

Table Top Patio Heater

INSTRUCTION MANUAL

MODEL: HPS-B



- Certified by international recognized standards.
- The infra-red with heat wave outdoor heater.
- Variable control gas valve with electric push igniter.
- Steel with powder coated or stainless steel.
- 880 mm free table top.
- Cover with extend warming area.

Keep the instructions for future reference



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WARNING SAFETY RULES

PLEASE READ THE FOLLOWING SAFETY RULES PRIOR TO OPERATION OF THE HEATER

FOR YOUR SAFETY

If you smell gas:

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

FOR YOUR SAFETY

1. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
2. 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

WARNING: Improper installation, adjustment, alteration, service or maintenance Can cause injury or property damage. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

READ SAFETY REQUIREMENTS BEFORE OPERATION

- The installation must conform with local codes or, in the absence of local codes, with either the National Fuel Gas Code, Propane Installation Code.
- This outdoor gas appliance is not intended to be installed in or on recreational vehicles and/or boats.
- Maintain proper clearances from combustible construction the specific minimum clearances from such construction to the sides and back of the outdoor gas appliance.
- Inspect the hose before each use of the outdoor gas appliance. If it is evident there is excessive abrasion or wear out, or the hose is cut, it must be replaced prior to this outdoor gas appliance being put into operation. The replacement hose shall be the same length and the equivalent quality.
- Properly locating the gas hose, including locating the hose out of pathways where people may trip over it or in areas where the hose may be subject to accidental damage.
- Maintenance Instruction
 - Keeping outdoor gas 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.
 - Visually checking burner flames.
 - Cleaning this outdoor gas appliance, including special surfaces, with recommended cleaning agents, if necessary.
 - Checking and cleaning burner tubes for insects and insect nests, A clogged tube can lead to a fire beneath the grill.
- Maintain adequate clearance around air openings into the combustion chamber, clearances from combustible material, provisions accessibility and for combustion and ventilating air supply.
- Certain materials or items, when stored under the appliance, will be subjected to radiant heat and could be seriously damaged.
- Do not move the appliance when in operation.
- Shut off the valve at the gas cylinder or the regulator before moving the appliance.
- The tubing or the flexible hose must be changed within the prescribed intervals.
- Use only the type of gas and the type of cylinder specified by the manufacturer.
- In case of violent wind particular attention must be taken against tilting of the appliance.
- For use outdoors or in amply ventilated areas.
- An amply ventilated area must have a minimum of 25% of the surface area open.
- The surface is the sum of the walls surface.

WARNING:

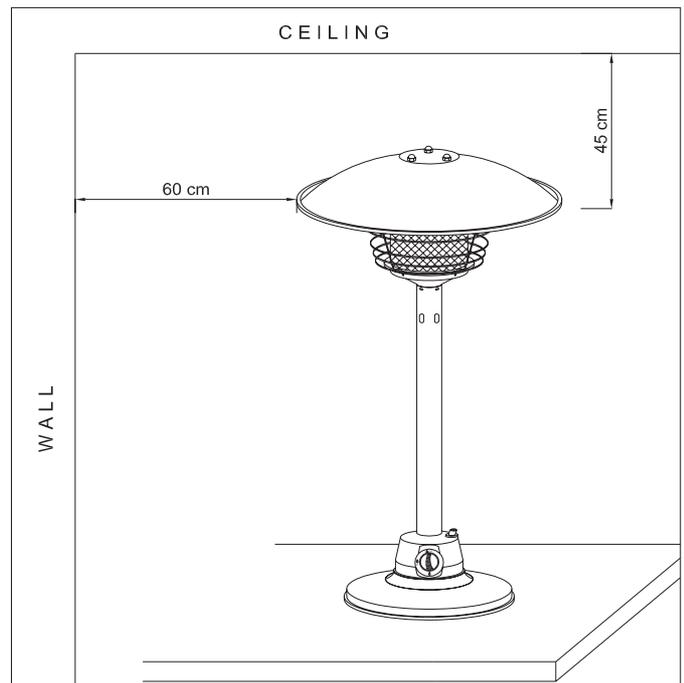
1. Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.
2. Young children should be carefully supervised when they are in the area of the heater.
3. Clothing or other flammable materials should not be hung from the heater, or placed on or near the heater.
4. Any guard or other protective device removed for servicing, the appliance must be replaced prior to operating.
5. Installation and repair should be done by a qualified service person. The heater should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required as necessary. It is imperative that control compartment, burners and circulating air passageway of the appliance be kept clean.

