

#### **Gas Fired Cookers**

# Installation Instructions for AGA PF Gas Fired Cooker Models GC, GCB and GE

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FOR USE IN GB & IE

#### PLEASE READ THESE INSTRUCTIONS BEFORE INSTALLING YOUR AGA

#### **Consumer Protection**

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

**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.

#### **Important**

This appliance may contain some of the materials that are indicated. 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.

 $\mbox{\bf Firebricks}, \mbox{\bf Fuel} \mbox{\bf beds}, \mbox{\bf Artificial Fuels} \mbox{\bf -} \mbox{\bf when handling use disposable gloves}.$ 

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, Kerosene Oil - may be harmful if inhaled, may be irritating to skin, eyes, nose and throat. When handling avoid inhaling and 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.

#### **INSTALLATION**

With specific exceptions, the installing of any type of AGA Cooker is subject to the respective directions contained in current issue of The Building Regulations. In addition, Planning Permission may need to be obtained, which should be applied for separately.

The complete range of AGA cookers are suitable for Natural or Propane gases only and cannot be used on any other gas.

The complete cooker is floor-mounted and the space in which the appliance is to be fitted must have the following maximum distances:-

A minimum clearance of 60mm is required above the raised insulating cover handle.

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

Where cookers are fitted against side walls a 116mm clearance is required at the right hand side for oven door access. (A further 116mm is necessary if a left hand side gas connection is required).

If the AGA is to be installed in a brick recess, then the minimum clearance should be increased by at least 10mm on either side, to allow for the walls not being square and also for the natural dimensional variations found in the casting.

In addition, a minimum clearance of 1000mm must be available at the front of the cooker to enable the cooker to be serviced.

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

#### 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,

Models GC and GCB 406Kg, GE - 584Kg.

The top of the hearth must be of non-combustible material thickness of 12mm.

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

#### Tiling

When 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.

#### **Installation Requirements**

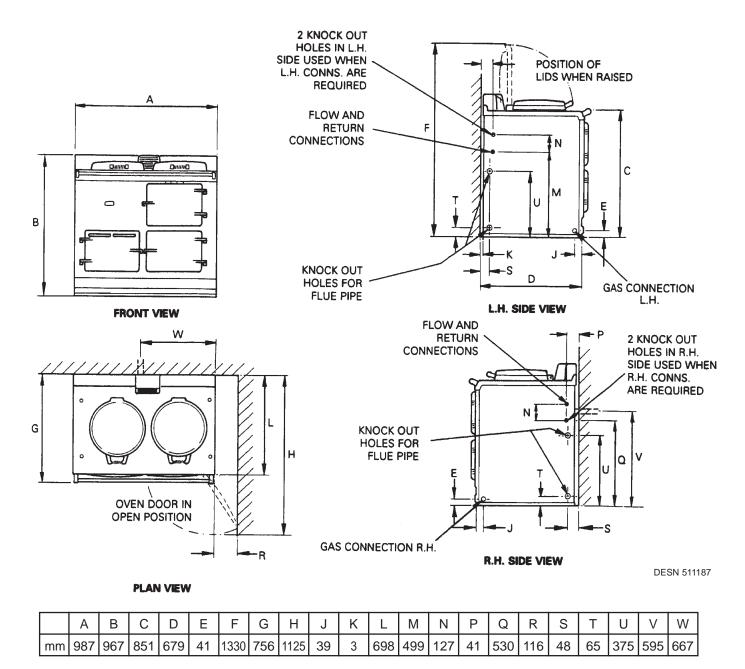
The installation of the cooker must be in accordance with the relevant requirements of the Gas Regulations and Building Regulations in force and the bylaws of the local Water Authority.

It should be in accordance also with any relevant requirements of the Gas Region and Local Authority.

