



Effective: July 2015

ASSEMBLY INSTRUCTIONS AND OWNER'S GUIDE



GENERAL INFORMATION

This series is design certified by the Underwriters Laboratories as an Outdoor Gas-Fired Patio heater and must be assembled and operated in accordance with these instructions.

ANY ALTERATION TO THE ORIGINAL DESIGN, INSTALLED OTHER THAN SHOWN IN THESE INSTRUCTIONS, OR USED WITH A TYPE OF GAS NOT SHOWN ON THE RATING PLATE IS PROHIBITED AND VOIDS WARRANTY.



WARNING FOR YOUR SAFETY

Do not store or use gasoline or flammable vapors or liquids in the vicinity of this or any other appliance.



WARNING FOR YOUR SAFETY

For Outdoor Use Only. (Outside any enclosure) Solamente Para Uso En Exteriores (Fuera de cualquier recinto)



WARNING FOR YOUR SAFETY

Improper installation, adjustment, alteration, service or maintenance of this product can cause injury or property damage. Please read the installation and operating instructions thoroughly before installing or servicing this appliance.



WARNING FOR YOUR SAFETY

If you smell gas:

- 1. Shut off gas to the appliance.
- 2. Extinguish any open flames.
- 3. If odor continues, immediately call your gas supplier from a neighbor's telephone.
- If you cannot reach your gas company, call the fire department.



WARNING FOR YOUR SAFETY

Read these assembly instructions carefully before attempting to assemble, use or service this product. Please keep this manual for your future reference.



WARNINGS

Read this installation and owners guide carefully before attempting to assemble or operate the heater.



AWARNING

BURN HAZARD

Hot surfaces! Do NOT move, handle or service heater while operating.

Allow at least 45 minutes before touching any surfaces.

Failure to do so may result in serious injury.



MWARNING

FIRE HAZARD

Never use an open flame to check for gas leaks.

DO NOT operate a heater that has a leak

Any leaks must be repaired before use.

Failure to do so may result in death, serious injury or property damage.

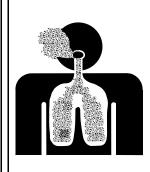


MARNING

FIRE HAZARD

Heater must be on a stable and level surface.

Failure to do so may result in death, serious injury or property damage.



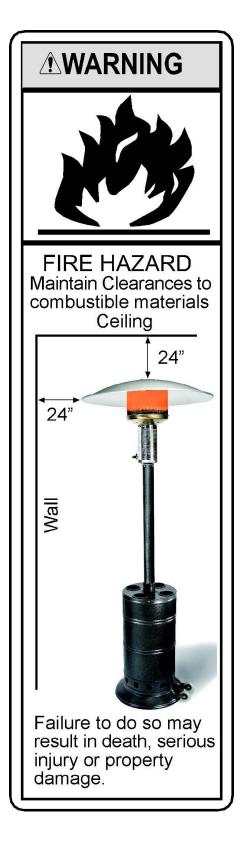
AWARNING

POISON HAZARD

For outdoor use only - adequate ventialtion must be provided.

Poisonous Carbon Monoxide may be produced.

Failure to do so may result in death or serious injury.





WARNINGS

Please note the following very important safety precautions:

- ⚠ Children and adults should be alerted to the hazards of high surface temperatures of the main burner and reflector and should stay away from these areas.
- A Children should be carefully supervised when near the heater. This heater is not a toy and children should not be allowed to push, climb on, or swing on the heater. This could cause serious injury, property damage, or death.
- ▲ Clothing or other flammable materials should not be hung from the heater or placed near the heater while in operation.
- **A** Installation and repair of the heater should only be carried out by a qualified service person.
- Any part or component removed for cleaning or maintenance must be properly re-installed before using the heater.
- ⚠ The installation of this appliance must conform with local codes or, in the absence of local codes, the installation must conform to the National Fuel Gas Code, also known as NFPA 54 and ANSI Z223.1 latest edition.
- ⚠ There must be adequate clearance around all air openings into the combustion chamber, clearances from combustible materials, and accessibility and for combustion and ventilating air supply. Clearances from the side and top must be at least 24" combustible materials.
- Always place heater on a hard and level surface.
- ⚠ The inlet gas supply pressure must not exceed 11" W.C. Use only hose, regulator, and tank adapter that is supplied with the product. Replacements must be those specified by the manufacturer.
- ▲ Test all fittings and connections with a soapy solution prior to use. Never use an open flame or open flame device.
- A Keep water sources such as sprinklers away from the burner and controls.
- A Certain items or materials when stored under the heater or too close to the heater head will be subject to radiant heat and these items could be damaged.
- A Review carefully and follow all assembly instructions. If you do not understand any of these instructions please call your selling dealer or call SunStar directly at local 704 372 3486.
- ⚠ Carefully inspect the rubber hose included with the unit before each use. Be sure there are no visible cracks, damage, abrasion, or other signs of visible wear. If there is any evidence of wear it should be replaced with a Sunstar replace hose assembly.
- ⚠ In the event your unit uses an approved 12 foot hose please be sure that it is placed in a manner when it cannot be damaged or positioned in a way that someone might trip over it.
- Always follow the lighting and shutdown instructions to insure safe use.
- ⚠ The heater should be visually inspected before each use and at least annually by a qualified service person. Certain weather conditions such as being near the ocean, dusty areas, areas with high humidity, areas with high wind conditions, and heavy use, may require more frequent cleaning or maintenance. When in doubt call a qualified service person. It is imperative that the control compartment, burner system, and circulating air passages of the heater be kept clean.

