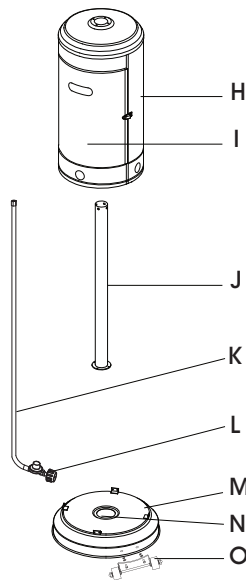
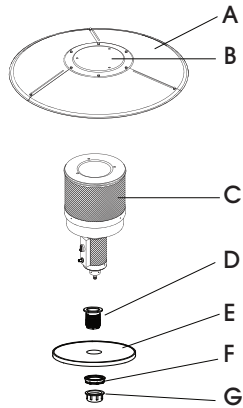
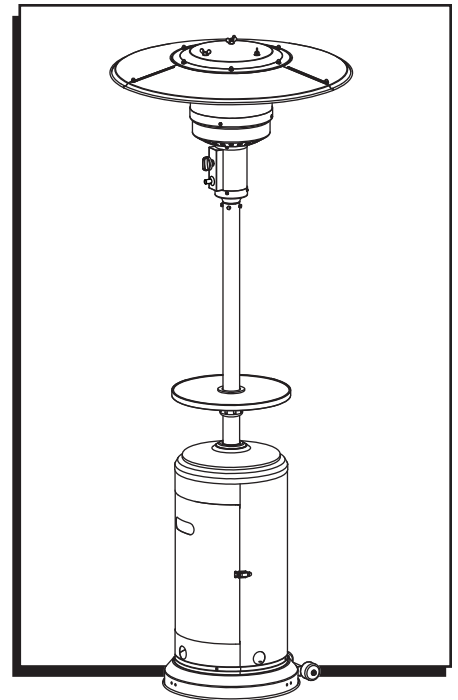


ULINE H-5839

1-800-295-5510

uline.com

**OUTDOOR
PATIO HEATER**



#	DESCRIPTION	QTY.
A	Reflector Panel	3
B	Reflector Plate	1
C	Head Assembly	1
D	Screw Coupler	1
E	Table	1
F	Tightening Spacer	1
G	Fastening Nut	1
H	Cylinder Housing	1
I	Door (Preassembled)	1
J	Post	1
K	Gas Hose	1
L	Regulator	1
M	Base	1
N	Bucket (Preassembled)	1
O	Wheel Kit	1



DANGER! FOR YOUR SAFETY.

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.



WARNING! 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.



WARNING! For outdoor use only.



DANGER! 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 or home.



SAFETY

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! 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.



DANGER! FOR YOUR SAFETY.

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.



DANGER! 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 that 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 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: three (3) feet from the sides and two (2) feet from the top.



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.



DANGER! EXPLOSION/FIRE HAZARD.

- Never store propane near high heat, open flames, pilot lights, direct sunlight, other ignition sources or where temperatures exceed 120°F.
- Propane vapors are heavier than air and can accumulate in low places. If you smell gas, leave the area immediately.
- Never install or remove propane cylinder while heater is lit, near flame, pilot lights, other ignition sources or while heater is hot to touch.
- This heater is red hot during use and can ignite flammables too close to the burner. Keep flammables at least three feet from sides and two 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.



WARNING! Every use that may be made of heaters cannot be foreseen. 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, ANS 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.

SAFETY CONTINUED



WARNING! CALIFORNIA PROPOSITION 65. Combustion byproducts of this product contain chemicals known to the state of California to cause cancer, birth defects and other reproductive harm.



WARNING! BURN HAZARD.

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



WARNING! 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.



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.



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



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.



CAUTION! SERVICE SAFETY.

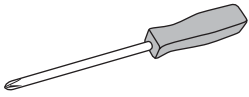
- Keep all connections and fittings clean. Make sure propane cylinder valve outlet is clean.
- During set up, check all connections and fittings for leaks using soapy water. Never use a flame.
- Use as a heating appliance only. Never alter in any way or use with any device.



WARNING!