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

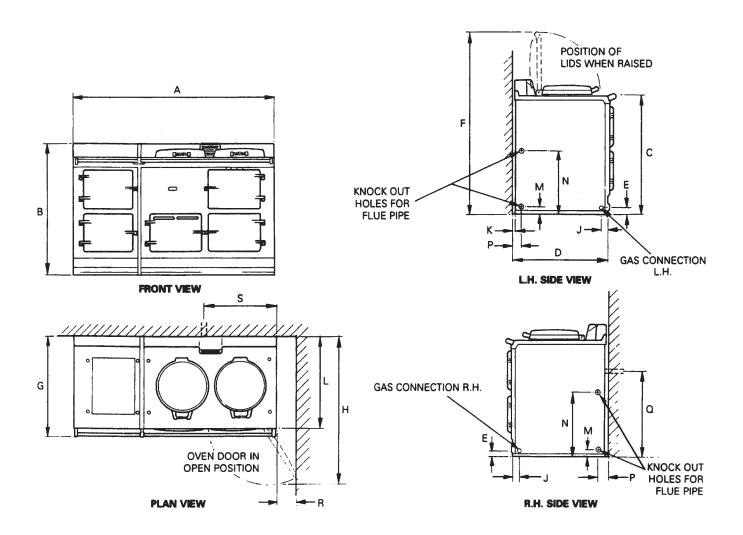
On completion, test the gas installation for soundness.

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.



Models GC and GCB Powered flue	GC	GCB
NATURAL G20		
MAXIMUM HEAT INPUT Thermostat Bypass Main Burner Injector Pilot Injector Inlet Pressure	5kW 100 or 120 285 N35 20mbar	5kW 120 or 140 285 N35 20mbar
PROPANE G31		
MAXIMUM HEAT INPUT Thermostat Bypass Main Burner Injector Pilot Injector Inlet Pressure Burner Pressure	5kW (357g/h) 60 or 80 180 L23 37mbar 28mbar	5kW (357g/h) 80 or 100 180 L23 37mbar 28mbar

For natural gas the gas valve outlet pressure is non adjustable, BUT for reference purposes only, a pressure drop of 1-2 mbar can be observed between inlet and outlet pressures on a cold appliance.



DESN 511188

		Α	В	С	D	Е	F	G	Н	J	K	L	М	N	Р	Q	R	S
Ì	mm	1487	967	851	679	41	1330	756	1125	39	3	698	65	375	48	595	116	667

Models GE Powered flue	GE
NATURAL G20	
MAXIMUM HEAT INPUT Thermostat Bypass Main Burner Injector Pilot Injector Inlet Pressure	5kW 100 or 120 285 N35 20mbar
PROPANE G31	
MAXIMUM HEAT INPUT Thermostat Bypass Main Burner Injector Pilot Injector Inlet Pressure Burner Pressure	5kW (357g/h) 60 or 80 180 L23 37mbar 28mbar

For natural gas the gas valve outlet pressure is non adjustable, BUT for reference purposes only, a pressure drop of 1-2 mbar can be observed between inlet and outlet pressures on a cold appliance.

#### **FLUE SYSTEM**

SEE FIGS. 1, 2, 3 & 4

The flue system must be installed in accordance with the regulations in force.

Products of combustion discharge is by a fan powered flue pipe of 50mm diameter which can reach up to 6 metres in length through a maximum of 6 x 90° bends or 9 metres with one bend. Exits from the appliance can be from rear LH or RH sides, from the rear centre or from the underside (Figs. 3 & 4).

The flue pipe should exit through the outside wall fixing plate by 25mm (Fig. 1).

#### **Terminal Position**

The minimum acceptable spacings from the terminal to obstructions and ventilation openings are as shown in Fig.2.

Where the terminal is fitted within 600mm below plastic guttering an aluminium shield 1500mm long should be fitted to the underside and immediately beneath the guttering or eaves.

Where the terminal is fitted within 450mm below eaves or painted guttering an aluminium shield 750mm long should be fitted to the underside and immediately beneath the guttering or eaves.

#### **Terminal Protection**

A terminal guard is supplied with the cooker and must be fitted if flue termination is less than 2 metres above ground level, or subject to damage.

When fitted, it must be positioned to provide a minimum of 50mm clearance from any part of the terminal and be central over the terminal.

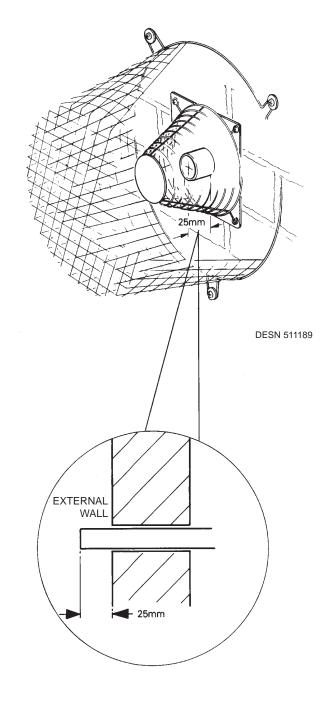
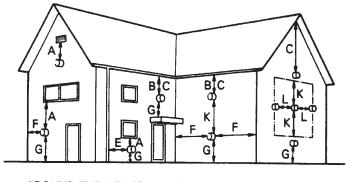


