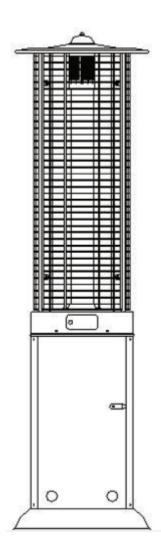


## PATIO HEATER

MODEL# ROUND

## **Owner's Manual**





## SAFETY INFORMATION

Please read and understand this entire manual before attempting to assemble, operate or install the product.

This manual contains important information about the assembly, operation and maintenance of this patio heater. General safety information is presented in these first few pages and is also located throughout the manual. Keep this manual for future reference and to educate new users of this product. This manual should be read in conjunction with the labeling on the product. Safety precautions are essential when any mechanical or propane-fueled equipment is involved. These precautions are necessary when using, storing and servicing this item. Using this equipment with the respect and caution demanded will reduce the possibilities of personal injury or property damage. The following symbols shown below are used extensively throughout this manual. Always heed these precautions, as they are essential when using any mechanical or fueled equipment.

### 

DANGER indicates an imminently hazardous situation which, if not avoided will result in death or serious injury.

# 

CAUTION indicates an imminently hazardous situation which, if not avoided, may result in minor or moderate personal injury, or property damage.

# 

WARNING indicates an imminently hazardous situation which, if not avoided will result in death or serious injury.

# 

- If you smell gas:
- 1. Shut off gas to the appliance.
- 2. Extinguish any open flame.
- 3. If odor continues, keep away from the appliance and immediately call your gas supplier or fire department

# 

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance. An LP-cylinder not connected for use shall not be stored in the vicinity of this or any other appliance.

# A WARNING

Certain materials or items, when stored under the heater, will be subjected to radiant heat and could be seriously damaged.

# 

Failure to comply with the precautions and instructions provided with this heater can result in death, serious bodily injury and property loss or damage from hazards of fire, explosion, burn, asphyxiation and/or carbon monoxide poisoning. Only persons who can understand and follow the instructions should use or service this heater.

## 

- EXPLOSION FIRE HAZARD
- Keep solid combustibles, such as building materials, paper or cardboard, a safe distance away from the heater as recommended by the instructions.
- Provide adequate clearances around air openings into the combustion chamber.
- 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.
- During operation, this product can be a source of ignition. Keep heater area clear and free from combustible materials, gasoline, paint thinner, cleaning solvents and other flammable vapors and liquids. Do not use heater in areas with high dust content. Minimum heater clearances from combustible materials: 3 feet from the sides & 3 feet from the top.

# A WARNING

#### **BURN HAZARD**

- Never leave heater unattended when hot or in use.
- Keep out of reach of children.

# 

#### • EXPLOSION - FIRE HAZARD

- Never store propane near high heat, open flames, direct sunlight, other ignition sources or where temperatures exceed 120 degrees F (49°C).
- Propane vapors are heavier than air and can accumulate in low places. If you smell gas, leave the area immediately.
- Never install or remove the propane cylinder
- This heater is red hot during use and can ignite flammables that are too close to the burner. Keep flammables at least 3 feet from sides & 3 feet from top. Keep gasoline and other flammable liquids and vapors well away from heater.
- Store the propane cylinder outdoors in a well-ventilated space out of reach of children. Never store the propane cylinder in an enclosed area (house, garage etc.). If heater is to be stored indoors, disconnect the propane cylinder for outdoor storage.

# 

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.

If no local codes exist, follow National Fuel Gas Code, ANSI Z223.1. In Canada, installation must conform to local codes. If no local codes exist, follow the current National standards of CANADA CAN/CGA-B 149.2.

# 

#### California Proposition 65

Combustion by-products produced when using this product contain chemicals known to the State of California to cause cancer, birth defects and other reproductive harm.

