

DOUBLE VISION® DECORATIVE FIREBOX

INSTALLATION & OPERATING MANUAL

The Double Vision gas firebox is approved to be installed as a zero clearance firebox and is designed to operate on Natural Gas and Propane (LPG) gases ONLY. Approval Number 6731.



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.

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: The Double Vision Modular fire is primarily a decorative appliance and is not certified as a space heater.
- 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.
- CARE MUST BE TAKEN TO ENSURE THAT ANY RETURN AIR REGISTER OR EXHAUST SYSTEM DOES NOT ADVERSLEY AFFECT THE OPERATION OF THE APPLIANCE OR DRAUGHT OF CHIMNEY OR FLUE.

WARNING

This firebox has a naked flame, care should be taken when it is operating if children or the infirm are in close proximity. A safety screen is recommended if constant supervision is not possible.

VENTILATION REQUIREMENTS

MODEL	SIZE	EFFECTIVE VENTILATION
Double Vision	850	40,000 sq mm



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DATA PLATE (Affixed to the base of the unit for reference to gas pressure & consumption)

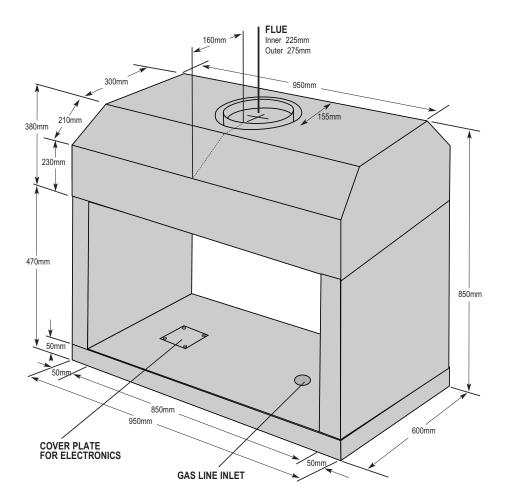
		INJE	CTOR	M	j/Hr	TP	Р	APPROVAL No.	BURNER MODEL
MODEL	SIZE	N.G	LPG	NG	LPG	NG	LPG		
DOUBLE VISION	850	2.8mm	1.35mm	52	49	0.87kPa	2.64kPa	6731	540 Double



DOUBLE VISION FIREBOX

- The Double Vision is designed to be installed into a new frame out as shown on page 6.
- The fire can be installed at ground level or raised to what ever height is required providing the flue length is 2.7 meters or more.
- The firebox can sit directly onto a wooden surface.
- The Double Vision requires twin skin flue with an AGA approved cowl
- The control valve on the Double Vision is a millivolt system and as such, no electrical work is required

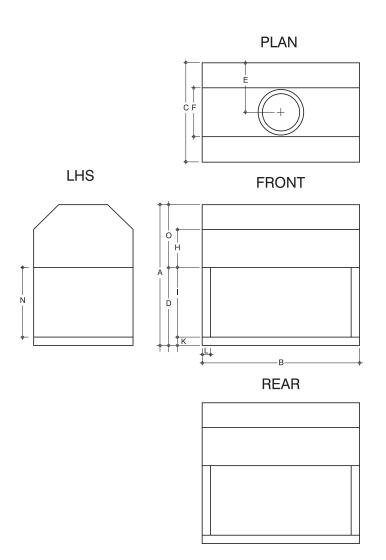
Overall Dimensions (in mm)



MODEL	Inner	Outer
850	225mm	275mm

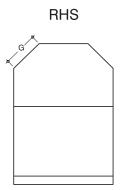


DIMENSIONS

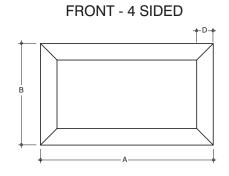


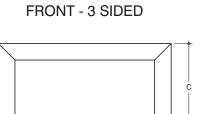
Α	В	С	D	E	F	G	Н
850	950	600	470	272.5	295	210	230

