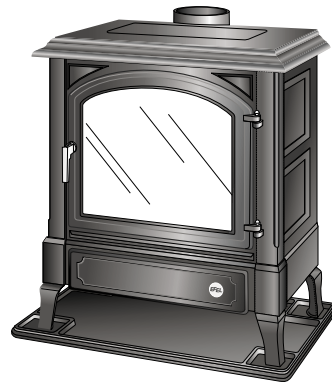




The Stove Company



Installation & Servicing Harmony 8 & Stanford 80 Gas Balanced Flue Stove



Part No.

Serial Number

**Euroheat Distributors
(H.B.S.) Ltd.,
Unit 2, Court Farm
Business Park,
Bishops Frome,
Worcestershire,
WR6 5AY.**

Contents

Safety Precautions	3
Manufactures Identification Plate	3
The Euroheat Appliance Serial Number	3
Technical Data with Eurosit Gas Valve 630	4
Technical Data with Mertik Maxitrol GV34 Gas Valve	5
Primary Air Collar	6
Appliance Location	6
Hearth and Fireplace Requirements	7
Standard Top to Horizontal Balnaced Flue Kit (Part Number MS91038)	8
Standard Top to Vertical Balanced Flue Kit (Part Number MS91061)	8
Balanced Flue Additional Flue Lengths, Elbows and Accessories	9
Example Horizontal to Vertical Ratio calculations	11
Vertical to Horizontal Ratio Graphs A & B	12
Fitting the Flue Kit	14
Position of flue terminal on outside wall	15
Flueing through combustibile material	15
Balanced Flue Terminal Positions	16
Location of outlets from flues serving balanced flue gas appliances	16
Installation of the Gas Supply, BS 6891	17
Appliance Location	17
Gas Connection	18
Fitting the Coal Effect Kit and Fuel Guard	19
Gas Control Valve	20
Sit Gas Valve Eurosit 630	20
Lighting	20
Thermostatic Eurosit Gas Valve 630 with Manual Override	21
Lighting	22
Manual Control	22
Mertik Maxitrol GV34 Gas Valve	23
Gas Pressure Test Nipple Locations	24
Fitting the Remote Control	24
Motor and Micro switch	24
Fitting the Electrical Connections	24
Receiver location	24
Information for Users which must be advised by the installer verbally or in writing.	25
Removing Main Burner Jet	26
Service Record	28

Safety Precautions

- a) The stove should be visually inspected and if damaged should not be installed.
- b) The flue components should be checked to ensure that all are present and are not damaged. If any damage is found then the flue system should not be installed, until replacement parts have been obtained.
- c) It is a requirement of the Gas Safety (Installation and Use) Regulations that these instructions, together with the Appliance User Instructions, be left intact with the user.
- d) In your own interest, and those of safety, and in accordance with the Gas Safety (Installation and Use) Regulations, Efel stoves must be installed by a suitably qualified gas technician using the appropriate fittings for the gas type being used and the stove must not be modified in anyway. The gas technician will be responsible for the installation conforming to all current regulations and standards. Failure to install the appliance correctly could lead to prosecution.
- e) It is important that the stove is installed so that the clearances specified in these instructions are complied with.
- f) Fireguards, in accordance with current British Standards, should be fitted when the appliance is used in the presence of young children, the elderly or infirm.
- g) The stove must not be run with its door open.
- h) It is also important that the occupiers of the property have their attention drawn to the high temperatures which are normally present on the external surfaces of the stove during operation.
- i) Do not use the stove if any of the ceramic coal components are damaged or broken.
- j) The plastic bags used to protect components of this appliance are a potential hazard to young children, and should be disposed of immediately.
- k) The stove must be serviced annually by a suitably qualified gas technician.

Manufactures Identification Plate

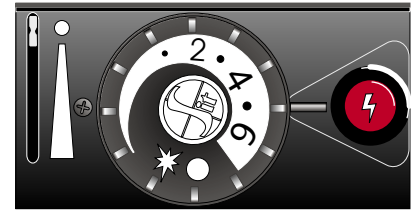
The identification plate is located at the right rear side. To access the plate swing outwards.

The Euroheat Appliance Serial Number

The serial number can be found at 5 locations:

- 1: On the front page of this manual
- 2: On the front page of the operating instructions
- 3: Under the base of the stove.
- 4: On the warranty registration form
- 5: On the warranty certificate returned to the user after successful registration.

Technical Data with Eurosit Gas Valve 630



Harmony 8 & Stanford 80 Gas Balanced Flue

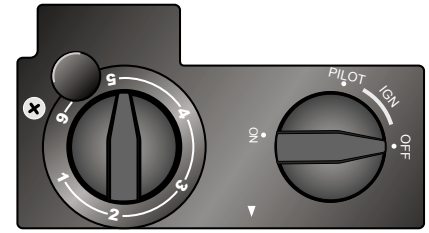
Model Number	49982
Heat Output Maximum	
Natural gas	7.4 kW/hr (25,248 BTU)
LPG	7.1 kW/hr (24,225 BTU)
Gas Input Maximum	
Natural gas	8.8 kW/hr (30,025 BTU)
LPG	8.3 kW/hr (28,319 BTU)
Gas Input Minimum	
Natural gas	3.6 kW/hr (12,283 BTU)
LPG	4.3kW/hr (14,671 BTU)
Heat Control	Thermostatic and Manual
Fuel Types	Natural Gas or L. P. G. (Specify at time of order)
Efficiency	80% + (net)
Ignition Type	Battery Spark
Pilot Flame	Yes
Flame Failure	Yes
Fuel Effect Type	Coal
Fuel Outlet	Top Balanced Flue
Flue Size	180mm External
Terminal Guard	Optional Extra
Warranty	Standard 1 Year
Colour Options	Cast Black, Satin Black Enamel, Bottle Green Enamel (Harmony only)
Decorative Plinth	Optional Extra

Gas Type	System Pressure	Main Burner Nozzle	Nominal Output (Maximum operation)		Minimum Output (low operation)		Pilot Nozzle size	Low Operation By Pass	Heat Output	Gas Input
			Hourly input	Burner operating pressure	Hourly input	Burner operating pressure				
G20 Natural Gas	20mbar	1 jet 4 x 1.27	0.935 m ³ /h	12.8mbar	0.379 m ³ /h	2.5mbar	51	1.70	7.4kW/hr 25,248 BTU/hr	8.8kW/hr 30,025 BTU/hr
G31 Propane	37mbar	1 jet 4 x 0.79	0.66kg	33.2mbar	0.342kg	9mbar	30	1.20	7.1kW/hr 24,225 BTU/hr	8.3kW/hr 28,319 BTU/hr

Seasonal Efficiency

The efficiency of this appliance has been measured as specified in BS EN 613:213 and the result is 72% Nat Gas and 73.7% LPG. The gross calorific value of the fuel has been used for this efficiency calculation. The test data from which it has been calculated has been certified by BELTEST. The efficiency value may be used in the Governments Standard Assessment Procedure (SAP) for energy rating of dwellings.

Technical Data with Mertik Maxitrol GV34 Gas Valve



Harmony 8 & Stanford 80 Gas Balanced Flue

Model Number	49982
Heat Output Maximum	
Natural gas	7.4 kW/hr (25,248 BTU)
LPG	7.1 kW/hr (24,225 BTU)
Gas Input Maximum	
Natural gas	8.8 kW/hr (30,025 BTU)
LPG	8.3 kW/hr (28,319 BTU)
Fuel Types	Natural Gas or L. P. G. (Specified at time of order)
Efficiency	80% + (net)
Ignition Type	Piezo
Pilot Flame	Yes
Flame Failure	Yes
Flue Spillage Sensor	Thermocouple Interrupter (TTB)
Fuel Effect Type	Coal
Fuel Outlet Options	Top Balanced Flue
Flue Size	180mm External diameter
Warranty	Standard 1 Year
Colour Options	Cast Black, Satin Black Enamel, Bottle Green Enamel, (Harmony only)
Decorative Plinth	Optional Extra

Gas	Gas Pressure mbar	Main Jet mm	Maximum output		Minimum output Low Burn		Pilot Jet
			Hourly Flow	Burner Pressure	Hourly Flow	Low burn pressure	
G20H Natural Gas	20	1 jet with 4 x 1.22	0.93 m ³ /h	16.4 mbar	0.39 m ³ /h	3 mbar	51
G31 LPG	37	1 jet with 4 x 0.79	0.67kg/h	35 mbar	0.34 kg/h	9 mbar	30

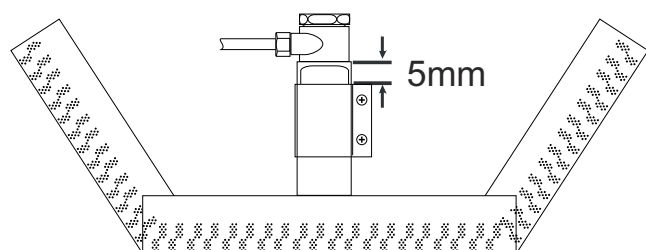
Seasonal Efficiency

The efficiency of this appliance has been measured as specified in BS EN 613:213 and the result is 72% Nat Gas and 73.7% LPG. The gross calorific value of the fuel has been used for this efficiency calculation. The test data from which it has been calculated has been certified by BELTEST. The efficiency value may be used in the Governments Standard Assessment Procedure (SAP) for energy rating of dwellings.

Primary Air Collar

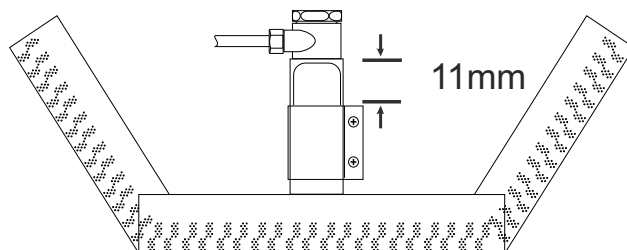
Natural Gas

The air collar should be adjusted to give a 5 mm wide opening.



L.P.G

The air collar should be adjusted to give a 11 mm wide opening.



