

# AGA GAS MARK 1 BURNER (CONVERSION)

# **Fitting 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.

#### TECHNICAL DATA

AGA GAS MARK 1 BURNER (CONVERSION)	
NATURAL G20	
MAXIMUM HEAT INPUT	5 kW
Thermostat By-Pass Size	0.95
Main Burner Injector	400
Pilot Injector	4212
Inlet Pressure (EU COUNTRIES ONLY)	20 mbar
Burner Pressure	10 mbar (4" w.g.)
PROPANE G31	
MAXIMUM HEAT INPUT	5 kW (357 g/h)
Thermostat By-Pass Size	70
Main Burner Injector	170
Pilot Injector	4209
Inlet Pressure (EU COUNTRIES ONLY)	37 mbar
Burner Pressure	25 mbar (10" w.g.)

NOTE: MAXIMUM HEAT INPUT FOR USA/CANADA IS 15,000 Btu/hr.

**NOTE:** ON 4-OVEN MODELS WITH BOILER (GEB), IT MAY BE NECESSARY TO INCREASE THE BURNER PRESSURE SLIGHTLY (12 mbar).

NOTE: Maximum inlet operating pressure for the multi-function gas valve is 50 mbar.

## **DATA PLATE**

The data plate is situated on the front of the burner door (below viewing window).

## **HOW TO FIT NEW BURNER**

1. Isolate gas supply.

Remove existing burner assembly taking care not to damage gas inlet pipe.

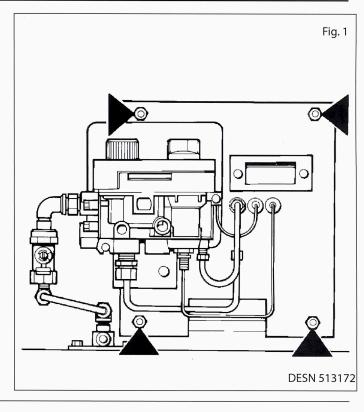
Once the old burner has been removed, you should be left with the gas inlet supply pipe (with ¼" BSP male threaded end), and four burner support studs on burner housing (casting).

- 2. Screw elbow fitting (supplied loose) onto gas inlet pipe ensuring that the 8mm end faces the front, when the elbow is tight.
- **3.** Fit new burner as follows:

**NOTE:** There are two options for mounting the new burner.

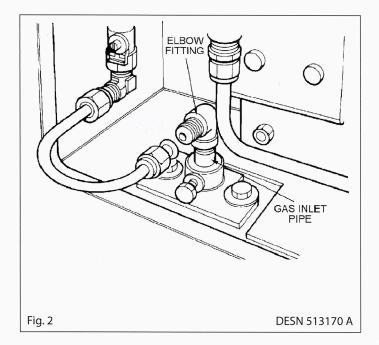
Where possible the existing 1/4" BSW studs should be reused, in conjunction with the 4-off shoulder nuts and larger washers supplied. It may be necessary to slightly enlarge the holes in the burner front plate (See Fig. A).

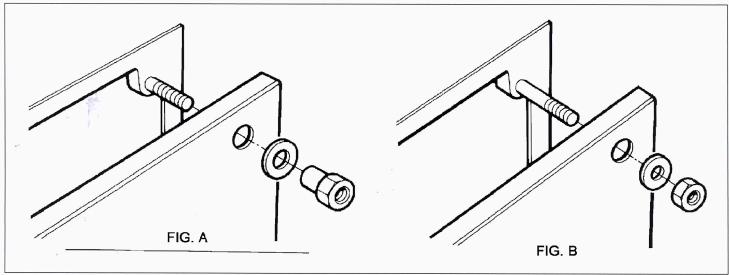
Alternatively, if the existing studs are damaged, replace them with the new longer studs, plain nuts and washers provided. (See Fig. B).

