

PYROTECH STANDARD®

INSTALLATION & OPERATING MANUAL

The Pyrotech Space Heater is approved to be installed into a masonry fireplace or as a zero clearance firebox enclosed by a timber frame & plastered. The Pyrotech is approved to operate on Natural Gas and Propane (LPG) gases only. Approval Number 6877.

VERSION 20



WARRANTY

Provided your Real Flame gas fire is installed in strict accordance with our installation instructions, the firebox is unconditionally guaranteed for ten years and all other parts for twelve months from date of purchase.

This unconditional warranty covers parts and labour at our discretion taking into consideration normal wear and tear and does not cover fires installed in outdoor settings.

WARNING

The Pyrotech Standard has a primary safety glass fitted in front of the glass door. This safety glass is fitted to this appliance to reduce the risk of injury from burns and at no time should this glass be permanently removed.

For protection of young children or the infirm, a secondary guard is required.

INSTALLATION NOTICE

- The installation of this appliance is only to be carried out by an authorised person in accordance with the Manufacturer's Instructions, local gas fitting regulations, AG601 installation code for gas burning appliances and any other relevant statutory regulations.
- In all cases the installation of this appliance shall meet the requirements as set out in AS5601/AG601.
- NOTE: A slight smell may be apparent for the first few hours of use. This is due to the heat resistant paint curing. It is recommended to open windows in the room for the first lighting of the fire. In some instances a slight discolouration may occur inside the firebox. This is a normal condition and is not covered by warranty.

IMPORTANT SAFETY NOTICE

- DO NOT PLACE ARTICLES ON OR AGAINST THIS APPLIANCE.
- DO NOT USE OR STORE FLAMMABLE MATERIAL NEAR THE APPLIANCE.
- DO NOT SPRAY AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHILST IT IS IN OPERATION.
- DO NOT OPERATE WITH GLASS PANEL REMOVED FROM THIS APPLIANCE.

VENTILATION REQUIREMENTS

■ ADDITIONAL VENTILATION IS REQUIRED ONLY IF THE UNIT IS INSTALLED IN A ROOM OF LESS THAN 10 CUBIC METRES IN SIZE - REFER AG601 CLAUSE 5,4,3,1.



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DATA PLATE

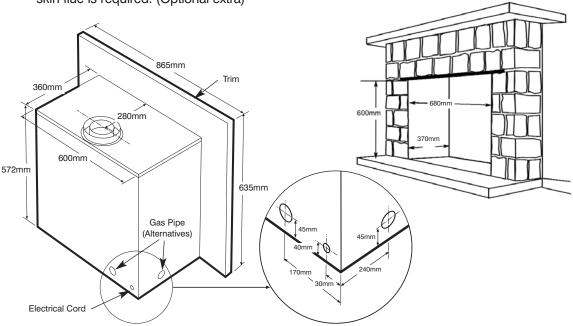
MODEL: PYROTECH SPACE HEATER		WEIG	iHT:	55 kg	
TYPE		INJ/SIZE	MJ/H		P.T.P.
☐ NATURAL	GAS	2 x 1.83mm	30		0.90 kpa
PROPANE	i	2 x 0.90mm	24		2.54 kpa
APPROVAL NUMBER 6877	JMBER SERIAL NUMBER			DATE	OF MANUFACTURE



PYROTECH INBUILT MODEL

- Unit installed into an existing "working" fireplace requires an AGA approved 150mm gas cowl.
 If the chimney does not draw properly, a 900mm length of flexi flue (supplied with unit) should
 be fixed to the flue spigot on top of the heater. The flexi flue should be fixed in the vertical
 position in a manner that does not allow the flue to fall or come away from the spigot.
- If the fireplace is not a working fireplace, then an approved 100mm flue system with 100mm AGA approved gas cowl should be used. (Optional extra)

• If the flue is exposed or enclosed with combustible materials, an approved 100/150mm twin skin flue is required. (Optional extra)



Pyrotech Inbuilt Installation Procedure

TICK BOXES Check chimney for correct venting of fumes

Position unit centrally.

Connect to gas supply using 15mm copper union.

Connect to power supply.

Remove glass and assemble log or pebble set as shown (Figures 1 - 12).

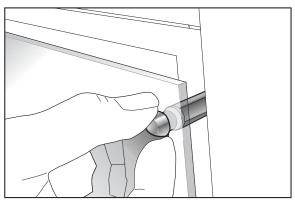


Figure (1) Remove decorative fasteners from four corners of shield glass panel.

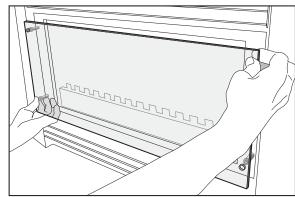


Figure (2) Remove shield glass panel.



PYROTECH INBUILT MODEL

Pyrotech Inbuilt Installation Procedure (continued)

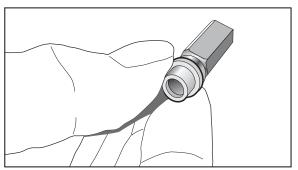


Figure (3) Remove nylon grommets and put aside carefully.

