



The following excerpt from the Owners Manual is provided to help explain the proper way to safely use this product. If you have any questions please call RSVP at 702-878-0144

Please do not attempt to service or repair this product in any way.

If you experience any problems with this item please discontinue its use and call RSVP at 702-878-0144 for assistance. If for any reason we cannot be reached, please discontinue use of any malfunctioning piece of equipment.

**PLEASE NOTE THAT PROPANE FUELED ITEMS ARE FOR OUTDOOR USE ONLY**

RSVP Party Rentals  
4445 S. Valley View Blvd.  
Suite 7  
Las Vegas, NV 89103

[www.RSVPPARTY.com](http://www.RSVPPARTY.com)



# Owner's Manual and Instructions

## Premier Tent Heaters



| MODELS | OUTPUT (Btuh) | FUEL   |
|--------|---------------|--|
| TS080  | 80,000        | Propane Vapor<br>Withdrawal<br>or<br>Natural Gas |
| TS170  | 170,000       |  |

Certification by:



## Congratulations!

You have purchased the finest circulating tent heater available.

Your new L.B. White heater incorporates the benefits from the most experienced manufacturer of heating products using state-of-the-art technology.

We, at L.B. White, **thank you** for your confidence in our products and welcome any suggestions or comments you may have...call us, toll-free, at 1-800-345-7200.

### ATTENTION ALL USERS

This heater has been tested and evaluated by C.S.A. International in accordance with the requirements of Standard ANSI Z83.7 • CSA 2.14 and is listed and approved as a ductable direct gas-fired forced-air construction heater with application for the temporary heating of buildings under construction, alteration, or repair. Additionally, this heater has been application reviewed and approved by C.S.A. International for USA Tent Heating Applications with temporary human occupancy. If you are considering using this product for any application other than its intended use, then please contact your fuel gas supplier, or the L.B. White Co., Inc.



Quality heaters you can count on.

W6636 L.B. White Rd., Onalaska, WI 54650 ■ (800) 345-7200 ■ (608) 783-5691 ■ (608) 783-6115, fax ■ [info@lbwhite.com](mailto:info@lbwhite.com)

150-26421





### GENERAL HAZARD WARNING

- Failure to comply with the precautions and instructions provided with this heater, can result in:
  - Death
  - Serious bodily injury or burns
  - Property damage or loss from fire or explosion
  - Asphyxiation due to lack of adequate air supply or carbon monoxide poisoning
  - Electrical shock
- Read this Owner's Manual before installing or using this product.
- Only properly-trained service people should repair or install this heater.
- Save this Owner's Manual for future use and reference.
- Owner's Manuals and replacement labels are available at no charge. For assistance, contact L.B. White at 800-345-7200.



### WARNING

- Proper gas supply pressure must be provided to the inlet of the heater.
- Refer to data plate for proper gas supply pressure.
- Gas pressure in excess of the maximum inlet pressure specified at the heater inlet can cause fires or explosions.
- Fires or explosions can lead to serious injury, death, or building damage.
- Gas pressure below the minimum inlet pressure specified at the heater inlet may cause improper combustion.
- Improper combustion can lead to asphyxiation or carbon monoxide poisoning and therefore serious injury or death.



### WARNING

#### Fire and Explosion Hazard

- Not for home or recreational vehicle use.
- Installation of this heater in a home or recreational vehicle may result in a fire or explosion.
- Fire or explosions can cause property damage or loss of life.

### FOR YOUR SAFETY

If you smell gas:

1. Open windows.
2. Don't touch electrical switches.
3. Extinguish any open flame.
4. Immediately call your gas supplier.

### FOR YOUR SAFETY

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



### WARNING

#### Fire and Explosion Hazard

- Keep solid combustibles a safe distance away from the heater.
- Solid combustibles include wood, paper, or plastic products, building materials and dust.
- Do not use the heater in spaces which contain or may contain volatile or airborne combustibles.
- Volatile or airborne combustibles include gasoline, solvents, paint thinner, dust particles or unknown chemicals.
- Failure to follow these instructions may result in a fire or explosion.
- Fire or explosions can lead to property damage, personal injury or loss of life.



