

# E331

# **GAS INSERT**

# LOG SET & PROFLAME IPI VALVE

# **OWNER'S MANUAL**





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.

# SAFETY PRECAUTIONS



### **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 immeadiately.
  - Immeadiately 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 veiwing 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 relight 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 E33I unit is pulled out of its installation, and the ventair 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 FIREPLACE INSERTS.

# 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 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 Z21.88-2014/CSA 2.33-2014 VENTED GAS FIREPLACE HEATERS

CAN/CGA 2.17-M91 (R2009) GAS FIRED APPLIANCES FOR HIGH ALTITUDES BY OMNI-TEST LABORATORIES

CSA P.4.1-09 TESTING METHOD FOR MEASURING ANNUAL FIREPLACE EFFICIENCY

### This ENVIRO E33I 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.



NFI Gas Specialists.

# SPECIFICATIONS

### **RATING LABEL LOCATION:**

The rating label is located on the left side of the unit, next to the receiver box.

### **DIMENSIONS:**

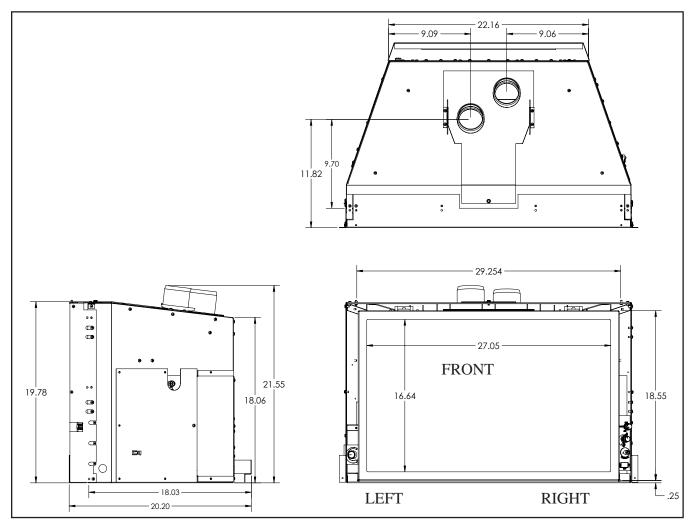


Figure 1: E33I Exterior Dimensions.

# SPECIFICATIONS

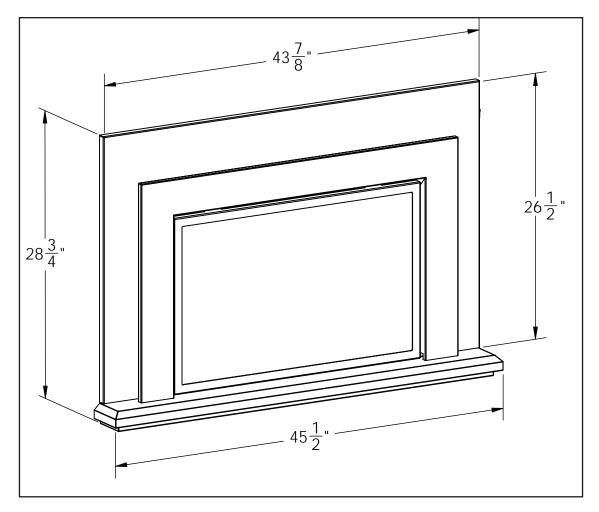


Figure 2: E33I Contemporary Surround with Base Shelf and Riser.

**Table 1: E33I Options Dimensions.** 

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

### 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 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.

- A. This appliance is equipped with an ignition device which automatically lights the pilot. Do <u>not</u> try to light the pilot by hand.
- B. BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS:

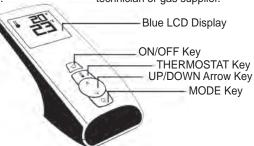
- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- C. Use only your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

#### **OPERATING INSTRUCTIONS**

- 1. STOP! Read the safety information above on this label.
- 2. Read the owner's manual including the section on "Remote Control" operation.
- 3. Set the thermostat to the lowest setting.
- 4. Turn off all electric power to the appliance.
- 5. Do not attempt to light the pilot by hand.
- 6. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
- 7. Turn on all electric power to the appliance.
- 8. Using the remote control, set thermostat to desired setting, or press the ON/OFF key on the remote. "ON" will be indicated on the display of the remote and an audible "beep" will be heard at the unit to indicate the command has been received.

9. This appliance is equipped with a completely automatic ignition and lighting control. The control will attempt to light the pilot several times if necessary. If it is unsuccessful, it will discontinue operations. If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.



#### TO TURN OFF GAS TO APPLIANCE

- Set thermostat to lowest setting, or press the ON/OFF Key. "OFF" will be indicated on the display and an audible "Beep" will be heard at the unit to indicate the command has been received.
- 2. Turn off all electric power to the appliance if service is to be performed.

C-12455

Figure 3: Lighting instruction label.

### **VENTURI ADJUSTMENT:**

The venturi adjustment lever is located on the right side of the unit, behind the surround panel (see Figure 4). 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

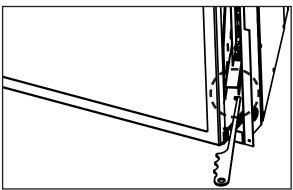


Figure 4: Adjusting the venturi air setting.

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.
Receiver	Beeps when remote control buttons are pressed.

**Table 2: Normal Sound** 

### REMOTE CONTROL OPERATIONS:

The Proflame GTMF is a modular remote control system that directs the functions of the E33I. The Proflame GTMF is configured to control the on/off main burner operation, its flame levels and provides on/off and Smart thermostatic control of the appliance. The system controls a remotely actuated 120V/60Hz power outlet, fan speed through six (6) levels and has a constantly powered 120V/60Hz power outlet.

#### **ATTENTION!**

- TURN "OFF" THE MAIN GAS SUPPLY OF THE APPLIANCE DURING INSTALLATION OR MAINTENANCE OF THE RECEIVER.
- PLACE THE RECEIVER'S 3 POSITION SLIDER SWITCH IN THE "OFF" POSITION DURING INSTALLATION OR MAINTENANCE.
- TURN "OFF" MAIN GAS SUPPLY TO THE APPLIANCE PRIOR TO REMOVING OR REINSERTING THE BATTERIES IN THE RECEIVER.
- DURING APPLIANCE INSTALLATION/MAINTENANCE OR IN CASE OF REMOTE CONTROL MALFUNCTION TURN OFF THE FAN CONTROL MODULE USING THE "ON/OFF" MAIN POWER SWITCH ON THE FRONT PANEL OF THE FCM.

### **TECHNICAL DATA**

Transmitter (Remote Control):

Supply voltage 4.5 V (three 1.5 V AAA batteries)

Ambient temperature ratings 0 - 50 °C (32 - 122 °F)

Receiver:

Supply voltage 6.0 V (four 1.5 V AA batteries)

Fan Control Module:

Supply voltage/frequency: 120 V / 60 Hz Aux switched output: 120 V / 60 Hz / 2 A Fan speed output: 120 V / 60 Hz / 1 A

### **SYSTEM DESCRIPTION:**

The Proflame Remote Control System consists of three (3) elements:

- 1. Proflame Transmitter.
- 2. Proflame Receiver and a wiring harness to connect the Receiver to the gas valve, stepper motor and Fan Control Module.
- 3. Proflame Fan Control Module (FCM)

### **SWITCHING TO CONTINUOUS PILOT MODE:**

The toggle switch located on the bottom right corner switches the unit between intermittent and continuous pilot modes. NOTE: It is recommended to use the continuous pilot mode during the winter when the outside temperature is below 50°F (10°C) to keep the chimney properly heated for updraft during burner ignition. Continuous pilot mode also keeps the firebox warm which eliminates both heat loss to cold air that is trapped inside the firebox as well as excessive exhaust vapour condensation on the door glass.



