



Slimline Convector

Model No. MSCP70MN

PEBBLE FUELBED GAS FIRE

Installation and Maintenance Instructions

Hand these instructions to the user

Model No. MSCP70MN is for use on Natural Gas (G20) at a supply pressure of 20 mbar in G.B. / I.E.

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This appliance is manufactured by:-

CFM Kinder Ltd,
Trentham Lakes,
Stoke-on-Trent, ST4 4TJ

**SECTION 1
INFORMATION AND REQUIREMENTS**

1.0 APPLIANCE INFORMATION

Model	MSCP70MN
Gas Type	G20
Main injectors (2 off)	Size 235
Pilot Type	Copreci Single Flame 21100 / 141 or S.I.T. Dual Flame YA OP 9022
Max. Gross Heat Input :	6.5 kW
Min. Gross Heat Input :	4.2 kW
Cold Pressure :	20.0 +/-1.0 mbar
Ignition :	Push-button Piezo
Electrode Spark Gap	4.5mm
Packed Weight (without fender)	15.5 kg

Fire box Dimensions (with linear trim fitted)

Width :	(with trim fitted)	484mm
Height :	(with trim fitted)	595mm
Depth :	(from mounting face to rear panel)	125mm

Gas Connection : 8mm Compression (Supplied with fire)

INSTALLATION REQUIREMENTS

1.1 CONDITIONS OF INSTALLATION

It is the law that all gas appliances are installed only by a CORGI 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 3 Installation of Decorative Fuel Effect Gas Fires
2. B.S. 6891 Installation of Gas Pipework
3. B.S. 5440 Parts 1 & 2 Installation of Flues and Ventilation
4. B.S. 1251 Open fire place components
5. B.S. 715 Metal flue pipes for gas appliances
6. B.S. 6461 Part 1 Installation of Chimneys and flues
7. B.S. 1289 Clay Flue Blocks and Terminals
8. I.S. 813 : 1996 Domestic Gas Installation (Republic of Ireland)

No purpose made additional ventilation is normally required for this appliance, when installed in G.B. When installing in I.E. please consult document I.S. 813 : 1996 Domestic Gas Installation, which is issued by the National Standards Authority of Ireland. If installing in Northern Ireland, please consult local building regulations. Any purpose made ventilation must be checked periodically to ensure that it is free from obstruction.

1.2 FLUE AND CHIMNEY SUITABILITY

This appliance is designed for use with conventional brick built or lined chimneys and fabricated flues. It is also suitable for use with pre-cast flue blocks conforming to B.S. 1289 and metal flue boxes conforming to BS 715. All flues must conform to the following minimum dimensions.

Minimum diameter of circular flues	125 mm (Without Flue Restrictor Fitted)
Minimum effective height of all flue types	3 metres

When fitting to conventional chimneys or 175mm flues it may be desirable to leave the flue restrictor baffle (supplied) in place to reduce the flue flow and increase the efficiency of the fire. Safe clearance of products must always be checked by carrying out a smoke match test as described.

1.3 FIREPLACE / SURROUND SUITABILITY

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°C.

If a heating appliance is fitted directly against a wall without the use of a fire surround or fire place all combustible material must be removed from behind the trim. 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.

1.4 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 FLUE / CHIMNEY INSPECTION

Before commencing installation, a flue or chimney should be inspected to ensure that all the following conditions are satisfied.

