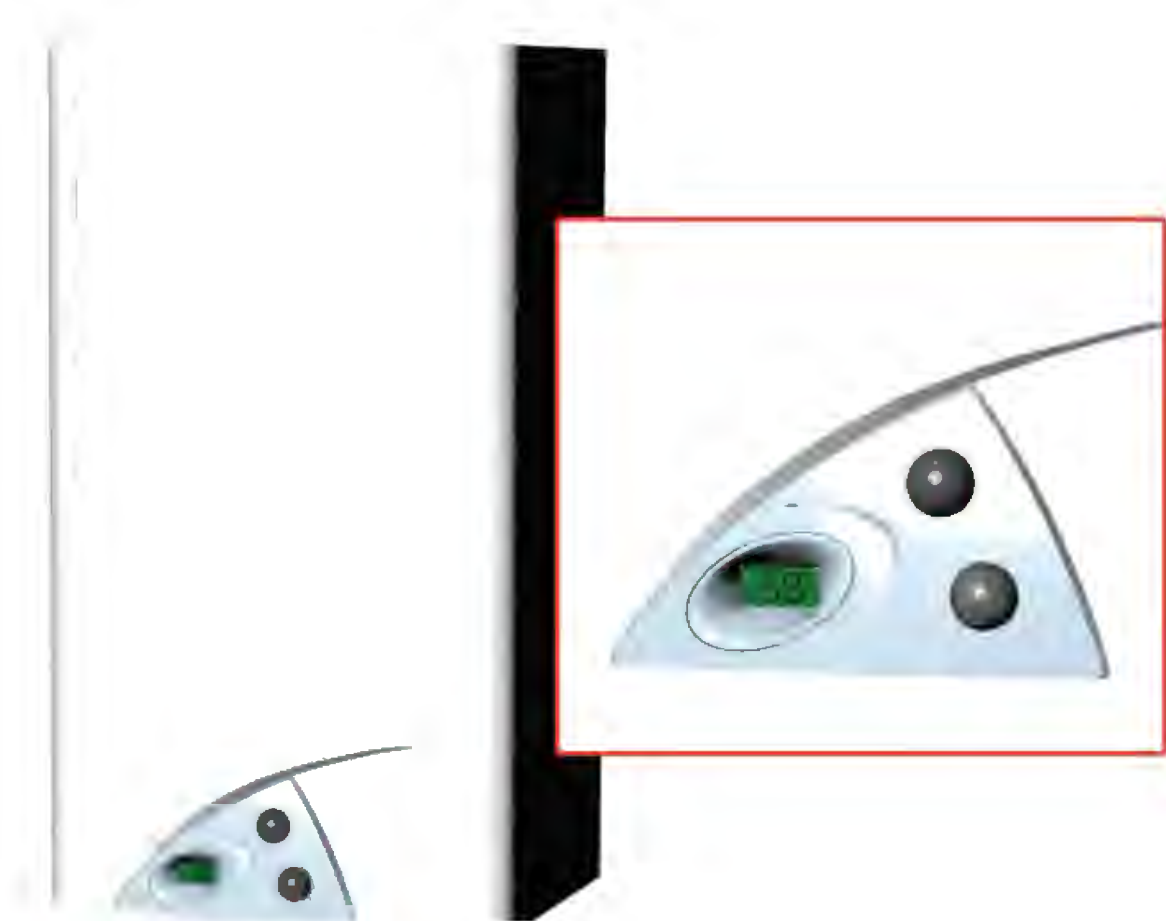




Heatline IG 19 & IG 24

Instantaneous Gas water Heaters

(for multipoint use)



Installation, Servicing & User Instructions

(These Instructions must be left with the user for future reference)

It is a legal requirement that this appliance must be installed by a competent person in accordance with the current Gas Safety (Installation and Use) Regulations

General Information

This product has been certified by Notified Body No. 0694 in accordance with the Gas Appliance Directive 90/396/EEC using EN26 to show compliance. These appliances have been certified for Gas Category II2H3+ for GB & IE for use with Natural Gas, Butane or Propane at the pressures prescribed on the data plate. The appliance is adjusted for the gas specified on the data plate, which is located on the bottom of the boiler. If the gas specified is not compatible with your supply consult the supplier of your boiler. Take care when lifting this appliance, seek assistance where appropriate.

G.C. No:

IG 19	Natural Gas	-	52-157-01
	LPG	-	52-157-02
IG 24	Natural Gas	-	52-157-03
	LPG	-	52-157-04

The manufacturer has a policy to continuously improve and develop their products in line with up-to-date technology and therefore reserves the right to change specifications, without prior notice and accepts no liability for any errors or emissions of information contained in these instructions.

Benchmark Log Book

As part of the industry-wide initiative the appliance comes complete with an Installation, Commissioning and Service Record Log Book. Please read the Log book carefully and complete all sections relevant to the appliance and installation. The details within the Log book will be required in the event of any warranty work.

On completion of installation, the Instruction Book, which includes the Log Book must be left with the end user and the relevant sections completed on each subsequent Service visit.

Important User Information

The water heaters are manufactured from high quality materials, to give reliability and optimum performance, ensuring that you as a customer are satisfied with the end product. The manufacturer provides a **12-month** guarantee, for the registered owner of the appliance that operates from the date the installation is completed. To register your appliance please complete the Warranty Card and return it to the address given.

Any part that becomes defective within the guarantee period as a result of faulty workmanship or failure of materials whilst in normal use will be repaired or replaced free of charge.

Contents

Section		Page
1	Warnings for the User and Installer	4
2	Technical data	5
3	Installation	6
	3.1 Pre-Installation Notes	6
	3.2 Correct Location of the Appliance	6
	3.3 Flue Terminal Location	7
	3.4 Acceptable Flue Configurations	8
	3.5 General Information	9
	3.6 Flue System Components	9
	3.7 Installation guide	11
	3.7.1 Installation of the Horizontal Flue System	11
	3.7.2 Water Connection	12
	3.7.3 Gas connection	13
	3.7.4 Gas connection – LPG	13
	3.7.5 Gas connection – Natural Gas	13
	3.8 Electrical Connection	14
4	User Instructions	15
	4.1 General Maintenance of your Water Heater	15
	4.2 Precautions against furring of your heat exchanger	15
	4.3 Cleaning the case of the Water Heater	16
	4.4 Precautions to be taken in frosty weather	16
	4.5 Operating the Appliance	16
	4.6 Failure modes	17
5	General Procedure before calling your after sales agent	18
6	Servicing Instructions	19
7	Exploded Diagrams	39
	7.1 Front Panel	39
	7.2 Burner Assembly	40
	7.3 Fanhood and Fan Assembly	41
	7.4 Mounting Frame - Back	42
	7.5 Circuitboard Housing	43
8	Gas Conversion	44
9	Spare Parts List	54
10	Service Log Book	55

Installation Regulations

The installation must be carried out by a competent person in accordance with the Gas Safety (Installation and Use) Regulation, the building regulations (Scotland) (Consolidation), the local building regulations, the current I.E.E Wiring Regulations and current local water Bye Laws.

Without specific instruction reference should be made to the relevant British Standard Code of Practice. For Ireland, install the appliance in accordance with IS 813 “Installation of Gas Appliances”



Section 1 / Warnings for the USER and INSTALLER

NOTE: Before installation check that the gas supply and pressure available are compatible for the appliance to be installed. This information can only be found on the data plate, which is situated on the bottom panel of the appliance. If the appliance is not suitable for the gas supplied, conversion kits can be obtained from your supplier.



The appliance must be installed in accordance with the rules in force. It is a legal requirement that this appliance is installed by a competent person in accordance with the current Gas (Safety and Use) Regulations.



When using LPG ensure that the regulator used is suitable for the pressure required by the appliance. 30mbar – Butane 37mbar - Propane



Flexible hoses must be correctly clamped at both ends.



Flexible hoses must not be longer than 2m and under no circumstances used within the building.



The appliance can be converted for use with other gases shown in the technical data on page 4. Consult your agent if a conversion kit is required as only manufacturer's genuine parts may be used on this appliance.



Do not install an appliance set for LPG on a natural gas supply line. See above.



A pre-installation check must be carried out to ensure that the appliance can be installed as required.



The appliance must not be installed directly over any heat sources such as cookers or radiators.



When using LPG, ensure that the bottle is in good condition, erect and stable and appropriately located.



Do not use damaged LPG cylinders. If for any reason the cylinder does leak wrap with a damp cloth and seek expert advice. Ensure that the cylinder is clear of any ignition source.



When investigating gas leaks do not, under any circumstances, use a naked flame. Use only proprietary leak detection fluids. Keep the flexible hose away from heat and flame and do not use if damaged.



On installation or conversion ensure that the gas lines are fully purged before igniting the appliance. Do not make unnecessary service calls.



If you smell any gas leakage turn off the appliance and shut off the main gas supply. Do not use any flames or operate any electrical appliances or lights. Open any doors and windows to vent the gas from the property and call Transco on 0800 111 999. (For LPG emergencies contact your gas supplier)

After installation instruct the householder on the use of the appliance and hand over these instructions to them to be kept in a safe place for reference.

Do not adjust or change any component within this appliance unless qualified to do so and then only use components provided by the manufacturer or his agent.

On completion enter your details in the Log Book instructing the user, or responsible person, the importance of annual servicing and service records.

Section 2 / Technical Data Label

Water Heaters meet all relevant current standards.

Model Names:		IG19	IG24
Gas Category		II_{2H3+}	II_{2H3+}
Minimum heat Input (Qn-min)	kW	8.0	9.5
Rated Heat Output (Pn)	kW	19.2	24.0
Rated Heat Input (Qn)	kW	22.9	28.0
Efficiency	%	84	86
Gas Supply Pressure			
Natural gas (G20)	mbar	20	20
Butane (G30)	mbar	30	30
Propane (G31)	mbar	37	37
Gas Rate			
Natural Gas (G20) (H _i =34.02 MJ/m ³)	m ³ /h	2.5	3.0
Butane (G30) (H _i =116.09 MJ/m ³)	kg/h	1.8	2.2
Propane (G31) (H _i =88 MJ/m ³)	kg/h	1.8	2.2
Burner Pressure			
Natural gas (G20)	mbar	12	14
Butane (G30)	mbar	27	28
Propane (G31)	mbar	33	35
Water Flow rate			
Water Flow Rate Range	l/min	2.7-11	2.7-14
Temperature Range	°C	35-60	35-60
Min. Water Pressure	bar	0.1	0.1
Max. Water Pressure	bar	10	10
Other Information			
Level of Protection		IPX4D	IPX4D
Flue Gas Connection	mm	Ø60/Ø100	Ø60/Ø100
Max Length Horizontal (inc. Terminal)	m	3.8	3.8
Max Length Vertical (inc. Terminal)	m	4.3	4.3
Cold and Hot Water Connection	inches	1/2" - 1/2"	1/2" - 1/2"
Gas Connection	inches	3/4"	3/4"
Dimensions (Packed)	mm	697x390x300	697x390x300
Dimensions (Un-Packed)	mm	627x348x240	627x348x240
Weight (Packed)	kg	20.2	20.9
Weight (Un-Packed)	kg	18.6	19.3
Power Supply	Input	230V 50 Hz	230V 50 Hz
Max. Power Consumption	Watts	73	73
Type		C ₁₂ -C ₃₂ -C ₄₂	C ₁₂ -C ₃₂ -C ₄₂

Section 3 / Installation

3.1 Pre-Installation notes

- ☐ The appliance should be installed by a competent person as specified in the Gas Safety Installation and Use Regulations. Failure to comply with this legal requirement may lead to prosecution.
- ☐ Your installer is required to carry a C.O.R.G.I. registration card and enter his registration number in your Log book. You may check your installers registration by contacting C.O.R.G.I. on 01256 372 300.
- ☐ When using LPG appliances ensure that the regulator is suitable for the pressure required by the appliance, 30mbar – Butane & 37mbar – Propane.
- ☐ Check the data plate to ensure that the gas supply is suitable for the application intended.
- ☐ Flexible hoses must not be longer than 2m, clamped at both ends, but not used indoors.
- ☐ LPG appliances must **not** be installed in a room or space below ground level.
- ☐ For maximum efficiency and safe operation of the appliance follow the instructions within this booklet, section 3.8.
- ☐ Do not touch or change any part or any setting of the appliance unless stated in this manual.
- ☐ This appliance should be used only with the flue system provided by your agent. If additional flue parts are required source them from your agent. Only install systems as outlined in these instructions. See section 4 for details. Failure to follow this instruction will invalidate your guarantee.
- ☐ After installation hand this manual to the responsible person to keep in a safe place for future reference if required.

3.2 Correct Location of the Appliance

- ☐ The appliance should not be installed above a heat source such as a cooker or radiator.
- ☐ LPG appliances must not be installed in a room or space below ground.
- ☐ Do not install the heater in places where it might be subjected to freezing.
- ☐ The wall intended for installation must be sufficient to support the appliance. If the wall is made of combustible material the appliance must be mounted on a thermally insulating board and the flue adequately insulated where it passes through the wall.
- ☐ For maintenance purposes the appliance requires clearances of 200mm above, 300mm below, 10mm clearance at the right hand side and 40mm at the left hand side in order to dismantle the heat-exchanger, or when replacing the over-heat thermostat. 600mm clearance is required at the front but this could be after opening a cupboard door.
- ☐ Locate the flue terminal to ensure that excessive dust, debris or volatile substances are not drawn into the appliance as this may considerably shorten the appliances' life expectancy.
- ☐ Ensure that the flue terminal location lies outside the parameters specified in section 3.4 figure 1.
- ☐ If the terminal is situated below a height of 2m from the ground or balcony a terminal guard must be fitted. Consult your agent.

