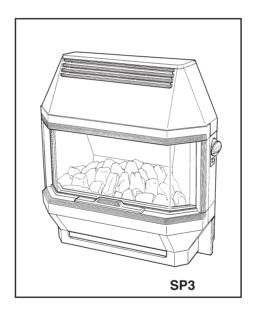
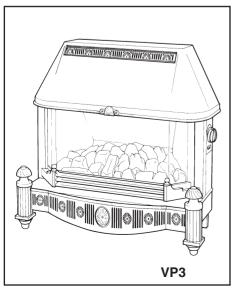
Baxi Bermuda SP3/VP3

Fireside Gas Central Heating Unit

Installation and Servicing Instructions







Natural Gas

Baxi Bermuda SP3 G.C.No. 37 077 63

Baxi Bermuda VP3 G.C.No. 37 077 62

For use with the following boilers:

Baxi Bermuda 45/4 M G.C.No. 44 077 71 Baxi Bermuda 45/4 E G.C.No. 44 077 73 Baxi Bermuda 57/4 M G.C.No. 44 077 72 Baxi Bermuda 57/4 E G.C.No. 44 077 74 Baxi Bermuda 51/5 G.C.No. 44 075 06

Propane Gas

Baxi Bermuda VP3 Propane G.C.No. 37 077 72

For use with the following boiler:

Baxi Bermuda 553 Propane G.C.No. 44 077 75

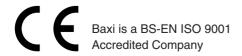
Baxi is one of the leading manufacturers of domestic heating products in the UK.

Our first priority is to give a high quality service to our customers. Quality is built into every Baxi product - products which fulfil the demands and needs of customers, offering choice, efficiency and reliability.

To keep ahead of changing trends, we have made a commitment to develop new ideas using the latest technology - with the aim of continuing to make the products that customers want to buy.

Baxi is also the largest manufacturing partnership in the country. Everyone who works at the company has a commitment to quality because, as shareholders, we know that satisfied customers mean continued success.

We hope you get a satisfactory service from Baxi. If not, please let us know.



Renewal

Baxi Bermuda SP3 Renewal G.C.No. 37 075 05A

Baxi Bermuda VP3 Renewal G.C.No. 37 075 04A

For use with the following boilers:

Baxi Bermuda 401 G.C.No. 44 077 49 Baxi Bermuda 552 G.C.No. 44 077 50 Baxi Bermuda 45/3 M G C No. 44 077 61 Baxi Bermuda 45/3 E G.C.No. 44 077 60 Baxi Bermuda 57/3 M G.C.No. 44 077 63 Baxi Bermuda 57/3 E G.C.No. 44 077 62 Baxi Bermuda 45/4 M G.C.No. 44 077 71 Baxi Bermuda 45/4 E G.C.No. 44 077 73 Baxi Bermuda 57/4 M G.C.No. 44 077 72 Baxi Bermuda 57/4 E G.C.No. 44 077 74 Baxi Bermuda 51/5 G.C.No. 44 075 06

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Supplementary Kit Instructions Existing Fire Boiler Adaptation

Codes of Practice, most recent version should be used

In GB the following Codes of Practice apply:

Standard Scope BS 6891 Gas Installation.

BS 5546 Installation of hot water supplies for

domestic purposes

BS 5871 Installation of gas fires, convectors and

fire/back boilers.

BS 5440 Part 1 Flues

BS 5440 Part 2 Ventilation.

BS 6798 Installation of gas fired hot water boilers. BS 5449 Part 1 Forced circulation hot water systems.

In IE the following Codes of Practice apply:

Standard

Scope
Domestic Gas Installations. LS 813

The following BS standards give valuable additional information; BS 5546

Installation of hot water supplies for domestic purposes

BS 5449 Part 1 Forced circulation hot water systems.

IMPORTANT - The addition of anything that may interfere with the normal operation of the appliance without express written permission from the manufacturer or his agent could invalidate the appliance warranty. In GB this could also infringe the Gas SAFETY (Installation and Use) REGULATIONS.

IMPORTANT - Installation, Commissioning, Service & Repair

This appliance must be installed in accordance with the manufacturer's instructions and the regulations in force. Read the instructions fully before installing or using the appliance.

In GB, this must be carried out by a competent person as stated in the Gas Safety (Installation & Use) Regulations.

Definition of competence: A person who works for a CORGI registered company and holding current certificates in the relevant ACS modules, or valid ACoP equivalents, is deemed competent.

In IE, this must be carried out by a competent person as stated in I.S. 813 "Domestic Gas Installations".

Information

Safe Installation

The appliance is suitable only for installation in GB and IE and should be installed in accordance with the rules in force.

In GB, the installation must be carried out by a CORGI Registered Installer. It must be carried out in accordance with the relevant requirements of the:

- Gas Safety (Installation & Use) Regulations.
- The appropriate Building Regulations either The Building Regulations, The Building Regulations (Scotland), Building Regulations (Northern Ireland).
- The Water Fittings Regulations or Water Byelaws in Scotland.
- The Current I.E.E. Wiring Regulations.

Where no specific instructions are given, reference should be made to the relevant British Standard Code of Practice.

In IE, the installation must be carried out by a competent Person and installed in accordance with the current edition of I.S. 813 'Domestic Gas Installations', the current Building Regulations and reference should be made to the current ETCI rules for electrical installation.

These Instructions must be read in conjunction with those for the Boiler Section before installing or using this appliance.

INTRODUCTION

Baxi Bermuda VP3 G.C.N° 37 077 62

Description

The Baxi Bermuda VP3 and Baxi Bermuda SP3 are combined gas fired central heating boiler and gas fire units, designed for installation in a living room. These boilers and fires are designed to be used on Natural Gas (For propane see page 35).

The heat input of both fires at their maximum setting is 5.74kW (19,600 Btu/h) with an output of 3.52kW (12,000 Btu/h). Electronic ignition is provided to light the main burner. The fires are controlled by a control knob positioned on the right hand side of the case.

This control knob has six positions giving a choice of five output settings.

Position - OFF

Position * - IGNITION/PILOT

Position 1 - LOW

Position 2 - MEDIUM

Position 3 - MEDIUM/HIGH

Position 4 - HIGH

The artificial coal bed may be illuminated by concealed bulbs as and when required. The light effect is operated by a switch situated below the control knob. It may be used whether the fires are ON or OFF.

Important Information

This product contains Refractory Ceramic Fibres (R.C.F.) which are man-made vitreous silicate fibres. Excessive exposure to these materials may cause temporary irritation to eyes, skin and respiratory tract. Care must be taken when handling these articles to ensure the release of dust or fibres is kept to a minimum. To ensure that the release of fibres from these articles is kept to a minimum, during installation and servicing it is recommended that a H.E.P.A. filtered vacuum is used to remove any dust, soot or other debris accumulated in and around the appliance. This should be

performed before and after working on the installation. It is recommended that any replaced item(s) are not broken up but sealed within heavy duty polythene bags and clearly labelled "R.C.F. 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 it is recommended that gloves are worn and the normal hygiene rules of not smoking, eating or drinking in the work area are followed and always wash hands before eating or drinking.

G.C.N° 37 077 63

Baxi Bermuda SP3

- NOTICE

DISCOLOURATION OF WALL SURFACES

Most heating appliances generate warm air convection currents and transfer heat to any wall surface against which they are situated.

Some soft furnishings (such as blown vinyl wallpapers) may not be suitable for use where they are subject to temperatures above normal room levels and the manufacturer's advice should be sought before using this type of wall covering adjacent to any heating appliance.

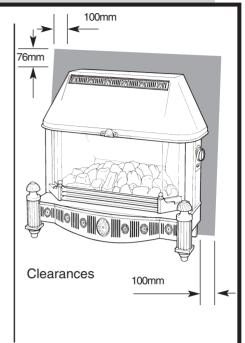
The likelihood of wall staining from convected air currents will be increased in environments where high levels of cigarette smoke or other contaminants exist.

TECHNICAL DATA

Bermuda VP3 (Natural Gas)

Heat Input (Gross)	High	Med-High
kW	5.74	4.95
Btu/h	19,600	16,900
Heat Input (Gross)	Med	Low
kW	3.43	2.07
Btu/h	11,700	7,100
Heat Output	High	
kW	3.52	
Btu/h	12,000	
Setting Pressure	Cold	
	12.8 ± 0	.5
mbar		
mbar in wg	5.12 ± 0	.2
	5.12 ± 0 9.4 - 13r	

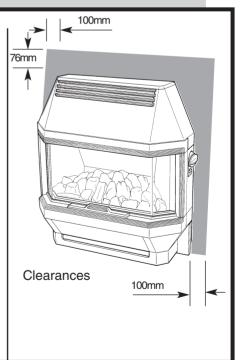
Gas Connection The gas supply is provided from the service cock on the boiler unit. Electricity Supply 230V~50Hz 3A 120W External fuse - 3A **Controls** Rotary gas tap with Atmospheric sensing device. Electronic ignition. **Gas Rate** 0.57m³/h (after 10 mins) (20.19ft³/h) **Lifting Weight** 27.5 kg (60.6 lbs) Outercase 689mm Height **Dimensions** Width 703mm Depth 337mm **Pilot Assembly** 9401 Heat Input (Gross) 210W (715 Btu/h)



Bermuda SP3 (Natural Gas)

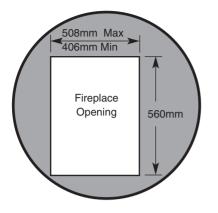
Heat Input (Gross)	High	Med-High
kW	5.74	4.95
Btu/h	19,600	16,900
Heat Input (Gross)	Med	Low
kW	3.43	2.07
Btu/h	11,700	7,100
Heat Output	High	1
kW	3.52	
Btu/h	12,00	0
Setting Pressure	Cold	
mbar	12.8 ± 0	.5
in wg	5.12 ± 0	.2
Thermocouple Output	9.4 - 13r	mV
Injector	Fo2	

Gas Connection The gas supply is provided from the service cock on the boiler unit. Electricity Supply 230V~50Hz 3A 120W External fuse - 3A Controls Rotary gas tap with Atmospheric sensing device. Electronic ignition. Gas Rate 0.57m³/h (after 10 mins) (20.19ft³/h) Lifting Weight 27.5 kg (60.6 lbs) Outercase Height 689mm **Dimensions** Width 680mm Depth 323mm **Pilot Assembly** 9401 Heat Input (Gross) 210W (715 Btu/h)



FOR PROPANE TECHNICAL DATA SEE PAGE 35.

SITE REQUIREMENTS



Fireplace Opening

The principal site requirements are determined by the boiler unit, but the following details are essential for the correct installation of the fire unit:

Fireplace Opening: Height: 560mm (22in)

Width: 406mm (16in) min 508mm (20in) max

NOTE: Where possible the fireplace opening should be made to the maximum width i.e. 508mm (20in). The wall behind the fire must be noncombustible.

If a fire surround is to be used, it must have a minimum rating of 100°C. Any gaps between the wall and the surround must be sealed. The surround or wall must have a flat vertical surface, centrally fixed about the opening measuring a minimum of 765mm (301/8in) high by 765mm (301/8in) wide.

