FOR YOUR SAFETY:
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 flames
> Don’t touch electrical switches
> Call your Gas supplier immediately

FIELD CONVERTIBILITY:
“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.
NOTICE:

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

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1. GENERAL

This appliance is an infrared transportable patio, deck and garden heater for operation with LPG (Liquefied Petroleum Gas) for 4001/2-J & 4401/2-J and for NG (Natural Gas) 4N11/2-J. The 4001/2-J & 4401/2-J burner is controlled and adjusted by the gas control knob, and the gas supply is controlled by the valve on the portable propane gas cylinder. The 4N11/2-J burner is controlled and adjusted by the gas control knob located below the burner. The gas supply is fed up through the inside of the pole using flexible gas hose. These installation and operating instructions are intended only for the patio heater Series 4001/2-J & 4401/2-J and 4N11/2-J.

All installations must conform to the following installation requirements. Also, all 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 ever changing standards and requirements, revision to our equipment and installation procedures may be necessary. In case of discrepancies, the latest installation manual will take priority.

2. INSTALLATION REQUIREMENTS

This Portable Patio Heater must always maintain proper clearance to combustible materials. (Top 18” sides 24” below 24”). The heater must always be placed on a stable, solid level surface. Do not use this heater in an explosive atmosphere. Keep heater away from areas where gasoline or other flammable liquids or vapors are stored.

**WARNING:** Improper operation, installation, adjustment, alteration, servicing or maintenance can cause severe property damage, serious injury or death. Carefully read this User Guide before assembling and setting up the heater.

3. GAS SUPPLY:

**PROPANE (CYLINDER - NOT INCLUDED)**

A dented, rusted or damaged propane cylinder may be hazardous and should be checked by your gas supplier. The heater comes equipped with a hose assembly for hook-up to a standard propane gas tank. For your safety:

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

**NATURAL GAS**

The heater comes pre-piped with a flexible hose assembly inside the pole for hook-up to a 5” w.c. Natural Gas supply. This heater requires a natural gas pressure regulator (supplied). Regulators must be properly sized and adequate for each particular installation.

Although gas connections on the heater are leak tested at the factory prior to shipment, potential hazards could result during shipment. Therefore For Your Safety a complete gas tightness check of all connections and hoses must be performed at the installation site, prior to use as per code.
3.1 GAS REQUIREMENTS AND LEAK TESTING:

NATURAL GAS

NEVER CONNECT AN UNREGULATED GAS SUPPLY TO THE HEATER. This heater requires a natural gas pressure regulator (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.

3.2 Schwank Series 4N11/2-J specifications:

- Manifold pressure 5” w.c. maximum/ 2” w.c. minimum
- Maximum inlet gas supply pressure 5” w.c.
- Maximum operating input rating 45,000 BTUH @ 5” w.c.
- Low fire input rating 24,000 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.
- Certifications CSA International US and Canada

TO LEAK TEST:
Make a soapy solution of one part liquid detergent and one part water. The soap solution can be applied with a spray bottle, brush or rag. Soap bubbles will appear where a gas leak is present.
3.3 GAS REQUIREMENTS AND LEAK TESTING: 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 Schwank and all local codes.
- The installation must conform with local codes, or in the absence of local codes, with National Fuel Gas Code.

3.4 Schwank Series 4001/2-J & 4401/2-J specifications:

- Operating pressure 11” w.c.
- Inlet gas supply pressure minimum 5psi / maximum 125psi
- Maximum operating input rating 46,000 BTUH
- Low fire input rating 26,500 BTUH
- Effective radiant range 8 to 20 foot circle (effected by wind and ambient temperature)
- Fuel Propane
- Cylinder size 30 lb or 20 lb. (cylinder not included)
- Fuel consumption 30 lb. cylinder 15 hours at maximum setting
  20 lb. cylinder 10 hours at maximum setting
  (ambient temperature effects rate of fuel delivery)
- Net Weight 60 lbs not including cylinder.
- Certifications CSA International USA and Canada
4. MAIN COMPONENTS AND TOOLS REQUIRED FOR ASSEMBLY

**Tools Needed:**
Adjustable Wrench, Slip Joint Pliers, Phillips Screwdriver, Medium Blade (#2 or #3 blade), Spray Bottle of Soapy Water or Paint Brush and soapy water (to check leaks)

