



# E33

GAS INSERT - LOG SET & NOVA

# OWNER'S MANUAL

WARRANTY REGISTRATION  
[enviro.com/warranty](http://enviro.com/warranty)



Report # 0268GN022S

**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.

CERTIFIED TO/ CERTIFIÉ AUX: ANSI Z21.88 / CSA2.33 VENTED GAS FIREPLACE HEATERS

# SAFETY PRECAUTIONS

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## **WARNING:**

### **FIRE OR EXPLOSION HAZARD**

**Failure to follow safety warnings exactly could result in serious injury, death, or property damage.**

- 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.
  - Leave the building immediately.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

### **INSTALLER:**

Leave this manual with the appliance.

### **CONSUMER:**

Retain this manual for future reference.

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

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

Massachusetts installations (Warning): This product must be installed by a licensed plumber or gas fitter when installed within the Commonwealth of Massachusetts. Other Massachusetts code requirements: Flexible connector must not be longer than 36in., a shut off valve must be installed; only direct vent sealed combustion products are approved for bedrooms/bathrooms. A carbon monoxide detector is required in all rooms containing gas fired direct vent appliances. The fireplace damper must be removed or welded in the open position prior to installation of a fireplace insert.

# SAFETY PRECAUTIONS

## FOR SAFE INSTALLATION AND OPERATION OF YOUR “ENVIRO” HEATER, PLEASE CAREFULLY READ THE FOLLOWING INFORMATION:

- All ENVIRO gas-fired appliances must be installed in accordance with their instructions. Carefully read all the instructions in this manual first. Consult the building authority having jurisdiction to determine the need for a permit prior to commencing the installation.
- **NOTE:** Failure to follow these instructions could cause a malfunction of the fireplace, which could result in death, serious bodily injury, and/or property damage.
- Failure to follow these instructions may also void your fire insurance and/or warranty.

### GENERAL

• Installation and repair should be done by a qualified service person. The appliance should be inspected before the first 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 the control compartments, burners and circulating air passageways of the appliance be kept clean.

• Due to high temperatures, the appliance should be located out of high traffic areas 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 burn or clothing ignition.**

• Young children should be carefully supervised when in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at risk individuals in the house. To restrict access to a fireplace or stove install an adjustable safety gate to keep toddlers, young children and other at risk individuals out of the room and away from hot surfaces. Any safety screen, guard, or barrier removed for servicing an appliance must be replaced prior to operating the appliance.

• Clothing or other flammable materials should not be placed on or near the appliance.

• A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals. If the barrier becomes damaged, the barrier shall be replaced with the manufacturer’s barrier for this appliance

### FOR YOUR SAFETY

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

• This installation must conform to local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54, or the Natural Gas and Propane Installation Code, CSA B149.1.

• To prevent injury, do not allow anyone who is unfamiliar with the stove to operate it.

**• To prevent injury, if the pilot or pilot and burners have gone out on their own, open the glass door and wait 5 minutes to air out before attempting to re-light the stove.**

• Always keep the area around these appliances clear of combustible material, gasoline and other flammable liquids and vapours.

• These appliances should not be used as a drying rack for clothing or for hanging Christmas stockings/decorations.

• Due to the paint curing on the stove, a faint odor and slight smoking will likely be noticed when the stove is first used. Open a window until the smoking stops.

Always connect this gas stove to a vent system and vent to the outside of the building envelope. Never vent to another room or inside the building. Make sure the specified vent pipe is used, properly sized and of adequate height to provide sufficient draft. Inspect the venting system annually for blockage and signs of deterioration.

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

**WARNING:** Do not operate with the glass front removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person.

• Never use solid fuels such as wood, paper, cardboard, coal, or any flammable liquids, etc., in this appliance.

• Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system or any gas control which has been under water.

• Do not abuse the glass by striking it or slamming the door shut.

• If the E33 unit is pulled out of its installation, and the vent-air intake system is disconnected for any reason, ensure that the vent-air intake pipes are reconnected and re-sealed in accordance to the instructions noted in INITIAL INSTALLATION - VENTING.

 **DANGER**



**HOT GLASS WILL CAUSE BURNS**  
**DO NOT TOUCH GLASS UNTIL COOLED.**  
**NEVER ALLOW CHILDREN TO TOUCH GLASS.**

A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals.

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# CODES AND APPROVALS

**DIRECT VENT:** This type is identified by the suffix DV. This appliance draws all of its air for combustion from outside the dwelling, through a specially designed vent pipe system.

This appliance has been tested and approved for installations from 0 feet to 4500 feet (1372 m) above sea level.

**In the USA:** The appliance may be installed at higher altitudes. Please refer to your American Gas Association guidelines which state: the sea level rated input of Gas Designed Appliances installed at elevations above 2000 (610 m) feet is to be reduced 4% for each 1000 feet (305 m) above sea level. Refer also to local authorities or codes which have jurisdiction in your area regarding the de-rate guidelines.

**In Canada:** When the appliance is installed at elevations above 4500 feet (1372 m), the certified high altitude rating shall be reduced at the rate of 4% for each additional 1000 feet (305 m).

- This appliance has been tested by INTERTEK and OMNI-Test Laboratories and found to comply with the established VENTED GAS FIREPLACE HEATER standards in CANADA and the USA as follows:

## DIRECT VENTED GAS FIREPLACE INSERT HEATER

TESTED AND LISTED TO: ANSI Z21.88 / CSA 2.33 VENTED GAS FIREPLACE HEATERS

CSA 2.17 GAS FIRED APPLIANCES FOR HIGH ALTITUDES

CSA P.4.1 TESTING METHOD FOR MEASURING ANNUAL FIREPLACE EFFICIENCY

### This ENVIRO E33 Fireplace Insert:

- Has been certified for use with either natural or propane gases. (See rating label.)
- Is not for use with solid fuels.
- Is approved for bedroom or bed sitting room. (**IN CANADA:** must be installed with a permanent wall thermostat for bedroom installations. Consult the authority having local jurisdiction in your area. **IN USA:** see current ANSI Z223.1 for installation instructions.)
- Must be installed in accordance with local codes. If none exist, use current installation code CAN/CGA B149 in Canada or ANSI Z223.1/NFPA 54 in the USA.
- Must be properly connected to an approved venting system and not connected to a chimney flue serving a separate solid-fuel burning appliance.
- Is not approved for closet or recessed installations.

**IMPORTANT NOTICE (Regarding first fire up):** When the unit is turned on for the first time, it should be turned onto high without the fan on for the first 4 hours. This will cure the paint, logs, gasket material and other products used in the manufacturing process. It is advisable to open a window or door, as the unit will start to smoke and can irritate some people. After the unit has gone through the first burn, turn the unit off, let the unit get cold then remove the glass door and clean it with a good gas fireplace glass cleaner, available at your local ENVIRO dealer. See "DOOR REMOVAL" and "CLEANING THE GLASS" sections.

### **COLD CLIMATES:**

**NOTE:** In cold climates, additional insulation may be used on some venting. It is recommended in cold climates to wrap the exhaust and intake venting for the final few feet before termination.

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[www.nficertified.org](http://www.nficertified.org)

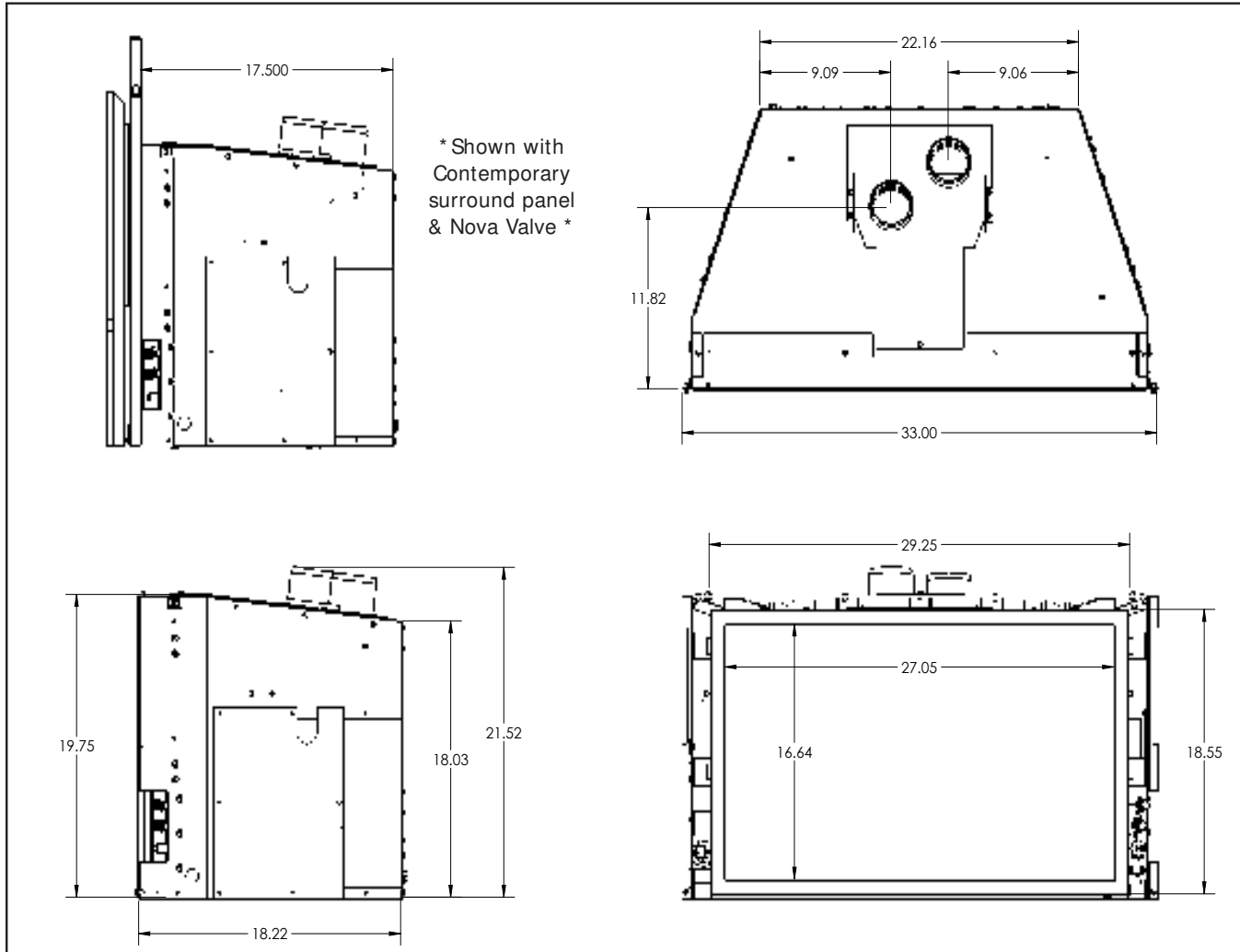
We recommend that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

# SPECIFICATIONS

## RATING LABEL LOCATION:

The rating label is located on the left side of the unit, next to the fan controller.

## DIMENSIONS:



**Figure 1: E33 Exterior Dimensions.**

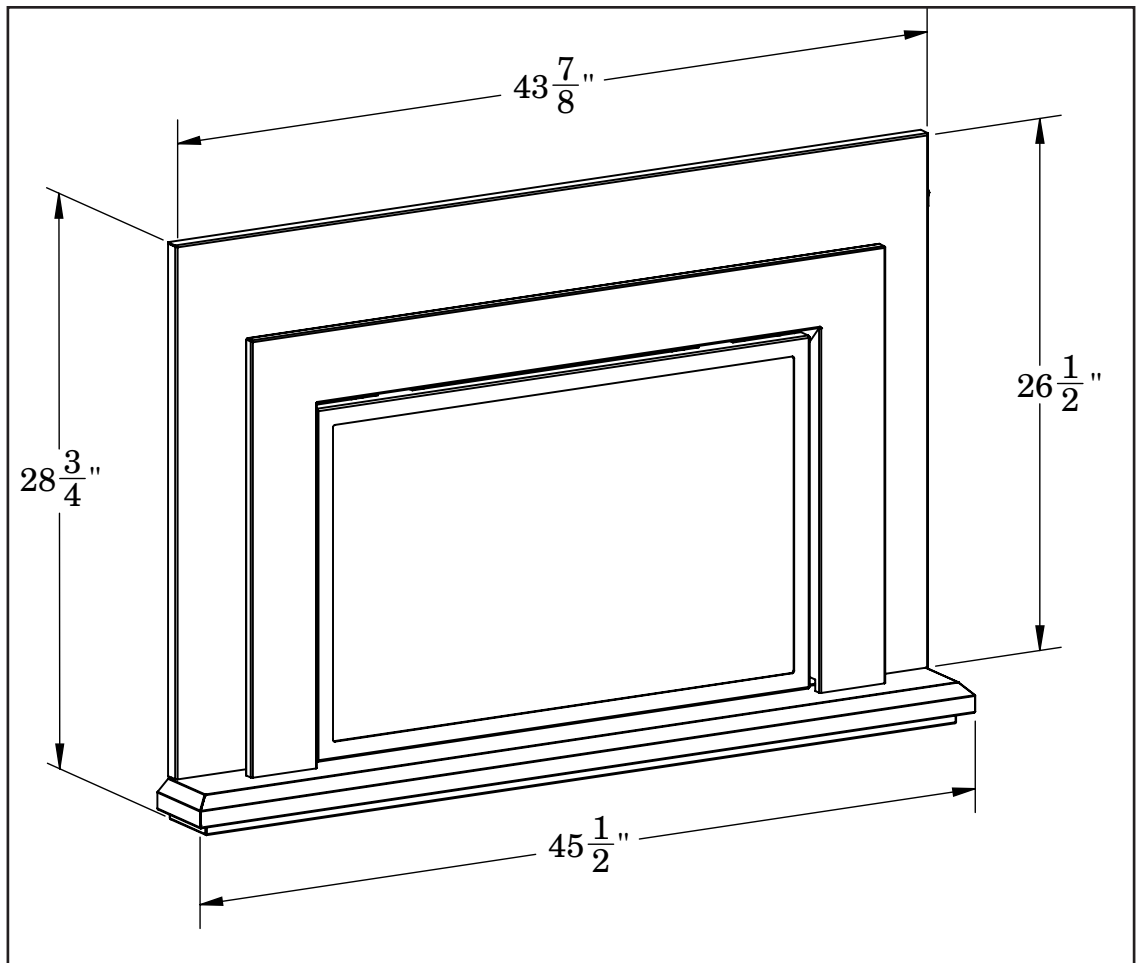
## INSTALL DEPTH:

E33 units have a minimum install depth of 17.5". The table below shows what depth of install it will need with each surround panel.

