



PROFESSIONAL 110 Dual Fuel
&
Falcon 110 Dual Fuel

Service Manual

U1 238 02sm

WARNING - SERVICING TO BE CARRIED OUT ONLY BY AN AUTHORISED PERSON
Disconnect from electricity and gas before servicing. Check appliance is safe when you have finished.

Servicing Notes

When servicing or replacing gas carrying components disconnect from gas before commencing operation and check appliance is gas sound after completion. When checking for gas leaks do not use washing up liquid - this can corrode. Use a product specifically manufactured for leak detection.

Do not use re-conditioned or unauthorised gas controls.

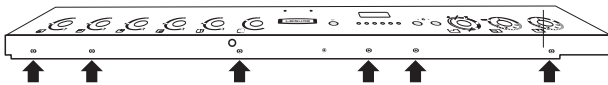
Disconnect from electricity supply before commencing servicing, particularly before removing any of the following: fascia panel, side panels, hotplate tray, or any of the electrical components or cover boxes. Before electrical reconnection check that the appliance is electrically safe.

1. To Remove Facia Panel

Disconnect from electricity supply.

Pull off all the control knobs.

Open the grill door and R H oven door and remove the 6 fixing screws underneath the control panel. NB some models have a plate under the fascia held in place by the bottom fixing screws.



Slide the fascia panel to the right and then pull forward. Disconnect leads from back of switches and timer. Lift fascia panel clear of cooker.

Reassemble in reverse order. When replacing leads refer to the wiring diagram. Check operation of timer, ignition, and oven light switches.

2. To Remove Hotplate Trays

Disconnect from electricity supply.

Pull the cooker forward to gain access to the rear

Left hand tray

From the rear remove the 3 screws securing the flue grille to the hotplate tray. Remove pan supports, burner heads and caps. Remove the 4 screws and washers holding the hotplate tray to the frame. Raise the front of the hotplate then withdraw.

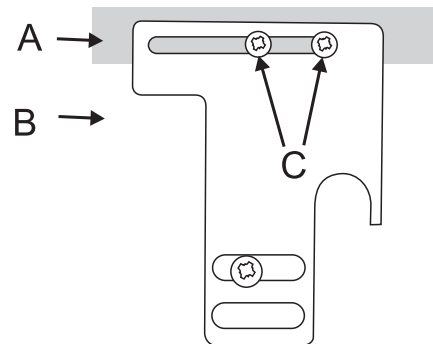
Right hand tray

From the rear remove the screws securing the flue grille to the hotplate tray. If the LH hotplate has not been removed, slacken the screws holding the L H tray. Remove pan support, burner head, caps and trim rings. Remove the 4 screws holding the Wok burner to the hotplate. Remove the two screws and washers holding the RH tray to the frame. Press the Wok burner down slightly and, taking care not to damage the Wok burner electrode, slide the tray about 30mm to right to clear the locating brackets on the R H side. Lift tray slightly at the front and taking care not to stress the Warmer/lead junction, disconnect the leads to the Warmer neon and separate the leads at the piggybacks. Withdraw the hotplate.

Reassemble in reverse order ensuring that the leads are reconnected. When replacing the RH hotplate take care not to damage the ignition electrode of the Wok burner.

It is important that the rear fixing screws are refitted as they form part of the cooker earthing.

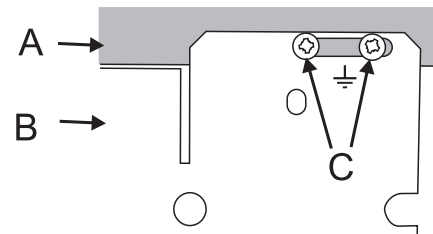
On some models there is a separate plate.



A flue grille, B cooker backsheet, C earthing/fixing screws

On others it is a tag on the cooker backsheet.

It is important that the tag is on the outside and that both fixing screws are fitted.



A flue grille, B cooker backsheet, C earthing/fixing screws

Check for correct burner operation.

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3. To Remove a Side Panel

Disconnect from electricity supply.

Remove fascia panel (see 1). Pull the cooker forward. Remove the 4 retaining screws for each panel (2 at the front and 2 at the rear). The lower front retaining screws (one each side) are situated beneath the lower edge at the front corners of the side panels

Reassemble in reverse order.

4. To Remove Ignition or Oven Light Switch

Remove fascia panel (see 1).

NB The old switch may be destroyed during removal.

Remove switch button and old switch from its bezel by gripping the switch body behind the fascia and twisting sharply.

