

# **Durlston BF**

### COAL EFFECT BALANCED FLUE GAS FIRE

Installation, Maintenance & User Instructions

Hand these instructions to the user

Model No. HBFC\*\*MN2 & HBFC\*\*EN3 are for use on Natural Gas (G20) at a supply pressure of 20 mbar in G.B. / I.E. Model No. HBFC\*\*MP2 is for use on Propane Gas (G31) at a supply pressure of 37 mbar in G.B. / I.E.

\*\* denotes trim / fret or fascia variant

#### Information Requirements for Commission Regulation (EU) 2015/1188

Model Identifier	HBFC**MN2, HBFC**EN3	HBFC**MP2	
Indirect Heating Functionality	Νο	No	
Direct Heat Output	3.9kW	4.0kW	
Indirect Heat Output	Not Applicable	Not Applicable	
Fuel	NG (G20)	LPG (G31)	
NOx Emissions	130mg/kWh	130mg/kWh	
Nominal Heat Output	3.9kW	4.0kW	
Minimum Heat Output (Indicative)	1.6kW	1.7kW	
Useful Efficiency at Nominal Heat Output	93.5%	93.5%	
Useful Efficiency at Minimum Heat Output (Indicative)	50.0%	50.0%	
Auxilliary power consumption at nominal heat output - manual control models	Not applicable	Not applicable	
Auxilliary power consumption at nominal heat output - efc models	0.000001kW	Not applicable	
Auxilliary power consumption at minimum output - manual control models	Not applicable	Not applicable	
Auxilliary power consumption at minimum output - efc control models	0.000001kW	Not applicable	
Auxilliary power consumption at standby mode - manual control models	Not applicable	Not applicable	
Auxilliary power consumption at standby mode - efc control models	0.0000005kW	Not applicable	
Permanent pilot flame requirement	Not applicable	Not applicable	
Type of heat output / room temperature	stages, no room	Two or more manual control stages, no room temperature control - manual & efc control models.	
	With electronic re control - remote	•	

Contact Details

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Information and Requirements

Section 1

1.0 1.1 1.2 1.3 1.4 1.5	Appliance Information Conditions of Installation Fireplace surround & suitability Flue Terminal Position Shelf position Hearths	3 4 5 6
Section 2	Installation of Fire	
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 2.10	Unpacking the fire Fireplace opening Preparation of the wall Preparation of the flue hole Installation of the gas supply Preparation of the flue duct Securing the firebox to the opening Making the gas connection Fitting the terminal guard Removal & refitting of the glass frame	6 7-8 8-9 9 10 11 12-13 13 14 15
Section 3	Assembling Fuel Bed and Commissioning	
3.1 3.2 3.3 3.4 3.5 3.6 3.7	Fitting the fuel bed Fitting the trim Fitting the fret Lighting the appliance (MC variants) Fitting the batteries (remote control & EFC models) Lighting the fire manually via the control valve (remote control & EFC models) Lighting the fire (EFC variants)	16-18 18 19 20-21 21 22-23
Section 4	Maintenance	
4.1 4.2 4.3 4.4 4.5 4.6 4.7	Removal of the burner assembly (all variants) Removal of the piezo igniter (MC variants) Removal of the control valve (MC variants) Removal of the pilot assembly (all variants) Removal of the control valve (EFC variants) Removal of the EFC trim switch Parts shortlist	24 25 25 26 26 27
Section 5	User Instructions	
5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8/9 5.10	Installation Information / about your fire Operating your fire (MC variants) Operating your fire (EFC variants) Manual operation of EFC models Replacing the batteries on EFC models Removal / replacing the glass frame Removal / replacing the fuel-bed Cleaning the fire / cleaning the glass panel & fuel-bed User replaceable parts	28-29 30 31 32-33 33 34 35-37 38 38

#### SECTION 1 INFORMATION AND REQUIREMENTS

Natural Gas

#### 1.0 APPLIANCE INFORMATION

Main injector : (1 off)

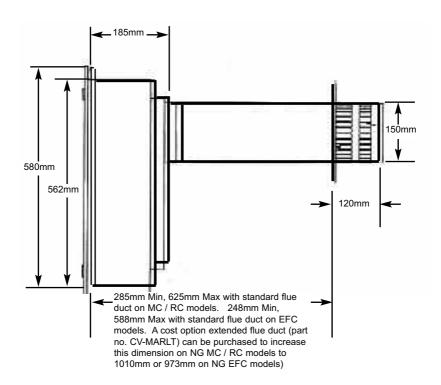
Pilot Type - S.I.T.140 Series Max. Gross Heat Input : Min. Gross Heat Input : Gas Rate : Cold Pressure : Ignition : Ignition : Electrode Spark Gap :

1.65mm (MC)	1.20mm (MC)	
1.8mm (EFC)		
Size 27	Size 19	
4.6kW	4.8kW	
3.2kW	3.4kW	
0.427 m <sup>3</sup> /hr	0.180 m <sup>3</sup> /hr	
20.0+/-1.0 mbar	37.0+/-1.0 mbar	
Push-button Piezo (MC models only)		
Electronic (EFC models only)		
4.0mm		

LPG

Weight (without fender) :

25.0 kg inclusive of flue pipe and terminal



#### INSTALLATION REQUIREMENTS

#### Efficiency Declaration

The efficiency of this appliance has been measured as specified in BS EN 613 : 2001 and the result is 85%. 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 BSI. The efficiency value may be used in the UK Government's Standard Assessment Procedure (SAP) for energy rating of dwellings.

#### 1.1 CONDITIONS OF INSTALLATION

It is the law that all gas appliances are installed only by a GAS SAFE Registered Installer, in accordance with these installation instructions and the Gas Safety (Installation and Use) Regulations 1998 as amended. Failure to install appliances correctly could lead to prosecution. It is in your own interest and that of safety to comply with the law.

The installation must also be in accordance with all relevant parts of the Local and National Building Regulations where appropriate, the Building Regulations (Scotland Consolidation) issued by the Scottish Development Department, and all applicable requirements of the following British Standard Code of Practice.

1. B.S. 5871 Part 1 Installation of Gas Fires

- 2. B.S. 6891 Installation of Gas Pipework
- 3. B.S. 5440 Parts 1 & 2 Installation of Flues and Ventilation

4. I.S 813 : 1996 Domestic Gas Installation, issued by the National Standards Authority of Ireland.

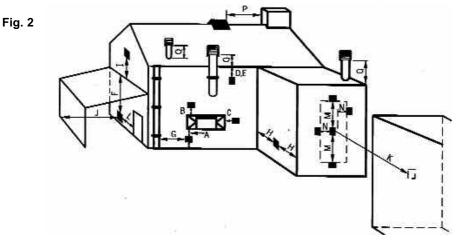
#### 1.2 FIREPLACE / SURROUND SUITABILITY

This product is designed to fit fireplaces with a minimum 1" / 25mm rebate. The fire must only be installed on a hearth it **must not be installed directly onto carpet or other combustible floor materials.** The fire is suitable for fitting to non-combustible fire place surrounds and proprietary fire place surrounds with a temperature rating of at least 150 degrees celcius (Class "O").