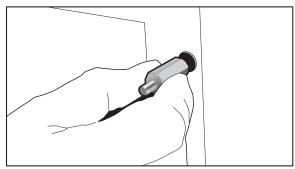
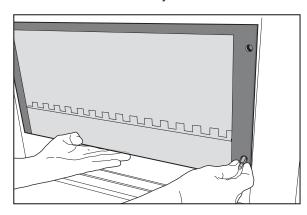


Figure (4) Remove three spacer bolts, and loosen bolt in bottom right corner.



NOTE: Keep coals or pebbles clear of burner rail.

Figure (5) Support front glass as shown, and remove fourth spacer bolt. Remove front glass.

Re-installation of glass panels is reverse of above. N.B: ensure that the roped edge of the glass is fitted to the top.

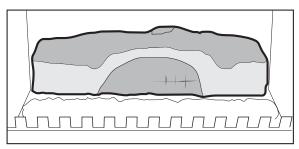


Figure (6) Remove box containing logset, and unpack. Place the large log at the rear of the burner just in front of the 2 square tabs on the log support panel.

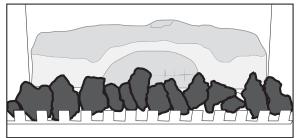


Figure (7) Place the 20 coals on top of the white ceramic blanket. Ensure front row of coals are placed 10-12mm away from the front grille.

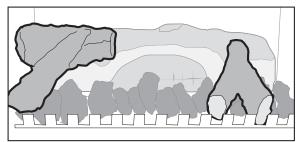


Figure (8) Place the 2 'Y' shaped logs as shown, the larger on the left.

Position the 'Y' end of the logs towards the front of the heater.

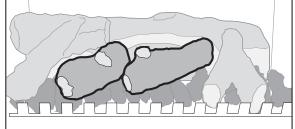


Figure (9) Place the 2 straight logs as shown



PYROTECH INBUILT MODEL

Pyrotech Inbuilt Installation Procedure (continued)

The Pyrotech Space Heater (Natural Gas Only) is approved for use with Pebbles.

To install the Pebbles follow the installation instructions as per Figures 1 to 5 above, and then proceed as follows (Figures 10 to 12).

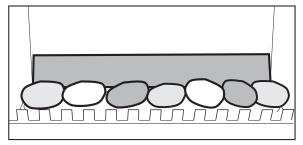


Figure (10) Install the metal angle at the rear of the fireplace and place one row of pebbles behind the burner rail.

Figure (11) Place pebbles between the first row and the angled tray.

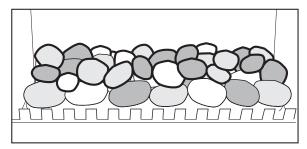


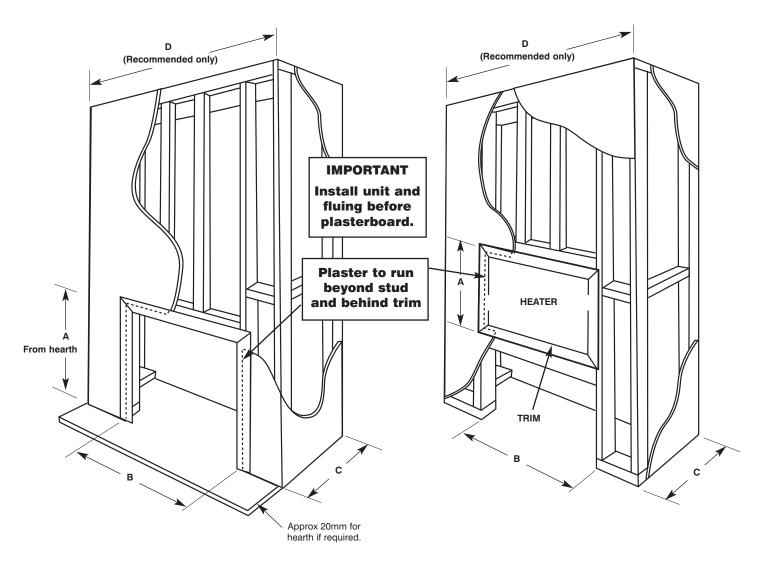
Figure (12) Place remaining pebbles up the angle of the rear tray so as the tray is hidden.

Note: If a coals only configuration is being used, use the same set up as pebbles.

TICK BOXES	Replace the glass front to its original position.
	Fit the trim to the front of the heater.
	Light the unit following the procedure on page 14.
	Install the 150mm AGA approved gas cowl where using the chimney to vent the fumes.
	Test the unit for safe operation and show customer correct operating procedures.
	Test for spillage.
	Perform pressure test.

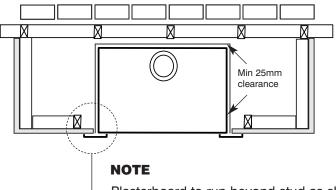


Pyrotech Zero Clearance Timber Frame Installation



NOTE: Note: If fire is to be installed off the floor with 4 sided trim, use same A, B, C and D dimensions as shown with frame work included below fire to required height.