# Heater Specifications

| SPECIFICATIONS  |                       | Model  |                          |             |            |
|---|-----------------------|--|--------------------------|-------------|------------|
|   |                       | TS080  |                          | TS170       |            |
| Fuel Type   | Propane Gas           | Natural Gas                                      | Propane Gas              | Natural Gas |            |
| Maximum Input (BTUH)  | 80,000                |  | 170,000                  |             |            |
| Ventilation Air Required to Support Combustion  | 450 CFM               |  | 1,200 CFM                |             |            |
| Burner Manifold Pressure  | 10 in. W.C.           | 4 in. W.C.                                       | 10 in. W.C.              | 4 in. W.C.  |            |
| Inlet Gas Supply Pressure Acceptable at the Inlet of the Heater for Purpose of Input Adjustment | MAX.                  | 13.5 in. W.C.                                    |                          |             |            |
|   | MIN.                  | 12 in. W.C.                                      | 8 in. W.C.               | 11 in. W.C. | 7 in. W.C. |
| Fuel Consumption Per Hour   | 3.70 lbs.             | 80 cu. ft.                                       | 7.87 lbs.                | 170 cu. ft. |            |
| Ball Bearing  |                       |  |                          |             |            |
| Motor Characteristics   | 1/8 H.P.<br>1,100 RPM |  | 1/3 H.P.<br>1,100 RPM    |             |            |
| Electrical Supply (Volts/Hz/Phase)  | 115/60/1              |  |                          |             |            |
| Amp Draw  | STARTING              | 5.0  | 7.3                      |             |            |
|   | CONTINUOUS OPERATION  | 1.5  | 5.0                      |             |            |
| Dimensions (Inches)<br>L x W x H  | 29-1/2 x 13-1/2 x 20  |  | 30-3/4 x 18-1/4 x 28-1/4 |             |            |
| Minimum Safe Distances From Nearest Combustible Materials                                       | TOP                   | 1 ft.  |                          |             |            |
|   | SIDES                 | 1 ft.  |                          |             |            |
|   | BACK                  | 1 ft.  |                          |             |            |
|   | BLOWER OUTLET         | 6 ft.  |                          |             |            |
|   | GAS SUPPLY            | Propane Gas - 6 ft., 1.83 m<br>Natural Gas - N/A |                          |             |            |
| Net Weight  | 81                    |  | 153                      |             |            |
| Shipping Weight   | 88                    |  | 161                      |             |            |
| Minimum Ambient Temperature in Which Heater May Be Used   | - 20°F                |  |                          |             |            |



## Safety Precautions

### **WARNING** **Asphyxiation Hazard**

- Do not use this heater for heating human living quarters.
- Do not use in unventilated areas.
- The flow of combustion and ventilation air must not be obstructed.
- Proper ventilation air must be provided to support the combustion air requirements of the heater being used.
- Refer to the specification section of the heater's Owner's Manual, heater dataplate, or contact the L.B. White Company to determine combustion air ventilation requirements of the heater.
- Lack of proper ventilation air will lead to improper combustion.
- Improper combustion can lead to carbon monoxide poisoning leading to serious injury or death. Symptoms of carbon monoxide poisoning can include headaches, dizziness and difficulty in breathing.

## FUEL GAS ODOR

Propane gas and natural gas have man-made odorants added specifically for detection of fuel gas leaks.

If a gas leak occurs, you should be able to smell the fuel gas.  
**THAT'S YOUR SIGNAL TO GO INTO IMMEDIATE ACTION!**

- Do not take any action that could ignite the fuel gas. Do not operate any electrical switches. Do not pull any power supply or extension cords. Do not light matches or any other source of flame. Do not use your telephone.
- Get everyone out of the building and away from the area immediately.
- Close all propane gas tank or cylinder fuel supply valves, or the main fuel supply valve located at the meter if you use natural gas.
- Propane gas is heavier than air and may settle in low areas. When you have reason to suspect a propane leak, keep out of all low areas.
- Use your neighbor's phone and call your fuel gas supplier and your fire department. Do not re-enter the building or area.
- Stay out of the building and away from the area until declared safe by the firefighters and your fuel gas supplier.
- **FINALLY**, let the fuel gas service person and the firefighters check for escaped gas. Have them air out the building and area before you return. Properly trained service people must repair the leak, check for further leakages, and then relight the appliance for you.

