

N Ε R U D  $\mathbf{E}$ L L Ι

CE

# Tuscany Model 637

Model 637

(GC No. 32 032 06)

Please keep in a safe place for future reference

# Please leave this Installer Guide with the user

Model 637 is for use with natural gas (G20)

This appliance is for use in the United Kingdom (GB) and the Republic of Ireland (IE) only.

C U S T O M E R C A R E

This Installer Guide gives sufficient details to enable the appliance to be installed and maintained. If further information is required, our **Valor AdviceLine** will be pleased to help.

Please telephone 0345 626341 (Local call rates apply)

# 1. APPLIANCE DATA

This product uses fuel effect pieces, containing Refractory Ceramic Fibres (RCF), which are man-made vitreous silicate fibres. Excessive exposure to these materials may cause temporary irritation to eyes, skin and respiratory tract. Consequently, it makes sense to take care when handling these articles to ensure that the release of dust is kept to a minimum. To ensure that the release of fibres from these RCF articles is kept to a minimum, during installation and servicing we recommend that you use a HEPA filtered vacuum to remove any dust and soot accumulated in and around the fire before and after working on the fire. When replacing these articles we recommend that the replaced items are not broken up, but are sealed within a heavy duty polythene bag, clearly labelled as RCF waste. This is not classified as "hazardous waste" and may be disposed of at a tipping site licensed for the disposal of industrial 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.

This appliance does not contain any component manufactured from asbestos or asbestos related products. The appliance data label is positioned below the burner and is visible when the fire front cover is removed.

Gas	Natural (G20)
Inlet Pressure	20mbar (8in. w.g.)
Input - Max. ( Gross)	6.85kW (23,400Btu/h)
Input - Min. (Gross)	3.4kW (11,600Btu/h)
Burner injector	Bray Cat.18 Size 420
Burner Test Pressure-	17.3mbar <u>+</u> 0.75mbar
Cold	(7.0in w.g. <u>+</u> 0.3in w.g.)
Inlet Pipe Connection	8mm
Pilot & Atmosphere	720A453
Sensing Device	SIT Ref 9051
Ignition	Piezo Spark
Aeration	Non-Adjustable

# 2. GENERAL INSTALLATION REQUIREMENTS

The installation must be in accordance with these instructions.

For the user's protection, in the United Kingdom it is the law that all gas appliances are installed by competent persons in accordance with the current edition of the Gas Safety (Installation and Use) Regulations. Failure to install the appliance correctly could lead to prosecution. The Council for the Registration of Gas Installers (CORGI) requires its members to work to recognised standards.

In the United Kingdom the installation must also be in accordance with:

- a) All the relevant parts of local regulations.
- b) The current edition of the Building Regulations issued by the Department of the Environment and the Welsh Office or the Building Standards (Scotland) (Consolidation) Regulations issued by the Scottish Development Department.
- c) All relevant codes of practice.
- d) The relevant parts of the current editions of the following British Standards:-

BS 1251

BS 4543 Part 2

BS 5440 Part 1

BS 5440 Part 2

BS 5871 Part 3

BS 6461 Part 1

BS 6891

BS 8303

In the republic of Ireland the installation must also conform with the relevant parts of:

a) The current editions of:-

IS 813

ICP3

IS327

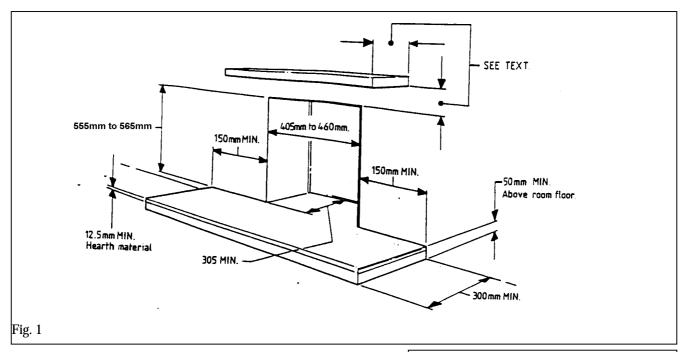
b) All relevant national and local rules in force

As supplied the appliance can be installed in the following situations:-

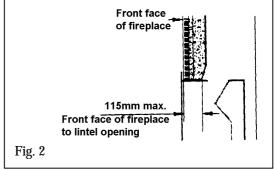
To a fireplace complete with surround and hearth as shown in figure 1 and complying with BS1251. The required fireplace, hearth, and clearance dimensions are shown in figure 1.

