AGA

OFTEC REGISTERED

AGA OIL-FIRED COOKER MODELS
(OC, (2 Oven) 2=OE, (4 Oven) =4=)

User Guide &
Installation Instructions

CAUTION: THIS UNIT IS HEAVY, PROPER EQUIPMENT AND ADEQUATE MANPOWER MUST BE USED IN MOVING THE RANGE TO AVOID DAMAGE TO THE UNIT OR THE FLOOR.

REMEMBER, when replacing a part on this appliance, use only spare parts that you can be assured conform to the safety and performance specification that we require.
DO NOT use reconditioned or copy parts that have not been clearly authorised by AGA.

PLEASE READ THESE INSTRUCTIONS BEFORE USING THIS APPLIANCE AND KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.

CE **For use in GB-IE**

05/17 EINS 510949

Contents

1. Health and safety

Consumer Protection

As a responsible manufacturer, we take care to make sure that our products are designed and constructed to meet the required safety standards when properly installed and used.

⚠ **CHILDREN SHOULD BE KEPT AWAY FROM THE APPLIANCE AS SOME SURFACES CAN BECOME HOT TO THE TOUCH.**

The appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. **Children less than 8 years of age shall be kept away unless continuously supervised.** Cleaning and user maintenance shall not be made by children without supervision.

⚠ **DO NOT spray aerosols in the vicinity of the cooker while it is on.**

⚠ **DO NOT modify this appliance.**

⚠ **IMPORTANT: Oil is a fire risk, DO NOT leave pans containing oil unattended.**

- In the event of a fire cover with a lid and switch OFF the electricity.
- Smother the flames on the hob rather than attempting to remove the pan to the outside.
- Burns and injuries are caused almost invariably by picking up the burning pan to carry outside.

When the oven (s) are on **DO NOT** leave any oven door open for long periods, this will affect the temperature of the oven and may allow controls to become hot.

The appliance may contain some of the materials that are indicated below. It is the Users/Installers responsibility to ensure that the necessary personal protective clothing is worn when handling where applicable, the pertinent parts that contain any of the listed materials that could be interpreted as being injurious to health and safety, see below for information.

Fire Cement - when handling use disposable gloves.

Glues and Sealants

Exercise caution - if these are still in liquid form use face mask and disposable gloves.

Glass Yarn, Mineral Wool, Insulation Pads, Ceramic Fibre

May be harmful if inhaled. May be irritating to skin, eyes, nose and throat. When handling avoid contact with skin or eyes. Use disposable gloves, face-masks and eye protection. After handling wash hands and other exposed parts. When disposing of the product, reduce dust with water spray, ensure that parts are securely wrapped.

Deep Fat Frying

- Use a deep pan, large enough to completely cover the appropriate heating area.

⚠ **NEVER fill the pan more than one-third full of fat or oil.**

⚠ **NEVER leave oil or fat unattended during the heating or cooking period.**

⚠ **NEVER use a lid on the pan.**

⚠ **In the event of a fire, cover the pan with a lid and turn OFF the appliance.**

⚠ **Smother the flames on the hob preferably with a fire blanket, rather than attempting to remove the pan to the outside.**

⚠ **Burns and injuries are caused almost invariably by picking up the burning pan to carry it outside.**

⚠ **CAUTION: The cooking process has to be supervised. A short term cooking process has to be supervised continously.**

⚠ **WARNING: Unattended cooking on a hob with fat or oil can be dangerous and may result in fire. NEVER try to extinguish a fire with water, but switch off the appliance and then cover flame e.g. with a lid or fire blanket.**

⚠ **WARNING: Danger of fire: DO NOT store items on the cooking surfaces.**

⚠ **WARNING: Accessible parts may become hot during use. Young children should be kept away.**

2. Introduction

As responsible manufacturers we take care to make sure that our products are designed and constructed to meet the required safety standards when properly installed and used.

Your AGA is an oil-fired, heat-storage cooker. The burner operates at either high or low fire and is controlled by the cooker thermostat which is linked to the oil control box.

In the event of a power failure the burner will automatically continue to operate on low fire. Should there be a prolonged power cut the burner can be operated under manual control.

However, for the most effective operation of the cooker the following points should be carefully observed:

1. Close the insulating lids whenever the hotplates are not in use.
2. Clean the hotplates regularly with the wire brush.
3. Utensils with ground flat bases must be used to make perfect contact with the hotplates.
4. Have the cooker serviced at regular intervals a competent service engineer such as OFTEC approved.
5. Take care, when closing the oven doors, to lift them onto the catch.

Refer to the diagram in the **Overview** chapter to familiarise yourself with the product and refer to the relevant sections.

⚠ IMPORTANT NOTICE: PLEASE READ THE ACCOMPANYING WARRANTY.

Any alteration that is not approved by AGA could invalidate the approval of the appliance, operation of the warranty and could affect your statutory rights.

In the interests of safety and effective use, please read the following before using your new AGA appliance.

The use of a oil-fired cooking appliance results in the production of heat and moisture in the room in which it is installed. Ensure that the kitchen is well ventilated: keep natural ventilation holes open or install a mechanical ventilation device (mechanical extractor hood).

Prolonged intensive use of the appliance may call for additional ventilation, for example, opening of a window, or more effective ventilation, for example increasing the level of mechanical ventilation where present.

Installation must be to local and national wiring regulations and carried out by an approved Aga engineer. Approved Aga engineers have been factory trained and always use genuine Aga spares

A little smoke and some odour may be emitted when first switched on. This is normal and harmless (from oven lagging and starch binder on the element insulation) and will cease after a short period of use.

Your cooker is supplied with the following accessories:

- 1 Large roasting tin with grill rack.
- 1 Half-size roasting tin with grill rack.
- 2 Oven Grid Shelves.
- 1 Plain Shelf.
- 1 Wire Brush.
- 1 Toaster.
- 1 AGA Cookbook.

3. Overview

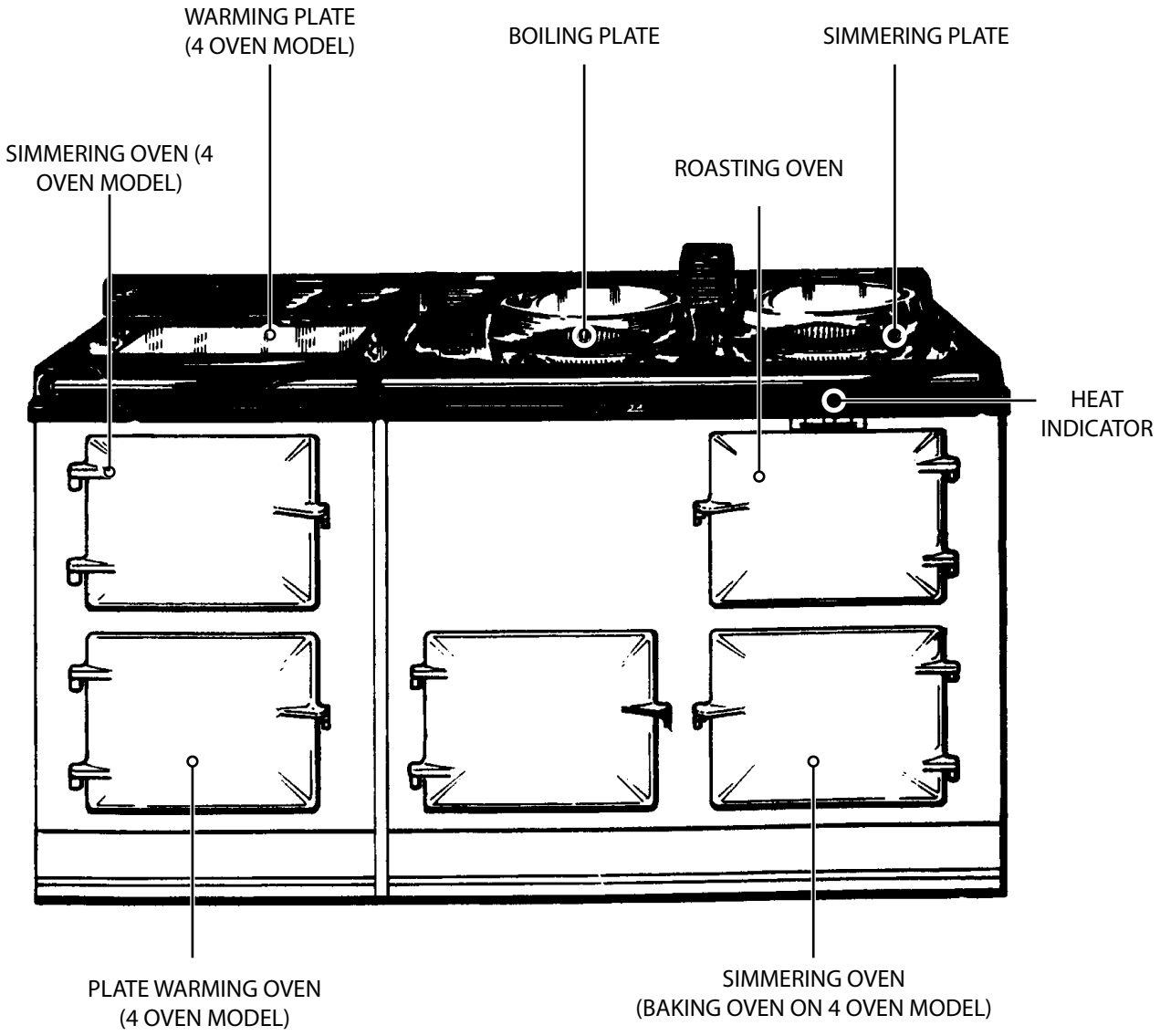
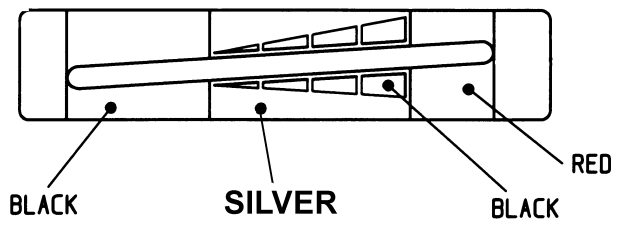


