YUNCA

EROS

FREESTANDING GAS HEATER

July 2001

OPERATIONS, MAINTENANCE & WARRANTY INFORMATION

CONTENTS: PAGE

INTRODUCTION

Welcome and congratulations on purchasing your YUNCA EROS FLUED GAS HEATER. Please read the following carefully before attempting to operate the heater and ensure all members of your home understand how this elegant and highly efficient heater functions.

Please fill out and return the registration card promptly.

These instructions should be stored in a convenient safe place for ready reference. If you have any questions regarding your heater please contact your YUNCA EROS dealer.

The YUNCA EROS FLUED GAS HEATER is a listed gas-fired, conventionally vented, room heater tested by independent laboratories to New Zealand standards.

The installation of the YUNCA EROS FLUED GAS HEATER must be carried out by a suitably qualified person and comply with the current New Zealand (Australian installation code) NZS 5261:1996 (AG 601:1998)

CAUTION: **This appliance must be flued to atmosphere**. Installation and repair of the YUNCA EROS VENTED GAS HEATER should be done by a qualified person. The appliance should be serviced at least annually by a qualified service person. Control valve compartments, burners, fan, and air circulating passageways of the EROS must be kept free from any lint and dust build-up to ensure efficient and safe operation of the heater.

DO NOT PLACE ARTICLES ON OR AGAINST THIS APPLIANCE.

DO NOT USE OR STORE FLAMMABLE MATERIALS NEAR THIS APPLIANCE.

DO NOT SPRAY AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHILE IT IS OPERATIONAL.

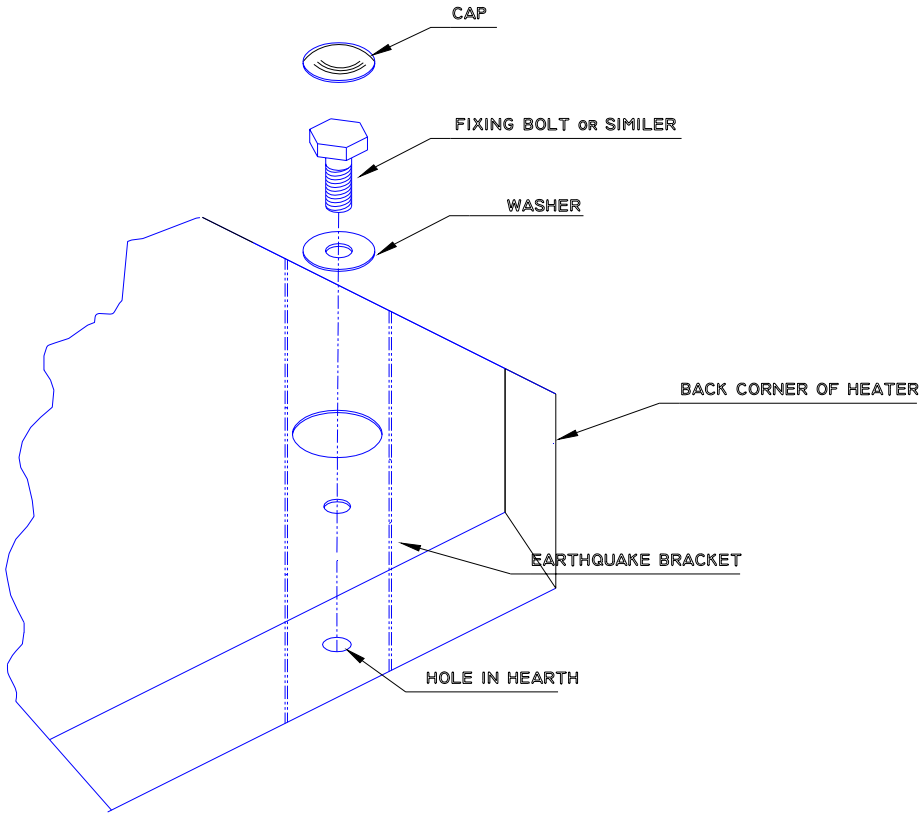
To remove internal packaging, refer to page 12 for front door removal.

