

# FIRELIGHT VENT FREE

Natural and Propane  
Gas Room Heater

## *Installation and Operation Instructions*

**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.

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

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

- \* Do not try to light any appliance
- \* Do not touch any electrical switch; do not use any phone in your building
- \* Immediately call your gas supplier from a neighbor's phone.  
Follow 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 gas supplier.*

This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to section 3.2, page 4 of this publication.

Manufactured and Distributed by, Jøtul USA

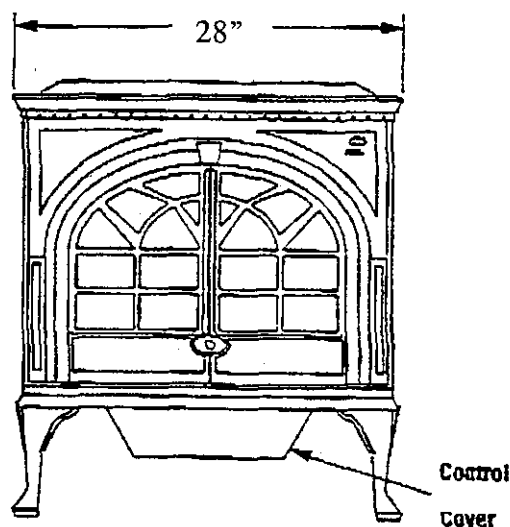
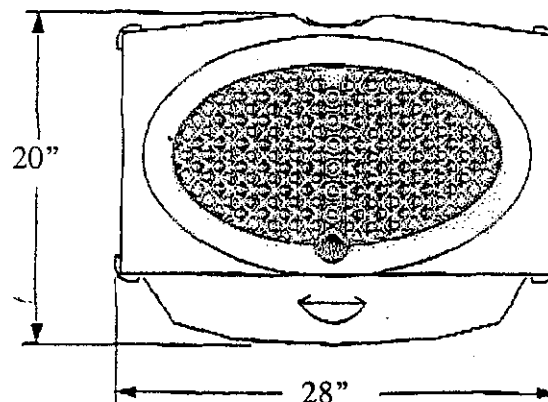
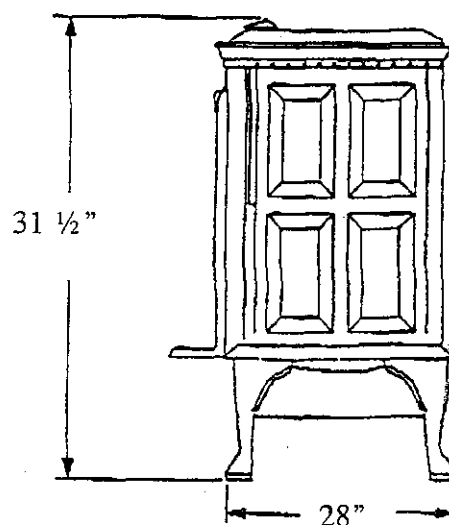
Installer - Please leave this Manual with user of Stove

*can use remote + wall thermo*

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RATING PLATE INFORMATION IS LOCATED ON THE BACK COVER	

Dimensional Diagrams of Stove:



The Rating Plate and Lighting Instructions are located on a tray underneath the Control Valve, below the ashlip, in the front of the stove. These instructions can be accessed by pulling the plates to the limit of the attached cable. A copy of the rating plate information is included on the back cover of this manual.

# 1. Important Safety Information

**DUE TO HIGH TEMPERATURES, THIS APPLIANCE SHOULD BE LOCATED OUT OF TRAFFIC AND AWAY FROM FURNITURE AND DRAPERIES.**

**INSTALLER:** Please leave these instructions with the owner.

**OWNER:** Please retain these instructions for future reference.

**IMPORTANT:** Read these instructions carefully before installing or trying to operate this unvented gas heater.

## WARNING

Any modification to this unvented gas heater or its controls can be dangerous. Improper installation or use of the heater can cause serious injury or death from fire, burns, explosion or carbon monoxide poisoning.

**1. CARBON MONOXIDE POISONING:** Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, obtain fresh air immediately. Have the heater serviced, as it may not be operating properly.

The installation must conform with local codes, in the absence of local codes, it must conform with the National Fuel Gas Code, ANSI Z223.1.

3. Do not use this heater in a bathroom or bedroom.

4. Installation and repair must be done by a qualified service technician.

5. To prevent malfunction and/or sooting, an unvented gas heater should be cleaned at least annually by a qualified service technician. More frequent cleaning may be required due to excessive lint from carpeting, etc. It is imperative that control compartments, burners and circulating air passageways be kept clean.

6. Correct installation of ceramic fiber logs, proper location of the heater and annual cleaning are necessary to avoid problems with sooting. Sooting, resulting from improper installation or operation, can settle on surfaces outside the heater and cause discoloration. See log placement instructions for proper installation.

7. Avoid any drafts that could alter flame patterns. Do not allow fans to blow directly into heater. Do not place a fan inside burn box area of firebox. Fans may create drafts that alter burner flame patterns. Sooting and improper burning will occur as a result of drafts.

8. Warning: Do not use a blower insert, heat exchanger insert or other accessory not approved for use of this heater.

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

10. Young children should be carefully supervised when they are in the same room with the heater.

11. Do not place clothing or other flammable material on or near the heater when the heater is in use.

12. Keep area where heater is located clear and free from combustible materials, gasoline and other flammable vapors and liquids.

13. Any safety screen or guard removed for servicing, must be replaced prior to operating the heater.

14. This unvented gas heater is intended to be smokeless. If logs appear to smoke, turn off the heater and call a qualified service technician. PLEASE NOTE: Initial burn off of heater may cause slight smoke and odor during the first four hours of operation.

