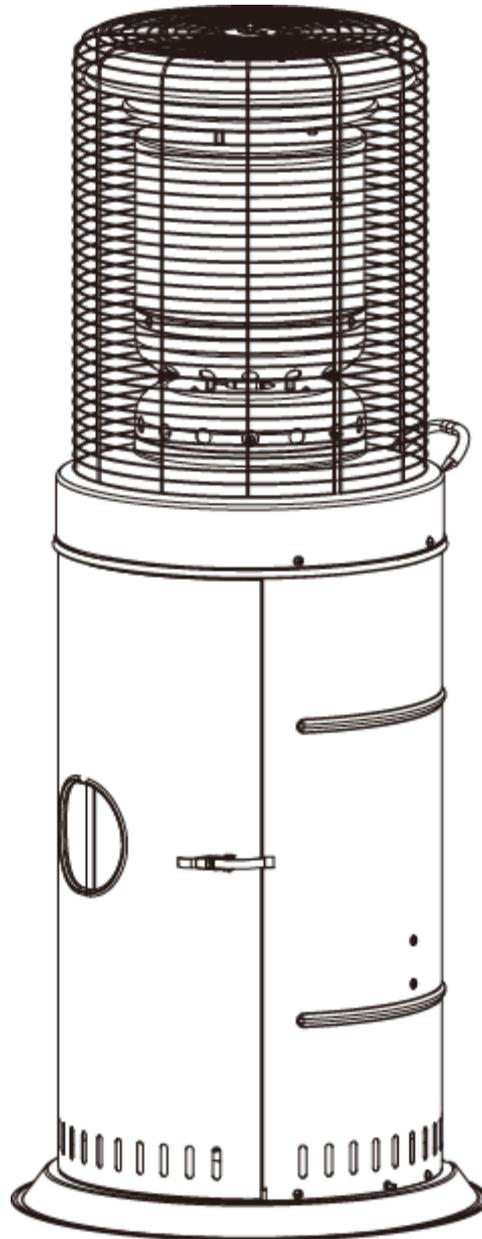


AREA PATIO HEATERS

INSTRUCTION MANUAL

MODEL: H1109F AND H1209F



FOR OUTDOOR USE ONLY !
PLEASE KEEP THE MANUAL FOR FUTURE USE.
THE INSTALLER OR SELLER MUST LEAVE THE MANUAL TO THE CONSUMER.

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WARNINGS

- For outdoor use only !
- For propane gas use only.
- Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage.
- Read the instructions thoroughly before installing or servicing this appliance.
- For your safety, if you smell gas:
 - Shut off the gas to the appliance.
 - Extinguish any open flame.
 - If odor continues, immediately call your gas supplier.
- Do not store or use gasoline or other flammable vapor and liquids in the vicinity of this or any other appliance.
- This appliance must only be used in a well ventilated area.
- This appliance shall not be installed or used indoors, in buildings, garages or any other enclosed area.
- Do not place articles on or against this appliance.
- Do not use or store flammable materials near this appliance.
- **Never hang anything including clothes or other flammable items on the appliance.**
- Do not operate this appliance unless it is fully assembled with burner guard in place.
- **Any guard or other protective device removed for servicing the appliance must be replaced prior to operating the appliance.**
- Do not spray aerosols in the vicinity of this appliance while it is in operation.
- **Children and adults should be alerted to the hazards of high surface temperatures burns and clothing ignition.**
- Young children should be carefully supervised when they are in the area of the appliance
- **Repair should be done by a qualified service person. The appliance must be inspected before use and at least annually by a qualified service person. It is imperative that control compartment, burners and circulating air passages of the heater be kept clean.**
- Prior to assembling your appliance, the following must be reviewed. Compliance with the following should result in satisfactory heater operation. The installation must conform with local codes or authority have jurisdiction.
- The appliance is intended for heating residential and non residential outdoor spaces. The installation must conform with local codes or in the absence of local codes, with the Australian Standard AS/NZS5601.1:2013.
- Adequate clearance around air opening into the combustion chamber, clearances from combustible materials,

provisions for accessibility and for the combustions and ventilating air supply must be maintained at all times when the appliance is operating.

