

#### Gas Fired Cookers



## Installation Instructions for Aga Gas Power Vent Fired Range Models: G.C. P.V. (2 Oven) N.G. and L.P.G. G.E. P.V. (4 Oven)



## For U.S. and Candian Markets

**NOTE:** THESE INSTALLATION INSTRUCTIONS SHOULD BE LEFT WITH THE APPLIANCE AND THE USER TO RETAIN FOR FUTURE REFERENCE.

The Gas fired ranges are delivered unassembled. Before installation can be made, the site is inspected for suitability by an Authorised Aga Distributor and corrected where necessary to conform with local installation codes or in the absence of local codes with:

#### In Canada:

The CAN/CGA-B149 installation codes

#### In U.S.:

The National Fuel Gas Code ANSI Z223 1-latest edition.

Assembly is undertaken on site by the same Aga Distributor to ensure correct performance and safety.

#### INSTALLATION

It is essential that the base or hearth on which the range stands should be level and strong enough to support the weight of the range.

Approximate weights:

Models G.C. - 406kg (900lb) G.E. - 585kg (1290lb)

The top face of the hearth must be of non-combustible material for a minimum thickness of 12mm (1/2) and comply with the current Building Regulations and National Fire Laws.

The location must also provide adequate space for servicing and air circulation around the range.

#### WALL TILING

If 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 range top plate.

#### GAS SUPPLY - U.S. PIPE THREADS

NOTE: A MANUAL VALVE MUST BE INSTALLED IN AN ACCESSIBLE LOCATION IN THE GAS PIPE EXTERNAL TO THE APPLIANCE FOR THE PURPOSE OF TURNING ON OR SHUTTING OF GAS TO THE APPLIANCE.

## ALL GAS CONTROLS MUST BE U.S. PIPE THREADS.

Maximum Heat Input: 4.4kW (15,000 Btu/h)

The maximum gas inlet pressure at the appliance must not exceed 10 inches w.g. for Natural Gas, 14 inches w.g. for L.P. Gas. The minimum gas inlet pressure at the appliance must be 5 inches w.g. Natural Gas and 11 inches w.g. L.P. Gas to enable the correct manifold pressure to be obtained.

The appliance and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5kPa). The appliance must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressure equal to or less than 1/2 psi (3.5kPa).

On completion test the gas installation for soundness and purge. Leak testing of the appliance shall be conducted according to manufacturer's instuctions.

NOTE: Use soapy water solution on new gas connections to ensure there are no gas leaks.

### AIR SUPPLY

#### Kitchen or Internal 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 36cm 2 (5.5in 2).

In the event of an extractor fan being fitted in the vacinity of the range, compensatory ventilation will be required to satisfy the demands of the fan without influencing combustion efficiency and flue conditions.

## ELECTRICAL

110/120V 60Hz 10 AMP FLEXIBLE CORD AND PLUG PARALLEL TYPE. The appliance when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Codes ANSI/NFPA 70.

An electrical socket must be provided within 6 feet of the LH side of the appliance and easily accessible to the user to disconnect. Do not position socket above the appliance.

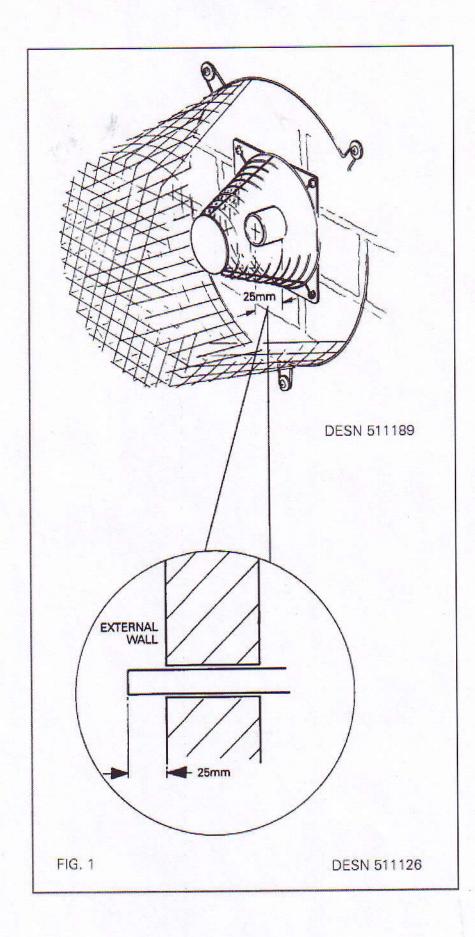
#### WARNING Electrical Grounding Instructions

