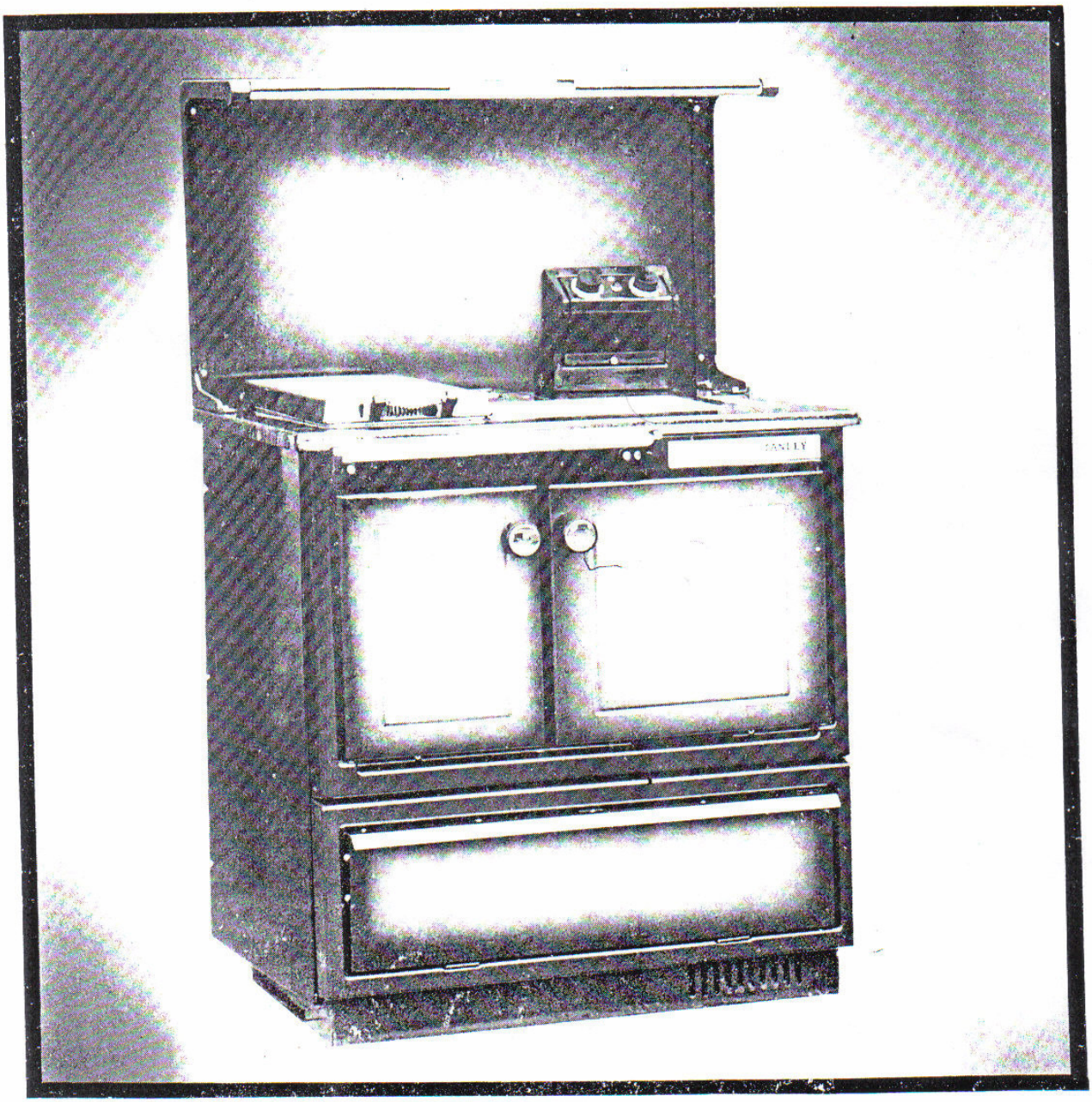
Oil-Fired
STANLEY
De-Luxe 90



To ensure safety, satisfaction and maximum service, this quality Cooker should be installed by a trained and competent installer. The provision of a Central Heating facility, requires that the hot water systems involved, conform fully to good plumbing practice and established standards.

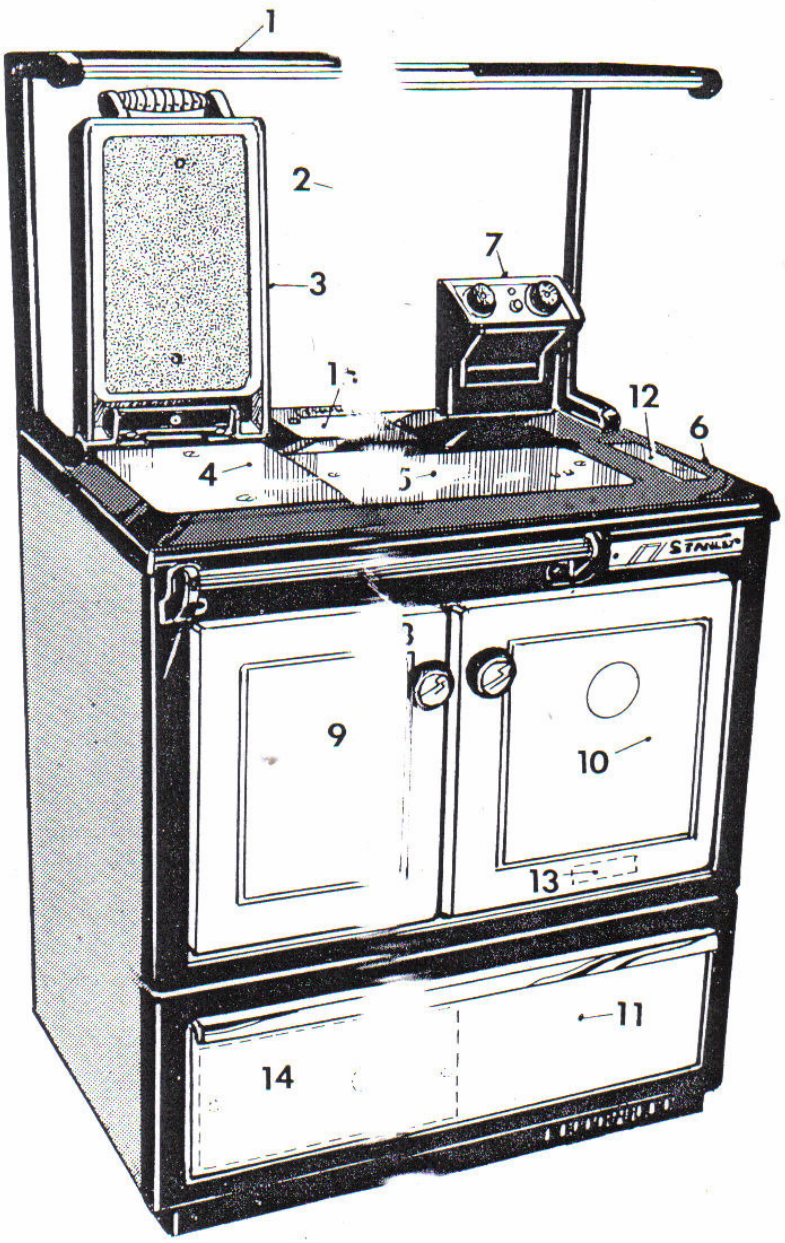
INSTALLATION AND OPERATING INSTRUCTIONS

Eckerty People Printing Ltd. : 656 2102

INTRODUCTION

Congratulations on purch... his fine Irish made Oil-fired Central Heating Cooker. It is built to our usual high standards and it will g... every satisfaction in use.

Please read the following i... tion before operating this excellent product.