July 2015 - 3 - Form 44080000

IMPORTANT SAFETY INFORMATION FOR THE USE OF LIQUID PROPANE (LP) GAS.

Caution: Liquid Propane (LP) gas is flammable and hazardous if handled improperly. Become aware of the characteristics before using any LP product.

- A Propane or liquefied petroleum gas is highly flammable, explosive under pressure, clean burning, heavier than air, and settles in puddles in low areas.
- ⚠ In its natural form propane gas is odorless. For your safety and for ease of detection an odorant has been added to the propane that smells like rotten cabbage. If you ever believe that you have a propane gas leak in any appliance shut off the appliance immediately and find and correct the leak.
- ▲ Direct contact with propane gas can cause freeze burns to the skin.
- ▲ Your heater is shipped from the factory to be used with propane fuel only. Do not attempt to alter your heater in any way.
- ⚠ Use only a "DOT" (Department of Transportation) approved 20-pound cylinder (when it's empty) with an "ACME"TYPE 1" connection with "QCC" (Quick Connect Coupler). Use only cylinders equipped with an approved OPD "Overfill Protection Device." This device prevents accidental over-filling and possible escape of fuel when the cylinder is heated. These OPD equipped cylinders can be easily identified by their triangular handle at the top of the tank and inside and outside threads where the regulator attaches to the cylinder valve. Do NOT attempt to alter or modify any parts of this safety system!
- A Never attempt to use a cylinder that has a rusted or damaged main body, a damaged collar or valve, or a damaged foot ring. Take your cylinder to an authorized propane retailer if you have any questions about the safety or suitability of your cylinder.
- A When the heater is not in use turn the LP tank OFF.
- A New tanks with OPD valves also contain a device that senses leaks in your heaters fuel system. If you find that the pilot light lights and ignites the burner only to find that it shuts down within a minute or two this indicates that the safety system has detected a leak in either the hose or at the various connections of the heater head. Check all fittings with a soapy solution and then attempt to re-light.
- ⚠ On all new OPD cylinders the regulator assembly and hand wheel must be completely and correctly engaged and tightened into the cylinder valve or it will not allow the gas to flow to the heater. Be sure this connection is tight but do not over-tighten. You do not need to use any tools to make this connection. You should always double-check this connection at the cylinder with a soap and water solution.
- A Never store a propane cylinder indoors. If you are not using the heater disconnect the cylinder from the heater and store it outdoors in an area where it is not accessible to children.



This product can expose you to chemicals including ceramic fibers, which are known to the State of California to cause cancer, and carbon monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

July 2015 - 4 - Form 44080000

Sunstar Patio Heater Assembly Instructions

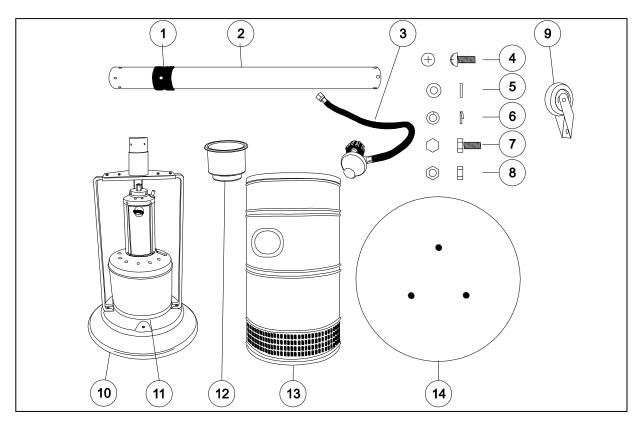
1. Unpack the carton carefully.



CAUTION

The base and head assembly combined weight is 40lbs this may require two people to lift it out of the carton.

2. Check the contents of the carton:



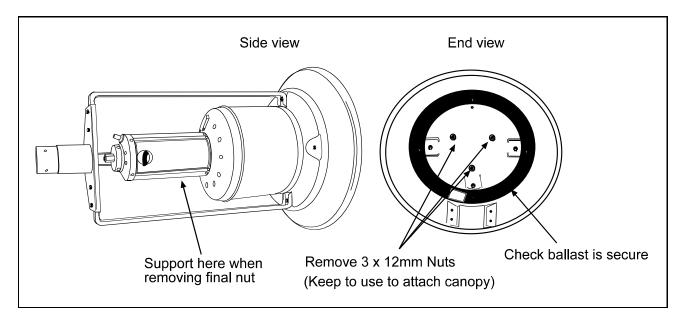
ITEM	PART	DESCRIPTION	QTY	QTY
	NUMBER		PHS40	PHJ40
1	44062000	Post sleeve		1
2	44063000	Post Jet painted		1
2	44064000	Post Stainless Steel	1	
3a	44079010	Regulator	1	1
3b	44079020	Hose assembly	1	1
4	44066000	Screw Pan Head SS M6 x 12 mm	8	8
5	44067000	Washer flat M6 SS	12	12
6	44068000	Washer lock M6 SS	8	8
7	44069000	Screw Hex Head SS M6 x 20 mm	4	4
8	44070000	Nut M6 SS	4	4
9	44071000	Wheel Assembly SS	2	
9	44072000	Wheel Assembly Painted Jet		2
10	44073000	Base assembly Jet painted		1
10	44074000	Base assembly SS	1	
11	44075010	Burner assembly complete	1	1
12	44057000	Cup holder	4	4
13	44076000	Cylinder Cover Jet Painted		1
13	44077000	Cylinder Cover SS	1	
14	44078000	Canopy	1	1

July 2015 - 5 - Form 44080000

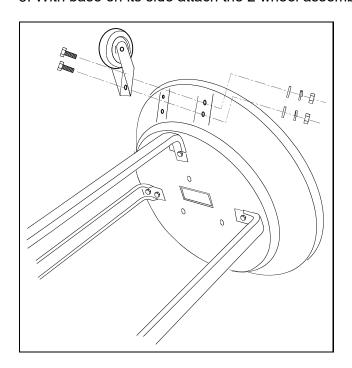
3. You will need the following tools to assemble the heater: The tools are not included, but are necessary for the proper assembly of your heater. Do NOT attempt to assemble without the correct tools.