# A DANGER

#### CARBON MONOXIDE HAZARD

- This heater is a combustion appliance. All combustion appliances produce carbon monoxide (CO) during the combustion process. This product is designed to produce extremely minute, non-hazardous amounts of CO if used and maintained in accordance with all warnings and instructions. Do not block air flow into or out of the heater.
- Carbon Monoxide (CO) poisoning produces flu-like symptoms, watery eyes, headaches, dizziness, fatigue and possibly death. You can't see it and you can't smell it. It's an invisible killer. If these symptoms are present during operation of this product, get fresh air immediately!
- For outdoor use only.
- Never use inside house, or other unventilated or enclosed areas.
- This heater consumes air (oxygen). Do not use in unventilated or enclosed areas to avoid endangering your life.

## A WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operation and maintenance instructions thoroughly before installing or servicing this equipment.

## 

#### SERVICE SAFETY

- Keep all connections and fittings clean. Make sure propane cylinder valve outlet is clean.
- During set up, check all connections and fittings for leaks using soapy water. Never use a flame.
- Use as a heating appliance only. Never alter in any way or use with any device.

# A WARNING

- Alert children and adults to the hazards of high surface temperatures. Stay away from these surfaces to avoid burning skin or igniting clothing.
- Carefully supervise young children when in the vicinity of the heater.
- Do not hang clothing or any other flammable materials from the heater, or place on or near the heater.
- Replace any guard or protective device removed for servicing the appliance prior to placing back in service.
- Installation and repair should be done by a qualified service person. The heater should be inspected before use and annually by a qualified service person. More frequent cleaning may be required as necessary. It is imperative that the control compartment, burners and circulating air passageway of the appliance be kept clean.

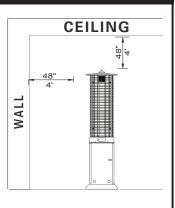
## **A** CAUTION

#### SERVICE SAFETY

- Keep all connections and fittings clean. Make sure propane cylinder valve outlet is clean.
- During set up, check all connections and fittings for leaks using soapy water. Never use a flame.
- Use as a heating appliance only. Never alter in any way or use with any device.

## A WARNING

- For outdoor use ONLY.
- An amply ventilated area must have a minimum of 25 % of the surface area open.
- The surface area is the sum of the walls surface.



# A WARNING

- This product is fueled by propane gas. Propane gas is invisible, odorless and flammable. An odorant is normally added to help detect leaks and can be described as a "rotten egg" smell. The odorant can fade over time so leaking gas is not always detectable by smell alone.
- Propane gas is heavier than air and leaking propane will sink to the lowest level possible. It can ignite by ignition sources including matches, lighters, sparks or open flames of any kind many feet away from the original leak. Use only propane gas set up for vapor withdrawal.
- Store or use propane gas in compliance with local ordinances and codes or with ANS/NFPA 58. Turn off propane when not in use.

### **WARNING:** For Outdoor Use Only

# 

#### CARBON MONOXIDE HAZARD

This appliance can produce carbon monoxide which has no odor.

Using it in an enclosed space can kill you.

Never use this appliance in an enclosed space such as a camper, tent, car or home.

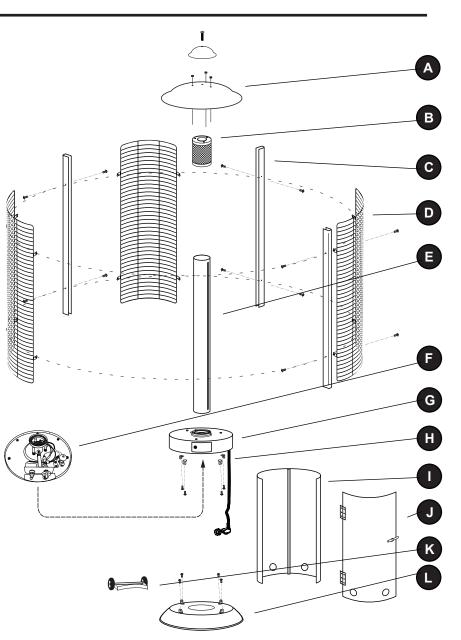
# A WARNING

Spiders and insects can nest in burner or orifices. This dangerous condition can damage heater and render it unsafe for use. Clean burner holes by using a heavy-duty pipe cleaner. Compressed air may help clear away smaller particles.