**TRANSMITTER** (Remote Control with LCD Display)

The Proflame Transmitter uses a streamline design with a simple button layout and informative LCD display (Figure 5). The Transmitter is powered by three (3) AAA type batteries. A Mode Key is provided to Index between the features and a Thermostat Key is used to turn on/off or index through Thermostat functions (Figure 5 & 6).

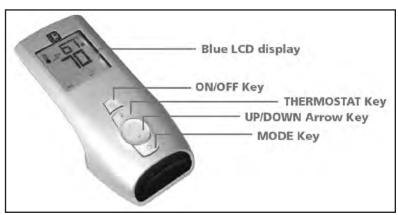


Figure 5: Proflame Transmitter.

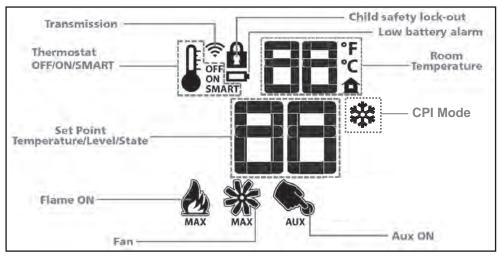


Figure 6: Proflame Transmitter LCD Screen.

#### **RECEIVER**

The Proflame Receiver (Figure 7) connects directly to the gas valve, stepper motor, DFC, and Fan Control Module with a wiring harness. The Receiver is powered by four (4) AA type batteries. The Receiver accepts commands via radio frequency from the Transmitter to operate the appliance in accordance with the particular Proflame system configuration. The Receiver three (3) position slider switch can be set to one of three positions: ON (Manual Override), Remote (Remote control), or Off.



Figure 8: Proflame Fan Control Module.

MAINS VOLTAGE PLUG

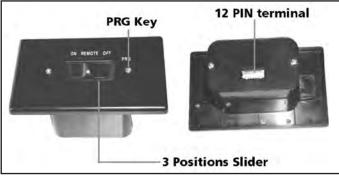


Figure 7: Proflame Receiver.

#### **FAN CONTROL MODULE**

Fan Control Module (FCM) offers the added ability to control the fan speed through six (6) speeds, a remotely actuated 120V outlet and a constantly powered 120V outlet. The FCM provides DC power to the Receiver allowing the batteries to be used only when line power is interrupted or lost (see Figure 8).

### REMOTE MOUNTING THE RECEIVER (OPTIONAL):

The receiver can be removed from the unit and placed inside a standard Junction type wall box or another convenient location. This installation can take place up to 6'ft (1.8 m) from the appliance control valve.

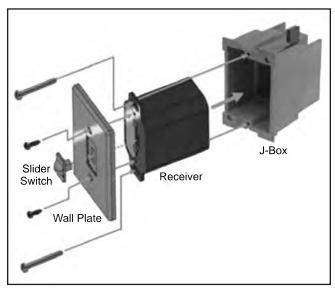


Figure 9: Wall Mounting the Receiver.

- 1. Connect the wiring harness to the back of the Receiver.
- 2. Install the Receiver in the Junction box using the existing J box screws (Figure 9).
- 3. Insert the four (4) AA type batteries in the battery compartment with the correct polarity.
- 4. Place the slider into the cover plate.
- 5. Put the Receiver switch in the "OFF" position.
- 6. Make sure the Receiver and cover plate words "ON" and "UP" are on the same side.
- 7. Align the slider with the switch on the Receiver and couple the switch into the slider.
- 8. Align the screw holes.
- 9. Using the two (2) screws provided secure the cover plate to the Receiver.

### **OPERATING PROCEDURE:**

### **Initializing The System For The First Time**

Install the four (4) AA batteries into the receiver battery bay. Note the polarity of the battery and insert into the battery bay as indicated on the Battery cover (+/-). Place the 3-position slider switch in the "Remote" position (see Figure 7). Using the end of a paper clip, or other similar object, insert the end of the paper clip into the hole marked "PRG" on the Receiver front cover (see Figure 7).

The Receiver will "beep" three (3) times to indicate that it is ready to synchronize with a Transmitter. Install the three (3) AAA type batteries in the Transmitter battery bay, located on the base of the Transmitter. With the batteries already installed in the Transmitter, push the 'ON' button. The Receiver will "beep" four (4)

times to indicate the Transmitter's command is accepted and sets to the particular code of that Transmitter. The system is now initialized.

### **Temperature Indication Display**

With the system in the "OFF" position, press the Thermostat Key and the Mode Key at the same time. Look at the LCD screen on the transmitter to verify that a °C or °F is visible to the right of the Room Temperature display (see Figure 10).

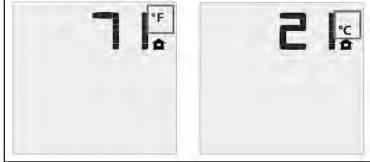


Figure 10: Remote Control Display in Farenheit and Celcius.

### **Turn on the Appliance**

Press the ON/OFF Key on the Transmitter. The Transmitter display will show all active Icons on the screen. A single "beep" from the Receiver will confirm reception of the command and will commence to first ignite the pilot light, followed by the main burner. This should take about 10 seconds to complete.

### **Turn off the Appliance**

Press the ON/OFF Key on the Transmitter. The Transmitter LCD display will only show the room temperature and Icon (see Figure 11). A single "beep" from the Receiver confirms reception of the command and both the pilot light (if the unit is not set to continuous pilot) and main burner will turn off.

### **Room Thermostat (Transmitter Operation)**

The Remote Control can operate as a room thermostat. The thermostat can be set to a desired temperature to control the comfort level in a room. To activate this function, press the Thermostat Key (see Figure 5). The LCD display on the Transmitter will change to show that the room thermostat is "ON" and the set temperature is now displayed (see Figure 11). To adjust the set temperature, press the Up or Down Arrow

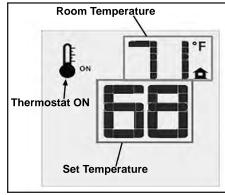


Figure 11: Remote Control Displays Set Temperature.

Keys until the desired set temperature is displayed on the LCD screen of the Transmitter.

### **Smart Thermostat (Transmitter Operation)**

The Smart Thermostat function adjusts the flame height in accordance to the difference between the set point temperature and the actual room temperatures. As the room temperature gets closer to the set point the Smart Function will modulate the flame down. To activate this function, press the Thermostat Key (Figure 6) until the word "SMART" appears to the right of the temperature bulb graphic (Figure 12). To adjust the set temperature, press the Up or Down Arrow Keys until the desired set temperature is displayed on the LCD screen of the Transmitter.

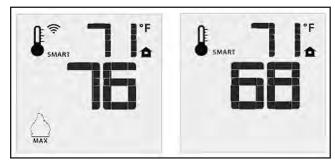


Figure 12: Remote Control's Smart Flame Function.

### **Remote Flame Control**

The Proflame GTMF has six (6) flame levels. With the system on, and the flame level at the maximum in the appliance, pressing the Down Arrow Key once will reduce the flame height by one step until the flame is turned off. The Up Arrow Key will increase the flame height each time it is pressed. If the Up Arrow Key is pressed while the system is on but the flame is off, the flame will come on in the high position (refer to Figure 13). A single "beep" will confirm reception of the command.

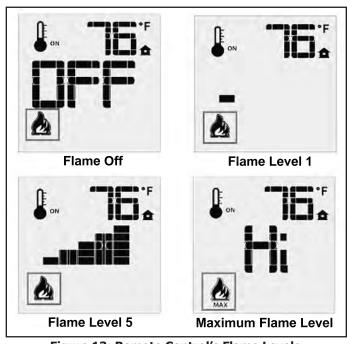


Figure 13: Remote Control's Flame Levels.

