DOMINATOR *PLUS* G3106 FAN ASSISTED RANGE

CAUTION: Read the instructions before using this appliance



INSTALLATION and SERVICING INSTRUCTIONS

This appliance must be installed and serviced by a competent person as stipulated by the Gas Safety (Installation & Use) Regulations.

IMPORTANT

The installer must ensure that the installation of the appliance is in conformity with these instructions and National Regulations in force at the time of installation. Particular attention MUST be paid to:

Gas Safety (Installation & Use) Regulations Health And Safety At Work etc. Act

Local and National Building Regulations Fire Precautions Act

Detailed recommendations are contained in Institute of Gas Engineers published documents: IGE/UP1, IGE/UP/2 BS6173 and BS5440

These appliances have been UKCA/CE-marked based on compliance with the Gas Appliance Regulations/Product Safety and Metrology Regulations, Electrical and Electromagnetic Compatibility (EMC) Regulations/Directives for the Countries, Gas Types and Pressures as stated on the data plate.

WARNING: TO PREVENT SHOCKS, ALL APPLIANCES WHETHER GAS OR ELECTRIC, MUST BE EARTHED.

On completion of the installation, these instructions should be left with the Engineer-in-Charge for reference during servicing. Further to this, The Users Instructions should be handed over to the User, having had a demonstration of the operation and cleaning of the appliance.

IT IS MOST IMPORTANT THAT THESE INSTRUCTIONS BE CONSULTED BEFORE INSTALLING AND COMMISSIONING THIS APPLIANCE. FAILURE TO COMPLY WITH THE SPECIFIED PROCEDURES MAY RESULT IN DAMAGE OR THE NEED FOR A SERVICE CALL.

PREVENTATIVE MAINTENANCE CONTRACT

To obtain maximum performance from this unit regular servicing of the appliance should be undertaken to ensure correct operation, it is functioning as intended, and safe to use. We recommend servicing in accordance with SFG20 Maintenance Schedules and as a minimum, after 2,500 hours of use, or annually, whichever comes first and that a maintenance contract be arranged with an appointed service contact. Visits may then be made at agreed intervals to carry out adjustments and repairs.



WEEE Directive Registration No. WEE/DC0059TT/PRO. At end of unit life, dispose of appliance and any replacement parts in a safe manner, via a licenced waste handler. Units are designed to be dismantled easily and recycling of all material is encouraged whenever practicable.

Falcon Foodservice Equipment

Wallace View, Hillfoots Road, Stirling, FK9 5PY, Scotland Phone: 01786 455200

IMPORTANT INFORMATION

ELECTRICAL SAFETY AND ADVICE REGARDING SUPPLEMENTARY ELECTRICAL PROTECTION

Commercial kitchens and foodservice areas are environments where electrical appliances may be located close to liquids, or operate in and around damp conditions or where restricted movement for installation and service is evident.

The installation and periodic inspection of the appliance should only be undertaken by a qualified, skilled and competent electrician; and connected to the correct power supply suitable for the load as stipulated by the appliance data label.

The electrical installation and connections should meet the necessary requirements to the local electrical wiring regulations and any electrical safety guidelines.

We recommend:-

- Supplementary electrical protection with the use of a type A residual current device (RCD)
- Fixed wiring appliances incorporate a locally situated switch disconnector to connect to, which is easily accessible for switching off and safe isolation purposes. The switch disconnector must meet the specification requirements of IEC 60947.

Your attention is drawn to:-BS 7671:2018–Guidance Note 8 - 8.13 : Other locations of increased risk

It is recognized that there may be locations of increased risk of electric shock other than those specifically addressed in Part 7 of BS 7671. Examples of such locations could include laundries where there are washing and drying machines in close proximity and water is present, and commercial kitchens with stainless steel units, where once again, water is present.

Where because of the perception of additional risks being likely, the installation designer decides that an installation or location warrants further protective measures, the options available include:

- Automatic Disconnection of Supply (ADS) by means of a residual current device having a residual operating current not exceeding 30mA;
- Supplementary protective equipotential bonding; and
- Reduction of maximum fault clearance time.

