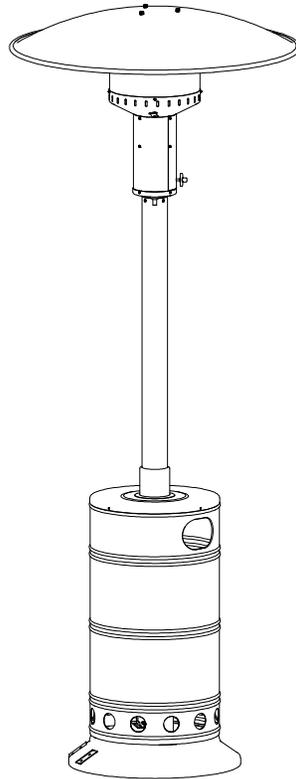


Owner's manual

OUTDOOR PATIO HEATER

APH-4000PV
APH-4000SV



IMPORTANT

Your safety is very important, please read this manual thoroughly before you install, operate and maintain this heater. Retain this manual for future reference. If you have questions about assembly, operation, servicing or repair of this heater, please contact your selling dealer or call us directly, we will gladly provide assistance as required.

Warning: For Outdoor Use Only!

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IMPORTANT WARNING

◆ **Warning:** For your safety

Fuels used in gas or oil-fired appliances and the products of combustion of such fuels, contain chemicals known to the State of California to cause cancer, birth defects and other reproductive harm. California Health & Safety Code Sec.25249.6

◆ **Warning:** For your safety

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage from hazards of fire, explosion, burn, asphyxiation, carbon monoxide poisoning. Please be sure you understand all operating the instructions before operate or service this heater. Read this installation, operation and maintenance instructions thoroughly before installing or servicing this equipment.

◆ **Warning:** For your safety

Follow the correct lighting and usage procedures. Handle metal parts with care to avoid injuries. Never allow children to operate this heater.

◆ **Warning:** For your safety

Do not store or use gasoline or other flammable vapors and liquids, solid combustibles in the vicinity of this appliance. Keep a safe distance away from the heater as

recommended by the instructions.

◆ **Warning:** For your safety

If you smell gas:

- 1.Shut off gas to the appliance.
- 2.Extinguish any open flame near the appliance.
- 3.If odor continues, immediately call your gas supplier or local fire department.

Introduction

Thank you for choosing Outdoor Patio Heater. Please take the time to read these instructions and follow each step carefully for safe operation. Retain this manual for future reference. If you have any question regarding this instruction, please stop and feel free to contact your selling dealer or call our Customer Service Dept. directly for assistance.

Specification

Model No	
Type of Gas	LPG (Propane) only
Input rating	40,000 BTU/HR
Pressure	11" W.C.
Gas Supply Inlet Pressure to Regulator	Max.150 PSI, Min. 5 PSI
Gas Cylinder	A Standard 20 IB. propane gas cylinder with a Type 1 QCC adapter only (not included) .
Overall Height	90 Inches
Reflector Diameter	34 Inches
Ignition System	Piezo Igniter
Electrical connections	No required
Net Weight	64 IBS. (not including the cylinder)

Important Safety Precautions

To ensure safe use of your outdoor patio heater, you are requested to pay close attention to these essential safety requirements.

- This is a propane, direct-fired heater. It Means that all of the combustion products enter the heated space. Even though this heater operates very close to 100 percent combustion efficiency, but it still produces small amounts of carbon monoxide. Carbon monoxide (called CO) is toxic. CO can build up in a heated space and failure to provide adequate ventilation could result in death. So, Always be sure there is plenty of fresh air when the heater is in use. Always follow advice about ventilation in these

operating instructions. If any time gas odor is detected, shut off the appliance immediately, find and correct the leak. Please set up the propane supply with utmost care.

