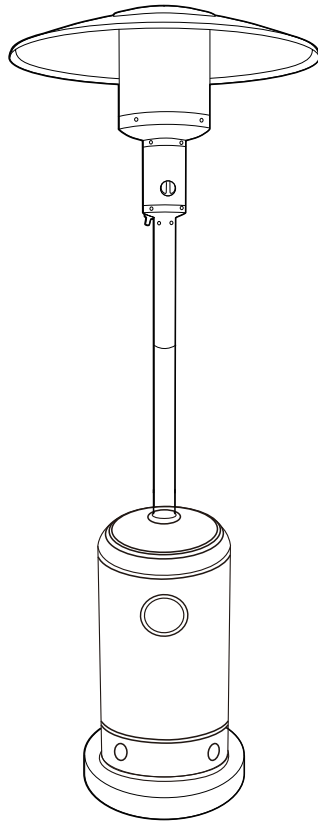


# STEEL PATIO HEATER

Model Number: PH02-S, PH02-SS



## DANGER

If you smell gas:


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

## WARNING

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance. An LP-cylinder not connected for use shall not be stored in the vicinity of this or any other appliance.

## WARNING

For outdoor use only.

 **WARNING:** This product can expose you to chemicals including Lead and Lead Compounds, which are known to the state of California to cause cancer, and Carbon Monoxide, Lead and Lead Compounds which are known to the state of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## WARNING

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Read the owner's manual thoroughly before installing or servicing this equipment. If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

Save these instructions for future use. If you are assembling this unit for someone else, give this manual to him or her and read and save for the future.



## DANGER



### **CARBON MONOXIDE HAZARD**

This appliance can produce carbon monoxide which has no odor.

Using it in an enclosed space can kill you.

Never use this appliance in an enclosed space such as a camper, tent, car or home.

# Owner's Manual

## SAFETY INFORMATION

Before you assemble or operate this unit, please carefully read this entire manual. Failure to do so may result in a fire, explosion, injury or death.

### WARNING

- The installation of this unit must adhere to local codes or either the National Fuel Gas Code, ANSI Z223.1/NFPA54, OR CAN/CGA-B149.1, National Gas and Propane Installation Code.
- THIS UNIT IS INTENDED FOR OUTDOOR USE ONLY! This product shall be used outdoors, in a ventilated space and shall not be used in any enclosed area.
- This unit is to be used with propane gas only! (sold separately)
- Do not attach a remote gas supply to this unit.
- Only use propane gas for this unit.
- This unit is not intended for natural gas.
- Converting this unit to natural gas is dangerous and not recommended. The conversion of this unit will void the manufacturer warranty.
- Do not use any solid fuel or charcoal for this unit.
- If the propane gas tank is leaking gas, you may hear, see, or smell a hiss. Do the following:
  1. Disconnect the propane gas tank.
  2. Do not attempt to fix the problem yourself.
  3. Contact your gas supplier or fire department for help.
- Applying too much propane may result in gas pooling and will not burn. Allow fresh air into the unit so that the remaining gas may escape.
- Do not use a flame to check for gas leaks.
- The max. inlet supply pressure: max. Gas supply 11 in w.c. (2.74kPa)
- Use LP propane tanks with the following dimensions: diameter 12 in, height 18 in.
- You must use a propane tank that has a collar to protect the gas valve.
- DO NOT fill tank over 80 percent full.
- The tank system must be set up for vapor withdrawal.
- Discontinue use if any part of the propane tank is damaged. Rust and dents may be hazardous and should be inspected by a gas supplier.
- Do not burn anything other than the provided materials for this patio heater.
- Do not operate unit until all parts are fully assembled.
- Do not paint or color any part of this heating unit.
- Unit may be hot while in use, do not attempt to move it while in use.
- Never leave this heating unit unattended while in use.
- This unit is not intended for cooking.
- Keep any flammable items away.
- Keep a safe distance to avoid burning skin or clothing.
- Do not sit or rest hands or feet on this heating unit.
- Never place hands or fingers on upper portion of this unit while in use.
- Keep all electrical cords and fuel supply hose away from heated surfaces.
- Combustible material should not be within 24 inches of the top of the unit, or within 36 inches around the entire unit.
- Keep the appliance area clear and free from combustible material, gasoline and other flammable vapors and liquids.
- If the flame goes out while burning, turn the gas valve off. Wait 5 minutes before repeating the initial lighting procedure. Once you have a flame started, hold down the control knob for 1 minute.
- Do not add water into the unit.
- Do not operate unit if any part has been under water. Call a service technician to replace any

damaged parts should this occur.