The switch bezel can then be removed by folding back its locking wings and pushing forward. Fit the new bezel to the fascia by first lining up the raised key on its body with the cutout in the fascia and pushing it in from the front. Assemble the new switch to the bezel by lining up the key sections and pushing home. Fit the new button by pushing in from the front.

Replace fascia panel in reverse order and test for correct operation.

5. To Remove Electronic Timer

Disconnect from electricity supply.

Pull off the timer control buttons and remove the fascia panel (See 1). Remove the timer/mounting bracket assembly from the fascia by removing the two fixing screws. Remove the timer from its mounting bracket by depressing the plastic lugs on the timer case, at the same time pulling the unit forward.

Reassemble in reverse order. When replacing leads refer to the wiring diagram. Check operation of timer.

6. To Remove a Thermostat

Remove fascia panel (see 1). Open appropriate oven door and remove oven furniture.

RH oven

Remove RH hotplate tray. (see 2) Remove thermostat phial cover (2 screws). Unclip the thermostat phial from the clips in the oven back.

LH oven

Pull cooker forward to gain access to the cover box at the rear of the cooker. Remove the screws securing the cover and lift clear.

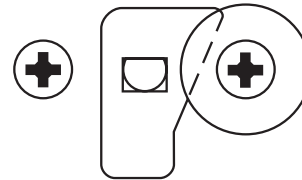
Feed the thermostat capillary out of the oven. Disconnect wiring from thermostat. Remove 2 screws holding thermostat to mounting panel. Fit new thermostat and reassemble in reverse order. Ensure that the phial is clipped to the oven back with the phial centrally positioned between the clips.

Check operation of thermostat.

7. To Change Grill Controller

Remove the fascia panel (see 1). Disconnect wiring from controller. Remove 2 screws holding controller to mounting panel. Fit new controller and reassemble in reverse order. Check for correct operation.

8. To Change Warmer Switch



Remove RH hotplate tray. (see 2). Disconnect wiring from Warmer switch. Remove 2 screws holding switch to mounting panel, taking care not to lose the switch rotation limiter. Fit new switch and reassemble in reverse order. Check for correct operation.

BEFORE SERVICING ANY GAS CARRYING COMPONENTS TURN OFF GAS SUPPLY.

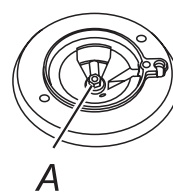
9. To Change Hotplate Control Tap

Remove the fascia panel, see 1. Lift up the LH hotplate tray front (see 2). Remove the heat shield (2 screws). Undo the nut at rear of the tap and remove the screw(s) securing tap to gas rail. Remove old tap, discard old gasket/seal. Fit new gasket/seal to new tap. Reassemble in reverse order. Check tap is adjusted for correct gas. Check appliance is gas sound.

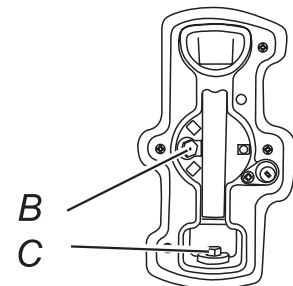
10. To Change Hotplate Burner Injector

Standard burner

Wok burner



A



B

C

A jet, B internal injector, C external injector

Remove burner cap and head. Remove old jet. Fit new injector. **Note** the Wok burner has 2 injectors. Reassemble in reverse order. Check appliance is gas sound.

11. To Change Hotplate Burner Electrode

Lift off pan supports, remove burner cap. Remove the screw holding the electrode. Pull electrode vertically up sufficiently to grip the lead between thumb and forefinger. Pull off the electrode, but keep hold of the lead. Fit new electrode to the lead. Fix electrode in burner with screw. Replace burner cap. Check the burner ignition. Replace pan supports.

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12. To Remove or Change a Hotplate Burner.

Remove the hotplate tray (see 2).

LH hotplate burners

Remove heat shield (2 screws). The burners are mounted in 2's on cross supports. Disconnect the burner feed pipes at the burners. Remove the screw on the right holding the cross support. Slide the support to the right to release in from the left hand location. Lift the cross support and burners clear. The burners are fixed to the cross supports with 2 screws. Remove the appropriate burner and fit the new one. Reassemble in reverse order. Check burner operation is satisfactory.

RH Wok burner

Disconnect the burner feed pipes at the burner. Fit the new one and reassemble in reverse order. Check burner operation is satisfactory.