INSTALLATION

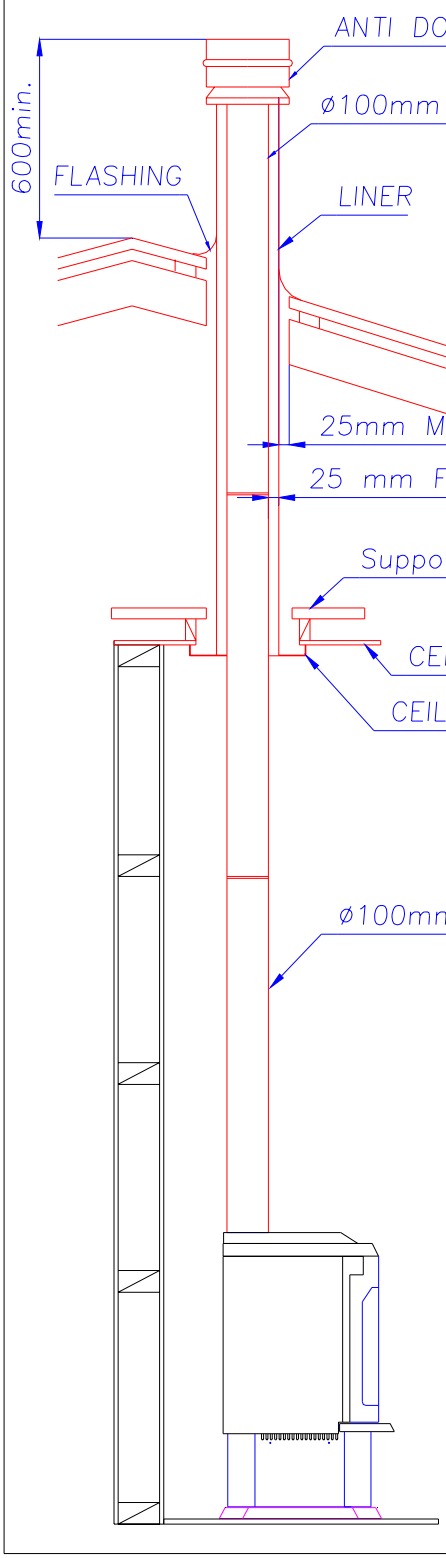
Considerations

The most desirable and beneficial location for a YUNCA EROS HEATER is in the centre of a building, thereby allowing the most efficient use of the heat created.
The location of windows, doors and the traffic flow in the room where the heater is to be located, should all be considered.
If possible a location should be selected that allows the flue pipe to be installed simply and pass through the house without cutting a floor or roof joist.
To obtain maximum heat distribution with any freestanding heater a ceiling fan can be fitted.
Another important consideration when installing the Yunca EROS is availability of power supply to the fan.

When the appropriate position has been selected the unit can be bolted to the floor to ensure that the unit remains upright in the event of an earthquake or similar. A template has been supplied with your heater and should be placed on the floor so holes can simply be drilled through the template. The flue centre is also marked so a plumbob can be used to find the centre of the ceiling flue.
If the heater is being attached to a concrete floor dyna bolts should be used, if the floor is wooden the bolts used should be long enough to go fully through the floorboards and fixed with nuts and washers from the underside.
The earthquake brackets are located at the rear corners of the heater and are exposed by removing the cover.



EROS TYPICAL FLUE INSTALLATION



CONDITIONS FOR FLUES

1. The flue shall extend to:

   (a) in the case of a pitched roof, not less than 600mm above the highest point on the roof.

   (b) in the case of a flat roof (ie. any roof with a pitch of less than 30°), not less than 1500mm above the highest point of the roof.

In any case the length of the flue shall not be less than 3 metres From Top of Appliance Flue Spigot

2. When loose fill insulation is used in the adjacent ceiling space, maintain clearence between the liner and the loose-fill insulation by provision of a boundary extending 200mm above the ceiling top surface. The boundary may be of any material capable of preventing accidental migration of the loose-fill by any action of wind or by persons moving in the ceiling space.

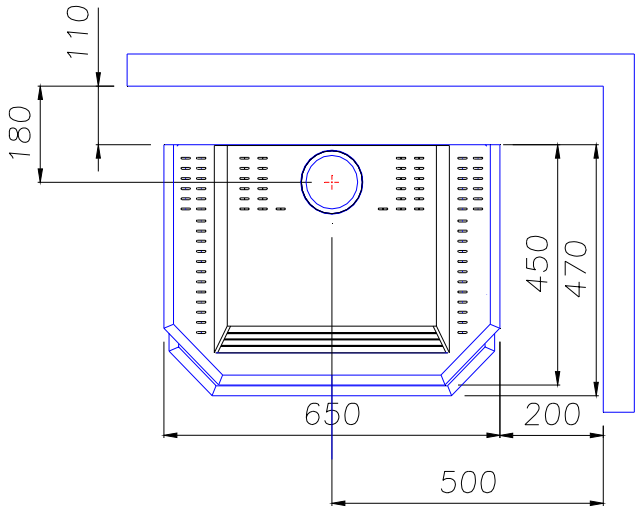
3. Minimum total flue length = 3M

CLEARANCES

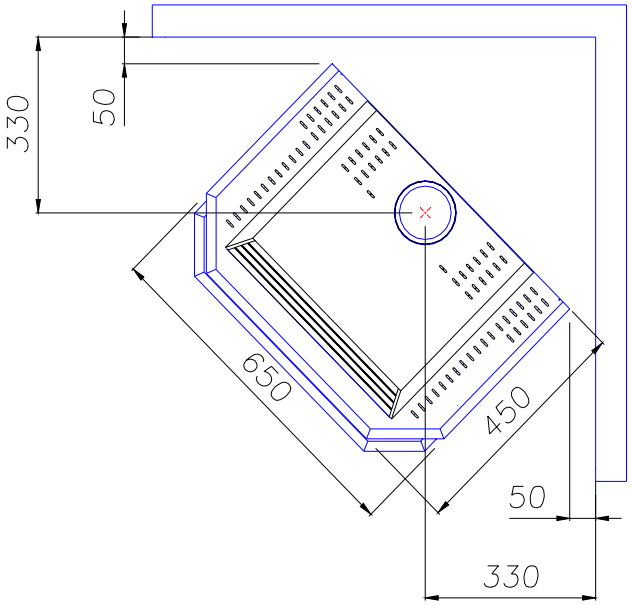
The YUNCA EROS FLUED GAS HEATER should be installed with clearances equal to or greater than those recommended below and comply with NZS 5261/ AG601.
This is to ensure adequate air circulation around the heater and avoid heat damage to wall coverings.

Note: Ensure main gas pipe will not interfere with the removal of fan assembly at the back of the plinth.

(Fig. 3)



Overall Height = 800mm



CONNECTING THE HEATER TO A GAS SUPPLY.

Burn only the fuel for which the heater is equipped.
The YUNCA EROS may be shipped from the factory equipped to burn natural gas, Propane or L.P.G. The data plate affixed to the back of the heater specifies the gas type which the heater is factory equipped for. Fuel Conversion Kits are available from your YUNCA agents.
See Appendix: A for instructions on field conversion from one gas to another. This conversion can only be done by a suitably qualified person.

