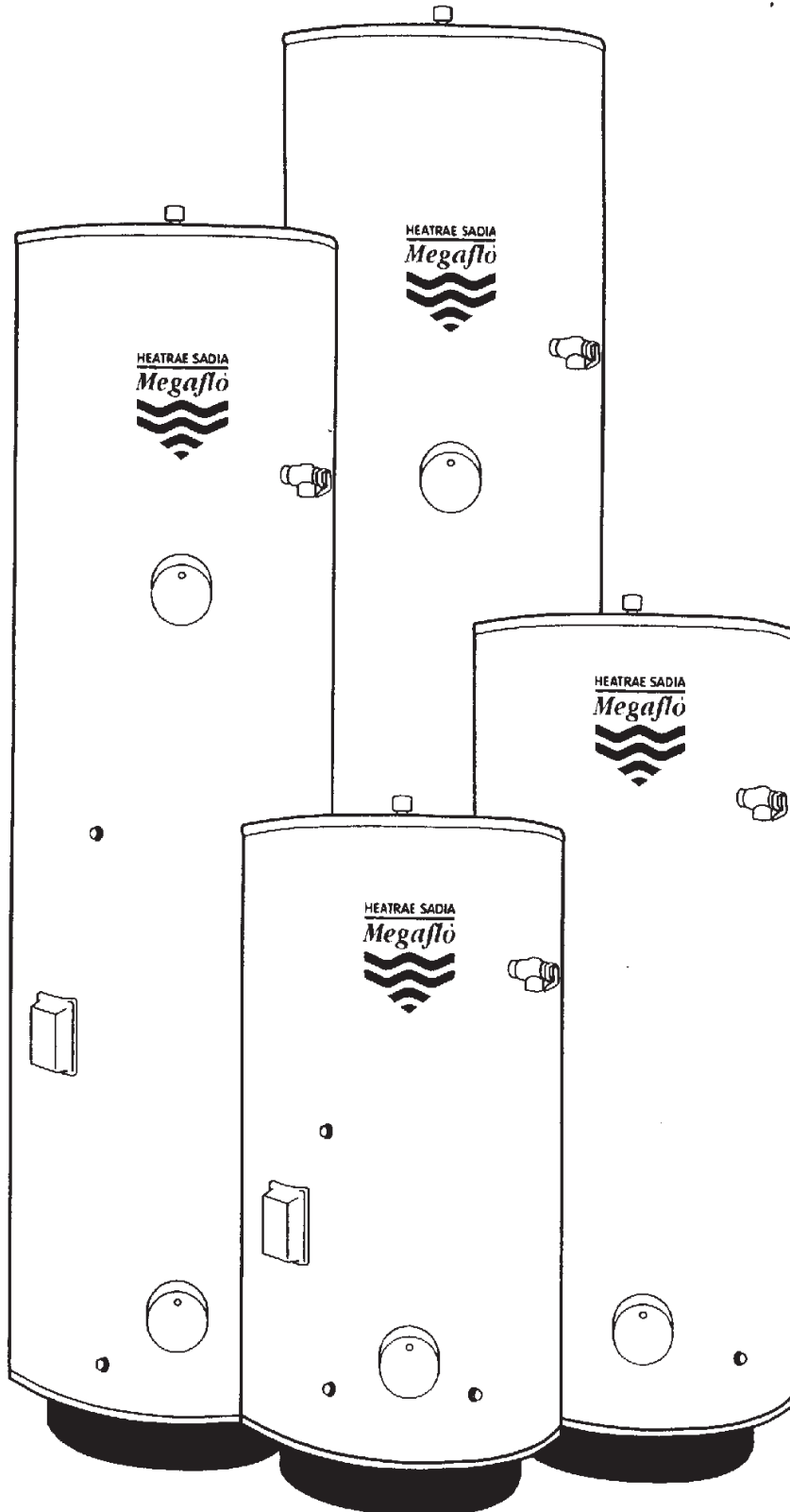


Installation Manual

Fitting and using the Megaflo unvented mains pressure water heater



megaflo[®]

HEATRAE SADIA
Megaflo



megaflo[®]

INSTALLATION AND USER INTRUCTIONS PLEASE LEAVE THIS MANUAL WITH THE UNIT FOR FUTURE REFERENCE

CONTENTS

SECTION	PAGE
1.0 INTRODUCTION	3
2.0 GENERAL REQUIREMENTS	
2.1 COMPONENT CHECK LIST	3
2.2 SITING THE MEGAFLO	3
2.3 WATER SUPPLY	3
2.4 OUTLET/TERMINAL FITTINGS	3
3.0 INSTALLATION - GENERAL	
3.1 PIPE FITTINGS	5
3.2 COLD WATER SUPPLY	5
3.3 COLD WATER COMBINATION VALVE	5
3.4 DRAIN TAP	5
3.5 OUTLET PIPEWORK	5
3.6 TUNDISH AND DISCHARGE PIPE	5
3.7 SECONDARY CIRCULATION	7
3.8 WARNINGS	7
4.0 INSTALLATION - DIRECT (D, DD & DDD) UNITS	
4.1 FITTING THE IMMERSION HEATER(S)	7
4.2 WIRING	7
4.3 OPERATION	7
5.0 INSTALLATION - INDIRECT (CL) UNITS	
5.1 BOILER SELECTION	7
5.2 INDIRECT THERMAL CUT-OUT AND 2-PORT MOTORISED VALVE	9
5.3 WIRING	9
5.4 HEATING SYSTEM CONTROLS	9
5.5 IMMERSION HEATER(S)	9
6.0 COMMISSIONING	
6.1 FILLING THE MEGAFLO WITH WATER	9
6.2 CHECK THE OPERATION OF THE SAFETY VALVES	9
6.3 DIRECT UNITS	9
6.4 INDIRECT UNITS	9
7.0 USER INSTRUCTIONS	
7.1 WARNINGS	9
7.2 TEMPERATURE CONTROL	9
7.3 FLOW PERFORMANCE	11
7.4 OPERATIONAL FAULT	11
8.0 MAINTENANCE	
8.1 MAINTENANCE REQUIREMENTS	13
8.2 CHECK OPERATION OF SAFETY VALVES	13
8.3 CLEAN THE STRAINER	13
8.4 DRAINING THE MEGAFLO UNIT	13
8.5 DESCALING IMMERSION HEATER(S)	13
8.6 REFILLING SYSTEM	13
9.0 FAULT FINDING AND SERVICING	
9.1 IMPORTANT NOTES	13
9.2 SPARE PARTS	13
9.3 FAULT FINDING CHART	14
10.0 GUARANTEE	
10.1 WARNING	Back Cover
10.2 GUARANTEE TERMS	Back Cover

1.0 Introduction

megaflo

The Megaflo is an unvented type water heater. This means that it can be supplied directly from the mains supply to the property without the need for separate feed cisterns or vent pipes. It is supplied complete with all its necessary inlet and safety controls, electric immersion heater(s) and, for indirect units, a cylinder thermostat, thermal cut-out and 2-Port motorised valve.

Generally its pressure and flowrate performance will far exceed that from a comparable vented system, thermal store, multipoint instantaneous gas heater or combination boiler.

The Megaflo requires no separate expansion vessel as any expanded water is accommodated within an internal air volume.

2.0 General Requirements

IMPORTANT : PLEASE READ AND UNDERSTAND THESE INSTRUCTIONS BEFORE INSTALLING THE MEGAFLO WATER HEATER. INCORRECT INSTALLATION MAY INVALIDATE GUARANTEE.

THE MEGAFLO MUST BE INSTALLED BY A COMPETENT INSTALLER IN ACCORDANCE WITH BUILDING REGULATION G3.