VENTILATION

Ventilation air supply should be in accordance with the relevant standards. In GB this is BS 5440 Pt. 2. In IE this is I.S. 813 "Domestic Gas Installations". The permanent ventilation area size requirements are:-

765mm

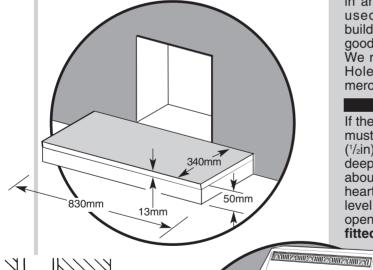
68.54cm² (10.62in²) 89.15cm² (13.82in²) 75.63cm² (11.72in²) SP3/VP3 & 45/4 SP3/VP3 & 57/4 SP3/VP3 & 51/5

The permanent vent may be directly into the room containing the appliance. The vent may also be sited in another room provided an interconnecting vent is used. The vent must not be installed inside the builders opening. The vent should be sited following good practice for a habitable room.

We recommend the use of the Stadium BM720 'Black Hole' ventilator which is available from your local merchant.



If the fire unit is to be hearth mounted then the hearth must be of a non-combustible material at least 13mm (1/2in) thick and measuring at least 340mm (133/8in) deep by 830mm (323/4in) wide and fitted centrally about the fireplace opening. The top surface of the hearth should be a minimum of 50mm (2in) above floor level and must be level with the base of the builders opening. On no account should the fire unit be fitted directly onto a combustible floor or carpet.



125mm Max 100mm Min

0,0

765mm

125mm Max

100mm Min

WALL FIXING

NOTE: Whilst the Bermuda VP3 is intended to be hearth mounted, it may also be fixed to a wall.

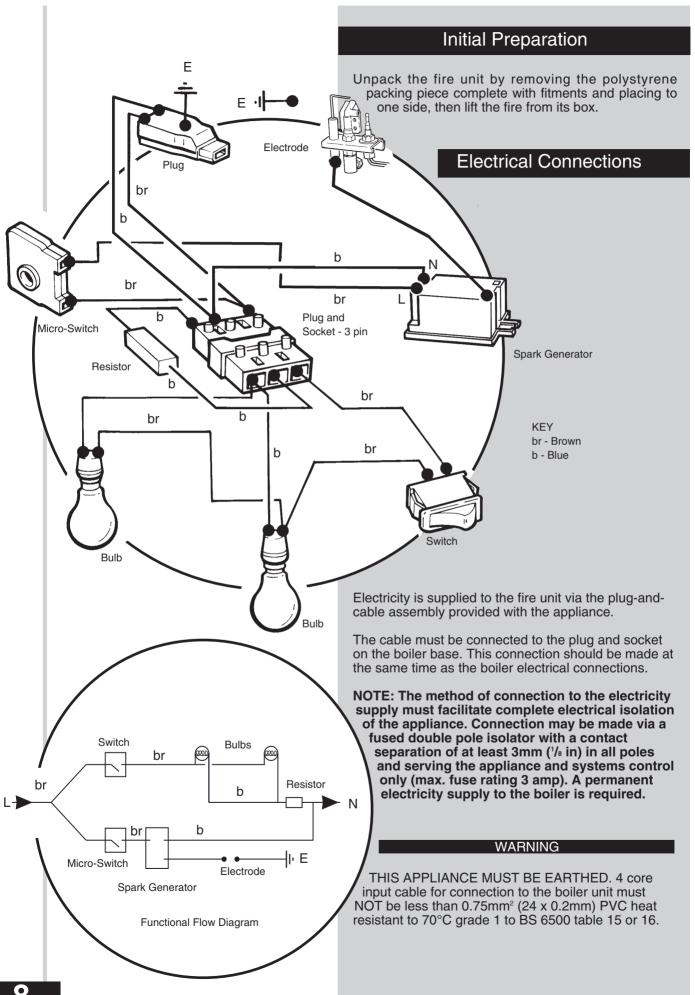
76mm

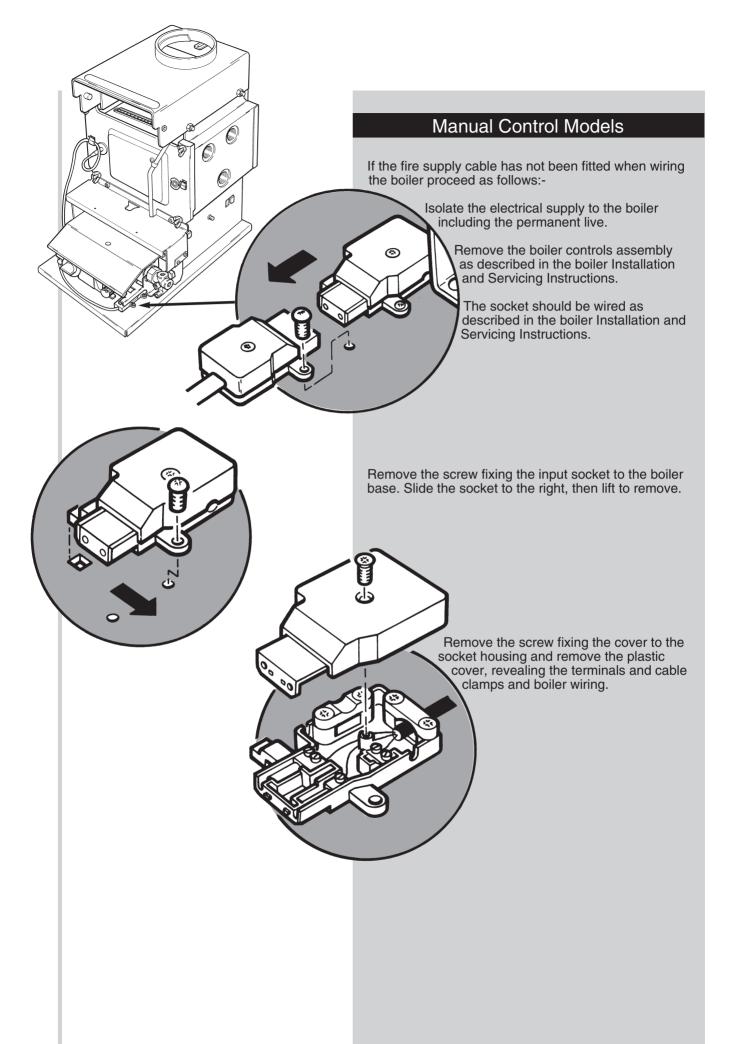
229mm

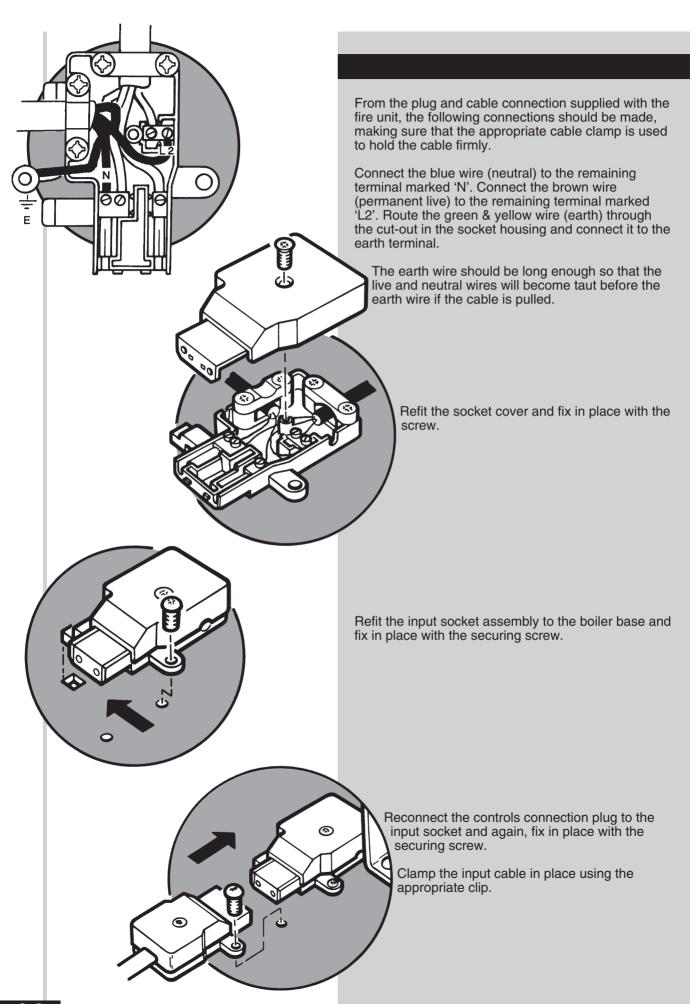
If the fire unit is to be fixed to the wall then it is strongly recommended that the fireplace opening is made to the maximum width i.e. 508mm (20in).

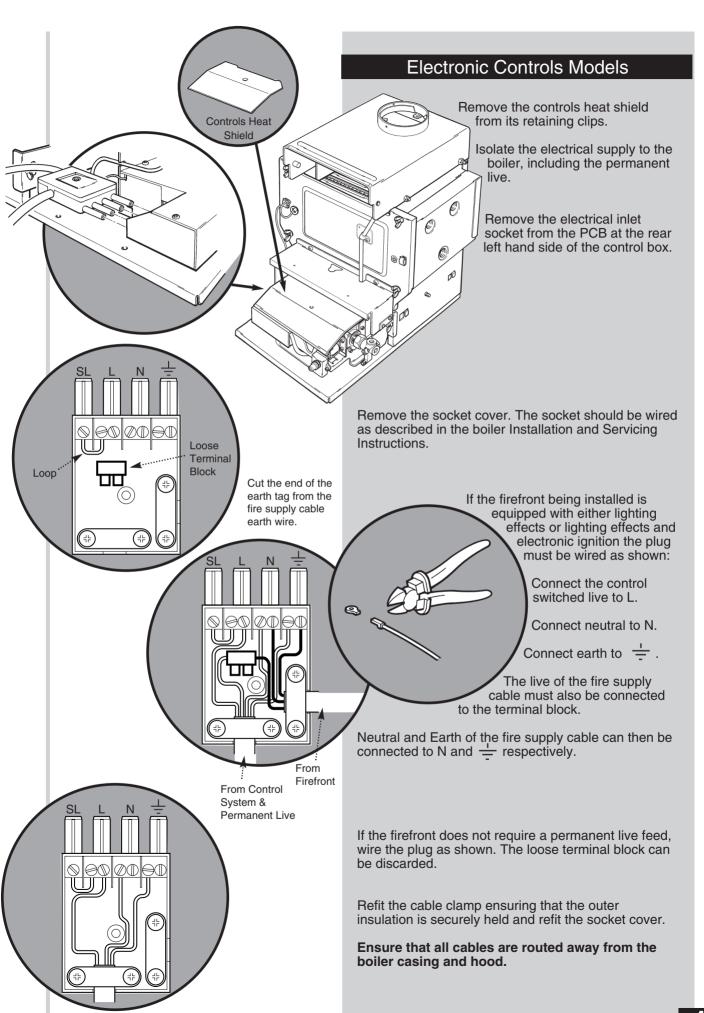
> A shelf may be fitted above the fire unit provided that it is not fire canopy and not more than 229mm (9in) in depth. The area between the shelf and the top of

INSTALLATION









3 Pin Electrical 4 Pin Electrical Inlet Socket Firefront From Control System & Permanent Live

Electronic Controls Model (51/5 only)

Remove the controls heat shield from its retaining clips.