Appliance Location

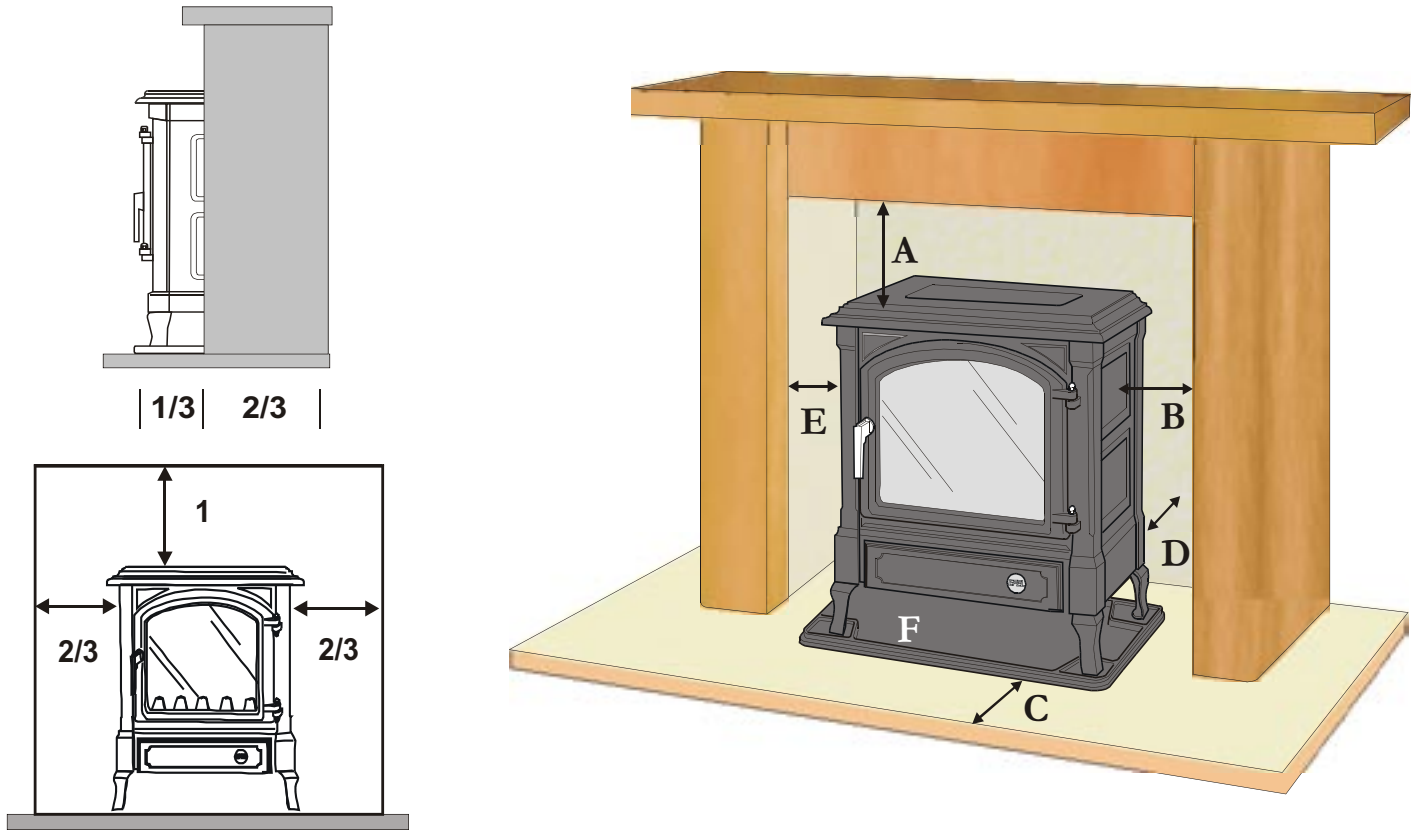
- a) This stove must be mounted on a non combustible hearth. The hearth must have a minimum of 12mm non combustible material thickness. The stove can be placed on a wooden floor if it can support the weight and as long as the hearth plinth is utilized.
- b) Combustible material at the rear of the stove shall be protected against the effects of heat.
- c) There must be a minimum of 300mm from the top of the stove to the underside of any combustible shelf. Note that for every 50mm increase on clearance, the shelf may project by a further 50mm.
- d) The appliance must not be installed in a room or space which will be used by the occupants for sleeping.
- e) Any manufactured surround used with this stove should comply with the appropriate British Standard.
- f) Do not place furniture, furnishing or combustible objects within 1 metre of the stove.

If any of these conditions are not fulfilled,

DO NOT FIT THE STOVE until this has been rectified.

Hearth and Fireplace Requirements

Do not be tempted to fit the stove into an unsuitable fireplace. Beyond the requirements of the building regulations and access to facilitate servicing the stove, providing a setting which will complement the Harmony is not a luxury, it is the practicality of making the most of an investment. A good builder will be able to transform even the most utilitarian of fireplaces, whether altering its proportions to those of the "Golden Mean" ideal, exposing a wooden lintel, stone or simply removing superfluous detailing for comparatively small costs, and the result will be a pleasure for many years.



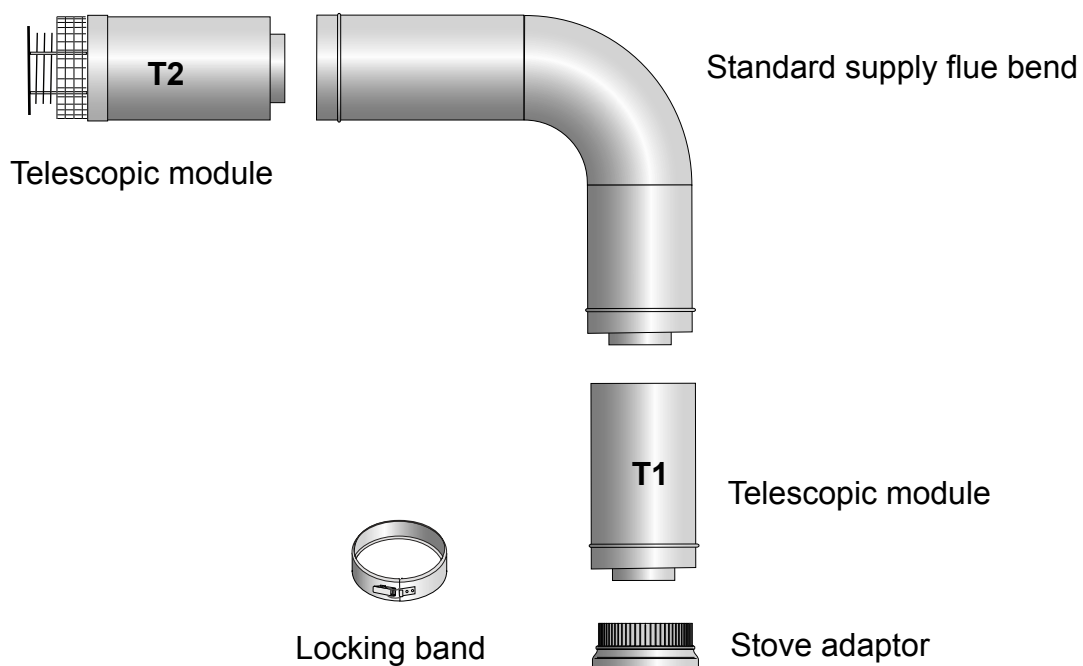
Minimum installation clearances

	Minimum clearance from combustible materials	Minimum clearance from non inflammable materials
A	12" 300mm	9" 230mm
B	12" 300mm	6" 150mm
C	1" 25mm	N/A
D	2" 50mm	2" 50mm
E	12" 300mm	6" 150mm

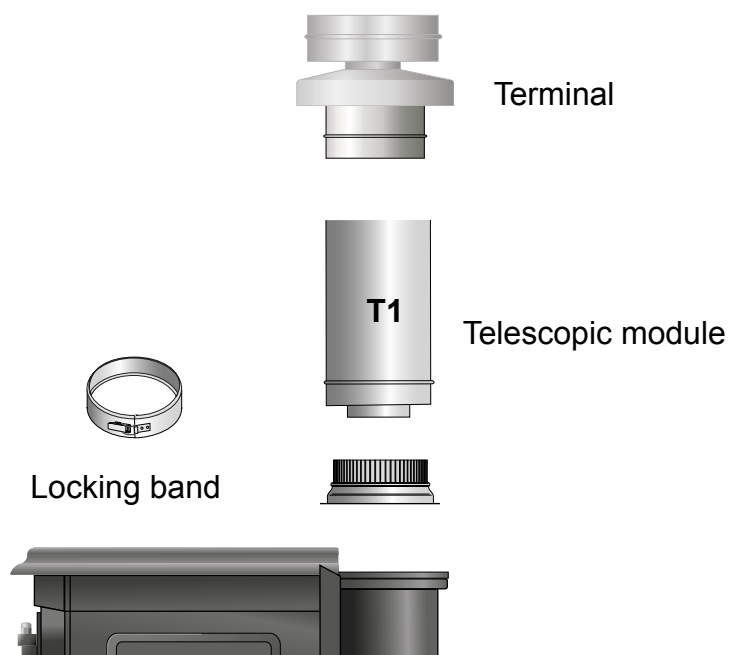
**F = Decorative Hearth Plate
Supplied as optional extra**

The measurements are for advice only. In all installations surrounding inflammable materials must not exceed 80°C. The stove must always stand perfectly level and have sufficient space allowed for service work.

Standard Top to Horizontal Balnaced Flue Kit (Part Number MS91038)

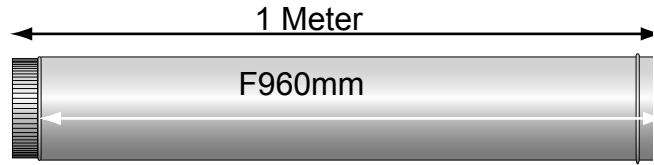


Standard Top to Vertical Balanced Flue Kit (Part Number MS91061)

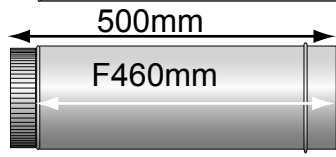


Balanced Flue Additional Flue Lengths, Elbows and Accessories

1 Meter
Part Number
MS91034

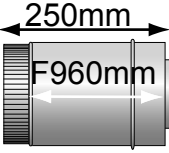


500 mm
Part Number
MS91035

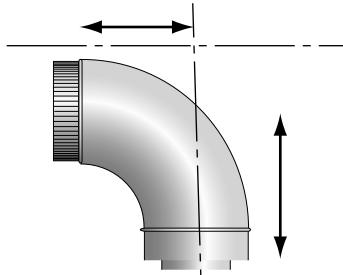


**FF??mm
= useable length**

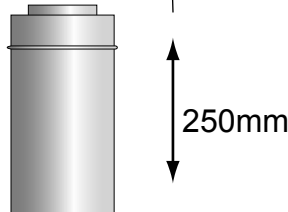
250 mm
Part Number
MS91036



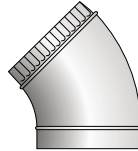
90 degree Bend
Part Number
MS91037



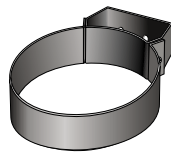
250 mm Adjustable
Part Number
MS91046



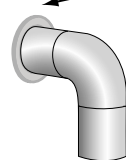
45 degree Bend
Part Number
MS91055



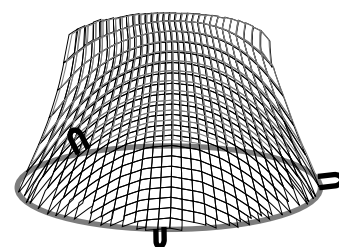
Wall Band
Part Number
MS91053



Closure Bezel
Part Number
MS91040



Terminal Guard
Part Number
FP767



Other Options
Ceiling Support MS91057
Fire Stop Spacer MS91059
Roof Flashing MS91063
Existing Chimney Converter
to Balanced Flue MS91086