Fireback (chairbrick) removal will usually be required unless the dimensional requirements in figure 1 can be met. Suitable flues and minimum flue sizes are as follows:-

- a) 225mm x 225mm conventional brick flue.
- b) 175mm diameter lined brick or stone flue.
- c) 200mm diameter factory made insulated flue manufactured to BS4543.
- d) 175mm diameter flue pipe. See BS6461 Part 1 for suitable materials.



The distance from the front face of the flueway opening in the lintel (or equivalent) to the extreme front face of the fireplace including all surfacing must be no more than the distance shown in figure 2.



If this maximum of 115mm is exceeded poor clearance of combustion products could result. In this situation there may be a requirement to adapt the lintel/brickwork ensuring that a minimum clearance of 100mm is maintained. Preferably the lintel/brickwork shall be tapered as per fig 2a to assist with the smooth transition of products of combustion.

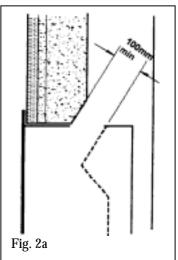
The minimum effective height of the flue must be 3m.

The flue must not be used for any other appliance or application.

Any chimney damper or restrictor should be removed. If removal is not possible, they must be secured in the open position.

If the appliance is intended to be installed to a chimney which was previously used for solid fuel, the flue must be swept clean prior to installation. All flues should be inspected for soundness and freedom from blockages.

If the fireplace opening is an underfloor draught type, it must be sealed to stop any draughts.



The appliance must be mounted behind a non-combustible hearth (N.B. conglomerate marble hearths are considered as non-combustible). The hearth material must be at least 12mm thick. The periphery of the hearth (or fender) should be at least 50mm above floor level to discourage the placing of carpets or rugs over it. (See fig 1)

The surface of the hearth must be sufficiently flat to enable the bottom of the front surround and the bottom front cover to be aligned horizontally. Any excessive unevenness (uneven tiles, Cotswold stone, etc.) should be rectified.

The appliance must not stand on combustible materials or carpets.

The minimum height from the top of the fireplace opening to the underside of any shelf made from wood or other combustible materials is as follows:-

- For a shelf up to 150mm deep Minimum height = 200mm.
- For a shelf deeper than 150mm 200mm + 12.5mm for every 25mm depth over 150mm.

When fitted to a proprietary surround its rating must be 150°C (Class "O"). The fire surround must be sealed to the wall.

Note that soft wall coverings (e.g. embossed vinyl, etc.) are easily affected by heat. They may scorch or become discoloured when close to a heating appliance. Please bear this in mind when installing.

This appliance must not be installed in any room which contains a bath or shower or where steam is regularly present. An extractor fan may only be used in the same room as this appliance, or in any area from which ventilation for the appliance is taken, if it does not affect the safe performance of the appliance. Note the spillage test requirements detailed further on in this manual. If the fan is likely to affect the appliance, the appliance must not be installed unless the fan is permanently disconnected.

In the UK no special ventilation bricks or vents are normally required in the room for this appliance. In the Republic of Ireland permanent ventilation must comply with the rules in force.

