# INSTALLER / CONSUMER SAFETY INFORMATION

Please read this manual before installing and using appliance.

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 suppler from a neighbor's phone. Follow the gas suppler's instructions.
- If you cannot reach your gas supplier, call the fire department.

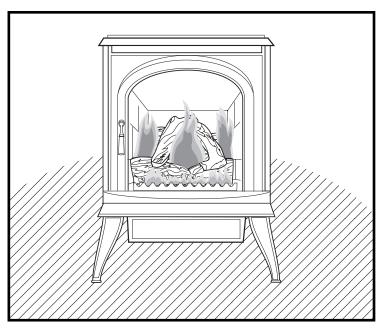
Installation and service must be performed by a qualified installer, service agency or the gas supplier.

This 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 Page 7.



# Jefferson<sub>®</sub> Vent Free Gas Heater

Models: JUVSR & JUVSM 3095, 3096, 3097, 3100, 3101, 3102, 3105, 3106, 3107, 3110, 3111, 3112



Homeowner's Installation and Operation Manual



## **Vermont Castings, Majestic Products**

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INSTALLER: DO NOT DISCARD THIS MANUAL - LEAVE FOR HOMEOWNER

## **Table Of Contents**

PLEASE READ THE INSTALLATION & OPERATING INSTRUCTIONS BEFORE USING APPLIANCE.

Thank you and congratulations on your purchase of a Vermont Castings stove.

IMPORTANT: Read all instructions and warnings carefully before starting installation. Failure to follow these instructions may result in a possible fire hazard and will void the warranty.

Installation and Operating Instructions	3
JUVS Dimensions	
Clearance Requirements	5
Hearth Requirements	5
Gas Specifications	
Gas Inlet and Manifold Pressures	6
High Elevations	6
Odor During Operation	6
Vent Free Features	7
Fresh Air Requirements	7
Assembly Procedures	
Unpack the Stove	9
Install Optional Fan Kit	9
Install ON/OFF Switch	10
Thermostat Connections	11
Connect the Gas Supply Line	11
Install Log Set	11
Install Stove Front	12
Operation	
Your First Fire	13
Pilot and Burner Inspection	
Flame & Temperature Adjustment	13
Flame Characteristics	13
Lighting Instructions	14
Troubleshooting	15
Maintenance	
Firebox Cleaning and Inspection	
Cleaning Procedure	17
Care of Cast Iron	17
Replacement Parts	18
Optional Accessories	
Fan Kits	
Remote Controls	
Warranty	22

## **Installation & Operating Instructions**

In order to ensure safe and effective installation, this unit must be installed only by a qualified agency, individual, firm, corporation or company that is experienced in the installation, repair and servicing of this type of appliance and is familiar with the building codes and installation techniques appropriate in your area. Contact your hearth products dealer or local gas supplier for the name of a qualified service person.

IMPORTANT: Read this owner's manual carefully and completely before trying to assemble, operate, or service this heater. Improper use of this heater can cause serious injury or death from burns, fire, explosion, electrical shock, and carbon monoxide poisoning.failure to follow instructions may result in property damage, bodily injury or loss of life. This manual contains important user information. Keep this manual with the heater after installation is complete.

# FOR SAFE INSTALLATION AND OPERATION, PLEASE NOTE THE FOLLOWING:

- Use only Natural Gas with JUVSRN/MN. Use only Propane with JUVSRP/MP. Do not use any other fuels.
- Install only in accordance with the National Fuel Gas Code, ANSIZ223.1/NFPA54-latest edition. (Exception: Do not derate this appliance for altitude. This appliance has been tested and listed for use in altitudes up to 10,000 feet.)
- 3. Use only the installation instructions provided by the manufacturer for this appliance. Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.
- 4. Warning: Any change to this heater or its controls can be dangerous. DO NOT make modifications to any heater or associated parts.
- DO NOT install this heater in a bedroom or bathroom.
- 6. Due to high surface temperatures, DO NOT install this heater
  - in a recreational vehicle,
  - where curtains, furniture, clothing or other flammable objects are less than 36 inches from the front, top or sides of the heater,
  - · in high traffic areas,
  - · in windy or drafty areas.
- 7. DO NOT place clothing or other flammable material on or near the appliance.
- 8. DO NOT obstruct the top grille at all. Doing so will cause high levels of carbon monoxide that will lead to death.

# CARBON MONOXIDE POISONING MAY LEAD TO DEATH!

Carbon Monoxide Poisoning: Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness, or nausea. If you have these signs, the heater may not be working properly. Get fresh air at once! Have the heater serviced. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes.

- This heater needs fresh, outside air ventilation to operate properly. See Fresh Air Requirements on pages 7 and 8.
- If heater shuts off, heater may not have enough fresh air ventilation. Provide more fresh air. If heater keeps shutting off, refer to *Troubleshoot-ing*.
- 11. DO NOT operate this heater
  - where flammable liquids or vapors are used or stored
  - under dusty conditions.
- 12. The heater becomes very hot when operating.
  Alert children and adults to stay away from hot
  surfaces to avoid burns or clothing ignition. The
  heater will remain hot for a time after shutdown.
  Allow surface to cool before touching.
- 13. Carefully supervise young children when they are in the room with the heater.
- 14. Do not use the heater if any part has been exposed to or 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.
- 15. DO NOT operate the heater if any log is broken or damaged.
- Turn heater off and let cool before servicing. Only a qualified service person should service and repair heater.
- 17. DO NOT operate this appliance with the safety screen removed. If the safety screen is removed from the appliance for service or cleaning, it must be replaced before operating the heater.

**NOTE:** If any of the original wire as supplied with the appliance must be replaced, it must be replaced with a wire of at least 105°F temperature rating.

**Proposition 65 Warning:** Fuels used in gas, woodburning or oil fired appliances, and the products of combustion of such fuels, contain chemicals known to the State of California to cause cancer, birth defects and other reproductive harm.

California Health & Safety Code Sec. 25249.6

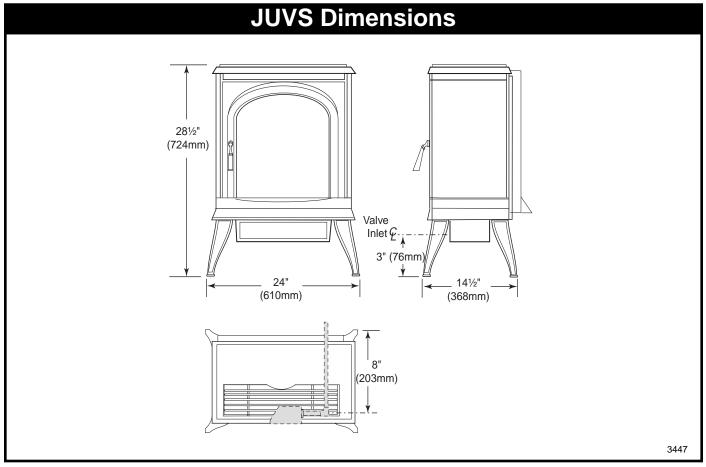


Fig. 1 Jefferson Vent Free dimensions.