### PACKAGE CONTENTS

PART	DESCRIPTION	QUANTITY
Α	Reflector	1
В	Emitter	1
С	Support	3
D	Protective Guard	3
E	Quartz Glass Tube	1
F	Burner Ignition Plate	1
G	Control Box Casing	1
Н	Gas Hose & Regulator	1
I	Back Panel	1
J	Front Door Panel	1
К	Wheel Kit	1
L	Base Plate	1



### **INCLUDED HARDWARE**





Wrench Qty. 1

Bolt M10 ×15mm Qty. 2

### ADDITIONAL REQUIRED HARDWARE

- Adjustable opening wrench (2) 20 cm (8") long
- Slip joint pliers 23 cm (9") long
- Philips screwdriver w/ medium blade
- Spray bottle of soap solution for leakage test



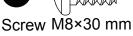
Nut M8 Qty. 11



Screw M8×15 mm



<u>MMM</u>



Qty. 1

DD

Qty. 16



AAA Alkaline Battery Qty. 1 (Not Included)

 $\bigcirc$ 

Qty. 12

00

Philips screwdriver Qty. 1

### PREPARATION

Before beginning assembly of product, make sure all parts are present. Compare parts with package contents list and hardware contents above. If any part is missing or damaged, do not attempt to assemble the product. Contact customer service for replacement parts.

#### **Estimated Assembly Time: 45 minutes**

Tools Required for Assembly (not included):

Phillips screwdriver w/medium blade. Leak Detection Solution.

### **ASSEMBLY INSTRUCTIONS Please install this product from step 7**

# 1. ALREADY ASSEMBLED: First please ensure all transit protection (foam, cardboard, bubble wrap, etc.) is Nut M8 ① removed. Carefully put the ruby quartz glass tube aside after removing the bubble wrap and foam material. Note: If you ever have to un-install, please see fig. 1. Hardware Used Nut M8 (2) Nut M8 Qty 9 Wrench Qty 1 (Already assembled) 2 2. ALREADY ASSEMBLED: Remove three protective steel guards by unscrewing all 12pcs M5x10mm Note: If you ever have to un-install, please see fig. 2. Hardware Used Screw M5×10 mm Philips screwdriver Qty. 12 Qty. 1