The provision of RCDs and supplementary bonding must be specified by the host organization's appointed installation designer or electrical contractor and installed by a suitably qualified and competent electrician so as to comply with Regulations 419.2 and 544.2

SECTION 1 - INSTALLATION



UNLESS OTHERWISE STATED, PARTS WHICH HAVE BEEN PROTECTED BY THE MANUFACTURER ARE NOT TO BE ADJUSTED BY THE INSTALLER.

1.1 MODEL NUMBERS, NETT WEIGHTS and DIMENSIONS

Model	Width	Depth	Height	Weight
	<i>(mm)</i>	(mm)	<i>(mm)</i>	<i>(kg)</i>
G3106	900	770	890	145

Take care when removing or installing cast iron components as they are heavy items.

Pan Support – 7kg

1.2 SITING

The appliance should be installed on a level, fireproof surface, in a well lit and draught free position.

If the floor is constructed of combustible material, then local fire requirements should be checked to ensure compliance. A clear space of 150mm should be left between rear and side of unit and any combustible wall.



Important

If a unit is to be installed in suite formation with other matching appliances, the instructions for all models must be consulted to determine the necessary clearances to any combustible rear wall or overlying surface. Some models require greater clearances than others and the largest figure quoted in individual instructions will therefore determine the clearance for the complete suite of adjoining appliances.

The oven flue discharges vertically through hob rear. There must be no direct connection of flue to any mechanical extraction system or to the outside air. Open top burners discharge combustion products directly into the room.

Care should be taken not to disturb the air combustion admission and evacuation of open top burner models.

1.3 VENTILATION

Adequate ventilation must be provided to supply sufficient fresh air for combustion and allow easy removal of combustion products which may be harmful to health. Recommendations for Ventilation of Catering Appliances are given in BS5440:2.

For multiple installations the requirements for individual appliances should be added together. Installation should be made in accordance with local and/or national regulations applying at the time. A competent installer MUST be employed.

1.4 GAS SUPPLY

The incoming service must be of sufficient size to supply full rate without excessive pressure drop.

A gas meter is connected to the service pipe by gas supplier. Any existing meter should be checked by supplier to ensure it is of adequate capacity to pass required rate for appliance in addition to any other gas equipment installed.

Installation pipe work should be fitted in accordance with IGE/UP/2. The pipe work should be of adequate size but not smaller than unit gas inlet connection, ie. Rp¾ (¾" B.S.P.). An isolating cock must be located close by to allow shut-down during an emergency or servicing.

If flexible tube is used, the gas supply tubing or hose shall comply with national requirements in force. These will be periodically examined and replaced as necessary.

The installation must be tested for gas tightness. Procedure details can be found in IGE/UP/1.

The adjustable pressure regulator supplied must be fitted to natural gas appliances.

1.5 ELECTRICAL SUPPLY

50Hz / 230V~ single phase with 13A supply. Unit must be electrically earthed.

Motor rating: 200W Oven lamp rating: 25W

Check that no damage has occurred to the appliance, power cable and plug face during transit. If damage has occurred, do not use the appliance.

Ensure that the mains power cable is routed free from the appliance to avoid damage.

We recommend supplementary electrical protection with the use of a residual current device (RCD). Periodical testing, repair and fixing wiring connection should only be undertaken by a skilled and competent electrician.

This appliance is also provided with a terminal for connection of an external equipotential conductor. This terminal is in effective electrical contact with all fixed exposed metal parts of the appliance and shall allow the connection of a conductor having a normal cross-sectional area of up to 10mm². it is located on the rear panel and is identified by the following symbol and must only be used for bonding purposes.



1.6 HEAT INPUTS - NATURAL and PROPANE GAS (*kW net & Btu/hr gross*)

1.6.1 Total Inputs

Model	kW	Btu/hr
G3106	41.3	155,000

1.6.2 Individual Inputs (kW nett & Btu/hr gross)

Model	kW	Btu/hr
Open top (each burner)	5.3 x 6	20,000
Oven	9.5	35,655

1.6.3 Individual Low Inputs (kW nett & Btu/hr gross)

Model	kW	Btu/hr
Open Top	1.1	4,130

1.7 INJECTOR DIAMETERS

Model	Natural	Propane
Open top	Ø1.93mm	Ø1.2mm
Oven	Ø2.6mm	Ø1.6mm
Pilot	G31.2	G25.1

1.8 GAS PRESSURE ADJUSTMENT NATURAL GAS AND PROPANE

Gas type	mbar	Inches w.g
Natural Gas	20	8
Propane Gas	37	14.8

Oven burner pressure has been factory set to 12mbar (natural gas) and 30mbar (Propane) at oven solenoid valve outlet with no appliance regulator fitted. DO NOT ADJUST THE MFC VALVE REGULATOR WHEN INSTALLING THE APPLIANCE.

