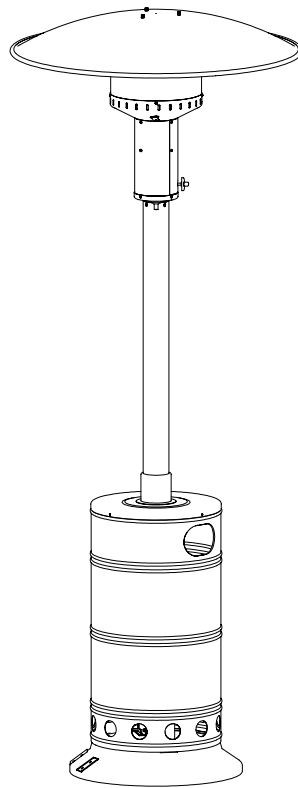


Owner's manual

SUNSHINE OUTDOOR PATIO HEATER

MODEL



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.

This appliance must be installed and gas cylinder stored in accordance with the regulation in force.

Warning: For Outdoor Use Only!

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IMPORTANT WARNINGS

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 these 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:

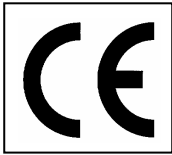
1. Shut off gas to the appliance.
2. Extinguish any open flame near the appliance.
3. If odor continues, immediately call your gas supplier or local fire department.

Introduction

Thank you for choosing SUNSHINE 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.

Specifications

Model No.	PHP/PHS/PHT/PHW
Type of gas	G30 (Butane) 30mbar, G31 (Propane) 37mbar
Input rating	12.5 kW (910g/hr)
Pressure	30mbar (G30), 37mbar (G31)
Gas supply inlet pressure to regulator	Max.150 PSI, Min. 5 PSI
Overall height	2,290 mm
Reflector diameter	865 mm
Ignition system	Piezo Igniter
Electrical connections	Not required
Net Weight	30 kg. (not including the cylinder)



The heater has been certified by Danish Governmental Gas Institute, and complies with CE Requirement for Gas-Fired Infrared Patio Heaters prEN 14543:2002 (E) Gas-Fired Portable Infrared Heaters.

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. This means that all of the combustion products enter the heated space. Even though this heater operates very close to 100 percent combustion efficiency, it still produces small amounts of carbon monoxide. Carbon monoxide (CO) is toxic and can build up in a heated space. Failure to provide adequate ventilation could result in death.

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 gas odor is detected at any time, shut off the appliance immediately, and 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 around the heater.
- This outdoor patio heater **must be used for outdoors only** in a well ventilated area and **must not be used in a vehicle or any enclosed building.**
- Always place the heater on a level stable surface.
- Do not move or touch the heater while hot or in operation.
- 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 liquid propane gas. Do not attempt to use any other fuel.
- Always keep at least a 24 inch clearance from any combustible material.
- Do not use if the wind speed is greater than 10 miles/hr.
- Do not use if outside 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.
- Place the control knob in 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 allow 45 minutes for heater 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 cut, immediately replace with the Regulator assembly listed on the Parts List .
- 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 following initial assembly and after 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 purchaser is responsible for explaining the instructions and or explaining the hazards involved. If this heater is used in a commercial or rental installation, it is the responsibility of the purchaser to check local codes for properly acquainting users 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 with connections of heater head regulator / hose assembly to fuel-tube.

1.2 Unpacking

- Remove the Fuel-tube, the Post and Heater burner assembly from 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 Box 1 of 2.
- Check the heater for any shipping damage. If any is found, immediately contact Sunshine Lifestyle Products.
- 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 / Slip socket cover
- Regulator / hose assembly
- Fastener package
- Owner's manual
- Wheel kit (optional part)



Figure 1

1.4 LP gas hookup 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 hookup 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 cylinders.
- Never use an LP cylinder with a damaged valve.
- Do not modify the regulator/hose assembly.

1.4.2 LP gas hookup (see Figure 2)

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

- Lift the cylinder's 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.