### **Key lock**

This function will lock the keys to avoid unsupervised operation. To activate this function, press the MODE and UP keys at the same time and the a lock will appear (see Figure 15). To de-activate this function, press the MODE and UP Keys at the same time.

### **Low Battery Power Detection**

Transmitter: The life span of the remote control batteries depends on various factors: quality of the batteries used, the number of ignitions of the appliance, the number of changes to the room thermostat set point, etc. When the Transmitter batteries are low, a Battery Icon will appear on the LCD display of the Transmitter (see Figure 16) before all battery power is lost. When the batteries are replaced this Icon will disappear.

Receiver: The life span of the Receiver batteries depends on various factors: quality of the batteries used, the number of ignitions of the appliance, the number of changes to the room thermostat set point, etc. When the Receiver

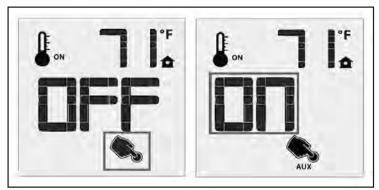


Figure 14: Remote Control with Aux for Accent Lights.

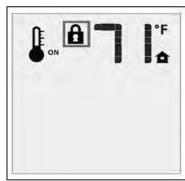




Figure 15: Remote Control Locked.

Figure 16: Low Battery Indicator.

batteries are low, No "beep" will be emitted from the Receiver when it receives an On/Off command from the Transmitter. This is an alert for a low battery condition for the Receiver. When the batteries are replaced the "beep" will be emitted from the Receiver when the ON/OFF Key is pressed (See *Initializing The System For The First Time*).

### **Manual Bypass Of The Remote System**

If the batteries of the Receiver or Transmitter are low or depleted, the appliance can be turned on manually by sliding the three position slider switch on the Receiver to the ON position. This will bypass the remote control feature of the system and the appliance main burner will come on.

WARNING: Fire Hazard. Can cause severe injury or death The Receiver causes ignition of the appliance. The appliance can turn on suddenly. Keep away from the appliance burner when operating the remote system or activating manual by pass of the remote system.

WARNING: Shock Hazard. Can cause severe injury or death. This device is powered by line voltage. Do not try to repair this device. In no way is the enclosure to be tampered with or opened. Disconnect from line voltage before performing any maintenance.

WARNING: Devices rated more than 5A shall not be connected to the OUT receptacle. Devices rated more than 1A shall not be connected to the FAN receptacle. Devices rated more than 2A shall not be connected to the AUX receptacle.

CAUTION: Property Damage Hazard. Excessive heat can cause property damage. The appliance can stay lit for many hours. Turn off the appliance if it is not going to be attended for any length of time. Always place the Transmitter where children cannot reach it.

### MAINTENANCE AND SERVICE

**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 GLASS:**

**When the fireplace is cool**, remove the glass door. See Maintenance and Service - Glass Door Removal. 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.** 

### **CLEANING THE FIREBOX:**

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:

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 15). 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:**

Periodically do a visual check of the pilot flames. One flame should encompass the flame sensor and the other should burn over the burner ports (see Figure 17). Also check that the burner is operating correctly, refer to Venturi Adjustment section.

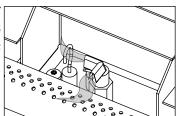
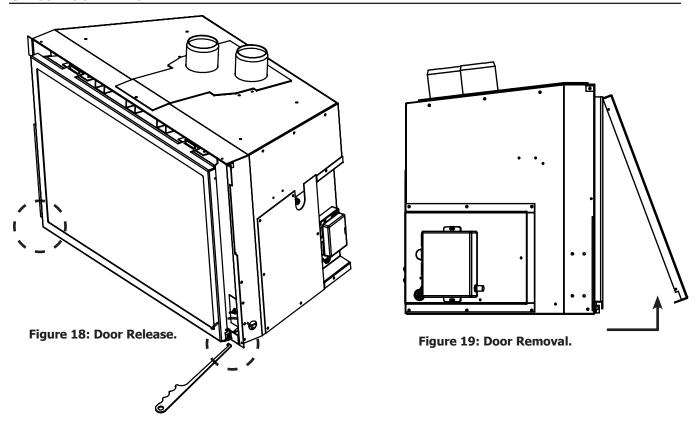


Figure 17: Pilot Flame

# MAINTENANCE AND SERVICE

### **GLASS 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 18) 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 19).

Re-assemble in the reverse order.

**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 PAINTED SURFACES:**

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

# MAINTENANCE AND SERVICE

# REMOVING VALVE COVER:

The valve cover can be removed to access the gas valve.

1. Use a T-20 screwdriver to remove the eight screws that hold down the valve cover shown in Fig. 20.

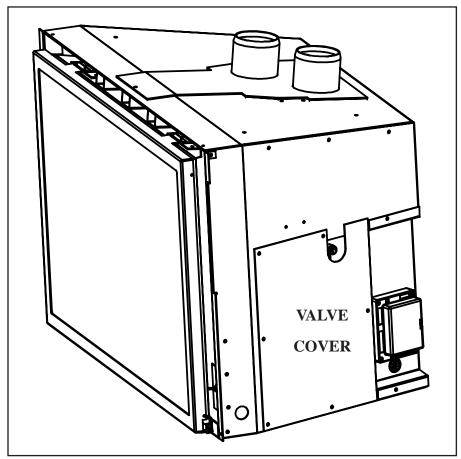


Figure 20: Valve Cover.

# 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:**

- 1 Orifice (NG #36 DMS or LP #52 DMS)
- 1 Conversion label

- 1 Servo regulator with diaphragm
- 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.

- 1. Ensure all the components of the conversion kit are accounted for.
- 2. If the unit has already been connected to a gas supply, shut off the gas supply to the unit.

CAUTION: The gas supply must be shut off prior to disconnecting the electrical power and before proceeding with the conversion.

- 3. If the unit has been run, shut off and allow cooling to room temperature.
- 4. Remove the glass as shown in the Maintenance and Service Glass Door Removal.
- 5. Carefully remove the log set and ember material if they are installed.
- 6. Remove the burner as shown in the Maintenance and Service Burner Removal.
- 7. Convert the pilot injector:
  - a) Using a <sup>7</sup>/<sub>16</sub>" wrench, turn the pilot head a ½ turn counter-clockwise.
  - b) Push the slider, with your finger or flat head screwdriver.
    - -Natural gas is marked NAT.
    - -Propane gas is marked LP with an indicating hole between L and P. It is also marked red.
  - c) Turn the pilot head a ¼ turn clockwise; back to its original position.
- 8. 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. DO NOT OVER-TIGHTEN.
- 9. Convert the SIT gas valve:
  - a) Remove Valve Cover.
  - b) Use a T-20 driver to remove the two screws that hold the servo regulator to the gas valve.
  - c) Remove the rubber regulator diaphragm that is situated between the servo regulator and the valve body and replace it with the one provided in the kit.
  - d) Install the LP servo regulator, with the new longer T-20 screws included in the kit.
  - e) Reinstall the Valve Cover plate.

# FUEL CONVERSION

- 10. 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 the burner to pilot hood relationship is similar to what is shown in Figure 21.
- 11. Reconnect the main gas line if it was disconnected and open the shut-off valve at the gas line to the unit.
- 12. 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.
- 13. Reconnect the electrical power to the unit.
- 14. Refer to the Operating Instructions to light the unit and verify proper burner ignition and operation and proper flame appearance.
- 15. 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.

