



# **Myson Heating Limited**

## **Installation and Maintenance Manual**

### **Apollo Fanfare 15/30i and 30/50i Wall mounted gas boilers**

G. C. Appliance Nos. Apollo Fanfare 15/30i 41789 73 Apollo Fanfare 30/50i 41789 74



# Myson Heating Limited

## INSTALLATION

### Apollo Fanfare 15/30i and 30/50i Wall mounted gas boilers

G. C. Appliance Nos. Apollo Fanfare 15/30i 41 789 73 Apollo Fanfare 30/50i 41 789 74

**For use with Natural Gas only.** (Leave these instructions adjacent to the gas meter).

This appliance must be installed by a competent person as stated in the Gas Safety (Installation and Use) Regulations 1984.

The inner case of this boiler should not be removed during installation.

Read these instructions thoroughly before installing the boiler.

Attention to the following points is important to ensure a trouble free installation.

1. The Apollo is to be used only on fully pumped systems, and with an indirect hot water cylinder.
2. Only high head pumps producing at least 3.35 m (11 ft) head at a flow rate of 1146 litres/h (4.2 gal/min) must be used.
3. Connect the pump in the flow pipe as shown in frame 19.
4. Mains electricity and the pump must always be connected to the boiler to allow the pump overrun to function.
5. It is important that the polarity of the mains supply is correct and that the boiler is adequately earthed.
6. For open vented systems a combined or close coupled feed and vent must be connected as shown in frames 19 and 20.
7. A system by-pass is essential. The by-pass should be of 15 mm pipe and must be as short as possible across the 22 mm flow and return pipes and at least 1.5 m away from the boiler. Install and adjust the by-pass as described in frames 19 and 29 respectively.
8. The system wiring must be completed in accordance with the diagrams supplied with the boiler.
9. When commissioning, the system must be vented and the pump running before the main burner is lit.
10. The system must be flushed twice; initially cold with the pump removed and all valves open, and then after the first heating.
11. For sealed systems see frame 32.
12. Where the Apollo replaces an older boiler in an existing system, make sure the cylinder is indirect (see 1, above).
13. In areas with hard or aggressive water we recommend that Fernox CP3 inhibitor should be used. See frame 22 for details of use.

## General

These fanned draught balanced flue wall mounted boilers are for use on natural gas only, and are suitable for rear or side exit flue.

The Apollo Fanfare 15/30L is range rated from 4.4 to 8.8 kW (15 000 to 30 000 Btu/h).

The Apollo Fanfare 30/50L is range rated from 8.8 to 14.7 kW (30 000 to 50 000 Btu/h).

The boiler must be installed in accordance with:

The Gas Safety Regulations, 1972.

The Gas Safety (Installation and Use) Regulations 1984.

Local Building Regulations.

By-Laws of the local Water Undertaking.

IEE Wiring Regulations.

Detailed recommendations are stated in the following British Standard Codes of Practice: CP331:3:1974, BS5376:2:1976, BS5546:1979, BS5440:1:1978, BS5440:2:1976 and BS5449:1:1977.

**Note:** Gas Safety Regulations: It is the law that all gas appliances are installed by competent persons, in accordance with the above regulations. Failure to install appliances correctly could lead to prosecution. It is in your own interest, and that of safety to ensure that the law is complied with.

## Delivery

The unit is delivered in two packages (1) the cased boiler and (2) the flue/terminal assembly. The same flue/terminal assembly is used for both sizes of boiler. If required, a 1000 mm (39 in) flue extension is available. A plug-in programmer kit is also available to fit inside the boiler casing. This programmer simplifies wiring and is suitable for use with all external control systems shown in this instruction.

## Gas supply

The Fanfare 15/30L requires 1.1 m<sup>3</sup>/h (37 ft<sup>3</sup>/h) of natural gas, the Fanfare 30/50L requires 1.8 m<sup>3</sup>/h (62 ft<sup>3</sup>/h). The meter and supply pipes must be capable of delivering this quantity of gas in addition to the demand from any other appliances in the house.

The complete installation must be tested for gas soundness and purged as described in CP331:3.

## Electricity supply

240V 50Hz via a fused double pole switch with a contact separation of at least 3 mm in both poles or preferably a fused 3-pin plug and shuttered outlet socket, adjacent to the boiler.

Fuse the supply at 3 amp.

Mains cable: 0.75 mm<sup>2</sup> (24 x 0.20 mm).

The external wiring between the appliance and the electrical supply shall comply with the latest IEE Wiring Regulations, and any local regulations which apply.

The appliance must be earthed.

In the event of an electrical fault after installation of the appliance, preliminary electrical systems checks can be carried out as described in the British Gas multimeter instruction book.

## Air supply

1. The room in which the boiler is installed does not require a purpose provided air vent.

2. If the boiler is installed in a cupboard or compartment, permanent air vents are required in the cupboard or compartment, one at high level and one at low level, either direct to the outside air or to a room. Both high and low level air vents must communicate with the same room or must both be on the same wall to the outside air. Both the high level and low level vent must each have a free area of 99 cm<sup>2</sup> (15 in<sup>2</sup>) for the 15/30L and 165 cm<sup>2</sup> (25 in<sup>2</sup>) for the 30/50L boiler. The free area of each vent may be halved if the ventilation is provided directly from outside.

## Flue system

Five adjustable flue/terminal assemblies are available to fit the following wall thicknesses when using rear exit flue: 100-150 mm (4-6 in), 150-250 mm (6-10 in), 250-460 mm (10-18 in), 460-610 mm (18-24 in) and 610-1060 mm (24-42 in). Unless otherwise specified the 250-460 mm (10-18 in) flue/terminal assembly will be supplied with the boiler.

If side exit flue is used, the following method should be used to select the correct flue/terminal assembly.

$$A = B + C + 127 \text{ mm (5 in)}$$

B = finished wall thickness.

C = distance between inside wall and side of white case.

Dimension A gives the size of flue/terminal assembly to use. If A is greater than the largest flue/terminal assembly—1060 mm (42 in)—the 1000 mm (39 in) flue extension should be used with the appropriate flue/terminal assembly.

**Note:** The maximum allowable flue length is 2000 mm (78 in).

The boiler must be installed so that the terminal is exposed to the external air. It is important that the position of the terminal allows the free passage of air across it at all times. The minimum acceptable spacings from the terminal to obstructions, corners and ventilation openings are specified in the following table:

TERMINAL POSITION	MINIMUM SPACING
Directly below an openable window, air vent or any other ventilation opening	300 mm (12 in)
Below gutters, soil pipes or drain pipes	75 mm (3 in)*
Below eaves or a balcony	200 mm (8 in)*
Above adjacent ground or balcony level	300 mm (12 in)*
From vertical soil pipes or drain pipes	75 mm (3 in)
From internal or external corners	25 mm (1 in)
From a surface facing the terminal	600 mm (24 in)
From a terminal facing the terminal	1200 mm (48 in)
Vertically from a terminal on the same wall	1500 mm (60 in)
Horizontally from a terminal on the same wall	300 mm (12 in)

\* If the terminal is fitted within 850 mm (34 in) of a plastic or painted gutter/pipe or 450 mm (18 in) of painted eaves, an aluminium shield of at least 750 mm (30 in) in length should be fitted to the underside of the gutter/pipe or painted surface.

† If the terminal is fitted less than 2 m (6.6 ft) above a balcony, above ground or above a flat roof to which people have access then a suitable terminal guard must be provided.

A type K1 protective guard is available from Tower Flue Components Ltd at:

Vale Rise

Tonbridge

Kent

TN9 1TB

Tel: 0732 351555

When using side exit flue the air/flue tube may be 'hidden' by boxing in if required. See BS5440:1:1978, sub-clause 20-1 for details.

## Installation

The boiler must be mounted on a flat wall which is sufficiently robust to take the weight of the boiler. If the wall is of combustible material it must be protected by a sheet of non-combustible material of thickness not less than 25 mm (1 in).

**Note:** If the boiler is to be fitted into a house of timber frame construction, advice is available from your trade organisation or local Gas Region.

The boiler is designed for use with a fully pumped open or sealed central heating system and an indirect hot water cylinder. IT MUST NOT BE CONNECTED TO A DIRECT CYLINDER.

The boiler may be installed in any room, although particular attention is drawn to the requirements of the latest IEE Wiring Regulations and, in Scotland, the electrical provisions of the building regulations applicable in Scotland, with respect to the installation of the boiler in a room containing a bath or shower.

Where the installation of the boiler will be in an unusual position, special procedures may be necessary and BS5376:2 and BS5546 give detailed guidance on this aspect.

A cupboard or compartment used to enclose the boiler must be designed and constructed specifically for this purpose. An existing cupboard or compartment may be used provided that it is modified for the purpose.

Details of essential features of cupboard/compartment design including airing cupboard installations are given in BS5376:2 and BS5546.

Boiler dimensions, minimum clearances and connection details are shown in frames 1 and 2.

The pump should be fitted in the FLOW pipe from the boiler.

The pump must be connected to the terminal block, see wiring diagram frame 31.

The flow through the boiler must not be allowed to fall below 690 litres/h (2.5 gal/min) for the 15/30L and 1146 litres/h (4.2 gal/min) for the 30/50L while the burner is alight.

It is important that a by-pass is fitted, see frame 19. See frame 29 for adjusting the by-pass.

Fit one or more drain cocks to enable the water system to



## Data

Boiler	Fanfare 15/30L	Fanfare 30/50L
Main burner	Furigas 175-500-003	Furigas 175-500-004
Burner injector	Bray Cat 16/800	Bray Cat 16/1400
Hot injector	Honeywell BCR 18 390686/4	
Gas valve	Honeywell VR 4700E1018	
Ignition	Intermittent pilot. THORN EMI special control box	
Pilot flame	35-40 mm	
Overheat cutoff device	Elmwood 2455R-98-841	
'Hi' thermostat	Elmwood 2455R-98-971	
'Lo' thermostat	Elmwood 2455R-98-926	
Pump overrun stat	Thermotest 60T13-500073	
Fan assembly	Smiths FFB0219/003	
Pressure switch	Yamatagi C6052A1007	
Electrode	Kigass 8438 gap 2.0/3.0 mm	
Weight empty	21 kg (46 lb)	24 kg (53 lb)
Water content	0.36 litre (0.08 gal)	0.50 litre (0.11 gal)
*Head loss	0.38 m (15 in)	0.71 m (28 in)
Max. static head	30.5 m (100 ft)	
Min. static head	0.2 m (8 in)	

Heat inputs and outputs together with burner setting pressures are given in frame 26.

In the event of any fault occurring during the commissioning of the boiler a fault finding guide is available in the maintenance instructions.

\*Head loss given is applicable only when the flow through the boiler is 690 litres/h (2.5 gal/min) for the Fanfare 15/30L and 1146 litres/h (4.2 gal/min) for the Fanfare 30/50L.

### 1 BOILER DIMENSIONS AND MINIMUM CLEARANCES

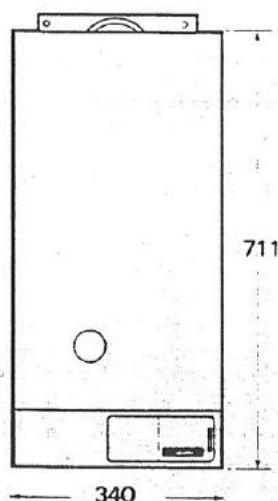
Projection from rear wall:  
300 mm

Clearance required for  
installation and service.

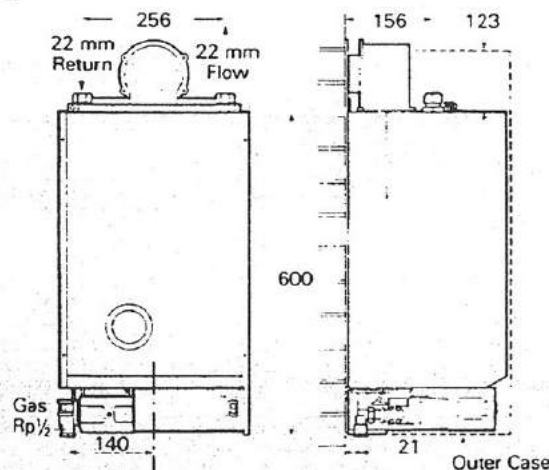
Top: 50 mm  
Each side: 5 mm  
Bottom: 90 mm  
Front: 300 mm

Flue terminal size:

100 mm dia x 65 mm deep



### 2 BOILER CONNECTIONS

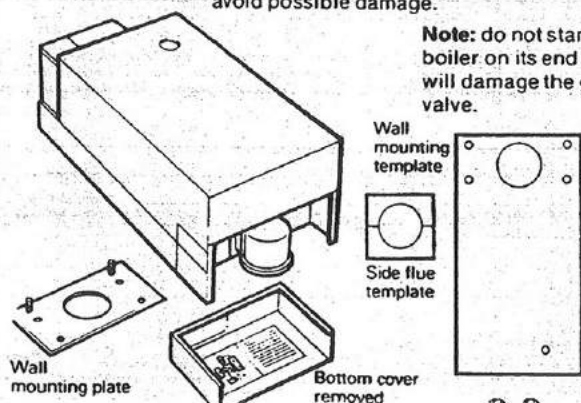


**Water connections:** compression fittings are supplied for flow and return to accept 22 mm copper tubing to BS2871.

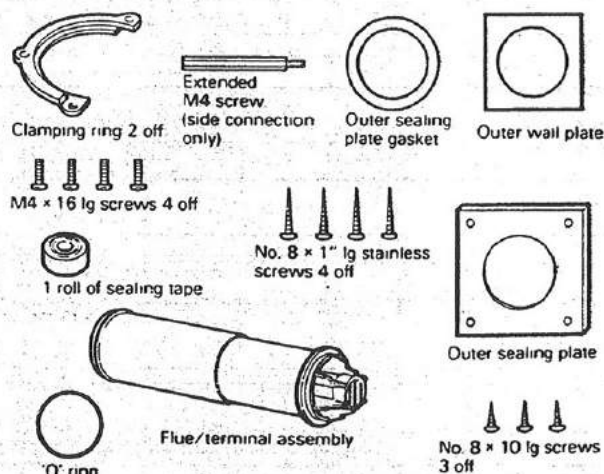
### 3 UNPACK THE BOILER

- Slide off the bottom cover.
- Remove the outer case by removing the bottom fixing screw and pulling the case off the fixing pins. Place the case safely aside to avoid possible damage.

