

SAFETY GUIDE

ZUBRI

PLEASE READ THESE INSTRUCTIONS BEFORE USING ANY
ZUBRI PATIO HEATER AND KEEP FOR FUTURE REFERENCE

What is Infrared Radiant Energy

As early as 1973 the ADHOC committee of the New York State Interdepartmental Fuel and Energy Committee claims fuel savings as high as 50 % with radiant infrared energy devices

Low intensity radiant heaters heat objects in the same manner that the sun heats the earth, with infrared energy! Infrared energy is generated by the sun and travels through space relatively unaffected until it strikes the earth's surface where it is transformed into heat energy. The heat energy is stored in the ground and given off to the air. This is why when you stand on brick paving, long after the sun has gone down, the paving is warm on your feet. The bricks are re-radiating stored infrared energy.

The infrared source or emitter operates at a minimum temperature range of 500 deg. C (932 deg. F). Aluminium Reflectors are used to control distribution of radiation in a specific pattern. Radiant heaters transfer infrared energy by radiation directly to whatever will absorb the energy, and this absorption results in a heating effect. Intermediate transfer mediums such as air or water are not needed, nor are fans or pumps. Hardly any energy is lost between the radiating surface and the target area because air is a poor absorber of infrared energy. As people, floors and objects in the primary radiation area are warmed by the infrared energy, they tend to become a reservoir of heat. Re-radiating warmth or losing it by convection especially to those areas outside the primary radiation pattern. Thus heating large areas or and entire buildings with high efficiency and a very substantial energy savings compared to conventional heating systems

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PATENT APPLICATION NUMBER PCT/IB00/00046 protects the unique design of the Zubri Patio Heater. Any infringement of the granted claims contained therein will be prosecuted on grant. In terms of the claims submitted attention is drawn specifically but not exclusively to the peripherally spaced legs and manner in which the skirt spans the said legs.

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IMPORTANT INFORMATION ABOUT USING SELF CONTAINED LOW PRESSURE GAS CYLINDERS

- Your Zubri Heater is designed for use with a 20lb (9kg) (LP) Liquefied Petroleum Gas Cylinder. No other size is recommended.
 - Ensure the LP gas cylinder you use is constructed and marked in accordance with the specifications for the LP-gas cylinders of the US Department of Transportation; or in accordance with the specifications of the relevant regulatory authority.
 - Your Zubri is for use only in outdoor well-ventilated spaces and is not for use in buildings, garages or other enclosed areas.
 - When fitting the gas cylinder, follow carefully the instructions under (6) "Assemble Your Zubri". **WARNING.** Whenever you fit a new cylinder or if you suspect there are any gas leaks, turn off the gas supply from the gas cylinder immediately. Mix up dilute mixture of washing liquid and water. Turn the gas supply on again, with small brush apply soapy liquid to suspected area, and observe. If a leak is present, bubbles will form. Never test with naked flame. Under no circumstances, use this equipment if you suspect or have detected a gas leak.
 - Your Zubri is fitted with a Quick-Disconnect Device. Whilst this device will normally not allow gas to escape when the gas-cylinder is turned on, it is not designed as a gas stopper. **WARNING.** Therefore, whenever the gas is not in use, you must turn off the gas supply from the gas cylinder.
 - Storage of your Zubri indoors is only permissible if the gas cylinder is disconnected and removed from the appliance.
- Store gas cylinders outdoors, in well-ventilated areas and out of reach of children. Ensure the gas cylinder valve plug is securely replaced and the cylinders are not stored in buildings, garages or other enclosed areas.**