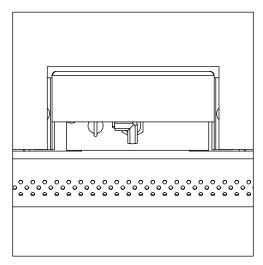


Figure 21. Ignitor assembly beside the burner.

**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 or up to 4" above floor, there must be a minimum of 16" (406 mm) of non-combustible material in front of the unit. If the unit is raised 0-3.9" up, this 16" must be maintained from the top surface of the combustible material.
- Unit can be installed with combustible material underneath and in front of unit, as long as it is raised 4" off the floor.
- Minimum ceiling clearance is 60" from bottom of unit.

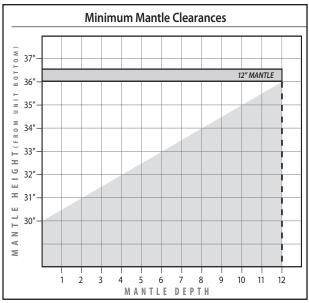


Figure 22: Mantle width and height.

### **MINIMUM FIREPLACE SIZE:**

Table 3: Minimum dimensions of fireplace for E33I to be installed into.

	Width At Front	Width At Back	Height	Depth
Fireplace Dimensions	32" (813 mm)	20" (508 mm)	20" (508 mm)	16" (406 mm)

NOTE: Space must be provided for gas line on right side of unit for servicing purposes.

#### **DIRECT VENT:**

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 E33I 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 approved 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 E33I.

### **QUALIFIED INSTALLERS ONLY**

### **VENTING FIREPLACE INSERTS:**

The **ENVIRO** E33I 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 Initial Installation - Preparing Your E33I For Installation. Please reference the information in Table 4 and Figures 23, and 25.

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 (3" flex conversion piece and 4"x 6 5/8" cap) from any of the following approved products; Simpson Dura-Vent (Direct Vent GS) or (ICC Excel Direct). 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 E33I 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.

Minimum Clearance*	Description
3 ft (0.9 m)	Clearance above the highest point where it passes through a roof surface, refer to Figure 23.
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 23.
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)

**Table 4: Vent termination clearances** 

<sup>\*</sup>Clearances are in accordance with local installation codes and the requiremenets of the gas supplier

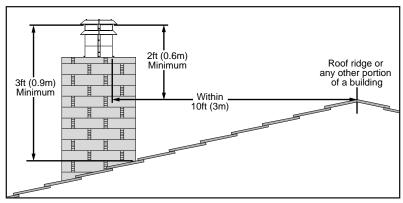


Figure 23: Roof Clearances.

### **QUALIFIED INSTALLERS ONLY**

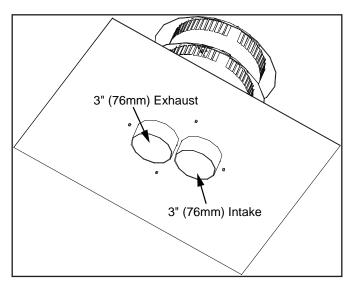


Figure 24: Generic Vent Cap Underside.

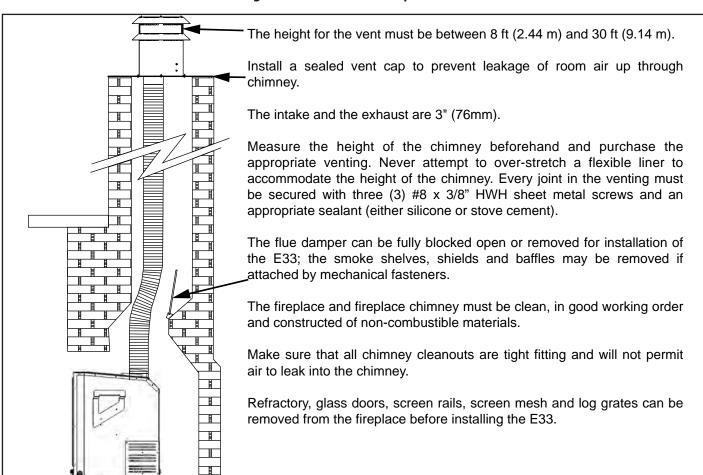


Figure 25: Installation of E33I DV.

### QUALIFIED INSTALLERS ONLY

### **DIRECT VENT VERTICAL VENT TERMINATION:**

### **INSTALLATION INSTRUCTIONS:**

- 1. Plan your installation and clearances to combustibles. The E33I 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 INITIAL INSTALLATION PREPARING YOUR E33I FOR INSTALLATION and CLEARANCES TO COMBUSTIBLES sections. Refer to Figure 25 throughout installation.
- 2. Stretch the Ø3" (76mm) flex vent liners to the length needed to ensure they can be easily connected to the vent terminals.
- 3. Install the flex pipe assembly up through the chimney, ensure that the pipe slides through far enough to connect onto the vent cap.
- 4. Most vent caps can be installed onto chimneys with flue openings up to 16" (406mm) x 16" (406mm) and the actual flashing is 18"x18" (refer to Figure 26). If the chimney is smaller the cap should be trimmed down and folded over.
- 5. 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.
- 6. 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.
- 7. At the top of the chimney, apply a bead of stove cement sealant to the Ø3" (76mm) pipe of the exhaust vent terminal (refer to Figure 24). Slide the flex liner onto the vent terminal and secure with three (3) sheet metal screws evenly spaced.
- 8. Place a bead of high temperature silicone on the intake collar of the vent terminal (refer to Figure 24). Slide the Ø3" (76mm) flex intake liner over the collar, secure the flex liner with three (3) sheet metal screws evenly spaced.
- 9. Make a tight connection between the gas fireplace insert flue collar and the fireplace chimney at the top of the chimney. Secure the vent terminal to the chimney using adequate sealant, and according to local building codes.

### <u>APPROVED TERMINATIONS:</u>

-Simpson Dura-Vent 46DVA-VCH cap with 46DVA-GK termination adapter or 46DVA-CL33 termination kit

-ICC TM-4SVT cap with TM-CTA termination adapter

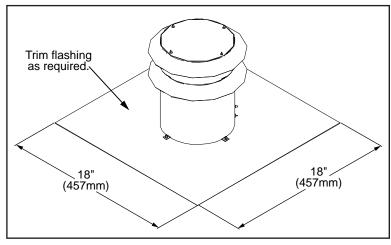
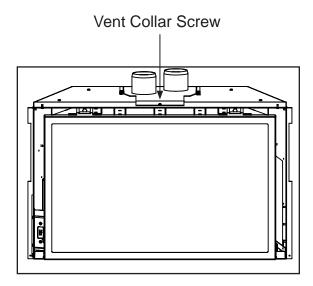


Figure 26: Generic Vent Cap Dimensions.

### **QUALIFIED INSTALLERS ONLY**

### **INSTALLING THE UNIT:**

- Remove the packaging from the appliance and surround panels; 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.
- 1. Remove the unit from the box and remove all packaging material from the appliance.
- 2. Remove door. See Maintenance and Service Glass Door Removal.
- 3. Remove log and ember set and all wrapping material from the stove. 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 E33I; the smoke shelves, shields and baffles may be removed if attached by mechanical fasteners.
- 5. If the fireplace opening is lower than 24" (610 mm), remove the vent collar plate from the top of the insert by unscrewing the single T-20 Torx screw located on the center top of the stove above the door opening (see Figure 27). 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).
- 6. Place the unit part way into the fireplace. Connect the gas line to the 3%" NPT pipe nipple at the lower left rear of the unit using locally approved methods (see Initial Installation Gas Line Connection). Place the electric cable so it can be connected to the power supply.
- 7. As you push the unit into its final position in the fireplace, if the vent collar plate was removed, reinstall it to the stove by sliding it along the top of the unit and secure with the screw previously removed.
- 8. 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 28).