**Note:** do not stand the boiler on its end as it will damage the gas valve.



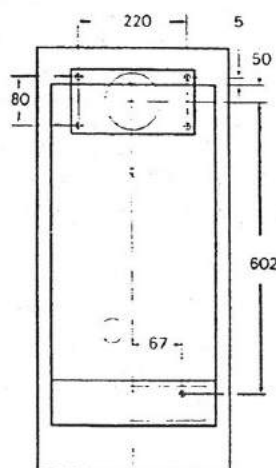
### 4 UNPACK THE FLUE/TERMINAL ASSEMBLY



# FOR REAR EXIT FLUE

Refer to frames 5, 6, 7, 8, 9 and 10 then proceed to frame 18

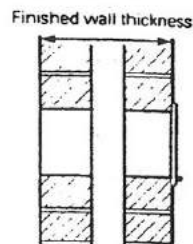
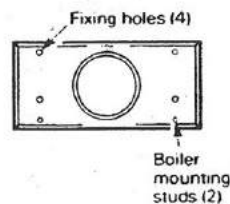
## 5 PREPARE THE WALL



Wall mounting template.

1. Decide upon the position of the boiler using the wall mounting template. The overall size of the template is the size of the boiler plus the minimum side, top and bottom clearances.
2. Tape the template to the wall, ensuring it is level and the correct way up.
3. Make sure that the position of the flue terminal will meet the requirements given on page 2 under the heading 'Flue system'.
4. Mark the positions of the four wall mounting plate fixing screws, hole for the flue and the lower boiler fixing screw.

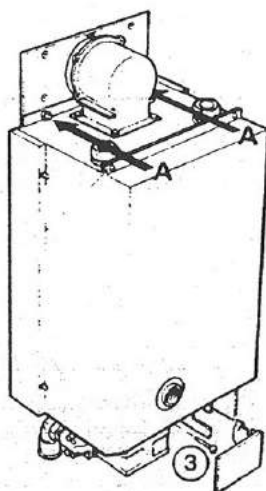
## 6 PREPARE THE WALL—contd.



5. Drill and plug the five fixing holes to accept 2½" lg. No. 12 woodscrews.
6. Cut the 115 mm (4½ in) dia. hole in the wall for the flue/terminal assembly.
7. Make a note of the finished wall thickness, this is very important and is required for frame 8 when adjusting the flue/terminal assembly.
8. Remove the template and position the wall mounting plate centrally over the hole in the wall, ensuring it is level and the right way up. Secure to the wall with four 2½" lg No. 12 woodscrews (not supplied).

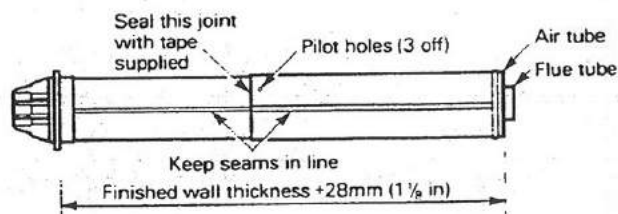
## 7 SECURE THE BOILER TO THE WALL

**Note:** The inner case does not need to be removed during installation.



1. Lift the boiler into position and mount it via the studs on the wall mounting plate. Secure to the wall plate, with two M6 nuts 'A' supplied.
2. Remove the two screws, above the boiler thermostat switch, securing the front of the wiring centre and lower the wiring centre. Slide out the fascia panel next to the control box. This will allow access to the bottom fixing screw.
3. Secure the bottom of the boiler to the wall with one 2½" lg No. 12 woodscrew (not supplied) into the hole previously drilled and plugged.
4. Replace the fascia panel and wiring centre.

## 8 ADJUST THE LENGTH OF THE FLUE/TERMINAL ASSEMBLY

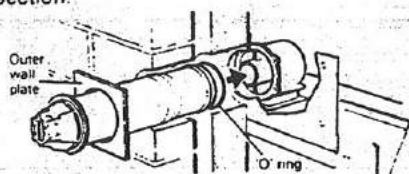


1. Using the measurements noted in frame 6 adjust the length of the flue/terminal assembly so that it is 28mm (1⅛ in) + finished wall thickness, from the back of the terminal flange to the inside of the OUTER air tube as shown.  
**Note:** Ensure that the seams in the outer air tubes are in line.
2. Drill through the three pilot holes, shown above, with a 2.8mm drill and secure the two tubes together using the three No. 8 x 10 lg screws supplied with the flue/terminal assembly.  
**Note:** When drilling through the outer air tube take care not to damage the inner flue tube with the drill.
3. Seal the centre joint with the tape supplied.

## 9 FIT THE FLUE/TERMINAL ASSEMBLY

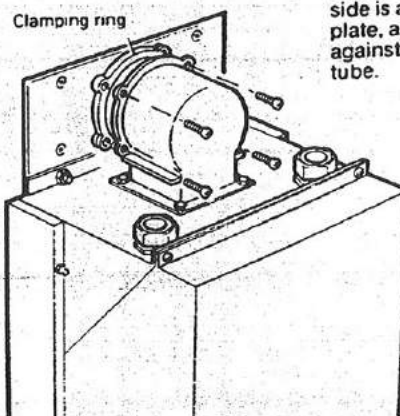
**Note:** If the wall is to be made good up to the terminal the outer wall plate need not be used.

1. Fit the outer wall plate over the flue/terminal assembly.
2. Fit the 'O' ring in position over the outer air tube against the flared section.



3. From outside the building insert the flue/terminal assembly into the wall. Ensure that the slots in the end of the terminal are vertical.
4. Push the flue/terminal assembly towards the boiler and engage the tube into the flue diverter on top of the boiler, ensuring that the inner flue tube slides INTO the inner tube of the diverter and the outer air tube slides into the diverter. Check that the 'O' ring is on the boiler side of the flared section. Push fully home until the flared end of the outer tube is in contact with the flue diverter.

## 10 CONNECT THE FLUE TO THE BOILER

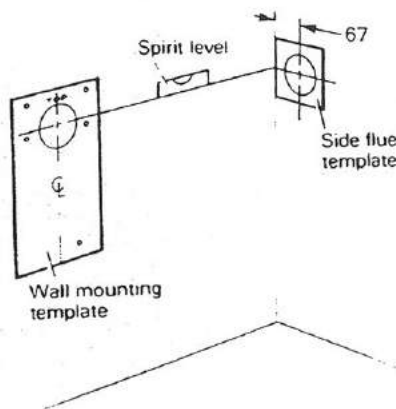


1. Fit the two halves of the clamping ring over the air tube as shown. Ensure that the flat side is against the wall mounting plate, and the recessed side against the flared part of the air tube.
2. Using the four M4 screws supplied, secure the fixing flange to the flue diverter.
3. Tighten the screws to seal the flue assembly.

# FOR SIDE EXIT FLUE

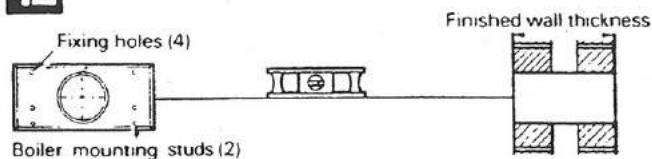
Refer to frames 11, 12, 13, 14, 15, 16 and 17 then proceed to frame 18

## 11 PREPARE THE WALL



1. Decide upon the position of the boiler using the wall mounting template. The overall size of the template is the size of the boiler plus the minimum side, top and bottom clearances. Note that the maximum distance (using the longest flue/terminal assembly and the 1000 mm (39 in) flue extension) from the side of the white case to the OUTSIDE of the wall is 1930 mm (76 in).
2. Tape the wall mounting template to the wall, ensuring it is level and the correct way up.
3. Continue the red line horizontally across the wall until it reaches the side wall.

## 12 PREPARE THE WALL—contd.

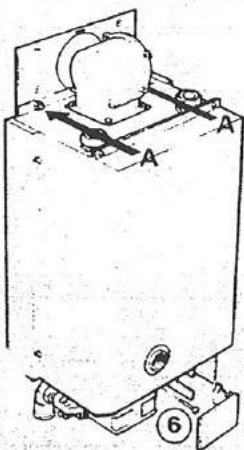


4. Tape the side flue template to the side wall so that it is in the corner and that the line just drawn lines up with the red line on the template. Check that the position of the terminal will meet the requirements given on page 2 under the heading 'Flue System'.
5. Mark the positions of the four mounting plate fixing screws and the lower fixing screw.
6. Drill and plug the five fixing holes to accept 2½" lg No. 12 woodscrews. Mark the position of the hole for the flue/terminal assembly.
7. Cut the 115 mm (4½ in) dia. hole in the side wall for the flue/terminal assembly.
8. Make a note of the finished wall thickness and the distance from the side wall to the side of the white case as shown on the template. These measurements are very important and are required in frame 14 when adjusting the flue/terminal assembly.
9. Remove the templates and place the wall mounting plate in position on the wall ensuring it is level and the right way up. Secure with four 2½" lg No. 12 woodscrews (not supplied).

## 13 SECURE THE BOILER TO THE WALL

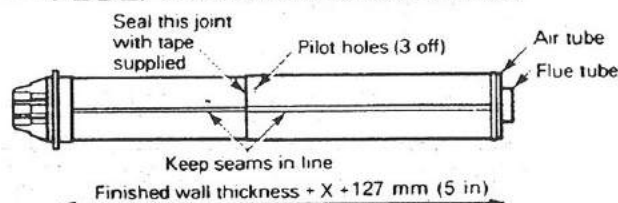
**Note:** The inner case does not need to be removed during installation.

1. Remove the four nuts securing the flue diverter to the top of the boiler chassis.
2. Carefully lift off the flue diverter taking care not to damage the gasket.



3. Replace the diverter so that it is either facing left or right depending on which side the flue is required. Ensure the gasket is intact and in position and secure with four nuts. Tighten evenly to form a seal.
4. Lift the boiler and offer it to the wall mounting plate and secure to the wall plate with two M6 nuts 'A' supplied.
5. Remove the two screws above the boiler thermostat switch, securing the front of the wiring centre and lower the wiring centre. Slide out the fascia panel next to the control box. This will allow access to the bottom fixing screw.
6. Secure the bottom of the boiler to the wall with one x 2½" lg No. 12 woodscrew (not supplied) into the hole previously drilled and plugged.
7. Replace the fascia panel and wiring centre.

## 14 ADJUST THE LENGTH OF THE FLUE/TERMINAL ASSEMBLY

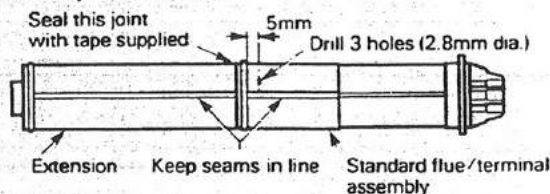


(X is the distance between the wall and the outside of the white case)

1. Using the measurements noted in frame 12, adjust the length of the flue/terminal assembly so that it is 127 mm (5 in) + finished wall thickness + distance between the wall and the outside of the white case, from the back of the terminal flange to the inside edge of the OUTER air tube as shown. **Note:** Ensure that the seams in the outer air tubes are inline.
2. Drill through the three pilot holes shown above, with a 2.8 mm drill and secure the two tubes together using the three No 8 x 10 lg screws supplied with the flue/terminal assembly. **Note:** When drilling through the outer air tube take care not to damage the inner flue tube with the drill.
3. Seal the centre joint with the tape supplied.

## 15 FLUE EXTENSION

The flue extension kit allows the standard flue/terminal assembly to be extended by 1000 mm (39 in).

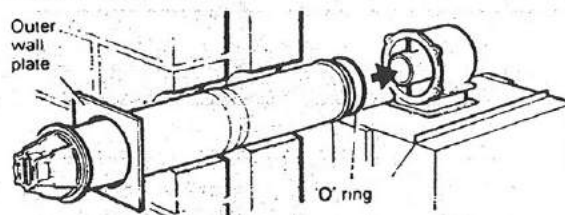


1. If the flue extension kit is used, connect the plain end of the extension to the swaged end of the standard flue/terminal. Ensure that the inner flue tube of the standard flue/terminal fits INSIDE the inner flue tube of the extension and the outer air tube fits OVER the air tube of the extension. Push fully home. **Note:** Ensure that the seams in the outer air tubes are in line.
2. Drill three equally spaced holes using a 2.8 mm drill in the position shown, through both the standard flue/terminal and the extension tube sleeve. Secure the two tubes together using the three No. 8 x 10 lg screws supplied with the flue extension. **Note:** When drilling through the outer air tube take care not to damage the inner flue tube with the drill.
3. Seal the joint with the tape supplied with the flue extension.
4. Adjust the OVERALL length as described in frame 14. Secure and seal.

