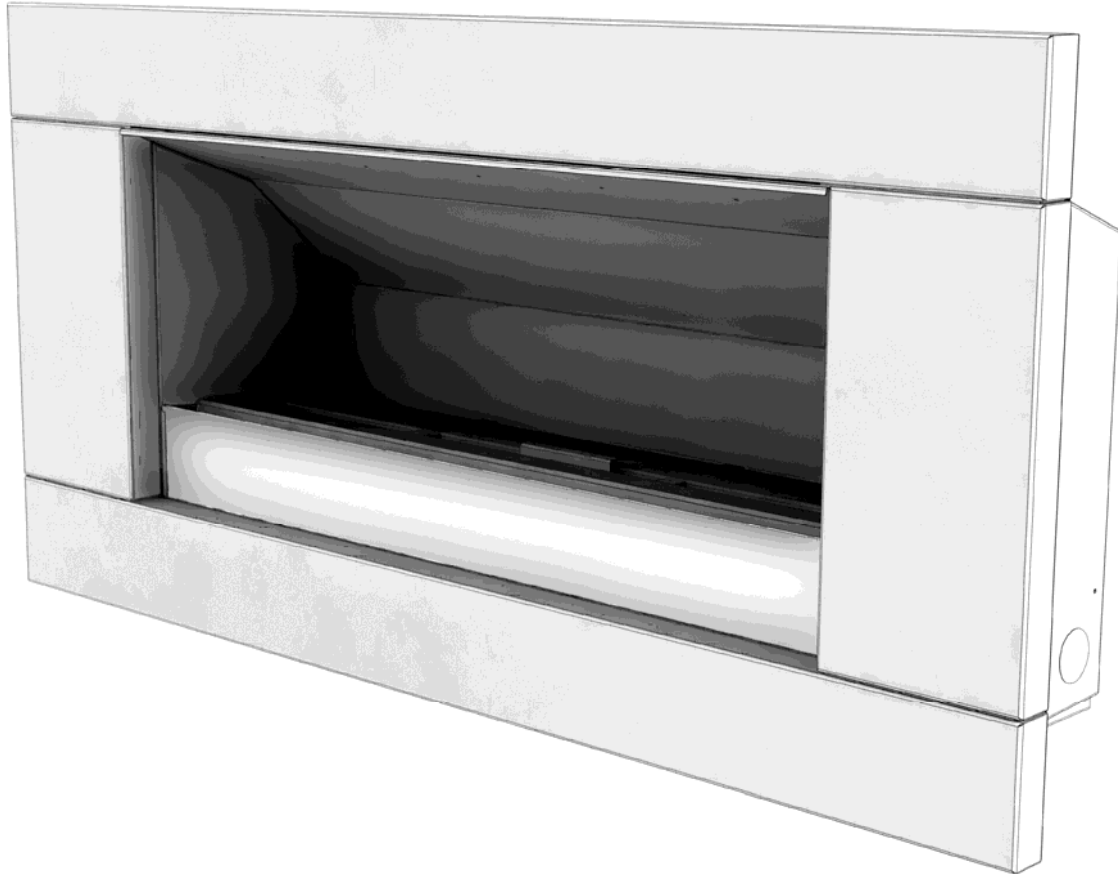


## Installation Manual

EF5000 – AUS & NZ

This manual is **ONLY** for fires with a serial No. from 80600 to 80999.



### Important:

The appliance shall be installed in accordance with;

- Local gas fitting regulations
- Municipal building codes
- AS/NZS 5601.1:2013, *Gas installations*
- Any other relevant statutory regulations.
- TO BE INSTALLED ONLY BY AN AUTHORIZED PERSON
- THIS APPLIANCE MUST NOT BE INSTALLED OR USED INDOORS
- INSTRUCTIONS MUST BE LEFT WITH THE CONSUMER AND THE CONSUMER TO RETEAIN THEM FOR FUTURE REFERENCE.

Manufactured by: Escea Ltd, PO Box 5277 Dunedin NZ, Ph: +64 3 4788220, email: [info@escea.com](mailto:info@escea.com)  
For contact details of your local Escea distributor or dealer please visit [www.escea.com](http://www.escea.com)

## Warning:

Children and adults should be alerted to the hazards of high surface temperatures, burns and clothing ignition.

Young Children should be carefully supervised when they are in the area of the appliance.

Clothing or other flammable materials should not be hung from the appliance, or placed on or near the appliance.

Any guard or other protective device removed for servicing the appliance must be replaced prior to operating the appliance.

Installation of appliances fitted to fixed gas supply systems and repair of all appliances must be carried out by a qualified service person.

A qualified service person should inspect and service this product at least annually.

Cleaning may be required in order to keep the control compartment, burners, and circulating air passageways clean.

**The 240/24volt plug pack MUST be installed inside and out of the weather. It MUST be kept dry and protected from rain and water ingress.**

**This Gas Fire is for outdoor use only.**

Contents:	Chapter:
Product description _____	1.0
Power supply _____	2.0
Creating the cavity _____	3.0
Wall cladding around the fire _____	4.0
Minimum install height off the ground _____	5.0
Types of installation _____	6.0
Corner Installations _____	7.0
Laying gas pipe _____	8.0
Fixing the fire into the cavity _____	9.0
Connecting gas pipe _____	10.0
Connecting the power supply and touch panel _____	11.0
Testing of touch panel and spark ignition _____	12.0
Checking operating pressure _____	13.0
Assembly of stone cartridge _____	14.0
Fitting the fascia _____	15.0
Placement of ceramic pebbles _____	16.0
Operating Instructions _____	17.0
Maintenance and cleaning _____	18.0
Electrical Schematic _____	19.0
Gas Conversion _____	20.0

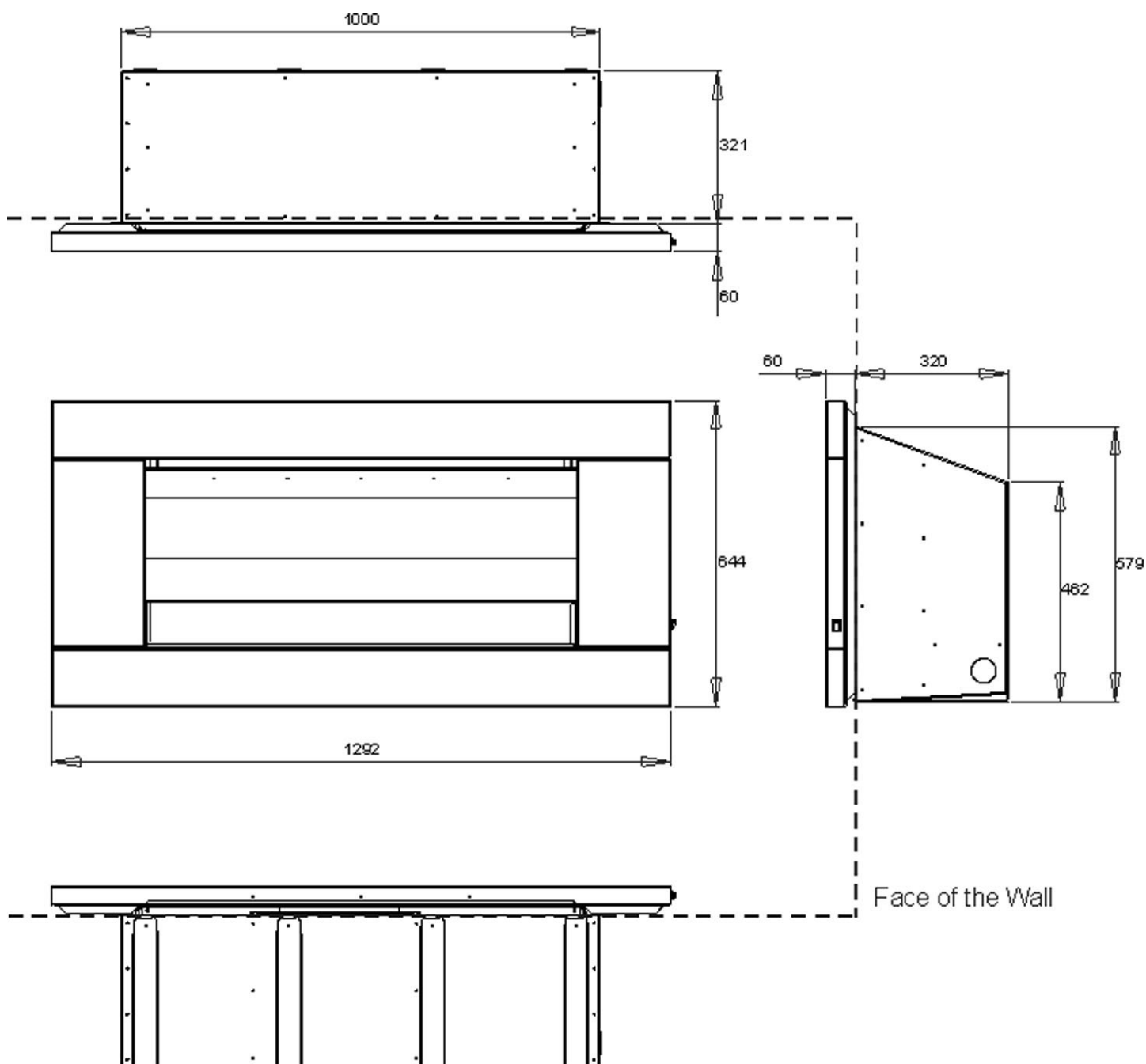
## 1.0 Product Description:

The escea EF5000 flame effect gas fire is designed for outdoor use only. This appliance requires no flue and must be permanently installed into a cavity. It may be installed into a timber cavity.

The fire is controlled by the user from a switch that is situated on the lower right hand side of the stainless steel fascia.

The Data Label, containing all technical information such as manufacture date, serial number, gas type, jet size, etc, can be found in the lower right hand side of the fire, below the firebox, to access this, the fascia must be removed.

