Servicing Instructions Type C Boilers

G.C.N: 47-116-14
47-116-15

LEAVE THESE INSTRUCTIONS WITH THE END-USER

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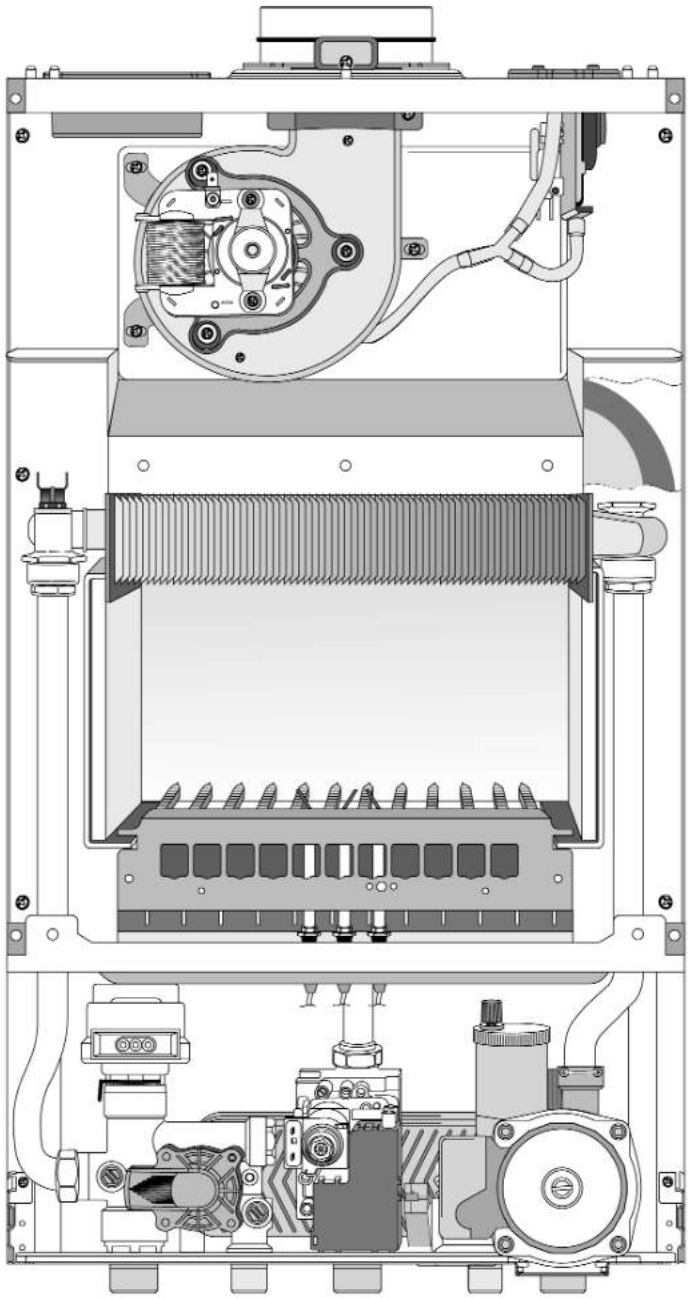
The code of practice for the installation, commissioning & servicing of central heating systems

micro GENUS



ARISTON

Country of destination: GB

TABLE OF CONTENTS

1. SERVICING INSTRUCTIONS

To ensure efficient safe operation, it is recommended that the boiler is serviced annually by a competent person.

Before starting any servicing work, ensure both the gas and electrical supplies to the boiler are isolated and the boiler is cool.
Before and after servicing, a combustion analysis should be made via the flue sampling point (please refer to the Installation Manual for further details).

After servicing, preliminary electrical system checks must be carried out to ensure electrical safety (i.e. polarity, earth continuity, resistance to earth and short circuit).

1.1 Replacement of Parts

The life of individual components varies and they will need servicing or replacing as and when faults develop.
The fault finding sequence chart in chapter 2 will help to locate which component is the cause of any malfunction, and instructions for removal, inspection and replacement of the individual parts are given in the following pages.

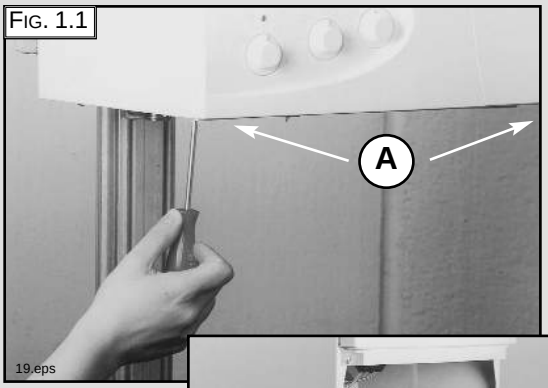
1.2 To Gain General Access

All testing and maintenance operations on the boiler require the control panel to be lowered. This will also require the removal of the casing.

Removing the front panel

1. Loosen the fastening screws “A” of the control panel located on the lower part of the panel itself. (Fig. 1.1);
2. The control panel moves downward and when pulled forward, rotates on two lateral hinges; the panel stays in a semi-horizontal position, which allows access to the inner parts of the boiler (Fig. 1.2);
3. In order to increase the manouvering space, it is possible to raise the control panel and rotate it to a fully horizontal position (Fig. 1.3);
4. Remove the screws “B” from the front panel bottom lip (Fig. 1.4);
5. Lift the front panel from the raised screws at the the top of the casing (Fig. 1.5).

Fig. 1.1



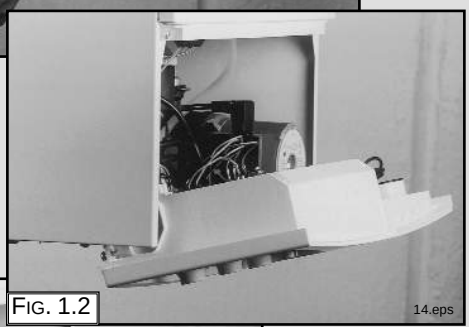


Fig. 1.2

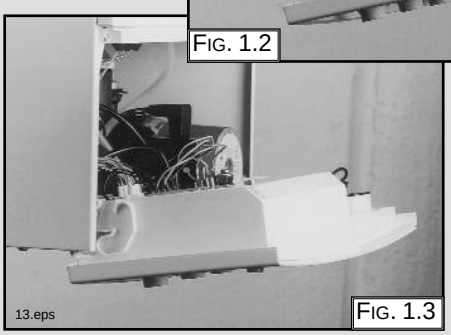
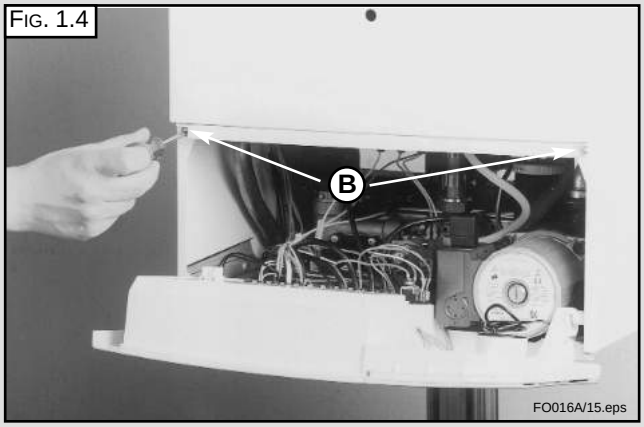


Fig. 1.3

Fig. 1.4



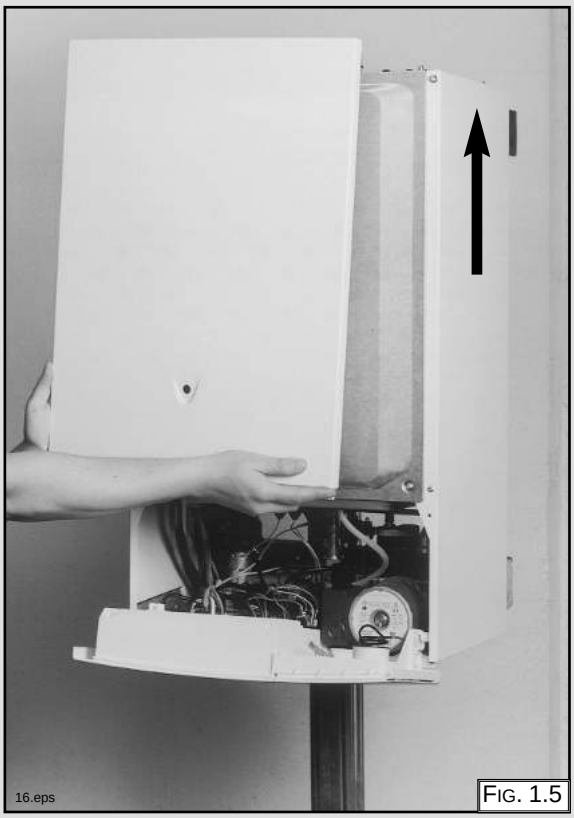


Fig. 1.5

Removing the sealed chamber frontal cover

1. Remove the screws “C” (FIG. 1.6);
2. Lift the sealed chamber frontal cover from the locating pins (FIG. 1.7).

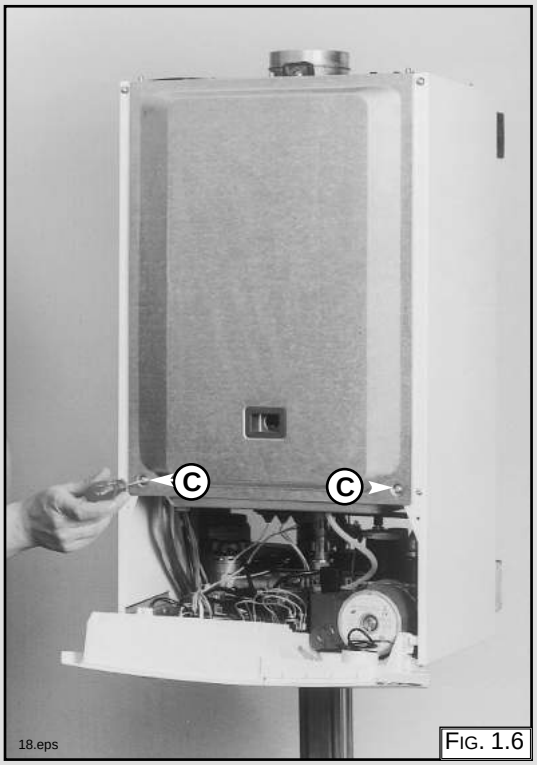


FIG. 1.6

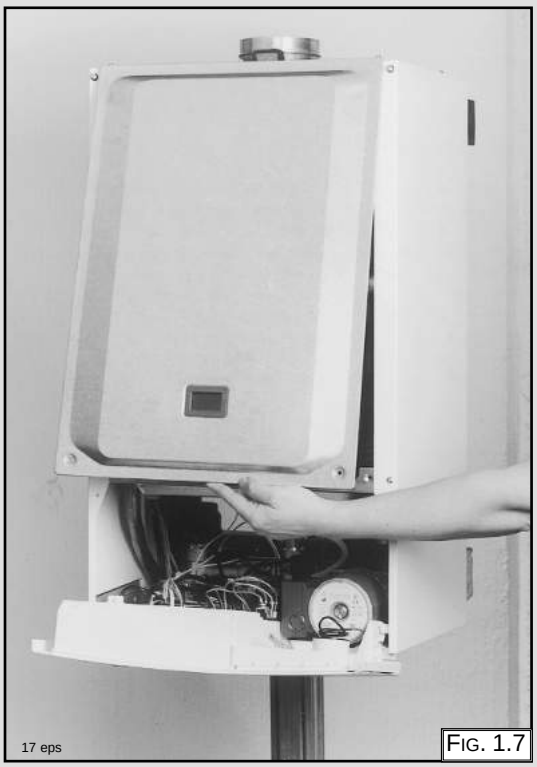


FIG. 1.7

Removing the side panels

1. Remove the four screws “D” for each side panel (FIG.1.8);
2. Pull the panel away from the boiler, then lift the panel up and remove from the boiler (FIG.1.9).

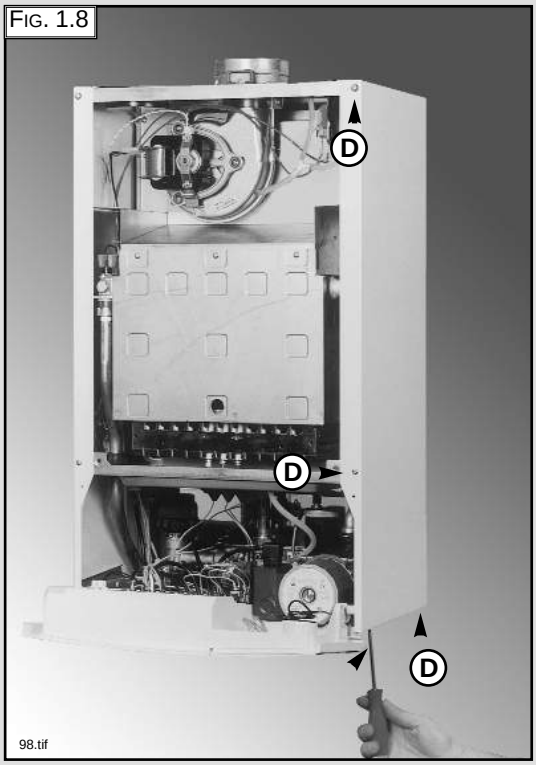
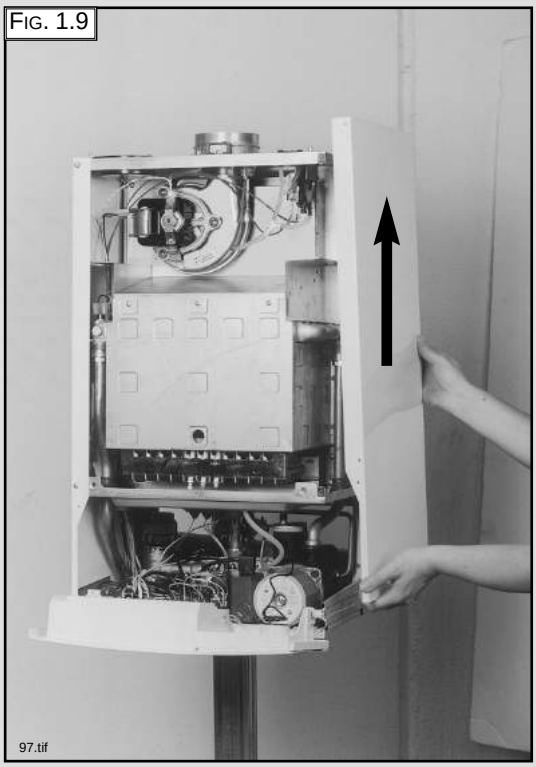
FIG. 1.8