FIG.1 DESN 511196

#### Minimum siting dimensions for Flue terminals

Ро	sition	Minimum Spacing			
٨	Directly halow on anaphle window	mm 			
Α	Directly below an openable window air vent, or an other ventilation open				
В	Below gutter, drain/soil pipe	75			
С	Below eaves	200			
D	Below a balcony or car port roof	200			
Ε	From vertical drain pipes and soil p	pipes 150			
F	From internal or external corners	200			
G	Above adjacent ground or balcony	level 300			
Н	From surface facing the terminal	600			
I	Facing terminals	1200			
J	From opening (door/window) in car port into dwelling	1200			
K	Vertical from a terminal	1500			
L	Horizontally from a terminal	300			



AROUND THE HOUSE

DESN511052

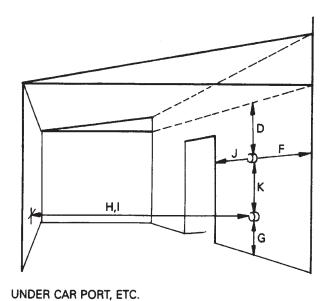


FIG.2 DESN511053

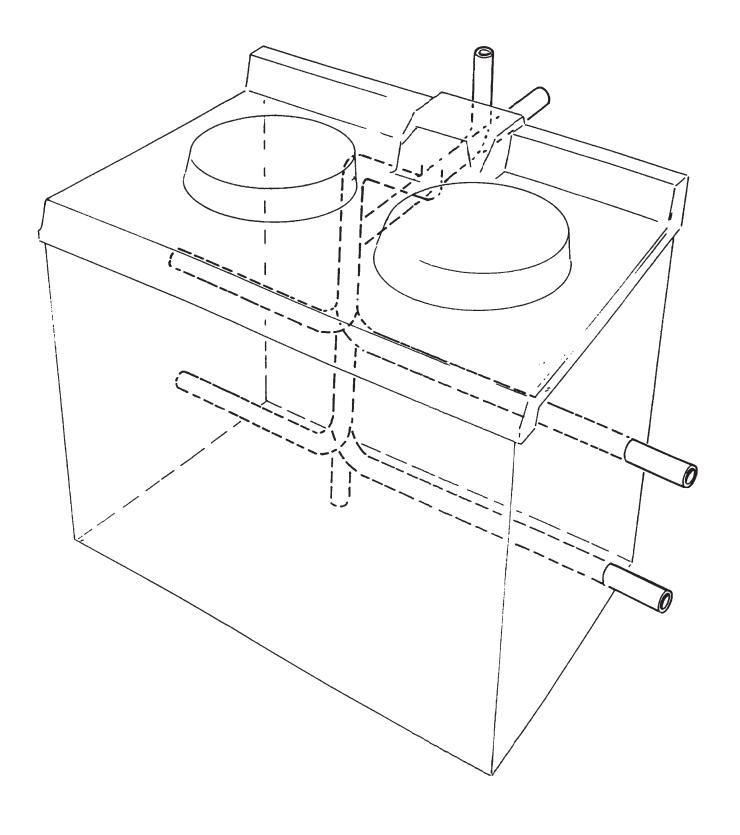
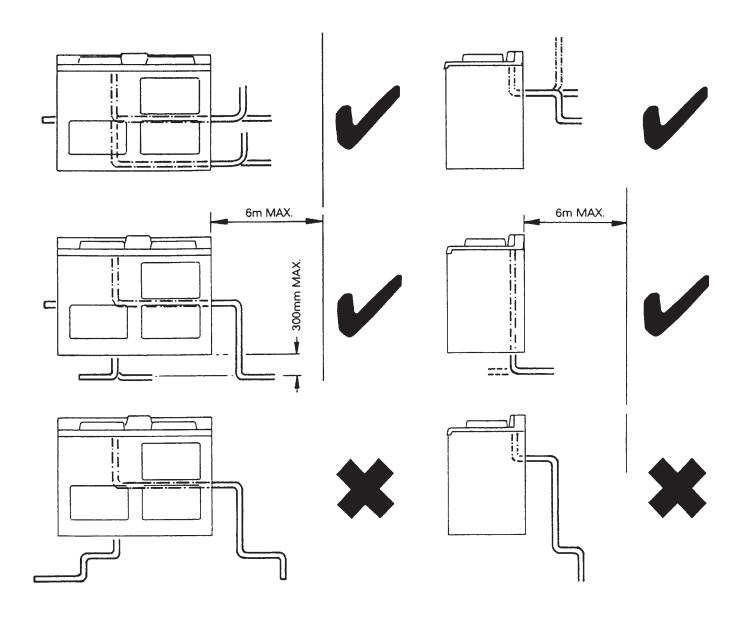