15. Input ratings are shown in BTU per hour and are for elevations up to 2,000 feet. For elevations above 2,000 feet, input ratings should be reduced 4 percent for each 1,000 feet above sea level. Refer to the National Fuel Gas Code.

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

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

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

19. Never burn solid fuels in this heater.

**WARNING:** Any change to this heater or its controls can be dangerous!

## 2. General Information

Jøtul is the world's largest manufacturer of solid fuel burning appliances and has been making cast iron wood and coal stoves since 1853. Your new Jøtul Unvented Room Heater has inherited the benefits learned from more than 140 years of producing stoves. With proper care and operation, your new Jøtul will last many, many years.

The Owner's Manual describes the installation procedures and operation instructions of the Jøtul Firelight Vent Free Gas Room Heater. This heater is manufactured in compliance with the American National Standard for Gas Fired Room Unvented Room Heaters (ANSI Z21.11.2a 1993), having been tested for compliance by the American Gas Association.

When installing, operating and maintaining your Jøtul Gas Heater, follow the guidelines given in these instructions. Save this Manual, and make it available to anyone using or servicing the heater.

A number of areas in the U.S. require a building permit to install an unvented gas heater, such as your Jøtul Gas Heater. The National Fuel Gas Code, ANSI Z 223.1 or similar local regulations may apply to the installation of an unvented room heater in your area. Your dealer has been specially selected to carry Jøtul stoves for his or her knowledge of your local codes, and can provide assistance in making sure your installation is safe and legal. You can also contact your insurance representative or building or fire officials to determine what regulations apply in your area.

## 3. Installation

The Jøtul Firelight Vent Free Room Heater must be installed in conformance with local codes, or in the absence of local codes, with the current edition of the National Fuel Gas Code, ANSI Z 223.1 or NFPA54.

### 3.1 Items Required for Installation

- \* External regulator (for LPG/Propane Gas models only)
- \* Piping which complies with local codes
- \* Pipe sealant approved for use with LPG/Propane Gas models (resistant to sulfur compounds)
- \* Manual shutoff valve
- \* Sediment trap
- \* Tee joint

THIS APPLIANCE MAY BE INSTALLED IN AN AFTERMARKET\* MANUFACTURED (MOBILE) HOME, WHERE NOT PROHIBITED BY STATE OR LOCAL CODES.

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

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.

### WARNING

Do not install this heater:

- \* Where curtains, furniture, clothing, or other flammable objects are less than 42" from the front of the heater.
- \* In high traffic areas.
- \* In windy or drafty areas.

### 3.2 Providing for Adequate Air for Combustion and Ventilation

Adequate air for combustion and ventilation must be provided for the proper operation of this room heater. This heater shall not be installed in a confined space unless provisions are provided for adequate combustion and ventilation air.

The National Fuel Gas Code defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 BTU per-hour (4.8 m<sup>3</sup> per kW) of the combined input rating of all appliances installed in that space and an unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 BTU per hour (4.8 m<sup>3</sup> per kW) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of the unconfined space.

*For the Jøtul Firelight Vent Free Room Heater, the minimum volume of a room that the stove can be placed in is 1,500 cubic feet.*

The following formula can be used to determine the maximum heater rating permitted in an unconfined space:

$$\text{BTU/HR} = \frac{\text{Length} \times \text{Width} \times \text{Height} \times 1000}{50}$$

Where length, width and height are measured in feet, and the product of the three dimensions equals the cubic volume of the room.

As an example, using the above formula, the minimum cubic volume of a room to be considered unconfined with regard to the Jøtul Firelight Vent Free Room Heater would be a room with the following dimensions:

Length: 12.5', Width: 15', Height: 8'

$$\text{BTU/HR} = \frac{12.5' \times 15' \times 8' \times 1000}{50}$$

BTU/HR = 30,000

Any room, or series of adjoining rooms not furnished with doors, that have a total cubic volume greater than 1,500 cubic feet would be considered an unconfined space, and thus adequate for location of the Jøtul Firelight Vent Free Room Heater.

#### WARNING

If the area in which the heater may be operated is smaller than that defined as unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the National Fuel Gas Code, ANSI Z223.1, 1992, Section 5.3 or applicable local codes.

Unusually tight construction is defined as construction where:

- Walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of 1 perm ( $6 \times 10^{-11}$  kg per pa-sec- $m^2$ ) or less with openings gasketed and sealed, and
- Weather stripping has been added on openable windows and doors, and
- Caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall panels, at penetrations for plumbing, electrical, and gas lines, and at other openings.

### 3.3 Minimum Clearances to Combustible Materials

The Jøtul Firelight Vent Free Room Heater must be installed with the following clearances to combustible material observed:

Right Side**	3 inches
Left Side**	3 inches
Rear	3 inches
Overhang clearance*	28 inches
Ceiling	42 inches
Front	36 inches

\*To 10 inch overhang

\*\*For installation of warming shelf option minimum side clearance is 9". For full open door viewing you must provide 12" of side clearance.

THIS HEATER MUST NOT BE INSTALLED DIRECTLY ON CARPET, NON-CERAMIC TILE OR OTHER COMBUSTIBLE MATERIAL, WITH THE EXCEPTION OF WOOD. IF IT IS DESIRED TO INSTALL THIS HEATER ON A CARPETED OR NON-CERAMIC TILED FLOOR, A METAL OR WOOD PANEL MUST BE PLACED UNDER THE HEATER THAT EXTENDS THE FULL WIDTH AND DEPTH OF THE HEATER.

### 3.4 Disassembly

#### WARNING

The cast iron lid of your Jøtul Firelight Vent Free Room Heater is not fastened to the top plate of your stove. UNDER NO CIRCUMSTANCES SHOULD YOU OPERATE THE STOVE WITH THE LID OR TOP PLATE REMOVED.