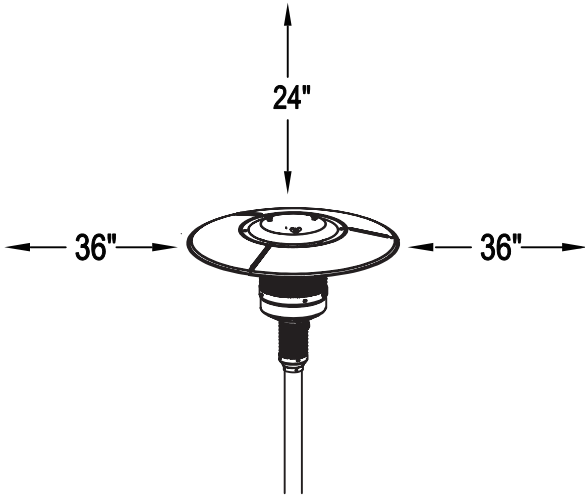
- Do not disconnect any part while unit is in use.
- Do not store a spare propane tank on or near this unit.
- If the heating unit is indoors, detach the propane tank and leave outdoors.
- Do not operate on a boat or vehicle. This unit must be used on a flat surface and outdoors ONLY.
- Always remove protective cover before operating (if applicable).
- Check for leaks after not using the unit for long periods of time.
- **Children should never operate this unit. Children must be supervised while near this unit.**
- Keep gas tank at least 5 feet away from unit when lit. (if external tank)
- The maximum gas supply pressure is 250psi.
- **All installation and repair should be done by a qualified professional. This unit should be inspected annually and cleaned regularly.**
- Inspect all elements of this heating unit before each use. If there is damage, the burner must be replaced.
- Be aware of the hazards of high temperatures and stay away from the unit to avoid any burns or injury.
- The gas supply tank should be constructed and marked with the specifications for the LP gas tanks of the U.S. Department of Transportation or the National Standard of Canada CAN/CSA-B339, LP gas tanks, spheres and tubes for Transportation of Dangerous Goods; and Commission.
- The LP gas tank must have a listed overfilling prevention device and a QCCI or Type I, (CGA810) LP gas tank connection.
- This heating appliance should not be used on plastic or artificial wood decks.
- **Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.**
- **Young children should be carefully supervised when they are in the area of the appliance.**
- **Clothing or other flammable materials should not be hung from the appliance or placed on or near the appliance.**
- **Any guard or other protective device removed for servicing the appliance shall be replaced prior to operating the appliance.**
- **Installation and repair should be done by a qualified service person. The appliance 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 the control compartment, burners and circulating airways of the appliance are kept clean.**

Only use the regulator and hose assembly provided with this unit.

Inspect the burner before use of this unit. If the burner shows any kind of damage, do not operate the appliance.

**NOTE: You must follow all steps to properly assemble this heating item. Make sure the gas valve is turned “OFF” before assembling. Do NOT attempt to assemble without proper tools.**

## SAFETY INFORMATION



**BE CAREFUL: WHEN CERTAIN MATERIALS OR ITEMS ARE STORED ABOVE, BESIDE OR UNDER THIS HEATER WHILE IN USE, THEY WILL BE SUBJECT TO RADIANT HEAT AND COULD BE SERIOUSLY DAMAGED.**

**Combustible materials should not be within 24 inches of the top of the unit, or within 36 inches around the entire unit.**