Fig. 3.1

DESN 510978

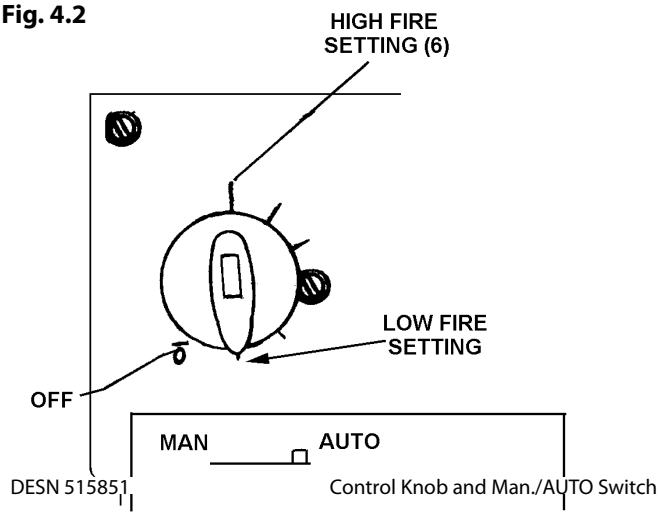
4. Control overview

Fig. 4.1



DESN 515920

Fig. 4.2



DESN 515851 Control Knob and Man./AUTO Switch

Heat Indicator Fig. 4.1

- The heat indicator above the Roasting oven door is a guide to the stored heat within the AGA, and does not directly relate to the Roasting oven centre oven temperature.
- It has 3 sections black, silver and red.
- To obtain your preferred working temperature the control knob can be adjusted slightly. Once set it is not recommended to adjust on a regular basis. An AGA is designed to work at an optimum setting.
- The optimum performance is usually achieved when the indicator is showing a mid-way position in the silver area.
- Since the purpose of the heat indicator is to show that the AGA contains the full amount of stored heat it is best to refer to it first thing in the morning or after a period of several hours during which no cooking has been done.

NOTE: IT DOES NOT INDICATE THE OVEN TEMPERATURE.

Automatic control

The setting of the thermostat control knob (alongside the burner inner door) at No. 5 should normally ensure that the cooker runs at the correct temperature, with the indicator on or about the centre of the silver section of the heat indicator.

Any discrepancy can be resolved by marginally advancing or retarding the knob to compensate - the higher the number, the higher the temperature setting.

Once the correct setting has been confirmed, the control will operate automatically to maintain the cooker at full temperature and need not be altered.

Manual control

Without an electric supply to the control box, the burner will operate continuously on 'Low Fire'. In the event of a power failure, the burner can be switched to 'High Fire' by simply moving the manual high fire lever on the top of the control box **Fig. 4.2** from **RIGHT** to **LEFT** and engaging it back in the slot in the cover.

The lever should be returned to its normal position when cooking is finished or when the power is restored.

The natural draught vapourising burner is designed to burn commercial kerosene to the Current Issue of BS2869: Class C2 suitable for vapourising burners.

The correct oil

OTHER GRADES OF OIL MUST NOT BE USED IN ANY CIRCUMSTANCES.

Turn control knob fully clockwise to 'O'. This will cut off the oil supply to the burner which will gradually die out.

To extinguish the burner

NEVER ATTEMPT TO RE-LIGHT A HOT BURNER.

If the cooker is being left out of use for more than a few hours or if the fuel supply has run out, turn off the valves on the oil feed line from the storage tank.

To light the burner

NEVER ATTEMPT TO RE-LIGHT A HOT BURNER.

If the cooker is being left out of use for more than a few hours or if the fuel supply has run out, turn off the valves on the oil feed line from the storage tank.

1. Open all valves on the oil feed pipe from the storage tank to the burner oil control box. Turn control knob fully anti-clockwise.
2. Switch on electric supply to the oil control box.
3. Lift up the reset lever on the oil control box **Fig. 4.3**. until it clicks.
4. Check that manual lever on oil control box is set at automatic (positioned to the right).
5. Open burner outer door and lift off inner door.
   - Allow about fifteen minutes for oil to enter burner.
   - Then open the lighting flap **Fig. 4.4** on burner outer shell position.
   - Taking care not to lift or disturb the burner shell position. Insert a match which will light the wick.
   - Close the flap and replace the inner door and switch off electric supply to the oil control box.

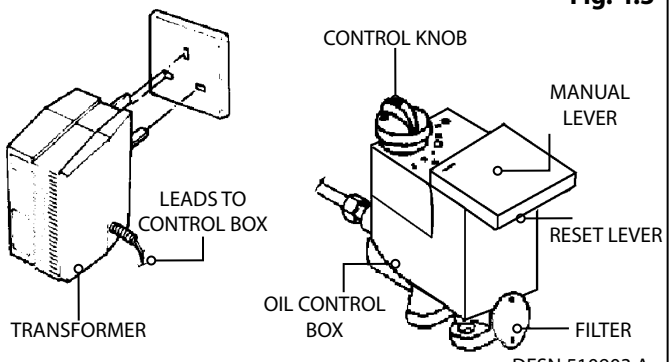
On lighting the flames will gradually come up and burn yellow, but will soon die down. It will take about 20-30 minutes for the burner to become hot before oil will vaporize properly. Observe through the sight glass on the inner door the condition of the flame when it has settled down, which should be burning blue with the shells glowing red. Then switch on electric supply to the oil control box and the burner will operate under control of the cooker thermostat.

On lighting condensation will form in the flue ways and may run onto the top-plate from the flue chamber, this should be wiped off to prevent any possibility of damage to the vitreous enamel.

NEVER ATTEMPT TO RE-LIGHT A HOT BURNER.

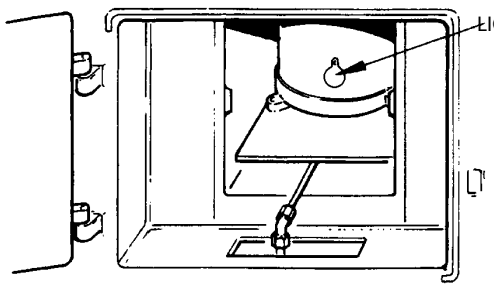
Down draught can sometimes occur in windy conditions causing the fire valve to close, and thus isolating the oil supply as a safety precaution.

