



Owner's Manual

Model : HPS-C-PC



IMPORTANT

Read this manual carefully before assembling, using or servicing this heater. Keep this manual for future reference.



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General Safety Information

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. 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

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

WARNING

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

CAUTION

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

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 you 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.

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.

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

• 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: three (3) feet from the sides & two (2) feet from the top.

WARNING

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.

WARNING

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

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.

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

• BURN HAZARD

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

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.
- Propane gas should be stored or used in compliance with local ordinances and codes or with ANSI/NFPA 58. Turn off propane when not in use.

DANGER

• EXPLOSION - FIRE HAZARD

- Never store propane near high heat, open flames, pilot lights, 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 propane cylinder while heater is lighted, 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 3 feet from sides & 2 feet from top. Keep gasoline and other flammable liquids and vapors well away from heater.
- The propane cylinder must always be stored outdoors in a well ventilated space out of reach of children. Never store propane cylinder in an enclosed area (house, garage, etc.). If heater is to be stored indoors, disconnect the propane cylinder for outdoor storage.

WARNING

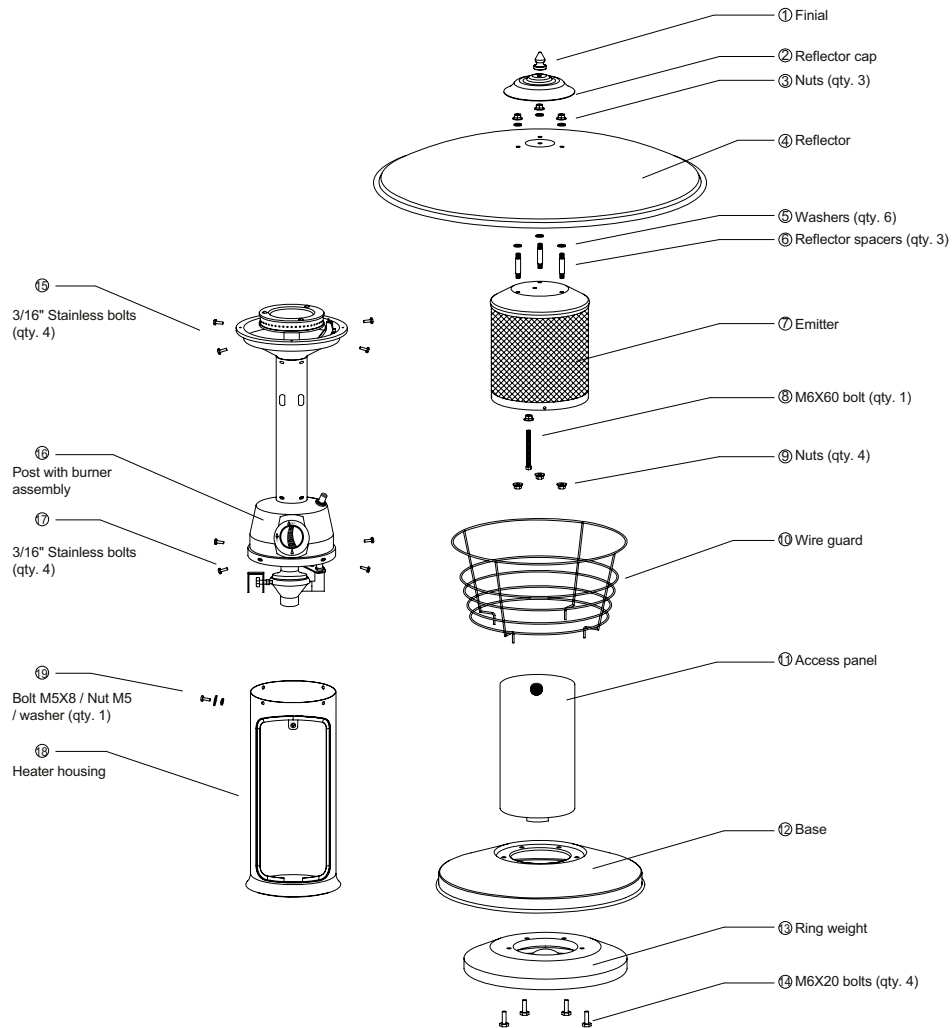
California Proposition 65

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.