13. To Remove Grill Door

Remove the left hand side panel (see 3). Remove the centre cover strip (5 screws, 2 top, 2 bottom, 1 in middle). Remove the two countersunk screws (1 each side) securing the grill hinge arms to the front of the grill chamber.

NOTE: The arms are spring tensioned. Carefully remove the grill door. Retain the gaskets.

Reassemble in reverse order ensuring that the gasket is fitted between the hinge arm and the front of the grill chamber.

14. To Remove an Oven Door

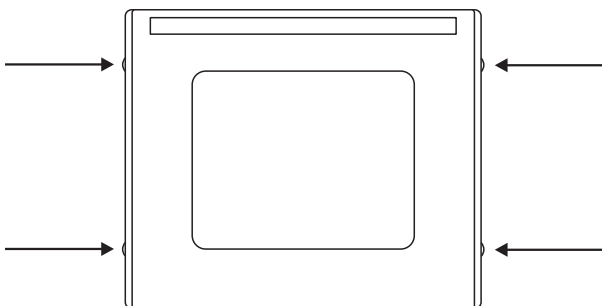
Open oven door and remove Handyrack (where fitted) by springing one side out of the bracket on the door and sliding the other side free. Support the door and remove the two screws securing the upper hinge and packing to the cooker front. Remove the door from the lower hinge by lifting slightly and moving outwards.

Reassemble in reverse order.

15. To Change Oven Door Outer Panel

Move the cooker forward to gain access to the sides.

Open the oven door slightly and remove the front panel fixing screws from the door sides (two each side).



Carefully lift off the outer door panel.

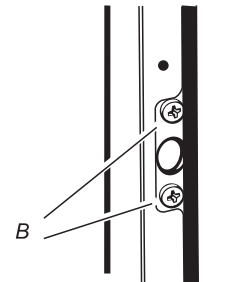
Remove door handle from panel by unscrewing 2 retaining nuts. Fit door handle to new panel

Fit panel to door. Reassemble in reverse order.

16. To Change Oven Door Latch

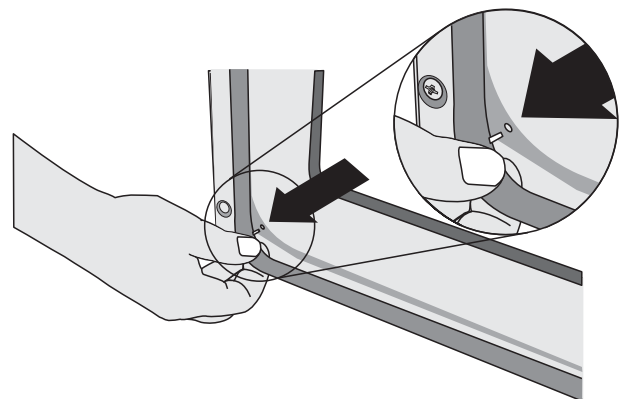
Remove outer door panel (see 15). Remove screws 'B' holding latch assembly to inner door panel. Fit new catch and reassemble in reverse order.

Check correct door operation.



17. To Change Oven Door Seal

Open oven door. The seal is held in place by small hooks on the rear face. At the corner pull seal diagonally away from the door centre until that hook is released. Proceed to the next hook and release it in a similar way, and so on. Use force if the hooks are stiff, as the old seal will be discarded.



When fitting new seal, position the seal join at the bottom. Hook the new seal in one of the corner holes of the door, and proceed round the door snapping in each hook in turn.

18. To Adjust Oven Door Catch Keep

Open oven door, slacken off locknut at base of keep, and screw in or out as required until required fit is obtained. Retighten locking nut.

19. To Change Ignition Generator

Disconnect from electricity supply.

Pull cooker forward to gain access to the cover box at the rear of the cooker. Remove the screws securing the cover and lift clear. Pull off all the leads to the generator noting their positions. Slacken the two screws holding generator to cooker and remove generator.

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Fit new generator to cooker and replace leads. Reassemble in reverse order. Refer to wiring diagram. Check ignition performance.

20. To Remove RH Oven Inner Back.

Open RH oven door and remove 4 screws and washers securing the inner back to the back of the oven. Carefully lift away the inner back. Reassemble in reverse order making sure that the 4 screws and washers are fully tightened.

21. To Change Fan in RH Oven.

Disconnect from electricity supply.

Pull cooker forward to gain access to the rear. Remove 4 screws securing the electric cover to the back sheet and remove cover. Disconnect the 3 terminals connected to the fan noting their position. Remove oven inner back (see 20). Hold the fan blade and remove the centre nut (left hand thread) 2 brass washers, fan blade and circlip. Unscrew fan retaining nuts and washers (3 off each) and lift the fan away from the rear of the cooker. Fit new fan and reassemble in reverse order. Check operation of oven.