## 1.1 Product dimensions: (mm)



## 2.0 Power Supply:

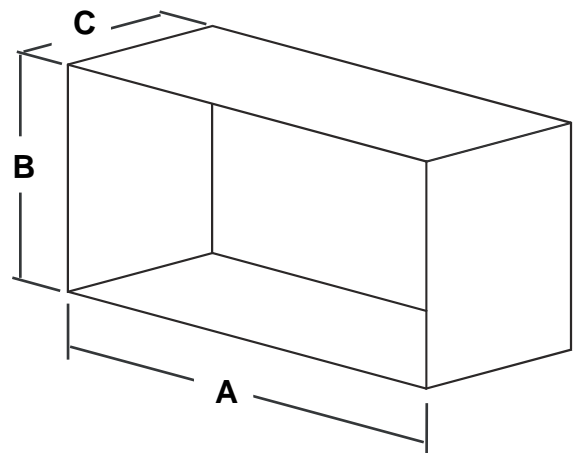
This appliance requires a constant external 24V AC 1A power supply to mains electricity. A transformer is supplied with the fire.

## 3.0 Creating the Cavity:

The dimensioned drawing below shows the size of opening that must be created to install the unit.

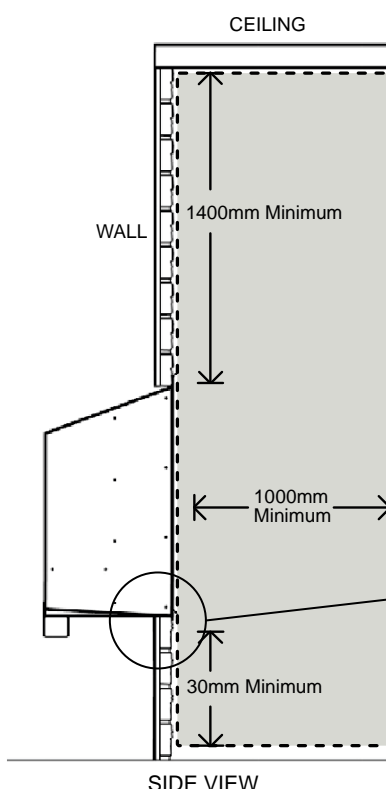
### 3.1 Cavity Dimensions:

Minimum Cavity Dimensions		
A	B	C
1010 mm	585 mm	330 mm



3.2 Where possible, it is recommended that the cavity is made slightly larger than the above dimensions to give the installer the maximum amount of space to work in.

### 3.3 Clearances to combustibles:



Minimum clearance distance between a combustible ceiling and the fascia must be no less than 1400mm.

Warning: Under no circumstances should any object such as people, pets, furniture, etc. be closer than 1 metre in front of the escea EF5000.



**Warning:** Do not install a TV above this fire under any circumstances.

## 4.0 Wall cladding around fire:

- 4.1 The temperature of the wall directly above the heater does get hot and hence may discolour paint finishes.
- 4.2 Some dark coloured exhaust stains may also become visible directly above the fire due to exhaust. In most cases this can be cleaned off with water and a brush.

## 5.0 Minimum install height:

The fire has ventilation gaps behind the fascia at the top and bottom. These must not be blocked, so ensure there is a gap of at least 30mm between the bottom of the fascia and anything below.

## 6.0 Types of Installation:

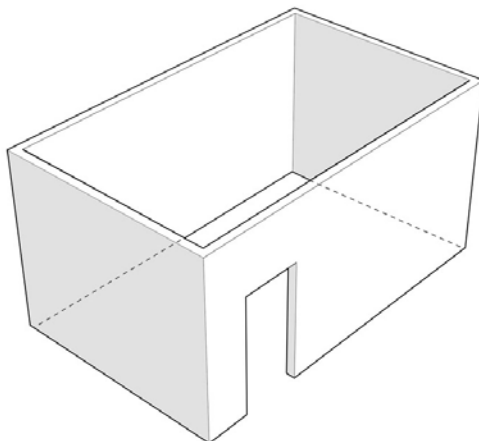
This appliance shall only be used in an above ground open-air situation with natural ventilation, without stagnant areas, where gas leakage and products of combustion are rapidly dispersed by wind and natural convection.

Certain materials or items, when placed under or near the appliance, will be subjected to radiant heat and could become damaged.

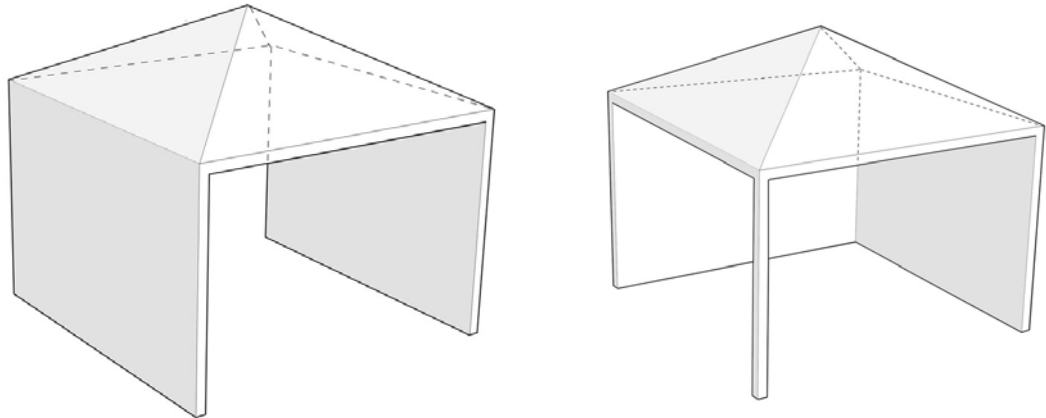
The following installation diagrams are escea recommendations only and may or may not comply with your local council standards. Please check with your local council for actual building standards.

Typically an outdoor space is not enclosed but, any enclosure in which the appliance is used should comply with one of the following:

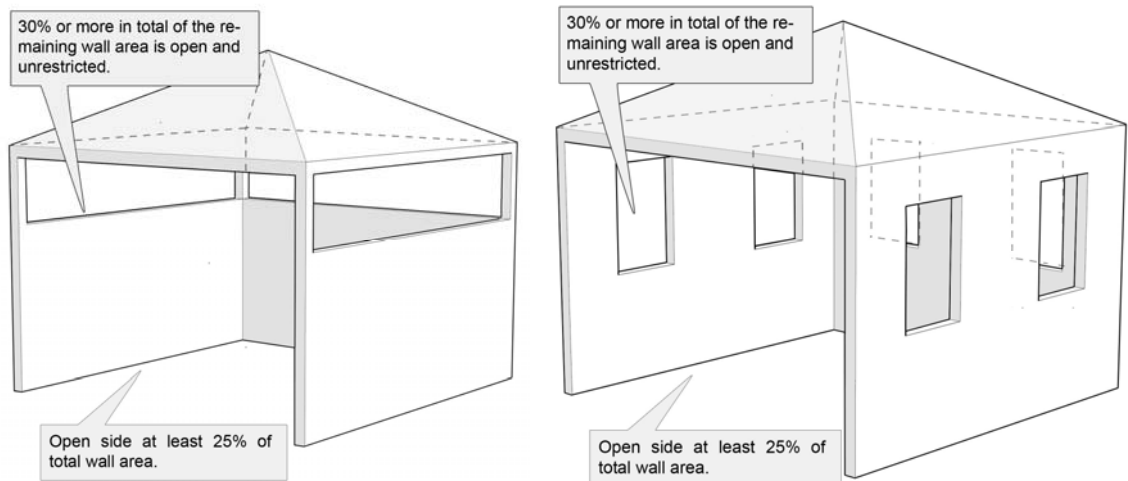
- An enclosure with walls on all sides, but at least one permanent opening at ground level and no overhead cover.



- Within a partial enclosure that includes an overhead cover and no more than two walls.



- Within a partial enclosure that includes an overhead cover and more than two walls, the following should apply:
  - At least 25% of the total wall area is completely open, and
  - At least 30% of the remaining wall area is open and unrestricted

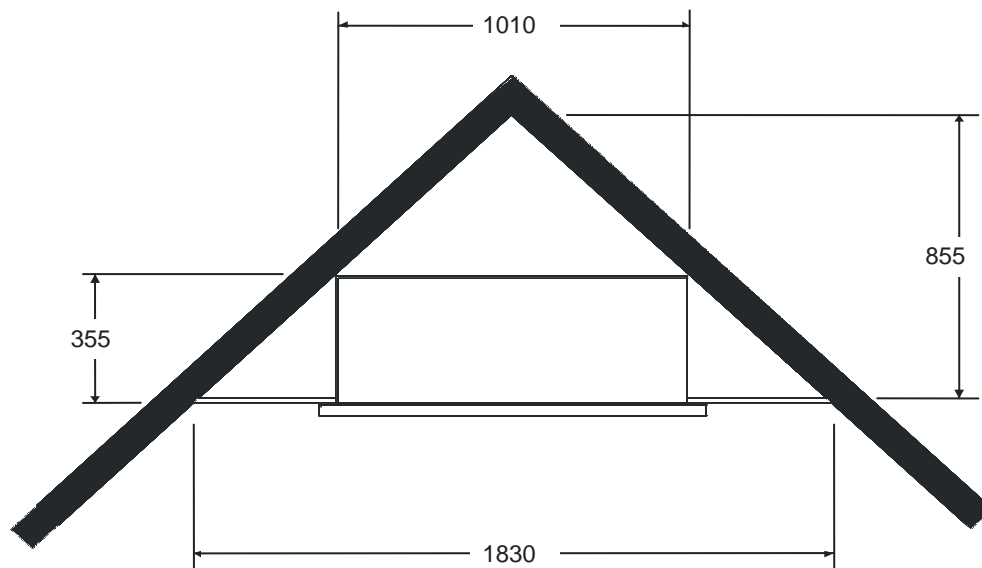


Rectangular areas have been used in the above diagrams; the same principles apply to any other shaped area.

In the case of balconies, at least 20% of the total wall area should be and remain open and unrestricted.

## 7.0 Corner Installations:

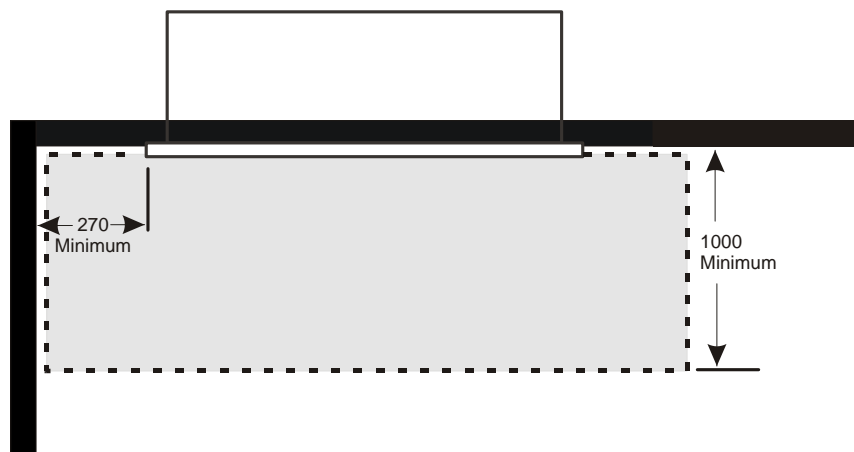
If a cavity is to be created in a corner, the following drawings give the minimum sized interior wall dimensions possible.



