



KAMINA CHEF

WOOD and COAL BURNING

CENTRAL HEATING COOKER



TECHNICAL SPECIFICATIONS

OUTPUT

	NOMINAL B.T.U./Hr.	MAXIMUM B.T.U./Hr.
Total output with coal	72,000	84,000
Heat to water	61,200	71,400
Square Metres (sq ft) of heating surface	32 (340)	
Total output with wood (20% moisture)	64,000	76,000
Heat to water	54,400	64,600

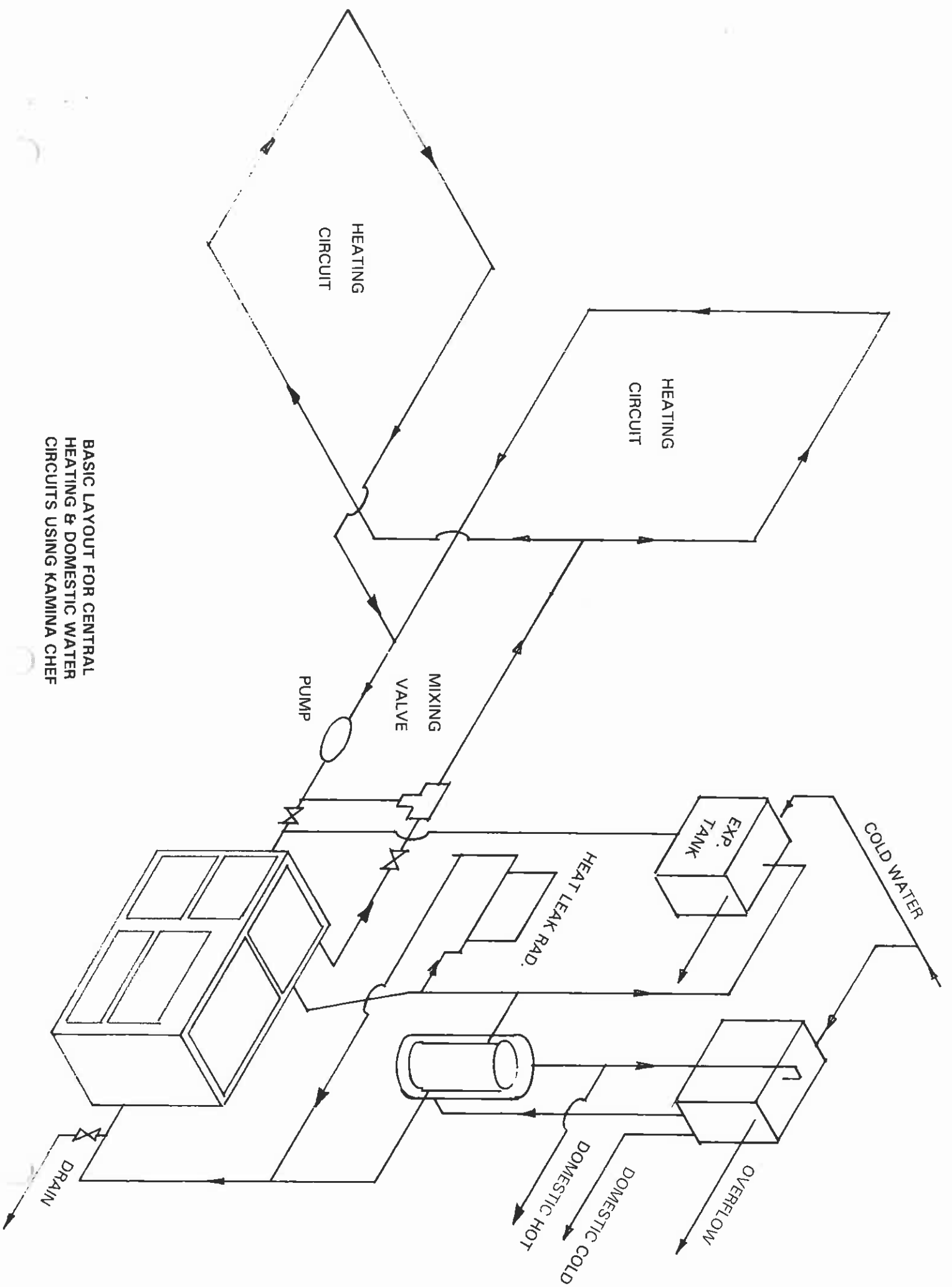
Radiant heat on average 15% of the output.