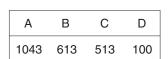
I	J	K	L	М	N	0
420	-	50	50	-	420	380



Trim



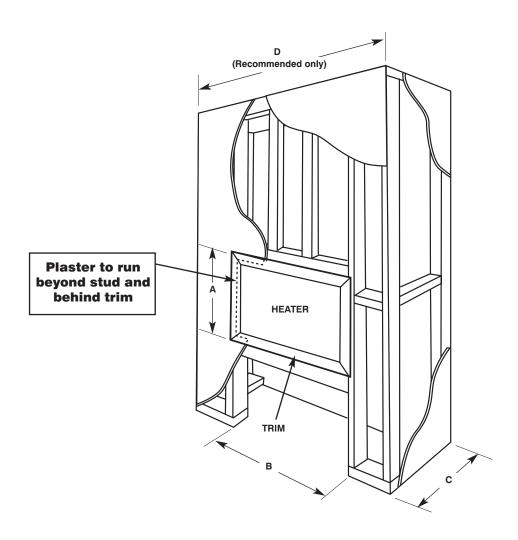






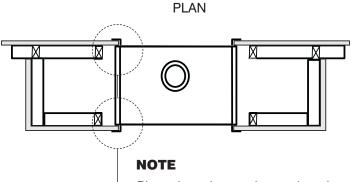
DOUBLE VISION FIREBOX

Double Vision Zero Clearance Timber Frame Installation



Frameout Dimensions (in mm)

Α	В	С	D
875	1000	600	2100



Plasterboard to run beyond stud as shown.

If unit requires trim only, frameout remains the same.

CLEARANCES FROM COMBUSTIBLES

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



DOUBLE VISION FIREBOX

Double Vision Inbuilt Installation Procedure

TICK BOXES	Check frame out has been constructed correctly and has not been plastered.
	Check frame out and structure above is clear of any structures that may impede the flue run.

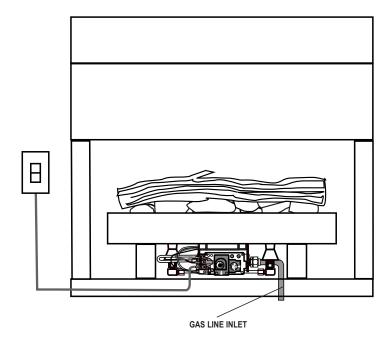
- Ensure an adequately sized gas connection is available within the frame out, a 15mm gas copper pipe is to be provided into the firebox. An access hole is provided in the base of the firebox. A 500mm tail is required into the firebox to allow for connection to the burner.
- Position the unit ensuring the millivolt loom and gas pipe are accessible.
- Connect the twin skin flue (or Optional Power Flue if supplied).
- Install an AGA approved 225mm gas cowl ensuring the termination meets all relevant code requirements.
- Place the burner in the double sided firebox.
- Connect the gas line to the burner connection using the 15mm flared copper union (supplied).
- Connect the two core wiring terminals to the millivolt system as shown below.

Note: The valve is pre wired and completely self contained to generate its own power. **DO NOT connect any external power to it.**

Note: Do not locate the switch further than 6 meters from the firebox.

- Screw the four burner legs to the base of the firebox in the holes provided.
- Place the burner surround over the burner.
- Place the coals (or optional pebbles) randomly on the ceramic blanket. If coals and logs option is supplied, place logs on top of coals randomly.

IMPORTANT! Only ceramics supplied by Real Flame are to be used.





LIGHTING PILOT AND MAIN BURNER

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

FOR YOUR SAFETY READ BEFORE LIGHTING

- The Double Vision has a pilot which must be lit using the piezo ignition. When lighting the pilot follow the instructions exactly.
- Before lighting the pilot, 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 or attempt to repair may result in a fire or explosion.
- Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and replace any part of the control system and any gas control that has been under water.

LIGHTING INSTRUCTIONS

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



OFF

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



PILOT

- 5. When the control knob is set at pilot, push it all the way in and hold it in. Immediately light the pilot using the piezo igniter. Red igniter button may need to be pressed rapidly several times. Once the pilot has lit keep holding the control knob in for about 45 seconds. Release the knob and it will "pop" back out, the pilot should remain lit. If pilot goes out repeat steps 1 to 5
- 6. Turn gas control knob to the "ON" position
- 7. Turn the switch on to ignite the burner. The switch is supplied with the unit and should be installed within 6m of the fire.



ON

- 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.