An adjustable appliance regulator (3/4" BSP) is provided on Natural gas units. This should be set to achieve an operating pressure at hob control manifold of 15 mbar (6inches w.g) with ALL burners (oven + 6 hob burners) operating at maximum control setting.

Pressure test point is located on RH side of hob gas manifold situated behind front control facia.

1.9 BURNER ADJUSTMENT - NATURAL and PROPANE.

1.9.1 Burner Aeration

NO ADJUSTMENT is possible.

1.9.2 Bypass screw diameters

Minimum gas flow to burner is governed by size of fixed by-pass screw aperture as follows.

	Natural gas	Propane gas
Model	marked	marked
Open top	76	51

SECTION 2 – ASSEMBLY and COMMISSIONING

2.1 ASSEMBLY



Note - The following paragraphs should be read as applicable to the unit being assembled.

Unpack appliance and place it in position using feet adjusters to level appliance.

Units with castors should be fitted with accessories supplied according to separate instructions provided.

Open oven door, pull out shelves and base panel. Check burner spark igniter arrangements are correctly located and secured. Ensure ALL packing, etc. is removed from oven. Replace all parts in reverse sequence.

Check open top and remove tape, packing, etc. from hob area and ensure that all burners and pan supports are secured in position. The open top burner heads fit loosely upon aluminium bases of lift-off construction.

2.1.1 Fryplate Accessory

If fryplate (*Figure 1*) is supplied, refer to user instructions for details. **Important note:** this should be **operated on a low flame setting only**.

2.1.2 Flue Accessory

A tall flue is available as an accessory that may be substituted for standard type supplied with unit.

Details of alteration process are indicated in Figures 2 through 6.

Remove hob as detailed in Sections 3.2.2 and 3.2.3. Undo and remove fixings at locations shown in Figure 2. Remove fixings at rear detailed in Figure 3.

Install replacement flue as detailed in Figure 4 and secure using existing fixings at hob and rear at positions indicated in Figures 5 and 6.

Important

Note: It is not possible to fit a splashplate / plateshelf to a model fitted with a tall flue.

2.2 CONNECTION TO GAS SUPPLY



Connect appliance to gas supply and ensure that regulator supplied is fitted on NATURAL gas installations. Test for gas tightness.

The integral gas supply downstream of gas valve may be checked by applying leak detection spray with burner lit. Inlet connection terminates at upper rear RH side in Rp³/₄ ($\frac{3}{4}$ " *BSP female*).

2.3 CONNECTION TO ELECTRICAL SUPPLY

A 13A socket is required in close proximity to accommodate plug supplied.





Figure 1

Figure 2





Figure 3

Figure 4





2.4 COMMISSIONING THE APPLIANCE

Important - Prior to operation, ensure that ALL packing material has been removed.

2.4.1 Setting Open Top Gas Pressure

(Natural Gas Only)

- a) It is necessary to check gas pressure during commissioning and a suitable gauge must be connected to test point on RH side of supply manifold (*situated behind front control facia*).
- b) Turn on main gas valve at supply to unit.
- c) Light three ALL burners (oven plus hob) at maximum gas rate as detailed in Section 2.4.3. Gas supply pipes may contain air so repeat procedure until burner lights.
- d) Adjust appliance regulator (*Natural gas installations only*) at unit rear to relevant pressure setting found in Section 1.8.

To increase pressure - turn screw clockwise (or anti-clockwise to decrease). Check again after 15 minutes of operation.

e) Disconnect gauge. Replace test point sealing screw and test for gas tightness.

2.4.2 Checking Performance of the Controls

- a) Light open top and oven as detailed in Section 2.4.3. Check ignition is smooth and without delay. Repeat operation several times.
- b) Place a thermocouple at oven centre and select 200°C setting. Allow oven to heat up and check temperature is 200°C (+/-10°C). If reading is outwith specified range, the thermostat may be faulty. In this case, unit should be serviced (see thermostat replacement and calibration procedure). Turn gas supply to oven OFF and allow a sufficient cool-down period before removing thermostat.