**Parts Supplied: 4001/2, 4N11/2 & 4401/2, 44N1/2**

- Main Burner/Head assembly unit
- 34” housing and Base
- Post Support Brackets (3 each)
- 46” gas supply line
- Aluminum Reflector (5 pc. Sectional)
- 4 ea. - M6 x 20mm Bolts for Burner Assembly & Upper Post
- 6 ea. - M6 x 35mm long with M6 Nuts for Post & Brackets
- 3 ea. - M8 x 15mm long bolts for Post Bracket to Cylinder Base
- 12 ea.-1/4” acorn nuts for attaching reflector components.
- 12 ea.-1/4” washers for attaching reflector components.
- 12 ea.-1/4” bolts for assembling cylinder base
- 4 ea.- 10mm Phillips screws for burner to post mounting
- 3 ea- M8-125 Butterfly wing Nuts for top
- Fold away Wheels
- AAA Igniter Battery

**Propane Models (4001/2-J & 4401/2-J)**
- LPG Regulator on hose and QCC fittings

**Natural Gas Models (4N11-J, 4N12-J)**
- Sand fillable counterweight container
- 18 ft rubber gas hose c/w 1/2” male quick disconnect
- 1/2” female quick disconnect for gas supply piping
- N.G. Regulator 5” w.c.
- Gas hose clamp

**Note:** Gas Pressure Regulators are required (see Connection and Testing)

Model 4001-J, 4N11-J & 4401-J, 44N1-J includes stainless post, cylinder housing and base.
Model 4002-J, 4N12-J & 4402-J, 44N2-J includes powder coated post, cylinder housing and base.
All other components are common for Models 4001/2-J, 4N11/2-J & 4401/2-J, 44N1/2-J.
5. ASSEMBLY INSTRUCTIONS

Attach Wheel Kit to base:

- Assemble wheel brackets to base ‘L’ brackets using four #8 x 3/4” bolts and nuts (Note: Bolt heads face the wheel; Position wheel brackets with curve “up”)
- Align pairs of holes in each end of ‘L’ brackets to those in opposite sides of the base - fasten in place with #8 x 3/4” bolts & nuts. (NOTE: Position wheel brackets with curve “up”)
- Assemble wheels to wheel brackets using axle bolts & nuts

NG Model Only: Install #10 x 1 1/4” bolt up through the hole in top of cylinder base - opposite the wheel assemblies

- Place washer on bolt
- Insert up through hole in top surface of base
- Fasten with washer and nut
- Finger tighten the second nut in place for later use

Wheel brackets curve ‘up’

Attach the 3 post mounting brackets to the Cylinder Base as shown.
Use three M8 x 15mm bolts to secure brackets to the base

Fasten the post to the top of the post brackets, aligning pre-drilled holes as shown.

Use six M6 x 35mm bolts, washers & nuts to attach post to post brackets. Tighten securely.
ASSEMBLY..... CONTINUED

Slide cylinder cover over post and let rest in upper position.

For LP connection:
- Slide gas hose up the post with LP regulator at bottom (regulator will be inside tank cover)
- Attach hose securely to burner
- Allow burner to rest in post
- Connect hose to gas cylinder.
- Lift burner and leak test all connections
- Fasten burner securely in place with four 1/2" machine screws
- Attach assembled reflector (see next page)

For NG connection:
- Attach 45" hose securely to burner
- Slide hose down through inside of post
- Attach burner to post with two 1/2" machine screws - finger tight only (burner will need to be lifted later to leak test gas hose connection)
- Install outlet side of 5" wc gas regulator onto hose using 1/2" pipe thread to flared fitting adapter
- Install 1/2" male pipe thread of 18 ft rubber gas hose into gas regulator inlet side.
- Remove finger tight nut from #10 bolt extending from top side of base
- Using hose clamp provided, secure rubber gas hose to the #10 bolt extending from top side of base
  - Leave sufficient “slack in hose above the clamp to allow for lifting of the burner for leak testing
- Install female quick connect provided to gas supply and connect heater to the gas supply
- Lift burner and leak test all gas connections
- Secure burner with four 1/2" machine screws
- Install heavy duty grommet in one of the lower holes in the tank cover
- Disconnect gas hose from supply and feed gas hose through the heavy duty grommet
- Fill counterweight container (supplied) with sand or water and place on cylinder base
- Slide tank cover down into place - carefully slide hose out though grommet while tank cover descends
- Attach assembled reflector—see next page for instruction
Reflector Assembly:

5 piece Sectional Reflector:

Assemble the four outer reflector sections using 1/4” washers and wing nuts on only the outer studs.
Assemble the centre piece to the outer ring using wing nuts.