AA



BB



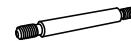
CC



DD



EE



FF



GG



HH



II



JJ



KK



LL



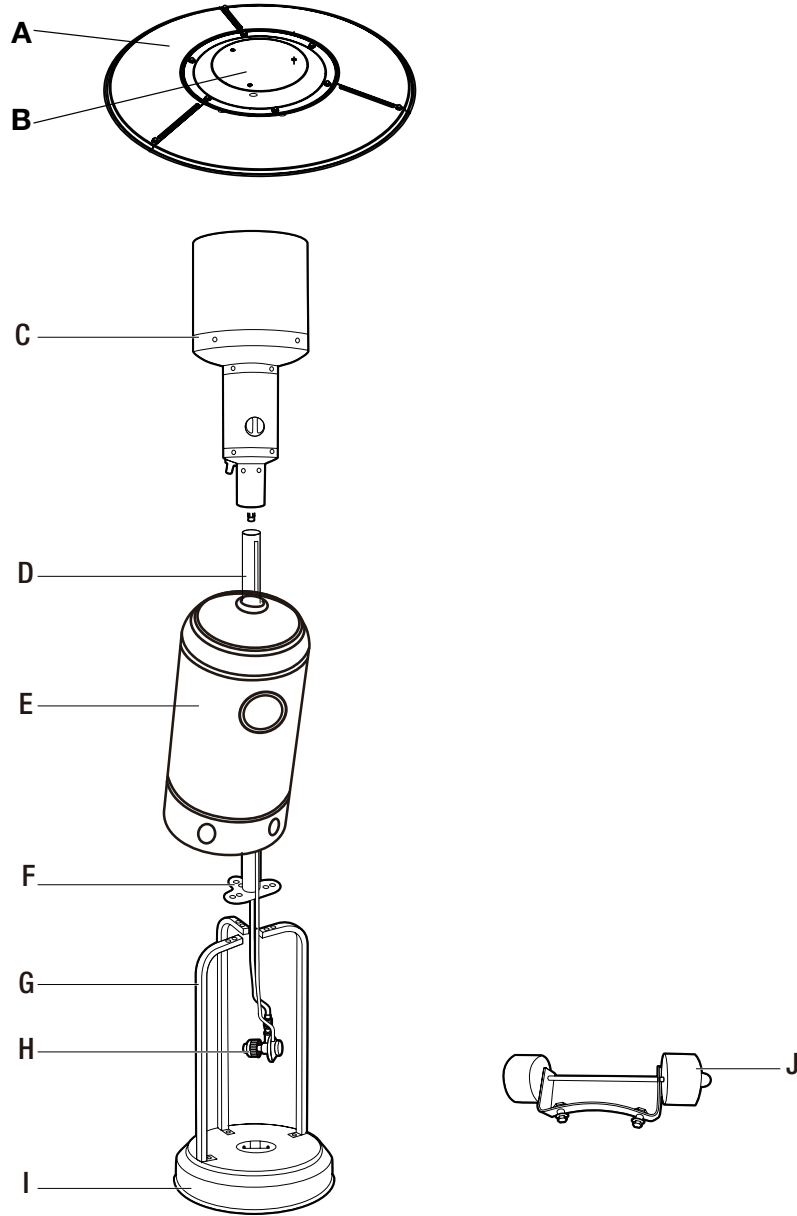
MM

Item	Description	Qty
AA	M6x10 Screw	8
BB	M6 Nut	14
CC	M8 Bolt	3
DD	M6x22 Bolt	6
EE	Wrench	1
FF	Reflector Stud	3
GG	Wing Nut	3
HH	Washer	6
II	Anchoring Arm	3
JJ	Anchoring Nut	3
KK	Cap Nut	9
LL	Small screw	9
MM	Webbing	1

Before beginning assembly of product, make sure all parts are present. Compare parts with package contents list and hardware contents list. If any parts are missing or damaged, do not attempt to assemble the product.

Estimated Assembly Time: 30 minutes

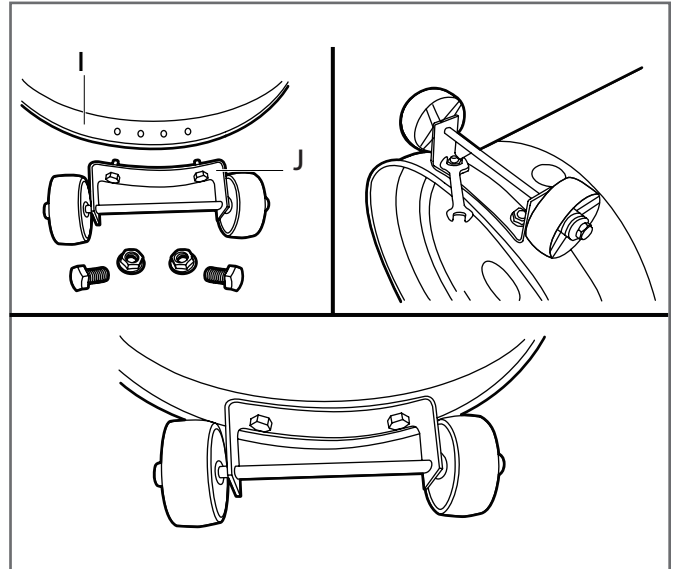
Tools Required for Assembly (not included): Phillips Screwdriver