## 16 FIT THE FLUE/TERMINAL ASSEMBLY

**Note:** If the wall is to be made good up to the terminal the outer wall plate need not be used.

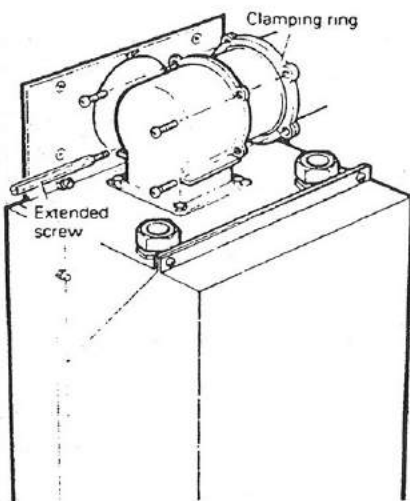
1. Fit the outer wall plate over the flue/terminal assembly.
2. Fit the 'O' ring in position over the outer air tube against the flared section.



3. From outside the building insert the flue/terminal assembly into the wall. Ensure that the slots in the end of the terminal are vertical.
4. Push the flue/terminal assembly towards the boiler and engage the tube into the flue diverter on top of the boiler, ensuring that the inner tube slides INTO the inner tube of the diverter and the outer air tube slides into the diverter. Check that the 'O' ring is on the boiler side of the flared section. Push fully home until the flared end of the outer tube is in contact with the flue diverter.



## 17 CONNECT THE FLUE TO THE BOILER

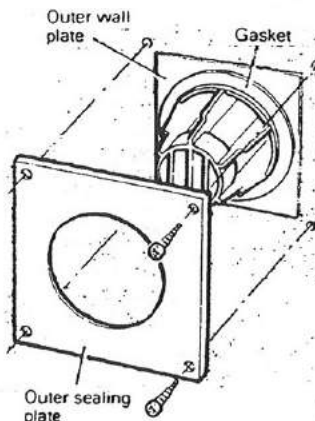


1. Fit the two halves of the clamping ring over the air tube as shown. Ensure that the flat side is facing away from the boiler, and the recessed side is against the flared part of the air tube.
2. Using three M4 screws and the special extended screw supplied, secure the clamping ring to the flue diverter.  
**Note:** The extended screw must be used for the rear lower fixing.  
The "fin" on the side of the flue diverter should be used to assist in the location of the extended screw.
3. Tighten the screws to seal the flue assembly.
4. Make good the gap on the inside wall around the flue tube.

## 18 FIT THE OUTER SEALING PLATE

**Note:** The outer sealing plate and gasket need not be used if the wall is made good up to the terminal

1. Stick the self adhesive outer sealing plate gasket to the terminal as shown.

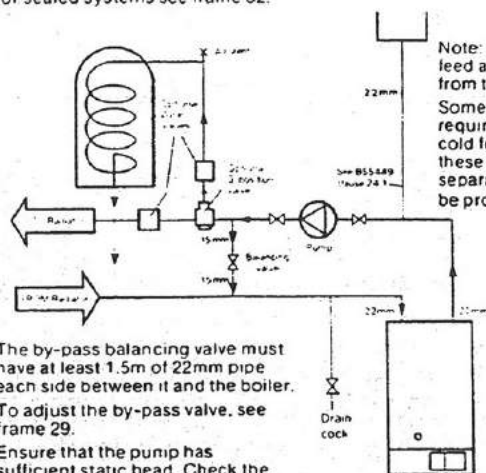


2. Place the outer sealing plate over the terminal and mark the position of the four fixing holes.
3. Remove the sealing plate and drill and plug the fixing holes, suitable for 1" lg No. 8 woodscrews.  
**Note:** The terminal should be covered before drilling to prevent debris entering the terminal.

4. Remove any covering from the terminal. Position the sealing plate over the terminal and secure to the wall with four 1" lg No. 8 screws (supplied with the flue assembly).

## 19 FULLY PUMPED, OPEN SYSTEM, PIPING DIAGRAM. COMBINED COLD FEED AND VENT

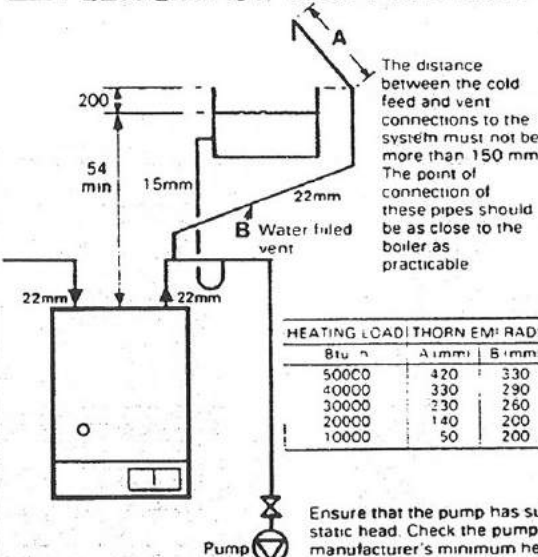
For sealed systems see frame 32.



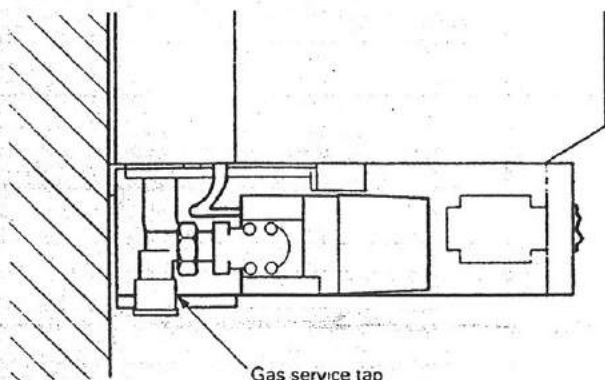
The by-pass balancing valve must have at least 1.5m of 22mm pipe each side between it and the boiler. To adjust the by-pass valve, see frame 29.

Ensure that the pump has sufficient static head. Check the pump manufacturer's minimum head

## 20 CLOSE COUPLED COLD FEED LENGTH OF WET AND DRY VENT



## 21 GAS SUPPLY



Connect a 15 mm gas supply to the service tap.

Pressure test for gas soundness and purge in accordance with BS 6891

## 22 COMPLETE THE INSTALLATION

After connecting the flue, gas and water connections, complete the electric wiring (see frames 23 and 24).

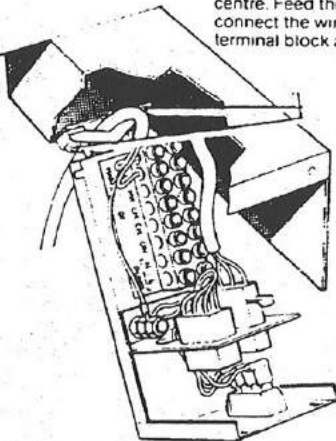
Thoroughly flush the whole system with cold water without the pump in position. Ensure all valves are open. With the pump fitted, fill, vent and check for water soundness, rectifying where necessary.

Where an inhibitor is added to the system, Industrial (Anti-corrosion) Services Ltd recommend Fernox CP3 for use with copper tube boilers and this should be used in accordance with their instructions. Where an Apollo replaces a boiler on an old system, special care is required. The system should be drained and flushed out, ensuring that all the radiators are drained. When filling, add the correct quantity of CP3 for the system volume. As a guide a 3 radiator system will on average require about 2 1/4 pints, a 6 radiator system 4 1/4 pints and a 9 radiator system about 6 1/4 pints.



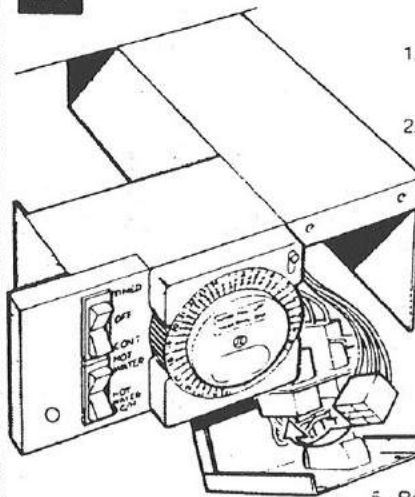
## 23 CONNECT THE MAINS

1. Take out the two fixing screws.
2. Lower the wiring centre and leave it hanging. If access is difficult it may be disengaged and drawn forward. It may be necessary to unplug the 3-way plug on the ignition control box lead to allow the wiring centre to be drawn forward.
3. Slacken two screws in the cable clamp below the wiring centre. Feed the mains lead under the clamp and connect the wires, brown to L and blue to N on the terminal block and green and yellow to the earthing stud.
4. Keep the wiring centre in the open position, take up the excess slack in the cables between the terminal block and the cable clamp, then tighten the cable clamp screws. Check that the wiring centre will open and close freely without straining the cables.  
**Note:** When connecting the mains lead to the terminal block and earthing stud, ensure that the length of the earth wire is such, that if the mains lead slips out of the cable clamp the live and neutral wires become taut before the earth lead.
5. The pump lead and any external controls wiring should be passed through one or both of the bushes, provided at the rear of the wiring centre, and connected to the terminal block. See wiring diagram, frame 31.



## 24 FIT THE PROGRAMMER KIT

1. Slide out and discard the fascia panel on the side of the control box.
2. Engage the programmer fixing into the slot in the control box and push fully home.
3. Connect the programmer 6-pin plug to the 6-pin socket on the wiring centre, push fully home until the latch engages.
4. Remove the relevant links from the terminal block. See wiring diagram frame 31.
5. Replace the 3-way plug if it was removed.
6. Replace the wiring centre and fix in position with two screws.



## 25 COMMISSION THE BOILER (A)

Refer to frame 27 for boiler controls.

With the gas supply isolated check the ignition sequence as follows:

1. Check that all system controls are on.
2. Set the boiler thermostat switch to OFF and switch on the electricity supply.
3. Set the boiler thermostat switch to HIGH and the automatic ignition sequence will start. A click will be heard indicating that the start gas solenoid has opened and the ignition sparks will also be heard.
4. As the gas supply is not yet turned on, the unit will 'lock-out' after 10-15 seconds.

Having checked the above sequence the pilot flame and burner setting pressure must be checked.

1. Set the boiler thermostat switch to OFF.
2. Remove the burner setting pressure test point screw on the burner manifold and connect a pressure gauge.
3. Turn on the gas supply and set the boiler thermostat switch to HIGH. The unit will go through the ignition sequence and the pilot will light. The pilot can be seen through the inspection window. A second or so after the pilot is lit the main gas solenoid will open and the main burner will light. If ignition does not take place, the start gas solenoid is closed and the spark ignition ceases after 10-15 seconds.

To reset, set the boiler thermostat switch to OFF, wait 5 seconds then set to HIGH. If ignition continually fails, refer to the fault finding guide in the Maintenance instructions.

**Note:** The pilot burner is turned off every time the main burner is off. The ignition sequence is automatically activated when the boiler thermostat requires heat.

- Remove the screw securing the gas valve plastic cover and lift off cover.
- Adjust the pilot throttle screw on the gas valve so that the pilot flame envelopes the electrode and extends 10 mm past it (approximately 35-40 mm long).

## 26 COMMISSION THE BOILER (B)

6. Allow the burner to run for 10 minutes and if necessary adjust the burner setting pressure to give the heat input required. Turn the adjusting screw clockwise to decrease the burner setting pressure.  
**Note:** The boiler is factory set to the maximum input.

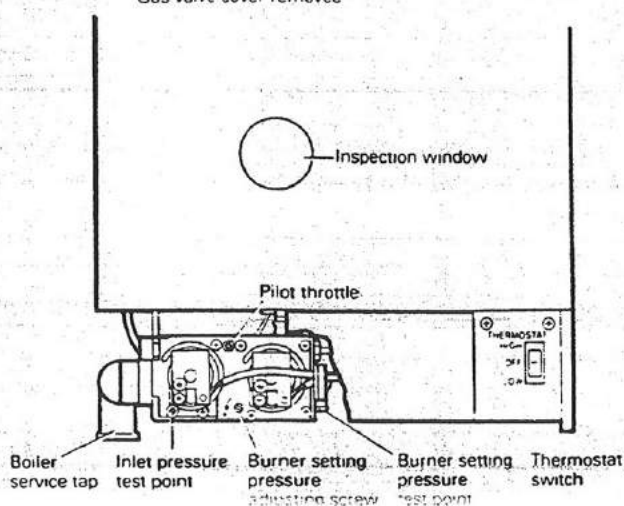
NOMINAL BOILER RATINGS

BOILER	OUTPUT		INPUT		BURNER SETTING PRESSURE	
	kW	Btu/h	kW	Btu/h	mbar	in wg
Fanfare 15/30L	4.4	15 000	5.8	19 600	5.4	2.2
	6.6	22 500	8.4	28 700	10.0	4.0
	8.8	30 000	11.0	37 500	16.2	6.5
Fanfare 30/50L	8.8	30 000	11.4	38 900	5.6	2.2
	11.7	40 000	14.9	50 900	9.2	3.7
	14.7	50 000	18.3	62 500	13.7	5.5

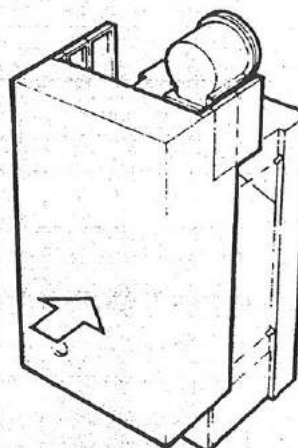
7. Set the boiler thermostat switch to OFF, disconnect the pressure gauge and refit the test point screw. Test for gas soundness around the screw.
8. Replace the gas valve plastic cover and secure with its screw. Ensure the cable clamp is located correctly in the cover.
9. Ensure the arrow on the data plate is against the correct boiler rating.
10. When the system has been tested, drain the water while it is still hot in order to complete the flushing process. Refill, vent and make a final check for water soundness.