# 3. UNPACKING

#### Contents:

- 1 Hotbox & Burner assembly
- 1 Hotbox Trim
- 1 Nut & olive for 8mm inlet pipe
- 2 Front coals (1 x right hand 1x left hand)
- 1 Coal matrix
- 1 Pack of loose coals containing 14 coals
- 1 Users instruction booklet
- 4 Fibre plugs
- 2 Eyebolts
- 2 Retaining cables
- 2 Cable clamps
- 3 Foam Seal
- 4 Woodscrews
- 1 Roll Sealing Tape

Carefully remove the contents . Take special care in handling the ceramic components and the coals. Check that all the listed parts are present and in good condition.

# 4. INSTALLATION OF APPLIANCE

#### **INSTALLATION**

# Fireplace size

The fireplace must comply with the requirements described in section 2.

#### Fireplace flue pull.

Visually inspect the flue for any obstruction, and that a smooth transition from the fireplace opening into the flue is available. Carry out a flue flow test by using a smoke pellet within the fireplace opening. Observe the smoke. If there is a definite flow into the opening continue with the installation. If there is not a definite flow, preheat the chimney for a few minutes and recheck If there is still no definite flow, the chimney may need attention. Do not fit the appliance. Seek expert advice.

#### Installation of the Hotbox assembly

Before commencing installation remove burner assembly from hotbox unit by removing nut from stud below data label. When installing the hotbox take care not to damage the hearth. The packaging fitments can be placed on the hearth for protection.

#### Attach foam seal.

A foam seal is supplied which will need to be attached to the rear face of the firebox frame on all three sides. Ensure all joints are butted together to prevent air gaps.

The hot box can be retained either by cables attached to the rear wall of the fireplace or screw fixing to the front face of the fireplace. The screw fixing method is only suitable for fireplace opening widths between 405mm and 420mm.

#### Cable Retention

Drill two holes in the rear wall of the fireplace for the eyebolt plugs. These holes should be drilled using a No. 12 masonry drill bit. The holes should be positioned as in Figure 3.

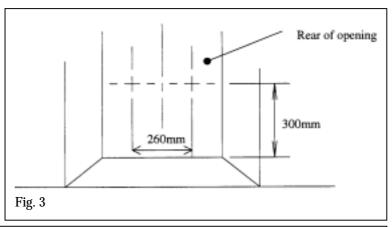
Insert a fibre plug into each hole. Use the rawlplugs supplied. Never use a plastic plug instead of the fibre plugs supplies. Screw the eyebolts into the plugs. Make sure that the eyebolts are secure. Place the hotbox unit close to the fireplace opening, but allow sufficient access into the fireplace opening so that the cable can be threaded through the eyebolt and returned through the

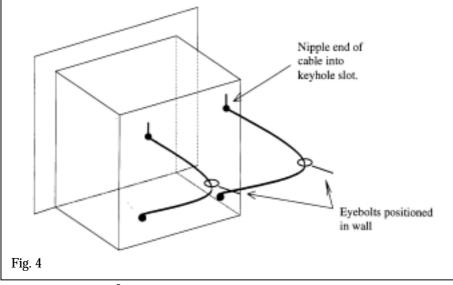
back of the hotbox.

If a concealed connection is being used, insert the hotbox box into the fireplace opening by feeding the supply pipe through a slit in the rear seal / grommet.

Place the nipple end of each cable into the keyhole slots at the top rear of the box (See Fig 4). Slide the cables down so that the nipples are secured into the base of the keyhole slots.

Feed the cables through the eyebolts below the keyhole slots (Fig. 4). The hotbox has three holes located toward the lower section of the rear panel, two on the right side and one





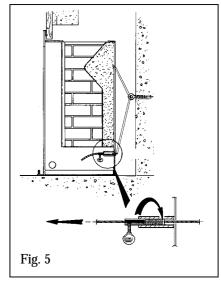
on the left side. Insert the end of the right hand cable from the back into the outermost hole on the right side of the hotbox. Insert the end of the left hand cable through the hole on the left side of the hotbox .

Fit a cable retainer over the end of each cable - see fig 5. (The cables do not need to be tight at this stage).

Place the hotbox fully into the fireplace opening. Pull the cables taut. Push the cable retainers hard up against the rear panel. Tighten the screws in the retainers so that they clamp the cable into position. Apply tension to the cable by turning the hexagonal adjuster by hand.