Calculating Flue Aspect Ratios

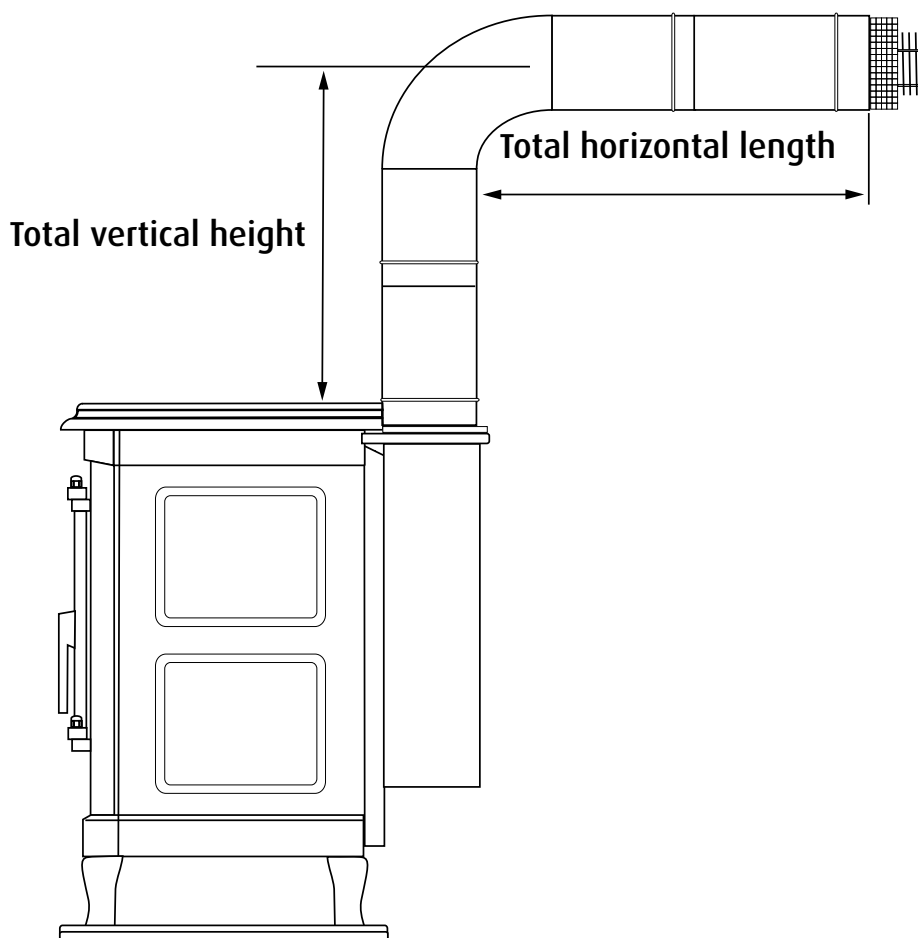
The stove operates correctly only with air flow induced by the flue system being within the defined parameters. To achieve these, the vertical elements of the flue, which induce flue draught and increase the air supply to the stove, must be balanced against the horizontal elements of the flue, which offer resistance to flue draught and reduce the air supply to the stove.

The ratio of vertical to horizontal lengths must be calculated to ensure the correct flue draught will be induced by the proposed flue.

The difference in height between the top of the stove and the bottom of the terminal determines the vertical height to be used in the calculation. The flue run may necessitate the vertical elements to be separated by several horizontal runs, this is not important, only the total height gain is needed.

The horizontal length is often more tedious to determine, but again, it is the total length which needs to be determined, regardless of their being continuous or in stages. Any change of direction within the flue will offer resistance to flue draught and each change of direction will offer the same resistance to the flue draught as a horizontal run of 1000mm.

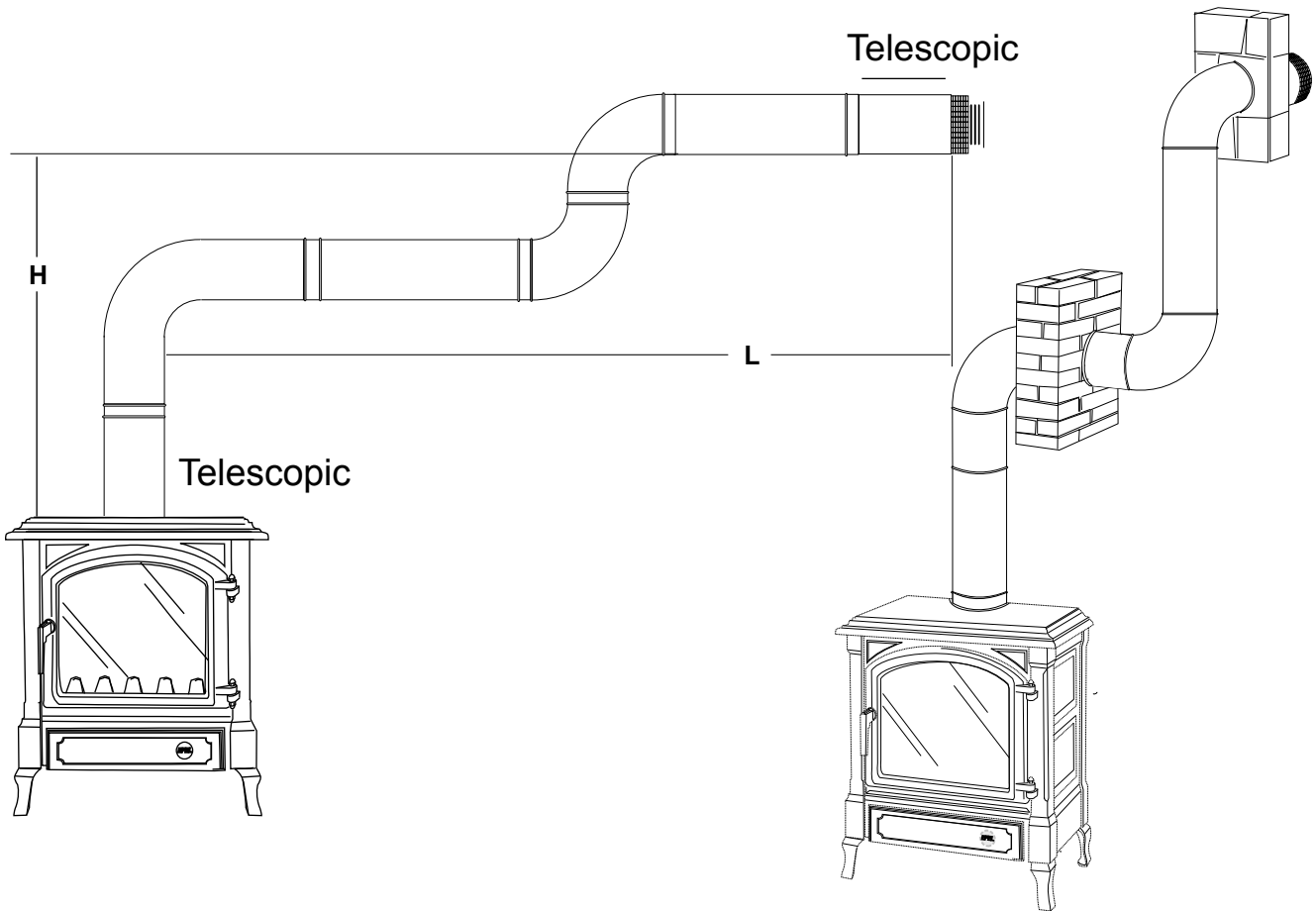
It is important to note that the balanced flue pipe must only ever rise vertically or travel horizontally at 90°.



Add 1000mm to the measured horizontal length for each additional change of direction (each 90deg elbow)

Example Horizontal to Vertical Ratio calculations

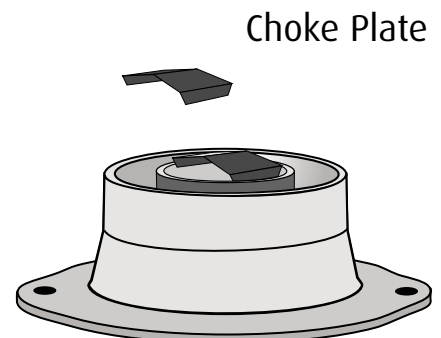
In these two examples the horizontal length will include an additional 2000mm to allow for the two additional elbows.



Having determined the vertical and horizontal length, reference should be made to the two drawings showing the permissible aspects.

Drawing A (page 11) illustrates the vertical heights necessary to overcome the inertia of horizontal lengths. If the proposed flue would terminate within the shaded area, the flue will not generate sufficient draught.

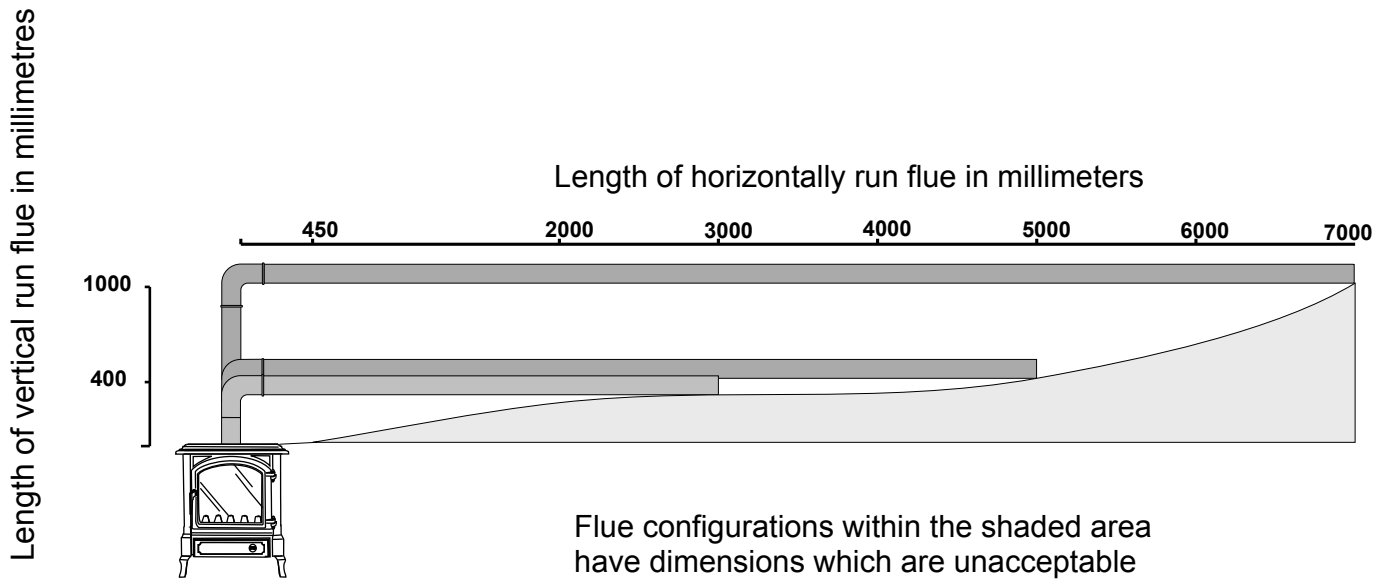
Drawing B (page 11) illustrates the maximum permissible vertical height of the flue for a given horizontal run. If the proposed flue would terminate within the shaded area the flue would induce too much draught and to prevent this any such flue will need the restricter Part Number 35432 fitted, which is part of the standard flue kit.