10mm AF Socket for brackets and wheel kit.
11mm AF or 7/16" Socket for Ballast Plate.
12mm Socket for Canopy
Standard Philips head #2 and #3 screwdrivers
Channel locks or pliers - minimum 1 ½" Capacity.
Adjustable Crescent wrench or socket driver
Soapy water solution for leak testing.

4. Lay the base down on its side to disassemble the burner from the base. Keep the nuts and washers that are removed. They are used to secure the canopy.

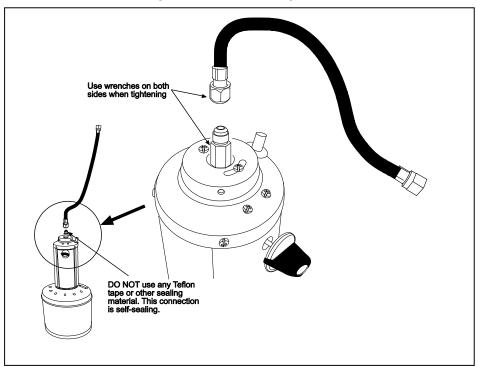


5. With base on its side attach the 2 wheel assemblies.

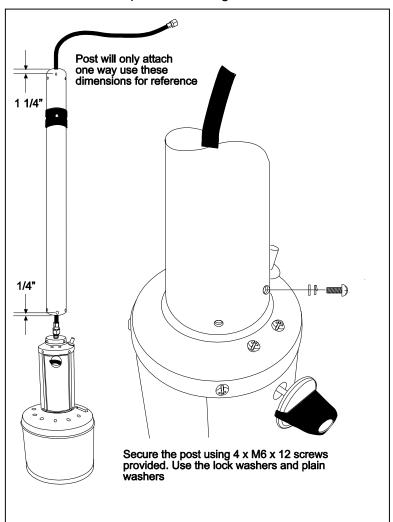


July 2015 - 6 - Form 44080000

6. With the burner upturned, remove the plastic cap from the burner gas inlet fitting. Attach the gas hose to the burner fitting. Either end of the gas hose can be used.

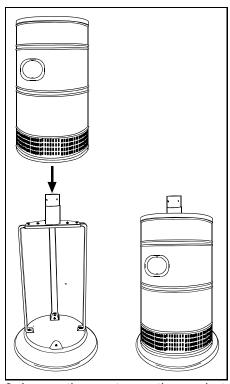


7. Slide the lower post over the gas hose and attach to the burner.

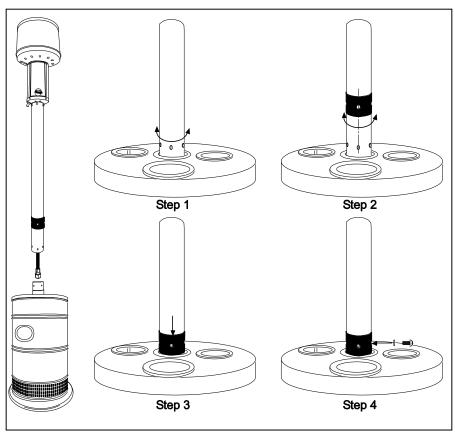


July 2015 - 7 - Form 44080000

8. Lower the cylinder cover onto the base.



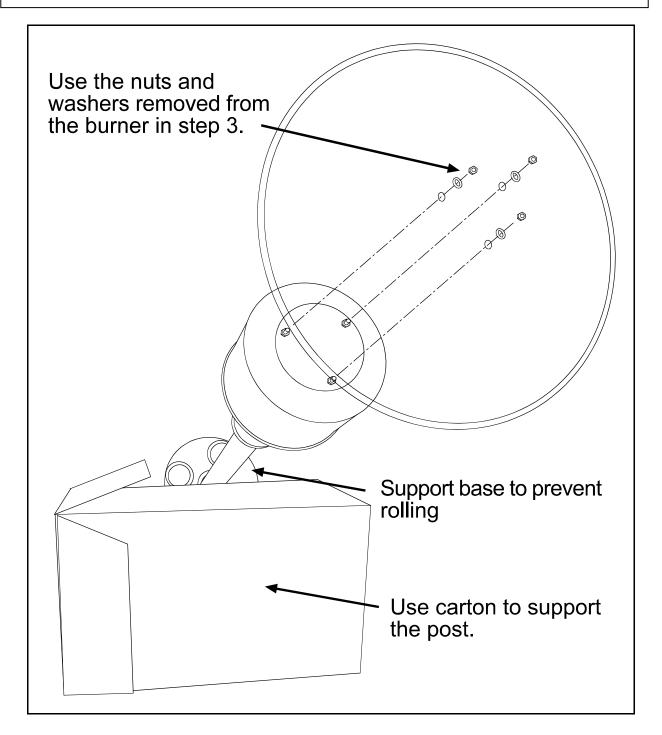
- 9. Lower the post over the socket in the base assembly. Follow the steps below:
- Step 1. Rotate the post until the holes are aligned with the socket.
- Step 2. Align the sleeve to line up with the holes.
- Step 3. Lower the sleeve over the post holes.
- Step 4. Secure the post using the 4 x M6 x 12mm screws and washers provided.