**Note:**

Allowances need to be made for cladding the internal of the cavity.

Dimensions of the cavity in this diagram represent the internal size only.



Minimum clearance distance between adjacent wall and fascia needs to be no less than 270mm.



## 8.0 Laying Gas Pipe:

Gas pipe should be sized as per the requirements of AS5601/AG601-2000. The pipe sizing must be sufficient to deliver the following volume of gas to the heater with all other gas appliances in the home running at the same time;

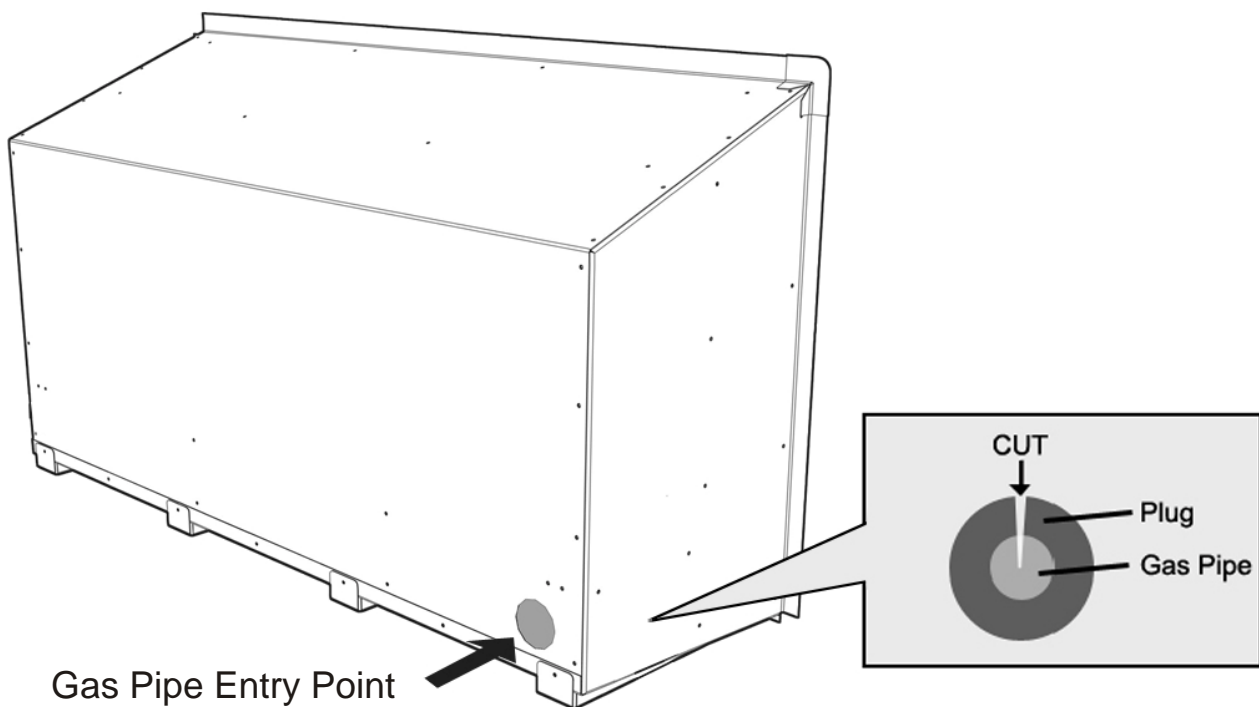
*EF5000 Natural Gas = 52 MJ/hr*

*EF5000 Propane = 40 MJ/hr*

*EF5000 ULPG = 40 MJ/hr*

It is highly recommended to install an easily accessible isolating shut off valve (ball valve) along the gas line to the EF500 unit which should be easily accessible to the user.

- 8.1 This fire has been supplied with a ½" pipe connected through a short 45° flare nut inlet connection to make the gas supply easy and safe. Solid pipe should be run to the inside lower left hand side of the fire. Insert the supplied rubber plug and cut it as shown below to allow the gas pipe and the electrical cable to pass through, keeping the plug as air-tight as possible.

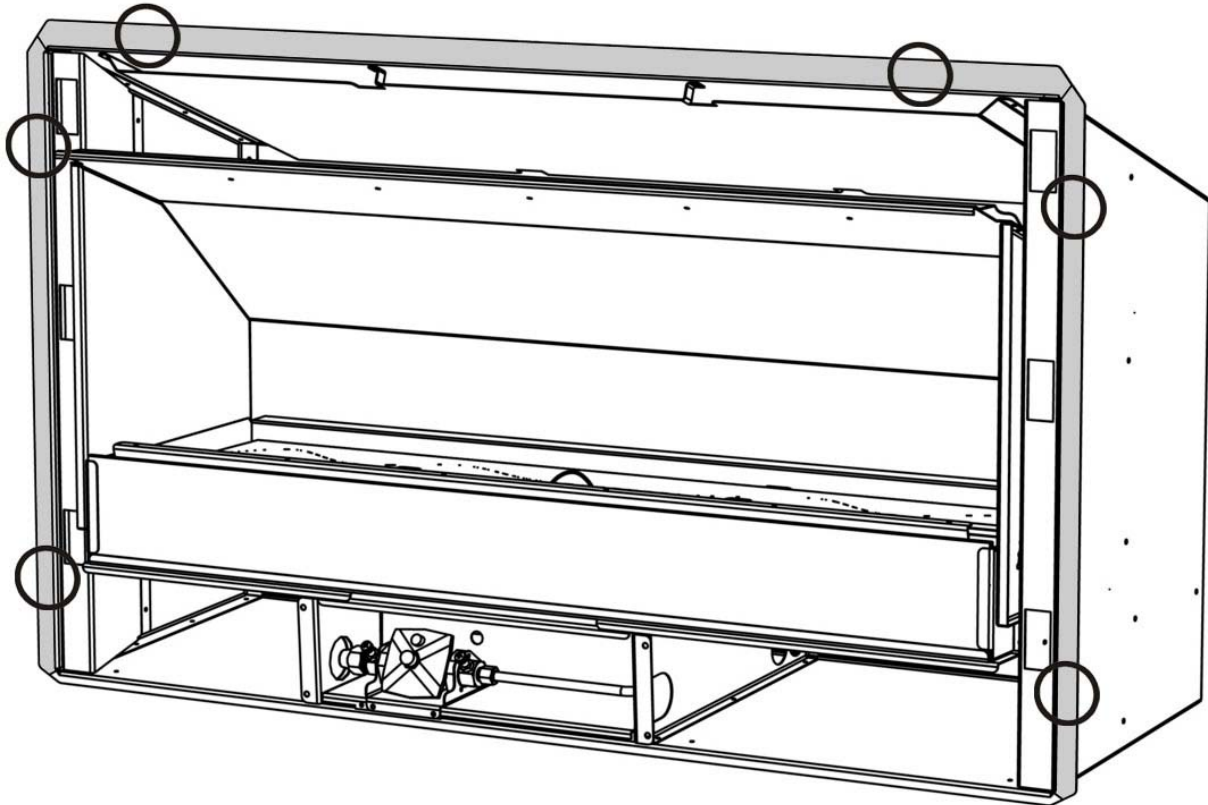


- 8.2 Any flexible pipe should be attached to the copper supply pipe and joint tested to ensure gas tightness, an isolating valve is recommended for this purpose.
- 8.3 Before each use of the appliance the hose assembly connecting the appliance to the gas supply must be inspected. If there is evidence of excessive abrasion or wear, or if the hose is damaged, then the hose assembly must be replaced before the appliance is operated.
- 8.4 The gas hose should be properly located away from pathways or areas where the hose may be subject to accidental damage.

## 9.0 Fixing the fire into the cavity:

To fix the fire to the cavity, first drill 4 to 6 (5mm diameter) holes in the *outer flange* (as shaded grey in the picture below) in locations which will give you the most support from the cavity framework behind and evenly spaced around the flange. Using the supplied Stainless Steel screws, fasten the fire to the cavity through these drilled holes.

Suggested location for screws of mounting:



Ensure that the fire is securely located and free from movement.

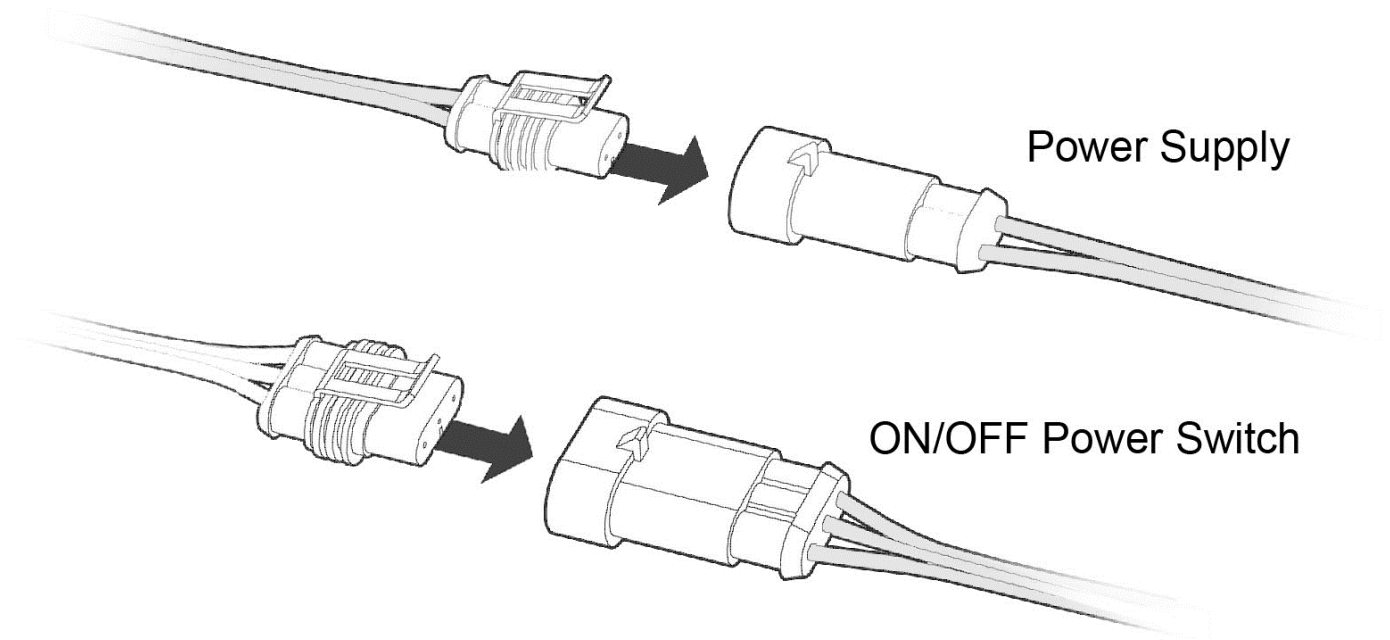
## 10.0 Connecting the Gas Pipe:

When the fire unit has been pushed into position and secured the flexible hose can be connected to the inlet side of the appliance regulator at the front center of the fire. The hose and pipe assembly should have been tested prior to this as per section 8.2

- 10.1 No matter which connection the installer chooses, the regulator that is supplied in the fire **MUST NOT BE REMOVED**. Removal of the regulator, or replacing it with one not intended for use with an Escea EF5000, will void the limited appliance warranty.
- 10.2 The EF5000 must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of ½ psi (3.5 kPa).

## 11.0 Connecting the power supply and power switch:

- 11.1 The Power Supply socket is located in the centerline of the fire, below the firebox, facing the right hand side behind the ignition tray. Push the 2 pin plug together until they 'click'.
- 11.2 The ON/OFF Power Switch socket plugs into the 3 pin plug lead situated at the front RH side of the fire. Push them together until they 'click'.



## 12.0 Testing of the power switch and spark ignition:

*IMPORTANT: Before the operating pressure can be checked and the fascia fitted,  
The power switch and spark ignition must be tested.*

- 12.1 This can be done with the gas supply either turned on or off.  
With the power supply and power switch connected, Lean the fascia Right end up beside the fire and run through the steps for igniting the pilot (refer to section 17.0 for instructions).

## 13.0 Checking Operating Pressure:

**NOTE:** Check ensure that the correct jets, for the gas being used, are installed – see Chapter 20.

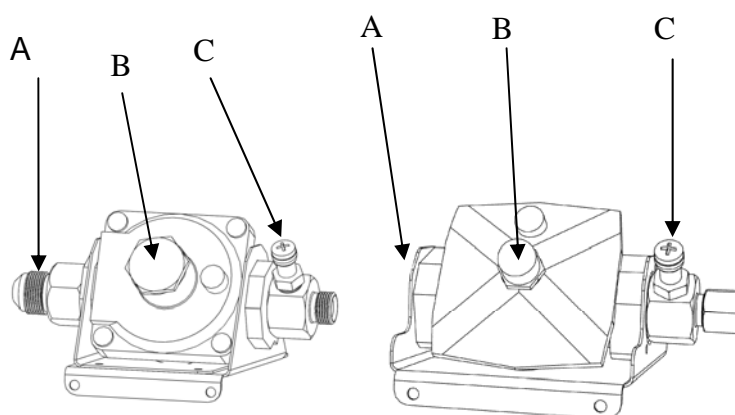
This check is done at the regulator located at the lower front of the appliance.

- 13.1 This must be done before fascia has been fitted.
- 13.2 Pressure test point available for operating pressure (as shown below).
- 13.3 The operating pressure has been factory set. Please check that the operating pressure is exactly as listed below and if not, adjust screw in centre of regulator until pressure is correct. If unable to do this, reassess the inlet gas pressure / pipes.
- 13.4 Replace operating test point screw and leak-test the test point.
- 13.5 Test for overall soundness using an appropriate method.

A = Inlet gas connection

B = Pressure adjustment screw

C = Operating pressure test point

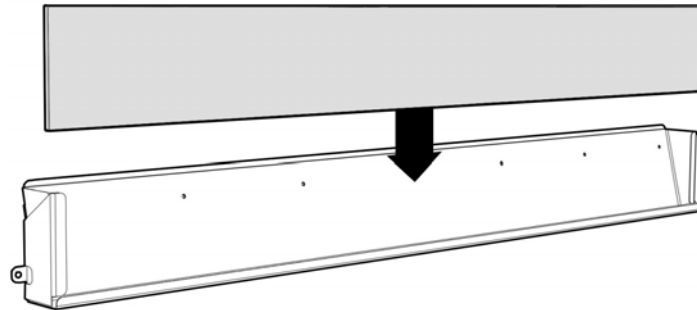


Note that that there are two types of regulator used in the EF5000.  
Although components are different the method for conversion is the same.

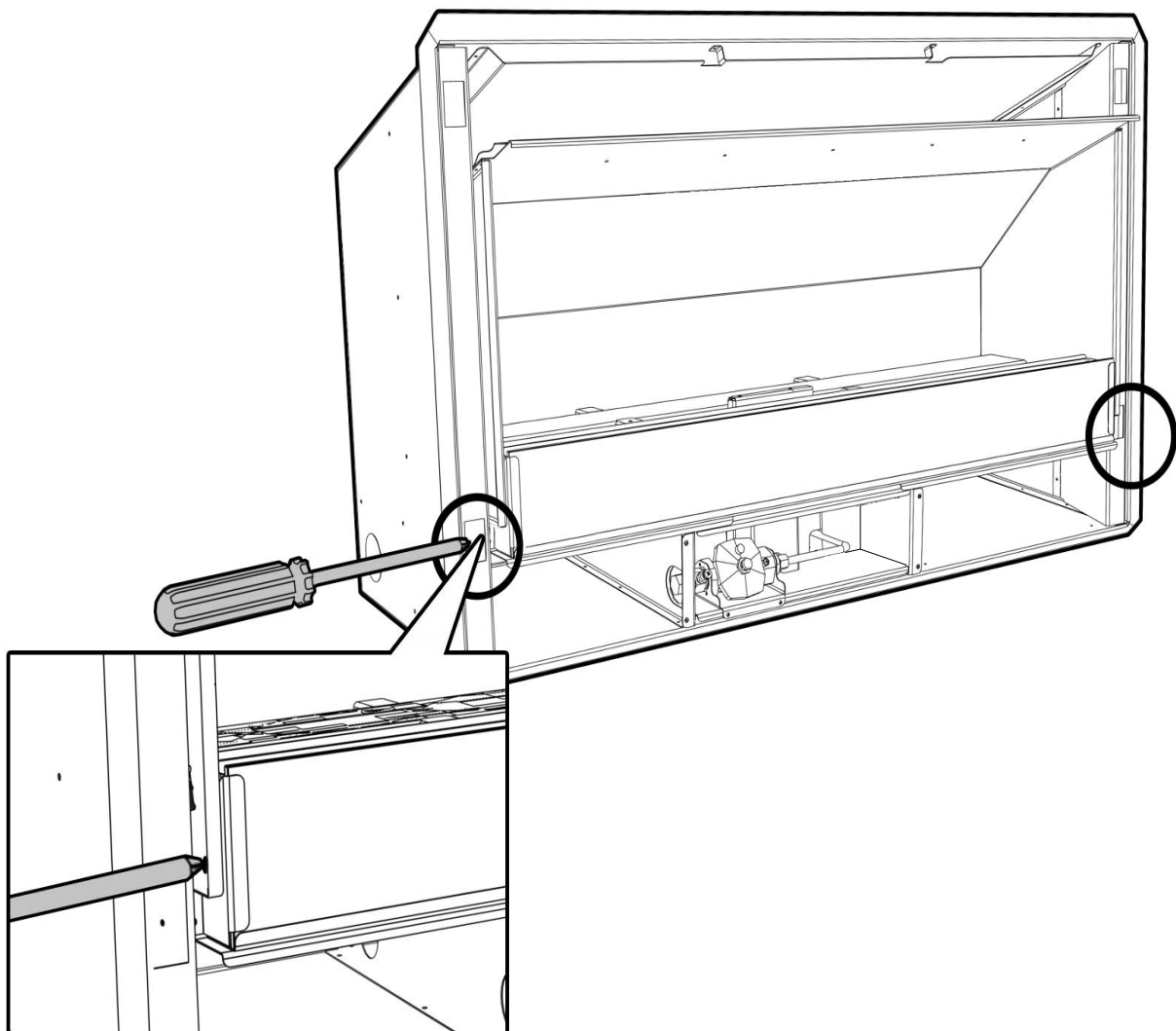
EF5000 Pressure table			
	Propane	Natural Gas	ULPG
Minimum Inlet pressure	2.5 kPa	1.0 kPa	2.5 kPa
Maximum Inlet pressure	5.0 kPa	5.0 kPa	5.0 kPa
Operating Pressure	2.0 kPa	1.0 kPa	2.2 kPa

## 14.0 Assembly of stone cartridge:

The glass which fits inside in the stone Cartridge has been packaged to protect it during transit, and can be found inside the firebox. Insert the glass strip into the stone cartridge as shown to the right, between the two metal flanges and push it all the way to the bottom. A bag of pebbles (River Stones) are also supplied, use these to fill the stone cartridge.