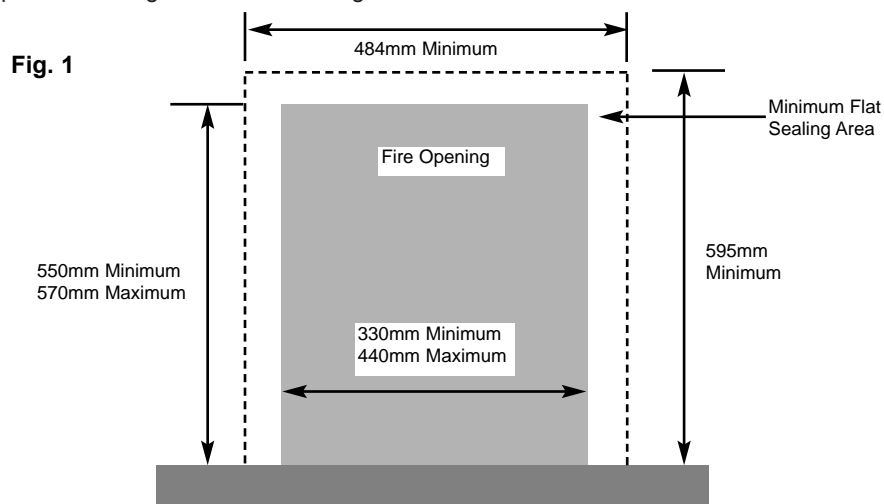
1. Check that the chimney / flue only serves one fire place and is clear of any obstruction. Any dampers or register plates must be removed or locked in the open position.
2. Brick/stone built chimneys or any chimney or flue which has been used for an appliance burning fuel other than gas must be thoroughly swept. The base of the chimney / flue must also be thoroughly cleared of debris etc.
3. Any under-floor air supply to the fire place must be completely sealed off.
4. Ensure that the inside of the chimney / flue is in good condition along its length and check that there is no leakage of smoke through the structure of the chimney during and after the smoke pellet test. **With pre-cast flues it is especially important to check the inside of the flue for extruded cement / sealant protruding from the joints between the flue blocks. If present, these should be removed by rodding the flue before proceeding with the installation.**
5. **Using a smoke pellet, check that there is an up-draught in the chimney / flue and that the smoke can be seen issuing from the terminal / chimney pot outside.**

There must be no leakage of smoke through the structure of the chimney during or after the smoke pellet test and it is important to check inside upstairs rooms adjacent to the chimney / flue. Check the chimney pot / terminal and general condition of the brickwork or masonry. If the chimney or flue is in poor condition or if there is no up-draught do not proceed with the installation. If there is a history of down-draught conditions with the chimney / flue, a tested and certificated flue terminal or cowl suitable for the relevant flue type should be considered.

6. **A spillage test must always be carried out during commissioning of the appliance.**

1.6 FIRE PLACE OPENING AND CHIMNEY CATCHMENT SPACE

The front opening of the fire place must be between 330 and 440 mm wide, and between 550 and 570mm high. If the opening exceeds these dimensions then a surround must be constructed from suitable non-combustible material to produce a correct size opening. Any surround must be suitably sealed to the fire place to prevent leakage. See below in fig.1



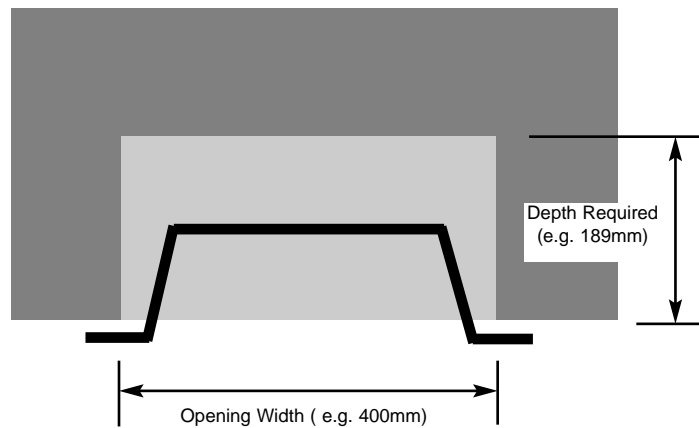
When installing into a brick built chimney, you must ensure that there is sufficient depth to accommodate any debris which may fall from the chimney. This depth must be sufficient to accommodate 12 litres of volumetric space.

Table A - Installation Depth Requirements for a Mesina Slimline Convector being installed into a brick built chimney, requiring 12.0 litres of debris collection volume (fig. 2).

Opening Width (mm)	Minimum Depth Required (mm)
330 (minimum opening width)	222
340	218
350	215
360	211
370	205
380	199
390	193
400	189
410	183
420	178
430	172
440 (maximum opening width)	168

For example, if the appliance was to be fitted into a 400mm wide opening, the depth required would be 189mm. See fig. 2 below for explanatory diagram.