Vertical to Horizontal Ratio Graphs A & B

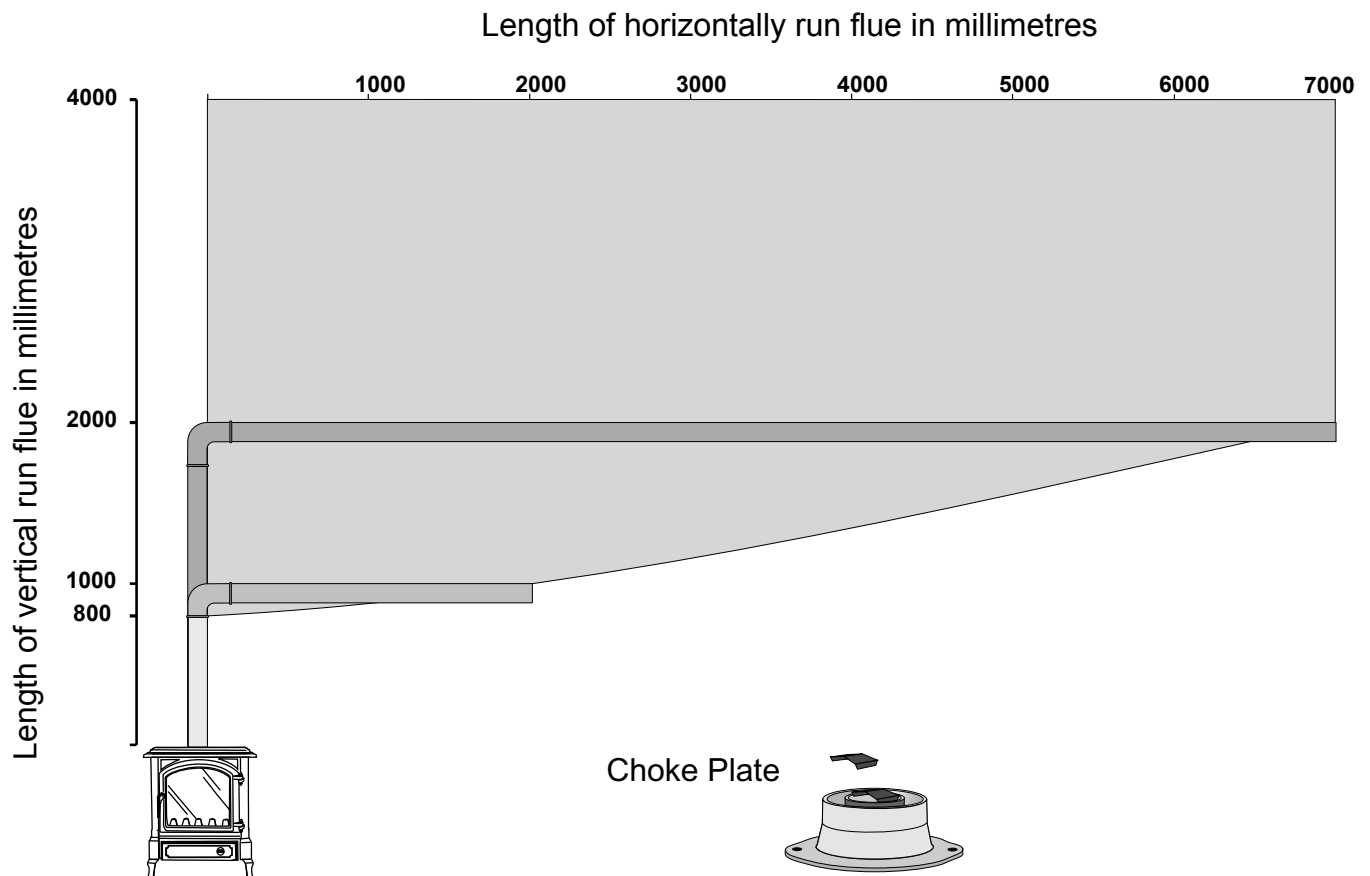
A

Minimum vertical height needed
to a horizontal flue length



B

Maximum vertical heights
to a horizontal flue length
before needing restricting



Example of Flue Calculation

Taking the attached diagram as an example we can calculate the flue parameters

Total Height = A
Total Horizontal = B

In this example

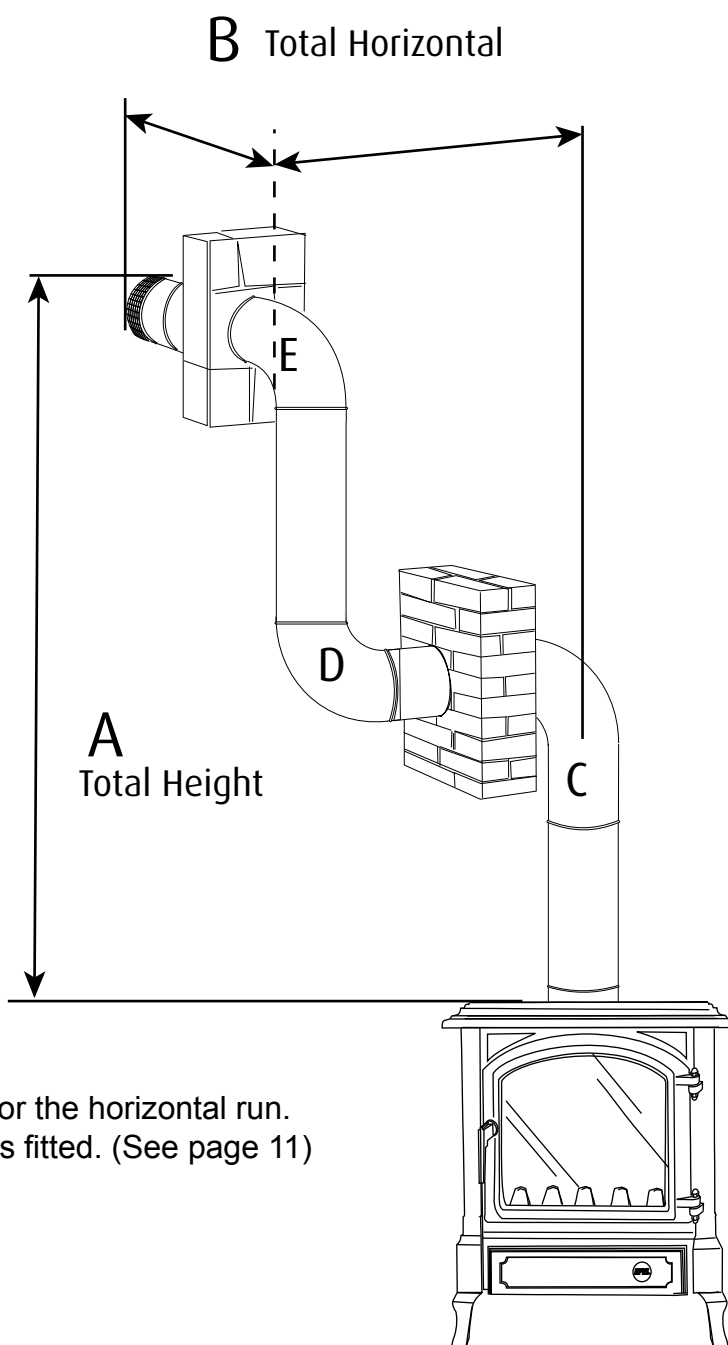
A = 2.8 Metres

B = 1.5 Metres

3 x 90deg bends have been used 1 of which (C) is the standard supply kit bend. This bend is ignored from the calculation as it is presumed it will always be used. The two remaining 90deg bends increase the horizontal length by 2 metres

(1 metre extra horizontal length per additional 90deg bend)

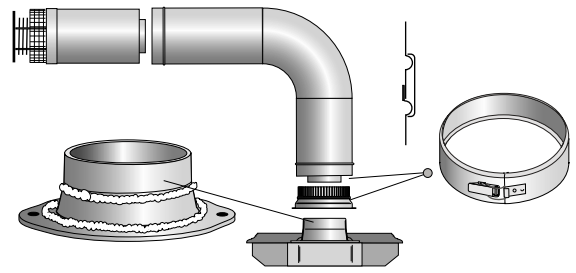
Total height A = 2.8 Metres
Total Horizontal B = 3.5 Metres



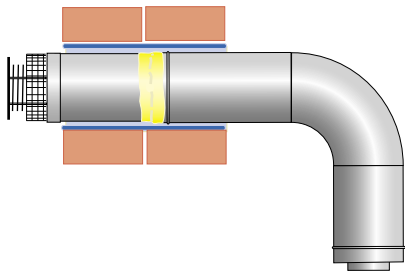
In this example there is sufficient vertical rise for the horizontal run. The vertical rise requires that the choke plate is fitted. (See page 11)

Fitting the Flue Kit

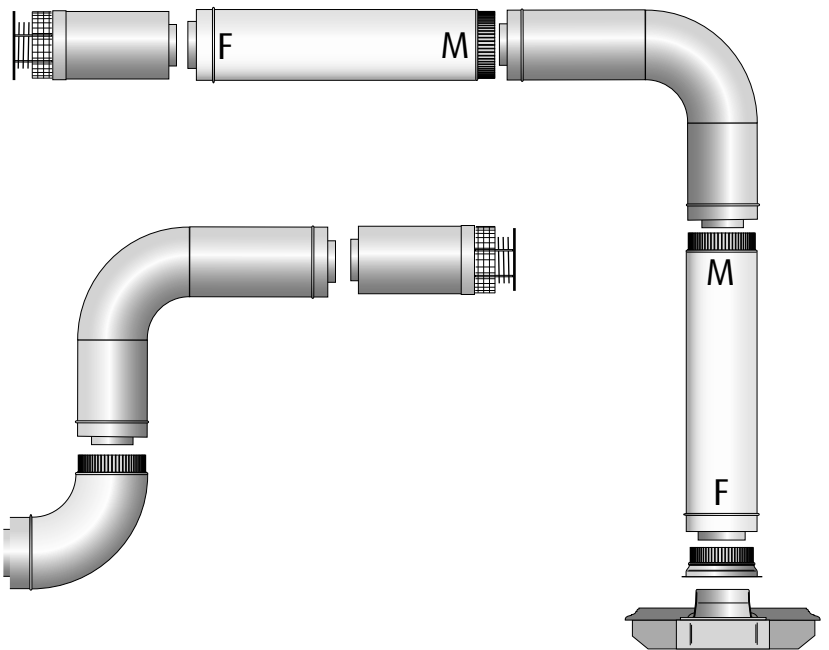
The flue system adaptor should be sealed to the stove's flue spigot with a heat proof sealant, taking care to ensure that at least two continuous lines of sealant are around the spigot before pushing on the adaptor to sit flat onto the spigot flange. The clamp should be used to secure the first elbow and the appropriate tape used to secure the telescopic fitting.



