WARNING PATIO HEATER SAFETY

Any piece of equipment can be dangerous if not operated properly. <u>YOU</u> are responsible for the safe operation of this equipment. The operator must carefully read and follow any warnings, safety signs and instructions provided with or located on the equipment. Do not remove, defeat, deface or render inoperable any of the safety devices or warnings on this equipment. <u>IF</u> any safety devices or warnings have been removed, defeated, defaced, or rendered inoperable, **DO NOT USE THIS EQUIPMENT!!!**

Propane itself is not a listed Proposition 65 chemical.

BUT

WARNING: The combustion of propane in appliances, such as stoves or heating systems and vehicles using propane, creates harmful chemicals. These chemicals include carbon monoxide, benzene, formaldehyde, and acetaldehyde - all chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. You should read and follow all use, care, and manufacturer instructions for propane appliances and equipment. Proper ventilation and frequent inspection of propane appliances and equipment are highly recommended. A warning odorant is added to propane so that leaks of unburned gas can be quickly detected. If a gas odor is detected, contact a qualified service technician immediately.

This equipment gets Extremely Hot during operation; allow it to cool before moving or handling.

WARNING: For outdoor use only.

IMPORTANT: Read and understand this manual before assembling, starting or servicing heater. Improper use of heater can cause serious injury. Keep this manual for future reference.

FOR YOUR SAFETY

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

FOR YOUR SAFETY

If you smell gas:

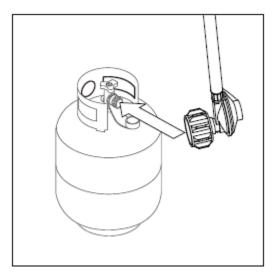
- 1. Shut off gas to the appliance.
- 2. Extinguish any open flame.
- 3. If odor continues, do not use this heater.

Never transport this heater with the Dome attached. The Equipment Protection Plan does not cover damage to the dome.

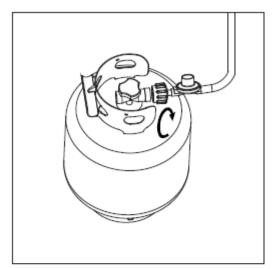
Warning metal conducts electricity. Do Not use this Heater where it may come into contact with power lines or other electric circuts. Failure to comply to this warning will result in serious personal injury or death.

If the person receiving this handout will not be the user of the equipment, forward these instructions to the operator. <u>IF</u> there is any doubt as to the operation or safety of the equipment, <u>DO NOT USE!!! CALL A TOOL SHED IMMEDIATELY!!!</u> FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN INJURY OR DEATH

CONNECTING LP TANK:



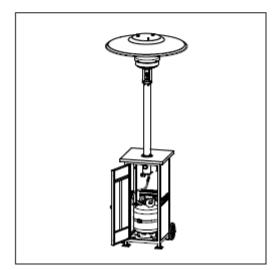
The knob on the LP tank must be closed. Make sure that the knob is turned clockwise to a full stop. The cylinder supply system must be arranged for vapor withdrawal. Check that the control knob on the control unit is turned off. Hold the regulator in one hand and insert the nipple into the valve outlet. Be sure the nipple is centered in the valve outlet. The coupling nut connects to the large outside threads on the valve outlet. Hand-tighten the coupling nut clockwise until it comes to a full stop. Firmly tighten by hand only. To Disconnect: Fully close the tank valve by turning clockwise. Turn the coupling nut counterclockwise until the regulator assembly detaches.



A dented, rusted, or damaged propane cylinder may be hazardous and should be checked by your cylinder supplier. Never use a propane cylinder with a damaged valve connection.

The propane cylinder must be constructed and marked in accordance with the specifications for LP gas cylinders of the U.S. Department of Transportation (DOT) or the standard for cylinders, spheres, and tubes for transportation of dangerous goods and commission, CAN/CSA-B339.

The cylinder must have a listed overfilling prevention device.



The cylinder must have a connection device compatible with the connection for the appliance.

The cylinder used must include a collar to protect the cylinder valve.

Never connect an unregulated propane cylinder to the heater.

Attach regulator to cylinder. Complete attachment.

Place cylinder into enclosure and secure with strap.

LEAK CHECK:

- 1. Make 2-3 oz. of leak check solution (one-part liquid dishwashing detergent and three parts water).
- 2. Apply several drops of solution where hose attaches to regulator.
- 3. Apply several drops of solution where regulator connects to cylinder.
- 4. Make sure all patio heater and light valves are OFF.
- 5. Turn cylinder valve ON.

If bubbles appear at any connection, there is a leak.

- 1. Turn cylinder valve OFF.
- 2. If leak is at hose/regulator connection: tighten connection and perform another leak test. If bubbles continue appearing, the hose should be returned to the place of purchase.
- 3. If leak is at regulator/cylinder valve connection: disconnect, reconnect, and perform another leak check. If you continue to see bubbles after several attempts, cylinder valve is defective and should be returned to cylinder's place of purchase.

If NO bubbles appear at any connection, the connections are secure.

NOTE: Whenever gas connections are loosened or removed, you must perform a complete leak test.

Before Turning Gas Supply ON:

- 1. Your heater was designed and approved for outdoor use only. Do NOT use it inside a building, garage, or any other enclosed area.
- 2. Make sure surrounding areas are free of combustible materials, gasoline, and other flammable vapors or liquids.
- 3. Ensure that there is no obstruction to air ventilation. Be sure all gas connections are tight and there are no leaks.
- 4. Be sure the cylinder cover is clear of debris. Be sure any component removed during assembly or servicing is replaced and fastened prior to starting.