CAUTION

DO NOT attempt to attach the canopy in windy conditions. Choose a sheltered area. Failure to do so may result in damage to the heater.

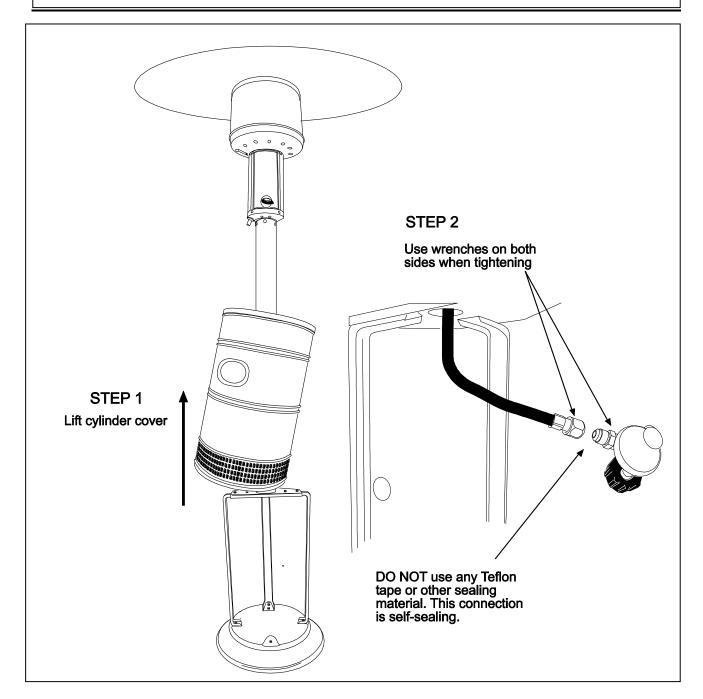


11. Lift the cylinder cover and attach the regulator assembly to the gas hose.



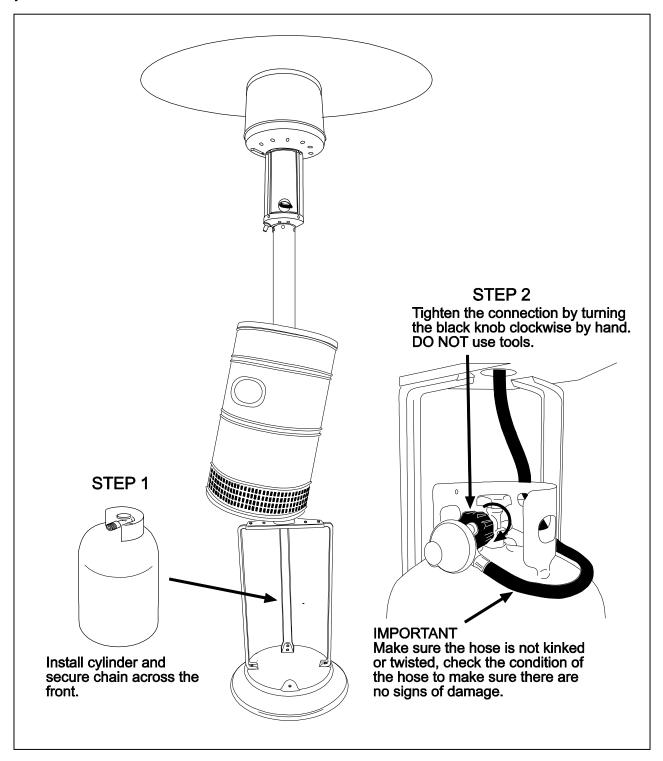
CAUTION

Before you attempt to use a propane tank understand all tank and Propane related precautions on Page 4 of this manual.



12. Connect gas hose and regulator assembly to the tank.

NOTE: Use only a "DOT" (Department of Transportation) approved 20-pound cylinder (when it's empty) with an "ACME"TYPE 1" connection with "QCC" (Quick Connect Coupler). Use only cylinders equipped with an approved OPD "Overfill Protection Device." This device prevents accidental overfilling and possible escape of fuel when the cylinder is heated. These OPD equipped cylinders can be easily identified by their triangular handle at the top of the tank and inside and outside threads where the regulator attaches to the cylinder valve. Do NOT attempt to alter or modify any parts of this safety system!



July 2015 - 11 - Form 44080000

13. Check for leaks. Make a solution of 2 -3 oz. of leak checking solution by mixing one part liquid dishwashing soap and three parts water. Follow the procedure below:

Leak checking gas hose connections

- Step 1. Turn cylinder valve on by turning anti-clockwise.
- Step 2. Check gas hose connections for leaks. To check for leaks Spoon several drops of solution onto the connections as illustrated.
- Step 3. Inspect the solution for bubbles. If no bubbles appear then the connection is secure.

If Bubbles appear then there is a leak:

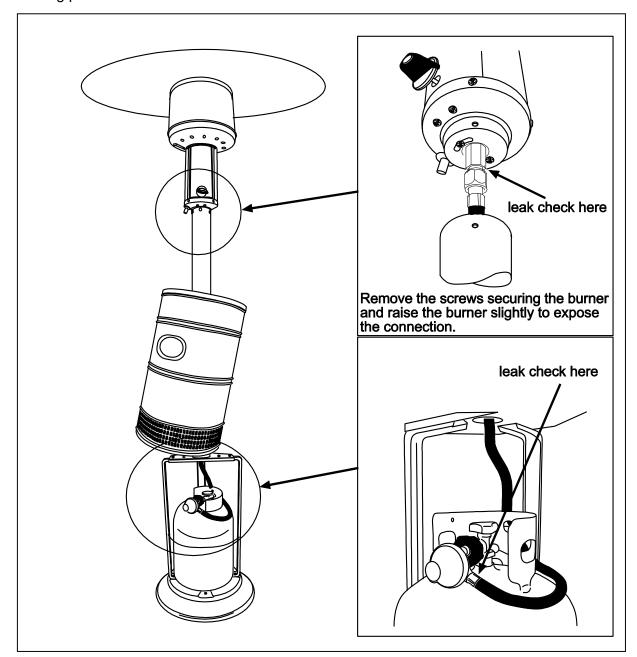
Turn OFF the cylinder valve.