Oil Control Box and Transformer **Fig. 4.3**



DESN 510903 A

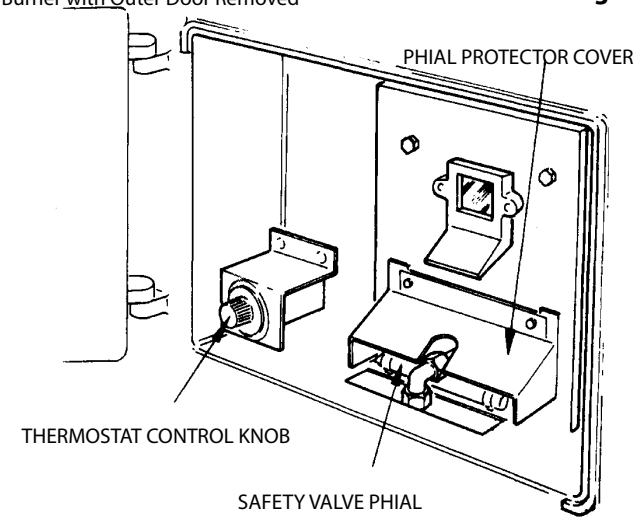
Fig. 4.4



Burner with Inner Door Removed

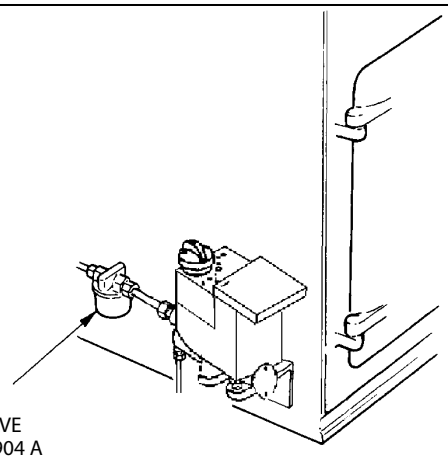
DESN 510902

Burner with Outer Door Removed **Fig. 4.5**



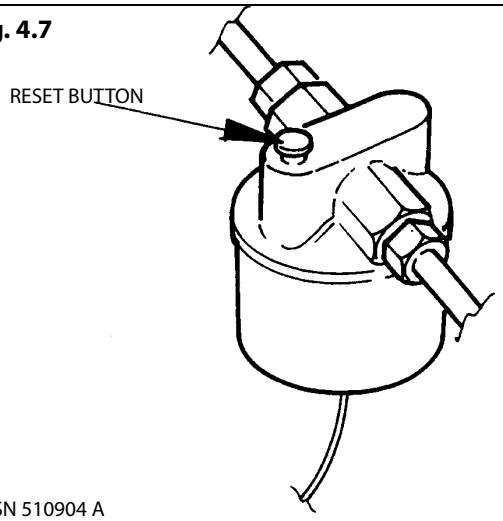
DESN 510901

Fig. 4.6



FIRE VALVE
DESN 510904 A

Fig. 4.7



DESN 510904 A

The fire valve, located at the side of the appliance (See **Fig. 4.6**) can be reset once the unit has sensed the correct functional temperature.

Fire valve resetting

TO RESET: press button (See **Fig. 4.7**) and if the button stays in, the appliance is fully functional again. If the button springs out, more cooling time must be given before trying again.

In the event of the fire valve frequently cutting-out, consult your Aga Distributor.

NEVER ATTEMPT TO RE-LIGHT A HOT BURNER.

Operating your AGA

The following points are intended to help you during the period of change-over from your previous cooker to the AGA way of life.

You will also find that the AGA Book provides a very useful introduction to the cooker.

After your AGA has been erected

When it first lit, your AGA will emit an odour for a short while.

Do not worry, this is simply due to protective oil burning off the hotplates. If you can wipe the inside of the hotplate lids whilst the AGA is heating up it will avoid a film of this oil being deposited on the inside of the lids.

Beginning to cook on your AGA

The first "'Golden Rule" of the AGA is to cook as much as possible in the ovens - without changing your menus. This not only conserves heat but also reduces cooking smells and condensation into the kitchen.

The Roasting Oven can also be used for grilling (at the top) and shallow frying (on the bottom).

Do keep the insulated lids down when the hotplates are not is use so that the heat stored in the cooker is conserved.

The AGA pans can be stacked in the Simmering Oven.

This is especially useful for steaming vegetables and simmering sauces.

Store the Plain Shelf out of the AGA. Use it, cold in the Roasting Oven on a 2 oven AGA to deflect the heat from the top of the oven thus creating a more moderate oven temperature. It can also be used as a baking sheet.

Roasting oven

The roasting oven can be used for 'grilling' at the top and 'shallow frying' on the oven floor.

The roasting oven is zoned in heat, meaning it is slightly hotter towards the top than the centre and the oven grid shelf set on the oven floor is slightly less hot than the centre.

The base of the oven can be used as another cooking surface, indeed it is often called a hidden hotplate use the floor grid for protection so food does not overbrown.

The beauty of the roasting oven setting is that any fat is burnt off when the oven is at full heat, just brush out occasionally to remove the carbon deposits. The roasting oven is excellent for bread and pastries. Quiches in ceramic or pies in Pyrex dishes need not be baked blind as when they are in placed on the floor grid on the base of the oven the pastry cooks from underneath and the filling will set and brown from the all-round heat. As you are aware metal flat tins conduct heat quicker than ceramic may need less cooking time.

The specially designed roasting tins and bakeware slide directly onto the runners, so almost every available square centimetre of space can be used. Food can be protected by the use of the plain shelf or shielded by means of the large roasting tin which means you can cook food that requires different temperatures at the same time. If food is browning too quickly and you do not want to move it to another oven just slide the plain shelf over the food to reduce the top heat.

Baking oven

This baking oven is a moderate heat, so is ideal for cakes, biscuits, also anything that requires medium heat cooking such as fish pie, lasagne, soufflés, crumble and roulades. Meat and poultry can be cooked here indeed most things that can be cooked on the roasting oven setting can be cooked on the baking oven setting but for a longer time.

As with the roasting oven, the specially designed roasting tins and bakeware slide directly onto the runners, so almost every available square centimetre of space can be used. Food can be protected by the use of the plain shelf or shielded by means of the large roasting tin, which means that you can cook food that requires different temperatures at the same time. If food is browning too quickly and you do not want to move it to another oven just slide the cold plain shelf over the food to reduce the heat.

NOTE: Always remove the plain shelf and roasting tins on completion of cooking, if left in the oven it will affect the oven temperature.

Simmering oven

The simmering oven can be described as a continuation oven, it continues to cook food that has been brought up to heat elsewhere on the cooker with the exception of meringues which are dried out rather than 'cooked'.

User Guidance

- **DO NOT** place dishes directly on to the oven base. Always place on a shelf.
- Joints of meat and poultry should be brought up to heat ideally on the roasting oven setting for 30-45 minutes, then transfered to the simmering oven.
- This method is unsuitable for stuffed meat and stuffed poultry).
- Make sure that pork and poultry reach an internal temperature of at least 75°C.
- Always bring soups, casseroles and liquids to the boil before putting in the simmering oven.
- Always thaw frozen food completely before cooking.
- Root vegetables will cook better if cut into small pieces.
- Adjust seasoning and thickenings at the end of the cooking time.
- Many dried pulses and beans for example, dried red kidney beans must be boiled for a minimum of 10 minutes, after soaking, and before inclusion in any dish.

5. Cooking guide

Cooking hints

- Larger items may benefit from being turned.
- Shelf positions are counted from the top.
- Put dishes in the centre of the shelf.
- It is important to check that food is piping hot before serving.

Deep fat frying

- **DO NOT** try to fry too much food at a time, especially frozen food.
- This only lowers the temperature of the oil or fat too much, resulting in greasy food.
- Always dry food thoroughly before frying, and lower it slowly into the hot oil or fat, Frozen foods in particular, will cause frothing or spitting, if added too quickly.
- **NEVER** heat fat, or fry with a lid on the pan.
- Keep the outside of the pan, clean and free from streaks of oil or fat.
- The cooking charts are a general guide but times and temperatures may vary according to individual recipes.
- The meat sections should be used as a general guide but may vary according to the size, shape of joint on or off the bone.
- Thaw frozen joints thoroughly before cooking them.
- The times are for open roasting. If covered with foil allow extra time.
- The turkey/chicken is cooked when the juices run clear when pierced with a skewer. If the juices are still pink continue to cook checking every 15 minutes until juices run clear.
- 1kg = 2.2lb