### **ASSEMBLY INSTRUCTIONS**

3. Install reflector to support with M8 screws (Qty. 6)

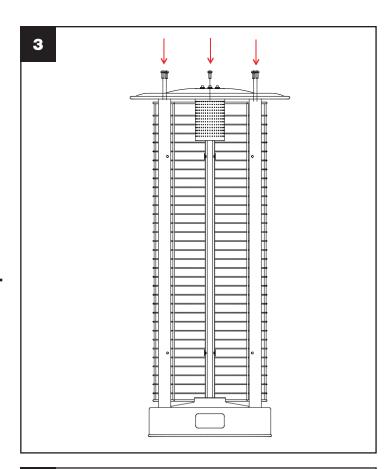
Hardware Used

DD

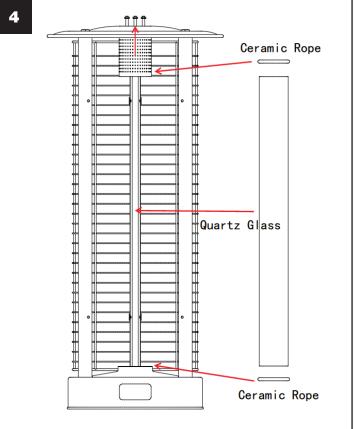


Screw M8×15 mm Qty. 6

Philips screwdriver Qty. 1



2. Then place 1pc of ceramic rope into emitter and 1pc of ceramic rope into glass tube holder at bottom.

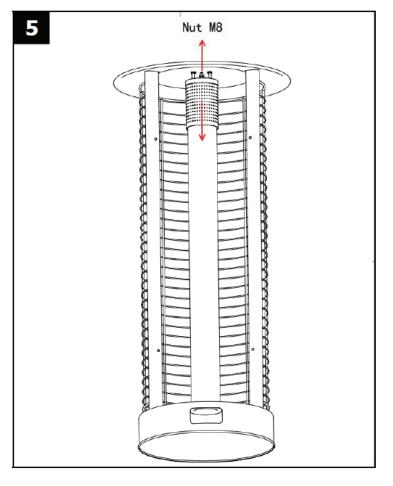


Hardware Used



Wrench Qty 1

5. Release the Nut M8(3) under the reflector in clockwise direction. Then lift the emitter by one hand and place the glass tube inside.Press the emitter and tighten the Nut M8(3) under the reflector in a counterclockwise direction.



Hardware Used



Wrench Qty. 1

6. Tighten the Nut M8 on the reflector. Then use Bolt M8 to tighten the small hat on top of the reflector.

#### Hardware Used



Nut M8 Qty. 3



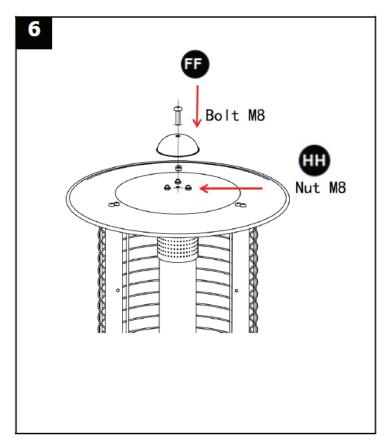
Wrench Qty. 1



2000 Bolt M8×30 mm Qty. 1



Philips screwdriver Qty. 1



7. Align bottom panel on top of base plate and connect them together by securely installing (5) M8×15 screws through the designated 90 degree metal brackets with a philips screwdriver.

**Hardware Used** 

Philips

screwdriver

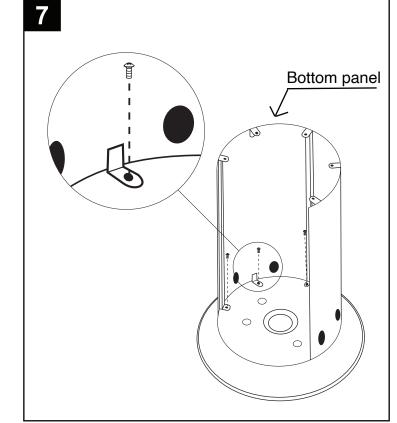
Screw M8×15 mm

PMMMA

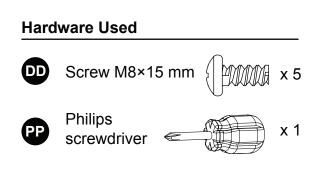
x 5

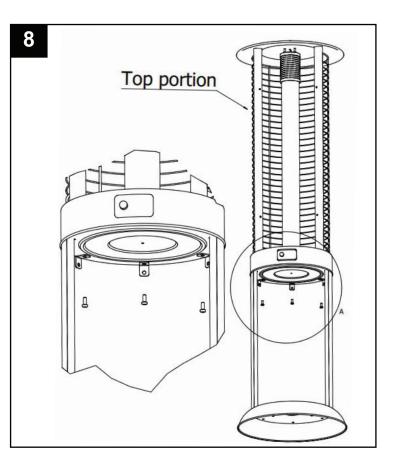
x 1

DD

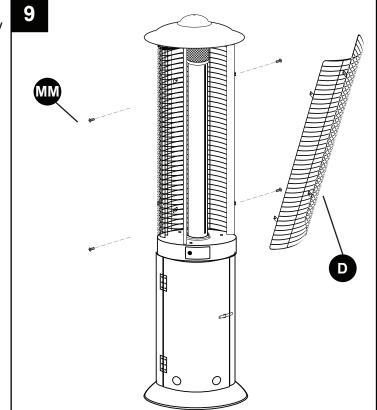


8. Align top portion on top of bottom panel and connect them together by securely installing (5) M8×15 screws through the designated 90 degree metal brackets with a philips screwdriver.