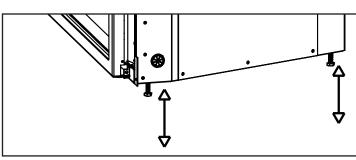


Figure 27: Vent Collar Plate Screw Location.

Figure 28: Levelling Legs Position.

### **QUALIFIED INSTALLERS ONLY**

### 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. 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.

Figure 29: Fireplace Altered Plate.

### **ELECTRICAL REQUIREMENTS:**

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  $105^{\circ}$ C

### **QUALIFIED INSTALLERS ONLY**

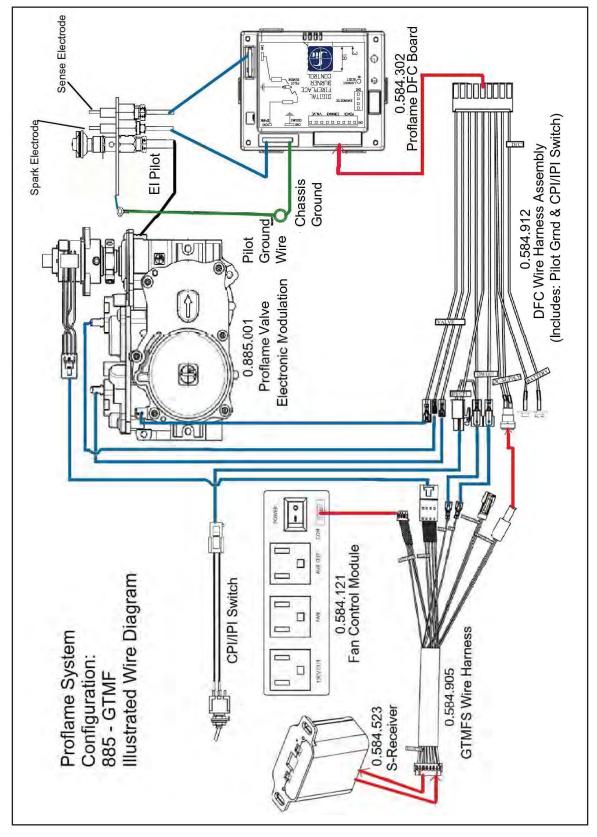


Figure 30: Wiring Schematic.

### **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 3/8" 45° flared fitting and flex connector are supplied with the unit (see Figures 31 and 32). 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).

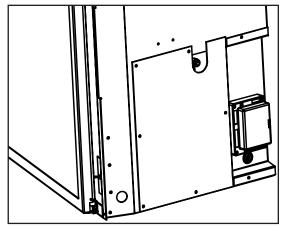


Figure 31: Gas Connection Location.

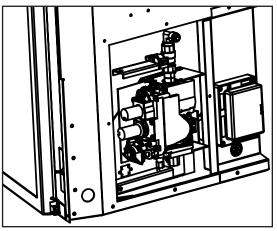


Figure 32: Gas Valve with Cover Removed.

# Table 5: Orifice and Pressure Information. E33I With Log Set & Proflame Valve

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:	3.5 W.C. (0.87 KPa)	8.0 W.C. (1.99 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)

### **QUALIFIED INSTALLERS ONLY**

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

The pressure taps are located on the front side of the valve (see Figure 33).

- 1. Using a long flat bladed screwdriver, turn set screw counter-clockwise to loosen.
- 2. Place 5/16 in (8 mm) I.D. hose over the pressure taps.
- 3. Check pressures using a manometer.
- 4. When finished, remove hose and tighten set screw.

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.**

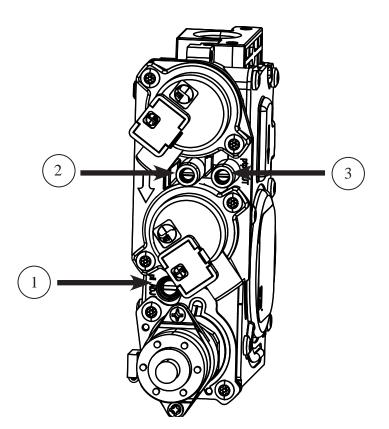


Figure 33: Valve Details.

ITEM NUMBER	DESCRIPTION
1	Pilot Adjustment Screw
2	Inlet Pressure Test Point
3	Outlet Pressure Test Point

**Table 6: Valve Details.** 

### **QUALIFIED INSTALLERS ONLY**

### **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 Flame sensor (see Figure 34). 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 long blade head screw driver (see Figure 33 for location on valve).
- 2. Turn the adjustment screw clockwise to decrease or counterclockwise to increase pilot flame.

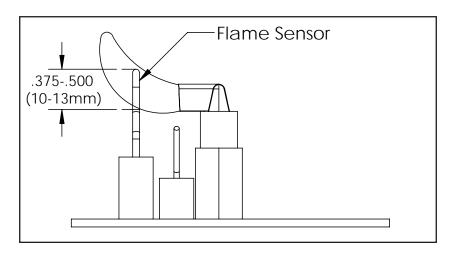


Figure 34: Proper Pilot Flame.

### **OPTIONAL BASE SHELF & RISER:**

The E33I Base Shelf (15%" (41 mm) high) and Base Shelf Riser (21%" (54 mm) high) are components that can be combined to create a riser with an overall height of  $2^3/16$ " (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 21%" (54 mm). This Base Shelf may be used in conjunction with the any of the E33I surround panel options, and it may also be used with the E33I Trimmable Surround. The Base Shelf and Riser are sold separately.

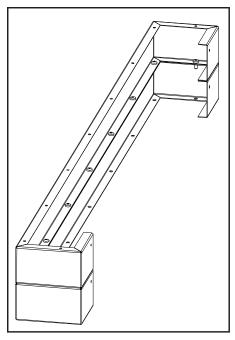


Figure 35: Combining 2 Base Shelf Riser.

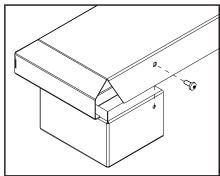


Figure 36: Installing Base Shelf onto Riser.

### 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 35).
- 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 (see Figure 36).
- 4. The leveling legs on the E33I 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.

### **OPTIONAL 3 TRIMMABLE PANELS:**

### **Trimmable Panel Install:**

The trimmable panel is installed by sliding slots in the panel into screws on the stove. Two screws must be installed at the bottom of the Side Extensions.

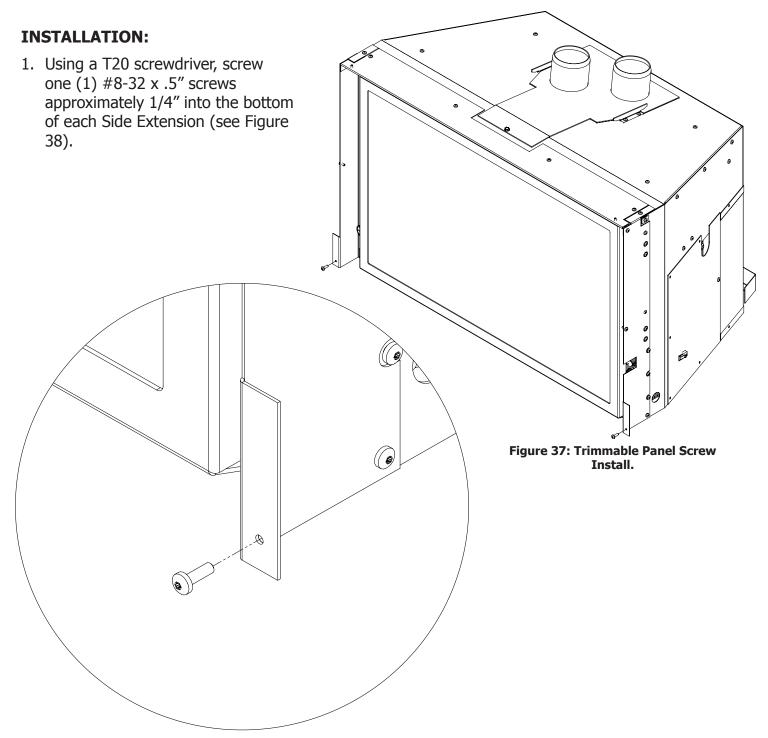


Figure 38: Trimmable Panel Screw Install Close-up.