Gas connection:
The gas inlet is located behind the fan Back Pane. The inlet thread is a female 3/8" BSP.
A separate gas isolation valve should be installed immediately up stream of the connection to the appliance.

WARNING: To stop pipe compounds entering the gas line, do not apply sealing compounds to the first two threads at the tip of any gas connection. All joints should be tested for leaks before operating the heater.

GAS PRESSURE REQUIREMENTS

Correct gas pressure and the use of a properly sized gas supply line is essential for the safe and efficient performance of this appliance. The inlet and outlet pressures at the control must be tested on installation, following the procedure over page.
Note: Improper gas pressure will affect heater performance, flame Colour or cause pilot malfunction.

Natural Gas:

Minimum inlet pressure	1.25 Kpa (5”w.g.)
Maximum inlet pressure	5.0 Kpa (20”w.g.) With supplied inline regulator fitted.
Operating pressure	1.0 Kpa (4”w.g.)

L.P.G. (NZ Only) and Propane

Minimum inlet pressure	2.75 Kpa (11”w.g.)
Maximum inlet pressure	3.5 Kpa (14”w.g.)
Operating pressure	2.5 Kpa (10”w.g.)

CAUTION: Do not use this heater if any part has been under water or exposed to moisture causing corrosion.
A Qualified service technician should inspect the heater and replace any part of the gas system that has been under water.

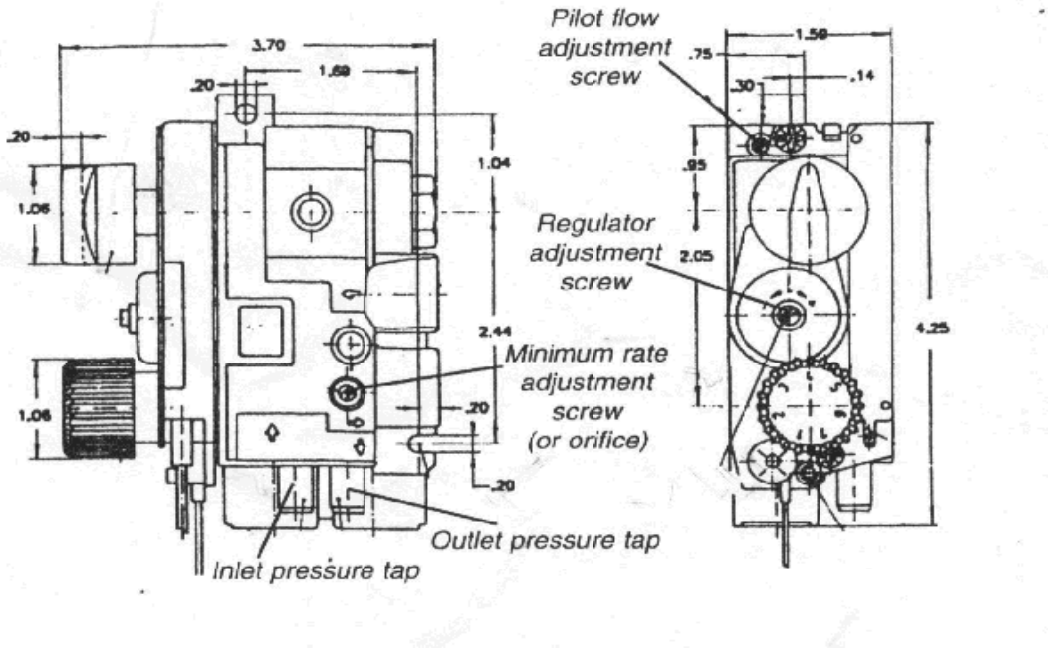
PRESSURE TESTING:

The pressures listed on the previous page can be tested using a manometer.

To attach manometer, first remove the inspection cover from back panel. The cover is located directly behind the control and is removed by unscrewing the two top screws.

This will expose the back of the control so manometer tubes can be attached to the **pressure taps** as shown below.

The inlet pressure can be adjusted via in line regulators in the supply to the heater, and the outlet (operating) pressure by adjusting the valves internal regulator. To locate the valves **regulator adjustment screw** the plastic control cover must be removed from the front of the valve. This is done by removing the bottom screw and inserting a small flat head screwdriver into the slot at the top on the front of this cover and pulling the cover off. Refer to fig. 4 below



THERMOSTAT

The thermostat sensing bulb is found on the fan back panel held in a saddle.

In some installations the thermostat sensing bulb may need to be repositioned to accurately sense the room temperature. Reposition in an unobtrusive place.

CONNECTING THE FAN

The fan should be connected to the mains supply (240V 50Hz) via the 3m flex and 3pin plug

OPERATION

How To Light Your YUNCA EROS
Refer to Fig 5.

