

USER'S INSTRUCTIONS

GEMINI RADIANT HEATER

THE GEMINI DOUBLE HEATER ON A STAND/TROLLEY - MOBILE HEATERS.

The GEMINI MOBILE Radiant Gas Heater is available for use with the following gases:
BUTANE and PROPANE gases.

It is important that the user checks, by reference to the RATING PLATE, affixed to the inside of the rear cover plate of the mobile heaters, that the appliance is suitable for the type of gas supply before connections are made.

THE GEMINI RADIANT HEATER IS NOT DESIGNED FOR USE IN DOMESTIC SITUATIONS.

VENTILATION REQUIREMENTS

For the correct and safe use of a gas appliance an adequate supply of fresh air shall be provided by means of unrestricted ventilation.

For the GEMINI the supply flow of clean, fresh air shall be not less than 90 metres per hour per individual burner. It is, therefore, important to ensure that all ventilation grilles, and air inlets into the premises are regularly inspected, and kept free from dust and dirt build-ups, and snow and ice, in order to allow fresh air to easily enter the building.

IMPORTANT INFORMATION UPON THE USE OF GEMINI RADIANT HEATERS

The GEMINI Radiant Heater is a gas-fired infra-red heater to be used in areas where local heating is required in non-domestic type applications. It is eminently suitable for small workshops, isolated workplaces in large factories or warehouses, and for local heating.

- READ THESE INSTRUCTIONS FOR USE CAREFULLY BEFORE OPERATING THE HEATER. To ignore these instructions and the important information they contain may result in bodily harm, fire, suffocation, or damage to property. Do not destroy these instructions, retain them for future reference.
- For further guidance on the use of the GEMINI Radiant Heater, contact your local dealer or installer.
- Only use good quality, approved, and reliable hose (maximum length 1 metre), and the appropriate gas regulator, to connect the heater to the gas supply. Contact a registered gas installer or component supplier for advice and assistance.
- Check, by reference to the Rating Plate affixed to the heater, for the gas type and its supply pressure, suitable for the heater BEFORE making the connections.
- DO NOT USE THE HEATER IN A BASEMENT, nor in similar places below ground level.
- Do not use the gas regulator, or top of the gas cylinder, etc., to support the heater.
- Avoid any kinks in, or stretching of the gas supply hose. Do not place any object upon the hose. Do inspect the hose regularly for damage and gas leaks.
- Place the heater at a minimum distance of 800mm (32 inches) from any combustible material, such as wood - wooden walls, furniture, etc., from tarpaulin or canvas or other covers - secure such covers to prevent them from being blown or accidentally dislodged closer to the heater.
- DO NOT MOVE OR LIFT THE HEATER WHILST IT IS IN USE.
- **At the first sign of any gas leak, immediately extinguish the heater and any other naked flames.** Gas is highly inflammable and has a readily noticeable smell. If a leak occurs remember that Butane and Propane Gas will accumulate in the lowest areas because they are heavier than air, and they are a fire risk. IMMEDIATELY turn off the heater, turn off any other naked flames, blow-lamps, etc., DO NOT STRIKE ANY MATCH, and safely dispose of any cigarettes. Ventilate the area well. Remove the heater to an open air situation and use a gas leak detection spray or fluid to locate the source of the leak. Repair the leak, and test again for leaks. IF IN ANY DOUBT contact a registered gas installer.
- The GEMINI Radiant Heater must, at all times, be used in conformity with local regulations in force in the country where the appliance is to be used.

Incorrect installation, maintenance, faulty adjustment, incorrect use, alterations, or servicing may cause damage to the heater and affect your guarantee. Always consult a competent or registered gas installer to repair or service your heater.

It is your interests and safety that advice is sought from a competent person before using a gas appliance, or having it repaired or serviced.