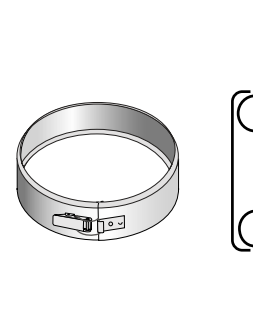
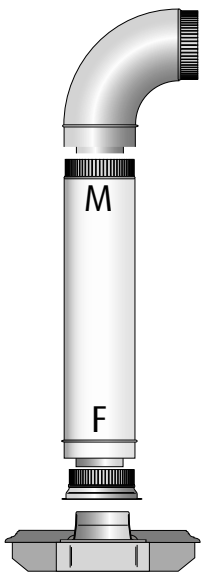
The guide giving the permitted flue configurations must be consulted to verify that a proposed flue is possible. If the telescopic termination piece is to be used the "long bend" supplied as standard with the stove must be incorporated into the system to ensure a non crimped end at the last fitting before the termination piece.



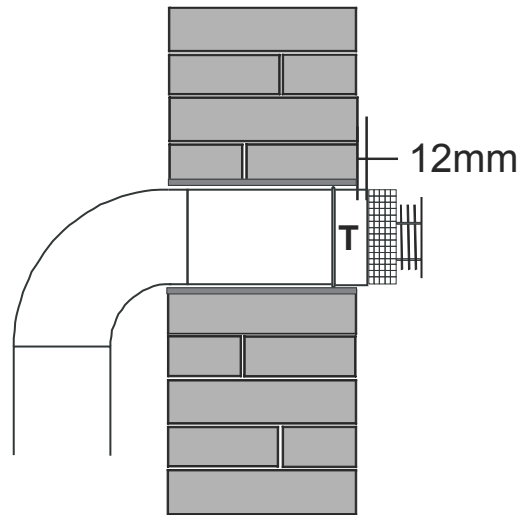
Where the flue passes through any wall, the hole must be sleeved for its entire length.



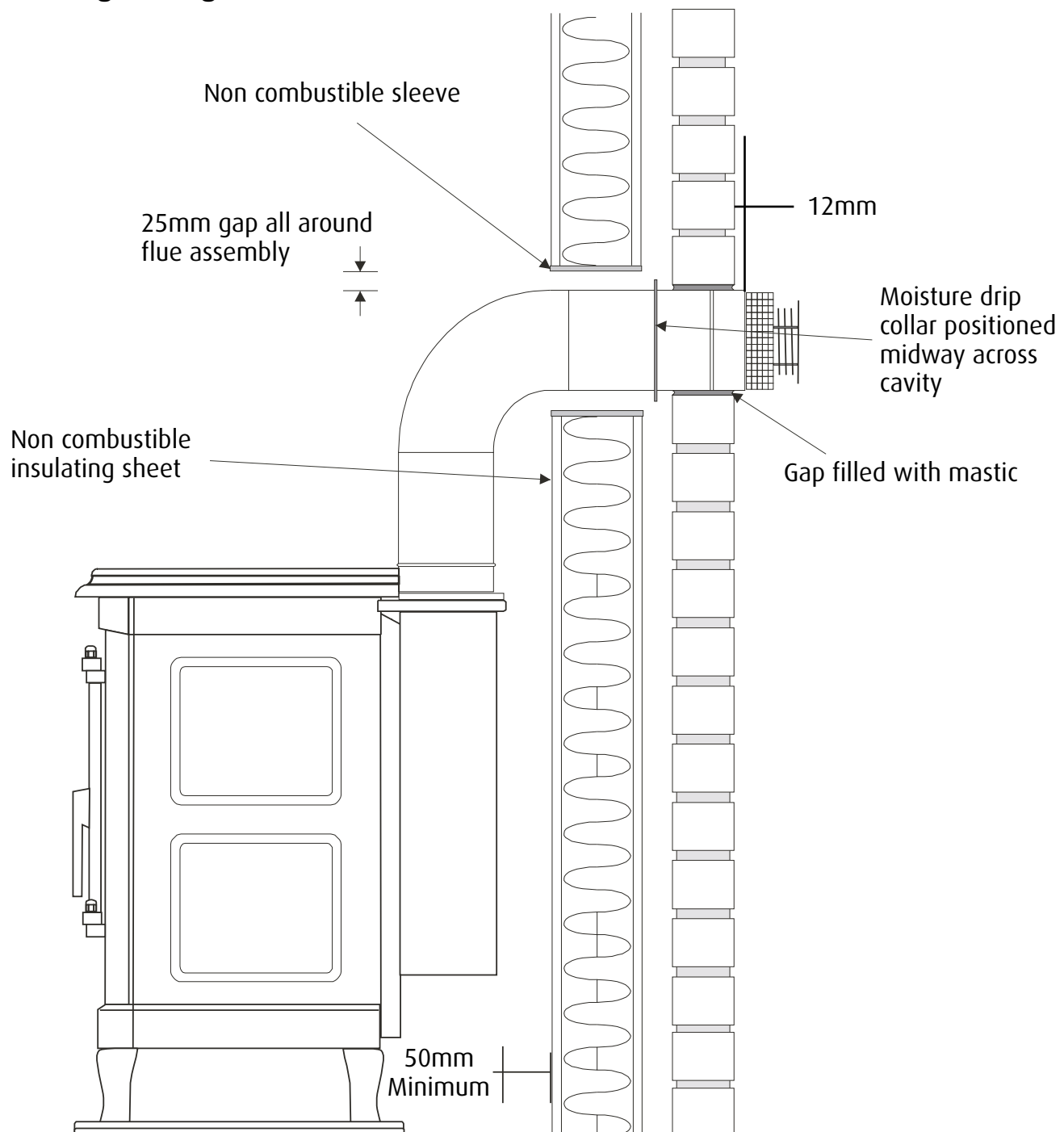
All joints between the fixed lengths of flue must be secured with locking bands, and no more than one length must be unsupported. It is your responsibility to ensure that no part of the flue installation contravenes any gas or building regulations.



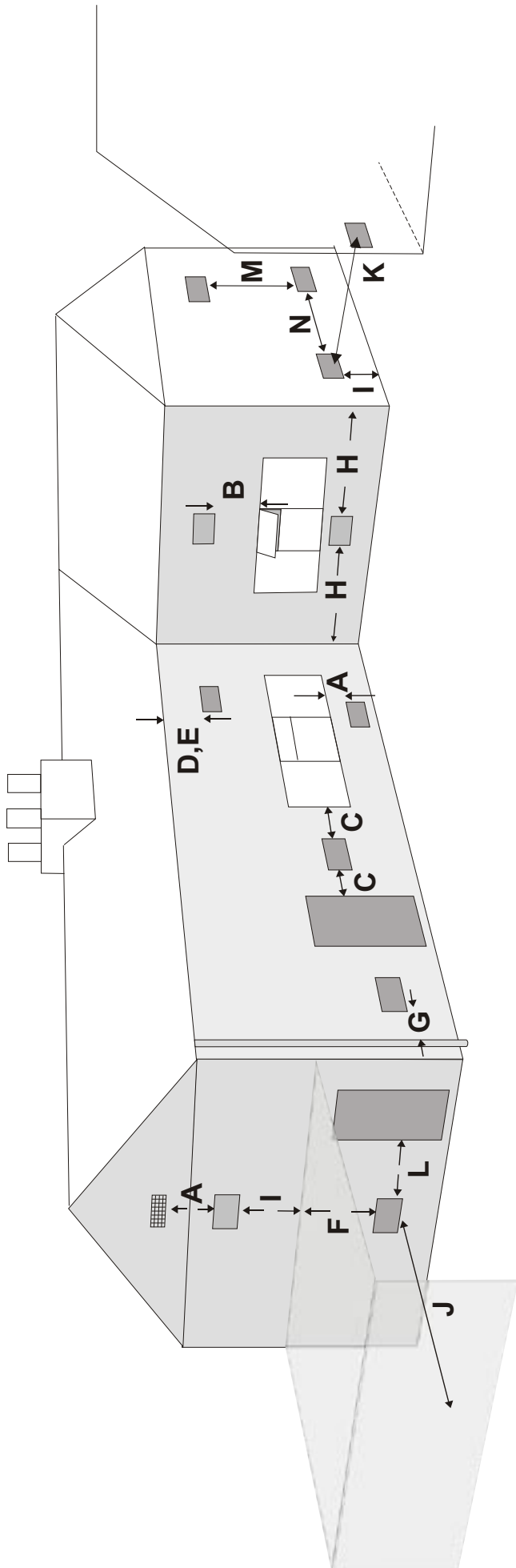
Position of flue terminal on outside wall



Flueing through combustible material



Balanced Flue Terminal Positions



Location of outlets from flues serving balanced flue gas appliances

Minimum separation distances for terminals in mm			
Location		Balanced flue terminals	
A	Below an opening (1)	Appliance rated heat input (net)	
		0 - 7kW	300
		>7 - 14kW	600
		>14 - 32kW	1500
	>32kW	2000	
B	Above an opening (1)	0 - 32kW	300
		>32kW	600
C	Horizontally to an opening (1)	0 - 7kW	300
		>7 - 14kW	400
		>14kW	600
D	Below gutters, soil pipes or drain pipes	300	
E	Below eaves	300	
F	Below balcony or car port roof	600	
G	From a vertical drain pipe or soil pipe	300	
H	From an internal or external corner or to a boundary alongside the terminal (2)	600	
I	Above ground, roof or balcony level	300	
J	From a surface or a boundary facing the terminal (2)	600	
K	From a terminal facing a terminal	600	
L	From an opening in the car port into the building	1200	
M	Vertically from a terminal on the same wall	1200	
N	Horizontally from a terminal on the same wall	300	

1. An opening means a window or door that is able to be opened or a fixed opening such as an air vent.

Installation of the Gas Supply, BS 6891

NOTE:

Ensure that the gas supply is capable of delivering the required amount of gas, and is in accordance with the relevant current standards.