- Combustible materials are considered to be wood, compressed paper, plant fibers, plastic, plexiglas or other materials capable of being ignited and burned. Such materials shall be considered combustible even though flame proofed, fire retardant treated or plastered. Additional clearance may be required for glass, painted surfaces and other materials which may be damaged by radiant or convention heat.
- Heater must be placed on a level and adequate footing and be readily accessible.
- The gas manifold supply pressure must be regulated at 2.75kPa utilizing an AGA approved regulator.
- The appliance must be kept clear and free of combustible materials, gasoline and other flammable vapors and liquids.
- Gas orifices and burner must be kept clear of dirt and cobwebs. Flow of combustion and ventilation air through the perforated portions of the heater must not be obstructed. Cleaning with a soft brush before use and at least every six months is recommended.
- All gas connections should be checked for leaks utilizing a soap solution. Never use a flame for this purpose.
- The flame pattern at the emitter grid should be visually checked whenever heater is operated. If flames extend beyond surface of the emitter grid or black spot is accumulating on the emitter grid or reflector, the heater should be turned off immediately. The heater should not be operated again until the heater is serviced and or repaired.
- Any cleaning agent used on the heater should be of a noncombustible and non corrosive nature.
- The stainless steel emitter grid normally does not require cleaning and should never be painted.
- The hose assembly should be located out of pathways where people may trip over it. The hose must be protected from contact with hot or sharp surfaces both during use and while in storage. The hose assembly should be visually inspected prior to each use of the heater. If excessive abrasion or wear is evident, or the hose is cut, it must be replaced prior to operating the heater. The replacement hose assembly may be obtained from the manufacture.
- Do not use any pressure regulator or hose assembly other than those supplied with the appliance. Replacement pressure regulator and hose assembly must be those specified. Replacement parts may be obtained from the manufacture or your local dealer.
- Installation and use of this heater must conform with local codes or in the absence of local codes, with the Standards of Storage and Handling of Liquefied Petroleum Gases.
- This heater is designed to operate with a 9kg propane cylinder with approved cylinder connection.
- The valve outlet must be maintained in good condition. When the cylinder is not in use, be sure to cover it with a dust cap. A leak test should be performed with soapy water whenever the connecting a new cylinder. Never use a match to test for leaks.
- The propane cylinder must be turned off whenever the heater is not in use. When the heater is to be stored indoors, the propane cylinder and the heater must be disconnected and the cylinder stored in accordance with the Standard for Storage and Handling of Liquefied Gases.
- The heater has been designed with several safety features which include a tip over switch.
- Storage of an appliance indoors with the cylinder attached is only permitted if the size of the cylinder complies with AS/NZS 1596, otherwise cylinders must be stored outdoors in a well ventilated area.
- The guards are fitted to the appliance to reduce the risk of fire or injury from burns and no part of it should be removed.
- The appliance must be protected from exposure to rain.
- Any modification to the heater not described in the installation instructions may be compromise the safety of this appliance. Special concerns are as follows:
 - Do not bypass the thermocouple safety burner.
 - Do not operate the heater without the guard.
 - **Clothing or other flammable materials should not be hung from the heater, or placed on or near the heater. The area above the burner may be extremely hot. Direct contact with these metal surfaces should be avoided in order to prevent burns or clothing ignition.**

ASSEMBLY

Note: Remove any transit protection material before assembly.

Tools required:

- Philips head screwdriver
- 2 adjustable spanners

Step 1.

Place the base on a flat surface. Secure the rear housing to the base with 5pcs M5*10 screws and washers.

Step 2.

Connecting hose & regulator to the burner assembly. (Ignore this step in case hose & regulator is assembled).

IMPORTANT: When fitting or removing the hose & regulator, please use 2 spanners. One is on the brass nut and the other is on the flat edges of the aluminum gas connection. Failure to do it can cause the aluminum gas connection to move and break the gas sealant and cause a leak.