3.3 Flue Terminal Location

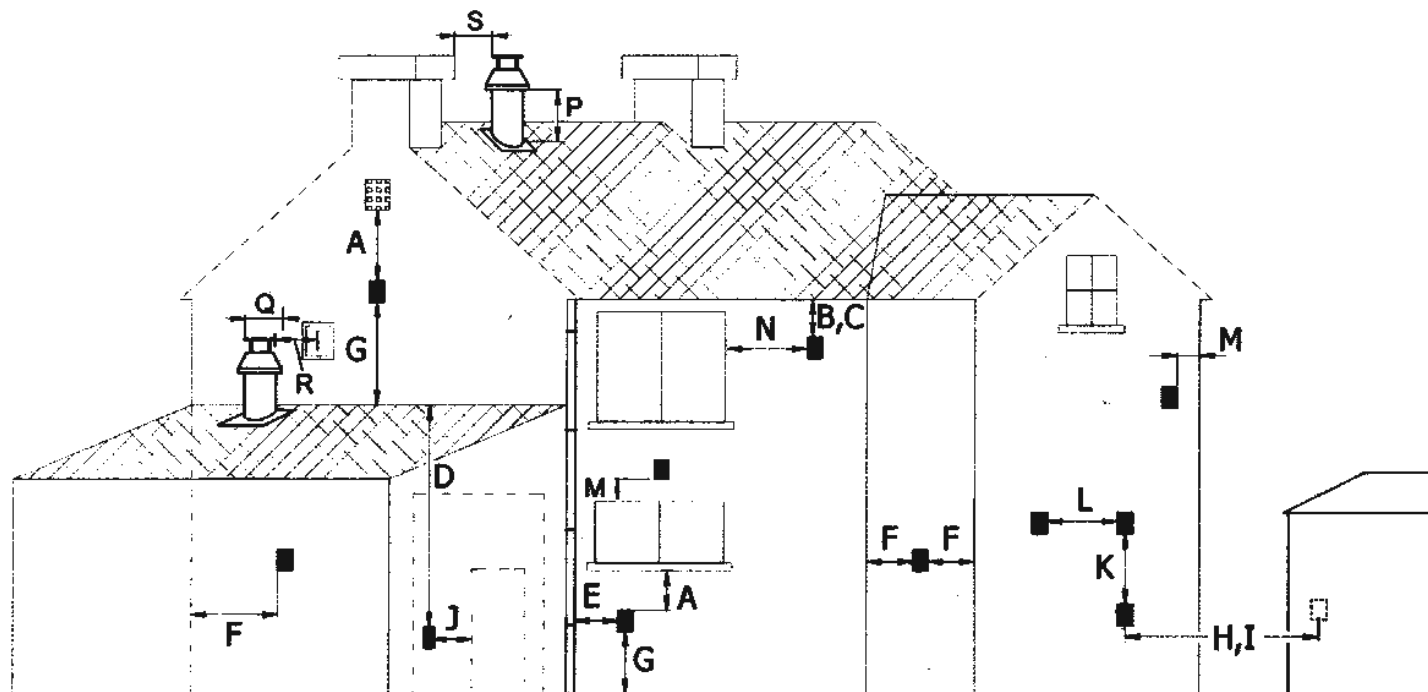
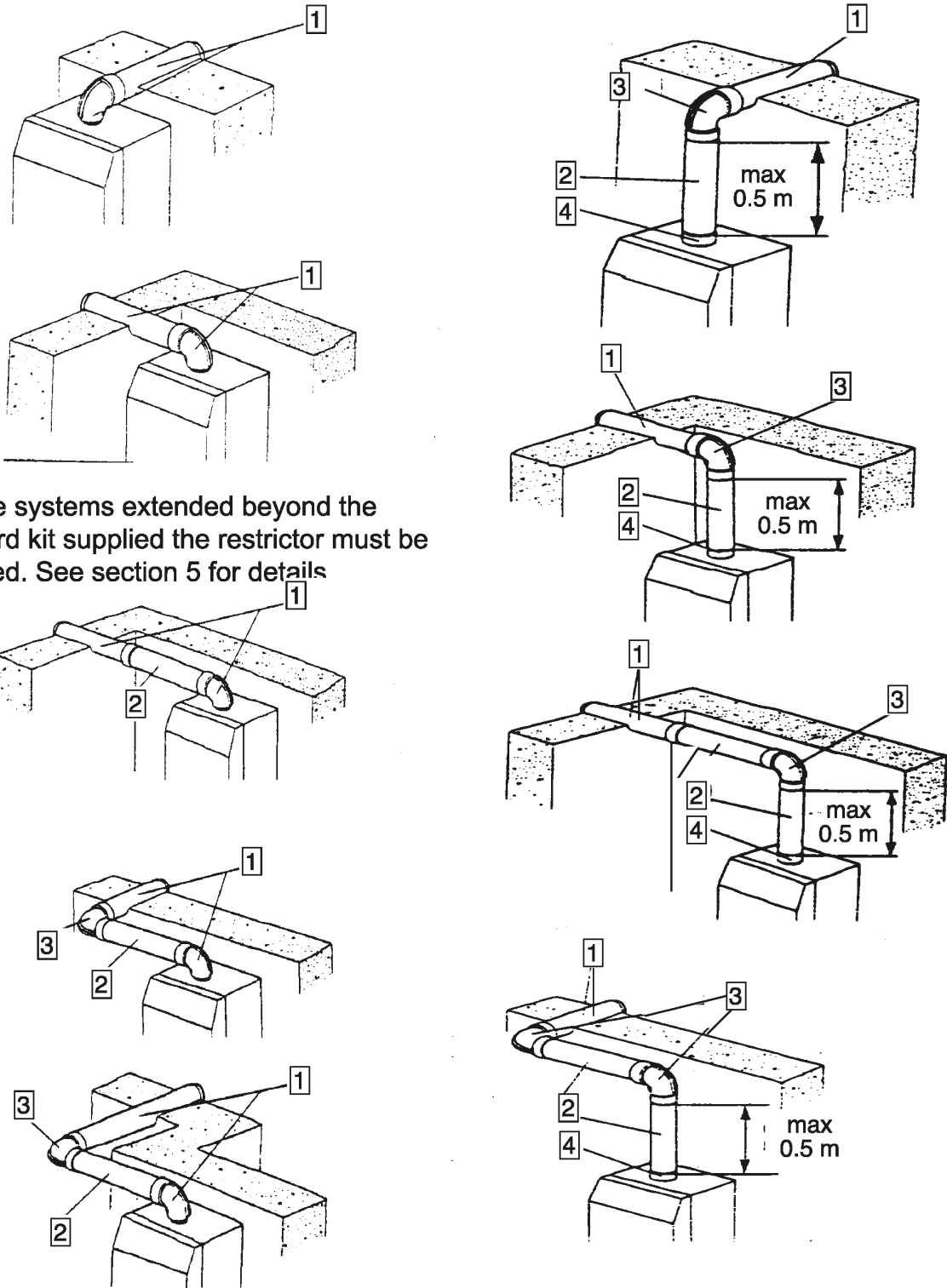


Figure 1

TERMINAL POSITION	MINIMUM DISTANCE
A- Directly below an openable window or other opening e.g. air brick	300 mm
B- Below gutters, soil pipes or drain pipes	75 mm
C- Below eaves	200 mm
D- Below balconies or car front roofs	200 mm
E- From vertical drain pipes and soil pipes	150 mm
F- From internal or external corners	300 mm
G- Above ground, roof or balcony level	300 mm
H- From a surface facing a terminal	600 mm
I- From a terminal discharging towards another terminal	1200 mm
J- From an opening in a car port (e.g. door, window) into a dwelling	1200 mm
K- Vertically from a terminal on the same wall	1500 mm
L- Horizontally from a terminal on the same wall	300 mm
M- Above an opening, air brick, opening windows, etc.	300 mm
N- Horizontally to an opening, air brick, opening windows, etc.	300 mm
P- Above roof level (to base of terminal)	300 mm
Q- From adjacent wall to flue	300 mm
R- From an adjacent opening window	1000 mm
S- From another terminal	600 mm

* Use only the flue components approved and supplied by your agent.

3.4 Flue configuration



For flue systems extended beyond the standard kit supplied the restrictor must be removed. See section 5 for details

Figure 2

- 1. Standard flue kit supplied
- 2. 1/2 m extension
- 3. 90° symmetrical elbow
- 4. Vertical flue adapter

*** Only use spare parts from the manufacturer or his agent.**

3.6. General Flue Information

The IG19 & IG24 employ a concentric flue arrangement consisting of a 60mm-diameter inner flue duct and 100mm-diameter outer air inlet duct.

A standard 680m flue kit is supplied with the appliance that can be routed to the rear, left or right of the appliance by means of a 90-degree bend. The bend is connected to the water heater by means of connection screws.

The flue may be lengthened, by means of extensions (available as an optional extra), to a maximum horizontal length of 3.8m (including terminal). Alternatively a vertical (60/100) flue system is available, from your agent, to a maximum length of 4.3m (including terminal). For alternative systems reduce the maximum length of the flue by 1.4m for each 90° bend and 0.65m for each 45° bend. Straight sections are available in 0.5m & 0.25m lengths.

Note: When using flue systems of over 1m length the flue restrictor shown below must be removed.



Figure 3

When using the standard flue kit, ensure that the flue restrictor is in place.

To avoid condensate flowing back into the combustion chamber; the flue should be installed with a downward gradient of 3° towards its point of termination.

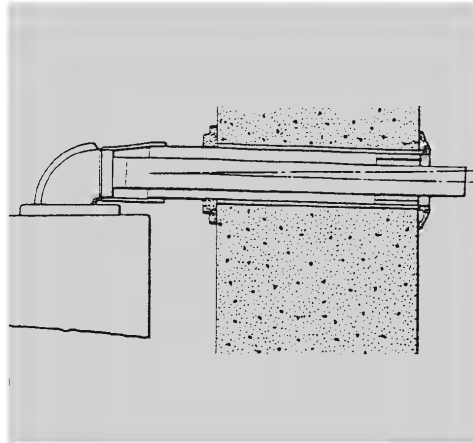


Figure 4

Flue System Components

1. Standard flue pipe

This standard flue pipe is given with water heater.

Length: 68 cm

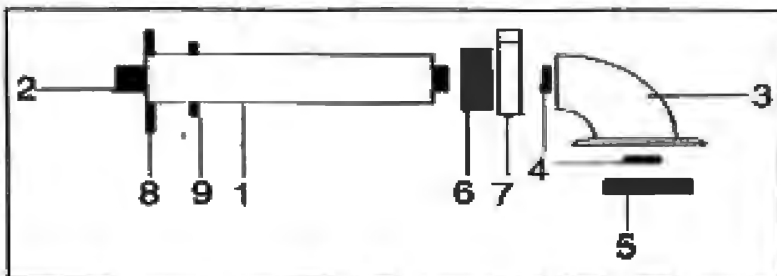
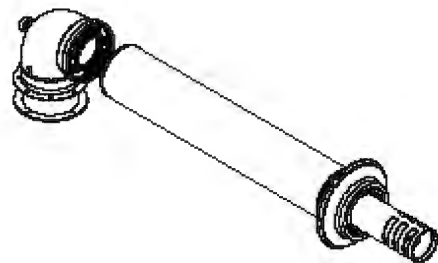


Figure 5

Component list

- | | |
|------------------------|--------------------|
| 1. Outer duct Ø 100 mm | 6. Rubber seal |
| 2. Inner duct Ø 60 mm | 7. Sealing ring |
| 3. Elbow | 8. Outer wall seal |
| 4. O-ring (2 pcs) | 9. Inner wall seal |
| 5. Boiler gasket | |

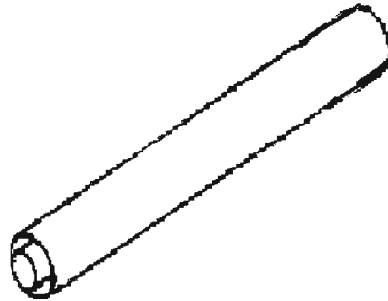


2. Flue extension

This flue extension pipe is available from your agent if required.

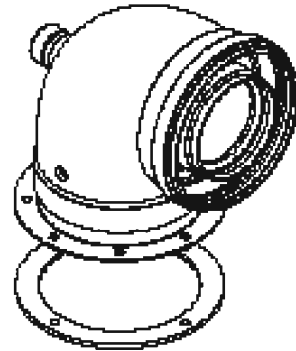
Length : 0.5 m / 0.25 m / 1 m

Diameter: Ø 60 / Ø 100



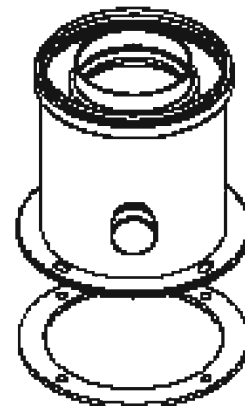
3. Symmetrical elbow (90°)

This symmetrical elbow is available from your agent if required.



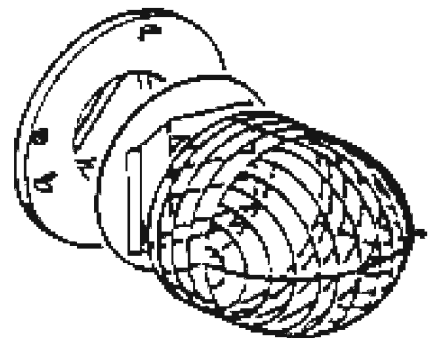
4. Vertical flue connector

This component allows a vertical exit from the boiler and is available from your agent.



5. Flue terminal guard

This guard should be fitted to all terminals below 2m from the ground or balcony and is available from your agent.



Important notes:

1. These components are available from your agent, note when extending the flue system refer to section 3.5 of this booklet.
2. Using non approved manufacturer's components will invalidate your guarantee and may lead to prosecution.

3.7 Installation Guide

Follow the instructions below but do not change any settings unless it is specified to do so.

- Check the installation location is suitable for installation using the template provided.
- Adhere the template to the wall when a suitable location for installation is found.
- Mark the locations for hanging the water heater (top left & right).
- Drill the holes, using a suitable 8mm drill, and plug with the rawl plugs supplied.
- For a rear exit flue mark and drill the flue exit hole $\varnothing$ 105mm as located.
- For side exit holes extrapolate the flue centre to the side wall reducing the height by 3.5mm for every metre of flue to ensure that any condensate will drain away from the appliance.
- Secure the hanging brackets and hang the boiler.
- Assemble the flue and secure to the appliance with the screws provided ensuring that all the mechanical joints are sealed.
- Connect the service pipes to the appliance as described on page 11 using the valves provided.

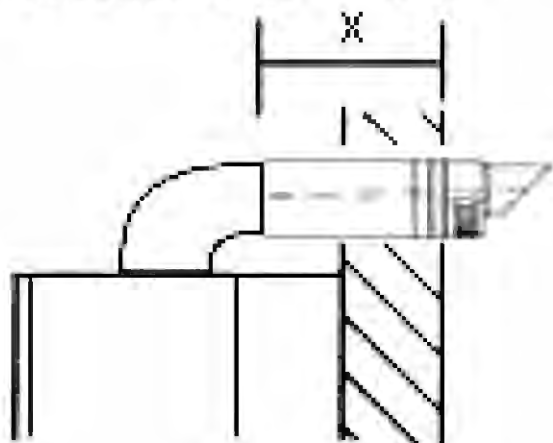


Figure 6

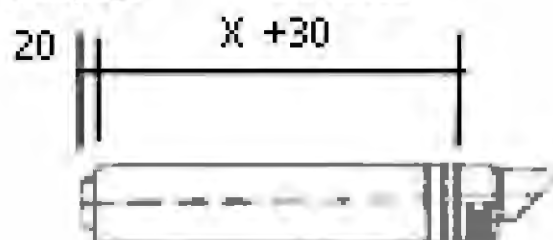


Figure 7

3.7.1 Installation of horizontal flue

- If the length of the flue will be over a meter long remove the flue restrictor.
 - Insert the connecting elbow into the top of the boiler.
 - Measure the distance, X, from the edge of the outer elbow duct to the outside of the wall (Fig 6).
 - To this dimension add 30mm, the insertion distance of the horizontal section into the elbow. ($X + 30 = L$)
 - Measuring from the back of the terminal connection, mark this distance, L, onto the outer air duct (figure 7)
 - Cut the outer air duct only to the required length ensuring that the cut is square and free from burrs.
 - Again measuring from the back of the terminal mark the same distance L, as above, +20mm on the inner duct such that when the duct is cut and assembled the inner duct protrudes 20mm from the outer duct (figure 7).
 - Pass the assembly through the wall and connect the flue assembly to the boiler, ensuring that both the air and flue ducts are pushed fully home into the connecting elbows collar.
 - With the flue joints secured fit the flue trim to the external wall surface using suitable mastic.
- Note: Where there is internal access only to the terminal the trim must be attached to the flue assembly before it is passed through the wall.

3.7.2 Water Connection

- See figure 8 for service connection details.
- Remove the plastic plugs from the pipe connections.
- Fit the flow restrictor and filter to the cold water inlet as shown in Fig 9.
- Using the yellow gaskets provided connect the appliance to the water circuit, connections B (Inlet) & C (Outlet) Fig 8.
- With your hot water outlets closed open the water inlet valve and pressurise the system to check for leakage.
- Crack open the cold water inlet connection to flush any debris from the pipe.