Undo the connection and inspect the surface of the cone to make sure they are clean.

Reconnect using two wrenches on the on either side of the connection.

Repeat the leak checking procedure described above.

If you continue to see bubbles after several attempts DO NOT use the heater. Contact Sunstar heating products customer service at 704 372 3486 for assistance. DO NOT use the heater.



July 2015 - 12 - Form 44080000

Leak checking Regulator and cylinder valve connections

Step 1. Turn cylinder valve on by turning anti-clockwise.

Step 2. Check regulator connections and valve for leaks. To check for leaks Spoon several drops of solution onto the connections as illustrated.

Step 3. Inspect the solution for bubbles. If no bubbles appear then the connection is secure.

If Bubbles appear then there is a leak:

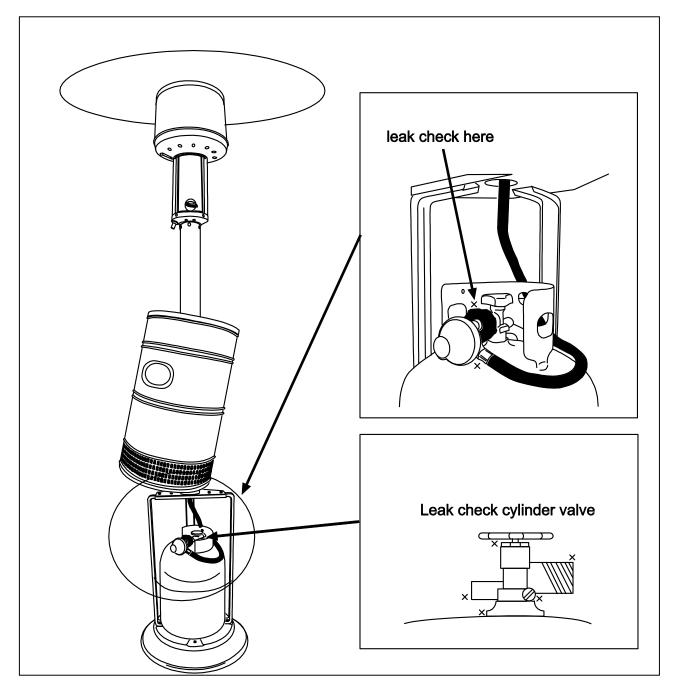
Turn OFF the cylinder valve.

Release the Regulator connection to the cylinder.

Re-attach the Regulator making sure the connection is tight.

Repeat the leak checking procedure described above.

If you continue to see bubbles after several attempts DO NOT use the heater. Contact Sunstar heating products customer service at 704 372 3486 for assistance. DO NOT use the heater.



July 2015 - 13 - Form 44080000

SPECIFICATIONS

	Models	
	PHS 40 Stainless Steel	PHJ 40 Jet
Maximum Btu /hr Input	40,000	40,000
Orifice size	1.9mm	1.9mm
Gas Type	LP Gas	LP Gas
Supply Inlet gas pressure to regulator:		
Maximum	100 psi	100 psi
Minimum	5 psi	5 psi
Manifold Pressure	11" w.c.	11" w.c.
Ignition type	Piezo igniter	Piezo igniter
Heat range	Up to 20ft diameter	Up to 20ft diameter
Weight	64 lb	64 lb
Base Carton dimensions: (W" x D" x H")	21.5" x 20.5" x 34"	21.5" x 20.5" x 34"
Canopy Carton Dimensions: (W" x D" x H")		
Overall Assembled Height:	89 inches	89 inches
Reflector Diameter	34 inches	34 inches
Fasteners	304 Stainless Steel	
Major components material	304 Stainless Steel	Aluminized Steel painted

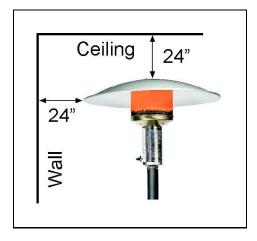
PLACEMENT OF THE HEATER

Your outdoor patio heater is designed for use as temporary comfort heating for your outdoor patio, outdoor decks, outdoor spa areas, pool areas, and other outdoor areas with plenty of fresh air.

The heater is NOT designed, approved, or intended for indoor use or enclosed area use such as a garage, commercial building, tents, ice fishing tents, prefabricated buildings or enclosures or other enclosed areas.

The heater is also not designed for use on moving objects or vehicles such as houseboats, yachts, travel trailers, boats, or other moving devices or vehicles.

The minimum clearances from combustibles must be maintained at all times. We recommend the heater be no closer than 24 inches from any combustible vertical or horizontal wall or have any combustible material within 24 inches of the top of the reflector.



The heater must always be used on firm, level, and stable ground. Never move the heater while it is in operation.

WARNING: Never operate heater in an explosive atmosphere and be sure to keep unit away from where gasoline or other flammable liquids or vapors are stored or used.

July 2015 - 14 - Form 44080000

LIGHTING INSTRUCTIONS

CAUTION: Do NOT attempt to operate heater until you have read and understand the warnings and section in this manual.