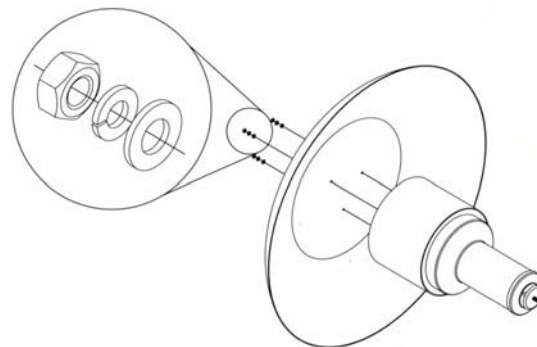


Figure 2

1.5 Assembly Instructions

Step 1

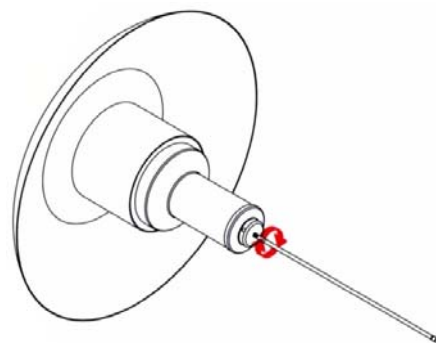
Assemble reflector and emitter by using the three M8 s/s hex-nuts, 8mm s/s flat washers and 8mm s/s lock washers provided. Secure the nuts. **Do not over tighten.**



Step 2

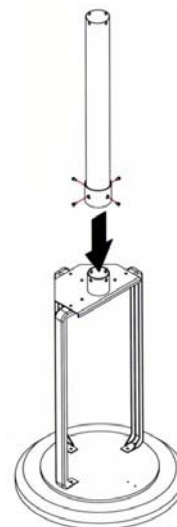
Remove the protective end cap from one end of the male flared fitting at the end of the fuel line. Screw the male flared fitting onto the inlet fitting at the base of the burner head and tighten using wrench. Be sure that the connection is tight (do not over tighten).

Note: The connection between the fuel line and the burner inlet fitting is brass-to brass connection. This connection does not require any thread sealing compounds. The flare design of the threads will provide a gas-tight seal.



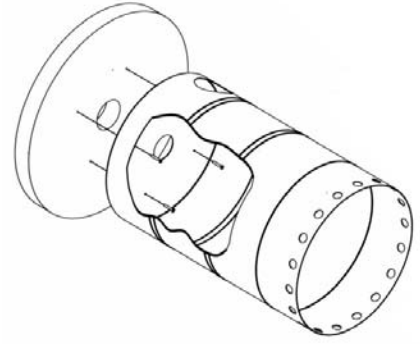
Step 3

Carefully slide the post socket cover into the post support socket (note that the slip socket cover has been assembled to the post). Using four Pan Head M6 x 12 screws and 6mm s/s flat washers secure the post/slip socket cover into the post support socket. Do not use lock washers at this connection. Make sure the set screws through the post and the slip socket cover firmly grips the post.



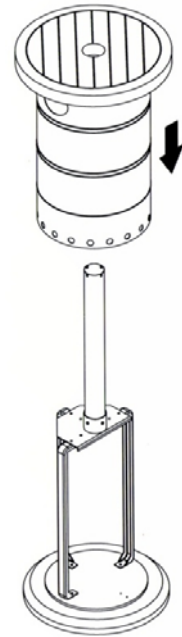
Step 4

Align screw holes located on the bottom of the hardwood table with cylinder decorative cover as illustrated. Use four M6 hex-nuts screws and secure the table to the cylinder decorative cover.



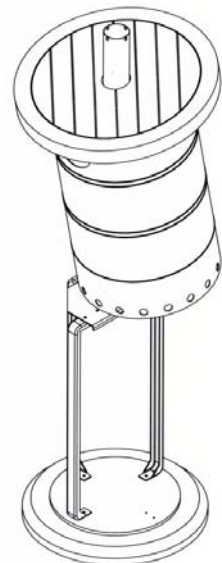
Step 5

Slide the table and cylinder decorative cover assembly over the post socket cover assembly.



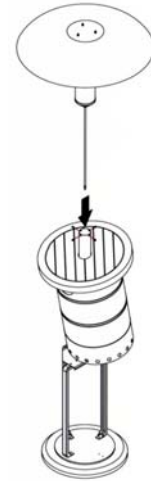
Step 6

Tilt the cylinder decorative cover assembly and rest it on the post support plate against the hex-bolts. Make sure that the cylinder decorative cover assembly is in stable position. **Do not allow it to slide!**