FIG. 1.9


1.3 Access to the Combustion Chamber

Removing the combustion cover

1. Remove the screws “E” (Fig. 1.10);
2. Lift off the combustion cover.

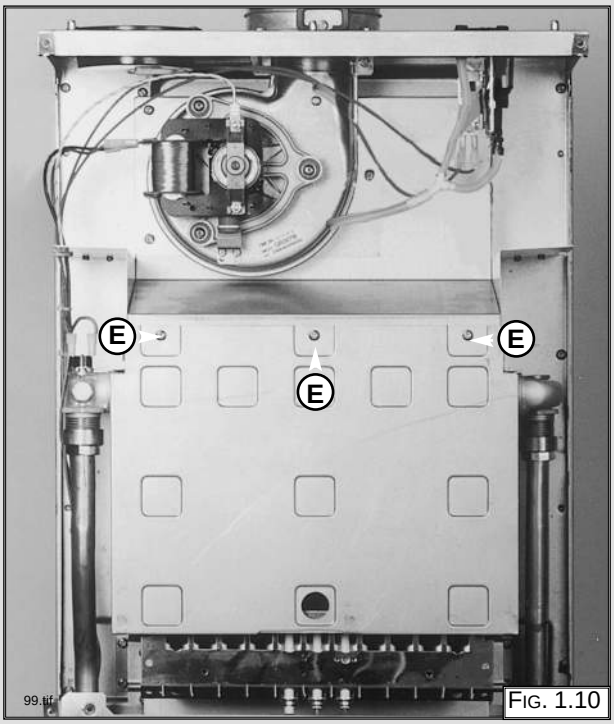
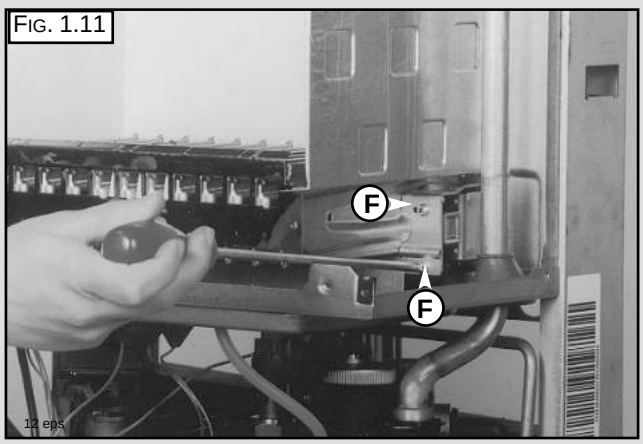


Fig. 1.10

Removing the burner and jets

1. Remove the screws “F” from the burner (Fig. 1.11);
2. Remove the burner (Fig. 1.12);
3. Remove the jets using a No. 7 socket spanner;
4. Replace in reverse order.

Fig. 1.11


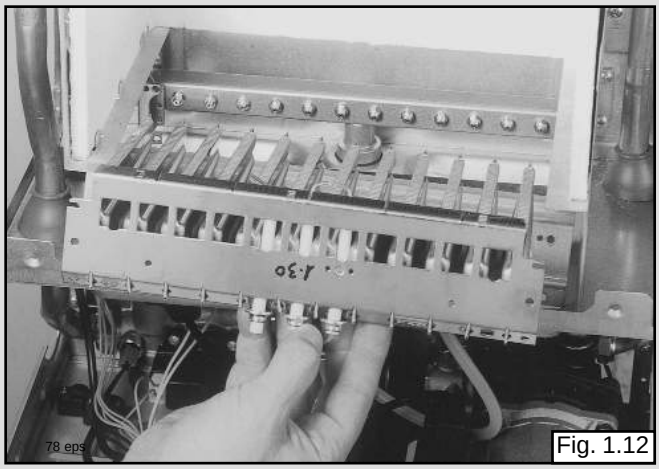
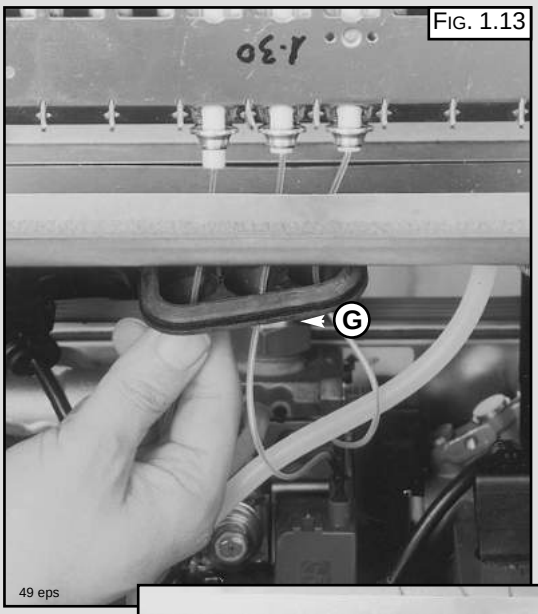


Fig. 1.12

Removing the electrodes

Before carrying out this procedure, unscrew and slide the burner forward (see previous section).
1. Remove rubber gasket “G” (Fig. 1.13);
2. To remove the detection electrode disconnect the cable at its connection point close to the P.C.B. (Fig. 1.14);

Fig. 1.13


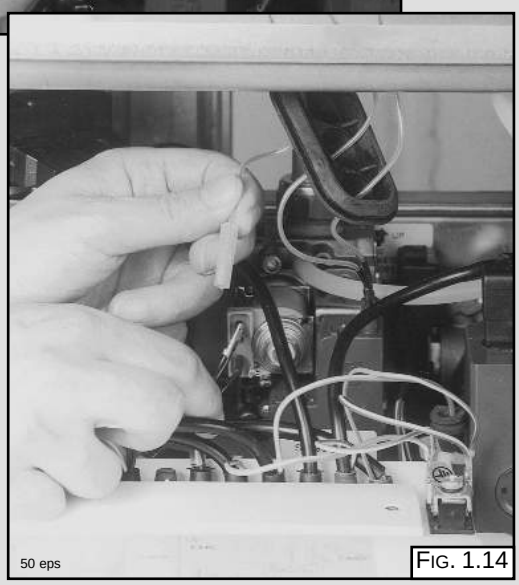
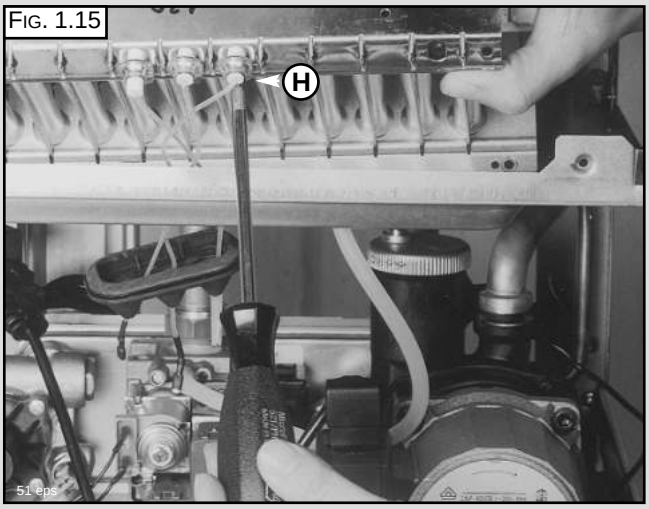


Fig. 1.14

3. Remove screw “H” (FIG. 1.15);
4. Gently slide the electrode downward (FIG. 1.16).

FIG. 1.15



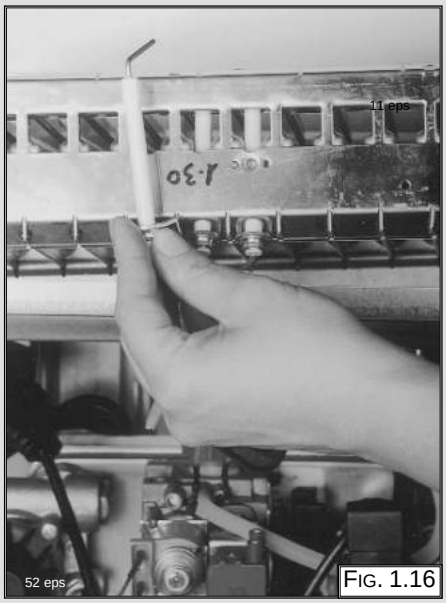


FIG. 1.16

To replace, repeat the steps in reverse order, paying particular attention to the following:

a - Centre the electrode in the positioning hole carefully, otherwise the electrode may break;
b - Check that the cables have been connected correctly;
c - Check that the rubber gasket covers the cable/ electrode connection point completely.

Removing the main heat exchanger

1. Drain the boiler of water;
2. Release the overheat thermostat sensor “I” (FIG. 1.17);
3. Release the two connection nuts “J” connecting the exchanger to the flow and return pipes (FIG. 1.18);
4. Pull it straight out (FIG. 1.19).

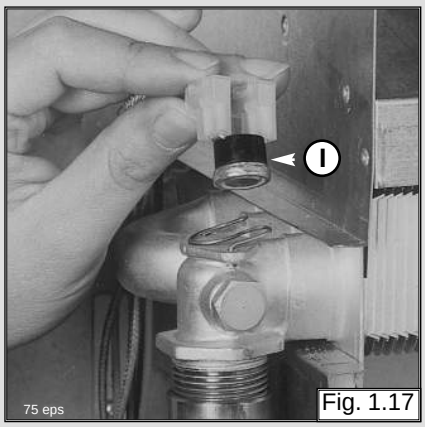


Fig. 1.17

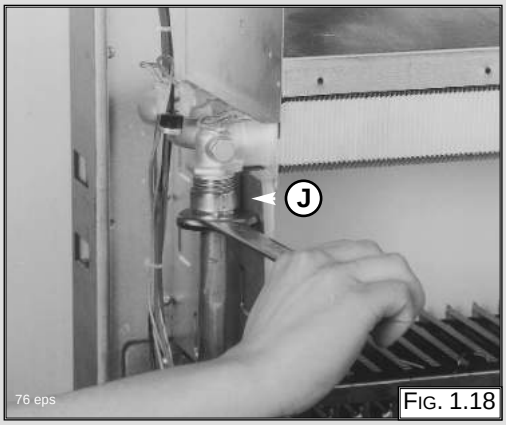


FIG. 1.18

FIG. 1.19

Removing the air pressure switch

1. Disconnect the electrical connections “K” and silicon pipes “L” from their connection points (FIG. 1.20);
2. Remove screws “M” on the top of the sealed chamber (FIG. 1.21);
3. Unscrew to remove switch from the plate (FIG. 1.22).

FIG. 1.20

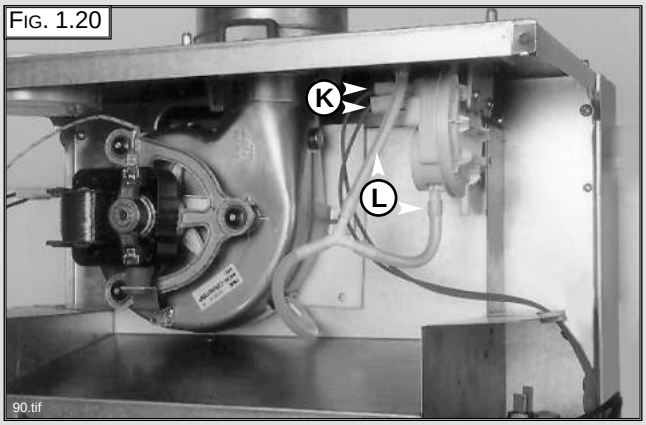


FIG. 1.21

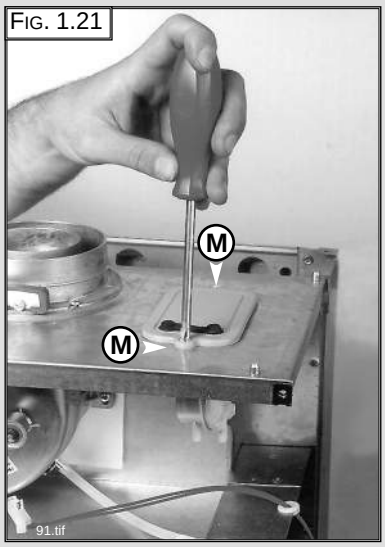
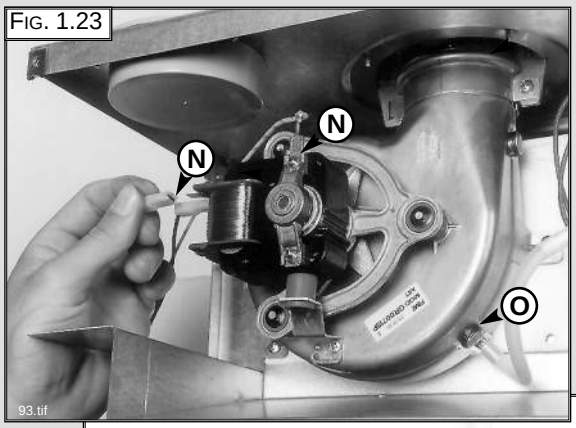


FIG. 1.22

Removing the fan

1. Disconnect electrical connections “N” and silicon pipes “O” (FIG.1.23);
2. Remove screw “P” and remove the fan collar clamp “Q” (FIG.1.24);
3. Remove screws “R” (FIG.1.25);
4. Remove fan and mounting plate (FIG.1.26).

