

MODELS
4SN5 4SL5
4BN6 4BL6

INSTALLATION / OWNER'S MANUAL



WARNING



Read and understand this installation and operation manual thoroughly prior to assembly, installation, operation or service to this appliance.

FOR YOUR SAFETY:

This heater must only be serviced by a trained gas service technician. Failure to comply could result in personal injury, death, fire and/or property damage.



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



IF YOU SMELL GAS:

- Extinguish any open flame
- Don't touch any electrical switch, or telephone
- Go to a neighbor and call your gas supplier immediately
- Follow any and all instruction from your gas supplier
- If your gas supplier is not available, call the fire department

FIELD CONVERTIBILITY: Gas conversion must only be done by a trained gas service technician. The conversion shall be carried out in accordance with the requirements of the authorities having jurisdiction and in accordance with the requirements of the B149.1 (latest edition) INSTALLATION CODE in Canada, and the ANSI Z223.1 (latest edition) in the U.S.A.

*Keep this manual in a secure place .
Record the following information for future reference:*

Model #: NG 4SN5 LP 4SL5
 4BN6 4BL6

Serial #: _____
(located on heater rating label)



NOTICE:

The Manufacturer reserves the right to make changes to equipment and specifications without obligation or notification.

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SERIES: 4SN/L5, 4BN/L6

INFRARED POST MOUNTED PATIO HEATER

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1. GENERAL

These installation and operating instructions are intended for Series 4SN/L5 and 4BN/L6 Heaters. This appliance is an infrared fixed post patio, deck and garden heater for operation with Natural Gas (4SN5 and 4BN6) or Propane (4SL5 and 4BL6).

The burner is controlled and adjusted by the gas control knob at the top of the heater, and the gas supply is fed up through the inside of the pole using flexible gas hose. All installa-

tions must conform to the following installation requirements, as well as local and national code requirements, including the current CAN/CGA-B149.1-00 (latest edition) installation code and the ANSI Z223.1 (latest edition) for the U.S.A. for gas burning appliances and equipment. Due to possible Code or Standard changes, revision to equipment and installation procedures may be necessary. In case of discrepancies, the latest installation manual, local and national codes will take priority.

2. INSTALLATION REQUIREMENTS

This heater must only be serviced by a trained gas service technician. Failure to comply could result in personal injury, death, fire and/or property damage.

The Series 4SN/L5 and 4BN/L6 Heaters must always maintain the proper clearance to combustible materials. (Top 18" sides 24" below 24"). Do not use this heater in an explosive atmosphere. Keep heater away from areas where gasoline or other flammable liquids or vapors are stored.

3. GAS SUPPLY:

NATURAL GAS

The heater comes pre-piped with a flexible hose assembly inside the pole with 3/8" male flared fitting for hook-up to a 5" w.c. Natural Gas supply.

This heater requires a natural gas pressure regulator (not supplied). Heaters may be connected to a regulator individually or in zones. Regulators must be properly sized and adequate for each particular installation.

As per code requirements, and for your safety a complete gas tightness check of all connections and hoses must be performed at the installation site, prior to use.

TO LEAK TEST: *also refer to Leak Test procedures on page 8*

Make a soapy solution part liquid detergent and one part water. The soap solution can be applied liberally to all gas system connections with a spray bottle, brush or rag. Soap bubbles will appear where a gas leak is present. If bubbles appear, valve off the gas supply. Repairs must be made by a trained gas service technician.



WARNING:

Improper operation, installation, adjustment, alteration, servicing or maintenance can cause severe property damage, serious injury or death.

Carefully read this User Guide before installing and setting up the heater.

PROPANE

The heater comes equipped with a hose assembly for hook-up to a propane gas supply.