Your Jøtul Firelight Vent Free Room Heater requires some minor assembly before you can operate the stove. Part numbers ( ) refer to diagrams at the end of this manual.

When you receive your heater, you should find the following components attached to the wooden pallet lid:

- ♦ Cast iron Ash Lip (30)
- ♦ Stove tool (31) for door operation
- ♦ Allen wrench for top plate removal
- ♦ Touch up paint

To attach the Ash Lip (30):

- ♦ Loosen the two Ash Lip bolts and discard the two spacers.
- ♦ Install the ash lip (30) in place of the spacers and replace and tighten the ash lip bolts.

The log set must be removed from the packaging and arranged prior to start up of your heater. This unit is supplied with a set of four ceramic logs. Do not handle these logs with your bare hands! Always wear gloves to prevent skin irritation from ceramic fibers. After handling logs, wash your hands gently with soap and water to remove any traces of fibers.

To remove logs:

- Remove lid (26), discard packing material.
- Remove top plate (25) by loosening the two set screws (33) located at the top of each side Plate (23,24).
- Remove the top deflector assembly (18, not shown) by removing the 3 screws at the back panel (19, not shown)
- The log package can be lifted out at this time.

### 3.5 Gas Connection:

**PLEASE NOTE:** Prior to connecting your Jøtul Firelight Vent Free Room Heater to a gas supply line you should first check with your local gas company to determine who is authorized to make such connections. Also, always consult your local gas company to ensure that the gas supply conforms with any applicable local codes.

**CHECK GAS Type:** The gas supply must be the same as stated on the stove's rating plate. If the gas supply is different, **DO NOT INSTALL THE HEATER.** Contact your local dealer for the correct model.

Always use an external regulator for all propane/LPG heaters only, to reduce the supply tank pressure to a maximum of 13" w.c. This is in addition to the internal regulator in the heater valve.

#### WARNING

Connecting directly to Propane/LPG tank without the use of a regulator can cause an explosion!

When installing the Jøtul Firelight Vent Free Gas Room Heater, use new black iron or steel pipe. Internally tinned copper or copper tubing can be used per National Fuel Gas Code, section 2.6.3, providing gas meets hydrogen sulfide limits, and where permitted by local codes. The gas piping system must be sized to provide minimum inlet pressure (listed on RatingPlate) at the minimum flow rate (BTU/HR). Undue pressure loss will occur if the pipe is too small.

A Manual shutoff valve must be installed upstream of the appliance. Union tee and plugged 1/8" NPT pressure tapping point should be installed upstream of the appliance. Refer to figure 3.5.1.

A sediment trap should be installed upstream to prevent moisture and contaminants from passing through the pipe to appliance controls and burners. Failure to do so could prevent the appliance from operating reliably. Refer to figure 3.5.1.

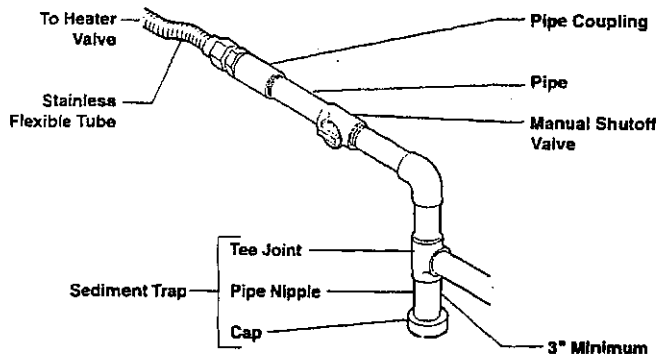


Figure 3.5.1

**IMPORTANT:** Hold heater valve firmly with a wrench to prevent movement when connecting to inlet piping.

The heater gas inlet connection is 3/8" NPT at the valve, inlet on the left side facing the heater. If a right side connection is required, the connecting pipe may be led under the rear of the gas heater at the left hand side for connection to the inlet.

When tightening the joint to the valve, hold the valve securely with a wrench to prevent movement.

Test all gas joints from the gas meter to the heater valve for leaks using a gas analyzer or soap and water solution after completing connection. **DO NOT USE AN OPEN FLAME.**

Check the gas pressure with the appliance burning and the control set to **HIGH**.

#### Millivolt Control (Figure 3.5.2)

The valve regulator controls the burner pressure which should be checked at the pressure test point. Turn captured screw counter-clockwise 2 or 3 turns and then place tubing to a pressure gauge over test point (use test point "A" closest to control knob). After taking pressure reading, be sure and turn captured screw clockwise firmly to re-seal. Do not over-torque. Check for gas leaks.

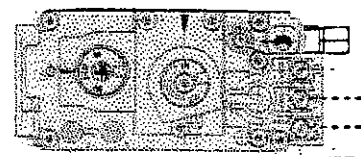


Figure 3.5.2

### 3.6 Electrical Wiring (millivolt)

This unit is operated with a millivolt (thermopile) self powered combination gas control valve. This heater does not require 110vac to operate. Refer to figure 3.6.1 and installation instructions provided with optional wall switch, thermostat or remote control for wiring instructions. A maximum length of 20 feet of 18awg two conductor wire is to be used for wall switch or thermostat installations. Note that thermostats and switches must be suitable for millivolt operation.