- Alert both children and elders to the hazard of high surface temperatures. Care must be taken for the supervision of children in the vicinity of an operating or hot heater.
- Your children and pets should be supervised when they are in area of heater.
- This outdoor patio heater **must be used for outdoors only** in a well ventilated area and **not be used in a vehicle or any enclosed building**.
- Always place the heater on a level stable surface.
- Do not move, touch the heater while hot or burning.
- Do not alter or modify the heater in any manner
- Use only a U.S. Department of Transportation approved 20 pound standard cylinder equipped with an TYPE 1 connection with QCC (Quick Connect Coupler).
- Use only with propane / LP Gas. Do not attempt to use any other fuel.
- Always keep at least a 24 " clearance from any combustible material.
- Do not use if the wind velocity is greater than 10 miles/hr.
- Do not use if the environment temperature is below 40 F.
- Do not spray aerosols near the heater while in use.
- Do not clean heater with combustible or corrosive cleaners. Use warm, soapy water.
- Do not hang clothing or flammable materials either on or near heater
- Do not move, touch the heater while it is hot or in operation.
- Place the control knob on OFF position when heater is not in use and always disconnect the gas cylinder at its main valve and store it outdoors where it is not accessible to children. Never store a propane cylinder indoors
- Always 45 minutes to cool down after use before attempting to move your heater.
- Use only the hose and regulator with the heater provided by the factory. Check the regulator and hose assembly before each use. If you find an excessive abrasion or hose is cut, please replace with the Regulator assembly listed on the parts list right away.
- Never use the heater if the ballast weight is not assembled into the base. The base must be weighted to prevent possible tipping.
- Inspect heater before each use and inspect annually by a qualified service person. Do not operate a damaged heater.
- Leak check only with soapy water when the initial assembly and after every cylinder is replaced. All gas connections should be checked. Look for bubbles.

Never use flame!

Warning:

When the heater is to be operated in the presence of other people, the user is

instructions, and of the hazards involved. If this heater is used in a commercial or rental installation, it is the responsibility of the purchaser to check with the local codes for properly acquainting with the safety precautions and instructions.

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, carbon monoxide poisoning. Be sure you understand all operation instructions before attempting to operate or service this heater.

1. Assembly

Note: The assembly of this heater requires basic mechanical skills. Proper assembly is the responsibility of the installer. All service and repair should be done by a qualified person.

1.1 Tools required

8mm, 10mm, 11mm, 12mm Socket
#2 & #3 Phillips Head Screwdriver
Pliers or Channel Lock Pliers
Crescent or Open End Wrenches

Caution:

Do not use Teflon Tape or any thread sealing compounds where connections between heater head to Fuel-Tube and Regulator / Hose assembly to Fuel-Tube.

1.2 Unpacking

- Remove the Fuel-tube, the Post and Heater burner assembly from the Box 2 of 2.
- Take out the heater burner assembly from the base assembly by removing the three Hex-Nuts, Flat washers and Lock washers, then screw the nuts and washers back onto the bolts at the top of the burner assembly.
- Remove all shipping packaging foam on the components.
- Check the fasteners, Regulator assembly and the Owner's Manual provided by the factory.
- Remove the Reflector from the Box 1 of 2.
- Check the heater for any shipping damage, if any is found, immediately contact and return this heater to the dealer or distributor where purchased.
- Retain all packaging material and carton until heater warranty has expired. Any warranty returns require original packing and carton.

1.3 Component List (see Figure 1)

- Reflector
- Burner assembly
- Base assembly with the Ballast weight & Bracket
- Fuel -line
- Cylinder decorative cover
- Post / the Slip socket cover
- Regulator / hose assembly
- Fastener package
- Owner's manual
- Wheel Kit (optional part)



(Figure 1)

1.4 LP gas hook up and installation of the cylinder

1.4.1 Gas requirements:

- Our heater is designed to **use LP gas only, never substitute gases.**
- The heater comes with a regulator/hose assembly for hook up to a standard 20 pound (5 gallon) LP Overfill Protection Device and Type 1 fitting equipped gas cylinder. **The LP cylinder is not included.** You need to purchase a filled LP Cylinder that must be constructed and marked in accordance with specifications of the U.S. Department of Transportation. Do not use dented or rusty LP cylinder by your LP supplier.
- Never use an LP cylinder with a damaged valve.
- Do not modify the Regulator / hose assembly.

1.4.2 LP gas hook up (see Figure 2)

The heater is designed to house a 20 pound gas cylinder on the base assembly.

- Lift the cylinder decorative cover and rest it on the triangular Socket.
- Place the LP cylinder into the housing on the Base, then attach the Regulator / hose assembly to the LP cylinder valve. The regulator and the Cylinder have right-handed threads (clockwise to tighten).