2.1 COMPONENT CHECK LIST

Before commencing installation check that all the components for your Megaflo unit are contained in the package. The following components are supplied as standard with your Megaflo unit :

- Immersion heater (s)
- Cold Water Combination Valve (comprises Pressure Reducing Valve, Balanced Pressure Cold Water Connection, Check Valve and Expansion Relief Valve).
- Factory fitted Temperature/Pressure Relief Valve (set at 90°C/10bar)
- Tundish (included in Cold Water Combination Valve pack)
- Factory fitted Indirect Thermostat and Thermal Cut-out (CL units only)
- 2-Port Motorised Valve (CL units only)

2.2 SITING THE MEGAFLO (see Diagram 1)

The Megaflo unit must be installed vertically. It can be placed anywhere convenient provided the discharge pipe(s) from its safety valves can be correctly installed. Areas that are subject to freezing must be avoided. The unit is designed to be floor standing, how-

ever, a wall mounting bracket is available for the 70, 105 and 145 litre models.

Diagram 10). Ensure that the floor or wall is of sufficient strength to support the "full" weight of the unit (refer to charts on page 15 for unit weights). Pipe runs should be kept as short as possible for maximum economy. Access to associated controls, immersion heaters and indirect controls should be possible for servicing and maintenance of the system.

2.3 WATER SUPPLY

Bear in mind that the mains water supply to the property will be supplying both the hot and cold water requirements simultaneously. It is recommended that the maximum water demand be assessed and the water supply be checked to ensure this demand can be satisfactorily met.

NOTE A high mains water pressure will not always guarantee high flow rates.

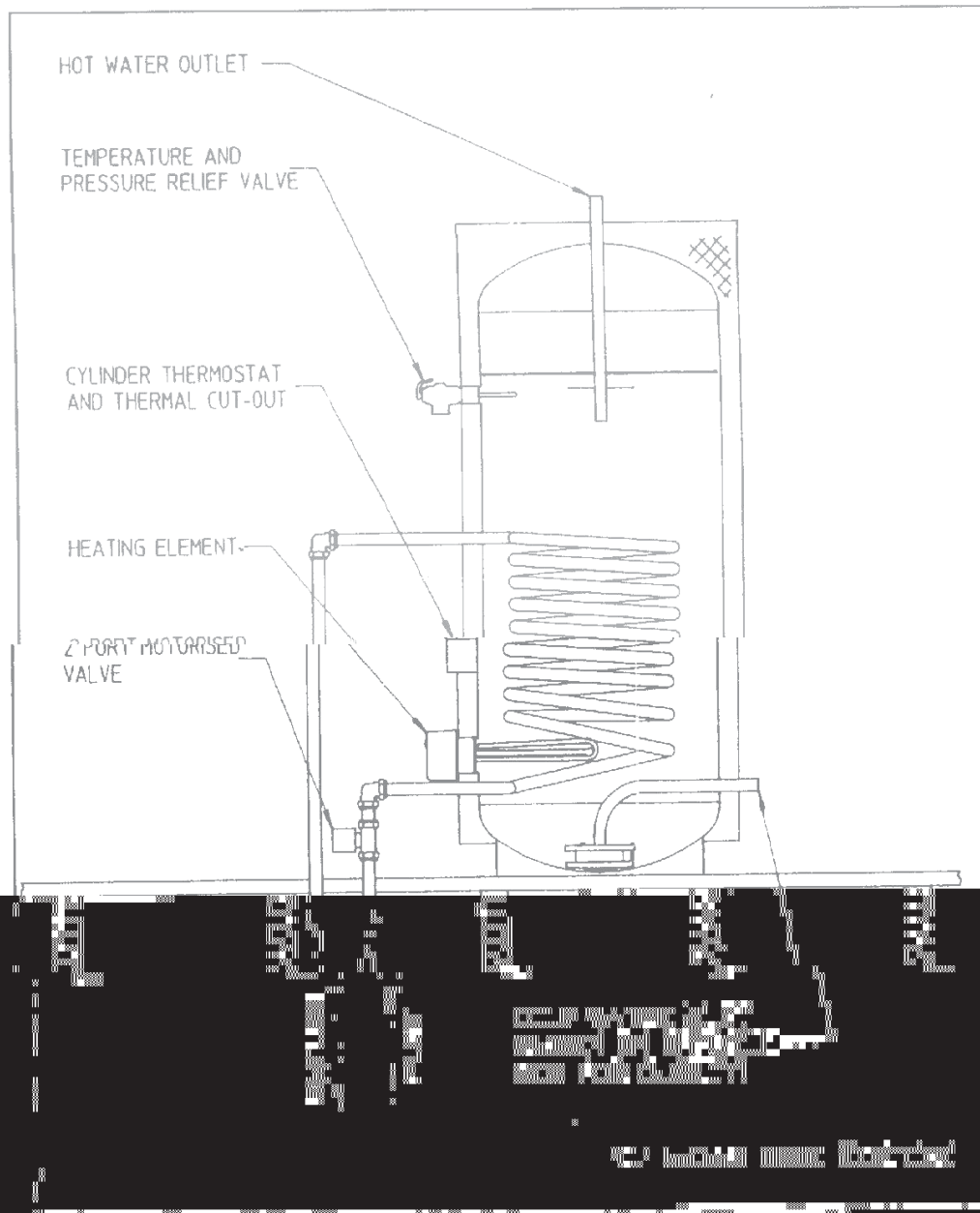
Wherever possible the main supply pipe should be in 22mm. We suggest that the minimum supply requirements should be 1.5 bar pressure and 20 litres per minute flowrate. At these values outlet flowrates may be poor if several outlets are used simultaneously, the higher the available pressure and flowrate the better the system performance will be.

The Megaflo has an operating pressure of 3 bar which is controlled by the Cold Water Combination Valve. The Cold Water Combination Valve can be connected to a maximum mains supply pressure of 16 bar.

2.4 OUTLET/TERMINAL FITTINGS (TAPS, ETC.)

The Megaflo can be used in conjunction with most types of terminal fittings. It is advantageous in many mixer showers to have balanced hot and cold water supplies, in these instances the Balanced Pressure Cold Water connection on the Cold Water Combination Valve should be used. Outlets situated higher than the Megaflo unit will give outlet pressures lower than that at the heater, a 10m height difference will result in a 1 bar pressure reduction at the outlet fitting.

Diagram 1: Typical Megaflo Installation



3.0 INSTALLATION - GENERAL(see Diagram 2)

3.1 PIPE FITTINGS

As all the pipes on the Megaflo are in Stainless Steel brazing or soldering is difficult, therefore use 22mm COMPRESSION FITTINGS when connecting to the Megaflo pipes.

"PUSH FIT" TYPE FITTINGS MUST NOT BE USED FOR CONNECTION TO THE MEGAFLO PIPES. However, there is no reason why, if technically suitable, these cannot be employed elsewhere in the system.

If solder type fittings are used in the supply to the Megaflo Cold Water Combination Valve the use of self-cleaning fluxes should be avoided as they can impair the operation of the valve.

3.2 COLD WATER SUPPLY

A 22mm cold water supply is recommended, however, if a 15mm (1/2") supply exists which provides sufficient flow (see 2.3 above) this may be used. More flow noise may be experienced from small bore pipes due to the increased water velocity through them.

A stopcock or servicing valve should be incorporated in the cold water supply to enable the Megaflo unit and its associated controls to be isolated and serviced.