FIG. 1.23



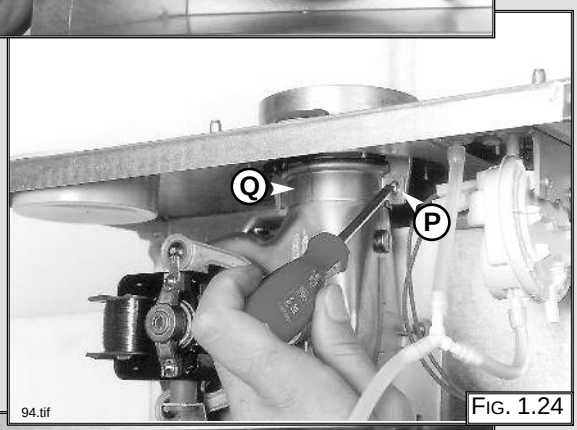


FIG. 1.24

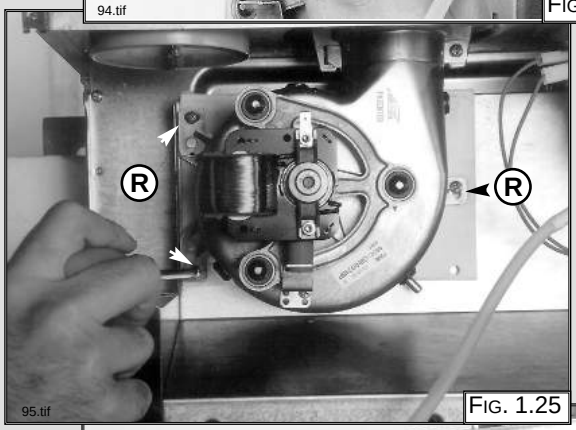


FIG. 1.25

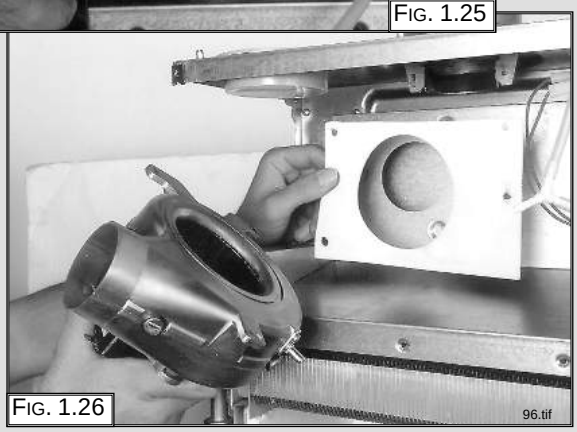
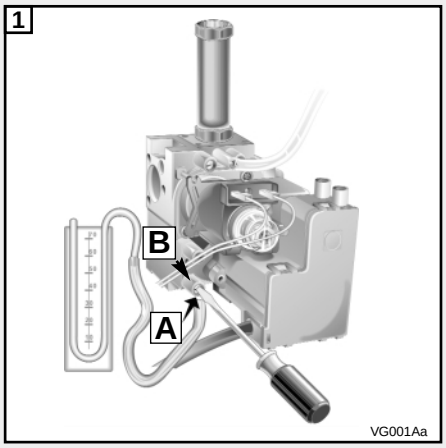


FIG. 1.26

1.4 SERVICING AND REMOVAL OF THE GAS VALVE

Setting the gas pressures

1



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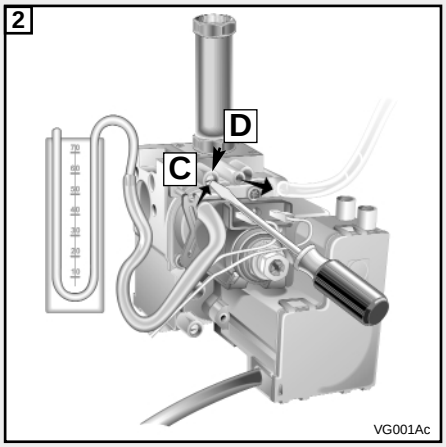

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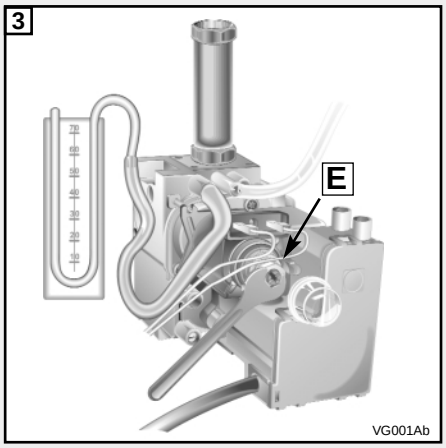
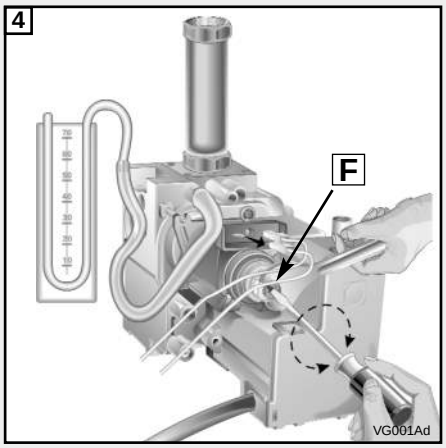


4



Setting the minimum and the maximum power of the boiler

1. Check that the supply pressure to the gas valve is a minimum of 20 mbar for natural gas.
2. To do this, remove the screw **"A"**.
   Fit the pipe of the pressure gauge to the pressure connection of the gas valve **"B"**.
   When you have completed this operation, replace the screw **"A"** securely into its housing to seal off the gas.
3. To check the pressure supplied by the gas valve to the burner, remove the screw **"C"**. Fit the pipe of the pressure gauge to the pressure outlet of the gas valve **"D"**.
   Disconnect the compensation pipe either from the gas valve or from the sealed chamber.
4. Set the On/Off button to position <⏽> and the "summer/winter" switch to the winter position.
   To set the maximum power, turn on the hot water tap and allow the hot water tap to run at a rate of about 8 litres/minute so that the main burner lights.
   Adjust nut **"E"** on the modureg to set the gas pressure (displayed on the pressure gauge) corresponding to the maximum power (see **TABLE "A"** page 9).
5. To set the minimum power, disconnect a supply terminal from the modureg and adjust screw **"F"**.
   Turn the screw clockwise to increase the pressure and counter-clockwise to decrease the pressure (displayed on the pressure gauge) corresponding to the minimum power (see **TABLE "A"** page 9).
6. When you have completed the above operations, turn off the hot water tap, re-connect the supply terminal to the modureg on the gas valve and replace the cap on the screw of the modureg.

Setting the maximum heating circuit power

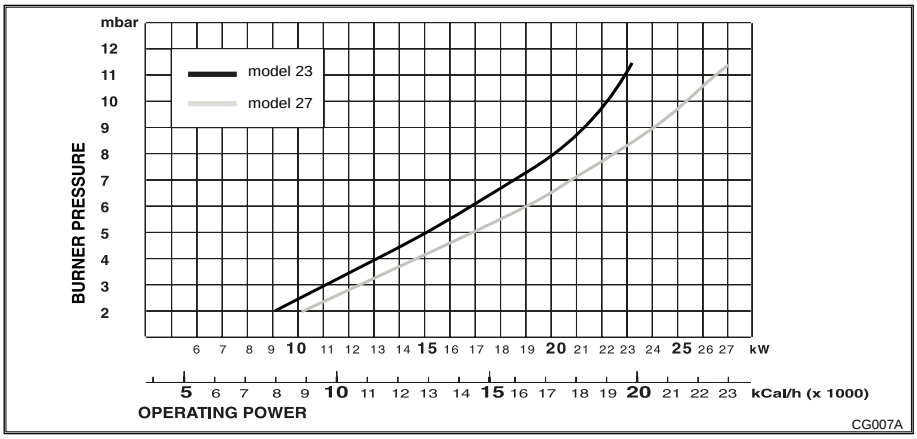
7. To set the maximum heating circuit power, place the On/Off button to position <⏽> and the "summer/winter" switch to winter position.
   Turn the knob of the heating thermostat clockwise to maximum.
8. Remove the inspection panel of the P.C.B. and fit a small cross-head screwdriver in to the right hand potentiometer. Turn clockwise to increase the pressure or counter-clockwise to reduce the pressure. Adjust the setting to the required heating pressure value (displayed on the pressure gauge), as indicated in the diagrams shown in page 10.
9. Turn off the boiler by placing the main switch to the "Off" position.

Setting pressure for soft ignition.

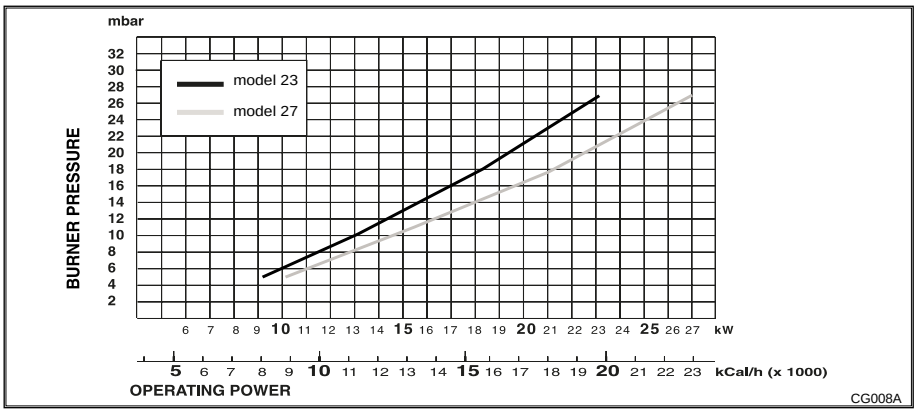
Disconnect the detection electrode connection from the P.C.B..
Start the boiler and during the ignition sequence adjust the left hand potentiometer until the gas pressure reads the required gas pressure as per the table below.
Once the gas pressure is set turn off the boiler and re-connect the connection to the P.C.B.
NB.: It may be necessary to reset the flame failure reset a number of times during this operation.

	NATURAL GAS (G20)	BUTANE GAS (G30)	PROPANE GAS (G31)
Recommended pressure for soft-light ignition	8 mbar	16 mbar	16 mbar

Regulating the heating power for natural gas (G20)



Regulating the heating power for butane gas (G30)



Regulating the heating power for propane gas (G31)

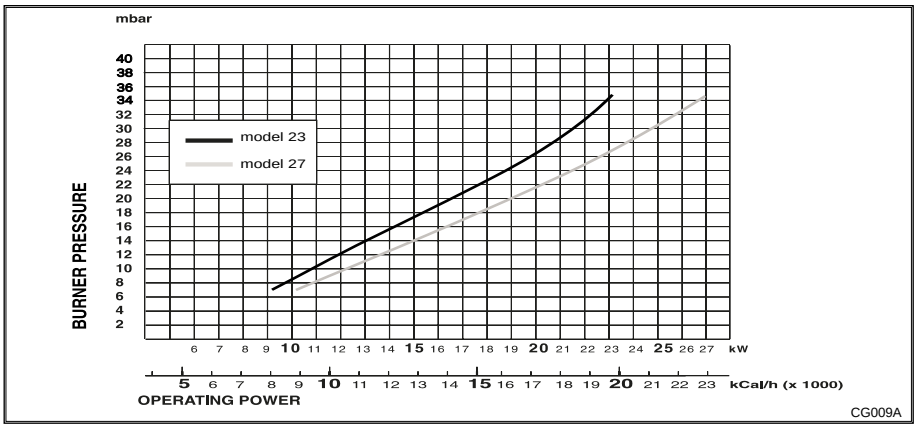
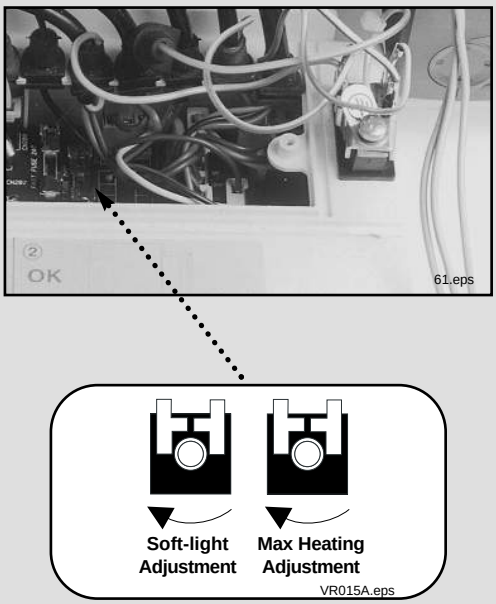


TABLE "A"

	GAS REQUIREMENTS	NATURAL GAS (G20)	BUTANE GAS (G30)	PROPANE GAS (G31)
mi GENUS 23 MFFI	Gas rate max	2.70 m^3/h	2.01 Kg/h	2.00 Kg/h
	Gas rate min	1.16 m^3/h	0.87 Kg/h	0.85 Kg/h
	Inlet pressure	20 mbar	28 mbar	37 mbar
	Burner pressure max	11.0 mbar	27.7 mbar	35.5 mbar
	Burner pressure min	2.0 mbar	6.0 mbar	7.3 mbar
	Burner jets	12 x 1.30	12 x 0.77	12 x 0.77
	GAS REQUIREMENTS	**NATURAL GAS (G20)**	**BUTANE GAS (G30)**	**PROPANE GAS (G31)**
mi GENUS 27 MFFI	Gas rate max	3.15 m^3/h	2.34 Kg/h	2.31 Kg/h
	Gas rate min	1.26 m^3/h	0.94 Kg/h	0.93 Kg/h
	Inlet pressure	20 mbar	28 mbar	37 mbar
	Burner pressure max	11.0 mbar	27.7 mbar	35.5 mbar
	Burner pressure min	1.6 mbar	4.6 mbar	6.0 mbar
	Burner jets	14 x 1.30	14 x 0.77	14 x 0.77

TB012A



10. Remove the pipe from the pressure gauge and connect screw "**C**" to the pressure outlet in order to seal off the gas.
11. Carefully check the pressure outlets for gas leaks (valve inlet and outlet).

IMPORTANT!
Whenever you disassemble and reassemble the gas connections, always check for leaks using a soap and water solution.

Removing the spark generator

1. Disconnect ignition leads "T" by pulling upward (FIG. 1.27);
2. Remove the screw "V" (FIG. 1.28);
3. Remove the spark generator (FIG. 1.29).

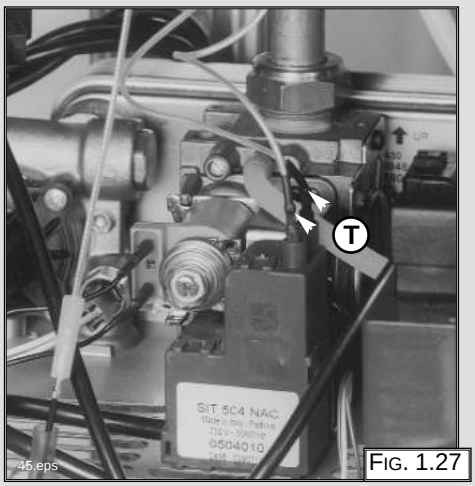


FIG. 1.27

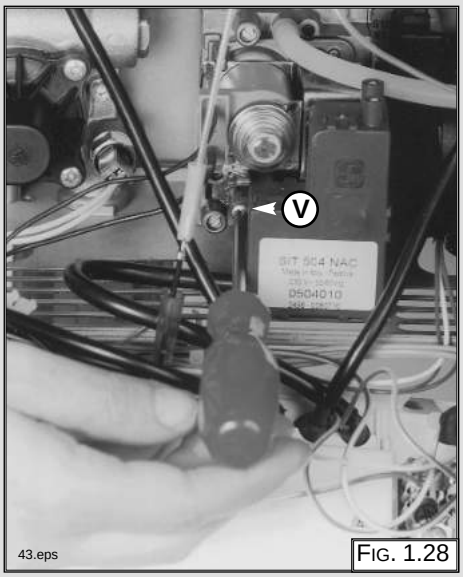


FIG. 1.28

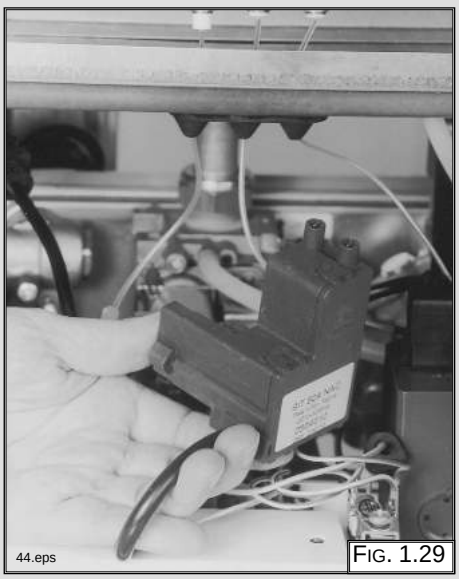


FIG. 1.29

Removing the gas valve

1. Disconnect all the cables from the solenoid and modureg;
2. Remove the spark generator (see previous section);
3. Release the top nut “W” (FIG. 1.30);
4. Remove the screws “X” from the bottom of the gas valve pipe (FIG. 1.31);
5. Remove the gas valve (FIG. 1.32).