## ODOR FADING – NO ODOR DETECTED

- Some people cannot smell well. Some people cannot smell the odor of the man-made chemical added to propane or natural gas. You must determine if you can smell the odorant in these fuel gases.
- Learn to recognize the odor of propane gas and natural gas. Local propane gas dealers will be more than happy to give you a scratch and sniff pamphlet. Use it to become familiar with the fuel gas odor.
- Smoking can decrease your ability to smell. Being around an odor for a period of time can affect your sensitivity to that particular odor.
- The odorant in propane gas and natural gas is colorless and the intensity of its odor can fade under some circumstances.
- If there is an underground leak, the movement of gas through the soil can filter the odorant.
- Propane gas odor may differ in intensity at different levels. Since propane gas is heavier than air, there may be more odor at lower levels.
- **Always be sensitive to the slightest gas odor.** If you continue to detect any gas odor, no matter how small, treat it as a serious leak. Immediately go into action as discussed previously.

## ATTENTION – CRITICAL POINTS TO REMEMBER!

- Propane gas has a distinctive odor. Learn to recognize these odors. (Reference Fuel Gas Odor and Odor Fading sections above.)
- If you have not been properly trained in repair and service of propane gas then do not attempt to light heater, perform service or repairs, or make any adjustments to the heater on the propane gas fuel system.
- Even if you are not properly trained in the service and repair of the heater, **ALWAYS** be consciously aware of the odors of propane gas and natural gas.
- A periodic sniff test around the heater or at the heater's joints; i.e. hose, connections, etc., is a good safety practice under any conditions. If you smell even a small amount of gas, **CONTACT YOUR FUEL GAS SUPPLIER IMMEDIATELY. DO NOT WAIT!**



1. Do not attempt to install, repair, or service this heater or the gas supply line unless you have continuing expert training and knowledge of gas heaters.

Qualifications for service and installation of this equipment are as follows:

- a. To be a qualified gas heater service person, you must have sufficient training and experience to handle all aspects of gas-fired heater installation, service and repair. This includes the task of installation, troubleshooting, replacement of defective parts and testing of the heater. You must be able to place the heater into a continuing safe and normal operating condition. You must completely familiarize yourself with each model heater by reading and complying with the safety instructions, labels, Owner's Manual, etc., that is provided with each heater.
- b. To be a qualified gas installation person, you must have sufficient training and experience to handle all aspects of installing, repairing and altering gas lines, including selecting and installing the proper equipment, and selecting proper pipe and tank size to be used. This must be done in accordance with all local, state and national codes as well as the manufacturer's requirements.
- c. In the Commonwealth of Massachusetts, this product must be installed by a gas fitter licensed by the Commonwealth of Massachusetts.

2. All installations and applications of L.B. White heaters must meet all relevant local, state and national codes. Included are L.P. gas, natural gas, electrical, and safety codes. Your local fuel gas supplier, a local licensed electrician, the local fire department or similar government agencies, or your insurance agent can help you determine code requirements.

Also refer to:

- NFPA 102, Standard for Assembly Seating, Tents and Membrane Structures.
- ANSI/NFPA 58, latest edition, Standard for Storage and Handling of Liquefied Petroleum Gas and/or
- ANSI Z223.1/NFPA 54, National Fuel Gas Code
- ANSI/NFPA 70, National Electrical Code.

3. We cannot anticipate every use which maybe made of our heaters. Check with the local fire safety authority if you have questions about applications.
4. Forced air heaters shall not be directed toward any propane gas container within 20 feet (6.10 meters). Do not wash the heater. Use only compressed air, a soft brush or dry cloth to clean the interior of the heater and it's components.
5. For safety, this heater is equipped with manual reset high limit switches, an air-proving switch and a redundant gas control valve. Never operate the heater with any safety device that has been

bypassed. Do not operate this heater unless all of these features are fully functioning.

