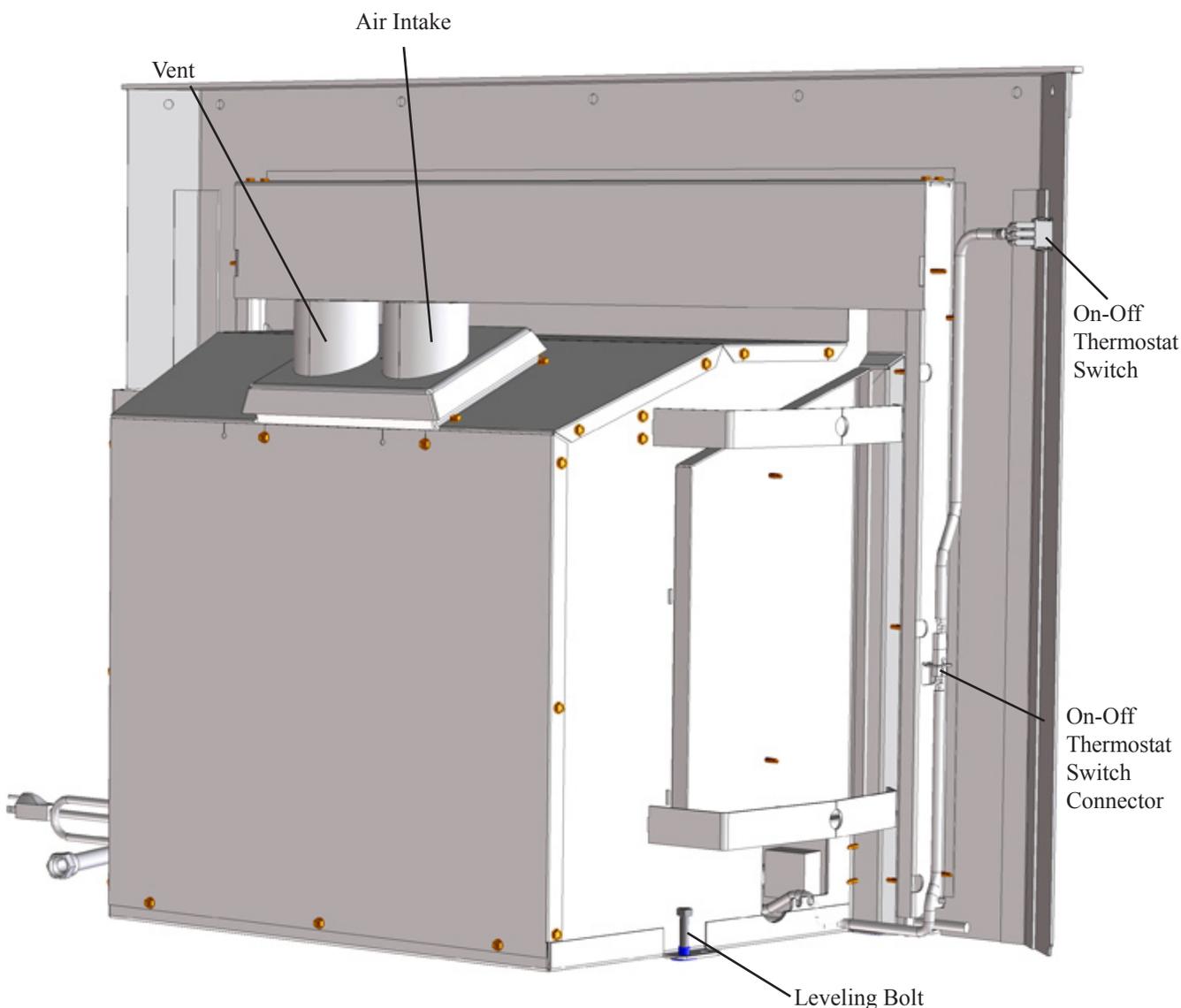


Side View



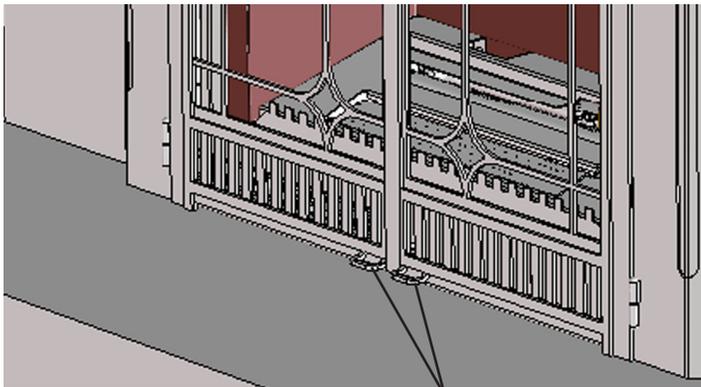
Front View





<b>RATINGS</b>	<b>NATURAL</b>	<b>PROPANE</b>
Input Rating (Btu/hr)(0-2,000 ft)(0-610m)	35,000 BTU	35,000 BTU
Input Rating(Btu/hr)(2000-4500ft)(610-1375m)	34,000 BTU	34,500 BTU
Min. Input Rating (Btu/hr)	21,600 BTU	20,900 BTU
Orifices (DMS)(0-2000 ft)(0-610m)	31	50
Orifices (DMS)(2000-4500ft)(610-1375m)	33	51
Manifold Pressure (in w.c./kPa)	3.5 / .87	10.0 / 2.49
Minimum Manifold Pressure (in w.c./kPa)	1.3 / .32	3.6 / 0.9
Minimum Inlet Pressure (in w.c./kPa)	5.0 / 1.25	11.0 / 2.74
Maximum Output (BTU/hr)(0 to 4,500 ft.)(0 to 1,375 m)(Blower off)	27,600	28,600

**Warning:** Doors Are Hot While In Operation. Wear Gloves and Only Touch Doors On The Handles.



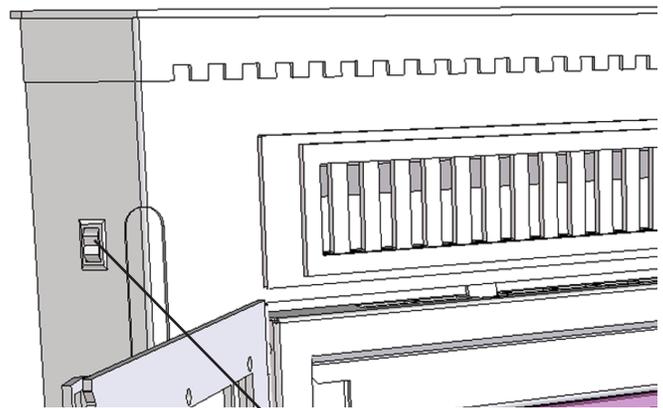
Door Handles



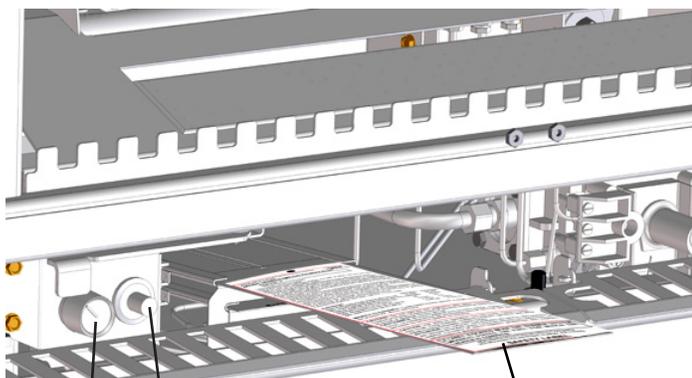
Pilot Location Shown Above



Lift bottom grill with index finger and fold down to access controls

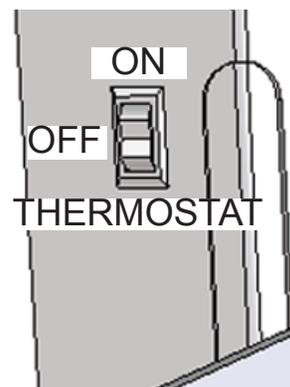


ON-OFF/  
THERMOSTAT  
Switch



Piezo Igniter  
Button  
Blower Speed  
Switch

- Pull lighting instruction plate out to view text.
- Push back in before closing grills.



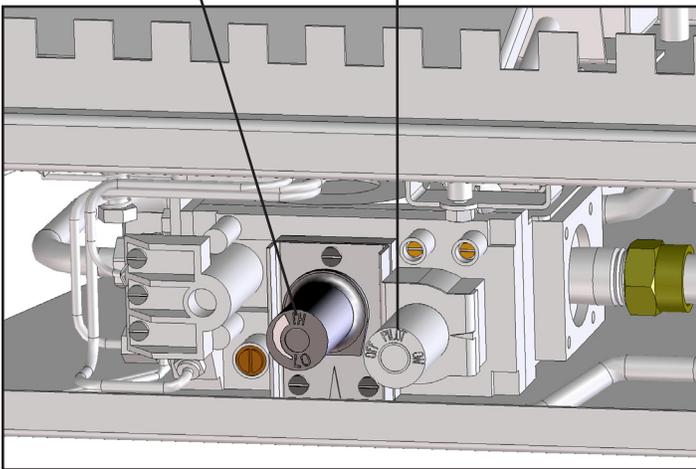
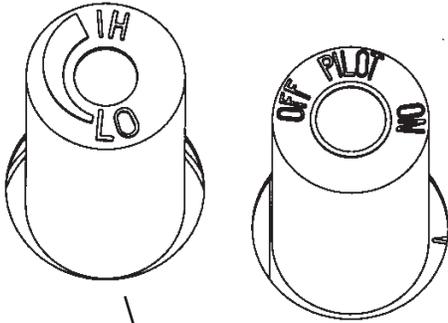
UP - ON  
MIDDLE - OFF  
DOWN - THERMOSTAT

# Operation

## HOW TO LIGHT THE FIRE

1. STOP! Read the safety information on the front cover.
2. If using the optional thermostat, set thermostat to the lowest setting.
3. Turn off electric power to the appliance.
4. Turn the ON-OFF/THERMOSTAT switch to the OFF position.
5. Push in the gas control knob slightly and turn it clockwise to "OFF." NOTE: THE KNOB CANNOT BE TURNED FROM "PILOT" TO "OFF" UNLESS IT IS PUSHED IN SLIGHTLY. DO NOT FORCE IT.
6. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow instructions on the front cover. If you don't smell gas, go to the next step.
7. Set the High-Low Regulator to High by turning it fully counterclockwise.
8. Press in the gas control knob slightly and turn counterclockwise to "PILOT."
9. Find the pilot by looking at the location shown in the picture on page 8.
10. Push the control knob fully down and hold. Immediately push the red piezo ignitor button to light the pilot. It is normal to have to push the red button several times before the pilot ignites. Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release the knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 9.
  - If the 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.
  - Let the pilot burn for 5 to 10 minutes prior to turning on the main burner.
11. Turn the gas control knob counterclockwise to "ON."
12. Place the ON-OFF/THERMOSTAT switch in the ON position or in the THERMOSTAT position if the optional thermostat is used.
13. Turn on the electric power to the heater.
14. Set the optional thermostat to the desired room temperature.

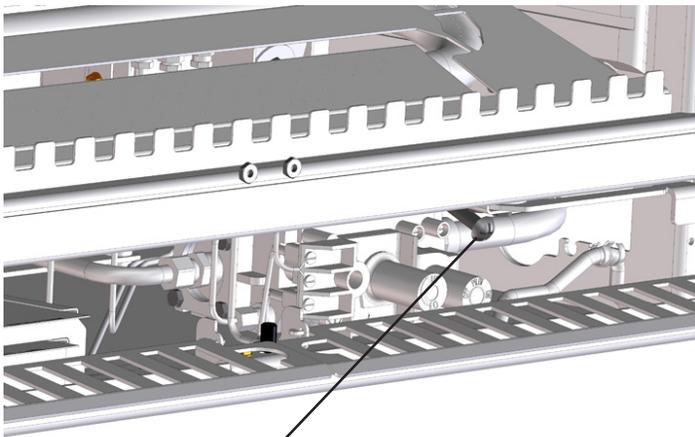
High-Low



**A LABEL ON THE BURNER SYSTEM MODULE STATES THE FUEL FOR WHICH THE HEATER IS EQUIPPED. It is not marked at the factory since it can be converted.**

**DURING INSTALLATION THIS LABEL MUST BE MARKED FOR THE TYPE OF FUEL IT WILL USE. (PROPANE OR NATURAL GAS)**

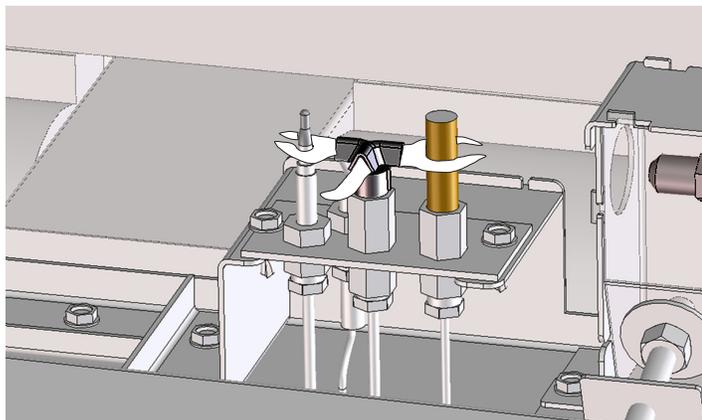
**Detailed lighting instructions can be located above the safety label. See picture on page 16.**



Air Shutter Adjustment



Normal Flame pattern. Note: Flames will vary in height and position depending on the placement and the amount of ember wool.



Pilot Flame Size

15. Set the High-Low Regulator to desired setting: Turn fully counterclockwise for High and fully clockwise for Low.

**NOTE:** An odor, resulting from the initial heating of new materials in your heater, is not unusual during the first fire, and in most cases will disappear after an hour or two.

**HOW TO TURN OFF THE FIRE**

1. If using optional thermostat, set thermostat to the lowest position.
2. Turn off the electric power to the appliance.
3. Turn the ON-OFF/THERMOSTAT switch to the OFF position.
4. Push in the gas control knob slightly and turn it clockwise to "OFF."

**NOTE:** The knob cannot be turned from "PILOT" to "OFF" unless it is pushed in slightly. Do not force it.

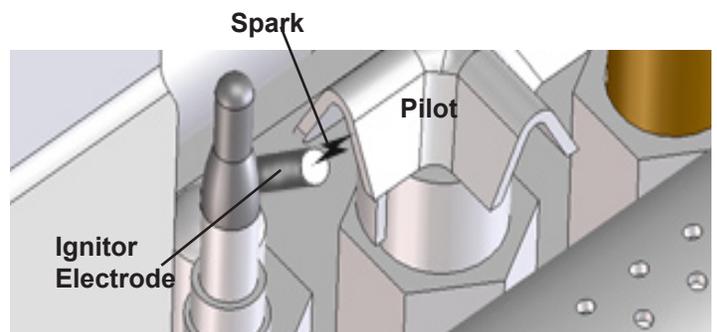
**AIR SHUTTER ADJUSTMENT**

The adjuster can be accessed with a phillips screw driver just above the valve . Turn the adjuster clockwise to increase flame height and counterclockwise to decrease. See above left. Adjusting the flames too high will cause them to have black tips and cause sooting. Sooting can cause the glass to get dirty.