## **Clearance Requirements**

# Minimum Clearances to Combustible Materials

Maintain clearance, (empty space), between combustible materials and the heater as specified below for the appropriate firebox shell being installed.

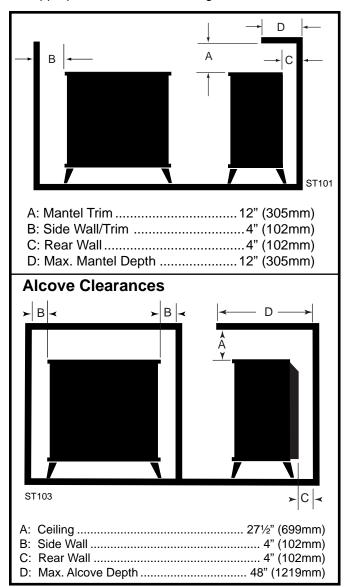
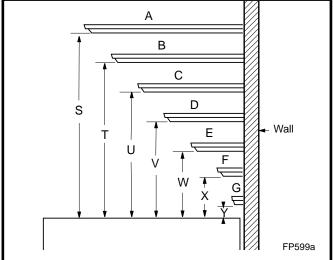


Fig. 2 Minimum wall clearances



Ref.	Mantel Shelf Depth	Ref.	Mantel from Stove Top
Α	12" (305mm)	S	12" (305mm)
В	10" (254mm)	T	10" 254mm)
С	8" (203mm)	U	8" (203mm0
D	6" (152mm)	V	6" (152mm)
Е	4" (102mm)	W	4" (102mm)
F	2" (51mm)	Χ	2" (51mm)
G	1" (25mm)	Y	1" (25mm)

## **Hearth Requirements**

The JUVS must be installed on rigid flooring. If the appliance is installed on any combustible surface other than wood flooring, such as carpet or tile, a metal or wood panel must be installed to extend the full length and width of the unit.

#### WARNING

- Do not install this heater in a bathroom or bedroom.
- Installation of this heater must conform with Local Codes or in the absence of Local Codes, with the National Fuel Gas Code, ANSI Z223.1.
- This heater creates warm air currents. These currents move heat to wall surfaces next to the heater. Installing the heater next to vinyl or cloth wall coverings or operating the heater where impurities in the air such as tobacco smoke exist, may discolor walls.
- Do not use a blower insert, heat exchanger insert or other accessory not approved with this heater.

Gas Specifications				
			Max. Input	Min. Input
Model	Fuel	Gas Control	BTU/h	BTU/h
JUVSRN	Nat.	Millivolt	28,000	20,000
JUVSRP	Prop	Millivolt	28,000	21,000
JUVSMN	Nat	Millivolt	28,000	18,500
JUVSMP	Prop	Millivolt	28,000	18,500

Firebox weight / shipping 110 lbs.

Gas Inlet and Manifold Pressures		
	Natural	LP (Propane)
Inlet Minimum	5.5" w.c.	11" w.c.
Inlet Maximum	14" w.c.	14" w.c.
Manifold Pressure	3.5" w.c.	10" w.c. (MP)
		11" w.c. (RP)

# JUVSR & JUVSM Vent-Free Certified to:

ANSI Z21.11.2a-2001 Unvented Heaters

The installation of your Vermont Castings stove must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code ANSI Z223.1 - latest edition. (EXCEPTION: Do not derate this appliance for altitude up to 4,500 feet (1,370m). Maintain the manifold pressure at 3.5" w.c. for Natural Gas and 11.0" w.c. for LP Gas.

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

This appliance is to be used only with the type of gas specified on the rating plate which is attached to the rear panel. This appliance is not convertible for use with other gases.

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

## **High Elevations**

Input ratings are shown in BTU per hour and are certified without deration from elevations up to 4,500 feet (1,370m) above sea level.

Nuisance outages may occur at altitudes above 4,500 feet (1,370m) if dirt, dust, lint and/or cobwebs are allowed to accumulate on burner and/or ODS pilot. Monthly inspection and cleaning is recommended for altitudes above 4,500 feet (1,370m)

For elevations above 4,500 feet (1,370m), installations must be in accordance with the current ANSI Z223.1 and/or local codes having jurisdiction.

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual for correct installation and operational procedures. For assistance or additional information consult a qualified installer, service agency, or the gas supplier.

## **Odor During Operation**

Neither natural gas nor propane gas give off an odor when burned. The nature of a vent free combustion system, however, is such that odors may occasionally be produced during heater operation when impurities exist in the immediate area. Cleaning solutions, paint, solvents, cigarette smoke, candles, adhesives, new carpet or textiles, etc., all can create fumes. These fumes may mix with combustion air and can create odor. Such odors will disappear over time, however the condition can be alleviated by opening a window or otherwise providing additional ventilation to the area.

## **Vent Free Features**

The JUVS Gas Heater is an unvented gas appliance tested and listed to the ANSI standard Z21.11.2a.2001. The Vent Free Gas Heater is configured to use Natural Gas, (JUVSRN, JUVSMN) or Propane (JUVSRP, JUVSMP). Because these heaters are clean-burning and highly energy-efficient, no venting system is required.

The JUVS is shipped fully assembled with the exception of the log set. The log set is assembled during installation.

The JUVS is equipped with a Honeywell control valve that allows thermostatic control, on/off switch or a remote switch (not supplied).

The JUVS model incorporates variable regulators that allow you to adjust burner heat output between HIGH, (28,000 BTU), and LOW, (20,000 BTU). See the Operation Section for details.

The standing pilot incorporates an Oxygen Depletion System (ODS/pilot) which shuts off gas flow to the burner in the event that sufficient fresh air becomes unavailable for continued safe operation.

# Fresh Air Requirements for Combustion and Ventilation

## WARNING

This heater must have fresh air for proper operation. If it does not, poor fuel combustion could result. Read the following instructions to ensure proper fresh air supply for this and other fuelburning appliances in your home.

Modern construction standards have resulted in homes that are highly energy-efficient and that allow little heat loss. Your home needs to breathe, however, and all fuel-burning appliances need fresh air to function properly and safely. Exhaust fans, clothes dryers, fireplaces and other fuel burning appliances use the air inside the building. If the available fresh air supply is insufficient to meet the demands of these appliances, problems can result.