6. Do not locate fuel gas containers or fuel supply hoses within 20 ft. of the blower outlet of the heater.
7. Do not block air intakes or discharge outlets of the heater. Doing so may cause improper combustion or damage to heater components leading to property damage.
8. The hose assembly shall be visually inspected on a daily basis after heater relocation and when the heater is in use. If it is evident there is excessive abrasion or wear, or if the hose is cut, it must be replaced prior to the heater being put into operation. The hose assembly shall be protected from building materials, and contact with hot surfaces during use. The hose assembly shall be that specified by the manufacturer. See parts list.
9. Check for gas leaks and proper function upon heater installation, when relocating, and after servicing. Refer to leak check instructions within installation section of this manual.
10. This heater should be inspected for proper operation by a qualified service person before each use and at least annually.
11. Always turn off the gas supply to the heater if the heater is not going to be used in the heating of the tent.
12. This heater is equipped with a three-prong (grounding) plug for your protection against shock hazard and must be plugged directly into a properly grounded three-prong receptacle. Failure to use a properly grounded receptacle can result in electrical shock, personal injury, or death.
13. If gas flow is interrupted and flame goes out, do not relight the heater until you are that all gas that may have accumulated has cleared away. In any event, do not relight the heater for at least 5 minutes.
14. Minimum propane gas supply cylinder size to be used shall be 100 pounds when using a cylinder supply system. The system must be arranged to provide vapor withdrawal from the operating cylinder.
15. When the heater is to be stored indoors, the connection between the propane gas supply cylinder(s) and the heater must be disconnected and the cylinder(s) removed from the heater and stored in accordance with the Standard for the Storage and Handling of Liquefied Petroleum Gases, ANSI/NFPA 58.
16. Propane gas supply containers have left handed threads. Use the manual hand wheel supplied with regulator to make a connection of the regulator's P.O.L. fitting into the cylinders' gas supply valve.
17. Use pipe joint compound that is resistant to propane and natural gas.



# Installation Instructions

## GENERAL



### WARNING

#### Fire and Explosion Hazard

Can cause property damage, severe injury or death

- To avoid dangerous accumulation of fuel gas, turn off gas supply at the heater service valve before starting installation, and perform gas leak test after completion of installation.
- Do not force the gas control knob. Use only your hand to turn the gas control knob. Never use any tools. If the knob will not operate by normal hand pressure the gas control valve should be replaced by a qualified service technician. Force or attempted repair may result in fire or explosion.

1. Read all safety precautions and follow L.B. White recommendations when installing this heater. If during the installation or relocating of heater, you suspect that a part is damaged or defective, call a qualified service agency for repair or replacement.
2. The heating equipment must be properly positioned on a flat, stable, and horizontal surface before use. Observe and obey all minimum safe distances of the heater to the nearest combustible materials. Safe distances are given on the heater dataplate and on page 4 of this manual.
3. **LP Gas Installation Requirements**
  - All LP. gas containers must be placed at least 5 feet from the nearest tent wall structure.
  - Ensure all L.P. gas containers are secured and protected from all people, vehicular traffic and contact.
  - L.P. gas containers must be located on a flat, level, and stable surface.
  - L.P. gas cylinders (a.k.a. 100 lb. cylinders/tanks) must be secured from tip-over.

Contact your local authorities, L.P. gas dealers, or fire marshalls for specifics dealing with installation in your area

4. This heater may be installed either indoors or outdoors. For outdoor installations, additional accessories are needed to properly provide heated air to the inside of the tent. These accessories are as follows:

#### Unit Diffuser:

This accessory provides the necessary clearance to combustible materials and also spreads the heated air inside the tent. Local codes may require a 10 ft. separation between the tent and the heater. In this case the unit mounted diffuser shall not be used.