- **Never use a propane supply with a damaged valve connection.**
- **Never connect an unregulated propane supply to the heater**

GAS REQUIREMENTS AND LEAK TESTING:

NATURAL GAS:

**NEVER CONNECT AN UNREGULATED GAS SUPPLY TO THE HEATER.
This heater requires a natural gas pressure regulator (not supplied)**

PRECAUTIONS:

- Periodically check the whole system for leaks or if the smell of gas is detected.
- Extinguish all open flames.
- Never smoke while leak testing.
- If you can not stop a leak, turn off the gas supply and call a qualified and licensed technician, or your gas supplier.
- Only those parts recommended by the Manufacturer should be used. Substitution will void the warranty.
- **Do not use the heater until all connections have been leak tested and are sound !!!**

GAS REQUIREMENTS:

- Maximum inlet pressure to heater must not exceed 5" w.c.
- Heater manifold pressure required to maintain correct burner input is 5" w.c.
- The installation must conform with local codes, or in the absence of local codes, with National Fuel Gas Code.

3.1 Series 4SN5/4BN6 specifications:

- | | |
|-------------------------------------|----------------------------------------------------------------|
| · Manifold pressure | 5" w.c. maximum / 2" w.c. minimum |
| · Maximum Inlet gas supply pressure | 5" w.c. |
| · Maximum operating input rating | 38,000 BTUH @ 5" w.c. |
| · Low fire input rating | 22,000 BTUH @ 2" w.c. |
| · Effective radiant range | 8 to 20 foot circle (affected by wind and ambient temperature) |
| · Fuel | N.G. |
| · Net Weight | 60 lbs . |
| · Certification | CSA International US and Canada |

PROPANE:

NEVER CONNECT AN UNREGULATED GAS SUPPLY TO THE HEATER.

PRECAUTIONS:

- Periodically check the whole system for leaks or if the smell of gas is detected.
- Extinguish all open flames. Perform ALL leak testing **outdoors**.
- Never leak test while smoking.
- If you can not stop a leak, turn off the gas supply and call a qualified and licensed technician, or your gas supplier.
- Only those parts recommended by the Manufacturer should be used. Substitution will void the warranty.
- **Do not use the heater until all connections have been leak tested and are sound !!!**

GAS REQUIREMENTS:

- Maximum inlet pressure to propane regulator must not exceed 125 psi.
- A Minimum supply pressure of 11.0" w.c. is required to maintain correct burner input.
- The pressure regulator and hose assembly supplied with the appliance **MUST** be used. Any replacement pressure regulator and hose must conform to standards & specifications of the Manufacturer and all local codes.
- The installation must conform with local codes, or in the absence of local codes, with National Fuel Gas Code.

3.2 Series 4SL5/4BL6 specifications:

- | | |
|----------------------------------|-------------------------------------------------------------------|
| · Operating pressure | 11" w.c. |
| · Inlet gas supply pressure | minimum 5 psi / maximum 125 psi |
| · Maximum operating input rating | 38,000 BTUH |
| · Low fire input rating | 22,000 BTUH |
| · Effective radiant range | 8 to 20 foot circle
(affected by wind and ambient temperature) |
| · Fuel | Propane |
| · Net Weight | 60 lbs |
| · Certifications | CSA International US and Canada |

4. TOOLS REQUIRED FOR ASSEMBLY

Tools Needed: (not supplied)

Adjustable Wrench, Slip Joint Pliers, Phillips Screwdriver-Medium Blade (#2 or #3 blade), Hammer, 3/8" Masonry

Drill Bit (if mounting on concrete patio), Teflon Plumbing Tape for Joints, Spray Bottle of Soapy Water or Paint Brush and soapy water (to check leaks)