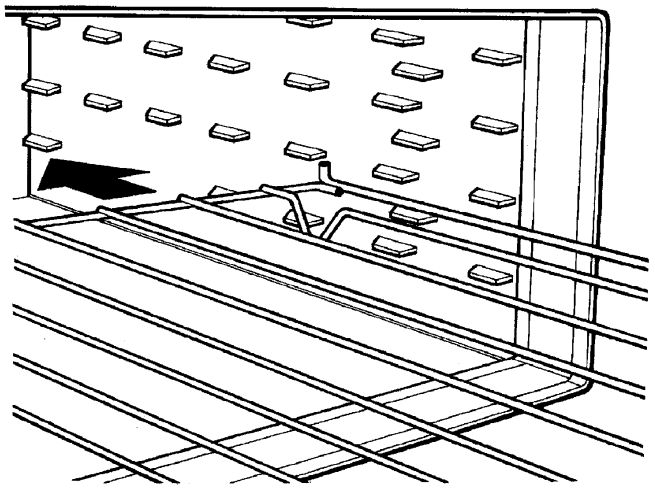
6. Cooking table

FOOD	OVEN TEMPERATURE
Roasting oven	**HIGH**
Grilling **Scones** **Pastries** **Bread** **Yorkshire puddings** **Roasts** **Shallow frying**	• Top - grilling • 2nd runner - scones, small pastries, grilling • 3rd runner - bread rolls, Yorkshire pudding • 4th runner - roasts, poultry • Oven grid shelf on base of the oven - bread loaves, pies, roast vegetables • Base of the oven - quiches, pies
Roasting/Simmering/Baking oven	**MODERATE**
Cakes **Biscuits** **Fish** **Shepherds pie, Cottage pie** **Lasagne** **Soufflés** **Shortbread**	**Roasting Oven** Place grid shelf on floor of Roasting Oven. Protect food with the cold plain shelf slid on second or third runners. For cakes that require over 45 mins use the Cake Baker. Alternatively with fish, cheesecake, start off in Roasting Oven, finish in Simmering Oven. • Towards top - whisked sponges, some biscuits, small cakes • Middle - fish, soufflés, shepherd and cottage pie, lasagne • Oven grid shelf on base of oven • Victoria sandwiches, shortbread, traybakes and cheesecake
Simmering oven	**LOW MODERATE**
Casseroles **Stock** **Milk puddings** **Meringues** **Rich fruit cake**	For casseroles, stock, milk puddings and similar dishes bring to heat elsewhere on the AGA then transfer to the simmering oven (one exception is meringues). Rich fruit cakes can be cooked here for a, long time on the base of the oven.

7. Oven shelves

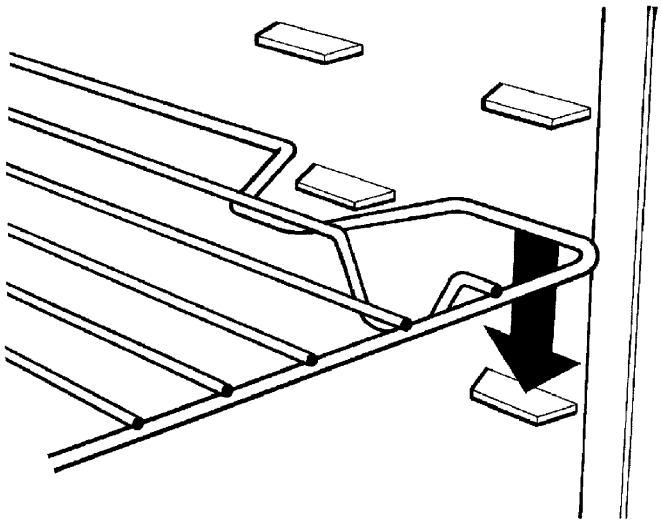
Fitting the shelves

Fig. 7.1



DESN 512403

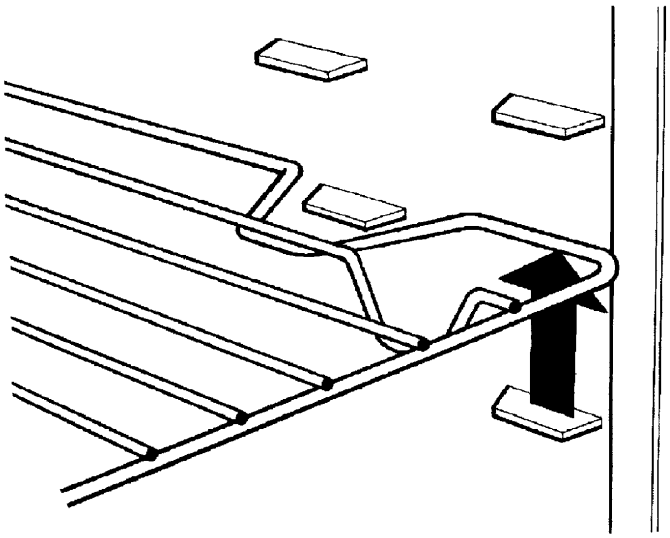
Fig. 7.2



DESN 512404

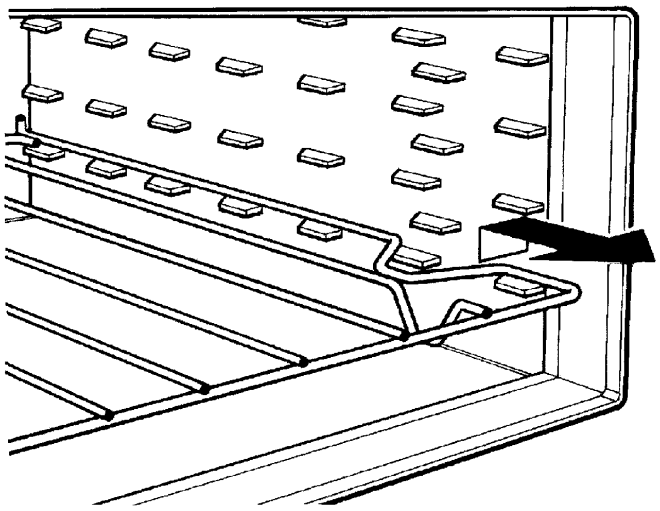
Removing the shelves

Fig. 7.3



DESN 512405

Fig. 7.4



DESN 512406

WARNING:
Accessible parts may become hot during use. To avoid burns and scalds children should be kept away.

8. Cleaning & caring for your cooker

⚠ **REMEMBER: be careful of the hot appliance.**

⚠ **DO NOT use a steam cleaner to clean this cooker.**

⚠ **DO NOT use abrasive pads, caustic cleaners, oven cleaners or metal scrapers to clean the surfaces of the enamel.**

⚠ **IMPORTANT: AGA recommend Vitreous Enamel Association approved cleaners for cleaning the vitreous enamelled surfaces of this product.**

⚠ **When cleaning use as little water as possible.**

⚠ **DO NOT immerse the doors in water as they are packed with insulating material, which will be damaged by excessive moisture.**

⚠ **DO NOT put oven doors or resting plates in a dishwasher.**

Enamelled cast iron

⚠ **The easiest way to clean the AGA top plate and front plate is to mop up spills as they happen. VEA approved AGA Enamel Cleaner can be purchased from www.agacookshop.co.uk.**

⚠ **Baked on food is more difficult to clean but can usually be removed with proprietary vitreous enamel cleaners or mild cream cleaners using a cloth, or if necessary, a nylon scouring pad and can be purchased from www.agacookshop.co.uk.**

⚠ **If milk or fruit juice, or anything containing acid is spilt on the enamel, wipe off immediately.**

⚠ **Clean off any condensation streaks on the front plate around the oven doors or vitreous enamel maybe permanently discoloured.**

⚠ **All that is usually needed to keep the vitreous enamelled surfaces of your cooker bright and clean is a daily rub over with a damp, soapy cloth followed immediately with a clean, dry cloth to avoid streaks.**

⚠ **Remember the top plate and the polished covers will scratch if pans or utensils are dragged across them.**

To keep the vitreous enamel surfaces of the cooker bright and clean, a daily rub over with a damp soapy cloth followed immediately with a clean, dry cloth to avoid streaks is all that is required. AGA E-cloths are excellent for this.

Cast iron ovens and hotplates

Ovens - are made from cast iron and keep themselves clean. They are very durable, but will rust if surface moisture is left on them.

Hotplates - is made from cast iron, and is easy to care for. Regular maintenance will ensure long-life. They will rust if surface moisture is left on them

Should the hotplates become soiled, use a sponge, cloth, scouring pad or wire brush to remove burnt-on spills.

Rinse off detergents or cleaning agents thoroughly.

Every now and then, apply a thin coating of vegetable oil (corn oil is best) when the hotplate is cold.

Lids and oven door/lids linings

The top of the insulated cover (lid) - this is chrome or stainless steel and can be kept clean by wiping over with a damp cloth and polished up - the AGA E-cloths are excellent for this purpose as they are lint-free and eco-friendly. AGA stainless steel and chrome cleaner are recommended to keep the insulated cover clean and shining. These can be purchased from your local AGA Specialist.

Lining of the insulated cover (lid interior) - the use of an AGA splash shield is recommended to keep the lining free of fat splashes, (obtainable from your AGA Specialist or on-line at www.agacookshop.co.uk).

If the lining is marked it is best cleaned when the hotplate is cold. It can be cleaned with hot soapy water and/or a cream cleanser. If badly marked then a soap impregnated pad can be used - this should be used in a circular motion.

The first few times a soap impregnated pad is used you will see the circular marks, these will become reduced and the surface of the lining becomes shinier each time when used. **DO NOT** use excessive water and make sure the lining is dry before closing the cover.