A	В	С	D
750	775	450	1800



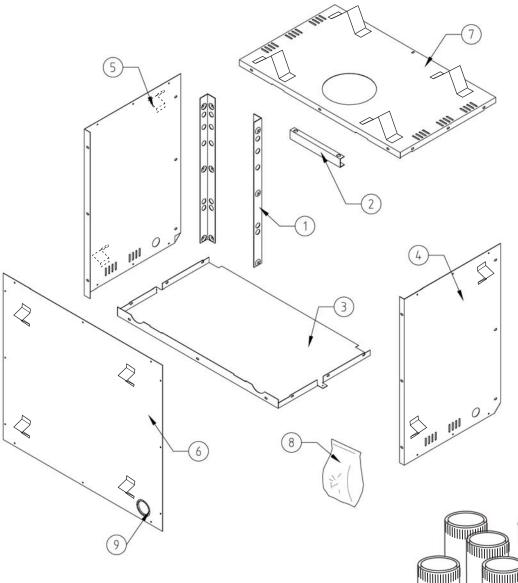
-Plasterboard to run beyond stud as shown, and to go behind fixing flange on unit.

CLEARANCES FROM COMBUSTIBLES

Floor	0 mm
Sides	25 mm
Тор	100 mm
Flue Outer	50 mm

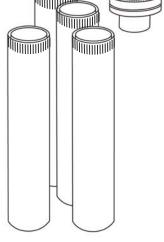


- 1. Position the Pyrotech firebox in the selected installation position in the room.
- 2. You will require the Zero Clearance Kit to suit, which is to be fitted to the main fire box as shown on page 10.



ZERO CLEARANCE KIT COMPONENTS

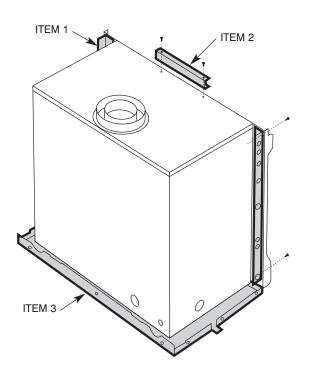
No.	Description	Qty
1	Panel – Side Strip	2
2	Panel – Top Strip	1
3	Panel – Base	1
4	Panel – Side L/H	1
5	Panel – Side R/H	1
6	Panel – Rear (with cord protector around large hole)	1
7	Panel – Top	1
8	Plastic Bag (Containing screws 35 off)	1
9	Cord Protector in place (154mm long)	1



FLUE KIT

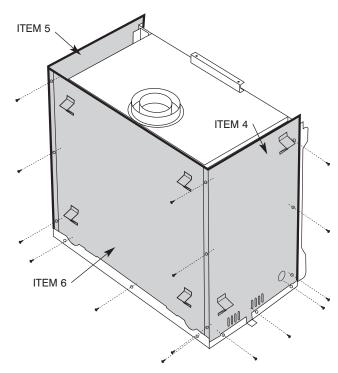


Fit Zero Clearance Kit to unit as shown below:



 Secure side strips (Item 1) to side brackets on fire box using screws (2 off per side strip).
 Remove 2 top screws in fire box and place top strip (Item 2) into position and secure using 2 screws.

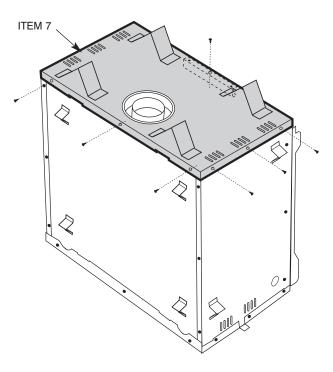
Place base panel (Item 3) under fire box.



2. Place LH side panel (Item 4) in behind lip of base panel. Secure side panel to side strip and base panel in 6 places.

Repeat for RH side panel (Item 5). Place rear panel (Item 6) in behind folds on side panels and base panel. Secure rear panel using screws 9 off.

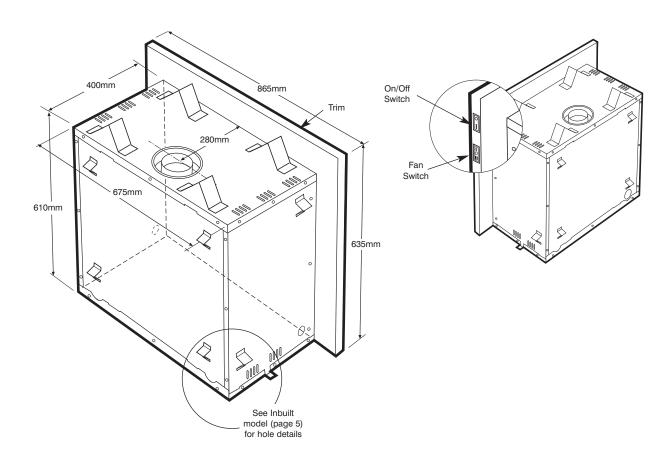
3. Place top panel (Item 7) onto assembly. Ensure all other panels sit behind folds on top panel. Secure top panel 9 places around edge and 1 screw on the top in the centre passing through hole in top strip as shown.