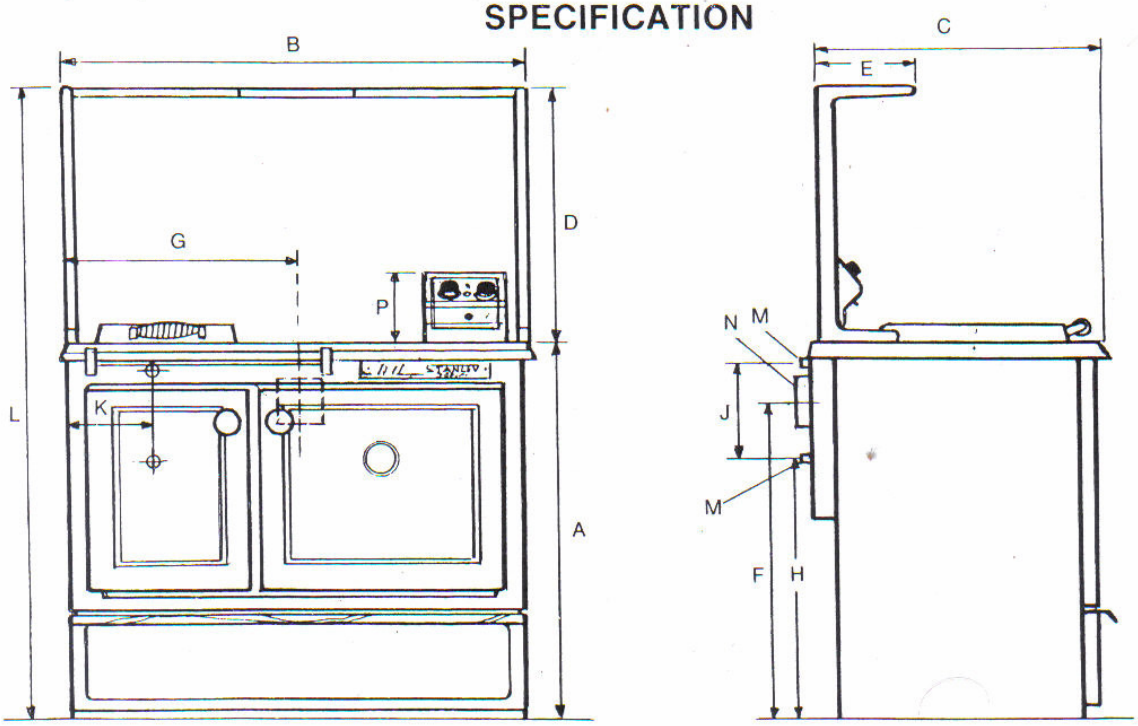
1. Plate Rack (to order)
2. Splash Back (to order)
3. Hot Plate Cover
4. Hot Plate
5. Simmer Plate
6. Hob
7. Thermostat Control Panel
8. Towel Rail
9. Fire Door
10. Oven Door
11. Warming Drawer
12. Side Flue Cleaning Plate
13. Front Cleaning Door
14. Burner Cover Plate
15. Hob Blanking-off Plate

guaranteed irish

Boiler capacity: 5.6 Litres = 1.25 Gallons
Cooker weight: 338 kgs. = 743 lbs.

The Manufacturers reserve the right to ... erations to design, materials or construction for manufacturing or other reasons sub... to publication.

SPECIFICATION

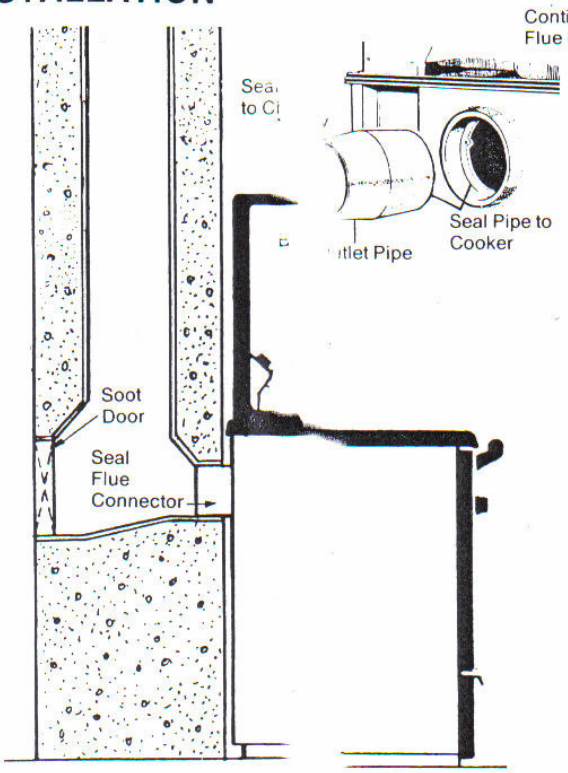


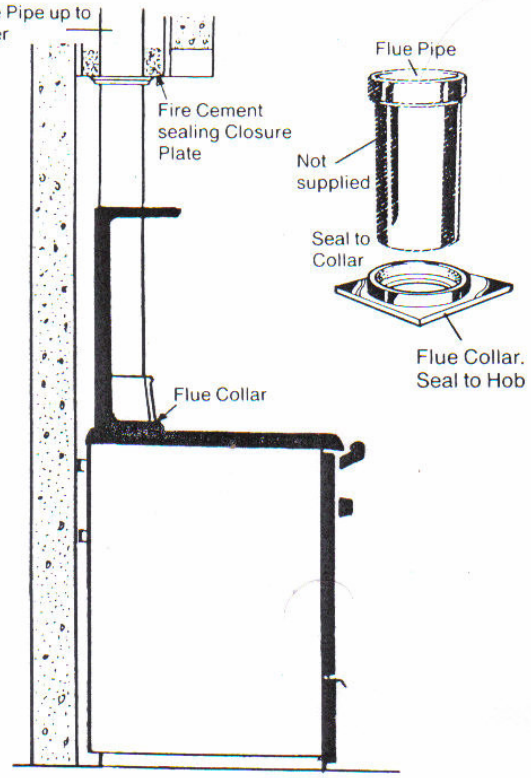
DIMENSIONS	A	B	C	D	E	F	G	H	J	K	L	M	N	P
METRIC (MILLIMETRES)	920	889	568	505	283	734	442	630	230	50	1425	1" BSP	127	205
IMPERIAL (INCHES)	36¼	35	22⅜	20	11⅛	28⅞	17⅜	24¾	8⅞	2	56⅛	1" BSP	5"	8⅛

FEATURE	METRIC	IMPERIAL
HOT PLATE	368 x 252	14½" x 10"
SIMMER PLATE	390 x 246	15⅜" x 9¾"
OVEN	400W x 324H x 396D	15¾"W x 12¾"H x 15⅜"D
WARMING OVEN	390W x 290H x 440D	15⅜"W x 11⅜"H x 17¼"D

Cooker Output:	At 1.8 Kg = 2.08 Litres Kerosene/Hour
Gross Output:	20 KW = 69,000 BTUs/Hour
Net To Water:	13.7KW = 47,000 BTUs/Hour (Max.)
Jet:	60 Degree Hollow Pattern (0.55 U.S. gallons)
Oil Pressure:	8.16 Atmospheres = (120 p.s.i.)
Radiation Surface:	Heating Surface only 22.2 sq. metres = 240 sq. ft.
	Heating and Domestic Hot Water 19.4 sq. metres = 210 sq. ft.

INSTALLATION





PRE-INSTALLATION CHE

Before installing your new C , check that the chimney is clean and clear of uctions. Cracked brickwork and leaking joints s d be made good. The chimney should have a cr ectional area of at least 176 sq. cm. or an inner dia r of 15 to 23 cm. A similar direct air inlet is require e room to support combustion.

Where flue piping passes thro losure plate with sliding door, ensure that the pi ntinues up and is ultimately connected to the flue r and well sealed with fire cement.

Do not connect to a chim serving another appliance. Always ensure that connection is to a chimney of the same size — ne connect to one of smaller dimensions. Chimneys lly constructed of single skin pipe are not reco nded under any circumstances. Due to their i ity to retain heat such chimneys will inevitably g e to the formation of condensation.

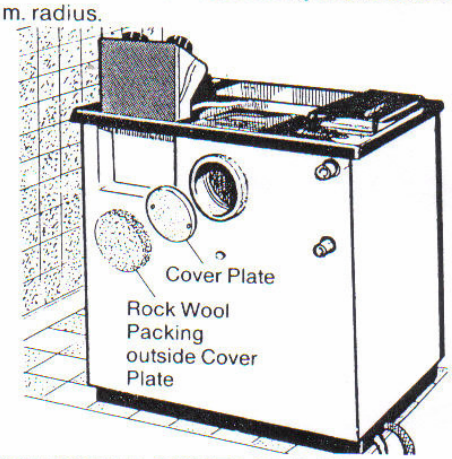
COOKER CLEARANCE

The cooker should not be insta at zero clearance to combustible materials. The s should have a minimum clearance of at 7.5 cm. from combustible materials un otherwise fully insulated.

When the Cooker is backed against a wall of combustible material it sh have adequate protection in the form of no bestos millboard covered with sheet steel.

CHIMNEY HEIGHT

The flue must be high enough (more than 4.6 m. in any case) to allow the flue gases to vent into clean air, away from the turbulence that may be caused by roof structures, other chimney stacks, etc. The venting position should be 1.0 m. above any obstruction within a 7.6 m. radius.