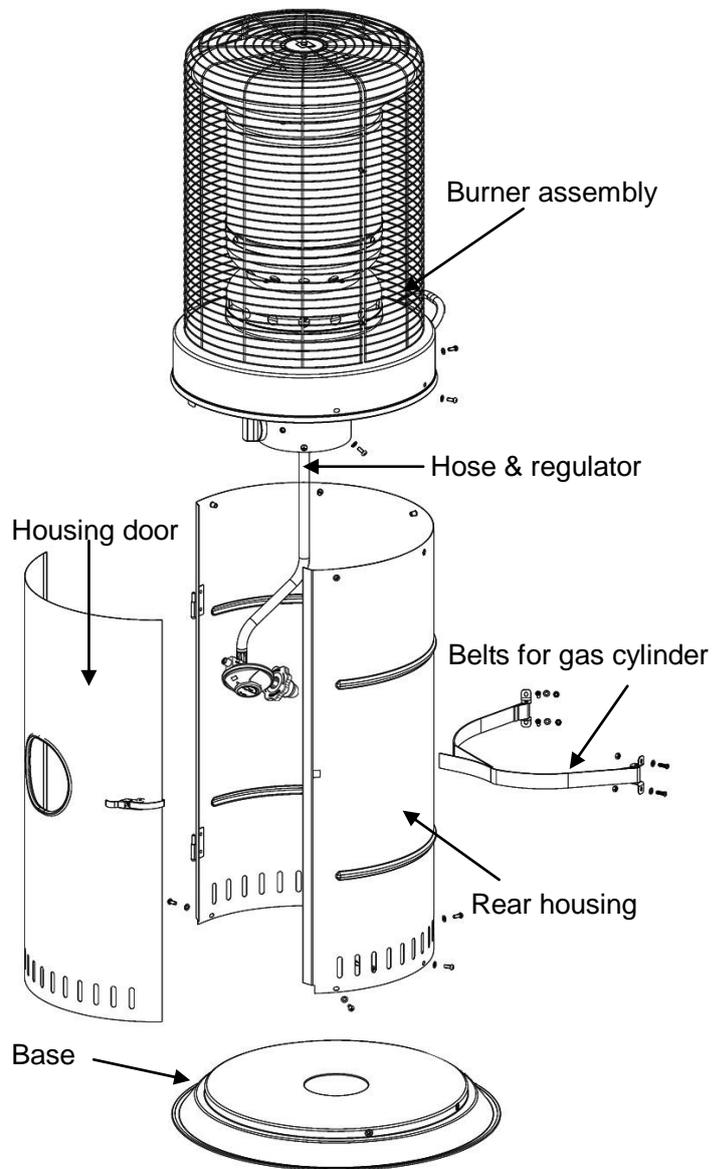
Step 3.

Secure burner head assembly outside of the cylinder housing with 5pcs M5*10 screws and washers.

ATTENTION: To close the door well, lift burner head assembly by one hand to secure 5pcs M5*10 screws and washers with the lowest position of screw holes in burner assembly.

Step 4.

Slide the housing door onto the hinge, close and lock.

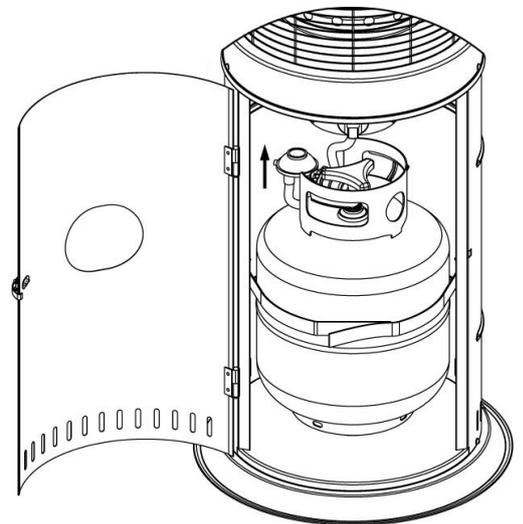


GAS REQUIREMENTS & CONNECTING TO A GAS CYLINDER

- The pressure regulator and hose assembly to be used must conform to local standard codes.
- Never use a gas cylinder with a damaged body, valve, collar, or foot ring. A dented or rusty gas tank may be hazardous and should be checked out by a gas supplier.
- Never connect this appliance to an unregulated gas source.
- When the appliance is not in use, turn the gas cylinder OFF.
- Use 9 kg gas cylinder. Please refer to your gas supplier for suitable gas cylinder.
- Refer to your gas supplier for instructions on the use of your gas cylinder.
- Connect the pressure regulator and hose assembly onto the valve of gas cylinder.
- The gas connection type is left-handed POL type connection
- Tighten all connections firmly or with a spanner where appropriate. The cylinder should be located on the cylinder base.
- Only change gas cylinders outdoors or in a well ventilated area away from naked flames and any other source of ignition.
- The gas cylinder must always be used in an upright position.