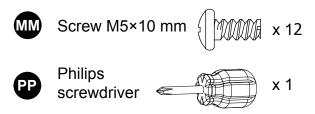




9 .Re-install the protective steel guard(D) by hanging it on the upper support slots.Next tightly secure it with all (12) of the M5×10 screws in to their original support slots accordingly.



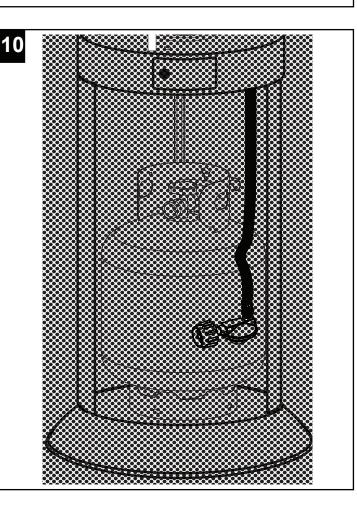
Hardware Used



10. Install regulator to the heater

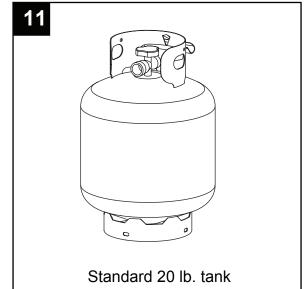
### A WARNING

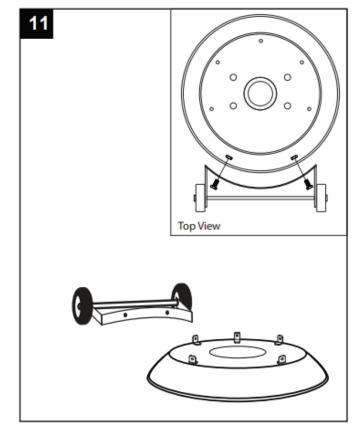
Ensure the hose does not contact any high temperature surfaces, or it may melt and leak causing a fire. After the cylinder is placed inside the heater, secure the cylinder with block belt tightly.



11. Connect hose and regulator to cylinder. The propane gas and cylinder are sold separately. Use a standard 20 lb. propane cylinder only. Use this heater only with a propane vapor withdrawal supply system. See chapter 12 of the standard for storage and handling of liquefied petroleum gas, ANSI/NFPA 58 or CSA B149.1, Natural Gas and Propane Installation Code. Your local library or fire department should have this book. Storage of an appliance indoors is permissible only if the cylinder is disconnected and removed from the appliance. A cylinder must be stored outdoors in a well-ventilated area out of the reach of children. A disconnected cylinder must have dust caps tightly installed and must not be stored in a building, garage or any other enclosed area. The maximum inlet gas supply pressure: 250 psi. The minimum inlet gas supply pressure: 5 psi is required for purpose of input adjustment. The minimum hourly of 16,000 Btu/hr is required input rating for a heater at ratings less than full input rating. The pressure regulator and hose assembly supplied with the appliance must be used. The installation must conform with local codes, or in the absence of local codes, with national fuel gas code, ANSI Z223.1/NFPA54, natural gas and propane Installation Code, CSA B149.1, or propane storage and handling code, B149.2.

11. Install wheel kit to base plate by inserting (2) x Bolt Ø10 ×15mm through the wheel kit and base plate and securing them with (2) x Nut M8 (use supplied wrench to tighten).