IMPORTANT INFORMATION ABOUT GAS REGULATORS AND CONNECTORS FOR LOW PRESSURE GAS CYLINDERS

- Your Zubri is supplied with a Low Pressure Gas Regulator complying with the US Standard for Pressure Regulating Valves for LP Gas, ANSI/UL 144-1985, as part of the self contained LP-gas supply system. The outlet pressure of the regulator does not exceed 11.0 inches water column (2.74 kPa) with your Zubri operating at maximum temp. Attach the Gas Regulator into gas cylinder valve by screwing, making sure no cross threading takes place, into valve and tighten firmly to give a gas tight fit.
- Only use the gas pressure regulator and hose assembly supplied with your Zubri. If you need to replace these items, only use identical replacements parts. If you are in doubt, contact your nearest Zubri dealer or visit our website at zubri.com to find the correct information.
- Your Zubri is not supplied with a Low Pressure (Butane) gas supply cylinder. Therefore the gas supply cylinder you use must be provided with a shutoff valve terminating in an LP- gas supply cylinder valve outlet, to which the supplied gas regulator and quick-disconnect assembly can be attached. Please note the quick disconnect assembly will not permit gas flow until the mating halves are connected.(USA only: The gas regulator and quick connect assembly – connection No. 510 - provided are in accordance with the Standard for Compressed Gas Cylinder Valve Outlet and Inlet Connections, ANSI/CGA-V-1) and is interchangeable with all other assemblies.
- Fit the gas supply cylinder in accordance with the assembly instructions contained in herein.
- **WARNING:** Under no circumstances attempt to attach your Zubri to a fixed gas supply. Not all the gas supply and connection components of your Zubri heater are suitable for use with a fixed gas supply. If you want to convert your Zubri for use with a fixed gas supply, contact your local registered gas dealer or your nearest Zubri supplier.

IMPORTANT: This appliance is for use on Butane (G30) at a supply pressure of 28mbar or Propane (G31) gas only at supply pressure of 37 mbar in GB and IE, and it must be serviced by a competent person in accordance with BS 5482; Part 1 : 1994 or the Rules in Force. Failure to service appliances correctly could lead to prosecution.

IMPORTANT: The Gas Regulator provided with the Zubri Z1 is for use with Propane Gas

FOR YOUR SAFETY

If you smell gas:

Shut off gas to appliance,

Extinguish any open flame,

**If odour continues, immediately call your gas
supplier.**

FOR YOUR SAFETY

**Do not store or use gasoline or other
flammable vapours and liquids near this or any
other appliance**

WARNING

For outdoor use only

WARNING

Improper installation, adjustment, service or maintenance can cause injury or property damage. Read the safety, assembly, operating and maintenance instructions thoroughly before installing or servicing equipment. We strongly recommend that only an able bodied adult, of sound mind, who has read and understood these instructions should assemble or use this heater. Anyone with either a temporary or permanent disability should seek specialist advice before using it

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For Your Safety – Using Gas

The use of and storage of gas bottles, not supplied, is governed by specific regulations and/or legislation. Make sure you are familiar with any rules that may apply in your area. If in doubt, contact the nearest Registered Gas Dealer

Propane or Butane gas is highly inflammable. It is also heavier than air, so increasing the risk of explosion. It is essential to check all gas supply connections for leaks. **To test for gas leaks, make up dilute mixture of washing liquid and water. With small brush apply soapy liquid to suspected area and observe. If a leak is present, bubbles will form. Never test with naked flame.**

You are advised to handle gas cylinders and fittings with care and to store them in a cool, safe place: away from heat and ignition sources and away from drains and other places where leaked gas could collect

WARNING: Smoking, flames or naked lights near gas bottles or gas storage areas are prohibited.

WARNING: If you suspect a gas leak in a gas storage area, you are advised to tell everyone in the vicinity to turn off or put out anything that could ignite the gas, unless this involves operating electrical switches (most switches generate a tiny spark when they are turned off or on). Open all doors and windows, and take all gas cylinders outside, check the gas cylinder valves are closed and test for leaks by the method described above. If you have any doubt immediately contact your nearest registered gas supplier