A: Gas inlet; **B:** Cold water inlet **C:** Hot water outlet

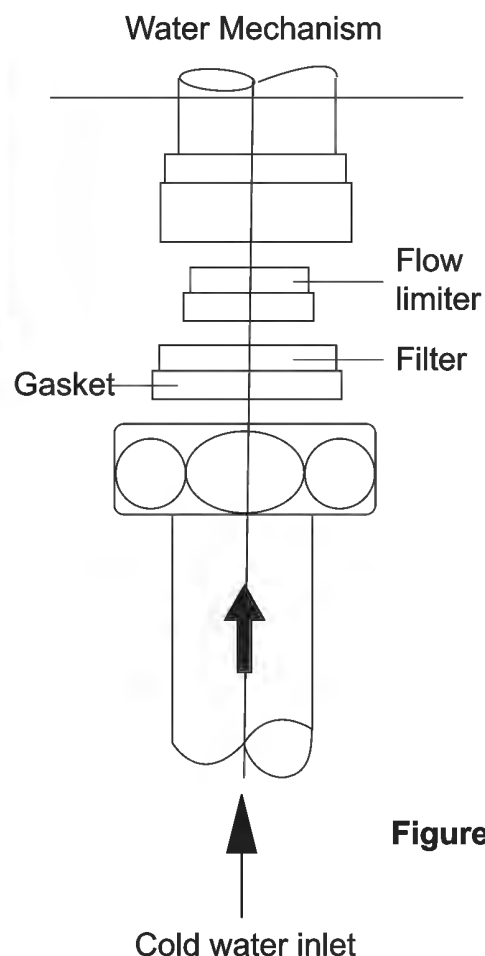


Figure 9

NOTE: When facing the appliance the cold water inlet should be on the right hand side of the appliance.

3.7.3 Gas Connection

Note: The appliances are pre-set for use with butane, propane or natural gas. Check your appliance is suitable for the type of gas and pressure stated on the data plate, which is located on the bottom of the appliance. If the appliance is not suitable for the gas supply, a conversion kit can be obtained from your agent. See section 9 for method of conversion.

3.7.4 LPG Bottled Gas Connection

- For use with butane use a gas governor with a set outlet pressure of 30mbar.
- For use with propane use a gas governor with a set outlet pressure of 37mbar.
- **No other governors should be used with this appliance.**
- There is no adjustment required to the appliance when changing from Butane to Propane or visa-versa.
- The flexible hose from the gas bottle should be suitable for the gas in use and less than 2m long. This hose must not extend into the building.
- Each end of the hose must be secured with a suitable clamp and the joints checked for leakage.

Attention: Do not fix the hose ends with wires or sharp attachments as you may damage the hose and cause gas leakage.

Note:

- LPG appliances must not be installed in a room below ground.
- Flexible hoses must not be used within the property.
- For the gas circuit within the property use copper pipe and appropriate fittings.
- Store the gas cylinders in appropriately vented compartments.
- In winter the bottles may fail to deliver the appropriate amount of gas to the appliance due to the cold temperature. The bottle may be insulated but do not apply any heating device or direct heat to the cylinder.
- If gas leaks from the bottle or circuit shut off the gas valve at the bottle. If gas continues to leak from the bottle wrap a wet cloth around the neck and valve of the bottle. Keep the bottle away from any ignition sources, such as naked flames, and seek expert assistance.
- Do not use damaged or corroded gas bottles.
- When searching for gas leakage, use a liquid soap solution or a proprietary leak detection fluid. Do not use a naked flame.

When the gas circuit has been completed and with the appliance control valve in the “Off” position open the gas valve on the bottle. Check the circuit for leakage. When the circuit is proved to be sound, purge the gas circuit at the appliance inlet re-checking the joint for soundness when made.

3.7.5 Natural gas Connection

Installation must be in accordance with the rules in force. When the gas circuit has been completed and with the appliance control valve in the “Off” position open the gas supply at the meter. Check the circuit for leakage. When the circuit has been proved sound purge the gas circuit at the appliance inlet re-checking the joint when made, as described above.

3.8 Electrical Connection

- The appliance must be supplied with 230V AC. (Brown– live, blue – neutral and yellow/green – earth) A double pole isolating switch with 3mm separation on both poles and fused at 3amp is the preferred method of installation but a three pin plug, with 3amp fuse, and socket may be used if the appliance is not located in the vicinity of a sink or installed in a bath or shower room.

The IG 19 and IG 24 appliances are supplied connected to a 1.2m fly lead, which is the maximum length, recommended by the manufacturer. If the lead is damaged a replacement can be sought from your agent ref. no. 3004090188. Electrical installation must be in accordance with current I.E.E regulations.

The point of electrical connection must be adjacent to the appliance and readily accessible giving complete electrical isolation to the water heater and control system.

In case of reversed polarity the appliance may not function correctly, therefore it is advised that the polarity of the system is checked before operation of the appliance.

The water heater's main PCB, fan and Gas` valve operate at 230V whilst all other components operate at low voltage.

On connection to the electrical supply it is essential that earth continuity, earth resistance, polarity and short circuit checks are carried out before the appliance is operated. An electrical wiring diagram can be viewed in section 10.

Warning: On no account must any external voltage be applied to any of the terminals on the heating control connection plug.

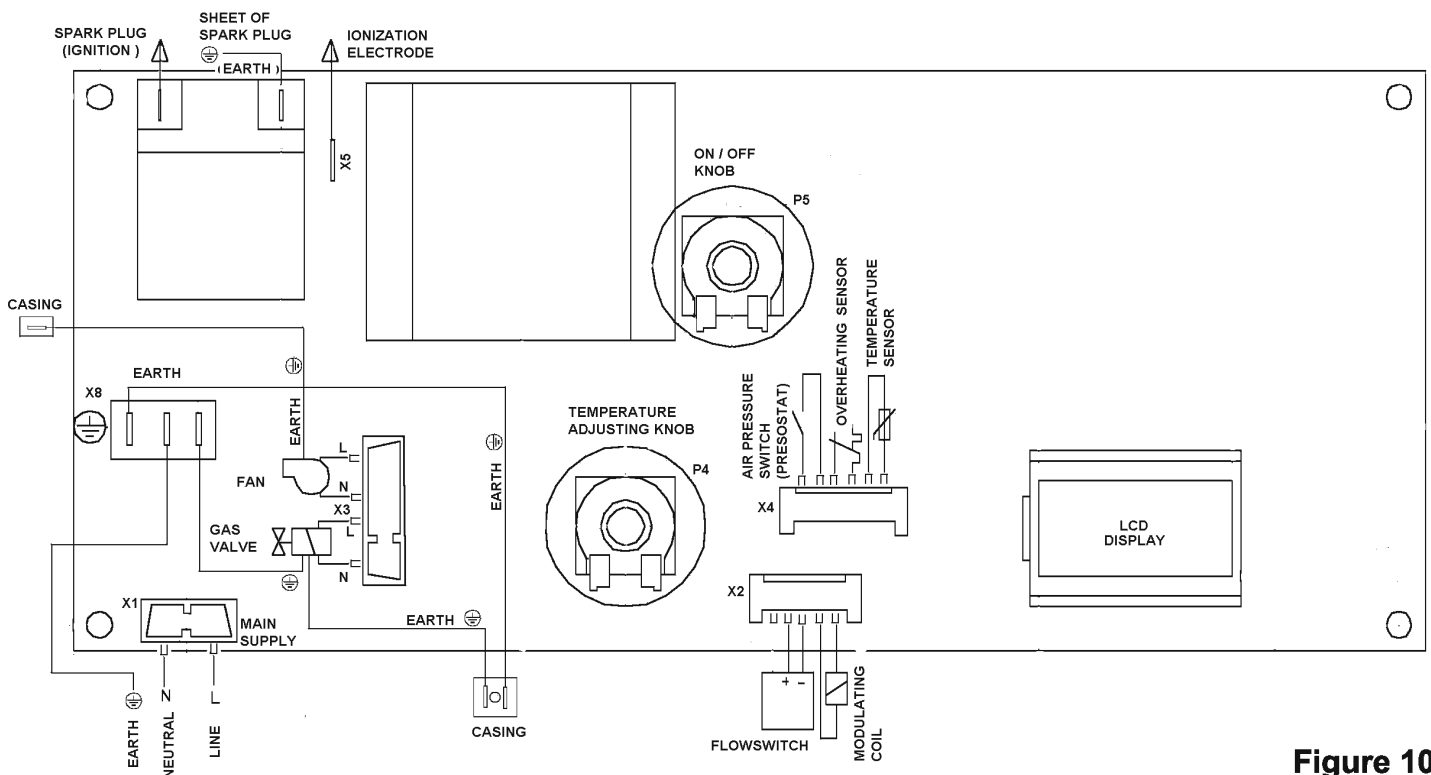


Figure 10

Main card Fuse : 2 A - 230 VAC Fast

Section 4 / User Instructions

1. Install the appliance in accordance with the rules

2. If you smell gas:

- Turn off the gas at the gas supply or meter.
- Do not operate any electrical equipment or lights.
- Extinguish any flames and burners.
- **Call Transco on 0800 111 999**

☐ IG19 & IG24 are supplied complete with a 1.2m mains fly lead. All electrical connections to the mains supply must be in accordance with current I.E.E. wiring regulations. If the mains lead becomes worn or damaged a replacement can be sourced from your agent, order code no. 3004090188.

☐ This water heater must be connected to an effective isolation system. Disconnection from the mains supply must have a contact separation of at least 3mm on all poles. Alternatively a three pin plug and un-switched shuttered socket outlet may be used provided that the water heater is not installed in a room containing a bath or shower or located in close proximity to a sink when disconnection must be achieved through fixed wiring as above.

☐ The point of connection must be readily accessible, adjacent to the appliance and provide complete electrical isolation for the water heater and control system.

☐ In the event of reversed polarity, the appliance may not operate correctly. Ensure that the electrical polarity is maintained throughout the life of the appliance.

☐ While the water heater's main PCB, fan, and gas valve are supplied 230V AC, all other components and associated circuits are supplied at extra low voltage.

Warning

- **On no account must any external voltage be applied to any of the terminals on the heating control connection plug.**
- **For electrical safety the water heater must be earthed and protected by a 3-amp 230/240 VAC fuse.**

4.1 General Maintenance of your Water heater

It is recommended that your appliance is serviced by a competent person on an annual basis. Contact your installer or agent when required.

4.2 Precautions against furring of the heat exchanger

If the domestic water supply is "hard" calcium will be deposited in the heat-exchanger and you may notice a fall in performance of the unit. It will then be necessary to decalcify the heater using a de-scaling agent. Contact your installer or agent for service.

4.3 Cleaning the case of the Water Heater

For cleaning external part use a soft damp cloth that has been dipped in a dilute soapy solution. Under no circumstances use abrasive cleaners or scourers.

4.4 Precautions to be taken in Frosty Weather

Pipe-work exposed to cold conditions must be adequately lagged. If your appliance will not be used over long periods of cold or freezing conditions, it must be drained as follows:

1. Switch off the electric supply and control knob on the appliance.
2. Turn off the gas supply at source.
3. Turn off the water supply at the service cock or inlet to the appliance as required.
4. Open all the hot water outlets and drain the appliance at the service valve.
5. To start up your appliance again close the drain cock and open the water service valve or stop cock as required.
6. Close your hot water outlets when the system is again filled with water.
7. Turn on the gas supply.
8. Switch on the electricity and the control on the appliance.
9. Open a hot water faucet to start the appliance. This may take several attempts whilst gas is fed through to the burner.

4.5 Operating the Appliance



Figure 11



- If the power is off the LCD screen will be blank. Switching on the electrical supply and turning the control knob to the “On” position will prepare your water heater for operation.
- With a supply of gas, water and electricity to the appliance opening any hot water faucet will operate the water heater.
- In operation mode you will see displayed on the screen, a tap symbol in the top right hand corner indicating a flow of water.
- When the burner ignites a flame symbol will be seen in the top left hand corner and the temperature of the outlet water will be displayed.
- If after three attempts, the appliance has failed to ignite, the appliance will lock-out displaying failure code of F4 on the screen. Switch the appliance off and on again to re-set.
- The water temperature can be regulated by turning the adjustment knob to the required setting. Temperature adjustment is from 35-60°C.

Note: Your appliance will give you longer service if operated at lower temperatures. However, at low water temperature settings your appliance may occasionally deliver water at higher temperatures than expected. This is not a failure of the appliance but is due to residual heat in the heat exchanger from previous firings.

4.6 Failure Modes

F1 Overheat error

If the appliance overheats this error code will be displayed. The appliance can be re-set by switching off and on again but if the fault reoccurs call your service agent specifying the code shown.

F2 NTC Sensor Error

The NTC sensor detects the temperature of the water outlet and sends the signal to the control board for display. If this code appears call your service agent specifying the code shown.

F4 Ionisation Error

The appliance has lost flame during operation and has shut down. Check things to do in section 5 before calling your service agent.

F5 Air Pressure Switch Error

The pressure switch registers a flow of air through the appliance, which if insufficient shuts down the appliance and displays this error code. If this code appears call your service agent specifying the code shown.

Note:

If there is a loss of gas pressure due to an empty cylinder or the service cock being closed the appliance will lock out. When the pressure has been restored simply turn off and back on to re-set the appliance.

If there is a break in the electricity supply the appliance will not operate but operation will resume without intervention on restoration of the supply.

For your safety

The safety devices on this appliance should not be disabled. Only registered engineers should install and maintain this appliance. Failure to comply with these requirements could invalidate your guarantee.

Section 5 / Checklist before contacting authorised dealer

FAILURE	REASON	ACTION
Water heater does not operate. LCD screen blank	No electricity	Check the 230V supply to the appliance.
There is no error code displayed but the water heater does not operate.	Low Voltage	Check the 230V supply to the appliance. If the voltage is outside of the range 195-253V the appliance will not operate.
Water heater does not operate but error F4 is displayed.	No gas supply	Check the gas inlet pressure or the bottle supply.
The water heater operates but fails to light. Error code F4 is displayed.	Faulty Gas Valve	Call your service agent specifying the failure and failure code shown.
Appliance fails to light however the fan starts to operate for a while, then stops. F5 failure code indicates on screen.	Flue system.	Flue pipe slope may be wrong (3° downwards slope from appliance) or flue pipe may be blocked. Once checked and the failure continues, call the authorised after-sales service.
Water is too hot. F1 failure code is indicated on screen.	Faulty electrical or water circuit	Call your service agent specifying the failure and failure code shown.
Water fails to reach temperature.	Electrical circuit fault	Check water temperature setting before calling the service agent.

NOTE: Only manufacturer's specified components should be used in the appliance. Failure to do so may invalidate the guarantee.

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Tel: +44 (0) 870 777 8318
Service Helpline: 08706 092 091
Fax: +44 (0) 870 777 8322
E-mail: info@heatline.co.uk
Web: www.heatline.co.uk

Section 6 / SERVICE INSTRUCTIONS

- ☐ The appliance should be serviced by a competent person as specified in the Gas Safety Installation and Use Regulations. Your agent will be happy to oblige.
- ☐ Ensure that the electrical and gas supplies are isolated before commencing work on this appliance.
- ☐ Fault codes of failures are located on page 28.
- ☐ When replacing components only use those specified by the manufacturer.