Fig. 2



1.7 FITTING TO FIREPLACES WITH EXISTING CHAIRBRICKS AND CONVENTIONAL BRICKBUILT CHIMNEYS

This appliance is suitable for use in fireplaces fitted with an existing chairbrick without the need for removal of the chairbrick, providing the minimum depth of the fireplace exceeds 175mm. If the depth is less than 175mm then the chairbrick must be removed. The fireplace must be checked to ensure that no part of the chairbrick is within 50mm of the flue outlet of the fire when installed.

1.8 FITTING TO PRE-CAST FLUE INSTALLATIONS

When installing this appliance into pre-cast flues, always ensure that the spigot restrictor baffle has been removed. This is held in place on the spigot by 2 screws

To install the fire box in to pre-cast flue starter blocks, there must be at least 132mm from the mounting face of the fire to the rear of the pre-cast flue starter block to allow sufficient space for debris collection. If this dimension is less than 132mm then a fire surround with a deeper rebate to increase the depth to at least 132mm from the mounting face of the fire. It is important to consider this depth when choosing a fire surround as the thickness of the fire surround must be sufficient to give a total depth of **at least 132 mm to the rear of the starter block**, otherwise there will be insufficient depth. To increase this depth the fire surround may be packed away from the wall using suitable non-combustible board, providing the installation is correctly sealed. If in doubt about the suitability of the fire contact Mesina Fires for advice before proceeding.

It is important to ensure that the pre-cast flue is in good condition and is free from extruded mortar or sealant from between the flue blocks.

This appliance has been tested for use in a pre-cast flue block complying with BS 1289. In accordance with BS 1289 Part 1, pre-cast flues built with directly plastered faces (front or rear) are not correctly installed as to ensure proper operation with any type of gas fire. In some instances of this flue construction, temperature cracking of surface plaster may occur through no fault of the appliance. An air gap or some form of insulation material should be installed to prevent normal flue temperatures from damaging wall surfaces.

1.9 FITTING TO PRE-FABRICATED TWIN WALL METAL FLUE BOXES

The appliance may be fitted to twin wall metal flue boxes conforming to the constructional requirements of BS 715, (for example the Selkirk LFE 125 box). The box must have a minimum flue diameter of 125mm internal and minimum internal dimensions of 160mm deep by 580mm high by 350mm wide. There are no maximum dimensional requirements for the box. The top face of the box must be insulated with a minimum thickness of 50mm of non-combustible mineral wool insulation or similar material. The flue box must stand on a non-combustible base of minimum thickness 12mm.

1.10 HEARTHES

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.

1.11 SPILLAGE MONITORING SYSTEM

This appliance is fitted with an atmosphere sensing spillage monitoring system in the form of an oxygen sensing pilot. This is designed to shut the fire off in the event of a partial or complete blockage of the flue causing a build up of combustion products in the room in which the fire is operated. **The following are important warnings relating to this spillage monitoring system :-**

- 1) The spillage monitoring system must not be adjusted by the installer.
- 2) The spillage monitoring system must not be put out of operation.
- 3) When the spillage monitoring system is exchanged only a complete original manufacturers part may be fitted. It is not possible to replace individual parts on the pilot system on this appliance, only a complete pilot assembly (including the thermocouple) may be fitted.

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 front of the appliance. Check the contents as listed :-

Packing Check List

1off	Fire box / burner assembly
1off	Boxed pebble base, ceramic front rail and 7 synthetic pebbles
1off	Loose items bag.
1off	Cable Fixing Kit
1off	Brushed Stainless Trim
1off each	User instruction book and Installation book
1off	Ashpan, Handle & fixing screw (packed in side fitting)

2.2 INSTALLING THE FIRE BOX

Establish which type of flue you are intending to install the fire in to :-

225 x 225mm (9 inch x 9 inch) brick built chimneys

175mm (7 inch) diameter lined brick or stone flue, or insulated pre-fabricated metal flue box to B.S. 715.