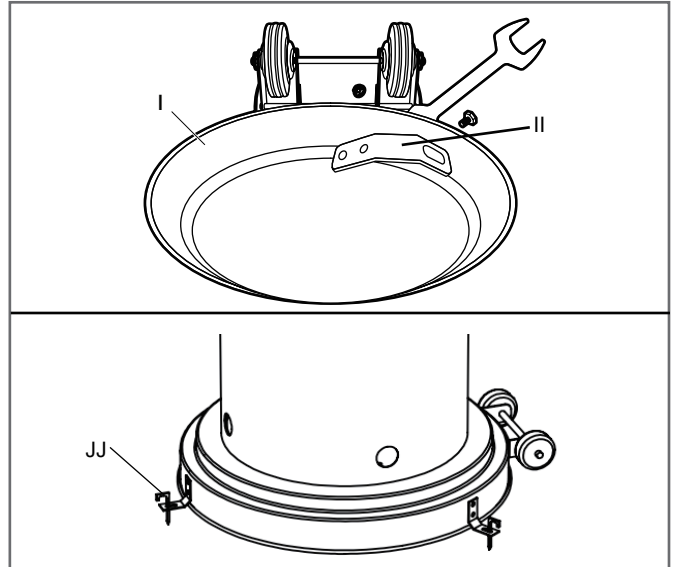
Item	Description	Qty
A	Reflector Panel	3
B	Center Reflector	1
C	Head Assembly	1
D	Post	1
E	Tank Housing	1
F	Post Support	1
G	Support Legs	1
H	Regulator	1
I	Base	1
J	Wheel Assembly	1

# ASSEMBLY INSTRUCTIONS

1. Align the holes in the wheel assembly (J) with the holes in the base (I), attach the wheel assembly to the base using 2 pcs M6x10 screws (AA) and 2 pcs M6 nuts (BB).

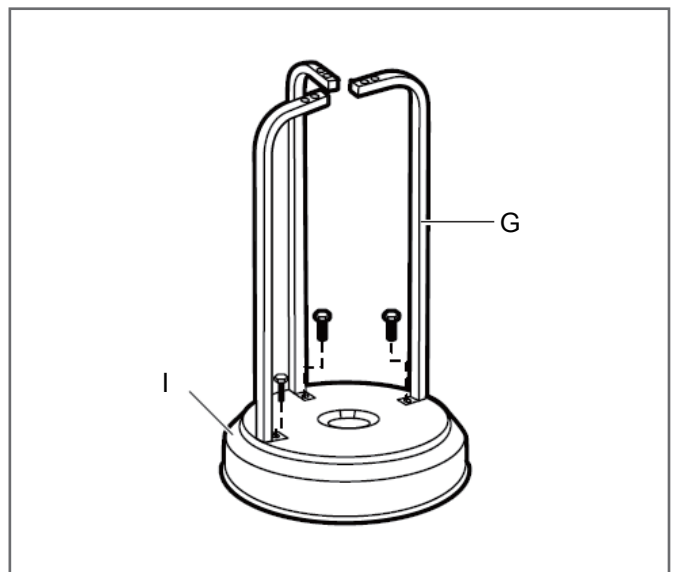


2. Mount the 3 pcs anchoring arms (II) to the holes on the base (I) using 6 pcs M6x10 screws (AA) and 6 pcs M6 nuts (BB).



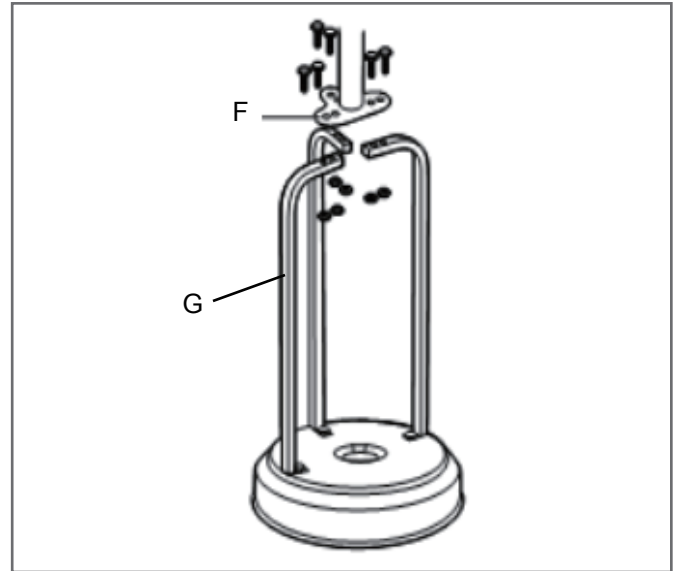
Optional: If you wish, the patio heater can be fixed by hammering the 3 pcs anchoring nuts (JJ) into ground through the anchoring arms after assembly.