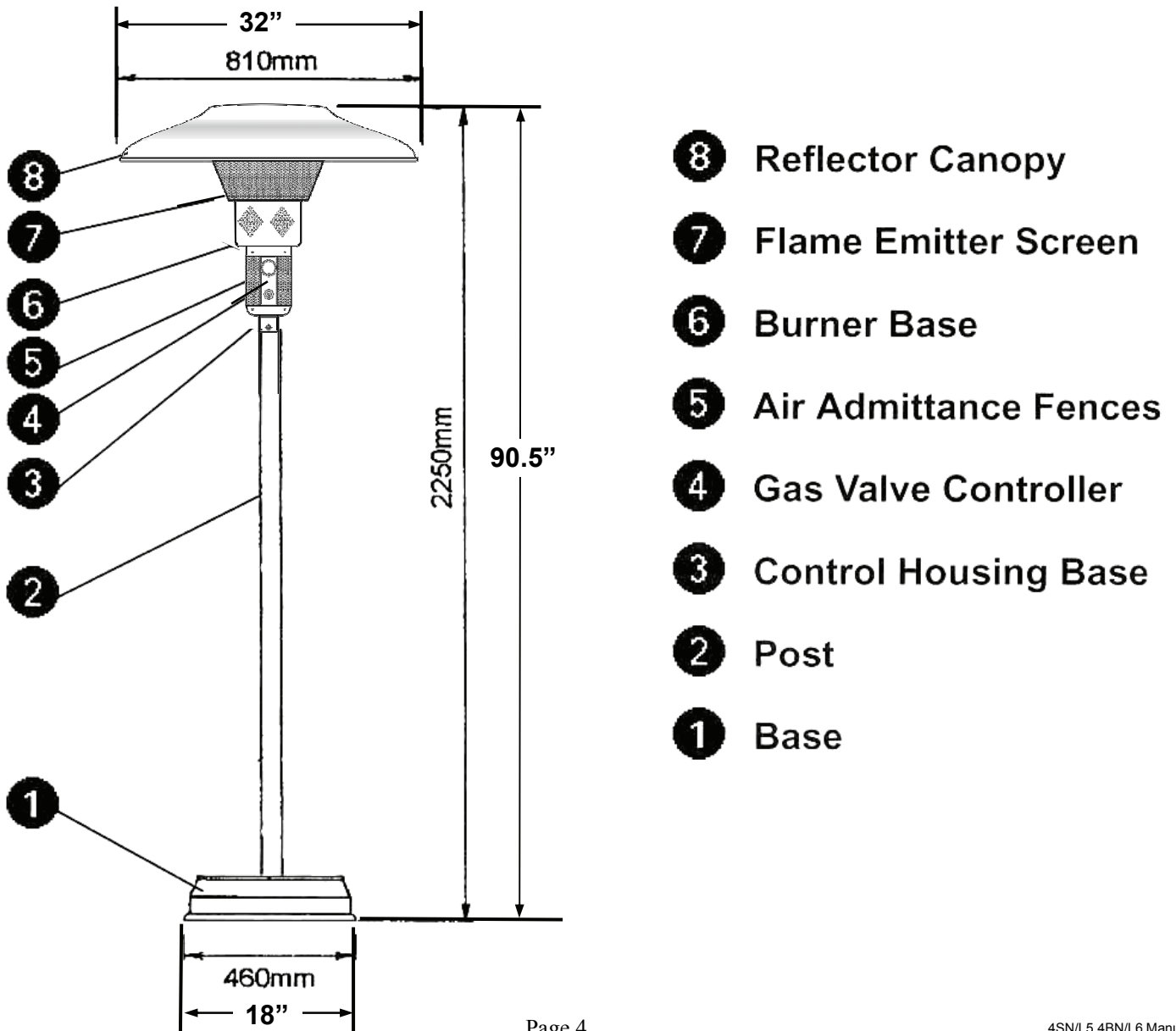
Note: Gas Pressure Regulators are required (not supplied)
(see Connection and Testing)

5. MAIN COMPONENTS AND DIMENSIONS

Models 4SN/L5 include stainless post and base.

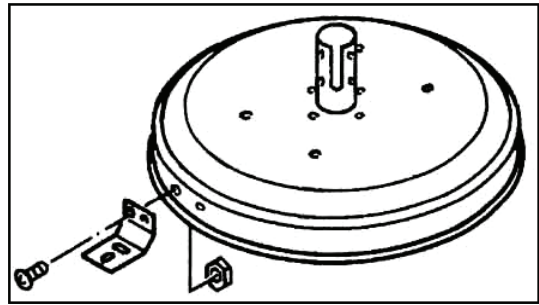
Models 4BN/L6 include black powder coated post and base.