FIG. 3 DESN 511190



DOWNWARD RUNS UP TO 300mm BELOW THE APPLIANCE ARE ALLOWED, PROVIDED ONLY ONE BEND IS USED.

DOWNWARD RUNS USING 2 BENDS ARE **NOT** ALLOWED.

#### **AIR SUPPLY**

#### Kitchen or Internal Space Air Supply

The appliance can only be installed in a room which meets ventilation regulations in force but in any event the room must have a permanent vent of minimum free air area of  $36\text{cm}^2$ 

#### **INSTALLATION PIPES**

Installation pipes should be fitted in accordance with current Gas Regulations. Pipework from the meter/tank to the cooker must be of adequate size, cooker connection size of 15mm Dia. On completion test the gas installation for soundness and purge in accordance with the above standard.

#### **ELECTRICAL**

A 3Amp 230V~50Hz fused electrical supply is required adjacent to the appliance. External wiring to the fan unit must be installed using a 3 core heat resisting 85°C PVC sheathed cable and in accordance with the current Wiring Regulations and any local regulations which apply. The wiring should be completed as indicated:

The method of connection to the mains electricity supply must facilitate complete electrical isolation of the appliance, preferably by the use of an unswitched shuttered socket outlet in conjunction with a fused three pin plug. Alternatively, a fused double pole switch, having a contact separation of at least 3mm in both poles, serving only the appliance may be used.

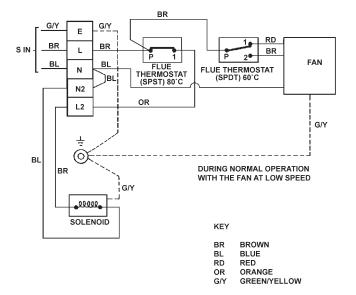


FIG.5

#### THE HOT WATER SYSTEM

#### (Model GCB)

In a domestic hot water system, the hot water storage vessel must be of the indirect cylinder of calorifier type. The hot water storage vessel should be insulated, preferably, with not less than 75mm thick mineral fibre, or its equivalent.

Pipework not forming part of the useful heating surface should be insulated to help prevent heat loss and possible freezing, particularly where pipes are run through roof spaces and ventilated under floor spaces. Cisterns situated in areas which may be exposed to freezing conditions should also be insulated.

Draining taps must be located in accessible positions which permit the draining of the whole system, including the boiler and hot water storage vessel.

Draining taps should be at least 15mm nominal size. The use of horizontal pipe runs should be avoided wherever possible in order to prevent the collection of air in the system. If horizontal runs are unavoidable, the pipes should rise upwards in the direction away from the boiler. Hot water systems should be in accordance with the relevant recommendations.

## Water Circulation System (Model GCB)

The cooker boiler should be connected to a cistern water supply and subject to a maximum head of 18.25m and minimum 1m.

The 28mm minimum diameter primary flow pipe must rise continuously from the cooker boiler to the cylinder to ensure good gravity circulation and have an open vent. The 28mm diameter primary flow and return pipes must not exceed 5.5m in length and be well insulated.

## Water Connections (Model GCB)

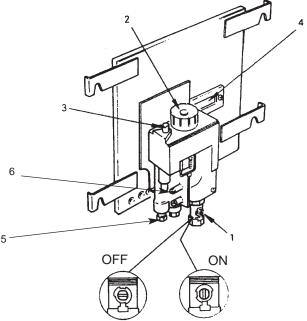
The two 28mm copper flow and return pipes from the boiler can be obtained for right or left hand connections.

#### **Hot Water Storage Vessel**

It is recommended that an indirect 190 litre (40 gallon) hot water storage cylinder of the double feed type should be lagged and fixed vertically as near as possible to the cooker.

The water draw-off pipes to the taps must be dead leg connection from the vent/expansion pipe.