**Warning:** The unit and adjuster may be hot. Wear gloves and arm protection if making adjustments while in operation.

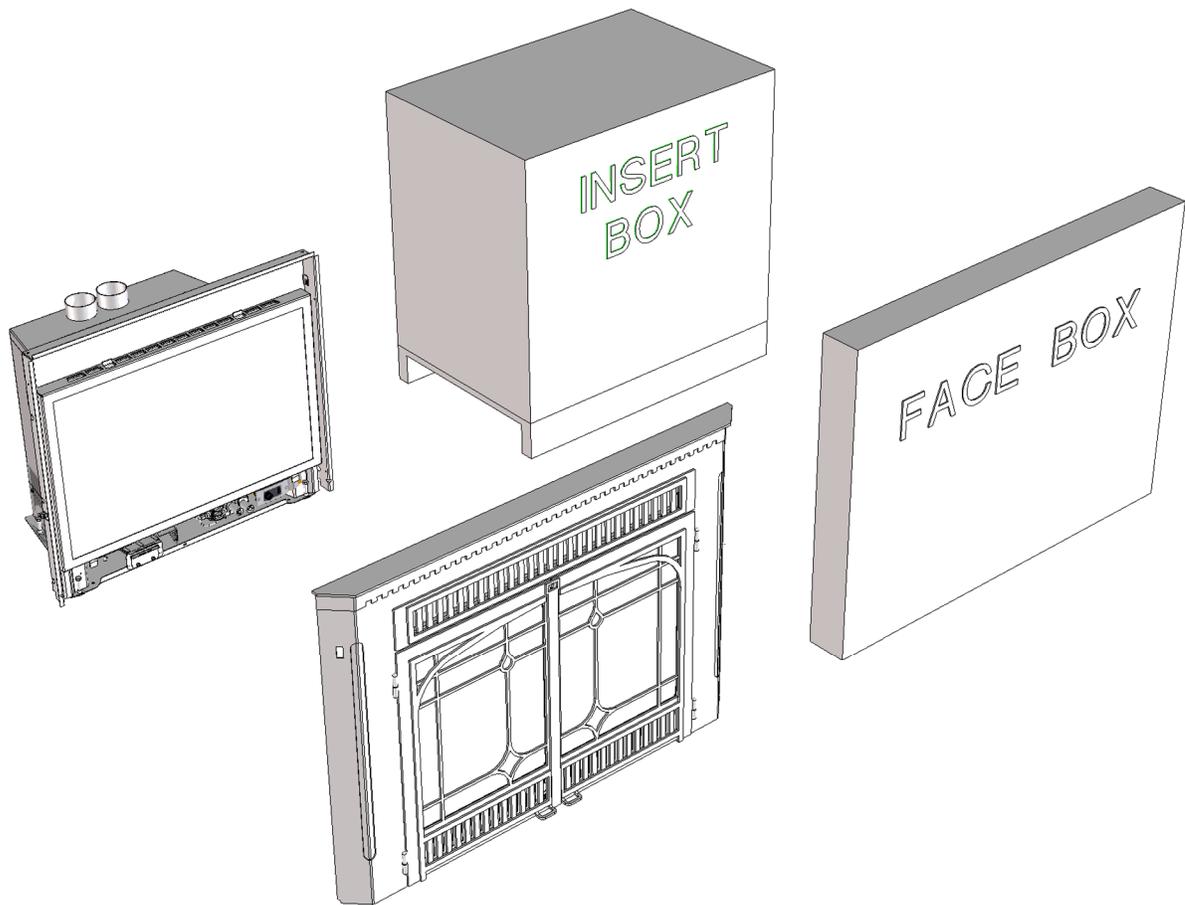
**PILOT FLAMES**

If pilot flames are less than shown at left, have your service technician increase the pilot flame height.



Pressing the ignitor button should produce a spark between the ignitor electrode and the pilot where shown above.

## Packing List



### Inside the Insert Box

ShadowLight XL Insert  
Log set  
Bag of rock wool  
Owners Manual  
Restrictor Plates

### Inside Face Box

ShadowLight XL Face  
Right Door  
Left Door  
Hardware Pack

# Installation

**“In the Commonwealth of Massachusetts, this product must be installed by a licensed Massachusetts Plumber or Gas Fitter”**

Due to high temperatures, the ShadowLight XL Fireplace Insert should be located out of traffic and away from furniture and draperies.

Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.

Young children should be carefully supervised when they are in the same room as the ShadowLight XL Gas Fireplace Insert.

Clothing or other flammable materials should not be placed on or near the ShadowLight XL.

Surveiller les enfants. Garder les vêtements, les meubles, l'essence ou autres liquides à vapeur inflammables loin de l'appareil.

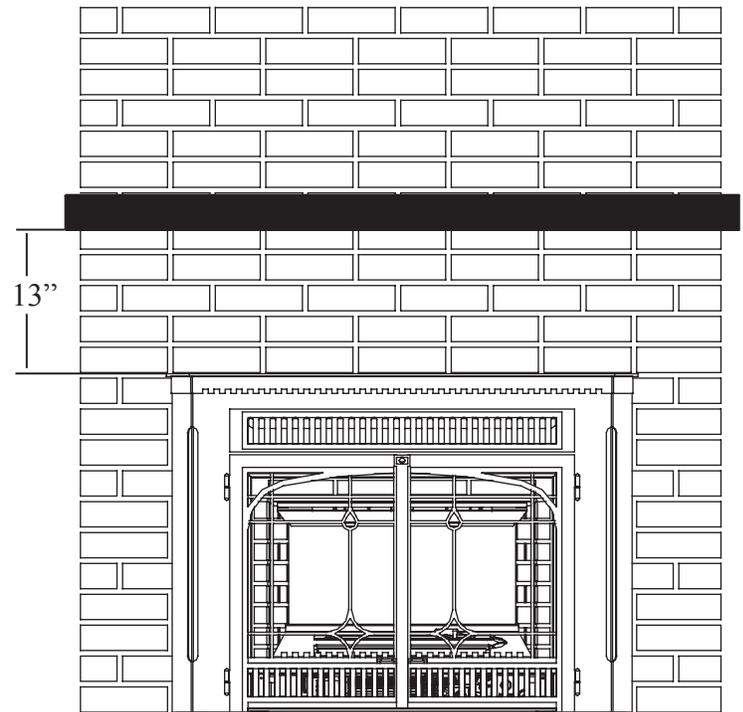
## CLEARANCES

The following clearances to combustibles must be observed:

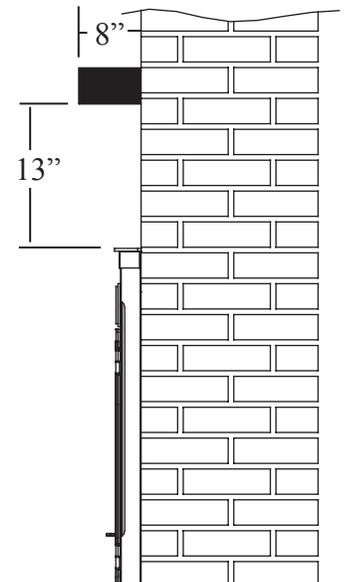
- Unit to mantel 8" or smaller or combustible trim, unprotected ... 13" (305 mm)

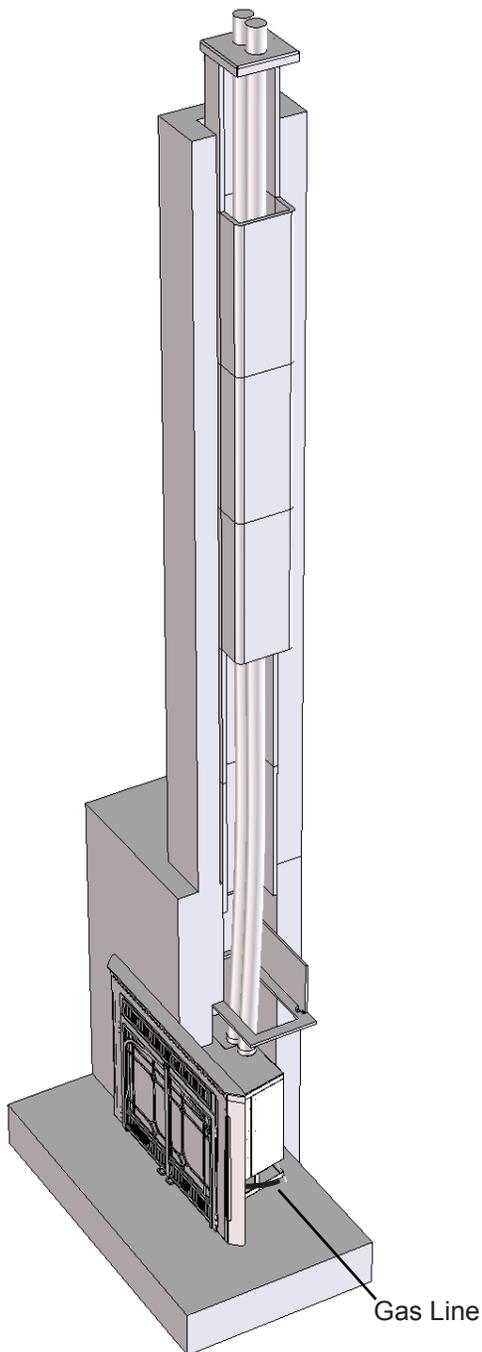
In addition to these clearances, adequate accessibility clearance for servicing and proper operation must be maintained.

**Only use Authorized Harman Service or Repair parts when working on your Shadowlight XL gas fireplace insert.**



Clearance from top of unit to mantel and combustible trim, unprotected





### CONNECTING THE SHADOWLIGHT XL FIREPLACE INSERT TO A GAS SUPPLY

Note: Stove is built for propane. A conversion must be done to accommodate natural gas.

Do not connect the venting to the flue of a chimney that serves a separate solid-fuel burning appliance.

### Making The Connection

The gas inlet is located on the bottom right side of the fireplace. The inlet fitting is 1/2" male flare fitting designed for 1/2" stainless flex pipe. This fitting can be removed to provide 3/8" female pipe thread.

A separate gas shut-off valve and a 1/8" N.P.T. plugged tapping should be installed immediately upstream of the connection to the appliance.

The ShadowLight XL Direct Vent Gas Heater must be disconnected from the gas supply piping during any pressure testing of that system at pressures in excess of 1/2 psig (3.5 kPa).

The ShadowLight XL gas control valve must be in the OFF position during any pressure testing of the gas supply system at pressures equal to or less than 1/2 psig (3.5 kPa).

**WARNING:** To avoid pipe compounds from entering into the gas train, apply compounds only to male pipe threads and do not apply compound to the first two threads.

**CAUTION: TEST ALL JOINTS FOR LEAKS BEFORE OPERATING.**

#### Gas Pressure Requirements:

Correct gas pressure and the use of a properly sized gas supply line are essential for the safe and efficient performance of this appliance. Make sure that the plumber or gas supplier checks the gas supply line and gas pressure at installation.

**NOTE:** Improper gas pressure can affect heater performance, flame color, or cause pilot outage.

#### Natural Gas:

Maximum inlet pressure 7.0" w.c. (1.74 kPa)  
 Minimum inlet pressure 5.0" w.c. (1.25 kPa)  
 Gas manifold pressure 3.5" w.c. (0.87 kPa)

#### LP Gas:

Maximum inlet pressure 13" w.c. (3.24 kPa)  
 Minimum inlet pressure 11" w.c. (2.74 kPa)  
 Gas manifold pressure 10" w.c. (2.49 kPa)

**DO NOT USE THIS HEATER IF ANY PART HAS BEEN UNDER WATER, EXPOSED TO MOISTURE, OR SHOWS SIGNS OF CORROSION. IMMEDIATELY CALL A QUALIFIED SERVICE TECHNICIAN TO INSPECT THE HEATER AND REPLACE ANY PART OF THE CONTROL SYSTEM AND ANY GAS CONTROL WHICH HAS BEEN UNDER WATER.**

## Converting to Natural Gas

“This conversion kit shall be installed by a qualified service agency in accordance with the manufacturer’s instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, explosion or production of carbon monoxide may result causing property damage, personal injury or loss of life. The qualified service agency is responsible for the proper installation of this kit. The installation is not proper and complete until the operation of the converted appliance is checked as specified in the owner instructions supplied with the kit.”

Cer equipement de conversion sera installe par une agence qualifiee de service conformement aux instructions du fabricant et toutes exigences et codes applicables de l’autorises avoir la jurisdiction. Si l’information dans cette Instruction n’est pas suivie exactement, un feu, explosion ou production de protoxyde de carbone peut resulter le dommages causer de propriete, perte ou blessure personnelle de vie. L’agence qualifiee de service est esponsable de l’installation proper de cet equipement. L’installation n’est pas proper et complete jusqu’a l’operation de l’appareil converti est cheque suivant les criteres etablis dans les instructions de proprietaire provisionnees avec l’equipement.

**Burn Only the Fuel for Which the Heater is Equipped**

**This Conversion Kit Shall Be Installed By A Qualified Service Agency.**

**The ShadowLight XL Fireplace Insert will burn either natural gas or propane, but requires a change over kit for converting to natural gas.**

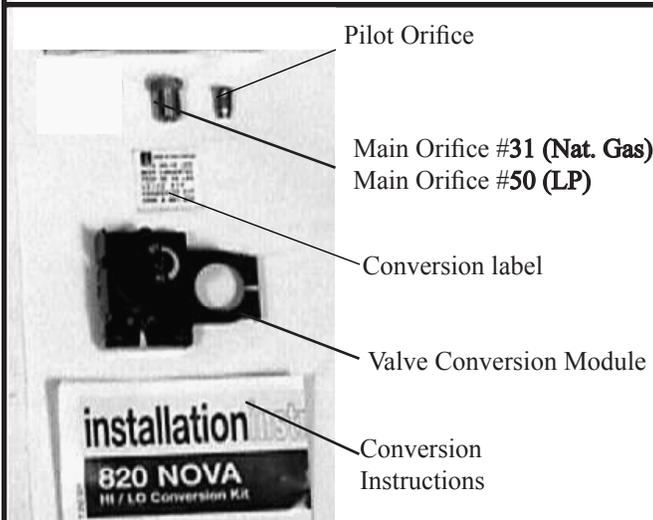
The label located on the inner stove base must be marked for the type of fuel the unit will use at the time of installation.

**Caution: Before proceeding with the conversion, the gas supply must be shut off prior to disconnecting the electrical power.**

Note: The higher the orifice number the smaller the hole in the tip. For example, a number 31 orifice has a larger hole than a number 50 orifice.