Be sure this connection is tight but do not over tighten on the LP cylinder valve.



(Figure 2)

1.5 Assembly Instructions

Step 1. Set the burner assembly on a flat surface. Remove the protective end cap from the only one end of the male flared fitting at the end of the fuel line. Leave the other end cap on to protect the fitting while you are doing this assembly. Screw the male flared fitting into the inlet fitting at the base of the burner head and tighten using a $\frac{3}{4}$ wrench. Be sure that the connection is tight (do not over-tighten). See Figure 3



(Figure 3)

Note: The connection between the fuel line and the burner inlet fitting is brass-to-brass connection. This connection doesn't require any thread sealing compounds. The flare design of the threads provides a gas tight seal.

Step 2. Carefully slide the post (Note: the Slip socket cover has been assembled to the post) over the fuel line. The post fit one way only because the holes drilled different positions. The end of the post that connects to the burner head has four holes drilled about $\frac{1}{2}$ " below the top of the post. That other end of the post that will connect to the support socket has four holes drilled about $1\frac{1}{2}$ " from the other end of the post. Attach the post to the burner assembly using four Pan Head (Phillips) screws, Flat washers and Lock washers. Make sure that the setscrews firmly grip the post. See Figure 4.



(Figure 4)

Step 3. If you prefer the heater comes with the wheel kit, you need to purchase them from your selling dealer. You can attach the wheel kit with the fasteners provided now. See Figure 5.

Step 4. Place the cylinder decorative cover over the base assembly / brackets.



(Figure 5)

Step 5. Please carefully insert the Post/Slip Socket Cover assembly with the fuel line into the post support socket assembly. Be sure that the lower end of the fuel line passes through the hole in the post support plate. Using four Pan Head (Phillips) screws, Flat washers secure the post / the slip socket cover into the post support socket. (Do not use lock washers at this connection). Make sure the setscrews through the Post and the slip socket cover firmly grip the post. See Figure 6



(Figure 6)

Step 6. Carefully lift up the cylinder decorative cover. Tilt the cylinder decorative cover and rest it on the post support Socket by against the Hex-bolts. Make sure that the cylinder decorative cover is in a stable position. **Never allow it slides!** See Figure 7

Step 7. Remove the other protective end cap from the fuel line inlet fitting. Hold the fuel line inlet fitting with an $\frac{3}{4}$ " wrench and gently hand-tighten the female fitting at the hose & regulator assembly to the fuel line inlet fitting, then securely tighten with another $\frac{3}{4}$ " wrench. These fittings should be tightened in a clockwise direction. **Do no over-tighten.** See Figure 7.



(Figure 7)

Step 8. Connect an approved propane cylinder to regulator / hose assembly. Properly tighten the regulator's hand wheel and connection device to tank valve. Do not use tools.

First check for leaks:

Be sure the fittings at the end of the feed line going into the burner head and other end of the fuel feed line where the hose is attached are tight. Leak test with a soapy solution by mixing one part liquid soap solution with two parts water only. **Do not use flame!**

1. Turn the Control Knob to the "OFF" position. Open the LP cylinder valve.
2. Apply a soapy solution to these connections. Bubbles will form if the connection is leaking. You will need to reconnect and leak test again. Upon completion of the leak test, turn off the LP cylinder valve and disconnect and remove the cylinder. Go to the next step.

Step 9. Tilt the heater over to a proper position (or using one of the shipping Styrofoam inserts to prop up the top half of the heater). Secure the reflector onto Emitter by using the three Hex-Nuts, Flat washers and Lock washers. Make sure that the nuts are tight properly. Stand the heater upright. As shown in Figure 8.



(Figure 8)

Step 10. The cylinder Must be secured in the base and chained in the upright position to keep it from falling or being knocked over.

2. Installation

This heater is intended for use outdoors only! Don't be used on any moving objects and any enclosed areas!

2.1 Installation warning

The installation must conform with local, state and federal codes. In absents of such codes, install in accordance with the current American National Standard (ANSI) / National Fire Protection Association (NFPA) publication " Standard for the Storage and Handling of Liquefied Petroleum Gases" ANSI / NFPA 58-Latest Revision, and " National Fuel Gas Code" ANSOZ223.1.