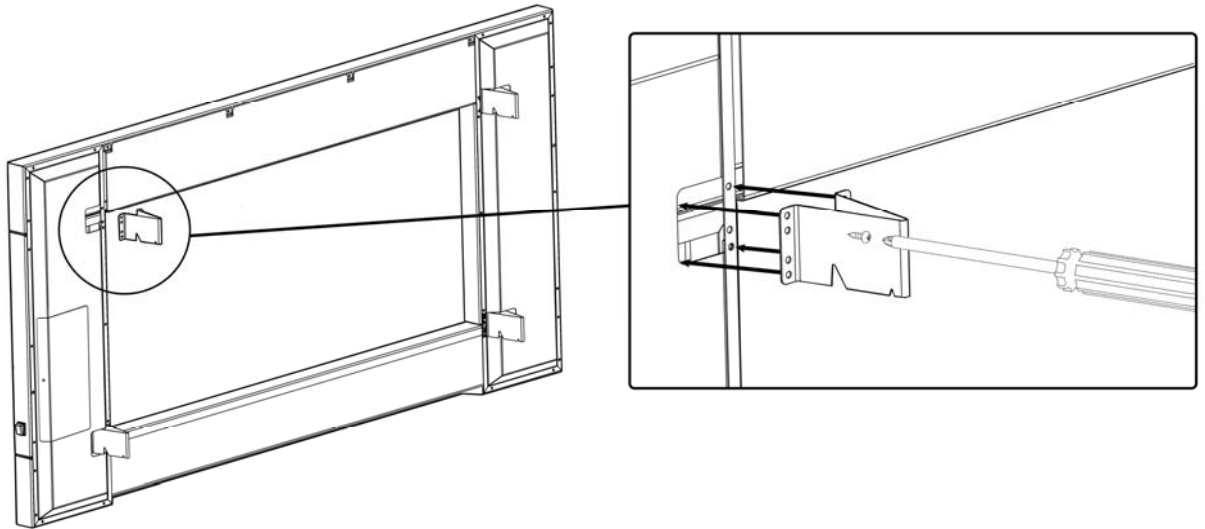
- 14.1 With the glass in position, fix the stone cartridge to the fire by using the two supplied screws in the location shown below. Do this before the fascia is fitted.



## 15.0 Fitting the Fascia:

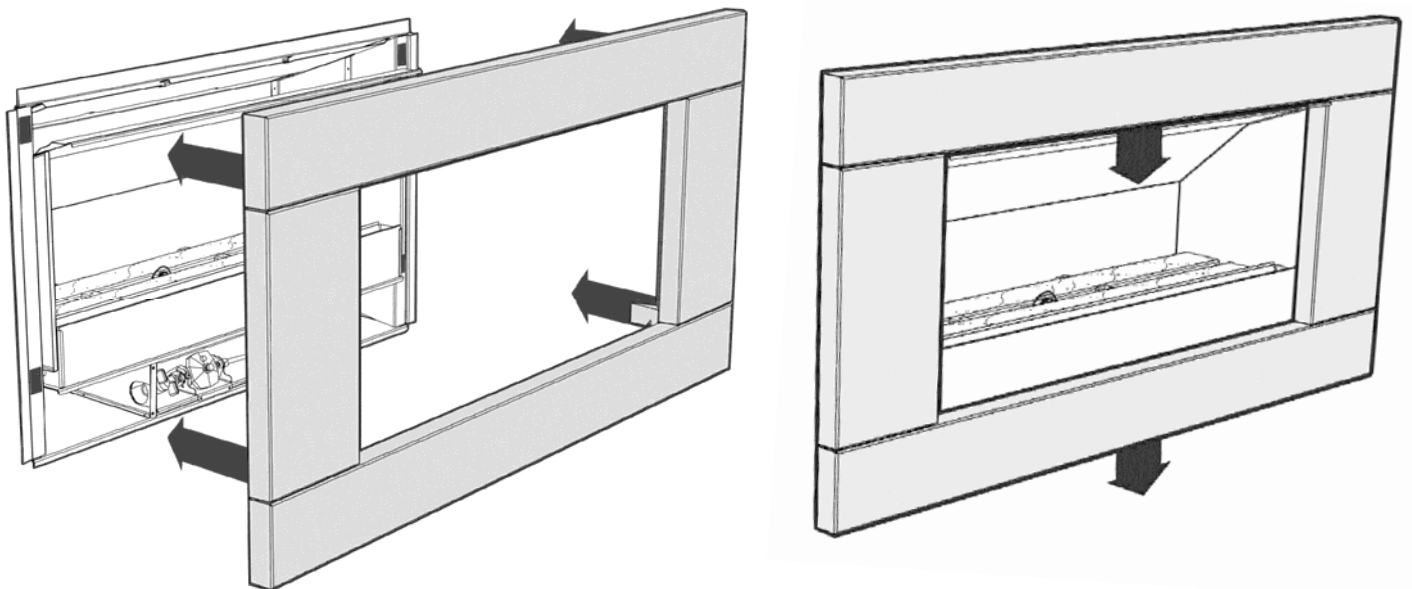
Before fitting the fascia, the hooks must be attached using the screws supplied. Ensure the wires connecting the fascia to the fire are securely connected, as per section 11.0.

The EF5000 fascia is attached to the combustion box by four 'hooks' on the corners of the fascia.



Line up the hooks with the receptacles on the Outdoor Fire pictured below, and push the fascia into position. The first slot in the hook can be used to hang the fascia in the receptacles in order to ease the attachment.

- 15.1 When you have pushed the fascia in as far as it will go, briefly push down on the fascia to secure the fascia into position.



## 16.0 Placement of ceramic stones:

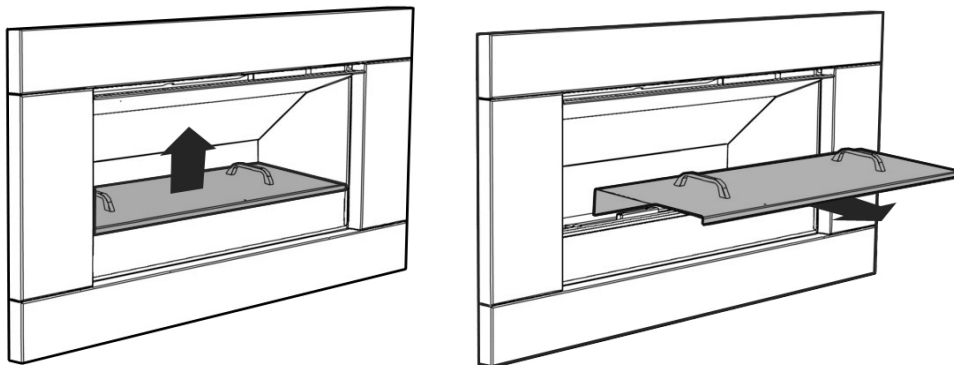
EF5000 fuel beds should be evenly spread out with a maximum one layer of media. Do not heap or mound the fuel bed media and attempt to get an even spread across the top of the burners.



River stones

**UNDER NO CIRCUMSTANCES SHOULD THE SUPPLIED SMALL STONE PEBBLES (RIVER STONES) BE PLACED ON THE BURNERS. THEY ARE FOR USE INSIDE THE STONE CARTRIDGE ONLY**

- 16.1 If desired, an optional Weather Cover can be purchased from your Escea retailer, which protects the fuelbed and burners. This should be replaced when while the fire is not in use.
- 16.2 To fit the weather cover ensure fire is off and cooled, and place the front edge on the glass at the front of the fire, the rear flange of the Weather Cover will rest on the burner supports behind the rear burner. To remove, lift the Weather Cover upwards and then towards yourself.

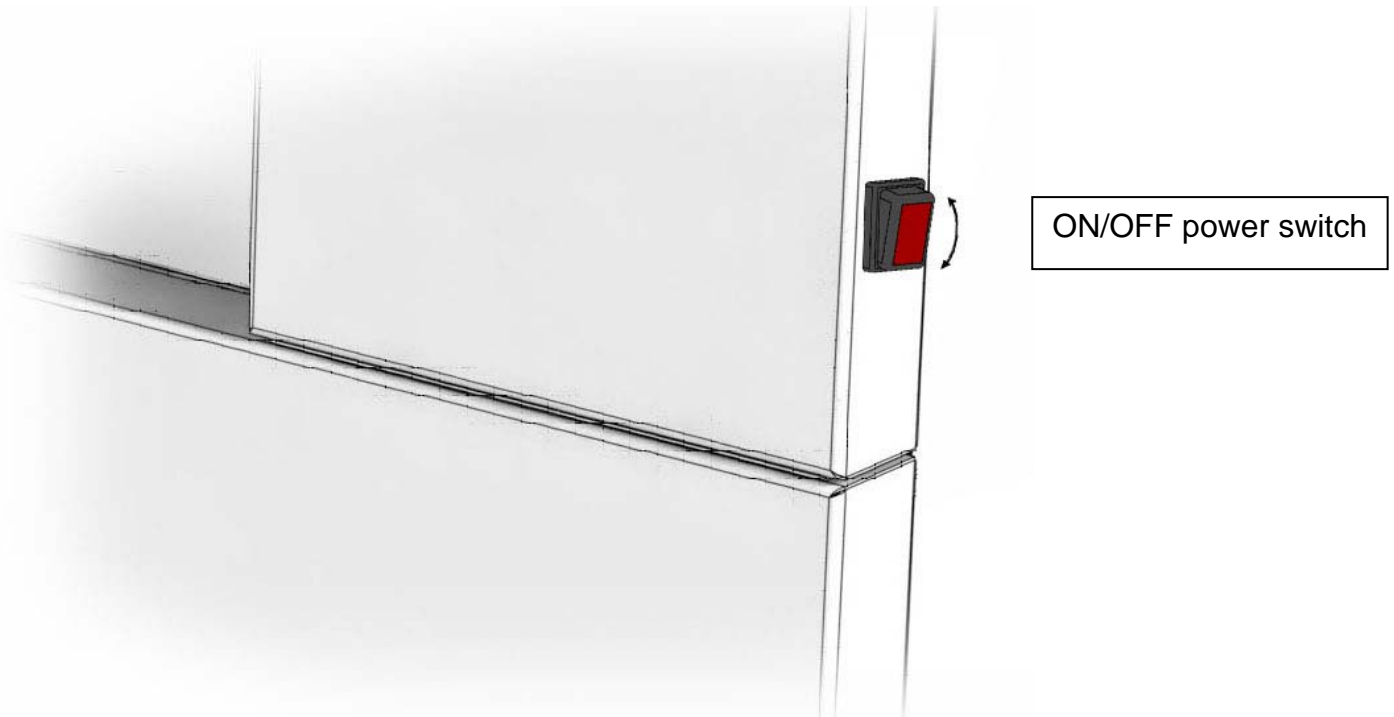


- 16.3 The fire **MUST NOT** be operated while the cover is fitted.
- 16.4 The cover **MUST NOT** be fitted while the fire is hot. A cooling period of 30 minutes must be observed before fitting.
- 16.5 Objects such as wood, coal, fire logs or any other solid fuels shall not be burned in the gas fireplace.  
Under no circumstances should any part of your body enter the gas fireplace during the start-up or whilst the fire is running.