Secure reflector to burner with wing nuts.
5.1 CONNECTION AND TESTING:

PROPANE CONNECTION 4001/2-J & 4401/2-J:

- Lift the cylinder cover up from the base of the heater
- Let cover rest in an angle position
- Install a full gas cylinder on to the base
- Connect the gas regulator to the QCC 1 cylinder valve by turning the connector knob manually in a clockwise direction.
- DO NOT use a tool, hand tighten only
- Replace the cylinder cover.

NATURAL GAS CONNECTION 4N11/2-J & 44N1/2-J:

- Install sand / water filled counterweight before connecting gas supply.
- Connect the 5” w.c. NG Gas Pressure Regulator to the flexible hose.
- Connect the Natural Gas supply line to the flexible hose within 15ft of the heater base.

LEAK TEST:

For your safety you must perform a leak test of all connections and hoses. Ensure that the connection of gas hose to burner assembly is also leak tested.

Mix equal parts of water and soap, brushing mixture on all joints.

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

If you detect bubbles, there IS a leak. Close relevant 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 cylinder valve completely and contact a qualified and licensed gas technician.

After successful leak test, ensure that the burner assembly and all other components are securely fastened.
6. A SAFE LOCATION FOR THE HEATER:

Caution: When objects are left under a heater in operation, such objects will be subject to radiant heat and could be damaged. 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 breakers", against wind and breezes.

NOTE: This heater is approved for outdoor use only:

- Respect minimum clearances to combustibles as shown in figure 12 below.
- Install heater on a levelled, 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 strong winds, completely shut-off the heater and the gas valve.
- In case of very high winds remove reflector dome.
- Do not move the heater when it is hot.
- Do Not operate the heater when the wheels are extended and exposed.

6.1 CLEARANCES FROM COMBUSTIBLES - ALL MODELS

The clearances to combustibles are established at points reaching a surface temperature of 160° F. Some materials such as awnings or plastic may require higher distances.

Respect clearances as shown:

- Sides of Reflector: 24 inches
- Above Reflector: 18 inches
- Below Reflector: 24 inches
7. OPERATION AND LIGHTING INSTRUCTIONS:

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.

Install ‘AAA’ Battery into electronic igniter (as illustrated) by unscrewing cap counterclockwise, insert battery with positive terminal facing “in”. Replace cap.
8. TROUBLE SHOOTING

WARNING:
THIS SECTION IS FOR CERTIFIED AND LICENSED GAS TECHNICIANS ONLY. IMPROPER ADJUSTMENTS, BAD MAINTENANCE OR SERVICING PROCEDURES, CAN CAUSE SEVERE PROPERTY DAMAGE SERIOUS INJURY, OR FATALITIES.

IMPORTANT PROPANE NOTICE:
Propane tanks equipped with the Q.C.C. {quick coupling connector} have an internal excess-flow valve safety feature to prevent propane from escaping at full pressure if a gas hose is severed. If the hand wheel on the propane tank is opened too quickly, the excess flow valve could close causing the propane flow to slow down or stop. The heater will appear to 'burn' properly for a few minutes, the flame will diminish and finally extinguish. Attempts to relight the heater will fail.

If this occurs: Close the hand wheel on the propane tank and let sit for a few minutes. The excess flow valve will then reset. Now turn the hand wheel on the propane tank very slowly to prevent the excess flow valve from closing again. After one complete turn, open hand wheel on propane tank all the way at normal speed. Heater should now be OK for normal operation.

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IMPORTANT PROPANE NOTICE:
Propane tanks equipped with the Q.C.C. {quick coupling connector} have an internal excess-flow valve safety feature to prevent propane from escaping at full pressure if a gas hose is severed. If the hand wheel on the propane tank is opened too quickly, the excess flow valve could close causing the propane flow to slow down or stop. The heater will appear to 'burn' properly for a few minutes, the flame will diminish and finally extinguish. Attempts to relight the heater will fail.

If this occurs: Close the hand wheel on the propane tank and let sit for a few minutes. The excess flow valve will then reset. Now turn the hand wheel on the propane tank very slowly to prevent the excess flow valve from closing again. After one complete turn, open hand wheel on propane tank all the way at normal speed. Heater should now be OK for normal operation.