Surround Panel	Required Depth
Contemporary	17½" [445 mm]
Modern	
Extruded	
Extruded Plus	18" [457 mm]
Slim & Elite Panels	19" [483 mm]

**Table 1: Install Depths**

# SPECIFICATIONS



**Figure 2: E33 Contemporary Surround with Base Shelf and Riser.**

**Table 2: E33 Options Dimensions.**

	<b>Regular Surround</b>	<b>Contemporary Surround</b>	<b>Extruded Surround</b>
Height	26.5" (673 mm)	26.5" (673 mm)	26.5" (673 mm)
Width	44 1/8" (1121 mm)	44 1/8" (1121 mm)	44 1/8" (1121 mm)
<b>Trimnable Surround</b>	Height		Width
	38" (965mm)		46" (1168mm)
	<b>Base Shelf</b>		<b>Base Shelf Riser</b>
Height	1 5/8" (41 mm)		2 1/8" (54 mm)
Width	45 1/2" (1156 mm)		44" (1118 mm)
Depth	Bottom 4 7/8" (112 mm); Top 3 13/16" (97 mm)		3 11/16" (94 mm)



# OPERATING INSTRUCTIONS

## For Your Safety, Read Safety Precautions And Lighting Instructions Before Operating

**WARNING: IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY A FIRE OR EXPLOSION MAY RESULT, CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.**

### LIGHTING AND TURNING OFF INSTRUCTIONS:

#### FOR YOUR SAFETY READ BEFORE LIGHTING



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

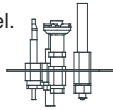
- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- C. Use only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



#### 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.

#### LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above on this label.
2. Set the thermostat to the lowest setting.
3. Turn off all electric power to this appliance.
4. Open the front control panel.
5. Turn off the gas control knob clockwise  to the "OFF" position.
6. Open door. Wait five (5) minutes to clear out any gas. Close door. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
7. Find pilot-located near the center rear of the firebox. Turn the gas control knob counter-clockwise  to "PILOT". Push the gas control in fully and hold, keep knob depressed for about 30 seconds after the pilot is lit. Release knob. If pilot goes out, repeat steps 4 through 5.



- WARNING:** This gas valve has a lockout device, which will not allow the pilot burner to be relit until the thermocouple has cooled.
- 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 clockwise  to "OFF" and call your service technician or gas supplier.
8. Turn the gas control knob counter clockwise  to the "ON" position. Flip the burner switch to "ON" then turn the "HI/LOW" knob to the desired setting.
  9. Close the front control panel.
  10. Turn on all electric power to the appliance.
  11. Set thermostat to desired setting.

#### TO TURN OFF GAS TO APPLIANCE

1. Set the thermostat to the lowest setting.
2. Turn off all electric power to the appliance if service is to be performed.
3. Open the front control panel and flip burner switch to "OFF"
4. Turn the gas control knob clockwise  to the "OFF" position.
5. Close the front control panel.

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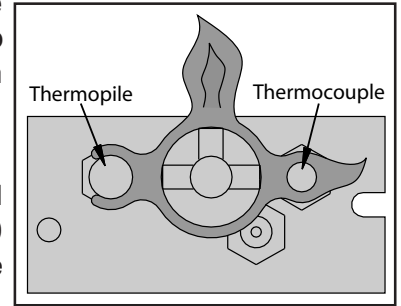
Figure 3: Lighting instruction label.



# OPERATING INSTRUCTIONS

## PILOT LIGHT:

1. Turn off the gas to the fireplace. **If not recently done, remove the glass and let the unit air out for at least five (5) minutes to clear out any gas.** Turn on gas to the heater. Leak test all joints with soapy water. **NEVER USE OPEN FLAME FOR LEAK TESTING.**
2. Start the pilot by pressing the gas control knob and turning it to PILOT. While holding the gas control knob in, press the piezo ignitor several times until the pilot light starts. Hold the gas control knob in for 30 seconds. Check that the pilot has fully engulfed the thermocouple assembly (see Figure 4).
3. Start the main burner by turning the gas control knob to ON and then turn the rocker switch to ON. Check that all burner ports have flame.
4. Leak test all gas joints again.

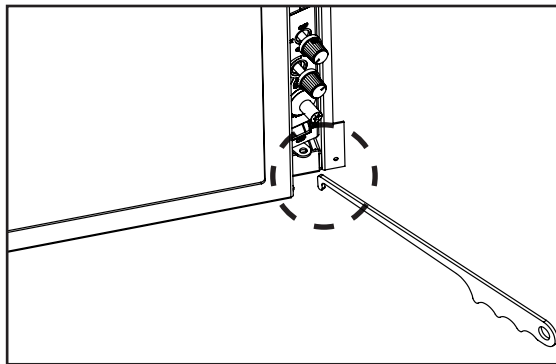


**Figure 4. Pilot Flame**

## VENTURI ADJUSTMENT:

The venturi adjustment lever is located on the right side of the unit, behind the surround panel (see Figure 5). To avoid touching hot surfaces under the unit, use the Door Tool to adjust the venturi.

The venturi allows the amount of air coming into the fireplace to be adjusted in order to accommodate different climates and venting arrangements. Start the pilot and then the burner. Make sure the pilot flame is burning normally and none of the burner ports are plugged. Let the fireplace burn for roughly



**Figure 5: Adjusting the venturi air setting.**

fifteen (15) minutes and then examine the flames. The ideal flame will be blue at the base and light orange above. The flames should be of medium height. If the flames look like this, no venturi adjustment is needed. If the flames are fairly short and mostly blue, the fireplace is getting too much air. Therefore, the air shutter should be closed (push in) slightly until the correct flames are achieved. Flames that are very orange, with tall dark stringy tips are not getting enough air. Open (pull out) the venturi until the flames clean up. If the venturi is opened, then closed all the way, and the correct flames cannot be attained, turn off the gas and contact the dealer.

**Warning:** Incorrect venturi adjustment may lead to improper combustion, which is a safety hazard. Contact the dealer if there is any concern about the venturi adjustment.

## NORMAL SOUNDS DURING OPERATION:

Component	Sound & Reason
Fire Box	Creaking when heating up or cooling down.
Burner	Light pop or poof when turned off; this is more common with LP units.
Temperature Sensor	Clinking when it senses to turn the blower on or off.
Pilot Flame	Quiet whisper while the pilot flame in on.
Blower / Fan	Air movement that increases and decreases with the speed of the blower.
Gas Control Valve	Dull click when turning on or off, this is the valve opening and closing.

**Table 3: Normal Sound**

# OPERATING INSTRUCTIONS

## BURNER LIGHTING:

- A) Make sure the pilot is lit.
- B) Turn gas control knob COUNTER CLOCKWISE to ON.
- C) Flip the burner switch to ON (Located on the surround panel).
  - An alternate switch location is shown in Figure 6.
- D) Turn HI/LO knob to the desired flame height.
- E) Turn on all electrical power to the unit.

**NOTE:** Check that all burner holes are lit.

### TO TURN GAS FIREPLACE OFF

Flip the burner switch to OFF to turn off burner only.

If the fireplace is to be turned off for the season or for servicing, turn control knob to OFF, turn the gas shut off valve to OFF. DO NOT FORCE IT. If the unit is going to be serviced, turn off the electrical power to the unit as well.

**NOTE:** When the unit is turned on for the first time, it should be turned to high, with the fan OFF, for the first four (4) hours. This will cure the paint, logs, gasket material, and other products used in the manufacturing process. It is advised that a door or window be opened as the unit will smoke, which can irritate some people. After the unit has gone through the first burn, turn the unit OFF, including the pilot, and let the unit completely cool. Then remove the door and clean the glass with a good gas fireplace glass cleaner, available at your local Enviro dealer. See MAINTENANCE AND SERVICE - CLEANING THE GLASS and MAINTENANCE AND SERVICE - GLASS DOOR REMOVAL.

**Alternate Burner Switch Location**



**Figure 6: E33 Control Panel.**

## BLOWER SPEED:

The blower will come on only when the fireplace is up to temperature (approximately 15 minutes). The fan controller knob can be found to the left of the door, behind the surround panel. Rotating the fan controller knob will change the speed of the fan. To turn the blower off, fully rotate the fan controller knob counter-clockwise.

# MAINTENANCE AND SERVICE

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**Warning:** Failure to position the parts in accordance with this manual, or failure to use only parts specifically approved with this appliance, may result in property damage or personal injury.

At least once a year, run through the following procedures to ensure the system is clean and working properly. Check the burner to see if all the ports are clear and clean. Check the pilot to make sure it is not blocked by anything. The pilot flame should be blue with little or no yellow on the tips.

The venting system must be periodically examined; it is recommended the examination is done by a qualified person.

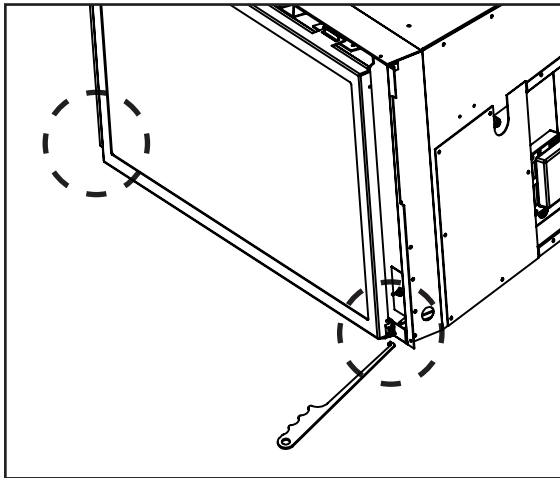
## **CLEANING THE PAINTED SURFACES:**

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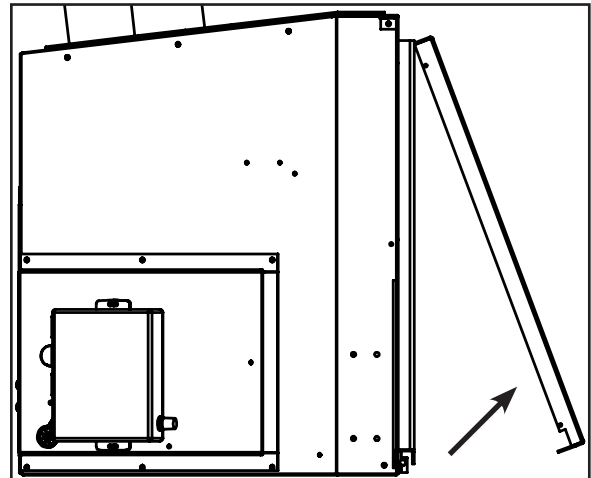
Painted surfaces should be periodically wiped with a damp cloth when the unit is cool.

## **GLASS DOOR REMOVAL:**

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**Figure 7: Door Release.**



**Figure 8: Door Removal.**

Remove the glass door by placing the hooked end of the door release tool in the hole on the door latch mechanism (see Figure 7) and pulling the latch out then up. When the two (2) latches have been released, tilt the bottom of the door forward and then lift up to unhook the top door tabs (see Figure 8.)

**Warning:** Do not touch or attempt to remove the glass if the fireplace is not completely cool.  
**Never operate the fireplace with the glass removed.**

CAUTION GLASS MAY SEPARATE FROM DOOR.

## **CLEANING THE GLASS:**

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**When the fireplace is cool,** remove the glass door as instructed above. Check the gasket material on the back of the glass, making sure that it is attached and intact.

During a cold start up, condensation will form on the glass. This is a normal condition with all fireplaces. However, this condensation can allow dust and lint to cling to the glass surface. Initial paint curing of the appliance can leave a slight film on the glass. The glass will need cleaning after the fireplace has cooled off from the first burn and about two weeks after first burn. **Use a mild glass cleaner and a soft cloth. Abrasive cleaners will damage the glass and painted surfaces.** Depending on the amount of use, the glass should require cleaning no more than two or three times a season. **Do not clean the glass when it is hot.**

# MAINTENANCE AND SERVICE

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## **CLEANING THE FIREBOX:**

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Remove the logs carefully, as they are very fragile. Gently remove all the embers and rock wool and place on a paper towel. Vacuum the bottom of the firebox thoroughly. Carefully clean any dust off the logs and remove any lint from the burner and pilot. At this time, inspect the burner tube for cracking or severe warping. If a problem is suspected, contact the dealer. Check the logs for deterioration or large amounts of soot; a small amount on the logs is normal. Replace the logs and embers as in the SECONDARY INSTALLATION - LOG SET AND EMBER INSTALLATION section. If new/more embers and rock wool are required, contact your nearest ENVIRO dealer.