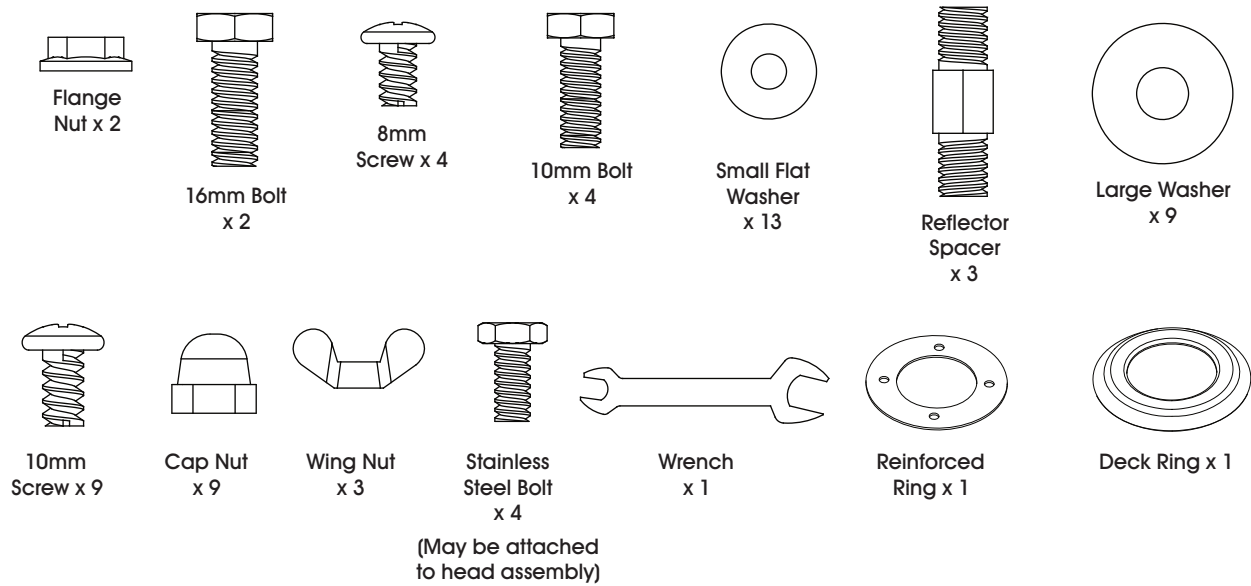
- Alert children and adults to the hazards of high surface temperatures. Stay away from these surfaces to avoid burning skin or igniting clothing.
- Carefully supervise young children when in the vicinity of the heater.
- Do not hang clothing or any other flammable materials from the heater, or place 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.

TOOL REQUIRED



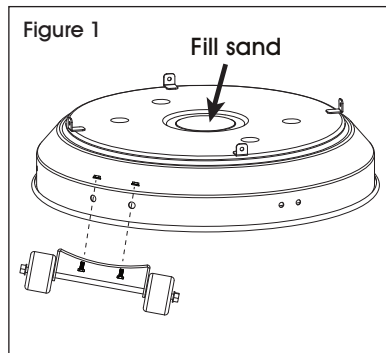
Phillips Screwdriver
(not included)

PARTS



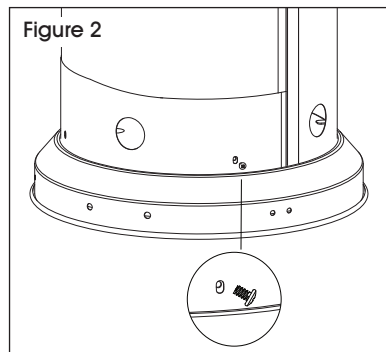
ASSEMBLY

1. Line up holes on the bracket of wheel kit with the corresponding holes on base, then insert 16mm bolts through holes. Hand tighten with flange nuts. Be sure the wheel kit is parallel to the base. (See Figure 1)