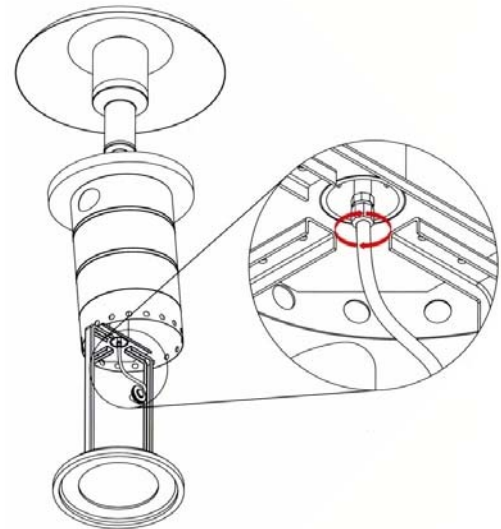
Step 7

Carefully insert the burner assembly with the fuel line onto the post. Be sure that the lower end of the fuel line passes through the hole in the post support plate. The post fits one way only because the holes are drilled in different positions. Attach the post to the burner assembly using four Pan Head M5 x 8 screws, 6mm s/s flat washers and 6mm s/s lock washers. Make sure that the sets screws firmly grip the post.



Step 8

Remove the other protective end cap from the fuel line inlet fitting. Hold the fuel line inlet fitting with wrench and hand-tighten the female fitting of the hose regulator assembly to the fuel line inlet fitting, then securely tighten with another wrench. These fittings should be tightened in a clockwise direction. **Do not over tighten.**



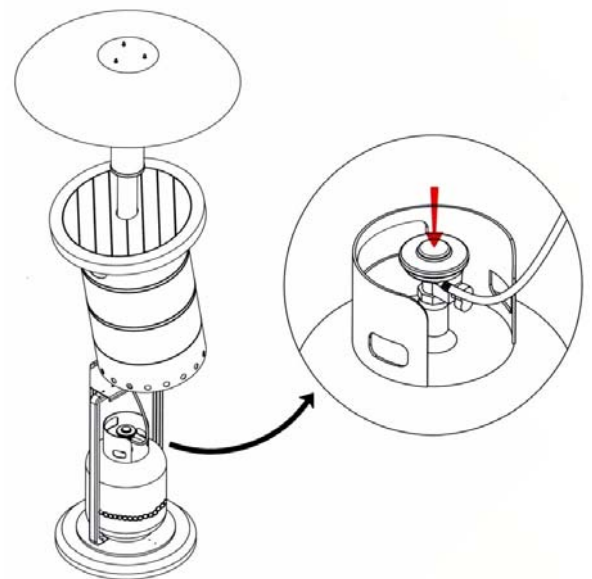
Step 9

Connect an approved propane cylinder to regulator/hose assembly. Properly attach the regulator gas cylinder valve. The cylinder must be secured in the base and chained in the upright position to keep it from falling.

First check for leaks:

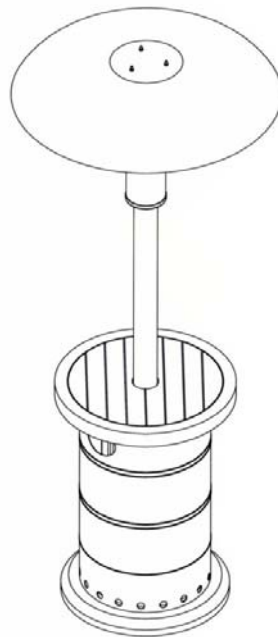
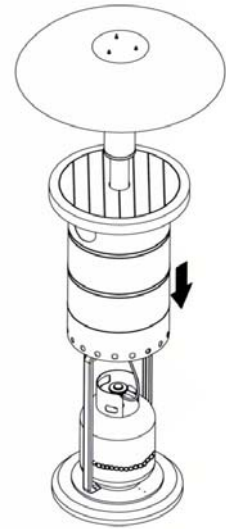
Be sure the fittings at the end of the feed line going into the burner head and other end of the fuel feed line where the hose is attached are tight. Leak test with a soapy solution by mixing one part liquid soap solution with two parts water only. **Do not use flame.**

1. Turn the control knob to OFF position. Open the LP cylinder valve.
2. Apply a soapy solution to these connection. 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, disconnect and remove the cylinder.



Step 10

Carefully place the cylinder decorative cover assembly over the base assembly.



Patio Heater PHT (Assembled)

2. Installation

This heater is intended for use outdoors only! Not to be used inside vehicles or in any enclosed area!

2.1 Installation warning

The installation must conform in accordance with local or country gas safety codes.

2.2 Minimum clearances

Minimum 24 inch 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 Sunshine Lifestyle Products.
- 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 Do not relight a hot heater always wait until the heater is cool.