All other components are common for all models

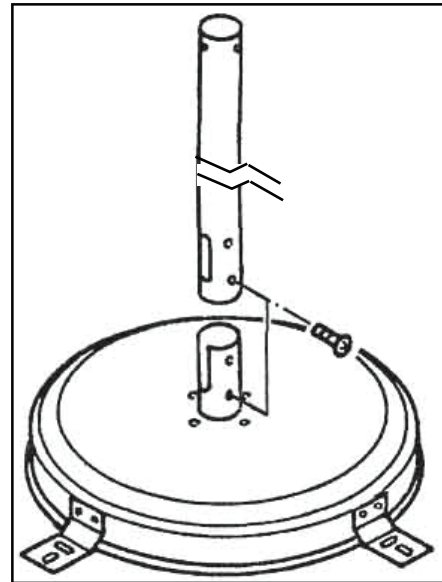


6. ASSEMBLY INSTRUCTIONS

Using screws, place L-shaped stabilizers to bottom base.
Secure with nut on inside of bottom base.



Place post on the bottom of the base in upward position.
Secure using screws.

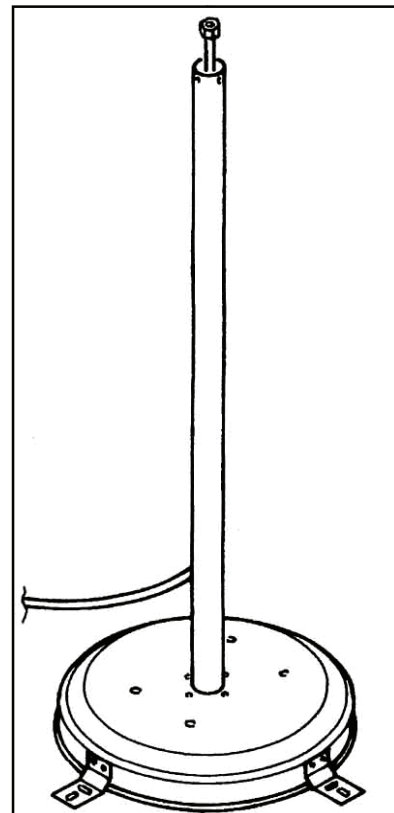


Feed the gas hose provided either down from the top of the post, or up through the side opening at the bottom of the post.

If inserted from the top, push the gas hose all the way down the post until it reaches the bottom.

Pull the end of the hose out through the side opening.

Fit the 1" x 7" ribbed gas hose protection sleeve over the end of the gas hose connection and slide it all the way over the fitting onto the hose.

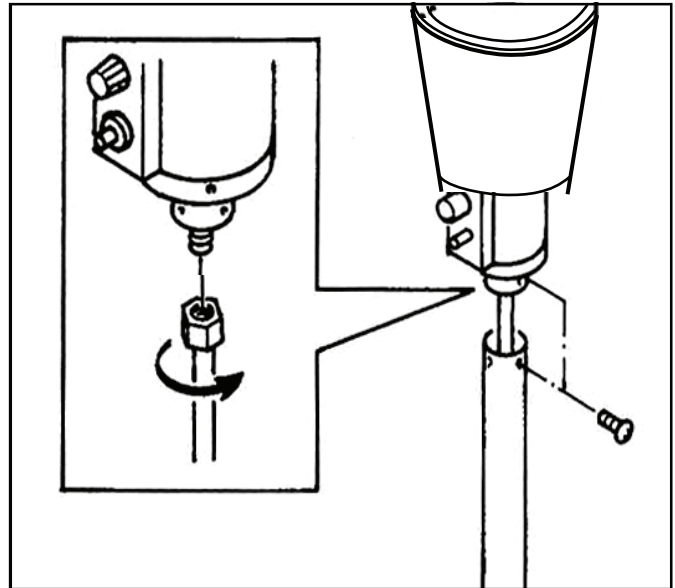


ASSEMBLY..... CONTINUED

Connect gas hose to burner valve and tighten with a wrench.