## 27 BOILER CONTROLS

Gas valve cover removed:



## 28 FINAL ASSEMBLY



1. **SIDE EXIT FLUE:** before fitting the outer case, the infill panels on the side of the case must be removed to provide clearance for the flue. Remove by withdrawing the plastic fixings.
2. Lift the outer case into position over the boiler and push back to engage the fixing pins on the chassis side into the case.
3. Secure the case in position by replacing the bottom fixing screw.
4. Slide the bottom cover into place.

## 29 ADJUST THE BY-PASS

1. Fully close the by-pass valve and then open it one full turn.
2. Start the boiler with the heating circuit only in operation and adjust the pump speed selector to achieve not more than 9°C temperature rise across the boiler. This will usually require the pump to be set to maximum.
3. If a temperature rise of 9°C or less cannot be achieved, gradually open the by-pass valve until the temperature rise decreases to 9°C.

**Note:** The by-pass valve should be of a type that is non adjustable by the householder.

## 30 HAND OVER THE INSTALLATION

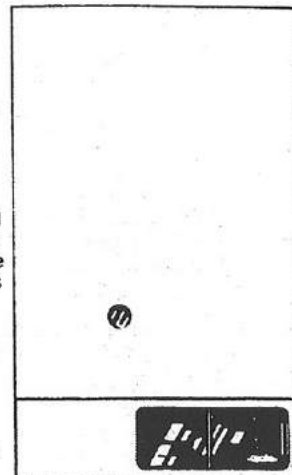
Hand the USER INSTRUCTIONS to the User and instruct in the safe operation of the boiler and controls.

Advise the User of the precautions to prevent damage to the heating/hot water system and to the building in the event of the system remaining inoperative during frost conditions.

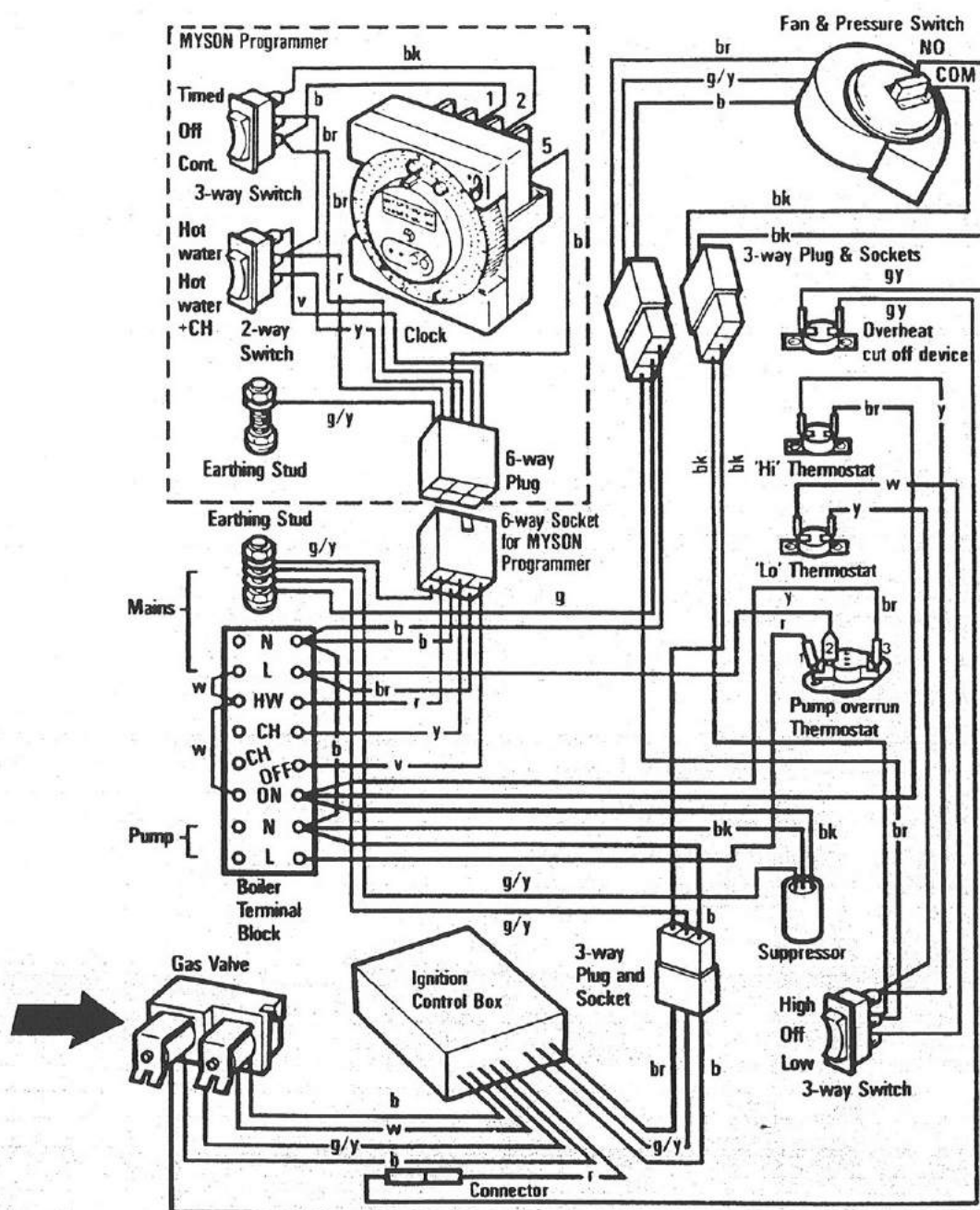
Advise the User that for continued efficient and safe operation of the boiler it is important that adequate servicing is carried out at intervals recommended by the Local Gas Region.

Leave a permanent card attached to the boiler giving:

1. Name and address of installer.
2. Date of installation.
3. A wiring diagram of the circuit.



# 31 BOILER WIRING DIAGRAM



NOTE: Remove link L-HW when fitting MYSON Programmer.  
 Remove link HW-ON when fitting external controls.  
 If a MYSON Programmer is fitted, terminal CH-OFF is live when HOT WATER is selected.

## COLOUR CODE

b—blue	p—purple
bk—black	v—violet
br—brown	r—red
g—green	w—white
gy—grey	y—yellow
o—orange	g/y—green and yellow
pk—pink	



## 32 REQUIREMENTS FOR SEALED SYSTEMS

### 1. GENERAL

The installation must comply with the requirements of BS5376:2 and BS5449:1. Maximum water temperature is  $85^{\circ}\text{C} \pm 3^{\circ}\text{C}$ .

### 2. SAFETY VALVE

A safety valve set to operate at 3 bar (45 lbf/in<sup>2</sup>) shall be fitted in the flow pipe close to the boiler. There must not be any valves between the safety valve and the boiler.

The valve should be positioned on a discharge pipe fitted to prevent any discharge creating a hazard to occupants or cause damage to electrical components and wiring.

### 3. PRESSURE GAUGE

A pressure gauge covering at least the range 0 to 4 bar (0 to 60 lbf/in<sup>2</sup>) shall be fitted in the system.

### 4. EXPANSION VESSEL

A diaphragm type expansion vessel, to BS4814, shall be connected at a point in the return pipe close to the boiler. The vessel must be chosen to suit the volume of water in the system and the charge pressure must not be less than the static head at the point of connection. Further details can be obtained from 'Material and Installation Specification for Domestic Central Heating and Hot Water' published by British Gas.

Sizing Table

Air or Nitrogen charge pressure (bar)	0.5		1.0	
Pre-pressurisation pressure (bar)	None	1.0	None	1.5
Expansion vessel volume (litres)	$A \times 0.07$	$A \times 0.120$	$A \times 0.088$	$A \times 0.160$

A = System volume (litres).

### 5. CYLINDER

The hot water cylinder shall either be the indirect coil type or a direct cylinder fitted with an immersion calorifier.

### 6. METHOD OF MAKE UP

Water lost from the system shall be replaced from a make-up vessel, and non return valve, mounted higher than the top of the system on the return side of the cylinder or radiators.

Where access to a make-up vessel would be difficult, make-up can be provided by pre-pressurisation of the system.

### 7. FILLING

The system may be filled from the mains via a temporary hose connection from a draw-off tap supplied from a service pipe under mains pressure, provided that this procedure is acceptable to the local Water Authority.

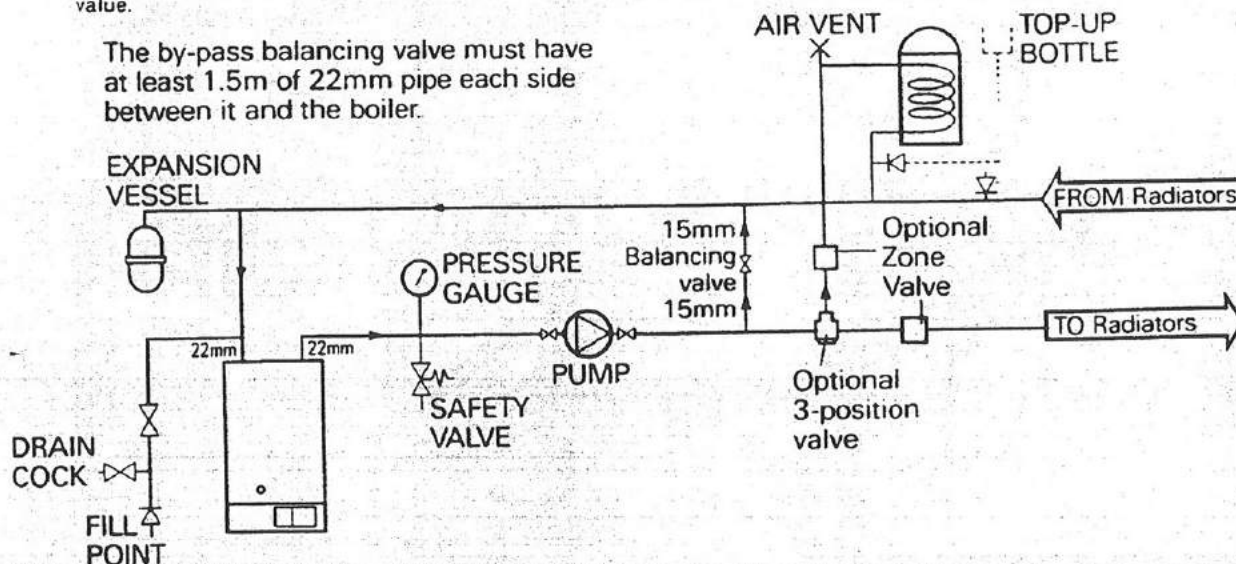
The following fittings should form a permanent part of the system and fitted in the order stated.

a) a stop valve complying to the requirements of BS1010:2. b) a test cock. c) an anti-vacuum valve of a type approved by the National Water Council; and d) a non-return valve of an approved type.

### 8. COMMISSIONING

Fill the system until the pressure gauge registers 1.5 bar (22 lbf/in<sup>2</sup>). Examine for leaks and rectify where necessary. Light the boiler and heat the system to the maximum working temperature. Examine for leaks then turn off the boiler. Drain the system while it is still hot. Refill, vent and adjust the cold fill pressure to the required value.

The by-pass balancing valve must have at least 1.5m of 22mm pipe each side between it and the boiler.



# Myson Heating Limited

## MAINTENANCE

### Apollo Fanfare 15/30i and 30/50i Wall mounted gas boilers

G.C. Appliance No's. Apollo Fanfare 15/30i 41 789 73  
(Leave these instructions adjacent to the gas meter)

Apollo Fanfare 30/50i 41 789 74

#### General

This booklet describes the annual maintenance procedure, provides instruction on the replacement of faulty parts and information on fault finding and spare part identification.

Before commencing work set the boiler thermostat switch to OFF. Allow the boiler to cool and isolate the electricity supply. Slide off the bottom cover and turn off the gas supply at the service tap, see frame 33.

**IMPORTANT:** ALWAYS test for gas soundness after completing any servicing or exchange of gas carrying components. Ensure that the inner case seal is intact and the case properly fitted after servicing or replacement of parts.

NOMINAL BOILER RATINGS

BOILER	OUTPUT		INPUT		BURNER SETTING PRESSURE	
	kW	Btu/h	kW	Btu/h	mbar	in w.g.
Fanfare 15/30i	4.4	15 000	5.6	19 200	4.6	1.8
	6.6	22 500	8.4	28 700	10.0	4.0
	8.8	30 000	11.0	37 500	14.8	5.9
Fanfare 30/50i	8.8	30 000	11.4	38 900	5.6	2.2
	11.7	40 000	14.9	50 900	9.2	3.7
	14.7	50 000	18.3	62 500	13.7	5.5

## ANNUAL MAINTENANCE

### 1 DISMANTLING

Remove the screw securing the bottom of the outer case and pull off the case. Remove the two screws 'A' securing the wiring centre and lower the wiring centre.