Before Lighting:

- 1. Heater should be thoroughly inspected before each use, and by a qualified service person at least annually. If relighting a hot heater, always wait at least 5 minutes.
- 2. Inspect the hose assembly for evidence of excessive abrasion, cuts, or wear. Suspected areas should be leak tested. If the hose leaks, it must be replaced prior to operation. Only use the replacement hose assembly specified by manufacturer.
- 3. The pressure regulator and hose assembly supplied with the appliance must be used. Replacement pressure regulators and hose assemblies must be those specified by the appliance manufacturer.

Lighting:

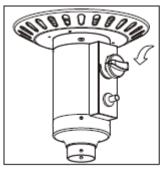
- 1. Turn on the valve on the gas cylinder.
- 2. Press and turn the control knob to HIGH (maximum) position (counter-clockwise 90°). (Figure 1)
- 3. Holding down the control knob, press the igniter button several times until the main flame is ignited.

Release the control knob 10 seconds after the ignition.

- 4. Turn the control knob to LOW (minimum) and leave it there for 5 minutes or more before turning the knob to the desired temperature setting. (Figure 2)
- 5. If the burner flame goes out, turn off the heater and wait at least 5 minutes or more to let the gas dissipate before re-lighting to avoid gas explosion.

 Repeat steps 2 to 4.

Note: Improper operation, can cause injury or property damage. If burner fails to remain lit, all valves should be closed and a waiting period of at least 5 minutes should pass before attempting to light.



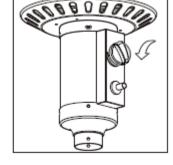


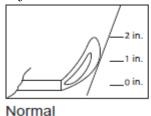
Figure 1

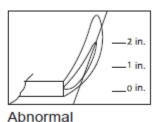
Figure 2

If you experience any ignition problem please consult "Troubleshooting" on the last page. **Caution:** Avoid inhaling fumes emitted from the heater's first use. Smoke and odor from the burning of oils used in manufacturing will appear. Both smoke and odor will dissipate after approximately 30 minutes. The heater should NOT produce thick black smoke.

Note: The burner may be noisy when initially turned on.

Turn the knob to the level of heat desired.





WARNING

FOR YOUR SAFETY

Be careful when attempting to manually ignite this heater. Holding in the control knob for more than 10 seconds before igniting the gas will cause a ball of flame upon ignition.

When heater is ON:

Emitter screen will become bright red due to intense heat. The color is more visible at night. Burner will display tongues of blue and yellow flame. These flames should not be yellow or produce thick black smoke, indicating an obstruction of airflow through the burners. The flame should be blue with straight yellow tops. If excessive yellow flame is detected, turn off heater and consult "Troubleshooting" on the last page.

M WARNING

FOR YOUR SAFETY:

- Do NOT touch or move heater for at least 45 minutes after use
- Reflector is hot to the touch.
- Allow reflector to cool before touching.

Re-lighting:

Note: For your safety, control knob cannot be turned OFF without first depressing control knob in PILOT position and then rotating it to OFF.

- 1. Turn control knob to OFF.
- 2. Repeat the "Lighting" steps on prior page.

Shut Down:

Turn cylinder valve clockwise to OFF and disconnect regulator when heater is not in use.

Note: After use, some discoloration of the emitter screen is normal.

Operation Checklist

For a safe and pleasurable heating experience, perform this check before each use.

Before Operating:

- 1. Confirm you are familiar with entire owner's manual and understand all precautions noted.
- 2. All components are properly assembled, intact and operable.
- 3. No alterations have been made.
- 4. All gas connections are secure and do not leak.
- 5. Wind velocity is below 10 mph.
- 6. Unit will operate at reduced efficiency below 40°F.
- 7. Heater is outdoors (outside any enclosure).
- 8. There is adequate fresh air ventilation.
- 9. Heater is away from gasoline or other flammable liquids or vapors.
- 10. Heater is away from windows, air intake openings, sprinklers, and other water sources.
- 11. Heater is at least 24 in. on top and at least 36 in. on sides from combustible materials.
- 12. Heater is on a hard and level surface.
- 13. There are no signs of spider or insect nests.
- 14. All burner passages are clear.
- 15. All air circulation passages are clear.
- 16. Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.
- 17. Young children should be carefully supervised when they are in the area of the heater.
- 18. Clothing or other protective material should not be hung from the heater, or placed on or near the heater.

After operation:

- 1. Gas control is in OFF position.
- 2. Gas Tank valve is OFF.
- 3. Disconnect Gas line.
- 4. Remove LP tank.

After allowing unit to cool completely before continuing.

- 5. Lower the post into the main frame.
- 6. Remove the dome.
- 7. Place protective cover over burner head.

Secure unit and propane tank before returning to rental center.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Burner won't light	Propane cylinder is frosted over	Wait until the propane cylinder warms up and is defrosted
	Blockage in orifice	Clear blockage
	Control knob is not in ON position	Turn control knob to ON
Burner flame is low	Gas pressure is low	Turn cylinder valve OFF and replace cylinder
	Outdoor temperature is less than 40°F and tank is less than 1/4 full	Use a full cylinder
	Control knob fully ON	Check burner and orifices for blockage
Carbon build-up	Dirt or film on reflector and burner screen	Clean reflector and burner screen
Thick black smoke	Blockage in burner	Remove blockage and clean burner inside and outside