TO TURN OFF GAS TO APPLIANCE

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



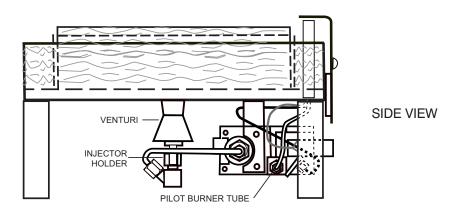
TESTS TO BE CARRIED OUT BY INSTALLER

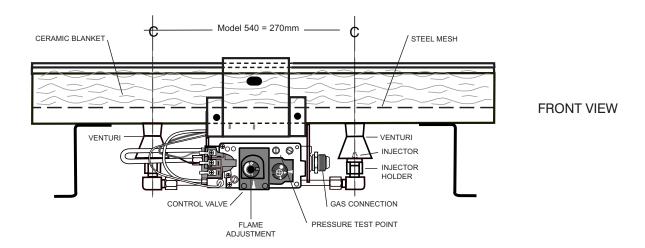
- 1. Carry out a smoke test to ensure the fireplace is drawing.
- 2. Test that the Test Point Pressures are correctly set. Refer to Data Plate on page 4 for correct setting.
- 3. Check that there are no gas leaks form any of the fittings.
- 4. Explain to the customer how the unit operates and how to turn it on and off.

FAILURE PROCEDURE

If when the control knob is turned to the "ON" position and the wall switch is turned to the "ON" position, the fire fails to ignite, check the following:

- 1. The pilot is burning.
- 2. Ensure that the wiring terminals on the control valve are not loose.
- 3. Test that the inlet and working pressures are both correct.







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 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

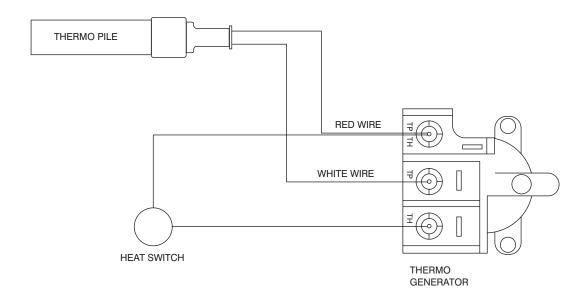
- Valve system troubleshooting should only be carried out by a qualified service technician.
- If supply cord is damaged or the unit needs repairing, it shall be repaired by the manufacturer or its service agent or similarly qualified person in order to avoid a hazard.

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: • 0.87 kpa for Natural Gas • 2.64 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 too low or blowing (High) causing the pilot/valve safety to drop out.	Clean and/or adjust pilot flame for maximum flame impingement on thermocouple.

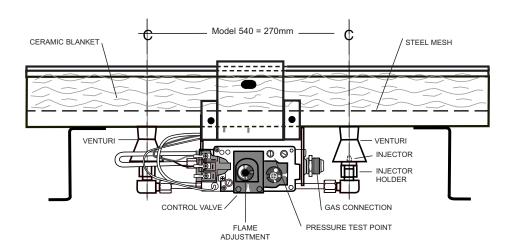


SERVICE

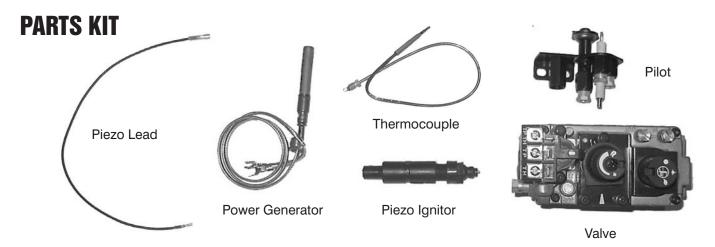
Igniter



Burner





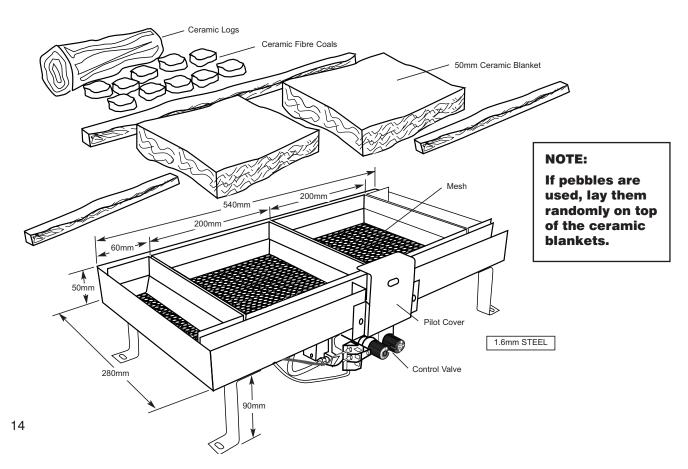


GAS CONTROL ASSEMBLY

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

All spare parts listed are available from the manufacturer.