SAFETY RULES FOR OUTDOOR GAS APPLIANCE

- This outdoor gas appliance shall be used only outdoors and shall not be used in a building, garage or any other enclosed area. When used in indoor or enclosed area may cause personal injury or property damage.
- If this outdoor gas appliance is not use, the gas must be turned off at the supply cylinder.
 - Storage of this outdoor gas appliance indoors is permissible only if the cylinder is disconnected and removed from the outdoor cooking gas appliance.
 - Cylinders must be stored outdoors in a well-ventilated area out of the reach of children. Disconnected cylinders must have threaded valve plugs tightly installed and must not be stored in a building, garage or any other enclosed area. This appliance must be installed and the gas cylinder stored in accordance with the regulations in force.
- The pressure regulator and hose assembly supplied with the outdoor gas appliance must be used. Replacement pressure regulators and hose assemblies must be those specified by the manufacturer.
- The cylinder supply system must be arranged for vapor withdrawal.
- The cylinder used must include a collar to protect the cylinder valve.

PORTABLE HEATER STAND AND LOCATION

- The garden table heater is primarily for outdoor use only. Always ensure that adequate fresh air ventilation is provided.
- Always maintain proper clearance to combustible materials, i.e. top 45 cm and sides 60 cm minimum.
- Garden table heater must be fixed on a stable and strong table made of non-flammable materials such as wood, stone, glass, metal, etc. Height of the table must be 80cm in minimum.
- Never operate heater in an explosive atmosphere like in areas where gasoline or other flammable liquids or vapors are stored. Distance between gas cylinder and out door gas appliance must be 1m in minimum.



GAS REQUIREMENTS

- Use propane or butane gas only.
- Maximum inlet pressure of propane regulator must not exceed 100 mbar.
- A minimum supply pressure of 28 mbar is required for the purpose of input adjustment for propane gas.
- The pressure regulator and hose assembly to be used must conform to local standard codes.
- The installation must conform to local codes, or in the absence of local codes, with the standard for the storage and handling of liquid petroleum gases.
- A dented, rusted or damaged propane tank may be hazardous and should be checked by your tank supplier. Never use a propane tank with a damaged valve connection.
- The propane tank must be arranged to provide for vapor withdrawal from the operating cylinder.
- Never connect an unregulated propane tank to the heater.
To change the gas cylinder in a amply ventilated area, away from any ignition source (candle, cigarettes etc.).

PROCEDURE FOR LEAKAGE TEST

NEVER CONNECT AN UNREGULATED GAS SUPPLY TO APPLIANCE PRECAUTIONS

- Periodically check the whole gas system for leaks.
- Immediately check for leaks if smell of gas is detected.
- Extinguish all open flames during leakage test or when smell of gas is detected.
- Never smoke while performing leak test.
- If you cannot stop a leak, turn off the gas supply immediately and contact the dealer where you bought your heater unit, or your gas supplier.
- The appliance must be checked with a full gas tank. DO NOT use the heater until you have performed leak test on all the connections and verified that your unit does not leak.
- Use only parts recommended by the manufacturer. Substitution can void the warranty.

TESTING FOR LEAKAGE

Gas connections on the appliance are leak tested at the factory prior to shipment. Possible mishandling of the appliance during the shipment might contribute to product integrity as a whole. A complete gas leakage test must be performed again at the installation site. Please follow the procedure below for leakage test.