## **REPLACING THE GLASS:**

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The glass in the fireplace is a high temperature ceramic. If the glass is damaged in any way, a factory replacement is required (see PARTS LIST). Wear gloves when handling damaged glass door assembly to prevent personal injury. Do not operate with the glass front removed, cracked or broken. Removal and replacement of the glass from the door **must** be done by a licensed or qualified service person. **The glass must be purchased from an ENVIRO dealer. No substitute materials are allowed.** Remove the door (see page 11). The replacement glass will come with a new gasket installed. Remove any silicone remnants from the door. Apply high temperature silicone to the two vertical faces of the door and install the new piece of glass with gasket (be sure to maintain edge clearances). Apply even pressure to the glass to allow the silicone to adhere to the gasket material.

## **CHECK PILOT AND BURNER FLAMES:**

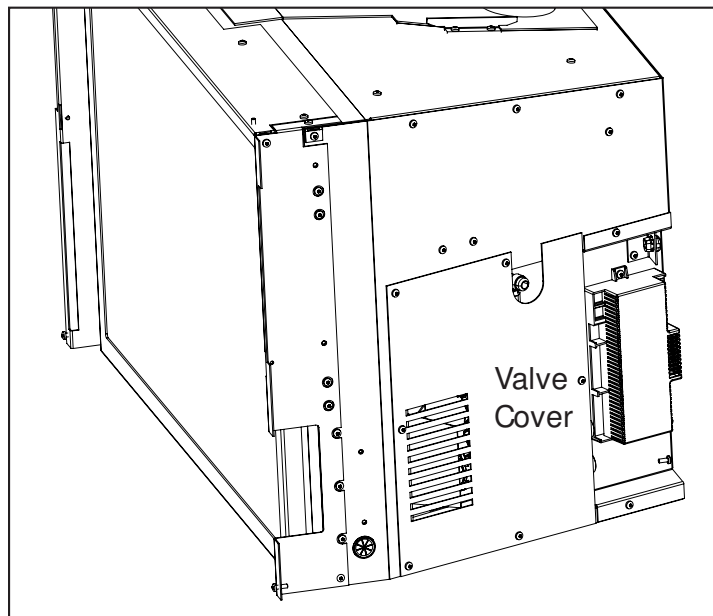
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Periodically do a visual check of the pilot flames. The outside flames should encompass the the thermocouple and thermopile (see figure 4) and the middle should burn over the burner ports. Also check that the burner is operating correctly, refer to Venturi Adjustment section.

## **REMOVING VALVE COVER:**

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The valve cover is located on the right side of the cabinet (figure 9) and it can be removed to access the gas valve. Use a Torx T-20 screwdriver to remove the 6 retaining screws.



**Figure 9: Valve Cover Location**

# FUEL CONVERSION

**TO BE INSTALLED BY A QUALIFIED SERVICE AGENCY ONLY**

**Please read and understand these instructions before installing.**

**WARNING: 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 or complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with the kit.**

## **Kit Parts List for all E33 Nova log models:**

- |  |   |
|--|---|
| 1 - Orifice (NG - #36 DMS or LP #52 DMS) | 1 - Pilot Orifice (LP supplied with unit) |
| 1 - Conversion label                     | 1 - Installation instruction sheet        |

Carefully inspect the orifice supplied with this conversion kit. If it has been damaged or is missing, contact your dealer, distributor or courier company to have it replaced before starting this installation.

**NOTE:** The unit is shipped from the factory adjusted for use with NATURAL gas.

## **Conversion Kit Installation:**

1. Turn control knob on the gas valve to the "OFF" position and shut the gas supply off at the shut-off valve upstream of the unit. **CAUTION:** The gas supply must be shut off prior to disconnecting the electrical power and before proceeding with the conversion. Allow the valve and unit to cool down to room temperature.
2. Remove the glass as shown in the MAINTENANCE AND SERVICE - GLASS DOOR REMOVAL.
3. Carefully remove the log set and ember material if they are installed.
4. Remove the burner as shown in the SECONDARY INSTALLATION - FIREBOX LINER & BURNER TUBE REMOVAL.
5. Convert the burner orifice(s):
  - a) Remove the main burner orifice with a 1/2" deep socket.
  - b) Put a bead of pipe-thread sealant on the orifice threads before installing.
  - c) Install the new orifice(s) from the kit into the orifice mount.
6. Convert the pilot orifice:
  - a) Using a  $7/16$ " wrench, loosen the pilot head counter clockwise and remove
  - b) Remove the existing orifice and replace with the one supplied in the kit (Figure 10)
  - c) Re-install the pilot head and tighten until it is back in the proper position (Figure 11)
7. Convert the Nova gas valve:
  - a) Remove Valve Cover.
  - b) Remove Hi/Lo valve knob extensions by pulling on them. They are pressed onto the gas valve knob.
  - c) Remove the black protection cap from the HI/LO knob by hand (Figure 12)
  - d) Insert a  $5/32$ " or 4 mm Allen wrench into the hexagonal key-way of the screw (Figure 13), rotate it counter-clockwise until it is free and extract it.
  - e) Flip the screw (Figure 14).
  - f) Using the Allen wrench (Figure 13), rotate the screw clockwise.



**Figure 10 Pilot Orifice**

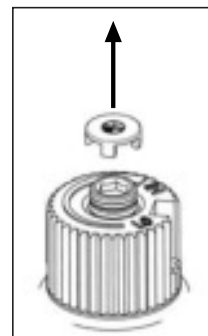


**Figure 11 Proper Pilot Position**

**WARNING!** Do not over tighten the screw.

# FUEL CONVERSION

- g) Verify that if the conversion is from NG to LPG, the screw must be re-assembled with the red o-ring visible (Figure 15). If the conversion is from LPG to NG, the red o-ring of the screw must not be visible.
  - h) Re-attach the black protection cap that was removed in step "c)". (Figure 12).
  - i) Reinstall the knob extensions. They are keyed into the notch on the knob.
  - j) Reinstall the Valve Cover plate.
8. Reinstall the burner, brick panels, log set, embers, and glass door. Also refer to SECONDARY INSTALLATION - INSTALLING LOG SET AND EMBERS in your Owner's Manual. When re-installing the burner, ensure that
9. Reconnect the main gas line if it was disconnected and open the shut-off valve at the gas line to the unit.
10. Use a small brush to apply a warm soapy water solution to all gas connections (use half dish soap and half warm water). If a gas leak is present, bubbling will occur. Gas leaks can be repaired by using an approved pipe thread sealant or approved Teflon tape. NEVER USE AN OPEN FLAME WHEN TESTING FOR LEAKS.



**Figure 12: Removing valve cap.**

11. Reconnect the electrical power to the unit.
12. Relight the pilot and confirm the flame properly covers both the thermocouple and thermopile (see Figure 4, page 9). Should the pilot require adjustment, turn the adjustment screw (page 24) clockwise to decrease or counterclockwise to increase until the correct flame is achieved.

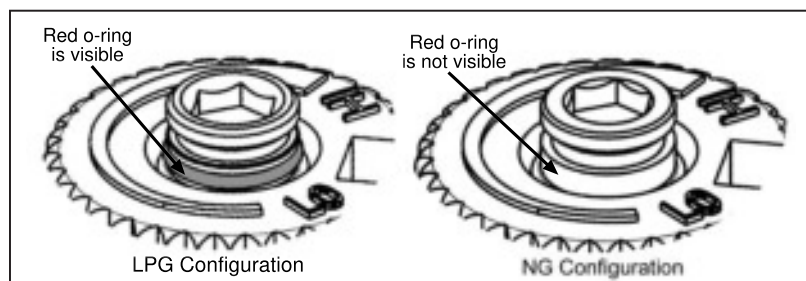
13. Relight the main burner in both the "HI" and "LO" positions to verify proper burner ignition, operation and proper flame appearance. Confirm the inlet and manifold pressures are within the acceptable ranges as directed in section INITIAL INSTALLATION - GAS LINE CONNECTION AND TESTING. If the E33 has been installed at an altitude higher than 2000ft (610m) it is required to de-rate the unit accordingly:

**In the USA:** The appliance may be installed at higher altitudes. Please refer to your American Gas Association guidelines which state: the sea level rated input of Gas Designed Appliances installed at elevations above 2000 (610 m) feet is to be reduced 4% for each 1000 feet

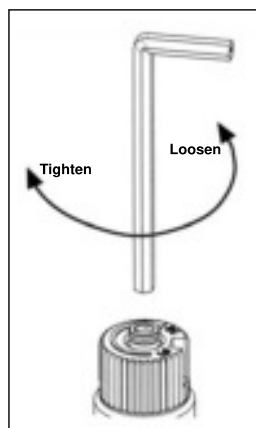
(305 m) above sea level. Refer also to local authorities or codes which have jurisdiction in your area regarding the de-rate guidelines.

**In Canada:** When the appliance is installed at elevations above 4500 feet (1372 m), the certified high altitude rating shall be reduced at the rate of 4% for each additional 1000 feet (305 m).

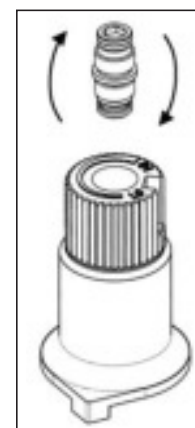
14. MAKE SURE that the conversion label is installed on or close to the rating label to signify that the unit has been converted to a different fuel type.



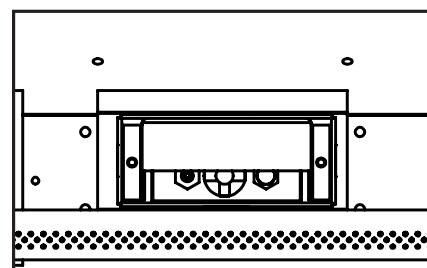
**Figure 15: O-ring on valve screw.**



**Figure 13: Removing valve screw.**



**Figure 14: Flip valve screw.**



**Figure 16: Ignitor assembly beside the burner.**



# INITIAL INSTALLATION

**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.

## CLEARANCES TO COMBUSTIBLES:

Maintain sufficient clearances for operation, service and maintenance.

- A minimum distance of 24" (610 mm) is required from the centerline of the unit to the sidewalls.
- Minimum clearance for any combustible facing is 30" (762 mm) from the bottom of the unit.
- A 12" (305 mm) wide mantel can be mounted at a minimum height of 36" (914 mm) from the bottom of unit.
- If installed at floor level there must be a minimum of 16" (406 mm) of non-combustible material in front of the unit. Once unit is rased 2" or more no floor protection is required.
- Unit can be installed with combustible material underneath, as long as it is raised 4" off the floor.
- Minimum ceiling clearance is 60" from bottom of unit.

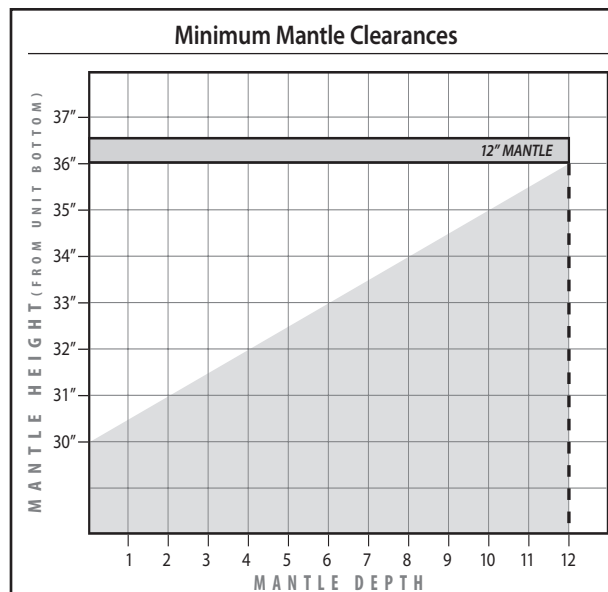


Figure 17: Mantle width and height.

## MINIMUM FIREPLACE SIZE:

Table 4: Minimum dimensions of fireplace for E33 to be installed into.

	Width At Front	Width At Back	Height	Depth
Fireplace Dimensions	32" (813 mm)	20" (508 mm)	20" (508 mm)	17 1/2" (445 mm)

NOTE: Space must be provided for gas line on right side of unit for servicing purposes. The E33 can only be installed into masonry or zero-clearance fireplaces.

## NON-COMBUSTIBLE BUILD OUT:

The E33 may be installed and vented into any solid fuel fireplace that has been installed in accordance with the National, Provincial/State and local building codes and has been constructed of noncombustible materials. Before starting, refer to please reference the information in Table 5 and Figures 19 and 20. Additionally should extra installation depth be required, a build out may be constructed in front of the fireplace comprised completely of non-combustible framing and finishing material (Figure 18). The construction of the build out must be sealed and the opening dimensions must follow the minimum height and front width (see Table 4) to prevent any direct heat transfer from the fireplace into the build out. The flex venting is permitted to have smooth sweeping, slight angle bends but must not be kinked in any way.