DO NOT USE THE HEATER IN AN AREA WHERE PETROL OR OTHER VOLATILE LIQUIDS OR INFLAMMABLE VAPOURS ARE STORED OR USED, OR WHERE COMBUSTIBLE MATERIALS ARE PRESENT.

CHANGING THE GAS CYLINDER

Gas cylinders MUST be changed in an open area away from naked flames, and electrical appliances.

Extinguish the heater by turning off the gas supply at the cylinder's gas valve. Disconnect the heater from the gas supply by unscrewing the hose and its regulator from the cylinder. Reconnect the new cylinder to the regulator, ensuring that the screwed adapter is tight. The size of the cylinder used should be at least 15 Kg. Nett.

INSTALLATION

INSTALLATION SHOULD BE CARRIED OUT BY A REGISTERED COMPETENT PERSON.

The GEMINI Radiant Heater unit is factory assembled and tested. Check that the gas supply available is suitable for the heater by reference to the details given on the heater's Rating Plate. (This will be found affixed to the inside of the base plate). SEE TECHNICAL DETAILS TABLE.

For the assembly of mobile trolley/stand models :

Assemble the trolley. See separate Instructions leaflet.

1. **For butane/propane heaters:** Slip a double ear O clip over the end of a suitable length of approved flexible hose WITH A CONNECTED SUITABLE BUTANE OR PROPANE GAS REGULATOR. Push the open end of the hose securely onto a matching Fulham Nozzle and tighten the O clip around the hose over the Nozzle using appropriate pliers. Screw the Fulham Nozzle onto the Heater's gas inlet.
2. Fit the heater to the Heater Carrier Tube section of the Trolley/Stand immediately above the cylinder position, using the two 6mm x 40mm long screws and nuts, and connect the gas regulator to the gas cylinder.
3. **Test all gas joints for leaks, using a gas leak detector spray or liquid before lighting the heater.**

LIGHTING THE HEATER. - DO NOT STAND OVER OR WITHIN 300mm (12 INCHES) OF THE HEATER WHEN LIGHTING.

1. Turn on the gas supply - at the cylinder gas valve .
2. Press in, and hold in, the button on the GAS CONTROL (Flame Safety Device), **AT THE SAME TIME** press - several times if necessary - the button on the SPARK IGNITER . The chosen Heater Burner and Pilot Burner will light within 10 seconds.
3. Continue to press on the Gas Control Button for about a further 15 -20 seconds and then release the pressure.
4. Should the Pilot or Heater Burner fail to remain alight, repeat 2 & 3, this time pressing down on the Gas Control Button for a longer period after the Burner has ignited.
5. After a further one minute the Heater Burner should burn evenly and smoothly, and glow with an orange red appearance.

TURNING OFF THE HEATER.

To turn off the heater, close off the gas supply at the cylinder's gas valve.

If the heater is not to be used for a period of time then disconnect the gas cylinder and store the heater in a clean, dry environment.

ROUTINE MAINTENANCE.

1. The GEMINI Radiant Heater should not require any special maintenance. It will be necessary, though, to clean the appliance periodically and to check it for gas leaks, cracked or broken burner plaques, or loose nuts and screws.
2. Should the heater be left unused for a long period, the following procedure must be followed to ensure that it is still safe to use.
3. Blow off all dust and dirt using a air hose. The applied air pressure must not exceed 2Bar (30 PSI). Alternatively, use a vacuum cleaner to suck off the dust. Apply the hose to all of the Main Burner's surface. Clean out the entry into the Burner's venturi.
4. Remove, and clean by blowing, the gas Injector. Do not poke out the small hole in the Injector, replace by fitting a new Injector if necessary.
5. Wipe clean the Reflector.
6. Connect the Heater to the gas, and then carry out the ignition sequence.
7. Check that the Flame Safety Device operates correctly.
8. **CHECK THE HEATER'S GAS CONNECTIONS FOR LEAKS USING A LEAK DETECTION SPRAY OR LIQUID.**
9. Inspect, and check the flexible hose and its connections for damage and leaks.