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<td>Gas valve may be in OFF position or fuel cylinder is empty</td>
<td>Turn the gas valve ON or replace LPG gas cylinder if empty.</td>
</tr>
<tr>
<td></td>
<td>Pilot Orifice blocked</td>
<td>Clean or replace orifice</td>
</tr>
<tr>
<td></td>
<td>Air in supply system</td>
<td>Purge air from lines. Open gas line valve &amp; depress control knob for approx 2 minutes. Check igniter lead and fittings.</td>
</tr>
<tr>
<td></td>
<td>Loose connection</td>
<td>Check and replace if necessary</td>
</tr>
<tr>
<td></td>
<td>Electronic Igniter ‘AAA’ Battery Dead</td>
<td>Replace cylinder or regulator</td>
</tr>
<tr>
<td></td>
<td>Gas pressure low with valve open full</td>
<td>Purge air from lines. Is cylinder full/ check regulator /hose assy.</td>
</tr>
<tr>
<td></td>
<td>New cylinder or 1st time start up</td>
<td>Check set-up and position then retry.</td>
</tr>
<tr>
<td></td>
<td>Cylinder Valve On, no gas flow</td>
<td>You can light pilot manually with a match or taper</td>
</tr>
<tr>
<td></td>
<td>Igniter assembly bent/ or out of correct position to ignite</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Igniter failure</td>
<td></td>
</tr>
<tr>
<td>Burner will not stay on</td>
<td>Debris or dirt around the pilot</td>
<td>Clean pilot area</td>
</tr>
<tr>
<td></td>
<td>Loose connections</td>
<td>Tighten Connections</td>
</tr>
<tr>
<td></td>
<td>Thermocouple faulty</td>
<td>Replace Thermocouple</td>
</tr>
<tr>
<td></td>
<td>Gas leak in the line</td>
<td>Check connections</td>
</tr>
<tr>
<td></td>
<td>Lack of fuel pressure</td>
<td>Near empty fuel cylinder (LP)</td>
</tr>
<tr>
<td>Low Burner Flame</td>
<td>Cylinder is low on fuel</td>
<td>Check regulator (NG)</td>
</tr>
<tr>
<td></td>
<td>Pressure is low, or regulator is defective</td>
<td>Replace empty LPG gas cylinder or defective regulator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check gas pressure (NG)</td>
</tr>
<tr>
<td></td>
<td>Gas inlet hose is kinked or bent</td>
<td>Check &amp; straighten out hose for damage</td>
</tr>
<tr>
<td></td>
<td>Spider or insect cocoon</td>
<td>Check for obstructions.</td>
</tr>
<tr>
<td></td>
<td>Burner Unit</td>
<td>Carbon on reflector &amp; emitter screen or Thick black smoke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clean components as needed, check for probable cause, and rectify</td>
</tr>
</tbody>
</table>
8.1 STORAGE

When heater is not in use for a prolonged period of time, remove gas cylinder.
Verify that the gas valve is fully and tightly closed.
Do not store the gas cylinder indoors.
Store gas cylinder in a well ventilated area.
For more compact storage and to avoid damage, the reflector may be removed.

8.2 PREVENTATIVE CARE AND MAINTENANCE

The burner area is likely to attract spiders, especially inside orifices. Once a year, the heater should be inspected for spider webs, insects, and debris around burners and orifices. Plugged injectors or orifices will obstruct the gas flow to the burner. This will result in burner malfunction or possible damage.

Have heater inspected if:
- you smell gas combined with yellow tipped flames on burner.
- heater does not provide expected heat capacity
- burner makes little popping sounds while operating, other than when shutting down after being turned off. When heater is warming up or cooling down a pinging metallic noise is normal.

8.3 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 cylinder valve and contact your gas supplier or a qualified, licensed gas technician.
- Do not alter or modify this heater in any way.
LIMITED WARRANTY CERTIFICATE

FOR GAS-FIRED INFRA-RED PATIO HEATERS : 4001/2 (-J), 4N11/2 (-J) / 4401/2(-J), 44N1/2(-J)  
4N/L51, 4N/L62 (-J) / 44N/L5, 44N/L6 (-J) 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.

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 Manufacturer 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 MERCHANTIBILITY 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 price 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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