THERMOSTAT CONTROL PANEL

When you unpack the cooker the control panel will be fitted into a socket in the back of the cooker. Swing the control panel out of this recess and place it on the hob. Fix it in position with the two screws and gasket provided.

Be careful not to damage any of the electrical connections and capillary tubes when fitting on the control panel.

Where the standard masonry chimney is not available, a proprietory type of twin wall, fully insulated pipe may be used. As already stated, the minimum inner diameter must not be less than 15 cm. and the pipe must terminate at a point not lower than the main ridge or adjacent outside obstructions. With such installations, access to the chimney must be provided for cleaning purposes.

FLUE PIPES

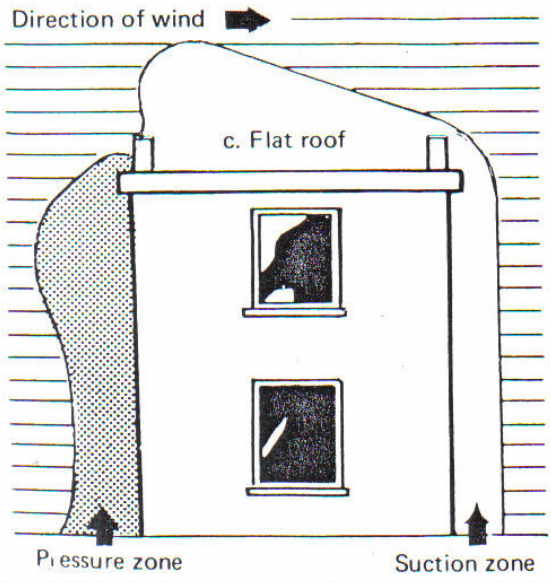
Square bends and long horizontal runs of flue piping must be avoided. A Back outlet Pipe is provided with the cooker. A Top outlet Pipe is available. ALL FLUE CONNECTIONS MUST BE THOROUGHLY SEALED. Blocked chimneys are dangerous, use only recommended fuels, keep chimneys and flue ways clear; read the operating instructions.

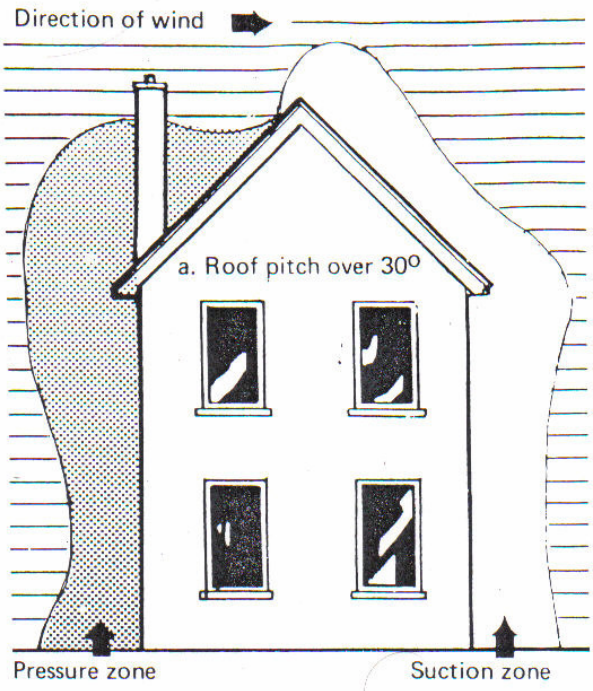
CHIMNEY CLEANING

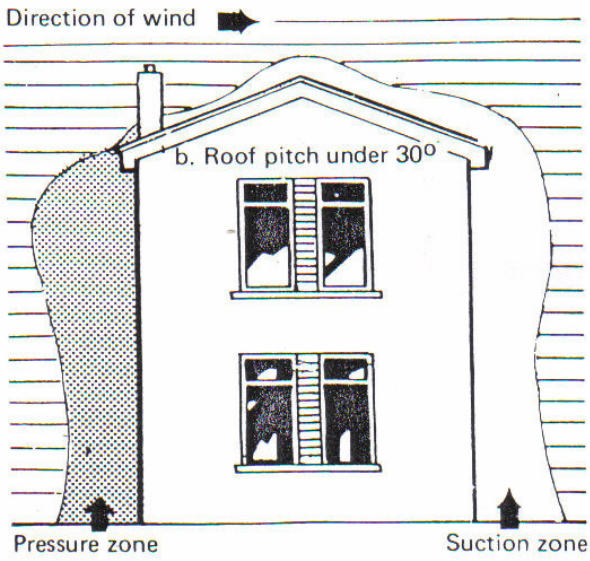
Whichever type of flue is chosen, there must be cleaning access to the whole flue system. The flue of the chimney will need to be cleaned regularly. How often will depend a lot on how your Cooker is run, but, to start with, make a point of inspecting the flue system every six months. This period may well be extended as time goes by if there is little sign of deposits.

HEARTH CONSTRUCTION

When a properly constructed hearth is not available we recommend that the Cooker be placed on a slab or foamed concrete 4 cm or a slab of other insulating material. This hearth must extend at least 45 cm to the front and 30 cm each side.







DRAUGHT REQUIREMENTS

When a draught recorded is over .06 inches W.G. a draught stabiliser should be fitted on the outside wall of the chimney or fit a cowl to the chimney top.

Remember, a proper flue is necessary for the efficient operation of your Oil Cooker to provide a steady draught of between .04 and .06 inches W.G.

The cooker is fitted with a pressure Jet burner and will not be affected by down-draught conditions.

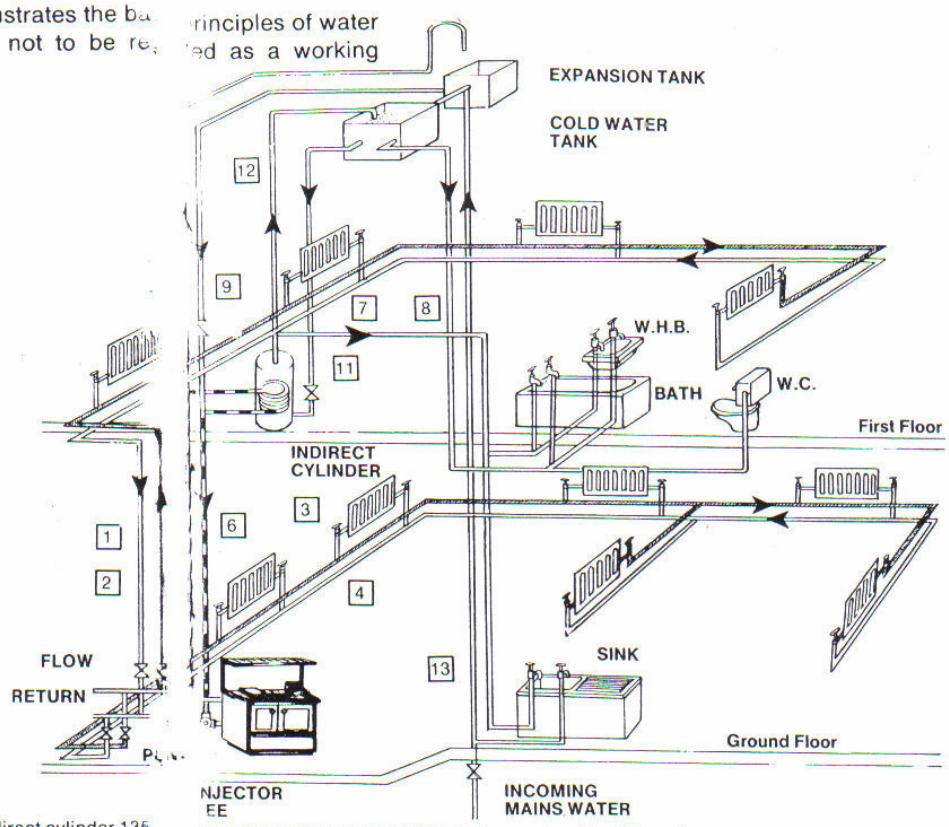
PLUMBING

RADIATOR HEATING CIRCUITS	FIRST FLOOR
	GROUND FLOOR
CYLINDER HEATING CIRCUIT	FIRST FLOOR

FUNCTION		PIPE	FUNCTION
PUMPED	FLOW TO RADIATORS	7	HOT WATER FLOW
PUMPED	RETURN EX "	8	COLD WATER (EX TANK)
PUMPED	FLOW TO RADIATORS	9	COLD FEED-HEAT SYSTEM
PUMPED	RETURN EX "	10	OPEN VENT-HEAT SYSTEM
GRAVITY	FLOW TO CYLINDER	11	COLD FEED TO CYLINDER
GRAVITY	RETURN EX "	12	HOT WATER VENT
		13	MAINS WATER
		T	THERMOSTAT
		⧖	ISOLATING VALVES

This diagram illustrates the ba... systems and is not to be re... drawing.