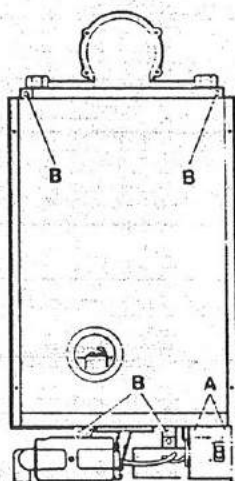
If a programmer is fitted, unplug the programmer plug from the wiring centre and slide out the programmer. If a programmer is not fitted, slide out the fascia panel.

Replace the wiring centre.

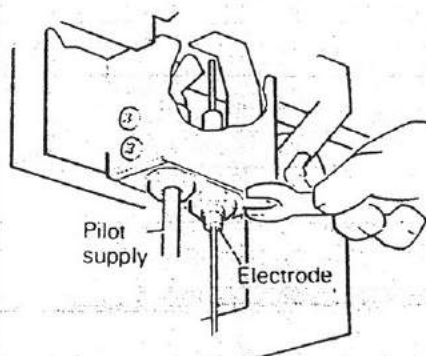
Unscrew the four inner case fixing screws 'B' and remove inner case.

The heat exchanger and burner should be examined to determine if cleaning is necessary before completely dismantling. To do this, slacken the two wing nuts securing the flue hood to the combustion chamber. Remove the four screws and one wing nut securing the combustion chamber front cover and withdraw cover.

Examine the heat exchanger and burner. Should the burner not require cleaning it should be covered over before cleaning the heat exchanger.



### 2

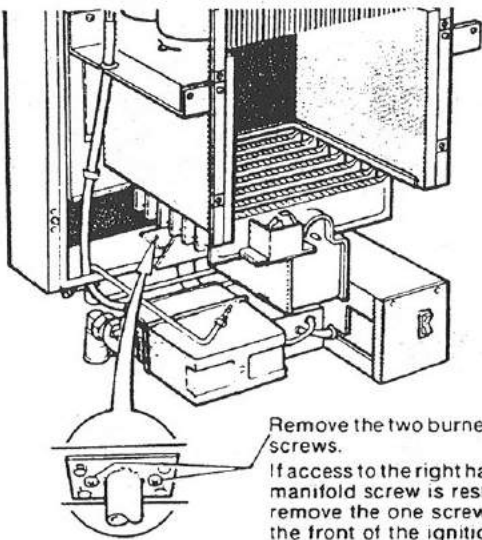


1 Disconnect the electrode lead from the ignition control box and withdraw the lead and grommet through the chassis.

2 Undo the nut and disengage the electrode.

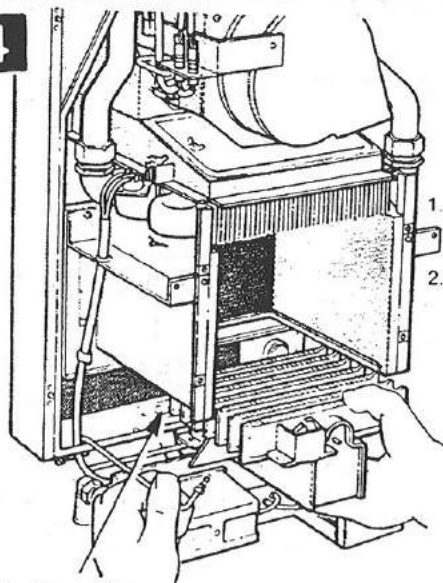
3 Undo the nuts and disconnect the pilot supply from both the pilot assembly and gas valve.

4 Carefully remove the pilot injector

**3**

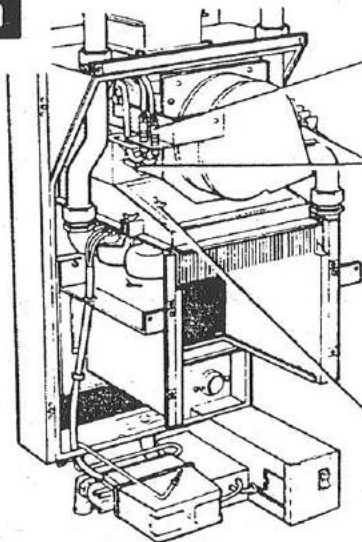
Remove the two burner manifold screws.

If access to the right hand burner manifold screw is restricted, remove the one screw securing the front of the ignition control box mounting bracket to the side of the wiring centre and pull the box forwards slightly.

**4**

1. Move the pilot supply to one side.
2. Lift out the burner assembly being careful not to lose the burner flange 'O' ring.

3. Cover this flange.

**5**

1. Unplug the two plug and sockets attached to the pressure switch mounting bracket.

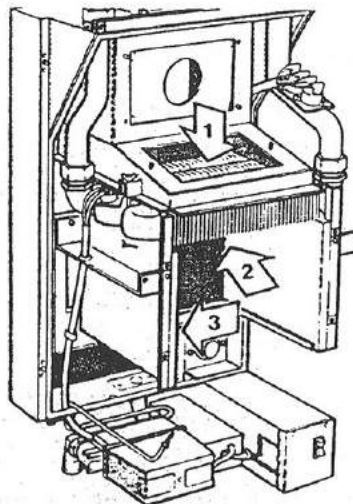
2. Remove two screws (one each side) securing the fan assembly to the flue hood and withdraw forwards to remove the complete fan assembly.

3. Visually check that the fan impeller and inlet are clean. If necessary, clean the fan blades with a soft brush.

4. Remove the two wing nuts securing the flue hood cover. Lift off the cover taking care not to damage the gasket.

**6**

## CLEANING THE HEAT EXCHANGER



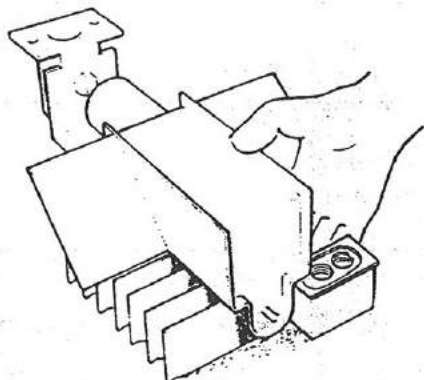
- 1 and 2. Brush the heat exchanger from above and below using a small stiff brush. (British Gas No. SK4798E) Brush back to front **NOT** sideways.

3. Remove any fallen deposits from the boiler base.

**7**

## CLEANING THE BURNER AND INJECTOR

1. Turn the burner over and tap gently to remove any debris.



2. Unscrew the injector from the manifold. Clean by blowing through or washing in acetone or similar solvent. Do **NOT** clear the injector with a pin or wire. Replace injector using a small amount of sealant.

**8**

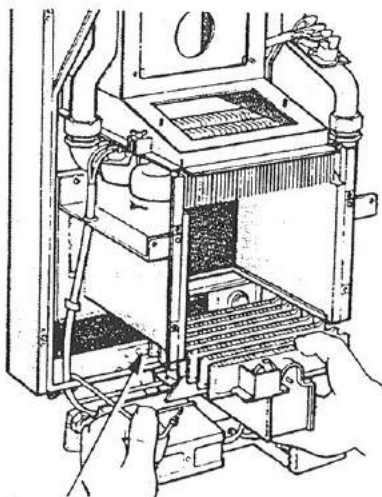
## CLEANING THE PILOT INJECTOR

1. Clean the pilot injector (removed in frame 2) by blowing through or washing in acetone or similar solvent.  
Do **NOT** clear the injector with a pin or wire.
2. Clean the pilot burner and electrode with a fine wire brush if necessary.

To clean the pilot filter in the gas valve refer to frame 32.



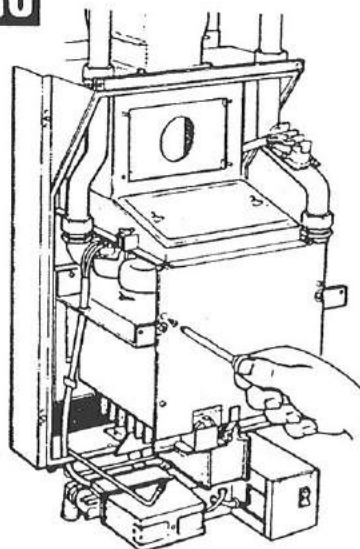
## 9 REASSEMBLY



1. Remove temporary cover from flange.

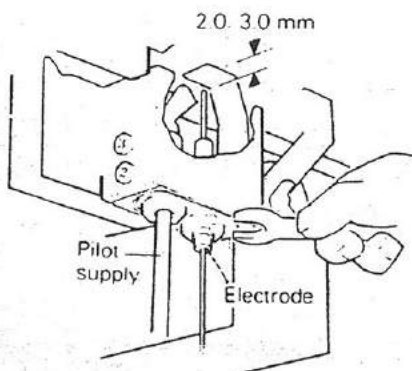
2. Check 'O' ring is in position in the burner flange.
3. Move the thermocouple and pilot supply to one side.
4. Replace the burner and secure with two screws previously removed.
5. If the ignition control box was moved, push it back into position and secure with one screw.

10



1. If the burner was not removed for cleaning, take out the protective covering.
2. Replace the flue hood cover, ensuring that the gasket is intact, and secure with two wing nuts.
3. Replace the combustion chamber front, ensuring that the burner stud locates in the bracket, and secure with four screws and wing nut.
4. Retighten the two wing nuts securing the flue hood to the combustion chamber.

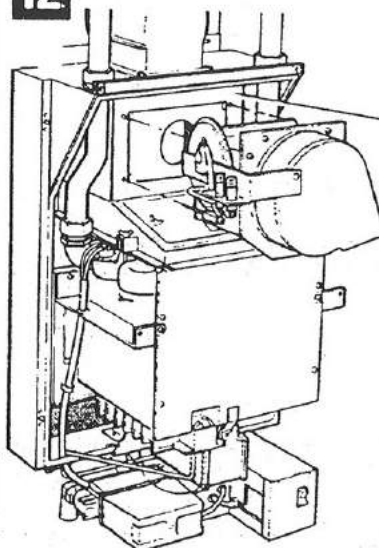
11



3. Check that the spark gap is 2.0/3.0 mm.

1. Replace the pilot injector and reconnect the pilot supply to the pilot assembly and gas valve. Secure with nuts.
2. Replace the electrode and secure in position with nut. Pass the electrode lead through the chassis and fit the grommet in position. Connect the electrode lead to the ignition control box.

12



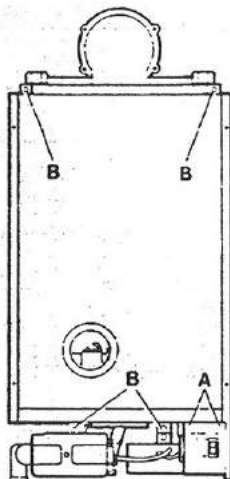
1. Ensure that the gasket is intact around the opening in the flue hood.
2. Replace the fan assembly, locating it over the two studs. Secure with two screws (one each side). Tighten to form a seal between the fan assembly and flue hood.  
**NOTE:** The two studs are for locating purposes only.
3. Re-connect the two plugs and sockets.

13

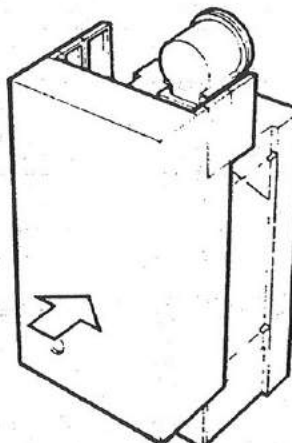
1. Ensure that the inner case seal is intact around the boiler chassis. Fit the inner case and secure with four screws (B). Tighten sufficiently to form a seal.

**WARNING:** It is imperative for complete safety of operation that the inner case is properly fitted.

2. Open the wiring centre and replace the programmer and re-connect the plug or replace the fascia panel if a programmer is not fitted.
3. Replace the wiring centre and secure with two screws (A).
4. Turn on the gas at the service tap.
5. Refer to the lighting instructions and light the boiler.
6. Test pilot connection at gas valve for gas soundness.
7. Check that the pilot flame envelops the electrode and extends 10 mm past it (approximately 35-40 mm long) if necessary adjust the pilot throttle screw—see frame 33.



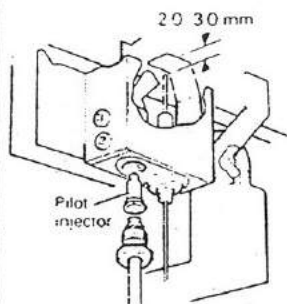
14



1. Lift the outer case into position over the boiler and push back to engage the fixing pins on the chassis side into the case.
2. Secure the case in position by replacing the bottom fixing screw.
3. Check the operation and setting of the boiler and system controls.
4. Replace the bottom cover.

# REPLACEMENT OF PARTS

## 15 TO REPLACE THE PILOT BURNER, INJECTOR OR ELECTRODE



1. Remove the outer and inner cases (see frame 1).  
**Spark electrode:** Disconnect the electrode lead from the ignition control box and withdraw the lead and grommet through the chassis. Undo the nut and disengage the electrode. Insert a new electrode and secure with nut. Pass the electrode lead through the chassis and fit the grommet in position. Connect the electrode lead to the ignition control box. Check that the gap is 2.0/3.0 mm.

**Pilot injector:** Remove the electrode and disconnect the pilot supply. Carefully remove the pilot injector. Fit new injector and re-connect pilot supply. Replace the electrode and check that the gap is 2.0/3.0 mm.

## 16 Pilot Burner, Injector or Electrode—continued

**Pilot burner:** Remove the spark electrode, pilot supply and injector. Undo the two screws securing the pilot shield and pilot burner to the mounting bracket. Replace pilot shield and new pilot burner and secure with two screws. Replace the injector, pilot supply and electrode. Check that the gap is 2.0/3.0 mm.