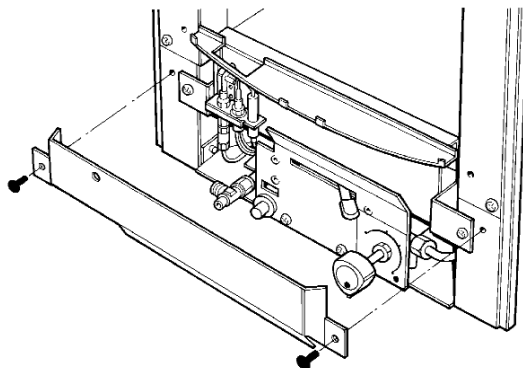
When installing into 125mm (5 inch) diameter lined brick or stone flue, or insulated pre-fabricated metal flue box to B.S. 715 and pre-cast flues the restrictor baffle must not be fitted.

A spillage test must always be carried out to check satisfactory clearance of flue products, regardless of the type of flue the appliance is being fitted to.

Proceed as follows :-

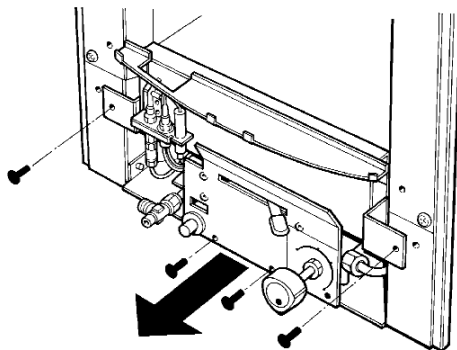
- a) Remove the contemporary trim and ashpan cover. Remove the burner heat shield from the front of the fire box to allow access to the burner. See fig. 3 below.

Fig. 3



- b) Ensure that the hearth is protected from damage and carefully lift the fire box into the fire opening, then slide it back into position. Check that the fire box flange fits flush to the sealing face of the fire surround or wall with no gaps present.
- c) Remove the four retaining screws securing the burner to the firebox. The base of the burner unit can now be pulled forward, allowing the burner to be removed from the fire box. See fig. 4 below.

Fig. 4



- d) Whilst the fire box is still in position, decide which side the gas supply is to enter the fire from. 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 below the fuelbed support panel and connect to the isolating / inlet elbow. The gas connection to the appliance should be made to the isolating / inlet elbow using 8mm rigid tubing. There must be no soldered joints within the firebox. See fig. 5 & 6 below for suggested concealed pipe layouts.

Fig. 5

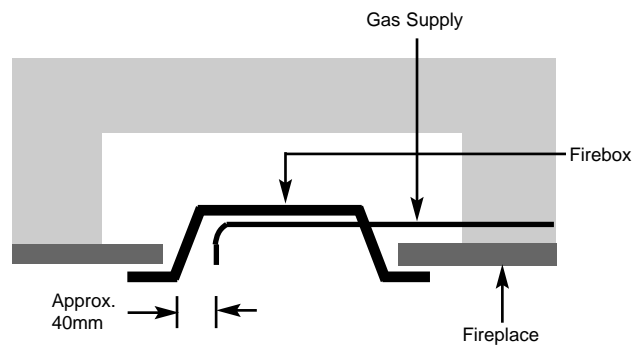
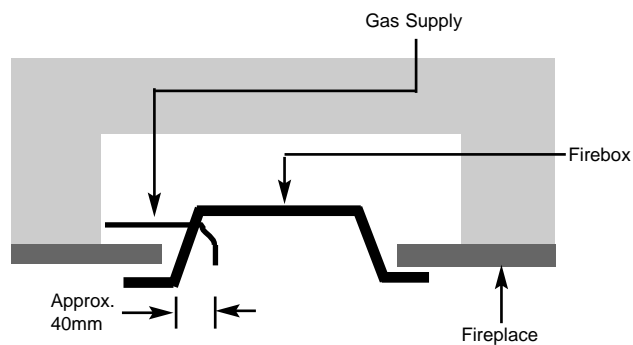


Fig. 6



Note : Before breaking into the gas supply a pressure drop test should be carried out to establish that the existing pipework is sound.

Carefully withdraw the fire box from the opening to enable the gas supply and fire fixing to be completed.

There is a choice of methods of fixing the firebox which are provided to enable the installer to deal with any type of installation.