Soft wall coverings such as blown vinyl, wall paper etc. could be affected by the rising hot air and scorching and/or discoloration may result. Due consideration should be made to this when installing or decorating.

#### 1.3 FLUE TERMINAL POSITION

The minimum acceptable dimensions from the flue terminal to obstructions and ventilation openings are shown below and listed in the table It is important that the position of the flue allows the free passage of air across it at all times. The minimum acceptable space from the flue terminal to obstructions and ventilation openings are specified below in figure 2.



MINIMUM DIMENSION

#### DIMENSION TERMINAL POSITION

Α	Directly below an opening, air brick,	300mm (12in)
в	opening window Above an opening, air brick,	300mm (12in)
	opening window	
С	Horizontally to an opening, air brick,	
_	opening window etc.	
D	Below gutters, soil pipes or drain pipes	300mm (12in)
Е	Below eaves	300mm (12in)
F	Below balconies or car port roof	600mm (12in)
G	From a vertical drain pipe or soil pipe	300mm (12in)
н	From an internal or external corner	600mm (24in)
I I	Above ground roof or balcony level	300mm (12in)
J	From a surface facing the terminal	600mm (24in)
к	From a terminal facing the terminal	600mm (24in)
L	From an opening in the car port	1200m (48in)
М	Vertically from a terminal on the same wall	1500mm(59in)
Ν	Horizontally from a terminal on the	300mm (12in)
~	same Wall	
ο	NOT APPLICABLE	N/A
Р	NOT APPLICABLE	N/A
Q	NOT APPLICABLE	N/A

#### 1.4 SHELF POSITION

The fire may be fitted below a combustible shelf providing there is a minimum distance of 200mm above the top of the fire and the shelf does not project more than 150mm. If the shelf overhangs more than 150mm the distance between the fire and the shelf must be increased by 15mm for every 25mm of additional overhang over 150mm.

#### 1.5 HEARTHS

This appliance must only be installed on to a concrete or non-combustible hearth. The hearth material must be a minimum thickness of 12mm with the top surface at least 50mm above the floor. The hearth must be fitted symmetrically about the fire opening and have a minimum width of 760mm and a minimum projection of 300mm forwards from the fire opening.

#### SECTION 2 INSTALLATION OF FIRE

#### 2.1 UNPACKING THE FIRE

Carefully lift the fire out of the carton. Remove the loose item packaging carefully from the pack. Check the contents as listed :-

#### IMPORTANT : THE CARDBOARD FITMENT THAT IS AT THE TOP OF THE CONVECTION APERTURE SHOULD NOT BE REMOVED UNTIL THE APPLIANCE IS FULLY INSTALLED AND READY TO BE LIT.

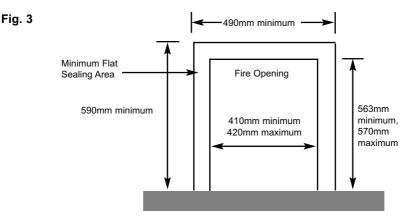
### DO NOT UNDER ANY CIRCUMSTANCES USE THIS APPLIANCE IF THE GLASS PANEL IS BROKEN OR NOT SECURELY FIXED TO THE FIREBOX.

Packing Check List

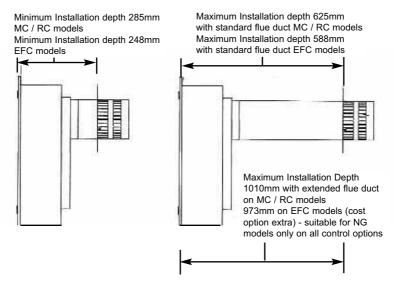
- 1 off Fire box & foam seal / burner assembly
- 1 off Boxed ceramic 5 piece fuel bed set
- 1 off Flue terminal / pipe unit
- 1 off Flue terminal guard
- 1 off Loose Items pack including cable fixing kit
- 1 off Installation / user manual (combined)
- 3 off AA batteries (EFC models only)
- 1 off Rubber grommet (to seal gas aperture used)
- 2 off Cabling pipes

#### 2.2 FIRE PLACE OPENING

2.2.1 The front opening of the fire place must be between 410 and 420mm wide, and between 563 and 570mm high. If the opening exceeds these dimensions then a surround must be constructed from suitable non-combustible material to produce a suitable sized opening. Any surround must be suitably sealed to the fire place to prevent leakage. See figure 3 below.

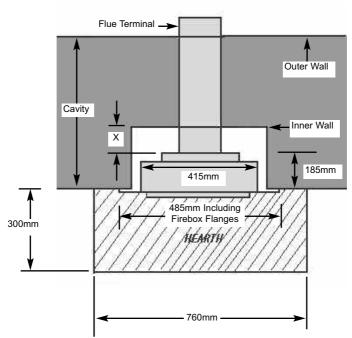


2.2.2 The minimum / maximum sized distances between the firebox mounting flange and outside wall are shown below in figure 4.



2.2.3 <u>NOTE</u>: WHEN MEASURING LENGTH BETWEEN FIREBOX AND THE OUTER WALL TAKE INTO ACCOUNT THE DISTANCE BETWEEN THE BACK OF THE FIREBOX AND THE INNER WALL AS THIS WILL VARY BETWEEN INSTALLATIONS, DEPENDENT UPON THE FIRE SURROUND REBATE OR CAVITY DEPTH. (DIMENSION "X" BELOW - FIGURE 5).

Fig. 5

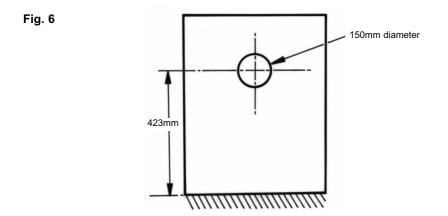


2.2.4 The appliance must be fitted into a fireplace or false chimney constructed of non-combustible materials, minimum width 415mm, minimum height 563mm and minimum surround or false chimney breast rebate 75mm.

#### 2.3 PREPARATION OF THE WALL

2.3.1 The appliance and flue pipes must be installed at right angles to the mounting wall. The appliance itself should be installed vertically against a flat wall. Where an uneven wall surface is found, appropriate action should be taken to ensure that the appliance is not stressed or does not distort when installed.

Ensure that the floor surface onto which the appliance is mounted onto is flat. The minimum height from the floor to the centre of the flue is shown on figure 6 overpage.