3.2 Leak Checking

- Check all 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, check.
- If no bubbles appear, the connection is safe continue to lighting.
- If the leak persists, turn cylinder valve OFF and contact Sunshine.

Warning:

- **Perform Leak test outdoors only.**
- **Do not smoke when performing leak test.**
- **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 in a 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 feed gas to the pilot assembly. Do not press on the igniter while you are purging the line.

3.3.2 Important Lighting step

- While depressing the control knob, press and release the igniter button (red button) in quick succession until lit.
- After the pilot is lit, continue to depress the control knob for a further 30 seconds to heat the thermocouple. Release the control knob and the pilot should stay lit. To observe the ignition of the pilot, slide 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 or 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 at maximum heat output. The knob can be turned back to desired setting.

Note: While in use, the burner flame should be mainly blue in appearance with little to no yellow tip.

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

3.5 Turn Off and Relight

- If you turn the knob back to PILOT position, the main burner will extinguish

- but the pilot should remain lit.
- Turn the control knob clockwise to OFF position.
Note: Do not attempt to relight the heater for 5 minutes after you turn it off. The safety system built into the heater will not allow you to immediately relight the heater from the OFF position.
 - To relight a warm heater, repeat 3.3.2. Once the pilot is lit, depress the control knob for a further few seconds. The main burner can be ignited immediately once the pilot remains lit

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.
- Optional vinyl protective cover is available to protect the burner head and cylinder cover when in storage.
Note: Be sure the heater is cool before covering.
- If the heater is not to be used for an extended period of time, disconnect, remove the gas cylinder and store in a cool dry place. For extended storage, cling film or aluminium foil should be used to cover the emitter screen to prevent insects or other debris from collecting in the pilot and burner holes.
- Never store gas cylinders indoors. Gas cylinders should always be stored outdoors in a cool, dry and well ventilated area away from sources of heat or flame.
- Keep children away from gas cylinders

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 known 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 the control compartment burners and air circulation 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 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 symptoms:
 - a. Flashback
 - b. Odor gas
 - c. Predominately 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 clean with wood or plastic they 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 tube	Clean tube.
	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 buildup around pilot tube	Clean pilot tube.
	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. Stop using when temperature is below 40 F.
Burner emits smoke	Burn off of oily materials	During the first few minutes burn off of ant materials is normal.
	Blockage in burner	Remove blockage and clean burner inside and outside.
Carbon buildup	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 inside and outside.

7. Replacement Parts

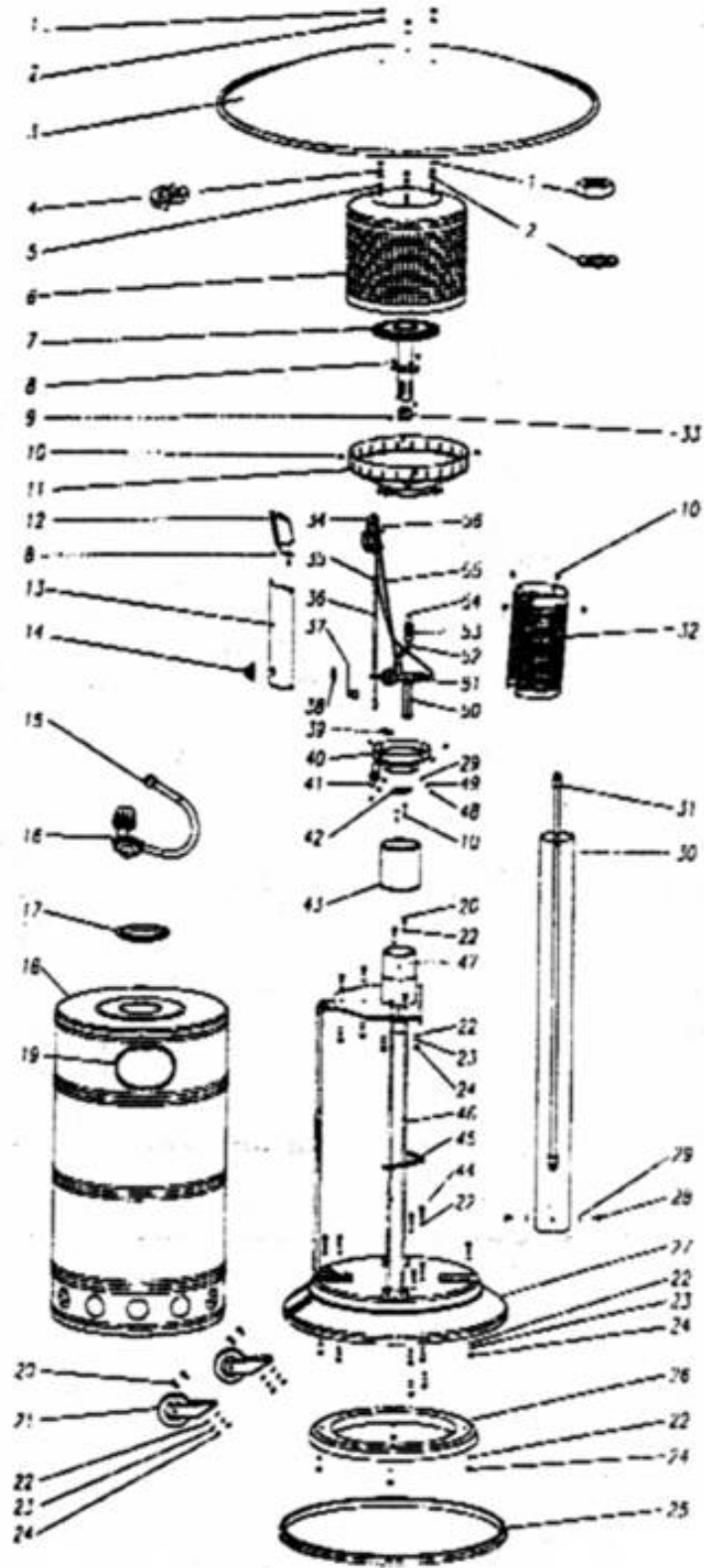
Use original equipment and replacement parts only.
Use of unauthorized parts or modification of parts can void warranty and may cause damages to properties, serious injuries or even death.