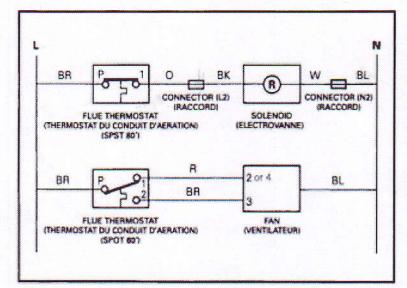
This appliance is equipped with a (three-prong) grounding plug for your protection against a shock hazard and should be plugged directly into a proper receptacle. Do not cut or remove the grounding prong from this plug.

## VENT SYSTEM

Products of combustion discharge is by a fan powered vent pipe 50mm (2in) diameter which can reach up to 6 metres (19.5ft) in length through a maximum of  $6 \times 90^{\circ}$  bends or 9 metres (29ft) with one bend. Exits from the appliance can be from rear L.H. or R.H. sides, from the rear centre or from the under side (Figs. 2 & 3).

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



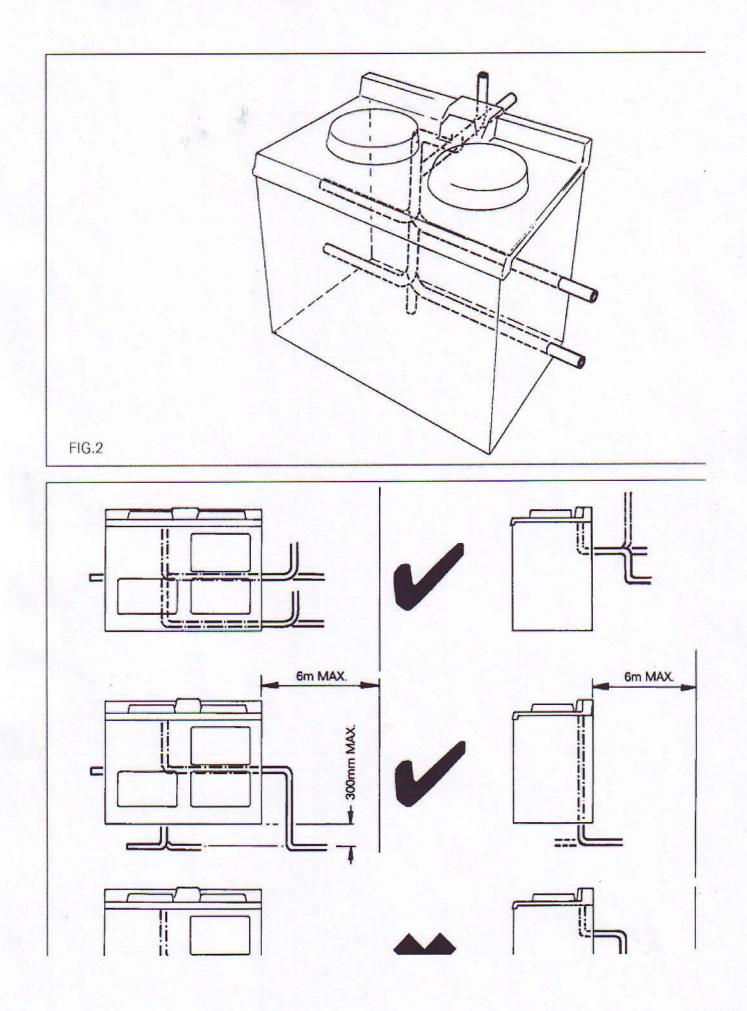


KEY

BR	BROWN	(MARRON)
BL	BLUE	(BLEU)
R	RED	(ROUGE)
BK	BLACK	(NOIR)
w	WHITE	(BLANC)
0	ORANGE	(ORANGE)
L	LIVE	(SOUS-TENSION)
N	NEUTRAL	(NEUTRE)

Caution: Label all wire prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation

Verify proper operation after servicing.



