# **HARGROVE**

# Timberland Glow & Highland Glow

#### Natural Gas and Propane (LP) Models

# Vent Free Room Heater Operation and Installation Guide



Timberland Glow 22" Set

Highland Glow 26" Set



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





This appliance is designed to supplement a current heating system. It is not designed to be used as a primary heat source.

This appliance operates as an unvented room heater when fitted to a solid fuel burning masonry or UL127 approved factory built fireplace with the flue damper closed. It may also be installed in an approved unvented fireplace.

WARNING: 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. REFERENCE NATIONAL FUEL GAS CODE NFPA 54, ANSI Z223.1. REFER TO PAGE 2 OF THE INSTALLATION INSTRUCTIONS.

<u>WARNING:</u> Improper installation, adjustments, alteration, service, or maintenance can cause personal injury or property damage. Refer to this manual. For assistance or for additional information, consult a qualified installer, service agency or gas supplier.

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. Solid fuels shall not be burned in a fireplace where an unvented room heater is installed.

WARNING: If 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 the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.

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

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# PRE-INSTALLATION REQUIREMENTS

#### Approved Fireplace Listings (Vent Free)

This appliance operates as an unvented room heater certified under ANSI Z.21.11.2a-2003 when fitted to a masonry or factory built fireplace with the flue damper open or closed. It may also be installed in approved vent free fireplaces.

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

Solid-fuels shall not be burned in a fireplace where an unvented room heater is installed.

<u>WARNING:</u> THIS APPLIANCE IS FOR INSTALLATION ONLY IN A SOLID-FUEL BURNING FIREPLACE OR APPROVED VENTLESS FIREBOX ENCLOSURE.

#### Fireplace Location

**IMPORTANT:** If installing in an approved vent free firebox, refer to their instruction guide for proper installation.

WARNING: DO NOT INSTALL THIS
APPLIANCE IN ANY AREA WHERE GASOLINE
OR ANY COMBUSTIBLE OR EXPLOSIVE
MATERIAL WILL BE USED OR STORED. THE
FLAME IN THIS APPLIANCE IS NOT ISOLATED
FROM THE AIR SPACE IT HEATS AND IT WILL
IGNITE FLAMMABLE VAPORS, DUST
PARTICLES OR OTHER COMBUSTIBLE
MATERIALS THAT COME IN CONTACT WITH
IT WHICH CAN RESULT IN AN EXPLOSION
OR FIRE.

# To determine the safest and most efficient location for your Vent Free Fireplace, you must take into consideration the following guidelines:

- 1. The location must allow for proper clearances for accessibility of servicing and proper operation (See section on Fireplace Clearances page 4).
- 2. Consider a location where heat output would not be affected by drafts, air conditioning ducts, windows or doors.
- 3. Inspect area surrounding the location chosen for the fireplace for possible air drafts that may affect the flames and possibly cause sooting. Air drafts may be caused by a ceiling fan near the fireplace, a hot furnace, or an open door.

**WARNING:** DO NOT ALLOW FANS TO BLOW DIRECTLY INTO THE FIREPLACE. AVOID ANY DRAFTS THAT ALTER BURNER FLAME PATTERNS.

- 4. <u>Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.</u> Young children should be carefully supervised when they are in the same room with the appliance.
- 5. Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.
- 6. Install in an area providing adequate combustion and ventilation air (see section on adequate combustion and ventilation air requirements page 2).
- 7. Do not install in a building that is of unusually tight construction. Unusually tight construction is defined as construction where:
  - Walls and ceilings exposed to the outside atmosphere have a continuous wall vapor retarder with a rating of 1 perm or less with openings gasketed or sealed, and
  - b. Weather striping has been added on openable windows and doors, and
  - c. Caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetration for plumbing, electrical, and gas lines, and at other openings.
- 8. Do not install this heater in bedrooms, bathrooms, or or recreational vehicles.
- 9. This appliance may be installed in an aftermarket\* manufactured (mobile) home, where not prohibited by state or local codes.
- 10. Maintain adequate clearances around air openings.
- 11. Young children should be carefully supervised when they are in the same room as the appliance.
- 12. Keep appliance area clear and free from combustible materials, gasoline, and other flammable vapors and liquids.

<u>WARNING:</u> DO NOT ALLOW CLOTHING OR FLAMMABLE MATERIALS ON OR NEAR THE FIRPLACE.

# PRE-INSTALLATION REQUIREMENTS

## Combustion and Ventilation Air Requirement Worksheet (Vent Free only)

<u>WARNING:</u> 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 SECTION 5.3 OR APPLICABLE LOCAL CODES.

This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air.

The following formula can be used to determine the maximum BTU rating per the definition of unconfined space:

STEP ONE: DETERMINE THE VOLUME OF SPACE IN CUBIC FEET.				
		DTH X HEIGHT = ing rooms with doorless p	cu. Ft. passageways or ventilation grills between rooms.)	
	Example: 24' (I	L) X 16' (W) X 8' (H) = 3,0	072. cu. Ft.	
STEP TWO: MULTIPLY THE VOLUME OF SPACE BY 20 BTU/Hr. TO DETERMINE THE MAXIMUM BTU/H THE SPACE CAN SUPPORT.				
	Example: 3,072	2 cu. Ft. X 20 BTU/Hr. = 6 (Maximum BTU/Hr. the		
STEP THREE: ADD THE BTU/Hr. OF ALL THE FUEL BURNING APPLIANCES IN THE SPACE.				
	VENT FREE H	EATER	BTU/Hr.	
	GAS APPLIAN	CE #1	BTU/Hr.	
	GAS APPLIAN	CE #2	BTU/Hr.	
	Example:	VENT FREE HEATER GAS APPLIANCE #1 TOTAL		

NOTE: DO NOT INCLUDE DIRECT-VENT GAS APPLIANCES. DIRECT VENT IS SEALED COMBUSTION AND DRAWS COMBUSTION AIR FROM THE OUTDOORS.

THE SPACE IN THE ABOVE EXAMPLE IS AN UNCONFINED SPACE BECAUSE THE 61,000 BTU'S AN HOUR USAGE IS LESS THATN THE 61,440 BTU'S AN HOUR AVAILABLE. IF THE TOTAL BTU'S AN HOUR USAGE IS GREATER THAN 61,440 BTU'S AN HOUR THEN THE SPACE WOULD BE A CONFINED SPACE AND ADDITIONAL AIR MUST BE PROVIDED.

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 m³ per kw) of the aggregate input rating of all appliances installed in that space and unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 BTU per hour (4.8 m³ 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.