MEASUREMENTS

	LENGTH		DEPTH		HEIGHT	
	mm	inches	mm	inches	mm	inches
Overall Size	1040	41¼	660	26	890	35
Fire Box	260	10¼	535	21	230	9
Oven	440	17¼	425	16¾	370	14½
Boiler	340	13½	585	23	545	21½
Hob	970	38¼	380	15		

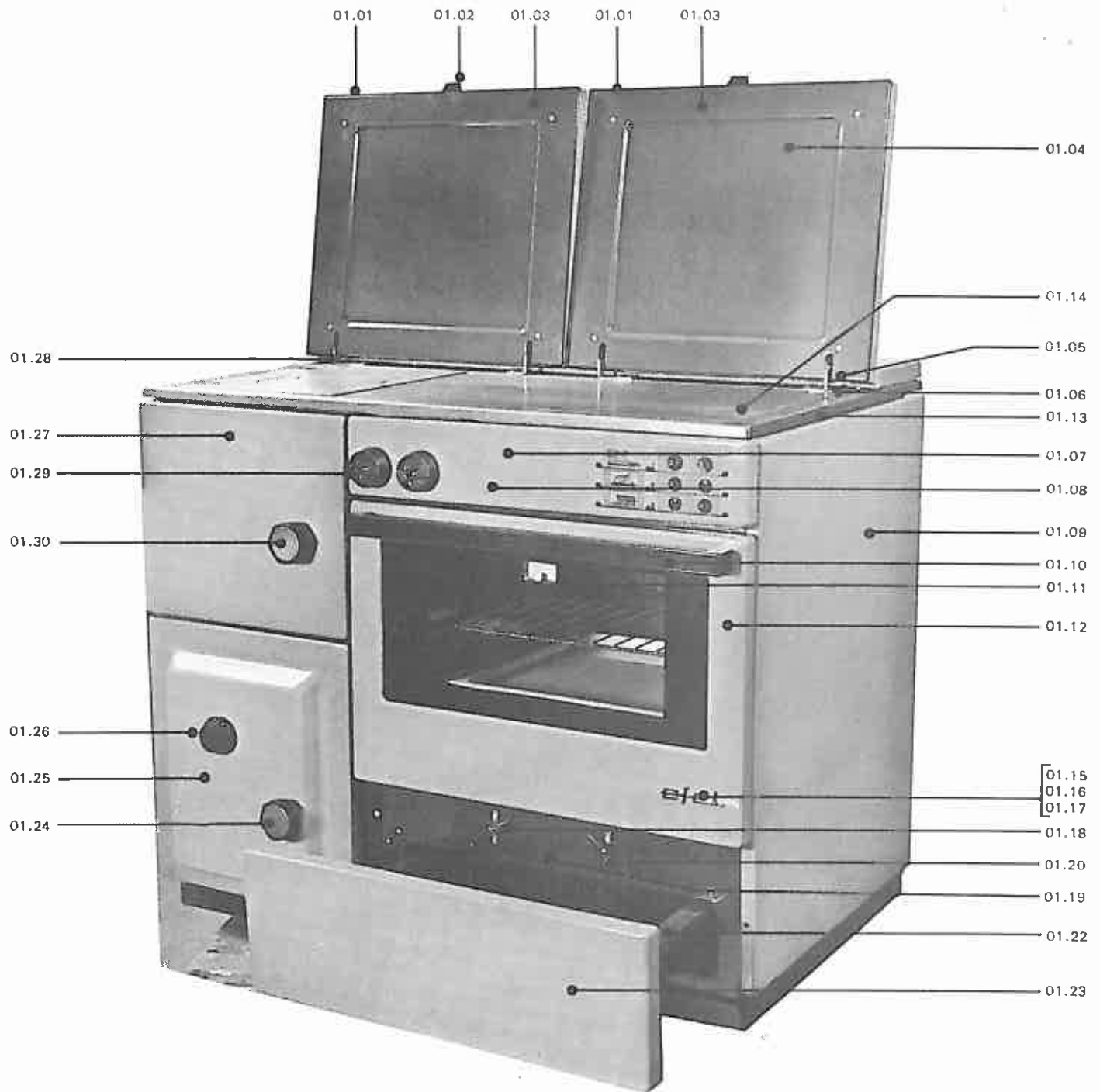
Flue Diameter	150 mm O/D 6" O/D	
Flue Outlets	Top or Rear	
Floor Level to Underside Rear Flue 535 mm	21"	
Flow Pipes	2 x 1" B.S.P.	} Early models fitted with flow 1 x 1" B.S.P. and return 1 x 1" B.S.P.
Return Pipes	2 x 1" B.S.P.	
Water Content of Boiler	22 litres	4½ gallons
Maximum Water Pressure	3 bar	42 lbs/sq. inch
Chimney Draught	Nominal	1.5 mm W.G.
	Maximum	2.0 mm W.G.
	Minimum	0.5 mm W.G.
Weight	260 KG	570 lbs
Air Flap Setting with boiler cold	Control knob on position O	Air flap opening 7mm