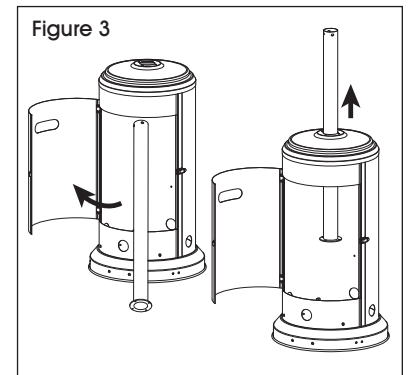


 **NOTE:** To improve stability, the bucket (in base) can be filled with sand (not included).

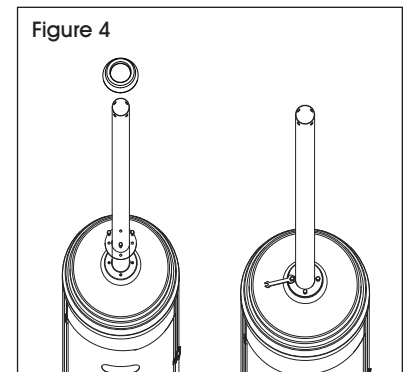
2. Attach cylinder housing loosely to base with 8mm screws. (See Figure 2)



3. Open the preassembled door on cylinder housing and place post through the hole on the top. (See Figure 3)

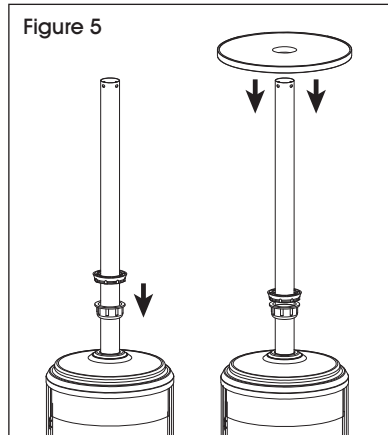


4. Secure post to cylinder housing using the reinforced ring, 10mm bolts and 4 small flat washers. Fasten and cover with the deck ring. (See Figure 4)

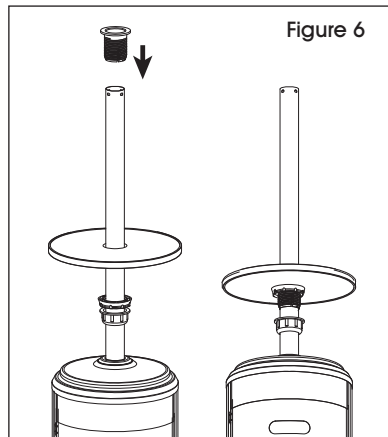


ASSEMBLY CONTINUED

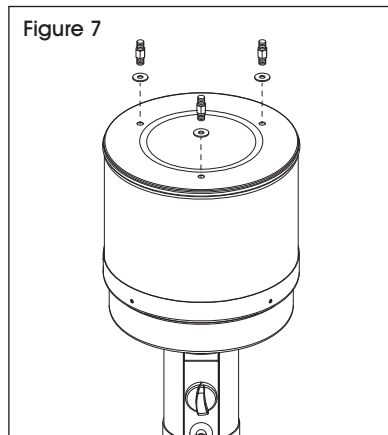
5. Slide fastening nut down the post with the rounded side facing down. Next, slide the tightening spacer down the post with the smaller side facing down. Put the table on the post with the metallic side facing up. (See Figure 5)



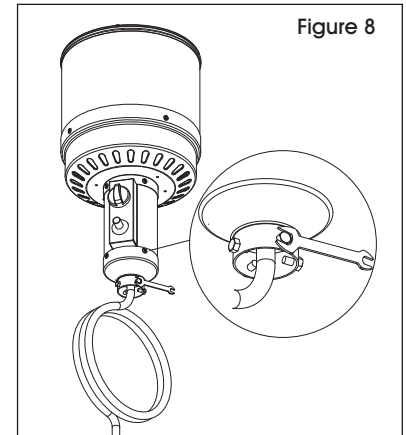
6. Insert the screw coupler on the post, inserting it through the middle of the table on the post. Thread the tightening spacer on the bottom of the table counterclockwise onto the screw coupler. Tighten securely to hold the table to the screw coupler. Thread the fastening nut counterclockwise. Tighten securely to lock in place. Loosen the fastening nut to adjust the position of the table on the post. (See Figure 6)