The JUVS heater has specific fresh air requirements. You must determine that these requirements will be met within the space where the appliance will be installed. The following information will help you insure adequate fresh air is available for the heater to function properly.

## **Provide for Adequate Ventilation**

Any space within a home can be classified in these categories:

- 1) Unusually tight construction
- 2) Confined space
- 3) Unconfined space

First, determine which classification defines the intended installation space.

## **Unusually Tight Construction**

You must provide additional fresh air if the space falls into this classification. *Unusually Tight Construction* is defined as construction wherein:

- a. Walls and ceilings exposed to the outside atmosphere have a continuous water vapor barrier with a rating of one perm or less, with openings gasketed or sealed, *and*
- b. weather stripping has been added on openable windows and doors *and*
- c. caulking or sealants are applied to areas such as joints around windows and door frames, between sole plates and floors, between wall and ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines and at all other openings.

If your home meets all of the above criteria, you must provide additional fresh air for the appliance as detailed on Page 7.

If your home does not meet the above criteria, follow the procedure below.

## Determine If You Have a Confined or Unconfined Space

Use the following formula to determine if you have a confined or unconfined space.

Space is defined as the room in which you will install the heater, plus any adjoining rooms with doorless passageways or ventilation grilles between the rooms.

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 input rating (4.8m³ per Kw) of the aggregate (total) 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 (4.8m³ 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.

**1.** Determine the volume of space (length x width x height). Include adjoining rooms connected by doorless passageways or ventilating grilles.

Example: A room that is 18' x 12' x 8' has a volume of 1728 cubic feet. An adjoining open kitchen that is 10' x 12' x 8' has a volume of 960 cubic feet. An adjoining open dining room is 12' x 12' x 8' with a volume of 1152 cubic feet. The total volume is 3840 feet. (1728 + 960 + 1152)

**2.** Divide the volume of space by 50 cubic feet. The result is the maximum BTU/hour the space can support.

Example: 3840 cubic feet divided by 50 = 76.8 or 76,800 BTU/hour.

**3.** Add the BTU/hour ratings of all fuel-burning appliances installed in the same space, including the following:

Gas Water Heater Gas Furnace
Gas Fireplace Logs Vent-free Gas Heater
Vented Gas Heater\* Other Gas Appliances\*

\*Do not include Direct-vent appliances as these use outdoor air for combustion and vent to the outdoors.

#### Example:

Gas Range 55,000 BTU/hour
Vent-free Logset +25,000 BTU/hour
Total 80,000 BTU/hour

**4.** Compare the maximum BTU/hour rating the space can support with the total BTU/hour used by the appliances.

Example: 76,800 BTU/hour the space can support

80,000 BTU/hour used by appliances

In this example, the maximum BTU/hour that the space can support is less than the total used by the appliances. The space is considered to be *Confined Space*.

Additional air must be provided to meet the requirements of the vent-free heater.

A confined space may be ventilated in two ways:

**A.** Open or provide at least two ventilating grilles to an adjoining unconfined space. (Fig. 3)

Each of the two grilles must provide an opening of at least 50 square inches, with all opening dimensions being at least 3". One grille must be within 12" of the ceiling; the other within 12" of the floor. (If the total exceeds 100,000 BTU/hour, additional grilles will be needed.)

**B.** Vent the room directly to the outdoors. (Provide one square inch of opening for each 4,000 BTU/hour)

For further information on ventilation guidelines and sizing specifications, follow the National Fuel Gas Code/NFPA 54/ANSI Z223.1, Section 5.3.

If the total BTU/hour used by the appliances is less than the maximum BTU/hr the space can support, the room meets the *Unconfined Space* criteria and no further ventilation is needed.

#### WARNING

This heater shall not be installed in a confined space unless provisions are made for adequate combustion and ventilation air.

#### WARNING

If the area in which the heater may be operated is smaller than that defined as an unconfined space, 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.

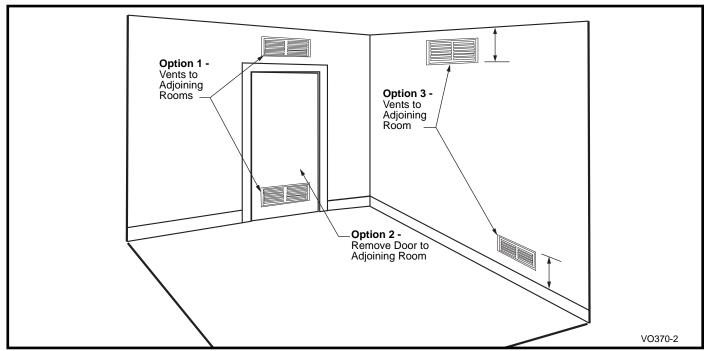


Fig. 3 Supplementing ventilation air.

## **Assembly Procedures**

## **Unpack the Stove**

Remove the stove assembly from the shipping carton and inspect it for loose or damaged parts. Do not install this appliance if any parts are loose or if there is any visual or suspected damage resulting from shipping or handling. Report damage to your dealer/distributor immediately. The log set is packaged in the box shipped inside the firebox.

#### To remove the packaged log set from the firebox:

- Lift the stove front up and then swing the bottom out and away to disengage it from the stove body. (Fig. 4) Cut the wire tie securing the screen.
- Remove the screen frame. (Fig. 5)
- · Remove box and set aside.

Contact your dealer if the burner is loose or damaged in any way.

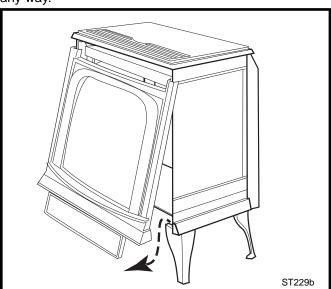


Fig. 4 Remove stove front.

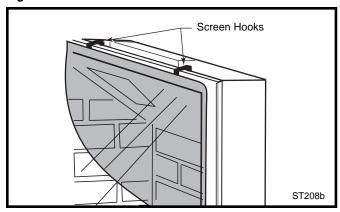


Fig. 5 Lift screen from firebox.

## **WARNING**

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

## **CAUTION**

Porcelain enamelled surfaces are fragile. Handle porcelain enamelled castings tenderly. Familiarize yourself with the assembly steps before you begin and proceed with deliberation and care. If possible, have assistance available.

Place enamelled castings on a soft, cushioned surface until you are ready to assembly.

Avoid contact between the castings and other hard surfaces or objects.