...rinciples of water ...ed as a working



Recommended indirect cylinder 135 ... each in length. Cylinder and pipe wo... ...res, depending on domestic requirements with a 2.5 cm flow and return pipes not exceeding 7.8m ...ld be lagged to minimise heat losses.

REGULATIONS

The Plumbing must be in acco... ...e with all relevant regulations and practices. It ... ...include a gravity circuit with expansion pipe, op... ...the atmosphere. The central heating will norma... ...pump-driven as with other types of boile... The system is thermostatically controlled by ... ...it mounted on the Cooker Hob.

BOILER OUTPUT

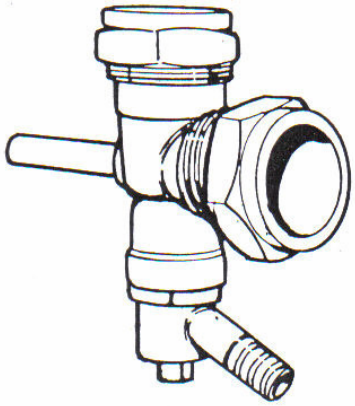
High output cannot be maintai... ...less fuel is being burned at a rate of 2.08 Litres p... ...r of Kerosene.

GRAVITY CIRCUIT

The gravity circuit consists of the domestic hot water tank of 135 — 180 litres indirect cylinder, fixed in an upright position, recommended for hot water storage and it should be connected to the boiler by 25 mm diameter flow and return piping. The pipes should not exceed 7.8 m. each in length and anything in excess of 4.6 m. must be fully lagged. The shorter the run of pipe work the more effective the water heating efficiency and to this end, the cylinder should be fully lagged. For safety's sake do not have any valves on this circuit.

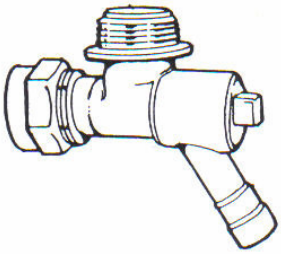
INJECTOR TEE

Where the gravity and central heating circuits join together to return to the Cooker we recommend the use of an injector tee connection, situated as close to the unit as possible. This type of tee encourages a stable flow of hot water through both circuits and helps to prevent priority being given to the stronger flow, which is most commonly the pumped central heating circuit. This way, there will be no shortage of hot water to the taps when the heating is on.



WATER CIRCUIT TEMPERATURE

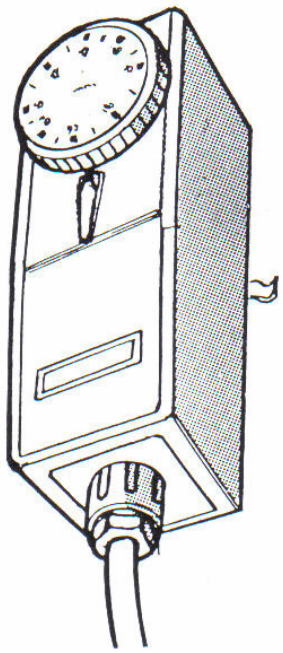
The return water temperature should be maintained at not less than 40°C. so as to avoid condensation on the boiler and return piping. Fitting a pipe thermostat to the flow pipe of the gravity circuit and wiring it into the pump control will ensure rapid circulation of the hot water to avoid premature burner shut down being activated by the Cooker thermostat.



PIPE THERMOSTAT

The fitting of a pipe thermostat to the flow pipe is absolutely essential in order to activate the water circulation pump when the water reaches the selected temperature.

When the water temperature falls below the selected temperature the pipe thermostat will cut off the water circulation pump in order to allow the boiler to recover. Ensure that the pipe thermostat is fitted on the flow pipe and as close as possible to the cooker. The recommended setting should be between 45°C. and 55°C.

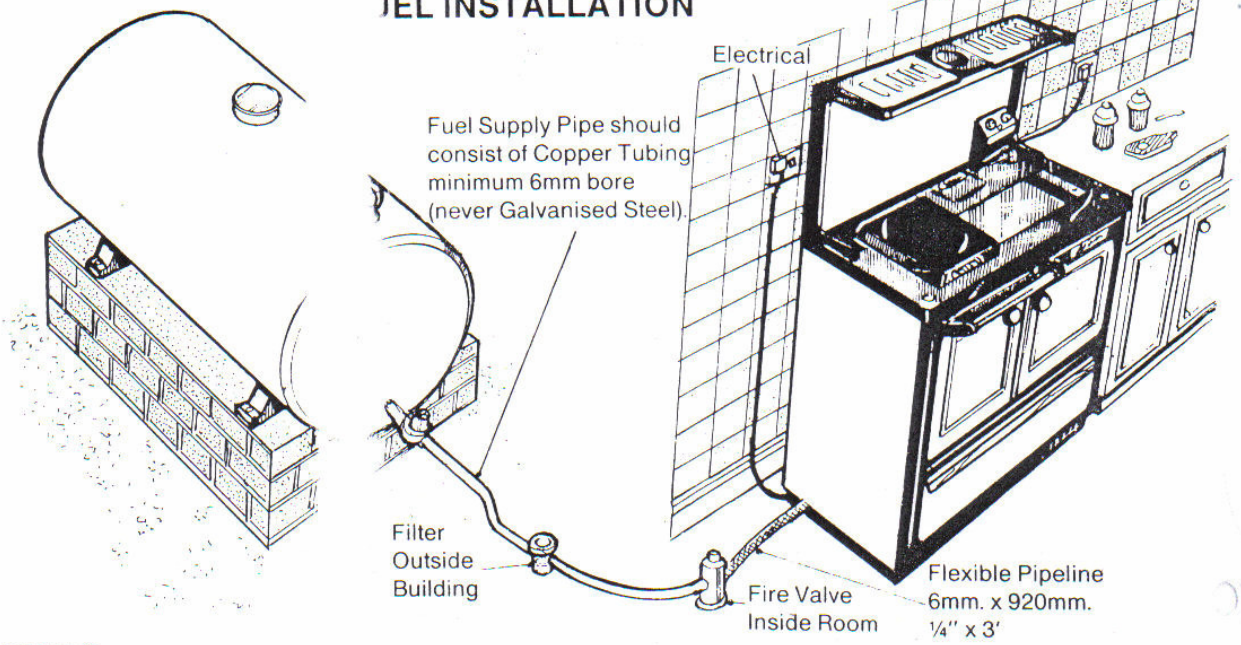


FUEL CALORIFIC VALUES

Kerosene 28 sec. —

Calorific Value: 8354 Calories = 33,150 BTUs per Litre/Hour.

JEL INSTALLATION



FUELS

THE RECOMMENDED FUE
BURNER IS KEROSENE 2
FUEL OIL.

Gas Oil 35 second viscosity is
to high servicing requiremer
coagulation in severe cold w
burner is not suitable for use w
to premature blocking of the j
in the fuel.
If possible, purchase fuel fro
time.

R THE COOKER
ND VISCOSITY

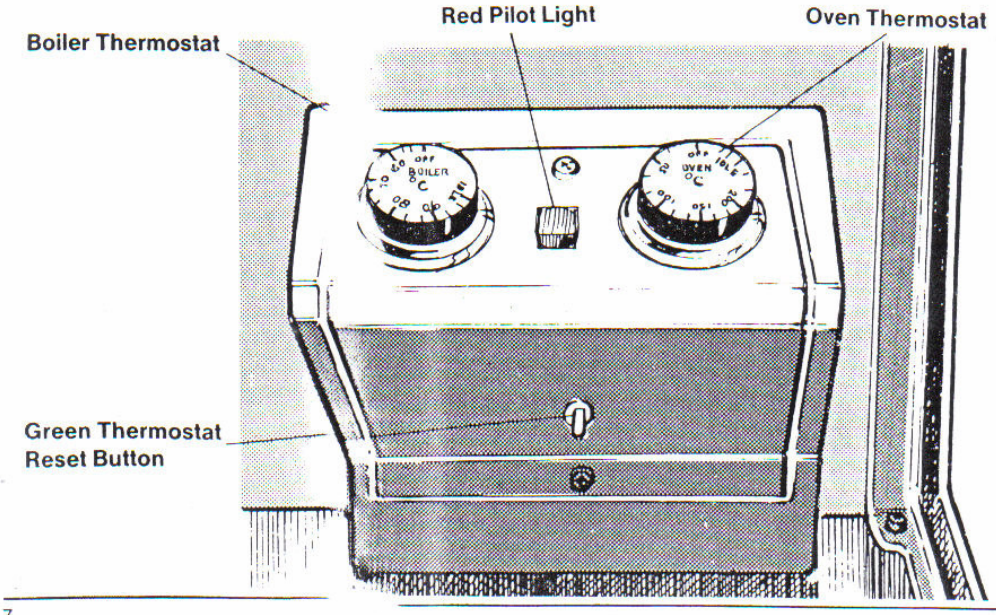
commended due
the possibility of
conditions. The
tor diesel oil due
sed by inhibitants