3.3 COLD WATER COMBINATION VALVE (see Diagram 3)

The Cold Water Combination Valve can be connected anywhere on the cold water mains supply prior to the Megaflo unit. There is no requirement to site it close to the unit, it can be located at a point where the mains supply enters the premises if this is more convenient. However, ensure the discharge from the Expansion Relief Valve can be correctly installed (see section 3.6 and Diagram 2).

tion is supplied with a blanking plug should it not be required.

3.4 DRAIN TAP

A suitable draining tap should be installed in the cold water supply to the Megaflo unit between the Cold Water Combination Valve and the heater at as low a level as possible (see Diagram 2). It is recommended that the outlet point of the drain pipe work be at least 1 metre below the level of the heater (this can be achieved by attaching a hose pipe to the drain tap outlet spigot).

3.5 OUTLET PIPEWORK

Ideally the pipework from the Megaflo to the outlet fittings should be in 22mm pipe with short runs of 15mm pipe to showers and basin taps. Small bore pipe can also be used to suit some taps, but runs should be of minimum length.

3.6 TUNDISH AND DISCHARGE PIPE

It is a requirement of Building Regulation G3 that any discharge from an unvented system is safely conveyed to where it is visible but will not cause danger to persons in or about the building.

See Diagram 2 for fitting details.

The Tundish supplied and the discharge pipes should be fitted in accordance with the Requirements and Guidance Notes of Building Regulation G3. These are essentially as follows :

G3 Requirement

- i) Discharge pipe **MUST** terminate in a **SAFE, VISIBLE** position.

G3 Guidance

- ii) Tundish should be within 500mm of the Temperature/Pressure Relief Valve and, wherever possible, be in a visible position.
- iii) Discharge pipe should have a vertical fall of at least 300mm from the Tundish.

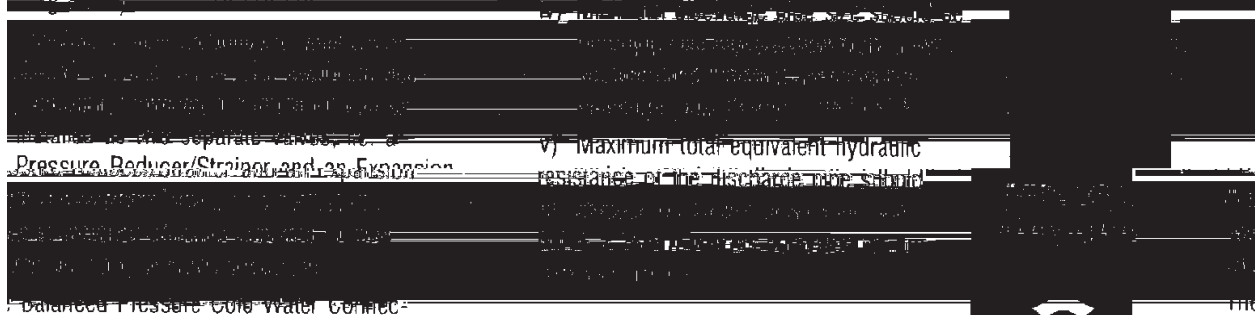
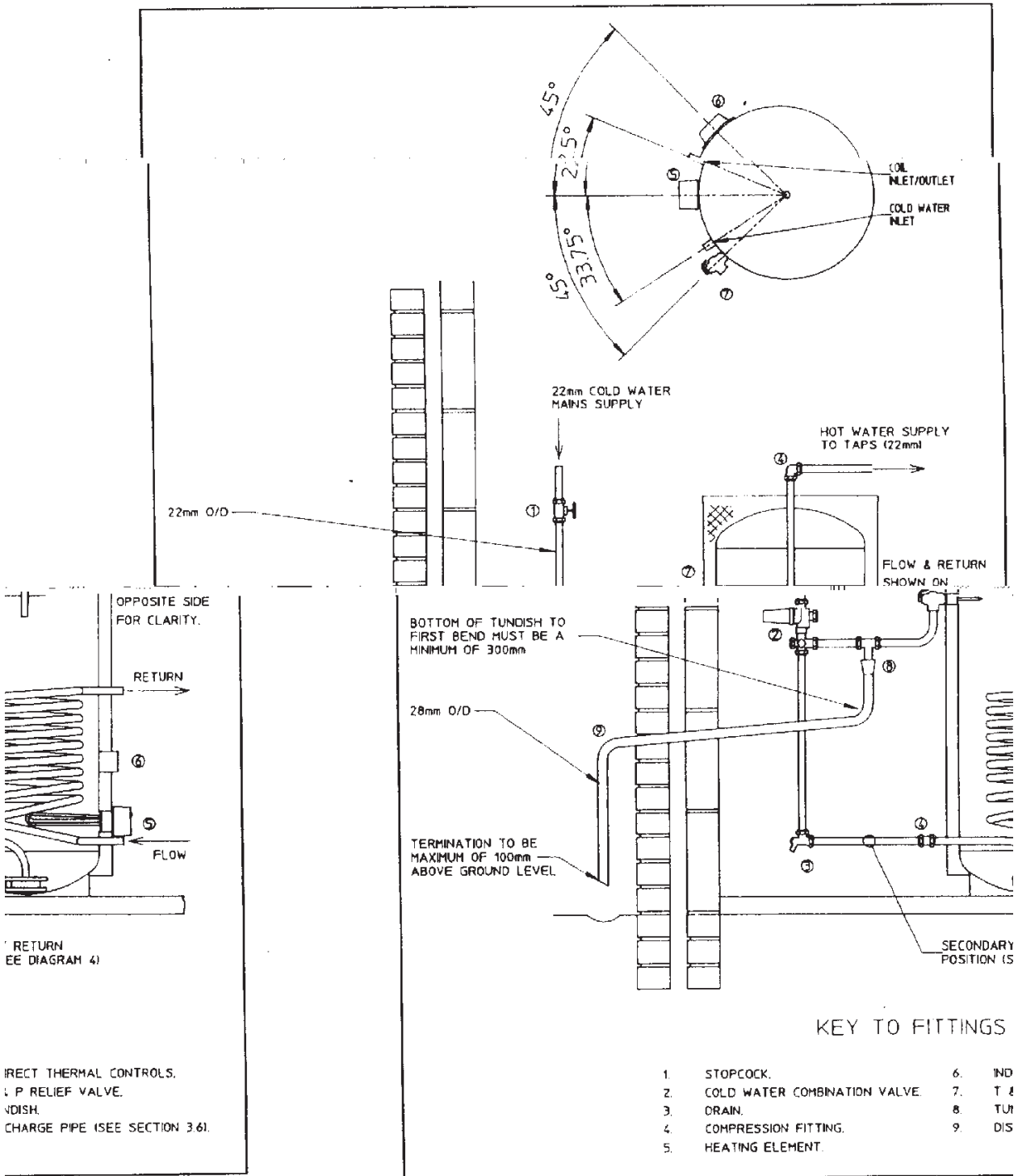


Diagram 2: Typical Pipework Installation for Megaflo 6



vi) Discharge pipe should have a continuous fall (minimum 1:200).

Information Sheet No. 33 available from the British Board of Agreement gives further advice on discharge pipe installation (contact 01923 662900).

3.7 SECONDARY CIRCULATION

If a secondary circulation system is required it is recommended that it be connected to the Megaflo as shown in Diagram 4 via a Swept Tee joint (not supplied - available as an accessory order Code No. 95 605 812). The secondary return pipe should be in 15mm pipe and incorporate a check valve to prevent backflow. A suitable WBS approved bronze circulation pump will be required.