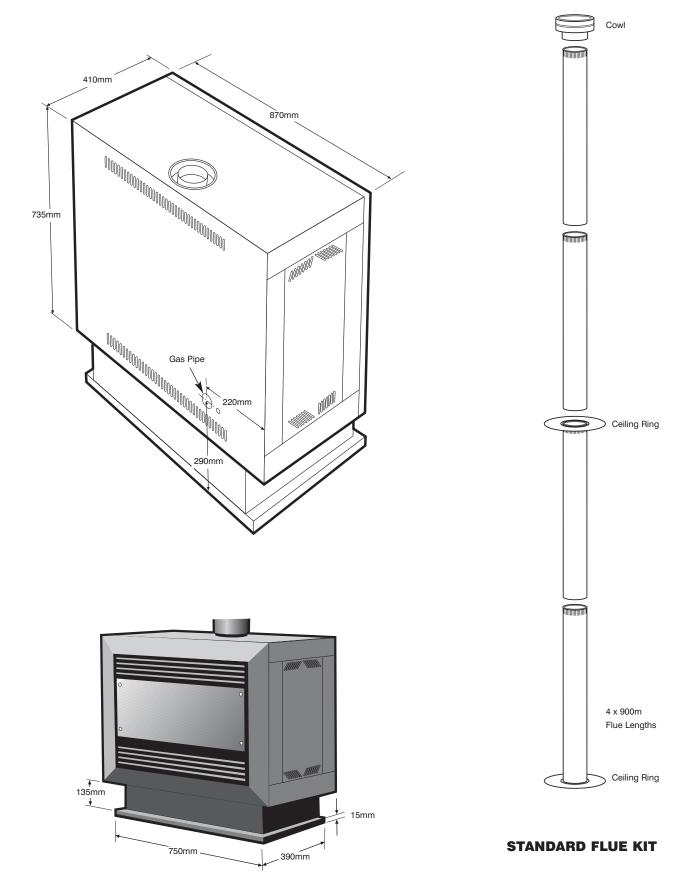
Pyrotech Zero Clearance Installation Procedure

TICK BOXES	Connect to gas supply.
	Connect to power supply
	Install flue to 500mm minimum above roof line. (Min total flue run 3.6 m)
	Plaster to unit with trim removed.
	Install trim.
	Assemble unit as per pages 5 - 7.
	Test the unit for safe operation and show customer correct operating procedures.





PYROTECH FREESTANDING MODEL





PYROTECH FREESTANDING MODEL

Pyrotech Freestanding Installation Procedure

TICK BOXES Position unit maintaining correct clearances from combustibles.

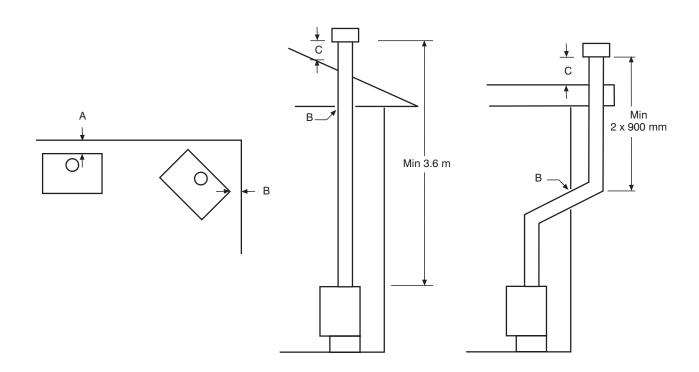
Connect to adequate gas supply.

Connect to adequate power supply.

Install flue kit maintaining minimum 25mm clearances from outer flue to combustibles.

Assemble as per pages 5 - 7.

Ensure clearances noted below are maintained.



MINIMUM CLEARANCES FROM COMBUSTIBLES

Α	50 mm
В	50 mm
С	500 mm



LIGHTING PILOT AND MAIN BURNER

The Pyrotech is fitted with a remote operated valve located in the cavity below the burner. The valve is pre wired and completely self contained to generate its own power.

Before lighting the pilot make sure that the gas line is connected.

DO NOT CONNECT ANY EXTERNAL POWER TO THE VALVE.

FOR YOUR SAFETY READ BEFORE LIGHTING

- The appliance has a pilot which must be lit using the piezo ignition, when lighting the pilot follow the instructions exactly.
- Before lighting the appliance check for gas leaks.
- Use only your hand to push in and turn the gas control knob, never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force of attempt to repair may result in a fire or explosion.
- If the controls have been underwater, immediately call a qualified service technician to inspect the appliance and replace any part of the control system and fan that has been immersed in water.

LIGHTING INSTRUCTIONS

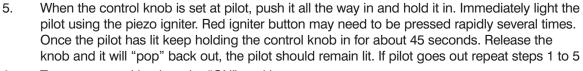
Visit www.realflame.com.au to view a video instruction.