Inspect the fit of the convection box to the fireplace surround. Ensure that the hotbox is aligned squarely and the seal is satisfactory, then fully tighten the cable retainers.

Push the free length of the cable inside the hotbox so that it is available to allow easy removal and refitting of the appliance during subsequent service calls. Cover the holes in the front flanges of the hot box (intended for the alternative screw fixing) with sealing tape to prevent air from the fireplace opening entering the room.



#### Screw Fixing

Position the hotbox centrally in the fireplace in the position in which it is to be permanently installed.

If a concealed connection is being used, insert the hotbox into the fireplace at an angle feeding the supply pipe through the slit in the rear seal / grommet.

Mark the positions of the four screw fixing holes located in the front flange.

Remove the hotbox and drill the holes using a no.12 masonry drill bit.

Insert a rawlplug into each hole.

Place the hotbox back into position in the fireplace.

Fit a woodscrew through each of the four holes and tighten to seal the hotbox to the fireplace surround.

#### Attach floor seal

Using the floor sealing tape supplied, seal the bottom of the hotbox to the fireplace and hearth floor, run the tape along the edge of the firebox with half of the tape on the hearth floor.

#### Gas supply

The hotbox is provided with three gas supply holes, one each side and a rear supply hole, all are fitted with grommets which should be cut to allow the incoming gas pipe to enter to hotbox. See fig 6.

A nut and olive is provided for an 8mm pipe inlet connection to be made directly to the restrictor elbow. The supply pipe must be rigid material. Flexible pipe must not be used. Replace the burner by locating rear support against lugs and locating burner onto front stud, replace nut, connect the supply line to the appliance.

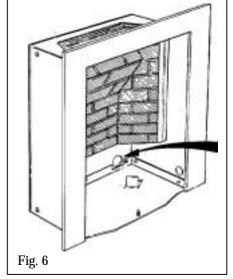
Pressure check the installation pipework for gas soundness in accordance with the current edition of BS6891.

# Preliminary burner checks.

Some burner operations can be checked at this stage. Checking now will mean that less disassembly will be required if any problems are found. A full check should still be made, however, after final installation.

If closed, open the isolating valve fitted to the supply line to the appliance. Rotate

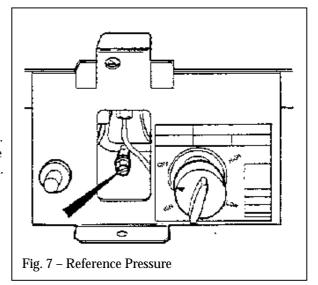
the control to the pilot position and depress. Press the piezo button repeatedly. There may be a delay before the pilot lights due to air being purged from the system.



When the pilot burner is operating properly, gradually turn the control knob anti-likewise to HIGH (Depress the knob slightly to get past the LOW position). The main burner should now light. Depress the control knob slightly to release from the HIGH position and turn back (clockwise) to LOW. While turning, the burner flames should gradually become lower but remain alight. Depress the control knob slightly to release from the LOW position and turn back (clockwise) to IGN. The main burner should extinguish but the pilot should remain alight. Depress the control knob slightly and turn back (clockwise) to turn OFF this will extinguish the pilot.

#### Check reference pressure.

The appliance is pre-set to give the correct heat input at the inlet pressure shown within Appliance data section of this manual. No further adjustment is necessary. The burner pressure should be checked by fitting a pressure gauge at the test point accessible through the aperture in the front leg. ( see fig 7). The pressure should be checked with the appliance alight and the control set at HIGH. After checking the pressure , turn off the appliance. Remove the pressure gauge and replace the test point sealing screw. Re-light the appliance. Turn to HIGH position and test around the sealing screw for gas soundness using a suitable leak detection fluid.