# INITIAL INSTALLATION

## QUALIFIED INSTALLERS ONLY

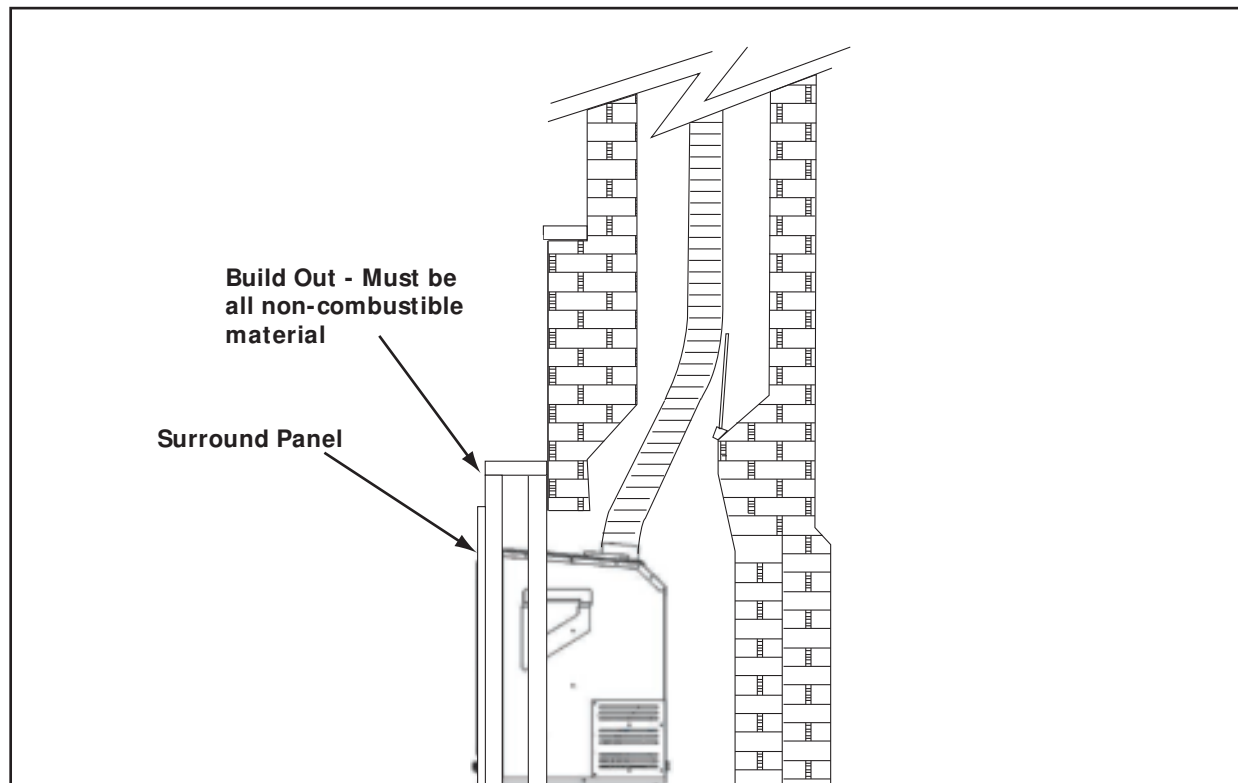


Figure 18: Installation with a non-combustible build out.

### VENTING:

**WARNING: This appliance has been designed to draw room air for proper heat circulation from the sides and bottom of the unit, and out the top front. Blocking or modifying these openings in any way can create hazardous situations.**

The vent length for the fireplace must be between 8ft (2.44 m) and 30ft (9.14 m).

This model is vented with a 3" intake and a 3" exhaust aluminum or stainless steel flex vent leading into a vertical termination cap. The flue collars of this model will fit inside of a standard 3" vent and must be fastened directly to the vent with three screws.. The exhaust vent and air intake are both located on the top of the unit.

Check periodically that the vents are unrestricted. Also ensure that all direct vent pipes have been properly sealed and installed after routine inspection or cleaning. The air intake and exhaust pipes must be installed in the correct locations on the top of the fireplace.

# INITIAL INSTALLATION

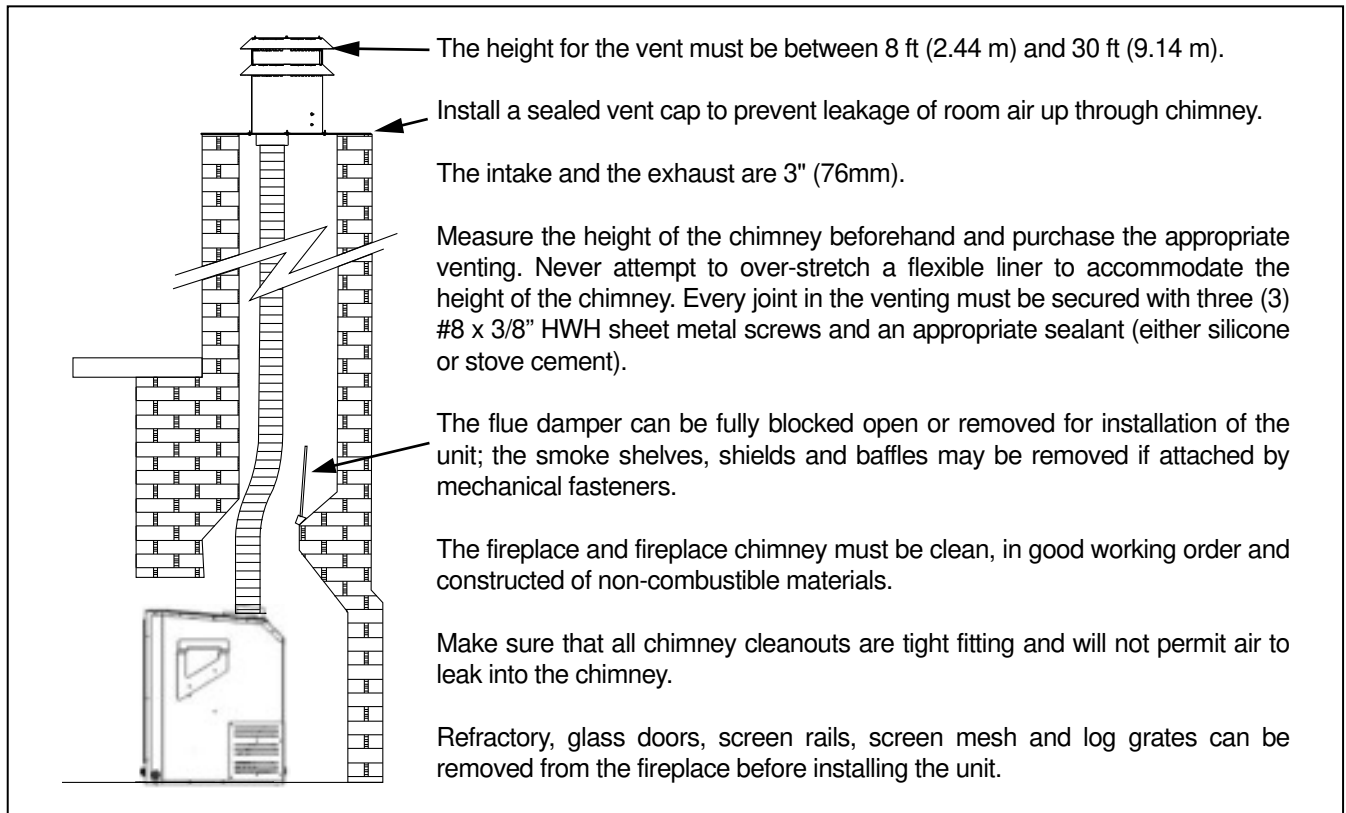
## QUALIFIED INSTALLERS ONLY

The **ENVIRO E33** may be installed and vented into any solid fuel fireplace that has been installed in accordance with the National, Provincial/State and local building codes and has been constructed of non-combustible materials. Before starting, refer to please reference the information in Table 5 and Figures 19 & 20.

An approved chimney liner and rain cap must be used. A throat connector or flashing **must** be installed to ensure a tight seal, top performance, safety and efficiency. Carefully follow the manufacturer's instructions that accompany the chimney liner kit. Use double walled aluminum flex vent from either M&G DuraVent DirectVent Pro or ICC Excel Direct (see table 6). If necessary, remove the vent collar plate from the top of the insert and connect it securely to the liner with sheet metal screws.

Check for any tears in the liner at this point. **IMPORTANT:** The screws that hold the vent collar plate in its approved position must be installed.

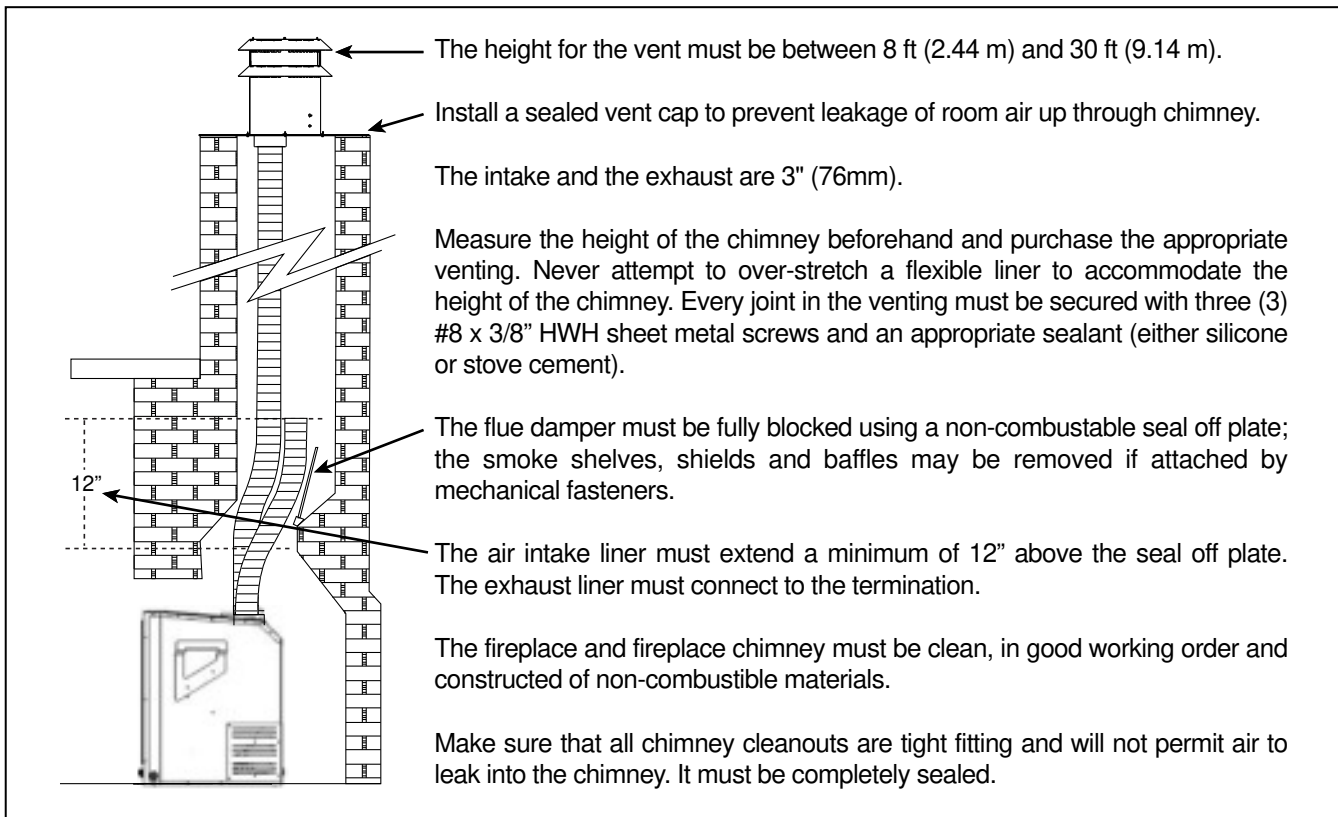
**NOTE:** If the E33 unit is pulled out of its installation, and the vent air intake system is disconnected for any reason, ensure that the vent-air intake pipes are re-sealed with high-temperature sealant and reconnected with three (3) sheet metal screws evenly spaced.



**Figure 19: Installation of E33**

# INITIAL INSTALLATION

## QUALIFIED INSTALLERS ONLY



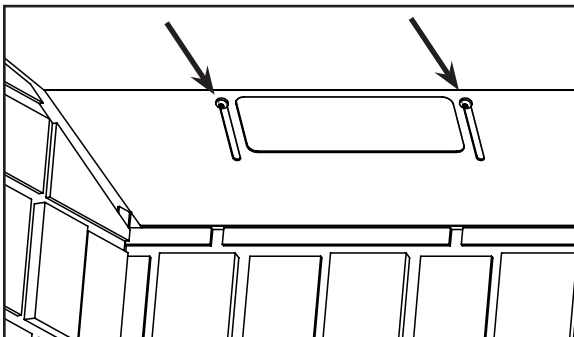
*\*This installation is not tested and is not covered by the certification of this appliance. Please contact authorities having jurisdiction in your area for restrictions\**

**Figure 20: Alternate Installation of E33**

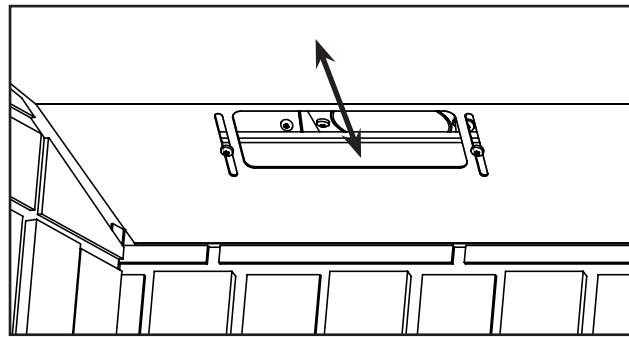
### BAFFLE PLATE ADJUSTMENT:

This appliance comes equipped with an adjustable baffle plate that must remain closed when installation utilizes the minimum permissible length of vent (8' / 2.44m). For venting lengths between 20'-30' (6.1 m-9.1 m) it may be necessary to adjust the baffle plate, depending on installation and climate, to prevent flames from lifting/ghosting during start-up.