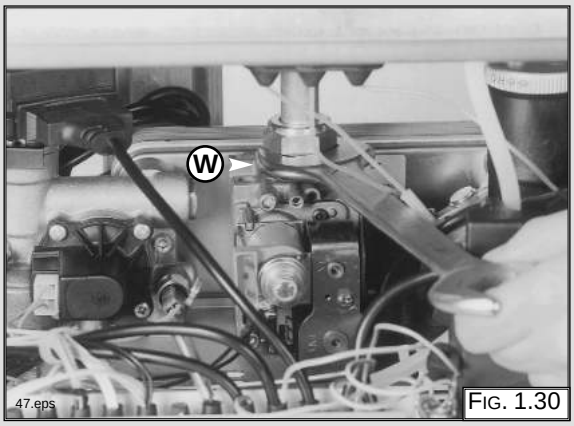


FIG. 1.30

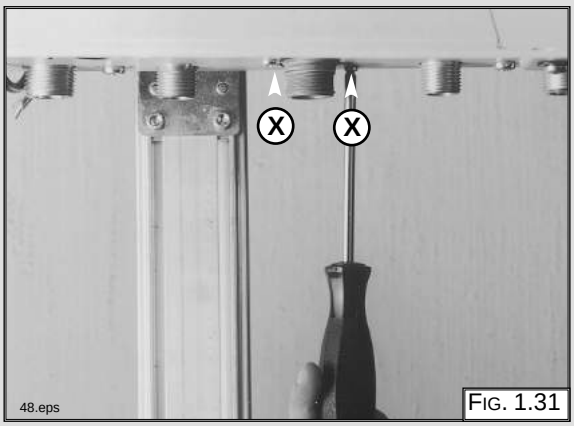


FIG. 1.31

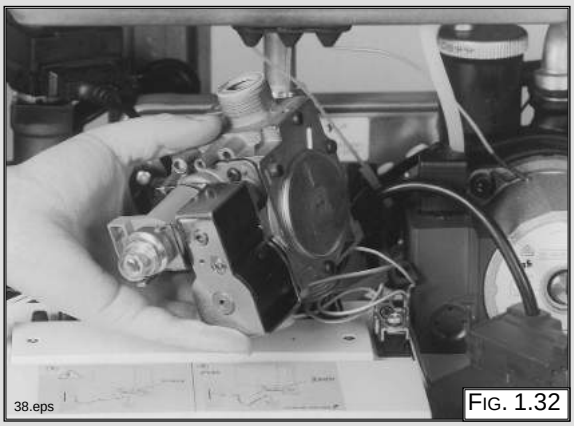


FIG. 1.32

1.6 ACCESS TO THE WATER CIRCUIT

Important! Before any component is removed, the boiler must be drained of all water.

Removing the D.H.W. (secondary) exchanger

1. Remove the screws “Y” (FIG 1.33 + FIG 1.34);
2. Push the exchanger towards the rear of the boiler, and lift upwards and remove out of the front of the boiler (FIG 1.35);
3. Before replacing the exchanger ensure that the O-rings are in good condition and replace if necessary.

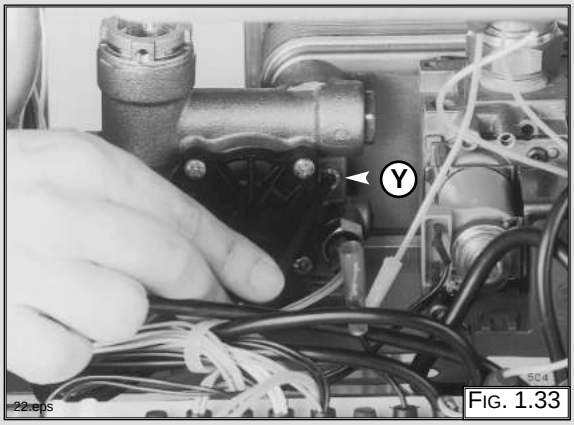


FIG. 1.33

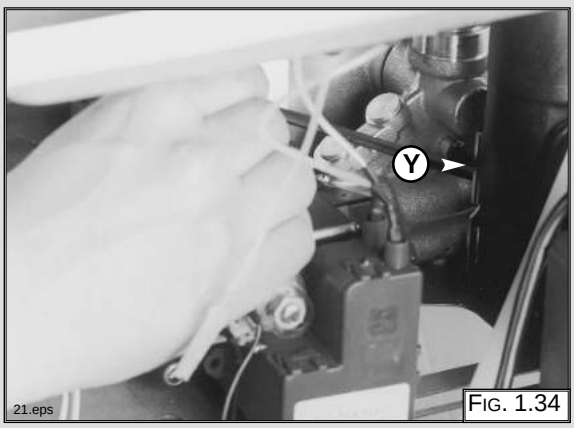


FIG. 1.34

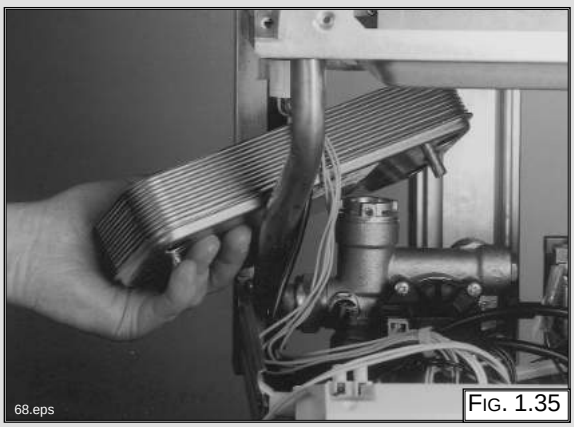


FIG. 1.35

Removing the safety valve

1. Loosen nut “Z” (FIG. 1.36);

2. Unscrew and remove the valve (FIG. 1.37).

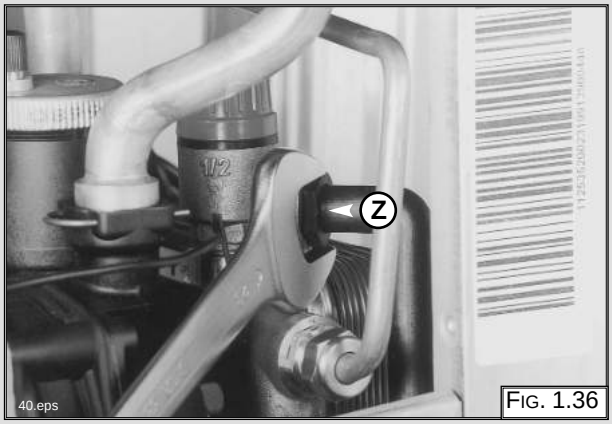


FIG. 1.36

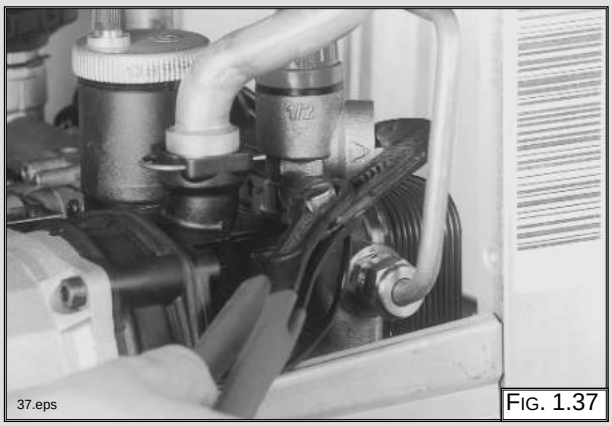


FIG. 1.37

Removing the automatic air vent

1. Unscrew valve top “A1” (FIG. 1.38);

2. Remove valve (Fig 1.39).

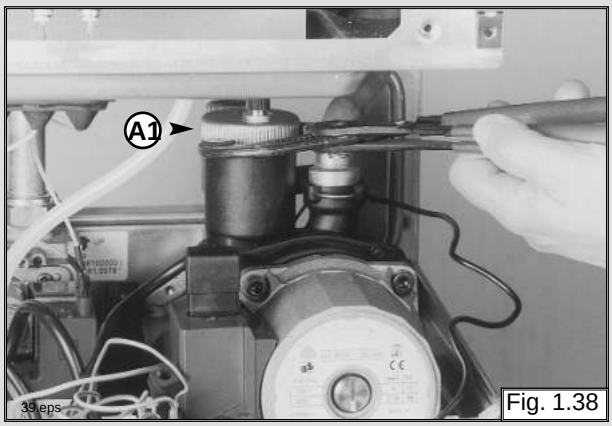


Fig. 1.38

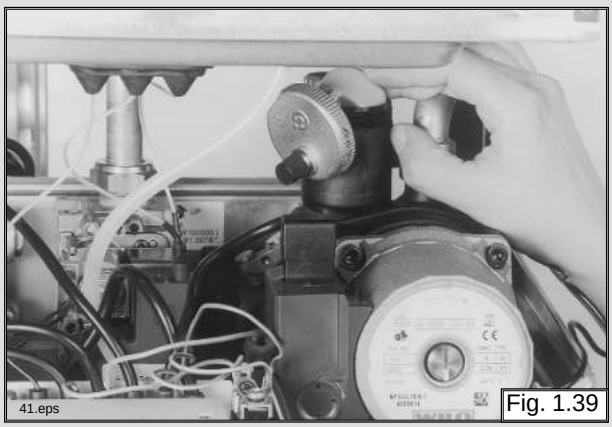


Fig. 1.39

Removing the main circuit flow switch

1. Remove the cable of the main circuit flow switch “B1” (FIG. 1.40);

2. Remove the screws “C1” (FIG. 1.41);

3. Remove the main circuit flow switch.

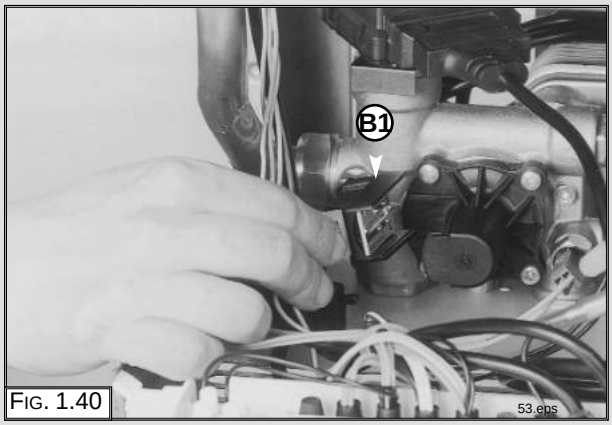


FIG. 1.40

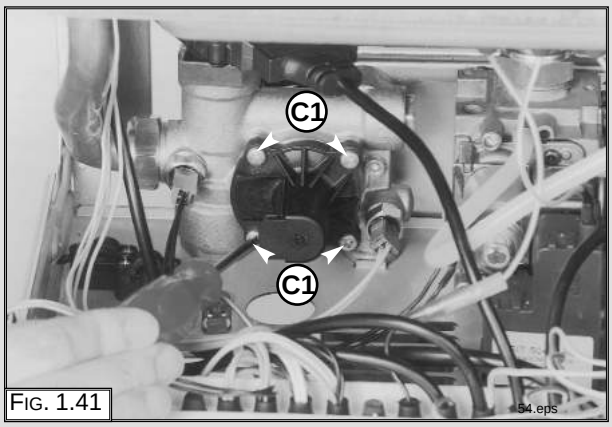


FIG. 1.41

Removing the pump

1. Remove the U-clip " D1" (FIG. 1.41);
2. Remove the retaining clip "E1" (FIG. 1.42);
3. Remove the U-clip " F1" (FIG. 1.43);
4. Release the nut "G1" (FIG. 1.44);
5. Remove the pipe "H1" (FIG. 1.45);
6. Remove the screws "I1" (FIG. 1.46);
7. Remove the pump (FIG. 1.47).

