

Chamber box

Model 037

For use with Model 639 Decorative Fuel Effect Gas Fire Only

We trust that these instructions give sufficient details to enable this chamber box to be installed and maintained satisfactorily. However, if further information is required, our Wonderfire **Technical Helpline** will be pleased to help.

Please telephone 08706 061 065

INSTALLER: Please leave this guide with the owner

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1. SAFETY

Installer

- Before continuing any further with the installation of this appliance please read the following guide to manual handling
- The lifting weight of this chamber box is 13 kg. One person should be sufficient to lift the chamber box. If for any reason this weight is considered too heavy then obtain assistance.
- When lifting always keep your back straight. Bend your legs and not your back.
- Avoid twisting at the waist. It is better to reposition your feet.
- Avoid upper body/top heavy bending. Do not lean forward or sideways whilst handling the chamber box.
- Always grip with the palm of the hand. Do not use the tips of fingers for support.
- Always keep the chamber box as close to the body as possible. This will minimise the cantilever action.
- Use gloves to provide additional grip.
- Always use assistance if required.

2. LIST OF CONTENTS

Quantity	Description
1	Chamber box
1	Accessory Pack
1	Trim Assembly
1	Self Adhesive smoke match test label.

Carefully remove the contents. Check that all the listed parts are present and in good condition.

3. GENERAL INSTALLATION REQUIREMENTS

As supplied the chamber box when fitted with the 639 gas fire can be installed as below: -

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

Suitable flues and minimum flue sizes are as follows: -

225mm x 225mm conventional brick flue.

175mm diameter lined brick or stone flue.

200mm diameter factory made insulated flue manufactured to BS4543.

175mm diameter flue pipe. See BS6461 Part 1 for suitable materials.

- **3.1.1** The minimum effective height of the flue must be 3m.
- 3.1.2 The flue must not be used for any other appliance or application.
- **3.1.3** Any chimney damper or restrictor should be removed. If removal is not possible, they must be secured in the open position.
- **3.1.4** If the appliance is intended to be installed to a chimney that 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.
- 3.1.5 The appliance must be mounted behind a non-combustible hearth (N.B. conglomerate marble hearths are considered as non-combustible). The appliance can be fitted to a minimum class "O" -100°C surround. 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 figure 1)

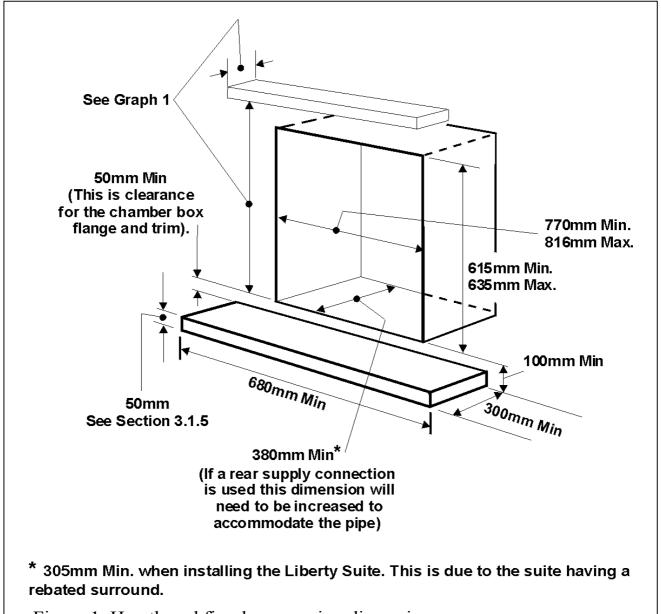


Figure 1. Hearth and fireplace opening dimensions

- **3.1.6** The surface of the hearth must be sufficiently flat to enable the bottom of the decorative trim to be aligned horizontally. Any excessive unevenness (uneven tiles, Cotswold stone, etc.) should be rectified where necessary.
- 3.1.7 Combustible and non combustible side projections or walls can be located within 10mm from the edge of the decorative trim. This 10mm is to allow for access during servicing.

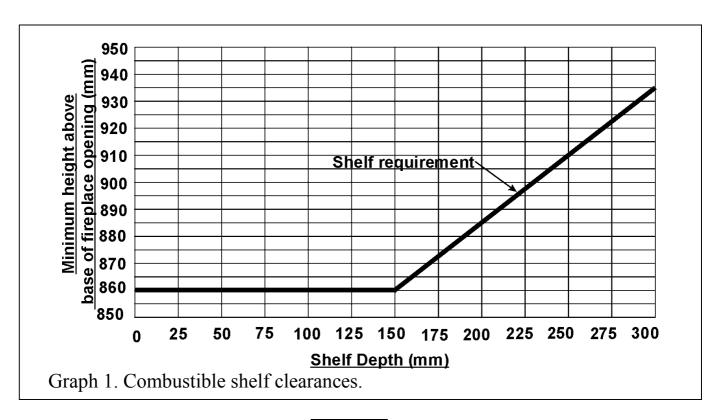
The surround that is part of the Liberty suite has been designed and tested for use with chamber box.