WHILE EVERY EFFORT HAS BEEN TAKEN TO ENSURE ACCURACY, DIMENSIONS AND PERFORMANCE SPECIFICATIONS ARE APPROXIMATE. THE COMPANY RESERVE THE RIGHT TO INTRODUCE CHANGES OF CONSTRUCTION AND PERFORMANCE WITHOUT NOTICE.



BASIC LAYOUT FOR CENTRAL HEATING & DOMESTIC WATER CIRCUITS USING KAMMINA CHEF

SPARE PARTS LIST FOR THE KAMINA CHEF COOKER 079.40



DENOMINATION	REFERENCE	DENOMINATION	REFERENCE
COVERS	01.01	BLACK EFEL TRADE MARK	01.16
HANDLES FOR 01.01	01.02	RIVETS FOR 01.15	01.17
PROTECTORS FOR 01.01	01.03	LATCH FOR 01.19	01.18
INSULATION FOR 01.01	01.04	SWEEPING COVER (SOOT TRAP)	01.19
SHOULDERED SCREWS FOR 01.06	01.05	SHOULDERED SCREW FOR 01.18	01.20
HINGES FOR RIGHT SIDE COVER	01.06	WARMING DRAWER - CONTAINER	01.22
UPPER FRONT PANEL	01.07	WARMING DRAWER - FRONT PANEL	01.23
INSULATION FOR 01.07	01.08	KNOB FOR 01.25	01.24
LEFT OR RIGHT SIDE PANEL	01.09	ASH BOX DOOR - PANEL	01.25
HANDLE FOR 01.12	01.10	THERMOSTAT HANDLE	01.26
THERMOMETER	01.11	(FIRE-BOX) - DOOR PANEL	01.27
OVEN DOOR	01.12	HINGES FOR LEFT SIDE COVER	01.28
SURROUNDING FOR CAST IRON PLATES	01.13	REGULATION KNOBS FOR SHUTTERS	01.29
RIGHT CAST IRON PLATE	01.14	KNOB FOR 01.27	01.30
SPIRE FOR 01.16	01.15		

OPERATING PRINCIPLE

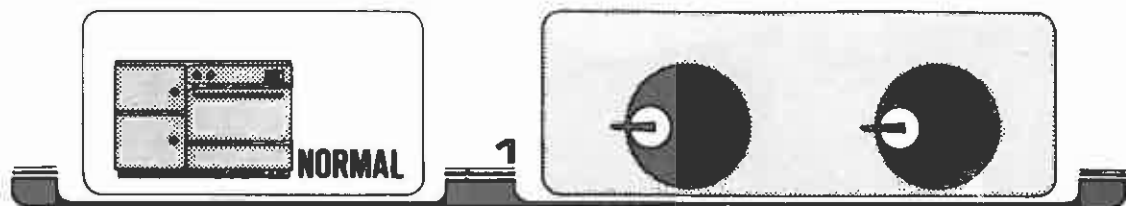
The thermostat, situated in the top of the boiler, automatically controls the air flap located in the ash box door and seeks to control a constant, predetermined central heating water temperature. If the temperature of the boiler water falls, the thermostat opens the air flap by a pre-set amount, which boosts the fire, and similarly as the boiler water temperature rises the air flap closes, thereby maintaining a reasonable constant water temperature.

The thermostat fitted on the ashpan door regulates the amount of air into the fire box chamber and governs the appliance output. The control knob of the thermostat is numbered from 0 - 8 which corresponds to water temperature between 35° - 90°C.

Secondary air is regulated by a spin control knob situated on the inside of the fire box knob. When using coal the spin control must be turned to the closed position.

The flue draught stabilised box should be set with a water gauge, to ensure that the draught at the top of the cooker does not exceed 2.0 mm W.G. and usually will not require any further adjustment. It must be appreciated that a flue draught stabiliser box will reduce the draught of a flue system to the required limit, it will not increase the draught of a badly designed flue system.

In conjunction with the thermostat control knob, the two baffle control knobs, located on the front fascia panel, regulates the Kamina CHEF to meet the user's requirements.



In this position for easy lighting and normal use.



This position to obtain a high temperature in the oven.