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 manufacturer 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 The manufacturer, distributor and retailer are not liable for any incidental or consequential loss or damage arising from the installation or operation of 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.

9. Parts List



PARTS LIST

KEY#	DESCRIPTION	QTY	KEY#	DESCRIPTION	QTY
1	Hex-Nut M8 S/S	6	29	Flat Washer 6mm dia. S/S	4
2	Flat Washer 8mm dia. S/S	6	30	Post	1
3	Reflector	1	31	Fuel-Tube	1
4	Lock Washer 8mm dia. S/S	3	32	Perforated Body	1
5	Hex-Bolt M8 x 20 mm S/S	3	33	Base Fitting for main Burner	1
6	Emitter Grid	1	34	Thermocouple	1
7	Burner Assy with shield	1	35	Wire Insulation	1
8	Self-tapping T Screw for Pilot shield M4 x 8mm S/S	2	36	Electrode	1
9	Screw for Burner Retention M4 x 8mm S/S	5	37	Bracket for Valve mounting	1
10	Pan Head Screw M5 x 8mm S/S	21	38	Specific Nut for Valve	1
11	Pan Assy S/S	1	39	Specific Nut for Igniter	1
12	Pilot Shield	1	40	Base Assy for Heater Head	1
13	Faceplate for Lighting Instruction S/S	1	41	Piezo Igniter	1
14	Knob	1	42	Bracket for Fuel-Tube	1
15	Hose Assy 3/8" Female Flare	1	43	Slip Socket Cover	1
16	Regulator with type 1 QCC Tank Adapter	1	44	Hex-Bolt M6x40mm	4
17	Molding for Decorative Socket	1	45	Chain Assy for tank restraint	1
18	Decorative Cover	1	46	"L" Bracket	3
19	Molding for tank Access Hole	2	47	Socket Assy	1
20	Hex-Bolt M6x16mm S/S	13	48	Pan Head Screw M6 x 12mm S/S	4
21	Wheel Assy w/Bracket(1ea.)	2	49	Lock Washer 6mm dia. S/S	4
22	Flat Washer 6mm dia.	30	50	Extention Fitting at Valve Base	1
23	Lock Washer 6mm dia.	17	51	Thermoelectric Control Valve	1
24	Hex-Nut M6	17	52	Tube Assy for burner	1
25	Molding for Base Bottom	1	53	Compression Fitting for Orifice	1
26	Ballast Weight for all Bases	1	54	Orifice for main burner	1
27	Base	1	55	Pilot Tube Assy	1
28	Pain Head Screw M6x12	4	56	Pilot Assy	1

European Distributor:

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