BURNER ASSEMBLY

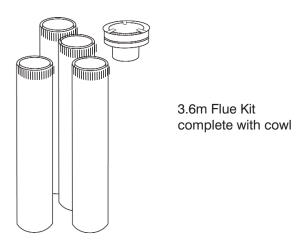




FLUE REQUIREMENTS

Natural Draught

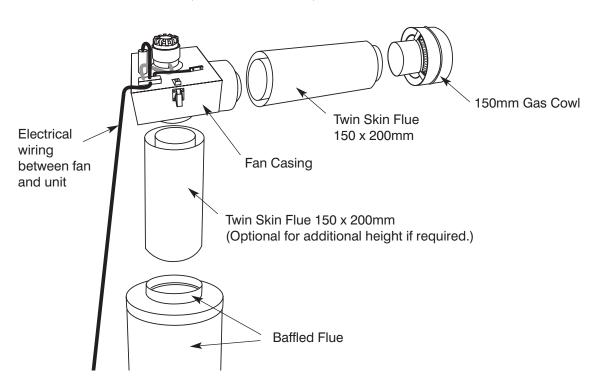
The standard natural draught flue kit consists of 4 x 900mm lengths of 225/275 twin skin flue and an AGA approved cowl.



Power Flue Kit (Optional - refer to pages 16 to 22 for details)

The standard Power Flue Kit consists of;

- 1 x Power Flue Fan
- 1 x Power Flue Motor
- 1 x Control Module
- 1 x Electronic Ignition Pack
- 1 x Baffle
- 1 x Pressure Differential Switch
- 1 x Loom
- 1 x Termination Cowl (horizontal or vertical)





OPTIONAL POWER FLUE

THE INSTALLATION MANUAL OF THE REAL FLAME POWER FLUE SYSTEM IS TO BE READ IN CONJUNCTION WITH THE INSTALLATION MANUAL OF THE REAL FLAME PRODUCT BEING USED. THE DESIGN OF THE REAL FLAME POWER FLUE SYSTEM IS SUBJECT TO COPYRIGHT AND ALL INFRINGEMENTS WILL BE VIGOROUSLY PURSUED.

Introduction - the Power Flue System

POWER FLUE DESIGN

A 'flue' using a fan to remove or assist in removing combustion products from an appliance, is known as a 'power flue'.

POWER FLUE APPLICATION

A power flue application can be used to enable a client to have a decorative fire with a horizontal flue run or a vertical flue run where flue space is inadequate for the normal flue.

Installation Instructions

VENTILATION REQUIREMENTS

Air supply to the unit is to be in accordance with ventilation Clause 5.4 of the Gas Code 601. Ventilation requirements do not change by using a power flue.

All Real Flame installation manuals have the ventilation areas clearly defined for each product.

ACCESS TO POWER FLUE MOTOR

Access must be provided to the flue motor, this access MUST be at least 400mm x 400mm. There MUST be a minimum clearance of 250mm between the top of the motor and any fixed object i.e. ceiling or stud work. This is so the top of the fan box can be removed.

WIRING OF THE POWER FLUE

All wiring for the power flue is carried out at the factory and plug connectors are fitted for easy installation. The power supply for the power flue is via a 3-pin plug at the rear of the firebox that can be plugged into a power socket within the cavity.

ISOLATION SWITCH

If the power point is within a cavity an isolation switch accessible from outside the cavity must be provided.

WIRING CLEARANCES

Wiring must at all times have a clearance of at least 150mm from the flue.

FAN FAILURE SENSING DEVICE

All Real Flame Power Flue systems are fitted with a sensing device within the unit to ensure that, in the event of flow failure, the safety shut off valve within the module will go into lockout and shut off the gas supply to the unit.

'LOCKOUT'

'Lockout' is the term used when the module in the unit senses a fault. When a fault is detected by the module it will shut off the gas and go into lockout. If this occurs contact the manufacturer.