#### 2.4 PREPARATION OF THE FLUE HOLE

- 2.4.1 Mark the position of the centre of the flue on the inner wall.
- 2.4.2 Cut hole for outer flue pipe. There are two possible methods to achieve this, either core drill or via hammer and chisel.
- 2.4.3 To core drill, proceed as follows :-

Drill a pilot hole through the wall, in position as specified in figure 6.

Using a 6" core drill, drill the flue hole.

To Hammer and chisel, proceed as follows :-

Mark the position of the centre of the flue pipe as specified in figure 6.

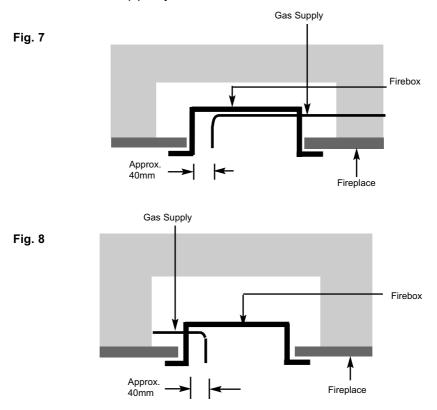
Mark the position of the hole around this point.

Chisel out the area as marked on the wall.

- 2.4.4 We then recommend that a cardboard cylinder is placed around the flue pipe and inserted in the chiselled out hole whilst making good.
- <u>NOTE :-</u> If the appliance is to be installed into a building under construction, it is recommended that a non-corrosive metal tube of 6" diameter be inserted into the position of the hole.

#### 2.5 INSTALLATION OF THE GAS SUPPLY

- 2.5.1 Before installing the firebox, decide from which side or if a rear connection to the gas supply is required. Plan the pipe run to enter the firebox from the left, right or rear and connect to the inlet elbow. See below :-
- 2.5.2 If concealed pipe work is required plan the pipe run to enter the fire box through one of the openings in the sides or rear of the fire box and connect to the inlet elbow. See figure 7 & 8 below for a suggested concealed pipe layout.



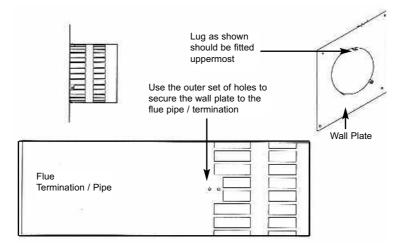
Note : Before breaking into the gas supply a pressure drop test should be carried out to establish that the existing pipework is sound. Always insert the grommet into the entry point used (a sharp blow with a hammer or chisel will be sufficient to knock out the opening selected in the firebox) and with the grommet fitted cut with a sharp knife to allow the supply pipework to pass through into the firebox.

#### 2.6 PREPARATION OF THE FLUE DUCT

2.6.1 Place the firebox into the fire opening with fire surround correctly secured in the final position. From the outside of the house measure from the face of the outside wall to the rear panel of the firebox through the flue hole. Cut the flue duct to this size, using the polythene support ring to support the flue whilst being cut. Remove the polystyrene support ring from the flue duct and remove burrs from the pipe.

#### IMPORTANT : ENSURE THE PIPES ARE CUT SQUARELY.

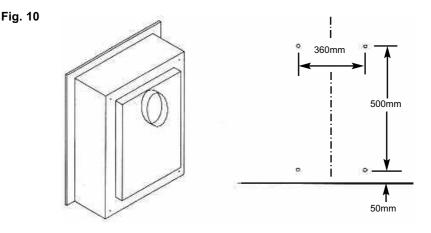
2.6.2 The joint between the firebox and the flue duct as shown below in figure 9 must be secured with screws and sealed with the foil tape as supplied. In order to do this, the wall plate must removed from the flue pipe / termination.



- 2.6.3 Due to the varying lengths of flue that will be required via differing installations it will be necessary to drill the flue pipe using the 3 off holes in the mounting flange on the rear of the combustion chamber as a guide for positioning. When the holes have been drilled and the screws fitted, wrap the joint with the foil tape supplied.
- 2.6.4 Re-fit the wall plate ensuring the outer set of holes as indicated above in figure 9 are used. Use a high temperature sealant to secure the wall plate to the outside wall of the property before securing with the screws and rawlplugs supplied to ensure a mechanical fix.

#### 2.7 SECURING OF FIREBOX TO THE OPENING

- 2.7.1 There is a choice of methods of fixing the firebox that are provided to enable the installer to deal with any type of installation. The preferred method of fixing the appliance is the cable fixing method, which is described in detail in the following section.
- 2.7.2 If the standard firebox fixing flange is to be used, the firebox may be secured using the cable method, but in installations where the cable method is not suitable, e.g.insufficient space behind the firebox, or loose masonry, the firebox can be fitted directly to either the front of the fireplace via the flange with the four off screws provided. The firebox will require sealing to the fireplace, regardless of the method used.
- 2.7.3 To secure the fire using the preferred cable method, proceed as follows below :-
- 2.7.4 Mark out and drill 4 off No 14 6mm holes in the rear face of the fire opening in the positions as shown in figure 10 below.



- 2.7.5 Fit the wall plugs provided and screw the fixing eyes securely into the rear of the fire opening.
- 2.7.6 Uncoil the two fire fixing cables and thread one end of the each of the cables through the rear of the fire box, and through each fixing eye at the top. Thread both cables through the fixing eye's at the bottom, then the holes at the bottom of the firebox
- 2.7.7 Thread the cables through the rear of the firebox, insert the flue pipe / terminal through the hole in the rear of the opening and offer the firebox up to the fireplace.

- 2.7.8 To improve access to tension the screws it may be advantageous to remove the control panel from the fire. To do this, remove the 4 off retaining screws and on MC models, remove the control valve retaining nut.
- 2.7.9 Thread a tensioning screw over both of the cables and ensure that the tensioning nut is screwed fully up against the hexagon shoulder of the tensioning screw (this provides maximum travel for the tensioning nut).
- 2.7.10 Fit a cabling pipe (found in loose items pack) and a screwed nipple on to each of the cables and pull hand tight up against the tensioning screw, then secure each nipple with a flat bladed screwdriver.
- 2.7.11 Before making the final gas connection, thoroughly purge the gas supply pipework to remove all foreign matter, otherwise serious damage may be caused to the gas control valve on the fire.
  Failure to purge the gas supply will invalidate the guarantee.