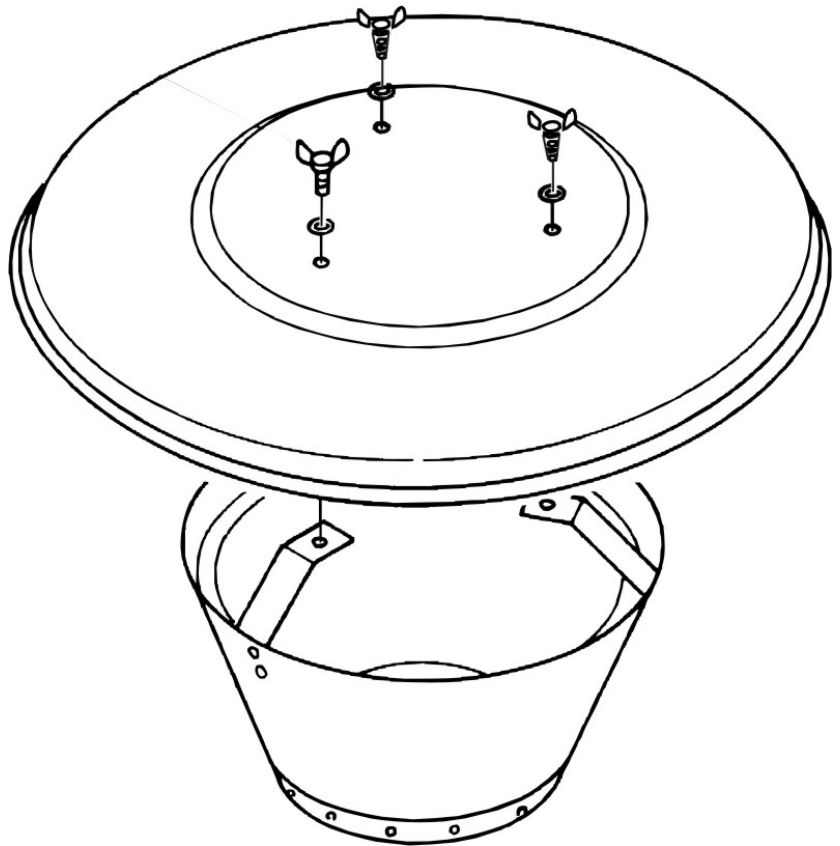
Temporarily secure the top burner assembly to center post with screws (already affixed to the burner assembly).

HAND TIGHTEN the fastening screws at this time. When the heater is connected to the gas supply, the burner head will need to be lifted to leak test the hose connection to the burner valve.



Reflector Assembly to Burner:

1. Install a washer onto threaded portion of wing bolts
2. Align holes in reflector to those in the brackets at top of burner
3. Secure reflector to burner with wing bolts.



ASSEMBLY..... CONTINUED

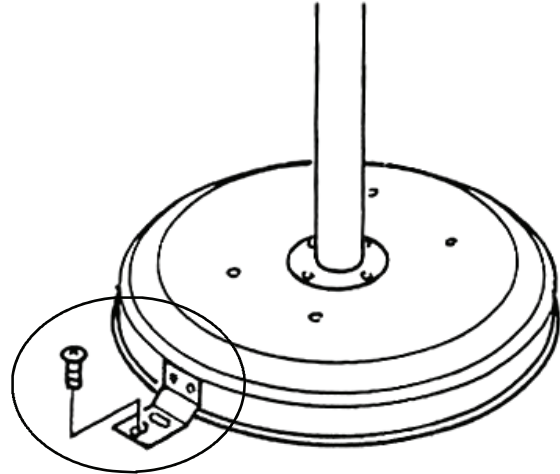
If placing on concrete patio only:

Drill 3 holes 1 3/4" deep using the 3/8" masonry drill bit (not supplied). Insert the 3 x 3/8" lag bolts provided, tapping them in using the hammer shaft until the washer stops it at the floor. Tighten the nuts down tight and the stud threads will get longer.

Remove the nuts and washers, leaving 3 x threaded studs sticking out of the concrete.