Installation Instructions (continued)

LOCATION OF FLUE TERMINAL FOR POWER FLUE

Listed below are the minimum clearances required for fan-assisted terminations:

1.	Below eaves, balconies and other projections
2.	From the ground, above a balcony or other surface
3.	From a return wall or external corner
4.	From a Gas meter
5.	From an electricity meter or fuse box
6.	From a drainpipe or soil pipe75mm
7.	Horizontally from any building structure or obstruction facing a terminal500mm
8.	From any other flue terminal. Cowl, or combustion air intake300mm
9.	Horizontally from any openable window, door, non-mechanical air inlet, or any other opening into a building with the exception of sub floor ventilation300mm
10.	From a mechanical air inlet including a spa blower1000mm
11.	Vertically below an openable window, non-mechanical air inlet, or any other opening into a building with the exception sub floor ventilation500mm

ELECTRICAL

SHOULD THE SUPPLY FLEX AT THE BACK OF THE FIREBOX BE DAMAGED, A SPECIALLY PREPARED FLEX IS REQUIRED. FOR REPLACEMENT CONTACT THE MANUFACTURER. THE ON/OFF WALL SWITCH MUST NEVER BE ATTACHED TO A METAL FRAME.

WARNING

Whenever servicing the power flue system, always turn off the electrical power supply and close the manual gas control valve.

IMPORTANT INFORMATION

In addition to the instructions in this manual all national, state and local regulations must be adhered to. These include but are not limited to:

- Australian Standards AS3000 Electrical Installation.
- Australian Standards AS5601 Gas Installation.
- Local Gas and Electrical Authority Regulations.
- Municipal Building Codes.

The power flue should be serviced every 12 months by an authorised technician. If repairs are needed an authorised technician must carry them out.

FITTING THE MOTOR

The power flue motor has a 150mm spigot and a twin skin spigot of 150mm & 200mm. The single spigot fits over the vertical flue and the 150mm/200mm flue attaches to the horizontal spigot.

FLUE SIZE

All flue prior to the motor is 150mm/200mm twin skin and all flue after the motor is 150mm/200mm twin skin.



Installation Instructions (continued)

HORIZONTAL FLUE RUN

The maximum length of horizontal flue run is to be 13.5 metres with a maximum of four (4) bends; these bends can be 45° or 90°. The horizontal flue run is to have a grade downwards from the motor to the termination.

VERTICAL FLUE RUN

The minimum vertical flue run is 900mm from the top of the firebox (1500mm from the floor). If a longer vertical run is required twin skin flue 150mm & 200mm can be added between the muffler top and the fan. The flue can be cut to the required height.

FLUE CLEARANCES

All flue clearances are as per the requirements listed in the heater specifications.

TERMINATION

The termination to be used for all horizontal installations is to be 150mm cowl that has been approved as a horizontal cowl.

Installation of Power Flue Kit

POWER FLUE MUFFLER

The power flue muffler has a spigot at each end. The end that attaches to the firebox has a spigot equivalent to the inner flue spigot diameter of the firebox, the top of the muffler has a 150mm spigot which the motor fits to, or the 150/200 twin skin flue if required. The flow arrow on the muffler is to be pointing up.

WIRING (see wiring diagram page 22)

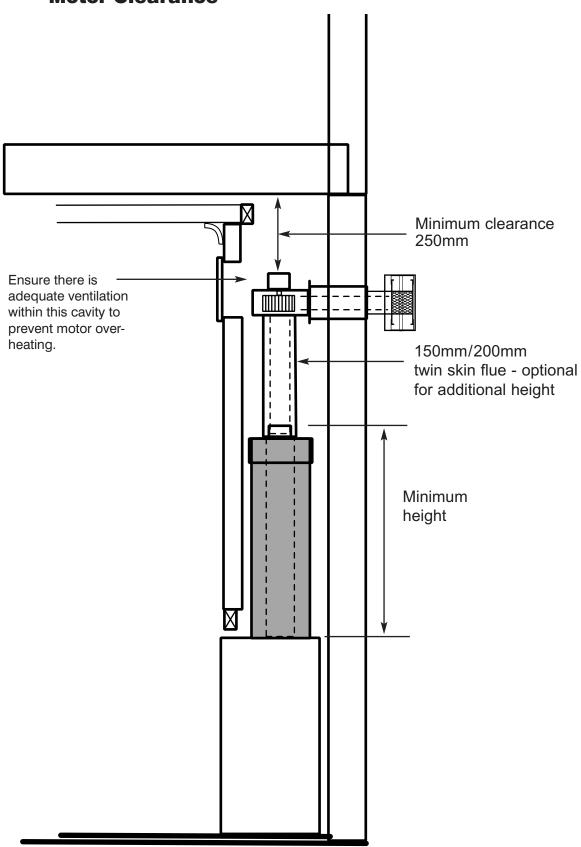
A 3 metre lead is supplied with the power flue, this lead has a different connection on each end, one end is plugged into the connection on the left hand side of the firebox and the other end is to be plugged into the fan. The wire coming from the rear of the firebox with the standard 3-pin plug attached is to be plugged into a power point. A single gang wall switch is also supplied attached to the 3 metres of lead; this wall switch is to be attached at a location accessible to the client. No other wiring is required.