A. CONTENTS

B, C	Purpose and Scope	19
	Front and Bottom View	20
	Technical Data	21
6.1	Components and function of components for the IG 19 and IG 24	22
	1a Safety Devices	
	1b Control and Regulating Devices	23
6.2	Principles of Operation of the Appliance	25
6.3	Instructions for the replacement of parts	27
6.4	Trouble Shooting, Failures and their Remedies	28
6.5	Assembly Diagrams	30
7	Exploded Diagrams	39
8	Gas Conversion	44
9	Spare Parts List	54
10	Service Log Book	55

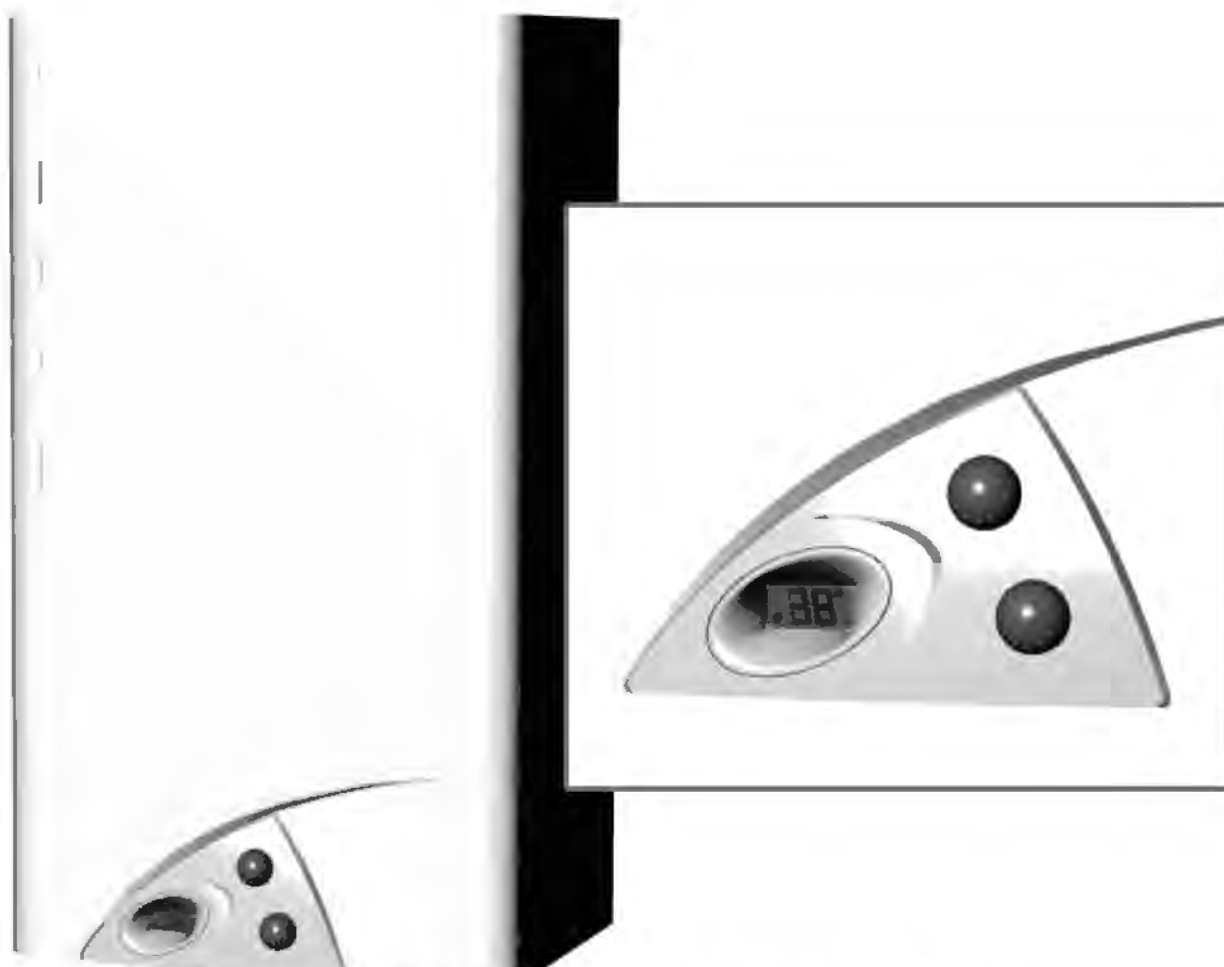
B. PURPOSE

This information sheet covers general definitions, functions, replacement of components and trouble-shooting for the **WATER HEATERS of TYPE IG 19 & IG 24.**

C. SCOPE

These service instructions cover the models below, for the gas category II2H3+:

- **IG 19 (Natural Gas)**
- **IG 19 (LPG)**
- **IG 24 (Natural Gas)**
- **IG 24 (LPG)**



IG 19 & IG 24 MULTIPOINT WATER HEATERS

FRONT AND BOTTOM VIEW



IG 19 & IG 24 MULTIPOINT WATER HEATERS

TECHNICAL DATA

Model Names:		IG19	IG24
	Units		
Nominal Heat Power (P _n)	kW	19.2	24
Nominal Heat Input (Q _n)	kW	22.9	28
Minimum Heat Input (Q _{n-min})	kW	8.0	9.5
Gas Inlet Pressure			
Natural Gas	mbar	20	20
LPG - Butane	mbar	30	30
LPG - Propane	mbar	37	37
Gas Consumption			
(15°C–1013 mbar—as relating to H _{UB} in dry condition)			
Natural Gas (H _i = 34.02Mj/m ³)	m ³ /h	2.5	3
Butane (H _i = 116.09Mj/m ³)	kg/h	1.8	2.2
Propane (H _i = 88 Mj/m ³)	kg/h	1.8	2.2
Maximum Water Rate	l/min	11	14
Minimum Water Rate	l/min	2.7	2.7
Minimum Water Pressure	Bar	0.1	0.1
Maximum Water Pressure	Bar	10	10
IP Rating		IPX4D	IPX4D
Flue Pipe Dimensions	mm	Ø60/Ø100	Ø60/Ø100
Water Inlet and Outlet	Inch	1/2"	1/2"
Dimensions (Packed)	mm	300x390x697	300x390x697
Dimensions (Unpacked)	mm	240x348x627	240x348x627
Packed Weight	Kg	20.2	20.9
Unpacked Weight	Kg	18.6	19.3

6.1 Components and Component Functions

A) Safety Devices:

6.1.1 Pressure switch : If there is inadequate air-flow or fan failure, the pressure sensing device will shut down the appliance and send a signal to the electronic circuit board. In this fault mode the F5 error code appears on the LCD screen. When the problem is rectified, by clearing the blockage or replacement of the fan or pressure switch, and the appliance re-set the appliance will operate as normal.



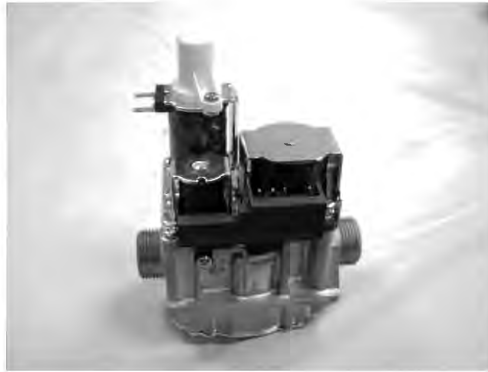
6.1.2 Overheating Safety Thermostat : If the temperature of the hot water exceeds the 85°C limit, pre-set within the appliance, then the sensor in the heat-exchanger outlet port generates a signal that shuts down the appliance. In this fault mode the F2 error code appears on the LCD screen. When the problem is rectified, by the replacement of the thermostat or circuit board, and the appliance re-set the appliance will operate as normal.



6.1.3 Ionisation Electrode : In the event of loss of flame or three consecutive ignition failures the error code F4 appears on the LCD screen. Once the gas supply is restored or the earthing connections re-established the appliance will operate as normal.

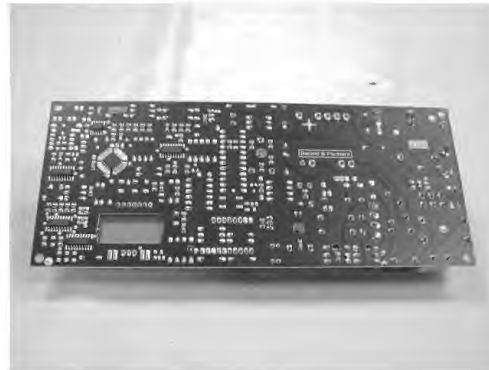
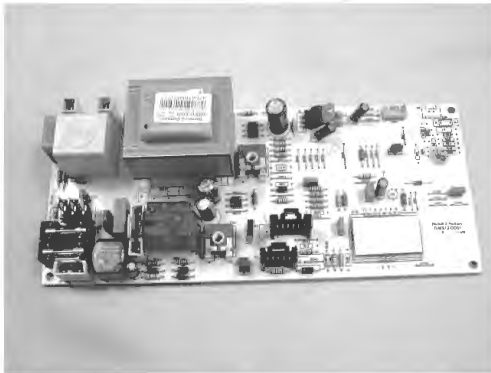
B) Control and Regulation Devices

6.1.4 Gas Valve : This device controls the flow of gas to the appliance.



Picture 1 : Gas Valve

6.1.5 Electronic Circuit board: This device controls all the ignition and performance functions of the water heater.



Picture 2 - 3 : Electronic Card

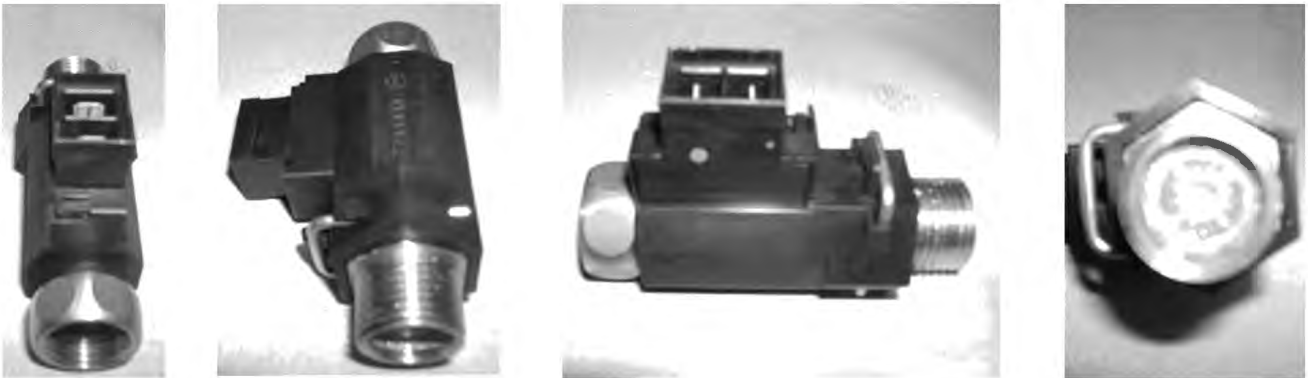
Main card Fuse: 2 A - 230 VAC Fast

6.1.6 Fan: This device ensures the safe discharge of exhausted gases and procures the intake of fresh air for combustion purposes.



Picture 4: Fan

6.1.7 Flowswitch : This component monitors the flow rate of water through the appliance by means of a magnet integrated into the body of the switch. When water flows through the appliance at a suitable pressure the signal generated by this component allows the ignition sequence to take place.



Picture 5 – 6 – 7 - 8 : Flowswitch.

6.1.8 Standard Horizontal Flue Assembly :

These are the components of standard horizontal balanced flue kit provided.



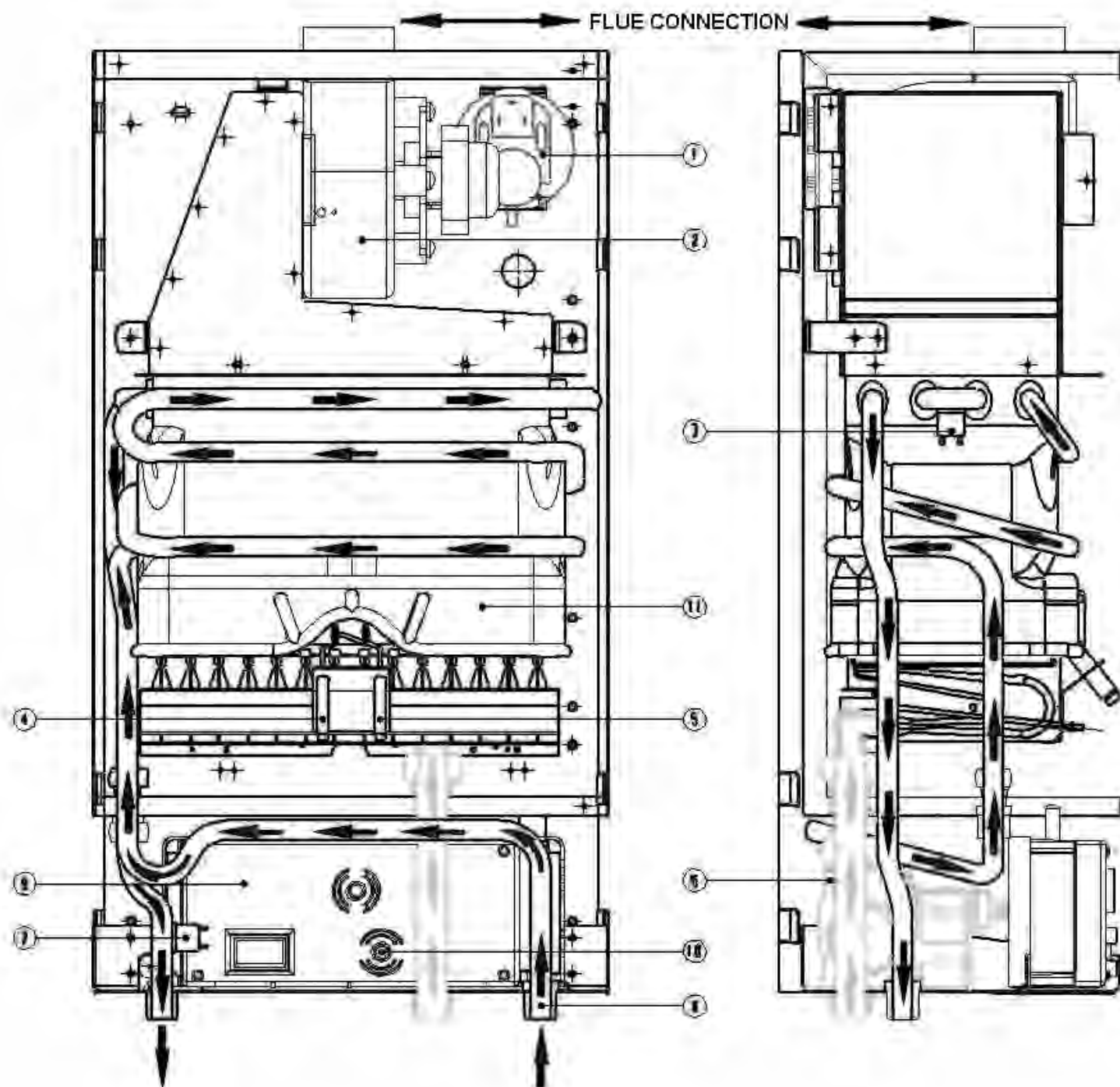
Picture 9 – 10 – 11 : Pipeline for the Exhaust Gas

6.1 Principles of Operation of the Appliance :

When suitable electrical, water and gas connections have been made as indicated in the instruction book the appliance is ready for use.

Turn the control knob to the ON position. When in the OFF position the appliance will remain in stand-by mode. The process of the operation is as indicated below :

- 1) Ensure there is a live supply of the correct gas to the appliance.
- 2) The Electrical connection is set to “ON” position.
- 3) The appliances’ “ON/OFF” switch is set to the “ON” position from “OFF” position. The water temperature is displayed on the LCD screen.
- 4) When a hot water faucet is turned on. The flowswitch senses the flow of water and sends a signal to the circuit board. On receipt of this signal the circuit board turns on the fan to deliver air for combustion. Once a signal is received from the pressure switch, indicating a flow of air, the ignition sequence is started and the gas valve opened. On ignition of the burner the water flowing through the heat exchanger begins to heat up and the temperature indicated on the LCD screen. The control board monitors the temperature of the water and regulates the flow of gas to maintain the desired water temperature.



1. Air Pressure switch
2. Fan
3. Overheat Safety Sensor
4. Ignition Electrode
5. Ionisation Electrode
6. Gas Valve
7. Hot water Temperature Sensor
8. Water Rate Limiter
9. Circuitboard
10. Temperature Controller
11. Heat-Exchanger

6.3 Instructions for the Replacement of Parts :

Tools required

- ☐ 10, 11, 22, 24, 30 & 32 mm spanners
- ☐ Flat screwdriver
- ☐ Star screwdriver
- ☐ Cutting pliers (normal, fine)
- ☐ U-type manometer
- ☐ 7mm Socket wrench (for natural gas – LPG conversion)



Picture 12 : Tools required for the replacement of Water Heater components

6.4 Error Code Definition (LCD screen):

6.4.1 Error code F1 :

6.4.2 Error code F2 :

6.4.3 Error code F4 :

6.4.4 Error code F5 :

Error code F1 : Appliance Overheated

If the water rate is too low the water temperature may rise above 85°C. In order to protect the heat-exchanger from overheating this sensor activates and sends a signal to the circuitboard, which in turn closes the gas valve. F1 error code appears on the LCD screen and the appliance locks-out. To reset the device, switch the appliance OFF at the control knob and switch back to the ON position.