22. To Remove RH Oven Element.

Disconnect from electricity supply.

Pull cooker forward to gain access to the rear. Remove 4 screws securing the electric cover to the back sheet and remove cover. Disconnect the 3 terminals connected to the element noting their position. Remove oven inner back (see 20). Remove 2 screws from the top of the element and 1 from the bottom of the element in side the oven. Lift out carefully, refit new element, reassemble in reverse order. Check operation of oven.

23. To Remove Grill Element.

Disconnect from electricity supply.

Pull cooker forward to gain access to the rear. Remove 4 screws securing the electric cover to the back sheet and remove cover. Remove the 4 terminals connected to the elements noting their position. Remove grill pan from grill chamber. From inside grill compartment remove enamelled front shield from grill roof, 2 screws and washers. Remove 2 screws and washers securing the grill element front support. Remove 1 screw from each of the grill elements and withdraw grill elements from grill chamber. Fit new elements, reassemble in reverse order. Check operation of grill.

24. To Remove LH Oven Elements.

Disconnect from electricity supply.

Pull cooker forward to gain access to the rear. Remove 4 screws securing the electric cover to the back sheet and remove cover. Remove the 4 terminals connected to the top element noting their position. Remove 2 screws and washers securing the bottom element cover. Remove the 2 terminals connected to the bottom element noting their position. Remove 2 screws and washer from the bottom element support. Remove 2 screws and washer from the element bracket and withdraw the element. Fit new element, reassemble in reverse order. Open LH oven door and remove 2 screws and washers securing the top element heat shield. Remove 2 screws and washers from the top element bracket and withdraw. Fit new element, reassemble in reverse order. Check operation of oven.

25. To Change Warmer Neon

Disconnect from electricity supply.

Remove RH hotplate (see 2). Carefully place hotplate upside down on a suitable flat surface. Remove 2 screws holding neon bracket to Warmer frame. Fit new neon and bracket assembly.

Reassemble in reverse order and check for correct operation.

26. To Change Warmer

Disconnect from electricity supply.

Pull the cooker forward to gain access to the rear.

Remove RH hotplate, see 2. Fit the new hotplate and reassemble in reverse order.

Warmer operation is satisfactory.

27. To change oven light bulb.

Disconnect from electricity supply.

LH Oven

Remove the oven furniture and side linings. Remove the oven rear liner (3 screws)

RH Oven

Remove the oven inner back (see 22). The oven light cover is now accessible. Unscrew the cover.

Unscrew the bulb.

Fit an Edison screw fitting 15w 240v lamp, FOR OVENS. It must be a special bulb, heat resistant to 300°C.

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Conversion to another gas

Conversion from Natural gas (1.0kPa) to LPG X Propane (2.75kPa)

This conversion must be performed by a competent person. After conversion the installation must comply with the relevant regulations and also the local electricity supply company requirements. Read the instructions before converting this appliance.

Failure to convert the appliance correctly could invalidate any warranty or liability claims and lead to prosecution.

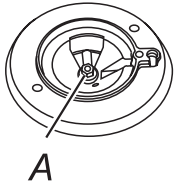
This instruction must be used in conjunction with the rest of the appliance instruction, in particular for information on Standards, cooker positioning, connection hose suitability etc.

When servicing or replacing gas-carrying components disconnect from gas before commencing operation and check appliance is gas sound after completion.

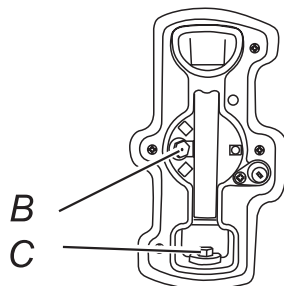
Do not use re-conditioned or unauthorised gas controls.

Jets

Standard burner



Wok burner



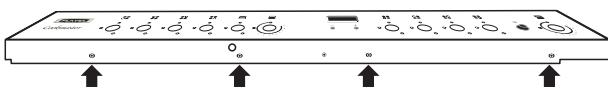
A jet, B internal injector, C external injector

Remove burner caps and heads. Remove old jets. Fit new jets (see Technical Data section at the back of the book for correct jets). Reassemble in reverse order.