Unit Diffuser Part Numbers:

Premier 80: 26349  
Premier 170: 26351

#### Duct Kit, 12 in. diameter x 12 ft. length:

This accessory provides for locating the heater 10 ft. away from the tent as required by some local codes.

Duct Kit Part Numbers:

Gray 26346  
White 26347  
Clear 26348

#### End Diffuser:

This accessory is used with the 12 in. diameter x 12 ft. duct. It is placed under the tent edge and provides for spreading of the heated air inside the tent.

End Diffuser Part Number: 26350

**DO NOT USE ANY OTHER DUCTWORK, DUCTING, FIELD FABRICATED DUCTS, TARPS, STOVE PIPE, or any other means of making the connection between the heater and the inside of the tent.**

5. When using the unit diffuser or end diffuser air distribution accessories, ensure the tent material is laid within the accessory's channel, and the tent material is firmly anchored to hold the tent material securely within the channel. See pages 12 and 13 for specifics when using these air distribution accessories.
6. The heater's gas pressure regulator (with pressure relief valve) must be protected from adverse weather conditions (rain, ice, snow) as well as from building materials (tar, concrete, plaster, etc.) which can affect safe operation and could result in property damage or injury.
7. Insure that all accessories that ship within the heater have been removed from inside the heater and installed.
8. Check all connections for gas leaks using approved gas leak detectors. Gas leak testing is performed as follows:



### WARNING

#### Fire and Explosion Hazard

- Do not use open flame (matches, torches, candles, etc.) in checking for gas leaks.
- Use only approved leak detectors.
- Failure to follow this warning can lead to fires or explosions.
- Fires or explosions can lead to property damage, personal injury or loss of life.

- Check all pipe connections, hose connections, fittings and adapters upstream of the gas control with approved gas leak detectors.



- In the event a gas leak is detected, check the components involved for cleanliness and proper application of pipe compound before further tightening.
  - Tighten the gas connections as necessary to stop the leak.
  - After all connections are checked and any leaks are stopped, turn on the main burner.
  - Stand clear while the main burner ignites to prevent injury caused from hidden leaks that could cause flashback.
  - With the main burner in operation, check all connections, hose connections, fittings and joints as well as the gas control valve inlet and outlet connections with approved gas leak detectors.
  - If a leak is detected, check the components involved for cleanliness in the thread areas and proper application of pipe compound before further tightening.
  - Tighten the gas connection as necessary to stop the leak.
  - If necessary, replace the parts or components involved if the leak cannot be stopped.
  - Ensure all gas leaks have been identified and repaired before proceeding.
9. A qualified service agency must check for proper operating gas pressure upon installation of the heater.
  10. Light according to instructions on heater or within owner's manual.
  11. The heater must have the proper gas regulator for the application. Use only the L.B. White regulator originally supplied with the heater. This regulator includes a POL fitting incorporating an excess flow valve. The excess flow valve is a safety device which protects against discharge from the propane gas supply container if the regulator is broken off. If the POL fitting is ever replaced, it needs to be replaced with an L.B. White POL fitting. Failure to do so can result in fires, explosions, loss of property, injury or death.
  12. The regulator must be connected to the gas supply so that gas pressure at the inlet to the gas valve is regulated within the range specified on the dataplate at all times. Contact your gas supplier, or the L.B. White Co., Inc. if you have any questions.
  13. This heater is configured for use for propane gas vapor withdrawal only. Do not use the heater in an propane gas liquid withdrawal system or application. If you are in doubt, contact the L.B. White Co., Inc.
  14. The heater must be installed so as not to interfere with or obstruct normal exits, emergency exits, doors and walkways.
  15. Railing, fencing or suitable substitute materials must be used to keep the heating equipment from any people using and visiting the structure.
  16. The heater shall be located so that rain, ice, or snow drainage from the structure does not affect heater operation. If the heater is located outside, it must be located above any pooled or standing water. A surrounding trench is recommended to drain any rain, ice or snow away from the unit.
  17. The ground and surrounding terrain must be cleared of any combustible vegetation and other combustible materials when the heater is mounted outside.
  18. Eventually, like all electrical/mechanical devices, the thermostat can fail. Thermostat failure may result in an underheating condition. The thermostat should be tested to make sure it turns the heater on and off within a temperature differential of  $\pm 3^{\circ}\text{F}$ .
  19. Take time to understand how to operate and maintain the heater by using this Owner's Manual. Make sure you know how to shut off the gas supply to the building and also to the individual heater. Contact your fuel gas supplier if you have any questions.
  20. Any defects found in performing any of the service or maintenance procedures must be eliminated and defective parts replaced immediately. The heater must be retested by properly qualified service personnel before placing the heater back into use.