Before Turning Gas Supply ON:

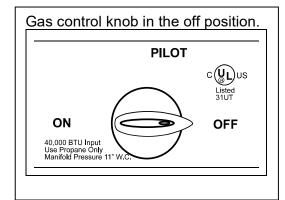
- 1. Your heater was designed and approved for OUTDOOR USE ONLY. DO NOT use it inside an enclosure.
- 2. Make sure that the clearances combustibles are maintained and that there are no flammable liquids or vapors in the vicinity of the heater.
- 3. Make sure there is no obstruction to air ventilation.
- 4. Any components removed during the assembly or servicing of the heater must be re-installed.
- 5. Check that all gas connections are tight and check the condition of the hose assembly to make sure it is not worn or damaged.

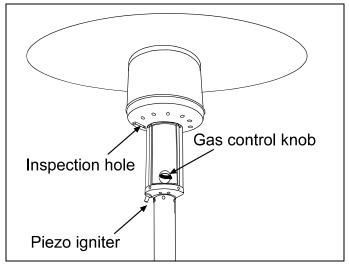
Before Lighting The Heater:

- 1. If attempting to relight the heater always wait at least 5 minutes.
- 2. The main heater components should be thoroughly inspected before each use and at least every two years by a qualified service person.

To Light The Heater:

Use the diagram below to locate the components referred to in this instruction sequence.





- 1. Raise the cylinder cover to access the LP gas cylinder. Turn the valve OFF.
- 2. Push the control knob in and turn to the OFF position.
- 3. Move the cover over the inspection hole.
- 4. Turn the cylinder valve anticlockwise to open.
- 5. Gently depress the gas control knob and turn it anticlockwise 'to PILOT position.

 Note: For the first use or after changing tanks depress the knob for at least 2 minutes to purge the air from the lines.
- 6. Push the Piezo igniter button to light the pilot. The blue flame of the pilot can be seen through the inspection hole.
- 7. Continue to depress the control knob for at least 20 seconds or until the pilot remains lit after the control knob is released.
- 8. Turn the gas control knob to the ON position. The main burner will light immediately. During use the control knob can be set to a lower position. This will reduce the heat output.

Note: For the first time use there may be a small amount of smoke from the emitter, this is residue oil used in the manufacturing process. This should last no longer than 30 seconds.

July 2015 - 15 - Form 44080000

To re-light the heater:

- 1. Turn control knob to the "OFF" position.
- 2. Wait at least <u>FIVE minutes</u> before attempting to relight heater, The safety system built into the heater will not allow you to immediately re-light the heater directly from the "OFF" position.
- 3. Repeat the lighting instructions on the previous page.

To Turn Off or Shut Down Heater:

- 1) Turn the control knob in a clock-wise direction to the "OFF" position. You may hear a slight popping sound when the main burner shuts down. This is normal.
- 2) Lift the cylinder cover and turn the valve on the top of the propane tank in a clock-wise direction to turn it off.

Caution: When your heater is not in use DO NOT store your propane cylinder indoors.

Storing your Heater and Insect Warning

Be sure control knob is in the "OFF" position and the cylinder valve is CLOSED.

When storing the heater please disconnect the tank from the heater at the regulator and LP cylinder. The tank should be stored outdoors in a well-ventilated area to be in compliance with ANSI Standard and NFPA National Fuel Protection Agency Code 58-1986,

Store your heater in an upright position in an area sheltered from inclement weather such as rain, snow, sleet, hail, dust storms, and other blowing debris.

Sunstar Heating Products makes a cover PN 44033000 available to protect the burner head. We strongly recommend using our cover when your heater is in storage or not in use. The cover will help protect the heater head from moisture as well as insects. CAUTION: Allow at least 45 minutes after operation to be sure heater is cool before using the cover.

Spider and Insect Warning,

Spiders and other insects are attracted to the smell of natural gas and propane. This is the case for outdoor heaters, gas grills, gaslights and torches, pool heaters, and other outdoor gas burning products. The webs and obstructions created by these insects can causes conditions that may damage the appliance or render it unsafe for proper use. You should inspect the burner at least once a year or immediately if any of the following conditions are present when operating the heater:

- 1. The odor of gas in conjunction with extreme yellow tipping of the burner flame.
- 2. The emitter grid does not glow evenly or reach proper operating temperatures.
- 3. The burner makes a popping or roaring noise,

If you feel uncomfortable working on the heater please contact your servicing dealer or distributor for the name and number of a qualified service technician.

July 2015 - 16 - Form 44080000

CLEANING AND MAINTENANCE

Your heater has been produced from highly weather resistant materials and only requires minimum cleaning and maintenance. Cleaning must be performed when the heater is cold. Your patio heater will last longer if it is cleaned and maintained properly. It is very important that the air required for the combustion process is not blocked going to the burner. Orifices, burner venturis, vents, and other openings must be kept free of dirt and spider webs.

Stainless Steel models:

Use a stainless steel cleaner product on the main components of the heater, cylinder cover, base and post. Never use a cleaning agent that is flammable or corrosive. Never spray any cleaning product on the emitter grid or burner area.

Painted models:

Wash all painted parts of the heater with a soapy solution and protect it with a coat of automobile car wax a couple of times per year or as required dependent upon your local weather and climate conditions.

If you need to touch up a painted heater only paint the post and base portions. Never paint the emitter grid, lighting instructions, valve or control knob area, or the LP cylinder.

The burner ports must also be kept clear so that the burner burns evenly and the flow of gas is not restricted. If the heater is not performing adequately it will be necessary to check the burner and burner venturi.