# **INSTALLATION SPECIFICATIONS**

#### BTU Ratings and Pressure Requirements

LOG SET SIZE	22" SETS		LOG SET SIZE 22" SETS 26" SETS		SETS
GAS TYPE MAX. HEAT INPUT MIN. HEAT INPUT	<b>Natural</b> 32,000 BTU/Hr. 24,000 BTU/Hr.	<b>Propane</b> 32,000 BTU/Hr. 23,500 BTU/Hr.	<b>Natural</b> 40,000 BTU/Hr. 29,000 BTU/Hr.	<b>Propane</b> 33,000 BTU/Hr. 23,500 BTU/Hr.	
GAS INLET PRESSURE MAX. MIN.	10.5 ins. WC 5 ins. WC	13 ins. WC 11ins. WC	10.5 ins. WC 5 ins. WC	13 ins. WC 11 ins. WC	
REGULATOR PRESSURE	4 ins. WC	10 ins. WC	4 ins. WC	10 ins. WC	

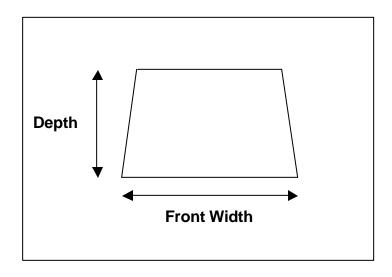
When operating the main burner, use the control knob to raise and lower the min. and max. heat output. Turn the control knob counterclockwise for max. heat and clockwise for min heat.

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% for each 1,000 feet above sea level. Refer to the National Fuel Gas Code.

<u>WARNING:</u> OPERATION OF THIS APPLIANCE ON GASES FOR WHICH IT IS NOT EQUIPPED MAY LEAD TO CARBON MONOXIDE POISONING.

# Fireplace Dimensions and Clearances

Refer to the following charts to determine the proper size set for your fireplace.



	Fireplace Dimensions			
Log Set Size	Depth	Height	Front Width	
22"	12"	16"	28"	
26"	12"	16"	30"	

The chart above indicates the minimum fireplace dimensions for each log set.

# INSTALLATION SPECIFICATIONS

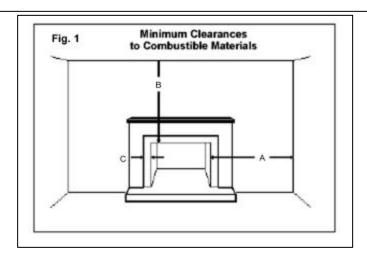
## Minimum Clearances to Combustible Materials (Vent Free only)

**IMPORTANT:** To insure a safe installation into a masonry or factory built fireplace, the following instructions must be carefully observed. If installing in a pre-manufactured fireplace follow the clearance requirements accompanying that fireplace.

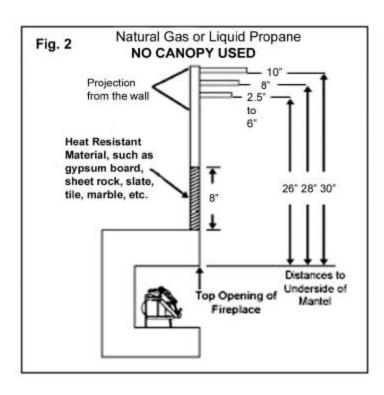
**Note:** Clearances to Combustible Materials and Mantle Clearances are in place to provide adequate spacing to prevent a fireplace mantle or facing from catching fire. In most cases they should also be adequate to prevent any discoloration or warping due to heat. However, each Gas Log installation will present unique circumstances creating many variables beyond the control of the Gas Log Manufacturer, including paint or finish composition, previous heat exposure, quality of construction, air flow patterns etc. Because of these variables we cannot guarantee that heat warping or discoloration will never occur. The possibility of heat damage exists whether burning wood or gas logs.

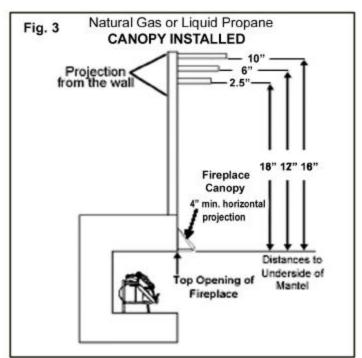
#### Refer to Fig. 1 for the following dimensions:

- A. Minimum left and right clearance to combustible walls = 15".
- B. Minimum clearance to combustible ceiling = 42".
- C. Minimum left and right side clearances to mantle = 6".



#### Mantle Clearances (Vent Free only)





# **INSTALLATION SPECIFICATIONS**

#### Mantle Clearances cont. (Vent Free only)

Woodwork such as mantles and other combustible material must be installed as tested per Fig. 3 or Fig. 4.

**NOTE:** Heat Resistant Material as shown in Fig. 3 are materials such as gypsum board, sheetrock, slate, tile, marble etc.

If mantle and wall are both non-combustible, mantle clearances are not applicable.

#### **FIREPLACE HOOD (CANOPY)**

A hood (canopy) as shown in Fig. 5 is used to deflect heat away from the fireplace face and mantle, reducing the chances of heat damage or discoloration. If using a hood, it must project a minimum of 4" from the face of the firebox. Contact your dealer to purchase a fireplace hood.

# <u>INSTALLATION</u>

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

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

State or local codes may only allow operation of this unit in a vented application. Check your state and local codes.

All Hargrove vent free room heaters comply with IAS U.S. Requirement 5-95.

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

#### FIREPLACE PREPARATION

**IMPORTANT:** Before installing in a solid fuel-burning fireplace, the chimney flue and firebox must be cleaned of soot, creosote, ashes, and loose paint by a qualified chimney cleaner.

# This unit complies with 527 CMR 30.00 vent free appliance requirements for Massachusetts.

- 1. Turn the gas supply to OFF.
- 2. Turn OFF all electrical power to blower (if applicable) before installing, servicing, or removing.
- 3. Clean the fireplace floor, walls, and chimney (if used) of any ashes, soot creosote, or obstruction. *This will minimize any smell from the fireplace*. We recommend cleaning by a chimney sweep.
- 4. Any outside air ducts and/or ash dumps in the fireplace must be permanently closed at the time of appliance installation.
- 5. A mesh fireplace screen must be in place when the appliance is operating unless other provision for

combustion air are provided, the screen shall have an opening(s) for introduction of combustion air.

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

WARNING: GLASS DOORS MUST BE OPEN WHEN APPLIANCE IS IN OPERATION.

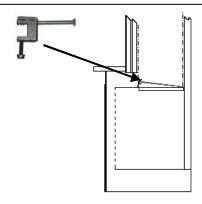
WARNING: ANY MODIFICATION TO THIS UNVENTED GAS HEATER OR IT'S CONTROLS CAN BE DANGEROUS. IMPROPER INSTALLATION OR USE OF THE HEATER CAN CAUSE SERIOUS INJURY OR DEATH FROM FIRE, BURNS, EXPLOSION OR CARBON MONOXIDE POISONING.

#### **DAMPER STOP (Vented Only)**

Attach the damper stop clamp to the fireplace damper blade. Position the clamp to prevent full closure of the fireplace damper blade.

If the damper stop provided does not fit, the installer shall install a permanent damper stop that will keep the damper open to a minimum of 3".