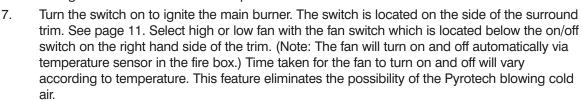
PILOT

STOP! Read the safety information. 1.

- 2. Push in gas control knob and turn to "PILOT"
- NOTE: Control knob cannot be turned from "OFF" to "PILOT" unless the knob is pushed in 3. slightly. Do not force.
- 4. Light pilot burner following steps below.



Turn gas control knob to the "ON" position 6.





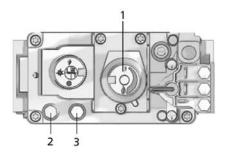
- After lighting the pilot, if the control knob does not "pop" out when released, stop and immediately call your service technician.
- If the pilot will not stay lit after several tries turn the gas control knob to "OFF" and call your service technician.
- N.B: WHEN THE CONTROL KNOB IS TURNED TO THE "OFF" POSITION IT WILL TAKE APPROXIMATELY 60 SECONDS FOR THE VALVE TO RELEASE AND ALLOW YOU TO MOVE THE KNOB. DO NOT FORCE THE KNOB.
- 8. To adjust the heat output of your Pyrotech, simply turn the Hi/Lo control knob to the right of the control knob.

TO TURN OFF GAS TO APPLIANCE

- Turn switch to "OFF" position. A.
- B. Push in gas control knob slightly and turn to the off position.



TESTS TO BE CARRIED OUT BY INSTALLER



- Remove Hi/Lo knob (1).
- Connect manometer to hi lo pressure point connection (3.)
- Via Hi/Lo knob (1), adjust hi pressure to N.G 0.9 OR LPG 2.54.
 Do not exceed these settings.
- Replace Hi/Lo knob.(1) (Note: Lo pressure will automatically set when knob is replaced)
- Check that flame height adjusts when Hi/Lo is turned.(1)
- Check that there are no gas leaks from any of the fittings.
- Explain to the customer how to turn the unit on and off (refer to page 14)

FAILURE PROCEDURE

If, when the control knob is turned to the "ON" position and the remote switch is turned to the "ON" position, the fire fails to ignite, check the following. (Allow 1 minute for the main burner to ignite once turned on.)

- A. The pilot is burning
- B. Ensure that the wiring terminals on the gas valve are not loose.
- C. Check that the inlet and working gas pressure are correctly set.

ACCESSING PILOT

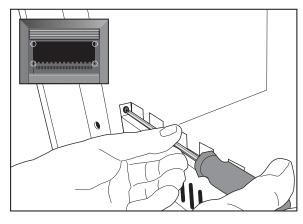


Figure (1) Remove the two glass panels, remove the front panel, this is held in place by two screws, one on each side.

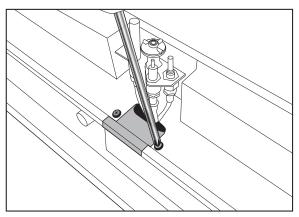
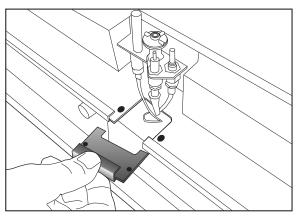


Figure (2) Remove the two screws holding the small bracket



ACCESSING PILOT (continued)



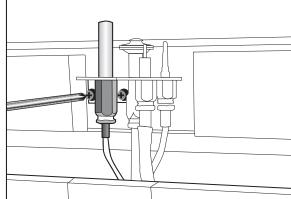


Figure (3) Remove the small cover plate

Figure (4) Remove the two screws holding the pilot assembly to the burner.

MAINTENANCE

The appliance should be thoroughly inspected before initial use and at least annually by a qualified service technician. If any abnormal condition is observed the home owner must contact a qualified service technician.

IMPORTANT: TURN OFF GAS AND ELECTRICAL POWER BEFORE SERVICING THE APPLIANCE.

MAINTENANCE SCHEDULE

Annually (Before Winter Season)

Maintenance Task	Accomplishing Person	Procedure
Inspection/Cleaning burner, logs and controls.	Qualified Service Technician	Inspect valve and ensure that it is operating correctly. Check piping for leaks. Vacuum the control compartment, fireplace logs and burner area.
Check Flame pattern and flame heights.	Qualified Service Technician	Ensure that the flame pattern is consistent and not impinged by the logs.
Inspecting/Cleaning Pilot and Burner	Qualified Service Technician	Remove any surface build up on pilot and burner assembly. Wipe the pilot nozzle, ignitor/flame rod and hood. Ensure the pilot flame engulfs the Thermocouple and Thermopile.



TROUBLESHOOTING THE MILLIVOLT GAS SYSTEM CONTROL

IMPORTANT

- Valve system troubleshooting should only be carried out by a qualified service technician.
- If supply cord is damaged or the unit needs repairing, it shall be repaired by the manufacturer or its service agent or similarly qualified person in order to avoid a hazard.