7. Attach reflector spacers and large washers to the top of head assembly. Tighten the reflector spacers. (See Figure 7)

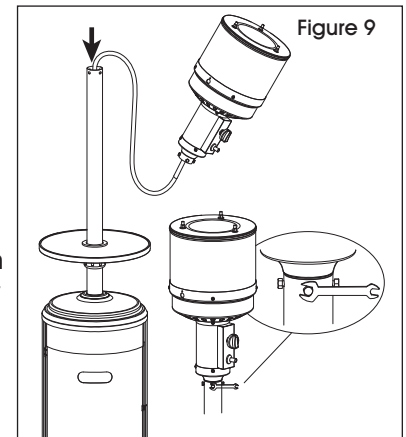


8. Unscrew stainless steel bolts from head assembly. (See Figure 8)




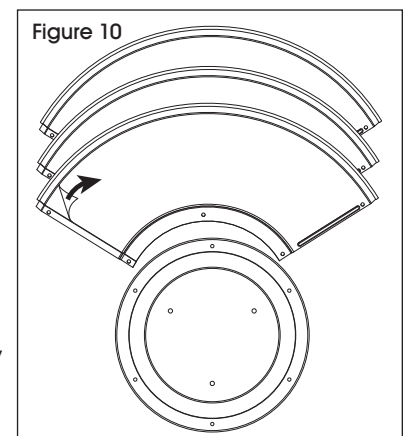
9. Insert hose of head assembly into post. Secure head assembly to post with stainless steel bolts. (See Figure 9)

 **NOTE:** The control knob on head assembly should be above the decal on post.



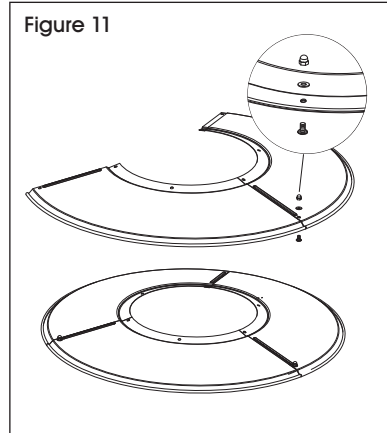
10. Remove protective cover from reflector panel and reflector plate. (See Figure 10)

 **NOTE:** In order to achieve proper alignment of reflector sections, it may be necessary to loosen the preassembled bolts prior to assembly and retighten once complete.

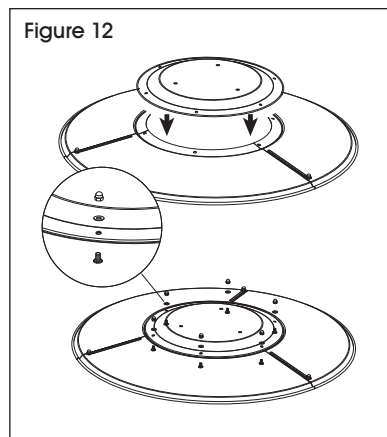


ASSEMBLY CONTINUED

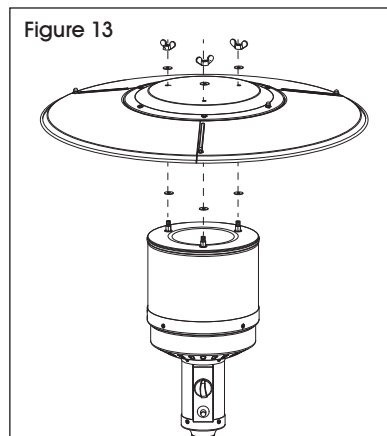
11. Attach reflector panels together using 10mm screws and small flat washers. Secure loosely with cap nuts. (See Figure 11)



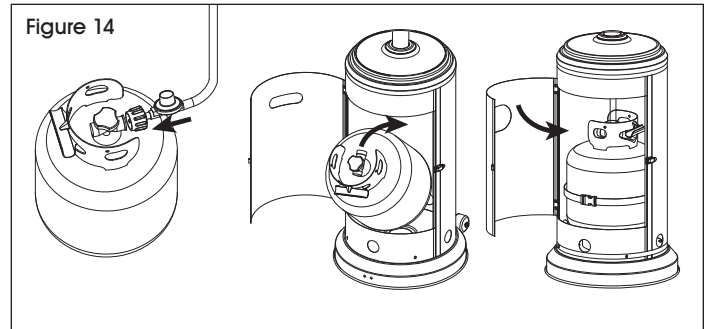
12. Attach reflector plate to reflector panels using 10mm screws and small flat washers. Secure loosely with cap nuts. Once properly aligned, tighten all screws and the preassembled bolts. (See Figure 12)