3. Attach the 3 pcs support legs (G) to the top of the base (I) using 3 pcs M8 bolts (CC).

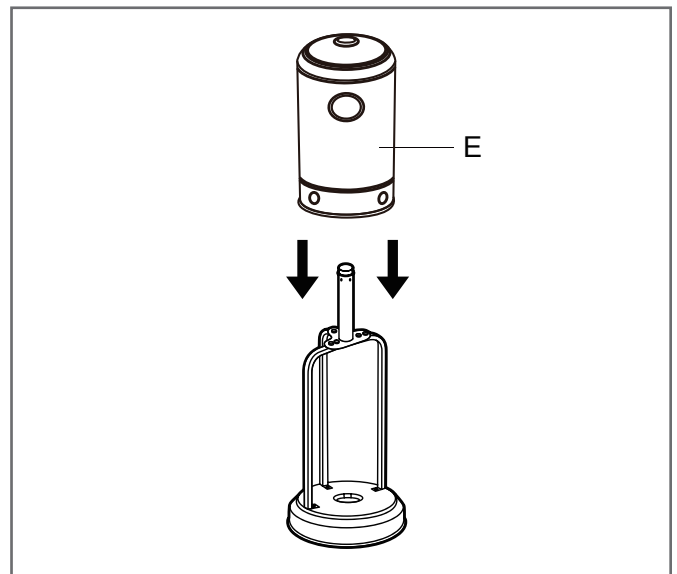


## ASSEMBLY INSTRUCTIONS

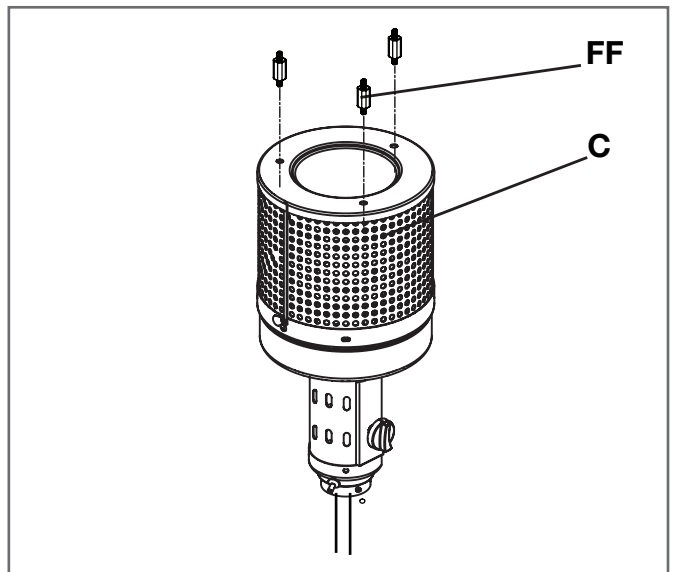
4. Attach the post support (F) to the top of the support legs (G) using 6 pcs M6 x 22 bolts (DD) and 6 pcs M6 nuts (BB).



5. Place the tank housing (E) on top of the assembly.



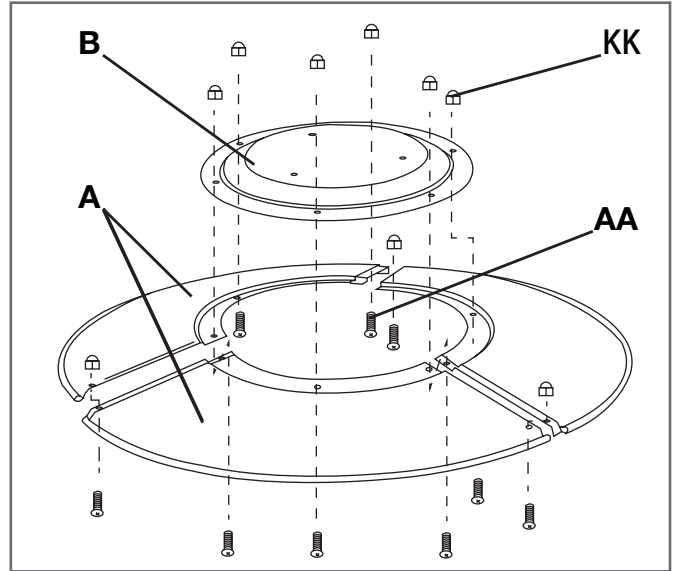
6. Screw the threaded end of the reflector studs (FF) into the top holes of the head assembly (C).