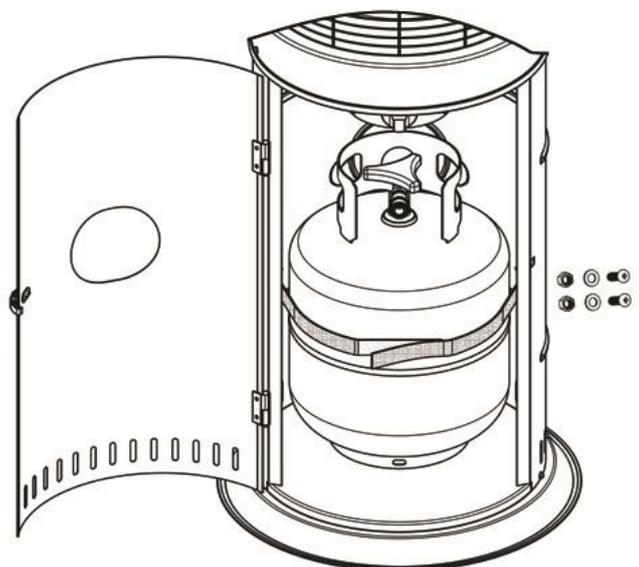
ATTENTION

- ✧ Do not twist or kink gas hose badly that may cause leak of connections
- ✧ Make sure pressure regulator must be used in an upright position as figure showed!
- ✧ Always perform a Leak Test on gas connections whenever a cylinder is connected. If bubbles form in the leak test solution, do not use. Never use a flame to test for leaks.



SECURING A GAS CYLINDER

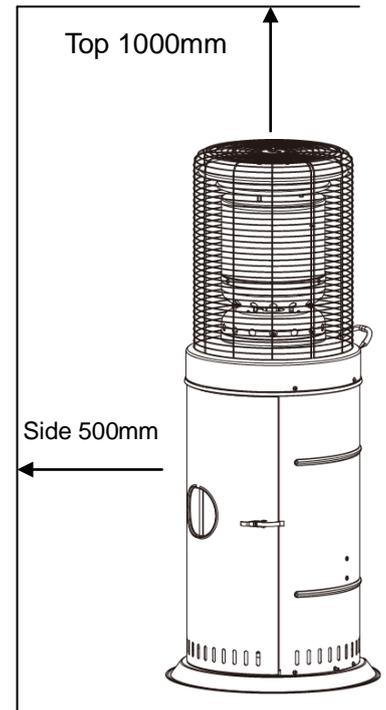
1. Fix both cylinder restraint straps onto the rear tank housing using 4pcs M5*12 bolts with M5 washer and M5 nuts.
2. Position a gas cylinder inside the tank housing.
3. Connect the gas cylinder with a regulator. Please refer to the instructions attached with the regulator on how to connect a regulator with the gas cylinder.
4. Stick cylinder restraint straps together as above photo illustrated. The straps must be in a proper tightness for the gas cylinder.



Caution: Please take care that the cylinder restraint straps. DO NOT strain the regulator assembly.

MINIMUM CLEARANCE FROM COMBUSTIBLE MATERIALS

Combustible materials are considered to be wood, compressed paper, plant fibre, plastic, plexiglas or other materials capable of being ignited and burned.



GAS LEAKAGE TEST

Please follow the lighting instructions on the heater to fire the heater firstly. Leak test all gas connections with soapy water solution. Soap bubbles indicate gas leakage, DO NOT use a match to test for gas leaks.

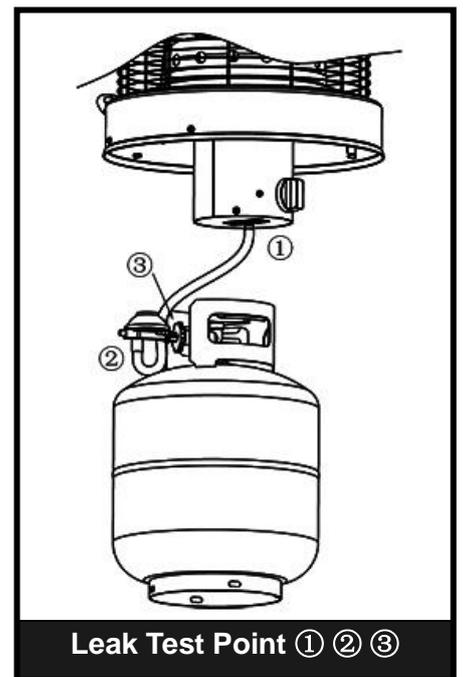
Warning: White smoke may appear around the radiant head during the first use of this appliance.

NEVER USE A NAKED FLAME TO CHECK FOR LEAKS.!

NEVER LEAK TEST WHILE SMOKING!

This appliance needs to be periodically checked for leaks and an immediate check is required if the smell of gas is detected.

- Make a soap solution using 1 part of liquid dish-washing soap to 3 parts water. The soap solution can be applied with a soap bottle, brush, or rag to the leak tested points shown in the figure above.
- The valve of the gas cylinder should be in the **OFF** position at this point of the leak test. Once the soapy solution is applied to the gas connections, the valve of the gas cylinder needs to be turned to the **ON** position.
- Soap bubbles will begin to form in the soapy solution if a leak is present.
- In case of a leak, turn off the gas supply. Tighten any leaking fittings, then turn the gas supply on and recheck.