### Re-assemble:

1. Replace the inner case, programmer or fascia panel and outer case.
2. Refer to the lighting instructions and light the boiler.
3. Check that the pilot flame envelops the electrode and extends 10 mm past it (approximately 35-40 mm long). If necessary adjust the pilot throttle screw—see frame 33.

## 17 TO REPLACE THE BURNER

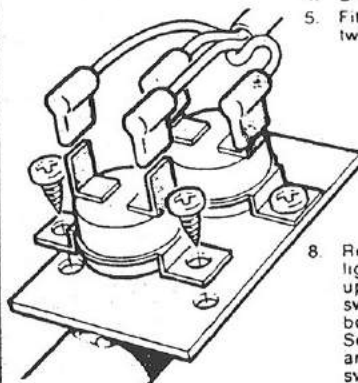
**NOTE:** The burner fitted may be either Furigas (silver) or Bray (blue) either may be used as a replacement for the other.

1. Remove the outer and inner cases (see frame 1).
2. Slacken the two wing nuts securing the flue hood to the combustion chamber. Remove the four screws and one wing nut securing the combustion chamber front cover and withdraw the cover.
3. Remove the burner assembly as described in frames 2, 3 and 4.
4. If necessary remove the pilot assembly and fit to new burner.
5. Using a new 'O' ring in the burner manifold flange fit the burner and reassemble the boiler as described in frames 9, 10 and 11.
6. Refer to lighting instructions and light the boiler.
7. Test pilot connection at gas valve for gas soundness.
8. Replace the inner case, programmer or fascia panel and outer case.
9. Check the operation of the controls.
10. Replace the bottom cover.

## 18 TO REPLACE THE BOILER 'Hi' or 'Lo' THERMOSTATS

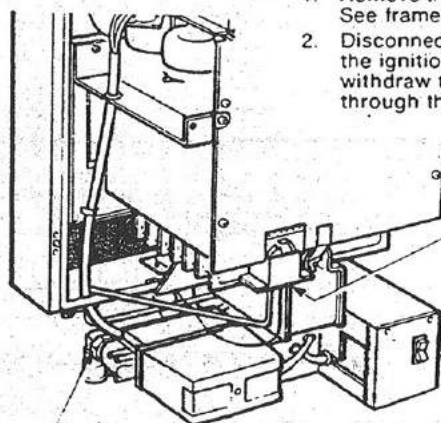
The 'Hi' thermostat is marked with brown paint and the 'Lo' thermostat is marked with white paint.

1. Remove the outer and inner cases (see frame 1).
2. Disconnect the two wires from the thermostat.
3. Unscrew the two screws securing the thermostat and remove thermostat.
4. Ensure that the mounting plate is clean.
5. Fit a new thermostat and secure with two screws.
6. Re-connect the two wires. The polarity of these wires is not important. Ensure that the brown wire goes to the 'Hi' thermostat and the white wire goes to the 'Lo' thermostat. The yellow wires are common.
7. Replace the inner case, programmer or fascia panel and outer case.
8. Refer to the lighting instructions and light the boiler. Allow the boiler to heat up. Check that the 'Hi' thermostat switches the boiler off and on when the boiler thermostat switch is set to HIGH. Set the boiler thermostat switch to LOW and check that the 'Lo' thermostat switches the boiler off and on.
9. Replace the bottom cover.



## 19 TO REPLACE THE GAS VALVE

Ensure that the gas supply is OFF

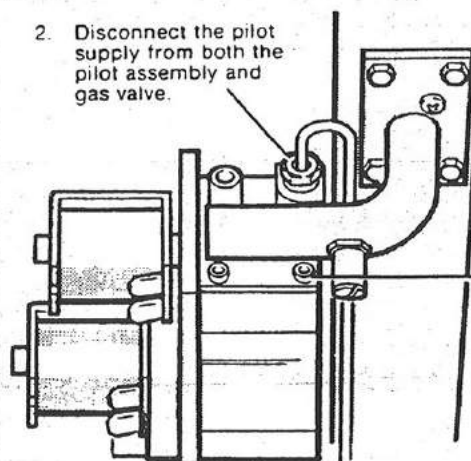


1. Remove the outer and inner cases. See frame 1.
2. Disconnect the electrode lead from the ignition control box and withdraw the lead and grommet through the chassis.

3. Undo the union securing the electrode and remove electrode

4. Disconnect the union at the service tap.

## 20 Gas Valve—continued

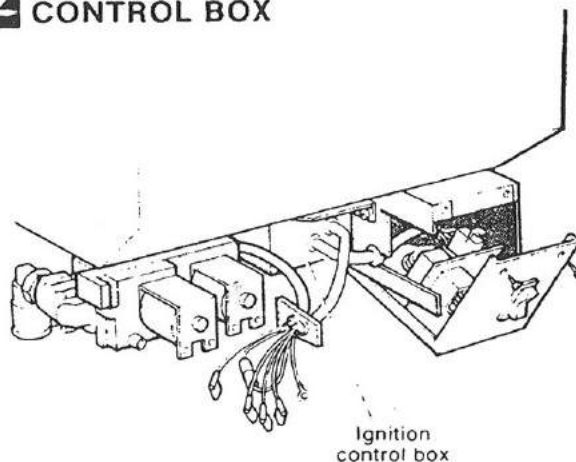


1. Remove the ignition control box as described in frames 22 and 23 paras 1-6 and 9.
3. Remove the four 3 mm socket screws which secure the manifold to the gas valve.

## 21 Gas Valve—*continued*

1. Hold the pilot supply aside and take out the gas valve.
2. Discard the 'O' ring in the manifold flange.
3. Remove the four 3 mm socket screws securing the service tap tail lining flange to the gas valve and remove flange. Discard the 'O' ring in the flange.
4. Fit a new 'O' ring in the flange and secure to the new valve.
5. Fit a new 'O' ring in the manifold flange. (Both 'O' rings are the same size).
6. Re-assemble the new gas valve to the boiler in the reverse order of frames 19 and 20, but do not replace the gas valve plastic cover at this stage.
7. Replace the inner case, programmer or fascia panel and outer case.
8. Refer to the lighting instructions. Turn on gas, purge supply of air, light the boiler and test gas valve inlet, outlet and pilot connections for gas soundness.
9. Check that the pilot flame envelopes the electrode and extends 10 mm past it (approximately 35-40 mm long). If necessary adjust the pilot throttle screw—see frame 33.
10. Allow the burner to run for 10 minutes then adjust the burner setting pressure (see frame 33) to the rating arrowed on the data plate.
11. Replace the gas valve plastic cover and secure with its screw. Ensure that the cable clamp is located correctly on the right hand side.
12. Replace the bottom cover.

## 22 TO REPLACE THE IGNITION CONTROL BOX



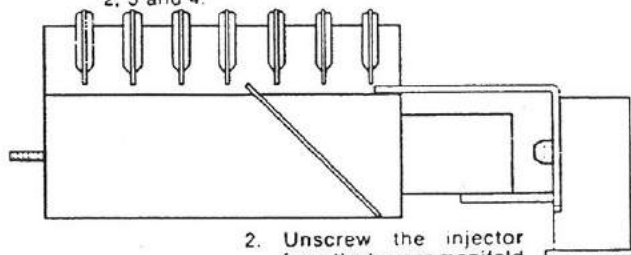
1. Remove the two screws securing the wiring centre and lower the wiring centre.
2. If a programmer is fitted, unplug the programmer plug from the wiring centre and slide out the programmer. If a programmer is not fitted, slide out the fascia panel.

## 23 Ignition Control Box—*continued*

3. Unplug the ignition control box plug from the wiring centre.
4. Disconnect the electrode lead from the ignition control box.
5. Remove the screw securing the gas valve plastic cover and lift off cover.
6. Disconnect the push-on terminals and unscrew the earth terminal. (The polarity of these wires is not important but the grey and a blue lead must go to the inlet solenoid and the white and a blue lead to the outlet solenoid)—see wiring diagram frame 34. Disconnect the one-way connector joining the grey and red leads.
7. Make a note of the position of the plastic cable clamp on the leads, as this must be replaced in the same position upon re-assembly.
8. Remove the cable clamp by "nipping" with a pair of pliers and withdraw it from the plastic retaining plate.
9. Remove the one screw securing the ignition control box mounting bracket to the side of the wiring centre and remove the control box complete with mounting bracket.
10. Remove the two screws securing the control box to the mounting bracket and remove bracket.
11. Re-assemble in reverse order using a new control box. Ensure that the plastic cable clamp is correctly fitted and in the same position on the leads as it was prior to dismantling. Check the gas valve wiring against the wiring diagram. Ensure that the control box lead grommet is in position in the side of the wiring centre.
12. Refer to the lighting instructions and light the boiler.

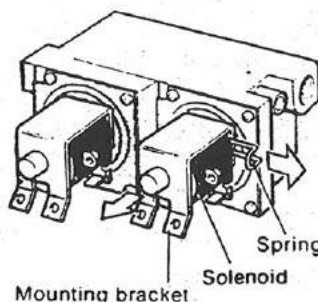
## 24 TO REPLACE THE BURNER INJECTOR

1. Remove the burner from the boiler, see frames 1, 2, 3 and 4.



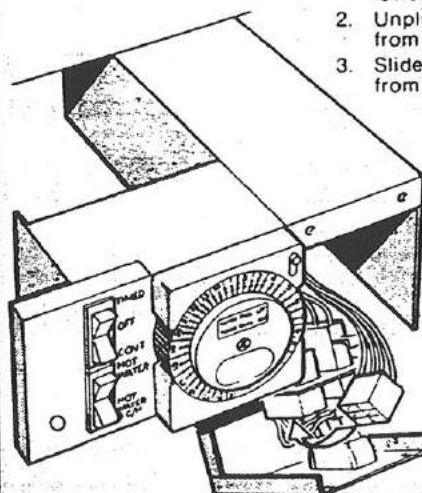
2. Unscrew the injector from the burner manifold.
3. Screw in a replacement injector, using a small amount of thread sealant.
4. Replace the burner assembly to the boiler.
5. Refit the combustion chamber front cover and tighten the two wing nuts securing the flue hood.
6. Replace the inner case, programmer or fascia panel and outer case.
7. Refer to the lighting instructions and light the boiler.
8. Check the operation of the boiler and controls.
9. Replace the bottom cover.

## 25 TO REPLACE A GAS VALVE OPERATING SOLENOID



1. Remove the screw securing the gas valve plastic cover and lift off cover.
2. Disconnect the push-on terminals and unscrew the earth terminal. (The polarity of these wires is not important but the grey and blue lead must go to the inlet solenoid and the white and blue lead to the outlet solenoid)—see wiring diagram frame 34.
3. Pull out the spring clip at the base of the solenoid and lift off the solenoid and its mounting bracket.
4. Position the new solenoid into the mounting bracket and re-assemble in reverse order.
5. Light the boiler to check the gas valve operation.
6. Replace the bottom cover.

## 26 TO REPLACE PROGRAMMER



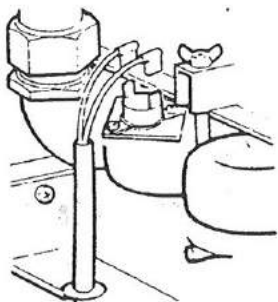
1. Remove the two screws securing the wiring centre and lower the wiring centre.
2. Unplug the programmer plug from the wiring centre.
3. Slide out the programmer from the control box.
4. Slide the new programmer into the control box, and push fully home.
5. Connect the programmer plug to the wiring centre.
6. Close the wiring centre and secure with two screws.
7. Light the boiler and check controls.
8. Replace the bottom cover.



## 27 TO REPLACE THE OVERHEAT CUT OFF DEVICE

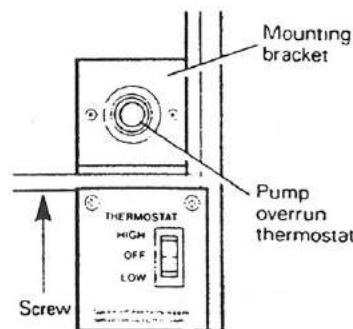
The overheat cut-off device is marked with grey paint so as not to be confused with the Hi or Lo thermostats.

- 1 Remove the outer and inner cases (see frame 1).
- 2 Disconnect the two wires from the overheat cut-off device.
- 3 Unscrew the two screws securing the cut-off device to the heat exchanger and remove cut-off device.
- 4 Ensure that the mounting plate is clean.
- 5 Fit a new cut-off device and secure with two screws.
- 6 Re-connect the two wires. The polarity of these wires is not important. Ensure that the grommet is in position in the air restrictor plate.
- 7 Replace the inner case, programmer or facia panel and outer case.
- 8 Refer to the lighting instructions and check that the pilot and main burner will light.



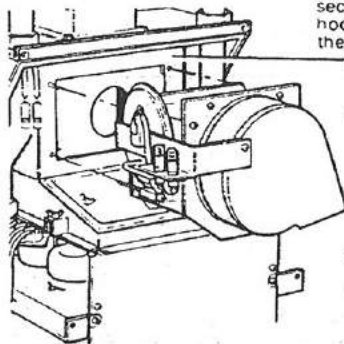
## 28 TO REPLACE THE PUMP OVERRUN THERMOSTAT

- 1 Remove the outer and inner cases (see frame 1).
- 2 Remove the ignition control box as described in frames 22 and 23 paras 1-6 and 9.
- 3 Remove the one screw securing the pump overrun thermostat mounting bracket situated next to the wiring centre underneath the chassis. Carefully withdraw the bracket complete with thermostat.
- 4 Disconnect the three leads (noting their position) and remove the two screws securing the thermostat to the bracket.
- 5 Fit the new thermostat to the mounting bracket and secure with two screws.
- 6 Connect the three leads to the thermostat (see wiring diagram) and re-assemble in reverse order.
- 7 Light the boiler and allow it to heat up fully. Switch off the boiler at the programmer or external controls and check that the pump runs for 5-15 minutes.
- 8 Replace the bottom cover.