Oven door linings - the linings can be cleaned with hot soapy water, a cream cleanser or soap impregnated pad. To deep clean the lining place a towel on the work surface and carefully lift off the oven door (doors are heavy) and place it enamel side down on the towel padding. Clean with a soap impregnated pad to remove stubborn marks. Dry off before replacing on their hinges.

9. Servicing

- To keep your Aga cooker running effciently we recommend that it is regularly serviced by an Approved Aga engineer. Approved Aga engineers have been factory trained and always use genuine Aga spares
- In the event of requiring maintenance, please call AGA Service or your authorised distributor.
- Your cooker must only be serviced by a qualified engineer from AGA tor an authorised distributor.
- **DO NOT** alter or modify the cooker.

For safety and reliability, it is important that servicing is carried out at regular intervals by a competent service engineer such as **OFTEC** approved **ONCE EVERY SIX MONTHS**. The cooker should be turned **OFF** by the User the night preceding the day of servicing so that the appliance will have cooled down by the following morning.

A HOT APPLIANCE CANNOT BE SERVICED.

Spare Parts

To maintain optimum and safe performance, we recommend that only genuine AGA spare parts are used. These are available from most major spares stockists, including ourselves.

10. Installation instructions

WARNING!

Please read the Warning, Cautionary notes at the start of this section. If the information contained within these instructions is not followed, property damage or personal injury may occur.

DO NOT store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS

DO NOT try to light any appliance.

DO NOT touch any electrical switch.

DO NOT use any phone in your building.

Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.

If you cannot reach your gas supplier, call the fire department.

Installation and service must be performed by a qualified installer, service agency or the gas supplier.

WARNING! This appliance must be installed with an appropriate device that will allow permanent disconnection of the Live and Neutral conductors. During Installation or disconnection prior to any electrical work, the appliance must be permanently disconnected from the Supply (Live) and Neutral Conductors.

CAUTION: THIS UNIT IS HEAVY, PROPER EQUIPMENT AND ADEQUATE MANPOWER MUST BE USED IN MOVING THE RANGE TO AVOID DAMAGE TO THE UNIT OR THE FLOOR.

REMEMBER, when replacing a part on this appliance, use only spare parts that you can be assured conform to the safety and performance specification that we require.
DO NOT use reconditioned or copy parts that have not been clearly authorised by AGA.

PLEASE READ THESE INSTRUCTIONS BEFORE USING THIS APPLIANCE AND KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.

11. Installation introduction

Health and safety

Consumer Protection

As responsible manufacturers we take care to make sure that our products are designed and constructed to meet the required safety standards when properly installed and used.

IMPORTANT: Please read the accompanying warranty.

Any alteration that is not approved by AGA could invalidate the approval of the appliance, operation of the warranty and could also affect your statutory rights.

In the interests of safety and effective use, please read the following before using your new AGA appliance.

Installation requirements

THIS APPLIANCE MUST ONLY BE INSTALLED BY PERSONS THAT ARE CERTIFIED TO LOCAL REGULATIONS.

THIS APPLIANCE IS A CONTROLLED SERVICE BY DEFINITION AND REQUIREDS EITHER FITMENT UNDER THE REMIT OF BUILDING CONTROL OR INSTALLATION BY AN OFTEC REGISTERED 105 TECHNICIAN (CLASSED AS A COMPENTENT PERSON) WHO CAN SELF CERTIFY HIS OWN WORKS.

The installation of the appliance must be in accordance with the relevant requirements of the current Building Regulations and the Building Standards (Scotland) (Consolidation), current I.E.E. Wiring Regulations and the byelaws of the local Water Undertaking where applicable. It should be in accordance also with any relevant recommendations of the following current British Codes of Practice:

BS 5410: Installation of oil fired space heating and hot water supply purposes. Part 1. Boilers of rated output not exceeding 44kW.

Building regulations

J1/4/5: Provision for introduction of air supply and discharge of products of combustion for appliances.

BS 4543: Specification for chimney for oil fired appliances. Part 1 - 3.

J1/4/5: Provision for protection against fire and heat.

Installation must be to Local authority and National Wiring Regulations/Codes in force, and carried out by a Qualified Engineer.

In your own interest, and that of safety to comply with the law, all appliances should be installed by a competent person, in accordance with the relevant regulations. Failure to install the appliances correctly could lead to prosecution.

Such provisions for oil burning appliances are dealt with in Section 4 of the Building Regulations where the AGA Oil Fired Cooker, compares as follows:

Hearths

The hearth must be of a non-combustible material for a minimum thickness of 12mm and comply with the respective clause in the Building Regulations.

The wall behind the cooker must be of a non-combustible material, for a minimum thickness of 25mm.

1. Section 4 - Para 4.24.

A Constructional Hearth should be provided to support the appliance.

Shielding of the Appliance

2. Section 4 - Para 4.28.

The surface temperatures of the sides and back of the appliance do not exceed 100°C and do not therefore require shielding as described in Section 3 - Para 3.2 (a) or (b) of the Approved Document.

Heat Exchangers - Models OCB and OEB only

This cast iron heat exchanger is 'listed' by the National Water Council and, when correctly installed, complies with Water Byelaws and Regulations.

The heat exchanger must be connected to a copper double feed indirect cylinder to BS 1566 Part 1 only.

NOTE: AGA OIL FIRED COOKERS ARE DELIVERED EX-WORKS UNASSEMBLED. ASSEMBLY IS UNDERTAKEN ON SITE BY THE AUTHORISED AGA DISTRIBUTOR.

Fuel

These appliances must only be used with Commercial Kerosene current issue to BS 2869 : Class C2 suitable for vapourising burners.

Location

The location chosen for the appliance must permit installation and the provision of a satisfactory flue and an adequate air supply. The location must also provide adequate space for servicing and air circulation around the appliance. See 'Installation of Cooker'.

In particular, please ensure the control box mounted to the side of the AGA, fire valves, isolation valves and their line fittings are always accessible to ensure they can be accessed for future service and maintenance requirements.

Delivery requirements

- Models OC - 406 kg
- Models OE - 584 kg

Cooker Base or Hearth

It is essential that the base or hearth on which the cooker stands should be level, and be capable of supporting the total weight of the respective cooker:

12. Location

Refer to **Fig. 12.3** or **Fig. 12.4**

The location chosen for the appliance must permit installation and the provision of a satisfactory flue and an adequate air supply. The location must also provide adequate space for servicing and air circulation around the appliance.

Oil supply

Oil Storage - See **Fig. 12.1 Oil Storage Tank and Pipeline details**.

The recommended oil tank size is 1400 litres (300 gallons) minimum, and the Codes of Practice governing its installation are covered by BS 5410.

The requirements for mild steel tanks should be to BS 799: Part 5 and advice should be sought from the manufacturers for the installation of Plastic Oil Tanks as an alternative consideration.

The oil storage tank must be positioned with the bottom of the tank not less than 450mm, and the top not more than 3.2m above the base of the cooker.

Oil Pipe Line

The oil line from the storage tank to the appliance should be fitted with a remote acting fire valve (such as a Teddington KBB-66°C) located outside the building, or where the supply enters the wall on the inside of the building and with the heat sensing phial of the fire valve, located as near as practicable on the valve side of the cooker.

A 5-10 micron oil filter should also be fitted in the oil line, and the minimum size of the copper oil pipe line should not be less than 10mm diameter.

A stop valve must be fitted near the appliance, in an accessible position.

Oil Control Valve

Oil is metered to the oil burner and controlled by a constant level oil valve, complete with a low voltage Electric Top, which is electrically activated by the cooker thermostat to maintain the optimum oil rate and heat input.

A remote acting fire valve is located adjacent to the oil control valve on the inlet side, with the sensing phial located behind the outer burner door.

The oil control valve can be bolted on either left-hand or right-hand side of the cooker, or at some other convenient position adjacent to the cooker and in the same room as the cooker, by the Authorised AGA Distributor who will connect up to the burner. If the control valve is fitted away from the cooker, the oil line between the valve and cooker must not exceed 1m in length. The connection for the oil line to the control valve is ¼in in B.S.P.