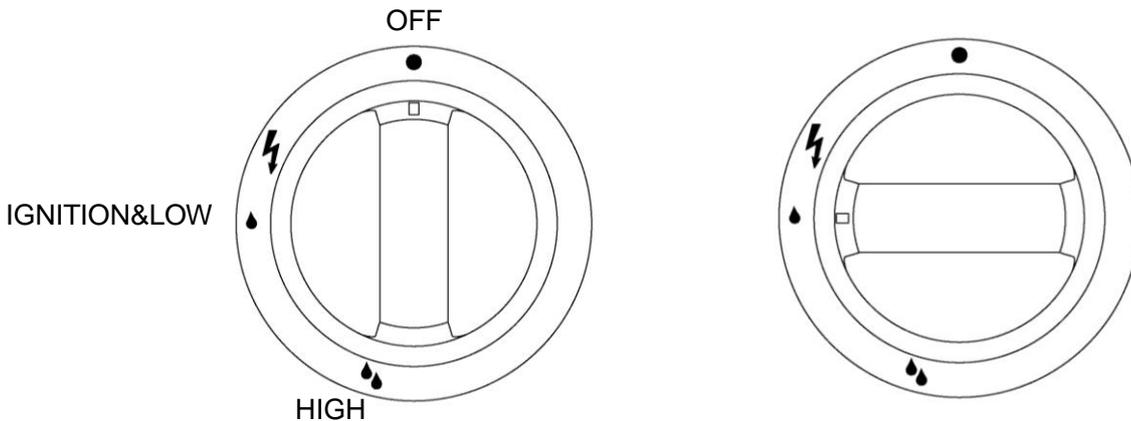
LIGHTLING INSTRUCTIONS

1. Open the gas cylinder valve.
2. Push in control knob and turn anti clockwise to "IGNITION&LOW". The rotary piezo will make a clicking sound.
3. Check for flame at the burner, if burner does not light immediately, turn control knob to OFF setting and try again from the start. Allow 30 seconds between ignition attempts for gas to dissipate. Several attempts may be necessary.

Failure to follow this lighting procedure may result in flame roll out beyond the emitter grid.

4. With the burner alight, keep control knob depressed for 15 seconds.
5. For maximum heat, turn control knob to "HIGH".
6. To turn the heater off, turn control knob to "OFF".

NOTE: Allow one minute to purge air through to pilot after connection to a new cylinder or replace hose & regulator.



SAFE APPLIANCE LOCATIONS

This appliance shall only be used in an above ground open air situation with natural ventilation, without stagnant areas, where gas leakage and products of combustion are rapidly dispersed by wind or natural convection.

Any enclosure in which the appliance is used shall comply with one of the following:

An enclosure with walls on all sides, but at least one permanent opening at ground level and no overhead cover.

With a partial enclosure that includes an overhead cover and no more than two walls.

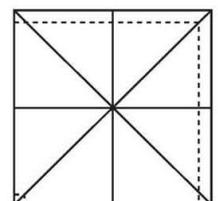
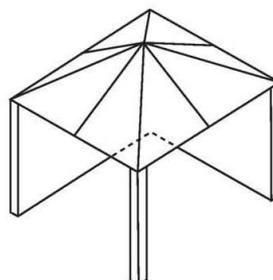
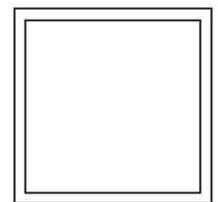
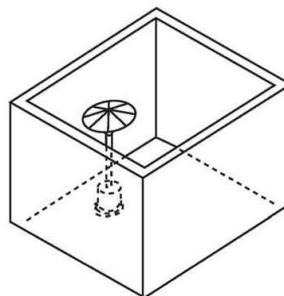
With a partial enclosure that includes an overhead cover and more than two walls, the following will apply:

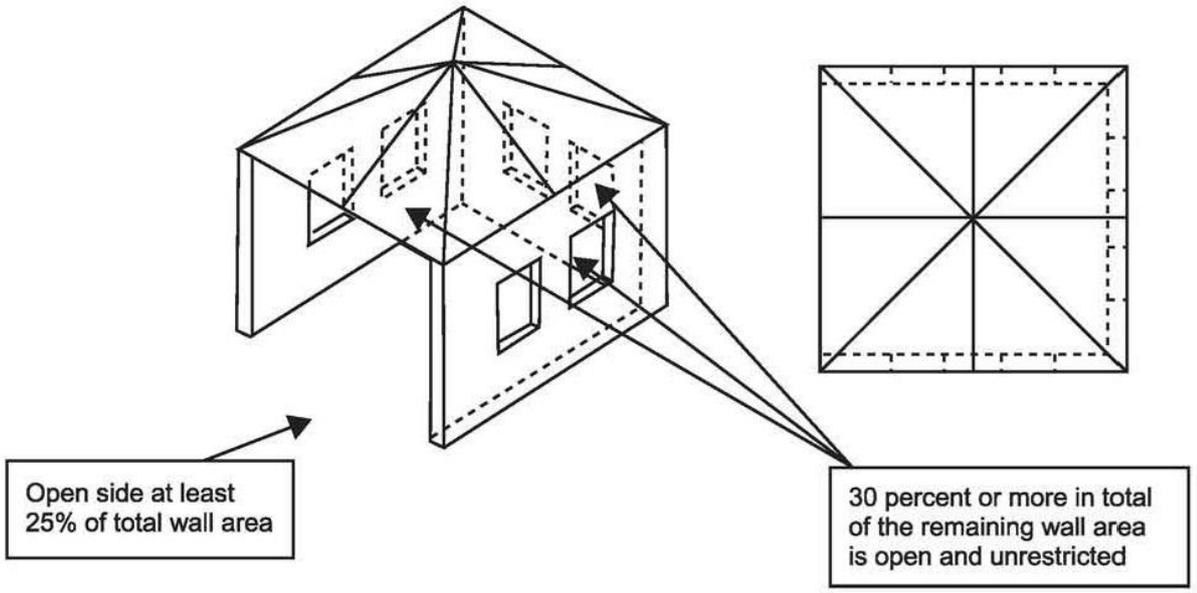
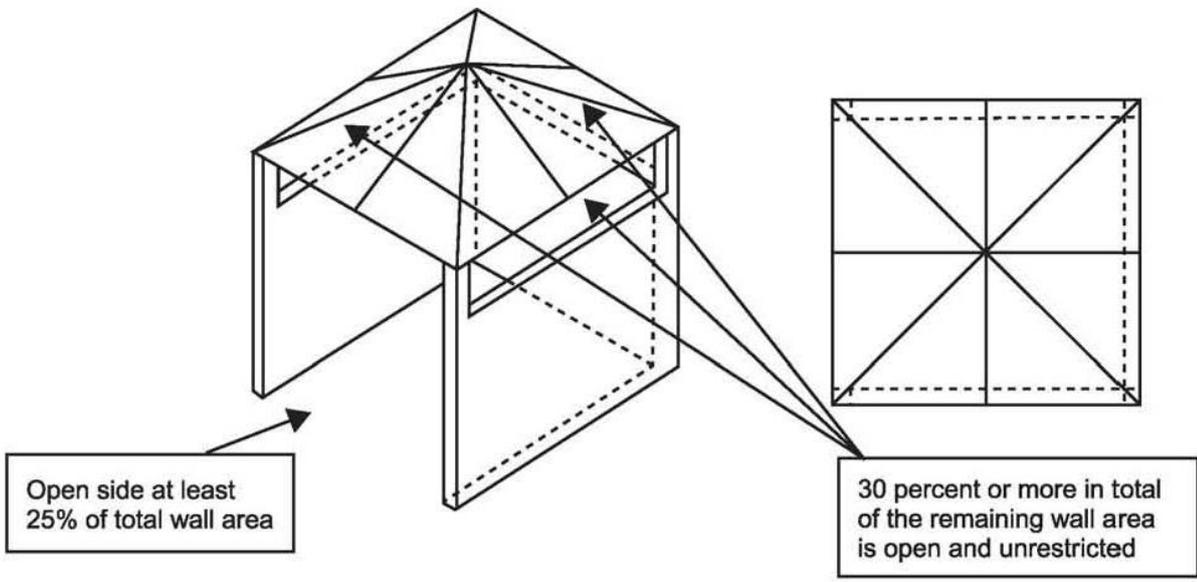
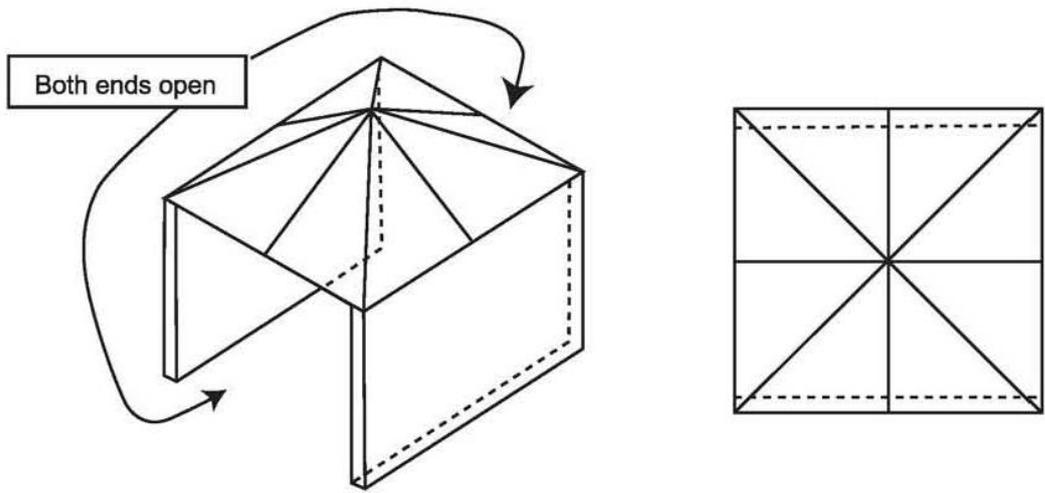
At least 25% of the total wall area is completely open, and