3.8 WARNINGS

- i) **Under no circumstances should the factory fitted Temperature/Pressure Relief Valve be removed other than by Authorised Heatrae Sadia personnel. To do so will invalidate any guarantee or claim.**
- ii) **The Cold Water Combination Valve must be fitted to the mains water supply to the Megaflo unit.**
- iii) **No control or safety valves should be tampered with.**
- iv) **The discharge pipe should not be blocked or used for any other purpose.**

4.0 Installation - Direct (D, DD and DDD units)

4.1 FITTING THE IMMERSION HEATER(S)

The immersion heaters should be screwed into the 1 3/4" BSP bosses on the side of the Megaflo unit. Ensure the "O"-ring seals are in place, DO NOT use any other type of seal or sealant on the threads.

The 1 3/4" BSP thread is non-standard to

boss or 2 x immersion heaters and blanking plug in lower bosses, 1 x immersion heater in top boss. If an additional immersion heater is required order Part No. 95 606 920.

4.2 WIRING (see Diagram 5)

All electrical wiring should be carried out by a competent electrician and be in accordance with the latest I.E.E. Wiring Regulations.

The immersion heater(s) should be wired in accordance with Diagram 5 and the instructions supplied within the cap of the heater. The immersion heaters **MUST** be earthed.

DO NOT operate the immersion heaters until the Megaflo has been filled with water.

4.3 OPERATION

It is recommended that the immersion heater thermostats are set to 60 - 65°C, however they can be set between 10° and 70°C. The thermostat incorporates a thermal cut-out that will switch off the immersion heater in the event of a thermostat failure. **DO NOT** bypass the thermal cut-out in any circumstances.

5.0 Installation - Indirect (CL) units

5.1 BOILER SELECTION

The Megaflo Indirect (CL) models are suitable for use with most gas or oil fired boilers compatible with unvented systems i.e. fitted with a temperature control thermostat.

If in doubt consult the boiler manufacturer.

DO NOT use a coal or wood burning boiler as these do not have adequate thermal control for unvented systems.

The boiler used can either be a sealed system or open vented type, maximum primary circuit pressure 3 bar.

The primary flow from the boiler should be

megaflo[®]

Diagram 3: Cold Water Combination Valve

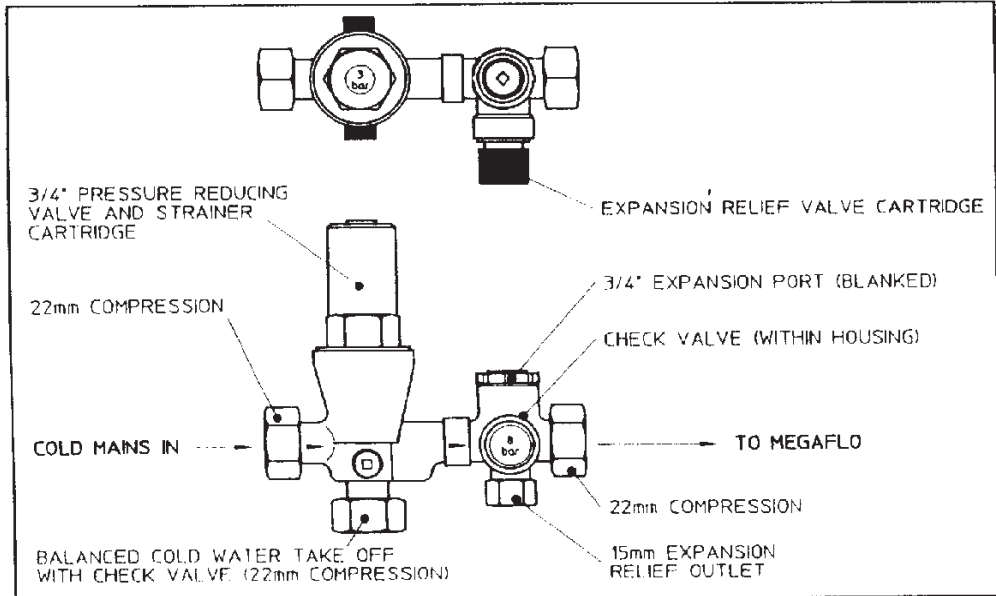


Diagram 4: Secondary circulation

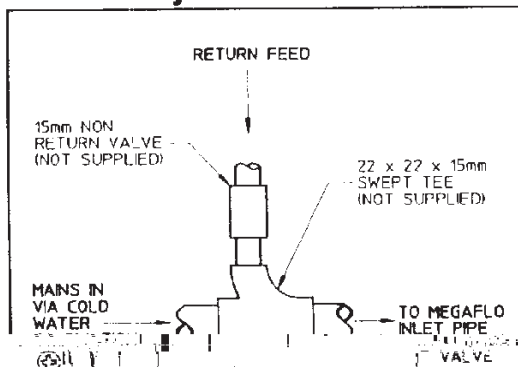


Diagram 6: Indirect Thermal Controls

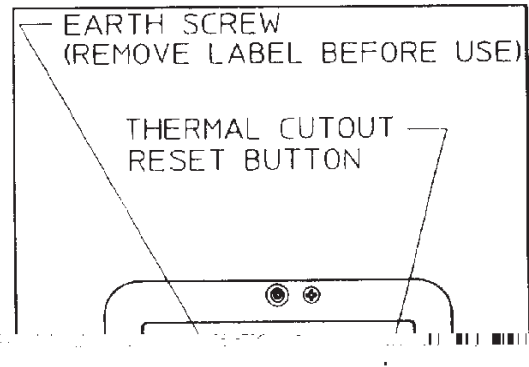
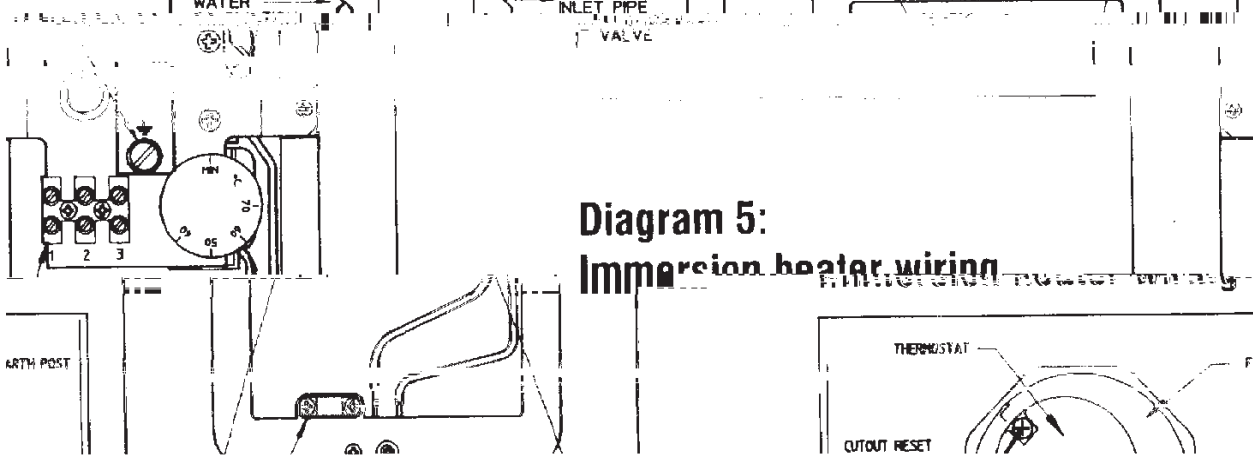


Diagram 5: Immersion heater wiring



5.2 INDIRECT THERMAL CUT-OUT AND 2-PORT MOTORISED VALVE

To comply with BBA regulations and to prevent the Megaflo from overheating the 2-Port motorised valve supplied **MUST** be fitted to the primary flow to the indirect coil (see Diagram 1).

