

AGA DUAL CONTROL

Model No's: DC3G

Installation Guide

REMEMBER: when replacing a part on this appliance, use only replacement 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 authorized by AGA.

PLEASE READ THESE INSTRUCTIONS BEFORE COMMENCING SITE SURVEY OR INSTALLING THIS APPLIANCE.

IMPORTANT: SAVE INSTRUCTIONS FOR FUTURE REFERENCE

For use in USA/Canada

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PRODUCT SAFETY

MEANING/DESCRIPTION	SYMBOL	SIGNIFICATION/DESCRIPTION
WARNING/CAUTION		AVERTISSEMENT
An appropriate safety instruction should be followed or caution to a potential hazard exists.		Une consigne de sécurité appropriée doivent être suivies ou garde d'un danger potentiel exists.
DANGEROUS VOLTAGE	٨	TENSION DANGEREUSE
To indicate hazards arising from dangerous voltages.	4	Pour indiquer les dangers résultant des tensions dangereuses.
PROTECTIVE EARTH (GROUND)		TERRE DE PROTECTION
To identify any terminal which is intended for connection to an external conductor for protection against electric shock in case of a fault, or the terminal of a protective earth (ground) electrode.		Pour marquer bornes destinées à être raccordées à un conducteur de protection extérieur contre les chocs éclectiques en cas de défaut d'isolement, ou pour marquer la borne de la terre de protection.
HEAVY	^	LOURD
This product is heavy and reference should be made to the safety instructions for provisions of lifting and moving.		Ce produit est lourd et doit être fait référence auc consignes de sécurité relatives aux dispositions de soulever et déplacer.
DISCONNECT MAINS SUPPLY		APPAREIL À LASER DE CLASSE 2
Disconnect incoming supply before inspection or maintenance.		Alimentation d'entrée Débrancher avant inspection ou d'entretien.
REFER TO MANUAL		ATTENTION, SURFACE TRÉS CHAUDE
Refer to relevant instructions detailed within the product manual.		Reportez-vous aux instructions applicables, indiquées dans le manuel du produit.

GENERAL NOTES

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

DELIVERY REQUIREMENTS

The AGA DC3 arrives on 1 pallet.

Vent Pipe Installation kit (AG1M212542) arrives in a separate carton.

There must be access to the kitchen to manipulate a foot print of $39 \, {}^{9}/{}_{16}$ " (1005mm) x 29 ${}^{1}/{}_{8}$ " (740mm). A wooden template (skate with castor wheels) of dimensions $39 \, {}^{9}/{}_{16}$ " (1005mm) x 29 ${}^{1}/{}_{8}$ " (740mm) could be used to check if the AGA Dual Control fully built appliance is able to fit through the property grounds and doors into its installation position in the kitchen. It must also be considered that the height of the appliance is $37 \, {}^{3}/{}^{4}$ " (960mm) off pallet and 43 ${}^{1}/{}_{4}$ " (1100mm) on the pallet, so high level obstacles/restrictions must not be overlooked.

GENERAL INSTALLATION REQUIREMENTS

The installation of the range must be in accordance with the relevant requirements of the local Wiring and Building Regulations. It should be in accordance also with any relevant requirements of the local or state codes.

In your own interest and that of safety to comply with the law, all appliances should be installed by an authorized AGA distributor in accordance with the relevant regulations.



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

APPLIANCE DIMENSIONS - AGA DC3G



	А	В	С	D	Е	F	G	Н	J	Κ	
mm	987	951	913	680	1388	760	1145	698	116	10	
inch	38 7/8	37 1/2	36	26 3/4	54 ⁵ /8	29 ⁷ /8	45 1/8	27 1/2	4 ^{9/} 16	3/8	
	l										
	L	М	N	Р	Q	R	S	Т	U	V	W
mm	L 565								U 996	•	W 9

Range Dimensions

When surveying for a range installation the actual clearance required for the 'body' of the appliance should be increased by 3/8" beyond the figures quoted above. This allows safe margin to take into account the natural dimensional variations found in major castings. In particular the width across the appliance recess could be critical.