IMPORTANT: In the Commonwealth of Massachusetts the damper must either be permanently welded in the fully open position or completely removed.



#### **GAS LINE HOOK-UP**

**NOTE:** Before you proceed, make sure your gas supply is OFF!

WARNING: OPERATION OF THIS APPLIANCE ON GASES FOR WHICH IT IS NOT EQUIPPED MAY LEAD TO CARBON MONOXIDE POISONING.

**IMPORTANT:** This appliance cannot be used with or converted to a gas other than the type for which it was equipped at the factory.

**Check Gas Type:** The gas supply must be the same as stated on the heater's rating plate. If the gas supply is different, DO NOT INSTALL the heater. Contact your dealer for the correct model.

WARNING: DO NOT USE A BLOWER INSERT, HEAT EXCHANGER INSERT OR OTHER ACCESSORY NOT APPROVED FOR USE WITH THIS HEATER.

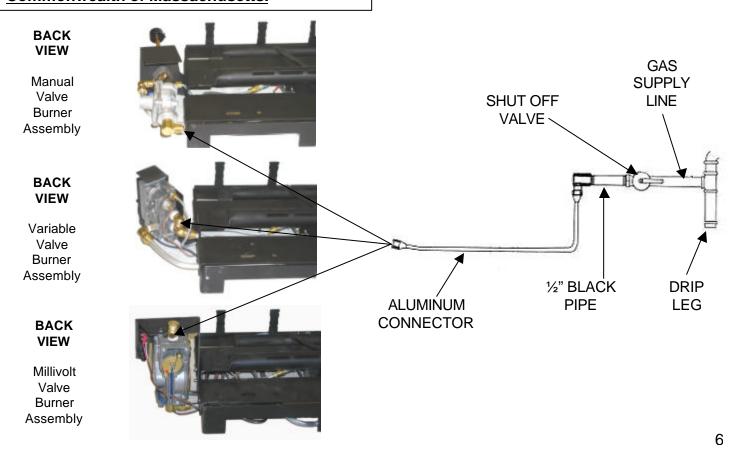
# IMPORTANT STEPS TO FOLLOW WHEN MAKING THE GAS LINE HOOK-UP (Fig. 5)

This product must be installed by a licensed plumber or gasfitter when installed within the Commonwealth of Massachusetts.

- 1.Consult your gas supplier for proper gas pipe sizing. Normally up to 50' of ½" inside diameter (ID) gas pipe will supply adequate volume for all vent free units.
- 2. The incoming gas line may be routed into the fireplace either from the left or right side.
- 3. Include a manual shutoff valve in the gas supply line so the appliance may be disconnected for servicing.
- 4. Center the burner system from side to side in the firebox. In a vented firebox, if the damper is used, the burner assembly should be located directly under the damper.
- 5. Use the 3/8" aluminum connector (provided in the accessory kit) to connect the gas supply line to the regulator on the burner assembly.
- 6. Always use an external regulator for all L.P. appliances to reduce the supply tank pressure to a maximum of 13" W.C. This is in addition to the regulator fitted to the heater.

WARNING: CONNECTING DIRECTLY TO AN UN-REGULATED L.P. TANK CAN CAUSE AN EXPLOSION.

- 7. Test all connections after turning gas supply on for leaks using a soap and water solution. DO NOT USE AN OPEN FLAME FOR LEAK TESTING.
- 8. It is most convenient to light the pilot and check the operation of the main burner with the logs not in place. After carefully checking the gas supply line for leaks and correcting any found, refer to the "LIGHTING INSTRUCTIONS" section (pg. 10) to test the burner assembly.



#### GAS PRESSURE CHECK

NOTE: The appliance and the appliance main gas valve must be disconnected from the gas supply system during any pressure testing of that system at test pressures in excess of 0.5 psig (3.5 kPa). The appliance must be isolated from the gas supply piping system by closing it's equipment shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 0.5 psig (3.5 kPa).

1. The gas valve controls the gas pressure, which can be checked at the pressure test point (1/8" NPT plug) located on the side of the valve.

- 2. The pressure should be checked with the heater burner and the control set to high (HI).
- 3. The pressure is preset and locked to avoid tampering. If the pressure is not as specified in "BTU Rating and Pressure Requirements" (pg. 3), contact your dealer.
- 4. Replace the test plug after measuring gas pressure. Check for gas leaks.

IMPORTANT: Do not use the appliance if any part has been submerged under water. Immediately call a qualified technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

#### WIRING SCHEMATIC (Millivolt Units Only)

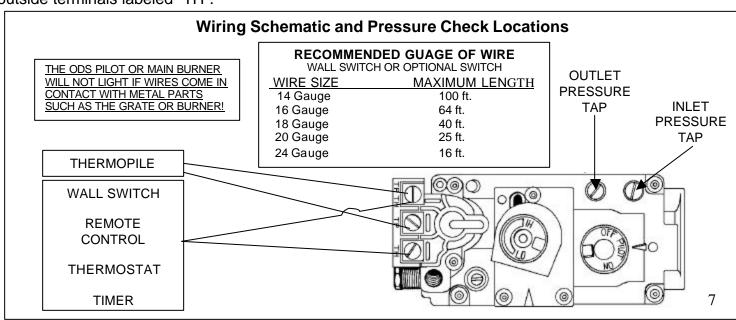
**CAUTION:** Label all wire prior to disconnection when servicing controls. Wiring errors can cause improper an dangerous operation. Verify proper operation after service.

#### WALL SWITCH INSTALLATION

- 1. To install a wall switch mount a 3" X 2" electrical box in the wall near the fireplace. Run the wire from the electrical box to the millivolt valve.
- 2. At the valve connect the lead wires to the two outside terminals labeled "TH".

- 3. On the Wall Switch connect a lead wire to each terminal.
- 4. Mount the Wall Switch to the electrical box and install the cover plate.

\*\*\*If installing a remote control, thermostat, or timer, attach the leads from the optional item to the same terminals as the Wall Switch on the Millivolt Valve.

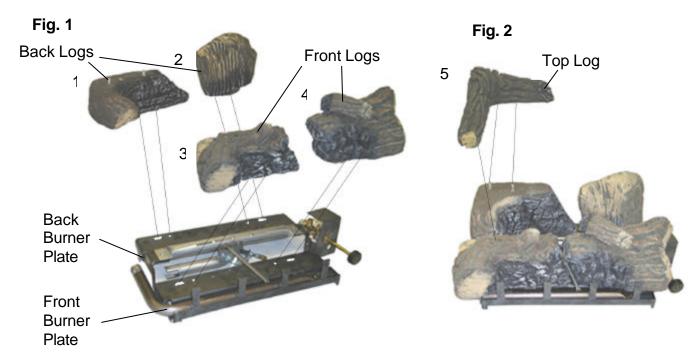


# Timberland Glow - 22" Model - Log Placement

**Step 1** – Identify each of the 5 logs in the set by comparing them to the log pictures below. (Fig 1 &2)

**Step 2** – Install the Front and Back Logs by placing the locator pins on the bottom of each log in the holes on the Front and Back Burner Plates. The Front Logs use the Front Burner Plate and Back Logs use the Back burner Plate (Fig 1).