## PROPANE GAS SUPPLY SIZING

The vaporization of propane is affected by several factors: the surface area of the container, the liquid level of propane, temperature surrounding the container, and the relative humidity. All of these factors are specific to a site. Therefore, a degree of experience and judgement is required to select the proper propane supply.

Although experience is the best guide, the following recommendations can be used as a starting point. The table is based on experience in northern climates where cold weather and high humidity are prevalent in the winter. If more or less favorable conditions prevail at a specific site, adjustments can be made on the basis of experience.

### Recommended Propane Gas Supply

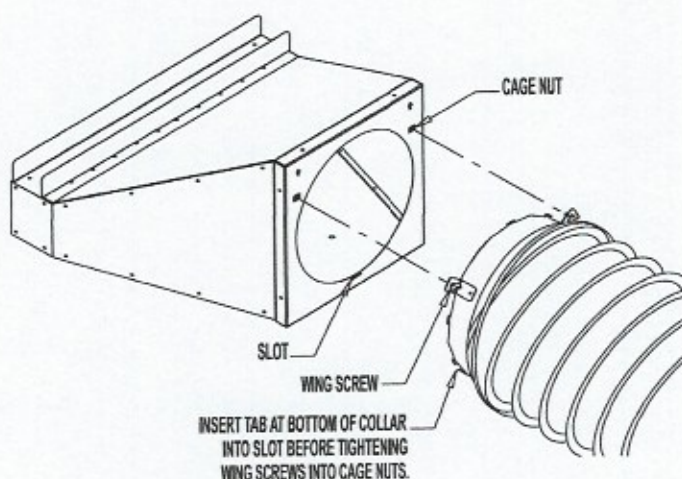
| Average Temp °F                                  |       | 50 | 40 | 30 | 20 | 10 | 0 | -10 |
|--|-------|----|----|----|----|----|---|-----|
| Number of 100lb. Gas Cylinders to Use Per Heater | TS080 | 1  | 1  | 2  | 2  | 2  | 2 | 2   |
|  | TS170 | 2  | 2  | 3  | 3  | 3  | 3 | 3   |

\* Cylinders must be manifolded together to allow simultaneous vapor withdrawal from all cylinders.

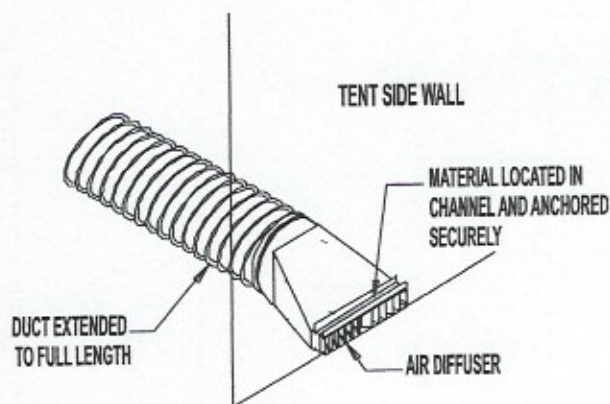


1. Wrap the duct clamp around duct and collar. Saddle of clamp lays over duct coil. Connect clamp ends together and tighten securely. See Fig. 11.

**FIG. 11**



2. Position the diffuser under the tent wall as shown. Lay the tent material within the channel of the diffuser. Ensure the material is securely anchored within the channel. See Fig. 12.