## **TERMINAL POSITION**

1. The range must be installed so that the vent terminal is exposed to the external air and terminal clearance comply with:

In U.S.: The National Fuel Gas Codes ANSI Z223 1 latest edition Section 7.7. In Canada: CAN/CGA-B149 installation code.

2. Termination should be on a clear expanse of wall, the terminal being preferably not less than 355mm (14in) away from a corner, recess of projection.

3. A hole must be cut through an outside wall with the hole falling 1.5" from inside to outside face of wall.

Openings in the walls behind or on the floor obelow the appliance must be sealed using the closure plate and sealant provided.

DO NOT install the terminal under the following conditions:

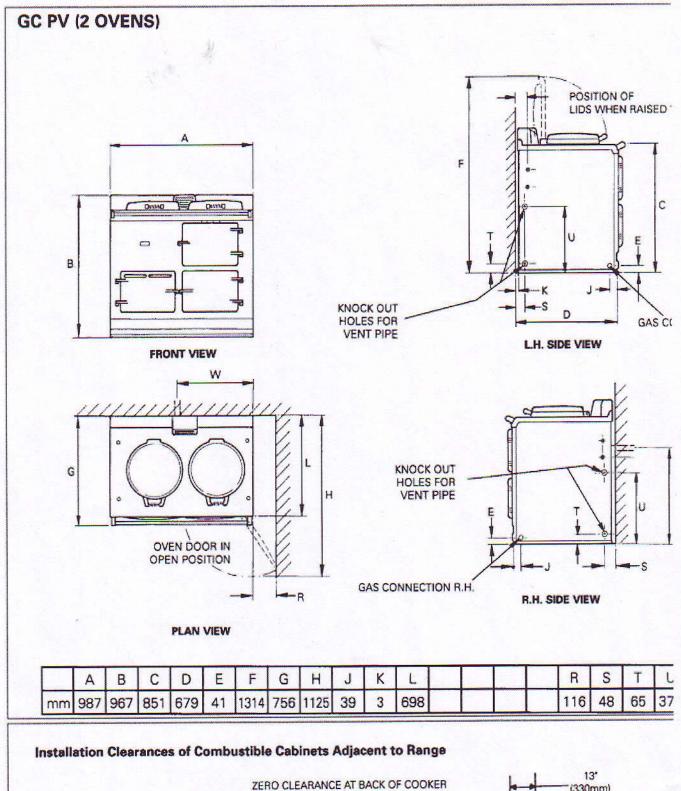
(a) Within 300mm (12in) measured vertically from the bottom of an openable window, air vent or any other ventilating opening.

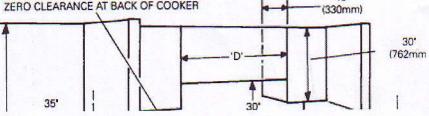
- (b) Within 300mm (12in) above adjacent ground level.
- (c) Within 600mm (24in) of any surface facing the terminal.
- (d) Within 355mm (14in) (U.S.) or 300mm (12in) (Canada) below eaves or balcony.