#### Hardware Used

Nut M8

Qty. 2

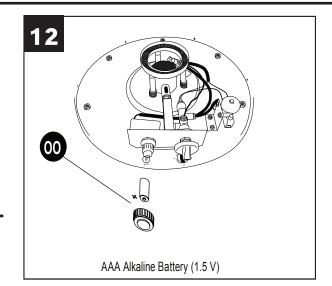
Bolt Ø10 ×15mm Qty. 2



Wrench Qty. 1

### **OPERATION INSTRUCTIONS**

12. Unscrew the switch button, insert AAA alkaline battery, tighten the switch button.



Hardware Used



(Not Included)

### **OPERATION INSTRUCTIONS**

*Caution:* Do not attempt to operate until you have read and understand all General Safety Information in this manual and all assembly is complete and leak checks have been performed.

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.

Lighting:

**Note:** This heater is equipped with a pilot light that allows for safer startups and shutdowns. Pilot must be lit before main burner can be started.

- 1. Turn the control knob to the "OFF" position.2. Fully open LP cylinder valve.
- 3. Push control knob in and rotate counter-clockwise until it stops (Figure 1).

**Note:** For initial start or after any cylinder change, hold control knob in for 2 minutes to purge air from gas lines before proceeding.

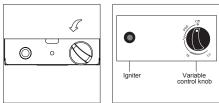
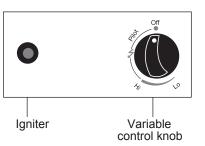


Figure 1

Figure 2

### **OPERATION INSTRUCTIONS**

- 4. Push the igniter button until pilot flame is visible through the glass tube.
- 5. Once the pilot is lit, continue to depress the control knob for 30 seconds.6. If the pilot does not stay lit, repeat steps 4 to 6.
- 7. If after repeating steps 4 to 6 unit does not light, then
  - -Push in control knob and turn counterclockwise to "PILOT" (*Figure 3*).
    -As you are depressing the control knob, place long stem lighter through the glass tube to light the pilot (*Figure 4*).
    -Repeat step 6.



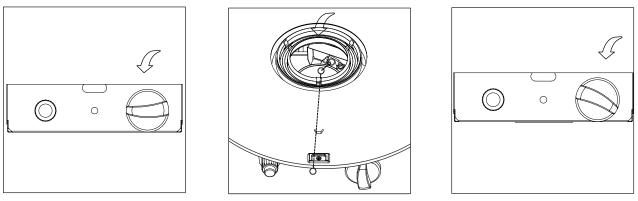


Figure 3

Figure 4

Figure 5

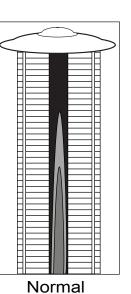
8. Push in and turn the control knob to the "HIGH", then release control knob. If you want a lower temperature, push in the control knob and turn counterclockwise to the "LOW" (*Figure 5*). *Note:* If pilot fails to remain lit, all valves should be closed and a waiting period of at least 5 minutes should pass before attempting to light.

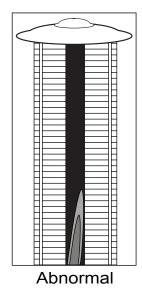
If you experience any ignition problem please consult "Troubleshooting" on page 18. **Caution:** Avoid inhaling fumes emitted from the heater's first use. Smoke and odor from the burning of oils used in manufacturing will appear. Both smoke and odor will dissipate after approximately 30 minutes. The heater should NOT produce thick black smoke.

**Note:** The burner may be noisy when initially turned on. To eliminate excessive noise from the burner, turn the control knob to the PILOT position. Then, turn the knob to the level of heat desired.

### Note:

In Normal condition, the height of flameis 2/3 height of glass tube under Hi position. the height of flame is 1/3 height of glass tube under Low position.The flame is stable and bright. Contrarily it is abnormal condition.





### **OPERATION INSTRUCTIONS**

# ▲ WARNING

FOR YOUR SAFETY

Be careful when attempting to manually ignite this heater. Holding in the control knob for more than 20 seconds before igniting the gas will cause a ball of flame upon ignition.

When heater is ON:

The "pilot light" should be blue with yellow top once burner is lit. The flame in the glass tube will be yellow in color. If excessive yellow flame is detected, turn offheater and consult "Troubleshooting" on page 18.