To adjust the baffle plate remove the door as shown in the MAINTENANCE AND SERVICE - GLASS DOOR REMOVAL. Then, using a Torx T20 screwdriver, slightly loosen (DO NOT remove) the two baffle screws indicated below in figure 21. Slide the the plate down to open the baffle as needed (figure 22) then re-tighten the screws to set the plate position. If flames continue to lift re-adjust the plate and confirm venting, venturi setting, and log setup are all correct.



**Figure 21: Baffle plate screws**



**Figure 22: Baffle plate adjustment**

# INITIAL INSTALLATION

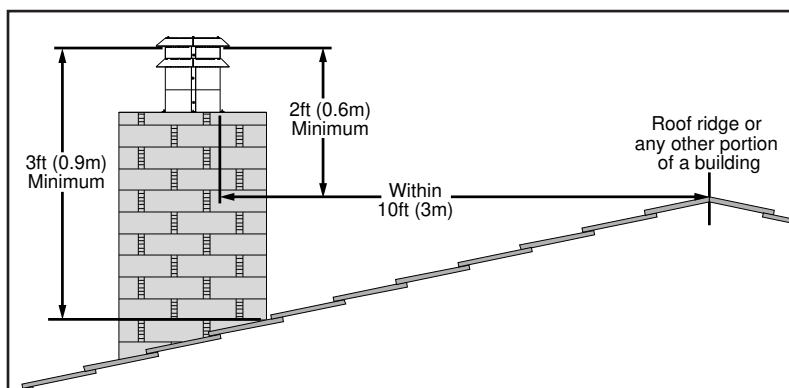
## QUALIFIED INSTALLERS ONLY

### INSTALLING THE UNIT:

- Remove the packaging from the appliance and check to make sure there is no damage. Carefully check the glass door. Do not use the unit if it is damaged. In the event damage is found, please report it to your dealer as soon as possible.
- Carefully clean the fireplace and flue before installing the stove. Failure to do so may result in fumes or soot being blown into the room and may cause a fire leading to death or serious injury.

### INSTALLATION INSTRUCTIONS:

1. Plan your installation and clearances to combustibles. The E33 may be installed and vented into any solid fuel fireplace that has been installed in accordance with the National, Provincial/State and local building codes and has been constructed of non-combustible materials. Also refer to the Also refer CLEARANCES TO COMBUSTIBLES section.
2. Remove door. See MAINTENANCE AND SERVICE - GLASS DOOR REMOVAL.



**Figure 23: Roof Clearances.**

3. Remove wrapping material from log and embers and check for any damage. If damage is observed, do not use unit and contact your local dealer.
4. Check that the chimney clean outs fit properly. The flue damper must be fully blocked open or removed for installation of the E33; the smoke shelves, shields and baffles may be removed if attached by mechanical fasteners.

**Table 5: Vent termination clearances**

Minimum Clearance*	Description
3 ft (0.9 m)	Clearance above the highest point where it passes through a roof surface, refer to Figure 20.
24 in (0.6 m)	Clearance above a roof ridge, any other portion of a building, or any other obstruction within a horizontal distance of 10 feet (3 m), refer to Figure 20.
5 ft (1.5 m)	Clearance for a vent or chimney above either the highest connected appliance drafthood outlet, or flue collar.
6 ft (1.83 m)	Clearance to mechanical air supply inlet.
3ft (0.9m)	Clearance to each side of center line extended above meter/regulator assembly.
6 ft (1.83 m)	Radial clearance around service regulator vent outlet.
12 in (30 cm)	Clearance above grade, verandah, porch, deck, or balcony.
3 ft (0.9 m)	Clearance to a building opening or combustion air inlet of another appliance, except with the approval of the authority having jurisdiction for the following reduced clearances.
9 in (0.23 m)	Exception for inputs up to and including 50,000 Btu/h (15kW)
12 in (0.3 m)	Exception for inputs exceeding 50,000 Btu/h (15kW) but not exceeding 100,000 Btu/h (30kW)

\* Clearances are in accordance with local installation codes and the requirements of the gas supplier

# INITIAL INSTALLATION

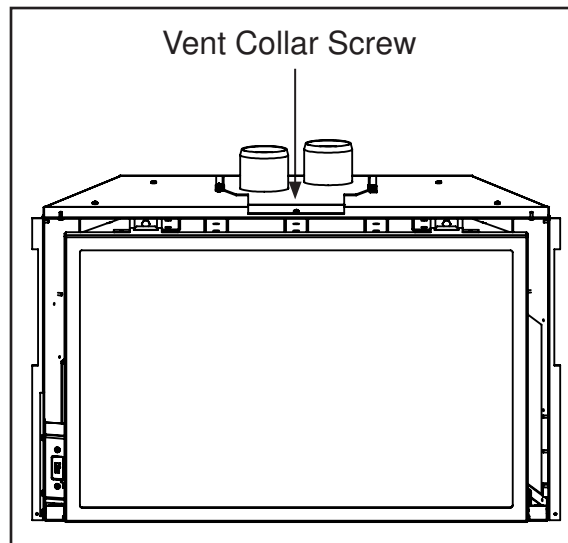
## QUALIFIED INSTALLERS ONLY

5. Stretch the Ø3" (76mm) flex vent liners to the length needed to ensure they can be easily connected to the vent terminals.
6. Install the flex pipe assembly up through the chimney, ensure that the pipe slides through far enough to connect onto the vent cap. Refer to table 6 to confirm the vent cap is approved for use.
7. Most vent caps can be installed onto chimneys with flue openings up to 16" (406mm) x 16" (406mm) when the actual flashing is 16" x 16" or larger. If the chimney is smaller, the flashing should be trimmed down and folded over.
8. Apply a bead of stove cement sealant to the Ø3" (76mm) pipe of the exhaust vent terminal. Slide the flex liner onto the vent terminal and secure with three (3) sheet metal screws evenly spaced.
9. Place a bead of high temperature silicone on the intake collar of the vent terminal. Slide the Ø3" (76mm) flex intake liner over the collar, secure the flex liner with three (3) sheet metal screws evenly spaced. Secure the vent terminal to the chimney using adequate sealant, and according to local building codes.
10. If the fireplace opening is lower than 24" (610 mm), remove the vent collar plate from the top of the insert by unscrewing the 5/15" screw located on the center top of the stove above the door opening (see Figure 24). Slide the collar plate backwards. Properly secure the vent collar plate to the flexible vent pipe liner(s) previously installed in the chimney. Be careful not to over-stretch the liner(s).
11. Apply a bead of stove cement sealant to the top section of the Ø3" (76mm) exhaust vent collar plate. Slide the Ø3" (76mm) flex vent over the flue collar and secure with three (3) sheet metal screws evenly spaced.
12. Place a bead of high temperature silicone on the intake collar of the fireplace, slide the Ø3" (76mm) flex intake liner over the collar, secure the flex liner with three (3) sheet metal screws evenly spaced.
13. Place the unit part way into the fireplace. Connect the gas line to the 3/8" NPT fitting on the right side of the unit using locally approved methods (see INITIAL INSTALLATION - GAS LINE CONNECTION). Route the power cord so it can be connected to the power supply.

	ICC EXCELDirect	M&G DirectVent Pro
Vertical Termination	TM-SVT*	46DVA-VCH*
	TM-IVT	
High-Wind Shield	TM-SVTS	46DVA-VWG
Flashing	TF-MFR	46DVA-GK
Co-Linear Adapter	TM-CTA	

\* Requires co-linear adapter

**Table 6: Approved Terminations & other parts**



**Figure 24: Vent Collar Plate Screw Location.**

# INITIAL INSTALLATION

## QUALIFIED INSTALLERS ONLY

14. As you push the unit into its final position in the fireplace, if the vent collar plate was removed, reinstall it on the stove by pulling it into the brackets on top and reinstall the 5/16" screw.
15. Adjust the levelling legs to ensure the unit is level and high enough if a base shelf and/or riser is to be installed. There are four levelling legs on the bottom of the unit (shown in Figure 25).

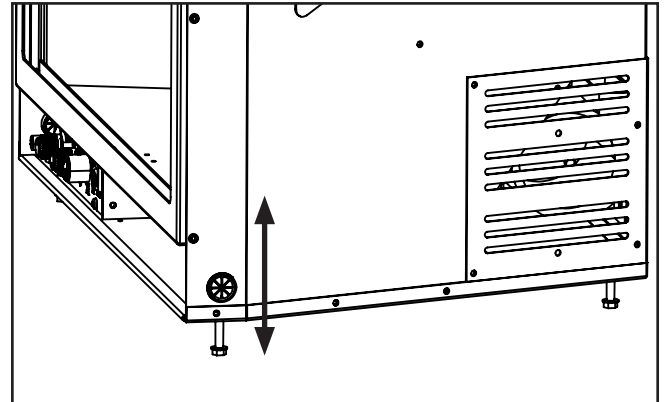


Figure 25: Levelling legs position.

### **ZERO CLEARANCE (ZC) FIREPLACE INSTALLATION:**

The metal floor of the ZC solid fuel firebox can be removed to allow the installation of the insert. THE CLEARANCE TO COMBUSTIBLE MATERIAL UNDER THE INSERT IS 4" (102 mm). YOU MUST USE THE LEVELING LEGS TO RAISE THE INSERT A MINIMUM OF 4" (102 mm) IF THE UNIT IS TO BE INSTALLED ON COMBUSTIBLE MATERIAL. IF THE ZERO CLEARANCE FIREPLACE IS INSTALLED DIRECTLY ONTO A CONCRETE FLOOR THE MINIMUM CLEARANCE IS NOT APPLICABLE. The optional Base Shelf and Riser are recommended to fill the space under the unit once raised. The sidewalls and top structure of the solid fuel firebox cannot be altered with the exception of: removal of dampers, removal of smoke shelf or baffle, removal of ember catches, removal of log grate, removal of viewing screen/curtain, and removal of doors. THE ORIGINAL FIREPLACE MAY NEVER BE RETURNED TO SOLID FUEL USE IN THIS CONDITION.

**IMPORTANT:** If the factory-built fireplace has no gas access hole(s) provided, an access hole of 1.5 inch (37.5 mm) or less may be drilled through the lower sides or bottom of the firebox in a proper workmanship like manner. This access hole must be plugged with non-combustible insulation after the gas supply line has been installed. Cutting any sheet-metal parts of the fireplace, in which the gas fireplace insert is to be installed, except as tested for the floor is prohibited.

The included label plate shown below must be permanently attached inside the cavity of the fireplace in a visible location.

**WARNING: This fireplace has been converted for the use with a gas fireplace insert only and cannot be used for burning wood or solid fuels unless all original parts have been replaced, and the fireplace re-approved by the authority having jurisdiction.**

C-11168

Figure 26: Fireplace Altered Plate.

# INITIAL INSTALLATION

## QUALIFIED INSTALLERS ONLY

### ELECTRICAL REQUIREMENTS:

The fan will not operate if the appliance is cold. Once the unit is lit and the fan is set to the desired level, the fan will automatically turn on upon reaching operating temperature. The fan will automatically turn off after the appliance has cooled down.

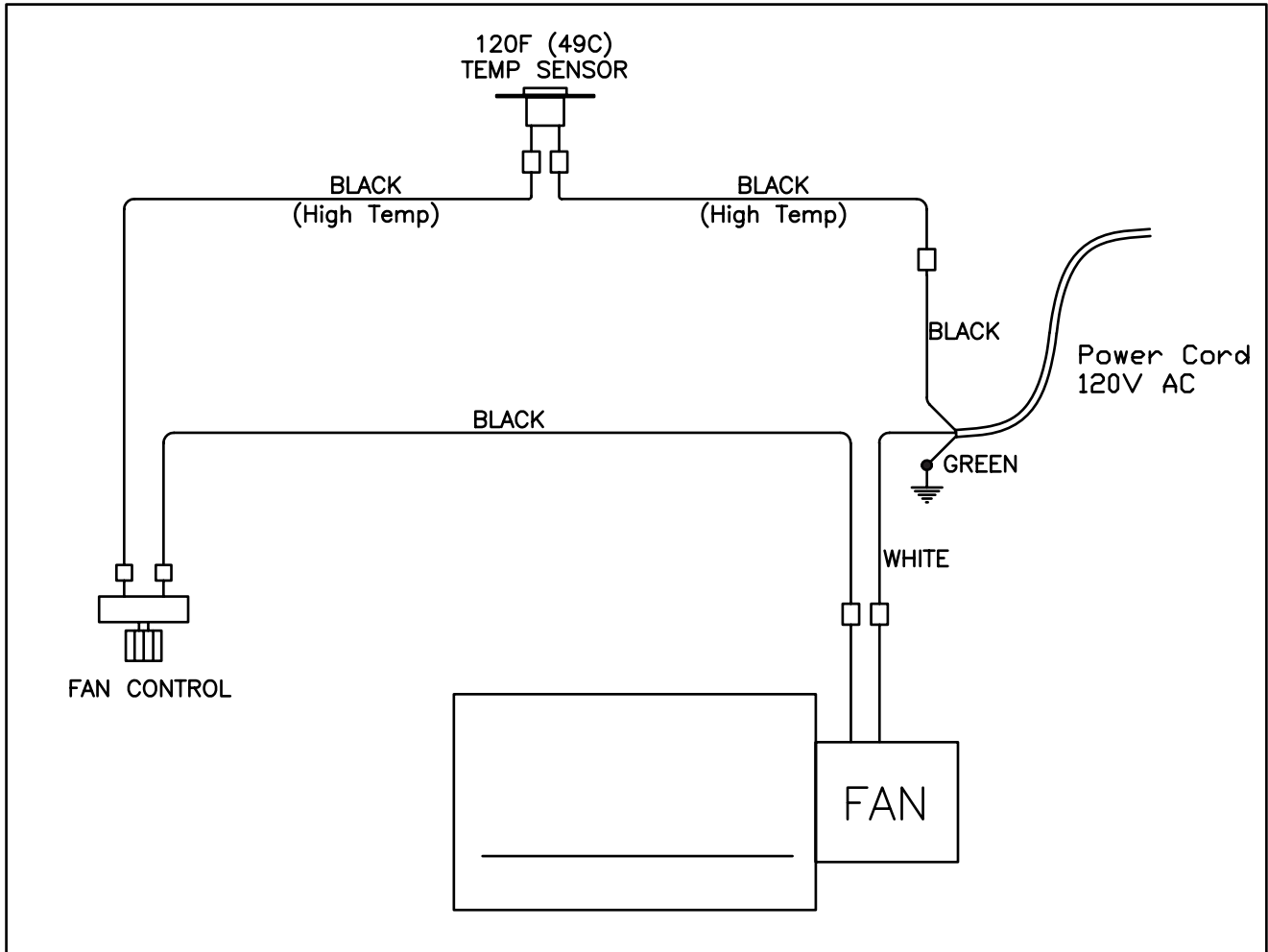


Figure 27: Fan wiring diagram.