Symptom	Possible Cause	Corrective Action
Spark ignitor will not light pilot after	A. Defective ignitor	Check for spark at electrode and pilot. If no spark and electrode wire is properly connected, replace ignitor
repeated triggering of igniter button	B. Defective or misaligned electrode at pilot (spark at electrode).	Using a match, light the pilot. If pilot lights, turn off pilot and trigger the igniter button again. If pilot lights, an improper gas mixture caused the bad lighting and a longer purge period is recommended. If pilot will not light - check gap at electrode and pilot - should be 1/8" to have a strong spark. If gap measures 1/8", replace pilot.
	C. Gas supply pressure errant.	Check inlet gas pressure. It should be: • 0.90 kpa for Natural Gas • 2.54 kpa for L.P.G. Refer Data information plate.
	D. Pilot orifice plugged.	Clean or replace pilot orifice.
Pilot will not stay lit after carefully following the lighting instruction	A. Defective pilot generator (thermocouple)	Check pilot flame, it must impinge on thermocouple. Clean and/or adjust pilot for maximum flame impingement on the thermocouple. Ensure that the connection between the valve and the thermocouple is tight and secure.
Pilot burning, no gas to burner, valve knob "ON", Wall switch "ON"	A. Wall switch or wires defective.	Check wall switch and wires for proper connections. Jumper wires across terminals at wall switch, if burner comes on, replace defective wall switch. If okay, jumper across wall switch wires at valve, if burner comes on wires are faulty or connections are bad.
	B. Thermopile may not be generating sufficient millivoltage.	Check thermopile with millivolt meter. Take reading at thermopile terminals of gas valve. Should read 325 millivolts minimum with optional wall switch "OFF". Replace faulty thermopile if reading is below specified minimum.
	C. Blocked burner orifice.	Check burner orifice for blockage and remove.
Frequent pilot/burner outage	A. Pilot flame may be to low or blowing (High) causing the pilot/valve safety to drop out.	Clean and/or adjust pilot flame for maximum flame impingement on thermocouple.



TROUBLESHOOTING FOR FAN OPERATION

IMPORTANT

■ The tests below are only to be carried out by an authorised service agent or electrician.

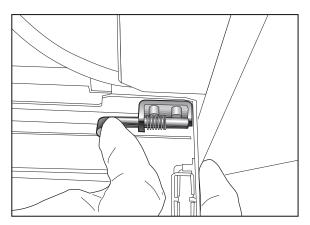
Symptom Possible Cause and Corrective Action

Fan will not operate Ensure that fire had been operating for at least 20 minutes.

Ensure that snap disc is operating. To check this, remove the two wires from the snap disc and bridge the wires. If the snap disc is faulty, the fan will now work.

If the fan still does not come on, the fan will need replacing.

REMOVING FAN



N.B.: Before removing the fan ensure that all power to the fan has been turned off.

Figure (1) Remove the bottom door panel from the unit.

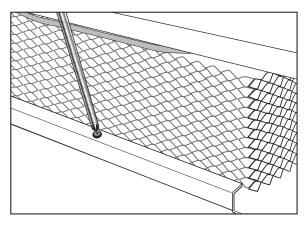


Figure (2) Remove the small screw holding the mesh electrical safety panel.

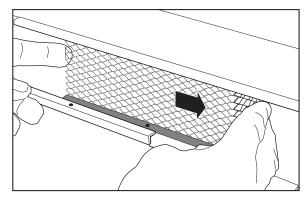


Figure (3) Remove the safety panel



REMOVING FAN (continued)

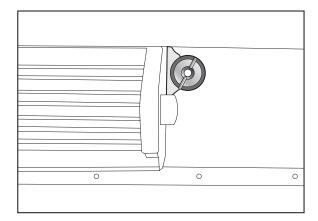


Figure (4) Remove the wing nut on the right hand side of the fan assembly.

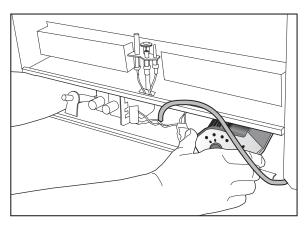


Figure (5) Slide the fan to the right to remove it from the holding bracket of the left hand side of the fan. Slowly remove the fan turning it slightly to the right. Do not force the fan.

Re-installation of the fan is the reverse of above.

REMOVING IGNITOR

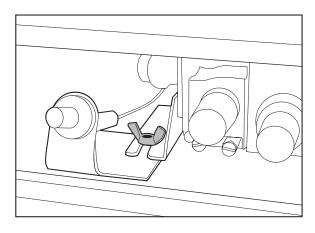


Figure (1) Prior to connecting the gas line to the unit, the piezo ignitor needs to be removed. Loosen the wing nut that holds the ignitor in place and slide it out.

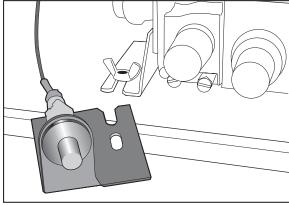
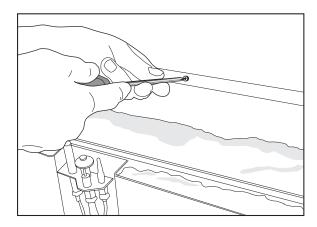


Figure (2) When the gas has been connected reinstate the ignitor.