It is generally preferred to conceal the gas supply by bringing it under the hearth, or through masonry to the side of the fireplace. Any pipe work in 15mm tube connecting the stove to the main pipe work should be kept as short as possible with as few fittings as possible to prevent restrictions.

- a) Whenever a gas pipe passes through any masonry it must have a sleeve of non combustible material sealed at both ends to prevent the gas supply from coming in contact with masonry or lime based mortars.
- b) The gas pipe should be adequately supported over longer lengths.
- c) Soft copper tubing and soft soldered joints are suitable, providing the tube is not closer than 150mm to the stove casing i.e. the temperature must not exceed 100°C.
- d) A means of isolating the gas supply to the appliance must be provided independent of any appliance control. This may be a gas cock, ideally of the nursery type to prevent children interfering with the gas supply.
- e) Any gas tubing that has been passed through masonry, should be purged to expel any foreign materials that may have entered the supply.
- f) Care should be taken to ensure that pipe work brought through metal structures has been secured to prevent chaffing, but allow for thermal expansion.

Appliance Location

- a) This stove must be mounted on a non combustible hearth. The hearth must have a minimum of 12mm non combustible material thickness.
- b) The stove is not suitable for installation into a rear combustible wall, any combustible materials must be removed from an area of 300mm around the installation of the appliance.
- c) There must be a minimum of 450mm from the top of the stove to the underside of any combustible shelf, Note that for every 50mm increase on clearance, the shelf may project by a further 50mm. See page 8.
- d) The appliance must not be installed in a room or space which contains a bath or shower.
- e) Ensure that the stove fits neatly into its intended location.
- f) Any manufactured surround used with this stove should comply with the appropriate British Standard.
- g) Do not place furniture or furnishing within 1 metre of the stove.
- h) Do not obstruct the area directly beneath the stove as this may block the passage of air into the appliance.

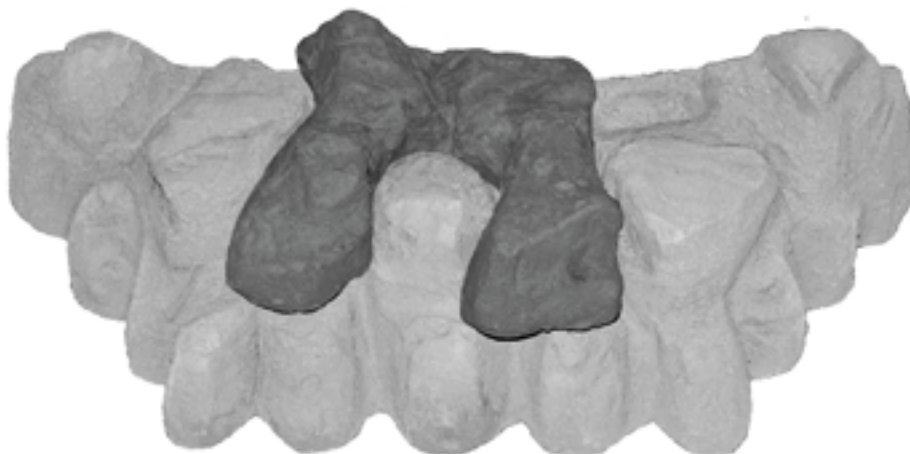
If any of these conditions are not fulfilled,

DO NOT FIT THE STOVE until the problem has been rectified.

Fitting the Coal Effect Kit and Fuel Guard

Under no circumstances should additional coals be added other than those supplied with the appliance.

The coal effect is very fragile under no circumstances should force be used to locate the effect. Damage to the coal effect is not covered by warranty.





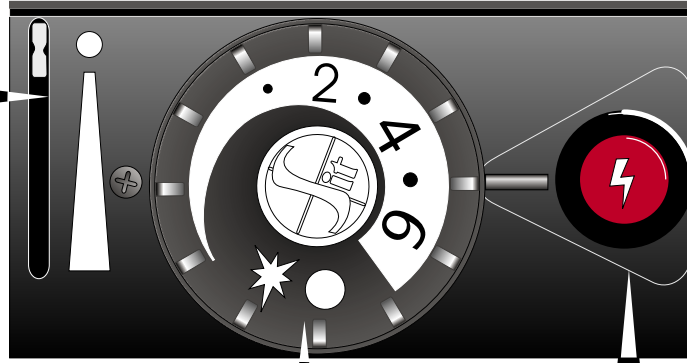
Place the loose coals to give an even flame effect

Gas Control Valve

Sit Gas Valve Eurosit 630

Manual control.

Disables the thermostatic control of the stove and allows the stove to operate at any chosen setting.



Thermostatic control.
Allows the stove to be controlled by the room temperature, maintaining a constant ambient temperature.

Ignition Button.
Pushing the button energizes the electronic spark generator to produce a pulsed sparks to ignite the pilot flame.

Lighting

a) (see operating instructions for full details) Ignition is by battery spark, ensure battery is fitted. Ensure control knob is in the off position. Push in the control knob and turn to the pilot position, keeping the knob depressed. Press the ignition button. The pilot should now be alight after the system has been purged. Keep the knob depressed for 20-30 seconds, when the knob is released the pilot should stay lit. It may be necessary to repeat the procedure if the pilot does not light, particularly when the fire is first used.

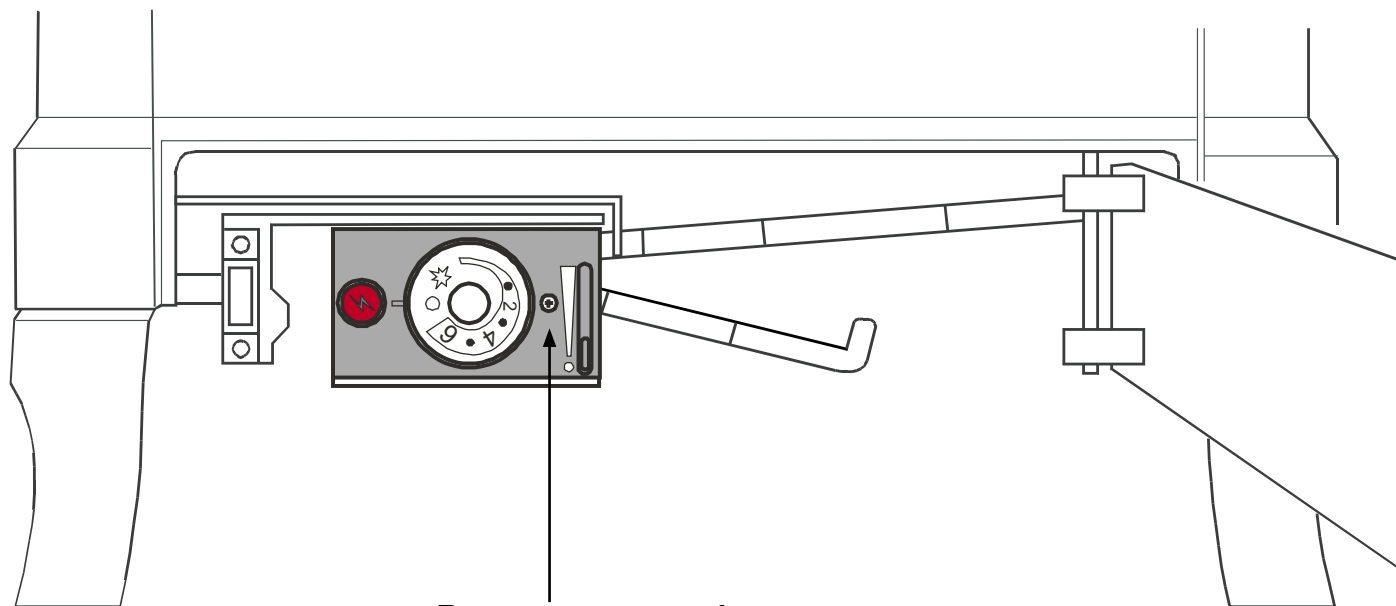
b) With the pilot burning, turn the control knob clockwise, this will turn the main burner on.

c) In the unlikely event of the flame being extinguished whilst the gas control is in the "on" position, immediately turn "off" and wait 2 minutes before attempting to relight.

For full operating instructions see operation manual.

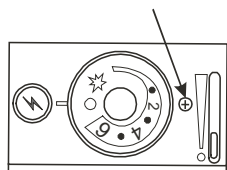
Thermostatic Eurosit Gas Valve 630 with Manual Override

Removing Gas valve Cover Plate

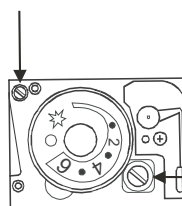


Remove screw and gently remove cover

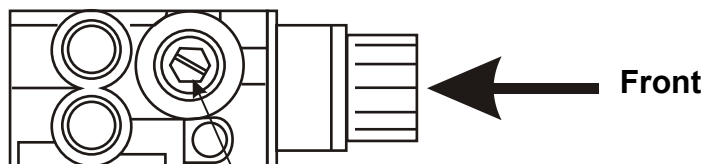
Remove screw and gently remove cover



Pilot adjustment SHOULD NOT BE ALTERED

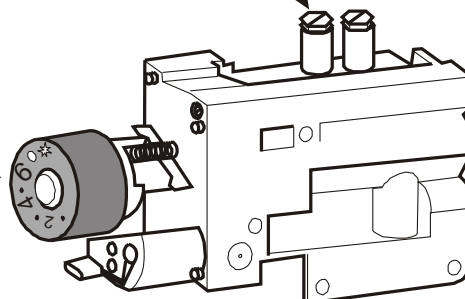


Low operation bypass. SHOULD NOT BE ALTERED



Operating pressure adjustment

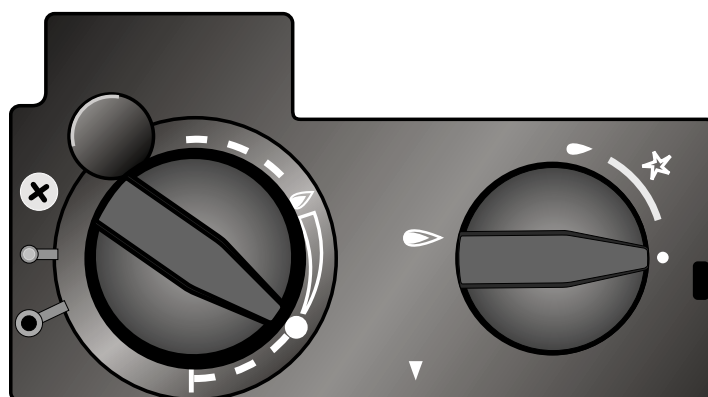
Operating pressure test nipple
Supply pressure test nipple



Mertik Maxitrol GV34 Gas Valve

Manual Control.