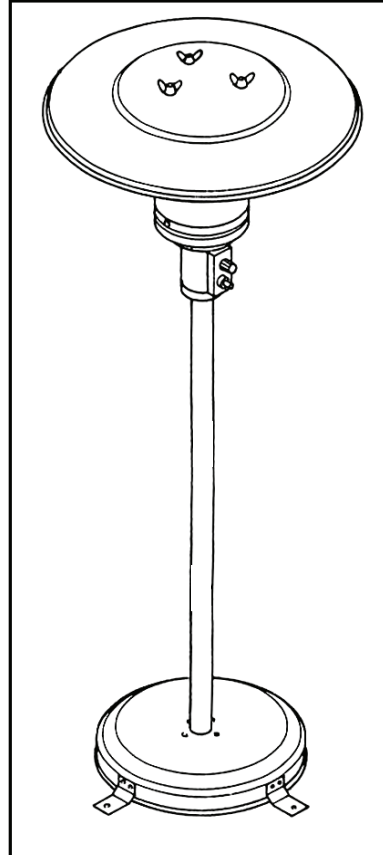


Bolt 3 bolts down into the ground to secure heater into place through the opening on the L-shaped stabilizers.



Check that the center post and the burner assembly stand vertically as shown.

Make sure all bolts and nut pairs are tightened. Ensure correct connection by local gas professional.



6. CONNECTION AND TESTING:

NATURAL GAS CONNECTION:

- Connect the natural gas supply line to the flexible hose at the base of the post as per local or national gas code.
- A 5" w.c. gas pressure regulator is required (not supplied) after the shut off valve to each heater or zone.

PROPANE CONNECTION:

- Connect the propane gas supply line to the flexible hose at the base of the pole as per local or national gas code.
- A 10" w.c. gas pressure regulator is required (not supplied) after the shut off valve to each heater or zone.



WARNING

LEAK TEST:

This heater must only be serviced by a trained gas service technician. Failure to comply could result in personal injury, death, fire and/or property damage.

Now that the heater is assembled, for safety a leak test of all connections and hoses must be performed.

Mix equal parts of water and soap, apply mixture liberally to all gas connections.

1. Ensure that the heater gas control knob is fully closed by turning completely clockwise.
2. Open the gas supply valve
3. Apply the soap solution generously to all connections and hoses.

If bubbles are detected, there **IS** a leak.

Close gas supply valve completely.

Retighten the leaking connection and repeat leak test process, until **ALL** leaking has ceased, no matter how small.

If the leak cannot be repaired permanently, close the gas supply valve completely. A trained gas service technician must replace any defective part(s).

7. A SAFE LOCATION FOR THE HEATER:



Caution:

The main application of this heater is to provide radiant heat comfort in the outdoors, at poolside, spa areas, terraces, patios and work areas, etc.

It is necessary to provide “wind breaks”, against wind and breezes to maximize comfort.

If objects are left under a heater in operation, such objects will be subject to radiant heat.

Always maintain at least the minimum certified clearances to combustibles from the heater to any adjacent combustible materials. Refer to Fig 12 below.

NOTE : This heater is approved for outdoor use only:

- Always maintain minimum clearances to combustibles as shown in figure 12 below.
- Install heater on a level, solid and stable surface.
- Do not install in an explosive environment. Keep away from areas where gas vapours are present or inflammable liquids are stored or used.
- In case of high winds, completely shut-off the heater and gas valve. Remove reflector dome if necessary

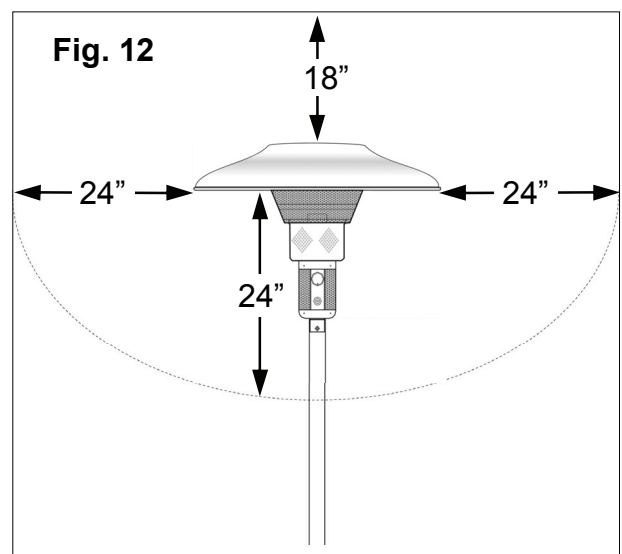
7.1 CLEARANCES FROM COMBUSTIBLES:

The clearances to combustibles represent a surface temperature of 90F° (50C°) above ambient temperature.