Error code F2 : Failure of the water temperature sensing device

This sensor is located on the outlet water pipe and measures the water-flow temperature, which is displayed on the LCD screen. Failure of this sensor is indicated on the LCD screen as error code F2.

Error code F4 : Flame detection

Error code F4 appearing on the LCD screen indicates that there has been a loss of flame or the appliance has failed to light after three ignition attempts. First check that there is supply of gas to the appliance. For appliances burning LPG the gas supply may have been depleted. After checking the supply of gas to the appliance re-check the operation of the appliance after ensuring the gas line is correctly purged and the appliance re-set. If the appliance continues to display the error code F4, check the location and integrity of the ignition circuit and ignition and ionisation probes.

Error code F5 : Air pressure sensing failure

Error code F5 appearing on the LCD screen indicates that there is a loss of air pressure sensing. Check that the flue-ways are clear from obstruction and that the fan is operating correctly. If neither of these problems are evident check the sensing tubes on the pressure switch for blockage or damage. If this is not the case replace the pressure-switch.

TROUBLE-SHOOTING

PROBLEM	CAUSE	REMEDY
The heater is not operating. No LCD display.	Electricity off	Restore power
The heater is not operating.	Voltage	The voltage must be within 195-253 V.
The heater is out of operation. Error code F4	Gas supply failed	Check the gas supply. Check adequate gas pressure.
The appliance fails to ignite. Error code F4	Gas valve	Call an authorised agent
The appliance fails to ignite. Fan runs for a while and agent. stops Error code F5	Flue system	Check the flue for blockages If problem persists call an authorised agent
Water too hot. Error code F1	Electric circuit Water circuit	Re-set the appliance by switching OFF and ON at the control knob. If the problem persists call an authorised agent.
Water not hot enough (max. reg temp 50C in flow rates 5 l/min).	Electric circuit	Call an authorised agent

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6.5 Assembly Diagrams - Relating to the “Operating Instructions” Booklet

6.5.1 Disassembling the Flue System



Picture13 : Remove the 4 star slotted screws attaching the flue to the appliance. After cracking the joint with a slight tap or twist the flue can be lifted clear of the appliance.

6.5.2 Disassembly of the Outer-case

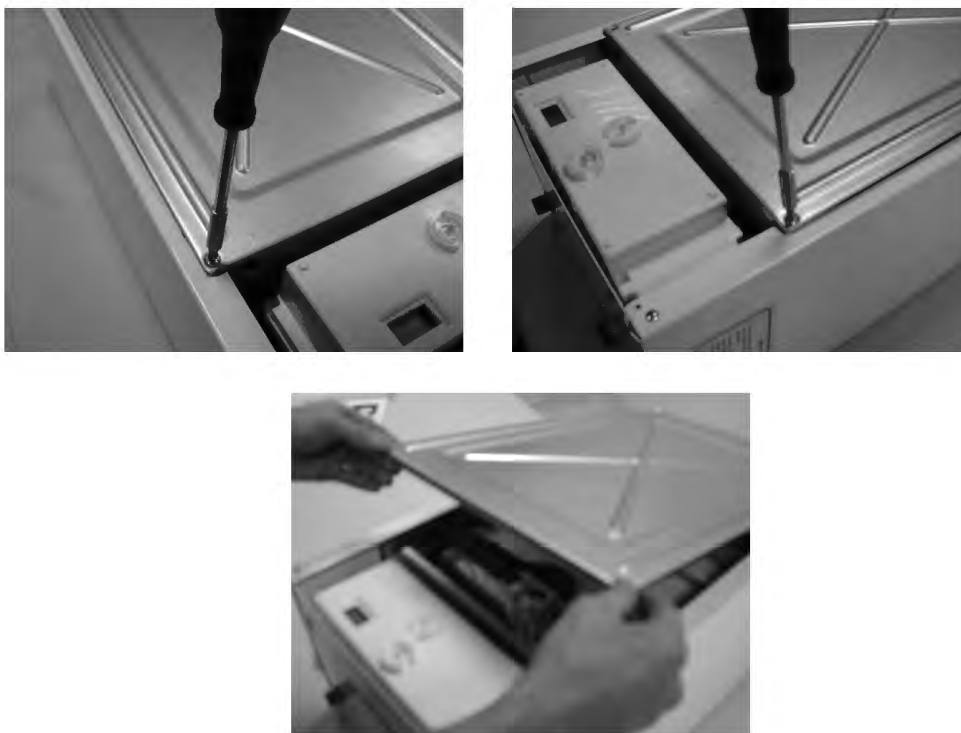


Picture 14 – 15 - 16 : Remove the control knobs by pulling them out.



Picture 17 - 18: Remove the two screws from the bottom of the appliance as shown using a star head screw driver. Lift the front panel away from the appliance and push upwards to remove.

6.5.3 Removal of the Combustion Box Cover:



Picture19 – 20 – 21 : Remove the two screws at the bottom of the cover. Lift off the cover.

6.5.4 Removal of the Side Panels :



Picture 22 – 23 - 24 – 25 - 26 : Lift the sides free of their retaining slots.

6.5.5 Removal of the Electronic Control Box :



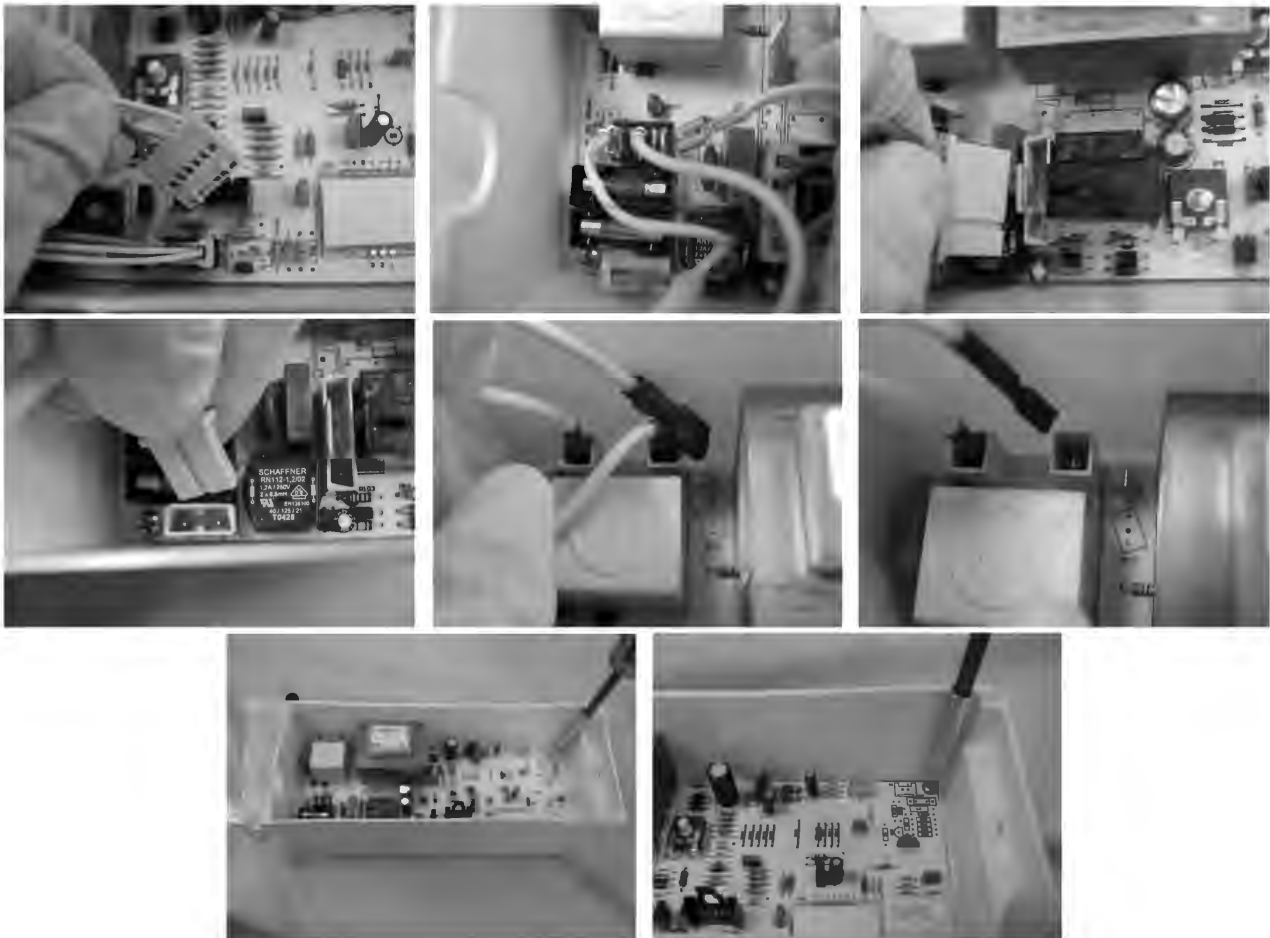
Picture 27 – 28 – 29 – 30 : Remove the two screws locating the control box and remove the box.

6.5.6 Removal of the Circuit Board from its Box:



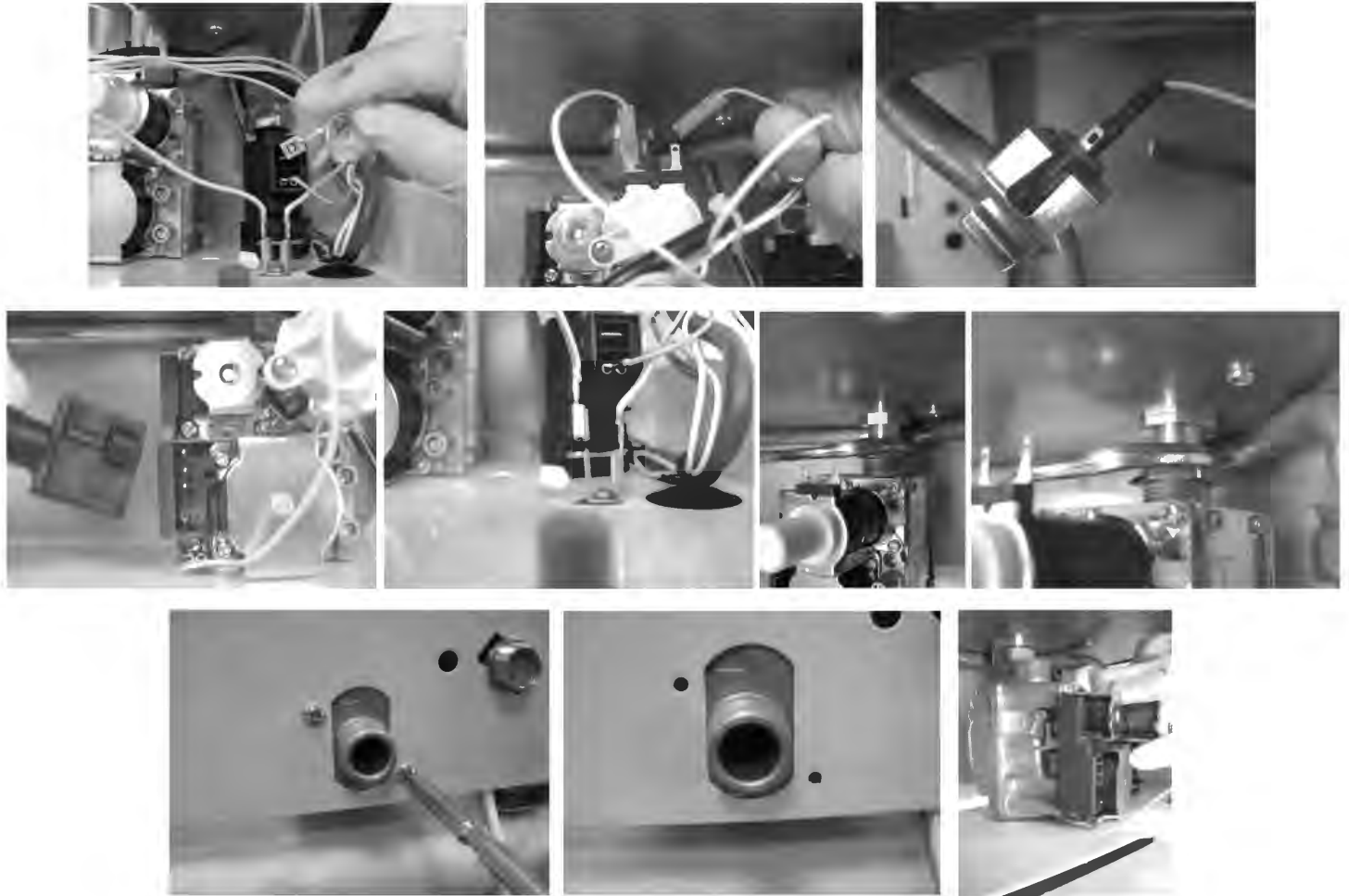
Picture 31 – 32 – 33 : Remove the 4 securing screws from the back of the box and lift off the cover.

6.5.7 Removal of the Circuit Board from its Box:



Picture 34 – 35 – 36 – 37 – 38 – 39 – 40 – 41 : After removing all the connecting cables, the circuit board can be removed by simply removing the 4 screws at the corners with a star head screwdriver.

6.5.8 Removal of the Gas Valve :



Picture 42 – 43 – 44 – 45 – 46 – 47 – 48 – 49 – 50 – 51 – 52: After having removed all the connectors from the valve and having removed the two screws, which connect the valve to the bottom bracket, the nut securing the valve can be removed using a No: 30 spanner.

6.5.9 Removal of the Flame Guard:



Picture 53 – 54 – 55 – 56 : The Flame Guard is removed after removing the 2 screws positioned under and outside the the combustion box by means of a long star headed screwdriver.

6.5.10 Removal of the Flowswitch :



Picture 57 – 58 : The nut which secures the flowswitch to the lower side bracket is removed by means of a No: 24 spanner. The cold water feed pipe, which connects the flowswitch from the upper side, is similarly removed by means of a No: 24 spanner and the flowswitch is lifted free.

6.5.11 Removal of the Hot and Cold Water Connection Pipes :



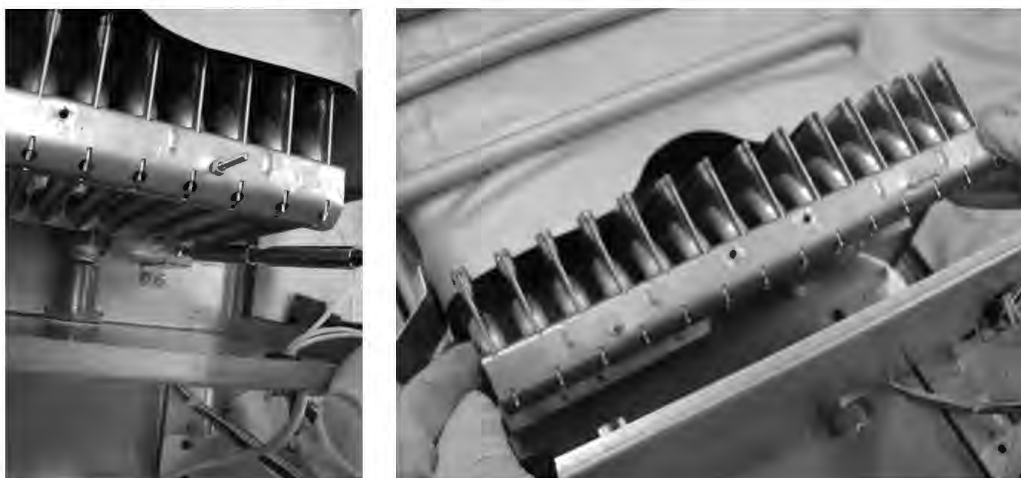
Picture 59 – 60 – 61 – 62 – 63 – 64 – 65 – 66 : Using a No. 24 spanner disconnect the securing nuts at the ends of each of the pipes and remove.