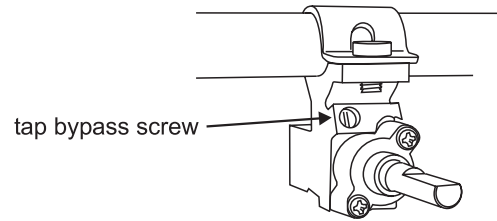
Tap adjustment

Pull off all the control knobs.

Open the grill door and R H oven door and remove the fixing screws underneath the control panel. NB some models have a plate under the fascia held in place by the bottom fixing screws.



Slide the fascia panel to the right and then pull forward. Disconnect leads from back of switches and timer. Lift fascia panel clear of cooker.



Remove the tap bypass screw and fit the correct new one. See table for correct screws.

Gas connection

Unscrew the inlet governor from the gas inlet and reconnect the gas hose with a 1/2" female /female connector. A 1/2" BSP flexible connection is supplied with the cooker. If it is necessary to use another hose it must be to A.S. 1869 1869 class B and suitable for your gas type. If in doubt contact your supplier.

Pressure Testing

Connect the appliance to the gas supply. Check the appliance is gas sound.

See Technical data section at the back of this book for test pressures.

Pull the cooker forward, if necessary, to gain access to the rear.

The pressure test point is accessible on the connector block at the upper right hand rear. Remove the test nipple screw and fit a pressure gauge to the test point.

Stick on label

Stick the gas type label over the correct gas part of the appliance data label. Check the appliance is gas sound.

Check the appliance is gas sound.

Check operation of all the burners.