Do not strike glass or close door with excessive force. Breakage of glass and/or damage to door may result.

### LP and Natural Gas Conversion Kits



**Natural Gas Kit  
LP Kit**

**Part No. 1-00-00384  
Part No. 1-00-00385**

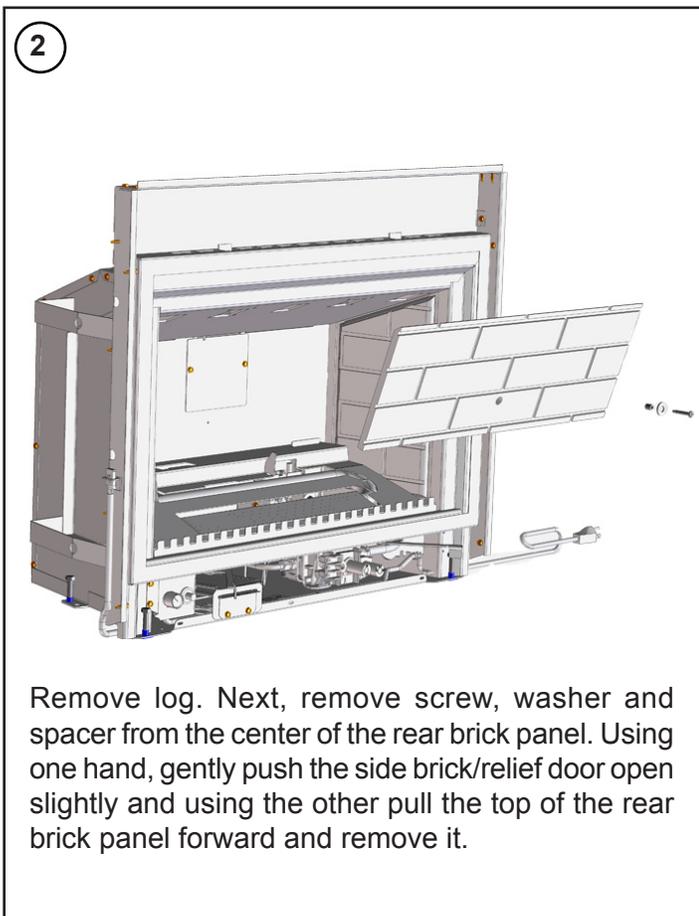
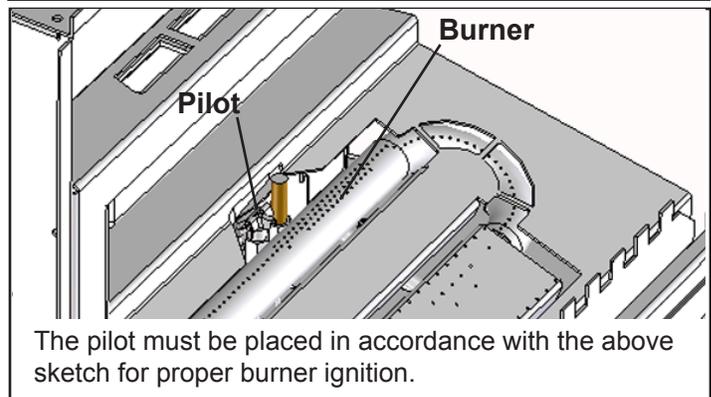
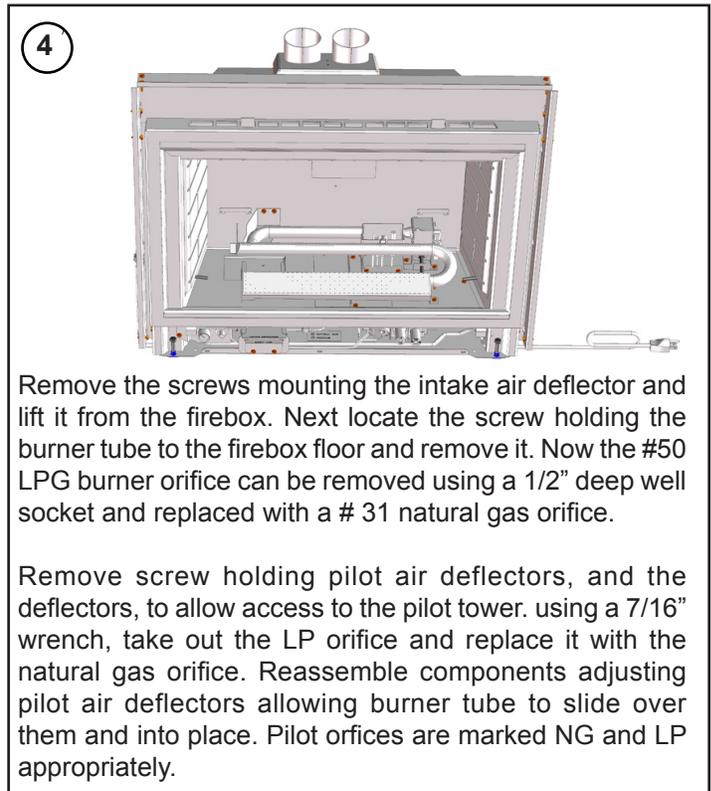
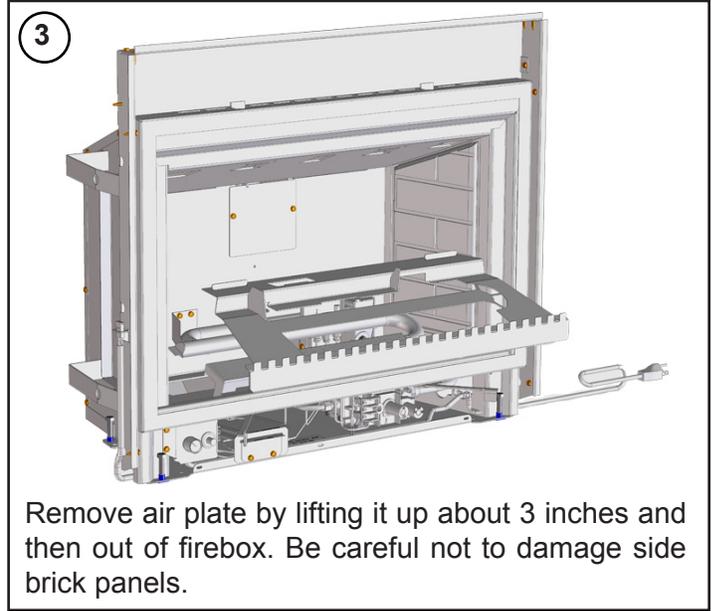
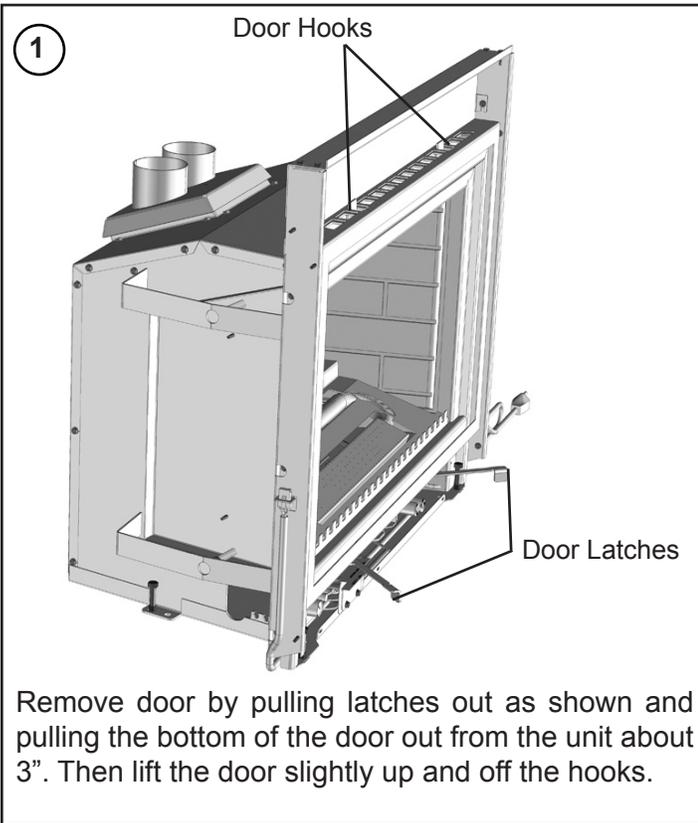
**These kits are only for use in the ShadowLight XL Insert.**

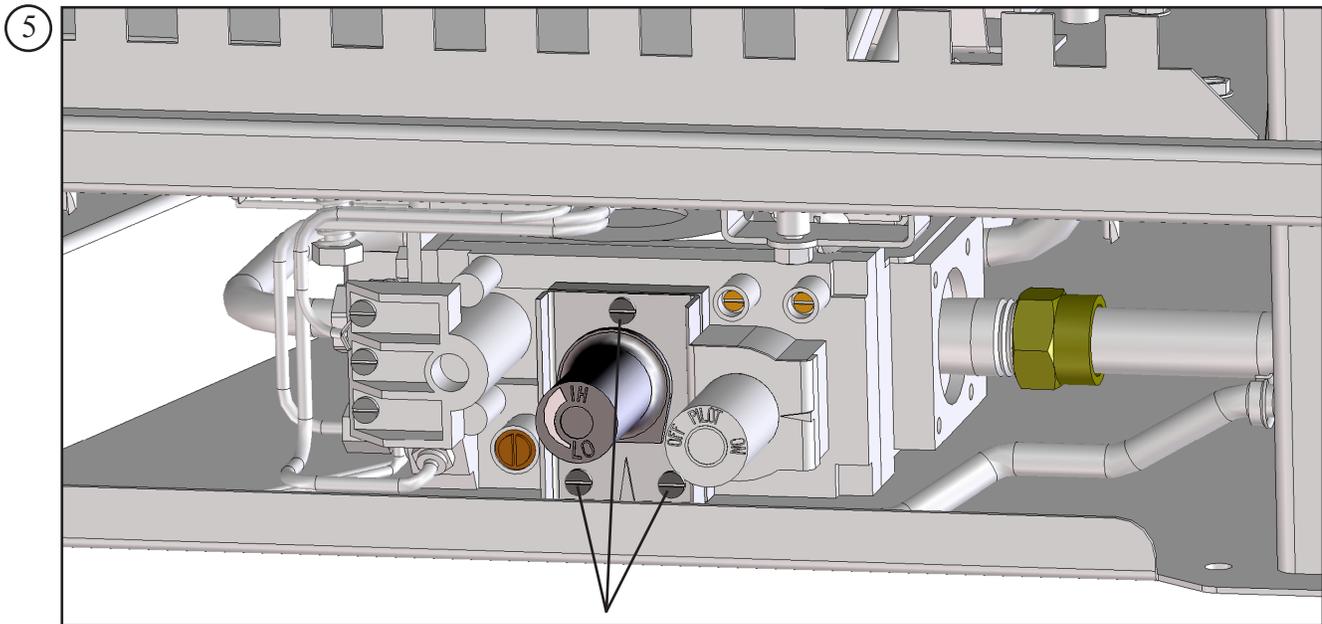
#### RECOMMENDED GAS PIPE DIAMETER

Pipe length (feet)	Schedule 40 pipe Inside Diameter		Tubing, Type L Outside Diameter	
	N.G.	L.P.	N.G.	L.P.
0-10	1/2" 1.3 cm	3/8" 1.0 cm	1/2" 1.3 cm	3/8" 1.0 cm
10-40	1/2" 1.3 cm	1/2" 1.3 cm	5/8" 1.6 cm	1/2" 1.3 cm
40-100	1/2" 1.3 cm	1/2" 1.3 cm	3/4" 1.6 cm	1/2" 1.3 cm
100-150	3/4" 2.0 cm	1/2" 1.3 cm	7/8" 2.3 cm	3/4" 2.0 cm

**Note: Never use plastic pipe. Check to confirm whether your local codes allow copper tubing or galvanized pipe.**

## Converting to Natural Gas





Remove three screws to change knob assembly. Install NG knob assembly in place of the LP assembly. Be sure screws are tight.

6

Place conversion sticker (provided in Kit) on the valve. This is to permanently mark the valve that it has been converted to Natural Gas. This label is important in the event that the valve is ever removed and mixed in with other valves. Reassemble all components removed during the conversion process.

7

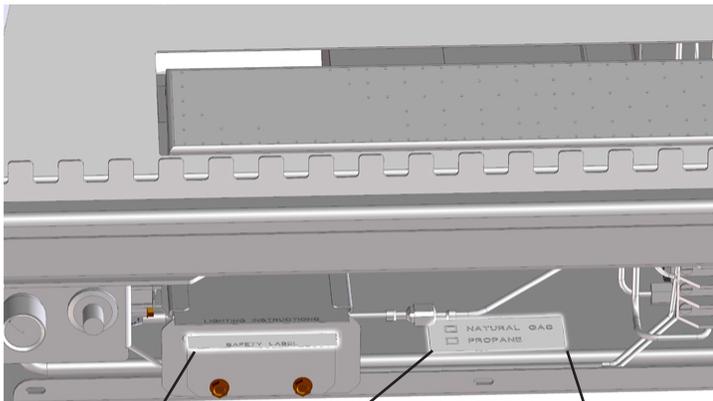
Mark the proper box on the fuel label with a permanent marker. Note: If no conversion is made, the box for propane must still be marked.

8

When installation has been completed, verify the gas inlet and manifold pressures are within specifications. The safety label, located inside the bottom of the unit, will have the information needed to verify correct operation. To read the safety label, pull the label out away from the unit. Be sure to use the information for the type of gas that it will be using.

You must check the unit for any gas leaks using soapy water or an electronic style leak detector.