6.5.12 Removal of the Ignition Electrodes:



Picture 67 – 68 : The electrodes and earth cable assembly is removed by loosening the 2 securing screws using a star headed screwdriver.

6.5.13 Removal of the Burner :



Picture 69 – 70 : The burner is disconnected from its support by loosening the two screws, which are located at the back sides of the burner assembly.

If converting the appliance from one gas type to another remove the electrode bracket as above. Then remove the metal bracket covering the bottom of the burner by removing its locating screws which are accessible from the underside of the appliance. Finally disconnect and remove the burner.

Attention!

After removing the burner from its location for conversion purposes, replace the injectors and re-connect the manifold to the burner. On re-assembling the burner ensure that the collector sealing gasket is replaced.

6.5.14 Removal of the Overheating Sensor and NTC Sensor :



Picture 71 – 72 – 73 : After removing the electrical cable connections of the overheat sensor, which is located at the hot water outlet connection of the heat exchanger, the screws are loosened and the overheating sensor is removed.



Picture 74 – 75 – 76 : Remove the electrical cable connections from the surface type NTC sensor, which is located on the surface of the hot water pipe, the NTC sensor used to fit onto the pipe surface can be easily removed from its bracket.

6.5.15 Removal of the Heat-Exchanger :



Picture 77 – 78 – 79 : The earth cable is first disconnected from the heat-exchanger followed by the connection pipes using a No: 24 spanner. The heat-exchanger, which is positioned within the Fanhood is gently lifted upwards from its front side and removed.

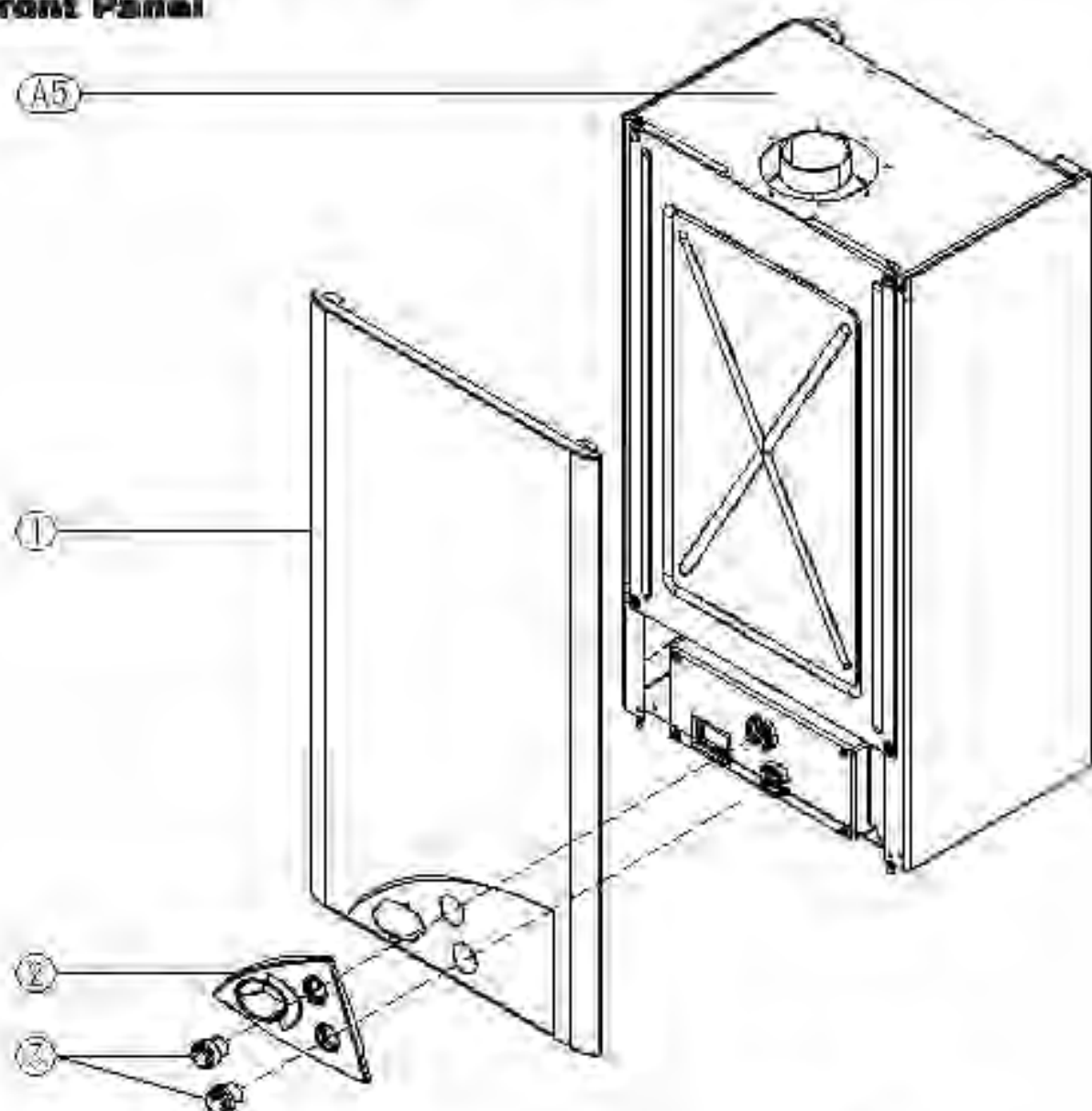
6.5.16 Removal of the Fanhood



Picture 80 – 81 – 82 – 83 – 84 : After removal of the heat-exchanger disconnect the cables from the fan and pressure switch along with the sensing pipes from the pressure switch. After removal of the three securing screws the hood and fan assembly can be removed.

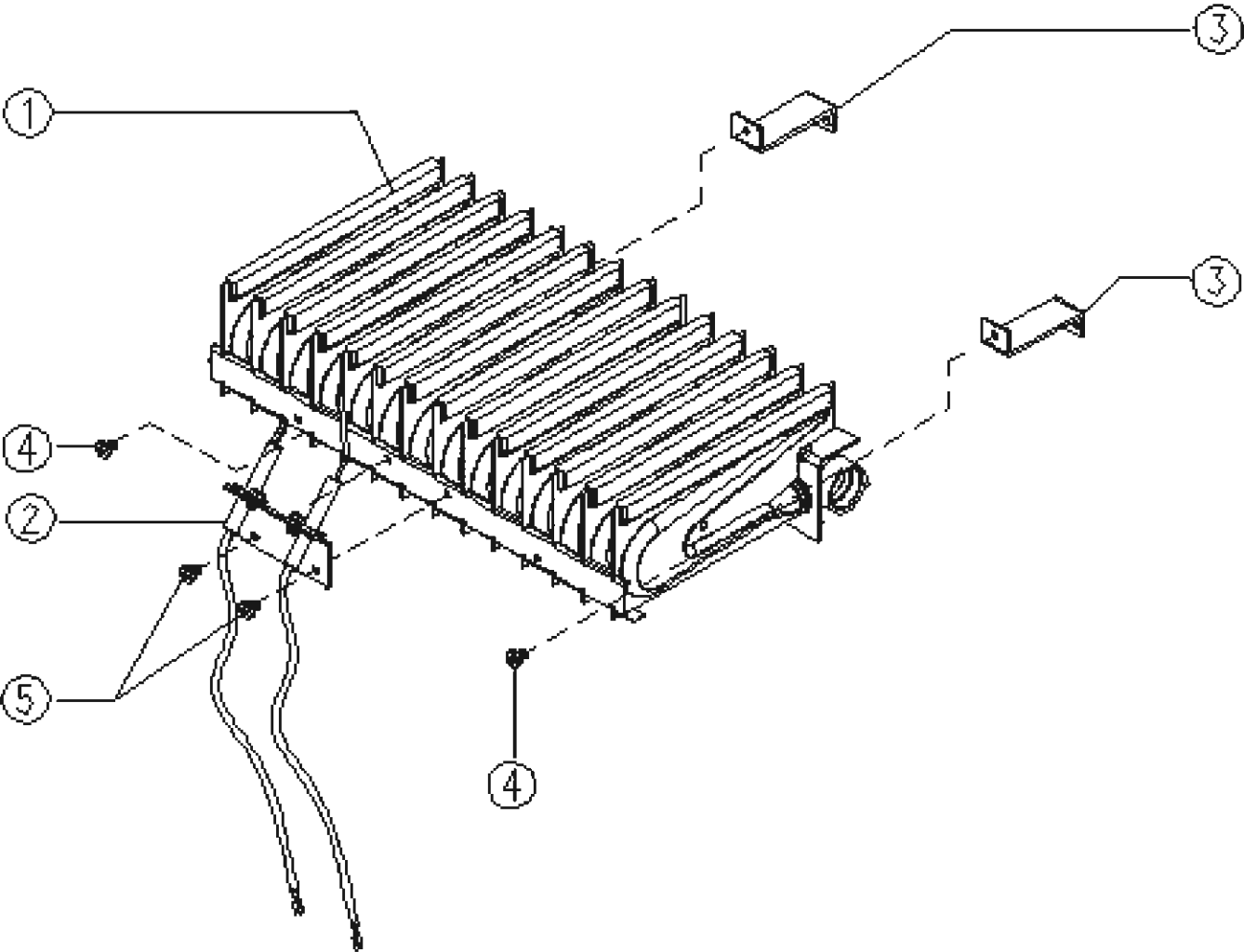
Section 7 / Exploded Diagrams :

7.1 Front Panel



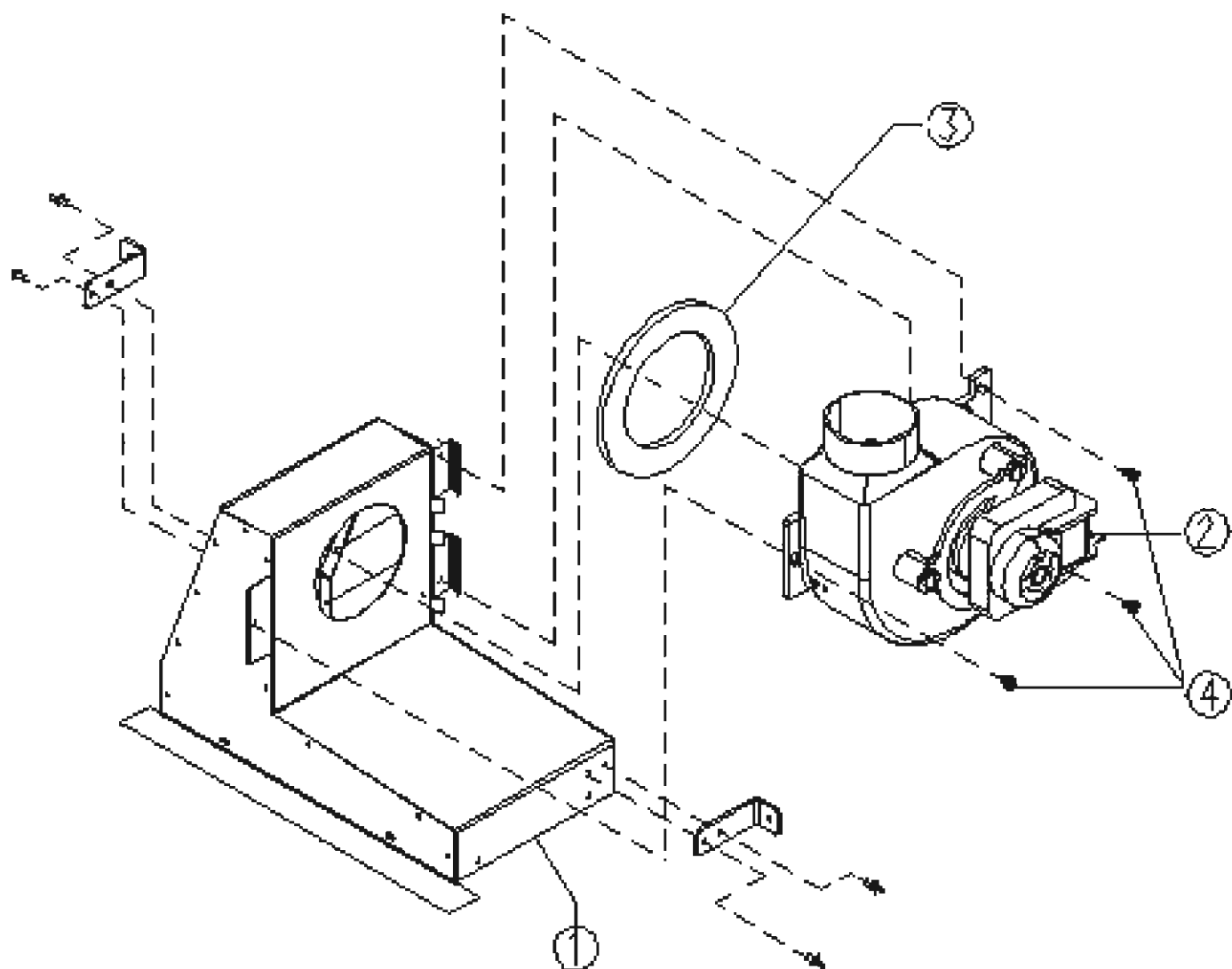
NO	PART NAME	ORDER CODE	AMOUNT
1	Front Panel	3002208655	1
2	Control Panel	3002121054	1
3	Control Switch (Button)	3002121053	2

7.2 Burner Assembly :



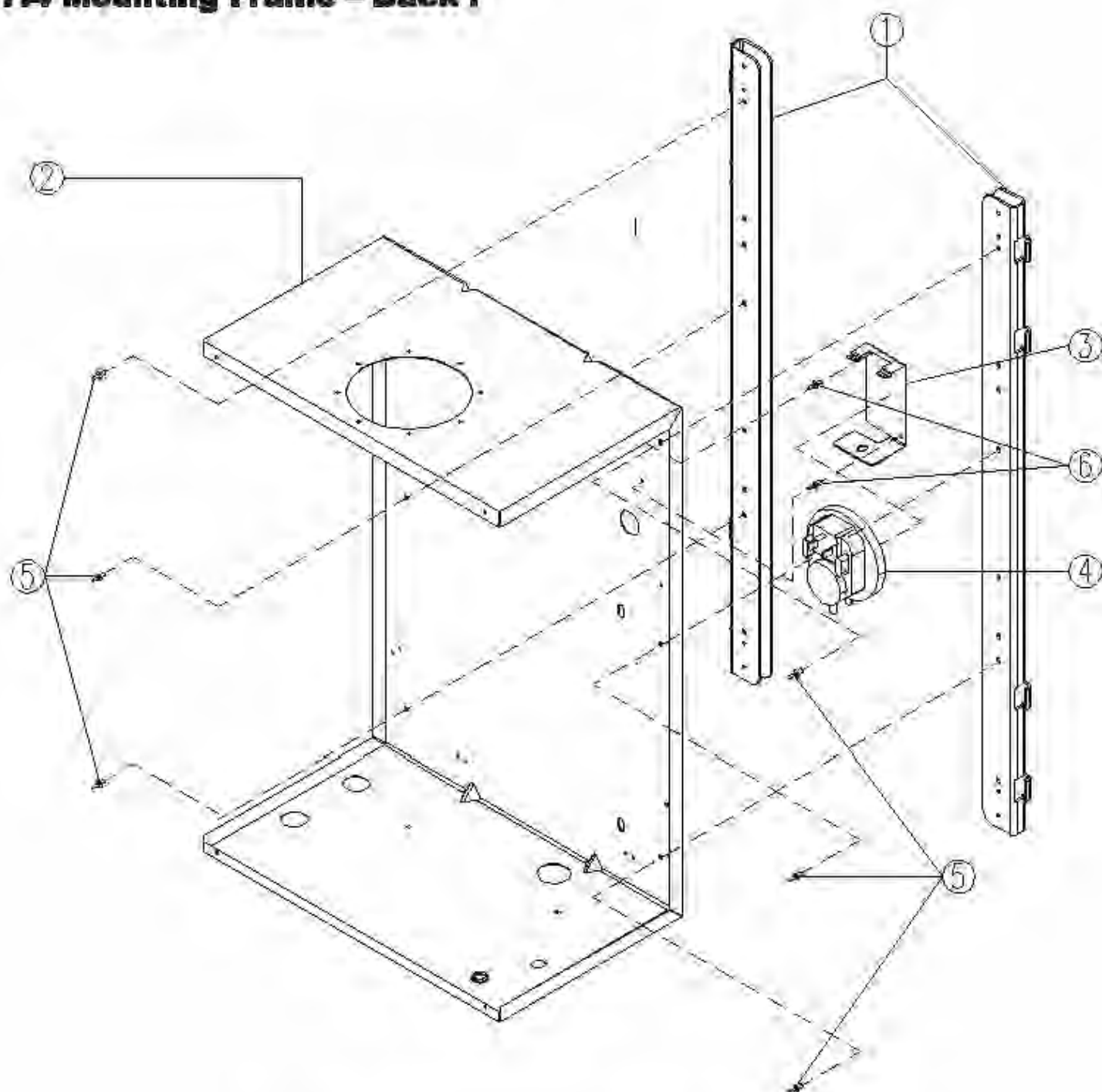
NO	PART NAME	ORDER CODE	AMOUNT
1	Burner Assembly-IG24	3000004759	1
	Burner Assembly-IG19	3000004767	1
2	Electrode Assembly	3004090189	1
3	Burner Support	3002208652	2
4	M4x8 Bolt	3002006862	2
5	4.2x9.5 Screw	3002005468	2