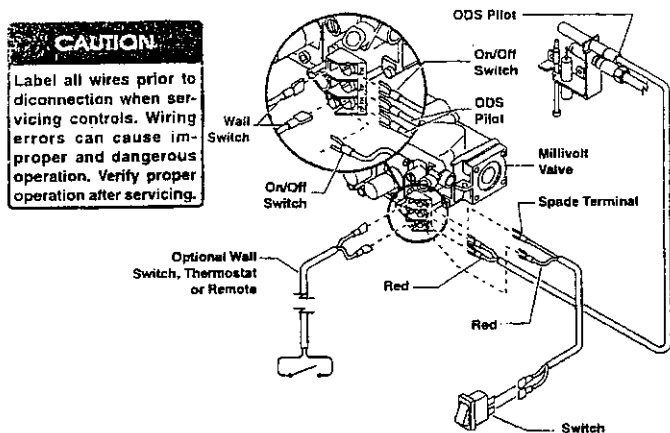


Figure 3.6.1

### 3.7 Arrangement of Logs (figure 3.7.1)::

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

#### WARNING

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

#### Proper installation sequence:

1. Install the rear log (#3) on the top set of locating pins. Visually check to verify that the log is securely placed on the pins and is in contact with the grate.
2. Install the front log (#1) on top of the piezo and control cover. Center the log left to right to properly engage the locator lugs.
3. Install the center log (#2) behind the front log on the remaining set of locating pins. Visually check to verify that the log is securely placed on the pins. Install the cross log (#4) by engaging the holes in the cross log onto pins on the center and/or rear log.

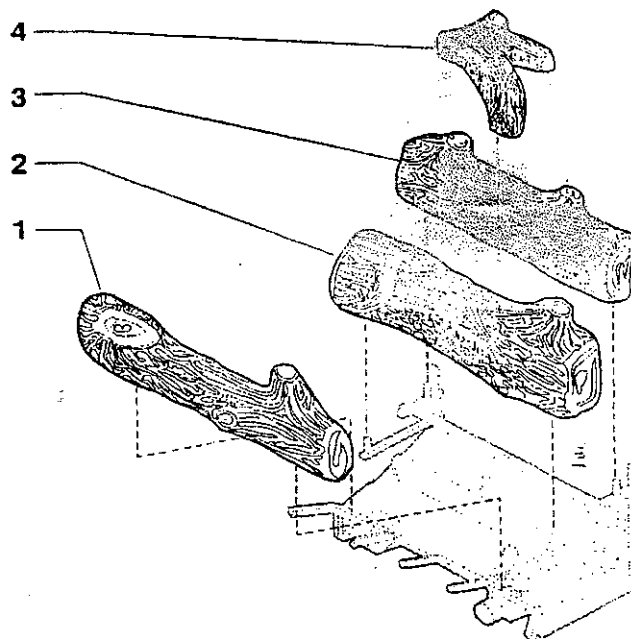


Figure 3.7.1

### 3.8 Reassembly

- Reinstall top deflector assembly (18, not shown) to back panel (19, not shown) using three screws.
- Replace top plate (25) and attach by tightening the two set screws (33) at the top of each side plate (23,24).
- Replace lid (26).

### 4. Lighting, Startup & Operating Instructions

**Avoid any drafts that alter burner flame patterns.** Do not allow fans to blow directly into the fireplace. Do not place a blower inside the burn area of the firebox. Ceiling fans may create drafts that alter flame patterns. Sooting and improper burning will result.

During manufacturing, fabricating, and shipping, various components of this appliance are treated with certain oils, films, or bonding agents. These chemicals are not harmful, but may produce annoying smoke and smells as they are burned off during the initial operation of the appliance, possibly causing headaches, or eye or lung irritation. *This is a normal and temporary occurrence.* The initial break-in operation may last 4 hours while burning at the highest setting.

Provide maximum ventilation by opening windows or doors to allow odors to dissipate. Any odors remaining after this initial break-in will be slight and will disappear with continued use.

## FOR YOUR SAFETY READ BEFORE OPERATING

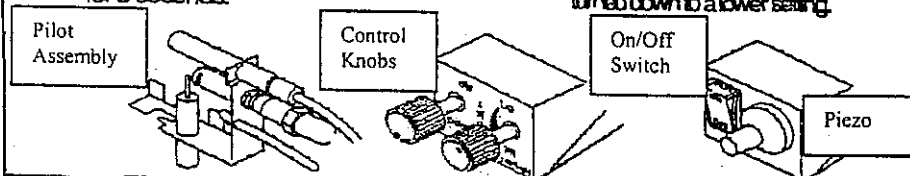
**WARNING:** If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This heater is equipped with an ignition device (piezo) which automatically lights the pilot.
  - B. **BEFORE OPERATING** smell all around the heater 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 heater 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 electric switch; do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.

Removal of this plate will void the compliance with ANSI Z21.11.2

## Removal of this plate will void the compliance with ANSI Z21.11.2 OPERATING INSTRUCTIONS - MILLI-VOLT CONTROL

1. STOP! Read the safety information label.
2. Make sure the manual shutoff valve is fully open.
3. This heater is equipped with an ignition device (piezo) which automatically lights the pilot. Refer to instructions for match lighting.
4. Turn gas control knob clockwise to the "OFF" position, set the thermostat to lowest setting and turn ON/OFF switch to OFF position.
5. 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 label. If you don't smell gas, go to next step.
6. From "OFF" position, turn the gas control knob counterclockwise to "IGN" position. Push in control knob for 5 seconds.
7. With the control knob pushed in, push in and release the piezo ignitor button to light the pilot.
8. Continue pushing the control knob in for a further 60 seconds to prevent the flame detector from shutting off the gas while the probe is warming up. Release the control knob.
9. Turn gas control knob counterclockwise to the ON position.
10. After the pilot has been light for one minute, the burners can be turned on. Turn the ON/OFF switch to ON position or adjust thermostat to desired setting. The ON/OFF switch is located at the upper right rear of the appliance.
11. If the heater will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.
12. Wait 30 seconds before readjusting the heater when the control knob has been turned down to a lower setting.