THIS POSITION FOR MAXIMUM OUTPUT OF HOT WATER (HIGH FIRE).

The position shown in illustration 3 **MUST NOT** be used with a low to medium fire as it increases the length of the flue way with the probability that the flue gas temperature will be at or below the dew point causing tar to be formed in the flue way and chimney. This position should only be used with a brisk fire and when maximum output is required quickly.

The oven thermometer gives a general indication of the oven temperature, although it must be appreciated that there will be temperature variations in different parts of the oven. Generally, the left hand side and the top shelf will be the hottest parts of the oven. It is impossible to give the precise temperature variation throughout the oven but with intelligent use of the thermostat and oven baffle controls, satisfactory oven temperature can be maintained to meet the user's requirements.

FUELS

COAL DO NOT use ordinary household (bituminous coal). Use of this type of coal may lead to minor explosions in the appliance and/or the flue system.

In general smokeless fuels designed for open fires are perfectly suitable, **RECOMMENDED** coals being the hard shiny coal such as **WELSH NUTS** or **ANTHRACITE**, **COALITE NUTS** or **PHURNICITE**, **HOMEFIRE**, etc. The size should be **20/30** or **30/50**. Remember when burning coal or smokeless fuels, the ashes must be riddled more frequently to allow a good air flow to the fire, as smokeless fuel requires much more air to burn than wood. The coal must produce a long flame for satisfactory cooking results and you may have to experiment with several types before you obtain satisfactory performance.

WOOD The wood **MUST** be **WELL SEASONED** and **DRY** with a moisture content of **NO MORE** than 20%.

Well seasoned wood has been cut at least 1 year and has been stacked in such a way as to permit a good air circulation through the pile.

Remember that surface water is still moisture and the wood should be dried before use in order to obtain the maximum amount of heat from the fuel.

Damp and wet wood quickly forms tar which necessitates frequent cleaning of the flue passages and chimney system. **AVOID** burning oak bark as it forms tar quicker than any wood.

It is strongly recommended to burn coal once a week to remove the tar on the boiler surfaces.

An indication of the boiler output and fuel consumption is listed below:

COAL	NORMAL	17.8 KW	(61,200 BTU's) for 4 hrs. consumption 10 Kg.
ANTHRACITE 20 x 30 30 x 50	MAXIMUM	20.8 KW	(71,400 BTU's) for 1 to 2 hrs. consumption 3-6 Kg.
	SLOW	8.9 KW	(30,600 BTU's) for 8 hrs. consumption 10 Kg.
WOOD 20% MOISTURE USING LOGS OF MAX. SIZE 500 mm (20") length	NORMAL	15.8 KW	(54,400 BTU's) for 4 hrs. consumption 24 Kg.
	MAXIMUM	18.8 KW	(64,600 BTU's) for 1-2 hrs. consumption 7-14 Kg.
	SLOW	7.6 KW	(27,200 BTU's) for 8 hrs. consumption 24 Kg.

COOKING

Do use thick based utensils with good lids and flat bottoms for cooking on the hob. Experiment will show the best position where to boil and where to simmer.

Before using the oven, do establish a good fire so that re-fuelling is kept to a minimum during the use of the oven. Each time re-fuelling takes place, there is a reduction in heat from the fire with a consequential variation in oven temperature.

Do remember that **ANTICIPATION** is the key to success in the use of the oven as the thermostat will not give an immediate response to oven temperature.

Set the thermostat control knob at about the mid-position and adjust the baffle control knob to give the required oven temperature. If an adequate heat leak has not been provided on the gravity side of the central heating system, it may be necessary to switch on the circulating pump in order to achieve the required oven temperature.

The oven temperature gauge is indicative, and if using the left hand side of the oven, remember to rotate the oven dish to prevent over-cooking and possible burning on one side.