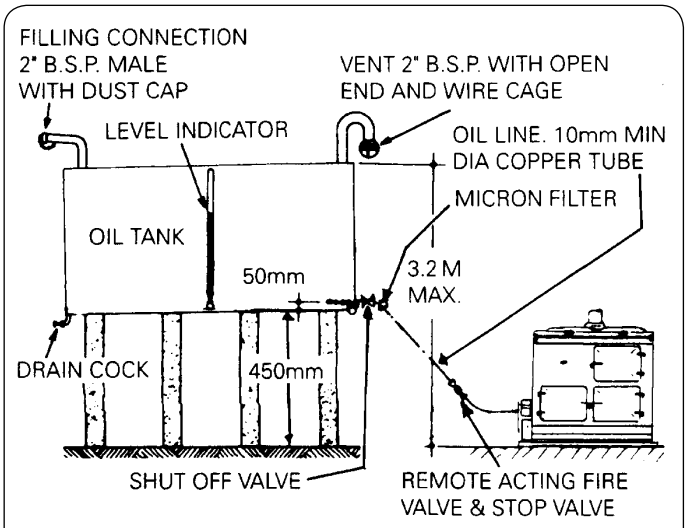


Fig. 12.1 **Oil Storage Tank and Pipeline details**

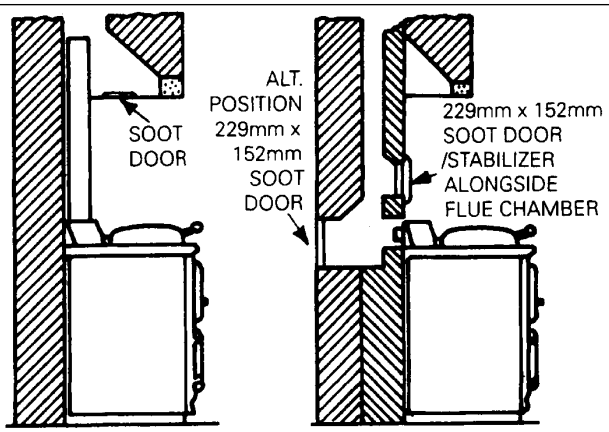


Diagram 1 Cooker installed in a recess with flue pipe passing through the register plate into the throat of the chimney.

Diagram 2 If a recess is to be partially or completely bricked in, a primary flue can be constructed in the new brickwork up to the throat of the chimney. Alternatively, if a new chimney is constructed immediately behind the cooker, a direct connection can be made into it.

Fig. 12.2 **Flue Layouts**

Flue system

See **Fig. 12.2 Flue Layouts**.

Detailed recommendations for fluing are given in the current Building Regulations J1/4/5.

The following notes are intended to give general guidance:

- The cross sectional area of the flue serving the appliance must be not less than the area of the flue outlet of the appliance and be at least 4.5m high.
- The flue pipe to be used must be not less than 102mm internal diameter. Flue pipes and fittings should be constructed from one of the following materials:

A. Mild Steel with a wall thickness of 3mm minimum.

B. Stainless Steel to BS 1449: Part 2.

C. Cast iron to BS 41, acid resistant vitreous enamel lined.

D. Mild Steel, acid resistant vitreous enamel lined to BS 1344: Part 2.

Chimneys

Flue Gas Temperature: Min 100°C Max 150°C

Chimneys should be built of masonry or be assembled from factory-made insulated components.

Masonry chimneys may be built of any masonry material, with a lining, or if flue blocks, without a lining.

The chimney lining should be 150mm minimum diameter and be formed of moisture and acid resistant liners to BS 1181 with rebated or socketed joints uppermost.

Alternatively, linings may be imperforate clay flue pipes as described in BS 65 or flue blocks to BS 1289 and installed to BS 6461:Part 1.

A 127mm minimum diameter factory-made insulated chimney, complying to BS 4543:Part 1 - 3 may be fitted and installed to BS 7566: Parts 1 to 4.

Where a chimney is to be used which is not composed of or lined with a non-porous acid resistant material, it may be lined with a stainless steel flexible flue liner such as the CHIMFLEX LW from RITE-VENT LTD, suitable for oil fluing.The internal diameter of the liner must be not less than 127mm and the number of joints must be kept to a minimum. If the flue liner is not connected directly to the appliance flue chamber socket, a flue pipe which is constructed from one of the materials in 'Flue Systems' (a) to (d) above should form the connection between the flue chamber socket and flue liner.

Before connecting the appliance to or inserting a liner into a flue that has been previously used, the flue must be thoroughly swept clean of any soot and loose material. If a register plate, restricter plate, damper, etc., is fitted in the flue it must be removed before connecting the appliance to, or inserting a liner into the flue.

The flue should terminate with a fitment of a flue outlet terminal.

The point of termination must not be within 600mm of an openable window, air vent or any other ventilation opening.

For correct operation of the appliance, the flue should have a minimum pull of 1mm H2O and a maximum 5mm H2O.

For conditions above 5mm pull, an additional stabiliser should be installed in the flue (in the same room).

Chimney Terminations

All chimneys should terminate above the roof ridge level in accordance with current Building Regulations and statutory requirements as outlined in BS 6461:Part 1 and BS 7566:Parts 1 to 4.

However well designed, constructed and positioned, the satisfactory performance of a flue can be adversely affected by the downdraught caused by adjacent tall buildings and trees or even nearby hills. These deflect the wind creating a zone of high pressure over the terminal causing it to blow directly down the chimney flue.

A suitable anti-downdraught terminal such as the Marcone will usually effectively combat low pressure down-blow but no known cowl is likely to prevent downdraught due to a high pressure zone.

Air supply

Detailed recommendations for air supply are given in the current Building Regulations J1/4/5 - Section 1.

The following notes are intended to give general guidance:

Kitchen or Internal Space Air Supply

Wherever a flued appliance is to be installed, it must have a permanent air vent. This vent must be either direct to outside air or to an adjacent room or internal space which must itself have a permanent air vent of at least the same size direct to outside air. The minimum effective area of the permanent air vent in the outside wall must be 24.2cm^2 (3.7in^2) for OC, and OE models. Model requires 29cm2 (4.5in^2).

Air Extract Fans

Building Regulations 1990 permit the installation of an air extract fan in a kitchen containing an oil fired appliance. The appliance must be able to operate effectively whether or not the fan is running as follows:

1. Ensure the fan duty is capable of coping with the respective kitchen room volume. Avoid an oversize fan duty performance.

2. Follow the directions recommended by the fan manufacturer on the necessary air ingress needed for the fan or overhead cooker hood, then add this compensatory area to that recommended for the appliances primary air needs, to form a permanent air vent.

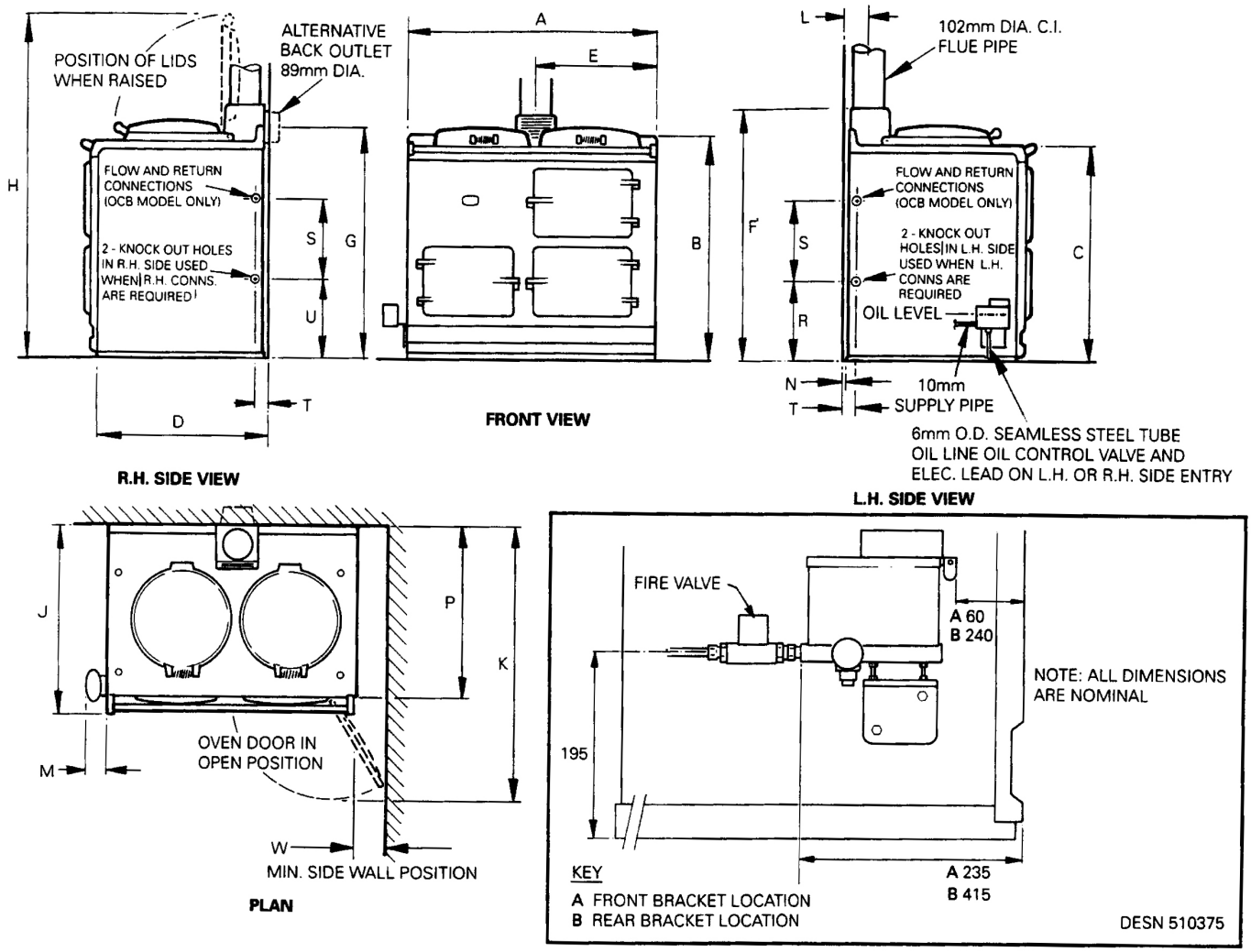
3. Ensure the wall location of the fan does not deprive the appliance of primary air.