### TO TURN OFF GAS TO APPLIANCE

1. Turn gas control knob clockwise to "OFF" position. Do not force.
2. Turn ON/OFF switch to OFF position and/or set thermostat (if present) to lowest setting.
3. If applicable: Turn off all electric power to the appliance.



## 5. Checking Flame Appearance

### 5.1 Pilot Flame

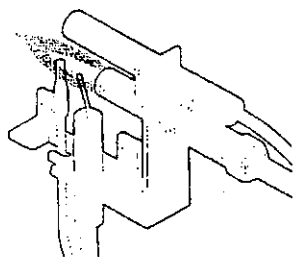
Flames from the pilot, front, and rear burner should be visually checked as soon as the heater is installed. In addition, periodically check the flames visually during operation.

#### *Checking the pilot flame:*

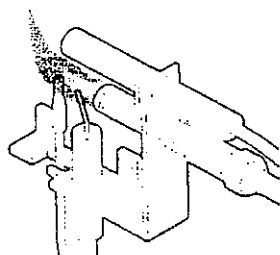
The pilot flame must always be present when the heater is in operation. It should just touch the top of the thermocouple tip. Refer to *Figure 5.1.1*.

If the pilot flame does not touch the thermocouple, then the main burner can not function reliably. Refer to *Figure 5.1.2* for incorrect shape of pilot flame.

#### Millivolt Control



*Figure 5.1.1: Correct Appearance of Pilot Flame*



*Figure 5.1.2: Incorrect Appearance of Pilot Flame*

### 5.2 Checking the Burner Flames

In normal operation at full rate after 15 minutes, the following flame appearances should be observed:

The rear flames above and behind log #2 and if front of log #3 may be yellow. The flames should extend approximately 2"-3" above log #2. Refer to *Figure 5.2.1*.

The front burner flames are blue, becoming yellowish as they hit the bumps on the face of the front log. The face of the front log will glow a bright reddish orange when the heater is in operation.

IF ANY OF THE BURNER FLAMES OR PILOT FLAMES ARE NOTICEABLY DIFFERENT FROM THE DESCRIPTION, DO NOT OPERATE THE HEATER. CALL A QUALIFIED SERVICE TECHNICIAN TO CORRECT THE PROBLEM.

NEVER OPERATE THE HEATER WITH THE SCREEN REMOVED.

## 6. Cleaning and Servicing

Your Jøtul Firelight Vent Free Gas Room Heater will give you many years of trouble-free enjoyment provided that the stove is maintained properly. Please note that a condition of the warranty is that the heater is serviced on an annual basis. To help you keep track of the service history of the heater, please use the *Service Record* provided on the back cover of this manual.

#### WARNING

Keep Rear Burner air intake hole clean and free of dirt and debris. Failure to do so may cause excessive sooting of stove and poor combustion.

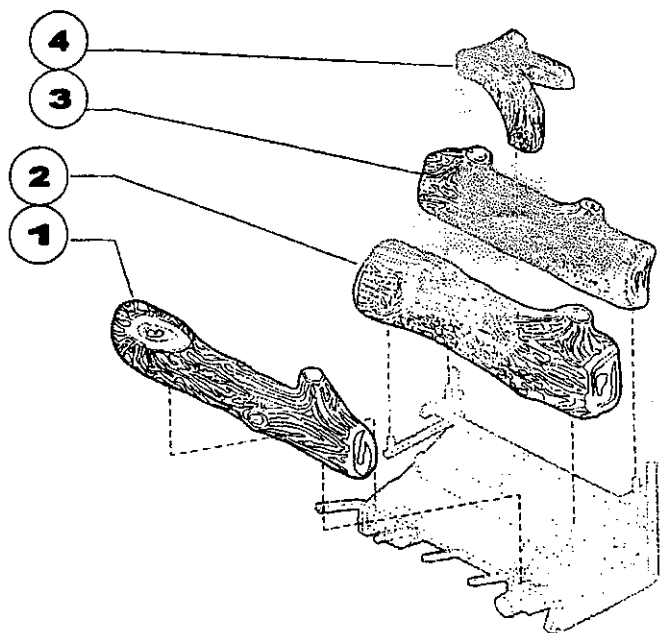
Prior to each heating season, a general annual maintenance should be conducted on the heater to ensure optimum performance.

ALL SERVICE WORK ON THE JØTUL FLVF GAS ROOM HEATER MUST BE CONDUCTED BY A QUALIFIED SERVICE TECHNICIAN. CONTACT YOUR DEALER WHEN NEEDING SERVICE OR MAINTENANCE.

### Periodic Cleaning

Periodic cleaning of your Jøtul Firelight Vent Free Room Heater should be conducted by a qualified service technician to prevent malfunction and/or sooting. When cleaning, follow these guidelines:

- Remove lid (26).
- Remove top (25) by loosening the two allen screws (33), one each located at the top of each side plate (23, 24).
- Remove top deflector (18) by removing the 3 screws at the pack panel (19).
- Remove screen (21) by sliding it up out of the casting.
- Do not use cleaning fluid to clean logs or any part of heater.
- To clean logs – brush with soft bristle brush or vacuum with brush attachment.
- Vacuum loose particles and dust from the front and rear burner, control, ignitor covers and grate weldment.
- Inspect rear burner. Remove lint or particles with vacuum.
- External cast iron casting should be dusted and wiped with soap and water.
- Reinstall screen and reassemble per paragraph 3.8.