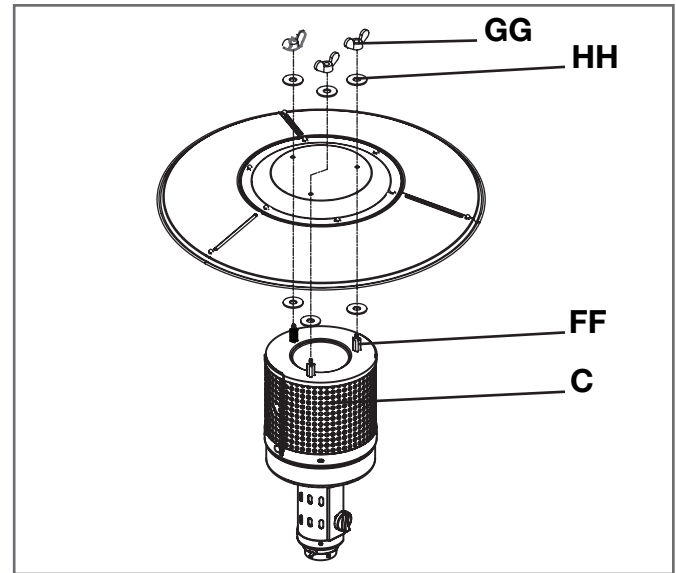
**! WARNING**

Remove plastic protective coating on reflector panel (A) and center reflector (B) before assembling!

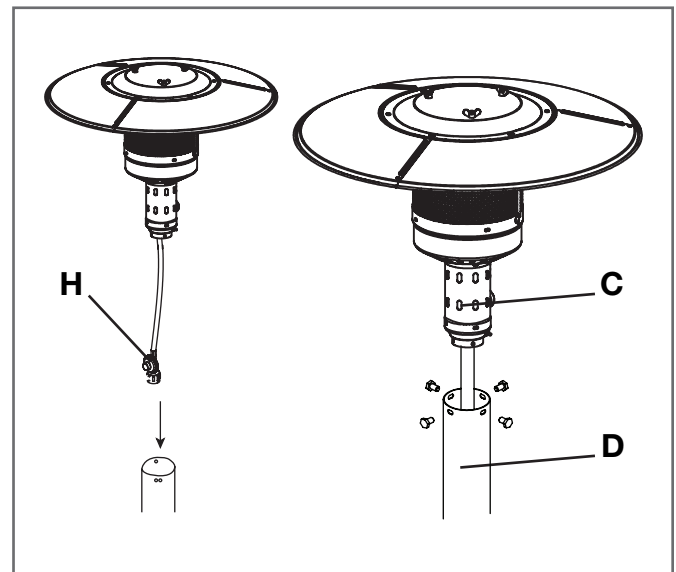
7. Slide two reflector panels (A) together and assemble the outer rim using one small screw (LL) and one cap nut (KK). Repeat this step with the third reflector panel (A). Once completed place the center reflector (B) in the middle and fasten using three M6 screws (AA) and three cap nuts (KK). Tighten all screws tightly.



8. Attach the reflector assembly made in step 7 to the top of the reflector studs (FF) on the head assembly (C). Fasten with six flat washers (HH) and three wing nuts (GG).

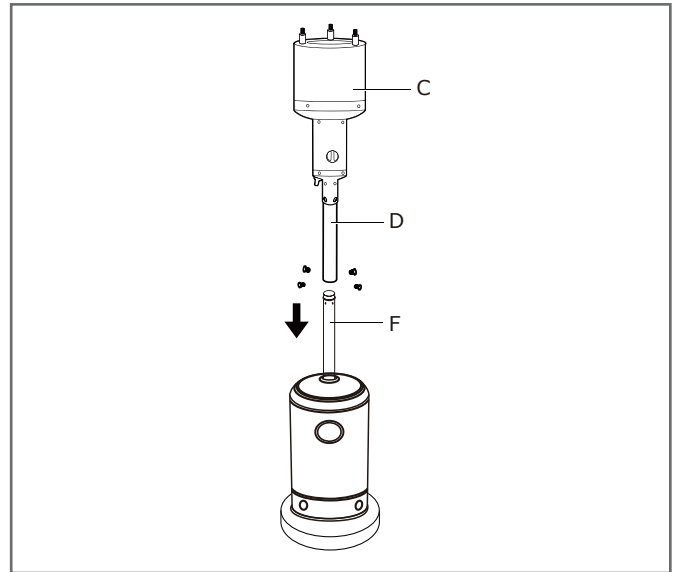


9. Unscrew the four screws that are pre-assembled on the head assembly (C). Place the head assembly (C) into the top of the post (D) by inserting the regulator (H) into the post (D). Tightly fasten the previously removed screws back into the head assembly (C) through the slots at the top of the post (D).