APPLIANCE WEIGHT (Excludes Packaging)

Model: AGA Dual Control (DC3G) - 996lb (452kg)

GAS CONNECTION - AGA DC3G ONLY

1/4" NPT MALE AT LEFT REAR OF APPLIANCE

NOTE: GAS CONNECTION POINT PROTRUDES

TECHNICAL DATA

Models AGA DC3G and DC5G	
NATURAL GAS	
MAXIMUM HEAT INPUT Thermostat Bypass Main Burner Injector Gas Supervision Injector Minimum Inlet Pressure Burner Pressure	6,800 Btu/hr 70 112 4212 5" w.g. 4" w.g.

INSTALLATION

Range Base or Hearth

It is essential that the base or hearth on which the range stands should be level and be capable of supporting the total weight of the range. The base of the built-in AGA plinth must be level and sit above the finished height for service access.

Plinth

The front plinth cover is removable and must not be obstructed by flooring or tiles. If necessary the range must be raised by the thickness of the tiles to ensure the plinth can be removed.

Rear Wall

Since this appliance runs continuously, please take note of these **IMPORTANT** instructions:

Combustible Walls

Houses constructed of combustible materials (such as all-timber or stud wall partitions and batoned plasterboarded walls) require special wall heat protection features.

Non-combustible material behind a range must be of at least 1" (25mm) thick insulation board (Monolux or equivalent), up to hotplate level.

SPECIAL NOTE: Ensure electric cabling or plastic services do not pass within or on the outside of the wall, behind or directly above the range.

This type of material can age prematurely when exposed to continuous higher ambient temperature.

Alternatively the range can be spaced 1 ¹/2" (38mm) away from the wall to create an air gap.

The air gap must be left open and **NOT** blocked off across the top edge.

Side Clearances

A 1/8" (3mm) gap is required each side between the range top plate and adjoining work surfaces that may be fitted, this is to allow for the safe removal of the top plate should this be required at a later date.

Where ranges are to be fitted against a side wall a 4 9/16" (116mm) clearance is required on the right and left hand side for oven door access.

If the AGA is to be installed in a brick recess, then the minimum clearance should be increased by at least 3/8" (10mm), to allow for the walls not being square.

In addition a minimum clearance of $39 \frac{3}{8}$ " (1000mm) must be available at the front of the range to enable the range to be serviced.

Tiling

When the range is to stand in a recess or against a wall which is to be tiled, under no circumstances should the tiles overlap the range top plate, access to remove the hotplate must be allowed for servicing at a later date.

A gap of at least 3/8" (10mm) must be observed from the rear of the top plate and the wall behind the range.

A Overhead Cabinets

To eliminate the risk of burns or fires by reaching over hot surface units, cabinet storage space located above the surface units should be avoided.



Top Plate Adjustment - AGA DC3 (See Fig. 4)

In general, adjustment of the top plate is to be avoided. However minimum use of the top plate adjusters can be used to improve the alignment of the top plate.



CONNECTION TO THE POWER SUPPLY - AGA DC3G



Electric Shock Hazard



Rating Plate is located behind removable plinth, see Fig. 4A, Page 11

Electrical Grounding is required on this appliance.

DO NOT connect to the electrical supply until the appliance is permanently grounded.

This appliance must be connected to a grounded metallic permanent supply or a grounding connector should be connected to the grounding terminal or wire lead on the appliance.

Failure to follow these instructions could result in death or serious injury.

This range must be supplied with a 240V, 60Hz power supply and connected to an individual, properly grounded branch circuit protected by a circuit breaker. At 240V, it has a maximum load of 30 amps. Electric hook-up must be done by a licensed electrician. This unit must be installed according to regional codes, or in the absence of codes, the National Electrical Code.

- Product installation requires a separate (not shared) 240V/40 amp circuit protected by an appropriate branch circuit supply.
- The service cord on your range is fitted with a standard four (4) prong type 14-50P plug (matching receptacle 14-50R).

The method of connection to the mains electricity supply must facilitate complete electrical isolation of the appliance.

The mains connection and isolation should not be positioned above the range and must be positioned within the area defined in Fig. 4A, Page 11.