Isolate the electrical supply to the boiler, including the permanent live.

Remove the electrical inlet socket from the PCB at the rear left hand side of the control box.

Remove the socket cover. The socket should be wired as described in the boiler Installation and Servicing Instructions. The boiler plug is supplied as shown: An earth lead connects to the boiler chassis.

If the firefront being installed is equipped with either lighting effects or lighting effects and electronic ignition the plug must be wired as shown:

Connect the control switched live to SL.

Connect neutral to N.

Connect earth to $\frac{1}{2}$.

Connect the permanent live to L.

The fire earth must connect to the chassis.

Neutral and Live of the fire supply cable can then be connected to N and L respectively.

If the firefront does not require a permanent live feed, wire the plug as shown. The loose terminal block can be discarded.

Refit the cable clamp ensuring that the outer insulation is securely held and refit the socket cover.

Ensure that all cables are routed away from the boiler casing and hood.

Gas Supply

The gas installation should be in accordance with relevant standards. In GB this is BS 6891. In IE this is I.S. 813 "Domestic Gas Installations".

The gas supply to the fire unit is provided from the gas service cock on the boiler using the supply pipe supplied with the unit.

The pipe has one flared end (for connection to the fire) and a plain end (for connection to the gas service cock by a nut and olive).

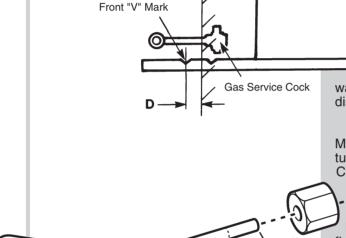
It may be necessary to shorten the supply pipe depending upon the position of the boiler unit relative to the face of the wall or surround. If this is the case, then follow the following procedure, taking care to cut the supply pipe to the correct length.

Measure the distance from the centre of the front 'V' mark on the boiler base tray to the face of the wall or surround. Let this distance be known as distance 'D'.

Mark off distance 'D' from the plain end of the supply tube, cut and dispose of the unwanted piece of tube. Care must be taken to ensure that the cut is square and that the pipe is free from burrs and swarf.

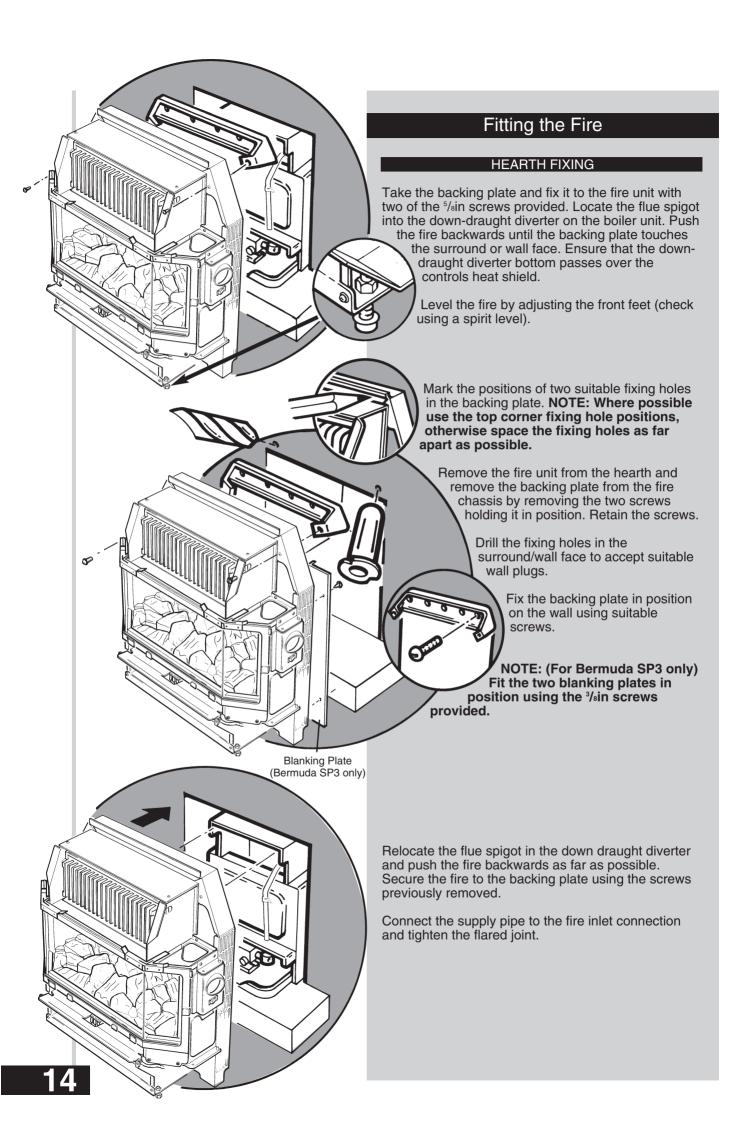
(An alternative method of determining the length of the supply pipe is to hold the plain end flush with the face of the wall or surround and mark the pipe at the position of the front V notch on the boiler base tray).

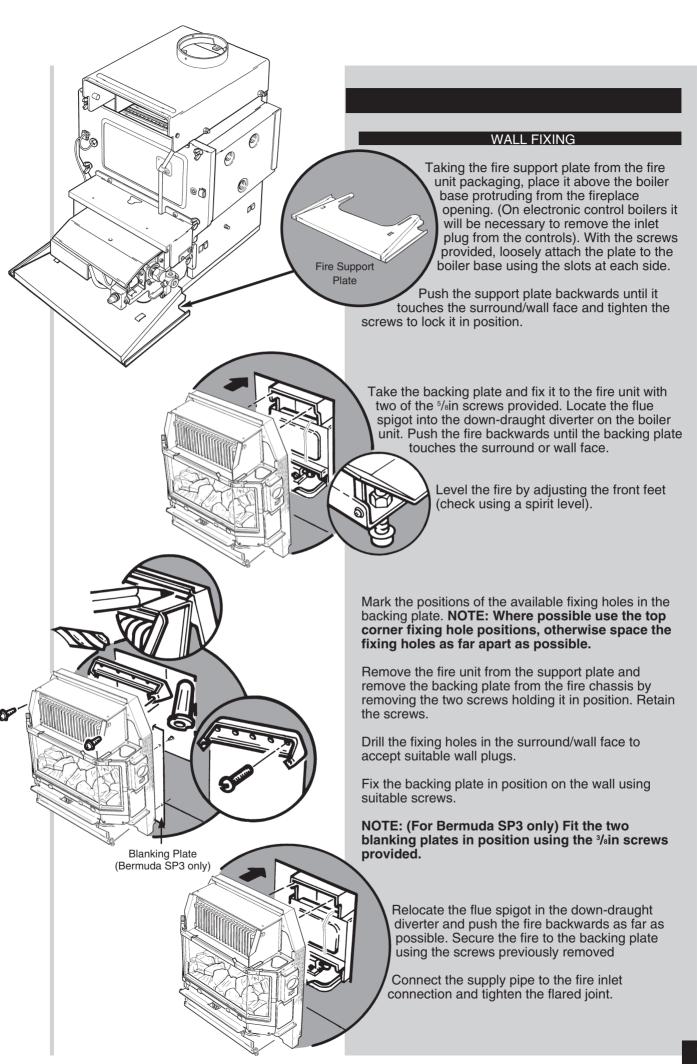
Thread the steel flare nut over the supply pipe, then fix the plain end to the gas service cock on the boiler using the nut and olive. Ensure that the flared end of the pipe faces to the right and is parallel with the hearth or floor, then fully tighten.