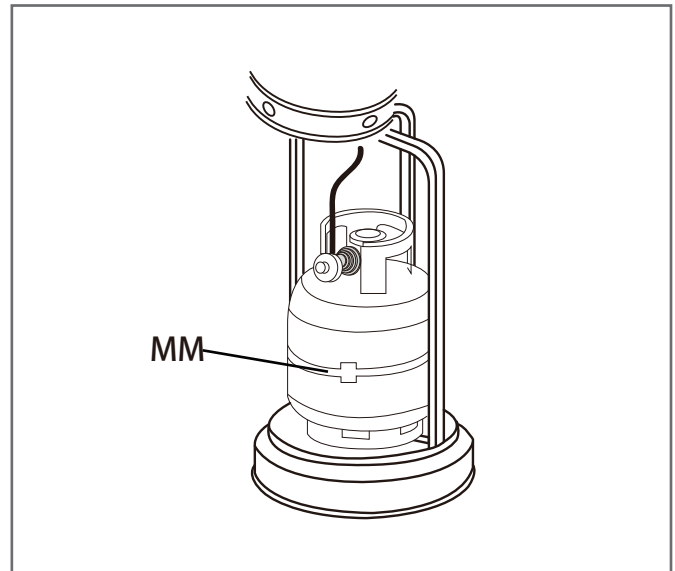


# ASSEMBLY INSTRUCTIONS

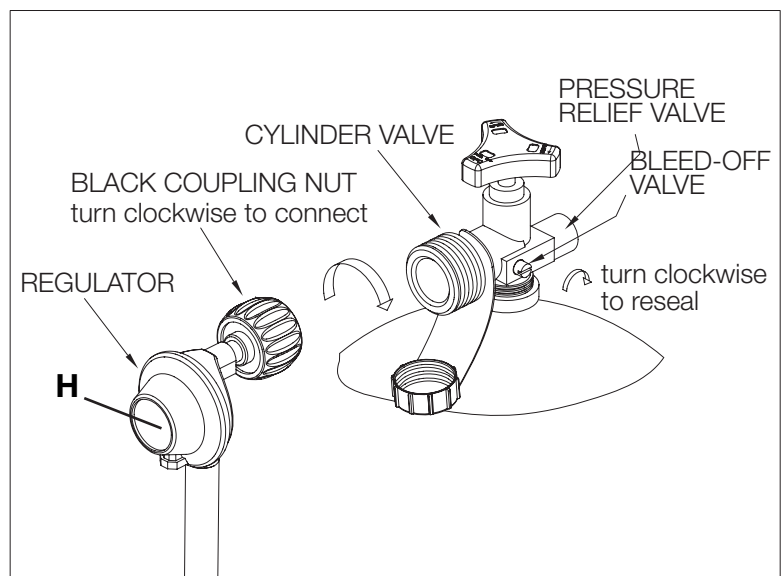
10. Remove the pre-assembled screws from the post support (F) and attach post (D) to the post support (F) using those 4 screws.



11. Place the 20 lb gas cylinder in the center of the base, fasten it with the webbing (MM).



12. Turn the cylinder valve on the tank clockwise to close the propane tank. Attach the regulator (H) to the cylinder valve by turning the regulator coupling nut clockwise. Make sure it is fastened securely and tighten connections by hand only.



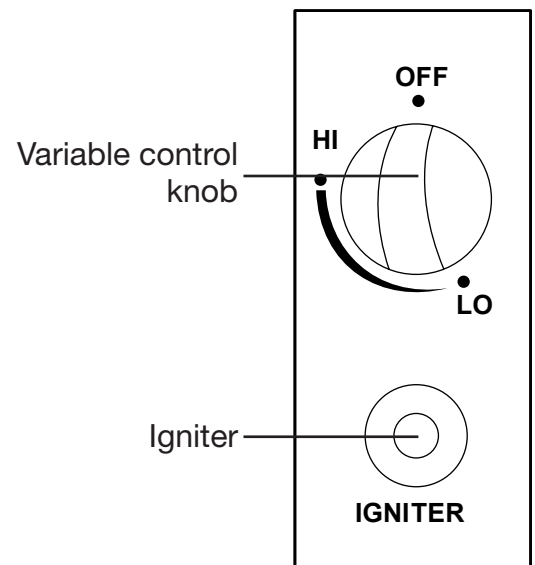
## OPERATION

Before performing a leak test, be sure that no sparks can occur and you are in a spacious outdoor area. Connect the propane gas tank to the regulator and turn the valve on the unit to the “off” position. Brush a soap and water mixture on all connections. Turn the gas supply on; if bubbles occur on any connection there may be a leak. **If you smell gas or a leak is discovered turn the gas valve off, disconnect propane gas tank and do not use the appliance until the leak is repaired.**

Do not use the heating unit without inspecting the gas hose. If there are signs of wear or abrasion you must replace the hose (if applicable).