- **IF IN DOUBT, CONSULT A REGISTERD COMPETENT PERSON.**

CHECKLIST FOR FAULT FINDING.

SYSTEM	CAUSE	SOLUTION
Gas heater does not light	Cylinder valve closed. Exceptional draught Safety valve defect Injector blocked	Open valve. Change position of heater Check gas supply pressure Replace Flame Safety Device Clean or replace injector
Heater lights but goes out when Gas Control Button is released	Insufficient gas pressure Insufficient gas supply Thermocouple nut loose at rear of Flame Safety Device Thermocouple defective	Increase gas pressure or replace Gas Regulator Replace gas cylinder Tighten nut, finger tight + ¼ turn with spanner Replace Thermocouple
Gas burns at Injector or inside the Main Burner	Gas connections loose Inlet pressure too high Burner not fitted correctly	Tighten & check for leaks Adjust to correct gas pressure Re-fit Main Burner
Plaque glow is dark or uneven	Dirty Injector Insufficient gas pressure Kink in flexible gas hose	Clean or replace Injector Adjust gas pressure Straighten gas hose, replace hose

PARTS LIST.

Burners	Infraglo 2 plaque	2 off
Injectors	Stereomatic # 100	2 off
FSD	Seagas	2 off
Piezo Ignition Device	Seagas	2 off
Ignition Lead	Seagas	2 off
Atmos Sens Pilot	Seagas	2 off

TECHNICAL DATA.

NOMINAL HEAT INPUT

BUTANE 5.8kW AT 28 MBAR GAS PRESSURE INJECTOR DIA. 0.82mm dia.

PROPANE 5.8kW AT 37 MBAR GAS PRESSURE INJECTOR DIA. 0.82mm dia.

(Marked 90 {Stereomatic})

GAS CATEGORIES I₃+, UK, IE, PORT, SP, FR. Use 37mb outlet pressure regulator on propane and 30mb outlet pressure regulator on butane.

I₃B/P, FIN, NOR, SW, DEN. Use 30mb outlet pressure regulator on both propane and butane.

**The GEMINI GAS RADIANT HEATER IS MANUFACTURED IN THE U.K. BY
INFRAGLO (SHEFFIELD) LTD, For:- Bullfinch(Gas Equipment) Ltd.**

Diadem Works. Kings Rd. Tyseley Birmingham B11 2AJ

REFERENCE:1D 13 12 99

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DOUBLE HEATER ON A STAND/TROLLEY - MOBILE HEATERS.

ASSEMBLY OF THE TROLLEY/STAND.

The trolley/stand is despatched in six parts:

1. Base with cylinder carrier and two castors affixed.
 2. Lower Upright Tube
 3. Cylinder Support Arms.
 4. Cylinder Retention Chain.
 5. Intermediate Upright Tube
 6. Heater Carrier Tube.
- a. Slide the Lower Upright over the upright tube projecting from the centre rear of the base
 - b. Slip the Cylinder Support down over the Lower Upright, ensuring that the two slots at the ends of the arms are facing upwards, and secure in a position to suit the cylinder with the Butterfly headed screw.
 - c. Slip the short end of the Intermediate Upright into the Lower Upright Tube, and fix using one 6mm x 40mm long screw and M6 nut.
 - d. Fix the Gemini heater to the Heater Carrier Tube Using two 6mm x 40mm long screws through the Heater 's Backplate and Carrier Tube using two 6mm nuts and washers.
 - e. Slip the Heater Carrier Tube into the Intermediate Upright Tube - with the heater immediately over the cylinder position. Fix in position using the one 6mm x 40mm long screw and M6 nut.
 - f. Place cylinder of gas in position on Base of the Trolley/Stand, and place the Cylinder Retention Chain in position around it, slipping the chain into the slots on the ends of the Cylinder Support Arms.

Follow the instructions given in the Heater's User's Instructions to connect the heater to gas.

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