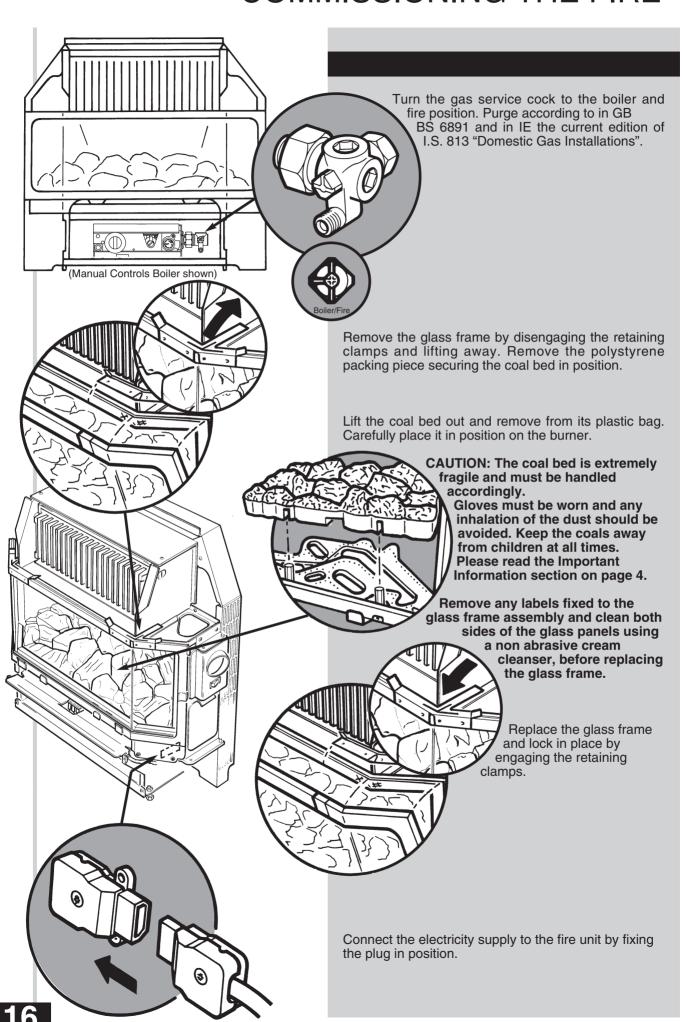
Surround Face or

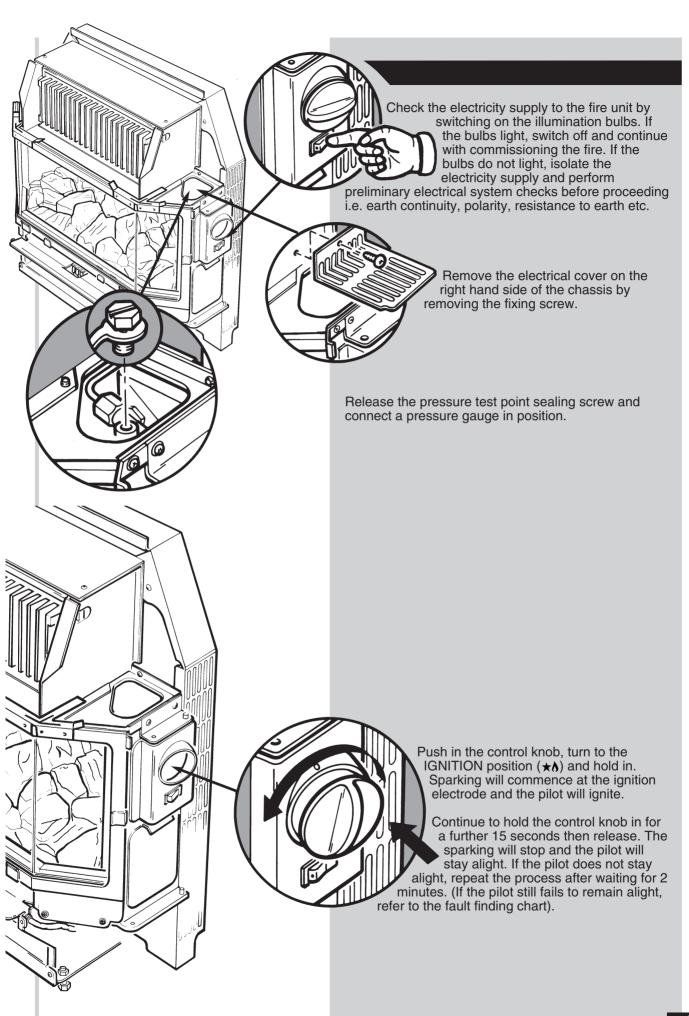
Finished Wall Face

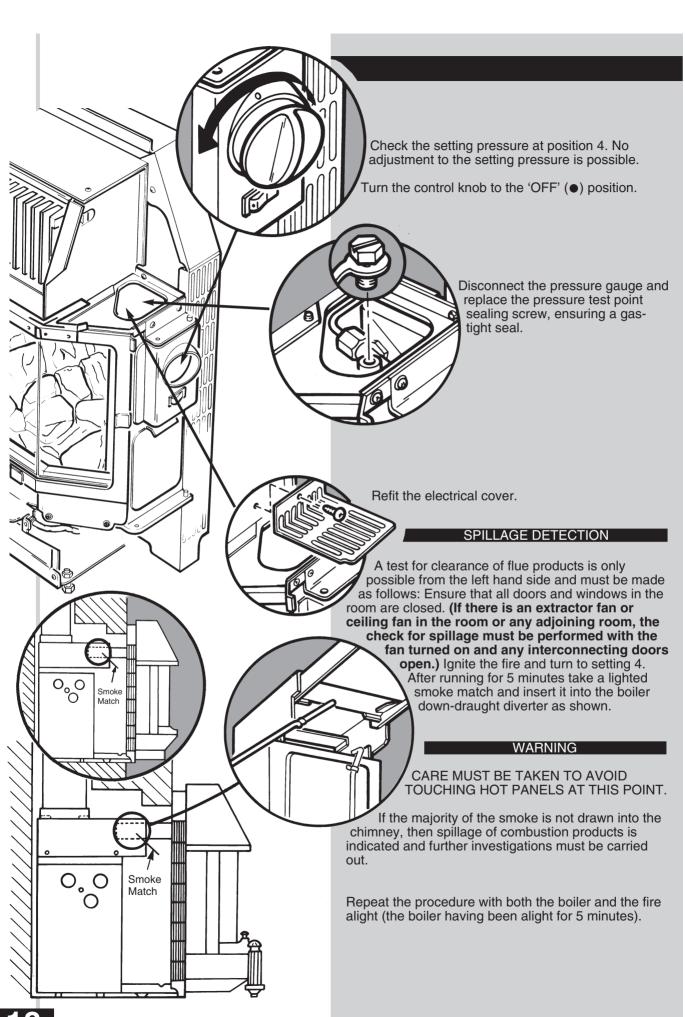




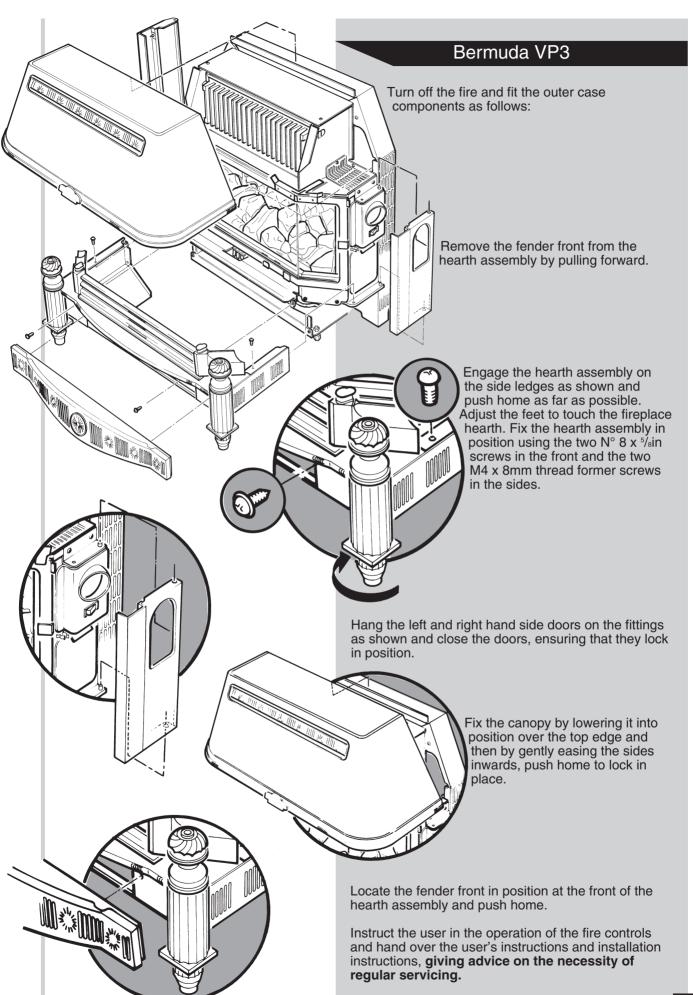
COMMISSIONING THE FIRE

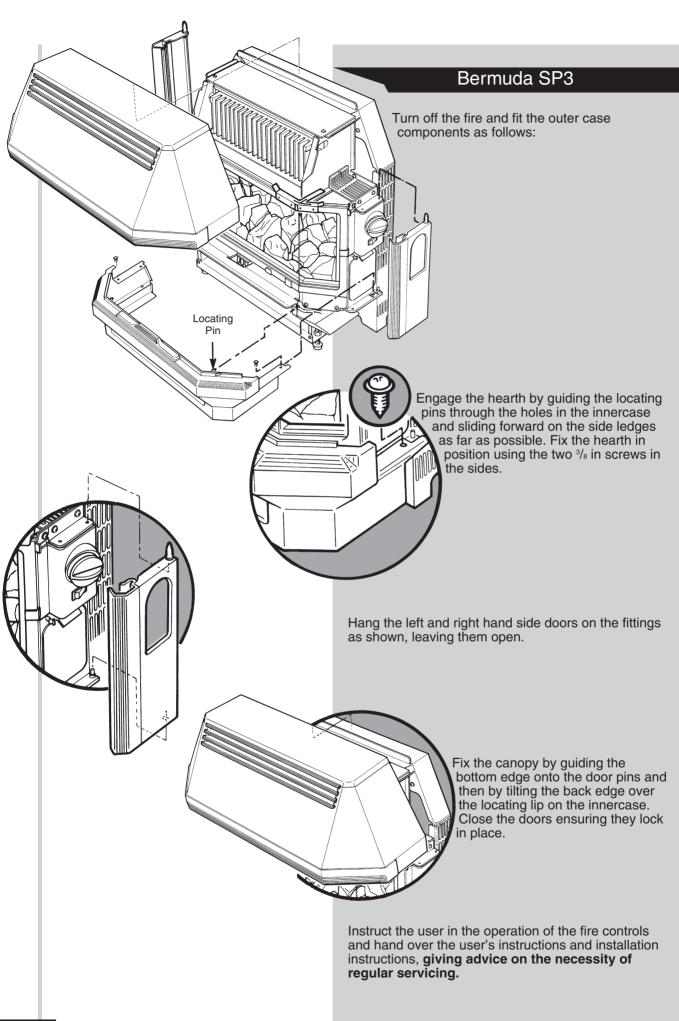




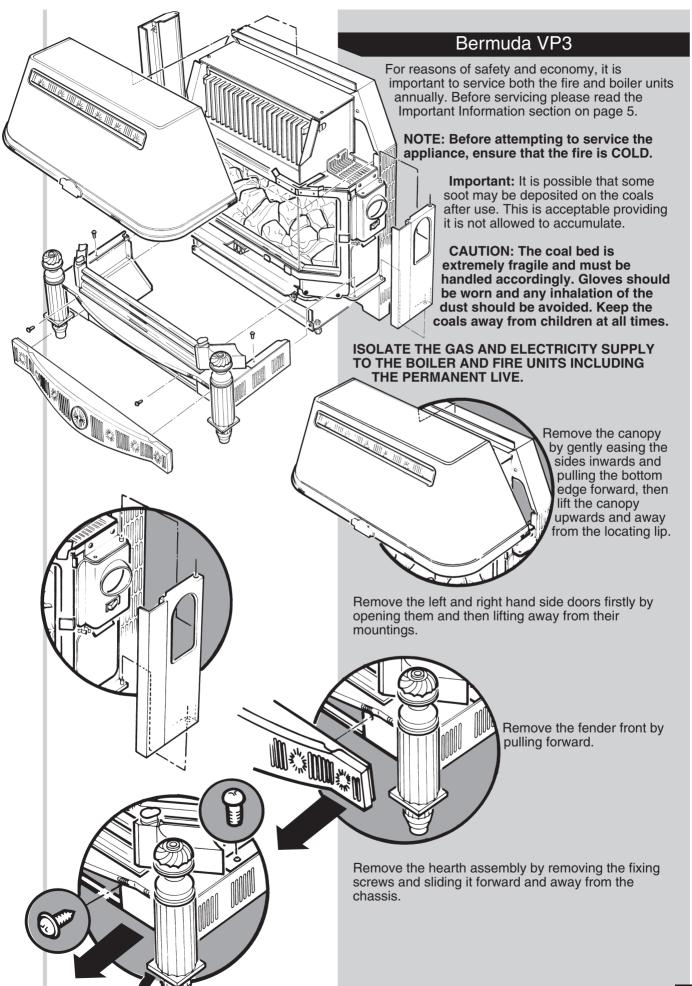


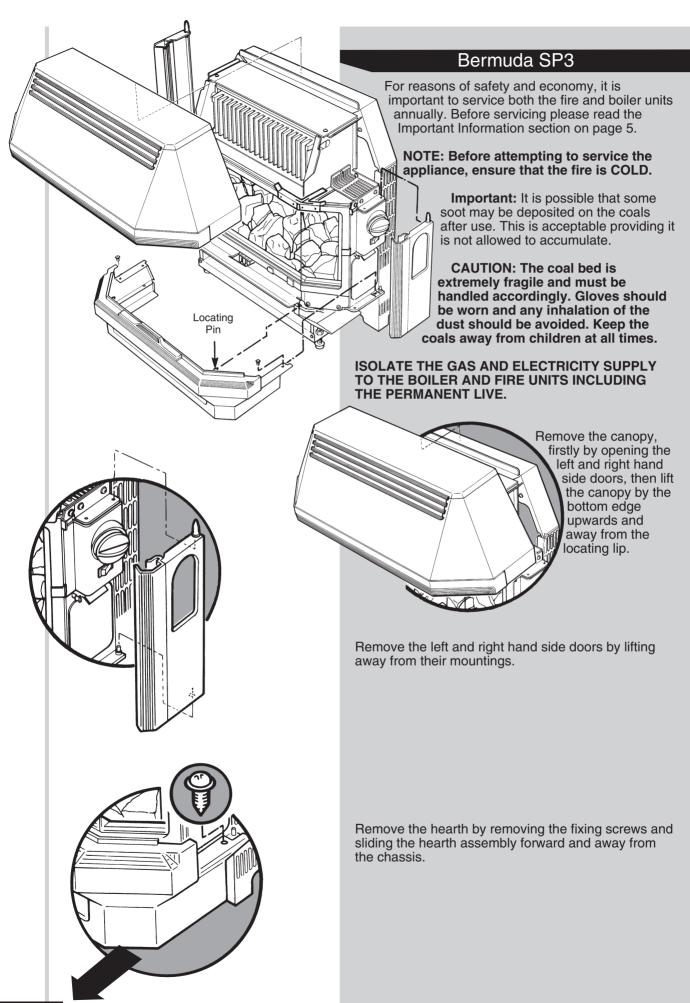
FITTING THE OUTER CASE

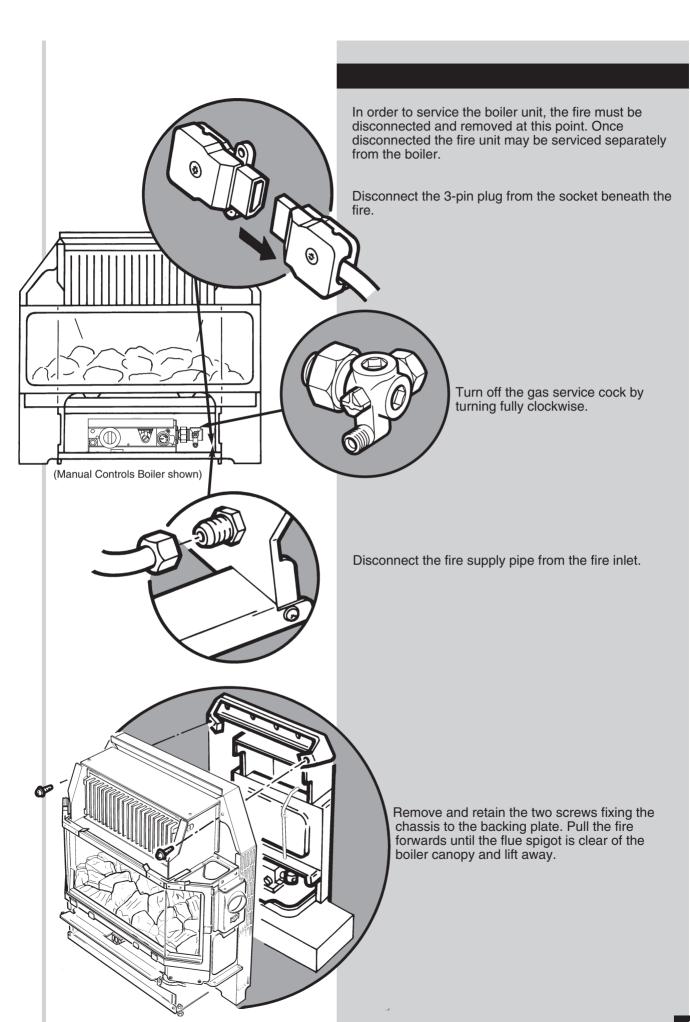


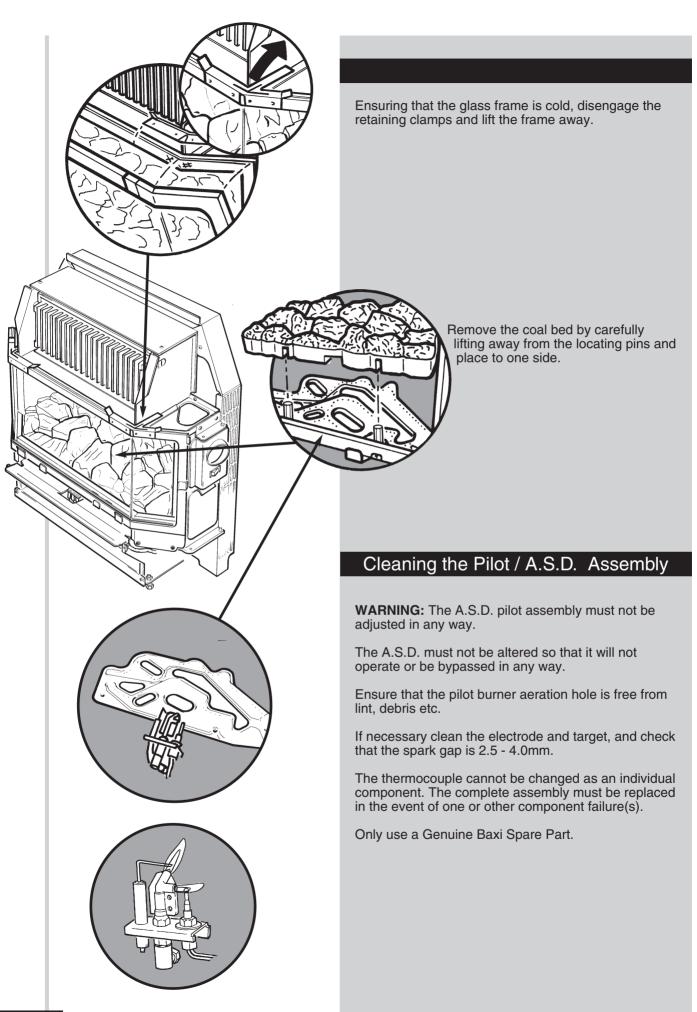


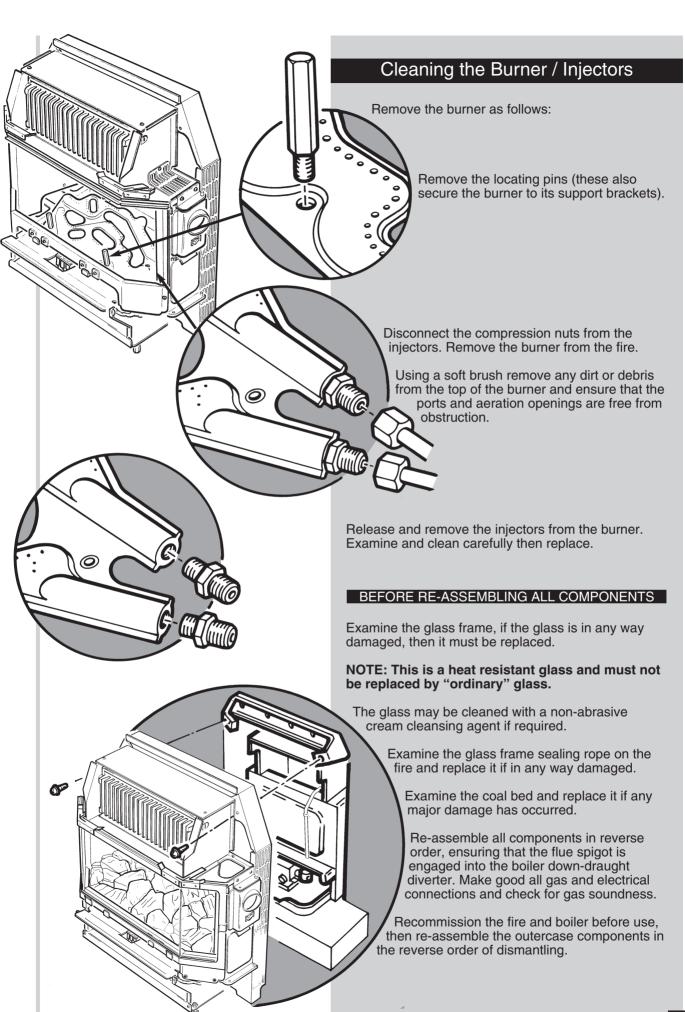
ANNUAL SERVICING



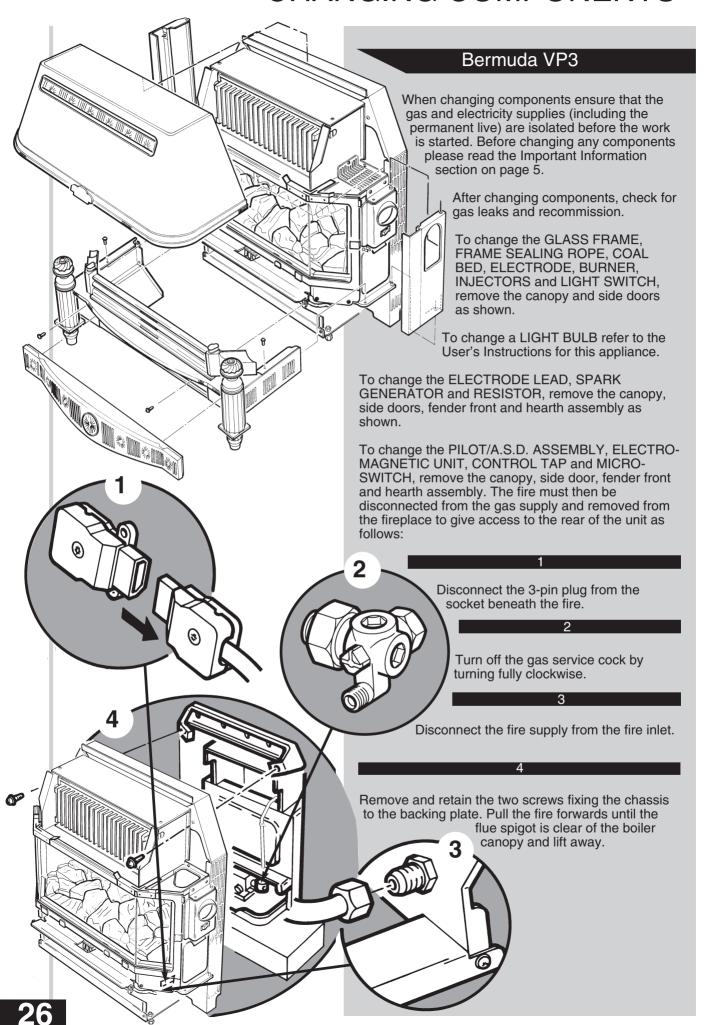


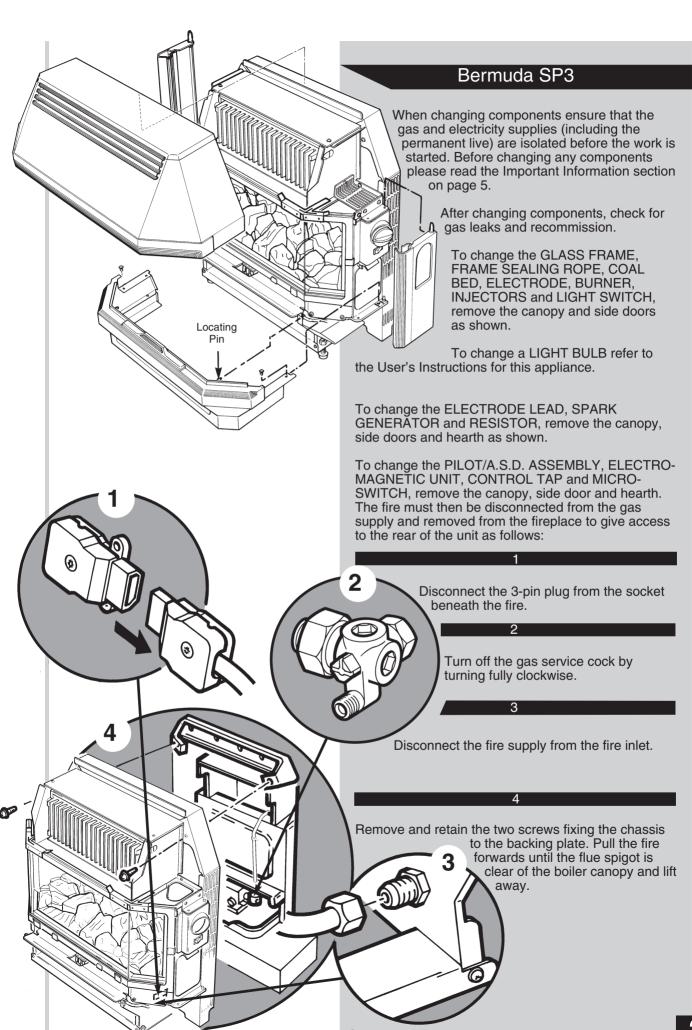


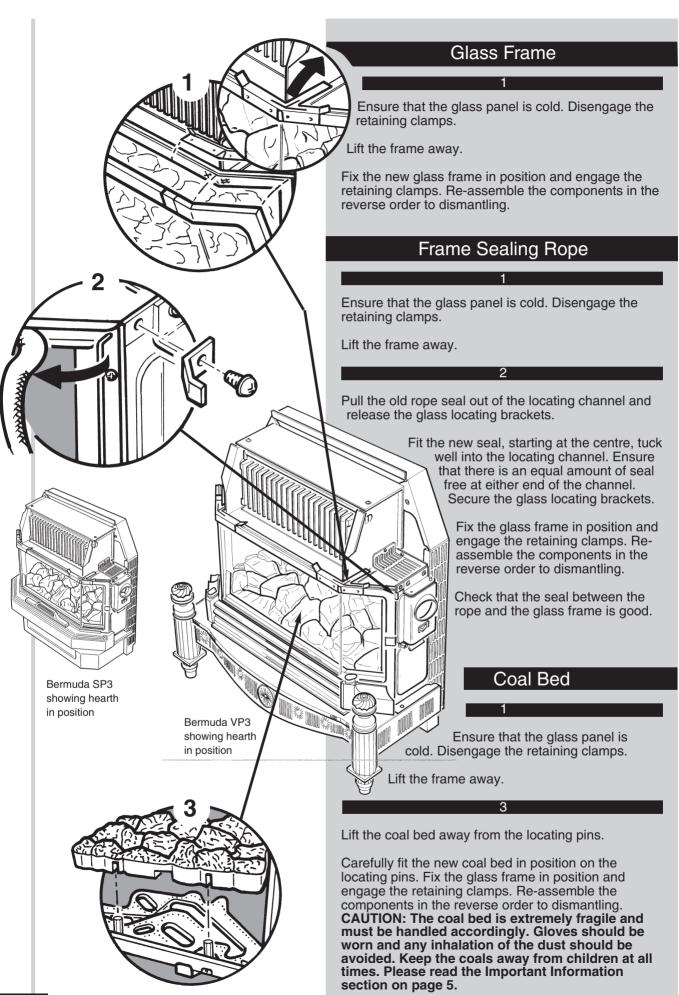


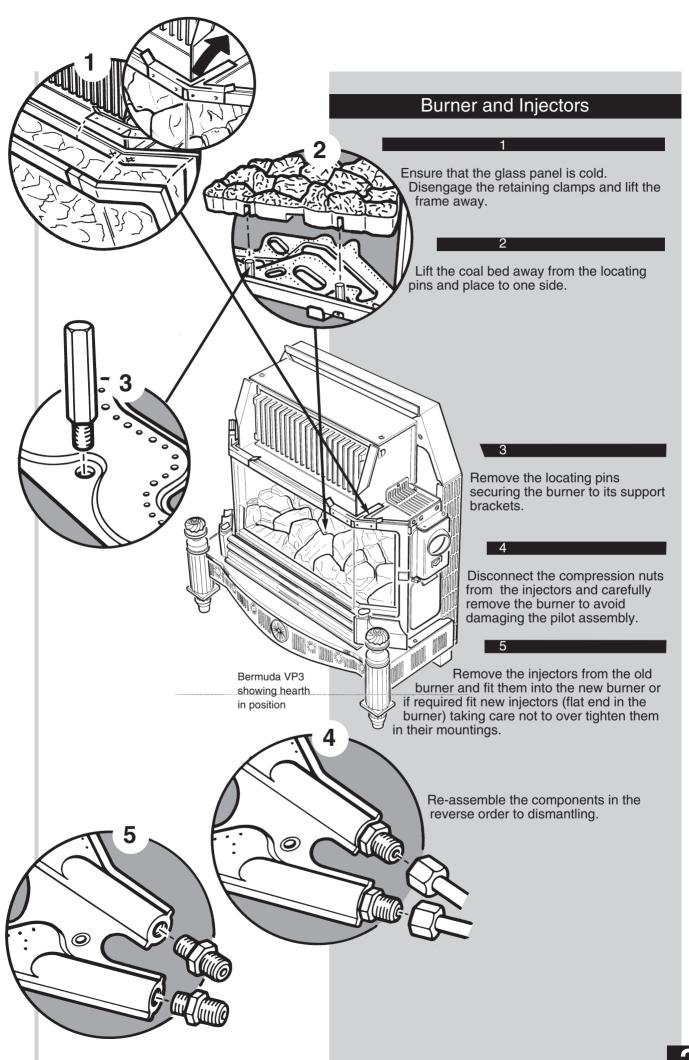


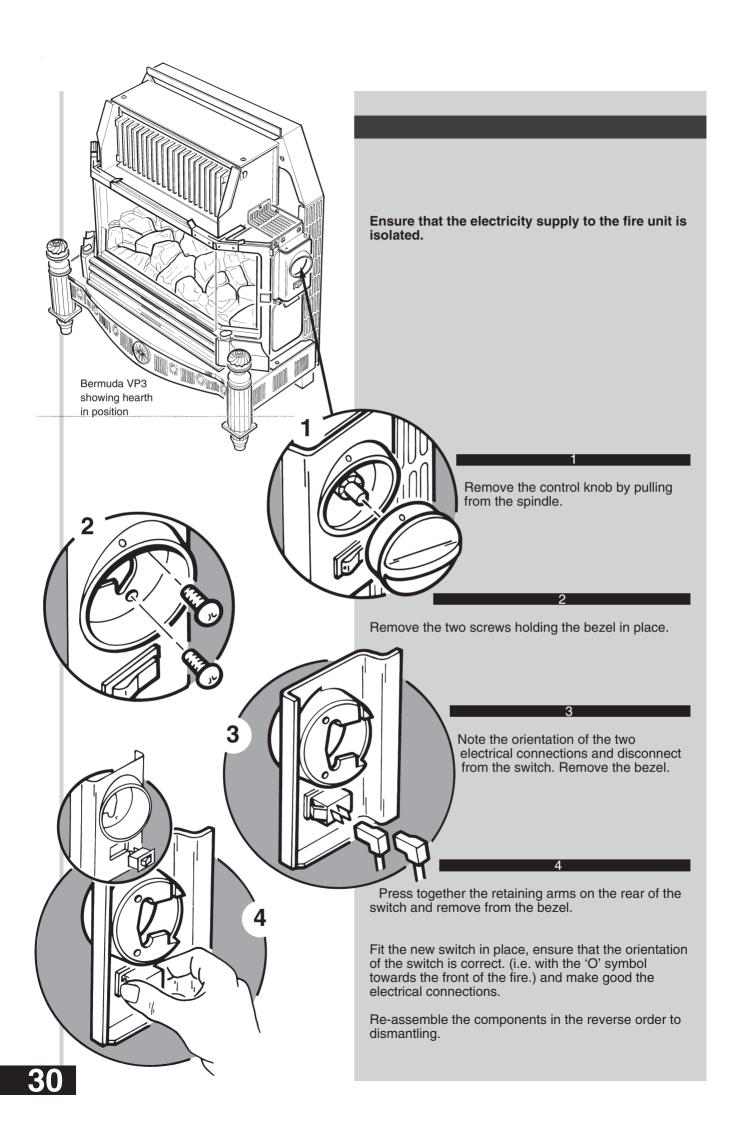
CHANGING COMPONENTS

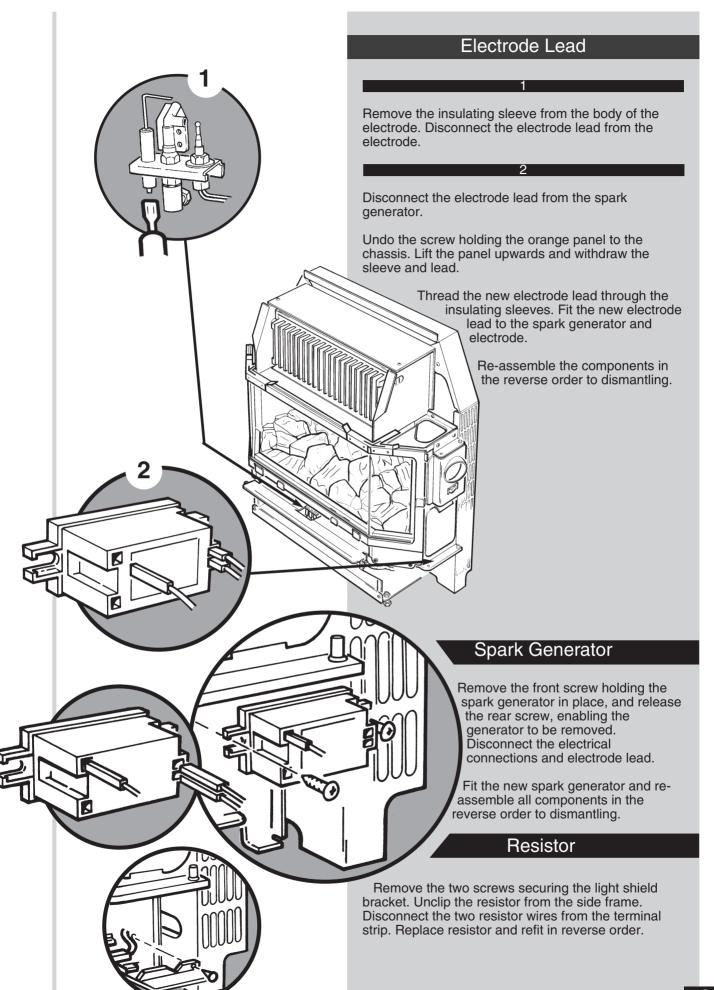


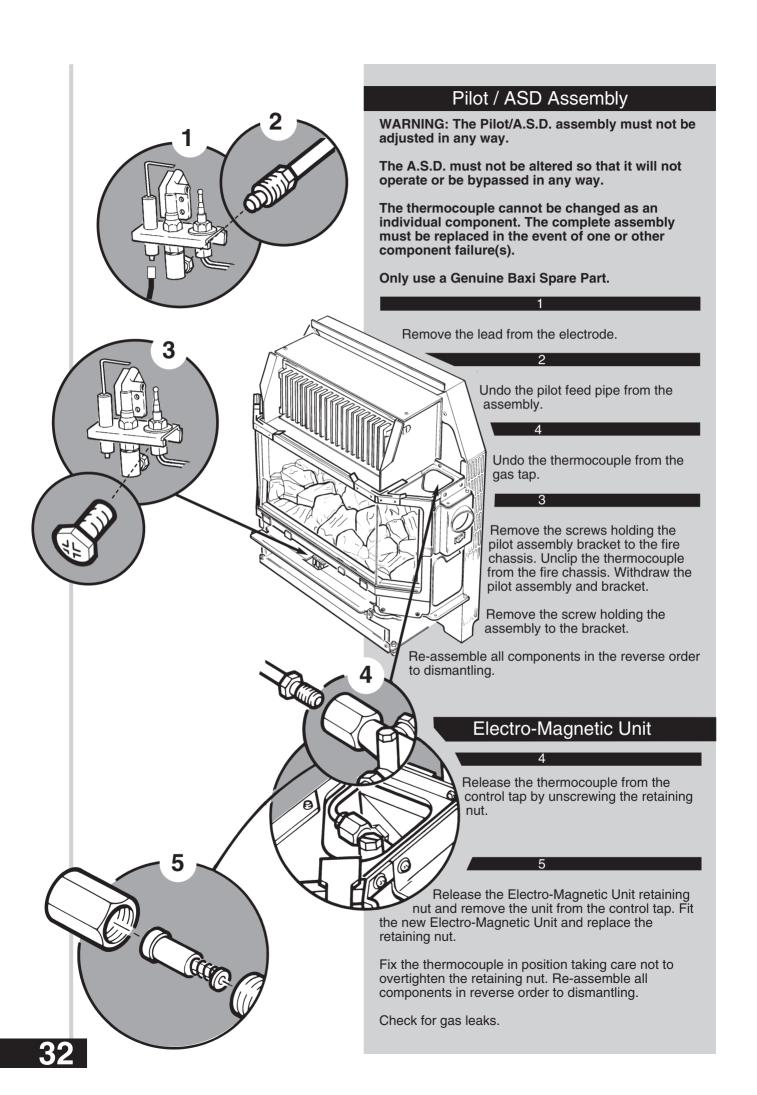


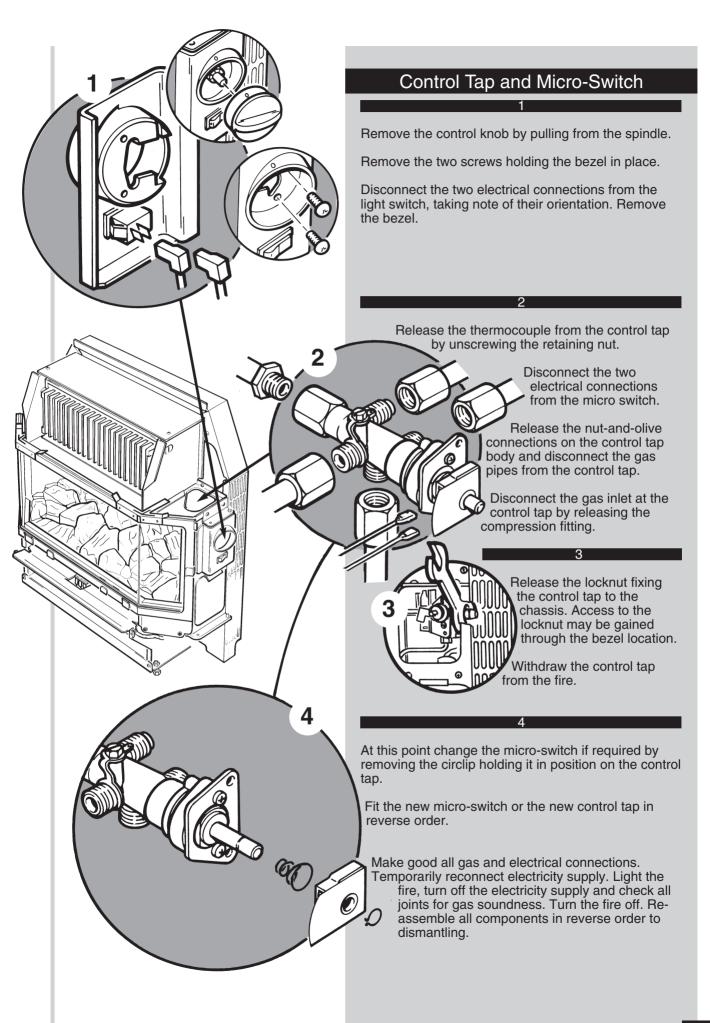




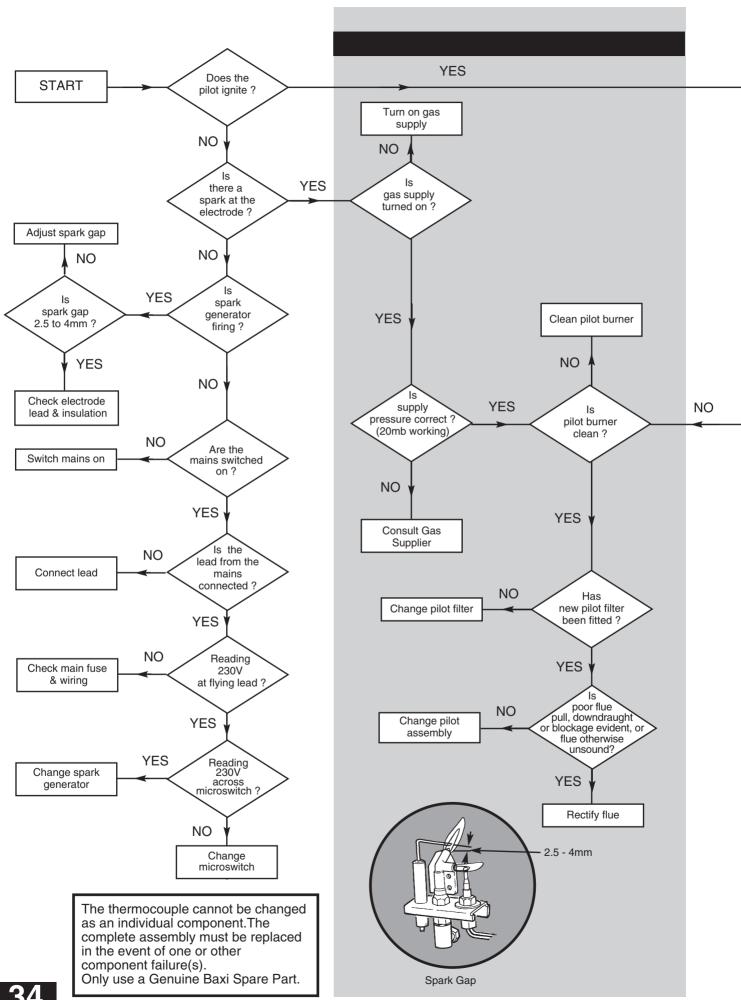


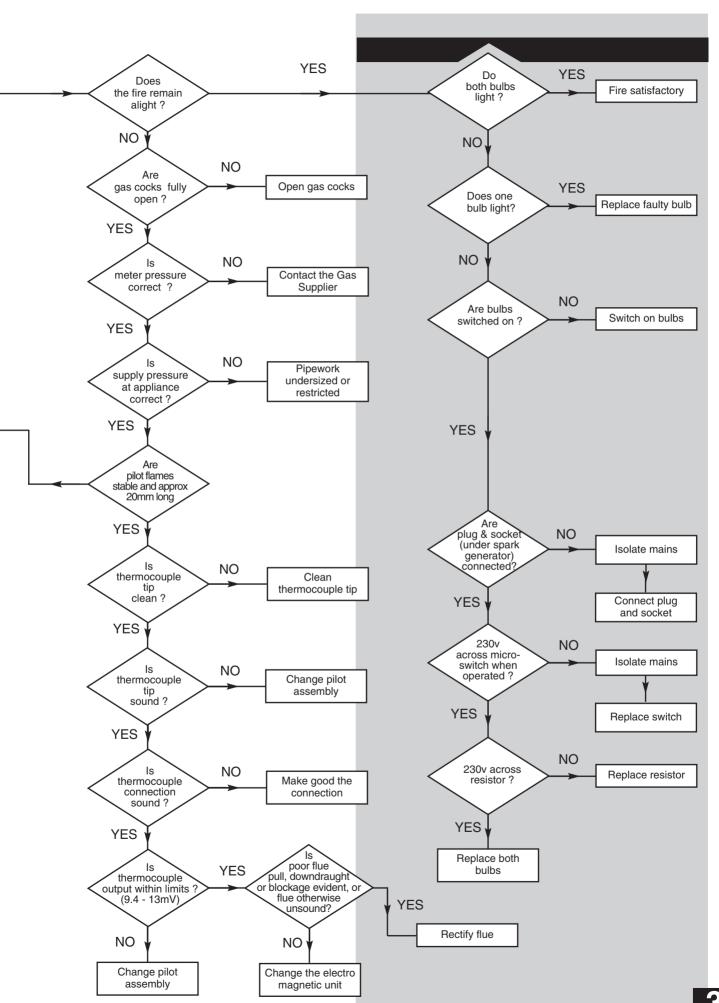




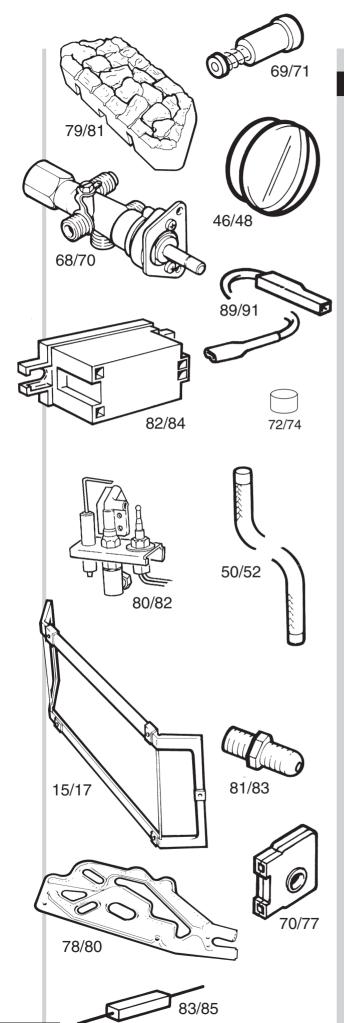


FAULT FINDING





SHORT PARTS LIST



V o	, Noo	0.0	Description	u ifa atu wa wa
•	/ Nºs	G.C.	Description Mar	nufacturers
SP3	VP3	N°		Part N°
15	17	156 036	Glass and Frame Assy	225391
-	48	156 233	Knob Control SP3	233466
46	-	156 431	Knob Control VP3	236394
50	52	156 063	Seal Frame Glass Rope	226876
80	82	378 912	Pilot/A.S.D. Assembly	235601
68	70	156 300	Gas Tap	234098
69	71	E01 617	Electro Magnetic Unit	239413
70	72	156 095	Micro Switch Assy	227761
78	80	156 094	Burner	225400
79	81	156 432	Coal Bed	236103
81	83	397 681	Injector Burner FO2	226910
82	84	378 988	Spark Generator	233254
87	91	387 916	Electrode Lead (2.8mm)	236184
83	85	386 129	Resistor 68 💭	228955
72	74	205 723	Pilot Filter	082412