SERVICING OF THE POWER FLUE MOTOR

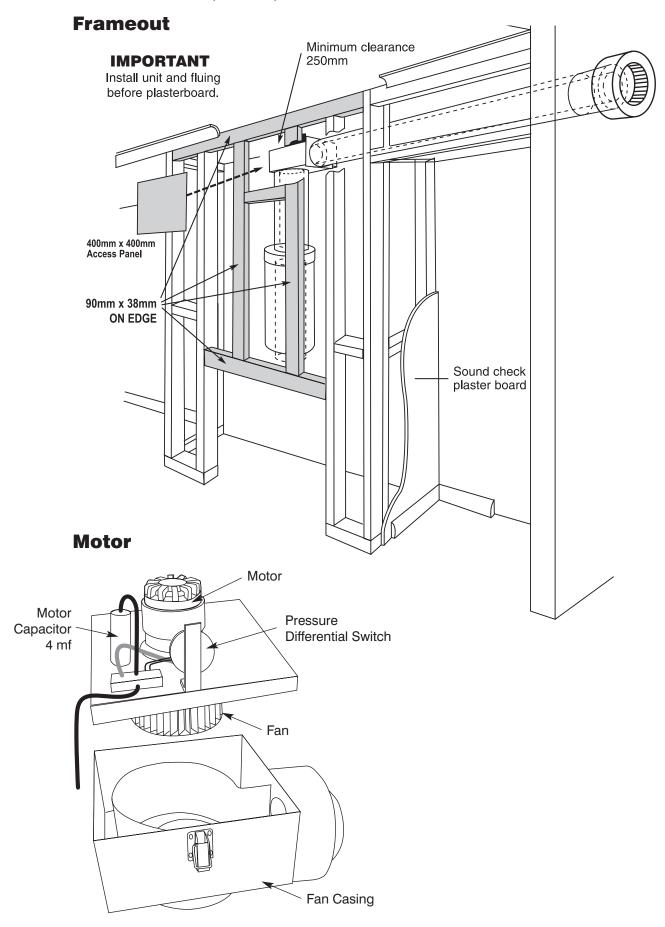
The Real Flame Power Flue motor is designed so as to make servicing the motor a simple task. The power lead connected to the motor is to be disconnected (unplugged) and the two side clips are to be undone, the fan motor will then lift out for servicing. The fan Motor box connected to the flue does not have to be disconnected from the flue.



Motor Clearance







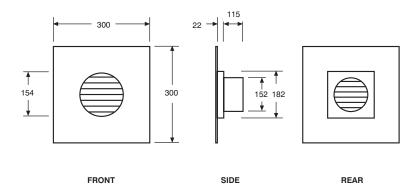


Internal Motor 500mm 🛦 Top Termination 300mm min 200mm 150mm x 200mm flue extension Access Min. Distance Domestic: 220mm Motor Termination 150mm x 200mm twin skin flue (if required) 900mm Heater Minimum 25mm clearance from outer flue to combustible interior.

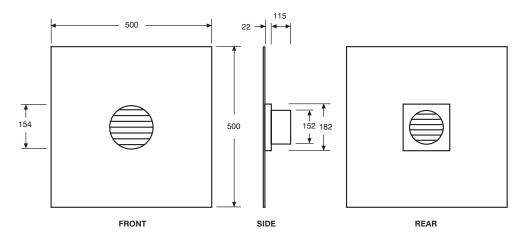
NOTE:

- 1. Maximum of 4 elbows, 45° or 90°.
- 2. Allow 400mm x 400mm access panel for service of motor.