## 17.0 Operating Instructions:

The EF5000 is operated by the switch located on the right hand side outer edge of the fascia. The basic operations possible are ON/OFF.

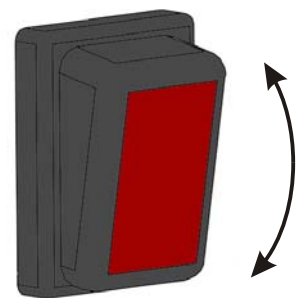
Before operating the fire, ensure the power transformer is plugged into the mains wall socket & turned on, and the supply is turned on.



### 17.1 Igniting the pilot flame

To turn the fire on push the ON/OFF rocker switch to the on position. The ignition unit will start sparking and the pilot and burners will ignite almost immediately.

In the event of no gas, the ignition unit will attempt to try to light up to 3 times before shutting down.



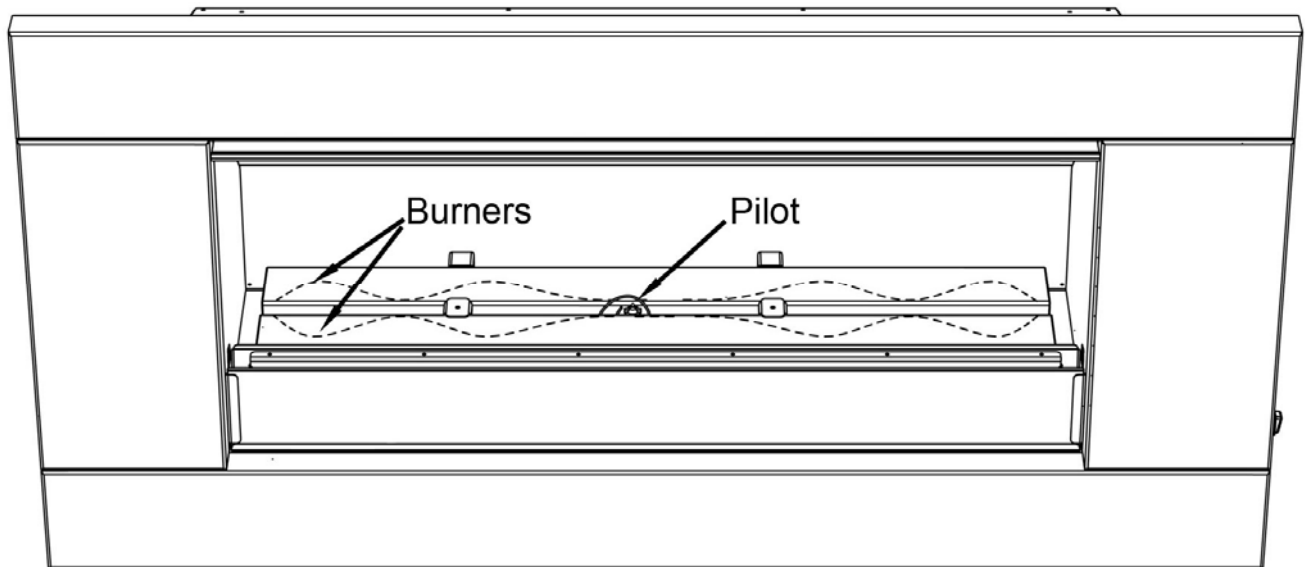
### 17.2 Turning off the fire

To turn the fire off, simply flick the ON/OFF rocker switch to the off position. This will shut down the gas flow to the pilot flame and both burners.

Please ensure the gas supply is also turned off, and as an extra safety please turn off the main power supply at the house.



## 17.3 Pilot Flame and Burner Positioning



## 18.0 Maintenance and Cleaning

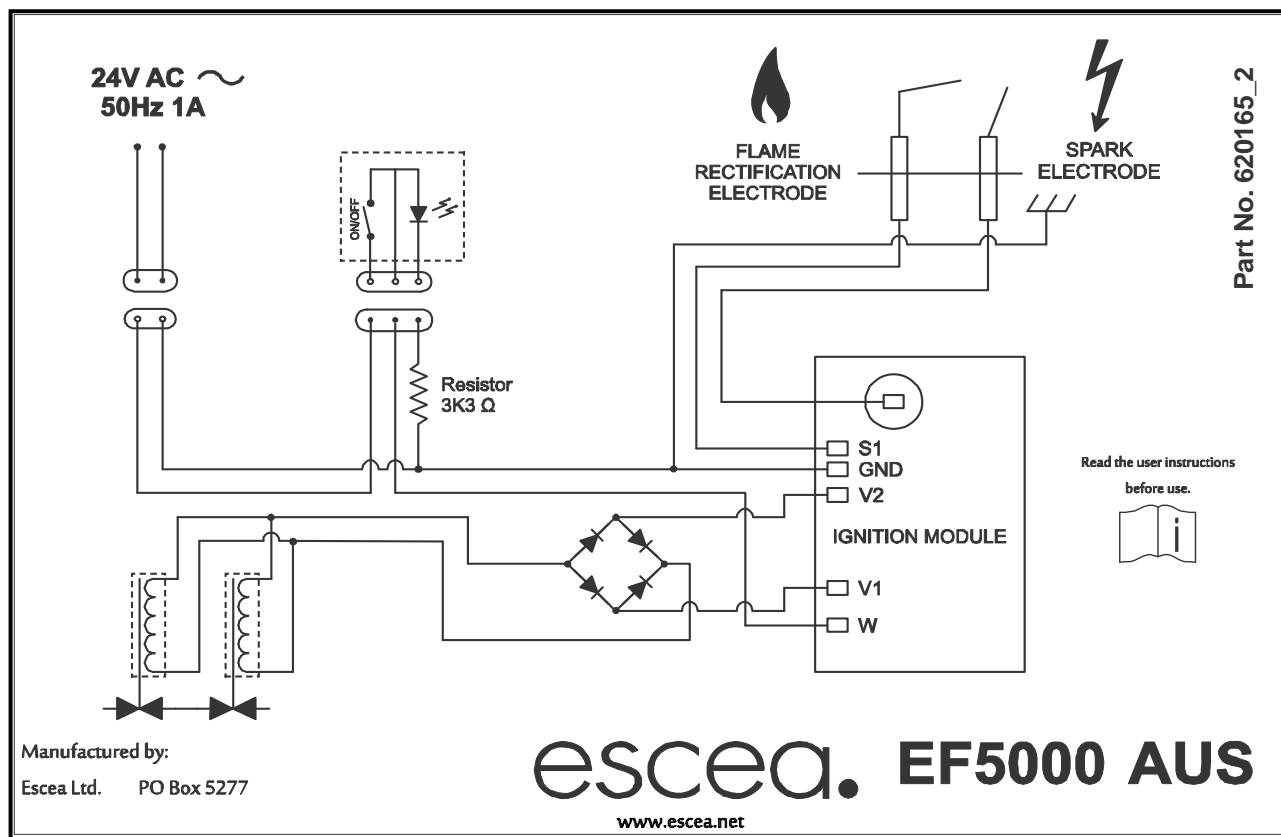
The unit must be cold before starting any form of maintenance or cleaning. To remove the glass and stones in the front stone tray simply reverse the steps in section 15.0. The glass can be cleaned using standard window cleaner and the quartz stones can be washed using soapy water

- 18.1 If the stainless steel fascia or weather cover requires cleaning the following products are recommended; 3M Stainless steel cleaner or methylated spirits.

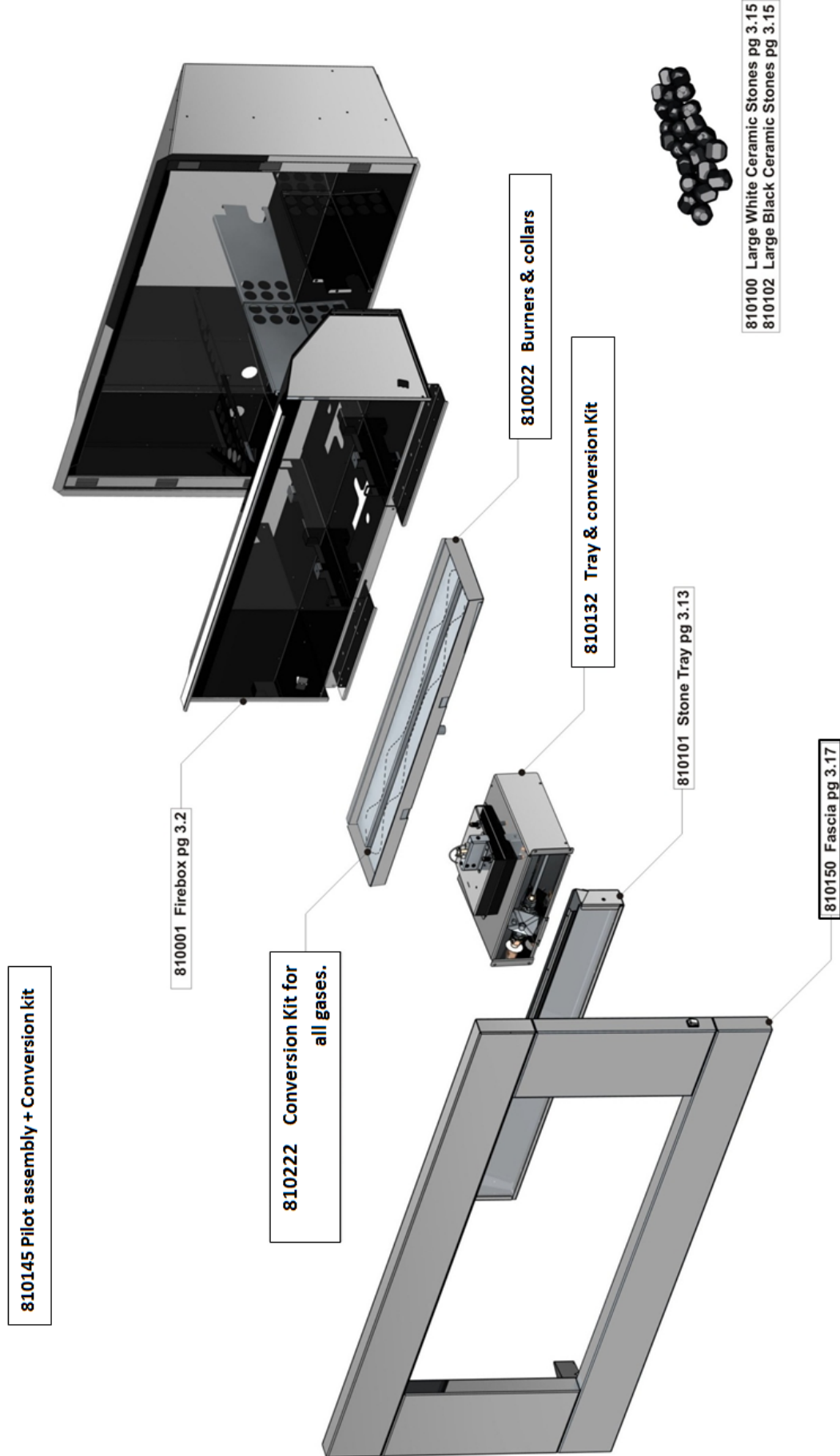
Periodically the pilot and burners should be checked visually for carbon and soot build-up, consistent flame and clean burning.