5.3 WIRING

All electrical wiring should be carried out by a competent electrician and being accordance with the latest I.E.E. Wiring Regulations.

The Megaflo Indirect Thermostat and Thermal Cut-out are factory pre-wired. The 2-Port motorised valve supplied **MUST** be wired in series with the Indirect controls such that the power supply to the valve is interrupted should either the Thermostat or Thermal Cut-out operate. The Wiring Diagrams 7a or 7b detail the wiring required between these controls and the motorised valve. Wiring to external controls is made via the terminal block fitted. The cable should be routed through the aperture in the terminal cover and

ensure
ts

situat
alve

immer-
eat up.
correctly.
m either
nd

ring the heating

) circuit following the
ommissioning instruc-
nary heating coil in
2-Port motorised
be manually opened
he motor housing to
fitting. When the

er supply need to be isolated
to unit.

immersion heater(s) should be
wired in accordance with
ve.

secured using the cable grip provided. The Indirect Thermal Cut-out **MUST NOT** be bypassed.

5.4 HEATING SYSTEM CONTROLS

The controls provided with the Megaflo will ensure the safe operation of the Megaflo within a central heating system. Other controls will be necessary to control the space heating requirements and times that the system is required to function, for example see Diagrams 8 and 9. The Megaflo is compatible with most heating controls,

examples of circuits are given in Diagrams 7a and 7b. However, other systems may be suitable, **refer to the controls manufacturers' instructions, supplied with the controls selected, for alternative system wiring schemes.**

5.5 IMMERSION HEATER(S)

The Megaflo indirect units are supplied with either one or two immersion heaters, these can be used as an alternative heat source

primary circuit is full return the lever to the **NORMAL USE** position. Switch on the boiler, ensure the programmer is set to Domestic Hot Water. Allow the Megaflo unit to heat up and check that the indirect thermostat and 2-Port motorised valve operate correctly. Check that no water is discharged from either the Expansion Valve or Temperature and Pressure Relief Valve during the heating cycle.

6.0 Commissioning

6.1 FILLING THE MEGAFLO WITH WATER

Ensure that all fittings and immersion heaters are correctly fitted and tightened.

- i) Open a hot tap furthest from the Megaflo.
- ii) Open the mains stop cock to fill the unit. When water issues from the tap allow to run for a few minutes to flush through any dirt or swarf, then close tap.
- iii) Open successive hot taps to purge any air from the system.
- iv) Check all connections for leaks and rectify as necessary.

6.2 CHECK THE OPERATION OF THE SAFETY VALVES

- i) Manually open, for a few seconds, the Temperature and Pressure Relief Valve situated on the Megaflo unit (see Diagram 2). Check water discharged runs freely away through the tundish and discharge pipe. Check return flow: when water flow stops and valve reseals correctly.
- ii) Repeat for the Expansion Valve s on the Cold Water Combination V (see Diagram 3).

6.3 DIRECT UNITS

Switch on the electrical supply to the immersion heater(s) and allow the unit to heat. Check that the thermostat operates correctly. Check that no water is discharged from the Expansion Valve or Temperature and Pressure Relief valve at cycle.

6.4 INDIRECT UNITS

Fill the indirect (primary boiler manufacturer's conditions. To ensure the primary the Megaflo is filled the valve (supplied) should be moved by moving the lever on the **FLUSHING ONLY** position. When the boiler should the boiler from the Megaflo. The Megaflo indirect connected and Section 4.0 above.

Diagram 7a: 2 x 2 port valve system

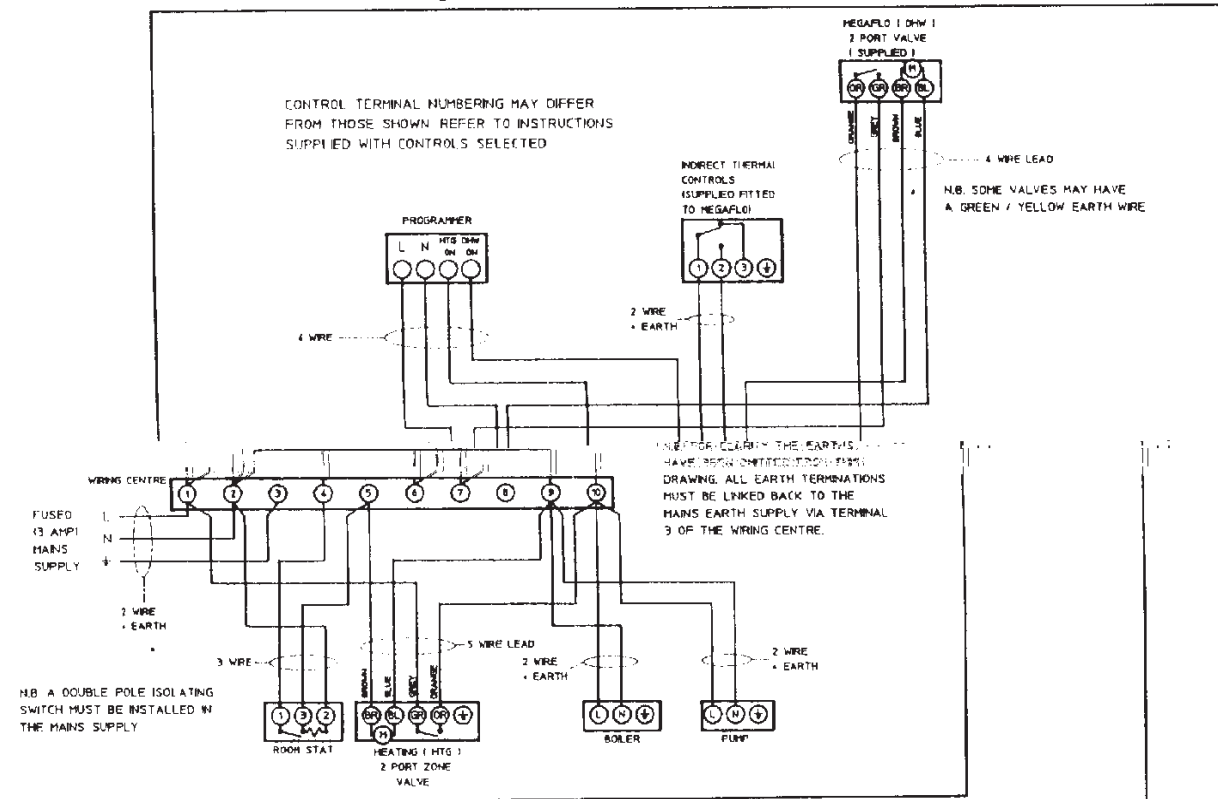
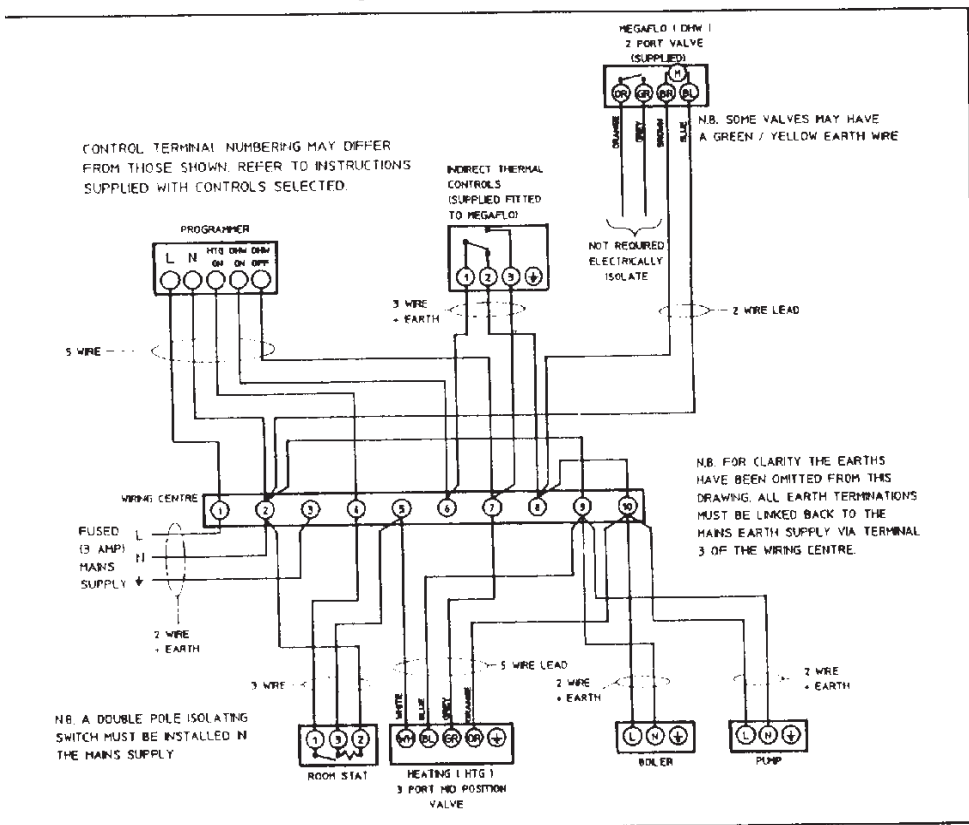