## **Optional Fan Kit Installation (2960/FK28)**

1. Attach the fan to the rear shroud by engaging the upper flange of the fan skirt under the lower edge of the shroud and secure the skirt with the four screws and one star washer provided. (Fig. 6,7)

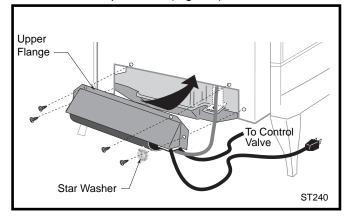


Fig. 6 Place upper flange behind lower edge of shroud.

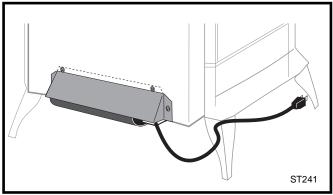


Fig. 7 Correct position of fan skirt installation.

- 2. Disconnect the snapstat module from the leads inside the snapstat bracket. (Fig. 8)
- 3. Bend open the snapstat bracket. use your fingers or needle nose pliers to remove the black plastic grommet from the bracket. Discard the grommet and bracket.

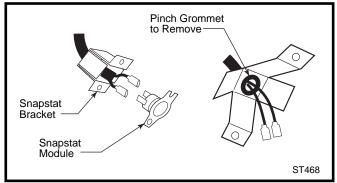


Fig. 8 Remove snaptstat and grommet from bracket.

- 4. Secure the snapstat to the upper middle of the inner shroud. (Fig. 9) **NOTE:** The snapstat location may be reached through the front of the stove between the top and the firebox or you may loosen the four screws holding the rear shroud in place. Be sure to secure shroud back into place before operation.
- 5. Connect the two wires to the two snapstat extension leads attached to the inner shroud. You may coil excess wire up inside the rear shroud.

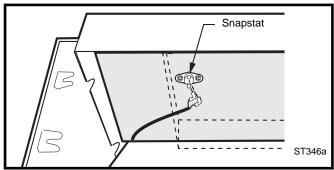
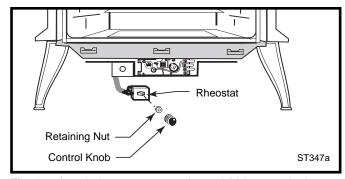


Fig. 9 Attach snapstat to inner shroud.

6. Route the rheostat control switch and wire forward under the stove. (Fig. 10) Use the wire tie to secure the fan and rheostat wire harnesses together to the tubing under the heater.



**Fig. 10** Attach rheostat to control panel. Valve may look different.

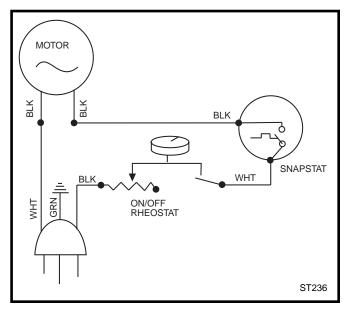


Fig. 11 Fan wiring diagram.

# Install ON/OFF Switch (R Models only)

The switch assembly parts are found in the parts bag.

- Attach switch assembly to left rear side of stove shroud using two screws and existing holes in shroud. (Fig. 12)
- 2. Run wires down back of stove, under bottom of rear shroud to valve.
- 3. Attach wires to valve terminals. (Fig. 13)

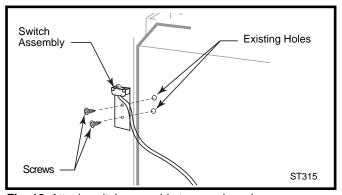


Fig. 12 Attach switch assembly to rear shroud.

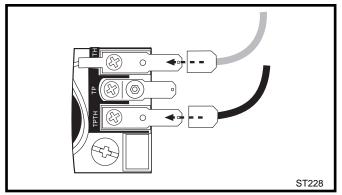


Fig. 13 Attach switch wires to valve.

## Thermostat Connection (optional) (R Models only)

Use only a thermostat rated for 500 millivolts. Do not use low voltage (24V) thermostats.

Check the table below for the appropriate gauge thermostat wire to use for the length of lead required in your installation.

Maximum Run
40 feet
25 feet
16 feet

- 1. Install the wall thermostat in the desired location and run the wires to the stove location. Terminate these leads with 1/4" female connectors.
- 2. Connect the thermostat wires to the valve. (Fig. 13)

## Connect the Gas Supply Line

Check the Rating Plate attached by a steel cable to the firebox, to confirm that you have the appropriate firebox for the type of fuel to be used.

#### **CAUTION**



This appliance should only be connected by a qualified gas technician. Test to confirm manifold pressures as specified below.

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

The Jefferson 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 pressure equal to or less than 1/2 psig.

There must be a gas shutoff between the stove and the supply.

In order to connect Natural Gas, use a fitting with 3/8" NPT nipple on the valve side and 1/2" natural gas supply line with an input of 28,000 BTUs at a manifold pressure of 3.5" and minimum inlet supply for adjustment of 5.5" W.C.

In order to connect Propane, use a fitting with 3/8" NPT nipple on the valve side and 1/2" propane gas supply line with an input of 28,000 BTUs at a manifold pressure of 11.0" and minimum inlet supply for adjustment of 11.0" W.C.

Gas connection should be made in accordance with current National Fuel Gas Code, ANSI Z223.1. Since some municipalities have additional local codes, be sure to consult you local authority.

Connect the gas supply and test for leaks. Use a 50/50 solution of liquid soap and water to test for leaks at gas fittings and joints. **NEVER test with an open flame.** Light the pilot according to the directions on page 14, before going to the next step.

## Install the Log Set

- 1. Remove the logs from their packaging, and inspect each piece for damage. DO NOT INSTALL DAM-AGED LOGS.
- 2. Install the rear log(1) by centering it side to side on the sheet metal shelf at the back of the firebox. (Fig. 14)
- 3. Install the left (2) and right (3) middle logs by engaging holes on their bottoms with pins on the burner brackets. (Fig. 14)
- 4. Loosely sprinkle the small package lava rocks directly on top of the burner between the decorative grate and the middle logs. Do not place any lava rocks behind the middle logs. (Fig. 15)
- 5. Engage the upper log(4) with the right middle log as shown in Figure 15. Swing the top end toward the rear of the firebox and rest on notch on top of rear log. (NOTE: This log will touch the back of the firebox.) Engage the top log (5) with the upper log and the left middle log. (Fig. 15)

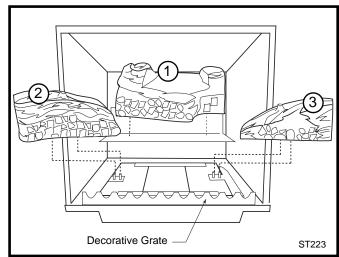


Fig. 14 Install back, left and right logs.