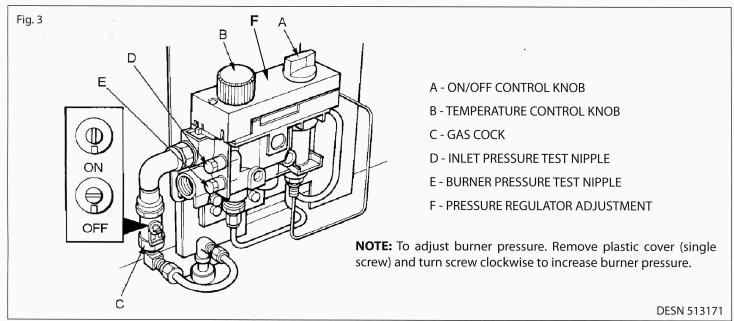


- **a.** Align 4 holes in burner door with 4 support studs on Aga burner housing, and place burner onto studs. (See Fig. 1).
- **b.** Align 8mm pipe (with nut) to elbow fitting on gas inlet pipe. (See Fig. 2).
- **c.** Finger tighten nut onto elbow.
- **d.** Fix burner door to housing using appropriate nuts and washers (See note above).
- e. Tighten 8mm nut connection to elbow inlet fitting.
- **f.** Feed gas valve sensing probe and capillary through guide tube (top right hand side of burner housing) into the roasting oven.
- **g.** Fit sensing probe to bracket and fix bracket to top of roasting oven.
- **4.** Make sure gas cock (C) is in the 'ON' position (See Fig. 3). Turn on gas supply to Aga. Check for gas tightness.

**IMPORTANT NOTE:** Attach new lighting instructions label (supplied) onto the existing instruction plate on the outer burner door. (Ensure the lighting instructions depict the graphics printed on gas valve control knob).







#### COMMISSIONING

FOR CONTROL KNOB 'B' WITH NUMBERS 1-7

(SEE PAGE 6 FOR KNOB'B' WITH GREEN BAND)

CAUTION: BEFORE LIGHTING: ENSURE KNOB (A) IS IN THE OFF POSITION (SEE FIG. 5). ALSO ENSURE GAS SUPPLY TO COOKER IS ON, AND THE GAS SERVICE COCK (C) IS IN THE ON POSITION (SEE FIG. 3).

#### **LIGHTING PROCEDURE - SEE FIGS 5 - 9**

- 1. The main burner gas flow is set with the 'temperature knob' (B) (See Fig. 4). Position '1' is the minimum and position '7' is the maximum temperature setting. First, ensure knob (B) is turned fully clockwise to position '1'.
- 2. Turn 'ON/OFF' knob (A) slightly anti-clockwise towards the IGNITION position ( ≺ → ) until reaching stop, press down and hold for 5 seconds (gas flows only to the pilot burner). (See Fig. 6).
- 3. Continue pressing down knob (A) while turning further counter-clockwise to the PILOT position (this activates the piezo), continue to hold down for 10 seconds after pilot burner has been lit. (If the pilot does not light steps 2 and 3 can be repeated). (See Fig. 7).
- 4. Upon lighting, release knob and turn further anticlockwise to the 'ON' position (large flame symbol) (See Fig. 8). Pilot gas flows and mains gas flows according to the temperature setting (knob B).
- Turn the temperature knob (B) slightly anti-clockwise to position '2' (LOW FIRE position). Leave in the low fire position for at least 30 minutes (See Fig. 9A).

**NOTE:** 'LOW FIRE' may be between 1 and 2. Turn knob until SMALL FLAME is observed through viewing window

**6.** After 30 minutes rotate control knob (B) anti-clockwise to between positions 5 and 7 for normal running (See Fig. 9B).

**NOTE:** After several hours the temperature of the cooker can be monitored by the heat indicator. Setting 5 to 7 should bring the indicator to the black line position. It may be necessary to adjust the control knob slightly (between 5 and 7) to achieve this. When the cooker 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 (MINIMUM) BEFORE RELIGHTING.