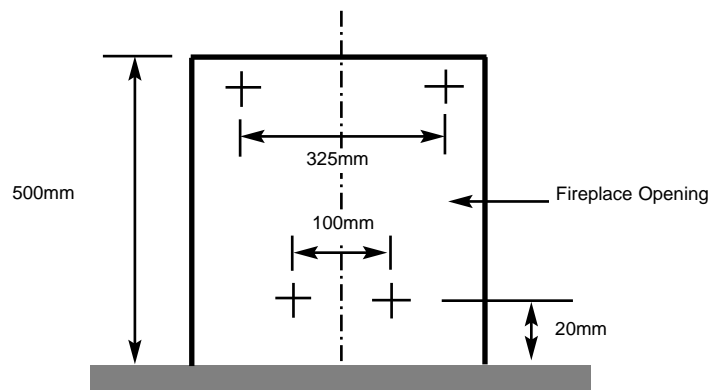
The preferred method of fixing which is suitable for almost all situations is the cable fixing method which is described in the following section in detail.

The fire may be secured using the cable method as described below, or alternatively, in installations where the cable method is not suitable (eg. loose masonry in rear of fire opening) the spacer may be removed from the fire box and secured to the fire surround using the screws and rawlplugs provided. The foam seal (supplied) must be fitted around the perimeter of the firebox in a “goalpost” arrangement to ensure a seal is achieved to the fireplace.

To fit using the **preferred** cable method proceed as follows-

- e) Mark out and drill 4 off No 14 (7mm) holes in the back face of the fire opening in the positions shown below in fig. 7

Fig. 7

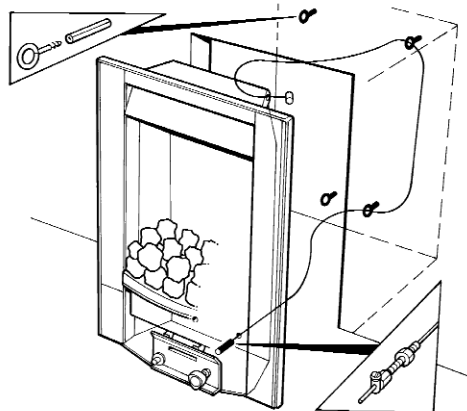


Fit the wallplugs provided and screw the fixing eyes securely into the rear of the fire opening. If the clearance at the rear of the fire is at the minimum specified for a precast flue application, it may be necessary to bend over the lower fixing eyes after screwing them fully in to the rear of a pre-cast starter block.

- f) Uncoil the two fire fixing cables and thread one end of each of the cables through one of the two holes on each side of the flue outlet shroud.

- g) Position the fire carefully on the (protected) surface of the hearth and reach into the fire opening. Thread each of the cables vertically downwards through the pair of fixing eyes on the same side of the fire. Thread the free end of the cables through the corresponding circular hole on each side of the lower rear of the fire. Carefully slide the fire box back into the fire opening and pull both cables tight.
- h) Thread a tensioning screw over each 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).
- i) Fit 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. See fig. 8 below

Fig. 8



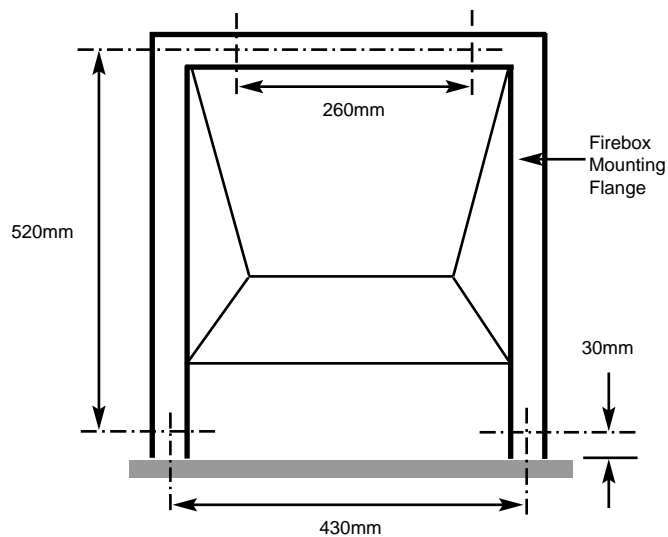
- j) Evenly tighten the tensioning nuts to tension both cables and pull the fire snugly against the wall. Do not overtighten, it is only necessary to pull the seal up against the sealing face of the wall, it does not need to be compressed. Check that there are no gaps behind the seal.
- k) With the fire securely in place, if a concealed gas connection has been made through either of the access holes in the sides or rear of the fire, the holes should be closed around the pipe to prevent leakage of air through the gap around the pipe.
- l) Refit the burner. Fit the four retaining screws and check that the burner is correctly locked into position.