- Make a soap solution of one part liquid detergent and one part water. The soap solution can be applied with spray bottle, brush or rag. Soap bubbles will appear where a leak is present.
- Make sure the safety control valve is in the "OFF" position.
- Turn ON the gas supply and check for bubbles from the hoses and connections. Presents of bubble means that a leak path is present.
- If a leak is present, turn OFF the gas supply immediately, tighten any leaking fitting, turn gas supply ON and recheck. Check that the regulator seal is correctly fitted before use.

VISUALLY CHECKING BURNER FLAMES

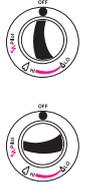
The flame pattern at the emitter grid should be visually checked whenever the appliance is operated. Under the following conditions the appliance should be turned off immediately and NOT operated again until repair are made:

- When the pilot flame extends more than 1/2 inch beyond surface of the emitter grid.
- When black soot accumulates on the emitter grid.

OPERATION AND STORAGE

TO TURN ON THE HEATER

1. Turn on the valve on the gas supply completely.
2. Firmly press down on the variable control knob for approximately 20 seconds.
3. While holding down on the control knob, Turn the variable control knob to horizontal position. Press the igniter button several times until the pilot flame lights. Release the control knob when the pilot flame comes on.
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 maximum position for about 5 minutes, then switch to a desire temperature position.

TO TURN HEATER AND PILOT OFF

1. Turn control knob to “Pilot” position.
2. Then , press down lightly and turn to “OFF” position.
3. Turn the gas tank off completely.



Variable Control Knob

TO STORE THE HEATER UNIT

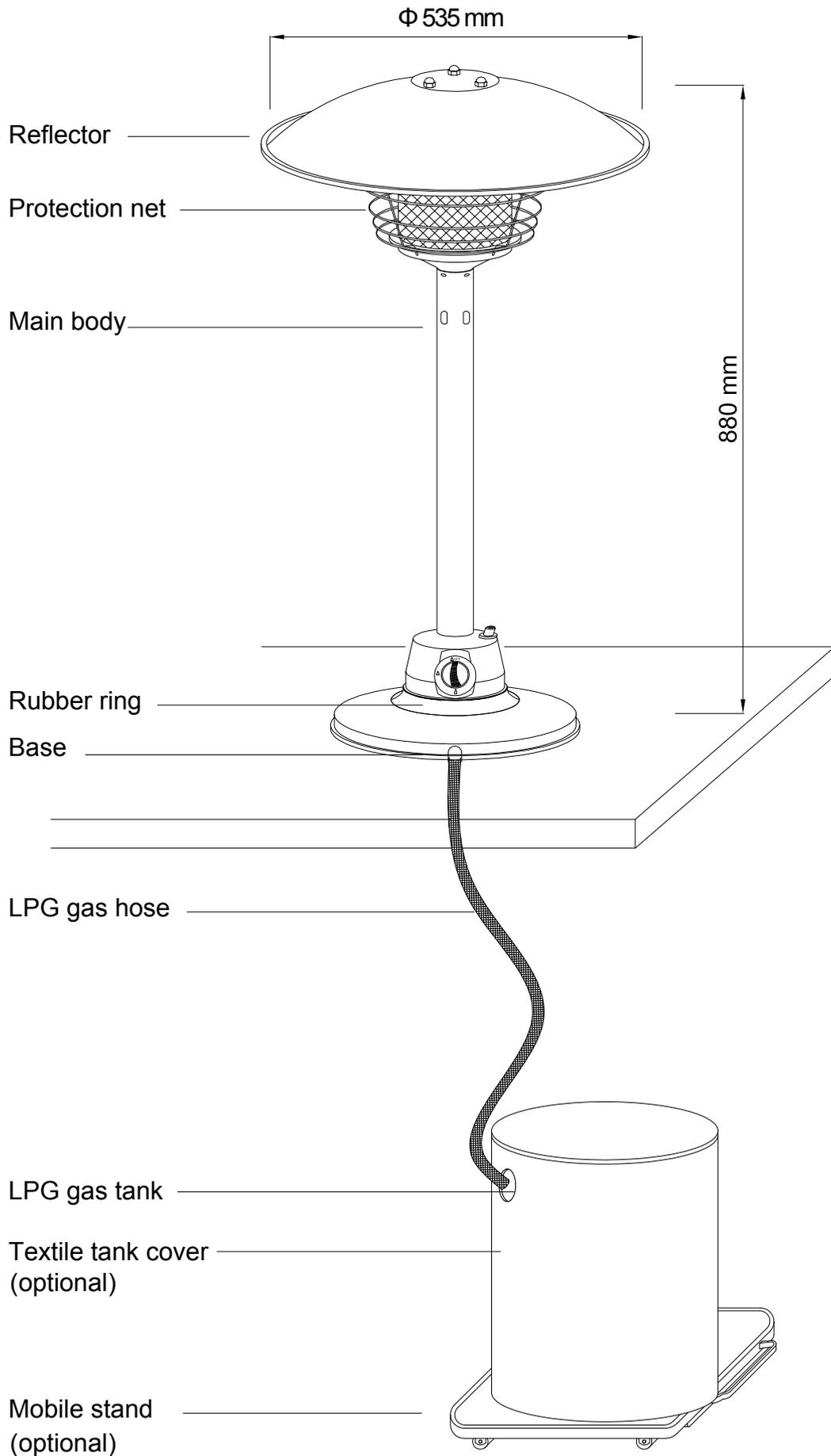
1. Turn the gas tank to complete closed position.
2. Remove the pressure regulator and the hose attachment.
3. Inspect the gas tank for damage. If you suspect that your tank is damaged, return it to your gas tank supplier.
4. Store the gas tank in a well-ventilated area. Never store the gas tank below ground (for example, basement).