#### 2.8 MAKING THE GAS CONNECTION / PRESSURE TESTING

- 2.8.1 The gas connection should be made to the appliance inlet elbow to using 8mm rigid tubing.
- 2.8.2 Remove the pressure test point screw from the inlet elbow and fit a manometer.
- 2.8.3 Turn on the main gas supply and carry out a gas tightness test.
- 2.8.4 Depress the control knob and turn anti-clockwise to the position marked pilot. Hold in the control knob for a few seconds to purge the pipe work then press the igniter button. The burner should light, continue to hold the control knob for a few seconds then turn to the full-on position. If lighting an EFC variant, please consult section 3.5 to 3.7
- 2.8.5 Check that the gas pressure is 20.0 mbar (+/- 1.0mbar) 8.0 in w.g.(+/-0.4 in w.g.) for NG models and 37.0 mbar (+/- 1.0mbar) 14.8 in w.g.(+/- 0.4 in w.g.) for LPG models
- 2.8.6 Turn off the fire, remove the manometer and refit the pressure test point screw. Check the pressure test point screw for gas tightness with the appliance turned on using a suitable leak detection fluid or detector.

## <u>IMPORTANT NOTE</u> : All LPG product installations must be fitted with an Over Pressure Shut Off (OPSO) device to guard against failure of the primary regulator.

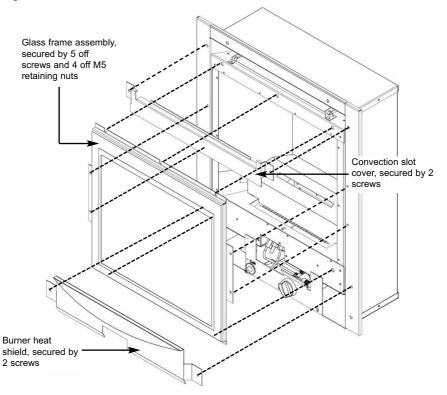
#### 2.9 FITTING THE TERMINAL GUARD

- 2.9.1 With the flue terminal in position, place the terminal guard over the top of the flue terminal and mark the position of the holes on the outer wall.
- 2.9.2 Remove the terminal guard and drill the 4 off 6 mm holes.
- 2.9.3 Insert the raw plugs into the drilled holes, replace the terminal guard over the top of the flue terminal and attach to the wall using the No.12 x 40mm screws provided with the terminal guard.

<u>NOTE</u>: In England & Wales, building regulations require that a terminal guard should be fitted if the terminal could come into contact with people near the building or be subject to damage. BFM Europe Ltd. also recommend the fitting of a flue terminal guard where regulations do not demand that it be fitted. A suitable flue terminal guard is supplied with the appliance.

#### 2.10 REMOVING & REFITTING OF THE GLASS FRAME.

- 2.10.1 Remove the 2 screws which hold the convection slot cover to the firebox, as shown below in figure 11.
- 2.10.2 Remove the burner heat shield by unscrewing the 2 off retaining screws as shown below in figure 11.
- 2.10.3 Remove the 4 off M5 retaining nuts as shown below in figure 11.
- 2.10.4 Remove the 3 off top retaining screws as shown below in figure 11.
- 2.10.5 Remove the 2 off bottom retaining screws as shown below in figure 11.
- 2.10.6 Re-assemble in reverse order.
- <u>NOTE :</u> Always ensure that a consistent seal between the combustion chamber and the glass frame is achieved.
- Fig. 11



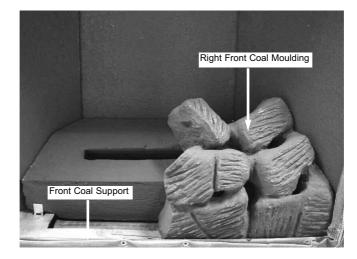
#### SECTION 3 ASSEMBLING FUEL BED AND COMMISSIONING

#### 3.1 FITTING THE FUELBED

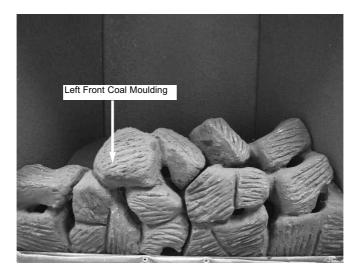
- 3.1.1 Place the ceramic fibre support behind the burner as shown below in figure 12.
- Fig. 12



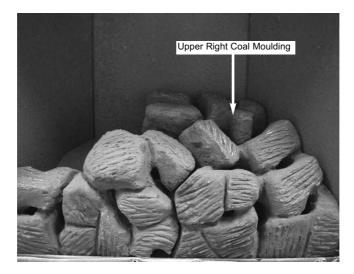
3.1.2 Place the front right coal moulding onto the front coal support as shown below in figure 13.



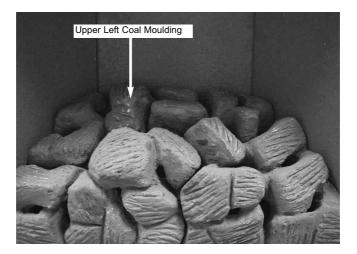
- 3.1.3 Place the front left coal moulding onto the front coal support as shown below in figure 14.
- Fig. 14



3.1.4 Place the upper right coal moulding as shown below in figure 15. This moulding tucks under the front right coal moulding and is supported by the ceramic fibre support.



- 3.1.5 Place the upper left coal moulding as shown below in figure 16. This moulding tucks under the front left coal moulding and is supported by the ceramic fibre support.
- Fig. 16



3.1.5 Refit the glass frame as detailed in section 2.10, then light the appliance as detailed in section 3.4 to 3.7

To ensure that the release of fibres from these R.C.F (Refractory Ceramic Fibre) articles is kept to a minimum, during installation and servicing we recommend that you use a HEPA filtered vacuum to remove any dust accumulated in and around the appliance before and after working on the appliance. When replacing these articles we recommend that the replaced items are not broken up, but are sealed within heavy duty polythene bags, clearly labelled as "RCF waste". RCF waste is classed as a "stable", non reactive hazardous waste and may be disposed of at a landfill licensed to accept such waste Protective clothing is not required when handling these articles, but we recommend you follow the normal hygiene rules of not smoking, eating or drinking in the work area, and always wash your hands before eating or drinking.

#### 3.2 FITTING THE TRIM (ALL MODELS)

3.2.1 The trim is held in position on the fixing flange by magnets.

#### 3.3 FITTING THE FENDER (ALL MODELS)

3.3.1 The fender is placed up to the front of the ceramic front rail on all models. Position the ashpan under the fender and centralise.

#### 3.4 LIGHTING THE APPLIANCE - MANUAL CONTROL VARIANTS

**IMPORTANT NOTE** : IF THE BURNER IS EXTINGUISHED FOR ANY REASON YOU MUST ENSURE THAT YOU WAIT A FULL FIVE MINUTES BEFORE ATTEMPTING TO RE-LIGHT THE FIRE.