- m) Refit the front burner heat shield to the sides of the fire box (2 Screws) and secure the brushed stainless trim to the fire using the magnets provided.
- n) **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.**

The other firebox fixing method is as follows :-

In installations where the cable method is not suitable (e.g. loose masonry in rear of fire opening) the firebox can be secured to the fire surround using four screws and wall plugs provided. Below (fig.9) is a diagram to indicate the hole centre positions available on the firebox to facilitate the screw fixing to the fireplace / surround.

Fig. 9



2.3 GAS SOUNDNESS AND INLET PRESSURE

- a) Remove the pressure test point screw from the inlet elbow and fit a manometer.
- b) Turn on the main gas supply and carry out a gas soundness test.
- c) 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.

- d) Check that the gas pressure is **20.0 mbar (+/- 1.0mbar) 8.0 in w.g.(+/- 0.4 in w.g.)**
- e) Turn off the fire, remove the manometer and refit the pressure test point screw. Check the pressure test point screw for gas soundness with the appliance turned on using a suitable leak detection fluid or detector.

SECTION 3 ASSEMBLING FUEL-BED AND COMMISSIONING

3.1 ASSEMBLING THE FUEL-BED

- a) Place the fuelbed base centrally on to the fuelbed support and pull fully forwards to the burner. **Make sure that the fuelbed base is located centrally in the fire box. Ensure that fuelbed base is fitted fully down onto the fuel bed support and is not lodged on the burner. See fig. 10 below.**

Fig. 10



- b) Position front ceramic pebble form on burner front ceramic support, and ensure that the locating channel in the front ceramic pebble form is correctly located onto the lip on the burner front ceramic support. See fig. 11

Fig. 11



- c) Fit the rear row of three pebbles (A, B & C) as shown in the following diagram, ensuring that individual pebbles are located exactly as is shown. The letter corresponding to the pebble position is stamped on the **bottom** face of the pebble itself. See fig. 12

Fig. 12



- d) Fit the front row of four pebbles (D, E, F & G) as shown in the following diagram, ensuring that individual pebbles are located exactly as is shown. The letter corresponding to the pebble position is stamped on the **bottom** face of the pebble itself. See fig. 13

Fig. 13



Warning : Use only the pebble set supplied with the fire. When replacing the pebbles remove the old pebbles and discard them. Fit a complete set of pebbles of the correct type. Do not fit additional pebbles or any pebbles other than a genuine replacement set.

3.2 LIGHTING THE APPLIANCE

- a) Turn on the gas isolation tap.
- b) 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.
- c) 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 the thermocouple to heat up, if the pilot goes out when the control knob is released, repeat the lighting sequence.
- d) Turn the control knob in the anti-clockwise direction to the high position and the main burner will light.
- e) Turn the control knob clockwise to the low position and the gas input will be reduced to the minimum setting.
- f) Slightly depress the control knob and turn to the pilot position, the main

burner will go out but the pilot will remain lit.

- g) Slightly depress the control knob and turn to the off position, the pilot will now be extinguished.

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 3 minutes before attempting to re-light it.

3.3 CHECKING FOR CLEARANCE OF COMBUSTION PRODUCTS

- a) Close all doors and windows in the room.
- b) Light the fire and allow to run for approximately 5 minutes on high position.
- c) After approximately 5 minutes hold a smoke match just inside and below the centre of the lower front edge of the top of the fire. (It is recommended that a suitable smoke match holder is used when checking for clearance of combustion products). All smoke generated should be drawn back into the flue. If slight spillage occurs or if in doubt, repeat the test after a further 5-10 minutes. **If the test indicates that spillage is occurring and the flue restrictor baffle has been fitted, it should be removed and the test repeated after the fire has cooled.**
- d) If spillage persists, the flue is not functioning correctly and a fault exists. If, after investigation the fault cannot be traced and rectified, the fire must be disconnected from the gas supply and expert advice obtained.
- e) If there is an extractor fan fitted any where in the vicinity of the appliance, or in adjacent rooms the spillage test should be repeated with the fan running on maximum and all interconnecting doors open.
- f) 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.