The manual control will set the output from the burner, varying from maximum to minimum output or any setting in between.



*On/Off
Pilot Setting and
Ignition Control*

Lighting

For full operating instructions see operation manual.

Turn the on/off knob, smaller right hand knob, slightly counter-clockwise towards the ignition position until the control knob stops turning, press it down and hold for 5 seconds to allow the gas to the pilot light.

After 5 seconds turn the control to the pilot position with the knob still depressed. There will be an audible click as the Piezo spark is generated. Hold down the control knob for 30 seconds if the pilot has lit, if it has not lit then repeat the pilot lighting procedure to maximum of 6 attempts. If after 6 attempts the pilot has not ignited leave the appliance for 2 minutes before attempting again. (This assumes the system has been purged)

Once the pilot has been established, let out the control knob and turn it anticlockwise to the “ON” position.

Manual Control

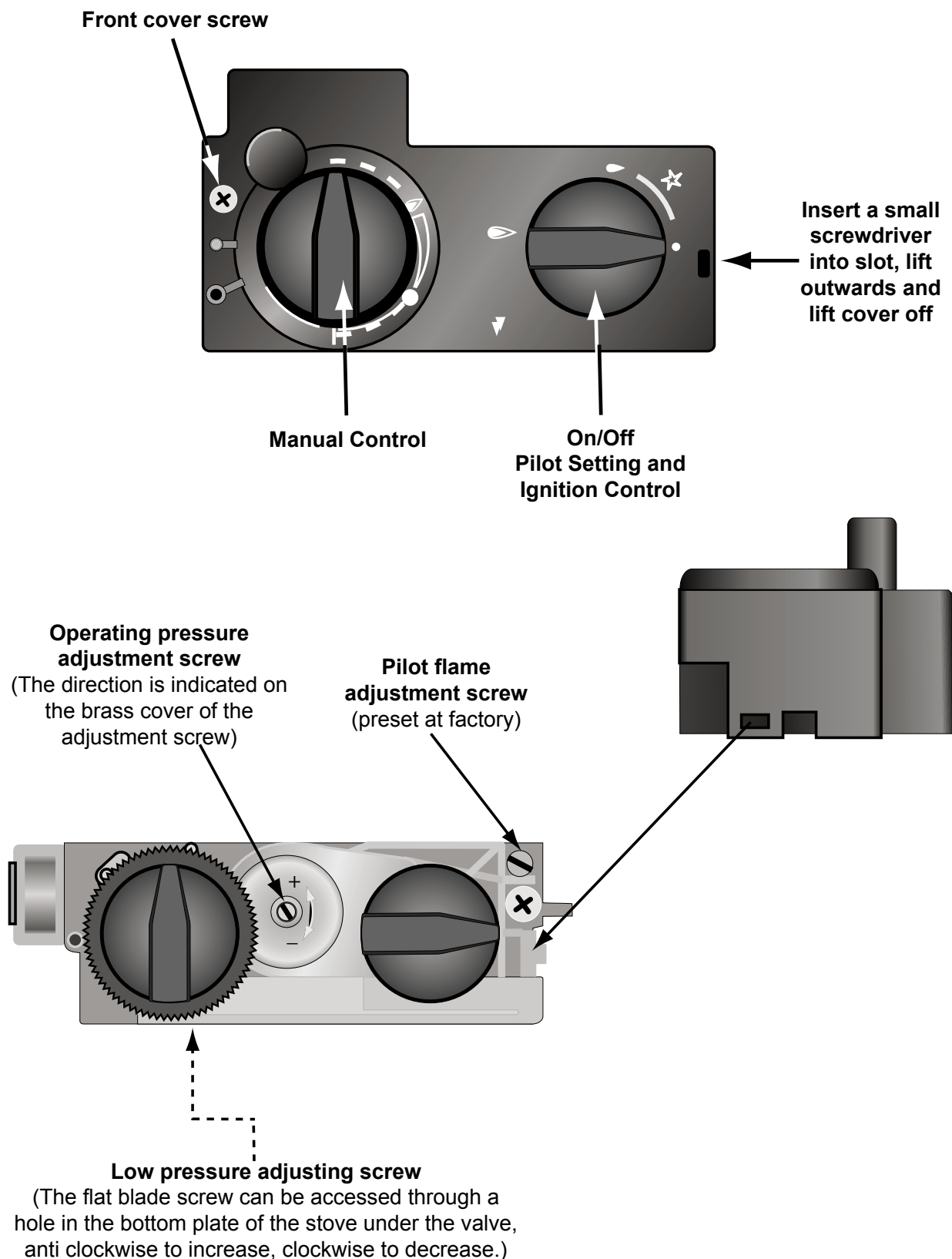
Turn the larger left hand control anti clockwise to increase, clockwise to decrease the desired heat output.

Mertik Maxitrol GV34 Gas Valve

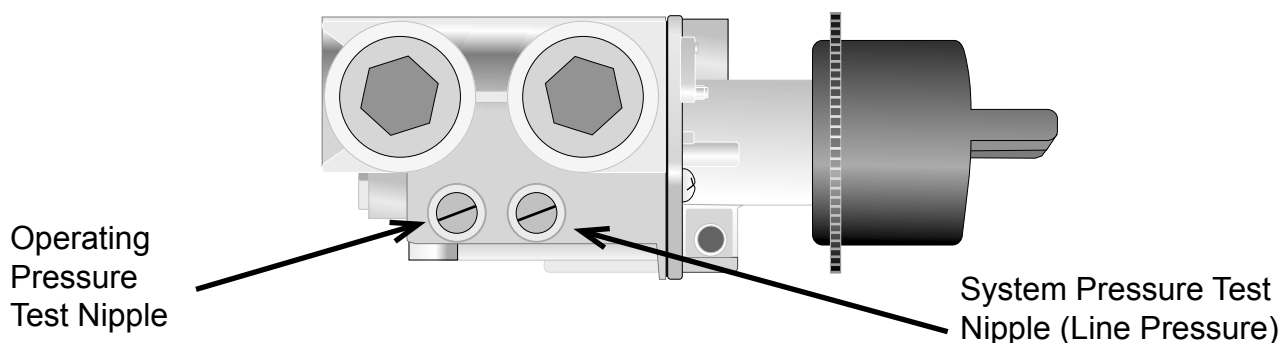
Removing Gas valve Cover Plate

Pilot gas and pressure regulator adjustment screws are located under the cover. To remove the cover, first loosen the screw next to the temperature knob.

Insert the tip of a small screwdriver into the slot on the side of the front cover next to the on/off knob, push outwards and lift the cover off.

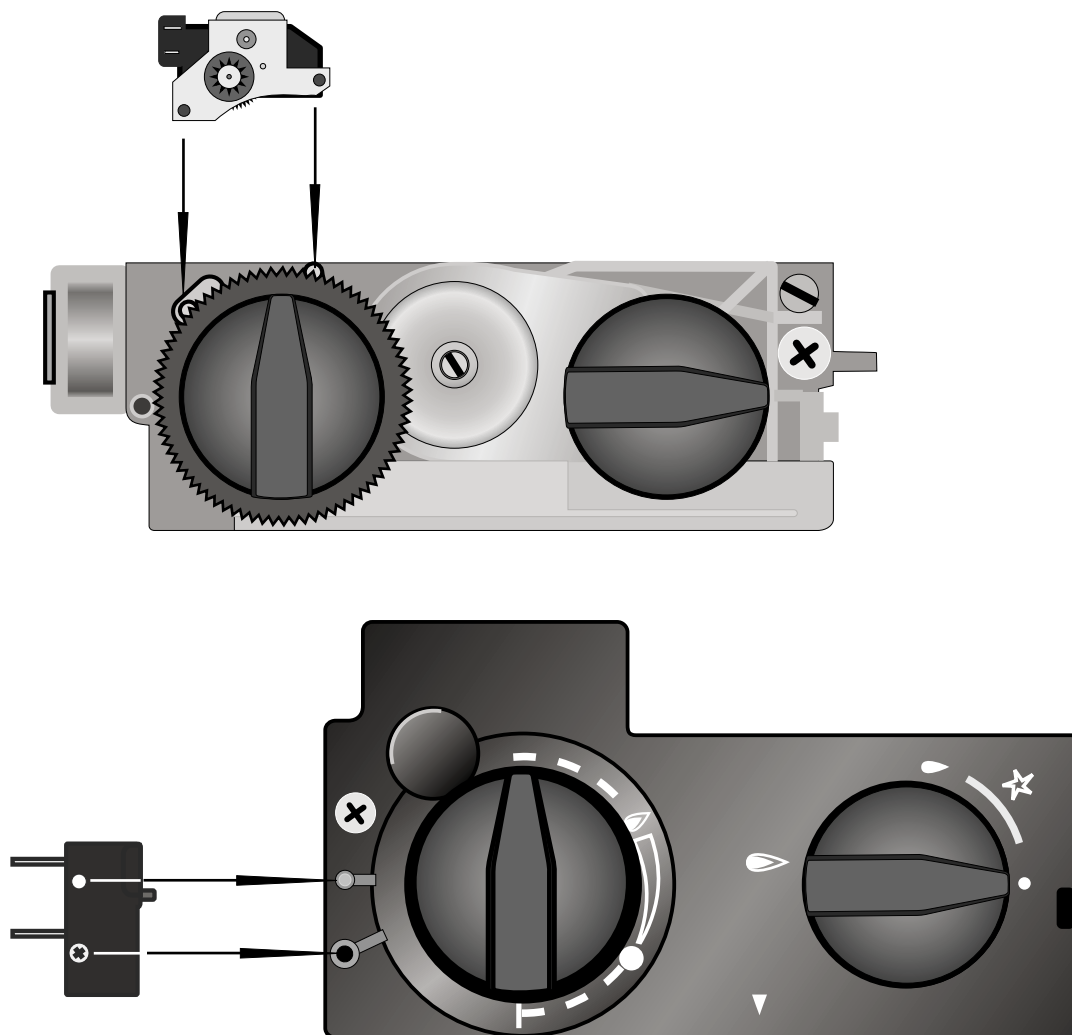


Gas Pressure Test Nipple Locations



Fitting the Remote Control

Motor and Micro switch



Fitting the Electrical Connections

The wiring loom has 5 connections.

