# G3512 and G3532 DOMINATOR*PLUS* Grills

# INSTALLATION and SERVICING INSTRUCTIONS



This appliance must be installed and serviced by a qualified person as stipulated by the Gas Safety (Installation & Use) Regulations. Furthermore, if a need arises to convert the appliance for use with another gas, a qualified competent person must perform this action.

#### 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

The appliance has been CE-marked on the basis of compliance with the Gas Appliance Directive 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. This appliance is only for professional use, and shall only be used by qualified personnel.

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

In order to obtain maximum performance from this unit we would recommend that a maintenance contract be arranged with **SERVICELINE**. Visits may then be made at agreed intervals to carry out adjustments and repairs. A quotation will be given upon request to the contact numbers below.



#### 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

HEAD OFFICE AND WORKS Wallace View, Hillfoots Road, Stirling. FK9 5PY. Scotland. SERVICELINE CONTACT Phone: 01438 363 000 Fax: 01438 369 900 T100787 Ref.5

# **IMPORTANT INFORMATION**

## **Warranty Policy Shortlist**

Warranty does not cover :-

- · Correcting faults caused by incorrect installation of a product.
- Where an engineer cannot gain access to a site or a product.
- Repeat commission visits.
- Replacement of any parts where damage has been caused by misuse.
- Engineer waiting time will be chargeable.
- Routine maintenance and cleaning.
- · Gas conversions i.e. Natural to Propane gas.
- Descaling of water products and cleaning of water sensors where softeners/ conditioners are not fitted, or are fitted and not maintained.
- Blocked drains
- · Independent steam generation systems.
- · Gas, water and electrical supply external to unit.
- Light bulbs
- · Re-installing vacuum in kettle jackets.
- Replacement of grill burner ceramics when damage has been clearly caused by misuse.
- Where an engineer finds no fault with a product that has been reported faulty.
- Re-setting or adjustment of thermostats when unit is operating to specification.
- Cleaning and unblocking of fryer filter systems due to customer misuse.
- Lubrication and adjustment of door catches.
- Cleaning and Maintenance
  - · Cleaning of burner jets
  - · Poor combustion caused by lack of cleaning
  - · Lubrication of moving parts
  - Lubrication of gas cocks
  - · Cleaning/adjustment of pilots
  - · Correction of gas pressure to appliance.
  - Renewing of electric cable ends.
  - Replacement of fuses
  - Corrosion caused by use of chemical cleaners.

## **SECTION 1 - INSTALLATION**

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

Model	Width(mm)	Depth (mm)	Height (mm)	Weight (kg)
G3512 Grill	725	585	500	60
G3532 Grill	785	355	340	33

#### 1.1 MODEL NUMBERS, NETT WEIGHTS and DIMENSIONS

The grill may be mounted on one of the following options: Bench legs, floor stand or wall bracket.

#### 1.2 SITING

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

A minimum distance of 500mm must be observed between the front of the grill and any combustible material. Furthermore, a minimum working clearance of 800 mm from the front face of the grill is required to operate the grill.

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: All grill brackets must be fitted to a non 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 clearance for complete suite of adjoining appliances.

Grills may be mounted on bench legs, a floor stand or a wall bracket.

Grills must not be placed directly upon a table top.

Appliances must be fixed to their stand/ wall bracket.

Appliance stands must be fixed to the floor.

Bench legs must be secured to their bench.

The grill flue discharges vertically through the top of the appliance, meaning the top of the appliance gets very hot.

There must be no direct connection of flue to any mechanical extraction system or to the outside air.

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

#### Warning

Extraction filters and drip trays become combustible without regular cleaning.

Grills under extraction canopies must have a flue diverter fitted as advised in DW172.

#### Note

G3532 model is not compatible with old-style plate shelves.

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

#### Brander Plate – 6.5kg

#### VENTILATION

This appliance must be installed in a suitably ventilated room in accordance with the regulations in force.

Sufficient ventilation, natural or mechanical, must be provided to supply adequate fresh air for proper combustion.

It should also prevent occurrence of unacceptable concentrations of substances harmful to health in the location where equipment is installed. It is also required to be able to remove any such products that may occur, safely and efficiently.

Recommendations for Ventilation of Catering Appliances are provided in BS5440: 2. For multiple installations, requirements for individual appliances should be added together. Installation should be made in accordance with local and/or national regulations which apply at the time.

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.

The flow of air required for combustion should be a minimum of 2m<sup>3</sup>/hr per kW of heat input.

#### **1.3 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, i.e.  $Rp\frac{1}{2}$  ( $\frac{1}{2}$ " B.S.P.). An isolating cock must be located close by to safely allow shut-down during an emergency or servicing. Position of isolating cock should be shown to responsible person(s).

If flexible tube is used, the gas supply tubing or hose shall comply with national requirements in force, and shall not exceed 1.5M length. This 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 governor supplied must be fitted to natural gas appliances.

#### 1.4 ELECTRICAL SUPPLY

Not applicable to this appliance.

#### **1.5 WATER SUPPLY**

Not applicable to this appliance.