Diagram 7b: Megaflo 2 port valve in conjunction with a 3 port mid-position valve

Diagram



7.0 User Instructions

7.1 WARNINGS

IF WATER ISSUES FROM THE TEMPERATURE/PRESSURE RELIEF VALVE ON THE MEGAFLO UNIT SWITCH OFF ELECTRICAL SUPPLY TO THE IMMERSION HEATER(S) (DIRECT UNITS) OR SHUT DOWN THE BOILER (INDIRECT LIMITS). DO NOT TURN OFF THE WATER SUPPLY. CONTACT A

where it
ansion.

Megaflo

outlet

asure
o run
at the

ief Valve.

the cover without first switching
electrical supply. The temperature
control is made by inserting a flat bladed
driver in the slot in the disc on top of
thermostat and rotating.

In any doubt consult a competent electrician.

DIRECT UNITS

Direct units are fitted with an Indirect thermostat which controls a 2 Port motorised valve and hence the temperature of the water entering the Megaflo unit. The thermostat can be set to control between 10oC and 70oC, this adjustment have been done during installation. Adjustments can only be made by removing the Indirect Thermal Control housing DO NOT remove the cover without first switching off the electrical supply. Temperature adjustment is made by rotating the thermostat knob until the selected temperature is indicated with the indicator mark.

PERFORMANCE

7.4 OPERATIONAL FAULTS

Operational faults and their possible causes are detailed in Section 9.3. It is recommended that faults should be checked by a competent installer.

The air volume within the Megaflo unit will periodically require recharging to ensure any expanded water is accommodated within the

COMPETENT INSTALLER FOR UNVENTED WATER HEATERS TO CHECK THE SYSTEM.

DO NOT TAMPER WITH ANY OF THE SAFETY VALVES FITTED TO THE MEGAFLO SYSTEM, IF A FAULT IS SUSPECTED CONTACT A COMPETENT INSTALLER.

7.2 TEMPERATURE CONTROL

IMMERSION HEATERS

The thermostat on the immersion heater(s) can be set to control between 10°C and 70°C. This will usually have been done during installation. Adjustments can only be made by removing the immersion heater cover. DO NOT remove the cover without first switching off the electrical supply.

- vi) The air volume will be automatically recharged as the unit refills.

If after following the above actions water still discharges from the Expansion Relief Valve further advice should be sought from a competent installer.

8.0 Maintenance

8.1 MAINTENANCE REQUIREMENTS

To ensure the continued optimum performance of the Megaflo it should be regularly maintained. This is of particular importance in hard water areas or where the water supply contains particulate matter. Maintenance should be carried out by a competent person and any replacement parts used should be authorised Heatrae Sadia Megaflo spare parts. It is recommended that maintenance is carried out every 12 months and includes the adjustment of the 2 Port motorised

megaflo

the air volume has reduced to a point where it can no longer accommodate the expanded water. To recharge the air volume :-

- i) Turn off the water supply to the unit.
- ii) Open nearest hot tap below the level of the Megaflo.
- iii) Hold open the Temperature/Pressure Relief Valve until water ceases to flow from the tap and gurgling noise valve stops.
- iv) Close Temperature/Pressure Relief Valve.

INDIRECT

Indirect Thermal Control valve a in the I set to (will use tion. A removing cover. I switchi ture ad gradual aligns

7.3 FLOW

Diagram 8: 2-port zone valve system (schematic)

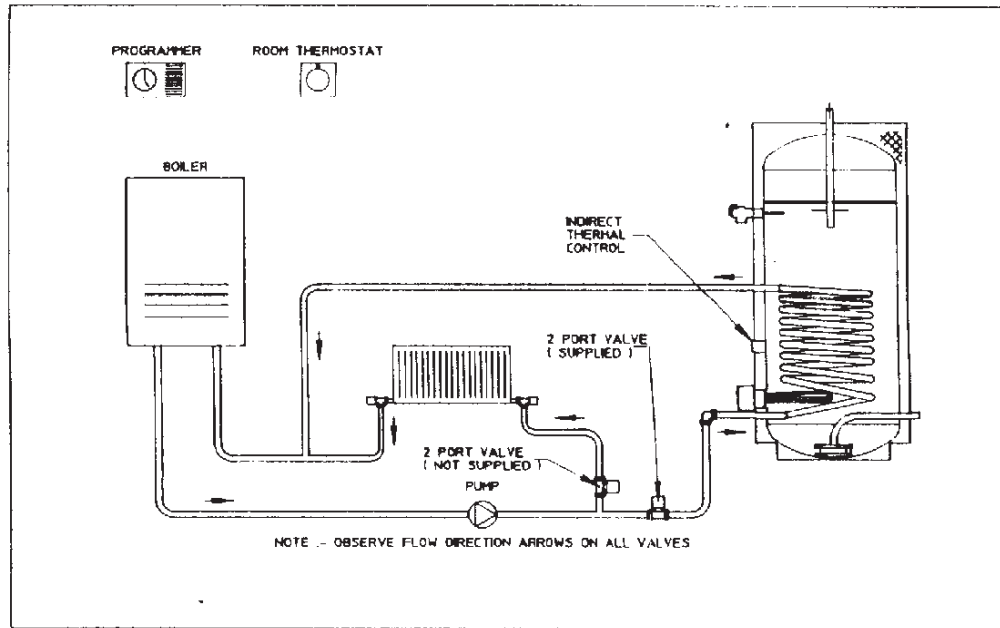
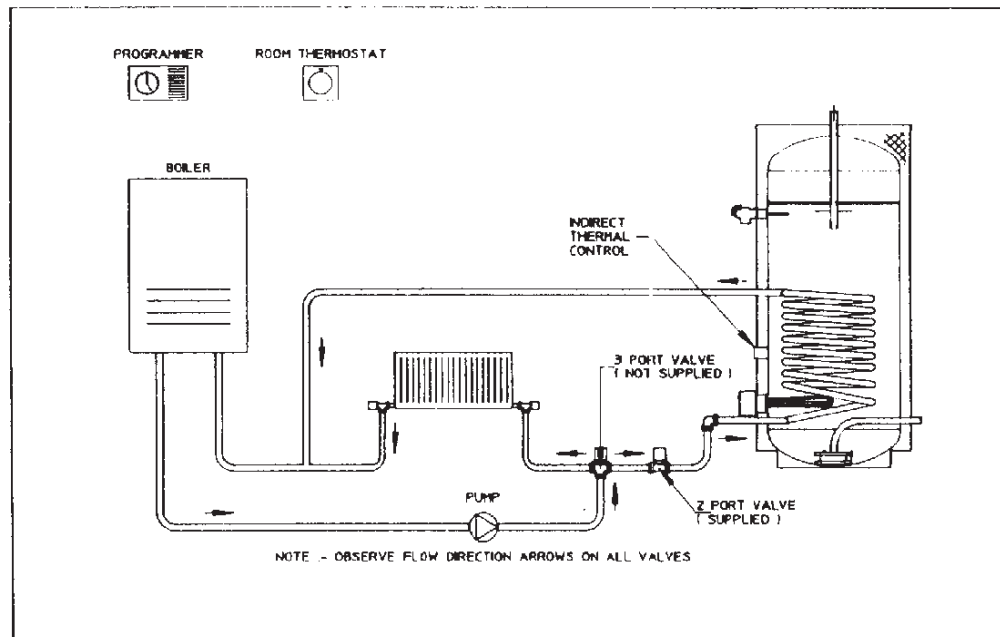