### **OPTIONAL 3 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 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 31 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 39).
- 3. Using the remaining hardware attach the Trimmable Panel to the Panel Brackets using a T-20 Torx screwdriver (See Figure 40).

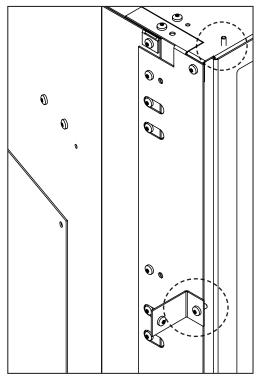


Figure 39: Panel Bracket Installed and Pin Location

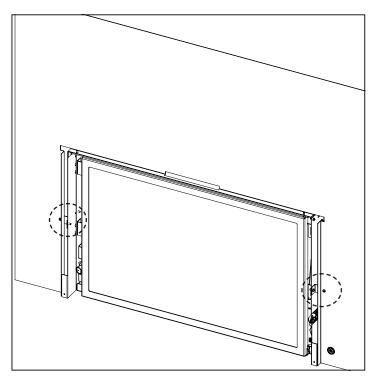


Figure 40: Trimmable Panel Installed

### **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 <sup>1</sup> /2" (673 mm)	44 <sup>1</sup> /8" (1121 mm)

**Table 7: 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 41). 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.

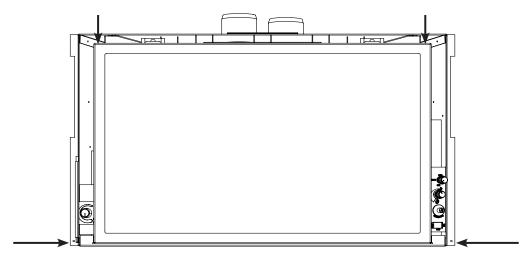


Figure 41: Screw Locations.

### **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:**

Painted surfaces should be periodically wiped with a damp cloth. Never clean the face when it is hot.

### **SAFETY SCREEN INSTALLATION:**

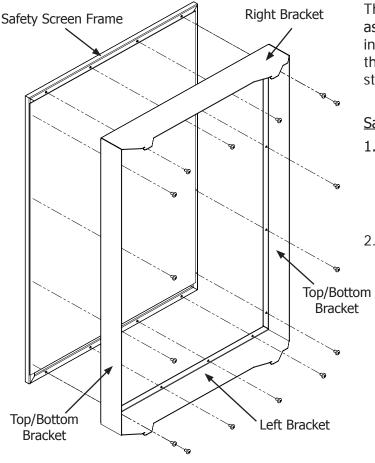


Figure 42: Installing Safety Screen Mounts.

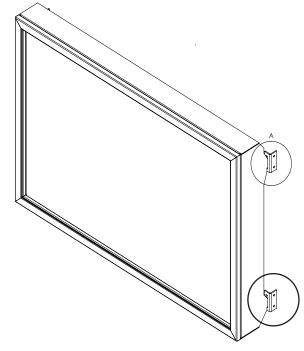


Figure 44: Installing Safety Screen onto Cabinet Bracket (Parts removed for clarity)

The safety screen supplied with the unit must be assembled first before it can be installed. When installed, the screen should not extrude out any farther than the surround panel if the cabinet extensions are still installed.

### Safety Screen Assembly

- 1. Attach the left, right, top/bottom brackets onto the safety screen using a T20 screwdriver and the supplied sixteen (16) #8 T20 screws (see Figure 42). Do not over-tighten the screws, doing so could cause them to strip out of the screen frame.
- Lift the face upright in front of the fireplace with the four (4) hooks pointing towards the fireplace. Slide the hooks into the corresponding brackets on each side of the cabinet (see Figure 44). Ensure the hooks are secure before releasing the safety screen.

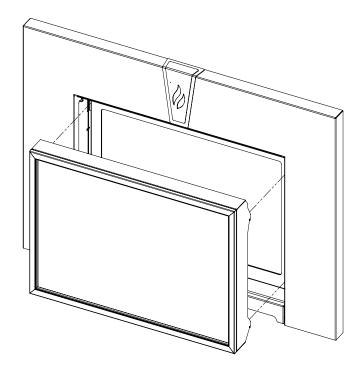


Figure 43: Installing Safety Screen onto Brackets.

### FIREBOX LINER AND BURNER TUBE REMOVAL:

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

- 1. Ensure the E30 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.

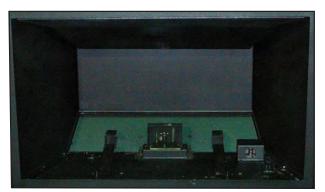
NOTE: Follow the steps in the reverse order for reassembly.



**Figure 45:** Carefully remove the front brick panel on the bottom of the firebox by lifting it up.



**Figure 47:** The side brick panels can be removed by pulling them towards the center of the firebox.



**Figure 49:** Firebox with all brick panels and burner tube removed.



**Figure 46:** To remove the burner tube, gently pull it out of the venturi box.



**Figure 48:** Remove the rear brick panel by pulling it forward off of the ledge.



**Figure 50:** The firebox showing the brick panels and burner tube already installed.

### LOG SET AND EMBER INSTALLATION:

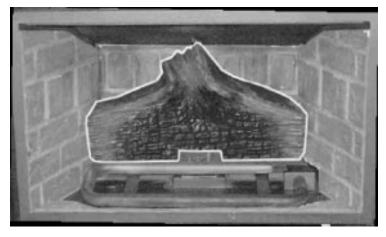
**NOTE:** The logs are fragile and should be handled gently. WARNING: Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury (see Figures 50 through 53).

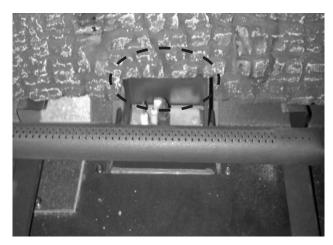
The underside of the logs are contoured to make alignment easier. Using the pictures provided, carefully set the logs in place (see Figures 50 through 58).



Figure 51: First Stage Log Set Installation.

**Figure 51:** The **back log** rests on top of the pilot and against the back brick panel. There are two screws sticking up from the support brackets that go into holes in the bottom of the back log.





The Back Log rests on top of the pilot hood and support brackets. There are two screws sticking up from the brackets that go into the holes on the bottom of the Back Log. When installed correctly, the front of the Back Log should be flush with the top of the pilot hood (circled).

### SECONDARY INSTALLATION

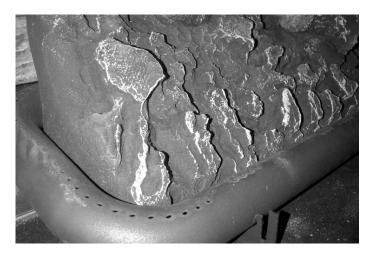
### LOG SET AND EMBER INSTALLATION:

#### **PLACEMENT OF EMBER BED**





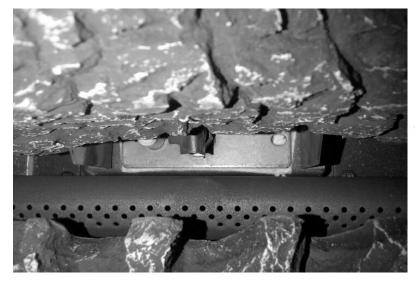
**Figure 52:** Place the **ember bed** in the center of the burner tube and pull it forward as far as it will go. Ensure it DOES NOT obstruct any part of the burner.