THIS RANGE MUST BE COMPLETELY ISOLATED FROM THE ELECTRICITY SUPPLY BEFORE SERVICING. THE RANGE IS DESIGNED FOR THE VOLTAGE STATED ON THE RATING PLATE, WHICH IS SITUATED BEHIND THE PLINTH COVER.

MAINS CABLE ROUTING - AGA DC3G



FLUE SYSTEM

SEE FIGS. 5, 6, 7, 8 & 9

The flue system must be installed in accordance with the federal, state and local codes.

Only genuine AGA approved flue pipe is to be used.

Maximum permitted flue length run including bends is 13 ft.

Products of combustion discharge is by a fan powered flue pipe of 2" (50mm) diameter which can reach up to 13' (4 metres) in length through a maximum of $4 \times 90^{\circ}$ bend. Exits from the appliance can be from rear, LH or RH sides. (See Figs. 6 and 7).

The flue pipe should protrude through the outside wall fixing plate by 1" (25mm) (See Fig. 5).

Terminal Position

The minimum acceptable spacings from the terminal to obstructions and ventilation openings are as shown in Fig. 7.

Where the terminal is fitted within 23 ⁵/8" (600mm) below plastic guttering an aluminium shield 39 ³/8"

(1000mm)

long should be fitted to the underside and immediately beneath the guttering or eaves.

Where the terminal is fitted within 17 $^{3}/_{4}$ " (450mm) below eaves or painted guttering an aluminium shield 29 $^{1}/_{2}$ (750mm) long should be fitted to the underside and immediately beneath the guttering or eaves.

Terminal Protection

A terminal guard is supplied with the range and must be fitted, if flue termination is less than 78 ³/₄" (2 metres) above ground level, or subject to damage.

When fitted, it must be positioned to provide a minimum of 2" (50mm) clearance from any part of the terminal and be central over the terminal.





NOTE: A 5" hole clearance is required through combustible material, to allow 1 1/2" clearance around flue pipe, (See Fig. 6).

Minimum siting dimensions for flue terminals

Position Spacing	Minimum inch/mm
A Directly below an openable window, air vent, or any other ventilation opening	11 ³ /4"/300
B Below gutter, drain/soil pipe	3"/75
C Below eaves	7 ⁷ /8"/200
D Below a balcony or car port roof	7 ⁷ /8"/200
E From vertical drain pipes and soil pipes	5 ⁷ /8"/150
F From internal or external corners	11 ³ /4"/300
G Above adjacent ground or bacony level	11 ³ /4"/300
H From surface facing the terminal	23 ⁵ /8"/600
I Facing terminals	47 ¹ / ₄ "/1200
J From opening (door/window) in car port into dwelling	47 ¹ /4"/1200
K Vertical from a terminal	59"/1500
L Horizontally from a terminal	11 ³ /4"/300







DOWNWARD RUNS UP TO 11 ³/4"(300mm) BELOW THE APPLIANCE ARE ALLOWED, PROVIDED ONLY ONE BEND IS USED.

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

MAXIMUM VERTICAL RISE = 59 ¹/16" (1500mm)

VERTICAL RISE MUST BE AT LEAST 11 $^{3}/_{4}$ " (300mm) FROM PRODUCT BUT NO MORE THAN 31 $^{1}/_{2}$ " (800mm) BEFORE VERTICAL.

WIRING DIAGRAM - AGA DC3G



GAS SUPPLY - U.S. PIPE THREADS

NOTE: A MANUAL SHUT-OFF 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 2 kW (6,800 Btu/h).

Gas Inlet Pipe: 1/4" NPT male at left rear of appliance.

The maximum gas inlet pressure at the range must not exceed 10 inches w.g. for Natural Gas. The minimum gas inlet pressure at the appliance must be 5 inches w.g. Natural Gas to enable the correct manifold pressure to be obtained.

The range 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 (3.5 kPa). The range must be isolated from the gas supply piping system by closing its i 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 (3.5 kPa).

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

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

VENT PIPE AND GAS INLET PIPE RUN BEHIND THE HOTCUPBOARD

On DC5 models, the gas inlet pipe and the vent pipe run behind the hotcupboard, (See Fig. 11)

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 36cm² (14in²).