Diagram 9: 3-port mid-position valve system (schematic)



8.2 CHECK OPERATION OF SAFETY VALVES

Manually operate the Temperature and Pressure Relief Valve for a few seconds. Check water is discharged and that it flows freely through the tundish and discharge pipework. Check valve reseats correctly when released.

NOTE : The water discharged may be very

filled.

drain tap. With hot tap open, turn water supply. When water flows

at the hot tap allow to flow for a short

The strainer is incorporated within the Pressure Reducing Valve part of the Cold Water Combination Valve (see Diagram 3). To inspect and clean turn off the mains water supply to the Megaflo unit and open the lowest hot tap in the system to relieve the system pressure. Unscrew the black cap from the Pressure Reducing Valve and remove. The strainer will be removed with the cap, wash any particulate matter from the strainer under clean running water. Replace the cap assembly ensuring that the sealing ring is correctly fitted. Do not use any other type of sealant. Close hot tap, open mains stop cock and check for leaks.

8.4 DRAINING THE MEGAFLO UNIT

Switch off the electrical supply to the immersion heater(s) and shut down the boiler on indirect units. Turn off the mains water supply to the Megaflo unit. Attach a hosepipe to the drain cock having sufficient length to take water to a suitable discharge point below the level of the unit, at least one

metre below the unit to terminate. Open hot water tap nearest to the Megaflo to relieve the system pressure. Open drain cock. If water fails to drain from the Megaflo vent the unit by manually opening the Temperature/Pressure Relief Valve.

8.5 DESCALING IMMERSION HEATER(S)

Remove the cover from the immersion heater(s) and disconnect wiring from the thermostat and Earth Post (see Diagram 5). Remove supply cable from the cable grip. Using either an immersion heater "box" or "C" spanner unscrew and remove the immersion heater(s). Carefully remove the scale from the element and thermostat pocket surfaces. DO NOT use a sharp implement as damage to the element surface could be caused. Ensure boss threads and "O"-ring

seal groove are clean and replace immersion heater(s). DO NOT use any other type of seal or sealant on the threads.

Rewire the immersion heater(s) in accordance with Diagram 5. Replace cover(s).

8.6 REFILLING SYSTEM

DO NOT switch on the immersion heater(s)

or boiler until the system has been com-

pletely ref-

illed. Repeat the procedure for the Expansion Relief Valve.

8.7 CLEAN THE STRAINER

from the hot tap allow to flow for a short while to purge air and to flush through any disturbed particles. Close hot tap and then open successive hot taps in system to purge any air. The electrical supply can now be switched on.

9.0 Fault Finding and Servicing

9.1 IMPORTANT NOTES

- 1) Servicing should only be carried out by a competent installer or by authorised Heatrae Sadia Service Engineers or Agents.
- 2) Any Spare Parts used MUST be authorised Heatrae Sadia Megaflo parts.
- 3) Disconnect electrical supply before removing any electrical equipment covers.
- 4) NEVER bypass any thermal cut-outs.
- 5) Hot water can scald, care should be taken when drawing water from the units.

9.2 SPARE PARTS

A range of spare parts are available for the Megaflo units. When ordering spare parts serial number on the unit should be quoted

PART	CODE No.
Immersion Heater	95 606 920
Temperature/Pressure Relief Valve	95 605 810
Cold Water Combination Valve (complete)	95 605 817
Pressure Reducing Cartridge (for Cold Water Combination Valve)	95 605 824
Expansion Valve Cartridge (for Cold Water Combination Valve)	95 605 825
Expansion Valve/Check Valve	95 605 828
Core unit (complete)	95 605 828

HEATRAE SADIA

Megaflo



SPARE PARTS. (Continued)

PART	CODE No
(rectangular blue cap)	95 612 209
(round black cap)	95 612 599
CL units	
Indirect Thermal Cut-out	95 612 598
Indirect Thermostat	95 612 597
2-Port Motorised Valve	95 605 819

Tundish 95 605 811
 D/DD/DDD units
 Combined Thermostat/
 Thermal Cut-out

Immersion Heater Blanking
 Plug 95 605 8

Removing any electrical equipment covers

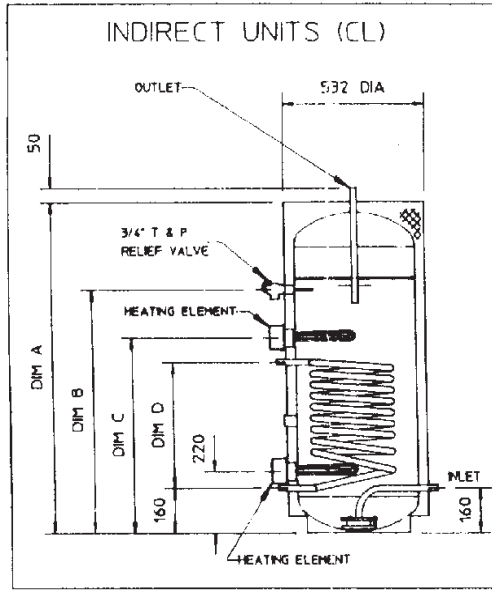
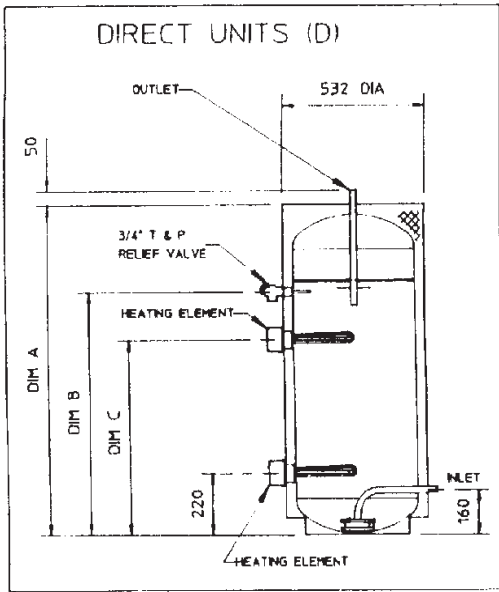
CAUSE	REMEDY
Water supply off blocked Combination Valve not fitted	<ol style="list-style-type: none"> 1. Check and open stop cock 2. Turn off water supply. Remove strainer and clean (see section 8.3) 3. Check and refit as required
Immersion heater not on Immersion heater thermal cut-out has operated programmer set to heating only boiler not working	<ol style="list-style-type: none"> 1. Check and switch on 2. Check. Reset by pushing button. Check thermostat operation. (See Diagram 5) 3. Check. Set to a domestic hot water programme 4. Check boiler operation. If fault suspected consult boiler manufacturer's instructions
Thermal cut-out has operated	<ol style="list-style-type: none"> 5. Check. Reset by pushing button on cut-out. Check operation of cylinder thermostat.
Motorised valve not operating properly	<ol style="list-style-type: none"> 6. Check wiring and/or plumbing connections to motorised valve. (See Diagram 7)
WATER PRESSURE TENDENTLY volume reduced FULLY water Combination Pressure Reducer not working correctly. Expansion Valve seat damaged.	<ol style="list-style-type: none"> 1. Refer to Section 7.4 2. (a) Check pressure from Cold Water Combination Valve. If greater than 3.5 bar replace Pressure Reducing Cartridge. (b) Remove Expansion Valve cartridge. Check condition of seat. If necessary fit new Expansion Valve Cartridge.
Control failure heater will be very hot	<ol style="list-style-type: none"> 1. Switch off power to immersion heater(s) and shut down boiler. DO NOT turn off water supply. When discharge stops check all thermal controls, replace if faulty.