IF A LOT OF GAS HAS ESCAPED

Evacuate the area and call the Fire Brigade

Important Safety Precautions

- The installation must conform with local codes or, in the absence of local codes, to the National Fuel Gas Code, ANSI Z2223.1-1988.
- Minimum inlet supply pressure 28 mbar
- Maximum inlet supply pressure 37 mbar.
- **WARNING:** Certain materials or items, when near the heater will be exposed to Radiant heat and could sustain damage. Minimum all round clearance is 400 mm (16 inches)
- Inspect all parts before each use. If excessive abrasion, wear or damage is evident, contact your nearest Zubri or Gas Dealer for advice. A competent person should carry out repairs or replacements.
- **WARNING:** The emitter and reflector reach high surface temperatures. To avoid injury do not touch for 20 minutes after being switched off.
- Carefully supervise children and animals in the area.
- Do not allow anyone to assemble or use if ill, tired, or under the influence of alcohol or drugs.
- Position on a level and stable surface capable of bearing its weight.
- Gas cylinders (not supplied) are heavy. Do not attempt to lift them, whether full or empty, by yourself. Always get help.
- Never carry or pull by its gas supply hose.
- Always turn heat control knob and gas bottle valve OFF when not in use.
- Never use, or leave standing in wind or rain exposed areas
- Never leave it turned ON while unattended.
- Watch your footing. Make sure the floor area around the heater is kept clear of trip-hazards and clean of any spillage

Troubleshooting

The most common cause for your heater not working correctly is an inadequate or non-existent gas supply. Therefore, the first action you should take in the event of your heater not lighting is to check that;

- There is gas in the cylinder
- The gas valve on the cylinder is fully opened.
- The quick connectors are firmly fastened together
- If you have an adequate gas supply and your Zubri is still not lighting properly, make sure;
 - You are following accurately the "Ignite Your Zubri" Instructions
 - The emitter is fastened securely onto the burner head.
 - The emitter is clean

If you have followed all the above instructions and your Zubri is still not working properly you are advised to immediately contact your nearest Zubri supplier or approved Gas dealer.

DO NOT ATTEMPT TO REPAIR ANY OF THE SENSITIVE GAS SUPPLY PARTS

Maintenance

- Repairs should only be done by qualified service persons.
- The heater should be inspected before use and serviced by a qualified person at least annually. More frequent servicing may be required as necessary.
- It is imperative that that the control compartment, burners and circulating air passageways of the heater be kept clean and the surrounding area free from combustible materials, gasoline and other flammable vapours and liquids.
- Keep ventilation openings of the cylinder enclosure free and clear of debris.
- Visually check burner flame. Flame should be blue with slight orange tips. If excess orange flame is seen, have heater serviced.

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Cleaning

- Do not attempt to clean heater while it is warm. Generally cleaning can be done with a damp soapy cloth followed by polishing with a soft cloth. Abrasive cleaners should never be used. Turn off gas at cylinder valve.
- Remove reflector by unscrewing securing nut. Clean reflector with a damp soapy cloth followed by polishing with a soft cloth. **IMPORTANT:** Treat the reflector with care as it is normally made from malleable material and could bend or dent if you handle it roughly.
- Remove emitter by loosening lower securing nut and removing threaded rod. Wire brush inside and outside of perforated emitter cone to remove any deposits.

Storage

- When not in use turn off gas supply at gas cylinder
- Only store your Zubri inside if you have removed the gas cylinder
- Removing Gas Cylinder:
 - Undo completely zip on skirt
 - Turn 'OFF' gas cylinder
 - Separate quick coupler (if supplied)
 - Remove gas cylinder
 - Remove gas regulator from gas cylinder. Always replace safety cap when putting into storage to prevent dirt entering gas cylinder valves.
- **WARNING-** Always store gas bottles in accordance with Code of Practice for keeping liquefied petroleum gas cylinders.
- To dismantle heater for storage, reverse the Assembly procedure on Page 3, and repack your heater into its packing case making sure the lid covers it.
- You are advised, If you do not have the original packing case, to make sure the heater is adequately covered whilst in storage. Dust and other airborne matter can block gas openings and cause the heater to malfunction.