The following components are unique to the **VP3 PROPANE** appliance only:

Key N°s	s G.C. N°	Description	Manufacturers Part N°
70	E00 855	Gas Tap (LPG)	237082
80	E00 857	Burner (LPG)	237433
81	E00 856	Coal Bed (LPG)	237432
83	387 857	Injector Burner (LPG)	228486
82	E00 858	Pilot/A.S.D. Assembly	(LPG) 237079

PROPANE Cat II 2H3P

Supplementary Instructions

BERMUDA VP3 - G.C.N° 37 077 72 GAS TYPE G31

These supplementary instructions should be read in conjunction with the Fire Installation and Servicing Instructions and cover certain features unique to the Propane appliance.

This model to be used only with the Bermuda 553 Propane.

The Heat Input, Heat Output and Setting Pressures given in the Instructions Booklet do not apply to the Propane appliance. Refer to the table opposite.

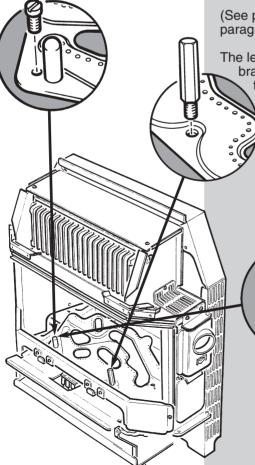
Propane appliances can be converted to operate on Natural Gas if required.
A conversion kit is available, Baxi Part No 247064.

Heat Input (Gross)	High	Med-High
kW	6.05	5.34
Btu/h	20,642	18,220
Heat Input (Gross)	Med	Low
kW	3.35	2.47
Btu/h	11,430	8,427
Heat Output	High	
kW	3.63	
Btu/h	12,385	
Supply Pressure		
mbar	37	
in wg	14.8	
Setting Pressure	Cold	
mbar	34.2 ± 1	.5
in wg	13.7 ± 0	.6
I		

Burner Removal

(See page 29 and read instruction 4 in conjunction with the paragraph below.)

The left hand locating pin does not secure the burner to the support bracket. To remove the burner, unscrew the right hand locating pin and the set screw at the left hand side.



Burner Replacement

When replacing the burner remove the left hand locating pin from the old burner and refit to the new burner.

(See page 29 for re-assembling all components in the reverse order to dismantling.)

Renewal Firefront