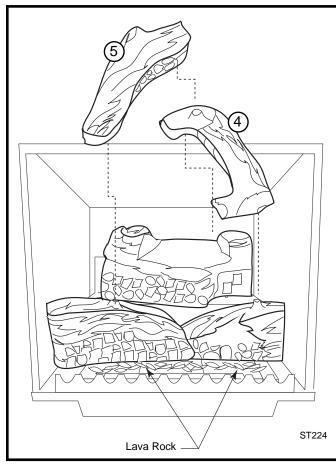


Fig. 15 Install lava rock and upper logs.

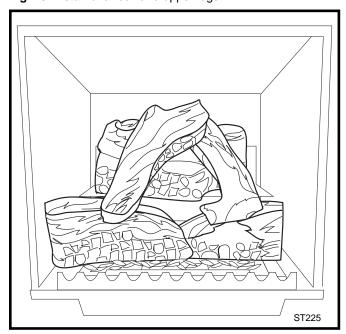


Fig. 16 Completed log installation.

## **Install the Stove Front**

The Front Plate attaches to the stove by four steel tabs that engage with corresponding cast ribs on the sides and bottom of the stove body. Position the Front about 3" down from stove top and lift the plate to engage the upper tabs behind the adjacent ribs on the sides. (Fig. 17) Then lower the plate into position, so that the lower tabs engage with the corresponding ribs at the bottom. (Fig. 18)

When properly installed, the bottom of the Stove Front cannot be pulled away from the sides without also lifting it.

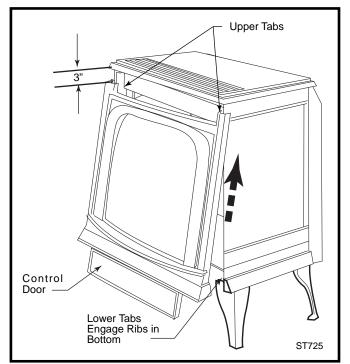


Fig. 17 Install stove front.

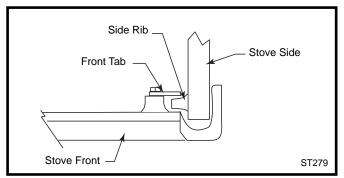


Fig. 180 Engage with side ribs.

# **Operation**

#### **Your First Fire**

Read these instructions carefully and familiarize yourself with the burner controls of this heater.

The JUVSR uses a Honeywell control valve that allows thermostatic, on/off switch regulation and has a separate Piezo ignition button. (Fig. 20)

The JUVSM is equipped with an SIT control valve for manual use only.

Locate the Pilot assembly to the right behind the burner. (Fig. 21) Follow the lighting instructions on page 14 exactly.

For the first fire, allow the stove to operate continuously for six hours without using the fan. During the first fire, it is not unusual to smell some odor associated with new logs, paint and metal being heated. Odors should dissipate within a few hours or so, however, you can open a window to provide plenty of fresh air to alleviate this condition.

## **Pilot and Burner Inspection**

Each time you light your heater, check that the pilot flame and burner flame pattern are as shown in Figures 22 and 23. If flame patterns are incorrect, turn the heater off. See *Troubleshooting*, page 15.

Follow regular maintenance procedures as described on page 17.

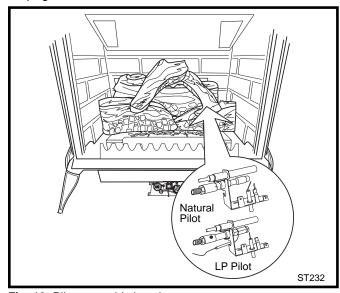


Fig. 19 Pilot assembly location.

## Flame & Temperature Adjustment

For units equipped with 'HI/LO' valves, the flame adjustment is accomplished by rotating the 'HI/LO' adjustment knob located near the center of the gas valve. (Fig. 20, 21)

Turn counterclockwise to decrease flame height

Turn clockwise to increase flame height

Fig. 20 Flame adjustment knob for Honeywell Valve.

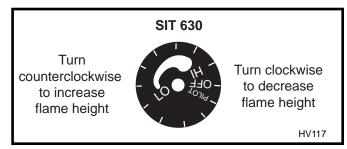
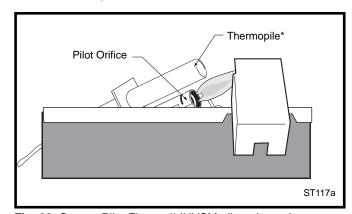


Fig. 21 Flame adjustment knob for Eurosit Valve.

## **Flame Characteristics**

It is important to periodically perform a visual check of the pilot and burner flames. Compare them to the illustration below. (Fig. 22, 23) If the flame patterns appear abnormal contact a qualified service provider for service and adjustment.



**Fig. 22** Correct Pilot Flame. (\*JUVSM pilots do not have Thermopile)



**Fig. 23** Proper flame pattern with Regulator in HIGH position.

# **Lighting And Operating Instructions**

## FOR YOUR SAFETY READ BEFORE LIGHTING

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

- A. This heater has a pilot which must be lit manually. When lighting the pilot follow these instructions exactly.
- B. BEFORE LIGHTING 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.

#### WHAT TO DO IF YOU SMELL GAS

- Do not try to light any fireplace
- Do not touch any electric switch
- Do not use any phone in your building
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.

- If you cannot reach your gas supplier, call the Fire Department
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, do not try to repair it, call a qualified service technician. Applying force or any attempted repair may result in a fire or explosion.
- D. Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect the heater and to replace any part of the control system and any gas control which has been under water.

## **Lighting Instructions**

- 1. **STOP!** Read the safety information above.
- 2. Turn off all electrical power to the fireplace.
- For MN/MP/TN/TP appliances ONLY, go on to Step 4. For RN/RP appliances turn the On/Off switch to "OFF" position or set thermostat to lowest level.
- 4. Open control access panel.
- 5. Push in gas control knob slightly and turn clockwise \_\_\_\_ to "OFF".







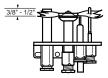
Furo SIT

SIT NOVA

Honeywell

- 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. If you do not smell gas, go to the next step.
- 7. Remove glass door before lighting pilot. (See Glass Frame Removal section).
- 8. Visibly locate pilot by the main burner.
- 9. Turn knob on gas control counterclockwise to "PILOT".

10. Push the control knob all the way in and hold. Immediately light the pilot by repeatedly depressing the piezo spark ignitor until a flame appears. Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 8.