Flush Cowl Terminations 300x300

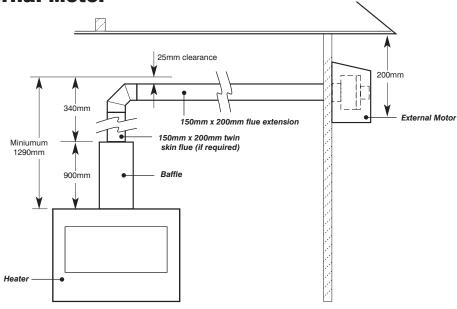


Flush Cowl Terminations 500x500





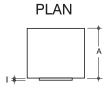
External Motor



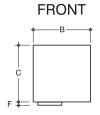
NOTE:

1. Maximum of 4 elbows, 45° or 90°.

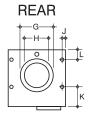
Fan Box Dimensions











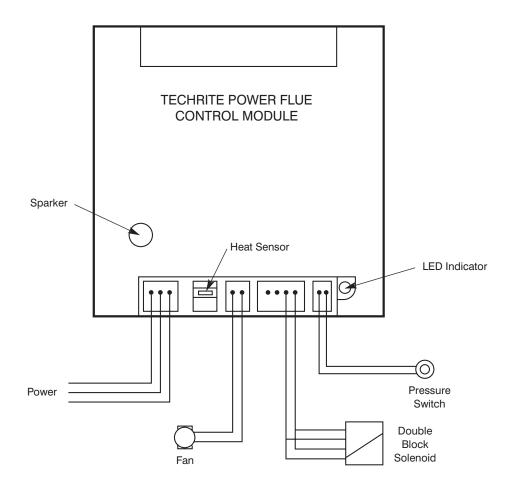
Α	В	С	D	E	F	G	Н
302	348	345	55	90	20	200	150



I	J	K	L	М	N	0	Р	
13	20	120	60	105	75	45	112	



Wiring Diagram



Parts List

PART No.	DESCRIPTION
1.	Dungs BM.740-007 double block solenoid valve
2.	Dungs DGAI.73 Module 5.1.3.
3.	Electronic Ignition Sparker
4.	Electronic Flame Sensor
5.	Ecofit 2GTA35 Motor. Complete with 'sail' switch.
6.	900mm Real Flame Power Flue Muffler.



TROUBLE SHOOTING FOR ELECTRONIC IGNITION AND POWER FLUE SYSTEM.

Symptom	Possible Cause	Corrective Action			
Fire turned on and nothing happens	No Power to Module	Connect Power			
Fire turned on and motor starts but there is no spark	Pressure switch not operating	Check pressure switch			
Fire sparks when turned on but will not ignite	A. No Gas	Connect Gas.			
not ignite	B. Sparker is to far from metal	Adjust sparker so it cross lights to metal.			
	C. Pressure switch (Power Flue) is not operating correctly.	Remove fan from housing and check that small tube supplying air to pressure switch has not moved or been damaged.			
	C. Valve solenoids are faulty	Check solenoids			
	D. Solenoid wires to module not connected correctly	Check that the four pin plug from the valve has been connected correctly			
Fire ignites and then shuts down within a couple of seconds	A. Something is touching the heat sensor	Ensure that nothing is touching the sensor which is located behind the cover plate at front of burner.			
	B. The power polarity is reversed	Check polarity			
Fire ignites and shuts down after several minutes	A. Insufficient air for burner to operate correctly	Check that the unit has correct ventilation as per Installation manual.			
	B. Pressure switch not operating correctly	Check air supply tube to pressure switch.			



TROUBLE SHOOTING FOR ELECTRONIC IGNITION AND POWER FLUE SYSTEM. (continued)

The power flue and electronic control box have a red LED light that indicates the possible cause of a problem, the LED light will flash in different sequences for different problems, the most common are:-

Long Flash	Short Flash	
1	0	Normal Running State.
1	1	Flame Failure.
1	2	Waiting for pressure switch ON
1	3	Waiting for pressure switch OFF
2	1	Maximum retries exceeded







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Perth - WA Showroom

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Fyshwick - ACT Showroom

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