WARNING

- Children and adults should be alerted to the hazards of high surface temperatures. Stay away from these surfaces to avoid burning skin or igniting clothing.
- Young children should be carefully supervised when in the vicinity of the heater.
- Clothing or any other flammable materials should not be hung from the heater, or placed on or near the heater.
- Any guard or protective device removed for servicing the appliance must be replaced 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.

Contents Breakdown



Package Contents

This outdoor/tabletop heater requires some assembly. Check over the contents to make sure all the parts are available for assembly.

Contents:

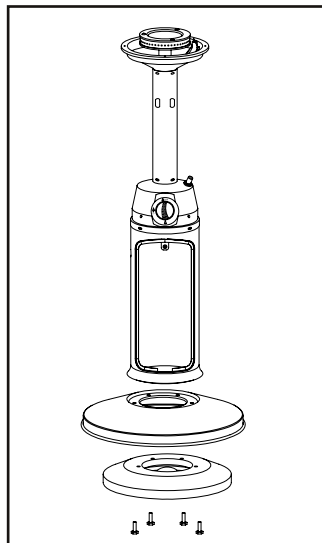
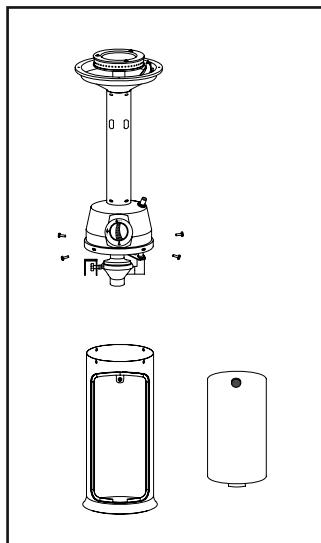
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|-------------------------------|--|
| 1. Finial | 12. Base |
| 2. Reflector cap | 13. Ring weight |
| 3. Nuts (qty. 3) | 14. M6X20 bolts (qty. 4) |
| 4. Reflector | 15. 3/16" Stainless bolts (qty. 4) |
| 5. Washers (qty. 6) | 16. Post with burner assembly |
| 6. Reflector spacers (qty. 3) | 17. 3/16" Stainless bolts (qty. 4) |
| 7. Emitter | 18. Heater housing |
| 8. M6X60 bolt (qty. 1) | 19. Bolt M5X8 / Nut M5 / washer (qty. 1) |
| 9. Nuts (qty. 4) | |
| 10. Wire guard | |
| 11. Access panel | |

Tools required for assembly:

1. Phillips screwdriver
2. Adjustable wrench
3. Spray bottle with soap solution for leak test

Assembly

For additional assistance or service,
please call: 888-775-1330.

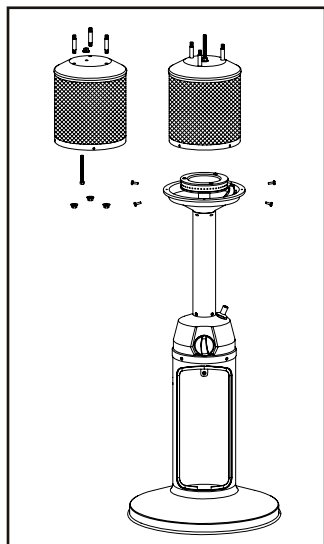


STEP 1:

Attach post with burner assembly onto heater housing, using 4pcs 3/16" Stainless bolts and M5X8 bolt / Nut M5/ washer, Keep the access panel open.