2.4.3 Lighting Sequence

Important - Prior to operation, ensure ALL packing material has been removed from appliance.

Open Top

- 1. Ensure mains gas is turned on.
- 2. To light hob burners, press knob and turn to full flame position. Ignite burners using taper or match. Hold in knob for 20 seconds and then release. Burner will remain lit. Turn knob to required position.

Oven

- 1. Ensure mains gas is turned on.
- 2. To light oven, close doors and set thermostat to required temperature.
- 3. Ignition sequence will begin If air is present in gas system, ignition system will go into a lockout state. Press burner reset button to repeat ignition sequence. (*This will occur until all air is purged from pipework and pilot flame is established*).
- 4. To extinguish flame, turn thermostat to OFF position.

2.5 INSTRUCTION TO USER

The installer must ensure that user(s) thoroughly understands instructions for lighting, cleaning and correct use. It is also important to ensure that gas isolating switch location is known to user(s) and that procedure to follow in event of emergency is demonstrated.

SECTION 3 - SERVICING, MAINTENANCE AND CONVERSION

SERVICE INFORMATION

This unit carries an extensive mainland UK warranty. The warranty is in addition to and does not change your statutory or legal rights.

The warranty policy can be found on our website which details the conditions of the warranty and the exclusions.

https://www.falconfoodservice.com/info-centre/policy



Service calls to equipment under warranty will be carried out in accordance with the conditions of sale.

Warranty calls can be made between 8:30 am and 5:00 pm weekdays only.

To ensure your warranty enquiry is handled as efficiently as possible, ensure you have the following appliance information prior to calling us:

- 1. Model number found on data plate
- 2. Serial number found on data plate
- 3. Brief description of the issue

To contact Falcon for a warranty issue dial (UK only) 01786 455 200 and select Warranty Issues from the menu.



Important

BEFORE ATTEMPTING ANY SERVICING, ENSURE ISOLATING COCK IS TURNED OFF AND CANNOT BE INADVERTENTLY TURNED ON. AFTER ANY MAINTENANCE TASK, CHECK APPLIANCE TO ENSURE THAT IT PERFORMS CORRECTLY AND CARRY OUT ANY NECESSARY ADJUSTMENTS AS DETAILED IN SECTION 1.



MAINTENANCE CHECK

Regular servicing of the appliance should be undertaken to ensure correct operation, it is functioning as intended, and safe to use. We recommend servicing after 2,500 hours of use, or annually, whichever comes first.

Any maintenance schedule should be carried out in accordance with SFG20 Maintenance Schedule. Should any issues with the integrity of the components be identified these should be replaced. If the appliance is not considered safe the unit should be removed from service and the responsible person advised why the unit is not safe to use and what remedial action is needed. Contents of the maintenance schedule should be agreed with the maintenance provider. After carrying out any servicing or exchange of gas carrying component.

ALWAYS CHECK FOR GAS TIGHTNESS!

3.1 GAS CONVERSION CHECK LIST

Ensure gas supply is disconnected before commencing. Only reconnect gas supply after all conversion work has been completed.

Refer to Sections 1.7 and 1.9.

CHANGE INJECTORS

CHANGE BYPASS SCREW

CHANGE DATA PLATE

Natural to Propane

REMOVE PRESSURE REGULATOR from appliance inlet pipework

SETTING THE OPERATING PRESSURE

Refer to Section 1.8.

Oven: Note: oven MFC pressure is set without an appliance pressure regulator fitted – even on natural gas operation.

Hob: For conversion to NATURAL GAS, disconnect gas supply after checking the oven burner pressure and add correct appliance pressure regulator. Reconnect the gas supply.

Set/check the hob manifold pressure.

3.2 REMOVAL OF CONTROL PANELS

Various panels are removed as follows:

3.2.1 To Remove Fascia Panel

Remove hob burner control knobs. Open oven doors and undo fixings along underside and top. Pull fascia panel forward while slightly easing bottom edge upward to remove.

3.2.2 To Remove Lift-Off Open Top Hob Components

Remove pan supports and burner heads complete with aluminium bezels and venturi that sit loosely upon injector holder.

