

## Propane Heater

### SAFETY INFORMATION

**WARNING:** This product contains and/or generates chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

**WARNING:** Fire, burn inhalation and explosion hazard. Keep solid combustibles, such as building materials, paper or cardboard, a safe distance away from the heater as recommended by the instructions. Never use the heater in spaces which do or may contain volatile or airborne combustibles or products such as gasoline, solvents, paint thinner, dust particles or unknown chemicals.

**WARNING:** Not for home or recreational vehicle use.

The heater is designed for use as a construction heater in accordance with ANST Z83.7-CGA 2.14. Other standards govern the use of fuel gases and heating products for specific uses. Your local authority can advise you about these. The primary purpose of construction heaters is to provide temporary heating of buildings under construction, alteration or repair. Properly used, the heater provides safe economical heating. Products of combustion are vented into the area being heated.

We cannot foresee every use which may be made of our heaters. **CHECK WITH YOUR LOCAL FIRE SAFETY AUTHORITY IF YOU HAVE QUESTIONS ABOUT HEATER USE.**

Other standards govern the use of fuel gases and heat producing products for specific uses. Your local authorities can advise you about these.

**Carbon Monoxide Poisoning:** Some people are more affected by carbon monoxide than others. Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness and/or nausea. If you have these signs, the heater may not be working properly. **Get fresh air at once!** Check for proper Ventilation and have heater serviced.

**Propane Gas:** Propane gas is odorless. An odor-making agent is added to propane gas. The odor helps you detect a propane gas leak. However, the odor added to propane gas may fade. Propane gas may be present even though no odor exists. Make certain you read and understand all warnings. Keep this manual for reference. It is your guide to safe and proper operation of this heater.

1. Install and use heater with care. Follow all local ordinances and codes. In the absence of local ordinances and codes, refer to the *Standard for Storage and Handling of Liquefied Petroleum Gas ANSINFPFA 58 National Gas Installation Code, CAN/CGA B149.2*. This instructs on the safe storage and handling of propane gases.
2. This product has been approved for use in the Commonwealth of Massachusetts.
3. Use only propane gas set up for vapor withdrawal.
4. Provide adequate ventilation. Before using heater, provide at least a 2.5 square foot (0.232 m<sup>2</sup>) (80,000 btu heaters) or 6.0 square foot (0.557 m<sup>2</sup>) (200,000 btu heaters) opening of fresh, outside air.
5. For indoor use only. Do not use heater outdoors.
6. Keep heater away from strong drafts, wind, water spray, rain or dripping water.
7. Do not use heater in occupied dwellings or in living or sleeping quarters.
8. Do not use heater in a basement or below ground level. Propane gas is heavier than air. If a leak occurs, propane gas may sink to the lowest possible level.
9. Keep appliance area clear and free from combustible materials, gasoline, paint thinner and other flammable vapors and liquids. Dust is combustible. Do not use heater in areas with high dust content.
10. Minimum heater clearances from combustibles: **80,000 Btu heaters** Sides: 3 feet (91 cm); Top: 6 feet (1.83 m) **100-200,000 Btu heaters** Sides: 3 feet (91 cm); Top: 7 feet (2.1 m)
11. Keep heater at least six feet (1.83 m) from propane tank(s).
12. Keep propane tank(s) below 100° F (37.8° C).
13. Use only the hose and factory preset regulator provided with the heater.
14. Check heater for damage before each use. Do not use a damaged heater.

### SAFETY INFORMATION

*Continued*

15. Check hose before each use of heater. If highly worn or cut, replace with hose specified by manufacturer before using heater.
16. Do not alter heater. Keep heater in its original state.
17. Do not use heater if altered.
18. Locate heater on stable and level surface if heater is hot or operating.
19. Not intended for use on finished floors.
20. Never block air inlet (bottom of shell) or air outlet (around top of shell) of heater.
21. Do not leave heater unattended.
22. Keep children and animals away from heater.
23. Never move, handle or service a hot or operating heater. Severe burns may result. You must wait 15 minutes after turning heater off.
24. To prevent injury, wear gloves when handling heater.
25. Never attach duct work to heater.
26. Turn off propane supply to heater when not in use.
27. Use only original replacement parts. This heater must use design-specific parts. Do not substitute or use generic parts. Improper replacement parts could cause serious or fatal injuries.

### UNPACKING

1. Remove all packing items applied to heater for shipment. Keep plastic cover caps (attached to inlet connector and hose/regulator assembly) for storage.
2. Remove all items from carton.
3. Check all items for shipping damage. If heater is damaged, promptly inform dealer where you bought heater.