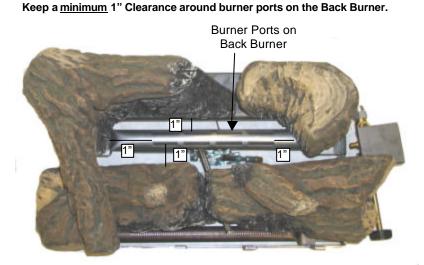
**Step 3** – Install the Top Log by placing the holes in the bottom of the Top Log over the pins in the Top of the left Back Log. The branch from the top log faces forward and will rest on the left Front Log (Fig 2 & 3).



**Step 4** – Assure that all of the logs have at least a 1" clearance around the burner ports of the Back Burner (Fig 3).

Step 5 – Once the set is completely set up, observe the operation of the set. The back flame should not be coming in contact with any logs. The front flame should cause a glowing effect on the ember material and part of the surface of the front logs (Fig 4).

Fig. 3 Fig. 4





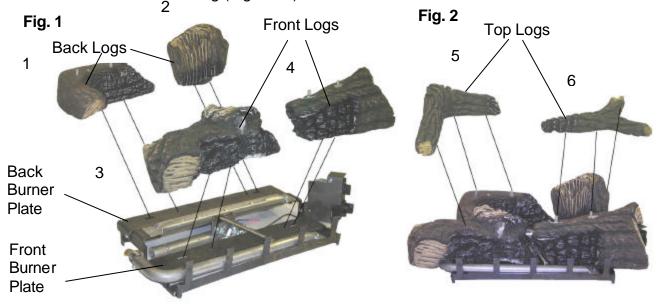
# Timberland Glow - 26" Model - Log Placement

**Step 1** – Identify each of the 6 logs in the set by comparing them to the log pictures below. (Fig 1 &2)

**Step 2** – Install the Front and Back Logs by placing the locator pins on the bottom of each log in the holes on the Front and Back Burner Plates. The Front Logs use the Front Burner Plate and Back Logs use the Back burner Plate (Fig 1).

**Step 3** – Install the left Top Log by placing the holes in the bottom of the left Top Log over the pins in the Top of the left Back Log. The branch from the top log faces forward and will rest on the left Front Log (Fig 2 & 3).

**Step 4** – Install the right Top Log by placing the holes in the bottom of the right Top Log over the pins in the right Front Log. The small branch on the right Top Log faces back and will rest on the extension on the bac<sup>1, -:-</sup> ht log (Fig 2 & 3).

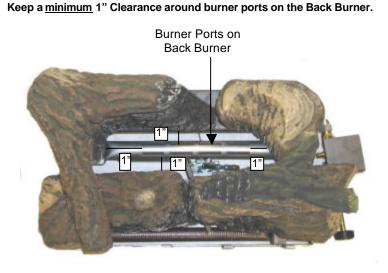


**Step 4** – Assure that all of the logs have at least a 1" clearance around the burner ports of the Back Burner (Fig 3).

**Step 5** – Once the set is completely set up, observe the operation of the set. **The back flame should not be coming in contact with any logs.** The front flame should cause a glowing effect on the ember material and part of the surface of the front logs (Fig 4).

Fig. 3

TOP VIEW

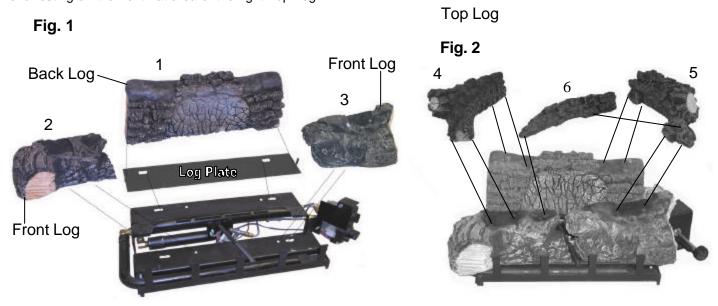






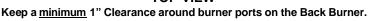
# Highland Glow - 22" & 26" Models - Log Placement

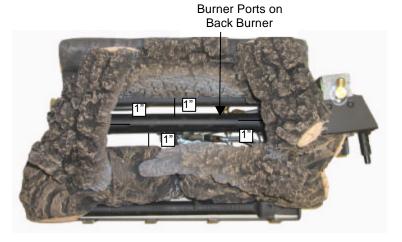
- Step 1 Identify each of the 6 logs in the set by comparing them to the log pictures below. (Fig 1 &2)
- Step 2 Identify the Back Log Plate in the log box. (Fig 1)
- **Step 3** Install the Log Plate on the Back Burner Plate by placing the tabs on the bottom of the Log Plate in the holes on the Back Burner Plate. Assure that the tabs on the Log Plate are facing forward toward the grate on the front of the set.
- **Step 4** Place the Back log (1) on the Log plate with the char area facing forward.
- **Step 5** Install the Front Logs (2 & 3) by placing the locator pins on the bottom of each log in the holes on the Front Burner Plate. (Fig 1)
- **Step 4** Install the left Top Log (4) by placing the flat side of the log on the notches on the top of the back and front log. The branch should be facing forward. (Fig 1 & 2)
- **Step 5** Install the right Top Log (5) by placing the flat side of the log on the notches on the top side of the back and front log. The branch should be facing forward. (Fig 1 & 2)
- **Step 6** Install the middle Top Log (6) with the charred end resting in the notch on the top of the Front Left Log and the other end resting on the front flat area of the right Top Log.



**Step 4** – Assure that all of the logs have at least a 1" clearance around the burner ports of the Back Burner (Fig 3). **Step 5** – Once the set is completely set up, observe the operation of the set. The back flame should not be coming in contact with any logs. The front flame should cause a glowing effect on the ember material and part of the surface of the front logs (Fig 4).

Fig. 3 Fig. 4







#### Ember Placement

<u>WARNING:</u> IMPROPER INSTALLATION OF THE EMBER MATERIAL MAY LEAD TO CARBON MONOXIDE POISONING.

- 1. Tear the Ember Material into 10 to 12 individual pieces (Fig 1).
- 2. Slightly stretch each Ember piece so it can be placed on the front burner ports and be supported by the front grate and burner (Fig. 1 & 2).
- 3. Place the pieces of Ember Material evenly across the front burner so as many front burner ports can be covered as possible. (Fig 3 & 4) DO NOT PRESS THE EMBER MATERIAL INTO THE BURNER PORTS.

4. You may place some ember material on the tube that connects the front and back burner. Do not press the ember material into the ports as it may obstruct the ignition of the front burner.