ame source each

FUEL SUPPLY LINE

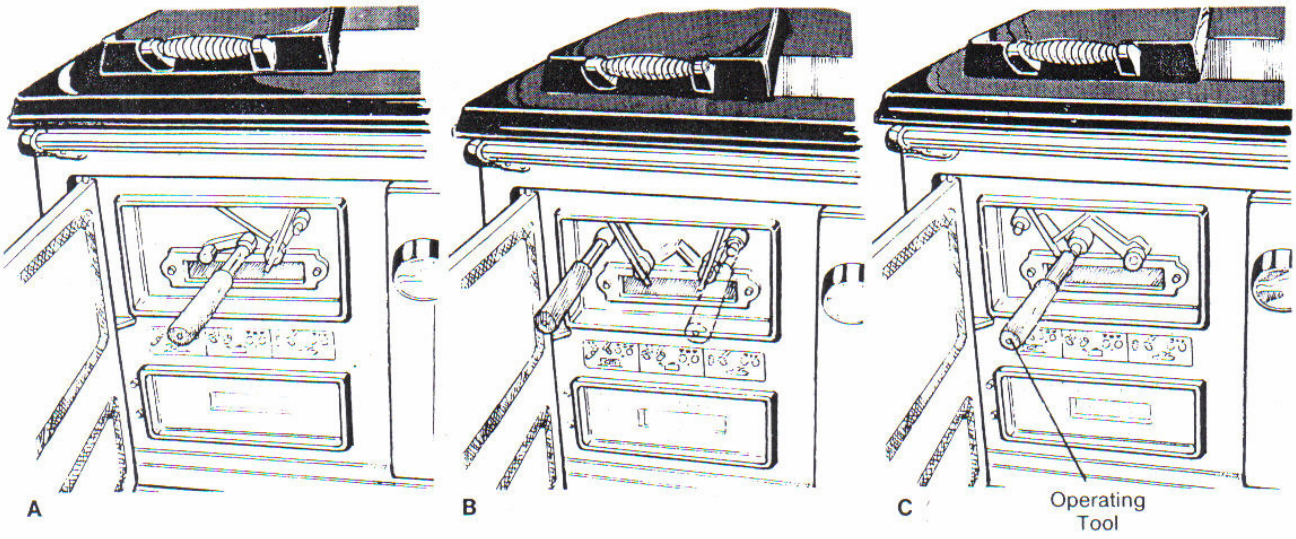
Pipes should consist of
tube (NEVER
galvanised steel), the final connection to the burner pump inlet port being made with the length of flexible pipe supplied with the burner. Joints should be made with compression fittings, not by soldering.
When gravity feed is used (the most common), the maximum head should not exceed 4 m. (equivalent to a pressure of 35 kPa).
Note that the pump is factory set for single pipe installation.

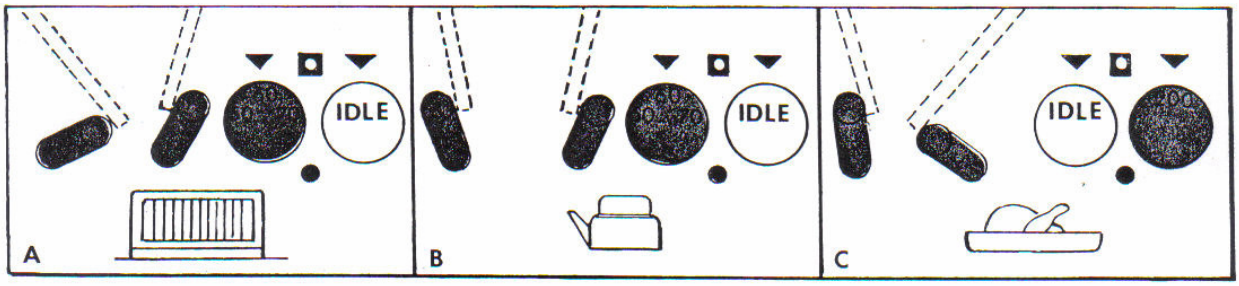
IT IS ABSOLUTELY ESSENTIAL THAT A SUITABLE FIRE SAFETY VALVE BE FITTED ON THE OIL SUPPLY LINE BETWEEN THE COOKER AND OIL FILTER, ADJACENT TO THE COOKER.



OPERATION

1. Ensure that the control panel thermostats are in the "off" position.
2. Switch on the mains electric supply.
3. Turn on the oil supply.
4. Select the heating mode required by opening the fire door and moving the boiler baffle levers with the tool provided, to the required position.





Setting A. High Boiler Output with Hot Plate and Oven.

1. Move the Left-hand Control Lever to the right.
2. Set the **Oven** thermostat to Idle.
3. Set the Boiler thermostat to required temperature.

Setting B. High Hotplate Output, with Boiler and Oven.

1. Move Left-hand Control Lever to the left and move Right-hand Control Lever to the right.
2. Set the **Oven** thermostat to Idle.
3. Set the Boiler thermostat as required.

Setting C. High Oven Output with Hot Plate and Low Boiler Output.

1. Move Right-hand Control Lever to the left.
2. Set the **Boiler** thermostat to Idle.
3. Set the Oven thermostat to the required cooking temperature.

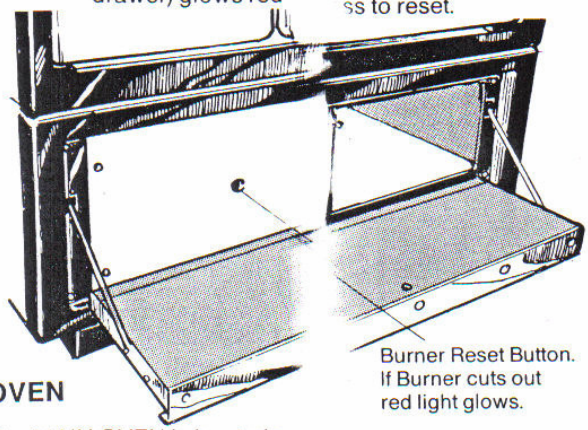
Pilot Light. Red Pilot Light will got out when oven reaches temperature selected.

Reset Button. Green thermostat reset button will pop out if thermostat settings are exceeded.
To reset — press button **inwards.**

To switch off. Turn **both** thermostats to off.

BURNER DOES NOT IGI

Check (a) that electricity is sv. d on;
Check (b) that oil supply valv. en;
Check (c) that the green the tat reset button is pressed in;
Check (d) that the **burner** res. ton is pressed in. If burner reset button ted inside warming drawer) glows red ss to reset.



Burner Reset Button. If Burner cuts out red light glows.

OVEN

The MAIN OVEN is heated on ur faces and it will cook food evenly when bakin oasting on Setting C. The warming compartmen eated on top face only, and it is ideal for heating s and keeping food ready for serving.

CENTRAL HEATING

The boiler output is determine the position of the boiler baffles as follows:
Setting A: Max output 13.7KW 0 BTUs.
Setting B: Max output 7.9KW 0 BTUs.
Min. output 4.4KW 0 BTUs.
Setting C: Max. output 3.7KW 00 BTUs.
Min. output 2.3KW 0 BTUs.
(The above may vary slightly d ding on individual installation conditions).
The boiler therefore will opera s maximum output at Setting A of the controls, w thermostat turned up to 90°C. A range of output n the boiler may be obtained to suit individual re ments by adjusting the thermostat between 50°C 90°C.

SUMMER SETTING

For Summer use and lower b utput Use Setting C. When using the oven in th sition turn the oven thermostat to the required tem ture.