9.3 FAULT FINDING CHART

Note: Disconnect electrical supply before

FAULT	POSSIBLE CAUSE
No hot water flow	<ol style="list-style-type: none"> 1. Mains supply 2. Strainer blocked 3. Cold Water incorrectly
Water from hot taps is cold	<ol style="list-style-type: none"> 1. DIRECT immersion heater switched on 2. DIRECT immersion heater thermal cut-out 3. INDIRECT immersion heater central heating 4. INDIRECT immersion heater 5. INDIRECT immersion heater operated 6. INDIRECT immersion heater connected
Water discharges	<ol style="list-style-type: none"> 1. INTERMITTENT Expansion Valve within unit 2. CONTINUOUS Expansion Valve (a) Cold Water Valve Faulty (b) Expansion Valve damaged
Water discharges from Temp/Pressure Relief Valve	<ol style="list-style-type: none"> 1. Thermal cut-out <p>NOTE: Water</p>

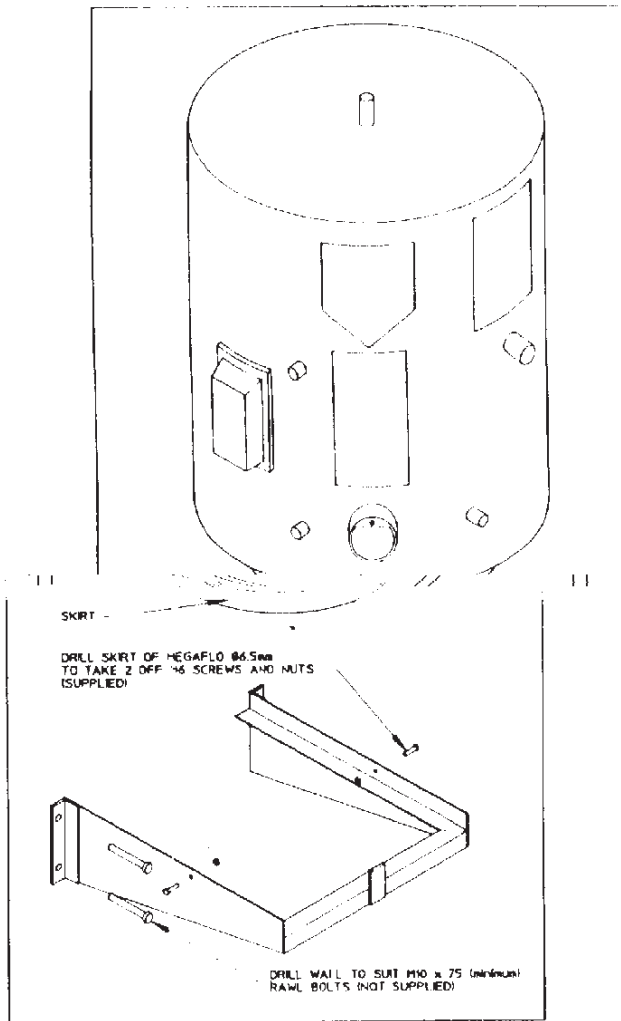
General Dimensions



SIZE	TYPE		UNIT WEIGHT KGS		DIMENSIONS (DIM)				COIL				OFF PEAK BOOST CD MODELS	
	DIRECT (D)	INDIRECT (CL)							CAPACITY LITRES	SURFACE m ²	RATING (kW)	HEAT UP (mins)		MODEL D (kW) HEAT UP (mins)
70	D		24	124	759	505	—	—	—	—	—	—	86	—
70		CL	25	125	759	505	—	300	2.18	0.391	5.2	30	—	—
125	D		29	178	1065	779	—	—	—	—	—	—	144	—
125		CL	31	180	1065	779	—	400	2.60	0.521	11.8	25	—	—
145	D		31	200	1191	880	505	—	—	—	—	—	160	110 mins to heat 104 litres
145		CL	34	203	1191	880	—	450	2.91	0.586	12.5	27	—	—
170	D		36	230	1348	1005	637	—	—	—	—	—	191	108 mins to heat 103 litres
170		CL	39	233	1348	1005	—	550	3.54	0.716	14.5	27	—	—
210	D		42	252	1479	1081	869	—	—	—	—	—	209	85 mins to heat 81 litres
250	D		49	299	1701	1308	1059	—	—	—	—	—	263	92 mins to heat 88 litres
250		CL	54	305	1701	1308	1059	600	3.85	0.782	17.4	34	—	—
300	D		58	358	2015	1559	1320	—	—	—	—	—	292	97 mins to heat 93 litres

megaflo[®]

**Diagram 10: Wall mounting bracket
Models 70,125 & 145**



10.0 Guarantee

10.1 WARNING

Should the factory fitted Temperature and Pressure Relief Valve be tampered with or removed your guarantee will be invalidated. Neither the Distributor or Manufacturer shall be responsible for any consequential damage howsoever caused.

10.2 GUARANTEE TERMS

Heatrae Sadia guarantee the electrical parts, thermal controls and valves for a period of two years from the date of purchase, with the exception of damage due to scaling.

The stainless steel vessel is guaranteed for a period of five years against faulty manufacture or materials provided that :-

- i) It has been installed by a competent installer and as per the instructions contained in the Manual.
- ii) It has not been modified in any way other than by Heatrae Sadia Heating Ltd.
- iii) It has only been used for the storage of potable water.
- iv) It has not been installed in a location liable to be subjected to frost, nor has it been tampered with or been subjected to misuse or neglect.
- v) No factory fitted parts have been removed for unauthorised repair or replacement.

Evidence of purchase and date of supply must be submitted.

This guarantee does not affect your statutory rights.

ENVIRONMENTAL INFORMATION

This product is made from many recyclable materials, therefore at the end of its useful life it should be disposed of at a local authority waste disposal site to ensure the environmental benefits are realised.

HEATRAE SADIA HEATING LTD.
HURRICANE WAY
NORWICH
NR6 6EA

Telephone : (01603) 424144

FAX : (01603) 417606