The semi-sealed hob tray is retained by ball stud fixings at each corner. Lift hob tray clear to access burner support brackets.

3.2.3 To Remove Hob Frame

Remove fixings that secure front hob support and fixings that secure flue to back panel. Lift full hob area - including flue - clear of unit.

3.2.4 To Remove Oven Controls Box Cover

The oven controls box is situated at the top rear of the unit. Undo the three fixings along the top edge of the cover. Lift upwards to clear tab slots along lower edge.

3.2.5 To remove fan motor cover panel

Undo fixings around the periphery of the fan motor cover panel at the rear of the unit and lift clear.

3.3 REMOVE or REPLACE COMPONENTS

3.3.1 Open Top Burners - To Replace Injector (Refer to Figure 6)

Remove pan supports, burner heads, burner bases and pressed hob as detailed in Section 3.2.2. $_{\rm Op}$

Leaving injector holder in situation, unscrew existing injector.

Remove injector.



Fit and secure replacement injector. Repeat for all burners.

Refit removed parts in reverse order.

3.3.2 Open Top Bypass Screw - To Replace (Refer to Figure 7)

Remove fascia panel as detailed in Section 3.2.1.

Unscrew and remove bypass screw from open top tap.

Insert replacement bypass screw into tap and secure. Repeat for all taps.

Refit control panel.

3.3.3 Oven Burner – To Replace Injector (from rear of oven - Refer to Figure 8)

Remove fan motor cover as detailed in section 3.2.5.

Undo burner gas pipe compression fitting at burner end.

Unscrew and remove existing injector.

Insert and screw in replacement injector.

Re-assemble in reverse order.

3.3.4 Oven Burner - To Replace Injector (from front of oven Refer to Figure 9)

Remove oven shelves and base plate.

Undo fixings and remove burner plate.

Undo fixings and remove pilot shield from back wall of combustion chamber.

Remove burner by pushing it back out of mounting and draw it forward until pilot assembly and gas pipe can be removed from burner.

Undo fixings and remove existing injector.

Insert and screw-in replacement injector.

Refit burner.

Re-assemble in reverse order.

3.3.5 Setting Oven Burner Pressure (Refer to Figure 10)

- a) Open oven control box cover at rear as detailed in Section 3.2.4.
- b) Connect manometer to valve outlet pressure test point as detailed in Figure 10.
- c) Adjust MFC outlet pressure to value stated in Section 1.8 by adjusting built-in valve regulator screw.

3.3.6 Pilot Injector

Remove fan motor cover as detailed in Section 3.2.5.

Undo pilot pipe fixing nut to access injector.

3.4 BURNERS

3.4.1 Open Top

Remove hob components as Section 3.2.2. Undo burner pipe compression fitting.

Undo injector holder fixings. Withdraw burner body.

Replace in reverse order.

3.4.2 Oven

Refer to Section 3.3.4.

3.5 CLEANING

3.5.1 Burners

Burners should be cleaned periodically to maintain maximum performance.







Figure 10

Clean open top burners as detailed in User Instructions.

Oven burner is best cleaned with compressed air from inside of the burner; grease or other burnt on materials can be cleaned using detergent applied with a soft cloth. DO NOT use acid-based cleaners as this may cause surface corrosion.

Ensure burners are dry and free from any cleaning material before replacing.

Check adjustment as detailed in Section 1.

3.5.2 Injectors

Injectors are best cleaned with a wooden splinter or soft fuse wire. Metal reamers may distort or increase orifice size and their use should be avoided.

3.6 THERMOCOUPLES and FLAME FAILURE DEVICE (FFD)

3.6.1 Open Top Flame Failure Device Magnet Unit

To remove and replace FFD magnet unit, the following procedures must be followed.

Remove hob components as detailed in Section 3.2.2. Undo FFD thermocouple at rear of tap, undo FFD section at tap rear and withdraw.

Replace in reverse order.

3.6.2 Open Top Thermocouple

Remove hob as detailed in Section 3.2.2.

Remove nut that secures thermocouple to burner support bracket and pull thermocouple through support bracket from underside.

Undo thermocouple connection at FFD section of gas tap and carefully remove thermocouple.

Replace in reverse order, taking care to position tip correctly in relation to burner ports. Thermocouple tip should be 35mm above support bracket. Ensure thermocouple does not touch any part of burner when fully re-assembled.