A drain tap must be fitted at the lowest point of the system.



DESN210252 A FIG. 4

#### COMMISSIONING

LIGHTING THE BURNER - Fig. 2

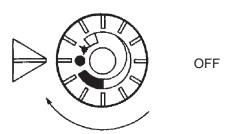
#### **CAUTION: NO SMOKING OR NAKED LIGHTS**

Open the burner outer door to expose the gas control combination valve.

CAUTION: BEFORE LIGHTING: ENSURE THAT THE GAS VALVE CONTROL KNOB 2 IS SET IN THE OFF POSITION (SEE FIG. A) AND **COMBUSTION** DISCHARGE **SAFETY DEVICE BUTTON** DEPRESSED.

- 1. Turn off union gas cock 1. Test the gas installation from the meter cock for soundness and purge.
- 2. Turn on gas supply to cooker and open gas cock 1.
- 3. Turn the gas valve control knob 2 anti-clockwise to the position (see fig. B). Press down and hold the knob in the position while depressing the piezo ignitor 3 several times until the pilot has lit. This can be observed through the viewing windows 4.
- 4. When the pilot has lit continue to hold the gas valve control knob for approximately 30 seconds. If it goes out, wait 3 minutes and repeat the procedure for holding a little longer.
- 5. With the pilot flame established, release the gas valve control knob 2 gradually and rotate anti-clockwise to its low fire position. Where upon the main burner will automatically light. Leave in the low fire position for at least 30 minutes.

NOTE: ANY ATTEMPT TO ROTATE THE CONTROL KNOB BEFORE RELEASE MAY RESULT IN DAMAGE.



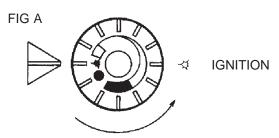
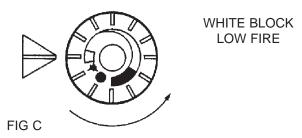
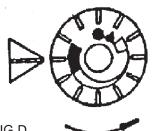


FIG B





**GREEN BAND NORMAL** RUNNING

FIG D

NOTE: AFTER SEVERAL HOURS THE HEAT INDICATOR SHOULD BE ON OR ABOUT THE CENTRE OF THE SILVER SECTION

IT MAY BE NECESSARY TO ADJUST THE CONTROL KNOB SLIGHTLY IN THE GREEN BAND TO ACHIEVE THIS.

## IF THE FLAME HAS EXTINGUISHED FOR WHATEVER REASON, WAIT 3 MINUTES (MINIMUM) BEFORE RELIGHTING.

- 7. On the first lighting or if the cooker has been cold for a long time, moisture from the insulation may run down the enamelled front of the cooker. This should be wiped off to prevent staining.
- 8. Check the inlet gas pressure is as indicated in the data plate as follows:-
- (i) Turn the gas valve control knob 2 to OFF position (see Fig. A). Remove the inlet pressure test nipple plug 5 and fit pressure gauge. Turn gas valve control knob 2 to the mid position of green band.
- (ii) Check inlet pressure correctly corresponds to the data plate.
- (iii) Check that the gas pressure is unaffected when other gas appliances are used.
- (iv)Turn gas valve control knob 2 to ignitor position (see Fig. B). Remove the pressure gauge and replace gas nipple plug. Turn gas valve control knob 2 to the midposition of the green band for normal running.

#### NOTE FOR L.P. COOKERS ONLY

Repeat instruction 8 on completely cold cooker with the pressure gauge fitted to the burner pressure test point 6. Check that the burner pressure correctly corresponds to the table on pages 2 or 3.

**NOTE:** IF FOR ANY REASON A GAS RATE CHECK IS REQUIRED. TURN OFF ALL OTHER APPLIANCES USING GAS AND USING THE GAS METER TEST DIAL AND STOPWATCH. CHECK THAT THE MAXIMUM GAS INPUT TO THE APPLIANCE IS AS INDICATED ON THE DATA PLATE.

Once the correct setting has been confirmed, the heat control will operate automatically to maintain the cooker at full temperature.

**NOTE:** REMEMBER TO NOTE THE SETTING POSITION IF TURNING OFF THE COOKER.

#### **INSTRUCTIONS**

Hand these and the Operating Instructions to the User for retention and instruct 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 the adequate servicing is carried out at regular intervals recommended by the Aga Distributor or local Gas Region.

## For further advice or information contact your AGA Specialist

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



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