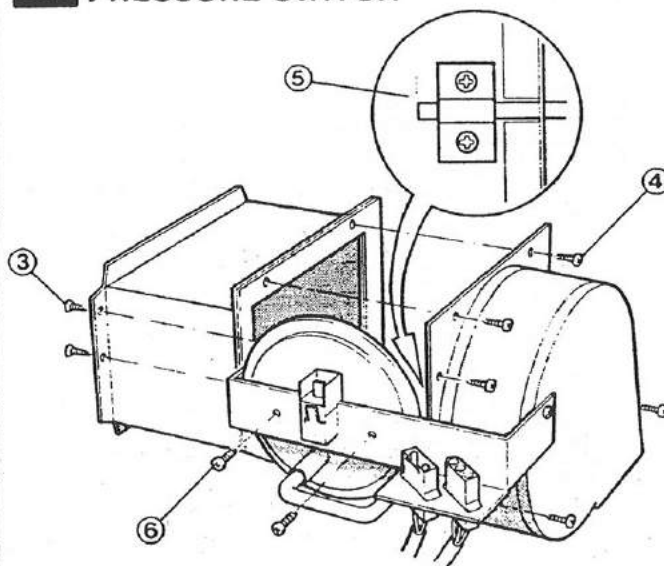


## 29 TO REPLACE THE COMPLETE FAN ASSEMBLY

- 1 Remove the outer and inner cases (see frame 1).
- 2 Unplug the two plugs and sockets attached to the pressure switch mounting bracket.
- 3 Remove two screws (one each side) securing the fan assembly to the flue hood and withdraw forwards to remove the complete fan assembly.
- 4 Ensure that the gasket is intact around the opening in the flue hood.
- 5 Fit the new fan assembly, locating it over the two studs. Secure with two screws (one each side). Tighten to form a seal between the fan assembly and flue hood.
- 6 NOTE: The two studs are for locating purposes only. Re-connect the two plugs and sockets.
- 7 Replace the inner case, programmer or facia panel and outer case.
- 8 Refer to the lighting instructions and light the boiler.
- 9 Check that the fan switches on and off as the main burner cycles on and off respectively.
- 10 Replace the bottom cover.



## 30 TO REPLACE THE AIR FLOW PRESSURE SWITCH



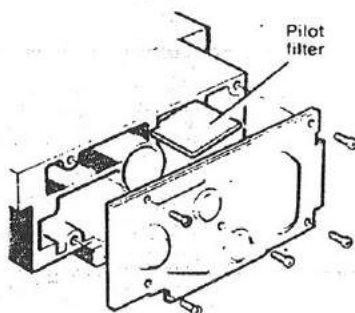
## 31 Air Flow Pressure Switch—cont.

- 1 Remove the complete fan assembly as described in frame 29.
- 2 Disconnect the two wires from the microswitch (noting their position).
- 3 Remove the two screws securing the pressure switch mounting bracket to the rear of the fan assembly.
- 4 Remove the five screws securing the fan to the fan box and carefully remove the fan box. Ensure the gasket is intact between the fan and the fan box.
- 5 Mark the position of the pressure sensing tube on the back of the fan. This is essential as the position is factory set and must be repositioned if it is inadvertently moved.
- 6 Remove the two screws securing the pressure switch to the mounting bracket.
- 7 Carefully remove the pressure switch from the rubber tube.
- 8 Replace the pressure switch and re-assemble in reverse order. Ensure that the pressure sensing tube has not moved.
- 9 NOTE: The polarity of the micro switch wires is not important. Ensure they are connected to terminals COM and NO.
- 10 Refit the fan assembly to the boiler as described in frame 29.
- 11 Light the boiler and check that the pressure switch allows the main burner to light.
- 12 Replace the bottom cover.

## 32 TO REPLACE THE PILOT FILTER

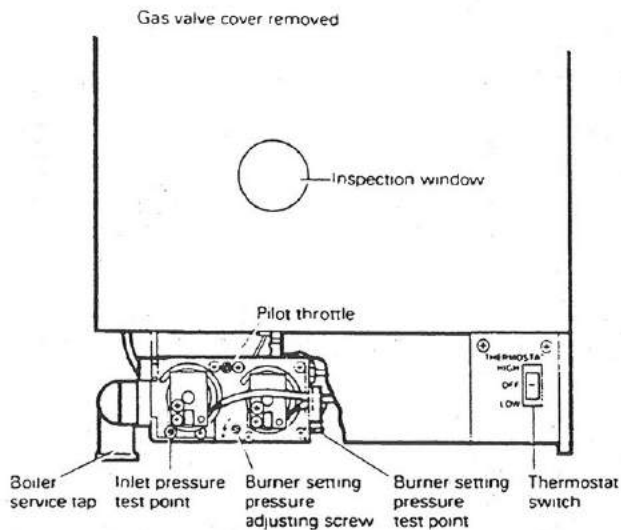
NOTE: It is extremely unlikely that the pilot filter will become blocked. If the pilot injector and pilot supply are clear and the filter is still suspect proceed as follows:

Ensure the gas supply is OFF



- 1 Remove the gas valve as described in frames 19 and 20.
- 2 Remove the five screws securing the rear cover plate on the gas valve and carefully remove it. Discard the gasket.
- 3 Carefully remove the pilot filter and replace with a new one.
- 4 Replace the rear cover using a NEW gasket and secure by evenly tightening the five screws.
- 5 Replace the gas valve in reverse order to frames 19 and 20.
- 6 Replace the inner case, programmer or facia panel and outer case.
- 7 Light the boiler and check the rear of the gas valve and all gas valve connections for gas soundness.
- 8 Replace the bottom cover.

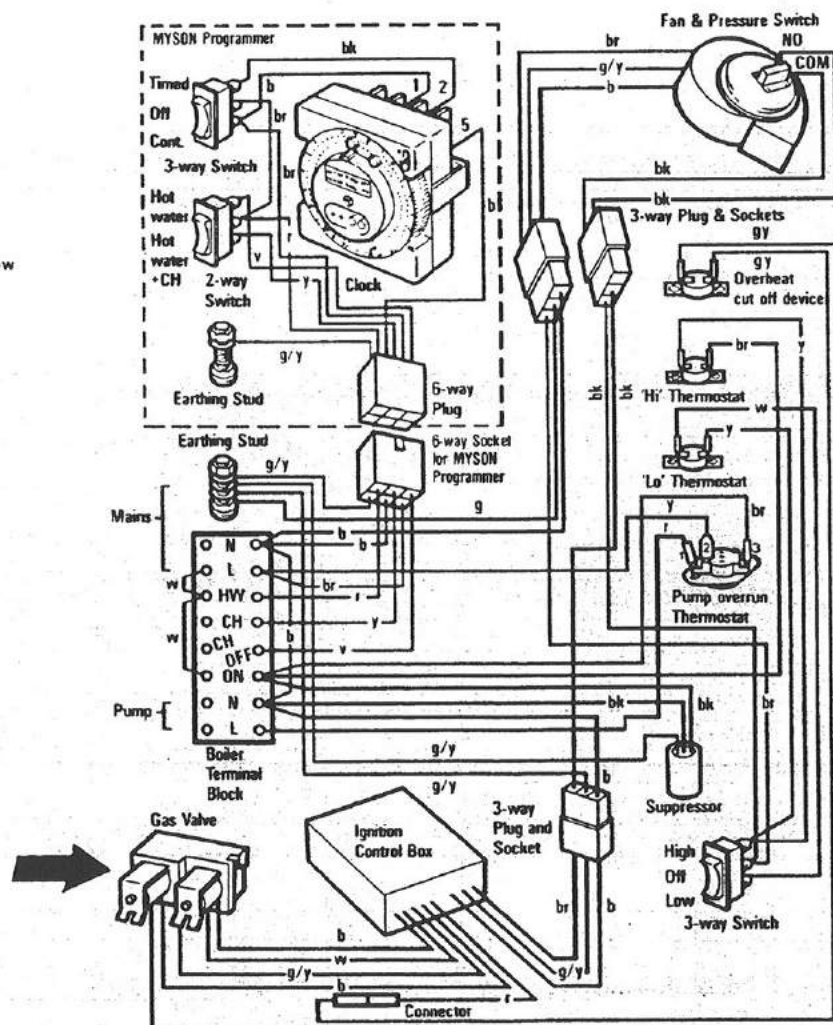
### 33 BOILER CONTROLS



### 34 BOILER WIRING DIAGRAM

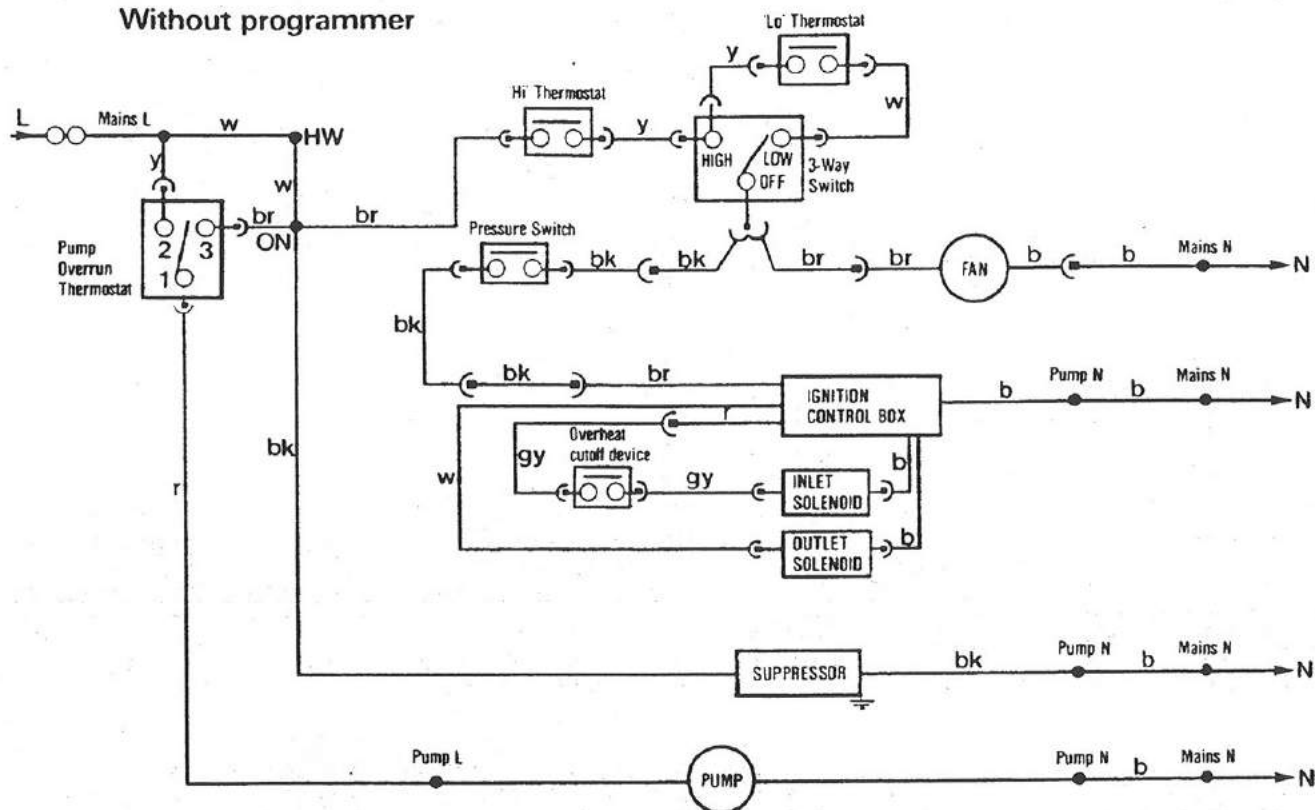
#### COLOUR CODE

b—blue  
bk—black  
br—brown  
g—green  
gy—grey  
o—orange  
pk—pink  
p—purple  
v—violet  
r—red  
w—white  
y—yellow  
g/y—green and yellow