The fireplace must be electrically connected and grounded in accordance with local codes or, in the absence of local codes, with the current CSA C22.1 Canadian Electrical Code Part 1, Safety Standards For Electrical Installations, or The National Electrical Code ANSI / NFPA 70 in the US.

**WARNING:** The electrical grounding instructions must be followed. The fan kit is equipped with a three-prong (grounding) plug for your protection against shock hazard, and should be plugged directly into a properly grounded three-prong outlet. DO NOT cut or remove the grounding prong from this plug.

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

If any of the original wire as supplied with the appliance must be replaced, it must be replaced with 18 AWG wire with a temperature rating of 105°C



# INITIAL INSTALLATION

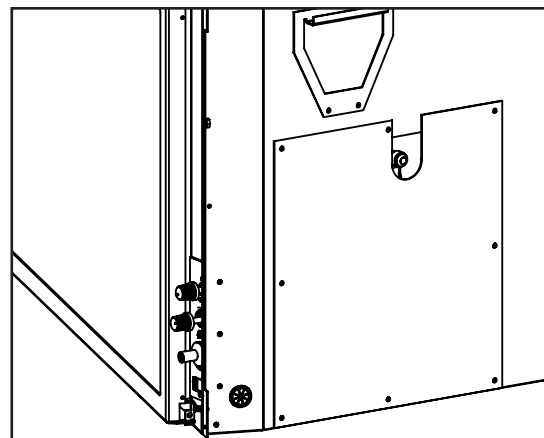
## QUALIFIED INSTALLERS ONLY

### GAS LINE CONNECTION:

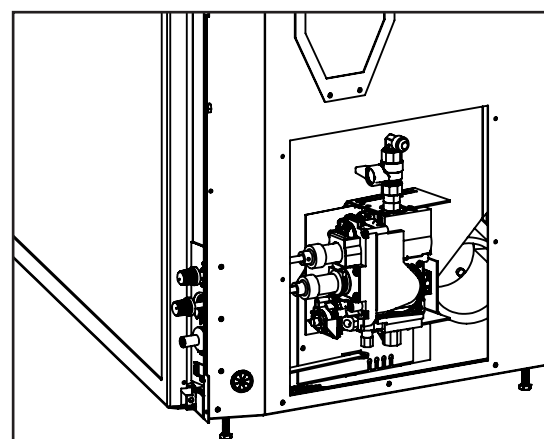
**WARNING:** Only persons licensed to work with gas piping may make the necessary gas connections to this appliance.

#### Gas Line Connection:

- A  $\frac{3}{8}$ " NPT male pipe nipple (supplied with the unit) will have to be turned into the valve at the lower left side rear of this fireplace (see Figures 28 and 29). Consult the local authorities for local codes or use the CAN/CGA B149 (1 or 2) installation code in Canada. In the US, gas installations follow either local codes or the current edition of the National Fuel Gas Code ANSI Z223.1.
- If the factory-built fireplace has no gas access hole(s) provided, an access hole of 1.5 in (37.5mm) or less may be drilled through the lower sides or bottom of the firebox in a proper workmanship like manner. This access hole must be plugged with non-combustible insulation after the gas supply line has been installed.
- A shut-off valve is supplied with this unit.
- The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess  $\frac{1}{2}$  psi (3.5 kPa). The appliance must be isolated from the gas supply piping system by closing its equipment shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than  $\frac{1}{2}$  psi (3.5 kPa).



**Figure 28:  $\frac{3}{8}$ " NPT Male Pipe Nipple with Cover Attached.**



**Figure 29:  $\frac{3}{8}$ " NPT Male Pipe Nipple with Cover Removed.**

**Table 7: Orifice and Pressure Information.  
E33 With Log Set**

Main Burner	Natural Gas	Propane Gas
Orifice:	#36 DMS	#52 DMS
Max. Manifold Press:	3.8 W.C. (0.95 KPa)	11.0 W.C. (2.74 KPa)
Min. Manifold Press:	1.2 W.C. (0.30 KPa)	2.7 W.C. (0.67 KPa)
Max. Supply Press:	10.5 W.C. (2.62 KPa)	13.0 W.C. (3.24 KPa)
Min. Supply Press:	5.0 W.C. (1.24 KPa)	11.0 W.C. (2.74 KPa)
Max. Input:	34,000 BTU/hr (9.96 KW)	31,000 BTU/hr (9.09 KW)
Min. Input:	17,000 BTU/hr (4.98 KW)	23,000 BTU/hr (6.74 KW)

# INITIAL INSTALLATION

## QUALIFIED INSTALLERS ONLY

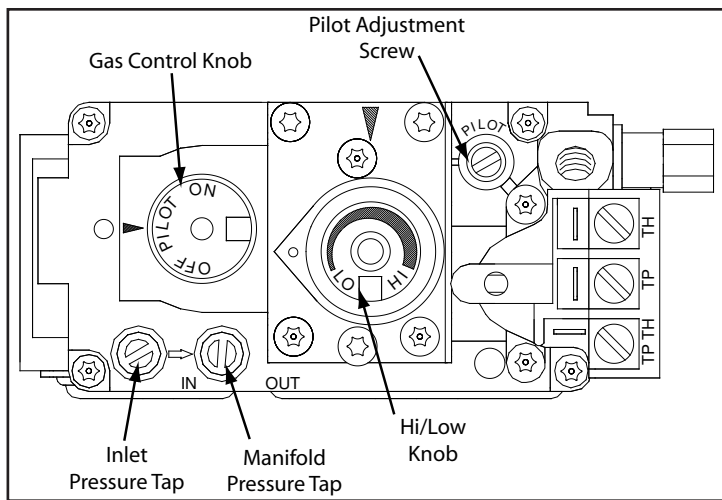
### TO TEST VALVE PRESSURES (INPUT RATES):

The pressure taps are located on the front side of the valve (see Figure 30).

1. Remove valve control knobs, then remove control panel.
2. Using a long flat bladed screwdriver, turn set screw one (1) turn counter-clockwise to loosen.
3. Place  $\frac{5}{16}$  in (8 mm) I.D. hose over the pressure taps.
4. Check pressures using a manometer.
5. When finished, remove hose and tighten set screw.
6. Re-install the control panel and knobs. Pointer on knobs can be removed and oriented correctly to point at the right location.

**Always check for gas leaks with a soap and water solution after completing the required pressure test.**

**NEVER USE AN OPEN FLAME FOR LEAK TESTING.**

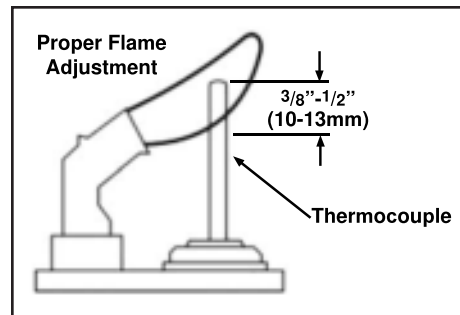


**Figure 30: Valve Details.**

### ADJUSTING THE PILOT FLAME:

The pilot flow adjustment is set to maximum at the factory and should not need to be adjusted. The pilot flame should envelope  $\frac{3}{8}$ " to  $\frac{1}{2}$ " (10 to 13mm) of the thermocouple (see Figure 31). However, should the need arise, follow Steps 1- 2 below.

1. The adjustment screw can be reached through the front of the unit using a 10 inch flat head screw driver (see Figure 30 for location on valve).
2. Turn the adjustment screw clockwise to decrease or counterclockwise to increase pilot flame.

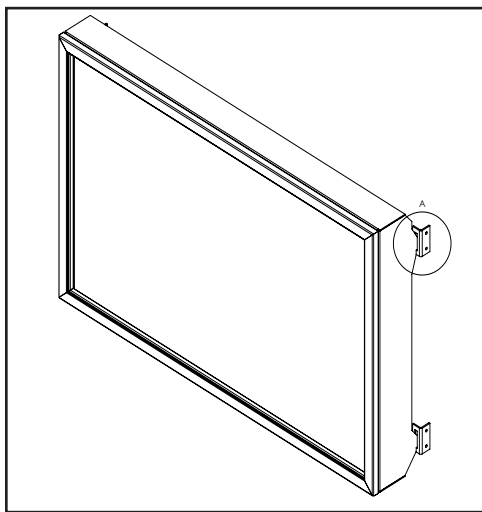


**Figure 31: Proper Pilot Flame.**

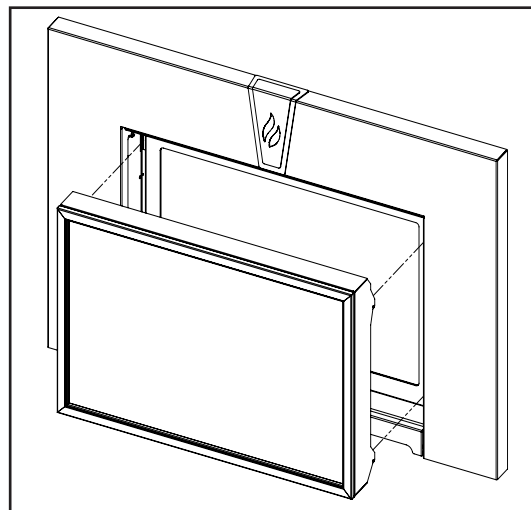
# SECONDARY INSTALLATION

## SAFETY SCREEN INSTALLATION / REMOVAL:

To install the safety screen hold it upright in front of the fireplace with four (4) hooks pointing towards the fireplace. Slide the hooks into the corresponding brackets on each side of the cabinet (see figures 32 and 33). Ensure the hooks are secure to confirm correct installation. To remove the safety screen unhook it from the brackets by lifting up and out.



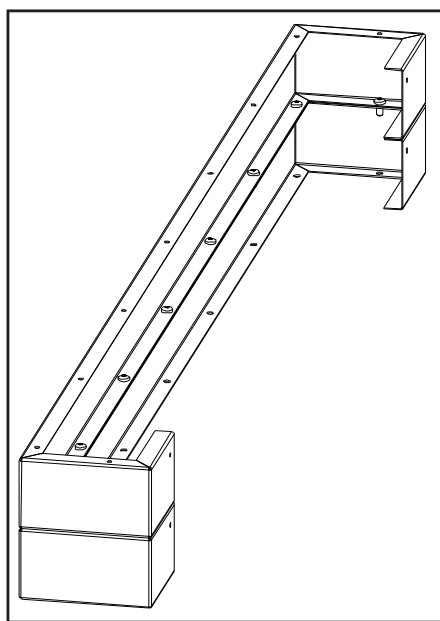
**Figure 32: Installing Safety Screen onto Cabinet Bracket (Parts removed for clarity)**



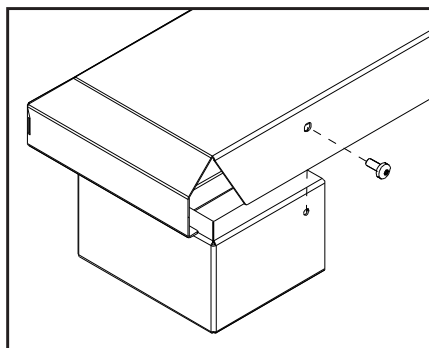
**Figure 33: Installing Safety Screen onto Cabinet Brackets**

## OPTIONAL BASE SHELF & RISER:

The E33 Base Shelf (1 $\frac{5}{8}$ " (41 mm) high) and Base Shelf Riser (2 $\frac{1}{8}$ " (54 mm) high) are components that can be combined to create a riser with an overall height of 2 $\frac{3}{16}$ " (55 mm). This shelf can be installed with or without the riser and can be used when the hearth in front of the unit is lower than the fireplace opening. Additional Base Shelf Risers can be fastened together to increase the height in increments of 2 $\frac{1}{8}$ " (54 mm). This Base Shelf may be used in conjunction with the any of the E33 surround panel options, and it may also be used with the E33 Trimmable Surround. The Base Shelf and Riser are sold separately.



**Figure 34: Combining 2 Base Shelf Riser.**



**Figure 35: Installing Base Shelf onto Riser.**

(see Figure 35).