2.2 Minimum clearances

Minimum 24" clearances from combustible materials must be maintained at all times while the heater is in operation.

3. Operation

3.1 Preparation before lighting

- 3.1.1 Check any possible shipping damage of the heater. If any is found, immediately contact your selling dealer or call us directly.
- 3.1.2 Please review thoroughly and be sure you understand all of the "safety precautions and warnings".
- 3.1.3 Make sure control knob is at "OFF" position.
- 3.1.4 Place the LP cylinder onto the Cylinder Base. Connect the Regulator / hose assembly to the cylinder by rotating the Regulator's hand wheel clockwise into the cylinder's valve and securely tighten.
- 3.1.5 If attempting to relight a hot heater, always wait until the heater is cool.

3.2 Leak Checking

- Check all of gas connections in the heater with soapy water.
- Apply soap solution to all propane connections, especially the fuel connections between the Regulator connection device to the Cylinder valve, the fitting at the end of the Fuel Line to the Burner Head and the other end of the Fuel Line to the Hose assembly.
- Inspect all propane connections, look for bubbles.
- If bubbles appear, there is a leak. Disconnect and reconnect, try again.
- If no bubbles appear, the connection is safe, continue the next step: Lighting.
- If the leak persists, turn cylinder valve OFF and contact your selling dealer or call our Customer Service Dept. directly for assistance and advice.

Warning:

- **Perform Leak test outdoors only.**
- **Never leak test when smoking.**
- **Do not use a flame to check for leaks.**

3.3 Lighting

3.3.1 To light the pilot

- Lift the cylinder cover from the base and set it the stable position. Turn the cylinder valve on.
- The first step is to purge the fuel line when a new or refilled propane cylinder is installed.
- Gently depress the control knob at the faceplate panel and rotate it to "PILOT"

position. Depress and hold the control knob for 2-3 minutes to purge the air from the gas line and flow of gas to the pilot assembly. Do not press on the igniter while you are purging the line.

3.3.2 Important Light step

- While Hold the control knob in, press the Piezo Igniter button (red button), the Piezo Igniter will be lit. On occasion conduct to light several times.
- After the pilot is lit, continue to depress the control knob for 30 seconds to heat the thermocouple. Release the control knob and the pilot should stay lit. You can visually observe the ignition of the pilot through sliding the hole cover at the base of the heater head assembly.

Caution:

Close the hole cover once the pilot flame stays on. Do not attempt to slide this cover when the main burner is lighting, operating.

- Lower the cylinder cover onto the base.

3. 4 Setting Control

- Press and turn the control knob from “PILOT” to full “ON” position, the burner will light immediately for maximum heat output. The knob can be turned back to reduce or desired setting.

Note: While in use, the burner flame should be mainly blue in appearance with a small amount of yellow.

Caution: White smoke may appear around the emitter screen during the first few minutes of the initial burning. The burner is burning off oily materials during the first few minutes of the initial burning.

3.5 Turn Off and re-light

- If you turn the knob back to “PILOT” position, the main burner will extinguish but the pilot will remain lit.
- Turn the control knob clockwise to “OFF” position.

Note: Do not attempt to relight the heater for 5 minutes after turn off the heater. The safety system built into the heater will not allow you to immediately re-light the heater from the “OFF” position.

- Repeat following “Important Light step” procedure, you don’t have to wait more than few seconds to restart the “PILOT” light and then ignite the main burner.

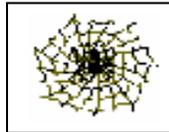
3.6 Turn Off and Shut Down

- Turn the control knob clockwise to “OFF” position.
- Turn off gas supply.
- Disconnect the cylinder and remove when the heater is not in use.

4. Storage

- Allow at least 45 minutes for the heater to cool down after using.
- Store the heater upright in a sheltered area away from inclement weather such as rain, snow and dust.
- We have our patio heater cover available to protect the burner head. We recommend using our heat head cover when your heater is in storage.
Note: Be sure the heater is cool down before using the cover.
- If the heater is not to be used for an extended period of time, disconnect and remove the Propane Gas Cylinder and store in accordance with the "Standard for Storage and Handling of Liquefied Petroleum Gases", ANSI/INFPA 58- latest edition.