- If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
- If after several tries, the pilot will not stay lit, turn the gas control knob to "OFF" and call your service technician or gas supplier.
- 11. Replace glass door.
- 12. Turn gas control knob to "ON" position.
- 13. For RN/RP appliances turn the On/Off switch to "ON" position or set thermostat to desired setting.
- 14. Turn on all electrical power to the fireplace.

## To Turn Off Gas To Heater

- 1. Turn the On/Off switch to Off position or set the thermostat to lowest setting.
- 2. Turn off all electric power to the fireplace if service is to be performed.
- 3. Open control access panel.
- 4. Push in gas control knob slightly and turn clockwise to "OFF". Do not force.
- 5. Close control access panel.

## **Troubleshooting**

Follow these procedures in the order presented.

## WARNING

TURN OFF HEATER AND ALLOW TO COOL COMPLETELY BEFORE SERVICING.

#### CONDITION **POSSIBLE CAUSE** SOLUTION No spark at pilot when Ignitor is 1. Ignition Electrode is disconnected 1. Inspect and re-connect, replace or operated. from ignition wire, broken or repair as necessary. incorrectly positioned. 2. Ignitor wire is broken. 2. Replace wire. 3. Bad Piezo Ignitor. 3. Replace Piezo Ignitor. The Ignitor Electrode sparks, 1. Gas supply is turned off or supply 1. Turn on gas supply or open supply but Pilot does not light. line shut-off valve is closed. line shut-off valve. 2. Control Knob is not in PILOT 2. Turn Control Knob to PILOT. position. 3. Control Knob not pressed in while 3. Press Control Knob in while in the in PILOT position. PILOT position. 4. Continue holding in Control Knob 4. Air present in gas lines. and repeat ignition procedure until air is bled from the lines. 5. Inlet supply pressure is not within 5. Call local gas supplier. Adjust inlet correct settings. supply pressure to specification: NG; 5.5" w.c.-14.0"w.c. LP; 11.0" w.c.-14.0"w.c. 6. Call qualified gas technician. 6. Other conditions that should be identified only by a qualified gas technician.

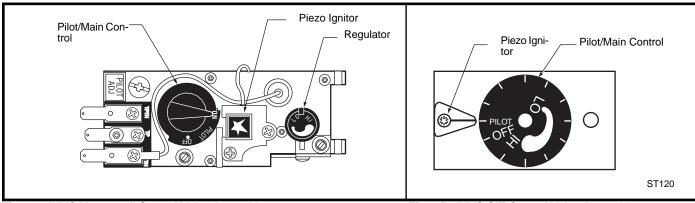


Fig. 24 JUVS Honeywell Control Valve Assembly.

Fig. 25 JUVS SIT Control Valve Assembly.

## CONDITION

#### **POSSIBLE CAUSE**

#### SOLUTION

# Pilot lights but flame goes out when Control Knob is released.

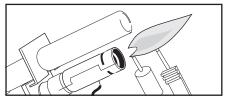
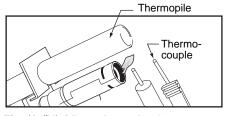


Fig. 26 Pilot flame is lifting.



**Fig. 27** Pilot flame is weak - does not touch Thermocouple.

- 1. Control Knob not fully depressed or held in long enough.
- 2. Gas supply line shut-off valve is not fully open.
- 3. Thermocouple connection is loose at the Control Valve.
- 4. Pilot flame does not touch the Thermocouple. (Figs. 26, 27)
  This can be caused by:
  A) Incorrect gas pressure, and/or
  B) other conditions that should be identified only by a qualified service technician.
- 5. Thermocouple is damaged.
- 6. Control Valve is damaged.

- 1. Depress Control Knob fully and hold in for a full 30 seconds.
- 2. Fully open gas supply line shut-off valve.
- 3. Inspect and tighten securely.
- A) Contact the local gas company. Inlet supply pressure should be 5" w.c.-8"w.c. for NG (5"w.c.-7"w.c. over 8000 ft. elevation) and 11"w.c.-12"w.c. for LP. Adjust as necessary. B)Call local gas service techni-
- cian.
  5. Call local gas service technician.
- 6. Call local gas service technician.

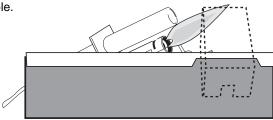


Fig. 28 Correct LP Pilot Flame.

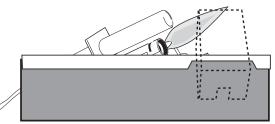


Fig. 29 Correct NG Pilot Flame.

# Pilot lights but Main Burner does not.

- 1. Gas supply line shut-off valve is not fully open.
- 2. Foreign material is blocking Burner ports.
- 3. Main Burner orifice is clogged.
- 4. Thermostat or remote switch not activated on JUVS.
- 5. Bad Thermopile.

- 1. Fully open gas supply line shut-off valve.
- 2. Insptect and clear debris away from Burner ports.
- 3. Call local gas service technician.
- 4. Set thermostat to higher temperature or check remote switch.
- 5. Call local gas service technician.

# Main Burner shuts off and Pilot flame goes out while in operation.

- 1. Insufficient fresh air.
- Determine that adequate ventilation exists to provide sufficient fresh air. Open a window or provide additional ventilation. (See Fresh Air Requirements, Pages 7-8)
- 2. Incorrect inlet supply pressure.
- Contact the local gas company. Adjust inlet supply pressure to specification: NG; 5"w.c.-8"w.c. (5"w.c.-7"w.c. at elevations over 8000 ft.) LP; 11"w.c.-12"w.c.

## **Maintenance**

The following procedures will help ensure that your stove continues to perform safely and efficiently.

## **Firebox Cleaning and Inspection**

Cleanliness is critical to correct operation of the heater. The log set, burner, valve controls and air circulation areas must all be kept free of dust and unobstructed by debris. Inspect these areas before each use and clean whenever accumulation is evident. Follow the simple procedure outlined below.

Frequent cleaning may be necessary in living environments subject to excessive carpet lint or pet hair. For example, if you live with a dog that sheds continuously, you will need to inspect the burner area frequently and clean it as often as the accumulation requires. In extreme conditions, it may be necessary to clean the burner and log set monthly or bi-weekly.

This appliance should be inspected and thoroughly cleaned annually by a qualified gas technician.