HOT PLATE

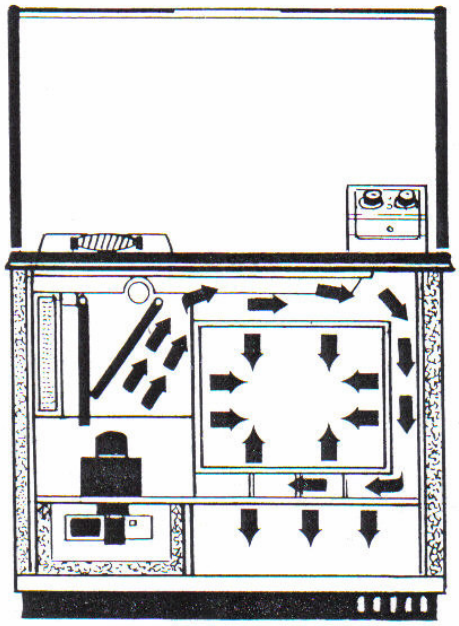
The hot plate is machine grou r maximum heating efficiency and it is temperatu aded, the left-hand side over the burner being the st at settings A and B and the right-hand side is ble for simmering. For maximum hotplate tempe use Setting B.

EXTERNAL AUTOMATI MESWITCH

The cooker may be con d to an external automatic timeswitch which ontrol the light up and shut down operation per the cooker.

ROOM THERMOSTAT

The Cooker may be connected to a room thermostat in order to maintain an overall even temperature.

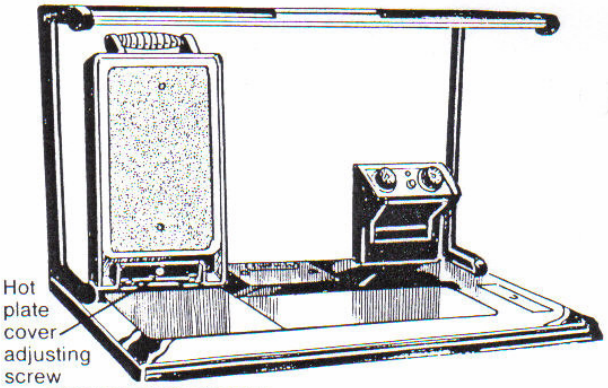


COOKING UTENSILS

For best cooking results and economy of operation use heavy based, flat bottomed utensils.

HOT PLATE INSULATING COVER

The insulating cover retains most of the heat that would otherwise be radiated into the kitchen. It also retains the heat in the hotplate so that rapid heating of cooking utensils will occur when it is lifted for cooking purposes.



Hot plate cover adjusting screw

CONDENSATION

If the Cooker is run for extended periods on the low settings the unit can cool down to an extent that vapour in the flue gases may condense.
This will make the inside of the flueways damp, creating a sooty deposit which will reduce the efficiency of the appliance.
It is best to run the cooker occasionally at the higher settings in order to prevent the formation of condensation.

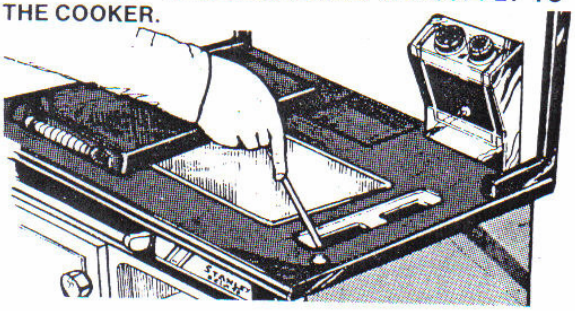
SERVICING

Provided that the Cooker has been operated normally and that the correct grade of oil has been used it will be found that the burner and cooker flueways will not need servicing until approximately every six to twelve months.

We recommend that the Cooker and Burner be serviced by an authorised STANLEY service agent. Your STANLEY distributor will let you have the name of your local service agent.

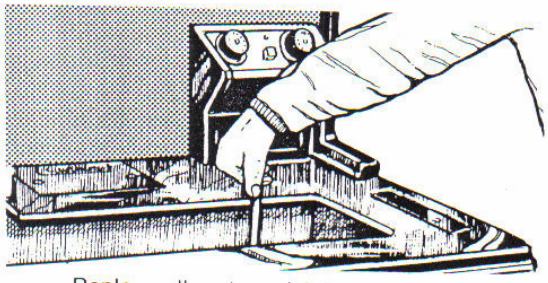
TO SERVICE THE COOKER, THE FOLLOWING PROCEDURE SHOULD BE ADOPTED.

WARNING!
SWITCH OFF ELECTRICAL AND OIL SUPPLY TO THE COOKER.

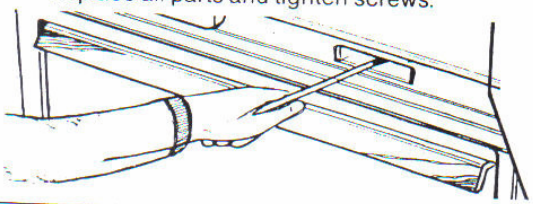


FLUE CLEANING

1. Remove the 3 retaining screws from the Hot Plate (No. 4) and Simmer Plate (No. 5) and also the screw of the simmer cleaning plate (No. 12). Remove hotplate and cleaning panels. Remove the front cleaning door (No. 13).
2. All deposits from the top of the oven may be brushed down the right-hand side of the oven. Deposits which have accumulated on the right-hand side of the oven should also be brushed downwards.
3. To remove these deposits thoroughly, clean out the residue from the side flue and base plate through the front cleaning door opening.
4. **Ensure that all plates and cleaning panels are thoroughly re-sealed with fresh fire cement when being refitted.**



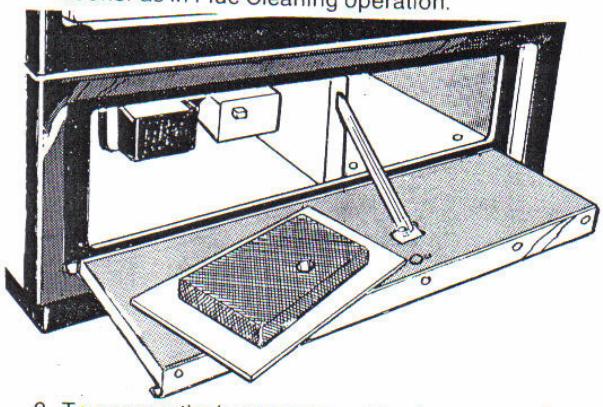
Replace all parts and tighten screws.



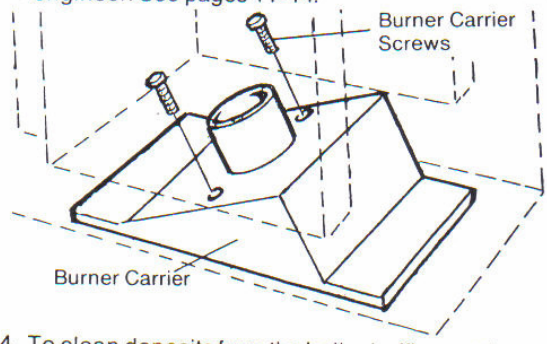
BURNER SERVICING

WARNING — SWITCH OFF ELECTRICAL AND OIL SUPPLY TO THE COOKER.

1. Remove the 3 Screws and Hot Plates from the cooker as in Flue Cleaning operation.

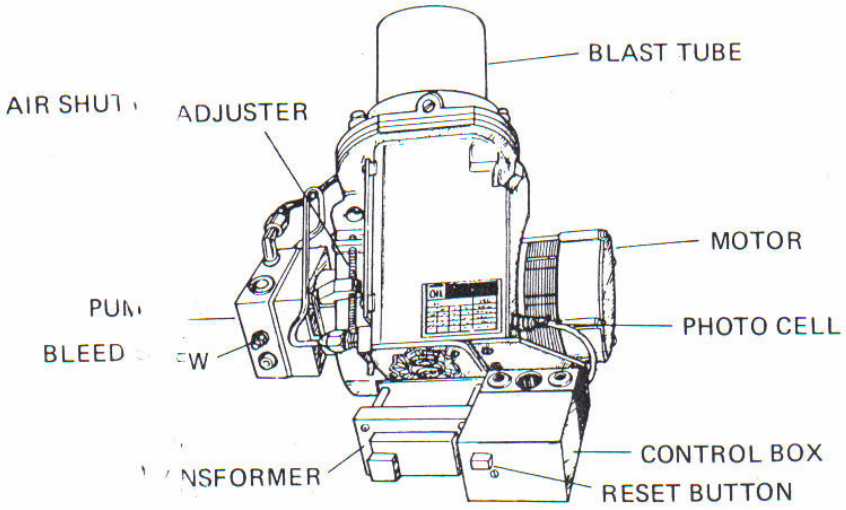


2. To remove the burner take out the four screws from the Cover Plate (No. 14). **Break the cement seal** and remove the plate. Remove the 2 outer screws from the back plate of the burner carrier from inside the Fire Box and withdraw the burner assembly complete.
   Care should be taken not to damage the electrical and oil leads connected to the burner.
3. The burner may now be serviced by a competent engineer. See pages 11-14.