### Installation:

1. If unit is running, turn it off and allow it to cool completely.
2. When using more than one riser each level must be attached using nine (9) #8 T-20 screws provided (see Figure 34).
3. If installing with riser(s) the Base Shelf is to be fastened to the riser(s) with one T-20 screw at each end of the back
4. The leveling legs on the E33 may need to be adjusted to match the height of the riser and shelf.
5. Center the Base Shelf assembly in front of the unit flush with the bottom of the unit.
6. Install surround if required.

# SECONDARY INSTALLATION

## SURROUND PANEL SCREW INSTALLATION:

**Trimmable Panel Install:** The trimmable panel is installed by sliding slots in the bottom of the panel into screws on the stove. Two screws must be installed at the bottom of the cabinet sides as shown.

**INSTALLATION:** Using a T20 screwdriver, screw one (1) #8-32 x .5" screws approximately 1/4" into the bottom of each Side Extension (see Figure 36).

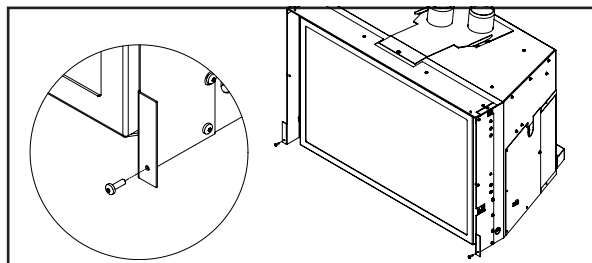


Figure 36: Trimmable Panel Screw Install.

## OPTIONAL TRIMMABLE PANELS:

### Modifying the Surround Panel:

The E33 Trimmable Surround Panels are large rectangular panels that may be cut for use in cases that a non-standard fireplace opening (e.g. an arched opening) is to be filled. Optionally this surround can be left uncut and placed in front of the fireplace opening.

1. Measure the fireplace opening and/or make a template of the fireplace opening.
2. Transfer the measurement to the Trimmable Surround.
3. If desired, offset the measurements by approximately  $\frac{1}{8}$ " (3mm) to the inside; this will allow for the panel to be placed just inside the fireplace opening for a cleaner appearance.
4. Cut along the preferred line (from direct measurements of offset) and remove any sharp edges.
5. The panel can be touched up with a high temperature metallic black paint available from your dealer.

### INSTALLATION:

1. Using the supplied hardware install a Trimmable Panel Bracket, on its short leg, onto each side of the stove using a T-20 Torx screwdriver. See Figure 37 for the screw location and bracket orientation.
2. Install the Trimmable Panel, **WITH THE FLANGES FACING OUT**, onto the Side Extensions and in front of the Panel Brackets by hooking the Panel's top flange onto the alignment pins on top of the Top Extension (See Figure 37).
3. Using the remaining hardware attach the Trimmable Panel to the Panel Brackets using a T-20 Torx screwdriver (See Figure 38).

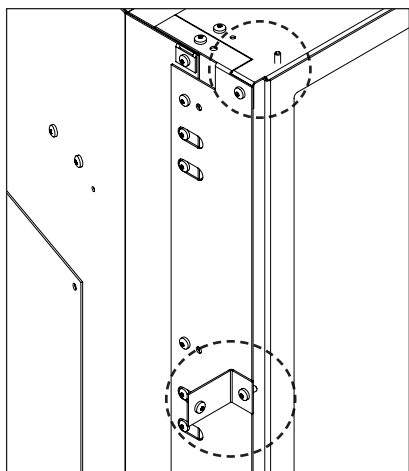


Figure 37: Panel Bracket Installed and Pin Location

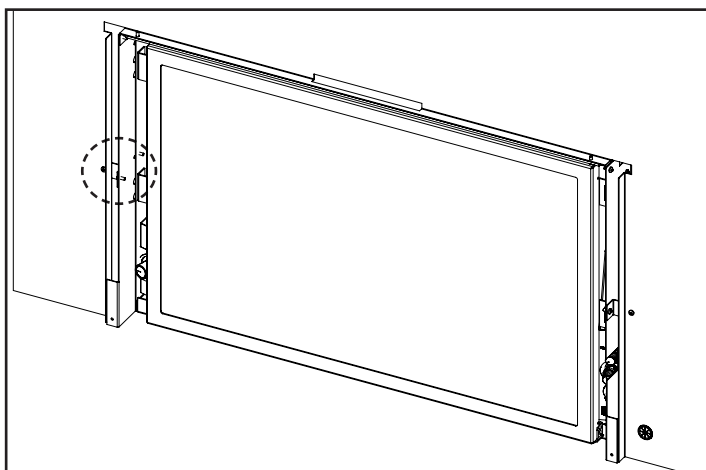


Figure 38: Trimmable Panel Installed

# SECONDARY INSTALLATION

## SURROUND PANEL INSTALLATION:

**WARNING:** The surround becomes hot when the unit is operating; ensure that the unit is turned off, and that it has cooled to room temperature before beginning this installation.

	Height	Width
3-Sided Surround	26 1/2" (673 mm)	44 1/8" (1121 mm)

Table 8: Surround Dimensions.

Please check components supplied with this kit. If components are missing or have been damaged, contact your dealer, distributor or courier company before starting this installation.

**IMPORTANT:** The panel must not seal ventilation openings in the fireplace.

## INSTALLATION:

If Installing a Contemporary or Extruded surround panel lift the access door up until it locks in place. Lift the panel upright in front of the fireplace with the top mounting flange pointing towards the fireplace. Slide the panel over the corresponding screws on top of the Top Extension and at the bottom of the Side Extension on each side (see Figure 39). Ensure the panel is secure before releasing it. The bottom screws can be tightened on the Contemporary and Extruded surrounds for a more permanent install.

## REMOVAL:

Lift the surround straight up in order to unhook it from the screws. Pull the surround away from the fireplace.

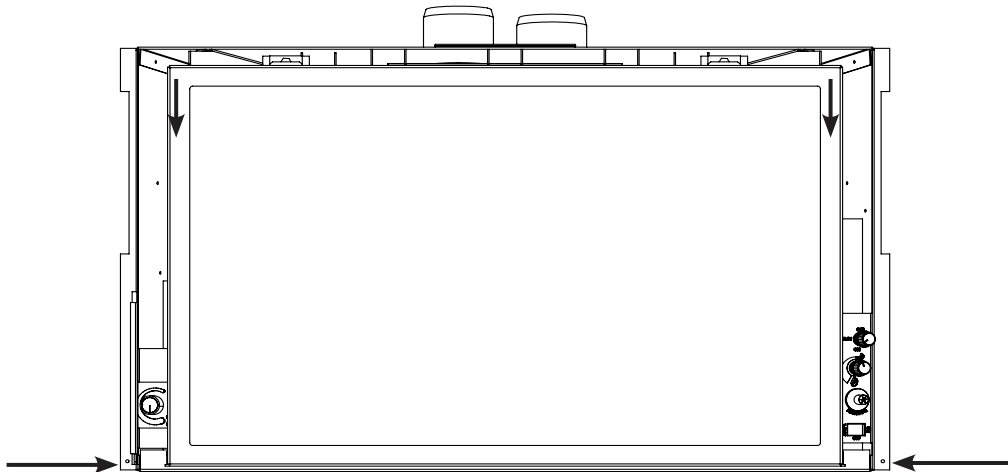


Figure 39: Screw Locations.

## BURNER SWITCH WIRING INSTALLATION:

The burner switch supplied with the surround comes pre-installed and wired. The wiring from the burner switch simply needs to be connected to the wiring on the E33 unit.

The wiring harness for the burner switch has one (1) blue wire, one (1) grey wire and two (2) purple wires.

The blue wire connects to the blue wire on the E33 unit, the grey wire connects to the grey wire on the E33 unit, and the purple wires are used to connect an optional thermostat.

## CLEANING:

**NEVER CLEAN FACES WHEN THEY ARE HOT. Turn off fireplace and allow to fully cool.**

Painted surfaces should be periodically wiped with a damp cloth. Plated surfaces must be free of fingerprints and smudges prior to installation and should be cleaned with a clean soft rag and a small amount of Isopropyl alcohol.

# SECONDARY INSTALLATION

## FIREBOX LINER AND BURNER TUBE REMOVAL:

**NOTE:** The firebox liners are fragile and should be handled gently.

1. Ensure the E33 is turned off and allow the unit to cool.

2. Remove the glass door as shown in the MAINTENANCE AND SERVICE - GLASS DOOR REMOVAL.

**WARNING:** Do not touch or attempt to remove the glass if the fireplace is not completely cool.

**Never operate the fireplace with the glass removed.**

3. Remove the log set and all ember material (if installed).

4. Use the following steps to remove the liners and the burner tube.

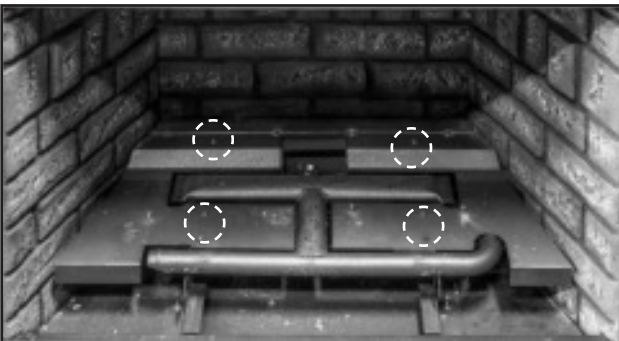
NOTE: Follow the steps in the reverse order for reassembly.



**Figure 40:** The firebox with log set and media removed.



**Figure 41:** Carefully remove the front liner on the bottom of the firebox by picking it up gently. Also remove the lower air deflector.



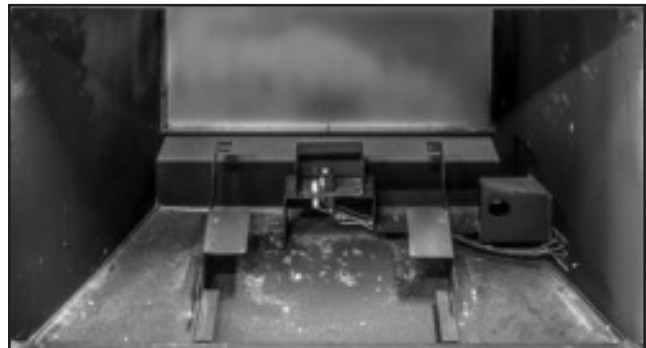
**Figure 42:** The log grate is removed next by simply lifting it off the grate tabs.



**Figure 43:** Remove the 6 screws highlighted in figure 42 using a Torx T-20 screwdriver and remove the air deflector



**Figure 44:** Lift the burner off the mounts and pull it out of the inlet box. The unscrew the panel brackets (T20's) from each side of the baffle to remove the left and right side liners.



**Figure 45:** The rear liner can now be removed. Use a vacuum to clean up the bare firebox if needed.



# SECONDARY INSTALLATION

## LOG SET AND EMBER INSTALLATION (TRADITIONAL & BIRCH):

**NOTE: The logs are fragile and should be handled gently. 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. The underside of the logs are contoured and some contain pin holes to make alignment easier. Using the pictures provided, carefully set the logs in place (see Figures 46 through 55).



**Figure 46:** Install the **back log** on top of the pilot on the back shelf of the air deflector. Push it against the back brick panel.

**Figure 47:** Place both the **left and right mid logs** in the middle of the air deflector. Make sure the bottom holes align with the pins in the air deflector.



**Figure 48:** Place the **left top log** on the right, on top of the rear log and left mid log. Locate the bottom on the far left grate arm.



## SECONDARY INSTALLATION



**Figure 49:** Install the **right top log** on top of rear log and right mid log. Locate the bottom on the far right grate arm.

**Figure 50:** Break up the **ember wool** as fine as possible (clump the wool together and separate it using the supplied brush) over the burner tube. It is best to have less ember wool strands of **Embaglow** ovetop of the wool. Place **coals** on the air deector in front of both mid logs as shown. **Do Not** cover the gaps between the burner and air deflector.



**Figure 51:** Place the **center top crossover log** at an angle on top of the rear log and left mid log pins

## SECONDARY INSTALLATION



**Figure 52:** Rest the **center top log** on top of the left mid log making sure to align the bottom with grate arm.

**Figure 53:** Place the **center front chunk log** on the log grate, close to the center, with the front edge resting on the right mid log.

**Note:** There are 2 locating notches on the bottom side.

Bottom Notch = E30

Top Notch = E33



**Figure 54:** Finally, rest the **left and right front chunks** on the log grate and burner as shown.

DO NOT cover any burner ports

**TIP:** While the glass is still removed, it is recommended that the gas line be purged by lighting the pilot.

## SECONDARY INSTALLATION

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**Figure 55:** Proper installation and flame appearance

Log setup is now complete. Re-install the firebox door, then the safety screen.

Run the unit for 15 minutes then adjust the venturi as needed using the door tool. Figure 55 above depicts what the burn and flame appearance should look like when the log set is properly installed and venturi adjusted.

When re-lighting the fireplace for the first time since the log set has been installed/replaced, watch for ignition at ALL the burner ports. If a long delay is noticed, turn the appliance off and wait for it to cool down. Then remove the glass and make sure none of the burner ports are blocked.

**Maintenance:** Once a year, the logs should be removed and checked for deterioration or large amounts of soot. A small amount on the bottom side of the logs is normal. Remove and replace the logs in the same manner described above.

If new logs are required, contact your nearest ENVIRO dealer.