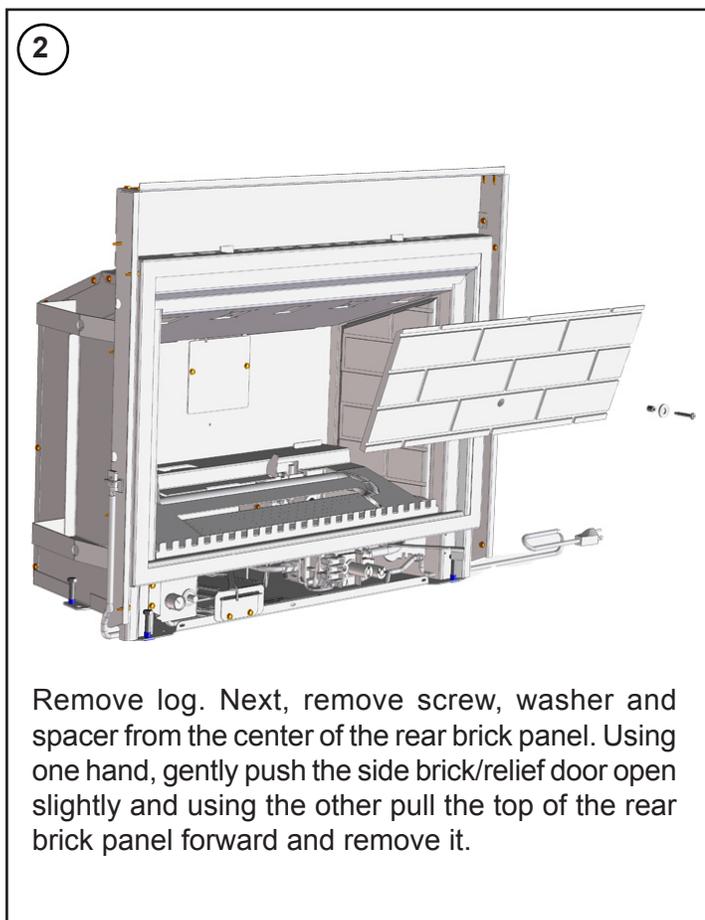
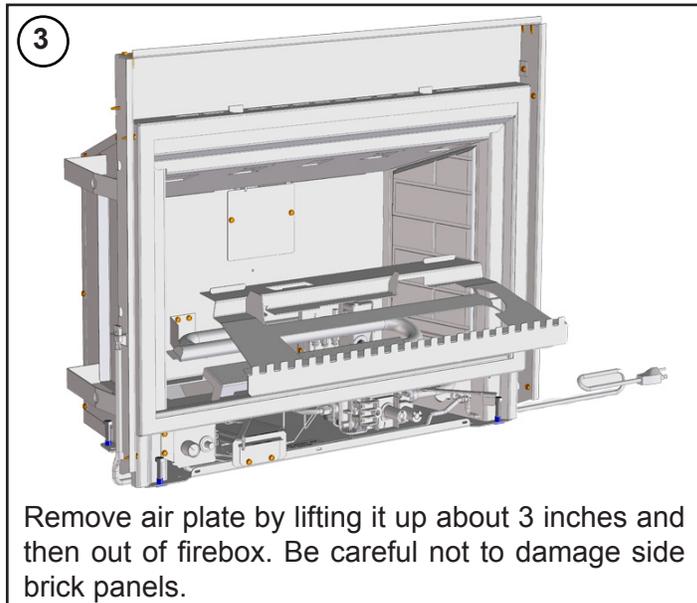
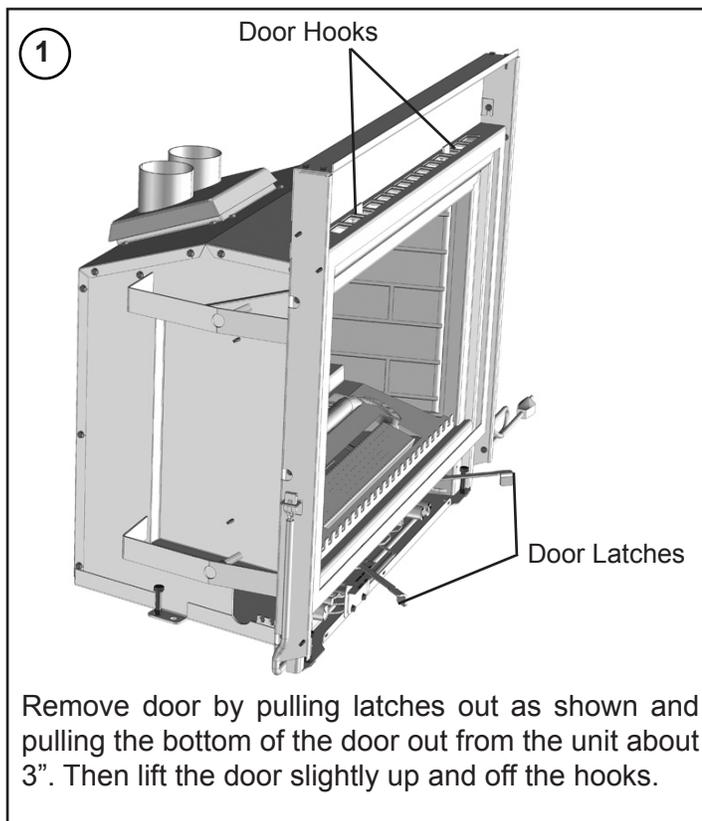
**Use soap and water and/or a gas detector to check for leaks before lighting the pilot.**



Safety Label



## Converting to High Altitude



## Venting

### Preliminary steps to prepare for the installation of the ShadowLight XL Fireplace Insert

Remove the chimney cap if one exists so that the flue may be cleaned and the venting installed.

Remove any existing hearth accessories such as glass doors, spark screens, andirons, and grates.

Clean the chimney thoroughly to remove ash, soot, and any obstructions, and then clean ash, soot, dust, and debris from the fireplace.

The damper must be locked open to allow the 3" venting to pass through. If it is necessary to modify the damper area to allow passage of the venting, the modifications should be allowed under local codes. Confirm any planned changes with local building officials.

### Use Only Approved Venting

Observe local codes when venting the ShadowLight XL. If no local codes exist, follow ANSI Z21.88-2002 installation code.

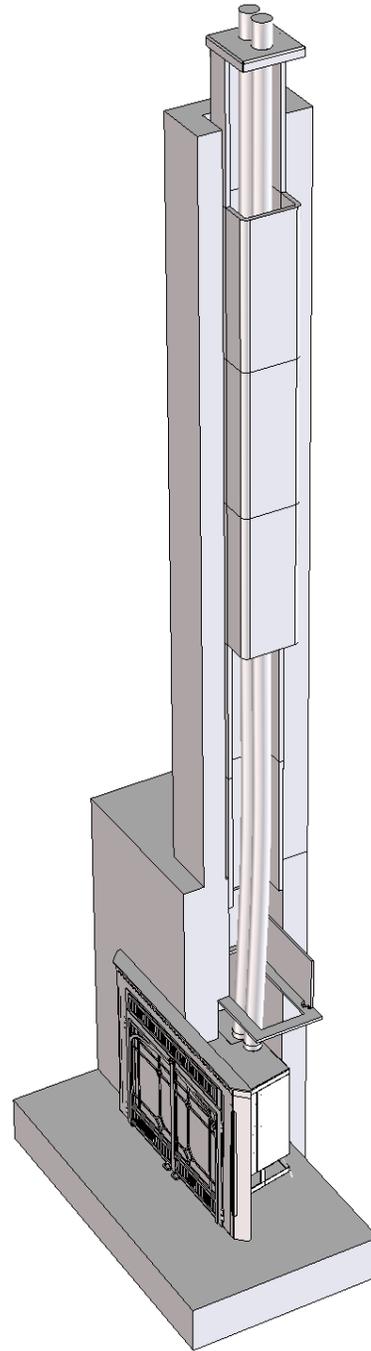
Do not connect the venting to the flue of a chimney that serves a separate solid-fuel burning appliance.

The venting manufacturer's installation instructions must be followed exactly.

The most efficient venting systems are those that have a minimum number of bends and minimal horizontal runs.

**WARNING:** Operation of this heater when not connected to a properly installed and maintained venting system can result in carbon monoxide (CO) poisoning and possible death.

Exhaust restrictor plates must be installed depending on type of gas and chimney height. See page 20 to determine restrictor.



**“Warning: Failure to position 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.”**

### Use Only Approved Venting

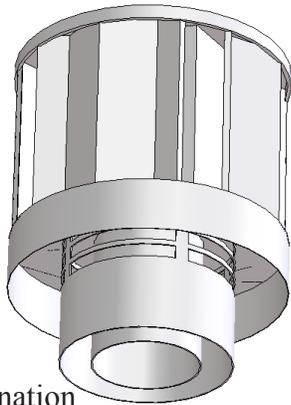
This appliance has been tested and is listed for installation with Simpson Duravent GS and Duraflex AL venting components. The warranty will be voided, and serious fire, health, or other safety hazards may result from any of the following actions:

- Installation of any damaged Simpson Duravent component.
- Unauthorized modification of the Simpson Duravent System.
- Installation of any component part not manufactured or approved by Simpson Duravent.
- Installation other than as instructed by Simpson Duravent and the appliance manufacturer.

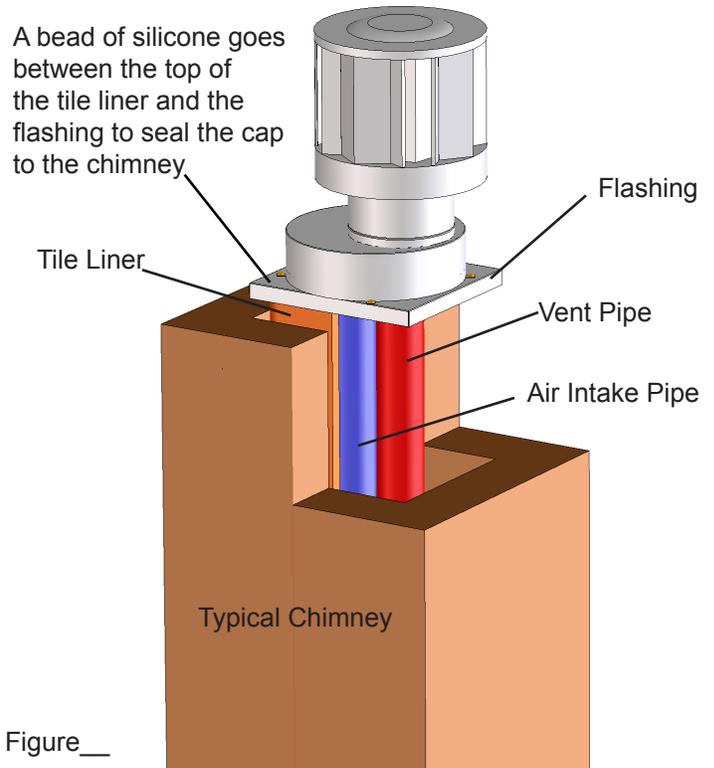
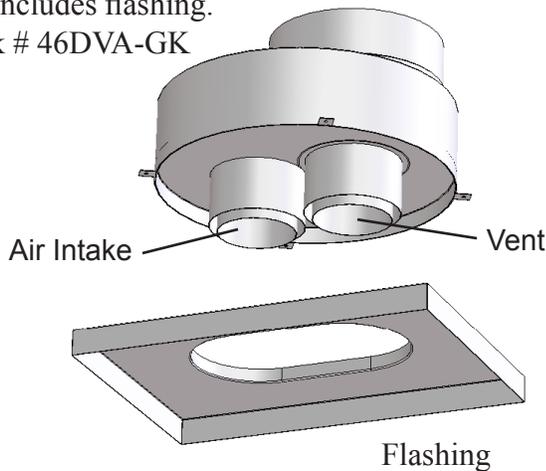
Consult your local building codes before beginning the installation, and follow the manufacturer's instructions exactly. The Simpson Duravent venting components listed below are approved for use with the ShadowLight XL Direct Vent Gas Insert.

### Chimney Cap Components

High Wind Cap  
Stock# 46DVA-VCH



Chimney Liner Termination Kit. Includes flashing.  
Stock # 46DVA-GK



Figure\_\_

### Duraflex AL - Flexible Aluminum Pipe Lengths

Size	Length	Stock #
3"	25'	2270
3"	35'	2280
3"	50'	2290

Minimum vertical vent pipe length is 10 Feet.  
Maximum horizontal distance is 36".



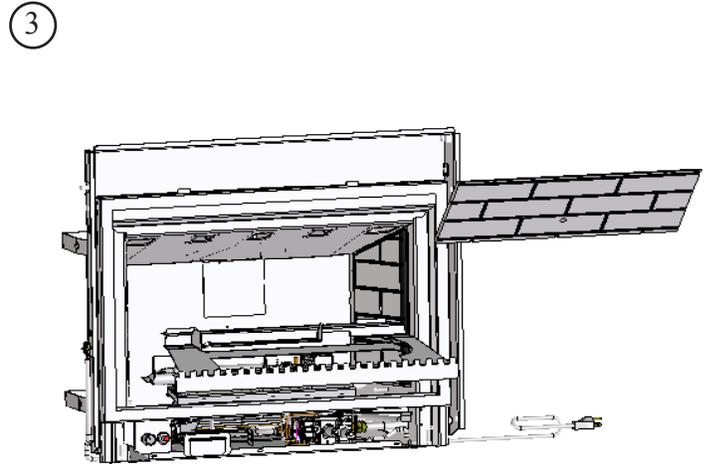
Uncoil the three inch aluminum chimney liners on the ground and measure to make sure the pipes are long enough. Mark one of the liners at both ends with paint and use it for the exhaust side connection. Once they are in the chimney it allows easier identification of intake and exhaust connections.

## Venting and Installation

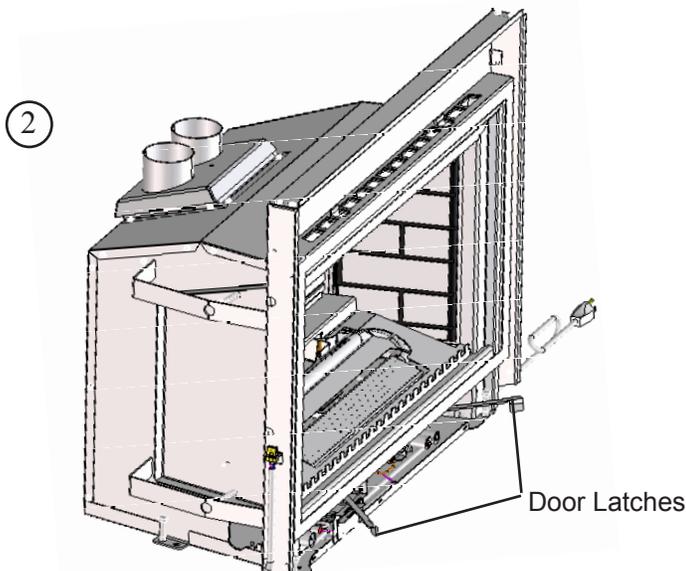


1 Feed chimney liners down the chimney and through the damper. If the fireplace opening does not allow enough room to connect the flue liners to the stove it is necessary to separate the exhaust/ intake pipe adapter from the stove body.

Approximately 4 inches clearance above the top of the glass door is needed to allow connection of the liners. This must be determined by the installer.

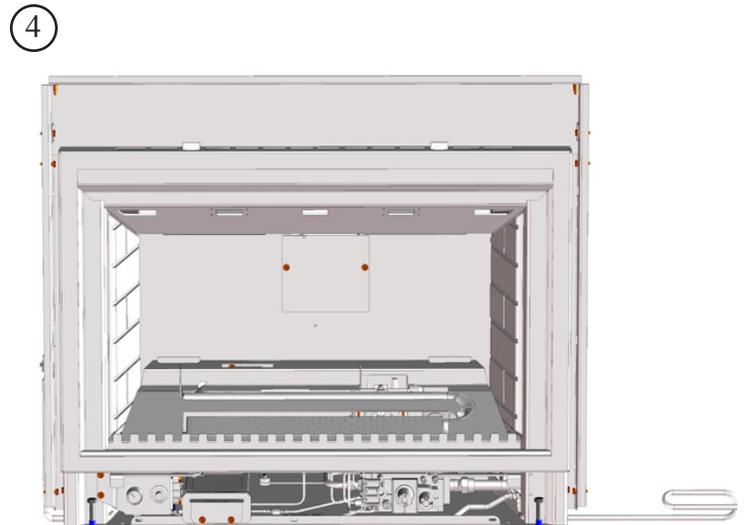


3 Remove the screw, washer and spacer from the center of the rear brick panel. Using one hand, gently push out on the side brick /relief door to allow clearance for removing the rear brick panel.