WHEN TURNING THE FIRE "OFF" PLEASE ENSURE THAT THE CONTROL VALVE IS TURNED TO THE "OFF" POSITION AND THE PILOT FLAME IS EXTINGUISHED. DO NOT LEAVE THE PILOT FLAME ONLY LIT.

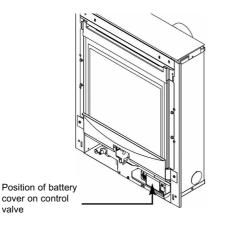
- 3.4.1 Turn on the gas restrictor at the inlet fitting.
- 3.4.2 Depress the control knob and turn anti-clockwise to the position marked pilot. Hold in the control knob for a few seconds to purge the pipe work.
- 3.4.3 Continue to hold-in the control knob and press the igniter button. If the burner does not light, continue to press the igniter button until ignition occurs. Continue to hold the control knob for 5-10 seconds to allow thermocouple to heat up, if the pilot goes out when the control knob is released, repeat the lighting sequence.
- 3.4.4 Turn the control knob in the anti-clockwise direction to the high position and the main burner will light.
- 3.4.5 Turn the control knob clockwise to the low position and the gas input will be reduced to the minimum setting.
- 3.4.6 Slightly depress the control knob and turn to the pilot position, the main burner will go out but the pilot will remain lit.
- 3.4.7 Slightly depress the control knob and turn to the off position, the pilot will now be extinguished.
- 3.4.8 After ensuring that the fire is safe to use it should be left on high position to fully warm up. During this time a slight odour may be noticed, this is due to the "newness" of the fire and will soon disappear.

Finally, hand the Installation and Maintenance Instructions and the Users Instructions over to the customer and explain the operation of the fire.

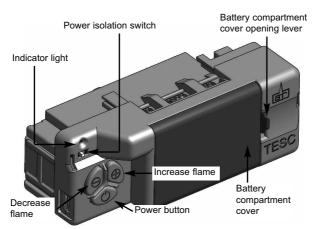
<u>NOTE</u> : THIS APPLIANCE IS DESIGNED TO WORK SAFELY AND EFFECTIVELY DURING ADVERSE WEATHER CONDITIONS. HOWEVER, DURING SUCH TIMES FLAME DISTURBANCE MAY BE NOTICED. THIS IS NORMAL AND DOES NOT EFFECT OR IMPAIR THE SAFETY OF THE APPLIANCE.

#### 3.5 FITTING THE BATTERIES - EFC MODELS

- 3.5.1 The control valve is located at the base of the fire as shown below in figure 17.
- Fig. 17



- 3.5.2 Remove the battery compartment cover from the control valve as indicated below in figure 18 and fit the 3 off AA sized alkaline batteries supplied to the control valve unit.
- 3.5.3 Ensure that the power isolation switch is in position "1" and the power indicator light is illuminated (red) after the batteries have been fitted as shown in figure 18 below.
- Fig. 18

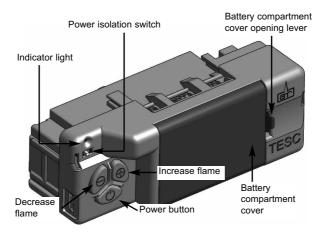


IMPORTANT NOTE : THE BATTERIES SHOULD BE REPLACED WITH GOOD QUALITY ALKALINE BATTERIES WHEN REQUIRED, THE BATTERY LIFE IS EXPECTED TO BE A MINIMUM OF 12 MONTHS WITH NORMAL USAGE. FOR BEST PERFORMANCE BFM EUROPE RECOMMEND THE USE OF ENERGIZER BATTERIES WITH IT'S PRODUCTS. 3.5.4 For easy flame control operation please see section 3.7

#### 3.6 LIGHTING THE FIRE MANUALLY VIA THE CONTROL VALVE

- 3.6.1 These products can be operated manually by using the buttons directly on the fire control in addition to the EFC switch (should the need arise).
- 3.6.2 To operate the fire press and hold the "power" button as shown below in figure 19 for two seconds, release as soon as the red indicator light shown in figure 19 illuminates. The burner will then start its ignition sequence and light to the maximum heat input level. For most efficient performance leave the fire on high when lighting from cold for ten minutes.



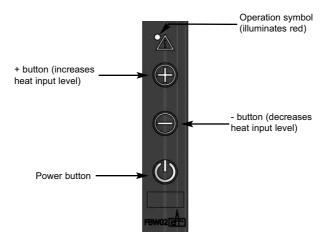


- 3.6.3 To reduce the heat input, press and release the (-) button to lower the heat input level one step at a time. Pressing the (-) button continuously will move the heat input level to the minimum.
- 3.6.4 To increase the heat input level, press then release the (+) button to increase the heat input level one step at a time. Pressing the (+) button continuously will move the heat input level to the maximum.
- 3.6.5 To turn the fire off, press the power button and the burner will stop.
- 3.6.6 If you are not intending to use the fire for a long period (i.e. over the summer months) the battery life can be extended by sliding the power isolator switch to the left (to the "0" position away from the "1" position) on the valve itself, which is located behind the ashpan cover on the fire.

### 3.7 LIGHTING THE APPLIANCE - EASY FLAME CONTROL MODELS.

3.7.1 To light the fire using the EFC switch press and hold the power button continuously until the red light illuminates next to the operation symbol (this typically takes two seconds). As the red light illuminates release immediately the power button. While the burner is lighting the red light will flash. When the burner has lit the red light will stop completely. The burner will now be lit at maximum heat input level.

NOTE : If the power button is pressed for too long or two short a time, the lighting sequence will be interrupted and not complete. The reason for the EFC switch having this strict start sequence is for safety reasons so that the starting operation of the fire will be most unlikely to be done other than intentionally by an adult.



- 3.7.2 To decrease the heat input level of the fire's burner, pressing and releasing the button will lower the heat input level one step at a time. Pressing the button continuously will move the heat input level to the minimum.
- 3.7.3 To increase the heat input level of the fire's burner pressing and releasing the + button will increase the heat input level one step at a time. Pressing the + button continuously will move the heat input level to the maximum.
- 3.7.4 To turn the fire off press and release the power button, the burner will extinguish.

- 3.7.5 If you are not intending to use the fire for a long period (i.e. over the summer months) the battery life can be extended by sliding the power isolator switch to the left (to the "0" position away from the "1" position) on the valve itself, which is located behind the ashpan cover on the fire.
- 3.7.6 In the unlikely event of the EFC switch malfunctioning the fire can be controlled from the valve, which is located behind the ash-pan cover on the fire, see section 3.6 for full manual operating instructions. If your fire does not operate manually please consult the troubleshooting chart on the rear page of this manual.