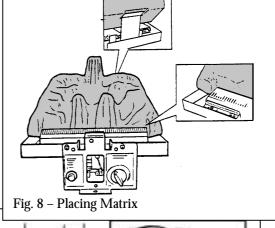


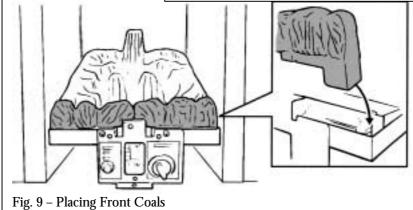
# 5. INSTALLING THE FUEL BED COMPONENTS

#### Placement of the ceramic coal matrix.

Position the bottom rear face of the coal matrix resting on the angled ledge of the coal matrix support plate located towards the back of the burner tray. The bottom front edge of the coal base should locate behind the recess in the burner plaques (See figure 8).

Place the ceramic front coals in position in front of the coal matrix. Make sure that the side legs of the front coals are fully seated into the burner tray. (See figure 9).





Install the 14 loose coals as follows. Place 5 of the coals resting between the front coal and the coal matrix. Please note the coals should bridge across the front coal to the coal matrix not placed in between. (See figure 10).

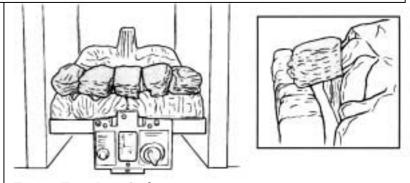
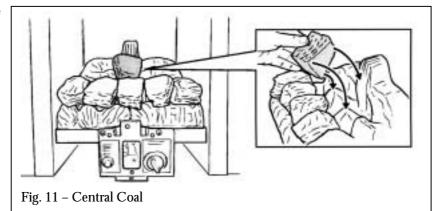
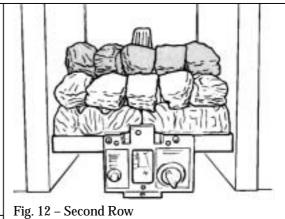


Fig.10 - Front Row Coals

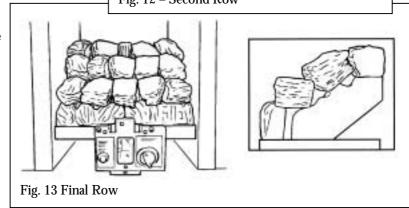
Place a single coal upon the two peaks of the coal matrix directly behind the centre line of the first row of coals. (see figure 11).



Place four further coals, two each side of the centre coal directly behind the front row of coals (see figure 12)



Place the remaining four coals behind the second row of coals , two each side of the centre coal shape formed within the matrix. ( see figure 13 )



# 6. FULL OPERATING CHECKS

#### **Decorative firefront.**

Place the decorative firefront on the hearth and central to the appliance.

# Spillage check.

A spillage check must be made before leaving the installed appliance with the customer. Make this with all the ceramic coals in position. ( see fig 14 )

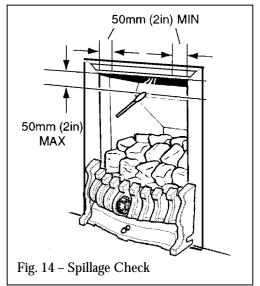
Close all doors and windows in the room containing the appliance. Light the appliance and set the control to the

maximum position. Leave the appliance on for five minutes. See lighting instructions within Installation of Appliance section.

Insert the smoke match at least 50mm away from the side of the fireplace opening and not more than 50mm from the top of the opening.

The installation is satisfactory if the smoke is drawn into the fireplace opening. If the smoke is not drawn into the fireplace opening, leave the appliance alight at the HIGH setting for a further ten minutes and then repeat the test. If smoke is still not drawn into the appliance *Disconnect the appliance and seek expert advice*.

If the above test is satisfactory, open all internal connecting doors, hatches, etc. in the room. Keep all doors and windows that open to the outside of the



building closed. Switch on any extractor fan installed in the same room as the appliance or a connecting room. Open all doors and other openings between the fan and the appliance. Recheck for spillage as above. If the smoke is drawn into the appliance, continue with the installation. If the test is not satisfactory, *Disconnect the appliance and advise the customer of the cause of failure.* 

# Final commissioning

Visually inspect the appliance. Clean off any marks incurred during installation.