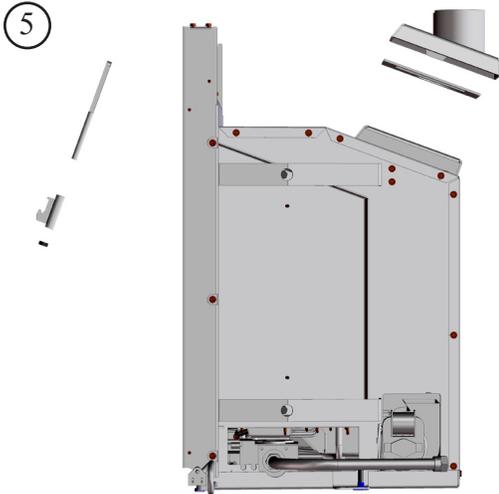


2 Open the glass door by pulling out on the 2 latches located on the bottom of the door frame. Pull the bottom out a couple of inches and lift the door off of the stove body and set safely out of the way. Remove the bag of rock wool, packaging materials and log set from inside the firebox.

Skip steps 3 thru 5 if intake / exhaust adapter does not need removed for installation.

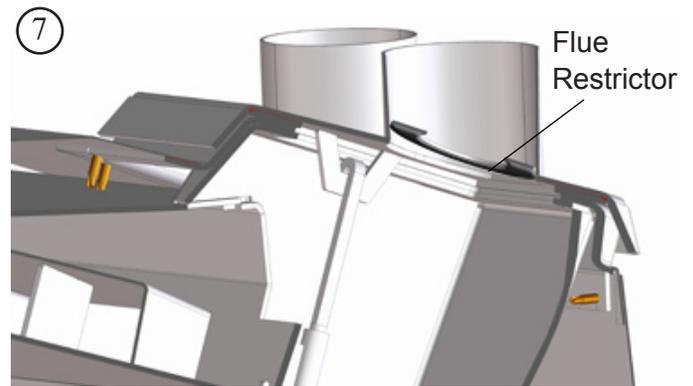


4 Remove 2 screws holding exhaust cover plate onto the rear of the firebox and remove cover.



Using a 1/2" deep well socket loosen the nut that was under the exhaust cover plate until it is flush with the end of the threads. Pull the exhaust clamp down from notch in firebox top. Lift the clamp assembly up and disconnect it from the intake / exhaust adapter.

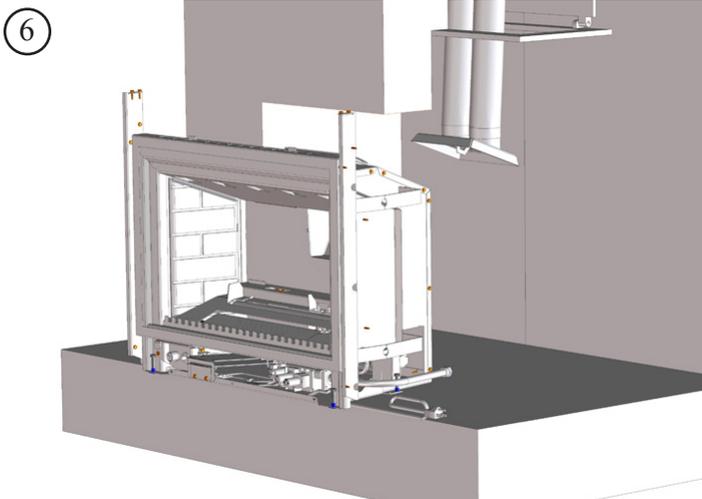
Remove exhaust adapter from the top of the stove assembly being careful not to damage the sealing gasket.



The flue restrictor can be installed after flex pipes are connected and stove is in fireplace opening. To change or install restrictor remove glass door then remove log. Next remove screw, washer and spacer in the rear brick panel and remove the brick panel while holding relief door open with one hand. Remove the 2 screws holding the exhaust cover onto the rear of the firebox.

To remove a restrictor push the front of the plate upward and pull down on the rear side bringing it into the firebox.

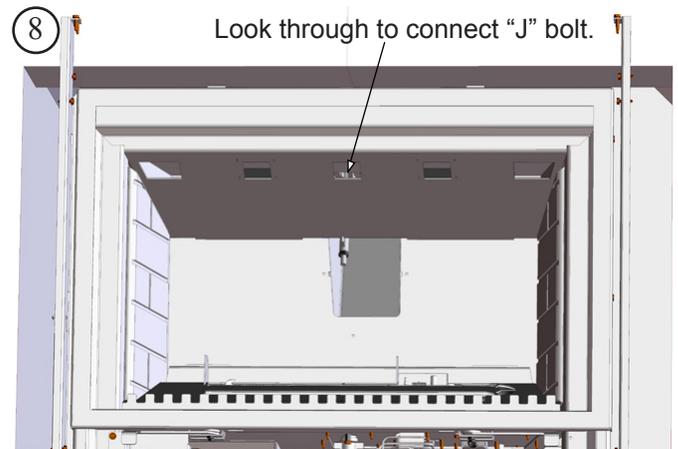
To install a restrictor, hold plate vertically and slide up into exhaust connector through the back of the firebox. Push bottom of plate back allowing it to set onto lip inside the exhaust adapter.



Determine the flue restrictor needed for this application and install into the exhaust pipe on the stove adapter.

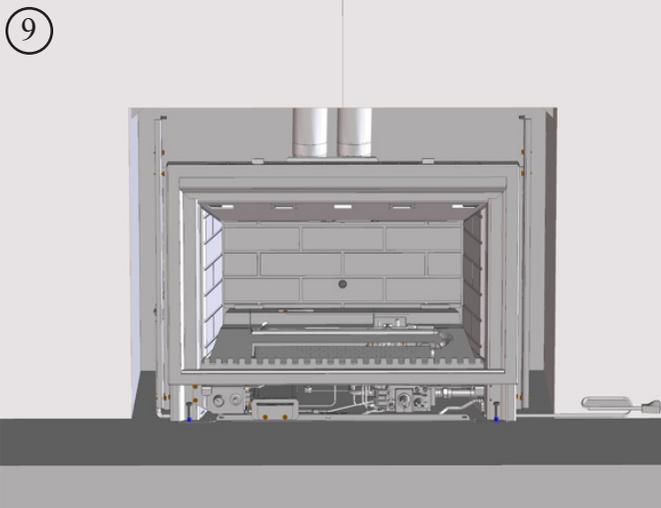
- Propane uses the 2" ID restrictor for 10' to 16' and the 1.75" ID for the 16' to 36' chimneys.
- Natural gas uses no restrictor from 10' to 16' and the 1.75" restrictor from 16' to 36'.

Lay cardboard or an old cloth onto the fireplace hearth to keep from damaging it. If the pipe adapter has been removed from the stove body connect the flex pipes to the intake/exhaust adapter assembly, be sure to use the correct pipe on the exhaust connector, the one that was marked with paint earlier. Tie a string to the exhaust adapter so you can pull the adapter onto stove body.



Check stove to opening side clearance. If there is not enough room to reach beside stove while it is installed you may want to remove the gas line from the valve assembly and connect it to your supply line inside the fireplace first, then reconnect to the gas valve.

Set stove into fireplace opening. Connect the pipe adapter or flex liners to the stove. To reconnect the pipe adapter use the string or reach through the exhaust passage and pull the adapter onto the stove body. While looking through the center exhaust port located toward the front of the firebox, connect the "J" bolt to the adapter. Next slide the clamping adapter into the notch in the firebox top and tighten the nut. Remove the string when completed.



Connect the gas pipe to the stove unit. If the pipe adapter was removed from the stove, replace all components back onto the stove in the reverse order from which they were removed.



Place rock wool on burner as shown above. The wool should be placed loosely and lightly. This wool forms the glowing ember bed and will look different depending on placement. Reinstall the glass door assembly and close the latches.

Do not strike glass or close door with excessive force. Breakage of glass and/or damage to door may result.

10



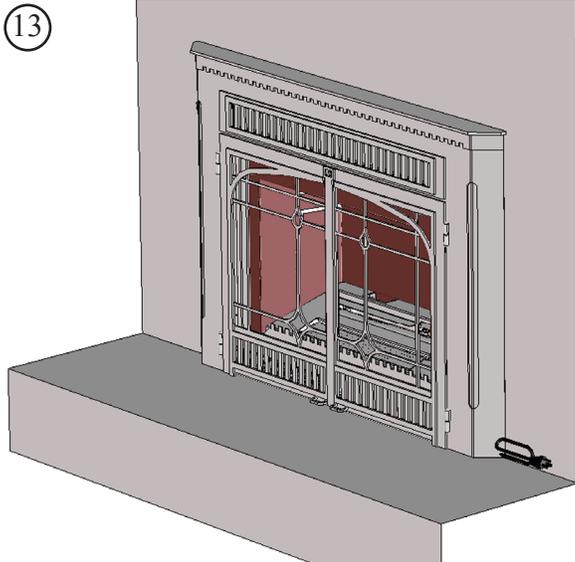
Place log set in firebox. Center the logs right to left and push back against the log stop.

The power cord comes out the right side of the unit from the factory. The power cord may be changed to the left side before installing the face. Start by bringing the plug end of the cord back through the side of the firebox, and lifting the strain relieved cord section up from body notches. Keeping the cord along the front of the stove bottom run the plug end under the label holding brackets and out the same area on the other side of the stove body. Press the strain relieved cord section into the notches on the left side of the stove body and secure the cord to the front bottom section of the stove using wire ties.

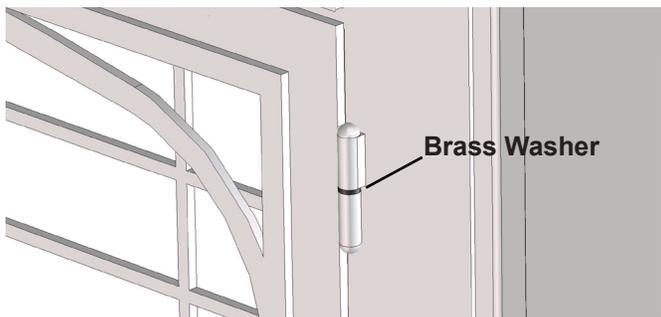
12



Back out the 4 face clamping bolts far enough to install the face. Slide the face onto the firebox assembly until the slots are just fully under the heads of the bolts and are all even, then tighten the 4 bolts as shown above. Check to see if the back of the stove face meets with the fireplace opening as neatly as possible, some adjustment may be necessary. If the face is slid too far back under the bolts the glass door will not be able to be removed without taking the face off first. Some applications may be required to be installed that way.



Install the face doors by hanging them on the hinges. **Note: a brass washer goes between the hinges.** The finished installation should look like this.



14

Finish installing chimney cap. Secure flex pipes to cap base using screws, be sure to connect the painted flex pipe for exhaust to the proper side on the base. Now secure base to the chimney using screws, silicone, a combination of the two, or another approved method.

The appliance must be electrically connected and grounded in accordance with local codes or, in the absence of local codes, with the current NFPA 70 National Electric Code or CSA C22.1-Canadian Electrical Code.

“This appliance is equipped with a three prong (grounded) plug for protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. DO NOT CUT OR REMOVE THE GROUNDING PRONG FROM THE PLUG.”

## Installation Check List

1. Verify unit is assembled for correct gas application. If not, install conversion kit available from Harman Stove Company.
2. Make sure gas line is installed in the fireplace to a point that it can be reached during installation.
3. Install inlet and vent pipes into chimney.
4. Remove glass door by pulling out on the two latches at the bottom of the door. Then lift up and out on the door.
5. Remove flex pipe adapter from the stove body if there is not enough clearance to do the connection assembled.
6. Protect hearth with drop cloth or cardboard.
7. Install flue restrictor if needed
8. Connect flex pipes to pipe adapter, and if removed, connect adapter to stove body. Keep marked flex liner to the exhaust side.
9. Reinstall all components that were removed if the pipe adapter was removed from the stove body.
10. Connect Gas line to the unit. Check for leaks using an approved method.
11. Change power cord to opposite side of unit if desired.
12. Install log, rock wool and glass door
13. Install Face assembly and adjust to opening.
14. Install chimney cap and mounting adapter
15. Check for leaks, then verify correct operation of stove.

**Connecting the  
Optional Thermostat**

If the optional thermostat is used, it must be plugged into the terminal strip located in the lower left front corner of the heater.

When installing a millivolt control system, use only a special low resistance thermostat. **DO NOT USE A REGULAR HEATING THERMOSTAT.**

Be sure that all electrical connections are clean, free from corrosion, and tight. Inspect connections periodically to confirm that no corrosion has built up over time.

When properly installed and maintained, a millivolt control system should give many years of trouble-free service.

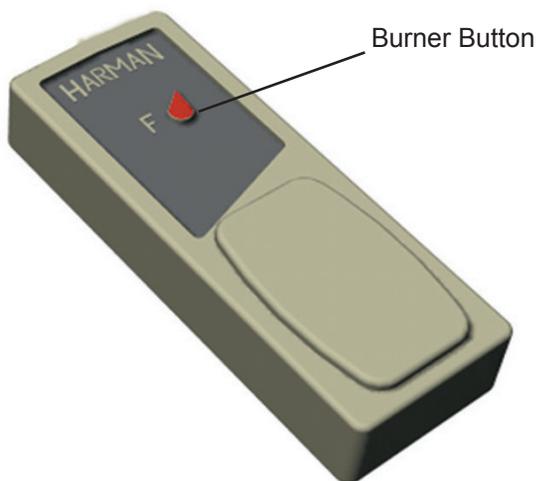
It is important to use the proper gauge wire for the length used.



Thermostat  
Part # 3-20-12080

**RECOMMENDED WIRE GAUGES**

Maximum Length	Wire Gauge
100'	14
60'	16
40'	18
25'	20
15'	22



Part # 1-00-7911

**Remote Control**

The button on the remote control can be used to turn the burner on and off.