DO NOT PLACE ANY EMBER MATERIAL ON THE BACK BURNER (Fig. 3)

WARNING: DO NOT PUT ANY ADDITIONAL
EMBER MATERIAL ON THE BURNER
SYSTEM. USE ONLY WHAT WAS PROVIDED
WITH THE SET. PLACING ADDITIONAL
EMBER MATERIAL ON THE SET MAY CAUSE
IMPROPER COMBUSTION AND WILL VOID
THE MANUFACTURER'S WARRANTY.

Fig. 1 Fig. 2

#### **EMBER PIECE**



Actual Size

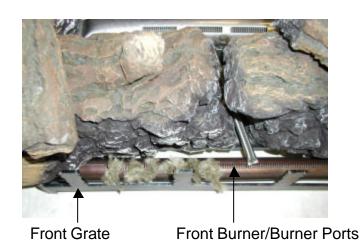


Fig. 3

DO NOT PLACE ANY EMBER

MATERIAL ON BACK BURNER!



Fig. 4



Front Burner with Embers Properly Installed

## **Volcanic Cinder Placement**

- 1. Once the burner system is in place, pour the Volcanic Cinder on the floor of the fireplace. **DO NOT POUR ANY VOLCANIC CINDER ON THE BURNERS OR AROUND THE PILOT.**
- 2. You may use the Volcanic Cinder to cover up the Lighting Tags that are attached to the set. **DO NOT REMOVE THE LIGHTING TAGS FROM THE BURNER SYSTEM. THIS WILL VOID THE MANUFACTURER'S WARRANTY.**

The Volcanic Cinder is the large bag of black rock that is included in the log set. The purpose of it is to cover the fireplace floor surrounding the set. The Volcanic Cinder will also cover the metal Lighting Instruction tags and help keep them out of sight.

3. You may use the Volcanic Cinder to cover the horizontal portion of the front of the grate. DO NOT POUR VOLCANIC CINDER ON THE BURNER OR AROUND THE PILOT.

#### **VOLCANIC CINDER PLACEMENT**



You may use the Volcanic Cinder to cover up the metal Lighting Instruction tags.

**VOLCANIC CINDER** 

#### FRONT OF GRATE

You may use the Volcanic Cinder to cover the horizontal portion of the Front of the Grate.

#### FOR YOUR SAFETY READ BEFORE LIGHTING

- A. This appliance has a pilot which is lighted by a spark igniter system. When lighting the pilot, follow these instructions exactly.
- B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

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.
- If you cannot reach your gas supplier, call the fire department.

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

- 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. Force or attempt repair may result in a fire or explosion and may void your warranty.
- D. Do not use the appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

#### LIGHTING INSTRUCTIONS

WARNING: At no time should the "LIGHTING INSTRUCTION" tags be detached from the burner system. Removing the tags will void the manufacturer's warranty.

- 1. STOP! Read the safety information above on this label.
- 2. Turn off all electrical power in the firebox before installing.
- 3. Turn the control knob clockwise  $\bigcap$  as far as it will go to reach the "OFF" position.
- 4. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above on this label. If you do not smell gas, go to the next step.
- 5. Turn the Control Knob counterclockwise 1 to the "PILOT" position.



- 6. Push in control knob and hold it in.
- 7. Light the pilot (mounted in the front of the back burner) by pushing the spark ignitor button several times. This will cause a spark at the pilot which will ignite the gas. If the spark does not work, light the pilot with a match.
  - \* When lighting the pilot it may take several seconds for gas to reach the pilot.
- 8. Continue to hold the control knob in all the way for about 30 seconds after the pilot is lit.
- 9. Release the knob and it will pop back out. The pilot should remain lit. If it goes out, repeat steps 3 thru 9.
  - \* If knob does not pop up when released, stop and immediately call your service technician or gas supplier
  - \* If the pilot does not stay lit after several tries, turn the gas control knob "OFF" and call your service technician or gas supplier.

7. Turn gas flame height control knob counterclockwise to "ON". Turn flame height control knob counterclockwise to select the desired comfort level.

IMPORTANT: The gas control knob has an interlock device. After shutting off all gas flow, the pilot burner cannot be relit until the thermocouple has cooled, allowing the electromagnet to be released (approx. 60 sec.). The gas control knob is designed to be operated by hand. DO NOT use any tools during this operation. Damaged knobs may result in serious injury.

NOTE: A periodic visual check of the pilot flames (Figure 11) and main burner flames should be made. The pilot flame should always be present when the appliance is in operation. See illustration below.

Fig 11

NATURAL GAS
ODS PILOT

LIQUID PROPANE
ODS PILOT

WARNING: TAMPERING WITH THE ODS PILOT WILL VOID THE MANUFACTURER'S WARRANTY.

#### **OPERATION**

#### FOR YOUR SAFETY READ BEFORE LIGHTING

- A. This appliance has a pilot which is lighted by a spark igniter system. When lighting the pilot, follow these instructions exactly.
- B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

#### 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.
- If you cannot reach your gas supplier, call the fire department.

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

- 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. Force or attempt repair may result in a fire or explosion and may void your warranty.
- D. Do not use the appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

#### LIGHTING INSTRUCTIONS

WARNING: At no time should the "LIGHTING INSTRUCTION" tags be detached from the burner system. Removing the tags will void the manufacturer's warranty.

- 1. STOP! Read the safety information above on this label.
- 2. Turn off all electrical power in the firebox before installing.
- 3. Turn the control knob clockwise as far as i will go to reach the "OFF" position.
- 4. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above on this label. If you do not smell gas, go to the next step.
- 5. Turn the Pilot Ignitor Knob counterclockwise \( \int\) to the "IGN" (ignition) position.



- 6. Once again the "IGN" position, push the knob in as far as it will go. This action releases gas flow to the pilot.
- 7. While holding in the Pilot Ignitor Knob, turn it counterclockwise to activate the spark ignitor on the pilot. This will cause a spark at the pilot which will ignite the pilot gas. If the spark does not work, light the pilot with a match.
  - \* When lighting the pilot it may take several seconds for gas to reach the pilot.
- 8. Continue to hold the control knob in all the way for about 30 seconds after the pilot is lit.
- 9. Release the knob and it will pop back out. The pilot should remain lit. If it goes out, repeat steps 3 thru 9.
  - \* If knob does not pop up when released, stop and immediately call your service technician or gas supplier
  - \* If the pilot does not stay lit after several tries, turn the gas control knob "OFF" and call your service technician or gas supplier.

7. Turn gas flame height control knob counterclockwise to "ON". Turn flame height control knob counterclockwise to select the desired comfort level.

IMPORTANT: The gas control knob has an interlock device. After shutting off all gas flow, the pilot burner cannot be relit until the thermocouple has cooled, allowing the electromagnet to be released (approx. 60 sec.). The gas control knob is designed to be operated by hand. DO NOT use any tools during this operation. Damaged knobs may result in serious injury.