Hand these instructions and the user's instructions to the customer.

Advise the customer that they should read their Owner's guide before operating the fire and always follow the advice in the section headed "Cleaning".

Stress that no extra coals must be added over and above those supplied with the appliance and that any replacements must only be the authorised spares. Warn that ignoring this advice could cause incomplete clearance of the products of combustion with consequent health hazards.

Advise the customer how to operate the appliance. Point out that lighting instruction details are contained within the user's instructions.

Explain that this appliance is fitted with a atmosphere sensing device, ODS pilot unit, which will automatically shut off the supply of gas to the fire if, for any reason, the flames go out It will also shut off the gas supply if the flue is blocked or if there is not enough ventilation. If this device does operate or if the fire is turned off accidentally or intentionally, always wait three minutes before attempting to relight.

Advise the customer that the fire front and ceramic pieces can be cleaned as described in the user's instructions and that the coal pieces must be replaced as described in those instructions.

Recommend that the appliance should be serviced and the chimney inspected by a competent person at least annually.

## 7. SERVICING & PARTS REPLACEMENT

- Always turn off the gas supply before commencing any servicing (The inlet elbow for this appliance incorporates an isolating valve).
- This product uses fuel effect pieces, burner compartment walls and gaskets containing Refractory Ceramic Fibres (RCF), which are man-made vitreous silicate fibres. Excessive exposure to these materials may cause temporary irritation to eyes, skin and respiratory tract. Consequently, it makes sense to take care when handling these articles to ensure that the release of dust is kept to a minimum. To ensure that the release of fibres from these RCF articles is kept to a minimum, during installation and servicing we recommend that you use a HEPA filtered vacuum to remove any dust and soot accumulated in and around the fire before and after working on the fire. When replacing these articles we recommend that the replaced items are not broken up, but are sealed within a heavy duty polythene bag, clearly labelled as RCF waste. This is not classified as "hazardous waste" and may be disposed of at a tipping site licensed for the disposal of industrial 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.
- Always turn off the gas supply and allow the appliance to cool down before commencing any servicing or replacement of parts.
- Check that the appliance is clean and that soot or debris is not blocking the gaps between the coals causing an imperfect flame.
- Check that soot or debris is not impairing the electrode spark or pilot burner.
- Check that soot or debris is not blocking any of the slots in the main burner.
- After servicing, make sure that the ceramic components and coals are replaced correctly as described in the installation instructions.
- Always test for gas soundness and spillage after servicing the appliance.

#### TO REMOVE THE BURNER UNIT

- Remove the firefront and place in a safe position..
- Remove the 14 loose coals, the front coals and the coal matrix.
- Isolate the appliance from the gas supply and disconnect from the inlet connection.
- Remove the nut securing the burner to the hotbox at the centre of the front leg.
- Replace in the reverse order.

#### TO REMOVE THE HOTBOX

- Remove the burner unit see above.
- If retained by tension cables, release the tension cables by slackening off the screws and removing the adjuster.
- If retained by screws, remove the four screws from the front face flanges.
- Remove the hotbox by pulling away from the fireplace wall being careful to maneuver the gas pipe through the gas supply hole.
- Refit in reverse order.

#### TO REMOVE THE ODS PILOT UNIT

- Remove the burner unit See above.
- Detach the electrode lead from the underside of the electrode tab.
- Disconnect the pilot pipe from the pilot unit.
- Remove the tap retaining nut from the front leg.
- Remove two screws securing the front support to the burner tray.
- Withdraw the front support and ODS pilot assembly from the tray.
- Remove two screws securing the pilot support bracket to the front support.
- Remove the screw securing the dust cage to the pilot unit. Carefully remove the dust cage and place aside.
- Remove the screw securing the pilot unit to the burner. Remove the pilot unit and place it aside.
- Refit in the reverse order.