7.3 Fanhood – Fan Connection :



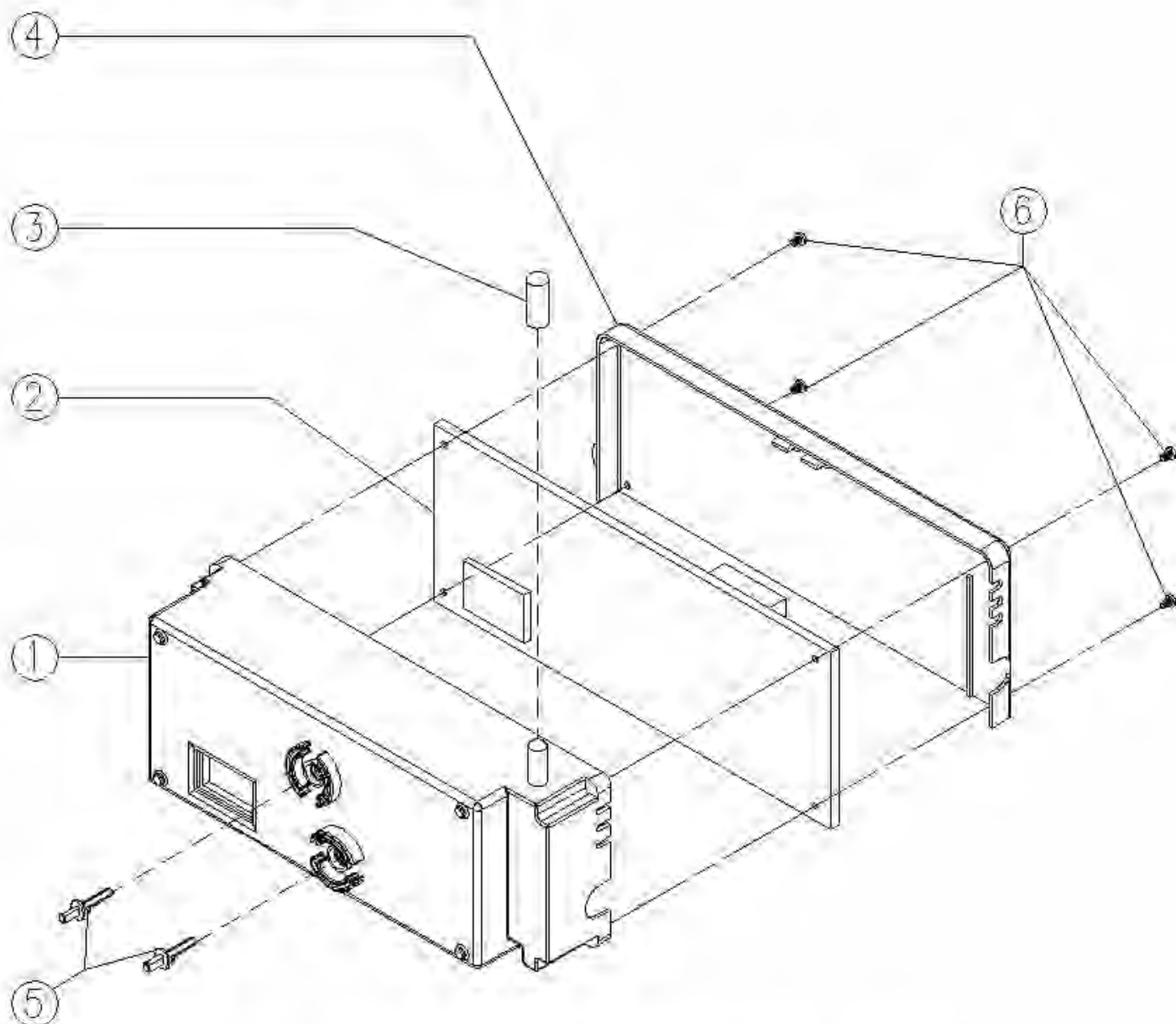
NO	PART NAME	ORDER CODE	AMOUNT
1	Fanhood Assembly		
	IG19	3002208690	1
	IG24	3002208650	1
2	Fan	3003200020	1
3	Fan Gasket	3002198465	1
4	4.8x13 Screw	3002005681	3

7.4 Mounting Frame – Back :



NO	PART NAME	ORDER CODE	AMOUNT
1	Back Support	3002208649	2
2	Mounting (U) Frame		
	IG19	3002208670	1
	IG24	3002208648	1
3	Pressure switch bracket	3002194404	1
4	Air Pressure switch	3003200032	1
5	3.2 x 9 Rivet	3003200215	8

7.5 Circuitboard – Housing :



NO	PART NAME	ORDER CODE	AMOUNT
1	Circuitboard Housing	3002121009	1
2	Circuitboard	3004090176	1
3	Silicon Sheath	3002029048	1
4	Control Box Cover	3002121010	1
5	Cam	3002121018	2

Section 8 / Gas Conversion

Carefully follow the procedures outlined below.

8.1 Change of the Burner's Injectors:

The injector diameters and their respective part numbers to be used in the LPG conversions or natural gas conversions are detailed below.

Conversion type	The injector diameter to be used in the conversion
Natural gas	1.17
LPG (Propane/Butane)	0.74



8.2 Change of gas type on the Control Board :

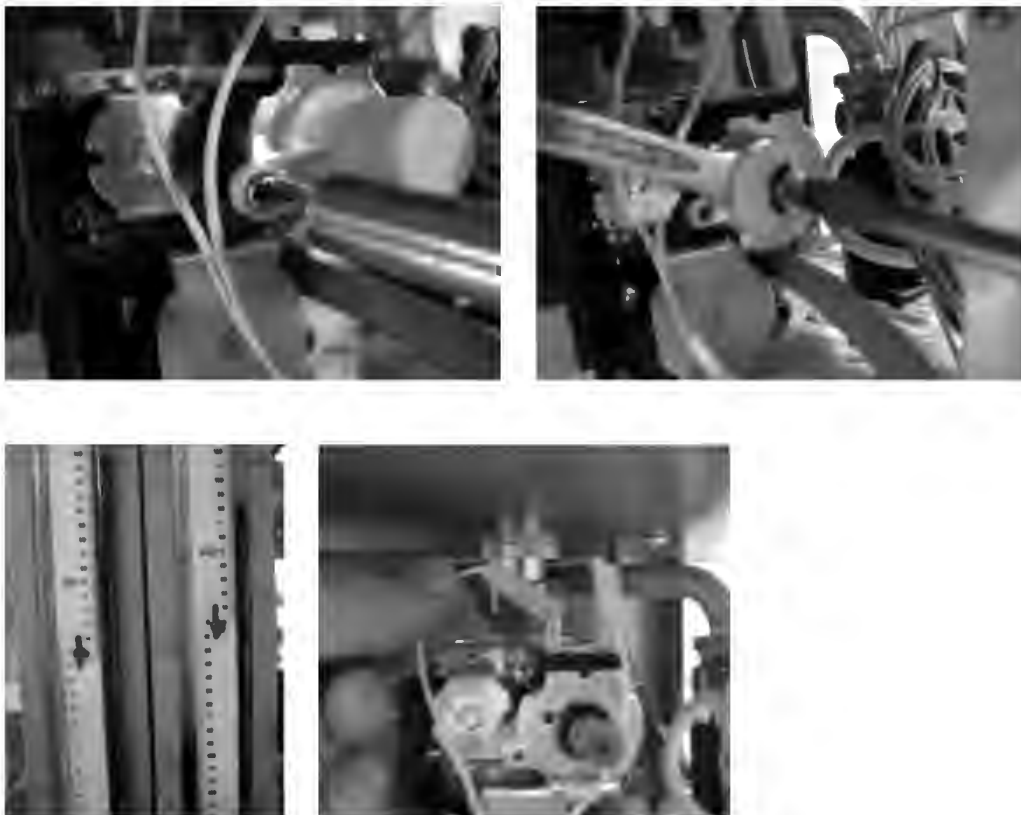
It is imperative that the control board is re-set during conversion to match the gas supply to the appliance. This menu is activated after 3 successive Off/On switching operations are carried out. Adjustments are made by turning the DHW control knob. Re-set by a three more successive Off/On operations of the control knob.

(NG – Natural gas, LP - Butane/Propane, 3G – Not applicable for the UK & IE)

Gas Pressure Regulating Values

The max and min burner operating parameters are factory set but need to be adjusted when the appliance is converted from one gas type to another, see below for details of adjustment.

Natural Gas (20mbar)		Natural Gas (37mbar)	
Min. Gas Pressure	2 mbar	Min. Gas Pressure	3 mbar
Max. Gas Pressure	14.5 mbar	Max. Gas Pressure	35 mbar



Picture 85 – 86 – 87 – 88 – 89 – 90 : The maximum and minimum settings measured at the pressure test point

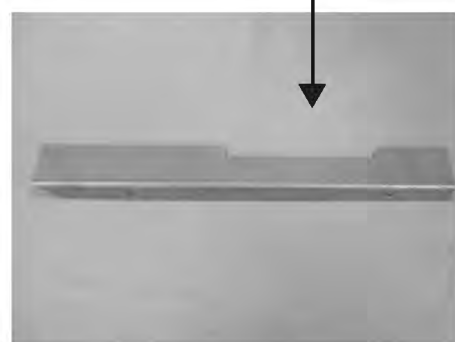
ATTENTION !

Set the burner pressure values of the burner after changing the injectors by following the procedure below:

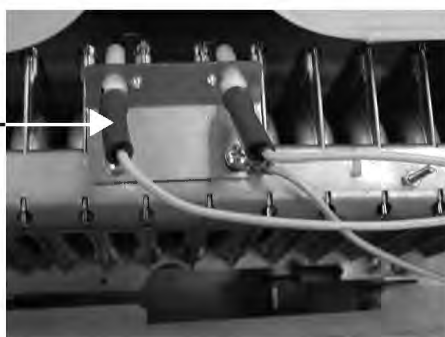
- ✓ Change the injectors.
- ✓ Replace the sealing gasket.
- ✓ Adjustment of the control board.
- ✓ Reset the burner pressure settings as per the above values in accordance with the new gas type

8.3 Conversion Procedure

- The baffle, which is located under the burner can be removed by removing the two screws, which are accessible through the two holes in the base of the appliance.



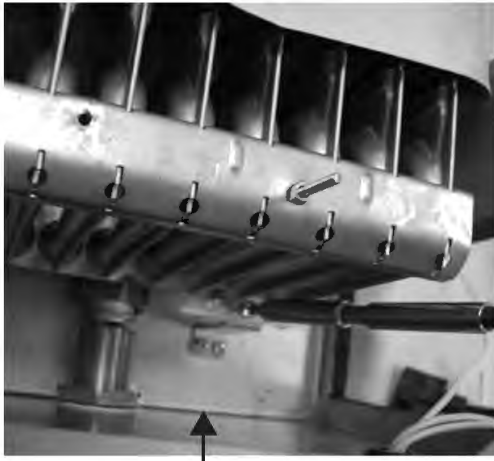
- The electrode assembly is removed by removing the two securing screws on the front of the bracket. The screw securing the earth connection has a knurled washer, which must be replaced on re-assembly.



- Loosen the nut under the burner being careful not to loose the green washer.



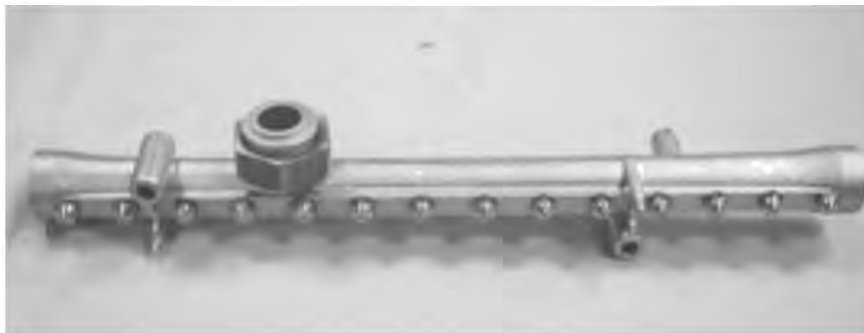
- Remove the two screws securing the burner to the back plate.



- Remove the burner.



- Removal of the top two screws on the burner allow the manifold to be removed..



- The injectors can now be removed from the manifold and replaced with either 1.7 mm injectors for natural gas or 0.74 mm injectors for LPG.



- With the new injectors in place the manifold can be secured to the burner..
- Re-locate the burner and secur after re-placing the green gasket.



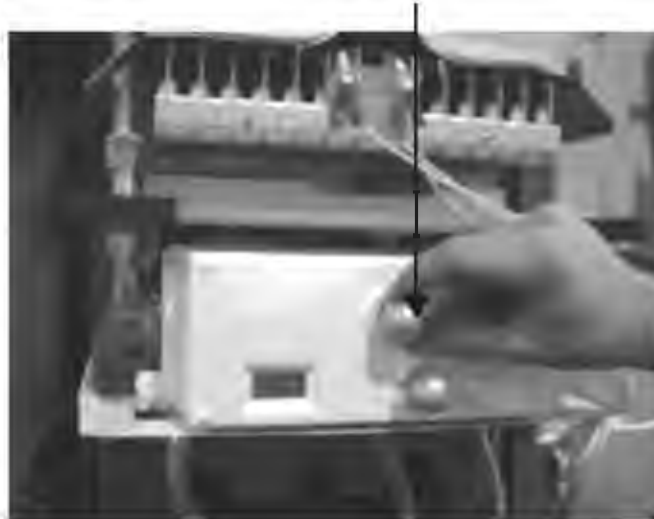
- The burner is then secured to the back plate.