NOTE: A periodic visual check of the pilot flames (Figure 11) and main burner flames should be made. The pilot flame should always be present when the appliance is in operation. See illustration below.

Fig 11

NATURAL GAS
ODS PILOT
ODS PILOT
ODS PILOT

WARNING: TAMPERING WITH THE ODS PILOT WILL VOID THE MANUFACTURER'S WARRANTY.

# PERATION

#### FOR YOUR SAFETY READ BEFORE LIGHTING

A. This appliance has a pilot which is lighted by a spark

igniter system. When lighting the pilot, follow these

instructions exactly.

B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

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.

\*If you cannot reach your gas supplier, call the fire department.

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

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. Force or attempt repair may result in a fire or explosion and may void your warranty.

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

#### LIGHTING INSTRUCTIONS

WARNING: At no time should the "LIGHTING INSTRUCTION" tags be detached from the burner system. Removing the tags will void the manufacturer's warranty.

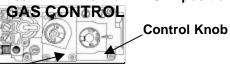
- 1. STOP! Read the safety information above on this label.
- Turn off all electrical power in firebox brane 7. Deness the control knob and turn counterclockwise installing.

3. Depress the control knob and turn clockwise as far as it will go to reach the "OFF" position.

4. 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 smell gas, STOP! Follow "B" in the safety information above on this label. If you do not smell gas, go to the pext step.

• Introl **Depress** knob the and to the "PILOT" position. counterclockwise

Fig 10



gas control knob to "OFF" and call your service technician or gas supplier.

"ON". Turn flame heightl knob to counterclockwise to select desired comfort level.

**IMPORTANT:** The gas control has an interlock device. After shutting off all gas flow, the pilot burner cannot be relit until the thermocouple has cooled, allowing the electromagnet to be released The gas control knob is (approx. 60 sec.). designed to be operated by hand. DO NOT use any tools during this operation. Damaged knobs may result in serious injury.

NOTE: A periodic visual check of the pilot flames (Figure 11) should be made. See illustration below.

#### Flame Height Control Knob

6. Push in control knob all the way and hold in.

If the control knob is not held in all the way the pilot **Fig 11** will not stay lit when the knob is released.

\* Do not turn the knob when pushing it in.

7. Light the pilot (mounted in front of the back burner) by pushing the spark igniter button several times. This will cause a spark at the pilot which will ignite the pilot gas. If the spark does not work, light the pilot with a match.

\* When lighting the pilot it may take several seconds for

gas to reach the pilot.

8. Continue to hold the control knob in all the way for about 30 seconds after the pilot is lit.

- 9. Release the knob and it will pop back out. The pilot should remain lit. If it goes out, repeat steps 3 through
  - If knob does not pop up when released, stop and immediately call your service technician or gas
  - \* If the pilot will not stay lit after several tries, turn the

below.

**NATURAL GAS** 



LIQUID PROPANE



WARNING: TAMPERING WITH THE ODS PILOT WILL VOID THE MANUFACTURER'S WARRANTY.

#### **OPERATION**

#### TO TURN OFF GAS TO APPLIANCE

TEMPORARY SHUTDOWN PROCEDURE: To turn off main burner only, depress the knob and turn it

clockwise as far as it will go. Do not force.

COMPLETE SHUT-DOWN PROCEDURE: Turn off all electrical power in firebox. Turn gas control

knob clockwise to the "OFF" position.

# **Controlling Heat Output**

- \* The heat output can be controlled by adjusting the vent free burner control knob.
- \* Another way to regulate the heat output is to open the fireplace damper.

If you want:

- a. more heat radiated into the room Keep the damper completely closed
- b. less heat radiated into the room open the fireplace damper to varying degrees.

### Important Safeguards

1. To avoid personal injury, do not touch hot surfaces when the appliance is operating. Touch only the piezo ignitor and control knob.

Hot Surfaces

- a. Grate
- b. Burner
- c. Logs
- d. Surfaces above the opening of the fireplace
- 2. Although your gas logs are very realistic in appearance, it is not a real wood-burning fireplace and must not be used for burning any material.
- \* To avoid irreparable damage to the appliance or personal injury, matches, paper, garbage, or any other material must not be placed or thrown on top of the logs or into the flames.

Close supervision is necessary when the appliance is being operated near children.

Avoid any drafts that alter burner patterns. Do not allow fans to blow directly into the fireplace. Ceiling fans may create drafts that alter burner flame patterns. Sooting and improper burning will occur.

#### **Cleaning And Servicing**

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, and material, etc. It is imperative that control components, burners and circulating air passageways of the appliance be kept clean

 If the flames show any unusual shapes or behavior, or the burners fail to ignite properly, then the burner holes may require cleaning.

**WARNING:** TURN OFF VENT FREE BURNER SYSTEM AND ALLOW TO COOL BEFORE CLEANING OR SERVICING.

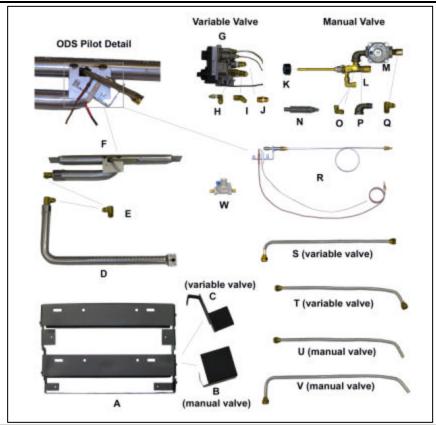
#### **MONTHLY CLEANING**

- 1. If removing logs, when reinstalling, refer to "Log Assembly Diagram" for correct log placement.
- Do not use cleaning fluids to clean logs or any part of the heater.
- 3. Brush logs with a soft bristle brush or vacuum with brush attachment.
- 4. Vacuum loose particles and dust from the front and rear burner ports, gas control, piezo cover, and grate.
- 5. Inspect and clean ODS pilot for operation and accumulation of lint at air intake holes.
- 6. Verify flame pattern and log placement for proper operation.
- 7. Verify smooth and responsive ignition of main burner and rear burner. Refer to page for proper pictorial sketch of proper operation.

#### ANNUAL CLEANING AND INSPECTION

 Dealer or qualified inspector – follow the above steps for proper servicing and inspection.

# PARTS AND ASSEMBLY IDENTIFICATION - MANUAL AND VARIABLE VALVE



<u>WARNING:</u> Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this heater may result in property damage or personal injury.