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. Wait at least 5 minutes, to let gas dissipate, before attempting to relight Pilot. Flash out will happen if performed before 5 minutes are up .
- 3. Repeat the "Lighting" steps on prior page.

## ▲ WARNING

FOR YOUR SAFETY Heater will be hot after use. Handle with extreme care.

Shut Down:

- 1. Turn control knob clockwise to PILOT. (Normally, burner will make a slight popping sound when extinguished.) Burner will extinguish but PILOT will remain ON.
- 2. To extinguish PILOT depress control knob and continue to turn it clockwise to OFF.
- 3. 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. I am 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.

### CARE AND MAINTENANCE

- Gas odor
- Heater does NOT reach the desired temperature.
- Heater glow is excessively uneven.
- Heater makes popping noises.
- Spiders and insects can nest in burner or orifices. This dangerous condition can damage heater and render it unsafe for use. Clean burner holes by using a heavy-duty pipe cleaner. Compressed air may help clear away smaller particles.
- Carbon deposits may create a fire hazard. Disassembly the reflector, unscrew the reflector spacer, take off the screen, take down one side of protective guards. Then take the glass tube from the heater and wash and clear. After that assembly ,the glass tube and the rest of parts.

**Note:** In a salt-air environment (such as near an ocean), corrosion occurs more quickly than normal. Frequently check for corroded areas and repair them promptly.

#### TIP:

Use high-quality automobile wax to help maintain the appearance of your heater. Apply to exterior surfaces from the pole down. Do not apply to emitter screen or domes.

#### Storage

Between uses:

- Turn Control Knob OFF.
- Disconnect LP cylinder.
- Store heater upright in an area sheltered from direct contact with inclement weather (such as rain, sleet, hail, snow, dust and debris).
- If desired, cover heater to protect exterior surfaces and to help prevent build-up in air passages. *Note: Wait until heater is cool before covering.*

#### During periods of extended inactivity or when transporting:

- Turn Control Knob OFF.
- Disconnect LP cylinder and move to a secure, well-ventilated location outdoors.
- Store heater upright in an area sheltered from direct contact with inclement weather (such as rain, sleet, hail, snow, dust and debris).
- If desired, cover heater to protect exterior surfaces and to help prevent build-up in air passages. Never leave LP cylinder exposed to direct sunlight or excessive heat. *Note: Wait until heater is cool before covering.*

#### Service

Only a qualified service person should repair gas passages and associated components.

*Caution*: Always allow heater to cool before attempting service.



### TROUBLESHOOTING

PROBLEM	PROBABLE CAUSE	CORRECTIVE ACTION
	Gas valve may be OFF	Turn the gas valve ON
Pilot will not light	Tank fuel empty	Refill LPG tank
Note: heater operates at reduced efficiency below 40° (5°C)	Opening blocked	Clean or replace opening
	Air in supply system	Purge air from lines
	Debris around pilot	Clean dirty area
	Loose connections	Tighten connections
Pilot will not stay on	Thermocouple bad	Replace thermocouple
	Gas leak in line	Check connections
	Lack of fuel pressure	Tank near empty. Refill LPG tank.
	Pressure is low	Tank near empty. Refill LPG tank.
	Opening blocked	Remove and clean
Durner will not light	Control not ON	Turn valve to ON
Burner will not light	Thermocouple bad	Replace thermocouple
	Pilot light assembly bent	Place pilot properly
	Not in correct location	Position properly and retry
	Gas pressure is low	Turn cylinder valve OFF and replace cylinder
Burner flame is low	Outdoor temperature is less than 40°F and tank is less thatn 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

In this particular heater, carbon will build up on the bottom of reflector shield. **This will need to be cleaned periodically after periods of extended use.** This is normal based on the way the flame hits the screen in combustion.

### WARRANTY

This product carries a one (1) year warranty against defects in workmanship and materials. We will replace the defective product free of charge within the stated warranty period, when returned by the original purchaser with proof of purchase. This product is not guaranteed against wear or breakage due to misuse and/or abuse.