- 18.2 Cleaning of the burners and ceramic stones can be carried out using a brush and a dry cloth and should be done at least annually. This will remove carbon or soot build-up.

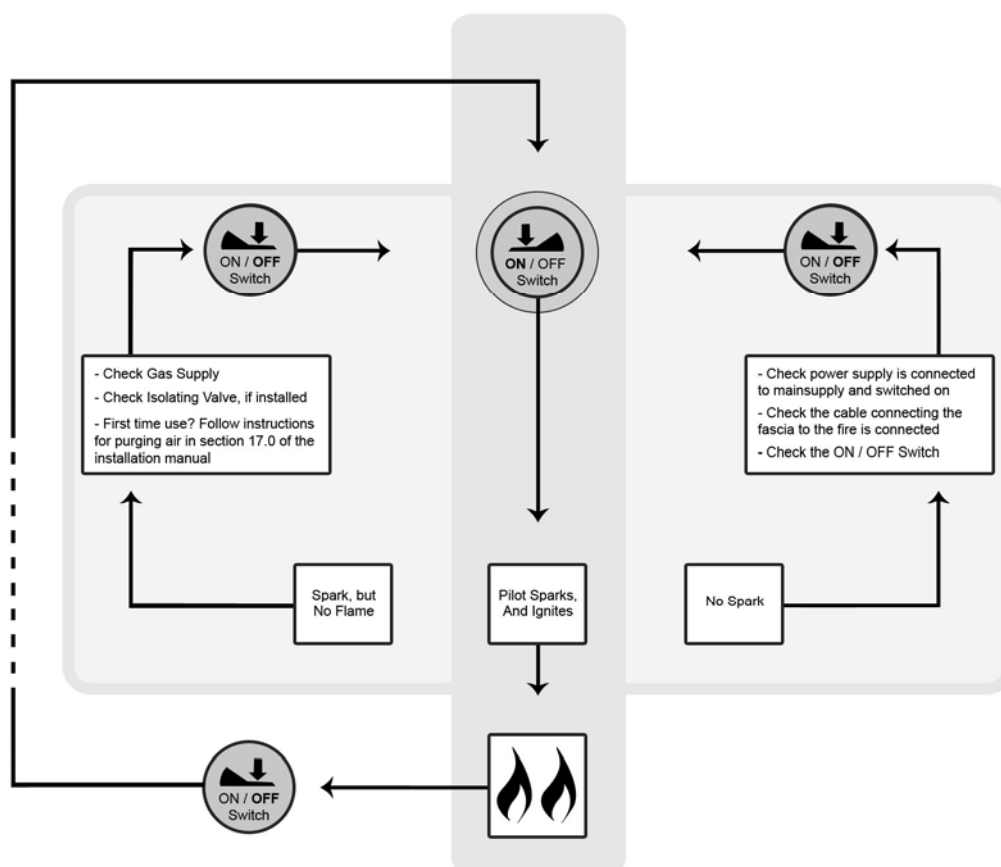
## 19.0 Electrical Schematic



# EF5000 Exploded View



## 19.1 Operation Chart



	Propane	ULPG	Natural Gas
Min. Inlet Pressure	2.5 kPa	2.5 kPa	1.00 kPa
Max Inlet Pressure	5.0 kPa	5.0 kPa	5.00 kPa
Manifold Pressure	2.0 kPa	2.2 kPa	1.00 kPa
Front Burner Jet Size	Ø1.4	Ø1.25	Ø3.2
Rear Burner Jet size	Ø1.4	Ø1.25	Ø3.2
Front Burner Aeration Hole	11mm x 2 off per burner	11mm x 2 off per burner	5mm x 2 off per burner <b>Collar must be fitted</b>
Rear Burner Aeration Hole	11mm x 2 off per burner	11mm x 2 off per burner	5mm x 2 off per burner <b>Collar must be fitted</b>
Mj/hour	40	40	52

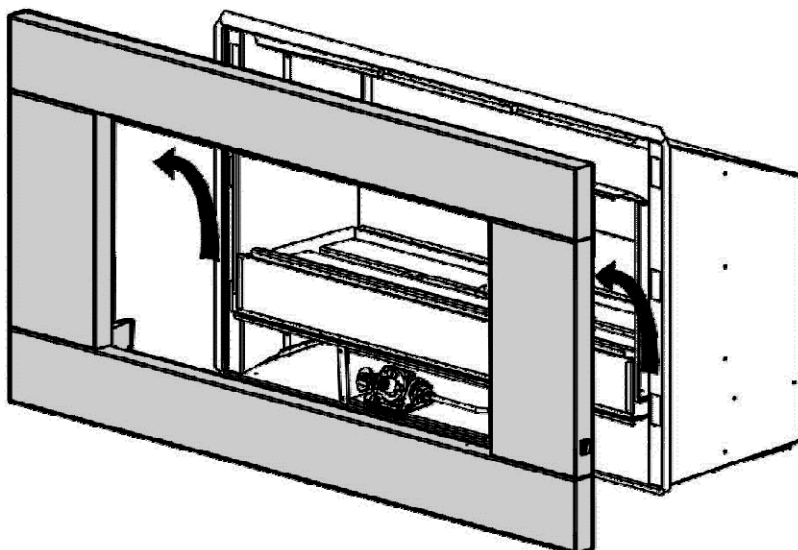
For any inquires, please contact your local Escea distributor or dealer [www.escea.com](http://www.escea.com)

## 20.0 Gas conversion

**Warning:** Before starting the gas conversion, ensure that the fireplace is cool.

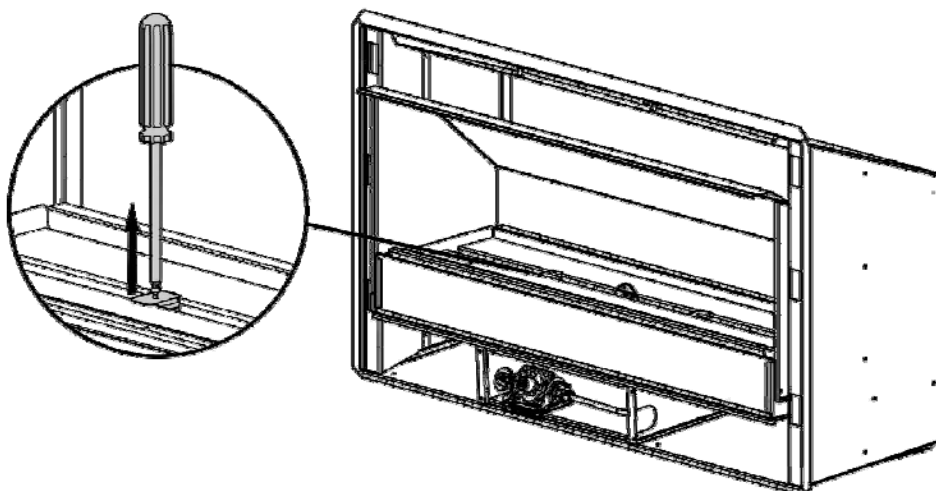
### Step One:

Lift the fascia and hang it in the second slot, now you can unplug the fascia lead and remove the Fascia from the EF5000 firebox by lifting up and outwards. This will give you access to remove the Burners and Stone tray.



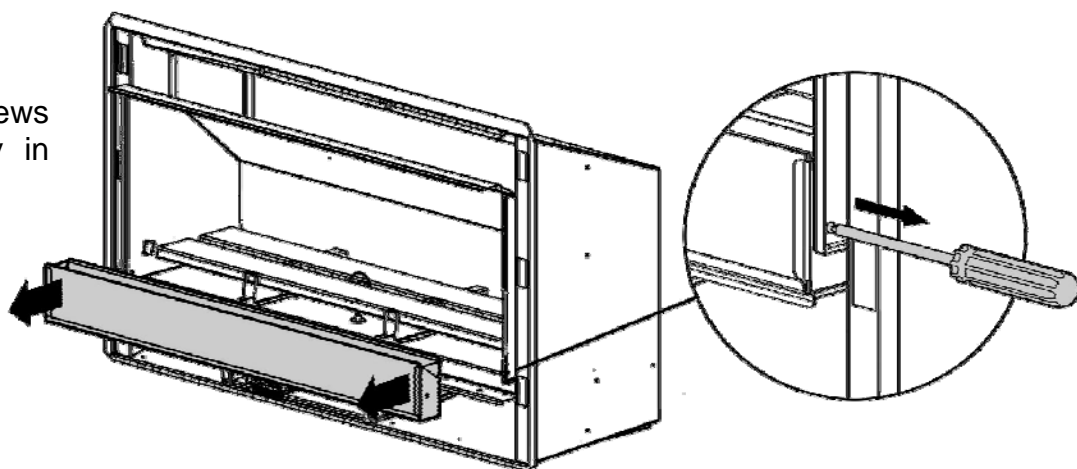
### Step Two:

Remove all of the coals and the two screws holding the burner clamps in place, remove the clamps.



### Step Three:

Remove the two screws holding the Stone tray in place and lift it out.



#### Step Four:

Lift out both burners, this will give you access to the jets (spuds).