Left Side of Ember Bed Sitting inside burner tube



The Ember Bed should sit flat on the support brackets as shown above. \*Ember Bed above has been cut for clarity\*



Back Side of Ember Bed (top view) does not obstruct burner tube when installed correctly.

### SECONDARY INSTALLATION



Figure 53: Place the **log grate** in front of the burner tube using the two slotted mounts underneath.

Figure 53: Third Stage Log Set Installation.

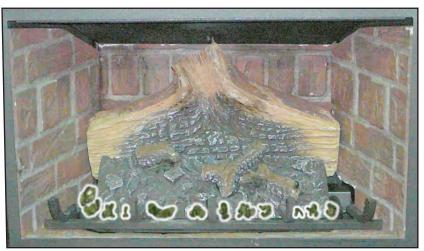


Figure 54: Fourth Stage Log Set Installation.



Figure 55: Fifth Stage Log Set Installation.

Figure 54: The ember wool comes in chunks that can be ripped into smaller pieces.

Place quarter-sized pieces of the ember wool irregularly onto and around the front of the burner to create a realistic look.

**WARNINGS:** DO NOT pack this ember material as this could create an unsafe condition. The pieces should be lightly placed so they don't block any of the burner ports.

**CAUTION:** Use only the type of ember material supplied with this fireplace. Due to the irregular size of the ember material, there is more than required. Use of other foreign materials on the burners may create dangerous conditions.

Figure 55: The left and right logs fit as shown. The bottom of the left log is contoured to fit the log grate.

## SECONDARY INSTALLATION

Figure 56: Place the small left and right logs as shown. The bottoms of both pieces have contours to fit on the log grate.



Figure 56: Sixth Stage Log Set Installation.

Figure 57: Place the two center logs as shown.

Figure 58: Place the two large outer logs as shown. The bottom ends of the logs will fit the shape of the log grate.

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

When lighting the fireplace for the first time since the log set and embers have 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. Remove the glass and rearrange the ember material, making sure none of the burner port holes are blocked.

Never operate the fireplace with the glass door removed.



Figure 57: Seventh Stage Log Set Installation.



Figure 58: Eighth Stage Log Set Installation.

## TROUBLESHOOTING

### **DIAGNOSTIC FLASH CODES:**

- 1. Fail to ignite: If there is no positive ignition, the board will go into lock out and the LED will blink 3 times in intervals until the system is reset.
- 2. Low battery condition (<4V): the LED indicator will blink one (1) time in intervals.
- 3. Parasitic Pilot Flame: the LED indicator will blink two (2) times in intervals.
- 4. System Lock out: the LED indicator will blink three (3) times in intervals.

#### Additional Ignition Information

- 1. The Proflame DFC Board will try two (2) times for ignition.
- 2. Each try for ignition will last approximately 60 seconds.
- 3. The wait time between the two tries is approximately 35 seconds.

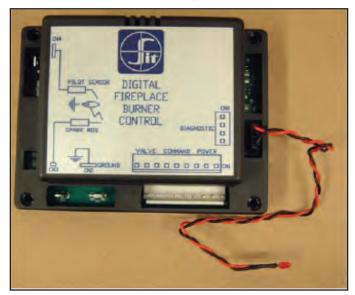


Figure 59: Proflame DFC Board with LED Indicator attached.

# TROUBLESHOOTING

Problem	Possible Cause	Solution	
Thermostat does not work	The pilot flame has gone out	· Turn it ON	
	The On/Off switch is turn to OFF	Turrit ON	
	The thermostat is set too high	· Set the thermostat to a lower temperature	
		· Check pilot assembly wiring	
No spark	Spark developes near the pilot assembly or could occur onboard	Check for broken or poor connection from the sparker to the electrode	
generation		· Check for the spark shorting or arcing at other locations	
		· Check for defective sparker and spark electrode	
	No spark from the igniter	· See "no spark generation"	
	Air in the gas line	· It takes a while for all the air to purge out of the pilot before gas can reach the pilot and ignite	
	Pilot gas pressure dropout upon main burner gas valve opening	· Check gas mains supply and pressure	
No pilot flame ignition		· Check gas valve wirings and connections to the board	
marrie ignition		· Check the pilot burner for obstruction	
	No gas flow out of the pilot burner	· Check the wirings and connections between the pilot assembly and the board	
		· Check the correct gas type settings on the valve and pilot burner assembly orifice	
	Problem with Flame Sensor circuit	· Check for proper connection of the Flame Sensor to the DFC board	
		· Check pilot for full flame impingement around Flame Sensor	
Pilot will not remain lit		· If flame is too small, check gas pressure, adjust pilot rate screw, check pilot head for damage	
		· Ensure the ground wire is properly attached to the pilot mounting bracket and that it is makes a good electrical connection.	
	Restrictor setting	· Use the correct restrictor setting for the venting configuration	
	The pilot light has gone out	· See "Pilot will not remain lit"	
Remote	The remote is too far away from the heater	· Use the remote closer to the heater	
control does not work	The remote control receiver is turned "OFF"	· Check the remote control instructions	
	One of the two remote control or receiver batteries are dead	· Replace the batteries	
No reaction to command	Receiver or transmitter batteries are low	· Replace the batteries	
	A maximum number of failed ignitions or flame restorations have	· Remove any possible blocking conditions. See "locking conditions"	
	been reached.	· See how to reset the board from Lockout	
	No communication between the	Reprogram the transmitter to the receiver.	
	remote control and the receiver	· Follow the initializing system for the first time	

# TROUBLESHOOTING

Problem	Possible Cause	Solution
Locking	Reset the Proflame DFC board	Turn the system off by pressing the ON/OFF button on the transmitter
		· After approximately 2 seconds press the ON/OFF button on the transmitter again.
		In the manual flame control mode, use the down arrow button to reduce the flame to off, indicated by the word OFF displayed on the transmitter LCD screen.
conditions		Wait approximately 2 seconds and press the up arrow button, the ignition sequence will start.
		With the transmitter off, move the slider switch on the receiver to the OFF position.
		Wait approximately 2 seconds and move the receiver slider switch to the ON position.
	The pilot flame has gone out	· See "Pilot will not remain lit"
	The remote control is not working correctly	· Replace the batteries
Main burners will not start	The thermostat is disconnected or set too high	· Set the thermostat to a lower temperature
		· Check gas line pressure
	Problem with thermopile circuit	· Check wiring to thermostat for breaks
		· Check for flame impingement on thermopile
	Leak in vent pipe	· Check for leaks in vent connections
	Improper vent configuration	· Check vent configuration with manual
Flame lifting		· Check to see if terminal is on correctly
	Terminal may be re-circulating flue gases	· May need to install high wind termination cap.
		· Contact dealer
Blue Flames	The heater has just been started	Normal during start up: flame will yellow as the fireplace heats up
Dide Fidines	Improper air shutter adjustment	· Adjust air shutter – contact your dealer
Glass fogs up	Normal condition: after the appliance warms up the glass will be clear.	**Due to additives in gas, glass may get hazy during operation** Clean as needed.
Flames are burning "dirty" or sooting	The logs or glasses are placed incorrectly	· Check log positioning
		· Check level of glasses layout
	Improper air shutter adjustment	Increase primary air by opening the air shutter and/or by opening the vent restrictor
		Check for proper venting and blockage of the vent termination
		· See also "Burners will not remain lit"
	Incorrect rating input	· Check manifold pressure and clock input rating for over- firing