In a salt air or ocean environment, corrosion and rust occurs at a far greater rate than in non-ocean areas. You will need to more frequently check for corrosion and replace parts as required.

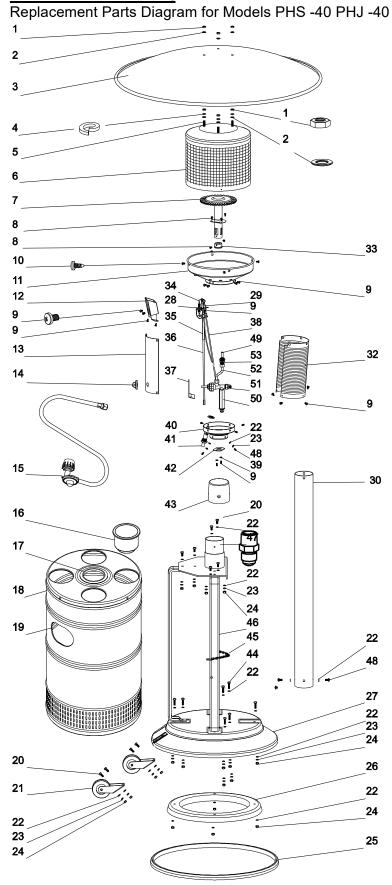
July 2015 - 17 - Form 44080000

TROUBLESHOOTING

Trouble	Cause	Solution
The Pilot won't light	Not pushing piezo all the way until it "clicks"	Review lighting instructions.
	Problem with piezo not sparking	Use a match to light through the inspection hole.
No Spark	Lead wire loose at piezo Igniter	Tighten connection
1	Lead wire loose at electrode	Tighten connection
	Lead wire broken	Replace lead wire
	Electrode gap to the pilot shield incorrect.	Adjust gap to 3mm (0.118")
	Piezo igniter is defective	, , ,
	Gas cylinder valve is closed	Turn cylinder valve in a clockwise direction to open.
	Knob not in PILOT position	Make sure knob is depressed and in the correct position.
Spark but no pilot ignition	Knob not depressed enough when turning from OFF to PILOT	Retry pressing knob all the way in.
	Air in gas line	Purge air by holding control knob at PILOT position for at least two minutes or until you smell gas
	Regulator not fully engaged on the cylinder valve.	Hand tighten firmly and check ACME1 adapter for damage or leaks
	Blocked pilot orifice	Inspect and clean pilot assembly.
	Defective regulator	Replace regulator
	Knob is not depressed long enough.	After pilot is lit, hold down for 30 secs
	Dirt built up around the pilot orifice	Clean pilot orifice
Pilot goes out when knob is released	High wind condition blowing out pilot	Put heater in more protected location. Do not use heater in winds in excess of 10 MPH.
	Pilot flame does not touch thermocouple	Replace pilot if gas pressure is OK.
	Thermocouple connection at valve may be loose.	Tighten connection firmly.
	Thermocouple is damaged.	Replace thermocouple.
	Gas Valve is damaged	Replace gas valve
Burner Does Not Light	Burner orifice clogged	Clean or replace orifice
	Burner orifice not correct size	Replace with correct size
Pilot Stays Lit	Low inlet gas pressure	Turn OFF and replace cylinder
•	Control Knob is not in the ON position	Turn the knob fully counter clockwise to ON
	Gas valve is defective	Replace gas valve
Improper burn pattern		
Slight smoke or odor during initial operation	Residues from manufacturing process	Residue will be completely burned off after the first few minutes of operation
	Gas pressure is low	Turn OFF and replace cylinder
	Control knob is not set to ON	Turn the knob fully counter clockwise to ON
Flame is low or does not glow evenly	Outdoor temperature is below 40° Fahrenheit	Turn OFF the heater
(Normal glow starts approximately 1" from the bottom)	Heater is not on a level surface	Reposition heater on a hard and level surface
•	High wind condition	Put heater in more protected location. Do not use heater in winds in excess of 10 MPH.
	Supply hose is kinked or restricted	Straighten hose
Carbon build up on emitter grid or thick black smoke	Dirt or film on the emitter grid	Gently clean reflector or emitter clear spider webs or debris
	Blockage in burner	Remove burner, inspect and clean burner throat and ports

July 2015 - 18 - Form 44080000

REPLACEMENT PARTS



			Models		
KEY#	Part Number	Description	PHS-40 (S/S)	PHJ-40 (Jet)	
1	44081000	Hex-Nut M8 S/S	6	6	
2	44082000	Flat Washer 8mm dia. S/S	6	6	
3	44078000	Canopy	1	1	
4	44083000	Lock Washer 8mm dia. S/S	3	3	
5	44084000	Hex-Bolt M8x 20mm S/S	3	3	
6	44085000	Emitter Grid	1	1	
7	44086000	Burner Assy	1	1	
8	44087000	Pan Head Screw M4x6mm S/S	5	5	
9	44088000	Pan Head screw M5×8mm S/S	17	17	
10	44089000	Self-tapping pan head Screw ST5x 10mm S/S	4	4	
11	44090000	Burner Pan S/S	1	1	
12	44091000	Pilot Shield	1	1	
13	44092000	Faceplate S/S	1	1	
14	44093000	Knob	1	1	
15a	44079010	Regulator	1	1	
15b	44079020	Hose Assy	1	1	
16	44057000	Cup holder-plastic	1	1	
17	44094000	Molding for Decorative Socket	1	1	
18	44077000	Cylinder Tank Cover S/S	1		
18	44076000	Cylinder Tank Cover Painted Jet		1	
19	44095000	Molding for the access holes	2	2	
20	44069000	Hex-Bolt M6x 20mm S/S	13	13	
21	44071000	Wheel Assy S/S	2		
21	44072000	Wheel Assy painted Jet		2	
22	44067000	Flat Washer 6mm dia. S/S	38	38	
23	44068000	Lock Washer 6mm dia. S/S	21	21	
24	44070000	Hex-Nut M6 S/S	17	17	
25	44096000	Molding for Base	1	1	
26	44097000	Ballast weight for base	1	1	
27	44098000	Base S/S	1		
27	44099000	Base painted Jet		1	
28	44100000	Nuts for Thermocouple M8x1	2	2	
29	44101000	Pilot Assy	1	1	
29a	44126010	Pilot orifice	1	1	
30	44064000	Post S/S	1		
30	44063000	Post painted Jet		1	
32	44102000	Perforated Body S/S	1	1	
33	44103000	Bracket for Orifice	1	1	
34	44104000	Thermocouple	1	1	
35	44105000	Wire Insulation	1	1	
36	44106000	Electrode	1	1	