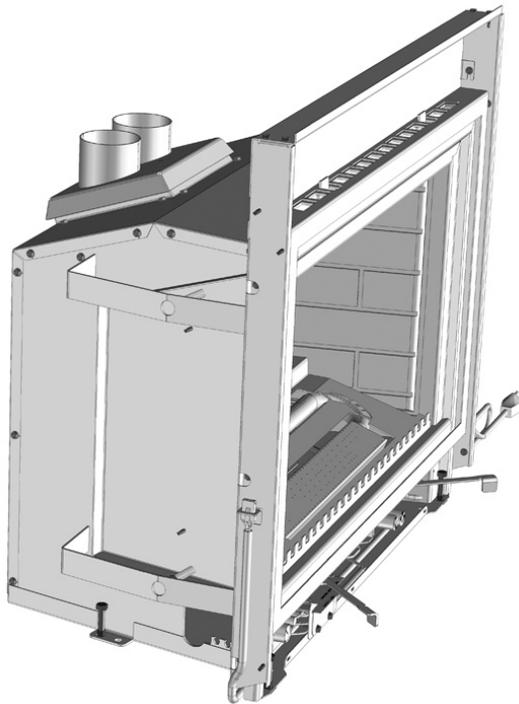
This remote uses an ultrasonic control method and does not need to be pointed directly at the fireplace.

A hand held sending unit, receiving unit, mounting bracket and all wiring are included when you order the remote control.

Installation instructions are packed with remote kit.

A qualified service technician recommended by your Harman dealer should conduct an annual inspection and maintenance of your fireplace, its venting, and the installation to keep it running safely and efficiently. The following procedures should be performed only by a qualified service person. The gas supply should be turned off whenever a maintenance procedure is performed.

If the glass front, or front access door are removed for servicing, they must be replaced prior to operating the fireplace.



### Removing the Glass Door

Remove door by pulling latches out as shown and pulling the bottom of the door out from the unit about 3 inches. Then lift the door slightly up and off the hooks.

**DO NOT STRIKE OR SLAM GLASS.**

**WARNING: DO NOT OPERATE THIS APPLIANCE WITH THE GLASS FRONT REMOVED, CRACKED OR BROKEN. REPLACEMENT OF GLASS SHOULD BE DONE BY A LICENSED OR QUALIFIED SERVICE PERSON. NEVER USE SUBSTITUTE MATERIALS.**

### Replacing the Glass and Gasket

The ShadowLight XL uses part no. 3-44-00539 fiberglass gasket in the front door. Should it ever need replacement, use only the proper replacement gasket that is available from your Harman dealer. To replace the gasket, follow this procedure.

1. Lay glass front face down.
2. Bend the four tabs up far enough to remove the glass.
3. Remove glass from frame. Discard gasket.
4. Install new gasket around glass (thick side toward stove).
5. Place glass in frame.
6. Bend tabs to secure glass. Not too tight.
7. Reinstall glass door by placing the door on the hooks at the top of the opening as shown. swing the bottom of the door in to the unit. Close the two latches to secure the door.

### Cleaning the Glass

The glass may be cleaned with ordinary household glass cleaner and a soft cloth or paper towel.

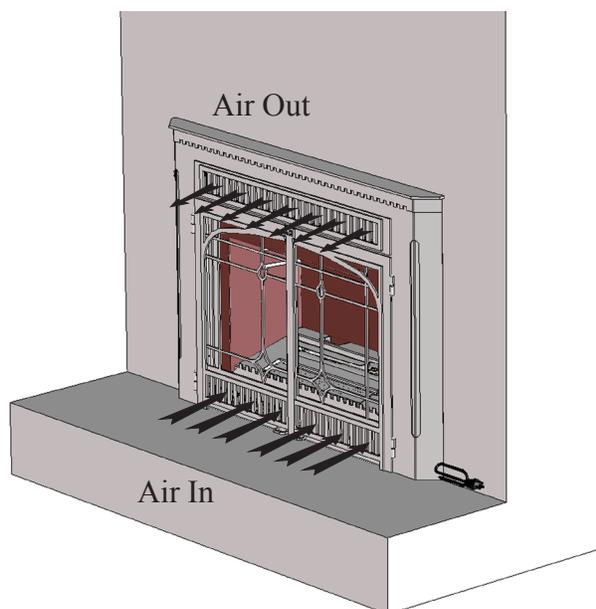
**WARNING:** Never clean the glass when it is hot. Do not use abrasive cleaners on the glass.

### Inspecting the Venting

An inspection of both pipes of the venting system should be made during the annual service appointment. They must have no blockage and be in good condition. The vent manufacturer's instructions may provide specific suggestions or details on vent inspection. Any sections that are taken apart for the inspection must be reassembled and sealed as required.

### Cleaning the Log Set and Firebox

During the annual inspection and maintenance appointment, the service person should clean dust, lint, and any light accumulation from the logs and the firebox area. An extra-soft brush should be used on the logs as they are extremely fragile; a vacuum cleaner may be used on the firebox. If at any time the logs cannot be removed or installed without forcing, the cause must be found. The logs must never be forced.



The flow of convection air must not be obstructed.

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

“Attention: Au moment de l’entretien des commandes, étiquetez tous les fils avant le débranchement. Des erreurs de câblage peuvent entraîner un fonctionnement inadéquat et dangereux.”

The appliance should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.

“If the vent/air intake system is disassembled for any reason, reinstall per the instructions provided for the initial installation.”

Only use Authorized Harman Service or Repair parts when working on your Shadowlight XL gas fireplace insert.

### Air Flow

To prevent damage to the heater, it is essential that air flows freely into the bottom grill and out of the top grill. Do not place objects in front of the grills.

### Cleaning the Burners

To clean the burners, the face, glass front, and log set must be removed. Remove the burner assembly as described on page 15.

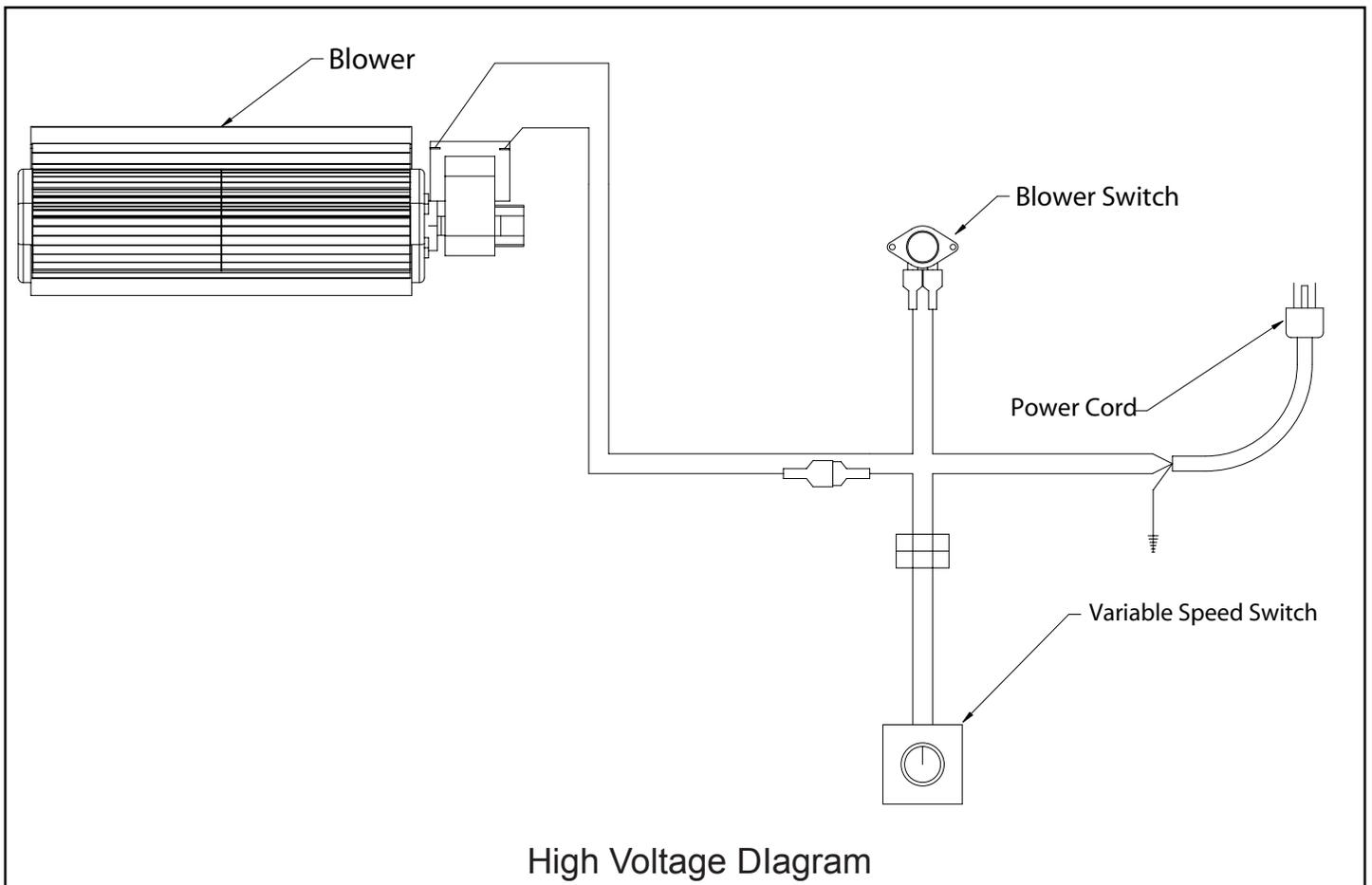
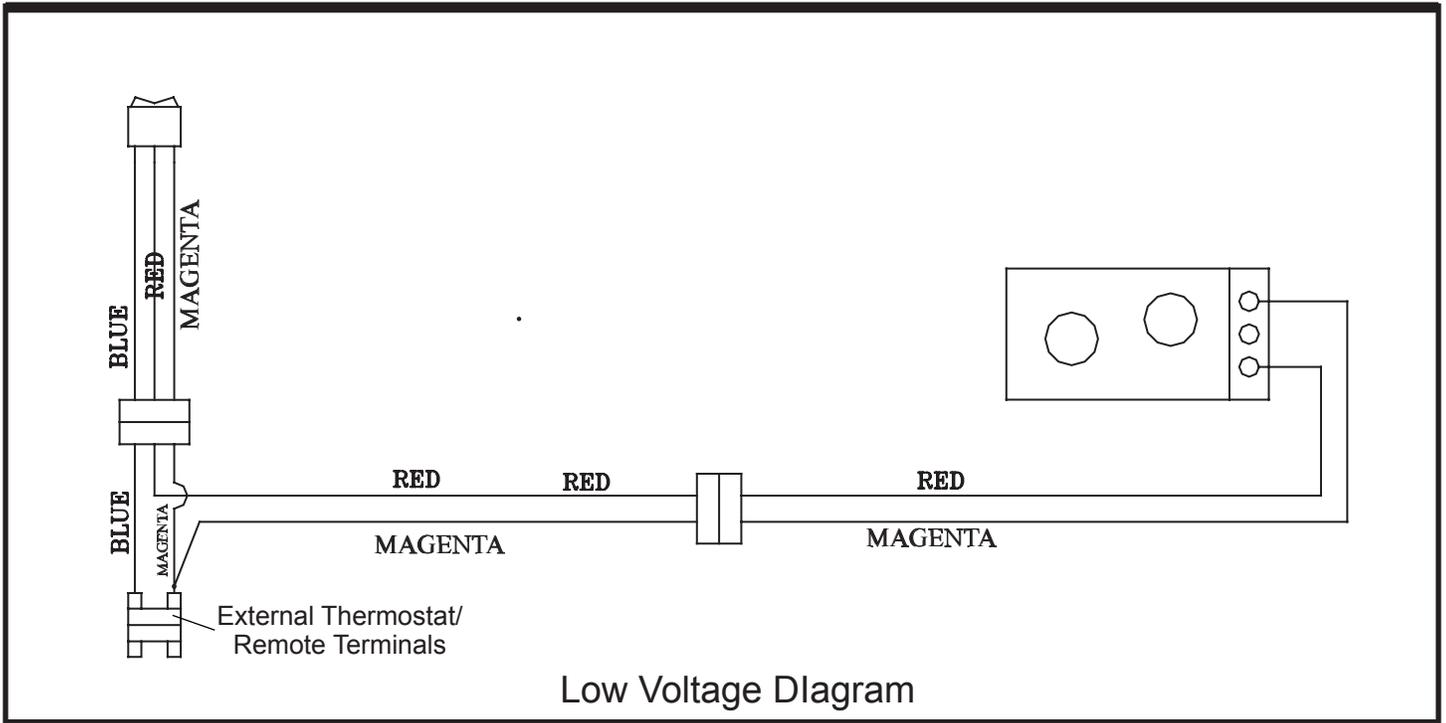
With the burner removed, inspect all of the holes to make sure they are unobstructed. Use a small drill or wire to clean any obstructed holes. Remove any rust or other buildup that may have accumulated.

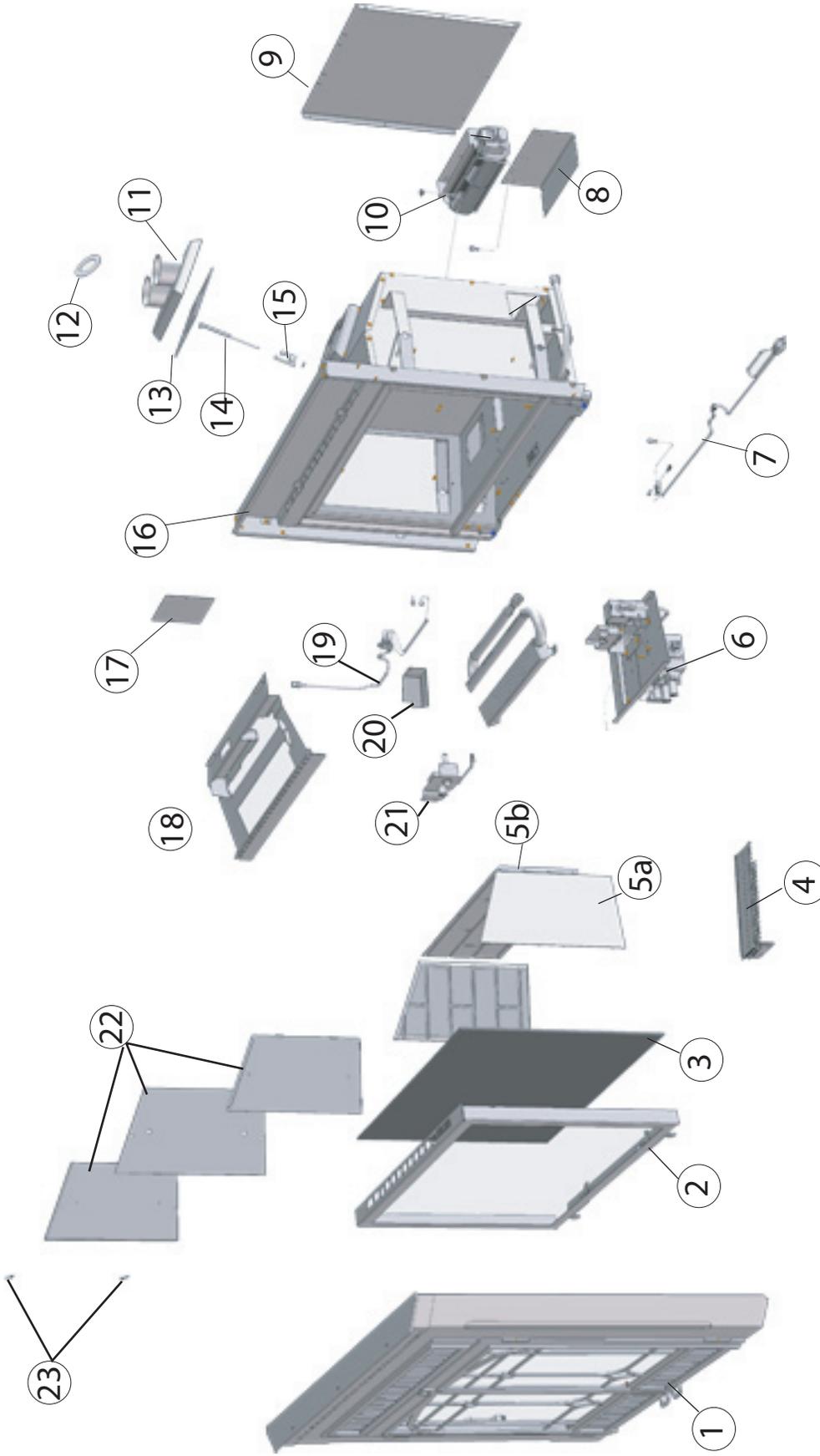
Replace burner in reverse order.