4. To clean deposits from the boiler baffles set them to position B and clean both sides down into firebox. Remove all soot deposits from the boiler and generally clean out firebox area.
   It is helpful to use a vacuum cleaner to collect dust deposits that will have accumulated.
5. Care should be taken when refitting the burner assembly that the insulation material over the burner blast tube is not damaged. Also ensure that the electrical and oil leads are not twisted.
   When refitting push the burner assembly into position **and ensure a good seal.** Refit screws, and tighten them.
6. Replace the Cover Plate **after applying fresh fire cement** and tighten the four screws.
7. Use new Insulating Rope before replacing the hotplates if necessary. **Tighten the 3 retaining screws.**
8. Switch on electrical and oil supply. The Cooker is now ready for operation.

BURNER TECHNICAL DATA



Motor	90, W, 1 - phase, 2800 rpm. Capacitor 3 uF.
Fan	108 Dia x 42 x 8H.
Pump	Danfoss 9.15 atmospheres (130 psi)
Electric Tra rmer	S EM 220/14, 600V. 38mA. TV and radio suppressed.
Control	Danfoss
Mounting t	Standard SIS
Flexible oi	¼" x 3ft. long.
Ignition ele tes	Electrodes with porcelain insulation.
Nozzle	Danfoss .55 US Gallons 60 degree hollow pattern.
Fan House	Aluminium die casting
Blast Tube	PLI
Limit Ther at	Ranco
Control Th stats	Ranco

STARTING UP

a) Check that the boiler is ful ater.

b) Check that all valves in th line are open and that the filter and oil pump urged of air.

c) Switch on main supply. Bu will attempt to fire (it may be necessary to pre e reset button on control box).
If flame or ignition fails, th trol locks out after 10 — 15 seconds and rema in that position until the safety switch is reset m ally.

d) Check that any time itches and room thermostats associated wi boiler are "on".

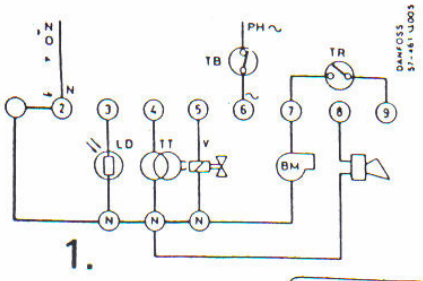
e) The burner is unlikely to f rrectly until the air has been purged from th essure side of the pump via the bleed nipple.

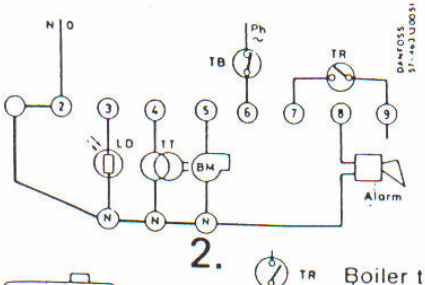
f) After the system has a ved its operating temperature, a flue gas a sis and check for smoke should be carried o.

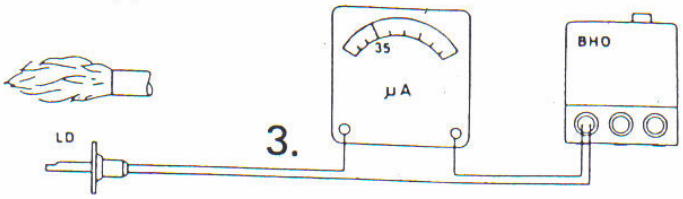
g) Check the correct position of the Air Shutter, wh gives the highest reading of CO_2 without exceeding a smoke of No. 0 - 1. (Bacharach).
Refer to the manufacturer's (Bacharachs) instructions. The CO_2 will normally be in the range of 10% - 13%.

h) Check the locating plate of inner assembly. It's normally set in forward position. At abnormal pressure in the combustion chamber the nozzle position can be moved backwards via an adjustable locating plate to stabilise the flame.
Check the oil connection from storage tank via oil filter.
The pressure in the pump is factory set. If adjustment is necessary, this must only be done in conjunction with an oil pressure gauge.

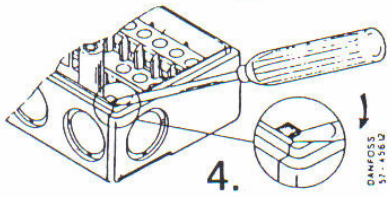
OIL BURNER ELECTRICAL CONTROLS

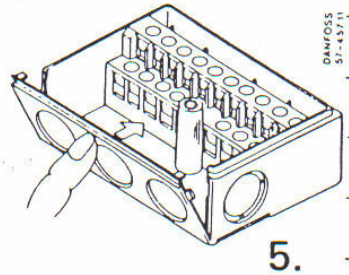




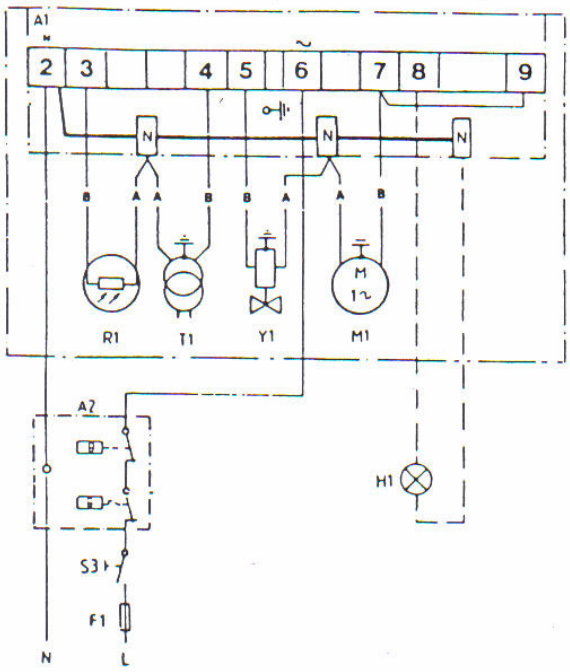


DANFOSS **Oil burner control type BHO 11.1**





TR	Boiler thermostat
TB	High temperature cutout
TT	Ignition transformer
BM	Burner motor
V	Solenoid valve
(LD)	Photo unit
	External alarm
~ Ph	Phase wire
O N	Neutral wire
(LD)	Danfoss type designation



A1 Oil burner control
A2 Twin thermostat
F1 Fuses
H1 Lock-out signal lamp
M1 Burner motor
R1 Photoresister
S3 Main Switch
T1 Ignition transformer
Y1 Magnetic valve
A Blue
B Brown
C Black

Application

Oil burner control type BHO11.1/1 is used for controlling and monitoring single-stage oil burners. In accordance with valid standards (ISO 3544 and DIN 4748) type BHO 11.1/ (with 10 s safety time) must only be used for fired oil quantities less than 30 kg per hour.

The flame is monitored by photo unit type LD. Provided the BHO 11.1 is used with a photo unit type LD codemarked "A" (Code No. 057H2020), 056H2021, 057H2022 and 056H2024) the false illumination requirement is met. Codemarking "A" is stamped on the cable of the photo unit.

Base

The base of BHO 11.1 is prov ith a loop terminal A.

The four neutral terminals, d N, are internally connected and can be used ally. Also the base is equipped with three cor d earth terminals which in turn are connected t ate at the bottom of the base. The plate has a h nd is designed for connection to burners with e rminals by means of a screw.

The front plate of the base ca moved as show in fig. 5.

Electrical connections

If type BHO 11.1 is connected ow in fig. 1, it gives prepurging in the preignition t

If it is connected as shown in f t gives pre-ignition without prepurging.

Technical data

Rated voltage:	22
Frequency:	50 Hz
Working range:	18 64 V
Mains fuse:	Ma A
Enclosure:	IP
Ambient temperature:	— — ×70$_2$C.

Function

Normal Start

Preignition and prepurging, ignition alone: 7 s.
Oil is released, and the burn erates, if the flame forms within the safety time of

Post ignition after oil release:
BHO 11.1 — 5s.

False light at start

If light reaches the photo uni e prepurging time the control will, after both the p rging time (7 s.) and the safety time (10 s.), cut out w ut releasing oil after approx. 17 s.

No flame formation at start

If oil is released and no flame is ablished the control will cut out within the safety ti 10 s.

Flame failure in operation

In the event of flame failure in ation the oil supply is cut off and the control arts the burner as described under the heading mal start". On flame failure, immediately after the er start, the control will initiate re-ignition.

Flame monitoring

The flame is monitored by pho it type LD.