At this stage any minor adjustments to the pebbles should be made using suitable long handled tongs and taking care not to damage the pebbles.

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

SECTION 4 MAINTENANCE

Servicing Notes

Servicing should be carried out annually by a competent person such as a CORGI registered engineer. **This is a condition of the Mesina Fires guarantee schemes.**

The service should include visually checking the chimney and fire opening for accumulations of debris and a smoke test to check for a positive up-draught in the chimney.

The condition of the pebbles 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 soundness check must always be carried out.**

For Diagrams refer to Section 2

4.1 Removing the burner assembly from the fire.

- 4.1.1 Prepare work area (lay down dust sheets etc.)
- 4.1.2 Lift the trim and ash pan cover out of the way and put them in a safe location. Remove the loose pebbles from the fuel bed and front ceramic rail. Remove the front ceramic from the rail. Unscrew the two pozi-driv fixing screws which secure the burner heat shield and remove it from the fire.
- 4.1.3 Isolate the gas supply and remove the inlet pipe from the appliance inlet elbow. Unscrew and remove the four screws which retain the burner. Remove the burner assembly from the fire.
- 4.1.4 To refit the burner assembly. Push the base of the control panel fully into the fire and secure with the four screws. Refit the gas supply pipe and carry out a gas soundness test. Refit the burner heat shield then refit the pebbles referring to section 3 for the correct layout. The trim and ash pan cover can now be re-positioned.

4.2 Removing the Piezo Igniter

- 4.2.1 Remove the burner assembly as in section 4.1
- 4.2.2 Disconnect the ignition lead from the piezo and unscrew the retaining nut on the rear of the control panel. Withdraw the piezo from the front of the control panel. Re-assemble in reverse order and carry out a gas soundness test.

4.3 Removing the Control Tap from the fire.

- 4.3.1 Remove the burner assembly as in section 4.1.
- 4.3.2 Pull the control knob off the control tap spindle.
- 4.3.3 Loosen and remove the three gas pipe retaining nuts from the control tap and release the ends of the gas pipes from the control tap body. Loosen and remove the thermocouple securing nut from the end of the control tap.
- 4.3.4 Unscrew the control tap locknut from the front of the control panel and remove the control tap.
- 4.3.5 To refit a control tap, reassemble in reverse order noting that the control tap locates with a flat in the control panel. Carry out a gas soundness test after re-assembly.

4.4 Removing the Oxy-Pilot Assembly

Note : Because this appliance is fitted with an atmosphere sensing 'Oxy-Pilot' it is not possible to replace the thermocouple separately, because the thermocouple position is factory set to a tight tolerance. Any replacement of parts on the pilot requires a complete new pilot assembly.

- 4.4.1 Remove the burner assembly as in section 4.1
- 4.4.2 Unscrew and remove the thermocouple retaining nut from the end of the control tap and disconnect the ignition lead from the pilot electrode.
- 4.4.3 Unscrew and remove the two pozi-driv screws which secure the pilot assembly to the burner. Remove the pilot.
- 4.4.4 Re-assemble in reverse order and carry out a gas soundness test.

PARTS SHORTLIST

Replacement of any other parts must be carried out by a competent person such as a CORGI registered gas installer. The part numbers of the user replaceable parts are as follows, these are available from Mesina Fires who may be contacted at the address shown below.

Pebble fuelbed base	B-55100
Pebble fuelbed front rail	B-55110
Replacement pebble set	B-55120
L/H Fibre Board	B-55140
R/H Fibre Board	B-55150
Upper Rear Fibre Board	B-55170
Lower Rear Fibre Board	B-55160
Piezo Igniter	B-1320
Ignition Wire	B-14340
Gas Valve	B-36990

This appliance must only be used with the Trim and ashpan supplied

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

**Part No. B-55280
Issue 2**



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