CLEANING AND CARE

1. Wipe off tarnished surfaces with soft, moist rag.
2. Do not use harsh chemical or abrasives to clean the heater housing. If necessary, use mild detergent.

Improper Lighting Procedures May Cause Personal Injury Or Property Damage.

PARTS AND SPECIFICATION



A. Construction and characteristics

- Gas heater for garden table
- Textile tank cover (optional)
- Gas hose connections with metal loop (screw caps for Germany)
- Stainless steel flame screen
- Heat emission from reflector

B. Specification

- For outdoor use only
- Uses propane or butane gas only
- Max. wattage: 4,000 watts
- Weight: 8.5 kgs
- Height: 880 mm approx
- Consumption:

GAS CATEGORY:	I ₃₊ (28-30/37)		I _{3B/P} (30)	I _{3B/P} (50)	I _{3B/P} (37)
TYPES OF GAS:	Butane	Propane	LPG Gas Mixtures	LPG Gas Mixtures	LPG Gas Mixtures
GAS PRESSURE:	28-30 mbar ✓	37 mbar	30 mbar	50mbar	37mbar
CONSUMPTION:	150-290g/h	220-400g/h	190-350g/h		

- With CE certificates

C. Table of injector

GAS CATEGORY:	I ₃₊ (28-30/37)		I _{3B/P} (30)	I _{3B/P} (50)	I _{3B/P} (37)
TYPES OF GAS:	Butane	Propane	LPG Gas Mixtures	LPG Gas Mixtures	LPG Gas Mixtures
GAS PRESSURE:	28-30 mbar ✓	37 mbar	30 mbar	50mbar	37mbar
TOTAL HEAT INPUT (Hs): (Qn)	4kW (290g/h)				
INJECTOR SIZE:	1.00 mm for main burner 0.18 mm for pilot burner			0.90 mm for main burner 0.18 mm for pilot burner	0.95 mm for main burner 0.18 mm for pilot burner

- The hose and regulator assembly must conform to local standard codes.
- Regulator outlet pressure should meet the corresponding gas category in the table of injector.
- The appliance requires approved hose in 1.4m length.
- Marking on the injector, for example, 1.00 means that the size of the injector is 1.00 mm.