Note: in accordance with th test ISO and DIN standards, type BHO activates e safety relay if the photo unit is exposed to lig n the pre-purging period.

Max. cable lenght between BHO and LD: 10 m.
Max. ambient temperature for LD: 70°C.
Note: Heat radiated by the flame can, in some cases, cause higher ambient temperatures than the max. permissible temperature for LD.

Control of flame signal

The photo current is measured with a d.c. ammeter (moving coil instrument) with is connected in series with the photo unit (fig. e).
Min. current for flame indication: 35 uA.

OIL PUMP ADJUSTMENTS

DANFOSS MSLA 032

Technical Data

Viscosity range:
1,3 — 18,0 mm²/s (cST) at 20°C.
Speed: 2800 R.P.M.
Factory setting: 9.15 Bar.
Coil voltage: Shown on the coil.

Connections (Fig. 1)
The pump is to be connected as follows:
Single-line open bypass (Fig. 6)
E = Nozzle line ⅛ in. BSP.F.
S = Suction line ¼ in. BSP.F.
M = Pressure gauge connection, venting ⅛ in. BSP.F.

Venting (Fig. 2)
Venting is necessary for single line Burner.

Pressure setting (Fig. 3)
Note: The valve has two functions: A closing function with fixed closing pressure and a regulating function where the pump pressure can be set by means of the pressure regulating screw.

Dismantle the regulation system (Fig. 4).

1. Dismantle the orifice nipple with valve (A).
2. Remove the pressure regulation spring with the black plastic cover and the pressure cone.
3. When dismantling the pressure setting screw, remove the O-ring (C) and metal ring (D). The setting screw (B) can then be screwed anti-clockwise out of the pump.

Note: Orifice nipple and valve are a unit and cannot be dismantled.

Coil replacement (Fig. 5).

Danfoss

MSLA

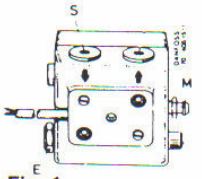


Fig. 1

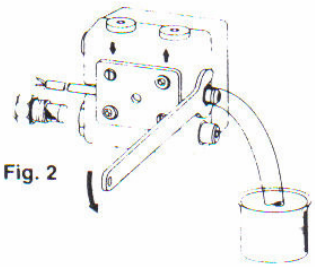


Fig. 2

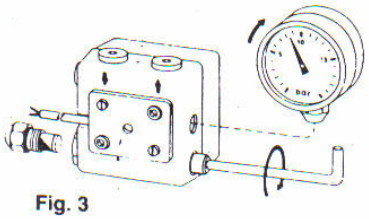


Fig. 3

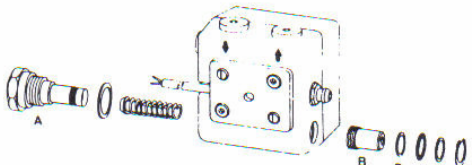


Fig. 4

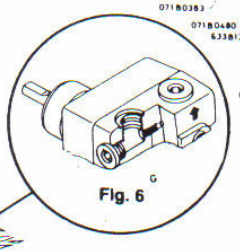
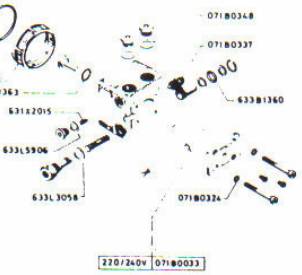


Fig. 6



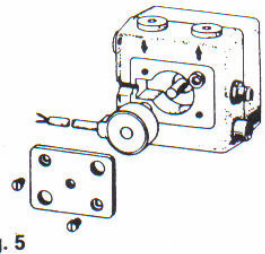
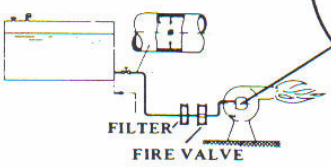
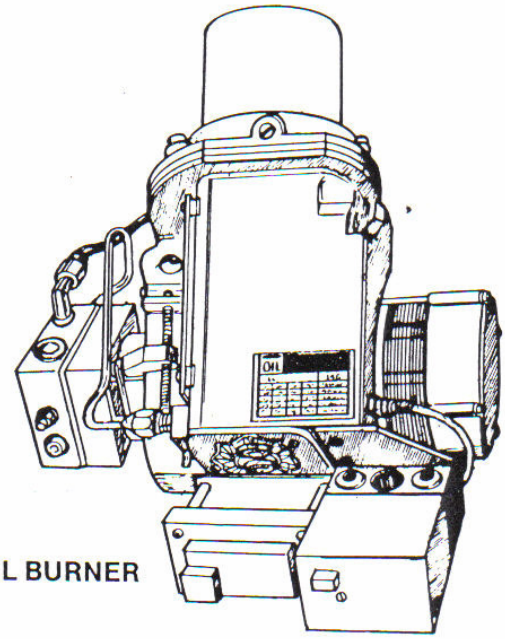


Fig. 5





ELECTRO OIL BURNER

Oil-Fired STANLEY De-Luxe 90

FAULT FINDING

1. Burner Cut Out	(a) Lack of Oil	(a) Refill Tank and Prime Burner Pump
	(b) High Limit Thermostat	(b) Press to Reset
	(c) Burner Control Box Reset Button	(c) If Red Bulb Lighting press to reset
2. Poor Chimney Draught	(a) Obstruction	(a) Clear and Clean
	(b) Too Low	(b) Raise Height above Ridge
	(c) Too Wide	(c) Fit Flue Liner 15 to 23 cm.
	(d) Crack in Wall	(d) Repair Cracks
	(e) Shared by another Unit	(e) Cut off other Unit.
3. Excessive Chimney Draught	(a) High Chimney	(a) Fit Draught Stabilizer or Cowl.
4. Down Draught	(a) High Trees	(a) Raise Chimney Height
	(b) High Buildings	(b) Raise Chimney Height
	(c) Low Chimney	(c) Raise Chimney Height
	(d) Negative Pressure Zone	(d) Fit Cowl
5. Cooker Smoking	(a) Insufficient Primary Air	(a) Provide Room Air Inlet or adjust Burner air intake
	(b) Chimney Choked	(c) Clean Flueways
	(c) Side Flueways Choked	(d) Raise Chimney Height or Fit Cowl
	(d) Down Draught	
6. Hot Plate not Heating	(a) Boiler Baffles incorrectly set	(a) Set Baffles at position B
	(b) Burner Cutting Out	(b) Increase Thermostat Setting
	(c) Utensils not Flat	(c) Use Machine-based Utensils
7. Oven not Heating	(a) Boiler Baffles incorrectly set	(a) Set Baffles at position C.
	(b) Flueways blocked with soot	(b) Clean Out
	(c) Faulty Thermostat	(c) Check and replace if necessary
8. Radiators not Heating	(a) Boiler Baffles incorrectly set	(a) Set Baffles at position A
	(b) Pump not working	(b) Check and replace if defective
	(c) Air in Radiators	(c) Vent Radiators
	(d) Pipe system faulty	(d) Check Pipe Sizes and Circuit
	(e) Excessive Number of Radiators	(e) Turn off unneeded Radiators
	(f) Radiator Valves not adjusted	(f) Adjust Valves to give even flow
9. Domestic Hot Water Cylinder not Heating	(a) Cylinder too Large	(a) Use 135 — 180L Cylinder
	(b) Flow Pipe too small	(b) Use 25 mm. Bore Pipe
	(c) Flow Pipe crossed	(c) Reverse Flow Pipe
	(d) Cylinder too far away	(d) Not more than 7.8m fully lagged
	(e) Hot water from Cylinder not reaching Cylinder	(e) Adjust Flow Control Valves or fit Injector Tee.
10. Intermittent Performance	(a) Cooker starved of Primary Air	(a) Provide Air Inlet in Room
	(b) Extraction Fan in Room	(b) Provide additional Air Inlet in Room
	(c) Dirt in Nozzle	(c) Clean or Replace Nozzle
	(d) Dirty Burner	(d) Service Burner
	(e) Dirty Flueways	(e) Clean Flueways frequently
	(f) Dirty Oil Filter	(f) Clean or Replace
	(g) Uncontrolled Burning	(g) Repair or Replace Thermostat
11. Domestic Hot Water Rusty	(a) Leak in Indirect Cylinder Coil	(a) Replace Cylinder
	(b) Incorrect Cylinder fitted	(b) Check with Installer

It is of the utmost importance to keep the flue pipe and chimney clear of deposits.
Blocked or partially obstructed flueways and chimneys will cause dangerous fumes to be emitted into the room, these may well be invisible.

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