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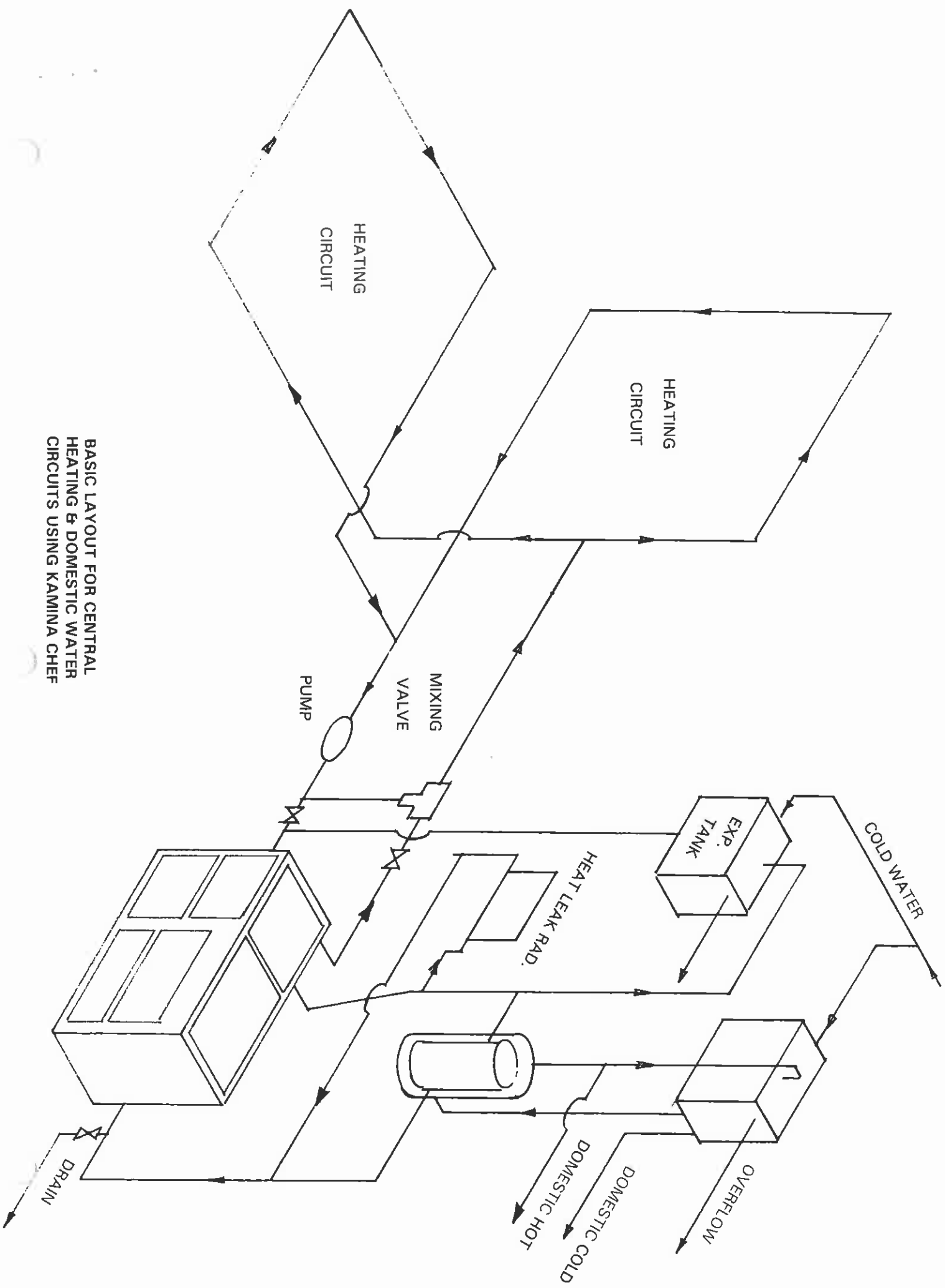
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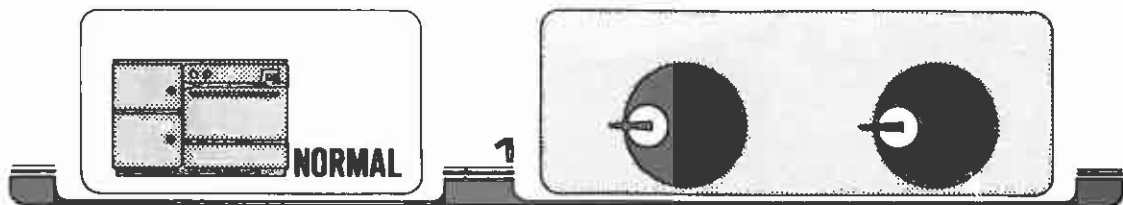
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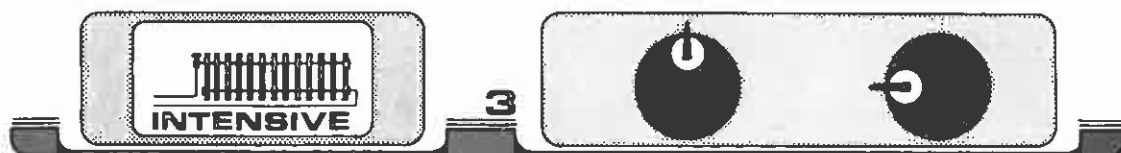
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