At least 30% of the remaining wall area is open and unrestricted.

In the case of balconies, at least 20% of the total wall area shall be and remain open and unrestricted.

The following figures are diagrammatical representations of outdoor areas. Rectangular areas have been used in these figures-the same principles apply to any other shaped areas.





MAINTENANCE & SERVICING

To enjoy years of outstanding performance from your heater, make sure you perform the following maintenance activities on a regular basis:

- Keep exterior surfaces clean.
- Use warm soapy water for cleaning. Never use flammable or corrosive cleaning agents.
- While washing your unit, be sure to keep the area around the burner and pilot assembly dry at all times. If the gas control is exposed to water in any way, **DO NOT** try to use it. It must be replaced.
- Airflow must be unobstructed. Keep controls, burner and circulation air passageways clean. Signs of possible blockage include:
 - Gas odor with extreme yellow tipping of flame.
 - Heater does **NOT** reach the desired temperature.
 - Heater glow is excessively uneven.
 - Heater makes popping noises.
- Spiders and insects can nest in burner or orifices. This dangerous condition can damage the heater and render it unsafe for use. Clean burner holes by using a heavy duty pipe cleaner. Compressed air may help clear away smaller particles.
- Carbon deposits may create a fire hazard. If any carbon deposits develop, clean dome and engine with warm soapy water.

Note: in a salt-air environment (such as near the sea), corrosion occurs more quickly than normal. Frequently check the corroded areas and repair them promptly.

SERVICING

- Please consult your local dealer for servicing this appliance and replacement of its parts. The servicing of the appliance shall be carried out only by authorised personnel.
- Caution: do not use unauthorized parts or components for this appliance, only use original equipment replacement parts and components. The use of unauthorized parts or components will void the warranty and can create an unsafe condition.

STORAGE

There is no limitation on the storage of the appliance indoors provided that the cylinder is removed from the appliance. Between uses:

- Turn control knob **OFF**
- Turn gas cylinder **OFF**

Store heater upright in an area sheltered from direct contact with inclement weather (such as rain, sleet, hail, snow, dust and debris).

If desired, cover to protect exterior surfaces and to prevent build up in air passages.

Note: Wait until heater is cool before covering.

During periods of extended inactivity or when transporting:

- Turn control knob **OFF**.
- Disconnect gas cylinder and move to a secure, well ventilated location outdoors. **DO NOT** store in a location that will exceed 50°C.

Store heater upright in an area sheltered from direct contact with inclement weather (such as rain, sleet, hail, snow, dust and debris).

If desired, cover heater to protect exterior surfaces and to prevent build up in air passages.