**Never operate the fireplace with the glass door removed.**



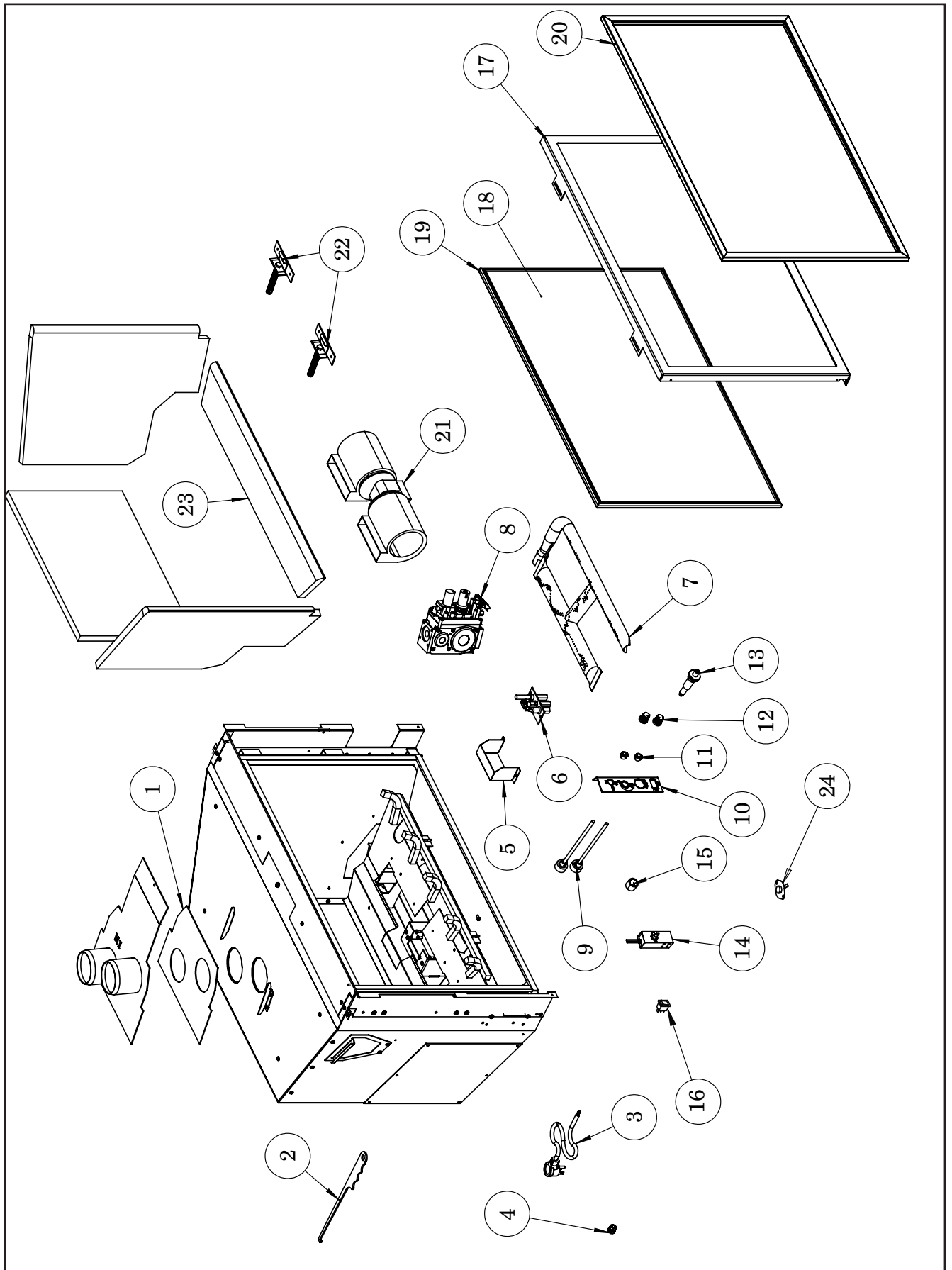
# TROUBLE SHOOTING

Problem	Possible Cause	Solution
The main burner does not ignite when called for.	The gas valve may not be on.	• Check that the gas control knob is in the "ON" position.
	Thermostat is not calling for heat.	• Adjust the thermostat several degrees above ambient temperature.
	Problem with gas valve.	<ul style="list-style-type: none"> <li>• Use a DC voltmeter to measure the voltage across the TPTH and TP terminals. Main operator voltage: Open circuit <math>\geq</math> 325mV Closed circuit <math>\geq</math> 100mV</li> <li>• If voltage is not present, check the control circuit for proper operation.</li> <li>• If proper control system voltage is present, replace the gas control.</li> </ul>
No spark at pilot.	Defective piezo ignitor.	<ul style="list-style-type: none"> <li>• Check connections to ignitor.</li> <li>• If ignitor connections are good but no spark, replace ignitor.</li> </ul>
	Broken spark electrode.	• Check for broken ceramic insulation, replace electrode if broken.
	Wire damaged to electrode.	• Replace ignitor.
Pilot will not remain lit.	7-Days of burner inactivity.	• The pilot will automatically turn off when the burner has not been used for 7 consecutive days. Re-light pilot to reset the counter.
	Problem with thermocouple circuit.	<ul style="list-style-type: none"> <li>• Check for proper connection of the thermocouple to the front of the valve. If loose, fully tighten.</li> <li>• Check pilot for full flame impingement around thermocouple. If flame is too small, check gas pressure, adjust pilot rate screw, check pilot head for damage. Check pilot orifice for debris.</li> <li>• Check thermocouple voltage at valve. It must be greater than 5 mV. If low, replace thermocouple.</li> </ul>
	Air in gas line (pilot dies while knob is depressed).	<ul style="list-style-type: none"> <li>• Bleed line.</li> <li>• Check gas line pressure.</li> <li>• Contact dealer.</li> </ul>
Burners will not remain lit.	Problem with thermopile circuit.	<ul style="list-style-type: none"> <li>• Check gas line pressure .</li> <li>• Check for flame impingement on thermopile. If low, see "Pilot will not remain lit".</li> <li>• Check thermopile for minimum of 300 mV when burner is switched on.</li> <li>• Check wiring to thermostat for breaks and bad connections.</li> </ul>
Flame lifting	Leak in vent pipe	• Check for leaks in vent connections.
	Improper vent configuration	• Check vent configuration with manual.
	Terminal may be recirculating flue gases	<ul style="list-style-type: none"> <li>• Check to see if terminal is on correctly.</li> <li>• May need to install high wind termination cap.</li> <li>• Contact dealer.</li> </ul>
Glass fogs up	Normal Condition: after the appliance warms up the glass will clear. ** Due to additives in gas, glass may get hazy during operation** Clean as needed.	
Blue Flames	Normal during start up: flames will yellow as the fireplace heats up.	
Flames are burning "dirty" or sooting	Flame impingement	<ul style="list-style-type: none"> <li>• Check log positioning.</li> <li>• Increase primary air by opening the venturi shutter.</li> </ul> See also "Burners will not remain lit."
Remote control doesn't work	Problem with the remote	• One or more of the batteries are dead. See remote control instructions.
	Problem with fireplace	<ul style="list-style-type: none"> <li>• The on/off switch is turned to OFF.</li> <li>• The gas control valve is turned to PILOT or OFF.</li> <li>• The pilot has gone out.</li> </ul>

# PARTS LIST

Reference Number	Part Description	Part Number
1	E33 DV Flue Adaptor Bottom Gasket	50-2516
-	E33 Owner's Manual	50-2517
-	E33 Conversion Kit NG to LP	50-2514
-	E33 Conversion Kit LP to NG	50-2518
2	Door Release Tool	50-2510
-	Ceramic Wool Embers Only	50-893
3	Domestic Power Cord (115V)	EC-042
4	Heyco Strain Relief	EC-044
5	Pilot Shield	50-2500
6	Pilot Assembly (PSE-NA479)	50-4083
7	E30/E33 H-Burner Tube	50-3653
8	S.I.T. 821 Nova Valve (7-Day) Convertible	50-3660
9	Valve Extension C/W Knob (Long)	50-2519
10	Control Panel C/W Decal	50-2521
11	Control Panel Bushings (Set 2)	50-2352
12	Control Panel Knobs (Set 2)	50-2355
13	S.I.T. Piezo Ignitor	EC-023
14	FPI Fan Controller (69.5V) 115V w/ Knob	EC-039A
15	Fan Control Knob w/ Decal	EC-040
16	FPI Burner Switch	EC-026
17	E33 Door Complete	50-2522
18	E33 Glass C/W Gasket (28.5" X 18")	50-2523
19	Dual Bulb Door Gasket (10ft)	50-634
20	E33 Replacement Safety Screen	50-3073
21	Convection Fan Only	50-2493
22	E33 Door Latch Mechanism (Set of 2)	50-2524
-	E30/E33 Traditional Logset (10 pcs)	50-3627
-	E30/E33 Birch Logset (10 pcs)	50-3628
23	E33 Brick Liner Set	50-2525
-	E33 Porcelain Liner Set	50-2437
24	120 Ceramic Fan Temp Sensor	EC-001
-	12 oz. Can of Metallic Black Touch Up Paint	PAINT-12-MB

# PARTS DIAGRAM - COMPONENTS





# Warranty for Enviro Gas Products

Sherwood Industries Ltd. ("Sherwood") hereby warrants, subject to the terms and conditions herein set forth, this product against defects in material and workmanship during the specified warranty period starting from the date of original purchase at retail. In the event of a defect of material or workmanship during the specified warranty period, Sherwood reserves the right to make repairs or to assess the replacement of a defective product at Sherwood's factory. The shipping costs are to be paid by the consumer. All warranties by Sherwood are set forth herein and no claim shall be made against Sherwood on any oral warranty or representation.

## Conditions

- A completed warranty registration must be submitted to Sherwood within 90 days of original purchase via the online warranty registration page or via the mail-in warranty registration card provided. Have the installer fill in the installation data sheet in the back of the manual for warranty and future reference.
- This warranty applies only to the original owner in the original location from date of install.
- The unit must have been properly installed by a qualified technician or installer, and must meet all local and national building code requirements.
- The warranty does not cover removal and re-installation costs.
- Sherwood Industries Ltd. reserves the right to make changes without notice.
- Sherwood Industries Ltd. and its employees or representatives will not assume any damages, either directly or indirectly caused by improper usage, operation, installation, servicing or maintenance of this appliance.
- A proof of original purchase must be provided by you or the dealer including serial number.
- This warranty does not cover any discoloration of the safety screen mesh.

## Exclusions

An expanded list of exclusions is available at [www.enviro.com/help/warranty.html](http://www.enviro.com/help/warranty.html)

This warranty does not cover:

- Damage as a result of improper usage or abuse.
- Damage caused from over-firing due to incorrect setup or tampering.
- Damage caused by incorrect installation.

## To the Dealer

- Provide name, address and telephone number of purchaser and date of purchase.
- Provide date of purchase. Name of installer and dealer. Serial number of the appliance. Nature of complaint, defects or malfunction, description and part # of any parts replaced.
- Pictures or return of damaged or defective product may be required.

## To the Distributor

- Sign and verify that work and information are correct.

### Sherwood Industries Ltd.

6782 Oldfield Road, Victoria, BC . Canada V8M 2A3  
 Online warranty registration: [www.enviro.com/warranty/](http://www.enviro.com/warranty/)

Category	One Year	Two Year	Limited Lifetime (7yr)
Parts <sup>1,2</sup> (unit serial number required)		✓	
Firebox Liner Panels <sup>3</sup>		✓	
Firebox			✓
Heat Exchanger			✓
Burner			✓
Ceramic Logs <sup>4</sup>			✓
Ceramic Glass <sup>5</sup>	✓		
Pedestal / Legs (excluding finish)			✓
Door Assembly			✓
Surround Panels (excluding finish)			✓
Exterior Panels (excluding finish)			Up to 5 years
Electrical Components		✓	
Exterior Surface Finishing	✓		
Labour	✓		

<sup>1</sup> Whereas warranty has expired, replacement parts will be warrantied for 90 days from part purchase date. Labour not included. Unit serial number required.

<sup>2</sup> 50-173 Westport Fan Kit covered for up to 5 years from purchase date. Labour not included. Unit serial required.

<sup>3</sup> Excluding damage to the finish caused by improper setup of the appliance, or color changes.

<sup>4</sup> Log set and panels excludes wear and tear or breakage caused by cleaning or service.

<sup>4</sup> Glass is covered for thermal breakage. Photos of box, inside of door, and unit serial # must be supplied for breakage due to shipping.

<sup>6</sup> Exterior Surface finishing covers plating, enamel or paint and excludes colour changes, chipping, and fingerprints. Travel costs not included.



# INSTALLATION DATA SHEET

The following information must be recorded by the installer for warranty purposes and future reference.

NAME OF OWNER: \_\_\_\_\_

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PHONE: \_\_\_\_\_

NAME OF DEALER: \_\_\_\_\_

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PHONE: \_\_\_\_\_

MODEL: \_\_\_\_\_

SERIAL NUMBER: \_\_\_\_\_

DATE OF PURCHASE: \_\_\_\_\_ (dd/mm/yyyy)

DATE OF INSTALLATION: \_\_\_\_\_ (dd/mm/yyyy)

DIRECT VENT

NATURAL GAS (NAT)       PROPANE(LPG)

INLET GAS PRESSURE: \_\_\_\_\_ in WC

MAIN BURNER ORIFICE: \_\_\_\_\_ # DMS

PILOT ORIFICE # \_\_\_\_\_ OR \_\_\_\_\_ in diam.

INSTALLER'S SIGNATURE: \_\_\_\_\_

NAME OF INSTALLER: \_\_\_\_\_

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PHONE: \_\_\_\_\_