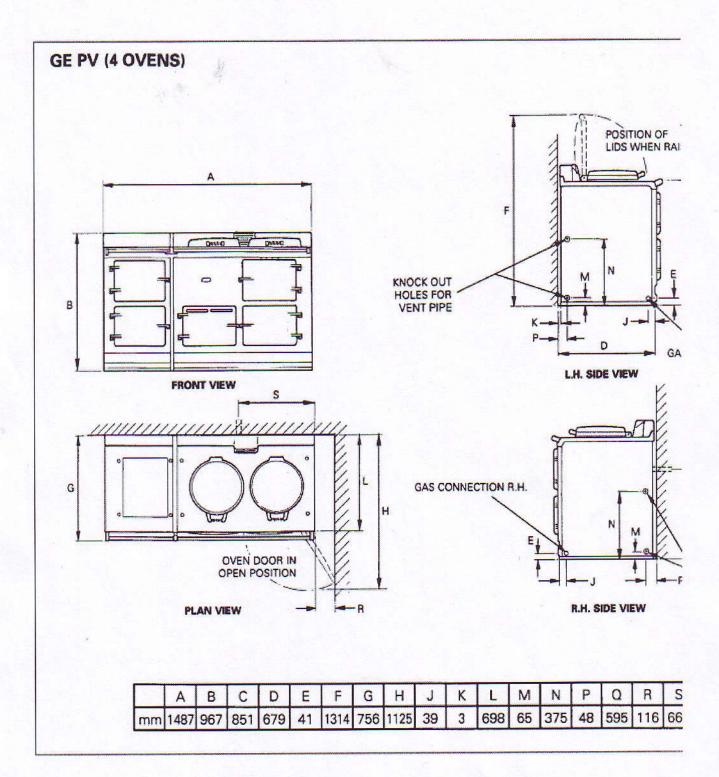
The terminal must be protected by the terminal protective guard (supplied) installed over the terminal to prevent unauthorised contact with the hot terminal surfaces. (See Fig. 1).

Models	GC and GE Natural Gas		GC and GE L.P.G	
Gas Type				
Range Model	GC	GE	GC	G
Main Burner Injector	400	400	180	18
Pilot Burner Injector	4212	4212	4208	42
Combination Gas Valve Bypass Screw	1.20 mm	1.20 mm	0.80 mm	0.80
Gas Burner Pressure	4.0 (inch w.g.)	4.0 (inch w.g.)	10.0 (inch w.g.)	1( (inch
Combination Gas Valve	S.I.T. EUROSIT			
Pilot Assembly	JOHNSONS			

## **Technical Specification**

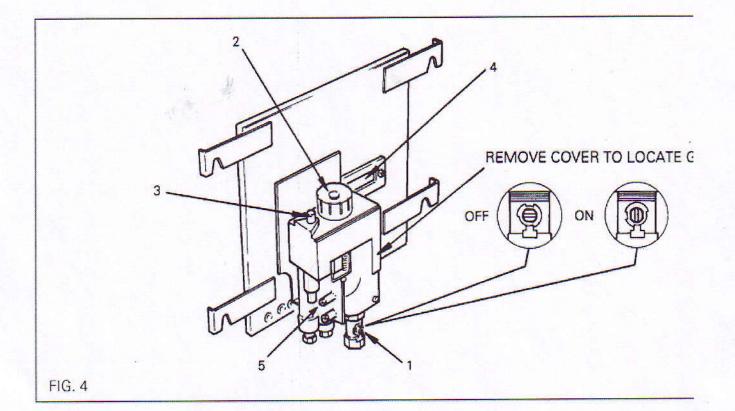






## LOCATION OF NAME PLATE

The model and serial numbers for this appliance are found on the name plate. These numbers must be used when requesting advice from your Aga Distributor. The name plate is located on the inside of the outer burner door.