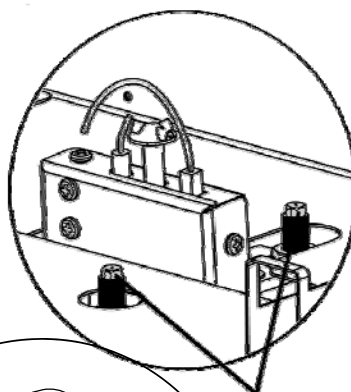
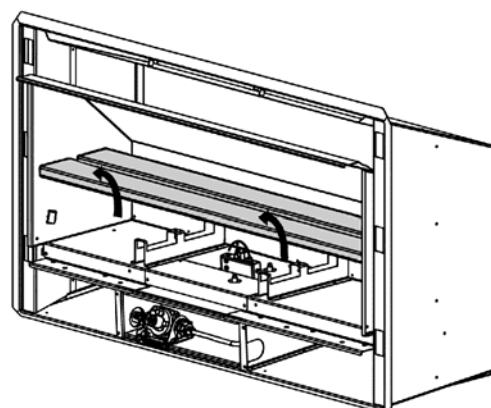
#### Step Five:

Change the two jets with the conversion jets supplied in kitset. Cover the existing gas type label with the new gas type label supplied in kitset. Ensure serial number and date of manufacture are still visible. Write your name, company (if appropriate) and date of conversion on new label with permanent marker.

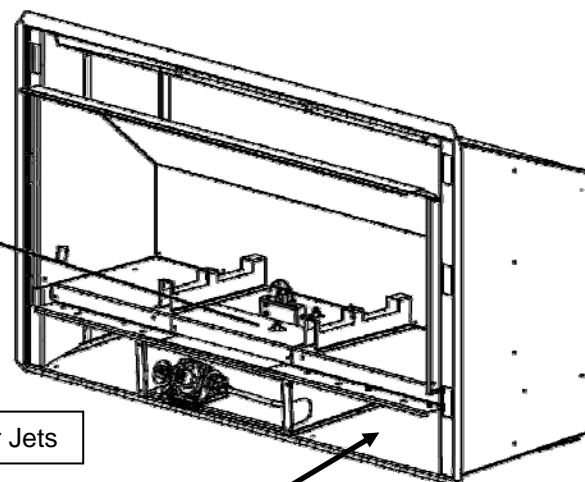
#### Step Six:

Replace the pilot jet with the correct one supplied in the kit (See the table below).

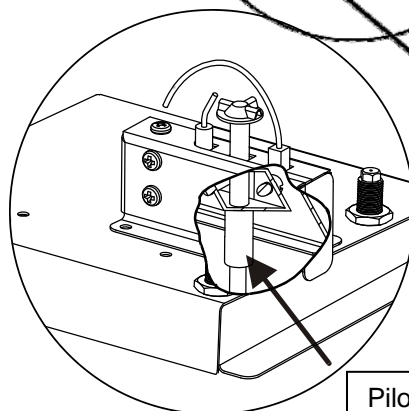
**Note:** You will have to remove the cover from behind the pilot assembly, it may be helpful to remove the control tray



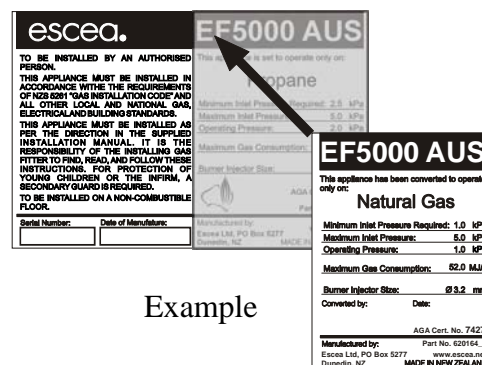
Burner Jets



Data Label Position



Pilot Jet

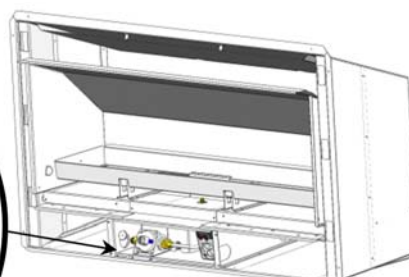
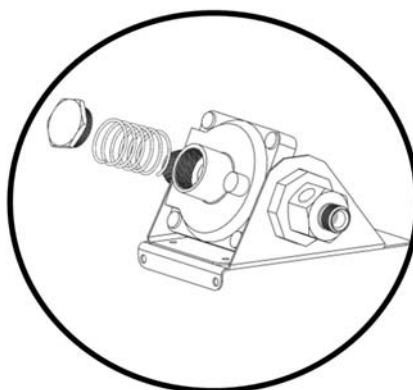


Example

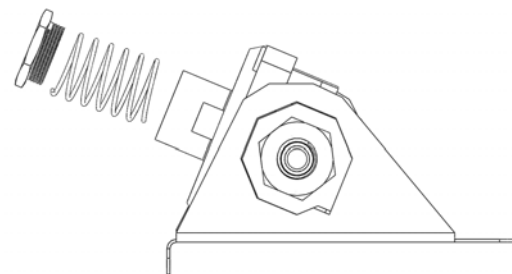
Gas	NG	Propane	ULPG
Pilot Jet	Ø0.45	Ø0.30	Ø0.30
Front Jet	Ø3.2	Ø1.4	Ø1.25
Rear Jet	Ø3.2	Ø1.4	Ø1.25

#### Step Seven:

Take the regulator spring out of the regulator by unscrewing the pressure adjustment knob completely. Swap regulator spring with the new spring that is supplied in conversion kitset. Replace adjustment screw and reset gas pressure as per the settings below.

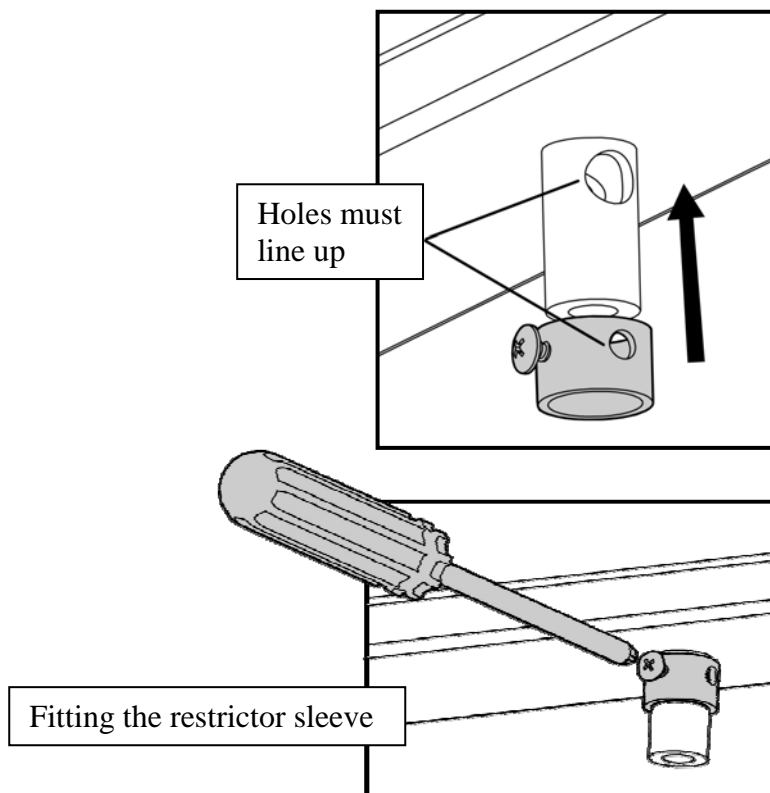


	Natural Gas	Propane	ULPG
kPa	1.0	2.0	2.2



### Step Eight:

For Propane/ULPG to Natural gas conversion you will need to fit the natural gas restrictor collars. These slide over the burner tube on the underside of the burners, and must be screwed into place so that the porting holes line up.



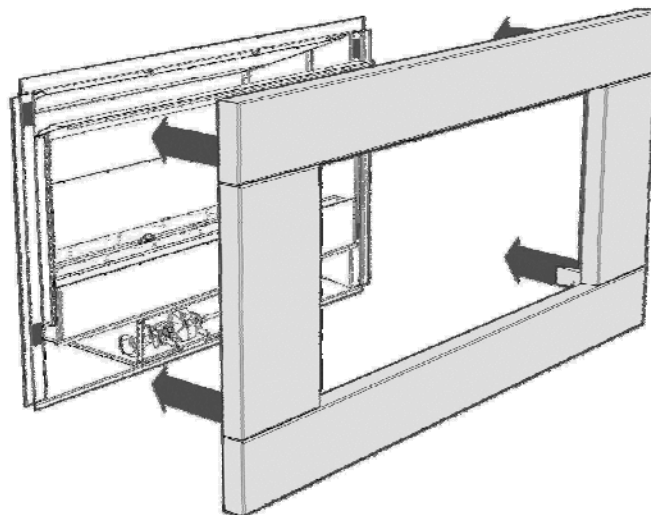
**Note:** For Natural gas to Propane/ULPG conversion remove the restrictor collars from the burners.

**Step Nine:**

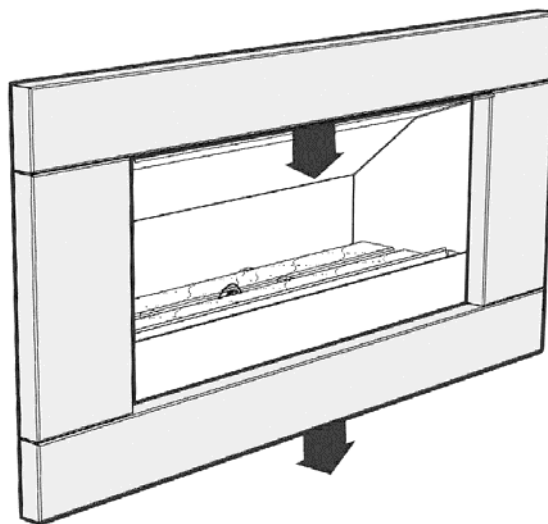
- a) Insert the burners and fix them into place with the burner clamps.
- b) Replace the stone tray and fix it back onto the firebox.
- c) Replace the coals, ensuring you have only one even layer.  
Do not heap or mound the coals.

**Step Ten:**

Re-attach the fascia power supply lead. Push them together until they 'click'. Line up the hooks with the receptacles on the Firebox, take advantage of the first slot in the hook where you can rest the fascia before you push the fascia into position.

**Step Eleven:**

When you have pushed the fascia in as far as it will go, briefly push down on the fascia to secure the fascia into position.



Once the fire has been re-assembled, test the fire to ensure it is running correctly.