REMOVING BURNER



When removing the burner, remove the glass as per pages 5 & 6. Remove the pilot from the burner as per page 15.

Figure (1) Remove screw from plate at rear of burner and remove plate.

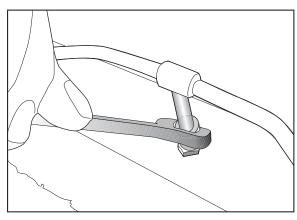
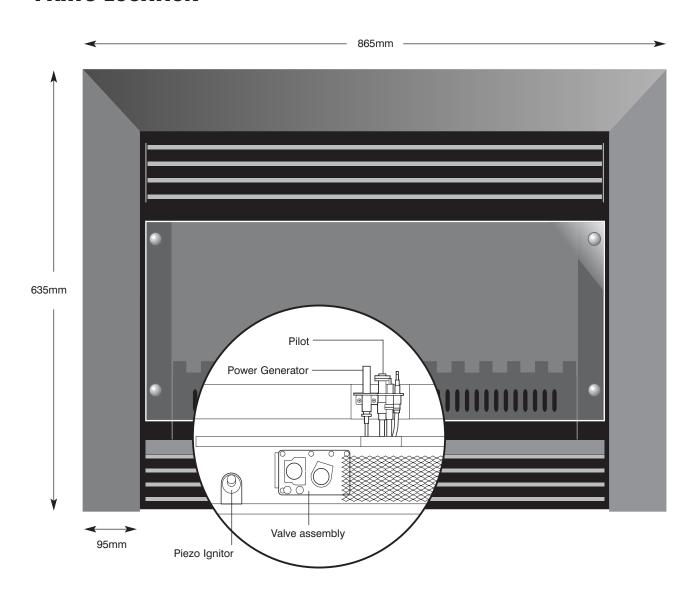
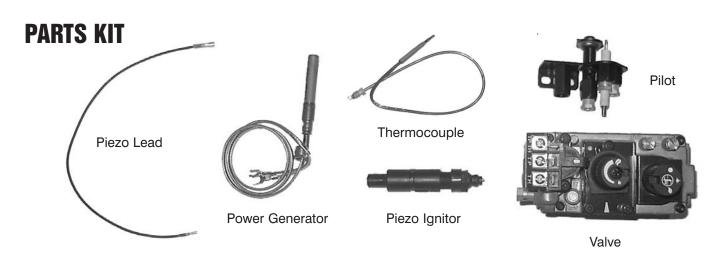


Figure (2) Unscrew burner tube at rear of burner and lift burner out.



PARTS LOCATION



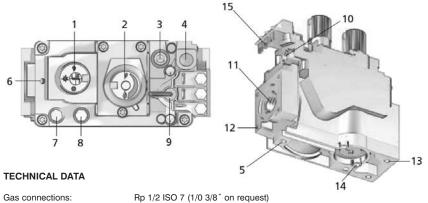




GAS CONTROL ASSEMBLY

PART	PART No.	AGA Approval
SIT 820 NOVA Mv	0820332-NAT GAS	4032
SIT 820 NOVA Mv	0820331-LPG	4032
SIT THERMOCOUPLE	200261	4032
SIT PILOT ASSEMBLY	190610	4032
SIT THERMAL GENERATOR	240002	4032
PIEZO WITH LEAD	28510	4032
PIEZO IGNITOR PUSH BUTTON	73953	4032
PIEZO BRACKET	978099	4032

VALVE DESCRIPTION AND TECHNICAL DATA



Gas connections:

Installation position: Gas families:

Maximum gas inlet pressure: Outlet pressure setting range: Working temperature range:

Pressure regulator: Automatic Solenoid Valve:

any position I, II and III 60 mbar

3 - 30 mbar (20 - 50 on request)*

0 – 70° C Class B

Class D (Class C on request)

* Versions without manual gas flow adjustment device

- Control Knob
- Main gas flow manual adjustment device
- Adjustment screw for gas flow to the pilot
- Thermocouple connector
- Alternative thermocouple connector
- Provision for accessories support bracket
- Inlet pressure test point
- Outlet pressure test point
- 9. Actuating solenoid valve
- 10. Pilot outlet
- Main gas outlet
- Holes (M5) for fixing flanges 12.
- Supplementary valve body fixing points
- Connection for pressure regulator/combustion chamber compensation
- Thermocouple and thermostat connection