ASSEMBLY PARTS

Tools needed:

- Adjustable opening wrench (2) 20 cm long
- Slip joint pliers 23 cm long
- Philips screwdriver w/ medium blade
- Teflon plumbing tape for joints
- Spray bottle of soap solution for leakage test

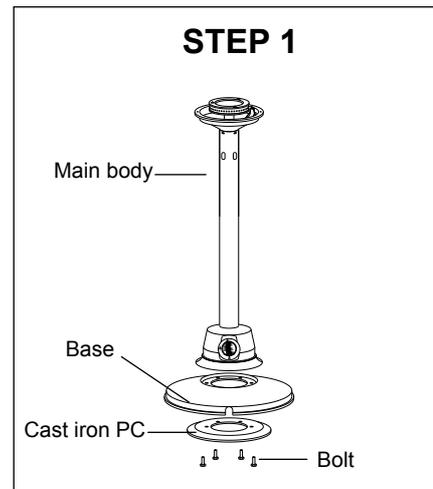
Other parts supplied:

- 3 pcs M6 castle nuts
- 4 pcs M6×16mm bolts
- 4 pcs M4×8 mm bolts
- 9 pcs Φ 6 mm washers
- Reflector Φ 535 x (D)100 mm
- Textile tank cover Φ 320 x (H)600 mm (optional)
- PVC mobile stand (L)375 x (W)334 x (H)53 mm (optional)

ASSEMBLY PROCEDURE

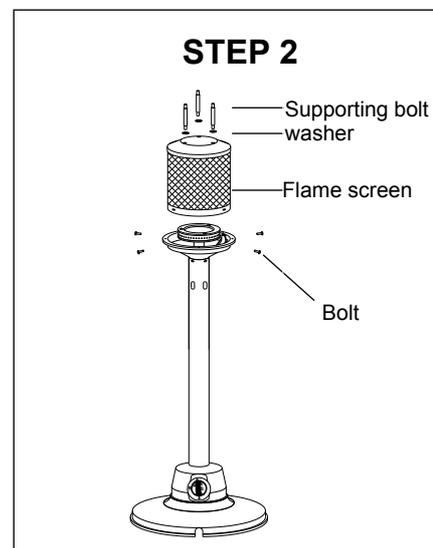
STEP 1:

- 1-1. Put the base and cast iron piece under the main body in the picture.
- 1-2. Use 4 pcs M6×20 mm bolts to join the base & cast iron piece and the main body.
- 1-3. Tighten each of the bolts.



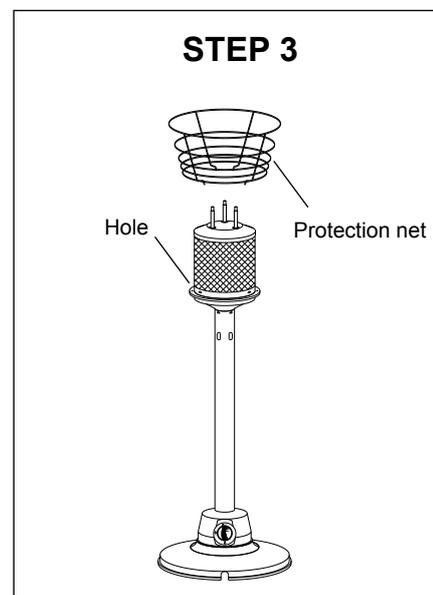
STEP 2:

- 2-1. Join 3pcs supporting bolts & 3pcs washers to the flame screen.
- 2-2. Put the flame screen into net base.
- 2-3. Use 4 pcs M4×8 mm stainless steel bolts to join the flame screen and net base as shown.
- 2-4. Tighten each of the bolts.