Specifications

Models OC and OCB

Models OC and OCB **Fig. 12.3**

DESN 510373

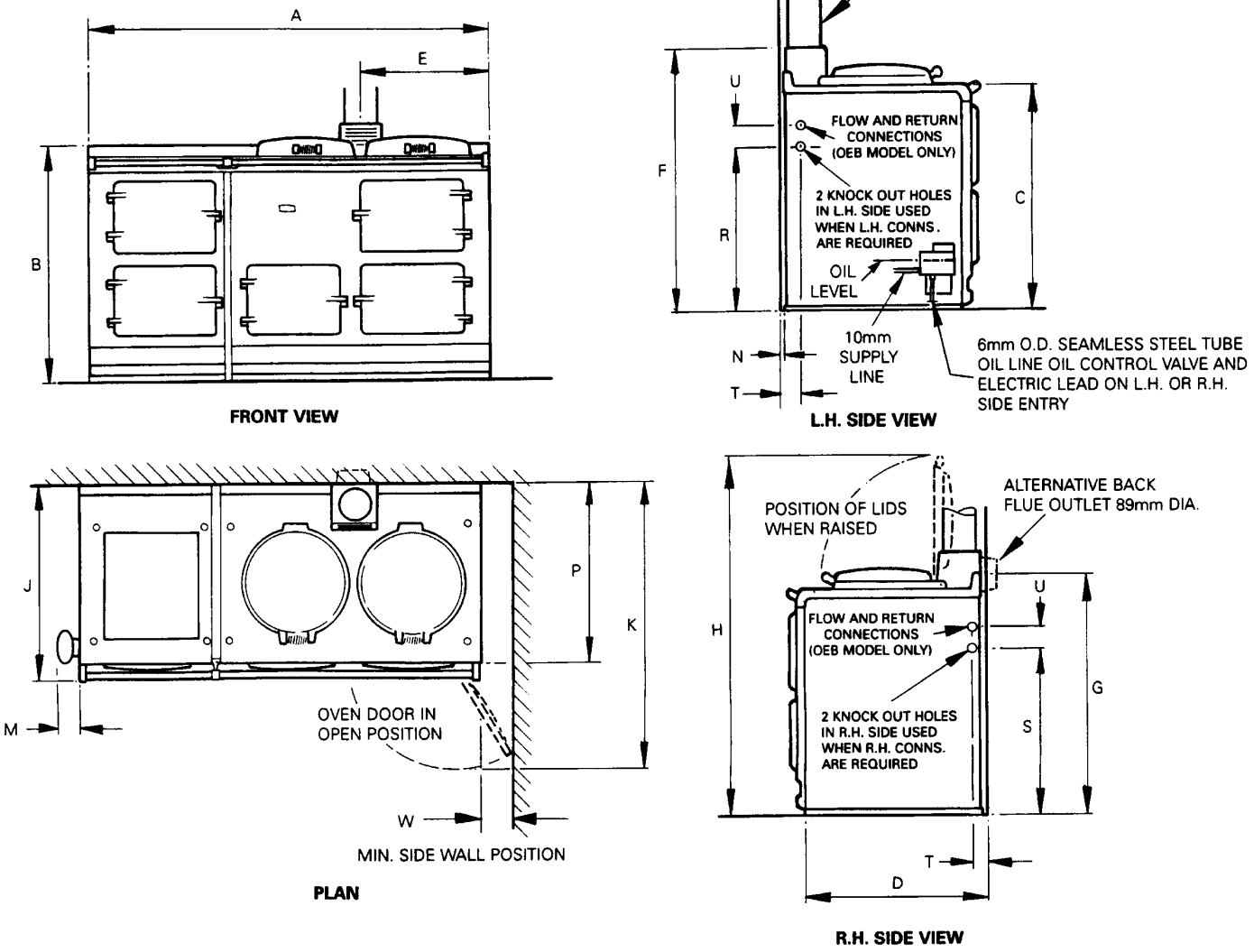


	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R
mm	987	889	851	679	467	959	889	1330	756	1125	64	83	3	698	116

Models		R	S	T	U
OCB 90	mm	499	127	53	530
OCB 135	mm	452	187	53	470

DESN 510375

Fig. 12.4
DESN 510374 'A'



	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	W
mm	1487	889	851	679	467	959	889	1330	756	1125	64	89	3	698	632	595	51	67	116

DESN 510374 A

Wiring external to the appliance must be installed in accordance with the current National and Local Regulations and Standards.

The cooker is supplied with a double insulated isolating transformer, designed for 230v ~ 50Hz supply and protected by a resettable fuse (resets within 2 minutes, after isolating transformer from mains).

The transformer leads are connected to the low voltage electric top mounted on the oil control valve top.

See **Fig. 12.5 Wiring diagram of low voltage electric top**.

The transformer can be plugged directly into an unswitched, shuttered socket-outlet. The socket should be accessible and adjacent to the appliance.

⚠ **WARNING! The low voltage electric top must not be connected directly to the mains supply.**

ALWAYS use an AGA Transformer.

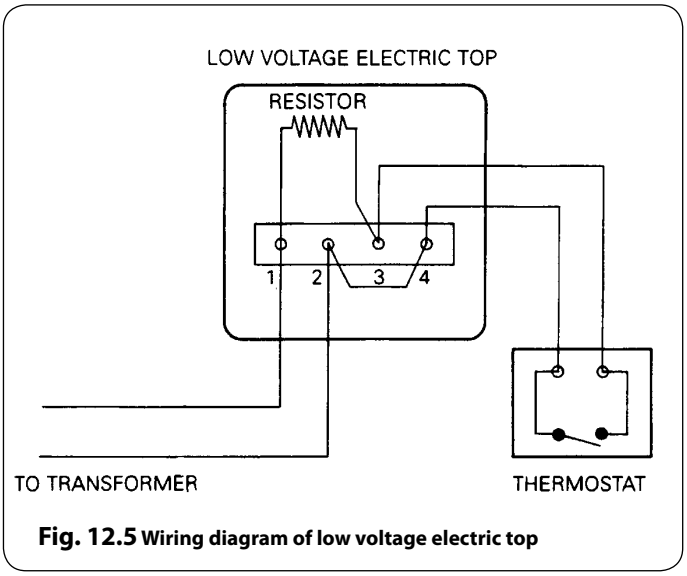


Fig. 12.5 **Wiring diagram of low voltage electric top**

Tiling

Where the cooker is to stand in a recess or against a wall which is to be tiled in no circumstances should the tiles overlap the cooker top plate.

Flue chamber outlets

The cooker flue chamber can be converted to provide either a horizontal or vertical flue outlet.

An extended horizontal flue connection is allowed upto a maximum of 150mm in length when a back chimney is constructed immediately behind the cooker (No bend connections are allowed).

The vertical flue outlet is used for main flue connection via a 100mm diameter flue pipe between the flue chamber and the chimney, etc.

Where the flue passes through a wall to reach a flue it must rise at a minimum angle of 45°.

General installation of cooker

The complete cooker is floor mounted and the space in which the appliance is to be fitted must have the following minimum dimensions:

	Oil valve left-hand side	
Model	OC	OE
Width	1303 mm	1803 mm
*Depth	1130 mm	1130 mm
Height	1400 mm	1400 mm

	Oil valve right-hand side	
Model	OC	OE
Width	1187 mm	1687 mm
*Depth	1130 mm	1130 mm
Height	1400 mm	1400 mm

* Depth dimension includes door opening.

This space includes the following minimum clearances for servicing:

Between wall and cooker side - 200mm adjacent to oil control valve.