## CONNECTING REGULATOR TO GAS SUPPLY

- Only use the L.B. White regulator supplied with the heater.
- The heater must be regulated at all times for proper operation.
- The regulator must be installed so its vents are directed downward.
- Leak check all regulator connections whenever the regulator is connected to the gas supply.

### Propane Gas Heaters

1. Remove the cap from the POL fitting. Insert the POL stem into the cylinder valve. Push the spring loaded hand wheel up against the threaded nut. Turning counter clockwise, thread the POL nut into the container valve using the hand wheel. Firmly tighten. See Fig. 13.

**FIG. 13**



2. Slowly open the cylinder valve. This will prevent lock-up of the excess flow valve built within POL stem.
3. When storing or transporting the heater, ensure the POL fitting is protected from damage and water entry.

### Natural Gas Heaters

- A regulator is required if the supply pressure to the heater is above the maximum pressure stated on the heater's dataplate.
- Connect the natural gas regulator (part # 09795) to the natural gas supply line. Gas supply pressure to the regulator must be a minimum of 14 in.W.C.



## Start-Up Instructions

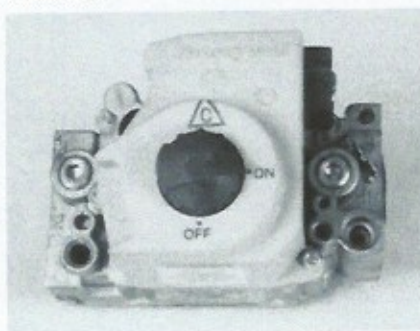
1. Connect the electrical cord to an approved electrical outlet.

A selector switch located on the back of the heater allows heater operation in either HEAT or VENT (no heat) modes. See Fig. 15.

### A. Heat Mode Operation

- a. Open all manual fuel supply valves. Check for gas leaks using an approved leak detector. The gas control valve in the heater has a manual shut-off feature incorporated into the valve assembly. Ensure the indicator on the valve is positioned to ON. See Fig. 14.

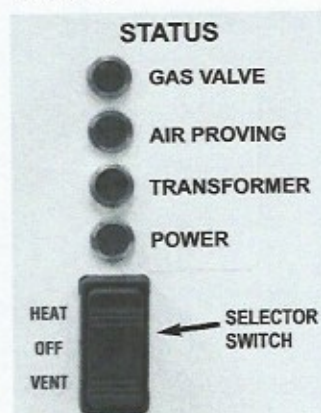
**FIG. 14**



- b. Push the selector switch to HEAT.
- c. Set the thermostat above room temperature
  - The fan motor will start
  - Igniter will spark
  - Ignition occurs
- d. The thermostat cycles the heater on and off based on set point.

(It is normal for air to be trapped in the gas hose on new installations. The heater may attempt more than one trial for ignition before air is finally purged from line and ignition takes place.)

**FIG. 15**



When the switch is set to HEAT, four status lights (See Fig. 15) will be activated in sequence as specific circuits within the heater are checked by the ignition control. **If the heater does not light and a status light is off**, refer to the troubleshooting label on the inside of the heater's burner end access door or the troubleshooting section in this manual.

### B. Vent Mode Operation

- Push the selector switch to OFF, then to VENT.
- Only the fan motor will operate. The igniter will not spark, nor will ignition occur.

The VENT feature is used when air circulation is required. The heater will not cycle on its thermostat setting. To discontinue ventilation, position the switch to OFF or HEAT.

### C. Off

Position the switch to midpoint.

2. Do not exceed input rating stamped on nameplate or manufacturer's recommended burner orifice pressure for size orifice(s) used. Make certain that the primary air supply to main burner is open and free of dust, dirt and debris for complete, proper combustion.



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## ***Shut-Down Instructions***

For normal shut-down, set the thermostat below room temperature. When servicing or performing maintenance, follow steps 1 - 5.

1. Close the fuel supply valve.
  2. Allow the heater to burn off any fuel gas remaining in the gas supply line.
  3. For heaters so equipped, set the thermostat to "Off" or "No Heat".
  4. Position selector switch to "Off."
  5. Disconnect the heater from its gas and electrical supplies.
-