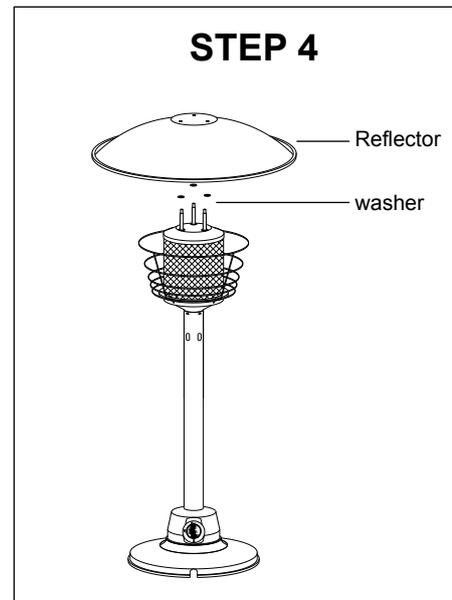
STEP 3:

- 3-1. Put the protection net cover the net base, aim at 4-Ø3mm holes around the base as shown.



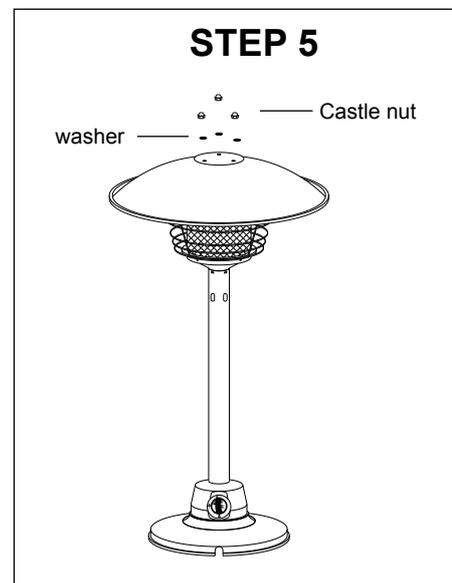
STEP 4:

- 4-1. Set 3 pcs washers above the 3 pcs supporting bolts.
- 4-2. Put reflector canopy onto the top of flame screen aligning through the 3 pcs supporting bolts.



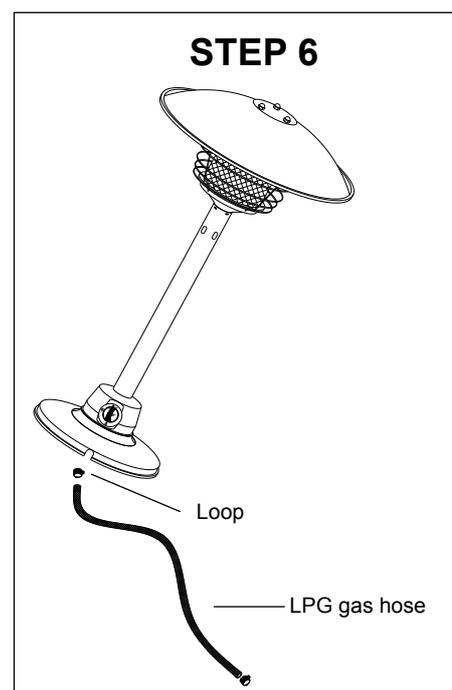
STEP 5:

- 5-1. Place 3 pcs castle nuts & 3 pcs washers on each reflector supporting bolts.
- 5-2. Tighten each of the castle nuts.