It is important that the existing installation is correct and that the flue is performing satisfactorily. Any remedial work necessary should be completed before the new appliance is commissioned. Please read the Important Information section on page 5.

WARNING: Renewal firefronts are fitted with an Atmospheric Sensing Device (A.S.D.). If they are installed in conjunction with a boiler NOT fitted with an A.S.D. (i.e. 401, 552, 45/3 & 57/3), under adverse flue conditions the boiler WILL NOT shut down.

NOTE: A permanent live is required for correct operation of the firefront.

Additional Installation Instructions

Bermuda VP3 Renewal G.C.N° 37 075 04A Bermuda SP3 Renewal G.C.N° 37 075 05A

The kit supplied with Renewal appliances provides all the necessary components to fit a Baxi Bermuda VP3 Renewal & Baxi Bermuda SP3 Renewal firefront to the following Bermuda Boilers.

The Renewal Fires may be used with the following Boilers:

Bermuda 401	G.C.Nº 44 077 49
Bermuda 552	G.C.Nº 44 077 50
Bermuda 45/3 M	G.C.N° 44 077 61
Bermuda 45/3 E	G.C.N° 44 077 60
Bermuda 57/3 M	G.C.Nº 44 077 63
Bermuda 57/3 E	G.C.N° 44 077 62
Bermuda 45/4 M	G.C.Nº 44 077 71
Bermuda 45/4 E	G.C.Nº 44 077 73
Bermuda 57/4 M	G.C.N° 44 077 72
Bermuda 57/4 E	G.C.Nº 44 077 74
Bermuda 51/5	G.C.Nº 44 075 06

Existing Fire

REMOVING THE EXISTING FIRE

Isolate the gas and electrical supply, including any permanent live, to the combined appliance.

Remove the controls cover panel from the front of the fire.

Remove the tap control knob. Disconnect the electrical socket from the fire plug if fitted. Remove the screws securing the outercase to the innercase. Lift off the outercase.

Turn the gas service tap to the "Boiler only" position by turning 1/4 turn clockwise.