37	44107000	Bracket for Valve	1	1
38	44108000	Pilot Tube Assy	1	1
39	44109000	Flat Washer 5mm dia. S/S	2	2
40	44110000	Burner Base Assy for post S/S	1	1
41	44111000	Piezo Igniter	1	1
42	44112000	Bracket for Fuel Tube	1	1
43	44062000	Socket Cover- plastic	1	1
44	44113000	Hex-Bolt M6×40 S/S	4	4
45	44114000	Chain Assy for tank holding	1	1
46	44115000	L Bracket S/S	3	
46	44116000	L Bracket Painted Jet		3
47	44117000	Socket Assy S/S	1	1
47	44118000	Socket Assy Painted Jet		
48	44066000	Pan Head Screw M6×12 S/S	8	8
49	44119000	Orifice for main burner	1	1
50	44120000	Connection tube at Valve Base (male before 2015)	1	1
50	44120010	Connection tube at Valve Base (female after 2015)	1	1
51	44121000	Thermoelectric Control Valve	1	1
52	44122000	Tube Assy for Burner (flare x bead)	1	1
52	44122010	Tube Assy for Burner (bead x bead)	1	1
53	44123000	Compression fitting for Orifice	1	1
Not Shown	44124000	Replacement Screw package for Burner	1	1
Not Shown	44125000	Replacement Screw package for Post	1	1

Only use genuine Sunstar Heating Products replacement parts.

July 2015 - 21 - Form 44080000



CONSUMER/RESIDENTIAL LIMITED WARRANTY

SunStar Heating Products (SunStar) warrants the original residential owner of any SunStar Patio Heater Model #PHS40 and #PHJ40 (patio heaters) that it will be free from defects in material and workmanship under normal use and service for a period of one year from the date of purchase. The patio heater shall be installed, used and maintained strictly in accordance with manufacturer's instructions. SunStar's sole obligation under this warranty is limited to providing the purchaser at no charge and upon proof of purchase (including original sales receipt or invoice and model number and serial number) with parts necessary to repair the patio heater; provided the purchaser (if requested) returns any parts needing replacement to the SunStar Service Center (as provided below) at the purchaser's expense.

COMMERCIAL OR RENTAL WARRANTY

SunStar Heating Products (SunStar) warrants the original residential owner of any SunStar Patio Heater Model #PHS40 and #PHJ40 (patio heaters) that it will be free from defects in material and workmanship under normal use and service for a period of 120 days from the date of purchase. The patio heater shall be installed, used and maintained strictly in accordance with manufacturer's instructions. SunStar's sole obligation under this warranty is limited to providing the purchaser at no charge and upon proof of purchase (including original sales receipt or invoice and model number and serial number) with parts necessary to repair the patio heater; provided the purchaser (if requested) returns any parts needing replacement to the SunStar Service Center (as provided below) at the purchaser's expense.

WHAT IS NOT COVERED

This warranty shall not apply: (a) to circumstances where gas pressure to each heater is higher than that specified for each heater; (b) to circumstances where the type of gas is different than the type of gas noted on the name plate for each heater, (c) to water damage to gas controls; and (d) to any heater or component, which has been repaired or replaced with other than factory parts, modified in any way, misused or damaged, or which have been used contrary to the manufacturer's written instructions; (e) to improper assembly or improper hook up; (f) to damage or repairs that result from spiders or other insect nesting (g) to damage due to weather conditions; (h) to normal wear and tear such as discoloration to the finish, scratches, chips, abrasion, or fading from exposure to sunlight or other atmospheric conditions; (i) to any component failure caused by abuse, transportation or misuse.

Additionally this warranty does not imply or assume responsibility for consequential damages that may result from the use, misuse or improper installation of this heating appliance and in no event shall SunStar be responsible for such damages. This warranty does not cover claims, which do not involve defective workmanship or materials.

DUTIES OF THE OWNER

Travel, diagnostic cost, service labor, labor to repair the defective appliance and freight charges on warranty parts will be the responsibility of the owner. A bill of sale, canceled check, or payment record should be kept to verify the purchase date and the remaining warranty period. Original carton should be kept for warranty return of unit.

YOUR RIGHTS UNDER STATE LAW

This warranty gives you the specific legal rights and you may also have other rights, which may vary, from state to state.

HOW TO GET SERVICE

All parts or products returned due to defects must be shipped prepaid to an Authorized SunStar Service Center. Please contact your SunStar dealer for service details. If, after contacting your SunStar dealer, service received has not been satisfactory, contact: SunStar Service Center, P.O. Box 36271, Charlotte, NC 28236 or call at (704) 372-3486;

July 2015 - 22 - Form 44080000