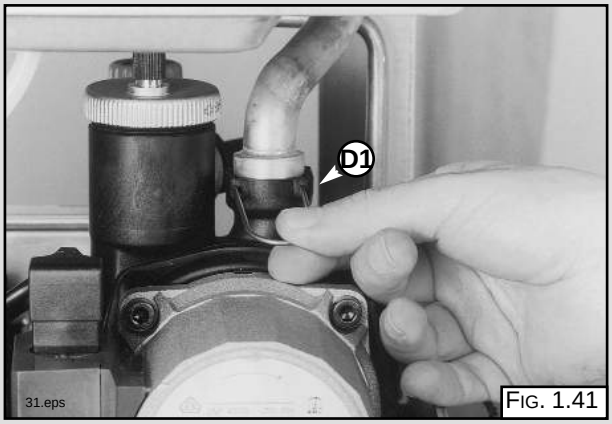


FIG. 1.41

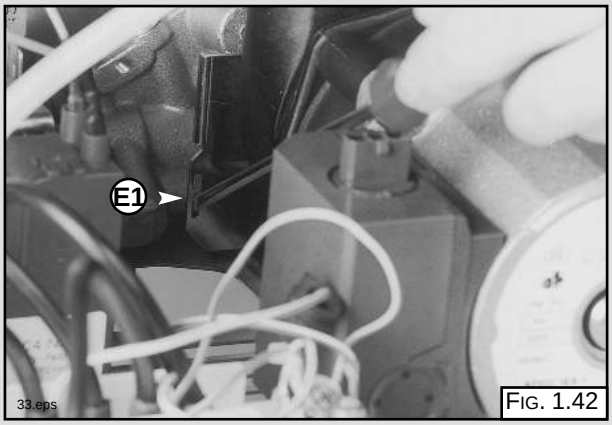


FIG. 1.42

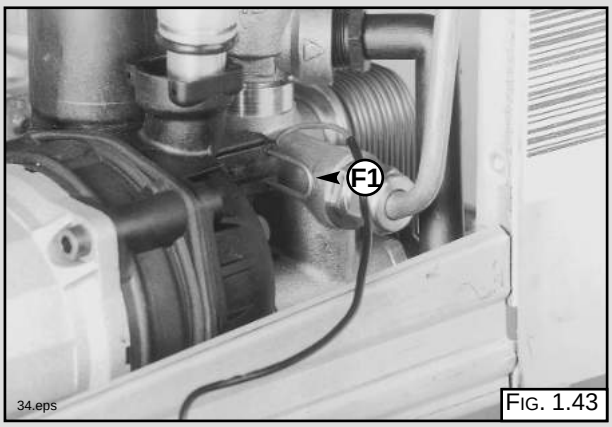


FIG. 1.43

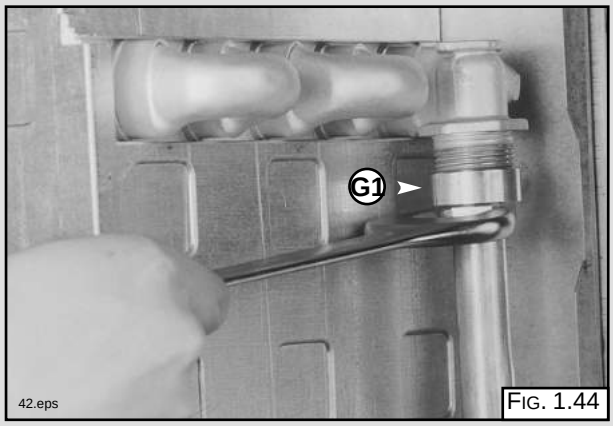


FIG. 1.44

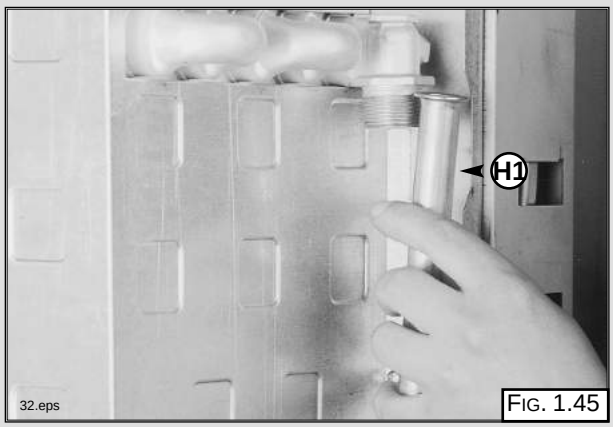


FIG. 1.45

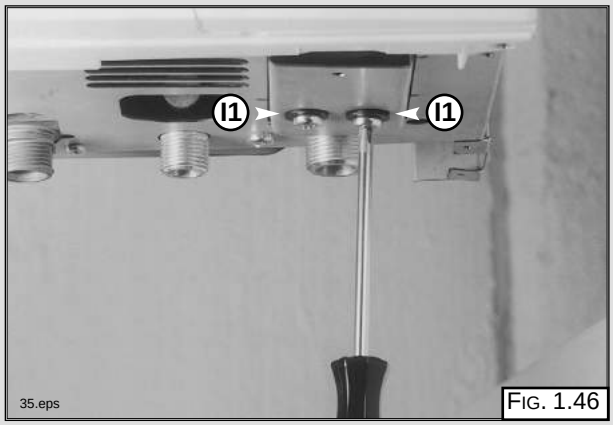


FIG. 1.46

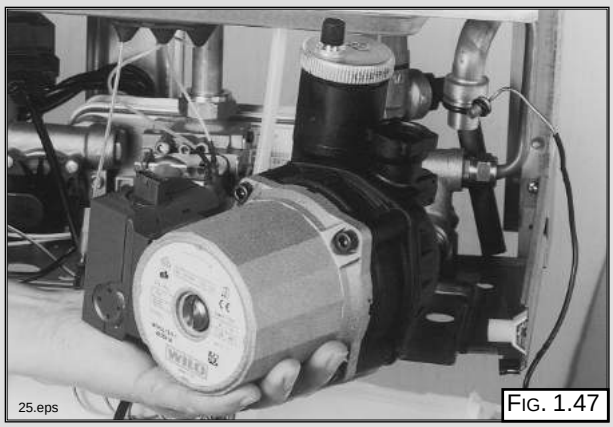


FIG. 1.47

Removing the pressure gauge

1. Remove the U-clip “J1” and remove the pressure gauge coupling (FIG. 1.48);
2. Push the pressure gauge through the control panel from the rear (FIG. 1.49).

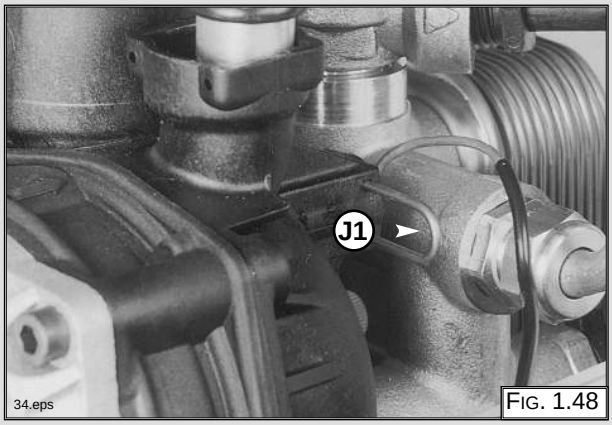


FIG. 1.48

FIG. 1.49

Removing the expansion vessel

1. Loosen nuts “K1” and remove the gas pipe (FIG. 1.50);
2. Loosen nut “L1” (FIG. 1.51);
3. Remove back nut “M1” (FIG. 1.52);
4. Remove the expansion vessel (FIG. 1.53).

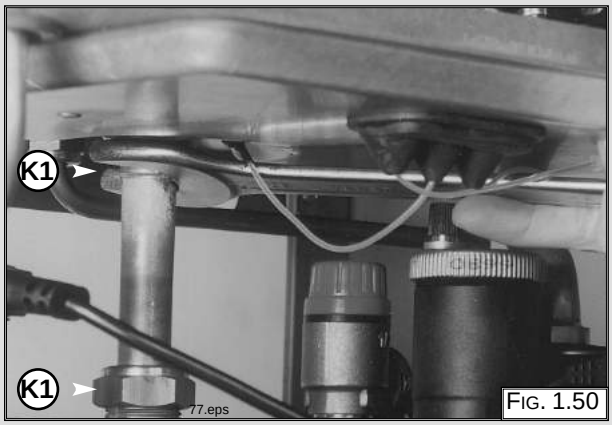


FIG. 1.50

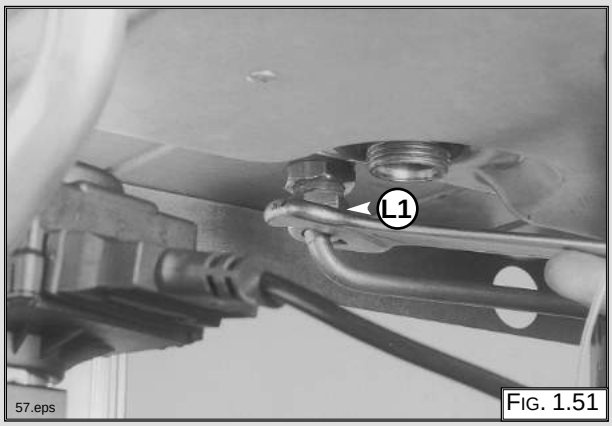


FIG. 1.51

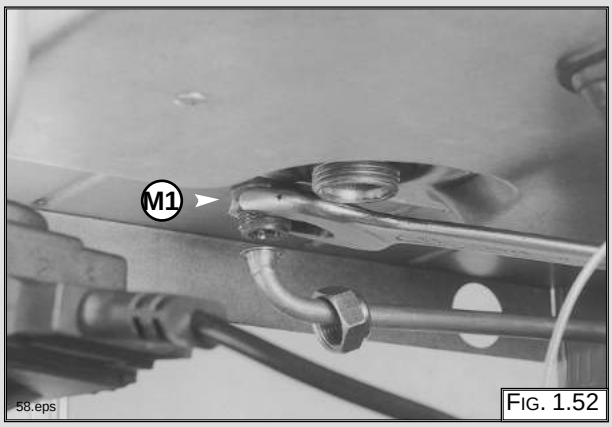


FIG. 1.52

FIG. 1.53

Removing the overheat thermostat

1. Disconnect the overheat thermostat electrical connections “N1” (FIG. 1.54);
2. Then remove the thermostat from its mounting by releasing the securing clip (FIG. 1.55).

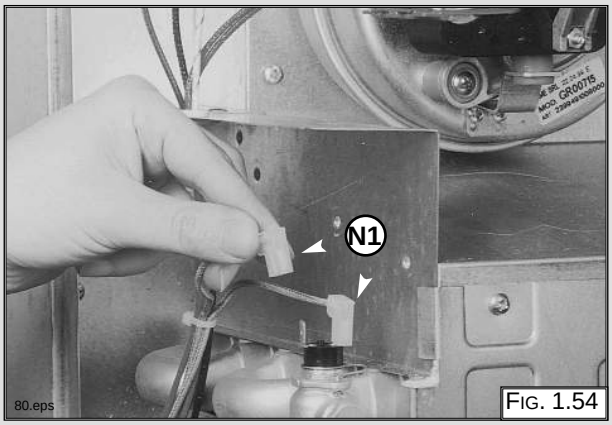


FIG. 1.54

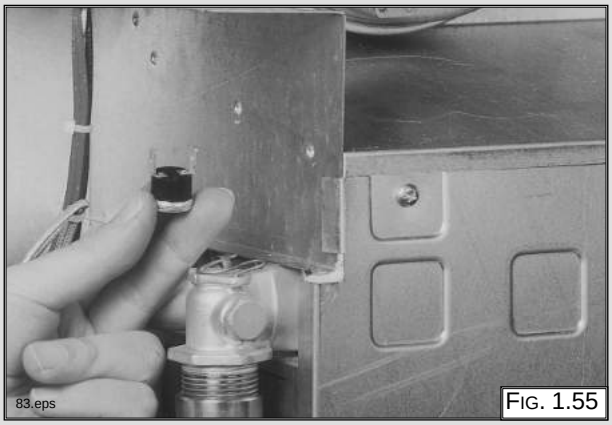


FIG. 1.55

Removing the heating temperature sensor (N.T.C.)

1. Pull off the electrical connector “P1” and unscrew the sensor probe using a suitable spanner (FIG. 1.56).

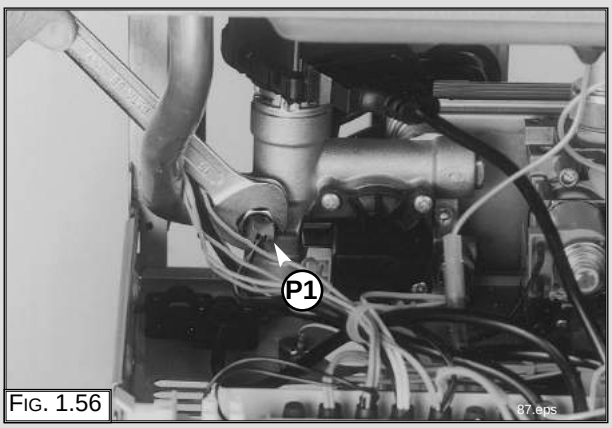


FIG. 1.56

Removing the D.H.W. temperature sensor (N.T.C.)

1. Pull off the electrical connector “Q1” and unscrew the sensor probe using a suitable spanner (FIG. 1.57).

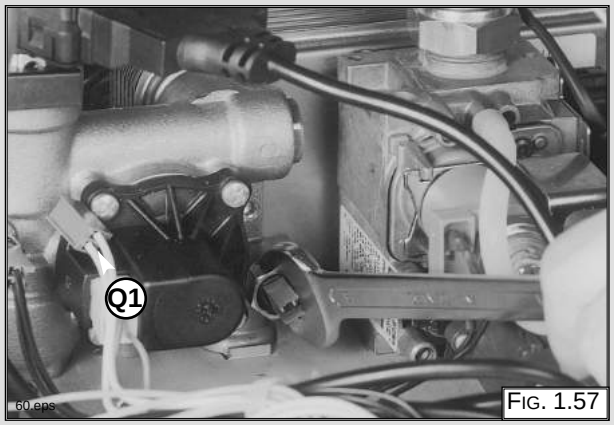


FIG. 1.57

Removing the divertor valve actuator

1. Unplug the electrical connector “R1” (FIG. 1.58);
2. Release the retaining clip “S1” and remove the divertor valve actuator.

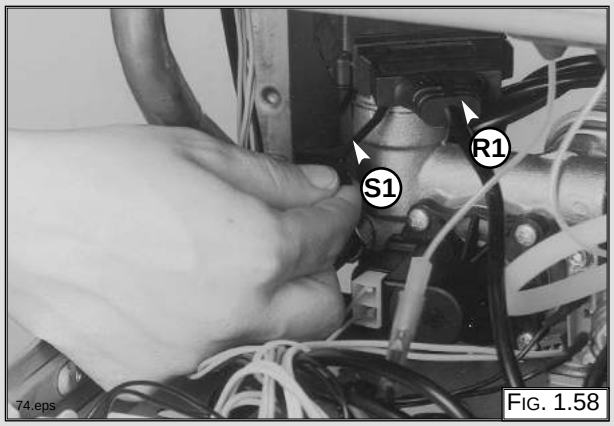


FIG. 1.58

Removing the D.H.W. flow switch

1. Unplug the electrical connector “T1” (FIG. 1.59);
2. Release the retaining clip “V1” and remove the D.H.W. flow switch.