If the oil control valve is not fitted against the cooker side panels, then the width across a recess which does not protrude beyond the front of the cooker may be reduced.

to:

- OC1000mm
- OE 1500mm

A 3mm gap is required each side between the cooker top plate and adjoining work surfaces that maybe fitted. This is to allow for the safe removal of the top plate should this be required at a later date.

Above the raised insulating cover handle - 60mm.

To facilitate further oil servicing, a minimum clearance of 1000mm must be available at the front of the cooker.

Flue pipes and fittings must not be closer than 25mm to combustible materials and where passing through a combustible partition such as a ceiling or roof, must be enclosed in a non-combustible sleeve providing a connector space of at least 25mm.

Spacers around flue pipes passing through walls or floors should be sealed against the passage of smoke and flame.

ASSEMBLE THE COOKER AS SEPARATELY INSTRUCTED AND INSTALL/CONNECT THE OIL BURNER ELECTRICAL SUPPLY.

Commissioning and lighting the burner

NOTE: BURNER BASE ENSURE THAT:

1. **THE BASE IS LEVEL.**
2. **IT CONTAINS A 6MM DEPTH OF OIL.**
3. **THE BURNER SHELLS ARE SEATED PROPERLY**

Lighting the Burner

See **Fig. 12.6 Wiring diagram of low voltage electric top** and **Fig. 12.7 Control Knob and Man./AUTO Switch**.

1. Ensure all oil valves are open and oil is in the oil control valve. Turn control knob **E** to MK6 position.
2. Lift up the reset lever **A** on the front of the oil control valve **B**.

NOTE: THE ACTUATING LEVER C ON THE ELECTRIC TOP MOUNTED ON THE OIL CONTROL VALVE TOP PERMITS MANUAL CONTROL TO OBTAIN MAXIMUM OIL FLOW RATES IN THE EVENT OF POWER FAILURE AND DEPRIVATION OF THERMOSTAT USE. ENGAGE THE ACTUATING LEVER C BY PUSHING TO THE LEFT AND ENGAGING IN THE NOTCH OF THE COVER.

THIS ALLOWS THE ACTUATING PLUNGER BUTTON TO EXTEND UPWARD AND GIVE HIGH FIRE OIL RATE.

USE ACTUATING LEVER WITH POWER FAILURE ONLY.

3. Open outer burner door **D**, lift off inner door **H** and set control thermostat knob **E** to Mark No. 6.
4. After allowing 15 minutes for oil to settle in the burner base, lift the lighting flap **F** on the front of the outer burner shell and light the front wick through the lighting aperture.
5. Close the lighting flap **F**, refit inner door **H**, and close the outer burner door **D**.
6. Connect transformer to mains supply.
7. The oil burner will gradually increase its oil rate, and under the control of the thermostat, bring the complete cooker up to temperature equilibrium, overnight.

Oil Rate and Combustion Checks

1. Remove the blanking plate and the oil filter within the oil control valve and connect an oil flow gauge assembly. The flow gauge must be capable of measuring up to 10cc per minute.
2. With the burner alight at high fire, check that the oil rate corresponds with the rates given on Page 1.
3. After 30 minutes on high fire, sample the flue products, just below, but within the bottom of the flue chamber with a Baccarach Smoke Pump. The Smoke Test should indicate a Baccarach Smoke No. 0 - 1.
4. Disconnect the oil flow gauge and replace oil filter and blanking plate in oil control valve.

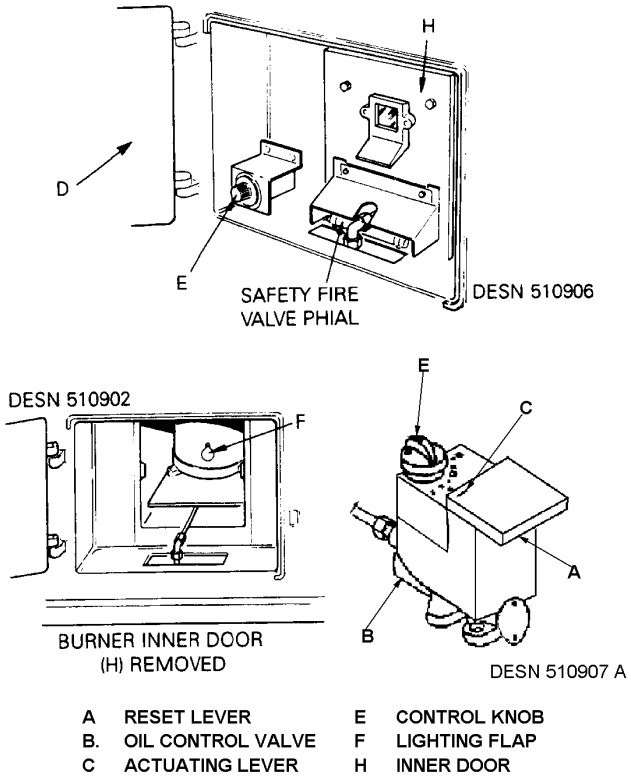


Fig. 12.6 Wiring diagram of low voltage electric top

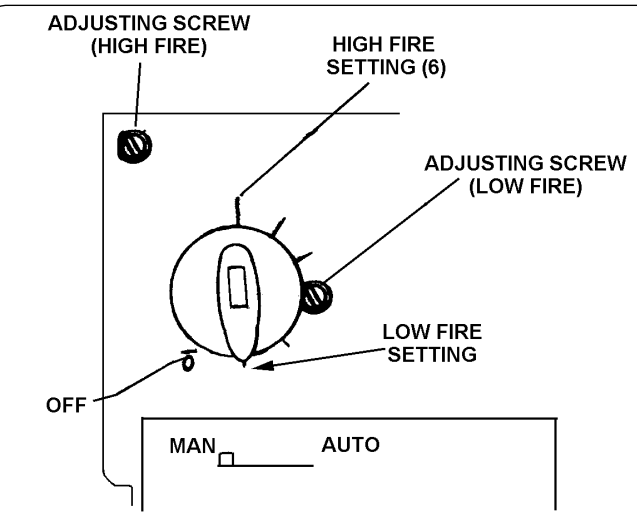


Fig. 12.7 Control Knob and Man./AUTO Switch

Automatic Control

The oil flow supply (heat input) is modulated by the electrical de-activation of the oil control valve top mechanism in conjunction with the control thermostat.

At idling temperature, the oil flow modulates down to minimal rates sufficient to maintain the cooker up to full temperature, with the indicator or or about the centre of the silver section of the heat indicator. If not, rotate the thermostat knob as necessary, but allow at least 12 hours between re-settings. Once the correct setting has been found, the cooker will operate automatically to maintain the cooker at full temperature.

When the cooking loading commences, a fall in oven temperature will cause the electrical activation of the oil valve top and subsequent increase in oil flow to a high fire condition, until recovery to its idling temperature is allowed.

Electrical Power Failure

Despite the loss of electrical power, normal cooking temperatures can still be obtained, but control must be manual only.

Method: Holding the actuating lever on the top of the oil control valve, push it to left and engage it in the ntoch of the cover. Electrical thermostat control will not be possible until the actuating lever is dis-engaged.

To Extinguish the Oil Burner

To completely extinguish the oil burner. Turn control knob fully clockwise to 'O' position, and isolate the electrical supply from the cooker.

If the cooker is being left out of use for more than a few hours or if the fuel supply has run out, turn off the valves on the oil feed line from the storage tank.

User's instructions

Hand the User Guide & Installation Instructions to the User for retention and instruct the user in the safe operation of the appliance.

Advise the User of the precautions necessary to prevent damage to the Domestic Hot Water system and to the building in the event of the Domestic Hot Water system remaining inoperative during frost conditions.

Finally, advise the User that, for continued efficient and safe operation of the appliance it is important that adequate servicing is carried out at regular intervals recommended by the AGA Distributor.

13. Technical data

	OC	OE
Maximum Operating Pressure 1.8 Bar	-	-
IDLING OIL		
cc per minute	3.7	4.4
RATE - LOW FIRE Heat Input (Btu/h)	7,690	9,145
COOKING OIL		
cc per minute	7.0	7.0
RATE - HIGH FIRE Heat Input (Btu/h)	14,550	14,550
Approximate Weekly		
Litres	40.0	50.9
Oil Consumption Gallons	8.8	11.2
BOILER OUTPUT		

For further advice or information contact your local AGA Specialist.

With AGA Rangemaster's policy of continuous product improvement, the Company reserves the right to change specifications and make modifications to the appliances described and illustrated at any time.

Manufactured By
AGA Rangemaster
Station Road
Ketley Telford
Shropshire TF1 5AQ
England

www.agaliving.com
www.agacookshop.co.uk