## Cleaning Procedure

- 1. Turn the burner OFF and let the heater cool completely before cleaning.
- 2. Remove the safety screen. (Fig. 30)
- Carefully inspect the log set for damage. Contact your local dealer if any damage is evident. DO NOT OPERATE THE HEATER WITH A DAMAGED LOG SET.
- 4. Use a soft-bristled brush vacuum attachment to sweep dust or debris from the log set, pilot and burner. Use care as the log set is fragile. Replace log set according to instructions on pages 11 - 12.
- Replace the screen and Front Plate. DO NOT OPERATE THE HEATER WITH THE SAFETY SCREEN REMOVED.

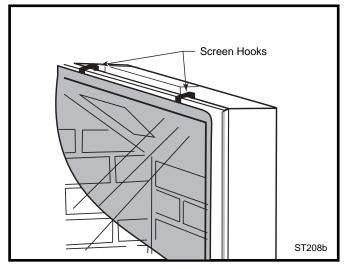


Fig. 30 Remove screen.

## **Care of Cast Iron**

An occasional dusting with a dry rag will help keep the painted surfaces looking new.

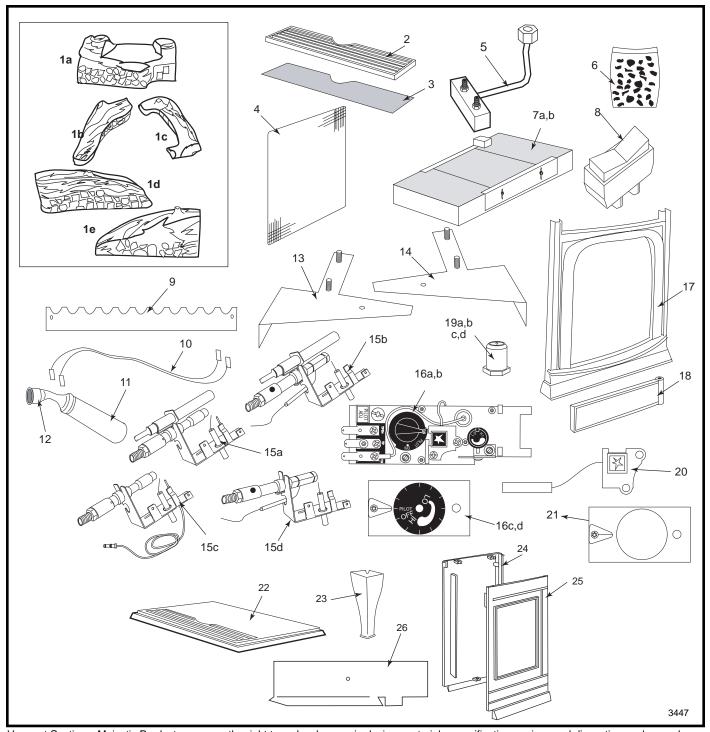
Porcelain enamel surfaces shoul be cleaned with a soft damp cloth. Do not use abrasive cleaning agents. If necessary, use only a cleaning agent formulated specifically for use on porcelain enamel surfaces.

## **WARNING**

Turn the burner Pilot <u>OFF</u> before applying paint. NEVER paint pilot or around pilot area.

#### WARNING

Dust and debris accumulation can result in poor performance. Inspect the valve compartment, burner parts and log set frequently and clean these parts monthly or as often as accumulation warrants.



Vermont Castings, Majestic Products reserves the right to make changes in design, materials, specifications, prices and discontinue colors and products at any time, without notice.

# Jefferson Vent Free Gas Heater (JUVS) Models 3095, 3096, 3097, 3100, 3101, 3102, 3105, 3106, 3107, 3110, 3111, 3112

# Jefferson Vent Free Gas Heater (JUVS) (continued)

Models 3095, 3096, 3097, 3100, 3101, 3102, 3105, 3106, 3107, 3110, 3111, 3112

Ref.	Description	JUVS
1.	Gas Log Set - JUVS	20003482
1a.	Log Rear JUVS	20003483
1b.	Log Upper Left JUVS	20003487
1c.	Log Upper Right JUVS	20003486
1d.	Log Left JUVS	20003485
1e.	Log Right JUVS	20003484
2.	Grille, JDV	30000685
3.	Screen, Grille JDV	30000665
4.	Screen, Front - JUV	20003438
5.	Manifold Assembly	20003739
6.	Lava Rocks, Burner	57897
7a.	Burner Housing Assembly - JUV NG	20003130
7b.	Burner Housing Assembly - JUV LP	20003334
8.	Trim ON/OFF Switch - JDV	53606
9.	Grate Decorative Burner	20003022
10.	Wiring Harness - FSDV32RN/JDV	57265
11.	Handle, Damper Maplewood - Blk	1600664
12.	Front Handle Assembly - JDV/Part 5	5004240
13.	Bracket - Right Log	20003019
14.	Bracket - Left Log	20003020
_15a.	Oxygenerator, NG OP #8204	55464
15b.	Oxygenerator, LP OP #8404	55465
_15c.	Oxygenerator, NG OP #8202	20004435
_15d.	Pilot ODS TP OP #8402	20001357
_16a.	Valve NG Honeywell - VS84212003	10000235
_16b.	Valve LP Honeywell - VS84212011	10000242
16c.	Valve MN Eurosit 0.630.564	20001354
_16d.	Valve MP Eurosit 0.630.563	20001355
17.	Front, JDV	Refer to Enamel Parts Chart Page 19
18.	Door, Control - JDV	30000686
_19a.	Orifice Hood #69 (.0292") - Front - LP	30000513
_19b.	Orifice Hood #54 (.055") - Front - NG	20000130
_19c.	Orifice Hood #54 (.055") - Rear - LP	20000130
19d.	Orifice Hood #44 (.086") - Rear - NG	30000334
20.	Ignitor Piezo -Honeywell #396079	20000062
21.	Cover, Valve w/Piezo	51851
22.	Тор	Refer to Enamel Parts Chart Page 19
23.	Left End	Refer to Enamel Parts Chart Page 19
24.	Right End	Refer to Enamel Parts Chart Page 19
25.	Leg	Refer to Enamel Parts Chart Page 19
26.	Rear Log Bracket	20003274

Shell Enamel Part Numbers					
Model Number	Color	Тор	Left End	Right End	From
3095, 3100, 3105, 3110	Classic	30000695	30000682	30000681	30000683
3096, 3101, 3106, 3111	Midnight	30001341	30000720	30000719	30000721
3097, 3102, 3107, 3112	Green	30001342	30000726	30000727	30000727

## **Optional Accessories**

## **Fan Kits**

#### **FK28 Fan Assembly**

The FK28 fan kit helps distribute heated air from within the firebox out into the room. The fan is controlled by a snapstat that turns power on and off as the firebox temperature rises above and falls below a preset temperature. A rheostat provides for variable fan speeds.