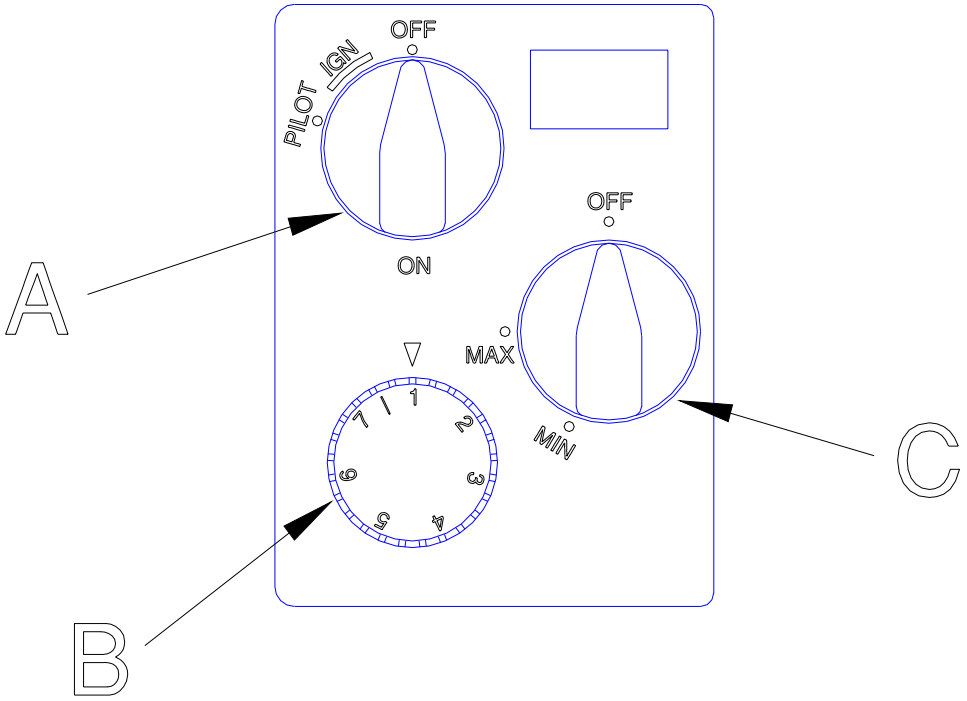


Fig 5: Control Panel.

7. First read all the instructions for the heater.

2. Check that the control knob “A”(Fig 5) is in the off position, the thermostat knob “B” is turned to its Highest setting (7) and back burner control “C” should be in the off position.

3. Turn off electric power at the wall.

4. Turn the knob “A” slightly anti-clockwise to stop. Push the control knob “A” fully down and turn left from OFF to IGN, hold for 5-15 seconds. Continuing to hold down, turn the knob “A” further anti-clockwise to pilot mark. Observe pilot light by looking through front door. The pilot light is visible under the left hand end of the log set.

5. When the pilot is lit, continue pushing in knob for further 20 seconds to allow safety thermocouple to heat up. Release knob and pilot flame should remain lit. If it goes out repeat steps 4 and 5

6. The pilot control knob “A” can now be turned fully left to the ON position to light the front burner.

7. Turn on electric power and the fan.

8. After the front burner has been on for at about 3 minutes. Turn the back burner on, by pushing in knob “C” and turning Anti-Clockwise to maximum position.

9. Allow both burners to run for 30 minutes to bring the room up to temperature.

10. Turn the back burner off.

11. Adjust the thermostat down, to the front burner turns off. Note the thermostat number and turn up by ½ to1 ½ a thermostat number till the front burner turns on.

12. Leave the fan on. Note Fan can be turned off, Higher efficiency is achieved with the fan running

To further increase the room temperature follows the following steps:

1st Turn the thermostat up one number.

2nd Turn the secondary burner on to minimum.

3rd Turn the secondary burner up to maximum.

Note: Various combinations of the settings of knobs "B" and "C" will provide different heat settings and flame effects.

The first few times that the heater is lit it should only be running for about twenty minutes. And then allowed to cool. This will eliminate damage to paints and reduce the smoke and odour caused by burning off of manufacturing oils etc.

HOW TO TURN OFF THE HEATER.

1. Turn the rear burner control, knob "C", to the off position.

2. Turn off the electrical power at the wall.

3. Push in the pilot control knob "A" and turn it clockwise to off.

Note: The knob cannot be turned from "pilot" to "off" unless it is pushed in slightly. Do not force it.

MAINTENANCE

A qualified service person recommended by your YUNCA dealer should conduct an annual inspection and undertake any maintenance required on your EROS. Its venting and installation must be checked to keep it running safely and efficiently. The following procedures should be performed only by a qualified service person. The gas supply and electrical power should be isolated whenever any maintenance procedures are undertaken.
Note: the door can only be removed after the heater has been turned off for long enough so that the door has cooled to touching temperature.

Removing The Front Door

1. First the top panel must be removed, to do this grip panel at the front edge and the back corner. Pulling up will disengage the locating pin. Then work the hand position around the panel to disengage all the locating pins.
   Care needs to be taken not to damage any panels by keeping the panels from touching each other during this process

2. The side panels must be removed, to do this grip the top of the and pull out to disengage the locating pins. The panel should be swung out to about 20 degrees and then pulled up to release the locating pins at the bottom. Take care to ensure the door is not damaged by the side removal.

3. This will expose the restraining latches at each side. To open these latches lift the butterfly grip forward and twist it through 180 degrees.

4. The front door can now be removed by griping it by its back bottom corners by lifting it away from the heater.

Removing The Glass For Replacement.

1. Remove the front door as described above, and place front down on a soft surface.

2. Remove the bottom front glass retainer by taking out the four screws along the base of the door.

3. To remove the front glass place one hand under it and lift it up and out of the doorframe.

4. New glass with gasket attached can be ordered through your YUNCA EROS agent.
   Note: Only recommended heat resistant glass may be fitted.

5. Place replacement glass in position in the reverse order of removal.

6. Replace bottom glass retainers with their respective bolts and screws.
   Note: Tighten the screws and bolts alternately, do not over tighten, to avoid damaging glass.

REPLACING THE GASKET.

The YUNCA EROS has a 10mm fibreglass gasket surrounding the front door. Should it ever need replacement, use only the replacement gasket that is available from your YUNCA dealer. The reference number for this is listed in the parts list.