#### **Manual Vent Free Burner Assembly**

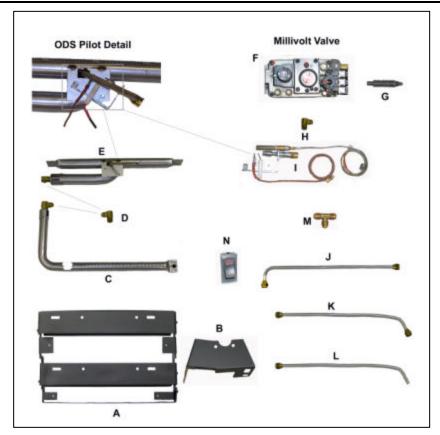


#### **Variable Vent Free Burner Assembly**



ITEM	DESCRIPTION	QTY	EFTG22(N,P)(1G,1E)	EFTG26(N,P)(1G,1E)
A.	TG BURNER ASSEMBLY	1	TGBA-22	TGBA-26
B.	MANUAL VALVE BRACKET (1G)	1	TGCVCVB	TGCVCVB
C.	VARIABLE VALVE BRACKET (1E)	1	TGMAXVB	TGMAXVB
D.	FRONT BURNER	1	TBF-22	TBF-26
E.	BRASS ELBOW FOR ORIFICE	2	49-6-6-Z2	49-6-6-Z2
	ORIFICE SPUD	2	ZRPTT-60	ZRPTT-60
F.	BACK BURNER	1	TBB-22	TBB-26
G.	VARIABLE VALVE (NG)	1	MAXGV36-B1AONTH (22" 8	& 26" MODELS)
	VARIABLE VALVE (LP)	1	MAXGV36-B1AOLTH (22" 8	k 26" MODELS)
H.	1/8"MIP X 3/8"FL ELBÓW (1E)	1	49-6-2	49-6-2
I.	3/8"FL X 3/8"MIP BRASS 45 (1E)	1	409-6-6-45	409-6-6-45
J.	3/8"MIP X 3/8"FL (1E)	1	48-6	48-6
K.	CONTROL KNOB (1G)	1	SPC-K	SPC-K
L.	MANUAL VALVE	1	CVC-C	CVC-C
M.	REGULATOR (1G, NG)	1	REG 4	REG 4
	REGULATOR (1G, LP)	1	REG 10	REG 10
N.	SPARK IGNITOR (1G)	1	SIT-PIEZO	SIT-PIEZO
Ο.	1/8"FIP X 3/8" COMPRESSION	2	70-6-2	70-6-2
P.	3/8"STREET ELBOW (1G)	1	SE-6	SE-6
Q.	3/8"ML X 3/8"FL	1	48-6	48-6
R.	OXYGEN DEPLETION SYSTEM (NG)	1	OP-8203-ODS-NG	OP-8203-ODS-NG
	OXYGEN DEPLETION SYSTEM (LP)	1	OP-8403-ODS-LP	OP-8403-ODS-LP
S.	BACK BURNER CONNECTOR (1E)	1	TCB-MAX	TCB-MAX
T.	FRONT BURNER CONNECTOR (1E)	1	TCF-MAX	TCF-MAX
U.	FRONT BURNER CONNECTOR (1G)	1	TCF-CVC	TCF-CVC
V.	BACK BURNER CONNECTOR (1G)	1	TCB-CVC	TCB-CVC
W.	PILOT REGULATOR (1E, NG)	1	REG PIL 4	REG PIL 4
X	SPARK IGNITOR CABLE (NOT PICTURED)	1	SIT-16 CABLE	SIT-16 CABLE

# PARTS AND ASSEMBLY IDENTIFICATION - MILLIVOLT VALVE



# Millivolt Vent Free Burner Assembly



ITEM	DESCRIPTION	QTY	EF(TG,HG)22(N,P)2C	EF(TG,HG)26(N,P)2C
A.	TG BURNER ASSEMBLY	1	TGBA-22	TGBA-26
B.	MILLIVOLT VALVE BRACKET (2C)	1	(22,26)TGMILVB	(22,26)TGMILVB
C.	FRONT BURNER	1	TBF-22	TBF-26
D.	BRASS ELBOW FOR ORIFICE	2	49-6-6-Z2	49-6-6-Z2
	ORIFICE SPUD	2	ZRPTT-60	ZRPTT-60
E.	BACK BURNER	1	TBB-22	TBB-26
F.	MILLIVOLT VALVE	1	SIT-MIL-NG-VAVLE	SIT-MIL-NG-VALVE
	CONVERSION FOR NATURAL GAS	1	SITMILCNG	SITMILCNG
	CONVERSION FOR LIQUID PROPANE GAS	1	SITMILCLP	SITMILCLP
G.	SPARK IGNITOR	1	SIT-PIEZO	SIT-PIEZO
H.	3/8"ML X 3/8"FL	2	48-6	48-6
I.	MILLIVOLT OXYGEN DEPLETION SENSOR (NG)	1	OP-8205-MODS-NG	OP-8205-MODS-NG
	MILLIVOLT OXYGEN DEPLETION SENSOR (LP)	1	OP-8405-MODS-LP	OP-8405-MODS-LP
J.	BACK BURNER CONNECTOR	1	TCB-MIL	TCB-MIL
K.	FRONT BURNER CONNECTOR	1	TCF-MIL	TCF-MIL
L.	VALVE OUTLET CONNECTOR	1	TOC-MIL	TOC-MIL
M.	BRASS T FITTING	1	58-6-6	58-6-6
N.	ON/OFF SWITCH	1	RS	RS
O.	SPARK IGNITOR CABLE	1	SIT-16 CABLE	SIT-16 CABLE

# **TROUBLE-SHOOTING**

Hargrove Manufacturing test fires all Vent Free burner systems before shipment. Each test consists of lighting the pilot, checking for proper ignition, and leak testing at each connection. Even though all of these precautions are taken sometimes problems do arise. The following Trouble-Shooting chart lists several problems with their probable cause and remedy.

<u>WARNING:</u> TURN OFF AND LET COOL BEFORE SERVICING. ONLY A QUALIFIED SERVICE PERSON SHOULD SERVICE AND REPAIR.

OBSERVE PROBLEM	POSSIBLE CAUSE	REMEDY
A. When ignitor button is pressed there is no spark at the	Ignitor electrode positioned wrong.	1. Replace ignitor.
ODS.	<ul><li>2. Ignitor electrode is broken.</li><li>3. Ignitor electrode is not connected.</li></ul>	<ol> <li>Replace ignitor.</li> <li>Reconnect ignitor cable.</li> </ol>
	4. Ignitor cable is pinched.	4. Free ignitor cable if pinched by any metal or tubing.
	<ul><li>5. Ignitor cable is wet.</li><li>6. Broken ignitor cable.</li><li>7. Bad piezo ignitor.</li></ul>	<ul><li>5. Dry ignitor cable.</li><li>6. Replace ignitor cable.</li><li>7. Replace Piezo ignitor.</li></ul>
B. ODS pilot lights, but flame goes out when control knob is	Control knob not fully depressed.	1. Press in control knob fully.
released.	Control knob not pressed in long enough.	2. After ODS pilot lights, keep control knob pressed in 30 seconds.
	3. Manual shutoff valve not fully open.	3. Fully open manual shutoff valve.
	Thermocouple connection loose at valve.	4. Hand tighten ¼ turn more.
	5. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by one or both of the following:  A) Log gas pressure.  B) Dirty or partially clogged ODS pilot.	5. Contact local gas company.
	<ul><li>6. Thermocouple damage.</li><li>7. Control valve damage.</li></ul>	<ul><li>6. Replace ODS pilot.</li><li>7. Replace control valve.</li></ul>
C. Appliance shuts of in use.	1. Not enough fresh air available for ODS pilot to operate.	Open door to adjoining room for added ventilation or open window.
	<ol> <li>Low gas pressure.</li> <li>ODS pilot is partially clogged.</li> <li>Unstable pilot flame due to drafts from ceiling fan, hot furnace register, open door etc</li> </ol>	<ol> <li>Contact local gas company.</li> <li>Clean ODS pilot.</li> <li>Locate and eliminate drafts.</li> </ol>
	5. If using damper, unstable pilot	5. Close damper.

flame from downdrafts.