#### **Specifications**

115 Volt / 60Hz / .75 Amps

#### Maintenance

The fan itself does not require regular maintenance, however periodic cleaning of the fan and the surrounding area is required.

#### Installation

Refer to Assembly Section, Page 10 for installation instructions.

## **Remote Controls**

The remote control allows you to turn the heater on or off from anywhere in the room. Remote controls are available for the UVS27R only. Refer to Figure 17, Page 12 for wiring diagram.

Model	Function/s Controlled
MRC1	ON/OFF
MRC2	ON/OFF and Temperature
MRC3	ON/OFF and Temperature control
	with a digital display and a pro
	grammable 24 hour clock
IMT	Wall mounted thermostat control

## LIMITED LIFETIME WARRANTY

#### PRODUCT COVERED BY THIS WARRANTY

All Vermont Castings gas stoves, gas inserts, and gas fireplaces, and all Majestic or Northern Flame brand gas fireplaces equipped with an Insta-Flame Ceramic Burner, or standard steel tube burner.

Any part and/or component replaced under the provisions of this

The Vermont Castings, Majestic Products Company (hereinafter referred to collectively as the Company) warrants that your new Vermont Castings or Majestic Gas Fireplace/Stove is free from manufacturing and material defects for a period of one year from the date of purchase, subject to the following conditions and limitations.

#### **EXTENDED LIFETIME WARRANTY**

The heat exchanger, where applicable, and combustion chamber of every Vermont Castings *or* Majestic gas product is warranted for life against through wall perforation. All appliances equipped with an Insta-Flame Ceramic Burner have limited lifetime coverage on the ceramic burner plaque. Warrantees are made to the original owner subject to proof of purchase and the conditions and limitations listed on this Warranty Document

#### **COMPONENT WARRANTY**

CAST IRON: All external and internal cast iron parts are warranted for a period of three years.

**Note:** On porcelain enamel finished external parts and accessories The Company offers no Warranty on chipping of enamel surfaces. Inspect all product prior to accepting it for any damage to the enamel

The salt air environment of coastal areas or a high humidity environment can be corrosive to the porcelain enamel finish. These conditions can cause rusting of the cast iron beneath the porcelain enamel finish, which will cause the finish to flake off.

Dye lot variations with replacement parts and/or accessories can occur and are not covered by warranty.

GLASS DOORS: Glass doors are covered for a period of one year. Glass doors are not warranted for breakage due to misuse or accident. Glass doors are not covered for discoloration or burned in stains due to environmental issues, or improper cleaning and maintenance.

BRASS PLATED PARTS AND ACCESSORIES: Brass parts should be cleaned with Lemon oil only. Brass cleaners cannot be used. Mortar mix and masonry cleaners may corrode the brass finish. The Company will not be responsible for, nor will it warrant any brass parts which are damaged by external chemicals or down draft conditions.

GAS VALVES: Gas valves are covered for a period of one year ELECTRONIC AND MECHANICAL COMPONENTS: Electronic and mechanical components of the burner assembly are covered for one year. All steel tube burners are warranted for one year.

ACCESSORIES: Unless otherwise noted all components and Vermont Castings, Majestic Products company supplied accessories are covered for a period of one year.

#### **CONDITIONS AND LIMITATIONS**

- This new Vermont Castings or Majestic product must be installed by a
  competent, authorized, service contractor. A licensed technician, as
  prescribed by the local jurisdiction must perform any installation/
  service work. It must be installed and operated at all times in accordance
  with the Installation and Operating instructions furnished with the
  product. Any alteration, willful abuse, accident, or misuse of the product
  shall nullify this warranty.
- This warranty is non-transferable, and is made to the original owner, provided that the purchase was made through an authorized supplier of the Company.
- The customer must pay for any Authorized Dealer in-home travel fees
  or service charges for in-home repair work. It is the dealers option
  whether the repair work will be done in the customer's home or in the
  dealer's shop.
- If upon inspection, the damage is found to be the fault of the manufacturer, repairs will be authorized at no charge to the customer parts and/or labor.

- Any part and/or component replaced under the provisions of this warranty is covered for six months or the remainder of the original warranty, whichever is longest.
- This warranty is limited to the repair of or replacement of part(s) found to be defective in material or workmanship, provided that such part(s) have been subjected to normal conditions of use and service, after said defect is confirmed by the Company's inspection.
- The company may, at its discretion, fully discharge all obligations with respect to this warranty by refunding the wholesale price of the defective part(s)
- Any installation, labor, construction, transportation, or other related costs/expenses arising from defective part(s), repair, replacement, or otherwise of same, will not be covered by this warranty, nor shall the Company assume responsibility for same. Further, the Company will not be responsible for any incidental, indirect, or consequential damages except as provided by law.
- SOME STATES DO NOT ALLOW FOR THE EXCLUSION OR LIMITATIONS OF INCIDENTAL AND CONSEQUENTIAL DAMAGES OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOUR CIRCUMSTANCES. THIS WARRANTY GIVES YOU SPECIFIC RIGHTS AND YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.
- All other warranties-expressed or implied- with respect to the product, its components and accessories, or any obligations/liabilities on the part of the Company are hereby expressly excluded.
- The Company neither assumes, nor authorizes any third party to assume on its behalf, any other liabilities with respect to the sale of this Vermont Castings, Majestic product
- The warranties as outlined within this document do not apply to chimney components or other non Vermont Castings, Majestic accessories used in conjunction with the installation of this product..
- Damage to the unit while in transit is not covered by this warranty but is subject to claim against the common carrier. Contact the dealer from whom you purchased your fireplace/stove (do not operate the appliance as this might negate the ability to process the claim with the carrier).
- The Company will not be responsible for:
  - a) Down drafts or spillage caused by environmental conditions such as near-by trees, buildings, roof tops, hills, or mountains.
  - Inadequate ventilation or negative air pressure caused by mechanical systems such as furnaces, fans, clothes dryers, etc.
- This warranty is void if:
  - a) The fireplace has been operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals.
  - b) The fireplace has been subjected to prolonged periods of dampness or condensation
  - c) Any damages to the fireplace, combustion chamber, heat exchanger or other components due to water, or weather damage, which is the result of but not limited to, improper chimney/venting installation.
  - d) Any alteration, willful abuse, accident, or misuse of the product has occurred.

#### IF WARRANTY SERVICE IS NEEDED...

- Contact your supplier. Make sure you have your warranty, your sales receipt, and the model/serial number of your Vermont Castings, Majestic product.
- 2) DO NOT ATTEMPT TO DO ANY SERVICE WORK YOURSELF.

## **Vermont Castings, Majestic Products**

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