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

AGA DC3G P/F HANDRAIL CONNECTION

1. Fit the handrail bracket over the fixing stud located on the top plate. Lock into position by tightening the grub screw nearest the appliance. (See Fig. 12).



2. Next the handrail, endcaps and handrail require assembly.

Slide the handrail through the handrail brackets.



- 3. Once the handrail assembly is located squarely, lock the handrail in position by winding in the grub screws on the underside of each handrail bracket.
- 4. Once the handrails are locked in position, fit the handrail endcaps. The endcaps should be carefully pushed into place until they sit flush with the outside face of each bracket (a light smear of lubricant such as, hand or dish soap on the end cap 'O' rings may ease fitment.
- 5. Finally, fit the plinth facia to the magnets on the front of the plinth. Make sure that the plinth facia is centrally located and does not overhang the range.

Commission the AGA Dual Control, as stated in the relevant Installation Instructions and carry out functional test on each of the features of the AGA Dual Control.

COMMISSIONING



Inlet Pressure Testing

- **1.** Turn off control knob (A) and turn off electrical supply to range.
- 2. Remove facia by pulling off hotplate control knob and removing four fixing screws.
- 3. Remove inlet pressure test nipple sealing screw (D) and fit rubber tube over the nipple.
- **4.** Turn on gas cock (C) and refit facia making sure the rubber pressure test tube is routed through the hotplate control knob hole within the facia.
- 5. Attach tube to manometer.
- 6. Turn on electricity supply.
- 7. Follow paragraphs 1-4 of 'LIGHTING PROCEDURE' on page 21, and check inlet pressure, 8" w.g.

Burner Pressure Testing

- **1.** Turn off control knob (A) and turn off electrical supply to range.
- 2. Remove facia by pulling off hotplate control knob and removing four fixing screws.
- 3. Remove inlet pressure test nipple sealing screw (E) and fit rubber tube over the nipple.
- 4. Turn on gas cock (C) and refit facia making sure the rubber pressure test tube is routed through the hotplate control knob hole within the facia.
- 5. Fit manometer tube to test nipple (E).
- 6. Turn on electricity supply.
- 7. Follow paragraphs 1-4 of 'LIGHTING PROCEDURE', and check burner pressure 4" w.g.

NOTE: Burner pressure adjustment screw is located behind valve cover.

Check for leaks around pressure test nipple after refitting.

Leak testing of the appliance shall be conducted according to the manufacturers instructions. (See 'YEARLY SERVICE')

COMMISSIONING

CAUTION: BEFORE LIGHTING: ENSURE KNOB (A) IS IN THE OFF POSITION (SEE FIG. 27). ALSO ENSURE GAS SUPPLY TO RANGE IS ON, AND THE GAS SERVICE COCK (C) IS IN THE ON POSITION (SEE FIG. 31), AND THE ELECTRICAL SUPPLY TO THE AGA IS SWITCHED ON.

LIGHTING PROCEDURE - SEE FIGS 15 - 23

- The main burner gas flow is set with the oven thermostat control knob (B). (See Fig. 14). First, ensure both knobs are turned fully clockwise. Knob (A) to the OFF position and oven thermostat control knob (B) to the minimum setting (thin end of the white band).
- 2. Turn oven gas control knob (A) slightly anti-clockwise towards the IGNITION position (≺) until reaching stop, press down and hold for 5 seconds (gas flows only to the flame supervision burner). (See Fig. 16).
- Continue pressing down knob (A) while turning further anti-clockwise to the (
 position (this activates the spark ignitor), continue to hold down for 10 seconds after flame supervision burner has been lit. (If it does not light, steps 2 and 3 can be repeated). (See Fig. 17).
- **4.** Upon lighting, release knob and turn further anti-clockwise to the ON position (large flame symbol) (See Fig. 18). Pilot gas flows and mains gas flows according to the appliance setting (knob B).
- 5. Turn the oven thermostat control knob (B) slightly anti-clockwise into the white band (LOW FIRE position). Leave in the low fire position for at least 60 minutes, (See Fig. 19).

NOTE: 'LOW FIRE' position is attained by turning knob (B) gradually into the white band, until a small flame along the main burner is observed through viewing window (F). (See Fig. 14).