### COMMISSIONING

#### LIGHTING THE BURNER - (Fig. 4)

#### CAUTION: NO SMOKING OR NAKED LIGHTS

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

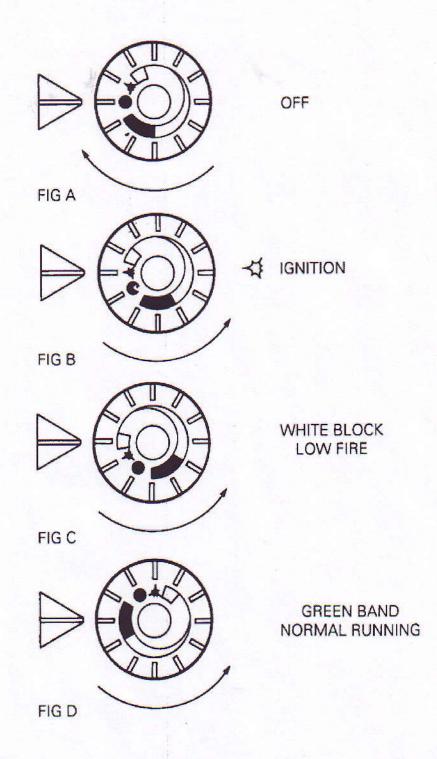
# CAUTION: BEFORE LIGHTING ENSURE THAT THE GAS VALVE KNOB 2 IS SET IN THE OFF POSITION. (SEE FIG. A) AND THE ELECTRICAL SUPPLY TO THE AGA IS SWITCHED ON.

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 <u>Fig. B</u>). Press down and hold the knob in the position while depressing the piezo lighter **3** several times until the pilot has lit. This can be observed through the viewing window 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 holding for a little longer.

5. When the pilot flame established, rotate the gas valve control knob **2** anti-clockwise to its low fire position (see fig. C). Where upon the main burner will automatically light. Leave in the low fire position for at least 30 minutes.



6. After 30 minutes, check the burner gas pressure. (i) Turn the gas control knob **2** to PILOT position (see <u>Fig. B</u>). Remove the main burner pressure test nipple plug **5** and fit pressure gauge. Turn gas valve control knob **2** to the mid position of the green band.

(ii) Check burner pressure correctly corresponds to the data plate.

(iii) Check that the gas pressure is unaffected to the main burner when other gas appliances are used.

(iv) Turn gas valve control knob 2 to PILOT (see Fig. B). Remove the pressure gauge and replace gas nipple

plug. Turn temperature control knob 2 to the mid position of the green band for normal running.

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.

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

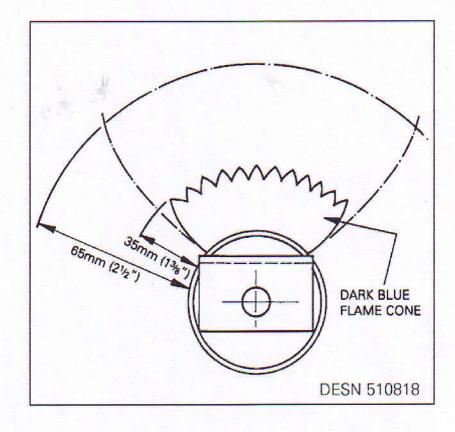
NOTE: AFTER SEVERAL HOURS THE HEAT INDICATOR SHOULD BE ON OR ABOUT THE BLACK LINE IN THE SILVER SECTION. IT MAY BE NECESSARY TO ADJUST THE CONTROL KNOB SLIGHTLY IN THE GREEN BAND TO ACHIEVE THIS.

IF THE FLAME HAS EXTINGUISHED FOR WHATEVER REASON, WAIT THREE MINUTES (MINIMUM), BEFORE RE-LIGHTING.