Beware of Spiders and Insects



Spiders and small insects occasionally spin webs or make nests in the burner tubes and or orifices during warehousing and transit. These webs or nests can lead to a gas flow obstruction, which could result in a fire in and around the burner tube. This type of fire is know as **FLASHBACK** and can cause serious damage to your heater and creates an unsafe operating condition for the user. Although an obstructed burner tube is not the only cause of flashback, it's the most common cause.

Check control compartment burners and circulation air passageways for free air passage. Make sure that there are no obstructions

5. Maintenance

To obtain the best 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. Be sure to keep the area around the burner and control assembly dry at all times.
- Airflow must be unobstructed. Clear insect nests or webs away from your heater's exterior and interior using a straight piece of wire and wire brush or vacuum cleaner at least once a year or immediately upon indication of any of the following systems:
 - a. Flashback
 - b. Smell the fuel gas
 - c. Predominate yellow flames
 - d. Excessive popping noises during operation
 - e. Uneven emitter glow

Carbon deposits may create a fire hazard. Clean dome and emitter with warm soapy Water if necessary.

Caution:

- Never use wood or plastic, it may break and block the parts.
- Never spray any cleaning product on the emitter grid or burner area.

6. Troubleshooting

Problem	Possible Cause	What to do
Burner won't light	Air in gas line	Purge gas line by holding control knob at "PILOT" position for at least two minutes.
	Blockage in orifice	Clean orifice
	Gas pressure is low	Replace cylinder
	Igniter is not sparking	Use match to light pilot through the hole at the base of heater head.
Pilot won't stay lit	Thermocouple is not operating properly	Replace thermocouple
	Dirt build up around pilot orifice	Clean pilot orifice
	There may be a leak in the system that has been detected by the safety system in the regulator.	Check connections at hose to fuel line and fuel line to heater head. Be sure Regulator hand wheel is tightened to cylinder valve properly.
	High wind condition blowing out pilot flame	Put heater in more protected location. Do not use heater in winds: greater than 10 miles/hr. or temperature: below 40 F.
Emitter glows uneven	Heater not leveled	Level the heater
	The burner tilted	Straighten burner
	Gas pressure is low	Replace cylinder
	Outdoor temperature is below 40 degrees Fahrenheit and cylinder is less than 20% full	Refill the cylinder. Using full one. Stop using this heater when the temperature is below 40 F.
Burner emits smoke	The burner burn off oily materials	During the first few minutes of the initial burning
	Blockage in burner	Remove blockage and clean burner inside & outside
Carbon build up	The base is not on a level surface	Place heater on a level surface
	Dirt or film on dome and emitter	Clean dome and emitter
	Blockage in burner	Remove blockage and clean burner and clean burner inside & outside.

7. Service and warranty Information

To learn how to service and procure parts for worn out, defective or damaged components, please contact your selling dealer or call us directly for assistance. Please provide us with heater's model number and the serial number.

Warning: Use our original equipment replaced parts only. Use unauthorized parts or modification of parts can void warranty and create an unsafe condition.

8. Warranty Terms

Subject to the conditions set out below, this product is warranted to the original purchaser to be free from defects in workmanship and materials for 12 months from the date of purchase.

- 8.1 Satisfactory proof of the purchase date must be furnished at the time of notification of the defect for any claim under the warranty to be enforceable.
- 8.2 This warranty covers all parts found defective in workmanship and / or materials during the warranty period and can be repaired or replaced at the discretion of the manufacture at no cost to the original purchaser.
- 8.3 This warranty will be void and accordingly no claim of any nature will be enforceable if the product has not been assembled, installed or operated according to the instructions, subjected to abuse, improperly treated, neglected, rusted by exposure to the element, misused and / or if any repairs, maintenance, or service has been done by an unauthorized person.
- 8.4 Return must be properly packaged and freight prepaid to the dealer from whom the product was acquired.
- 8.5 Each of the manufacturer, distributor and retailer will not be liable for any incidental or consequential loss or damage arising from the installation or operation for the product and / or the failure of any part for any reason.
- 8.6 There are no other express or implied warranties, except for those stipulated herein. This warranty gives specific rights and

the original purchaser may have additional rights and remedies in law.

8.7 This warranty does not cover commercial or rental use.



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