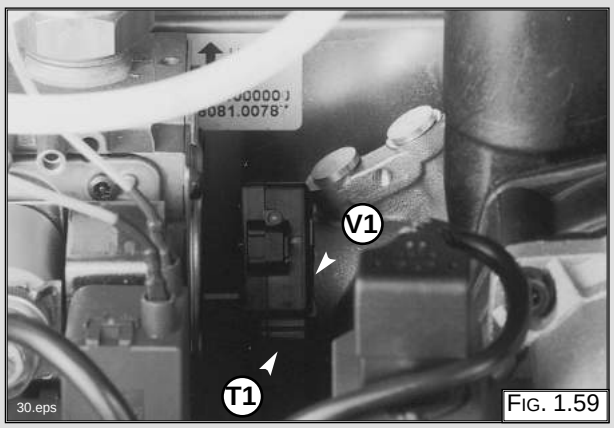
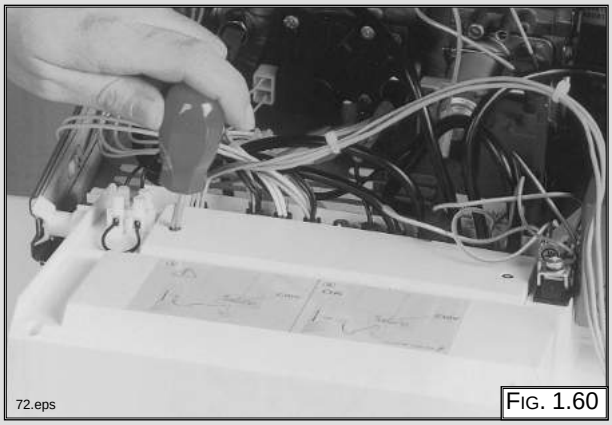


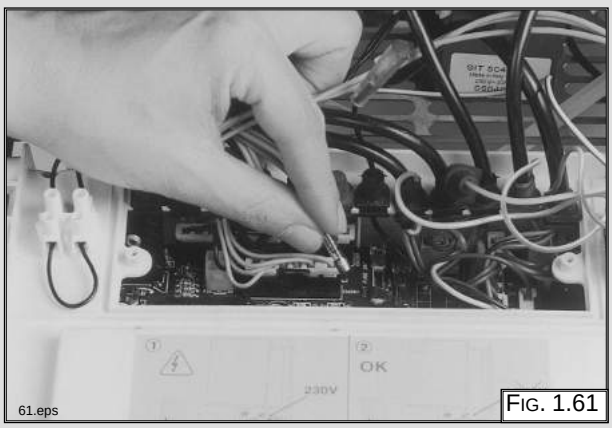
FIG. 1.59

1.6 ACCESS TO THE CONTROL SYSTEM

Checking the fuses

1. Remove the inspection cover on the reverse of the control panel (FIG. 1.60);
2. Remove the fuses (FIG. 1.61).


72.eps
FIG. 1.60

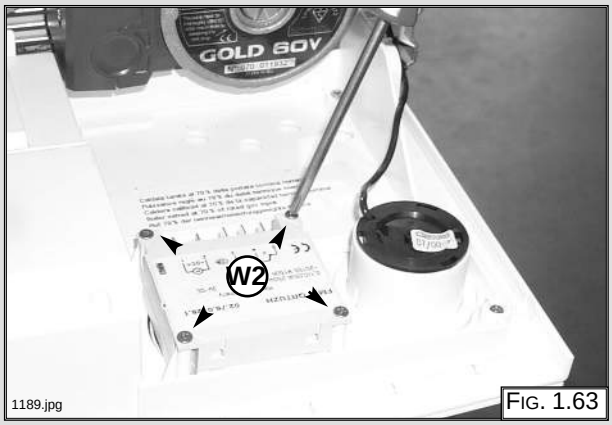


61.eps
FIG. 1.61

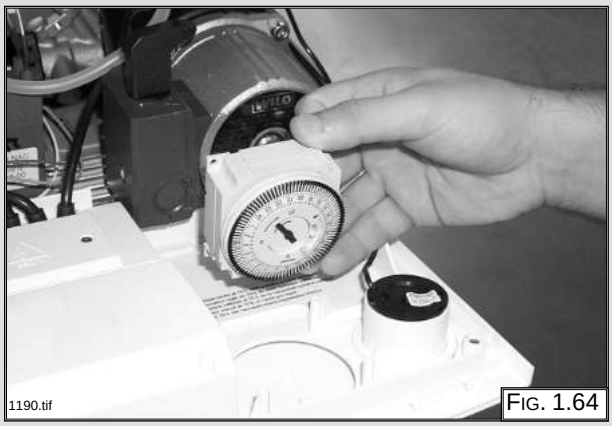
Removing the time clock

1. Unplug electrical connection “W1” from the clock (FIG. 1.62);
2. Remove the screws “W2” (see fig. 1.63);
3. Remove the clock from the panel (see fig. 1.64).

69.eps
FIG. 1.62



1189.jpg
FIG. 1.63


1190.tif
FIG. 1.64

Removing the P.C.B.

1. Isolate electricity;
2. Remove the inspection cover from the reverse of the control panel;
3. Unplug all electrical connections from the P.C.B. (FIG. 1.65);
4. Remove the screws “X1” (FIG. 1.66);
5. Separate the facia panel from the rear of the control panel (FIG. 1.67);
7. Remove the screws “Y1” and remove the P.C.B. (FIG. 1.68).

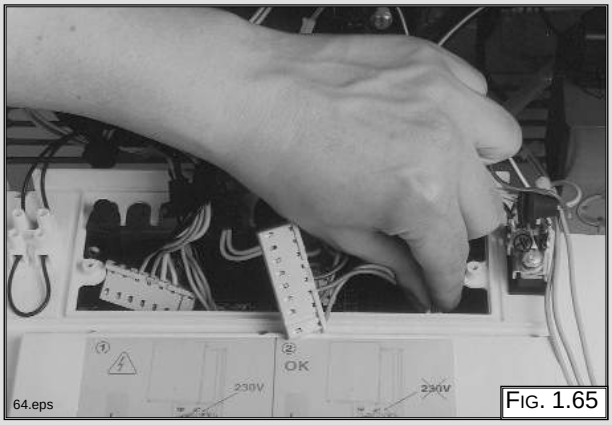


FIG. 1.65

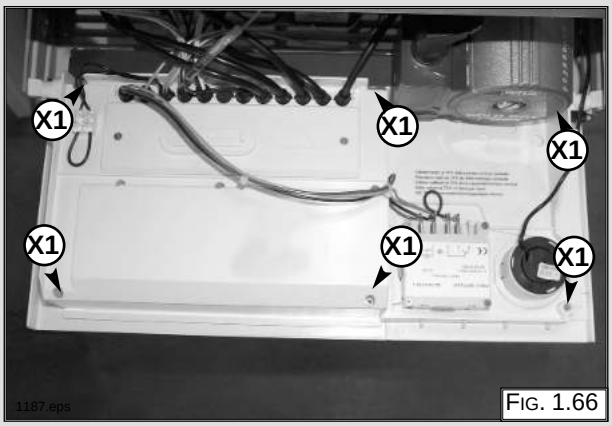


FIG. 1.66

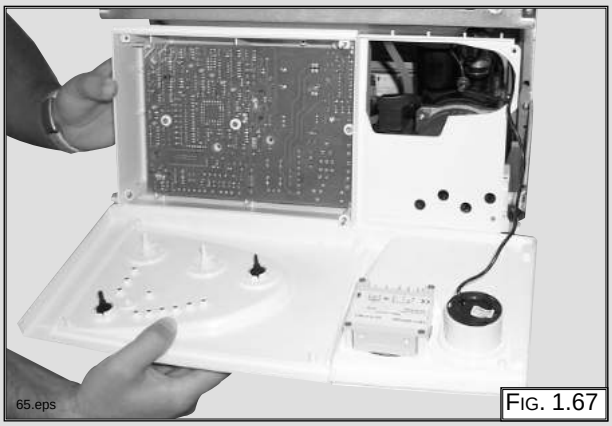


FIG. 1.67

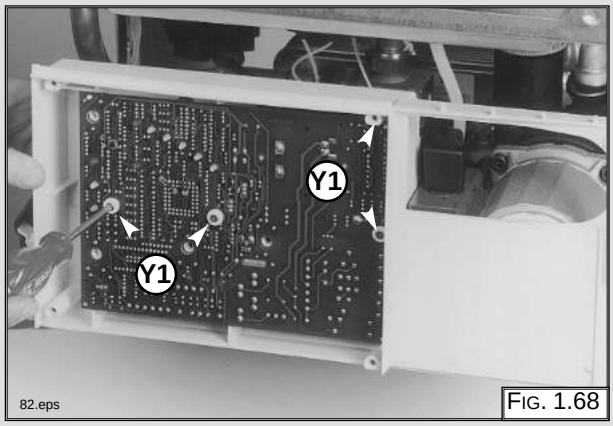
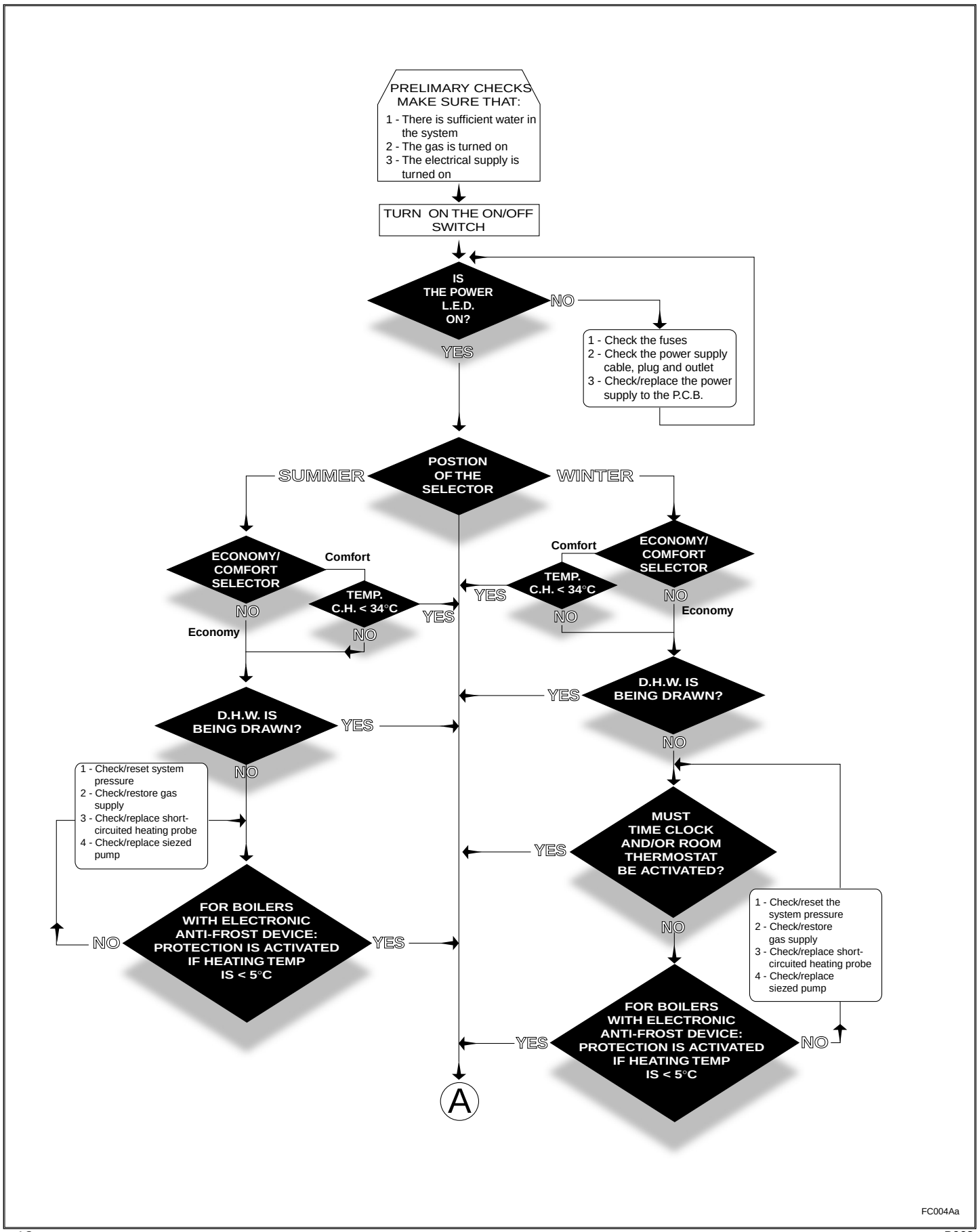