### Replacing The Blower

To replace the blower the stove must be removed from the fireplace.

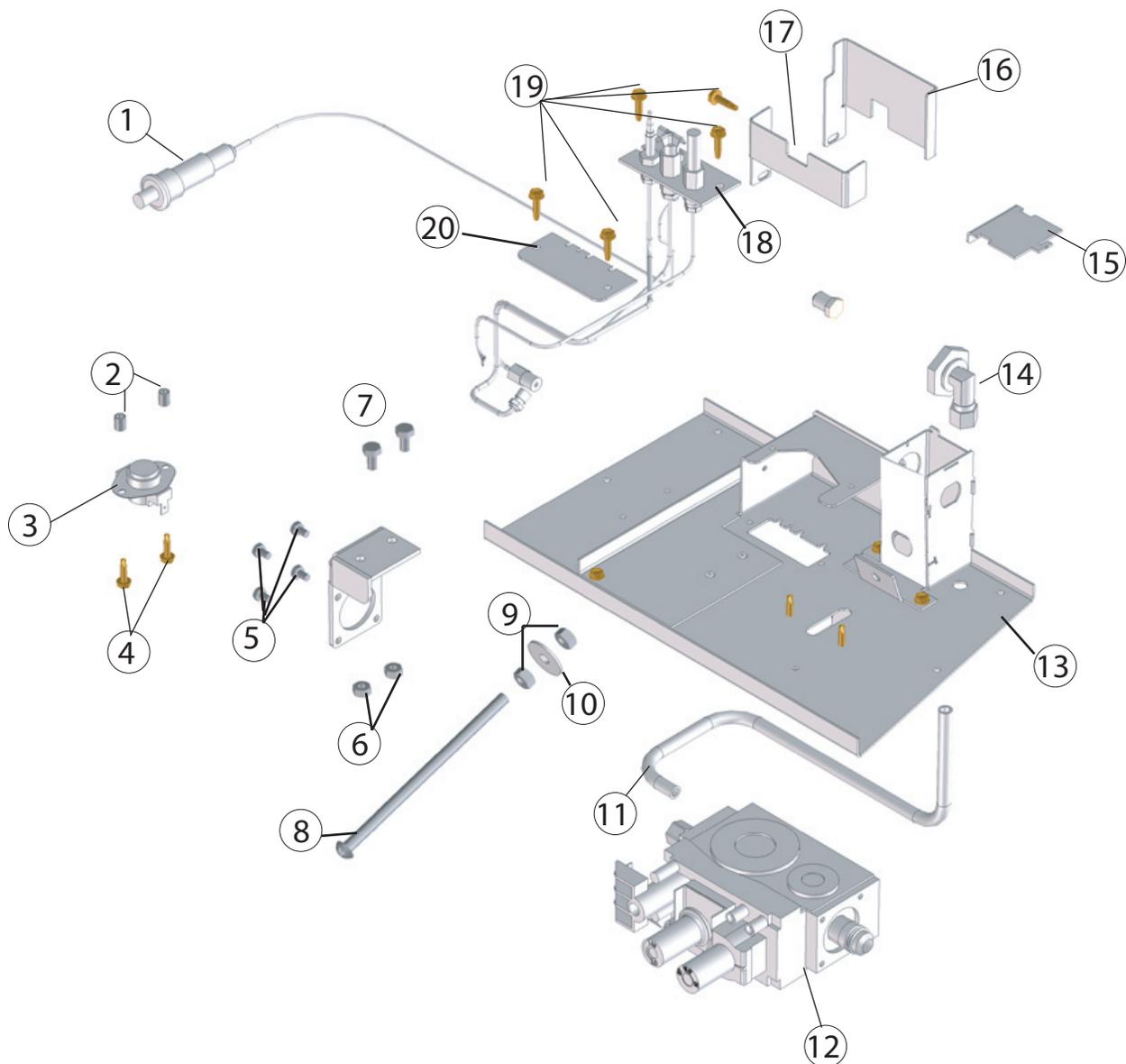
1. Shut off power and gas to stove
2. Remove face assembly
3. Remove glass door
4. Remove log, Rear brick panel and firebox rear cover plate.
5. Loosen nut on “J” bolt under the cover and remove “J” bolt
6. Disconnect power cord and gas line
7. Protect hearth
8. Remove stove from fireplace being careful not to damage flex pipes while removing adapter from the top of the stove.
9. Remove rear cover from stove body
10. Disconnect wires from blower motor
11. Remove screws mounting blower to blower mount
12. Replace blower.
13. Assemble in reverse order.





### Shadowlight XL Parts

- |                        |                               |                         |                |
|------------------------|-------------------------------|-------------------------|----------------|
| 1. Face Assembly       | 1-00-384200-17                | 10. Blower Motor        | 3-21-32080     |
| 2. Glass Door Assembly | 1-10-384148                   | 11. Tail Pipe Weldment  | 1-00-384314    |
| 3. Glass               | 3-40-18502900                 | 12. Restrictors         | 2-00-384321(2) |
| 4. Label Bracket Assy. | 1-10-384136                   | 13. Tail pipe Gasket    | 3-44-384328    |
| 5a. Side Brick Panel   | 3-40-384319 (1 left, 2 right) | 14. "J" Bolt            |                |
| 5b. Rear Brick Panel   | 3-40-384318                   | 15. Flue Clamp Weldment | 1-10-384343    |
| 6. Valve Assembly      | 1-10-384329                   | 16. Body Weldment       | 1-89-384300    |
| 7. Power Cord          | 3-20-348328                   | 17. Flue Access Cover   | 2-00-384307    |
| 8. Blower Mount        | 2-00-384315                   | 18. Air Plate Assembly  | 1-10-384307    |
| 9. Rear Cover          | 2-00-384317                   | 19. Low Voltage Harness | 3-20-348329    |



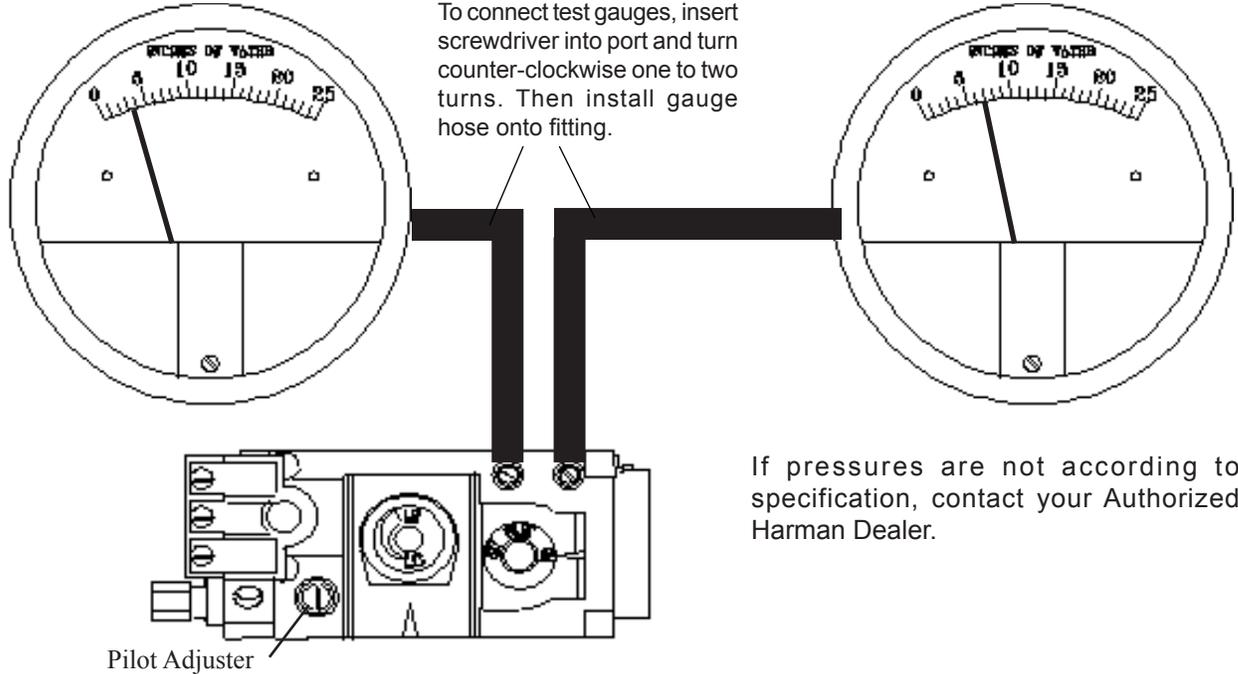
1. Piezo Igniter	3-40-08220	11. Gas Tube	2-00-384128
2. Spacers	3-31-90309017	12. Control Valve	3-40-820653
3. Snap Disc	3-20-23246	13. Burner Floor	2-00-384329
4. #10 Tek Screws	3-30-511007517	14. OPS Elbow	3-40-08779
5. Valve Mounting Screws	3-30-10050081	15. Tube Box Top	2-00-384135
6. 1/4" x 20 nuts	3-30-80252013	16. Pilot Cover Rear	2-00-384346
7. 1/4" x 20 x 1/2" bolts	3-30-1252005014	17. Pilot Cover Front	2-00-384345
8. 5/12" x 18 x 6" Pan Headbolt	3-30-631186001	18. Pilot Assembly	3-40-08715
9. 5/16" x 18 nuts	3-30-80311813	19. #10 x 3/4" Tek Screws	3-30-511007517
10. Adjuster Disc	2-00-384142	20. Pilot Sealer Plate	2-00-384120

**Natural Gas**

**Manifold Pressure**  
**3.5 inches**

(High-Low Regulator turned fully counter-clockwise.)