Procedure.
1. Remove the front door as described on previous page.

2. Remove the existing gasket and clean the channel of all loose material.

3. Lay the gasket in the channel, starting from one end.

4. Replace the door carefully to avoid dislodging the gasket.

Cleaning The Glass

The glass may be cleaned with ordinary household glass cleaner and a soft cloth or paper towel. Note: Never clean the glass when it is hot. Do not use abrasive cleaners on the glass.

CLEANING THE LOG SET AND FIREBOX.

During the annual inspection and maintenance appointment, the service person should clean dust, lint and any light soot accumulation from the logs and the fire box area. An extra soft brush should be used on the logs as they are extremely fragile. If at any time the logset cannot be removed or installed without force, the cause must be found. The logset must never be forced.

Procedure.
1. Remove front door as described previously.

2. Remove the inner hearth by removing the screws along the lower front and lifting clear.

3. Remove the loose side coals with care. Gently brush clean.

4. Remove the log set from the firebox by lifting it up and out.

5. Brush it gently over a newspaper and carefully place it out of the way.

6. Vacuum cleaner can be used to remove any visible dust and lint from within the firebox area.

7. In and around the pilot light assembly the fine gas ways need to be clean and free from obstruction. The jets may require to be checked for obstructions

8. Replace the logset and then the loose coals.

9. Replace the inner hearth.

10. Replace and relatch the front door, replace the side panels and top.

CLEANING THE TOP AND LOUVRES

Note: If a flue guard kit has been fitted this may need to be removed. This is done by sliding the front half up and out and unscrewing the back half from its brackets.

The top panel is held in place by four retaining pins. The top panel must be removed, to do this grip panel at the front edge and the back corner. Pulling up will disengage the locating pin. Then working the hand position around the panel to disengage all the locating pins.
Care needs to be taken not to damage any panels by keeping the panels from touching each other during this process.

Slide the top panel up the flue until there is sufficient space to vacuum any dust and lint that may be lying under the panel.

This is also a good time to wipe the front louvers with a soft cloth.

CLEANING THE (OPTIONAL) GOLD DOOR/PARTS

The gold finish is very soft. Care must be taken not to damage the gold coating.

Cleaning must be completed using a soft non-abrasive damp cloth.

NEVER use an ABRASIVE on the gold finish. The gold coating can easily be removed with the lightest rub with abrasive material.

INSPECTING THE VENTING

An inspection of the venting system should be made during the annual service appointment. There must be no blockages and the flue must be in good repair. Any sections that are taken apart for inspection must be reassembled and sealed as required.

CLEANING THE FILTER

This is the one maintenance procedure designed to be carried out by the householder. The filter should be cleaned periodically to maintain an unrestricted air passage to the fan.

The filter is found at the back of the fire (see below). To clean, use a vacuum cleaner or similar to remove any dust or lint build up. The filter is not designed to be removed for general cleaning.

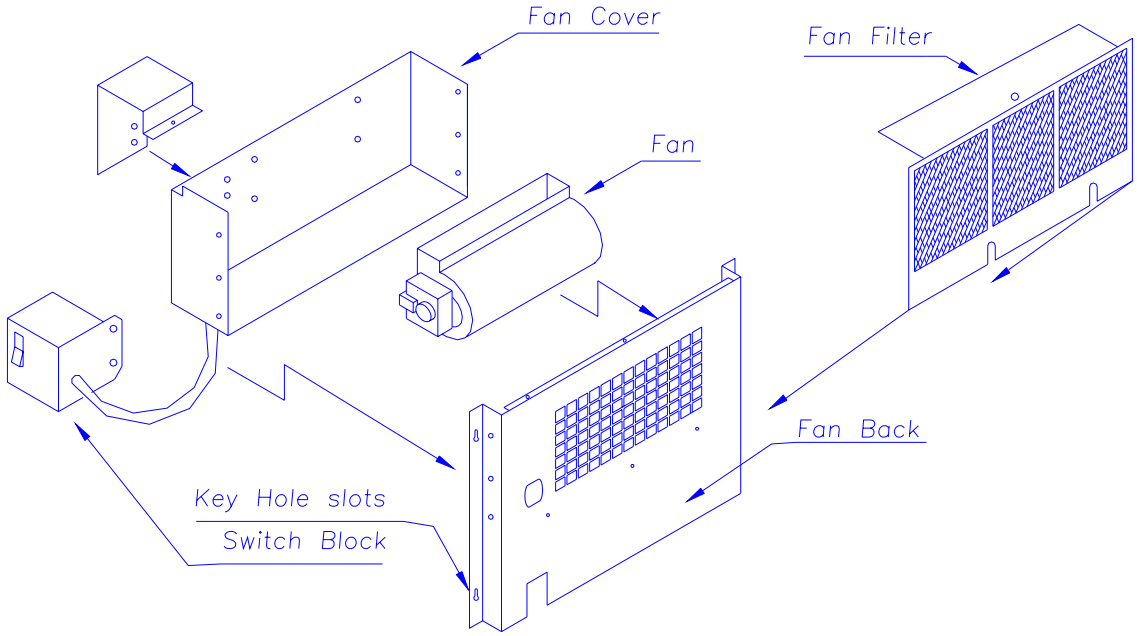
The area behind the fire should be maintained in a clean state. This reduces the possibility of the fan picking foreign matter that will cause fan noise or damage.

HOW TO REMOVE FAN

Fan removal for cleaning.