#### SECTION 4 MAINTENANCE

#### **Servicing Notes**

Servicing should be carried out annually by a competent person such as a GAS SAFE registered engineer. It is a condition of the Kohlangaz guarantee schemes that this is carried out by a competent person i.e a GAS SAFE registered Engineer in accordance with these servicing notes. The condition of the coals should be checked and if necessary the whole set should be replaced with a genuine replacement set.

The burner assembly is designed to be removed as a complete unit for ease of access. After any servicing work a gas tightness check must always be carried out.

#### 4.1 Removing the burner assembly from the fire (all models)

- 4.1.1 Remove ash-pan, fret assembly / trim or fascia from the front of the fire.
- 4.1.2 Isolate the gas supply, remove the glass frame as shown on in section 2.10 then remove the ceramics. Remove the 2 off fixing screws which hold the burner heat shield in place.
- 4.1.3 Remove the front ceramic support, which is held in position by 2 screws.
- 4.1.4 Loosen the burner pipe, which is situated behind the burner from the bulkhead fitting.
- 4.1.5 Remove the left and right hand burner retaining brackets, which are held in position by 2 screws.
- 4.1.6 Lift the burner assembly clear from the firebox.
- 4.1.7 Re-assemble in reverse order and carry out a gas tightness test.

#### 4.2 Removing the piezo igniter (manual control models only)

- 4.2.1 Remove ash-pan, fret assembly / trim or fascia from the front of the fire.
- 4.2.2 Remove the 4 off screws which hold the control panel in place. Remove the 2 off fixing screws which hold the burner heat shield in place.
- 4.2.3 Remove the piezo retaining nut and disconnect the ignition wire
- 4.2.4 Replace the piezo and re-assemble in reverse order.

### 4.3 Removing the control valve from the fire (manual control models only)

- 4.3.1 Remove ash-pan, fret assembly / trim or fascia from the front of the fire.
- 4.3.2 Isolate the gas supply, remove the glass frame as shown on in section 2.10 then remove the ceramics. Remove the 2 off fixing screws which hold the burner heat shield in place.
- 4.3.3 Remove the 4 off screws which hold the control panel in place and the gas valve retaining nut.
- 4.3.7 Loosen and remove the three gas pipe retaining nuts from the control valve and release the ends of the gas pipes from the control valve body. Loosen and remove the thermocouple securing nut from the end of the control valve.
- 4.3.8 We do not recommend re-greasing or servicing of control valves. Defective valves should be replaced with a genuine replacement of the correct type.
- 4.3.9 To refit a control tap, re-assemble in the reverse order noting that the control tap locates on a flat in the control panel. Carry out a gas tightness test after re-assembly.

#### 4.4 Removing the pilot assembly (manual & EFC control models)

- 4.4.1 Remove ash-pan, fret assembly / trim or fascia from the front of the fire.
- 4.4.2 Isolate the gas supply, remove the glass frame as shown on in section 2.10 then remove the ceramics. Remove the 2 off fixing screws which hold the burner heat shield in place.
- 4.4.3 Loosen the pilot pipe, disconnect the ignition lead from the electrode, and remove the thermocouple from the pilot body.
- 4.4.4 Remove the two fixing screws which secure the pilot assembly to the mounting panel.
- 4.4.5 Remove the pilot assembly.
- 4.4.6 Re-assemble with an new pilot assembly, and gasket, ensuring than an even seal around the pilot assembly is obtained. Carry out a gas tightness test after re-assembly.

#### 4.5 Removing the control valve (EFC models)

- 4.5.1 Remove ash-pan, fret assembly / trim or fascia from the front of the fire.
- 4.5.2 Isolate the gas supply, disconnect the gas control valve to bulkhead pipe and pilot connection to the valve at the pilot burner. Disconnect the ignition wire and thermocouple from the pilot.
- 4.5.3 Pull controls sub assembly forward, disconnect pilot and burner pipe, remove 2 off screws which secure the control valve to the controls sub assembly.
- 4.5.4 Replace in reverse order and carry out a gas tightness test.

#### 4.6 Removing the EFC trim switch

- 4.6.1 Remove ash-pan, fret assembly / trim or fascia from the front of the fire.
- 4.6.2 Isolate the gas supply, disconnect the gas control valve to bulkhead pipe and pilot / thermcouple connections to the pilot. Remove the fire from the opening.
- 4.6.3 Pull controls sub assembly forward, disconnect the trim switch lead from the control board, remove the EFC mounting frame from the fire.
- 4.6.4 Remove the EFC trim switch from mounting frame via the self adhesive pad, disconnect the wiring loom.
- 4.6.5 Replace in reverse order and carry out a gas tightness test.

#### 4.7 Parts Shortlist

Replacement of parts must be carried out by a competent person such as a GAS SAFE registered gas installer. The part numbers of the replaceable parts are as follows, these are available from your local Kohlangaz Stockist, whose details may be found on the BFM Europe website, address as shown on the back page of this book.

Complete fuel-bed / ceramic set	B-130100
L/H front ceramic	B-130060
R/H front ceramic	B-130070
L/H rear ceramic	B-130080
R/H rear ceramic	B-130090
Glass panel	B-128040
Ignition wire manual models	B-67910
Ignition wire EFC models	B-34690
Manual control models thermocouple	70-36270
EFC models thermocouple	B-1029684
EFC gas control valve	SP10620
EFC switch	B-170510
EFC cable	B-170520
NG manual gas valve	SP10686
LPG manual gas valve	SP10687
800mm extended flue duct (for use with NG models only)	CV-MARLT

#### **SECTION FIVE - USER INSTRUCTIONS**

#### 5.1 INSTALLATION INFORMATION

#### CONDITIONS OF INSTALLATION

It is the law that all gas appliances are installed only by a competent (e.g. Registered) Installer, in accordance with the installation instructions and the Gas Safety (Installation and Use) Regulations 1998. Failure to install appliances correctly could lead to prosecution. It is in your own interest and that of safety to comply with the law.

The fire may be fitted below a combustible shelf provided that the shelf is at least 200mm above the top of the appliance and the depth of the shelf does not exceed 150mm.

The fire may be installed below combustible shelves which exceed 150mm deep providing that the clearance above the fire is increased by 15mm for each 25mm of additional overhang in excess of 150mm.

If this appliance is fitted directly on to a wall without the use of a fireplace or surround, soft wall coverings such as wallpaper, blown vinyl etc. could be affected by the heat and hot convection air and may discolour or scorch. This should be considered when installing or decorating.

The Model number of this appliance is as stated on the rating plate affixed to the control panel of the fire and the appliance is manufactured by:-

BFM Europe Ltd Trentham Lakes Stoke on Trent ST4 4TJ

#### ABOUT YOUR NEW KOHLANGAZ DURLSTON GAS FIRE

The Kohlangaz Durlston coal effect gas fire incorporates a unique and highly developed fuel bed which gives the realism of a loose coal layout combined with realistic flames and glow. The use of durable ceramic material in the construction of the fuelbed components ensures long and trouble free operation. Please take the time to fully read these instructions as you will then be able to obtain the most effective and safe operation of your fire.