13. Slide three large washers over the threaded ends of reflector spacers. Attach reflector assembly to head assembly. Place three large washers over threaded ends of reflector spacers sticking out through reflector assembly and secure with wing nuts. (See Figure 13)



 **NOTE:** Do not overtighten.



14. Screw gas hose and regulator onto propane cylinder (not included). Do not cross-thread. Place the propane cylinder into the cylinder housing, then close the door. (See Figure 14)



WARNING! Use a standard 20 lb. propane cylinder only. Use this heater only with a propane vapor withdrawal supply system. See chapter 5 of the standard for storage and handling of liquefied petroleum gas, ANS/NFPA 58. Your local library or fire department should have this book. A minimum supply pressure of 0.4 P.S.I. is required for the purpose of input adjustment for propane gas. 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 minimum permissible gas supply pressure of 10 W.C. is required for purpose of input adjustment. A minimum of 17,000 BTUs per hour is the required input rating for a heater with a rating less than full. 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, ANS Z223.1/NFPA54, natural gas and propane installation code, CSA B149.1, or propane storage and handling code, B149.2.

ASSEMBLY CONTINUED

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.

- Do not store a spare LP-gas cylinder under or near this appliance.
- Never fill the cylinder beyond 80 percent full.
- Place the dust cap on the cylinder valve outlet whenever the cylinder is not in use. Only install the type of dust cap on the cylinder valve that is provided with the cylinder valve. Other type of caps or plugs may result in leakage of propane.

OPERATION

To check for a leak:

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

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

1. Turn cylinder valve OFF.
2. If leak is at regulator/cylinder valve connection: Disconnect, reconnect and perform another leak check. Apply the soapy solution to all hose and valve connections. If you continue to see bubbles after several attempts, cylinder valve is defective and should be returned to cylinder's place of purchase.
3. If leak is at hose/regulator connection, this part is defective and you should contact the customer service department for replacement.

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.



DANGER! CARBON MONOXIDE HAZARD.

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.



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.


OPERATION CONTINUED

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.

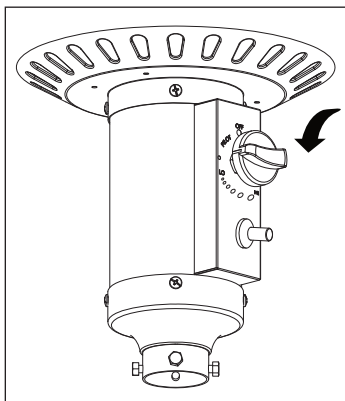
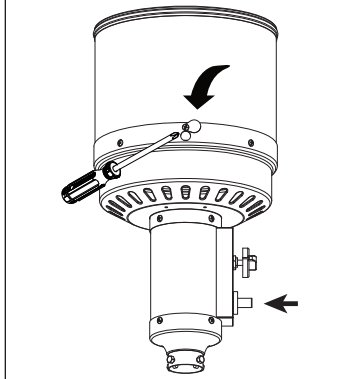
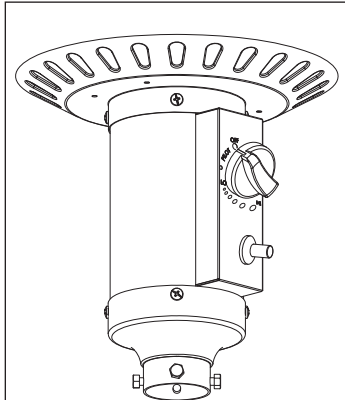
LIGHTING:

 **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. Open viewing hole by sliding cover to either side.
4. Push control knob in and rotate to "PILOT" position.

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


5. Push and release the igniter button until pilot flame is visible through viewing hole.
6. Once the pilot is lit, continue to depress the control knob for 30 seconds.
7. If the pilot does not stay lit, repeat steps 4 to 6.
8. If after repeating steps 4 to 6 unit does not light, then:
 - Push in control knob and turn counterclockwise to "PILOT."