1. IMPORTANT. Unplug the fan from the power supply.
2. Remove the front plinth by pulling clear of the locating pins.
3. Undo the screws attaching the switch block inside the heater
4. Loosen the four screws holding the Fan Back to the plinth at the back of the heater. Screws should be loosened but do not need to be removed.
5. The Fan Back that contains the fan is removed from the back of the fire by lifting up off the screws.
6. The fan blades can be cleaned of any dirt and grim.
7. Reassemble

The fan assembly should only be disassembled by an electrician or trained Yunca Technician.



Fault Finding:

SYMPTOM	PROBLEM	CORRECTIVE
Pilot Will Not Light.	No spark at pilot burner.	Check connection between electrode in pilot assembly and lead from control. Press connection hard together. (Inserted 18mm in to control) Replace the pilot assembly if ceramic insulator is cracked or broken. (Finger tighten nut that holds ceramic insulator)
	Gas not available at the spark point. A complete ring of gas around the pilot hood.	Clean the gas ways of soot or foreign particles Open up the gas gap where the spark earth's on to the pilot.
	Spark gap is incorrect.	Spark gap should be 3-4mm between the electrode tip and the pilot flame hood.
	No gas at pilot burner	Check that isolating valves are turned on and gas is available. Check pilot hood for blockage Remove pilot jet and blow clean. The jet is located inside the base of the pilot burner and is removed by disconnecting the gas to the pilot and removing the brass nut from the base of the burner. Jet will fall out. Check for any obstructions in the gas line that may cause low pressure or restrict flow. Purge gas lines.
	No Supply Gas.	L.P.G. -- Refill tank Natural -- Check with gas supplier

Soot is being deposited on logs or glass	There is insufficient secondary air in the combustion chamber.	Check the back of the heater for blockages around the air intake slots. Check that the clearances around the heater match those stated in this manual.
	LPG gas mix incorrect	Contact supplier to clean out bottle
	The logset is properly positioned.	Ensure the log set is siting flat on the seating face.
	Incorrect gas pressures.	Check and set gas pressure to manufacturers specifications.
Main burners extinguishing.	Flue down draughting.	This is caused by a vacuum in the room. Turn off heater. Turn off all air conditioners, expelair fans, other heaters etc. Open doors and windows to allow pressure to equalise. Re-light heater. Close doors and windows but not completely.
	Flueway blocked	Remove blockage.
	Pilot flame is not large enough.	Check that pilot assembly is correctly mounted and that the pilot burner flame hood directs the pilot flame over both burners and the thermocouple.
	Severe down draught.	If the flame pattern is disturbed during extreme winds then ensure a recommended flue cowl has been fitted and is still in place.
Pilot will not stay lit	Incorrect operation.	Operator not following correct lighting procedure, see lighting instructions.
	Weak or improperly located pilot flame.	Adjust the height of the thermocouple (using the brass nut at its base) The flame should engulf the

		top 8mm of the thermocouple.
	Thermocouple not properly connected.	Check back of main control where thermocouples copper tube enters the control. Tighten brass collar nut.
	Defective thermocouple.	Replace thermocouple A new thermocouple may be ordered through your YUNCA agent.
	Faulty control valve.	A replacement may be fitted by a suitably qualified service person.
Pilot burning, no gas to burners	Control turned to Pilot only	Turn the control knob to on position
	Thermostat turned down below the room temperature	Turn the thermostat up to a setting above room temperature. Move the thermostat bulb to a position that accurately senses the room temperature
	Burner injectors may be blocked.	Disconnect gas supply at burners and unscrew brass injectors from end of burner. Use compressed air to clean out orifice.
Back burner stays on when switched to off position.	Faulty control	Control requires replacement.
	Build up on the control valve.	Disassemble the control valve by removing the two screws below the cover. Extract the control valve, note the position. Clean the control valve clean and re-assemble. Test operation.

APPENDIX A:

GAS TYPE CONVERSION

If at any stage the heater is required to run on a gas other than that which it was factory equipped a conversion kit can be ordered through your YUNCA dealer.

The conversion should be done by a suitably qualified person.

Step 1. Isolate the heater from the gas supply

2. Remove the front door as previously described.

3. Remove the inner hearth by removing the screws along the lower front and lifting clear.

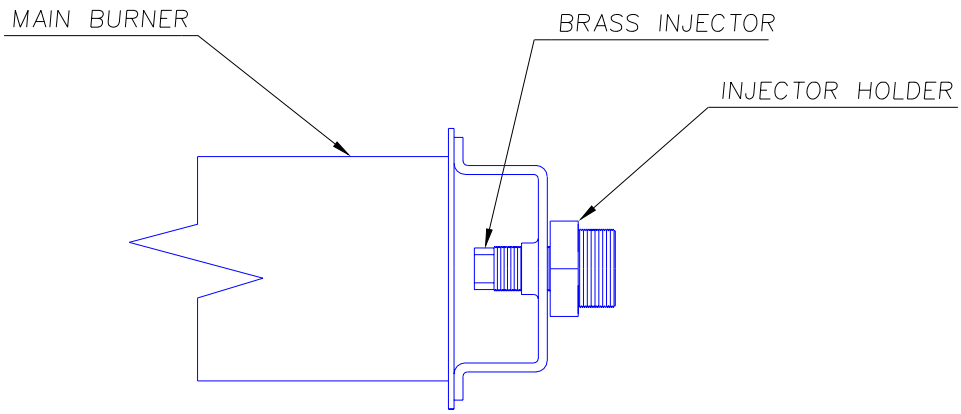
4. Remove logset.

5. Disconnect the burners from their supply pipes.

6. Unscrew the brass injector holders from the burner frame.

7. The brass injectors are threaded into the end of the injector holders, they can be removed with a 7mm spanner, and the new injectors fitted.
8. An approved sealing compound should also be used.