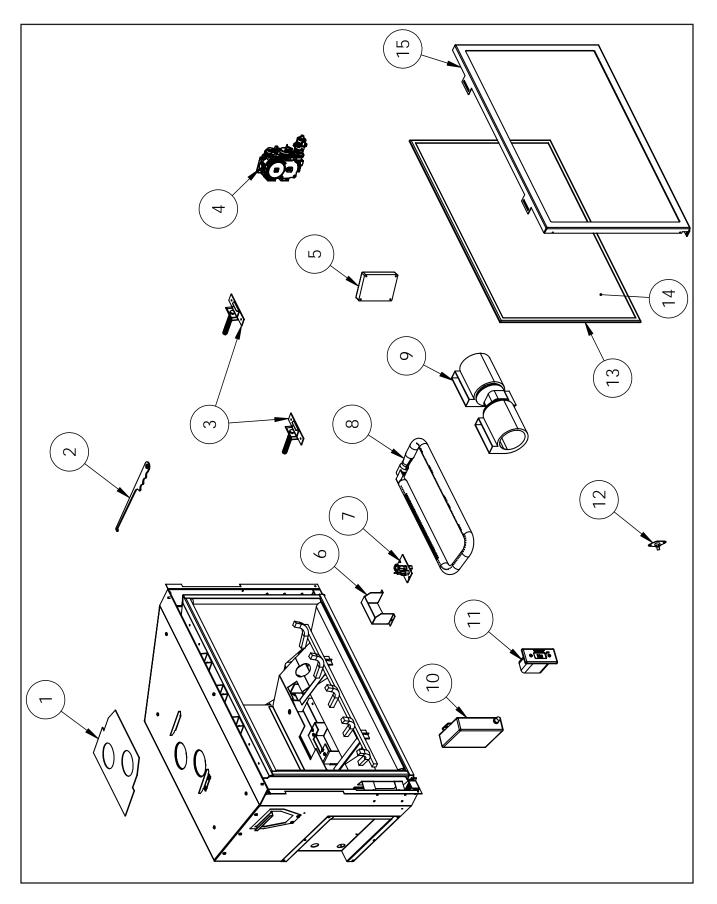
# PARTS LIST

Reference Number	Part Description	Part Number
1	DV Flue Adaptor Bottom Gasket	50-2516
2	Door Release Tool	50-2510
3	Door Latch Mechanism (Set of 2)	50-2524
4	885 Proflame IPI Valve NG	50-2682
5	Burner Control Module	50-2781
6	Pilot Shield	50-2500
7	PSE IPI Pilot Assembly	50-3026
8	Burner Tube	50-2504
9	Fan Only	50-2493
10	Fan Control Module	50-1572
11	Remote Receiver	50-2007
12	120 Ceramic Fan Temp Sensor	EC-001
13	Dual Bulb Door Gasket (10ft)	50-634
14	Glass C/W Gasket (21.75" x 13.575")	50-2523
15	Door Complete	50-2522
-	E33I Owner's Manual	50-2546
-	E33I Conversion Kit NG to LP	50-2488
-	E33I Conversion Kit LP to NG	50-2538
-	Ceramic Wool Embers Only	50-893
-	Blank Filler Switch	EG30-010
-	Log Set (9 pcs)	50-2508
-	Brick Liner	50-2525
-	12 oz. Can of Metallic Black Touch Up Paint	PAINT-12-MB
-	Remote Transmitter	50-2411
-	Wire Harness - Receiver	50-2008
-	Wire Harness - IPI	50-2009

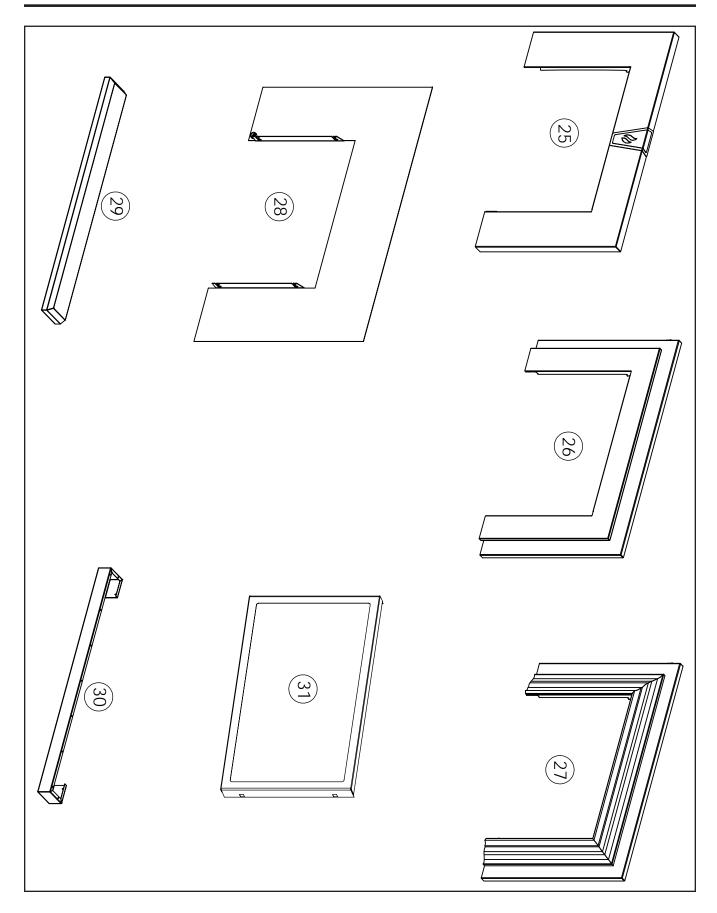
# PARTS LIST

Reference Number	Option Description	Part Number
25	Regular Surround Panel - E33I	50-2428
26	Contemporary Surround Panel - E33I	50-2429
27	Extruded Surround Panel - E33I	50-2430
28	Trimmable Surround Panel - E33I	50-2432
29	Base Shelf - E33I	50-2434
30	Base Shelf Riser - E33I	50-2435
-	Porcelain Liner Set - E33I	50-2437
31	Safety Screen - E33I	50-2496

# PARTS DIAGRAM - COMPONENTS



# PARTS DIAGRAM - OPTIONS





# Enviro 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 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/

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

- <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.
- $^{\rm 2}\,$  Log set and panels excludes wear and tear or breakage caused by cleaning or service.
- <sup>3</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>4</sup> Exterior Surface finishing covers plating, enamel or paint and excludes colour changes, chipping, and fingerprints. Travel costs not included.

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### INSTALLATION DATA SHEET

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

NAME OF OWNER:	NAME OF DEALER:
ADDRESS:	ADDRESS:
PHONE:	PHONE:
MODEL:	NAME OF INSTALLER:
SERIAL NUMBER:	
DATE OF PURCHASE: (dd/mm/yyyy)	
DATE OF INSTALLATION:(dd/mm/yyyy)	ADDRESS:
□ DIRECT VENT □ B-VENT	
☐ NATURAL GAS (NAT) ☐ PROPANE(LPG)	
INLET GAS PRESSURE:in WC	PHONE:
MAIN BURNER ORIFICE:# DMS	
PILOT ORIFICE #ORin diam.	
INSTALLER'S SIGNATURE:	

MANUFACTURED BY:
SHERWOOD INDUSTRIES LTD.
6782 OLDFIELD RD. SAANICHTON, BC, CANADA V8M 2A3
www.enviro.com
December 11, 2014
C-14472