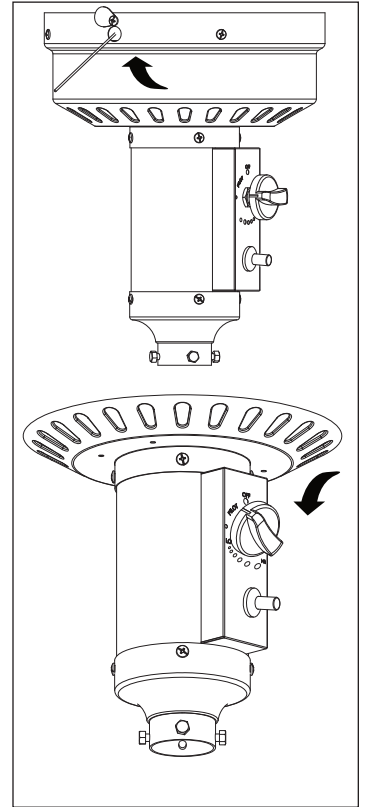


- As you are depressing the control knob, place long stem lighter into the ignition hole on the emitter screen to light the pilot

- Repeat step 7.

9. Push in and turn the control knob to "LOW," then release control knob. If you want a higher temperature, push in the control knob and turn counterclockwise to "HIGH."

 **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 11.



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 "PILOT." Then, turn the knob to the level of heat desired.

OPERATION CONTINUED



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 page 11.

RELIGHTING:



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.
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.

CARE AND MAINTENANCE



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.
- Keep exterior surfaces clean.
- Use warm, soapy water for cleaning. Never use flammable or corrosive cleaning agents.
- While cleaning your unit, be sure to keep the area around the burner and pilot assembly dry at all times. Do not submerge the control valve assembly. If the gas control is submerged in water, do NOT use it. It must be replaced.
- Keep the appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
- Do not obstruct the flow of combustion and ventilation air.
- Keep the ventilation opening(s) of the cylinder enclosure free and clear from debris.

- Air flow must be unobstructed. Keep controls, burner and circulating air passageways clean.
- 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. Clean dome and burner screen with warm, soapy water if any carbon deposits develop.



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.

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

CARE AND MAINTENANCE CONTINUED

BETWEEN USES:

- Turn Control Knob OFF.
- Disconnect LP source.
- 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 buildup in air passages.

 **NOTE:** Wait until heater is cool before covering.

DURING PERIODS OF EXTENDED INACTIVITY OR WHEN TRANSPORTING:

- Turn Control Knob to "OFF."
- Disconnect LP source 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 buildup 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

OPERATING ISSUE	CAUSES	RECOMMENDATIONS
Pilot won't light. NOTE: Heater operates at reduced efficiency below 40°F.	1. Cylinder valve is closed. 2. Blockage in orifice or pilot tube. 3. Air in gas line. 4. Low gas pressure with cylinder valve fully open. 5. Igniter fails.	1. Open valve. 2. Clean or replace orifice or pilot tube. 3. Open gas line and bleed it (pressing control knob in) for no more than 1-2 minutes or until you smell gas. 4. Turn cylinder valve "OFF" and replace cylinder. 5. Use match to light pilot; obtain new igniter and replace.
Pilot won't stay lit.	1. Dirt buildup around pilot. 2. Connection between gas valve and pilot assembly is loose. 3. Thermocouple is not operating correctly.	1. Clean dirt from around pilot. 2. Tighten connection and perform leak check. 3. Replace thermocouple.
Burner won't light.	1. Propane cylinder is frosted over. 2. Blockage in orifice. 3. Control knob is not in "ON" position.	1. Wait until the propane cylinder warms up and becomes unfrosted. 2. Clear blockage. 3. Turn control knob to "ON."
Burner flame is low.	1. Gas pressure is low. 2. Outdoor temperature is less than 40°F and tank is less than 1/4 full. 3. Control knob fully "ON." 4. Spiders and insects nest in burner or orifices.	1. Turn cylinder valve "OFF" and replace cylinder. 2. Use a full cylinder. 3. Check burner and orifices for blockage. 4. Clean burner and orifices.
Thick black smoke appears.	Blockage in burner.	Remove blockage and clean burner inside and outside.
Gas odor with extreme yellow tipping of flame.	Spiders and insects nest in burner or orifices.	Clean burner and orifices.
Heater glow is excessively uneven.	Spiders and insects nest in burner or orifices.	Clean burner and orifices.
Heater makes popping noises.	Spiders and insects nest in burner or orifices.	Clean burner and orifices.
Carbon buildup.	Dirt or film on reflector and burner screen.	Clean reflector and burner screen.