# 35 FUNCTIONAL FLOW WIRING DIAGRAM (A)

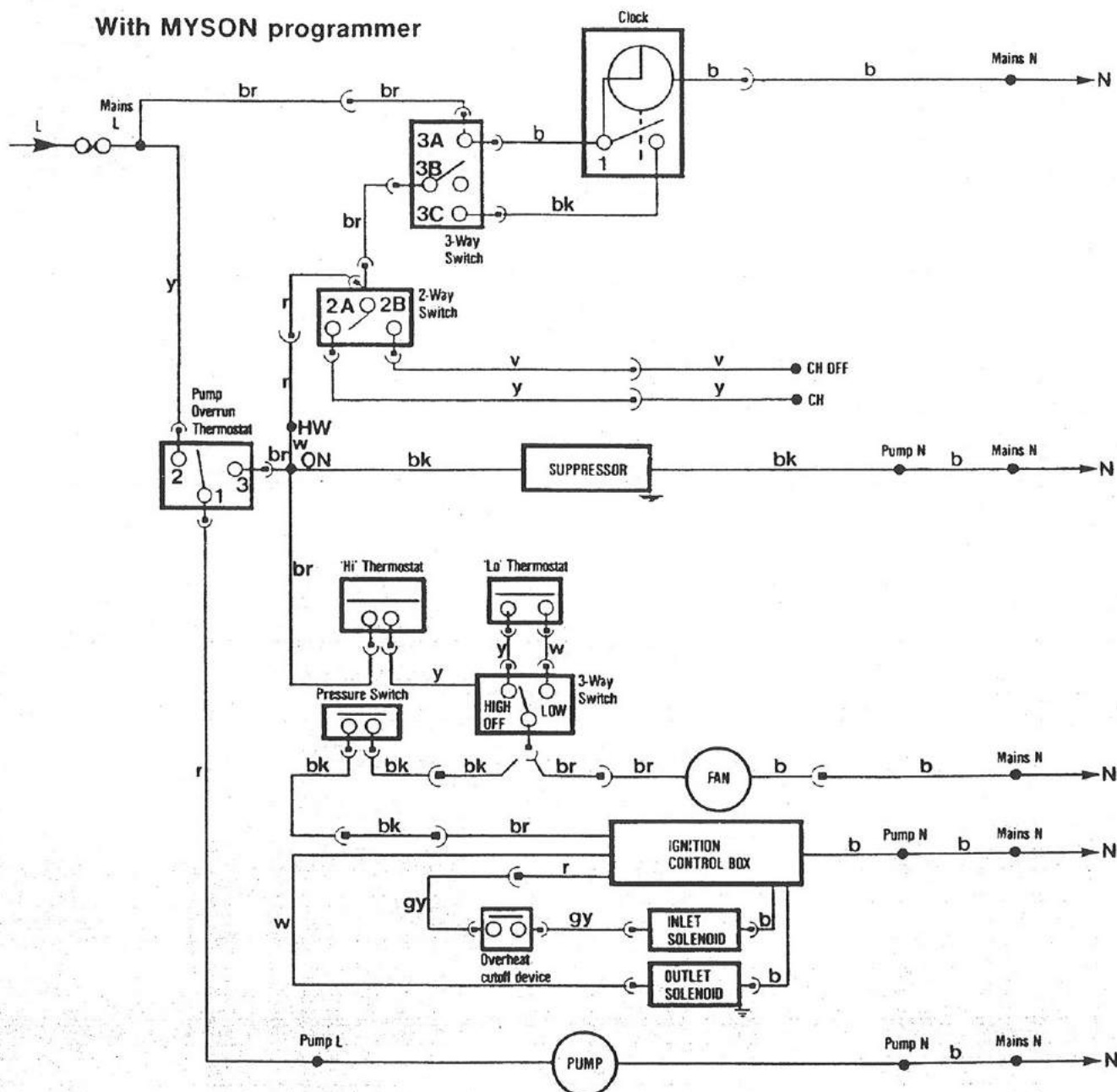
Without programmer





# **36** FUNCTIONAL FLOW WIRING DIAGRAM (B) With MYSON programmer

With MYSON programmer

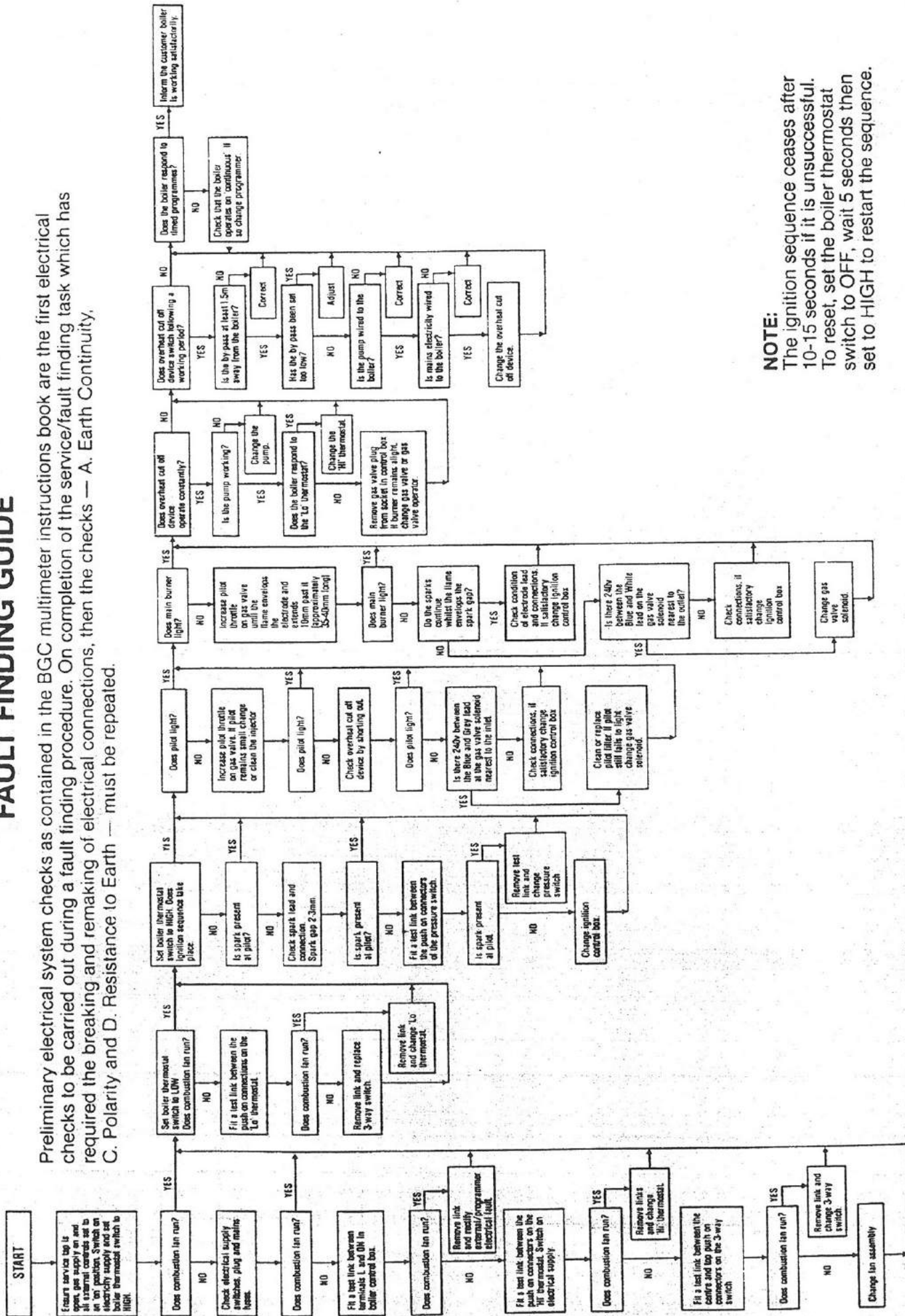


NOTE: Link HW-ON is removed when any external controls are fitted.

SERVICE	SELECTOR SWITCH CLOSED					
	1	2A	2B	3A	3B	3C
OFF						
CH OFF, HW ON						
CH + HW						
CONT. CH + HW						
CONT. HW						

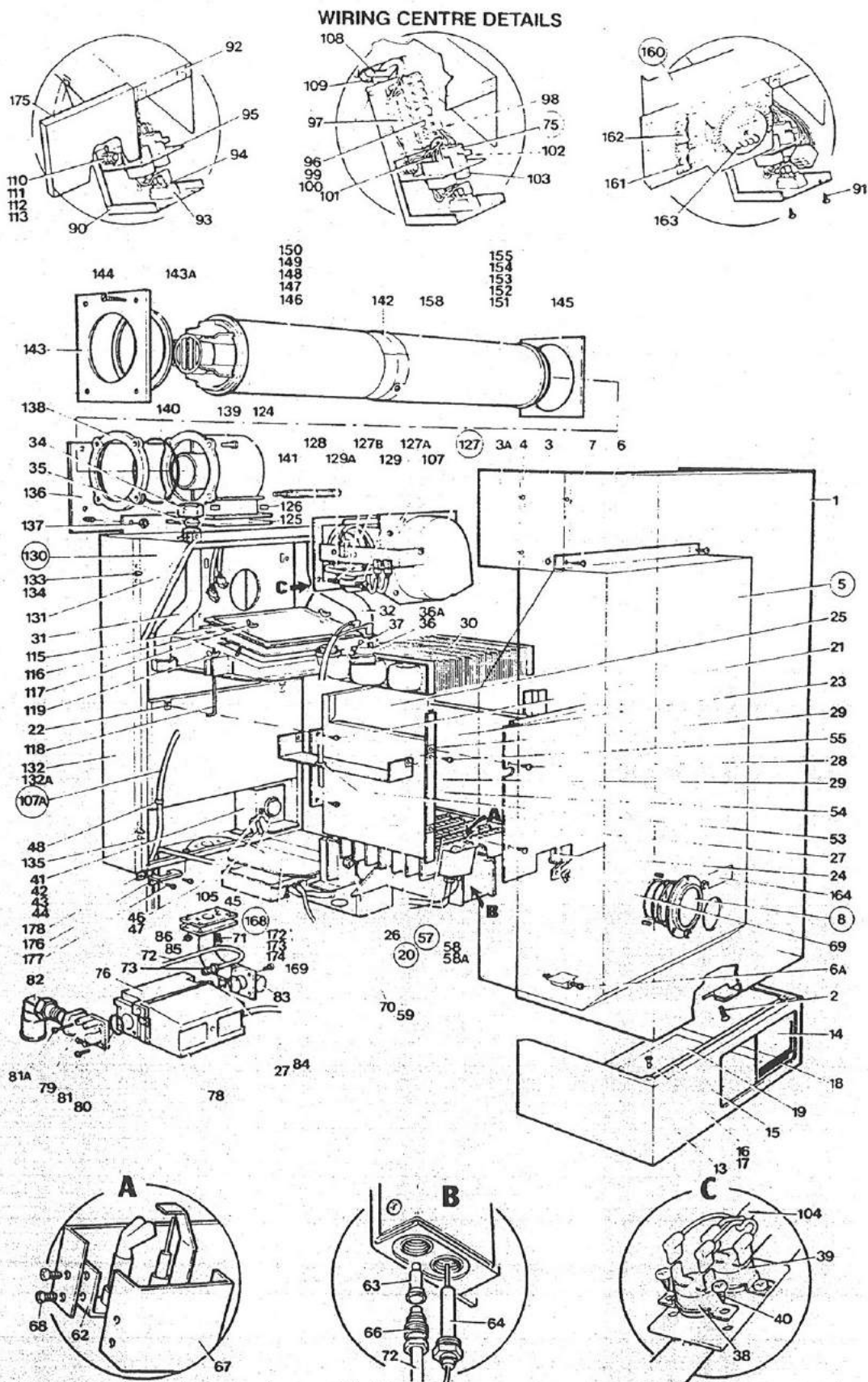
# FAULT FINDING GUIDE

Preliminary electrical system checks as contained in the BGC multimeter instructions book are the first electrical checks to be carried out during a fault finding procedure. On completion of the service/fault finding task which has required the breaking and remaking of electrical connections, then the checks — A. Earth Continuity, C. Polarity and D. Resistance to Earth — must be repeated



**NOTE:**  
The ignition sequence ceases after 10-15 seconds if it is unsuccessful. To reset, set the boiler thermostat switch to OFF, wait 5 seconds then set to HIGH to restart the sequence.

# APOLLO FANFARE I EXPLODED VIEW





# APOLLO FANFARE *i* SHORT LIST SPARE PARTS

Key No.	GC No.	Description	Qty.	Part No.
1	359 230	Outer case	1	402A1215
8	322 997	Inspection window assembly	1	307A251
14	323 339	Plastic door	2	402C053
23	323 342	Combustion chamber insulation (sides)	2	402C104
24	323 405	Combustion chamber insulation (front), 15/30 <i>i</i>	1	402C105
24	323 343	Combustion chamber insulation (front), 30/50 <i>i</i>	1	402C178
25	323 406	Combustion chamber insulation (rear), 15/30 <i>i</i>	1	402C141
25	323 344	Combustion chamber insulation (rear), 30/50 <i>i</i>	1	402C181
36	395 880	Overheat cut-off device	1	402C1498
38	382 397	'Hi' thermostat	1	402S114
39	382 373	'Lo' thermostat	1	402S115
45	384 208	Pump overrun thermostat	1	402S088
57	359 347	Burner and pilot assembly, 15/30 <i>i</i>	1	402A1471
57	359 336	Burner and pilot assembly, 30/50 <i>i</i>	1	402A1472
58	395 882	Burner, 15/30 <i>i</i>	1	402S1484
58	395 883	Burner, 30/50 <i>i</i>	1	402S1491
59	398 316	Main injector, 15/30 <i>i</i>	1	402S067
59	398 329	Main injector, 30/50 <i>i</i>	1	307S527
62	395 793	Pilot burner	1	Q371A1004
63	390 794	Pilot injector	1	390686/4
64	395 791	Spark electrode and lead	1	308S229
70	323 361	Burner 'O' ring	1	402S098
76	395 796	Gas valve	1	VR4700E1018
80	359 221	Gas valve 'O' ring	2	400-0016-7-32
127	359 258	Fan assembly	1	402A1233
129	395 810	Air flow pressure switch	1	307S620
163	323 452	Programmer pins (3 green and 3 red)	6	402A302
168	359 341	Ignition control box. Special	1	402A1473

**POTTERTON MYSON**  
PART OF BLUE CIRCLE

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Rugby, Warwickshire CV21 3JH  
Registered No. 412935

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