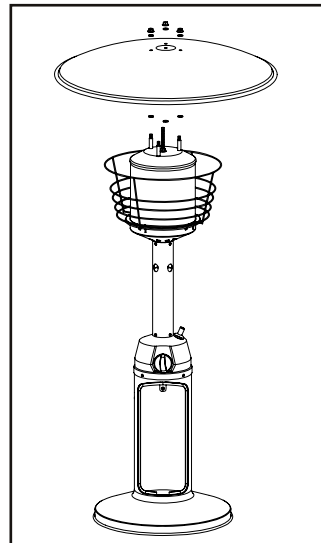
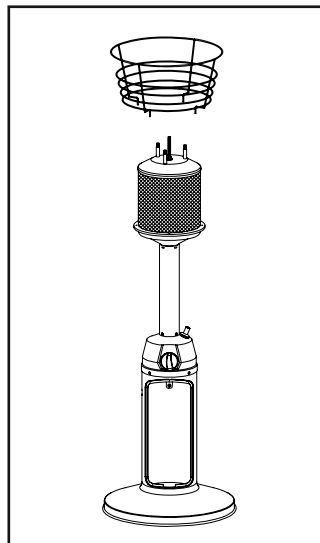
STEP 2:

Attach ring weight to base, using 4pcs M6X20 bolts.



STEP 3:

Put 3pcs reflector spacers into the hole in emitter using 3pcs nuts to firm the reflector spacers inside of the emitter. Put M6X60 bolt through the emitter hole into the top of the emitter, using 1pc nut to firm the bolt. Attach emitter assembly to post using 4pcs bolts and washers.

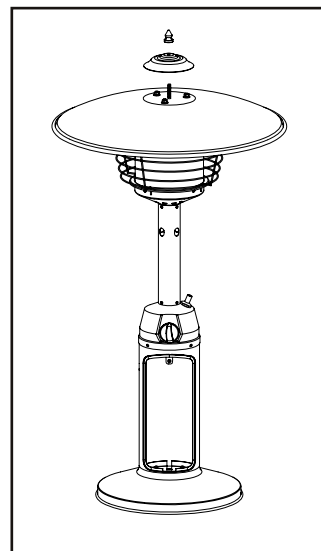


STEP 4:

Insert ends of wire guard into holes in the post with burner assembly flange and put 3pcs washers into the top of support bolt.

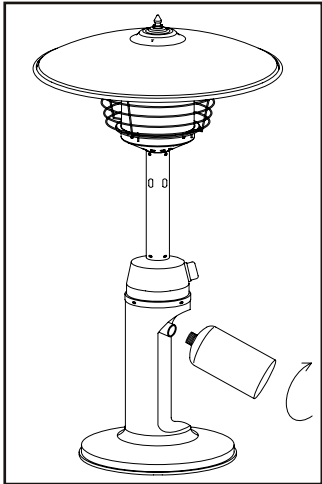
STEP 5:

Attach reflector to emitter assembly, using 3pcs nuts.



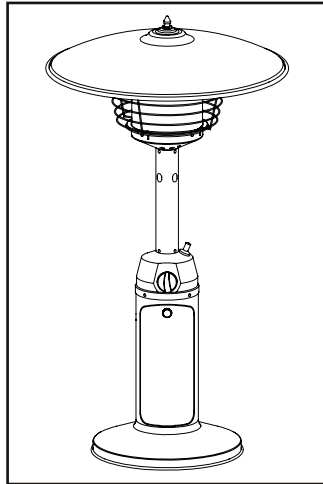
STEP 6:

Put reflector cap through the M6X60 bolt using finial to firm it.



STEP 7:

- Rotate regulator toward opening in housing.
- Line up threads on gas cylinder with those on the regulator.
- Insert and rotate cylinder clockwise until tight.

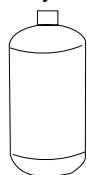


STEP 8:

- Close access panel.

Gas Tank Assembly

- You must provide propane gas and propane cylinder . Use a standard 1.02 lb. propane cylinder only.
- 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.

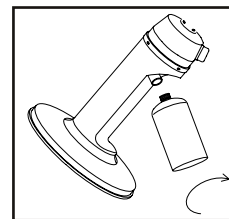


Standard 1.02 lb. tank

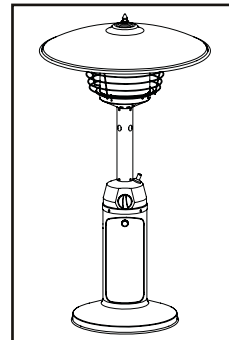
↑
orientation to provide
vapor withdrawal

- The pressure regulator 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.
- Certain materials or items, when stored under the heater, will be subjected to radiant heat and could be seriously damaged.
- Only a cylinder marked "propane" can be used.