3.6.3 Oven Flame Sensor

The oven flame sensor is built into the electronic ignition system controller. The sensor is not separately replaceable. Full replacement of controller is necessary.

Access to controller and burner end as detailed in Sections 3.2.4 and 3.2.5.

3.7 OVEN IGNITERS and ELECTRODES

The oven ignition system is electronically controlled. Access to ignition system is via rear electronic controls box. The cover is retained by 3 fixings.

Access to controller and burner end as detailed in Sections 3.2.4 and 3.2.5.

3.8 THERMOSTATS

3.8.1 Oven Thermostat

Remove control knobs and fascia panel as detailed in Section 3.2.1.

Remove thermostat from fascia panel.

From inside oven, release clips that secure thermostat capillary to oven side wall. Undo fixings that secure thermostat to manifold.

Remove thermostat by carefully feeding capillary and phial through crown plate.

Replace all parts in reverse order.

3.8.2 Thermostat Calibration

The thermostat should not be calibrated. If temperature is out with specified tolerances, replace thermostat and return faulty thermostat to Falcon Quality Department.

3.8.3 Safety Thermostat

Remove oven controls box cover at rear as detailed in Section 3.2.4.

Remove fan motor cover as detailed in Section 3.2.5. Remove wires 13 and 14 from safety thermostat.

From inside oven, remove phial guard and clips located at rear left of oven chamber.

Feed capillary and phial through back panel.

Undo nut that secures safety thermostat and remove thermostat from terminal box.

Replace all parts in reverse order.

3.9 OVEN FAN

Remove oven back baffle from inside oven. Remove fan impeller.

Remove fan motor cover, located at rear of unit as detailed in 3.2.5.

Remove oven controls box cover as detailed in Section 3.2.4 and disconnect motor wiring. Undo 4 fixings that secures motor to oven rear.

Replace fan.

Replace all other parts in reverse order.

3.10 OPEN TOP VALVES

Note - Plugs and bodies are machined in pairs and are not interchangeable. Always clean just one tap at a time

3.10.1 Service

Remove control knobs and fascia panel as detailed in Section 3.2.1.

Remove fixings from front of tap body. Withdraw spindle and niting arrangement to allow plug to be eased out.

Clean gas tap plug with a soft rag and grease using an approved high temperature lubricant. Take care not to over-grease as surplus may cause gas way blockage. Replace parts in correct order and check gas tightness.

3.10.2 Removal

Remove control knobs and fascia panel as detailed in Section 3.2.1.

Remove hob fitments as detailed in Sections 3.2.2

Disconnect thermocouple connection at gas tap rear.

3.11 APPLIANCE PRESSURE REGULATOR (Natural Gas Models Only)

The appliance pressure regulator supplied is maintenance free. Check that blue dust cap is covering vent and in good condition as this protects the breather hole.

When checking for gas leaks around regulator, be aware that unburned gas may be vented occasionally to release pressure on diaphragm. This should not be confused with a gas leak.

3.12 FAULT CHECK LIST

If a flame is not established on any burners (hob or oven), follow this check list.

- 1. Check mains gas is ON.
- 2. Check pressure at test point to ensure gas is flowing to unit.
- 3. If pressure does not register, check pressure regulator is fully operational or check for line blockage.
- 4. **OVEN ONLY** ensure door is closed and that door switch operates.
- 5. OVEN ONLY ensure safety thermostat has not tripped.
- 6. If gas is present, check burner injector for blockage.
- 7. If injector is OK then check FFD is engaging and passing gas.
- 8. **OVEN ONLY** Check for spark at spark electrode.
- 9. OVEN ONLY If there is no spark then check HT lead connections.
- 10. If flame is still not present, then re-check from start.

If flame is established but not maintained, follow this check list.

- 1. Check thermocouple is positioned correctly in burner flame. Burner ports must be clean.
- 2. Check thermocouple is not damaged and is secured to gas valve FFD section to allow FFD to energise.
- 3. Check FFD is energising and maintaining flame.
- 4. If, after carrying out the above, burner is still not maintaining flame then re-check from start.

SECTION 4 - SPARES and ACCESSORIES

When ordering spare parts, always quote appliance type and serial number.

This information will be found on data badge attached to base plate

Circuit Diagram

L



Wiring Diagram