### Annual Cleaning and Inspection

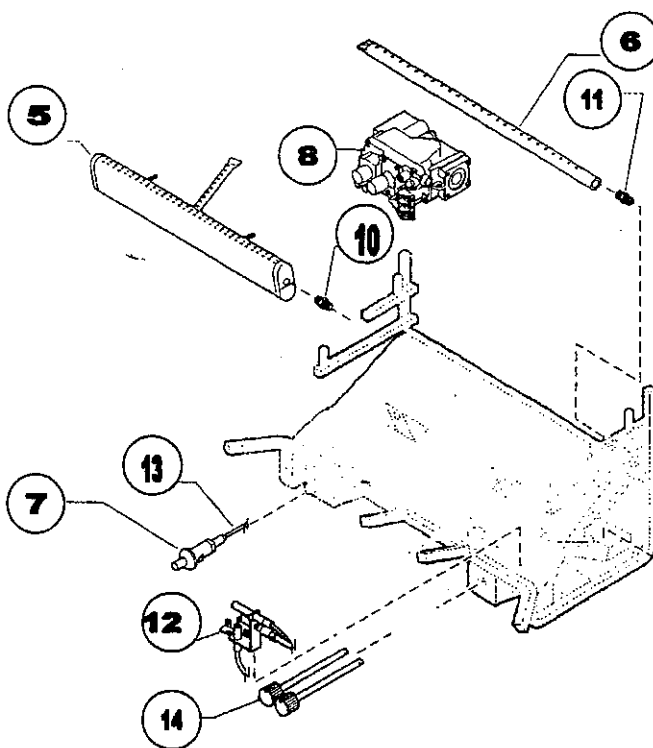
- Inspect and clean rear burner air intake holes.
- Inspect and clean all burner ports.
- Inspect ODS pilot for operation and accumulation of lint at air intake holes.
- Verify flame pattern and log placement for proper operation.
- Verify smooth and responsive ignition of main burner and rear burner.

#### **WARNING**

If for any reason you remove logs, handle carefully by holding at each end. Gloves should be worn to prevent skin irritation from ceramic fibers. If your skin should become irritated, wash hands gently with soap and water. WHEN REPLACING LOGS, FOLLOW DIRECTIONS CAREFULLY OUTLINED IN SECTION 5.

### 7. Replacement Parts

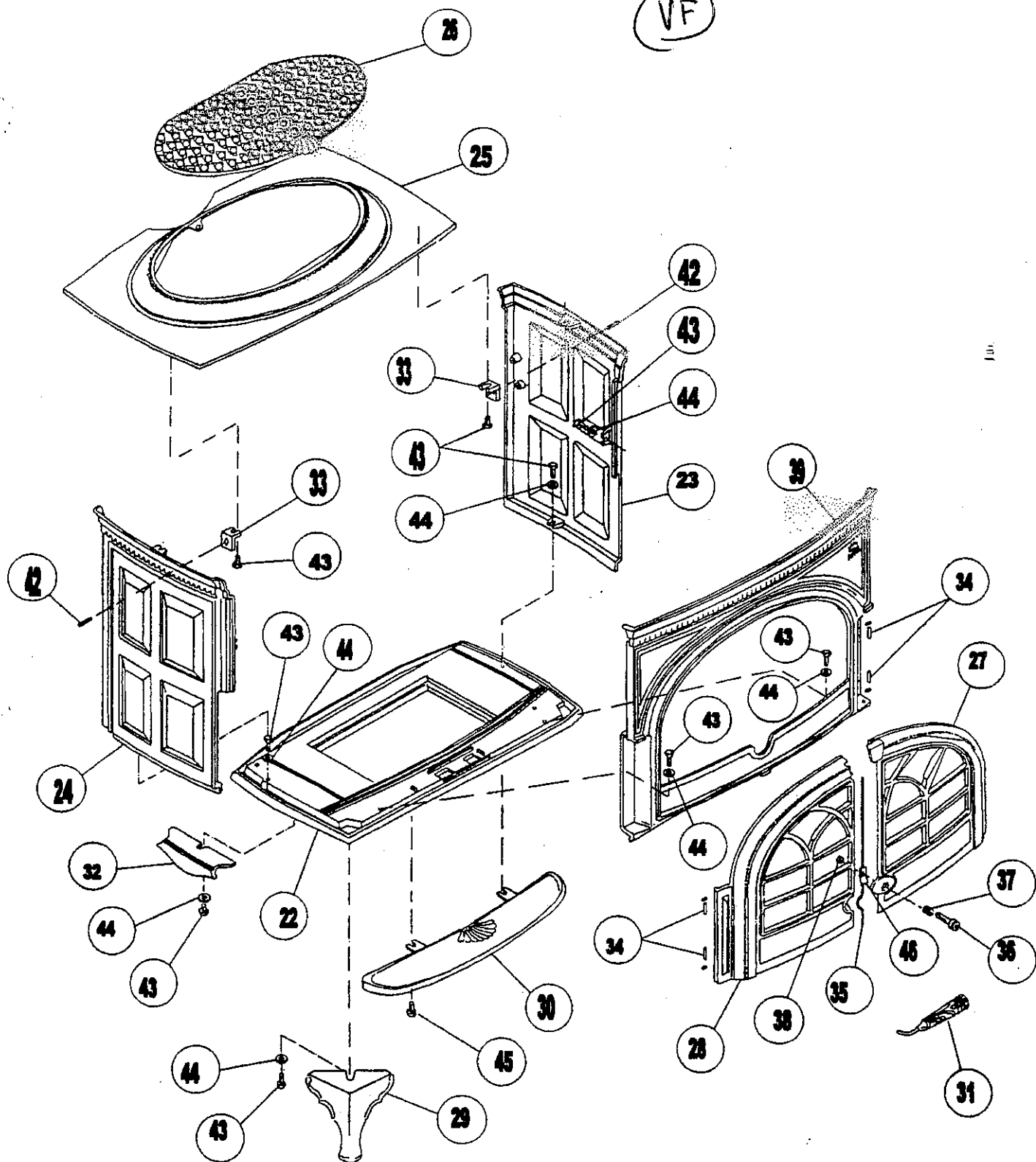
Should you, for any reason, require replacement parts for your Jøtul FLVF Gas Room Heater, you may order them from Jøtul USA through your dealer. A complete parts list is included in the back of this manual.