#### **IMPORTANT SAFETY INFORMATION**

#### WARNING

This is a heating appliance and as with all heating appliances a fireguard should be used for the protection of children, the elderly and infirm. Fireguards should conform to B.S. 8423 : 2002 (Fireguards for use with gas heating appliances).

It is important that this appliance is serviced at least once a year by a GAS SAFE registered gas installer. During the annual service, replacement of the pilot must be carried out. This is a condition of the manufacturers guarantee.

Any debris or deposits should be removed from the fuel bed from time to time. This may be carried out by referring to the cleaning section as described later in this book.

Only complete and genuine replacement fuel-bed sets must be used.

Always keep furniture and combustible materials well clear of the fire and never dry clothing or items either on or near to the fire. Never use aerosols or flammable cleaning products near to the fire when it is in use.

The ceramic fuel bed remains hot for a considerable period after use and sufficient time should be allowed for the fire to cool before cleaning etc.

#### DO NOT USE THIS FIRE UNDER ANY CIRCUMSTANCES IF THE GLASS PANEL IS CRACKED, BROKEN OR MISSING.

#### 5.2 OPERATING THE FIRE (MANUAL CONTROL MODELS)

- 5.2.1 The controls are located behind the ashpan cover which is situated behind the ashpan / fender. The controls, comprise a control valve to adjust the gas flow and a push button piezo igniter. To light the fire proceed as follows:-
- 5.2.2 Depress the control knob and turn anti-clockwise to the position marked pilot. Hold in the control knob for a few seconds to allow the gas to reach the pilot.
- 5.2.3 Continue to hold-in the control knob and press the igniter button. If the pilot does not light, continue to press the igniter button until ignition occurs. When the pilot has lit, continue to hold the control knob in for 5-10 seconds to allow the thermocouple to heat up, if the pilot goes out when the control knob is released, repeat the lighting sequence.
- 5.2.4 After lighting, turn the control knob in the anti-clockwise direction to the high position and the main burner will light. It is recommended that for most efficient performance the fire is allowed to warm up for a few minutes with the gas control on maximum.
- 5.2.5 The gas control can be turned clockwise from the maximum position to give the desired heat output.

#### WARNING

If the fire goes out for any reason or is turned off and it is necessary to re-light the fire it is important to allow the fire to cool for 5 minutes before attempting to re-light it.

WHEN TURNING THE FIRE "OFF" PLEASE ENSURE THAT THE CONTROL VALVE IS TURNED TO THE "OFF" POSITION AND THE PILOT FLAME IS EXTINGUISHED. DO NOT LEAVE THE PILOT FLAME ONLY LIT.

### 5.3 OPERATING THE FIRE - EASY FLAME CONTROL MODELS.

5.3.1 To light the fire using the EFC switch press and hold the power button continuously until the red light illuminates next to the operation symbol (this typically takes two seconds). As the red light illuminates release immediately the power button. While the burner is lighting the red light will flash. When the burner has lit the red light will stop completely. The burner will now be lit at maximum heat input level.

NOTE : If the power button is pressed for too long or two short a time, the lighting sequence will be interrupted and not complete. The reason for the EFC switch having this strict start sequence is for safety reasons so that the starting operation of the fire will be most unlikely to be done other than intentionally by an adult.

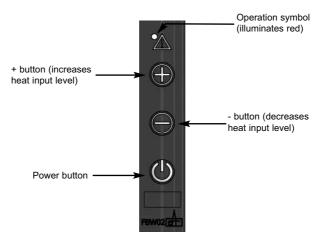
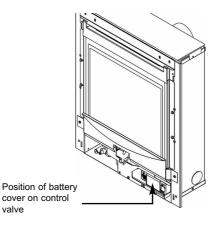


Fig. 1

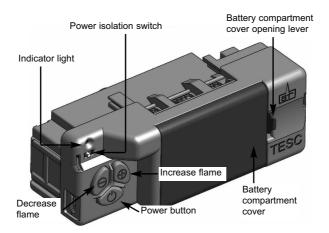
5.3.2 To decrease the heat input level of the fire's burner, pressing and releasing the - button will lower the heat input level one step at a time. Pressing the - button continuously will move the heat input level to the minimum.

#### 5.4 MANUAL OPERATION OF EASY FLAME CONTROL MODELS

5.4.1 These products can therefore be operated manually should the need arise. The control valve is located at the base of the fire as shown below in figure 2.



- 5.4.2 Ensure that the power isolation switch is in position "1" and the power indicator light is illuminated (red) as shown in figure 3 below.
- Fig. 3



- 5.4.3 To operate the fire press and hold the "power" button as shown in figure 2 on the previous page for two seconds, release as soon as the red indicator light in figure 3 on the previous page illuminates. The burner will start its ignition sequence and light to the maximum heat input level.
- 5.4.4 To reduce the heat input, press and release the (-) button to lower the heat input level one step at a time. Pressing the (-) button continuously will move the heat input level to the minimum.
- 5.4.5 To turn the fire off, press the power button and the burner will stop.
- 5.4.6 If you are not intending to use the fire for a long period (i.e. over the summer months) the battery life can be extended by sliding the power isolator switch to the left (to the "0" position away from the "1" position) on the valve itself, which is located behind the ashpan cover on the fire.

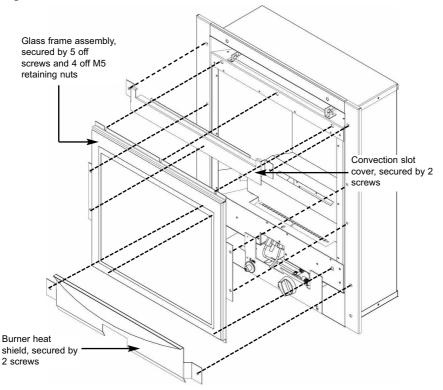
#### 5.5 REPLACING THE BATTERIES ON EASY FLAME CONTROL MODELS

- 5.5.1 Remove the ashpan cover, locate the control valve battery cover at the right hand side of the burner, slide the power isolator switch to the "0" position (to the left).
- 5.5.2 Remove the battery cover and replace the 3 off AA batteries with good quality Alkaline items, BFM Europe recommend the use of "Energizer" batteries. It is important that only an alkaline battery is used, otherwise premature battery failure and leakage may result.
- 5.5.3 Replace the battery cover and turn the power isolator switch to the "1" position (to the right).
- 5.5.4 Replace the ashpan cover and operate the fire as normal.