- 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.
- Provided with a listed overfilling prevention device.
- Provided with a cylinder 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.
- Turn off the control knob of the burner. Fix the 1.02 lb. propane cylinder to the regulator (rotate the propane cylinder clockwise toward the regulator connecting until tighten it).



- Close the door plate and lock it with the handle.



- The cylinder be disconnected when the appliance is not use.
- Storage of an appliance indoors is permissible only if the cylinder is disconnected and removed from the appliance.

An appliance may be installed with shelter no more inclusive than:

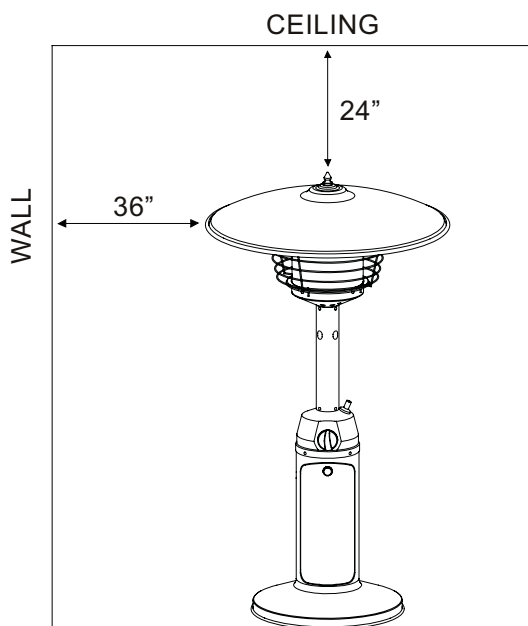
- (a) With walls on all sides, but with no overhead cover.
- (b) Within a partial enclosure which includes an overhead cover and no more than two side walls. These side walls may be parallel, as in a breezeway, or at right angles to each other.
- (c) Within a partial enclosure which includes an overhead cover and three side walls, as long as 30 percent or more of the horizontal periphery of the enclosure is permanently open.

- (a) Do not store a spare LP-gas cylinder under or near this appliance;
- (b) Never fill the cylinder beyond 80 percent full;

- Replacement pressure regulator must be that specified by the appliance manufacturer. The pressure regulator and hose assembly supplied with the appliance must be used.

Portable Heater Location

1. This portable heater is intended for outdoor use only. Always ensure that adequate fresh air ventilation is provided.
2. Always maintain proper clearance to combustible materials, i.e. top 24 inches and sides 36 inches minimum.
3. The heater must be put on a strong and stable table.
4. Never operate the heater in an explosive atmosphere like in areas where gasoline or other flammable liquids or vapors are stored.



Testing for Leakage

Gas connections on this heater are leak tested at the factory prior to shipment. Possible mishandling of this appliance during shipping may impair product integrity. A complete leakage test must be performed again at the installation site. Please follow the procedure below.



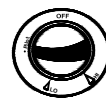
1. Make a soap solution of one part liquid detergent and one part water. The soap solution can be applied to hoses and connections with a spray bottle, brush or rag.
2. Make sure that the safety control valve is in the "OFF" position.
3. Turn the cylinder valve ON and check for soap bubbles forming on and around connections and hoses. If bubbles appear, there is a leak present.
4. If a leak is present, remove the gas cylinder immediately, tighten any leaking fittings, replace the gas cylinder, and recheck.

Procedure for Leakage Test

1. Periodically check the whole gas system for leaks.
2. Immediately check for leaks if an odor of gas is detected.
3. Extinguish all open flames during testing or when an odor of gas is detected.
4. Never smoke while performing the leak test.
5. If you cannot stop a leak, unscrew and remove the cylinder from the heater.
6. The heater must be checked with a full propane cylinder. DO NOT use the heater until you have performed a leak test on all the connections and verified that your unit does not leak.
7. Use only manufacturer recommended replacement parts. Substitution may void the warranty.