#### **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.

VF



Replacement parts are available through your retailer.

Item	Description	Part Number
1	Log, Front	120501
2	Log, Center	120502
3	Log, Rear	120503
4	Log, Top	120504

VF

Item	Description	Part Number	
		Natural	Propane
5	Burner, Front	120505	120505
6	Burner, Rear	120506	120506
7	Ignitor, Piezo	120507	120507
8	Valve, Control	120508	120509
9			
10	Injector, Main	120510	120511
11	Injector, Rear	120512	120513
12	Pilot ODS Assembly	120514	120515
13	Wire Piezo	0304800VF	0304800VF
14	Control Knob	120516	120516
15	Rocker Switch	120517	120517
16	Rocker Switch Lead	120518	120518
17	Burner Assembly	120519	120520
18	Top Deflector Assembly	120521	120521
19	Back Panel Assembly	120522	120522
20	Side	120523	120523
21	Inner Screen	120524	120524

Item	Description	Part Number			
		Matte Black	Blue Black	Green	Indigo Blue
22	Base Plate	10379593	10379528	10379533	10379537
23	Right Side Plate	10381592	10381527	10381532	10381536
24	Left Side Plate	10381492	10389427	10381432	10381436
25	Top Plate	10379793	10379728	10379733	1037+9737
26	Top Grill	10379892	10379827	10379832	10379836
27	Door, Right	103320	103415	10332032	10332036
28	Door, Left	103321	103416	10333232	10333236
29	Leg	103332	103413	10379632	10379636
30	Ashlip	10379692	10379627	10379632	10379636
31	Stove Tool	153286	153286	153286	153286
32	Cover, Bottom Surround	103342	103414	10334232	10334236
33	Assembly Bracket	103713	103713	103713	103713
34	Hinge Pins	125960	125960	125960	125960
35	Gasket	200028	200028	200028	200028
36	Latch Bolt	128359	128359	128359	128359
37	Spring, Latch Bolt	126164	126164	126164	126164
38	Nut, 10mm	9933	9933	9933	9933
39	Front Plate	10379992	10379927	10379932	10379936
40	Fire Screen	350169	350169	350169	350169
41	Warming Shelves	350296	350297	350299	350359
42	6x20 Set Screw	117835	117835	117835	117835
43	8x12 Hex Bolt	99115	99115	99115	99115
44	8mm Washer	9976	9976	9976	9976
45	8x25 Hexbolt	99131	99131	99131	99131
46	Door Latch	128011	128011	128011	128011
47	Switch, Wall Kit	Millivolt only	Millivolt only	Millivolt only	Millivolt only
48	Thermostat, Wall Kit	750003	750003	750003	750003
49	Remote, Hand Held	750002	750002	750002	750002

## 8. TROUBLESHOOTING

### WARNING

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

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

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is no spark at ODS/pilot.	<ol style="list-style-type: none"> <li>1. Ignitor electrode positioned wrong.</li> <li>2. Ignitor electrode is broken.</li> <li>3. Ignitor electrode not connected to ignitor cable.</li> <li>4. Ignitor cable pinched or wet. Keep ignitor cable dry.</li> <li>5. Broken ignitor cable.</li> <li>6. Bad piezo ignitor.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace ignitor.</li> <li>2. Replace ignitor.</li> <li>3. Reconnect ignitor cable.</li> <li>4. Free ignitor cable if pinched by any metal or tubing.</li> <li>5. Replace ignitor cable.</li> <li>6. Replace piezo ignitor.</li> </ol>
Appliance produces unwanted odors.	<ol style="list-style-type: none"> <li>1. Appliance burning vapors from paint, hair spray, glues, etc.</li> <li>2. Gas leak.</li> </ol>	<ol style="list-style-type: none"> <li>1. Ventilate room. Stop using odor causing products while heater is running.</li> <li>2. Locate and correct all leaks.</li> </ol>
Appliance shuts off during use.	<ol style="list-style-type: none"> <li>1. Not enough fresh air is available for ODS/ pilot to operate.</li> <li>2. Low line pressure.</li> <li>3. ODS/pilot is partially clogged.</li> <li>4. Defective Thermopile</li> </ol>	<ol style="list-style-type: none"> <li>1. Open window and/or door for ventilation.</li> <li>2. Contact local gas company.</li> <li>3. Clean ODS/pilot.</li> <li>4. Check pilot flame, check wire connections, check output, should be 325 millivolts across TH/TP and TP Terminals with ON/OFF switches off.</li> </ol>
Gas odor even when control knob is in OFF position.	<ol style="list-style-type: none"> <li>1. Gas leak.</li> <li>2. Control valve defective.</li> </ol>	<ol style="list-style-type: none"> <li>1. Locate and correct all leaks.</li> <li>2. Replace control valve.</li> </ol>
When ignitor button is pressed, there is spark at ODS pilot, but no ignition.	<ol style="list-style-type: none"> <li>1. Gas supply turned off or manual shutoff valve closed.</li> <li>2. Control knob not in PILOT position.</li> <li>3. Control knob not pressed in while in PILOT position.</li> <li>4. Air in gas lines when installed.</li> <li>5. ODS/pilot is clogged.</li> <li>6. Gas regulator setting is not correct.</li> </ol>	<ol style="list-style-type: none"> <li>1. Turn on gas supply or open manual shutoff valve.</li> <li>2. Turn control knob to PILOT position.</li> <li>3. Press in control knob while in PILOT position.</li> <li>4. Continue holding down control knob. Repeat igniting operation until air is removed.</li> <li>5. Replace ODS/pilot assembly or get it serviced.</li> <li>6. Replace gas regulator</li> </ol>
ODS/pilot lights, but flame goes out when control knob is released.	<ol style="list-style-type: none"> <li>1. Control knob not fully pressed in.</li> <li>2. Control knob not pressed in long enough.</li> <li>3. Manual shutoff valve not fully open.</li> </ol>	<ol style="list-style-type: none"> <li>1. Press in control knob fully.</li> <li>2. After ODS/pilot lights, keep control knob pressed in for 30 seconds.</li> <li>3. Fully open manual shutoff valve.</li> </ol>