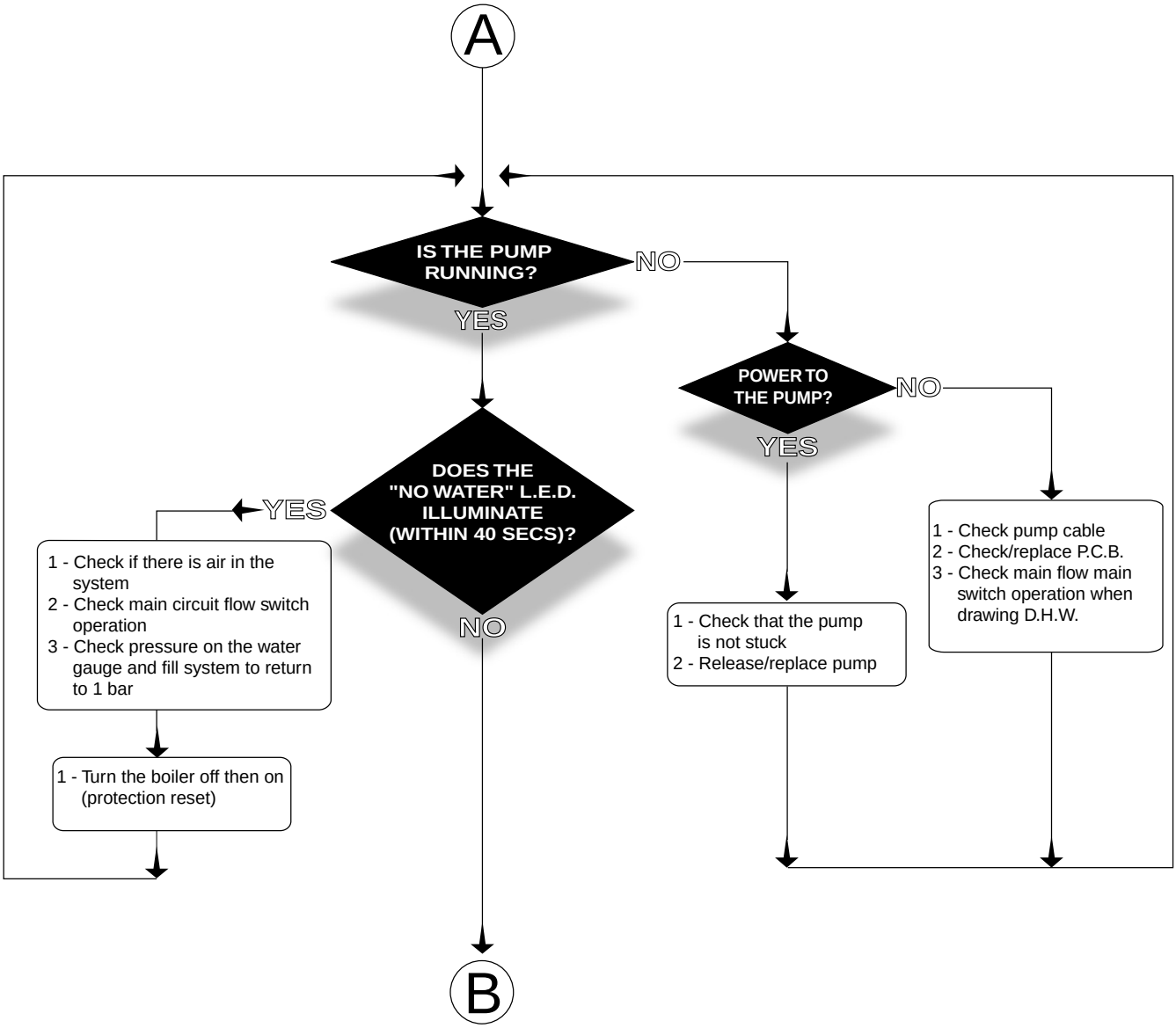
FIG. 1.68

2. FAULT FINDING

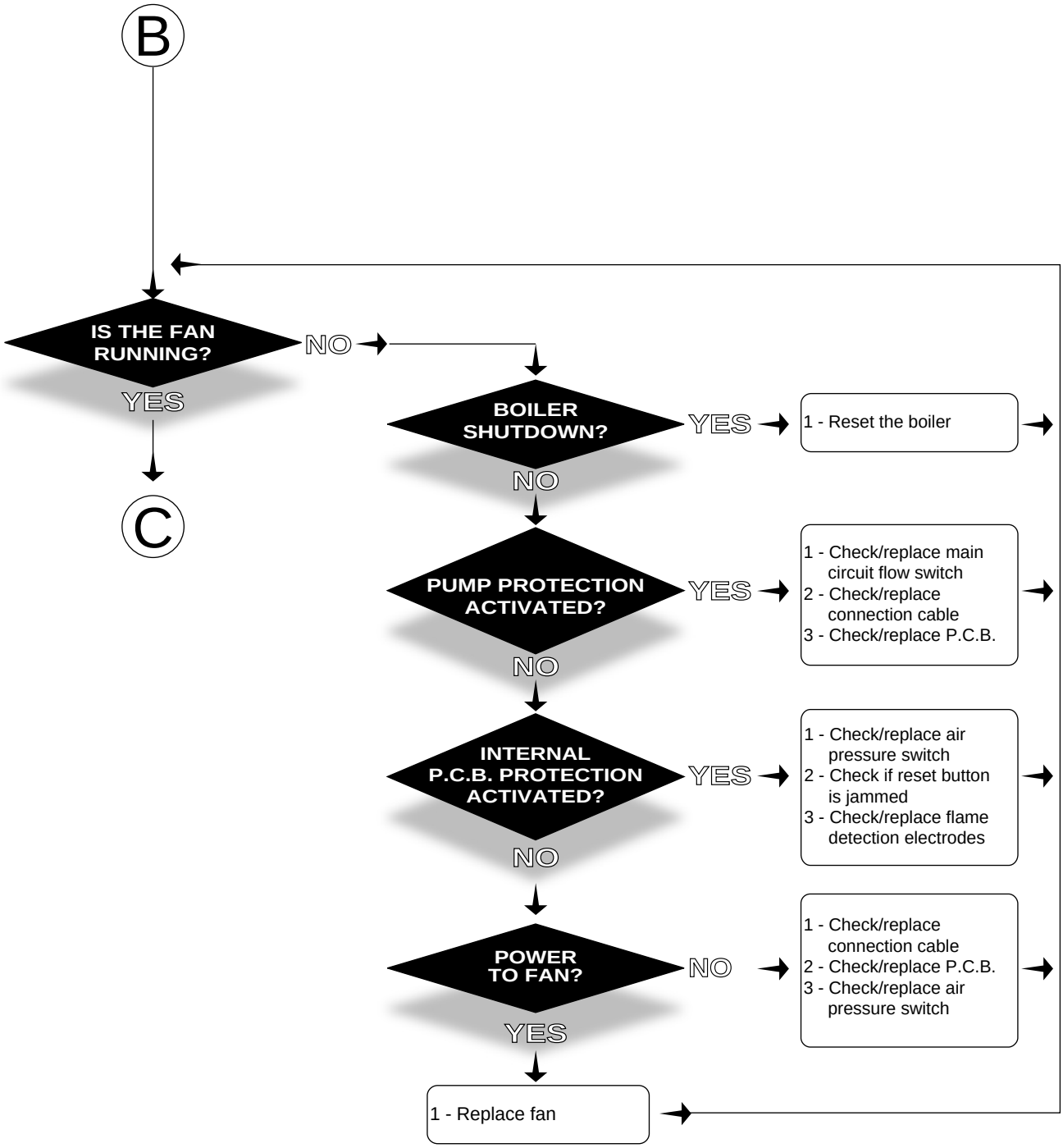
2.1 FAULT FINDING GUIDE (FLOW-CHARTS)

It is possible to detect and correct any defect by using the standard fault finding diagrams described in this chapter.

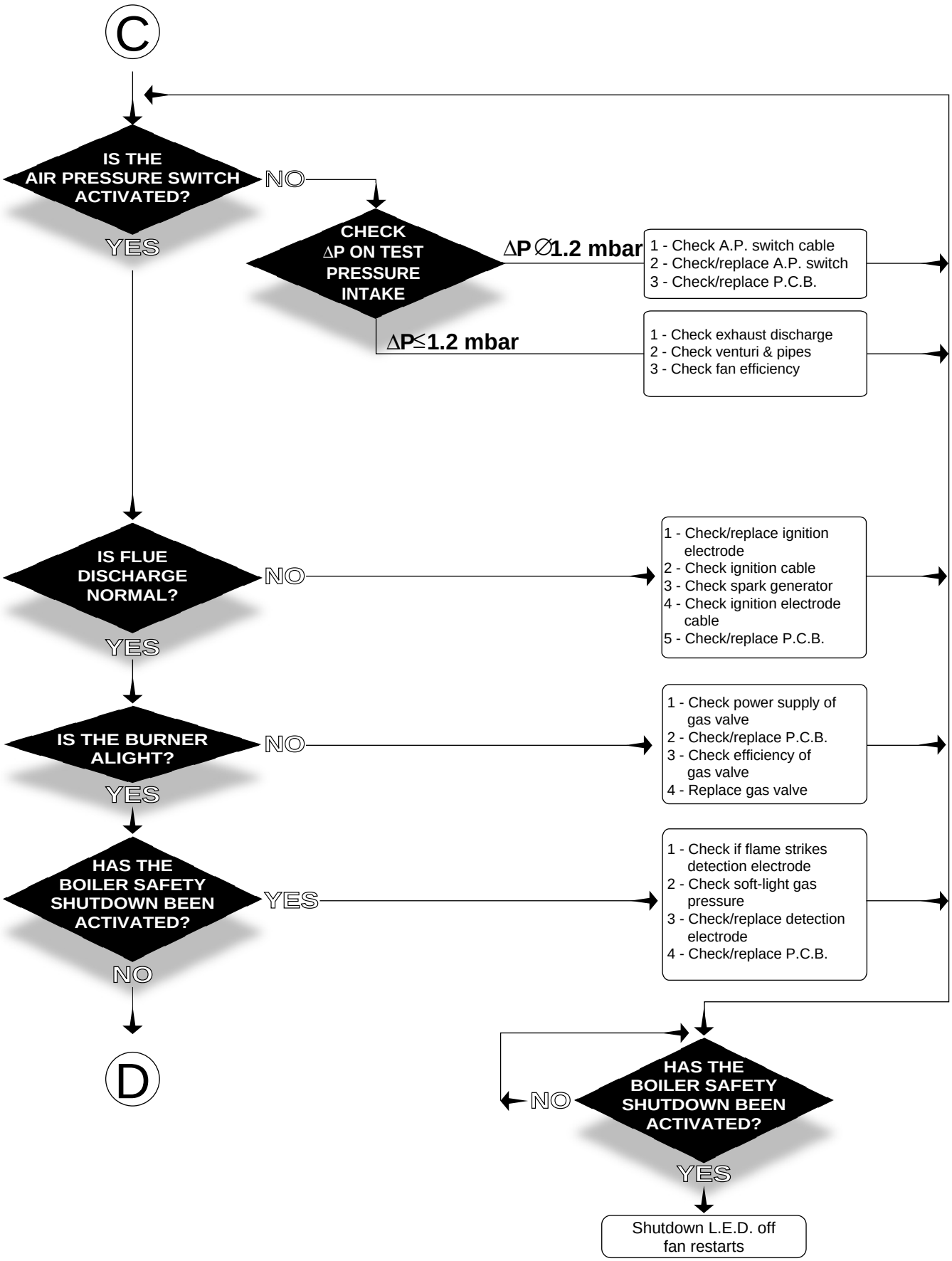



A
IS THE PUMP RUNNING?
NO
YES
POWER TO THE PUMP?
NO
YES
DOES THE "NO WATER" L.E.D. ILLUMINATE (WITHIN 40 SECS)?
YES
NO
1 - Check if there is air in the system
2 - Check main circuit flow switch operation
3 - Check pressure on the water gauge and fill system to return to 1 bar
1 - Turn the boiler off then on (protection reset)
1 - Check that the pump is not stuck
2 - Release/replace pump
1 - Check pump cable
2 - Check/replace P.C.B.
3 - Check main flow main switch operation when drawing D.H.W.
B

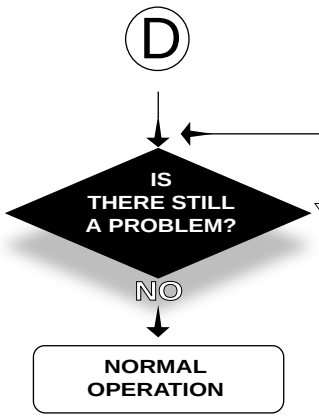
FC004Ab


B
IS THE FAN RUNNING?
NO
YES
C
BOILER SHUTDOWN?
YES
1 - Reset the boiler
NO
PUMP PROTECTION ACTIVATED?
YES
1 - Check/replace main circuit flow switch
2 - Check/replace connection cable
3 - Check/replace P.C.B.
NO
INTERNAL P.C.B. PROTECTION ACTIVATED?
YES
1 - Check/replace air pressure switch
2 - Check if reset button is jammed
3 - Check/replace flame detection electrodes
NO
POWER TO FAN?
NO
1 - Check/replace connection cable
2 - Check/replace P.C.B.
3 - Check/replace air pressure switch
YES
1 - Replace fan

FC004Ac


C
IS THE AIR PRESSURE SWITCH ACTIVATED?
NO
YES
CHECK ΔP ON TEST PRESSURE INTAKE
ΔP ∅1.2 mbar
1 - Check A.P. switch cable
2 - Check/replace A.P. switch
3 - Check/replace P.C.B.
ΔP≤1.2 mbar
1 - Check exhaust discharge
2 - Check venturi & pipes
3 - Check fan efficiency
IS FLUE DISCHARGE NORMAL?
NO
YES
1 - Check/replace ignition electrode
2 - Check ignition cable
3 - Check spark generator
4 - Check ignition electrode cable
5 - Check/replace P.C.B.
IS THE BURNER ALIGHT?
NO
YES
1 - Check power supply of gas valve
2 - Check/replace P.C.B.
3 - Check efficiency of gas valve
4 - Replace gas valve
HAS THE BOILER SAFETY SHUTDOWN BEEN ACTIVATED?
YES
NO
1 - Check if flame strikes detection electrode
2 - Check soft-light gas pressure
3 - Check/replace detection electrode
4 - Check/replace P.C.B.
D
HAS THE BOILER SAFETY SHUTDOWN BEEN ACTIVATED?
NO
YES
Shutdown L.E.D. off
fan restarts

FC004Ad



	FAULTS	*POSSIBILE CAUSES*
1	**Drawing D.H.W: When you turn on a tap burner switches off**	**- air in secondary heat exchanger - faulty main circuit flow switch - faulty D.H.W. flow switch**
2	**Drawing D.H.W: radiators heat up in summer mode**	**- faulty 3-way valve**
3	**Drawing D.H.W: insufficient hot water temperature**	**- check C.H./D.H.W. temperature probes - check gas pressures - check water flow rate - check secondary heat exchanger**
4	**Drawing D.H.W: noisy operation**	**- primary heat exchanger faulty or lime-scale deposits - low heating system water pressure - check gas pressures - check C.H./D.H.W. temperature probes**
5	**Decrease/increase heating circuit pressure**	**- check for leaks on the heating circuit - faulty filling-loop - faulty secondary heat exchanger - expansion vessel faulty**
6	**Repeated shutdowns**	**- faulty detection electrodes - check gas settings - check flame detection electric circuit**
7	**Repeated intervention of safety thermostat**	**- C.H./D.H.W. temperature probes open circuit - overheat thermostat not calibrated correctly - air in primary water circuit**
8	**When cold water tap turned off, the boiler ignites**	**- drop in pressure in the water mains, with consequent water hammer**
9	**Insufficient radiator temperature**	**- check C.H. temperature probe - check by-pass - check gas pressures**

FC004Ae

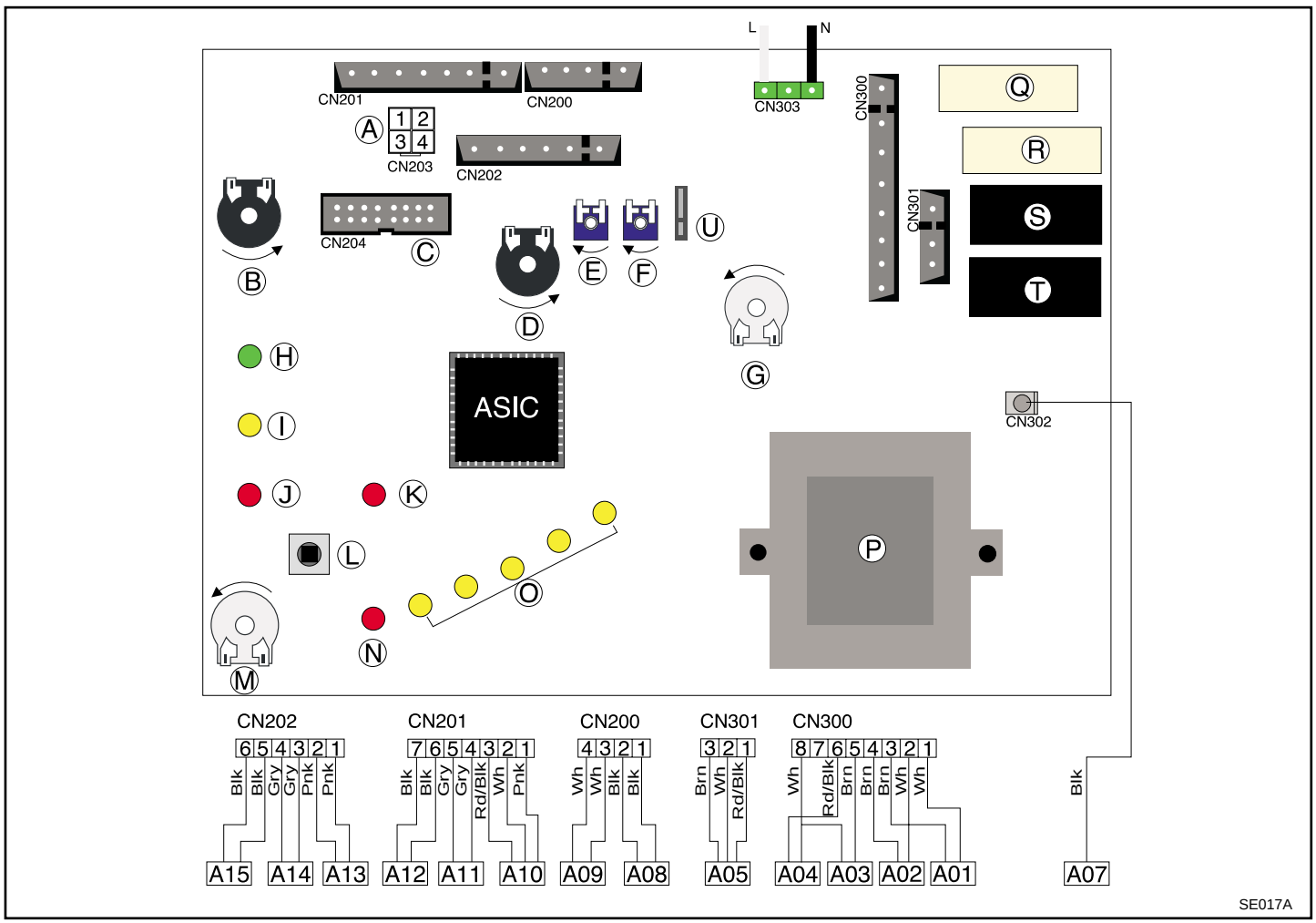
3. ELECTRICAL DIAGRAMS

LEGEND:

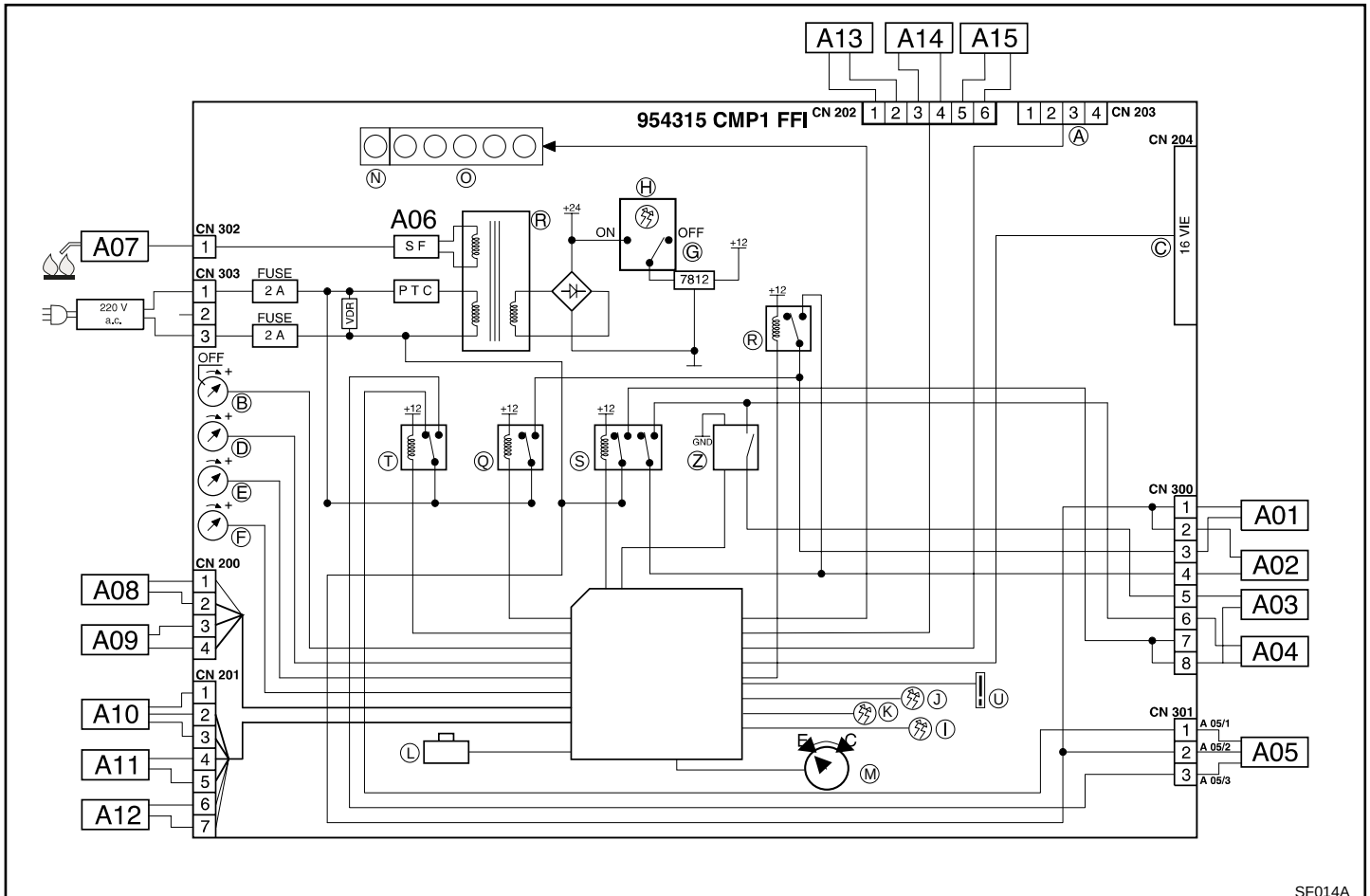
A = Time Clock Connector
B = Central Heating Selection (Winter) and Temperature Adjustment
C = Connector for Total Check System
D = Domestic Hot Water Temperature Adjustment
E = Soft-light Adjustment
F = Maximum Heating Adjustment
G = On/Off Switch
H = On/Off L.E.D.
I = Fume Sensor L.E.D.
J = Ignition Failure (Lockout) L.E.D.
K = Low System Water Level/Lack of Circulation L.E.D.
L = Reset Button
M = Economy/Comfort Selector
N = Overheat L.E.D.
O = Temperature L.E.D.s
P = Transformer
Q = Circulation Pump Relay
R = Fan Relay
S = Gas Valve Relay
T = Motorised Diverter Valve Relay
V = Spark Generator
U = Anti-cycling Device Adjustment for Heating

A01 = Circulation Pump
A02 = Fan
A03 = Spark Generator/Gas Valve Supply
A04 = Motorised Diverter Valve
A05 = Flame Detection Circuit
A06 = Detection Electrode
A07 = Main Circuit Temperature Probe
A08 = Domestic Hot Water Temperature Probe
A09 = Domestic Hot Water Flow Switch
A10 = Main Circuit Flow Switch
A11 = Modulator
A12 = Air Pressure Switch
A13 = Safety Thermostat
A14 = External (Room) Thermostat

Colours:
Gry = Grey
Wh = White
Pnk = Pink
Brn = Brown
Bl = Blue
Blk = Black
Rd/Blk = Red/Black



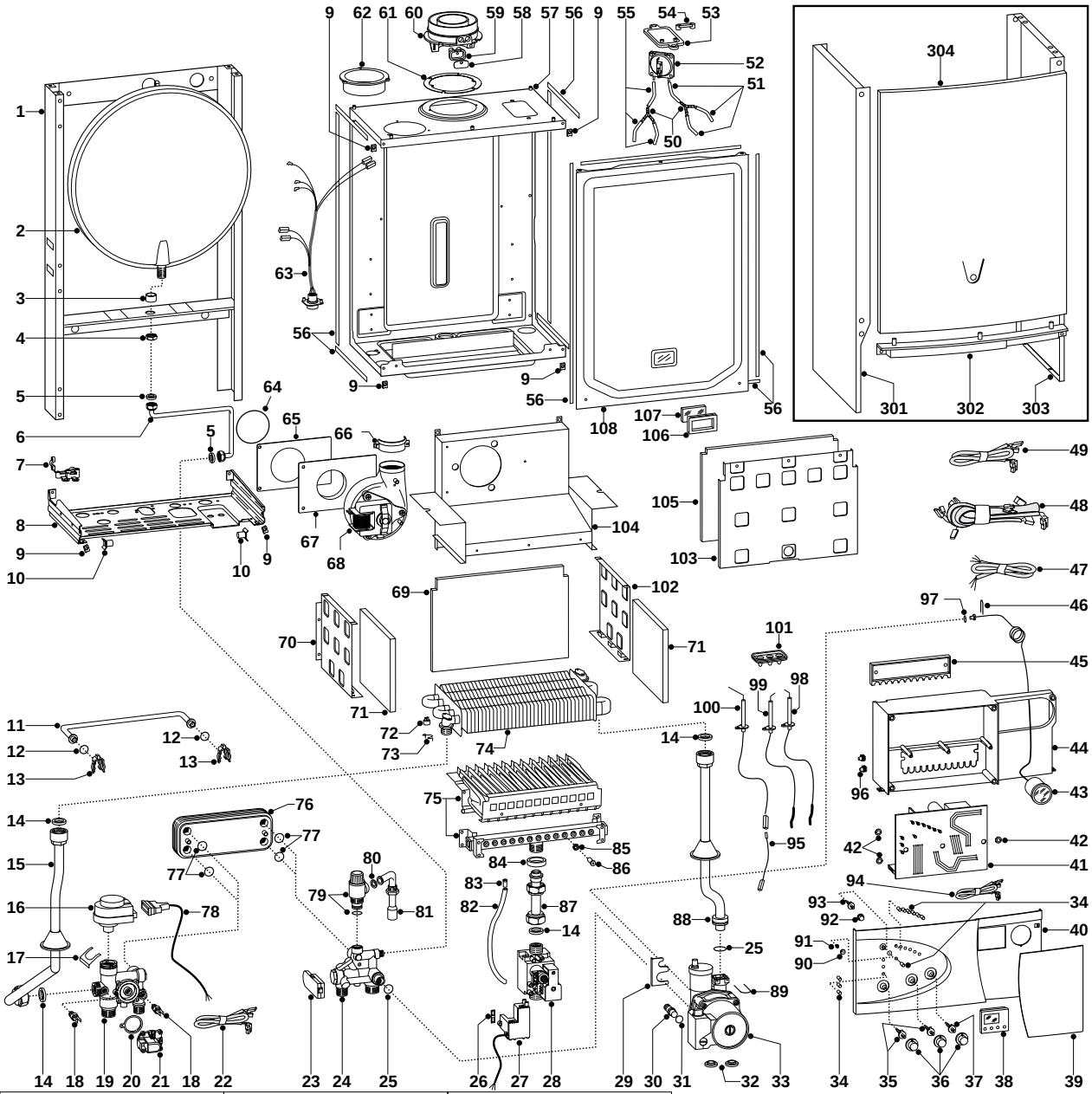
SE017A

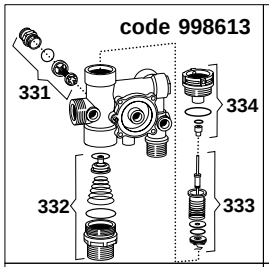


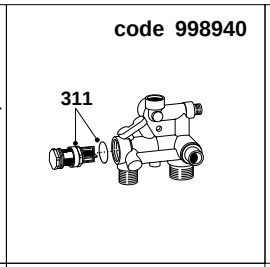
SF014A

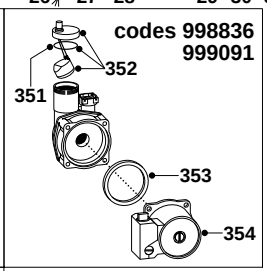
4. SHORT SPARE PARTS LIST

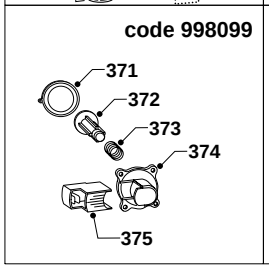
microGENUS 23/27 MFFI

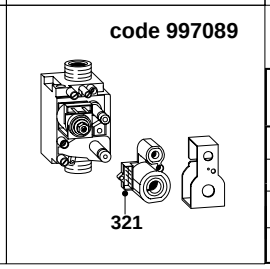












MODELS	CHARACTERISTICS	SERIAL NO: VALIDITY	REF.
MICROGENUS 23 MFFI	METHANE	2320005600001	A
MICROGENUS 23 MFFI	LPG	2320005600001	B
MICROGENUS 27 MFFI	METHANE	2320005600001	C
MICROGENUS 27 MFFI	LPG	2320005600001	D

Key no.	G.C. part no.	Description		ARISTON Part No.
2	E61 468	Expansion vessel		998616
5	164 282	Gasket 3/8"		573521
12	E61 475	O-ring		998077
14	164 225	Gasket 3/4"		573520
16	E25 427	Motor (3- Way valve)		997147
17	E61 429	Fixing clip (motor)		997077
18	164 338	Temperature probe (C.H.W.)		569236
19	E61 478	Flow group		998613
20	E24 077	Diaphragm (main flow switch)		571547
21	E61 479	Main circuit flow switch		998099
24	E61 482	Return group		998940
25	E61 483	O-ring		998424
26	E25 529	Gasket		574279
27	E61 848	Spark generator		998645
28	E61 485	Gas valve (SIT 845 SIGMA)		997089
33 AB	E61 490	Pump		998836
33 CD	E61 881	Pump		999091
38		Time clock		999599
41	E61 519	P.C.B. (CMP1-FFI)		998947
43	E61 520	Pressure gauge		999245
52AB	E61 530	Air pressure switch		573989
52CD	E03 818	Air pressure switch		571651
66AB		Fan		999397
66CD	E61 967	Fan		998894
72	E25 425	Thermostat (overheat)		997206
74AB		Main exchanger		998620
74CD	E61 546	Main exchanger		998893
75A	E61 547	Burner 12 ramp (natural gas)		998618
75B	E61 549	Burner 12 ramp (LPG)		998669
75C	E61 972	Burner 14 ramp (natural gas)		998887
75D	E61 974	Burner 14 ramp (LPG)		998939
76AB	E26 767	Secondary exchanger (p-type 23kW)		571646
76CD	E26 657	Secondary exchanger (p-type 27kW)		573295
77	E26 658	O-ring (secondary exchanger)		573825
79	E26 378	Safety valve (1/2" 3 bar)		573172
98	E61 565	Electrode (Ignition R.H.)		998623
99	E61 567	Electrode (Ignition L.H.)		998622
100	E61 569	Detection electrode		998624
311		D.H.W. actuator kit		998941
321	E25 582	Operator coils (SIT SIGMA)		997029
331	E61 647	Central heating by-pass kit		998490
332	E61 648	Heating spring kit		998718
333	E61 649	3-way spring kit		998975
334	E61 650	Actuator bush		998974
351	E61 652	Gasket (auto air vent)		998644
352	E61 654	Auto air vent		998643
353	E61 656	Gasket (pump head)		998738
354 AB	E61 660	Pump head (Gold 15/5)		998961
354 CD	E62 030	Pump head		999207
371	E24 077	Diaphragm (main flow switch)		571547
372	E24 077	Magnet (main flow switch)		571772
373	E24 076	Spring (main flow switch)		571771
374	E24 075	Main flow switch top cap		571770
375	E61 663	Main flow switch reed system		998172
381	E61 665	Burner jet 1.25 full kit (Natural gas)		998716
382	E61 667	Burner jet 0.72 full kit (LPG)		998717

Manufacturer: **Merloni TermoSanitari SpA - Italy**

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