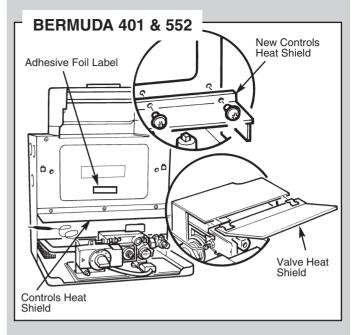
Remove the radiants if fitted.

Disconnect the supply pipe at the fire inlet.

Remove any screws securing the fire to the wall. Pull the fire forward until the flue spigot is clear of the boiler hood and lift away.

Remove and discard the fire supply pipe from the service gas tap. Disconnect and discard any electrical wiring between the boiler input terminal and the fire.

Boiler Modification

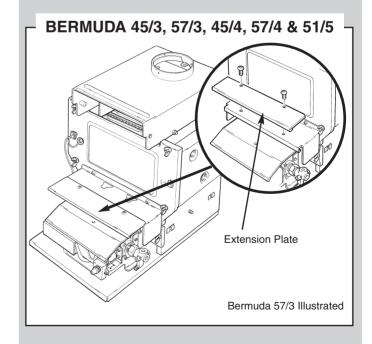


NOTE: It is important at this stage to fit the controls heat shield supplied with the fire unit to the boiler front panel.

Remove and discard the controls heat shield provided with the boiler and fit the new controls heat shield using the screws previously removed.

Fit the additional valve heat shield in position over the gas valve by engaging the two clips and pushing home as shown above.

Check the data badge on the back boiler. If the boiler internal wiring is not depicted, take the foil label from the kit and attach it below the data badge on the boiler front door.



If a radiant firefront has been installed previously it will be necessary to unscrew and remove the extension plate from the boiler controls heat shield. Once removed this item can be discarded.

If the fire is wall mounted remove and discard the existing support frame (Bermuda 401 only). Retain the two support brackets. These will be needed in wall mounting the renewal fire.

If the fire is hearth mounted ensure that the base of the builders opening and the front hearth are at the same level.

Refer to "Site Requirements" (page 7) and prepare the wall surface to the dimensions specified.

WALL FIXING

Two wall fixing plates are supplied in the Renewal Kit, one for Bermuda 401/552 and one for Bermuda 45/3, 57/3, 45/4, 57/4 & 51/5.