Once removed, ensure that the dust cage is cleaned before refitting. Make sure that it locates squarely onto the pilot unit without any gaps between the cage edges and the pilot unit.

#### TO REMOVE THE GAS TAP / FSD.

- Remove the burner unit See above.
- Detach thermocouple from the gas tap end.
- Undo inlet pipe nut from gas tap.
- Unscrew the pipe support clamp and place the pipe, clamp and screw aside.
- Remove the main burner supply pipe from the gas tap.
- Remove the pilot burner supply pipe from the gas tap.
- Remove the control knob.
- Detach the tap retaining nut from the front leg and remove the tap/fsd.
- Refit in the reverse order.

## TO REMOVE THE MAIN BURNER INJECTOR

- Remove the burner unit See above.
- Disconnect the main burner pipe from the injector at the venturi end. If necessary, loosen the pipe at the gas tap/fsd end to swing the pipe clear of the injector.
- Unscrew the injector from the rear support bracket.
- Refit in the reverse order.

# TO REPLACE BURNER PLAQUES

- Remove the 14 loose coals, the front coals and the coal. matrix. The plaques can be then be removed as follows.
- Remove the plaque clamping strips by detaching 8 screws.
- Remove the plaques, centre gasket and bottom gasket.
- Fit a new bottom gasket.
- Place the new left hand plaque in position. The left side of the plaque must touch the inside edge of the retaining flange at the left side of the burner well. *It is important that the plaque is accurately positioned so that it has the correct relationship to the pilot See figure 15*
- Fit the rear clamping strip over the left hand plaque and partially tighten with two screws.
- Fit the front clamping strip over the left hand plaque and partially tighten with two screws.
- Fully tighten the rear clamping strip then fully tighten the front strip
- strip.Place the new right hand plaque in position. Fit a new centre gasket

between the plagues. Push the plague and gasket firmly to the left

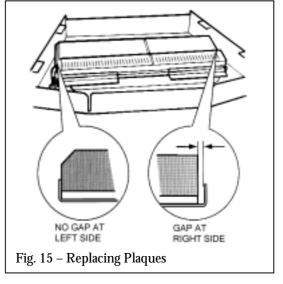
squeezing the gasket between the two plaques. There should be a gap between the right side of the plaque and the edge of the retaining flange at the right side of the burner well.



- Fit the front clamping strip over the right hand plaque and partially tighten with two screws.
- Fully tighten the rear clamping strip then fully tighten the front strip.
- Refit the coals as described in the installation instructions.

#### TO REMOVE THE PIEZO UNIT.

- Remove the HT lead from the rear of the piezo unit.
- Remove the piezo retaining nut from behind the front leg.
- Replace in reverse order.



# **SHORT LIST OF SPARES**

DESCRIPTION	NO. OFF	MAKER'S PART NO.
Pilot unit	1	563309
Burner injector	1	518759
Piezo unit	1	554909
Burner plaque & gasket set	1	541119
Coal matrix	1	541249
Front coal RH	1	563339
Front coal LH	1	563329
Pack of loose coals	1	563349
Dust cage	1	567619
Hotbox trim	1	9820038

## Safety First.

Valor fires are CE Approved and designed to meet the appropriate British Standards and Safety Marks.



# Quality and Excellence. At the heart of every Valor fire.

All Valor fires are manufactured to the highest standards of quality and excellence and are manufactured under a BS EN ISO 9001 quality system accepted by the British Standards Institute.



# The Highest Standards

Valor is a member of the Society of British Gas Industries which works to ensure high standards of safety, quality and performance.





#### **Careful Installation**

Valor is a Corgi registered company. All our gas fires must be installed by a competent Corgi Registered Installer in accordance with our Installer Guide and should not be fitted directly on to a carpet or floor of combustible material.



Valor Heating, Erdington, Birmingham B24 9QP

Because our policy is one of constant development and improvement, details may vary slightly from those given in this publication

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