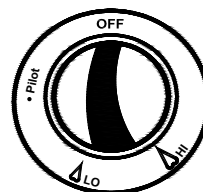
Turning ON the Heater

1. Turn on the valve on the gas supply cylinder completely.
 2. Firmly press down and turn the variable control knob approximately 45° (counter anti-clockwise).
 3. Press down the variable control knob and hold for 20 seconds. While holding down the variable control knob, press the igniter button several times until the pilot flame comes on. Release the variable control knob after the pilot flame lights.
 4. If the pilot does not light, repeat step 2 to 3.
- Note: If a new tank has just been connected, please allow at least one minute for the air in the gas pipeline to purge out through the pilot hole.
5. After the flame comes on, leave the variable control knob at minimum position for about 5 minutes, then switch to a desired temperature position.



Turning the Heater and Pilot Light OFF

1. Turn control knob to "PILOT" position.
2. Press down lightly and turn to "OFF" position.
3. Turn the gas tank off completely.
4. A 5 min. complete shut off period is needed before the appliance is relighted.



Variable Control Knob

Troubleshooting

<u>If the problem is:</u>	<u>And this condition exists:</u>	<u>Then do this</u>
Pilot won't light Note: Heater operates at reduced efficiency below 40°F (5°C)	Cylinder valve is closed	Open valve
	Blockage in orifice or pilot tube	Clean or replace orifice or pilot tube
	Air in gas line	Open gas line and bleed it (pressing control knob in) for not more than 1 - 2 minutes or until you smell gas
	Low gas pressure with cylinder valve fully open	Turn cylinder valve OFF and replace cylinder
	Igniter fails	Use match to light pilot; obtain new igniter and replace
Pilot won't stay lit	Dirt built up around pilot	Clean dirt from around pilot
	Connection between gas valve and pilot assembly is loose	Tighten connection and perform leak check
	Thermocouple is not operating correctly	Replace thermocouple
Burner won't light	Gas pressure is low	Turn cylinder valve OFF and replace cylinder
	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

Maintenance

WARNING

FOR YOUR SAFETY:

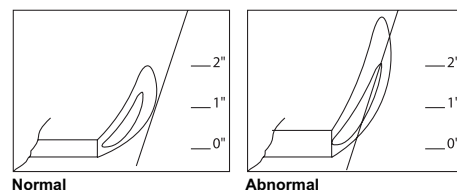
- Do NOT touch or move heater for at least 45 minutes after use.
- Reflector is hot to the touch.
- Allow reflector to cool before touching.

To enjoy years of outstanding performance from your heater, make sure you perform the following maintenance activities on a regular basis:

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.
 - Keeping the appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
 - Not obstructing the flow of combustion and ventilation air.
 - Keeping 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. Signs of possible blockage include:



- Gas odor with extreme yellow tipping of flame.
- 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. 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.

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 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 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 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 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

Repair to gas passages and associated components should be done only by a qualified service person.

Caution: Always allow heater to cool before attempting service.

Warranty

Heater's warranty extends for 1 years from date of purchase by original purchaser.

Manufactured by:

Changzhou Gardensun Furnace Co., Ltd. No. 1, Boyi Town, Changzhou City, Jiangsu Province P.R. China.

Manufacturer will cover:

All parts found to be defective due to materials or workmanship for 1 years from the date of original purchase. Proof of purchase is required before warranty performance will be rendered. Sales receipt and validation of product registration are valid forms of proof of purchase.

Warranty Exclusion

Manufacturer will NOT cover:

Assembly or start-up

Normal adjustment to burner

Cleaning and/or general maintenance

Legal Rights

No one else is authorized to make any warranties on behalf of manufacturer.

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, ORAL OR WRITTEN, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Manufactured by:

Changzhou Gardensun Furnace Co., Ltd.

No. 1, Boyi Town, Changzhou City,

Jiangsu Province P.R. China

Tel: 86-519-83317471

Fax: 86-519-83315116

Http: www.jiadesun.com

For additional assistance or service, please call: 888-775-1330.