BERMUDA 401 & 552

Take the fire support plate from the fire unit packaging and loosely attach it beneath the boiler base protruding from the fireplace opening using the M5 Nuts and screws provided. Use the centre group of holes at each side.

NOTE: If the fire is being used with a Bermuda 401 boiler unit, the support brackets from the previous plate must be fitted before the fire support plate can be fixed in place.

Push the support plate backwards until it touches the surround or wall face and tighten the screws to lock it in position.

BERMUDA 45/3, 57/3, 45/4, 57/4 & 51/5

Take the fire support plate from the fire unit packaging and loosely attach it above the boiler base protruding from the fireplace opening using the screws provided. Use the slots at each side.

Push the support plate backwards until it touches the surround or wall face and tighten the screws to lock it in position.

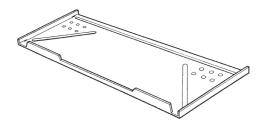
WIRING

When connecting the firefront wire to the plug on the boiler base tray refer to pages 8-12 of these instructions.

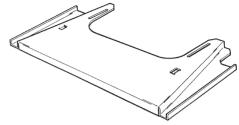
FIRE SUPPLY PIPE

Two fire supply pipes are supplied in the Renewal Kit, one for Bermuda 401 & 552 and one for Bermuda 45/3, 57/3, 45/4, 57/4 & 51/5. The smaller (6mm) diameter one is for Bermuda 45/3, 57/3, 45/4, 57/4 & 51/5 installations.

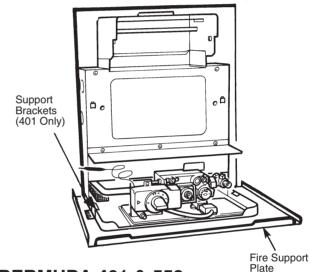
TO CONTINUE FITTING THE FIREFRONT REFER TO THE INSTALLATION CHAPTER OF THESE INSTRUCTIONS.



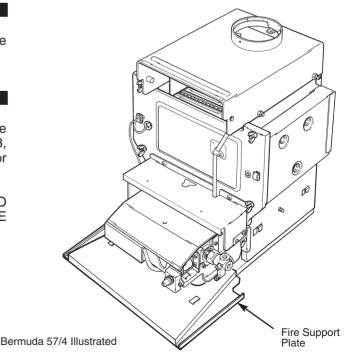
Fire Support Plate - Bermuda 401 & 552



Fire Support Plate - Bermuda 45/3, 57/3, 45/4, 57/4 & 51/5



BERMUDA 401 & 552



BERMUDA 45/3, 57/3, 45/4, 57/4 & 51/5