### To Light

1. Turn on the valve on the gas supply cylinder.
2. Press and turn the variable control knob to the ‘HI’ position.
3. Press down the variable control knob and hold for 30 seconds.
4. While holding down the variable control knob, press the igniter button several times until the burner head flame ignites. Release the variable control knob 10 seconds after the ignition.
5. If a new tank has just been connected, allow at least one minute or more for the air in the gas pipeline to purge out.
6. The flame can be watched and checked from the viewing hole located on the base of the burner.
7. Turn the variable control knob to the ‘LO’ position for 5 minutes or more before turning the knob to desired temperature setting. If a small flame is needed, turn the variable control knob to the ‘LO’ position.
8. If the burner flame goes out accidentally or it is blown out by wind, turn off the heater and wait at least 5 minutes or more to let the gas dissipate before lighting again to avoid possible gas explosion. Repeat steps 2 through 4.



When lit for the first time the heater may emit a slight odor and smoke. This is a normal and temporary condition. Emitter screen will become a bright red due to the heat. The color is more visible at night. Flame patterns should be a blue flame; these flames should not be yellow in color; indicating an obstruction of airflow through the burners.

### To Extinguish

1. Turn control knob clockwise to the “off” position.
2. Close the cylinder valve on the propane gas tank if you don’t intend to use it for a long time.

## MAINTENANCE

- Before performing any maintenance always disconnect propane gas tank.
- Keep the heating item free and clear from combustible materials.
- Visually inspect burner for obstructions and keep tank enclosure free and clear from debris.
- Use a soft brush to get rid of the mild stains, loose dirt and soil after the burner is completely cooled down. Wipe down with a soft cloth.
- Harsh weather conditions may cause stubborn stains, discoloration and possibly rust pitting.
- Permanent damage may occur if powder or solvent comes in contact with painted or plastic components on this heating unit.
- Keep the heating unit stored away from direct sunlight.
- If storing this unit inside, disconnect the propane gas tank from the gas valve.
- Not using manufacturer approved or supplied parts/accessories may result in a defective condition and void the warranty of this heating unit.
- Always place lid (if applicable) or protective cover on heating item when not in use.

# TROUBLESHOOTING

Problem	Cause	Solution
The burner will not light.	The burner injector is clogged.	Clean the burner injector.
	There is low gas supply pressure.	Call your gas supplier.
The burner flame goes off immediately after ignition.	There is low gas pressure.	Call your gas supplier.
The ignition is delayed.	The main burner carryover ports are clogged.	Clean the main burner ports.
	There is low gas pressure.	Call your gas supplier.
The combustion on the burner is inadequate.	There is not enough air.	Check the air passageways and burners for dirt and debris, and clean with compressed air.
The burner flame is low.	The supply hose is bent or twisted.	Straighten the hose and perform a leak test.
	There is blockage in the burner injector.	Clean or replace the burner injector.
The emitter glows uneven.	There is blockage in the burner injector.	Clean or replace the burner injector.
	The base is not on a level surface.	Place the heater on a level surface.
	The gas pressure is low.	Replace the cylinder with a new cylinder.
There is slight smoke and odor during initial operation.	This is residue from the manufacturing process.	This will stop after approximately 30 minutes of operation.
There is thick black smoke.	There is blockage in the burner.	Turn off the heater and let it cool. Remove the blockage and clean the inside and outside of the burner.
The heater produces a whistling noise when the burner is lit.	Air passageways are blocked.	Check the minimum installation clearances and air passageways for debris.
	There is air in the gas line.	Operate the burner until the air is completely purged.
The heater produces a clicking noise just after the burner is lit or turned off.	The metal is expanding and contracting.	This is common with heaters. If noise is excessive, contact a qualified service person.
There is a gas odor even when the control knob is in the OFF position.	There is a gas leak.	Locate and correct the leak immediately.
	The gas control is defective.	Replace the gas control.
There is a gas odor during combustion.	There is foreign matter in the gas or on the burner ports.	Check the gas passageway and burner.
	The heater is burning vapors from paint or impurities in the air.	Stop storing and using odor causing products near the heater.
	There is gas leaking from the regulator and hose connection, the valve and pipe connections, and the pipes.	Locate and correct the leaks, or contact your gas supplier.
There is carbon build-up.	There is dirt or film on the reflector and flame screen.	Clean the reflector and flame screen.