6. After at least 60 minutes rotate control knob (B) anti-clockwise to the mid-position of the green band for normal running. (See Fig. 20).

NOTE: It will take up to 24 hours for all ovens to reach operating temperature, the oven heat indicator may display green before this. Once the oven temperatures are at operating temperature it may be necessary to make fine adjustment to the oven control knob to achieve the desired temperatures. It is not advisable to make further changes to the control knob once the desired temperature is achieved.

When the range is lit from cold, moisture may form on the enamel which should be wiped off to prevent staining.

IF THE FLAME HAS EXTINGUISHED FOR WHATEVER REASON, WAIT THREE MINUTES AND REPEAT THE LIGHTING PROCEDURE.

YEARLY SERVICE

It is recommended that the range be serviced at regular intervals.

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

- **1.** Turn off power to the range.
- 2. Isolate the gas supply by turning off the gas shut off valve, See Fig. 14. This is accessed by removing the control panel facia (4 screws).
- 3. Break the hexagon union nut and remove two burner fixing screws, See Fig. 14.
- 4. Locate electric wires from gas valve and solenoid, disconnect inline connectors.
- 5. The burner assembly can now be withdrawn from the combustion chamber.

NOTE: Check there is sufficient length of thermostat capillary tube to allow the burner assembly to be rested on a work surface without detaching the sensing end from the top of the roasting oven.

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 FLAME SUPERVISION ASSEMBLY FROM THE BURNER TO ENSURE IT IS FREE.

- 7. Check the condition of the flame supervision thermocouple tip to ensure it is clean and free of carbon. Heavy heat oxidised tips should mean the removal of the thermmocouple 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.

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 centre shroud (one screw fixing inside top outlet slot).
- **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.** Visually check the main burner and flame supervision 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 100mm (4in) high. Ensure all flame ports have cross-lit and that the flame supervision 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.

INSTRUCTIONS

Hand these instructions to the user for retention, and instruct in the safe operation of the appliance.



Fig. 19

Fig. 20

CONTENT LIST (LOOSE ITEMS)

DESCRIPTION	PART NO	QTY	TICK
BAKING OVEN CALIBRATION PLATE	AE2M231432	1	()
OVEN GRID SHELF	AE4M211863	3	()
SHELF - OVEN	AG2M210636	1	()
GRILL RACK - LARGE	AG4M210268	1	()
GRILL RACK - SMALL	AG4M210269	1	()
WIRE BRUSH	EACS23230	1	()
TOASTER	EACS47380	1	()
MEAT TRAY - SMALL	EMTY530217	1	()
MEAT TRAY - LARGE	EMTY530218	1	()
AGA RECIPE BOOK (2 & 4 OVEN)	EACS40640	1	()
PLINTH FACIA ASSY	AE1M231475	1	()
PLATE - OUTLET BLANKING	AG2M210568	4	()
HANDRAIL	AE4M231411	1	()
HANDRAIL MOUNTING BRACKET	AE4M212288	2	()
'O' RING (SMALL)	AE4M212293	4	()
END CAP (HANDRAIL)	AE4M212290	2	()
M5 x 12mm CONE POINT GRUB SCREW	KGRB500674	2	()
SCREW M5 x 10mm SOCKET HD GRUB	KGRB50509	2	()
FLUE PIPE - HORIZONTAL	AG4M210566	1	()
ALLEN KEY 2.5 mm	AE4M280592	1	()
ALLEN KEY 3 mm	AE4M280593	1	()
HOB ADJUSTER TOOL	AE4M280388	1	()
FLUE PIPE 'S' BEND	AG4M212518	1	()
COUPLING KIT	AG4M211746	1	()
'O' RING KIT	AG4M211747	1	()
BRACKET - FLUE PIPE	AG4M210358	1	()
SCW M5 x 8mm PAN HD POZI Z/P	KPAN52581	2	()

PACKED SEPARATELY

FLUE PIPE/TERMINAL GUARD	AG1M212487	1	()
FLUE EXTENSION KIT	AG1M212542	AS REQUIRED	()

For further advice or information contact your local AGA Ambassador

With AGA Marvel'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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