THERMOPILE POWER SUPPLY

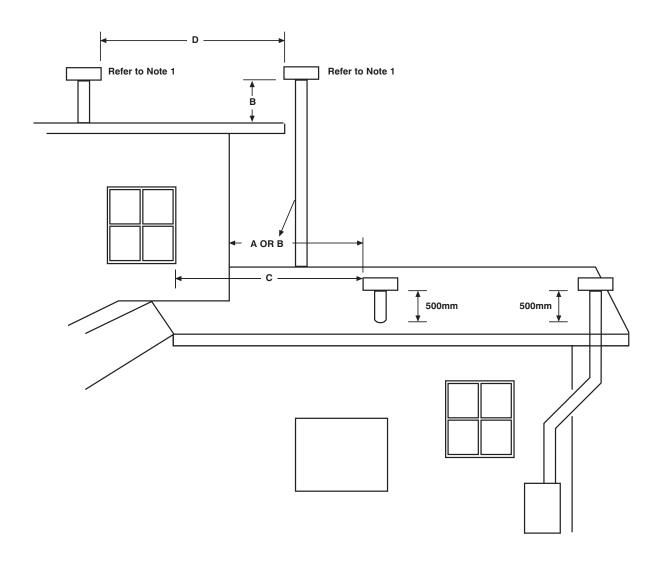
Use two-wire thermopile

≥ 350 mV Voltage with open circuit: Voltage with closed circuit: \geq 100 mV Resistance of the coil: 1.6 ohm



PYROTECH FLUE TERMINATION (COWLS) REGULATIONS

Natural Draft



ARE	EA .	CLEARANCE REQUIRED
A:	Horizontally from a neighboring structure	1000mm
B:	If less than a meter horizontally from a neighboring struthen terminates above that structure by	
C:	From any opening into a building	1500mm
D:	From another flue terminal	200mm

Notes:

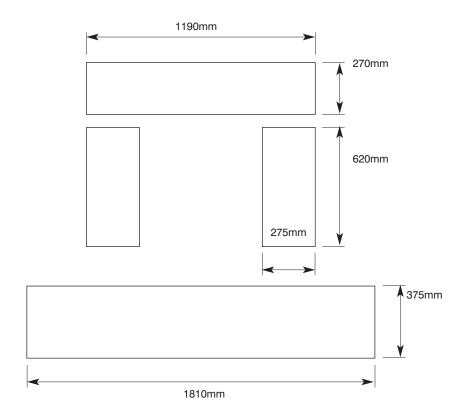
- 1. A trafficable roof designed for personal or public use, the end of the flue shall be at least 2 meters above the roof level. This dimension is to be increased where necessary so that the minimum distance of 500mm is maintained above any surrounding parapet or at least 200mm from the nearest part of a chimney.
- 2. The current version of the AG601 gas codes and any other relevant codes should be read in conjunction with the above guidelines to ensure a correct and safe installation.



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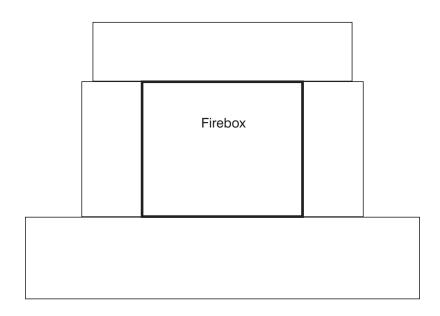


OPTIONAL MARBLE HEARTH AND/OR MARGIN SET



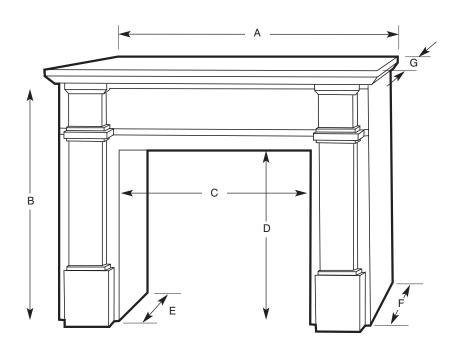
Marble Margin Set Installation Procedure

- 1. Install Pyrotech without trim.
- 2. Install marble up to flange on Pyrotech. Use liquid nails to fix to wall. Marble should look like the diagram below once it has been installed and before mantelpiece has been attached.
- 3. Once unit is all set up, attach trim. Trim should overlap the marble so that the switches are accessible.





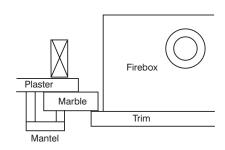
OPTIONAL MANTELPIECE INSTALLATION



MANTELPIECE DIMENSIONS

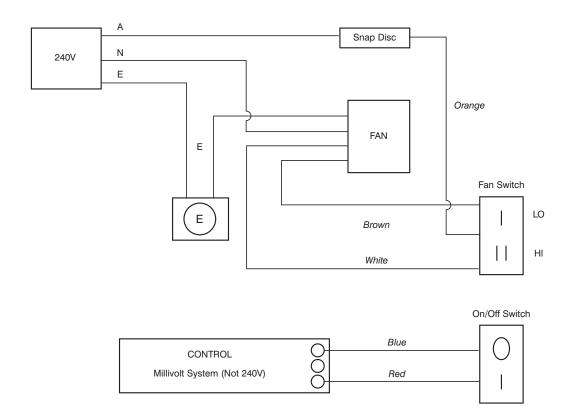
MODEL	Α	В	С	D	E	F	G
Universal*	1810	1220	1090	860	80	100	280
Victorian Arch	1440	1210	885	920	20	20	190
Federation Square	1440	1215	920	920	20	20	235

^{*} Universal Windsor, Bouvier, Kensington, Freidrich





ELECTRICAL DIAGRAM





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