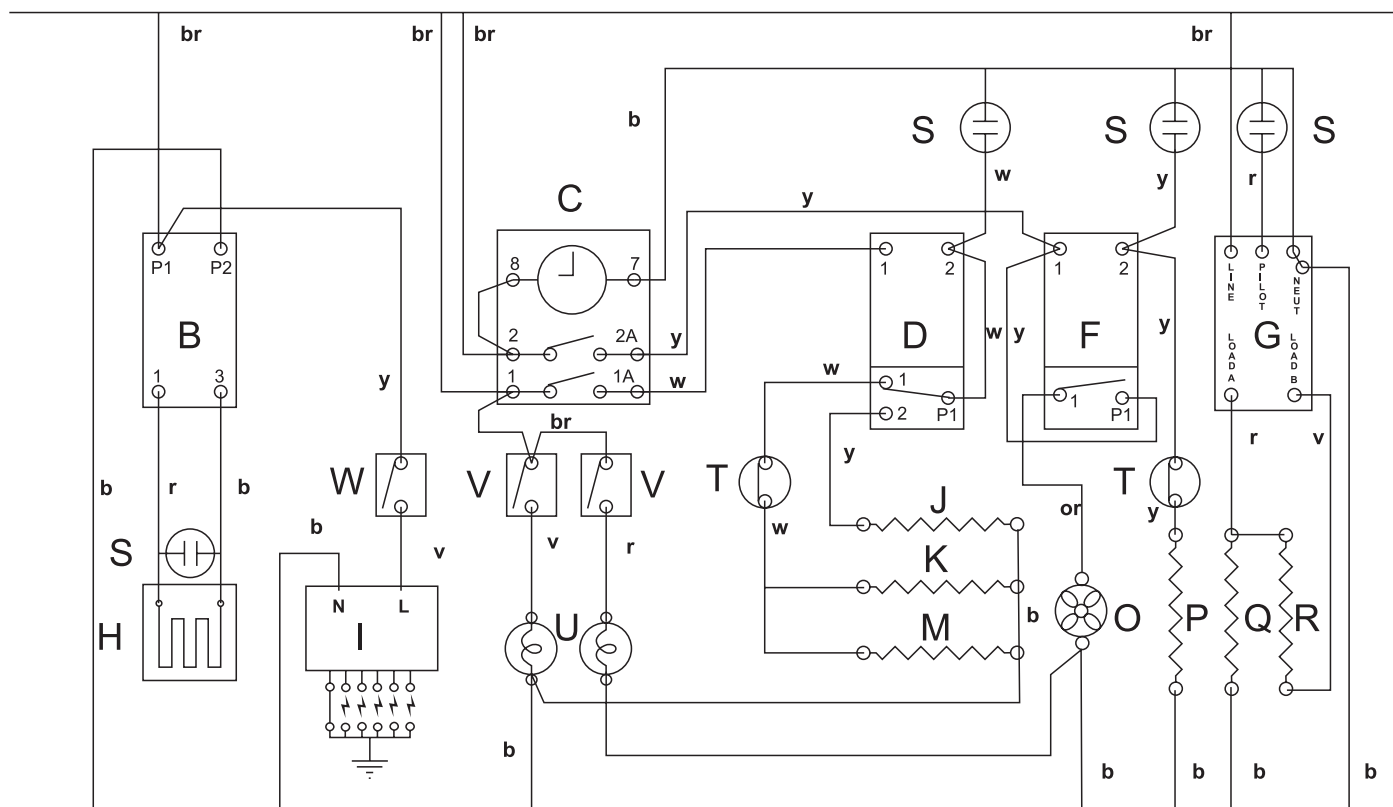
Bypass screws

	Natural gas	Propane
Hotplate		
Wok burner	90	54
Large Burner	80	41
Medium Burners	56	33
Small Burner	48	25

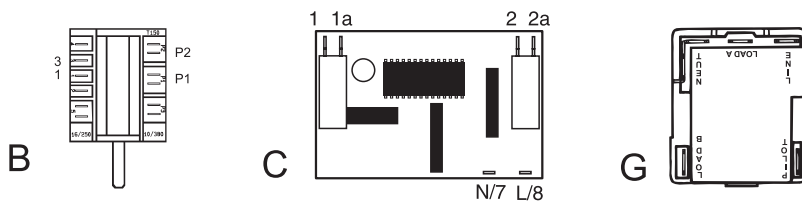
For jet sizes see the Technical Data page

Circuit Diagram

Active



Neutral



Connection shown in circuit diagram is for single phase. Ratings are for 230V 50Hz

- A Active
- B Warmer Switch
- C Clock
- D Left hand oven thermostat
- F Right hand oven thermostat
- G Grill energy regulator
- H Warmer 147W
- I Spark generator
- J Base element 1.0kW
- K Top element 1.2kW
- L Browning element 1.15kW
- N Neutral
- O Right hand oven fan
- P Fan oven element 2.5kW
- Q Right hand grill element 1.15kW
- R Left hand grill element 1.15kW
- S Neon
- T Cutouts

- U Oven light bulbs
- V Oven light switches
- W Ignition switch

Wire colours

- b blue
- br brown
- r red
- or orange
- v violet
- w white
- y yellow

Australia

Technical Data

This cooker is designed for use on Natural Gas:-

A conversion for LP (LPG X Propane (2.75kPa)) gas is available.

DATA BADGE LOCATION: LOWER RIGHT HAND COOKER UPRIGHT (Remove storage drawer)

Country of Destination: Australia

Gas		Electric
Natural gas	1kPa	220 - 240V 50Hz
Propane	2.75kPa	

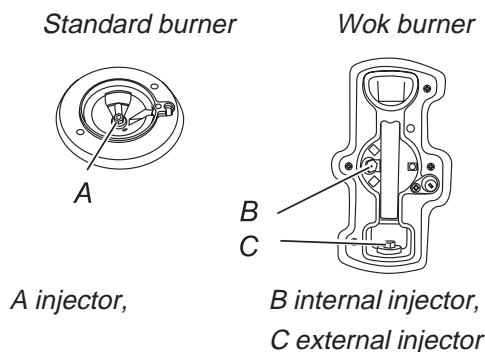
(See appliance data badge for test pressures)

Dimensions

Overall height	minimum	893mm	maximum	920mm
Overall width		1100mm	See 'Positioning of Cooker'	
Overall depth		648mm		
Space for fixing		See 'Positioning of Cooker'		
Minimum space above hotplate		650mm		

Connections

Gas:	Electric
Rp 1/2 at rear right-hand side	220 - 240V 50Hz



Ratings

	Natural gas 1.0kPa		Propane 2.75kPa			
		Injector	Bypass	Injector	Bypass	
Hotplate						
Wok burner	15.2MJh ⁻¹	internal 112	90	15.2MJh ⁻¹	internal 66	54
		external 164		external 91		
Large Burner	12.3MJh ⁻¹	165	80	12.0MJh ⁻¹	89	41
Medium Burners	6.2MJh ⁻¹	115	56	6.2MJh ⁻¹	67	33
Small Burner	3.7MJh ⁻¹	92	48	3.3MJh ⁻¹	48	25

Gas burner inputs based on Gross Calorific Value

Ovens	Conventional Oven	Fan Oven	
	Oven	Browning Element	
	2.2kW	1.15kW	2.5kW
Grill	2.3kW		
Warmer	160W		

Maximum total electrical load at 230V 7.3kW*

*approximate total including oven lights, oven fan etc.