- 1 x four wire white connector. Connect this to the remote control receiver.
- 2x small single wire connectors. Fit to the micro switch.
- 2x larger connectors fit to the motor. Note these two connectors are different in size and fit only to the appropriate sized connector on the motor.

Receiver location

Place the receiver on the stove hearth under the gas valve.

Information for Users which must be advised by the installer verbally or in writing.

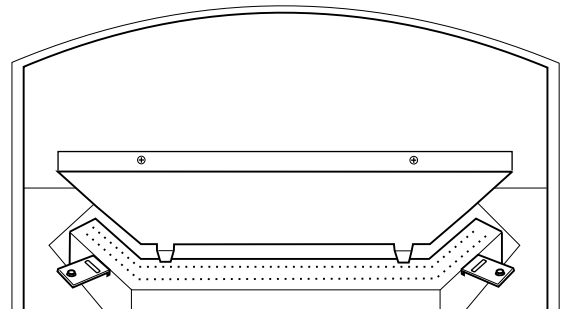
Hand this manual and the users manual to the user and explain the operation of the appliance.

Also explain that:

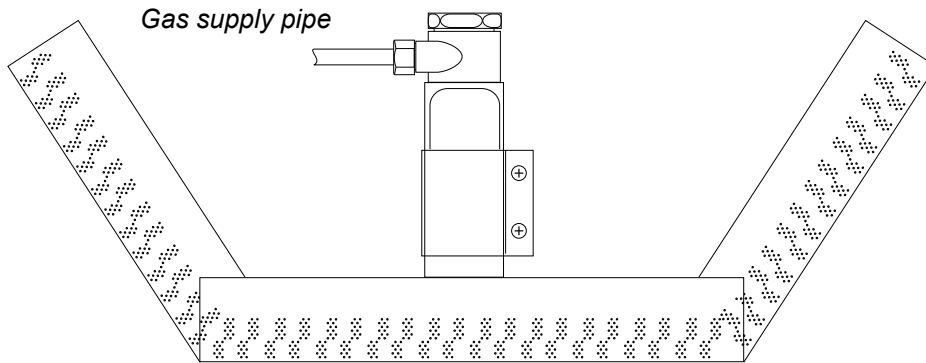
- a) The stove must not be run with the door open.
- b) It must be serviced on a regular basis, i.e. every 12 months.
- c) Servicing and spare parts can be obtained by contacting the stockist from which the stove was purchased.
- d) The stove's paint may smell for at least 3-4 hours as it cures. It is advisable to operate the stove at maximum with the gas valve set for manual operation.
- e) The stove imitates a solid fuel stove, and like a solid fuel stove, ITS SURFACES BECOME VERY HOT.
- f) Do not use the appliance if the glass is cracked or broken.
- h) Do not use the appliance if any of the coal effect components are broken.
- i) The appliance must be guarded to protect children, the aged or infirm.

Removing Gas Burner

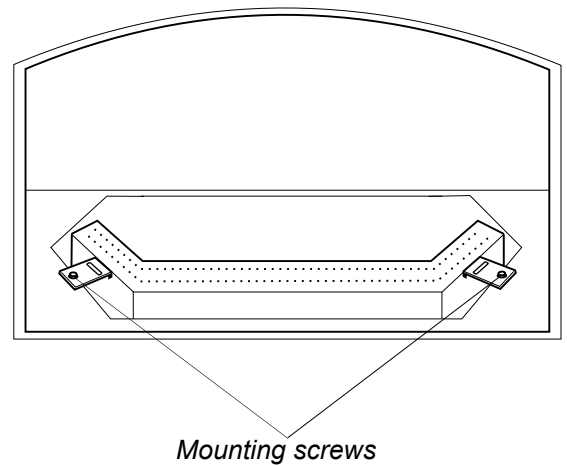
1: Lift and remove coal effect and rear coal support plate.



2: Loosen and remove Gas supply pipe

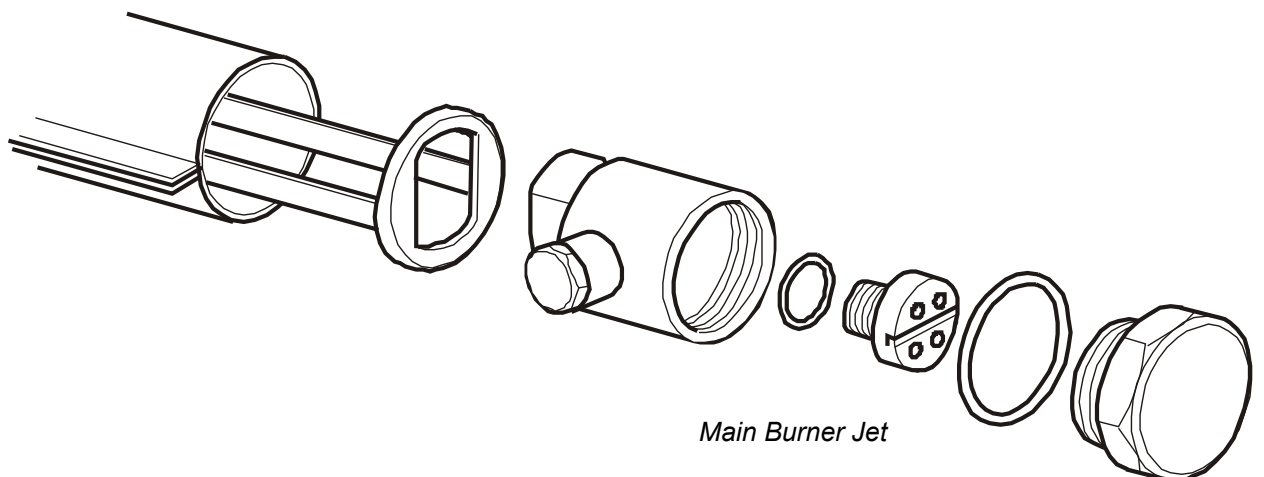


3: Loosen burner mounting screws and remove gas burner



Removing Main Burner Jet

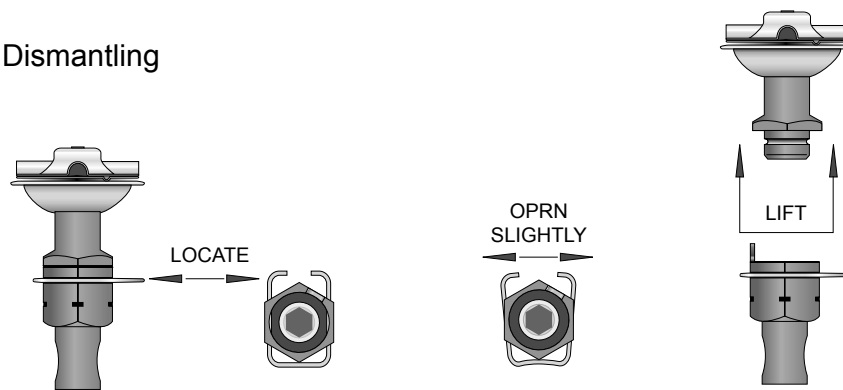
Follow the procedure for the burner removal. Once the burner is removed the main jet can be replaced, ensure the sealing washers are fitted.



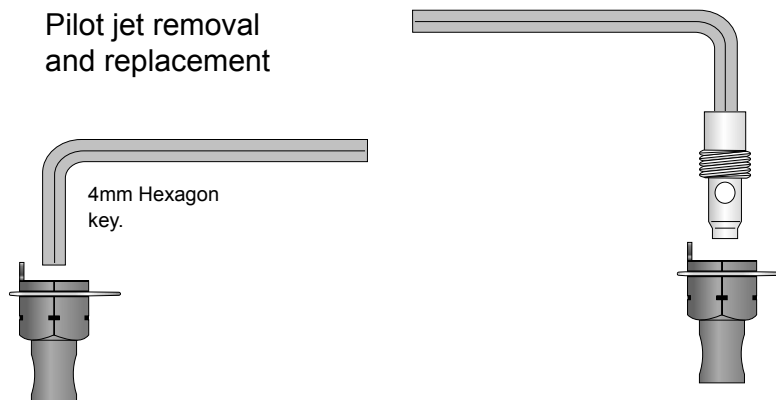
When fitting main gas burner jet ensure sealing washers are fitted.

Pilot Jet Replacement

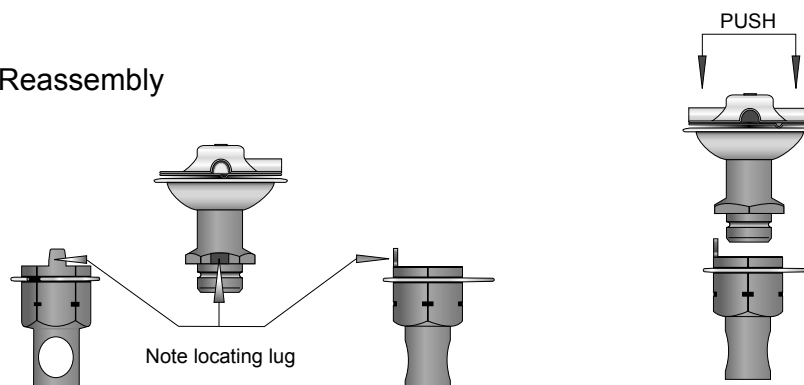
Dismantling



Pilot jet removal and replacement



Reassembly



Euroheat, Efel and Nestor Martin have a policy of continual research and development and reserve the right to modify its appliances without prior notice.

We make every effort to ensure that the information provided in this document is correct and accurate at the time of printing. Continued updates occur to adapt documents to customer requirements and appliance changes. For the latest editions of all Euroheat documentation visit our web site www.euroheat.co.uk.

We would request that you inform Euroheat of information which you feel is not provided in this document which would assist other users in the future.

The Euroheat Technical Team

Service Record

Year 1

Annual Service Completed :- Date _____

Parts Replaced

Service Engineer :-
House Name
Number/Street Name
Locality Name
Post Town
County
Post Code
Telephone Number

Year 2

Annual Service Completed :- Date _____

Parts Replaced

Service Engineer :-
House Name
Number/Street Name
Locality Name
Post Town
County
Post Code
Telephone Number

Year 3

Annual Service Completed :- Date _____

Parts Replaced

Service Engineer :-
House Name
Number/Street Name
Locality Name
Post Town
County
Post Code
Telephone Number

Year 4

Annual Service Completed :- Date _____

Parts Replaced

Service Engineer :-
House Name
Number/Street Name
Locality Name
Post Town
County
Post Code
Telephone Number

Year 5

Annual Service Completed :- Date _____

Parts Replaced

Service Engineer :-
House Name
Number/Street Name
Locality Name
Post Town
County
Post Code
Telephone Number

When this form has been completed contact Euroheat for additional Service records