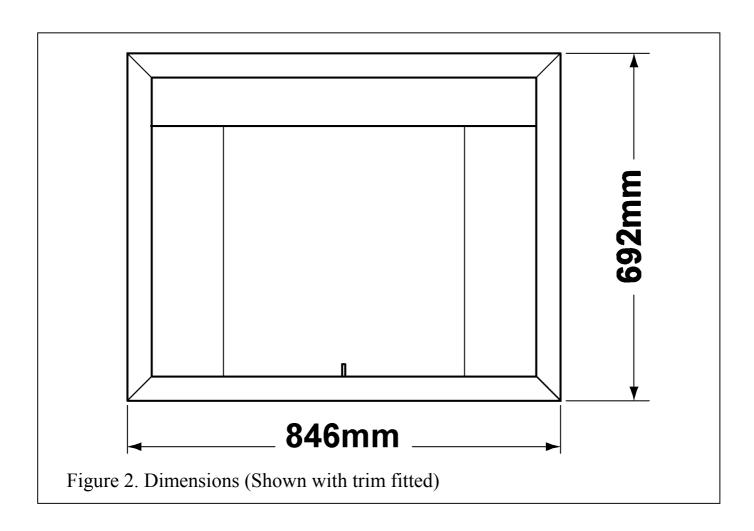
- 3.1.8 'Hole-in-the-wall' Installations
 - It is recommended that a hearth should be installed as in figure 1.
 - If a Hearth is not fitted, the fire must be installed so that the distance from the base of the fireplace opening in the wall to the finished floor level is 85mm minimum.
 - The Liberty suite has been designed to meet the Hearth / Plinth requirements as in figure 1.
- **3.1.9** If the Fireplace opening is greater than the acceptable dimensions given in this guide, do not use the back of a fire surround or marble to reduce the opening. This may cause cracking of the surround back or marble
- 3.1.10 The flue box must not stand on combustible materials or carpets.

The minimum height from the base 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 = 860mm.
- For a shelf deeper than 150mm 860mm + 12.5mm for every 25mm depth over 150mm (See Graph 1).

The surround which is part of the Liberty suite has been designed and tested for use with chamber box.





4. INSTALLATION OF CHAMBER BOX

INSTALLATION

4.1 Fireplace size

The fireplace must comply with the requirements described in section 3.

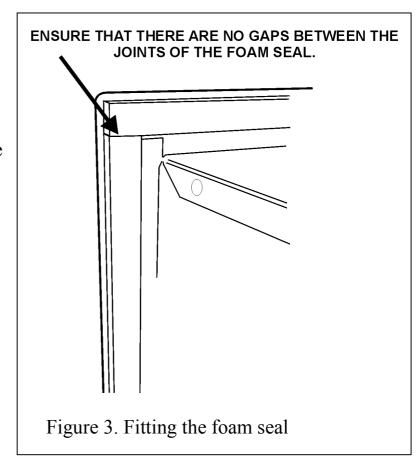
4.2 <u>Fireplace flue pull</u>.

Visually inspect the flue for any obstruction, and that a smooth transition from the fireplace opening into the flue is available. Close all doors and windows in the room in which the appliance is to be installed. After confirming with a match that smoke is drawn into the flue, light a 13 gram smoke pellet and check that there is a definite flow through the flue. Verify outside that the smoke exits from one terminal only and that the termination is suitable. Observe, where possible, upstairs rooms and loft spaces for signs of escaping smoke indicating a defective flue. If there is not a definite flow warm the flue for a few minutes and repeat the smoke pellet test. If there is still no definite flow the flue may need remedial work – **Do not fit the appliance until there is a definite flow through the flue.**

- 1. Remove the paper backing from the self-adhesive smoke match test label. Place this carefully over the smoke match test label on the data plate attached to the model 639 gas fire.
- 2. There is a length of self adhesive foam seal supplied with the chamber box. This will need to be fitted to the outer rear edges of the side and top flanges of the chamber box. Ensure that there is no gap between the foam seals where they meet at the top and bottom flange (See figure 3)