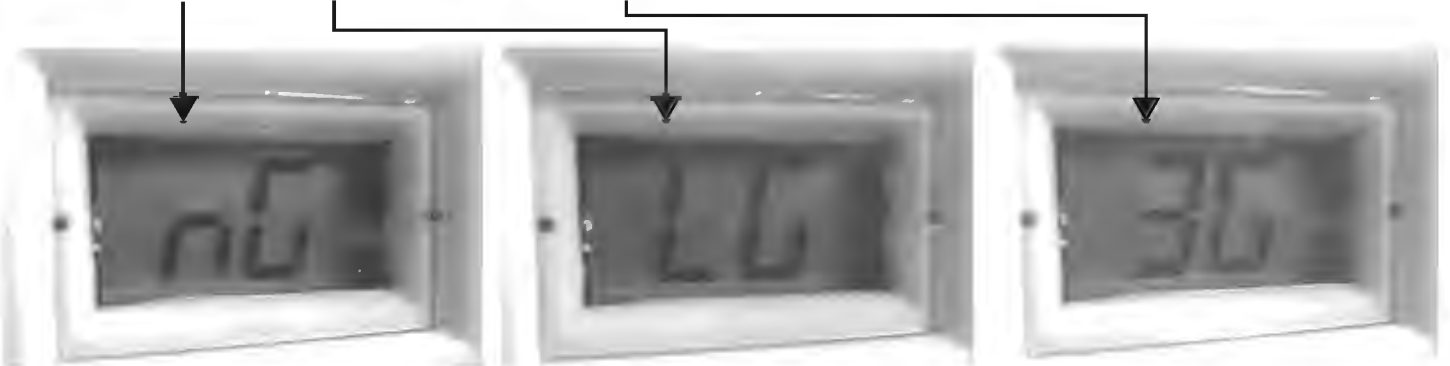
- Replace the baffle below the burner and secur in place..



- Replace the electrode bracket and earth connection with the knurled washer.
- Switch on the services to the appliance.
- The appliance is then turned on by turning the on/off switch to ON.

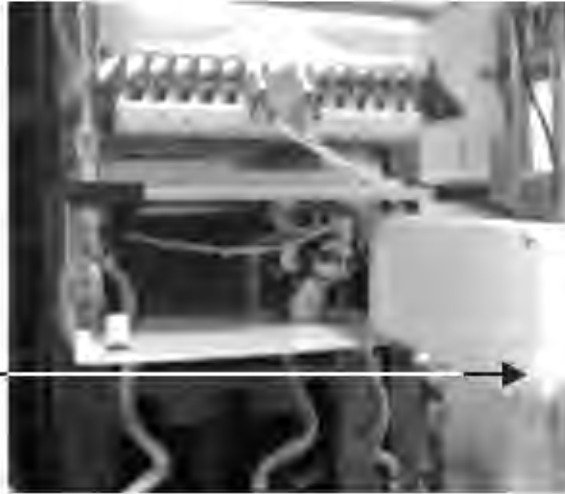


- Quickly turn the Off/On button 3 times (within 2 secs).
- The symbol for the pre-set gas appears on the LCD screen .
- **(nG- Natural gas, LG- LPG, 3G- not applicable for UK & IE)**



- Adjust the gas type appearing on the LCD screen by turning the Temperature Adjustment Knob to match the new injectors.
- The appliance is again switched on and off rapidly three times to reset the parameters.

- By loosening the screw connection on the left hand side of the Control Box, the cover can be swung open 90° as shown.



- The yellow coloured cover on the gas valve can be removed by loosening the attachment screw.



- There are 2 pressure test points on the gas valve that enable the gas pressure to be measured. Loosen the screw and attach the manometer hose to check the inlet pressure.



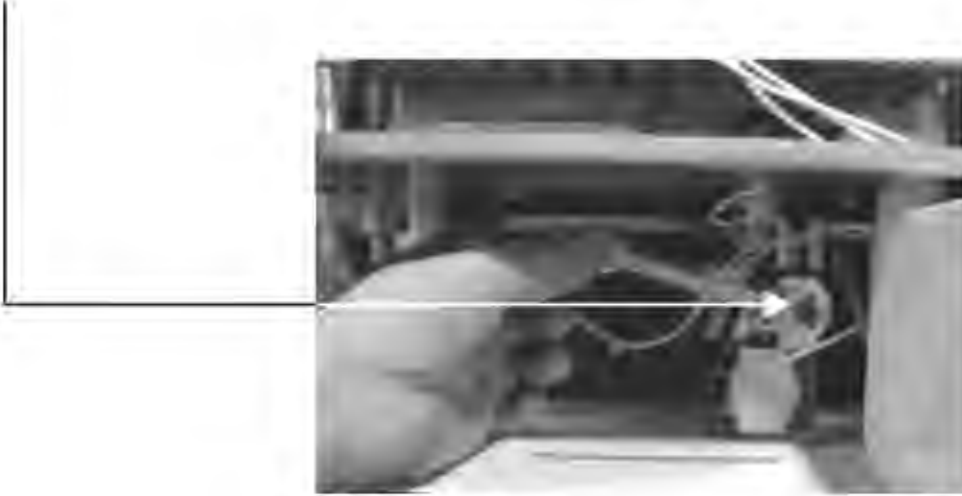
- Ensure that the inlet gas pressure for Butane is 30 mbar, 37mbar for Propane or 20mbar for Natural Gas.
- To adjust the burner pressure, using a No. 10 spanner, turn the brass gas setting switch placed under the yellow cover in a clockwise direction and set to max position 27-28 mbar for Butane, 33-35 mbar for Propane and 12-15 mbar for natural gas pressure values.



- After resetting gas valve max values, the min values must also be set. To do this disconnect the left terminal as shown below, which is located above the adjustment nut.



- For the minimum setting, secure the max adjustment nut with the No: 10 spanner to avoid it being inadvertently moved. Then adjust the star slotted minimum adjuster screw in the middle of the nut to give 1.3 mbar for natural gas and 3 mbar for LPG (Butane-Propane) by turning it in a clockwise direction.



- After setting the minimum value check that there has been no change to the maximum setting. If a change has occurred then the maximum setting is reset as above
- Remove the hose and seal the test point. Reconnect to the burner pressure test point and check for leaks.



- The yellow coloured safety plug which was removed from the gas setting switch is replaced and the manometer hose removed. The test point is resealed.
- The Control Box is closed and secured.
- If the side panels have been removed they are now replaced.
- The front cover is replaced and secured.

8.4 Pressure and Injector Detail

NATURAL GAS : 20 mbar		
IG24	Injector Diameter :	1.17 mm
	Max. Burner Pressure:	14.5 mbar
	Min. Burner Pressure :	1.5 mbar
IG19	Injector Diameter :	1.17 mm
	Max. Burner Pressure:	12.5 mbar
	Min. Burner Pressure :	1.3 mbar
LPG		
Butane : 30 mbar		
IG24	Injector Diameter :	0.74 mm
	Max. Burner Pressure:	28 mbar
	Min. Burner Pressure :	3.0 mbar
IG19	Injector Diameter :	0.74 mm
	Max. Burner Pressure:	27.1 mbar
	Min. Burner Pressure :	3.0 mbar
Propane : 37 mbar		
IG24	Injector Diameter :	0.74 mm
	Max. Burner Pressure:	35 mbar
	Min. Burner Pressure :	3.1 mbar
IG19	Injector Diameter :	0.74 mm
	Max. Burner Pressure:	33.8 mbar
	Min. Burner Pressure :	3.0 mbar

Section 9 / Spare Parts Lists

IG19 / IG24 Instantaneous Water Heater / Spare Parts List		
COMPONENT	ORDER NO.	AMOUNT
Heat-Exchanger - IG19	3000004755	1
Burner assembly- IG19	3000004767	1
Heat-Exchanger – IG24	3000004758	1
Burner assembly- IG24	3000004759	1
Silicon Sheath	3002029048	1
Control Switch (Button)	3002121053	2
Contol Panel	3002121054	1
Circuit Board Housing	3002121009	1
Circuit Board	3004090176	1
Control Box Cover	3002121010	1
Control Box Centre Part	3002121012	1
Cam (Control Button Shaft)	3002121018	2
Water Filter	3002142682	1
Water Flow Rate Limiter- IG24	3002184784	1
Water Flow Rate Limiter- IG19	3002184782	1
Fan Gasket	3003200137	1
Gas Valve	3003200618	1
NTC Sensor (Surface Type)	3003200688	1
Circuit-board	3004090176	1
Wiring Harness	3004090188	1
Electrode Assembly	3004090189	1
Flowswitch Body	3004090177	1
Flowswitch Float	3004090178	1
Flowswitch retaining U clip	3004090179	1
Flowswitch Reedswitch	3004090180	1
4.2x9.5 Screw (Side, Cover, Burner)	3002005468	16
4.2x9.5 Flat faced Screw	3002005470	4
PT3.5x7.5 Screw (Control Box)	3002006872	8
3.5x9.5 Screw (Bottom Bracket)	3002005450	5
M4x15 Bolt	3002007008	3
4.8x13 Screw (Fan-FanHood)	3002005681	3
M4x8 Bolt-Torx (Gas Valve-Bottom Bracket)	3003200886	2
M4x8 Pozi headed Bolt	3002006862	2
4.8x9.5 Screw	3002005550	2
PT 4x17 (Socket Fixing in Gas Valve)	3002006008	1
Cable Clamp (Bottom Bracket)	3004090903	1
PT3.5x15 Screw (Cable Holder)	3002005337	1
Natural Gas burner Injector (1.17)	3004605012	14
LPG burner Injector (0.74)	3004605007	14
Fan (FIME Made)	3003200020	1
Burner Manifold Gasket	3002029045	1
Pressure switch (24kW)	3003200032	1
Silicon Hose (Pressure switch)	3003200051	0.2 m



***The code of practice for the installation,
commissioning & servicing of mains pressure hot water storage***

Installation, Commissioning and Service Record Log Book

CUSTOMER DETAILS

NAME

ADDRESS

TEL No.

IMPORTANT

1. Please keep the Log Book in a safe place for future reference.
2. This Log Book is to be completed in full by the competent person(s) who commissioned the appliance and then handed to the customer. The completed Log Book is then considered, in accordance with the Building Regulations, as the Commissioning Certificate.
3. Failure to install and commission this appliance in accordance with the manufacturer's instructions may invalidate the warranty and could lead to prosecution.

The above does not affect your statutory rights.

The content of this Log Book has been
produced in consultation with



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INSTALLER & COMMISSIONING ENGINEER DETAILS

INSTALLER DETAILS

COMPANY NAME	DATE
ADDRESS	
INSTALLER NAME	TEL No.
REGISTRATION DETAILS	
REGISTERED OPERATIVE ID CARD No. (IF APPLICABLE)	

COMMISSIONING ENGINEER (IF DIFFERENT)

NAME	DATE
ADDRESS	
TEL No.	
REGISTRATION DETAILS	
REGISTERED OPERATIVE ID CARD No. (IF APPLICABLE)	

APPLIANCE & TIME CONTROL DETAILS

MANUFACTURER	MODEL		
CAPACITY	litres	SERIAL No.	
TYPE	UNVENTED ☐	or	THERMAL STORE ☐
TIME CONTROL	PROGRAMMER ☐	or	TIME SWITCH ☐

PLEASE FOLLOW THE INSTALLATION AND COMMISSIONING INSTRUCTIONS
IN THE INSTALLATION MANUAL SUPPLIED WITH THE APPLIANCE

COMMISSIONING PROCEDURE INFORMATION

BOILER PRIMARY SETTINGS (INDIRECT HEATING ONLY) ALL BOILERS

IS THE PRIMARY A SEALED OR OPEN VENTED SYSTEM?

SEALED ☐

OPEN ☐

WHAT IS THE BOILER FLOW TEMPERATURE?

°C

ALL MAINS PRESSURISED SYSTEMS

WHAT IS INCOMING STATIC COLD WATER PRESSURE AT THE INLET TO THE PRESSURE REDUCING VALVE?

bar

HAS STRAINER (IF FITTED) BEEN CLEANED OF INSTALLATION DEBRIS?

YES ☐

NO ☐

HAS A WATER SCALE REDUCER BEEN FITTED?

YES ☐

NO ☐

WHAT TYPE OF SCALE REDUCER HAS BEEN FITTED?

UNVENTED SYSTEMS ONLY

ARE COMBINED TEMPERATURE AND PRESSURE RELIEF VALVE AND EXPANSION VALVE FITTED AND DISCHARGE TESTED?

YES ☐

NO ☐

IS PRIMARY ENERGY SOURCE CUT OUT FITTED (NORMALLY 2 PORT VALVE)?

YES ☐

NO ☐

WHAT IS THE PRESSURE REDUCING VALVE SETTING (IF FITTED)?

bar

WHERE IS OPERATING PRESSURE REDUCING VALVE SITUATED?

HAS THE EXPANSION VESSEL OR INTERNAL AIR SPACE BEEN CHECKED?

YES ☐

NO ☐

WHAT IS THE HOT WATER TEMPERATURE AT THE NEAREST OUTLET?

°C

THERMAL STORES ONLY

WHAT IS THE OPERATING SETTING OF THE PRESSURE REDUCING VALVE (WHERE FITTED)?

bar

WHERE IS PRESSURE REDUCING VALVE SITUATED?

WHAT STORE TEMPERATURE IS ACHIEVABLE?

°C

WHAT IS THE MAXIMUM HOT WATER TEMPERATURE?

°C

WHAT IS THE MAXIMUM HOT WATER FLOW RATE AT MAXIMUM TEMPERATURE?

lts/min

ALL PRODUCTS

DOES THE HOT WATER SYSTEM COMPLY WITH THE APPROPRIATE BUILDING REGULATIONS?

YES ☐

HAS THE SYSTEM BEEN INSTALLED AND COMMISSIONED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS?

YES ☐

HAVE YOU DEMONSTRATED THE OPERATION OF THE SYSTEM CONTROLS TO THE CUSTOMER?

YES ☐

HAVE YOU LEFT ALL THE MANUFACTURER'S LITERATURE WITH THE CUSTOMER?

YES ☐

COMPETENT PERSON'S SIGNATURE

CUSTOMER'S SIGNATURE

(To confirm demonstrations of equipment and receipt of appliance instructions)

SERVICE INTERVAL RECORD

It is recommended that your hot water system is serviced regularly and that your service engineer completes the appropriate Service Interval Record below.

SERVICE PROVIDER

Before completing the appropriate Service Interval Record below, please ensure you have carried out the service as described in the manufacturer's instructions and in compliance with all relevant codes of practice.

SERVICE 1 DATE: _____

ENGINEER NAME _____

COMPANY NAME _____

TEL No. _____

COMMENTS _____

SIGNATURE

SERVICE 2 DATE: _____

ENGINEER NAME _____

COMPANY NAME _____

TEL No. _____

COMMENTS _____

SIGNATURE

SERVICE 3 DATE: _____

ENGINEER NAME _____

COMPANY NAME _____

TEL No. _____

COMMENTS _____

SIGNATURE

SERVICE 4 DATE: _____

ENGINEER NAME _____

COMPANY NAME _____

TEL No. _____

COMMENTS _____

SIGNATURE

SERVICE 5 DATE: _____

ENGINEER NAME _____

COMPANY NAME _____

TEL No. _____

COMMENTS _____

SIGNATURE

SERVICE 6 DATE: _____

ENGINEER NAME _____

COMPANY NAME _____

TEL No. _____

COMMENTS _____

SIGNATURE

SERVICE 7 DATE: _____

ENGINEER NAME _____

COMPANY NAME _____

TEL No. _____

COMMENTS _____

SIGNATURE

SERVICE 8 DATE: _____

ENGINEER NAME _____

COMPANY NAME _____

TEL No. _____

COMMENTS _____

SIGNATURE

SERVICE 9 DATE: _____

ENGINEER NAME _____

COMPANY NAME _____

TEL No. _____

COMMENTS _____

SIGNATURE

SERVICE 10 DATE: _____

ENGINEER NAME _____

COMPANY NAME _____

TEL No. _____

COMMENTS _____

SIGNATURE

When all of the above services have been completed, please contact your Service Engineer for an additional service interval record sheet.