**OBSERVED PROBLEM****POSSIBLE CAUSE****REMEDY**

	<ol style="list-style-type: none"><li>4. Thermocouple connection loose at control valve.</li><li>5. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by either low gas pressure, or a dirty or partially clogged ODS/pilot.</li><li>6. Thermocouple damaged.</li><li>7. Control valve damaged.</li></ol>	<ol style="list-style-type: none"><li>4. Hand tighten until snug, then tighten 1/4 turn more.</li><li>5. Contact local gas company.</li><li>6. Replace thermocouple.</li><li>7. Replace control valve.</li></ol>
One or both burners do not light after ODS/pilot is lit.	<ol style="list-style-type: none"><li>1. Burner orifice is clogged.</li><li>2. Burner orifice diameter is too small.</li><li>3. Inlet gas pressure is too low.</li></ol>	<ol style="list-style-type: none"><li>1. Clean burner or replace burner orifice.</li><li>2. Replace burner orifice.</li><li>3. Contact qualified service person.</li></ol>
Burner backfires during combustion.	<ol style="list-style-type: none"><li>1. Manifold pressure is too low.</li><li>2. Burner orifice is clogged.</li></ol>	<ol style="list-style-type: none"><li>1. Contact local gas company.</li><li>2. Clean burner or replace burner orifice.</li></ol>
Slight smoke or odor during initial operation.	<ol style="list-style-type: none"><li>1. Burner orifice is clogged or damaged.</li><li>2. Burner is damaged.</li><li>3. Gas regulator defective.</li></ol>	<ol style="list-style-type: none"><li>1. Clean burner or replace burner orifice.</li><li>2. Replace burner.</li><li>3. Replace gas regulator.</li></ol>
Logs appear to smoke after initial operation.	<ol style="list-style-type: none"><li>1. Vapors from paint or curing process of logs.</li></ol>	<ol style="list-style-type: none"><li>1. Problem will stop after a few hours of operation. Run the heater with the damper open if you have one, or open a window for the first few hours.</li><li>1. Log heater is intended to be smokeless. Turn OFF heater and call qualified service person.</li></ol>
Heater produces a whistling noise when burner is lit.	<ol style="list-style-type: none"><li>1. Turning control knob to HIGH position when burner is cold.</li><li>2. Air in gas line.</li><li>3. Dirty or partially clogged burners orifice.</li></ol>	<ol style="list-style-type: none"><li>1. Turn control knob to LOW position and let warm up for a minute.</li><li>2. Operate burner until air is removed from line. Have gas line checked by local gas company.</li><li>3. Clean burner or replace burner orifice.</li></ol>
No gas to pilot.	<ol style="list-style-type: none"><li>1. LP-regulator shut down due to inlet pressure too high.</li></ol>	<ol style="list-style-type: none"><li>1. Verify LP tank regulator is installed and set at 11" to 13" w.c.</li><li>2. Replace regulator on heater.</li></ol>

**WARNING**

If the gas quality is bad, your pilot may not stay lit, the burners may produce soot and the heater may backfire when lit. If the gas quality or pressure is low, contact your local gas supplier immediately.

# JOTUL FIRELIGHT

## VENTFREE ROOM HEATER

Model No. **JOTUL FIRELIGHT VENT FREE LPG** Gas Type **Propane/LPG**  
Max. Input **30,000 Btu/HR** Min Input **24,000 Btu/HR**  
Manifold Pressure **10.0" W.C.** Control No. **SIT 820.636.1**  
For Purpose of Input Adjustment: Min. Supply Pressure **11.0" W.C.**  
Max. Supply Pressure **13.0" W.C.**  
Standard **ANS Z21.11.2a-1997** Serial No. **XXXXXX**  
**Unvented Heaters**

Minimum Clearances to Combustible Surfaces (as viewed from front of appliance):

Sides **3"** Rear **3"** Floor **0"** Ceiling **42"** 10" Projection **28"**

**WARNING:** This appliance must be installed in accordance with instructions contained in the Owner's Manual.

Manufactured by:  
Jotul USA, Inc.  
400 Riverside Street  
P.O. Box 1157  
Portland, Maine.

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

This heater shall not be installed in a bedroom or bathroom.



PLEASE LIFT TO REVEAL LIGHTING INSTRUCTIONS.



# JOTUL FIRELIGHT

## VENTFREE ROOM HEATER

Model No. **JOTUL FIRELIGHT VENT FREE NG** Gas Type **Natural/NG**  
Max. Input **30,000 Btu/HR** Min Input **20,000 Btu/HR**  
Manifold Pressure **3.5" W.C.** Control No. **SIT 820.637**  
For Purpose of Input Adjustment: Min. Supply Pressure **5.0" W.C.**  
Max. Supply Pressure **10.5" W.C.**  
Standard **ANS Z21.11.2a-1997** Serial No. **XXXXXX**  
**Unvented Heaters**

Minimum Clearances to Combustible Surfaces (as viewed from front of appliance):

Sides **3"** Rear **3"** Floor **0"** Ceiling **42"** 10" Projection **28"**

**WARNING:** This appliance must be installed in accordance with instructions contained in the Owner's Manual.

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PLEASE LIFT TO REVEAL LIGHTING INSTRUCTIONS.