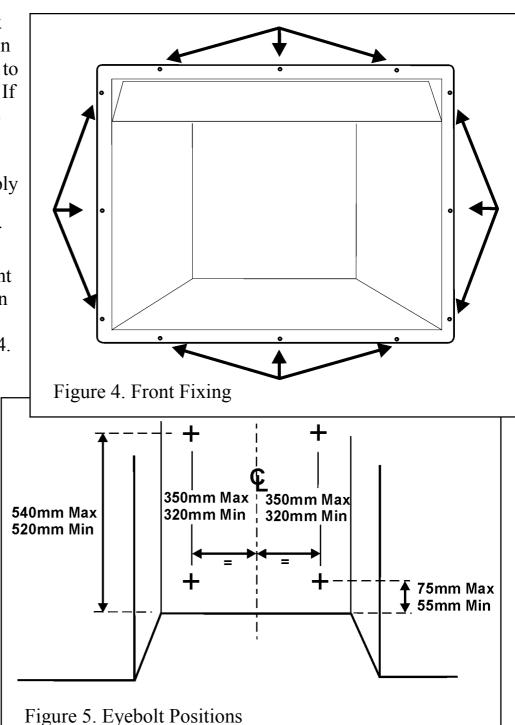
Method 1 - Front Fixing to Fireplace.

1. Make sure that the fireplace front area is sound enough to take the rawlplugs and woodscrews. If necessary, make sound with a suitable cement.



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- 2. Place the chamber box centrally in the fireplace in the position in which it is to be permanently installed. If a concealed connection is being used, insert the chamber box into the fireplace feeding the supply pipe through the pierced hole in the rear seal/ floor seal.
- 3. Mark the fireplace front through the fixing holes in the outer flanges of the chamber box. See figure 4.
- 4. Remove the chamber box. Drill holes in the fireplace front at the marked positions using a no.12 masonry drill.
- **5.** Insert a rawlplug into each hole.
- **6.** Place the chamber box back in position in the fireplace.
- 7. Fit a woodscrew through each required hole in the chamber box flange and tighten to seal the box to the fireplace surround.



Method 2 - Cable Retention.

- 1. Make sure that the relevant areas at the fireplace back are sound enough to take the eyebolts. If these areas have deteriorated due to prolonged use they should be made sound with a suitable cement.
- 2. Drill four holes in the rear wall of the fireplace for the eyebolt plugs. The holes should be drilled within the range of positions shown in figure 5 using a no.12 masonry drill. The holes should be equidistant each side of the centre line of the fireplace to ensure that the appliance finishes centrally in the opening when tension is applied to the cables.

- 3. Insert a fibre plug into each hole. Use the fibre plugs supplied with this appliance - Never use plastic plugs instead of the fibre plugs supplied. Screw the eyebolts into the plugs. Make sure that the bolts are secure.
- 4. The chamber box has two small holes located on the bottom of the side flanges. Insert one end of each cable (one cable each side) from the back through the lower of the two holes and return the end through the upper of the holes. See figure
- 6. Give the cables a pull so that they grip against the chamber box flanges.
- 5. Thread the cables through the eyebolts. Bottom first, then top. Return the cables through the slotted holes near the top of the chamber box side panel, and through the "V" shaped brackets on the inside of the chamber box - See figure 7.
- 6. Place the chamber box fully back into the fireplace opening

Figure 6. Lower Cable Retention

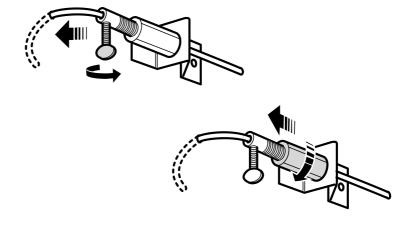


Figure 7. Lower Cable Retention

- so that it is sealed against the fireplace front.
- 7. Fit a cable retainer over the end of each cable.
- 8. Pull each cable taut. Push the cable retainers hard up against the "V" brackets. Tighten the screws in the retainers so that they clamp the cables in position. Apply tension to the cables by turning the hexagonal adjusters by hand. See figure 7.
- 9. Inspect the installation of the chamber box against the fireplace. If the chamber box is aligned squarely and the sealing is satisfactory, fully tighten the cable retainers.
- 10. If the chamber box is not correctly aligned, release the tension on the cables by slackening the screws and turning the hexagonal adjusters fully anticlockwise. The chamber box should then automatically realign itself. Pull each cable taut again and push the cable retainers back against the "V" brackets. Again, tighten the screws in the retainers and apply tension to the cables by turning the hexagonal adjusters clockwise as far as possible.

11. In front of the 'V' shaped brackets is a hole. Feed the free length of the cables into these holes so that they are available to allow easy removal and refitting of the appliance during subsequent service calls (See figure 7). Do not cut off the free lengths of cable

5. INSTALLING THE BURNER.

The burner position is pre set.