- **7.** Check the inlet gas pressure is as indicated on the data plate, as follows (See Fig. 3):-
- (a) Turn knob (A) to the OFF position (Fig. 5). Unscrew the inlet pressure test nipple plug (D) and fit manometer. Light the burner, turn knob (A) to the ON position (Fig. 8) and knob (B) between 5 and 7 (Fig. 9B).
- **(b)** Check inlet pressure correctly corresponds to the data plate.
- **(c)** Check that the gas pressure is unaffected when other gas appliances are used.
- **(d)** Turn knob (A) to OFF position. Remove the pressure gauge and replace test nipple plug (screw plug back in, but take care not to overtighten).
- (e) Relight burner as steps 1-6, and check pressure test nipple for gas tightness.
- **8.** Check burner pressure as follows:

Repeat instruction 7 on completely cold cooker with the pressure gauge fitted to the burner pressure test nipple (E) (See Fig. 3). Check that the burner pressure correctly corresponds with the table marked 'TECHNICAL DATA', (page 2).

#### TO EXTINGUISH THE BURNER

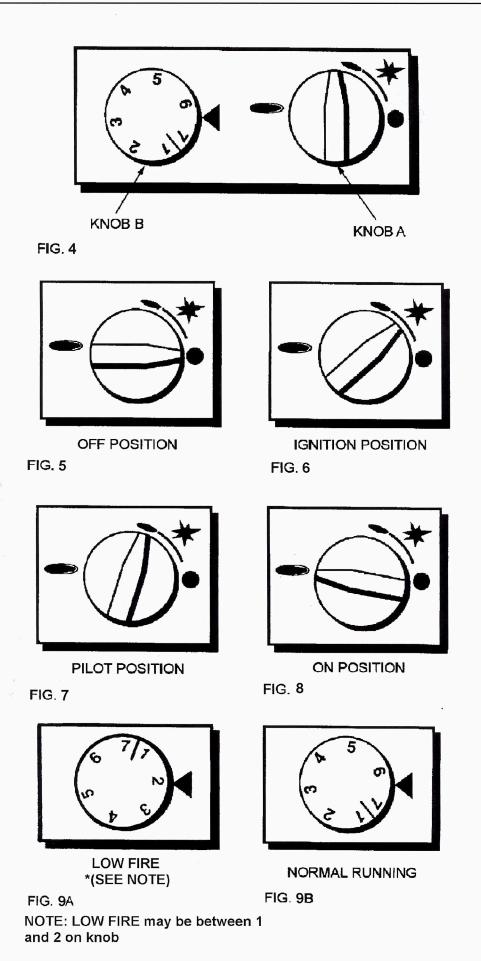
- **1.** Turn ON/OFF knob (A) clockwise until reaching stop (PILOT) position.
- **2.** Press down slightly and continue turning clockwise from pilot position to the OFF position (See Fig. 5).

When the thermocouple has cooled sufficiently, pilot lighting procedure may be repeated.

#### INSTRUCTIONS

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

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 Specialist or local gas region.



### **COMMISSIONING**

#### FOR CONTROL KNOB'B' WITH GREEN BAND GRAPHICS.

#### **SEE PAGE 4 FOR KNOB 'B' WITH NUMBERS)**

CAUTION: BEFORE LIGHTING: ENSURE KNOB (A) IS IN THE OFF POSITION (SEE FIG. 11). ALSO ENSURE GAS SUPPLY TO COOKER IS ON, AND THE GAS SERVICE COCK (C) IS IN THE ON POSITION (SEE FIG. 3).