Note: Wait until heater is cool before covering

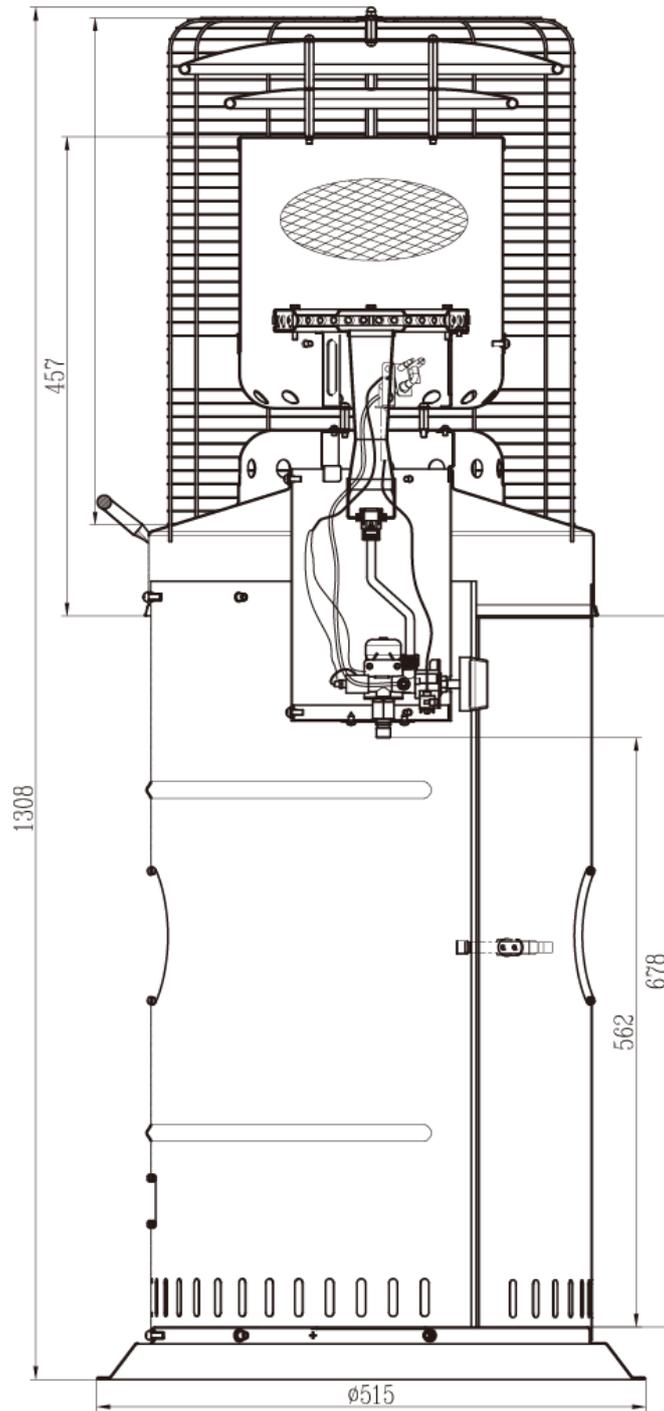
TROUBLE SHOOTING

Warning: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Any modifications or adjustments made to product without prior authority from the manufacturer will void any warranty claims. Read the installations, operating and maintenance instructions thoroughly before installing or servicing this appliance.

| Problem | Possible causes | Solution |
|--|---|--|
| Pilot won't light | Cylinder valve is closed | Open valve |
| | Blockage in orifice or pilot tube | Clean or replace orifice or pilot tube |
| | Air in the gas line | Open gas line and bleed it (pressing control knob in) for not more than 1-2 minutes or until you smell gas |
| | Low gas pressure | Replace new gas cylinder |
| | Igniter fails | Use match to light pilot, or obtain new igniter or replace. |
| Pilot won't stay lit | Dirt or debris build up around pilot | Clean dirty area |
| | Loose connection between gas valve and | Tighten connection |
| | Thermocouple is not operating correctly | Replace thermocouple |
| | Gas leak in line | Check connections |
| Burner won't light | Gas pressure is low | Replace new gas cylinder |
| | Blockage in orifice | Remove, Clean and replace |
| Burner flame is low <i>Note: Do not operate heater below 5°C</i> | Gas pressure is low | Replace new gas cylinder |
| | Tank is less than 25% full | Replace new gas cylinder |
| | Supply hose is bent or kinked | Straighten hose and perform leak test on hose connections |
| | Blockage in orifice | Remove, Clean and replace |
| Carbon build-up | Dirt or film on reflector and emitter | Clean reflector and emitter |
| Thick black smoke | Blockage in burner | Turn control knob to "OFF", let it cool to room temperature and remove blockage and clean burner inside and outside. |

Note: If the appliance can not be adjusted to perform correctly, it should not be used until serviced or repaired.

TECHNICAL DATA



AREA PATIO HEATER

| Model | Nominal GC | Test point pressure | Injector size | Gas type | AGA no. |
|-----------------|------------|---------------------|---------------|----------|------------|
| H1109F & H1209F | 36MJ/H | 2.75kPa | 1.65mm | Propane | AGA 8401 G |

Ningbo Innopower Hengda Metal Products Co.,Ltd