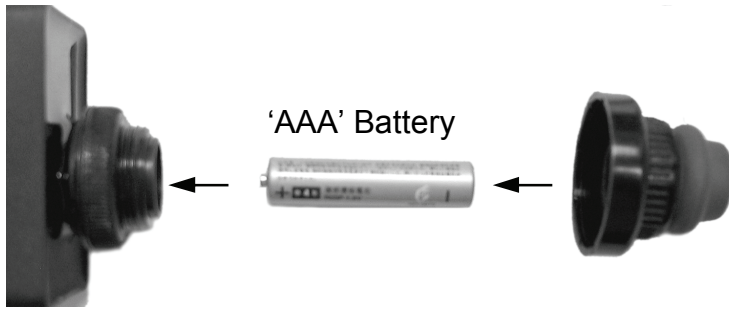
It is the installer’s responsibility to ensure that materials with a low heat tolerance which may degrade at lower temperatures are protected to prevent degradation.

Maintain clearances as shown:

- Sides of Reflector: 24 inches
- Above Reflector: 18 inches
- Below Reflector: 24 inches



8. OPERATION AND LIGHTING INSTRUCTIONS:



Install 'AAA' Battery into electronic igniter (as illustrated) by unscrewing cap counterclockwise, insert battery with positive terminal facing "in". Replace cap.

TO TURN ON:

1. From 'OFF' position, turn knob 90° counter-clockwise push and hold in.
2. Press the igniter until a flame is established.
3. Release the knob and check if the flame stays on.
4. If the flame goes out, repeat steps 1 & 2 above.
5. For maximum temperature, turn knob fully counter-clockwise.

TO TURN OFF:

1. Turn the knob clockwise until it stops.
2. Depress knob and turn fully clockwise to shut of the gas supply completely



Warning:

A 5 minute complete shut off period is required before the appliance is re-lighted.

In very strong winds, turn off the heater, turn off the gas cylinder valve.

Allow the heater to cool down before moving it to a sheltered location.

DO NOT move the heater while it is hot.

9. TROUBLE SHOOTING



This heater must only be serviced by a trained gas service technician. Failure to comply could result in personal injury, death, fire and/or property damage.

PROBLEM	PROBABLE CAUSE	SOLUTION
Burner will not light	Gas valve may be in OFF position Pilot Orifice blocked Air in supply system Loose connection Electronic Igniter 'AAA' 1.5v Battery Dead 1st time ignition Igniter assembly bent/or not in the correct position to ignite. Igniter failure	Turn the gas valve ON Clean or replace orifice Purge air from lines. Open gas line valve & depress control knob for approx 2 mins. Check igniter lead and fittings. Check and replace if necessary Purge air from lines Check set-up and re-position then retry. Pilot can be lit manually with a match or taper. Replace faulty igniter.
Burner will not stay lit	Debris or dirt around the pilot Loose connections Thermocouple faulty Gas leak in the line	Clean pilot area Tighten Connections Replace Thermocouple Check ALL connections
Low Burner flame	Gas pressure is low Spider or insect cocoon	Check gas pressures with manometer. Check for restricted or plugged orifice.
Burner Unit	Carbon on reflector & emitter screen or thick black smoke.	Clean components as needed, check for probable cause, and rectify.

9.1 STORAGE

When heater is not in use for a prolonged period of time verify that the gas valve is fully and tightly closed.

To avoid damage, the reflector may be removed and stored separately in a secure location.

9.2 PREVENTATIVE CARE AND MAINTENANCE

The burner area is likely to attract spiders, especially inside the gas orifice. Regularly, and at least once a year, the heater should be inspected for spider webs, insects, and debris around burners and orifices. A plugged orifice will obstruct the gas flow to the burner. This will result in burner malfunction and possible damage.