### THEORY OF OPERATION

**The Fuel System:** The hose/regulator assembly attaches to the propane gas supply. This provides fuel to the heater.

**The Ignition System:** The piezo ignitor lights the pilot.

**The Automatic Control System:** This system causes the heater to shut down if the flame goes out.

### PRODUCT IDENTIFICATION

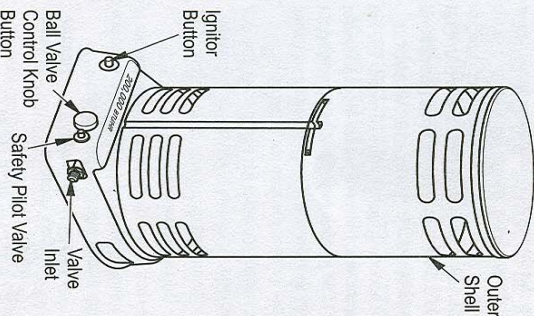


Figure 1 - 200,000 Btu Model Shown

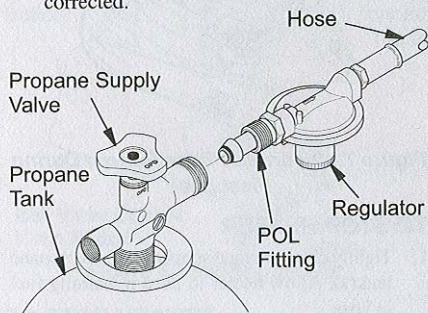
### VENTILATION

**WARNING:** Provide at least a 2.5 square foot (0.23 m<sup>2</sup>) opening of fresh, outside air while running heater. If proper fresh, outside air ventilation is not provided, carbon monoxide poisoning can occur. Provide proper fresh, outside air ventilation before running heater.

### CONNECTING TO GAS SUPPLY

**⚠ WARNING: Test all gas piping and connections for leaks after installation or servicing. Never use an open flame to check for a leak. Apply a mixture of liquid soap and water to all joints. Bubbles forming show a leak. Correct all leaks at once.**

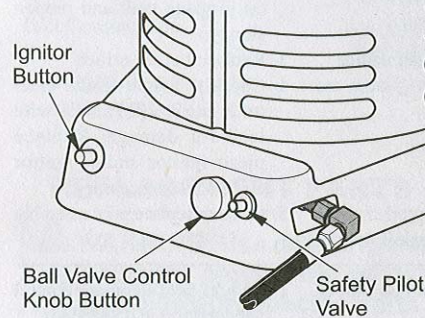
1. Provide propane supply system (see *Propane Supply*).
2. Connect fuel gas fitting on hose/regulator assembly to propane tank(s). Turn fuel gas fitting counterclockwise into threads on tank. Tighten firmly using a wrench. **IMPORTANT:** Tighten regulator with vent pointing down. Pointing vent down protects regulator from weather damage.
3. Connect hose to the valve inlet. Tighten firmly using a wrench. You must use the regulator supplied with heater even if propane tank has one.
4. Open propane supply valve on propane tank(s) slowly. **Note:** If not opened slowly, excess-flow check valve on propane tank may stop gas flow. If this happens, you may hear a click inside the regulator assembly, this is the check valve closing. To reset the excess flow check valve, close propane supply valve and open again slowly.
5. Check all connections for leaks. Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak that must be corrected.



**Figure 3 - Regulator Position**

### 200,000 BTU/HR HEATER TO START HEATER

1. Before lighting pilot fully close the ball valve (turn knob fully clockwise).
2. Fully open the valve on the propane cylinder and wait 15 seconds before proceeding to step 3.
3. Depress red button on safety pilot valve admitting gas to the heater. Then push and release the ignitor button until the pilot lights.
4. When the pilot lights, continue to hold the button depressed for 30 seconds, then release.
5. If pilot goes out, wait 5 minutes and repeat the lighting procedure.
6. When the pilot remains lit, open the ball valve (turn knob counterclockwise) to light main burner. Partially close valve to regulate heat output.



**Figure 8 - Starting Heater**

### TO STOP HEATER

1. Securely close valve on the propane cylinder.
2. Continue to operate heater until all fuel in the hose has burned.
3. Fully close the ball valve.

### TO RESTART HEATER

1. Securely close valve at propane cylinder.
2. Wait 5 minutes.
3. Restart heater by following *To Start Heater*, page 6.