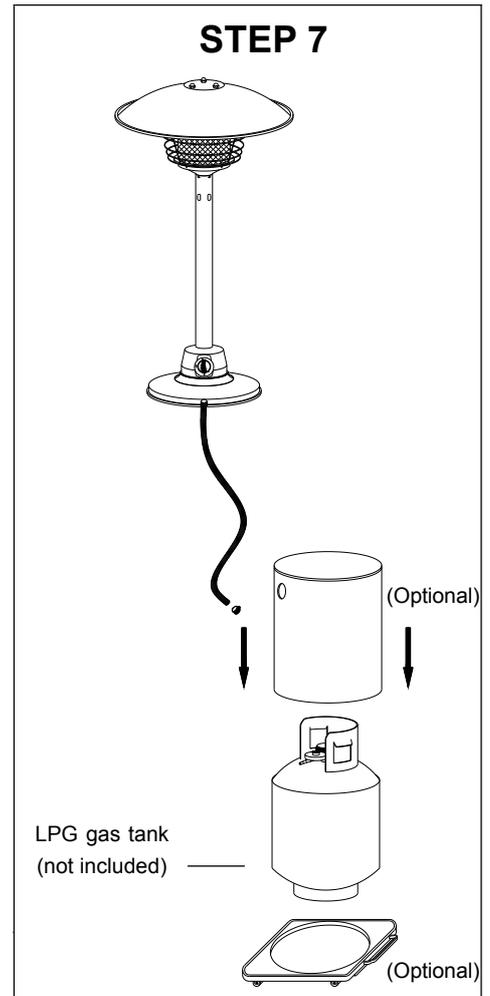
STEP 6:

- 6-1. Connect the LPG gas hose (not included) to the table heater gas inlet connector with a loop.
- 6-2. Tighten the loop.



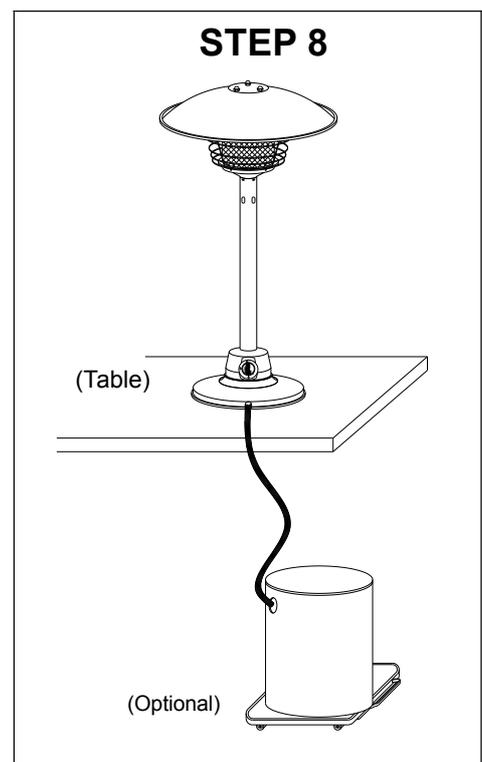
STEP 7:

- 7-1. Connect the regulator to the LPG gas tank and tighten it by adjustable wrench.
- 7-2. Connect the end thread of inlet gas hose to the regulator as shown.
- 7-3. Put the LPG gas tank on mobile stand.



STEP 8:

- 8-1. Adjust the gas tank to advisable position (push the mobile stand), for example under the table.



PROBLEMS CHECK LIST

PROBLEM	PROBABLE CAUSE	SOLUTION
Pilot will not light	Gas valve maybe OFF	Turn the gas valve ON
	Tank fuel empty	Refill LPG tank
	Opening blocked	Clean or replace opening
	Air in supply system	Purge air from lines
	Loose connections	Check all fittings
Pilot will not stay on	Debris around pilot	Clean dirty area
	Loose connections	Tighten connections
	Thermocouple bad	Replace thermocouple
	Gas leak in line	Check connections
	Lack of fuel pressure	Tank near empty. Refill LPG tank.
Burner will not light	Pressure is low	Tank near empty. Refill LPG tank.
	Opening blocked	Remove and clean
	Control not ON	Turn valve to ON
	Thermocouple bad	Replace thermocouple
	Pilot light assembly bent	Place pilot properly
	Not in correct location	Position properly and retry