#### 5.6 REMOVAL / REPLACING THE GLASS FRAME

- 5.6.1 Remove the 2 screws which hold the convection slot cover to the firebox, as shown below in figure 4.
- 5.6.2 Remove the burner heat shield by unscrewing the 2 off retaining screws as shown below in figure 4.
- 5.6.3 Remove the 4 off retaining nuts as shown below in figure 4.
- 5.6.4 Remove the 3 off top retaining screws as shown below in figure 4.
- 5.6.5 Remove the 2 off bottom retaining screws as shown below in figure 4.
- 5.6.6 Re-assemble in reverse order.

### <u>NOTE :</u> Always ensure that a consistent seal between the combustion chamber and the glass frame is achieved.



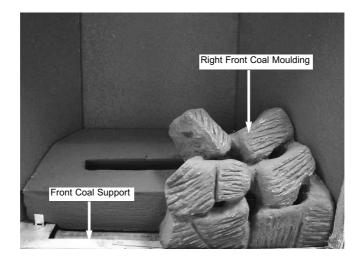
#### 5.7 REMOVING / REPLACING THE FUELBED

- 5.7.1 Remove the trim, fret & ashpan or fascia. Remove the glass frame assembly as shown in section 5.6. Place the ceramic fibre support behind the burner as shown below in figure 5.
- Fig. 5

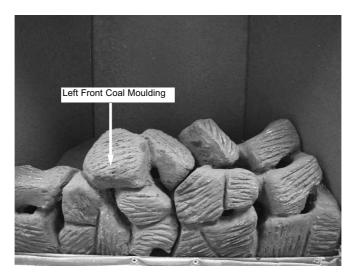


5.7.2 Place the front right coal moulding onto the front coal support as shown below in figure 6.

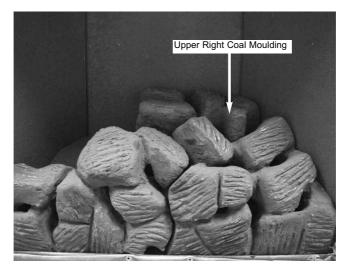




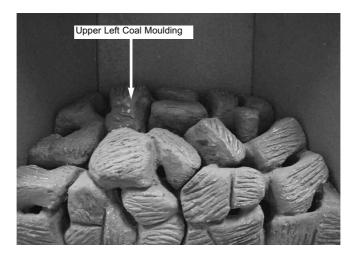
- 5.7.3 Place the front left coal moulding onto the front coal support as shown below in figure 7.
- Fig. 7



5.7.4 Place the upper right coal moulding as shown below in figure 8. This moulding tucks under the front right coal moulding and is supported by the ceramic fibre support.



- 5.7.5 Place the upper left coal moulding as shown below in figure 9. This moulding tucks under the front left coal moulding and is supported by the ceramic fibre support.
- Fig. 9



5.7.6 Refit the glass frame as detailed in section 5.6, then light the appliance as detailed in section 5.2 / 5.3 / 5.4

To ensure that the release of fibres from these R.C.F (Refractory Ceramic Fibre) articles is kept to a minimum, during installation and servicing we recommend that you use a HEPA filtered vacuum to remove any dust accumulated in and around the appliance before and after working on the appliance. When replacing these articles we recommend that the replaced items are not broken up, but are sealed within heavy duty polythene bags, clearly labelled as "RCF waste". RCF waste is classed as a "stable", non reactive hazardous waste and may be disposed of at a landfill licensed to accept such waste Protective clothing is not required when handling these articles, but we recommend you follow the normal hygiene rules of not smoking, eating or drinking in the work area, and always wash your hands before eating or drinking.

#### 5.8 CLEANING THE FIRE - WARNING

Before attempting any cleaning operation ensure that the fire has been allowed to fully cool. Consult your retailer to determine what trim / fret / fascia option was supplied with your fire. If a real Brass fret was supplied with the fire it will therefore will discolour with use and should be cleaned with a proprietory metal polish. A laquered brass fret should not discolour and should only be cleaned with a clean, damp cloth. The chrome, black & brass effect trims and chrome effect fret that are supplied with the fire (dependent upon model chosen) should only also be cleaned with a clean, damp cloth.

The trim is best cleaned in position on the fire when the appliance is not running and is cool. Black painted metal parts should be gently cleaned with a damp cloth.

#### 5.9 CLEANING THE FUEL-BED / GLASS PANEL

### NEVER USE THE FIRE WITHOUT THE GLASS PANEL IN POSITION, OR IF BROKEN OR CRACKED.

We do not recommend cleaning of the coals or fuelbed components as these are fragile and damage may result. **None of these parts must be washed or exposed to any cleaning agents or water**. Any damaged parts must be replaced by contacting your dealer or telephoning BFM Europe Ltd. on the number stated on the rear cover of this book. The coals must only be replaced with a complete and genuine replacement set and the fire must never be run with the wrong number or damaged coals. The fuel-bed must be carefully re-assembled as stated in section 5.7

To clean the glass panel, please remove it from the product as described overpage Use a clean damp cloth and ceramic glass cleaner to remove any stains or deposits frm the glass panel. Do not using scouring pads as this may scratch the surface finish of the glass panel.

**<u>PLEASE NOTE</u>** :- The glass will require cleaning periodically. Condensation produced by the products of combustion will create marks on the inside face of the glass panel.

#### 5.10 USER REPLACEABLE PARTS

Complete fuel-bed / ceramic set	B-130100
L/H front ceramic	B-130060
R/H front ceramic	B-130070
L/H rear ceramic	B-130080
R/H rear ceramic	B-130090

Due to our policy of continual improvement and development the exact accuracy of illustrations and descriptions contained in this book cannot be guaranteed.

#### TROUBLE SHOOTING ADVICE FOR ELECTRONIC FIRE CONTROL MODELS PRIOR TO REQUESTING A SERVICE CALL

Please locate the Indicator light on the control valve behind the ashpan cover (see figure 3 on page 32), if it shows **any** of the following flashing sequences then the problem requires the batteries in the control valve changing, **be advised that service calls as a result of batteries requiring being changed in the product are chargeable.** 

a) If the red indicator light flashes **ONCE** every ten seconds the batteries in the control valve require changing, see section 5.5

If this red indicator light flashing is ignored then eventually this will show as a flash every second and your fire will cease to operate until the batteries are changed.

If a permanent red indicator light is shown after attempting to ignite the fire this signifies no spark or no gas at the pilot and therefore a service call will be required to diagnose the fault.

PLEASE ENSURE THIS ADVICE IS FOLLOWED TO AVOID BEING CHARGED FOR A SERVICE CALL AS A RESULT OF BATTERIES REQUIRING TO BE CHANGED.

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