Under no circumstances must the burner position be altered from that shown in this section of the Installer's guide.

1 Remove the bracket that is attached to the rear of the front leg on the burner. There are two holes in this bracket. Locate these holes over the two threaded studs in the base of the chamber box. Secure the bracket in place using the nuts supplied. (See figure 8).

2 Position the burner and casting so that the burner assembly locates against the bracket. The fuel bed support plate

on the rear of the burner must touch the rear inner edge of the casting. (See figure 9).

- 3 Secure the burner position by replacing the screw previously removed from the front of the burner bracket.
- 4 Continue the installation of the supply pipe and ceramic fuel bed as in the installer's guide for the Model 639 Gas Fire.

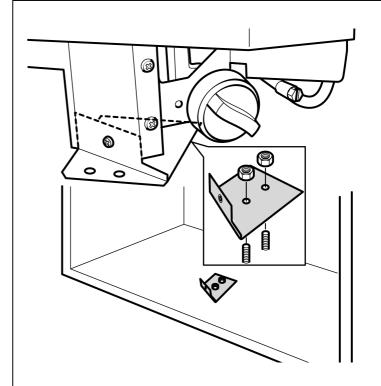


Figure 8. Locating the burner

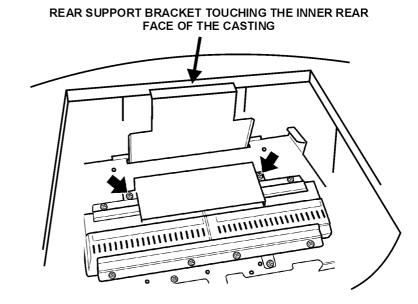
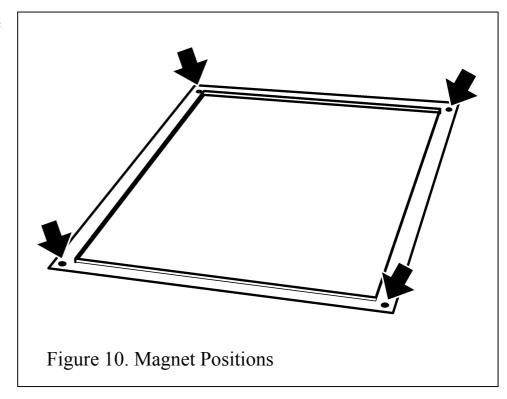


Figure 9. Locating burner into the Liberty Casting

6. FITTING THE DECORATIVE TRIM

The decorative trim is a one piece trim. It is secured using four magnets. Position the magnets as in figure 10. To fit the trim, hold the sides of the trim and locate to the chamber box flanges.



7. CHECK FOR SPILLAGE

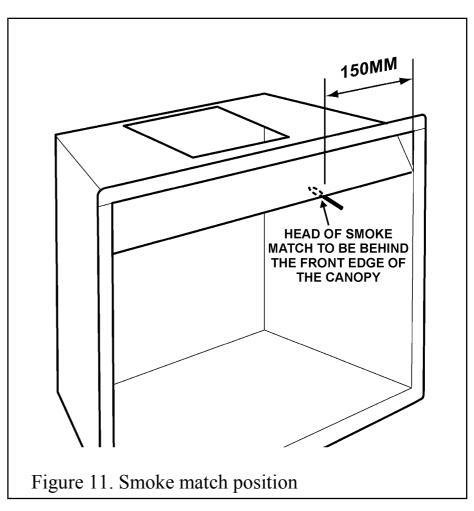
A spillage check must be made before leaving the installed appliance with the customer. Make this with all the Ceramic fuel effect in position

- 1. Close all doors and windows in the room containing the chamber box.
- 2. Light the appliance and set the control to the 'High' position.
- 3. Leave the appliance on for five minutes.
- 4. The smoke match should be placed horizontally into the chamber box at the right hand side. (See figure 11).

The installation is satisfactory if the smoke is drawn into the appliance.

If the smoke is not drawn into the appliance leave the appliance alight at the maximum setting for a further ten minutes and then repeat the test. If the smoke is still not drawn into the appliance inspect the sealing to the fireplace surround. Reseal the appliance and retest. If smoke is still not drawn into the appliance **disconnect the appliance and seek expert advice.**

5. 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. Recheck for spillage as above. If an extractor fan is installed in the same room as the appliance or a connecting room, check that spillage does not occur with the fan operating and all doors and other openings between the fan and the appliance open. 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.



6. Advice the customer that the guarding requirements as shown in the owner's guide of the model 639 gas fire also applies to this installation.