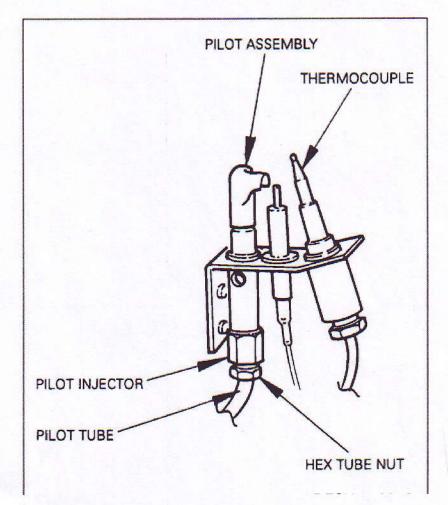
NOTE: REMEMBER TO NOTE THE SETTING POSITION IF TURNING OFF THE COOKER

#### TO EXTINGUISH THE BURNER

Turn the gas valve control to the OFF position (see Fig. A).



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## YEARLY SERVICE

It is recommended that the range be serviced every 12 months.

Arrange with the housholder that the range has been turned OFF the night before to ensure it is cold upon arrival.

1. WARNING: Disconnect Electric Supply before servicing.

2. Isolate the gas supply by turning off the service gas valve beneath the combination gas valve. Break the heaxgon union connection nut.

3. Detach the inner burner door fixing screw and draw complete gas burner assembly clear of the combustion chamber resting it on the floor of the range.

4. Remove the boiling plate, combustion chamber baffle and simmering plate.

5. Check conditions of flueways and combustion chamber and clean if necessary.

6. Lightly brush the perforated top of the gas burner and check that the burner venturi is free of lint and fluff.

NOTE: IT MAY BE NECESSARY TO DETACH THE PILOT ASSEMBLY AND REMOVE THE BURNER TO ENSURE IT IS FREE.

7. Check the condition of the pilot thermocouple tip to ensure it is clean and free of carbon. Heavy heat oxidised tips should mean the removal of the thermocouple and a new replacement. Examine and brush the pilot light parts and examine the ignitor cable to ensure the PTFE insulation remains intact and is firmly connected to the spark electrode. Clean any carbon away from the electrode.

8. Refit the gas burner assembly in reverse manner described in 3 and reconnect the gas supply at service gas valve union.

NOTE: USE SOAPY WATER SOLUTION TO ENSURE THERE ARE NO GAS LEAKS.

9. Inspect and clean vent fan blades, remove debris using a soft brush, access to this fan can be made by removing the R.H. and centre shroud.

10. Turn on the gas and electric supply and follow the procedure for lighting the burner.

11. Ensure that the pilot and main burner flame are burning evenly, the thermocouple is enveloped by the pilot flame.

12. Visuallt check the main burner and pilot flame for correct flame pattern. An established main burner at high fire will be predominantly blue with yellow tippings on an even height flame strip and be about 150mm (6in) high. See Fig. 11. Ensure all flameports have cross-lit and that the pilot light flame is free from sooting.

13. The maximum depth of any cabinets installed above the top cooking surface of the range must not exceed 330mm (13in).

NOTE: DO NOT ATTEMPT TO SERVICE THE RANGE YOURSELF. CONTACT YOUR LOCAL AGA DISTRIBUTOR STATING THE MODEL AND SERIAL NUMBER OF THE APPLIANCE TOGETHER WITH YOUR NAME AND ADDRESS.

## REPLACEMENT PARTS

In the event of a component failure which requires replacement, contact your local Aga distributor who will advise and supply the necessary replacement.

Expendable components that will require replacing at some time or other are listed as follows:

#### Description

- Pilot Thermocouple
  Main Burner
  Pilot Burner Assembly N.G.
  Pilot Burner Assembly L.P.G.
  Combustion Gas Valve
  Pressure Regulator N.G.
  Pressure Regulator L.P.G.
  Combustion Chamber Door Seal
  Solenoid Gas Valve
  Venting Fan
- 9. Flue Thermostat

#### For further advice or information contact your local distributor/stockist

With Aga-Rayburn'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.



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