# TROUBLE-SHOOTING

#### **OBSERVE PROBLEM**

#### **POSSIBLE CAUSE**

#### **REMEDY**

- D. When ignitor button is pressed there is spark at ODS pilot, but not ignition.
- 1. Gas supply turned off or manual shutoff valve closed.
- 2. Control knob not in PILOT position.
- 3. Control knob not pressed in while in PILOT position.
- 4. Air in gas line.
- 5. ODS pilot is clogged.
- E. Gas odor even when control knob is in the OFF position.

1. Gas leak.

- 2. Control valve defective.
- F. Slight odor during initial operation.
- 1. Smell coming from the paint curing on the logs and burner system.
- G. Main burner does not light after ODS pilot is lit.
- 1. Burner orifice is clogged.
- 2. Inlet gas pressure is too low.
- 3. Gas line obstruction. (pipe dope, teflon tape, etc...)
- H. Delayed ignition of main burner.
- 1. Burner orifice is clogged.
- 2. Inlet gas pressure is too low.
- 3. Gas line obstruction. (pipe dope, teflon tape, etc...)
- I. Main burner backfiring during combustion.
- 1. Burner orifice is clogged or damaged.
- 2. Inlet gas pressure is too low.
- 3. Gas line obstruction. (pipe dope, Teflon tape, etc...)
- J. Appliance produces unwanted odors.
- 1. Fresh paint fumes, cleaning agents, pet hair, or other particles are cycling thru the fireplace when it is operating.
- 2. Gas leak.
- K. Soot is depositing on logs, in fireplace, or in room.
- 1. Logs are not positioned properly and are obstructing the flame.
- 2. Main burner has accumulated dust or other small particles.

- 1. Turn on gas supply or open manual shutoff valve.
- 2. Turn control knob to PILOT position then depress knob.
- 3. Press in control knob while in PILOT position.
- 4. Continue holding down control knob. Repeat igniting operation until air is removed.
- 5. Clean ODS pilot.
- 1. Locate and correct all leaks.
- 2. Contact dealer to receive further instructions on correcting problem.
- 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.
- 1. Clean burner orifice and main burner.
- 2. Contact local gas company.
- 3. Locate and clear obstruction.
- 1. Clean or replace burner orifice. Clean main burner.
- 2. Contact local gas company.
- 3. Locate and clear obstruction.
- 1. Clean or replace burner orifice. Clean main burner.
- 2. Contact local gas company.
- 3. Locate and clear obstruction.
- 1. Ventilate room. Stop using odor causing products while heater is running.
- 2. Locate and correct all leaks.
- 1. Logs must be repositioned so they do not come in contact with the flame.
- 2. Clean main burner.

#### LIMITED WARRANTY

#### Logs

Hargrove gas logs carry a limited lifetime warranty against any manufactured defect or breakage. A replacement will be available from the dealer at which the appliance was purchased. This warranty does not cover breakage caused by excessive handling once installed and fired.

#### Burner & Grate

If the burner or grate fails due to deterioration within 2 years of the verified purchase date, a free replacement will be made available from the dealer at which the appliance was purchased.

#### Valves, Remote Controls, & Switching Devices

Hargrove warrants all valves, remote controls and switching devices against manufacturing defects which appear within two years of the verified purchase date. Warranty does not cover products that have been damaged by misuse from overheating. Before any product is returned a Return Goods Authorization number (RGA) must be issued by Hargrove's Customer Service Department. All returns must be accompanied by an explanation of the problem and all necessary parts.

#### All Other Parts

If any assembled part should fail to operate or be found defective which appear within two years of the verified purchase date, a replacement will be available from the dealer at which the appliance was purchased.

Buyer shall notify Hargrove Mfg Corp. of any defect covered by this warranty no later than thirty (30) days after defect is discovered. Failure to provide notice within thirty (30) days shall void the limited warranty.

#### WHAT IS NOT COVERED

- 1. Removal and reinstallation costs.
- 2. Labor costs for replacement or repairs.
- 3. Transportation or shipping cost.
- 4. The cost of a service call to diagnose trouble.
- 5. Painted Surfaces.
- 6. Damage or defect caused by improper installation, accident, misuse, abuse, alteration, or authorized service technician.
- 7. Replacement of burner or combustion chamber resulting from improper storage of the appliance.

#### LIMITATIONS AND EXCLUSIONS

- 1. No one has authority to add to or vary this limited warranty, or to create for Hargrove Manufacturing Corporation any other obligation or liability in connection with this appliance.
- 2. Any implied warranty applicable to this appliance is limited in duration to the same period of time as this written

Warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

- 3. HARGROVE MANUFACTURING CORPORATION WILL NOT BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, SPECIAL OR CONTINGENT DAMAGES YOU MIGHT SUFFER AS A RESULT OF A CLAIM UNDER THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusion may not apply to you.
- 4. This warranty applies only to the original purchaser and may not be transferred or assigned.
- 5. If you cannot verity the purchase date of the appliance, the warranty period will begin on the date of which the appliance was manufactured.
- 6. Replacement or repair parts are warranted for the remaining period of the original part warranty. Warranty parts must be obtained through authorized dealers of this product who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty.
- 7. The maximum liability of Hargrove Mfg Corp. in connection with this limited warranty shall not in any case exceed the contract price paid for the product claimed to be defective or unsuitable.
- 8. Purchaser or user agrees to hold Hargrove Mfg Corp. harmless from any and all claims by the buyer as a result of injury or damage to an ultimate user or other person caused by the product sold herein by the seller to the buyer, whether the injury or damage results from the assembly, installation, operation, shipment, storage, or manufacture of this product. Hargrove Mfg Corp. makes no warranties, expressed or implied, other than those expressly stated herein.

#### YOUR DUTIES

This appliance must be installed by a qualified installer, operated and maintained in accordance with all applicable codes and the instructions furnished with the appliance. You must provide a receipt verifying the purchase date of the appliance when making a warranty claim with the dealer from which the appliance was purchased.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

CONTACT INFO: Hargrove Manufacturing Corp. Tele: (800) 725-4166