9. The burner module can be unscrewed, it is held in place by two screws located between the burners.



8. The pilot assembly must be removed from the burner module. To do this, undo the screw on the left hand end of the burner support bracket and slide the pilot assembly down. The two screws that attach the pilot assembly are now accessible under the front burner, remove these screws.

9. It is now possible to remove the entire main burner module.

10. This will expose the pilot assembly and make it possible to disconnect the gas supply to the pilot burner

11. When the brass nut is removed from the base of the pilot burner the pilot jet will drop out. Insert new pilot jet from conversion kit ensuring the chamfered end is facing upwards.

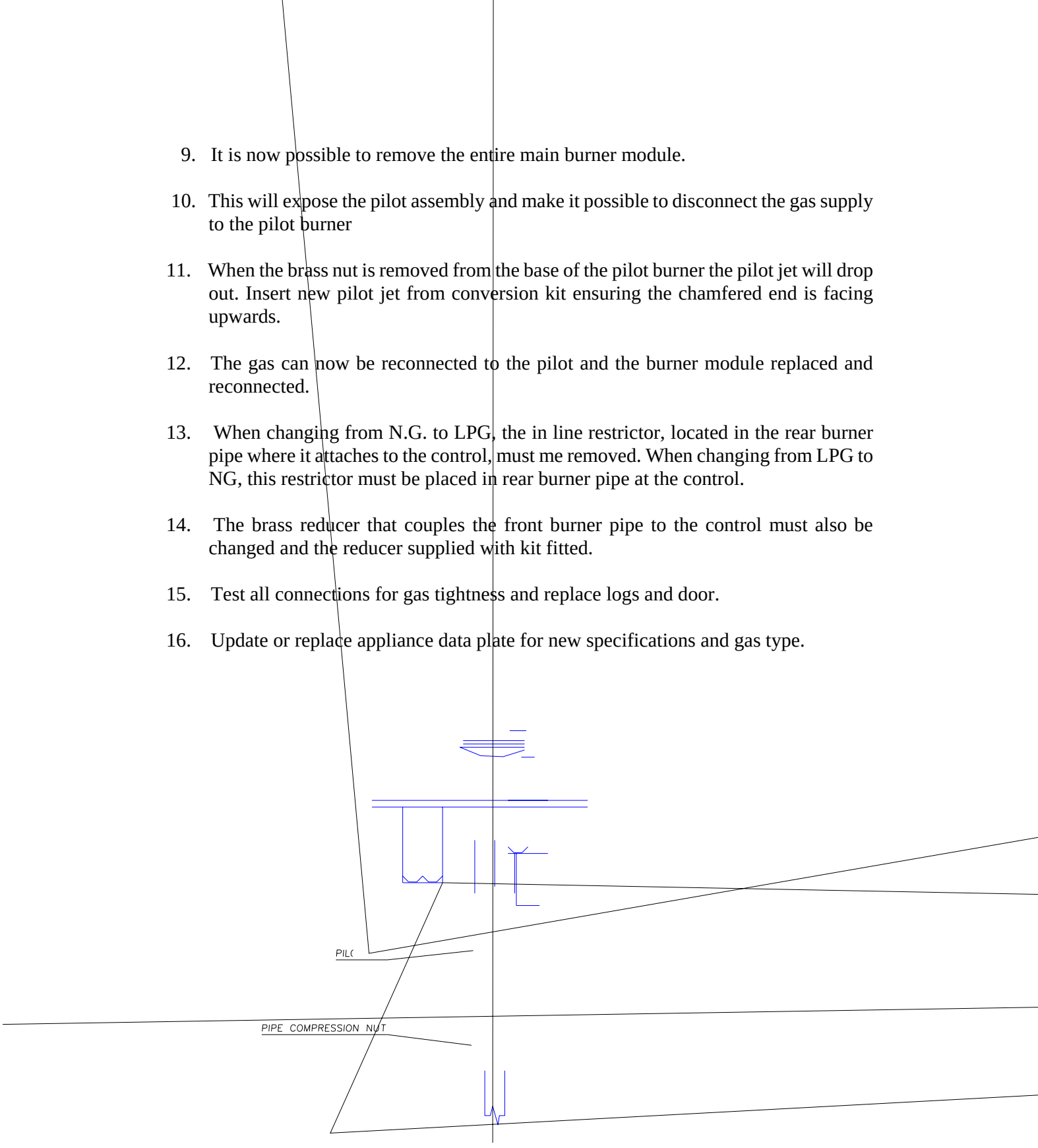
12. The gas can now be reconnected to the pilot and the burner module replaced and reconnected.

13. When changing from N.G. to LPG, the in line restrictor, located in the rear burner pipe where it attaches to the control, must me removed. When changing from LPG to NG, this restrictor must be placed in rear burner pipe at the control.

14. The brass reducer that couples the front burner pipe to the control must also be changed and the reducer supplied with kit fitted.