Have heater inspected by a trained gas service technician if.....

- You smell gas
- Heater does not provide expected heat capacity or flame appearance is abnormal
- Burner makes popping sounds while operating (other than when shutting down). When heater is warming up or cooling down a pinging metallic noise is normal.

9.3 SAFETY

- Check periodically for leaks in the system, or immediately when you smell gas.
- In case a leak is detected, extinguish all open flames in the area.
- Never leak test while smoking.
- If you cannot repair a leak, turn off gas supply at the supply valve and contact your gas supplier or a qualified, licensed gas technician.
- Do not alter or modify this heater in any way



FOR GAS-FIRED INFRA-RED PATIO HEATERS : 4SN/L5, 4BN/L6 SERIES

The Manufacturer warrants that this product is free from defects in material or workmanship under normal use and service subject to the terms of this document.

COMPONENT PARTS - ONE YEAR WARRANTY

Subject to the conditions and limitations stated herein, during the term of this limited warranty, we will supply any component part (at our option a new or repaired component part) of the heater, as defined below, excluding any labor, which the Manufacturer's examination determines to be defective in workmanship or material for a period of one year (1 year) from the date of installation, unless otherwise specified below. This warranty applies to the heater's original owner, and subsequent transferees and only if the unit is installed and operated in accordance with the printed instructions accompanying the unit and in compliance with all applicable installation, building codes and good trade practices.

BURNER AND MANTLE - THREE YEAR WARRANTY

The Manufacturer warrants the burner and mantle for a period of three years. (3 years)

WHAT IS NOT COVERED

The Manufacturer shall not be responsible for any expenses, including service, labor, diagnosis, analysis, material or transportation charges incurred during removal or reinstallation of this product, or any of its components or parts. All labor or service charges shall be paid by the owner. This warranty does not cover heating products improperly installed, misused, exposed to or damaged by negligence, accident, corrosive or contaminating atmosphere, water, excessive thermal shock, impact, abrasion, normal wear due to use, alteration or operation contrary to the owner's manual or if the serial number has been altered, defaced or removed. This warranty shall not apply if the input to the heating product exceeds by more than 2% of the rated input on the rating plate. The Manufacturer shall not be liable for any default or delay in performance by its warranty caused by any contingency beyond its control, including war, government restrictions, or restraints, strikes, fire, flood, acts of God, or short or reduced supply of raw materials or products.

WARRANTY PROCEDURE

To establish the installation date for any purpose under this Limited Warranty, you must retain the original records that can establish the installation date of your unit. If you do not provide such documents, the start date of the term of this Limited Warranty will be based upon the date of unit manufacture, plus thirty (30) days. Failure to maintain the equipment through regular annual service maintenance by a qualified service technician shall void the warranty.

LIMITATIONS AND EXCLUSIONS

This document contains all warranties made by the Manufacturer and may not be varied, altered or extended by any person. There are no promises, or agreements extending from the Manufacture other than the statements contained herein. **THIS WARRANTY IS IN LIEU OF ALL WARRANTIES EXPRESSED OR IMPLIED, TO THE EXTENT AUTHORIZED BY THE LAWS OF THE JURISDICTION, INCLUDING SPECIFICALLY THE WARRANTIES OR MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE.**

It is understood and agreed that the Manufacturer's obligation hereunder is limited to repairing or replacing parts determined to be defective as stated above. In no event shall the Manufacturer be responsible for any alleged personal injuries or other special, incidental or consequential damages. As to property damages, contract, tort or other claim the Manufacturer's responsibility shall not exceed the purchase priced paid for the product.

All replacement parts will be warranted for the unused portion of the warranty coverage period remaining on the applicable unit.

Some Authorities do not allow certain warranty exclusions or limitations on how long a warranty lasts or the exclusions or limitations of incidental or consequential damages. In such cases, the above limitations or exclusions may not apply to you and are not intended to do so where prohibited by law. This warranty gives you specific legal rights. You may also have other rights which vary by each jurisdiction.

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