#### **LIGHTING PROCEDURE - SEE FIGS 10 - 16**

- 1. The main burner gas flow is set with the 'temperature knob' (B). First ensure both knobs are turned fully clockwise. Knob (A) to the OFF position and knob (B) to the minimum setting. (See Fig. 10).
- 2. Turn 'ON/OFF' knob (A) slightly anti-clockwise towards the ignition position ≺⋨ until reaching stop, press down and hold for 5 seconds (gas flows only to the pilot burner) (See Fig. 12).
- 3. Continue pressing down knob (A) while turning further counter-clockwise to the PILOT position (this activates the piezo), continue to hold down for 10 seconds after pilot burner has been lit. (If the pilot does not light steps 2 and 3 can be repeated). (See Fig. 13).
- 4. Upon lighting, release knob and turn further anticlockwise to the 'ON' position (large flame symbol) (See Fig. 14). Pilot gas flows and mains gas flows according to the temperature setting (knob B).
- 5. Turn the temperature knob (B) slightly anti-clockwise into the white band (LOW FIRE) position. Leave in the low fire position for at least 30 minutes (See Fig. 15).

**NOTE:** 'LOW FIRE' position is attained by turning knob (B) gradually into the white band until SMALL FLAME is observed through viewing window.

**6.** After 30 minutes rotate control knob (B) anti-clockwise to mid-position of the green band for normal running (See Fig. 16).

**NOTE:** After several hours the temperature of the cooker can be monitored by the heat indicator. Setting mid-position in green band should bring the indicator to the black line position. It may be necessary to adjust the control knob (in the green band), to achieve this. When the cooker 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 (MINIMUM) BEFORE RELIGHTING.

- 7. Check the inlet gas pressure is as indicated on the data plate (See Fig. 3).
- (a) Turn knob (A) to the OFF position (Fig. 11).

Unscrew the inlet pressure test nipple plug (D) and fit manometer. Light the burner, turn knob (A) to the ON position (Fig. 14) and knob (B) in green band (Fig. 16).

- **(b)** Check inlet pressure correctly corresponds to the data plate.
- **(c)** Check that the gas pressure is unaffected when other gas appliances are used.
- (d) Turn knob (A) to OFF position. Remove the pressure gauge and replace test nipple plug (screw plug back in, but take care not to overtighten).
- (e) Relight burner as steps 1-6, and check pressure test nipple for gas tightness.
- 8. Check burner pressure as follows:- Repeat instruction 7 on completely cold cooker with the pressure gauge fitted to the burner pressure test nipple (E) (See Fig. 3). Check that the burner pressure correctly corresponds with the table marked 'TECHNICAL DATA'. (page 2).

#### TO EXTINGUISH THE BURNER

- **1.** Turn ON/OFF knob (A) clockwise until reaching stop (PILOT) position.
- **2.** Press down slightly and continue turning clockwise from pilot position to the OFF position (See Fig. 11).

When the thermocouple has cooled sufficiently, pilot lighting procedure may be repeated.

# **INSTRUCTIONS**

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

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 Specialist or local gas region.

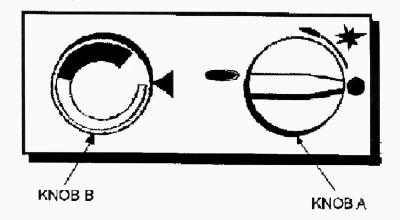
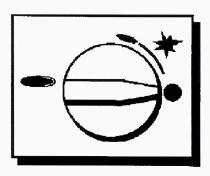
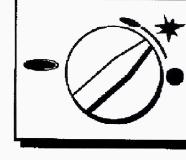


FIG. 10

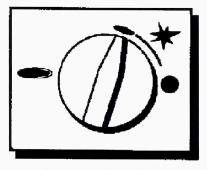


OFF POSITION



 $\begin{array}{c} \text{IGNITION POSITION} \\ \text{_IFIG. 12} \end{array}$ 

FIG. 11



PILOT POSITION

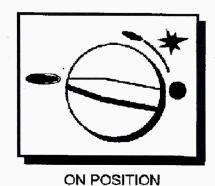


FIG. 14

FIG. 13

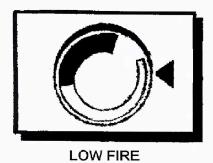
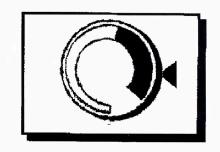


FIG. 15



NORMAL RUNNING

FIG. 16

# 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.



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