15. Test all connections for gas tightness and replace logs and door.

16. Update or replace appliance data plate for new specifications and gas type.



APPENDIX B:

PARTS LIST:

PART NO.	PART NAME
LZ-G01	Mertik gas control
EROS01	Burner module
LZ-G03	Pilot assembly
LZ-G04	Electrode
LZ-G05	Thermocouple
EROS02	Pilot pipe assembly
EROS03	Front burner pipe assembly
EROS04	Rear burner pipe assembly
LZ-G10	Adjustable N.G. inline regulator
EROS05	Log Set
LZ-G17	Bag of Vermiculite
IB-B11	Door gasket
IB-B25	Bay Glass (Deluxe model only)
EROS97	Side glass (Standard model only)
EROS98	Front glass (Standard model only)
EROS06	Booster fan assembly
LZ-B34	Rocker switch
EROS07	Right side panel (state Colour)
EROS08	Left side panel (state Colour)
EROS09	Top panel (state Colour)
EROS10	Main door (state Colour – Deluxe model only)
EROS99	Main door (Black – Standard model only)
EROS11	Control Door
EROS12	Plinth front
EROSA1	L.P.G. conversion kit
EROSA2	Natural gas conversion kit
EROSA3	Propane conversion kit

APPENDIX C
INJECTOR SIZE:

GAS TYPE	FRONT BURNER	BACK BURNER
NATURAL	2.5 mm diameter	2.95 mm diameter
L.P.G. (NZ only)	1.10 mm diameter	1.30 mm diameter
PROPANE NZ	1.20 mm diameter	1.40 mm diameter

APPENDIX D: Warranty:

The Yunca EROS Gas Heater is covered by a limited Five-Year Warranty against defects in materials and workmanship.
All gas and electrical components including control, burners, pilot assembly, tubing, fan and switches are warranted for a period of one year from date of purchase.
Glass and surface coatings are also warranted for one year.
Damage caused by neglect, improper use, acts of god, theft, or any other indirect, incidental cause are not covered by this warranty.
This warranty is void if the recommended service schedule is not implemented as suggested in this manual and carried out by a suitably qualified person.

Limitations of Liabilities:
Yunca Heating hereby waivers any liability for incidental and consequential damage directly or indirectly sustained, or for any loss caused by the application of this product not in accordance with the current printed instructions.
Our liability is expressly limited to replacement of defective goods as per above warranty. Any claim shall be deemed waived unless made in writing to Yunca within 30 days from the date that it was or reasonably should have been discovered.

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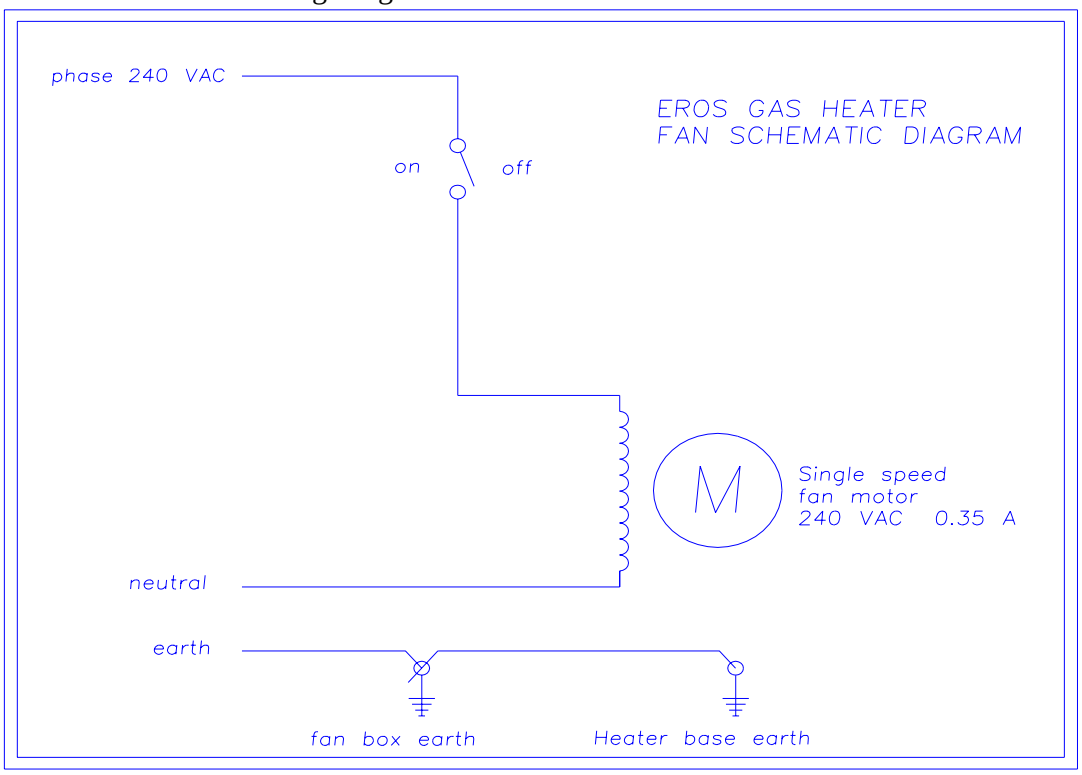
APPENDIX E: Fan Wiring Diagram:



CUSTOMER COPY
YUNCA EROS WARRANTY REGISTRATION:

Serial No._____ Gas Type. _____ **Purchase Date**_____

Purchasers' Name. _____

Purchasers' Address. _____

City. _____ Postcode. _____ Telephone _____

Where Purchased. _____

Installed By. _____ **Date.** _____

Yunca Gas Dunedin
PO Box 500
DUNEDIN
Telephone (03) 488 4342
Email: yuncagas@southnet.co.nz

Cut along here…

This section must be returned within 10 days of purchase.

YUNCA EROS WARRANTY REGISTRATION:

Serial No._____ Gas Type. _____ **Purchase Date**_____

Purchasers' Name. _____

Purchasers' Address. _____

City. _____ Postcode. _____ Telephone _____

Where Purchased. _____

Installed By. _____ **Date.** _____

Return to: Yunca Heating
PO Box 932
INVERCARGILL