**Inlet Pressure 5 to 7 inches**

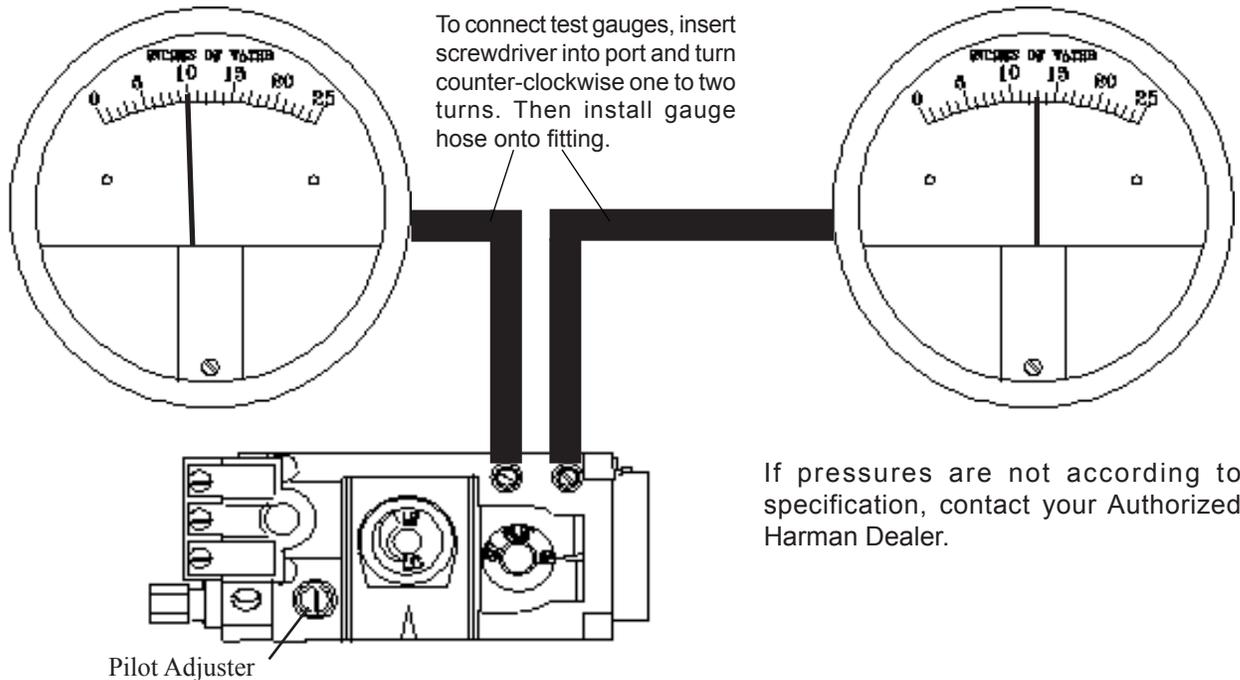


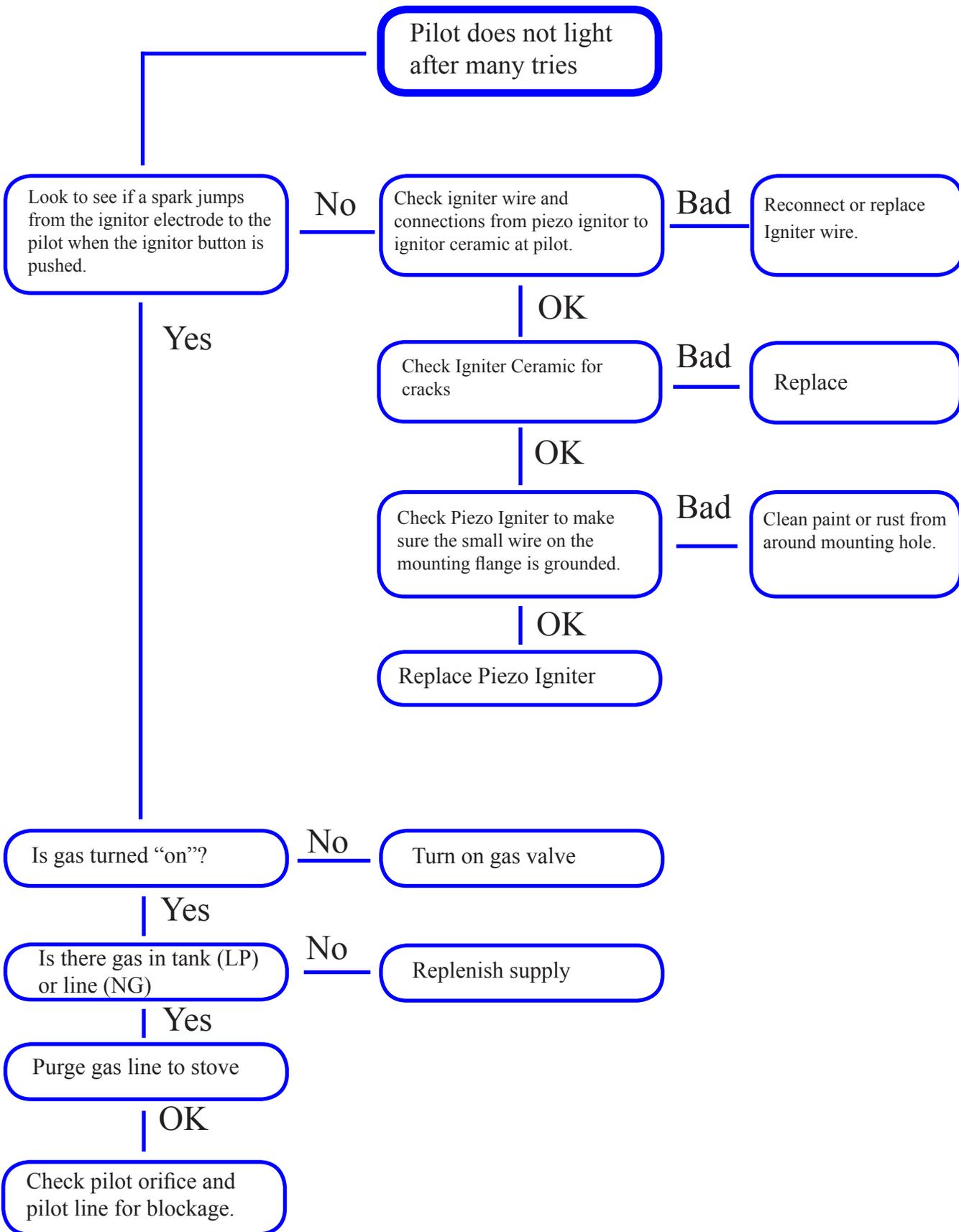
**Propane**

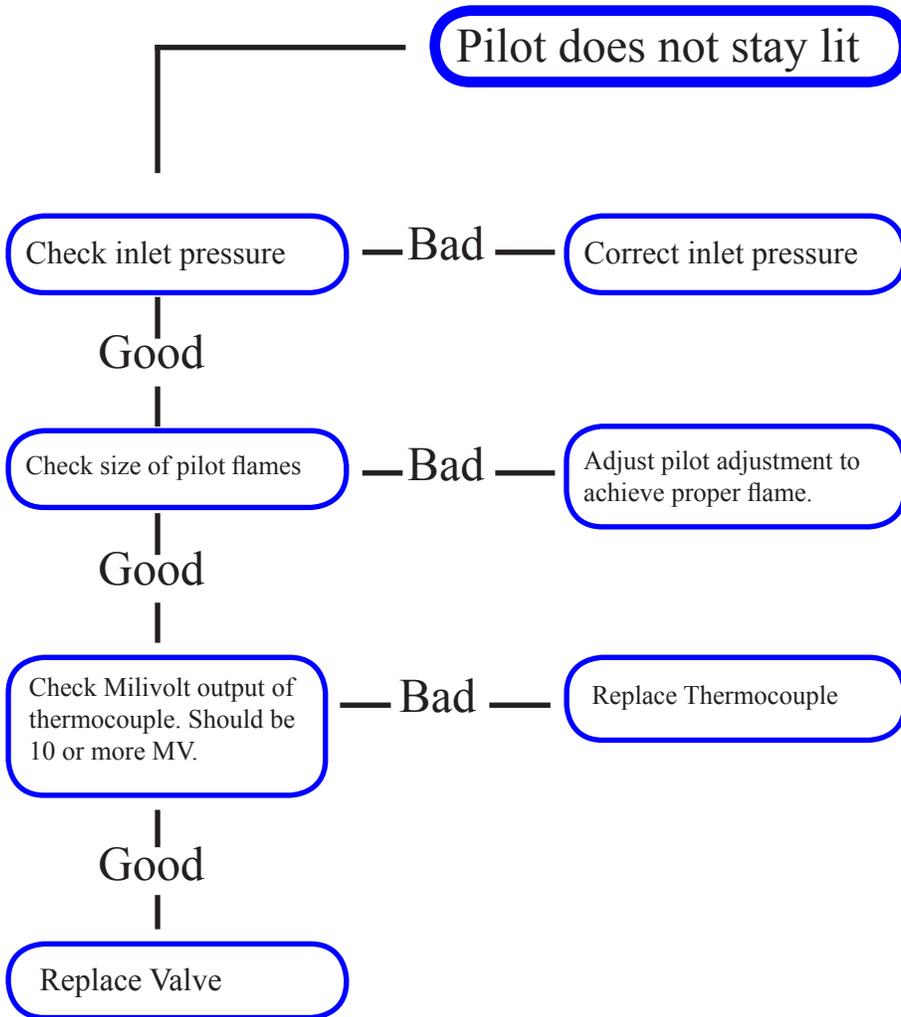
**Manifold Pressure**  
**10 inches**

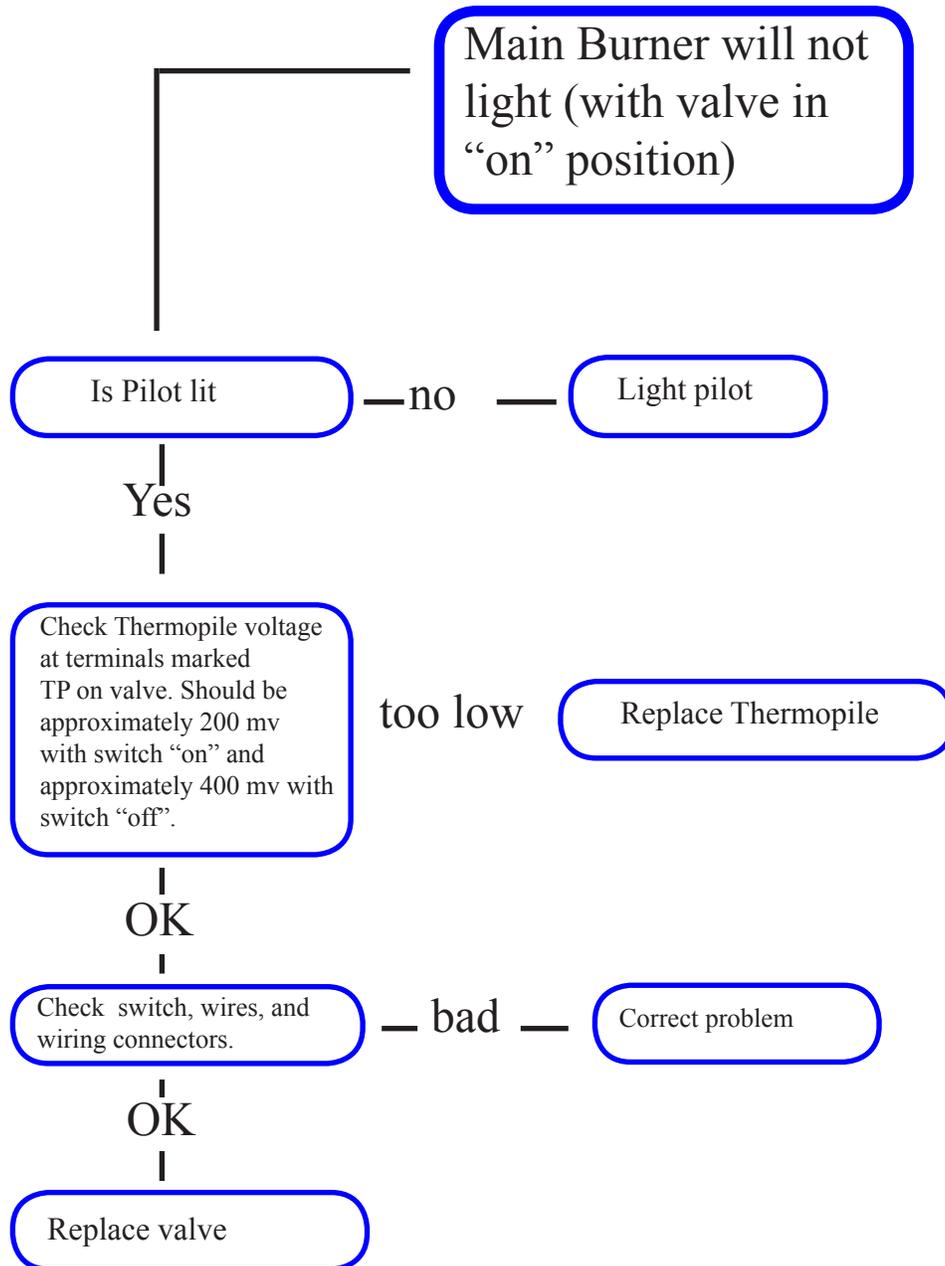
(High-Low Regulator turned fully counter-clockwise.)

**Inlet Pressure 11 to 13 inches**









## Hearth & Home Technologies Inc. LIMITED LIFETIME WARRANTY

Hearth & Home Technologies Inc., on behalf of its hearth brands ("HHT"), extends the following warranty for HHT gas, wood, pellet, coal and electric hearth appliances that are purchased from an HHT authorized dealer.

### **WARRANTY COVERAGE:**

HHT warrants to the original owner of the HHT appliance at the site of installation, and to any transferee taking ownership of the appliance at the site of installation within two years following the date of original purchase, that the HHT appliance will be free from defects in materials and workmanship at the time of manufacture. After installation, if covered components manufactured by HHT are found to be defective in materials or workmanship during the applicable warranty period, HHT will, at its option, repair or replace the covered components. HHT, at its own discretion, may fully discharge all of its obligations under such warranties by replacing the product itself or refunding the verified purchase price of the product itself. The maximum amount recoverable under this warranty is limited to the purchase price of the product. This warranty is subject to conditions, exclusions and limitations as described below.

### **WARRANTY PERIOD:**

Warranty coverage begins on the date of installation. In the case of new home construction, warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the product by an independent, authorized HHT dealer/ distributor, whichever occurs earlier. The warranty shall commence no later than 24 months following the date of product shipment from HHT, regardless of the installation or occupancy date. The warranty period for parts and labor for covered components is produced in the following table.

The term "Limited Lifetime" in the table below is defined as: 20 years from the beginning date of warranty coverage for gas appliances, and 10 years from the beginning date of warranty coverage for wood, pellet, and coal appliances. These time periods reflect the minimum expected useful lives of the designated components under normal operating conditions.

Warranty Period		HHT Manufactured Appliances and Venting							Components Covered
Parts	Labor	Gas	Wood	Pellet	EPA Wood	Coal	Electric	Venting	
1 Year		X	X	X	X	X	X	X	All parts and material except as covered by Conditions, Exclusions, and Limitations listed
2 years				X	X	X			Igniters, electronic components, and glass
		X	X	X	X	X			Factory-installed blowers
			X						Molded refractory panels
3 years				X					Firepots and burnpots
5 years	1 year			X	X				Castings and baffles
7 years	3 years		X	X	X				Manifold tubes, HHT chimney and termination
10 years	1 year	X							Burners, logs and refractory
Limited Lifetime	3 years	X	X	X	X	X			Firebox and heat exchanger
90 Days		X	X	X	X	X	X	X	All replacement parts beyond warranty period

See conditions, exclusions, and limitations on next page.

**WARRANTY CONDITIONS:**

- This warranty only covers HHT appliances that are purchased through an HHT authorized dealer or distributor. A list of HHT authorized dealers is available on the HHT branded websites.
- This warranty is only valid while the HHT appliance remains at the site of original installation.
- Contact your installing dealer for warranty service. If the installing dealer is unable to provide necessary parts, contact the nearest HHT authorized dealer or supplier. Additional service fees may apply if you are seeking warranty service from a dealer other than the dealer from whom you originally purchased the product.
- Check with your dealer in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this warranty.

**WARRANTY EXCLUSIONS:**

This warranty does not cover the following:

- Changes in surface finishes as a result of normal use. As a heating appliance, some changes in color of interior and exterior surface finishes may occur. This is not a flaw and is not covered under warranty.
- Damage to printed, plated, or enameled surfaces caused by fingerprints, accidents, misuse, scratches, melted items, or other external sources and residues left on the plated surfaces from the use of abrasive cleaners or polishes.
- Repair or replacement of parts that are subject to normal wear and tear during the warranty period. These parts include: paint, wood, pellet and coal gaskets; firebricks; grates; flame guides; and the discoloration of glass.
- Minor expansion, contraction, or movement of certain parts causing noise. These conditions are normal and complaints related to this noise are not covered by this warranty.
- Damages resulting from: (1) failure to install, operate, or maintain the appliance in accordance with the installation instructions, operating instructions, and listing agent identification label furnished with the appliance; (2) failure to install the appliance in accordance with local building codes; (3) shipping or improper handling; (4) improper operation, abuse, misuse, continued operation with damaged, corroded or failed components, accident, or improperly/incorrectly performed repairs; (5) environmental conditions, inadequate ventilation, negative pressure, or drafting caused by tightly sealed constructions, insufficient make-up air supply, or handling devices such as exhaust fans or forced air furnaces or other such causes; (6) use of fuels other than those specified in the operating instructions; (7) installation or use of components not supplied with the appliance or any other components not expressly authorized and approved by HHT; (8) modification of the appliance not expressly authorized and approved by HHT in writing; and/or (9) interruptions or fluctuations of electrical power supply to the appliance.
- Non-HHT venting components, hearth components or other accessories used in conjunction with the appliance.
- Any part of a pre-existing fireplace system in which an insert or a decorative gas appliance is installed.
- HHT's obligation under this warranty does not extend to the appliance's capability to heat the desired space. Information is provided to assist the consumer and the dealer in selecting the proper appliance for the application. Consideration must be given to appliance location and configuration, environmental conditions, insulation and air tightness of the structure.

**This warranty is void if:**

- The appliance has been over-fired or operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over-firing can be identified by, but not limited to, warped plates or tubes, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes.
- The appliance is subjected to prolonged periods of dampness or condensation.
- There is any damage to the appliance or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

**LIMITATIONS OF LIABILITY:**

- The owner's exclusive remedy and HHT's sole obligation under this warranty, under any other warranty, express or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified above. In no event will HHT be liable for any incidental or consequential damages caused by defects in the appliance. Some states do not allow exclusions or limitation of incidental or consequential damages, so these limitations may not apply to you. This warranty gives you specific rights; you may also have other rights, which vary from state to state. EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE EXPRESSED WARRANTY SPECIFIED ABOVE.