#### 1.6 HEAT INPUTS:

– Natural I<sub>2</sub>H and Propane Gas I<sub>3</sub>P (*kW net - Btu/hr gross)Full* 

Model	kW	Btu/hr
G3512 grill	8.9	33,400
G3532 grill	6.45	24,200

*(kW net - Btu/hr gross)Turndown / Low* Natural I<sub>2</sub>H and Propane Gas I<sub>3</sub>P

Model	kW	Btu/hr
G3512 grill	5.2	19,500
G3532 grill	3.6	13,500

#### 1.7 INJECTOR DIAMETERS - Natural Gas I<sub>2</sub>H

Model	Main burner(s)	X-lighting burner	Pilot
G3512	Amal 380 x 2	Amal 20	SIT 30
G3532	Ø2.05mm	n/a	SIT 30

Model	Main burner(s)	X-lighting burner	Pilot
G3512	Amal 160 x 2	Amal 10	SIT 19
G3532	Amal 210	n/a	SIT 19

# 1.8 GAS PRESSURE ADJUSTMENT Natural $I_2H$ and Propane Gas $I_3P$

The following supply pressures apply to all models.

Gas type	mbar	inch w.g
Natural gas I <sub>2</sub> H	20	8
Propane gas I <sub>3</sub> P	37	14.8

Pressure test point is located on the injector manifold situated behind front control panel.

An adjustable governor ( $\frac{1}{2}$ " BSP) is provided on Natural gas I<sub>2</sub>H units. This must be adjusted to achieve an operating pressure at control manifold of 15mbar (6 inches w.g.).

Low rate burner pressure for all models must be adjusted to:-

Gas type	mbar	inches w.g
Nat I₂H	4.7	1.9
Prop I <sub>3</sub> P	11	4.4

Turn screw on gas tap Clockwise to Decrease pressure, Anticlockwise to Increase pressure.

#### 1.9 BURNER ADJUSTMENT

Burners are factory set and NO ADJUSTMENT is necessary.

## SECTION 2 -ASSEMBLY and COMMISSIONING

#### 2.1 ASSEMBLY Note

Mounting accessories are available. Contact Falcon Sales, an equipment distributor or place of purchase.

- a) Unpack unit and place it in position using separate mounting accessories.
- b) Mounting accessories should be assembled according to separate instructions provided.
- c) Check the following listed parts are included:-

Brander plate Brander drip trough Grid shelf Grid shelf handles Drip tray Gas governor *(Natural gas models)* 

d) The grid shelf handles are supplied separately and must be screwed on to grid shelf arms.

#### 2.2 CONNECTION TO THE GAS SUPPLY

Installation should be carried out in accordance with the various regulations listed on the cover of this document.

On NATURAL gas appliances, the adjustable governor supplied MUST be fitted to gas circuit and fixed securely in a position that enables adjustment to be carried out during commissioning. PROPANE appliances do not require a governor.

Ensure that a gas Isolating cock is fitted to supply in convenient proximity to grill.

#### 2.3 CONNECTION TO AN ELECTRICAL SUPPLY

Not applicable to this appliance.

#### 2.4 CONNECTION TO A WATER SUPPLY

Not applicable to this appliance.

#### 2.5 COMMISSIONING Important

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

#### 2.5.1 Burners

- 1. Ensure mains gas is turned on.
- 2. To light grill burners, press knob in and turn it to pilot position. Ignite pilot manually. Hold knob in for 20 seconds and then release. Pilot will remain lit. Turn knob to required position.

If Pilot goes out when knob is released, wait 3 minutes before re-trying.

#### 2.5.2 Setting The Gas Pressure

- a) Check pressure during commissioning. A suitable gauge must be connected to test point located on injector manifold (G3532: situated behind front control panel).(G3512: situated behind back panel inspection panel)
- b) Turn on main gas valve at supply to unit.
- c) Light pilot flame as detailed in Section 2.5.1. Gas supply pipes may contain air so repeat procedure until burner/s light.

d) Adjust governor (*Natural gas installations only*) at unit rear to relevant pressure setting found in Section 1.9.

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

e) Turn control to low flame position and adjust low rate screw to relevant pressure setting found in Section 1.9.

(Clockwise to Decrease, Anti clockwise to Increase).

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

#### 2.6 INSTRUCTION TO USER

The installer must ensure that user thoroughly understands the instructions for lighting, cleaning and correct use of unit.

It is also important to ensure that gas isolating cock location is known to user and that the procedure to follow in event of emergency is demonstrated.

## SECTION 3 -SERVICING and CONVERSION

#### Important. To be performed by qualified competent personnel only.

BEFORE ATTEMPTING ANY SERVICING OR CONVERSION, ENSURE ISOLATING COCK IS TURNED OFF AND CANNOT BE INADVERTENTLY TURNED ON.

ONLY RECONNECT GAS SUPPLY AFTER ALL SERVICING OR CONVERSION WORK HAS BEEN COMPLETED. CHECK APPLIANCE TO ENSURE THAT IT PERFORMS CORRECTLY AND CARRY OUT ANY NECESSARY ADJUSTMENTS AS DETAILED IN SECTION 1.

ALWAYS CHECK FOR GAS TIGHTNESS AFTER CARRYING OUT ANY SERVICING OR EXCHANGE OF GAS CARRYING COMPONENT.

#### 3.1 GAS CONVERSION:

#### 3.1.1 Conversion to NATURAL GAS I<sub>2</sub>H:

- Change Pilot and Main burner injectors (and G3512 cross lighter injector).
- Add correct governor.
- Set burner Full and Low position pressures. (section 2.5.2).
- Change Data Badge

#### 3.1.2 For conversion to PROPANE GAS:

- Change Pilot and Main burner injectors (and G3512 cross lighter injector).
- Remove governor from gas circuit.
- Set Low position pressure. Section 1.9
- Change Data Badge

#### 3.1.3 Removal of Burners/Replacement of Injectors

#### G3532;

- a) Remove control panel.
- b) Remove side panels.
- c) Remove Front facia panel.
- d) Remove outer top panel.
- e) Remove back panel.
- f) Remove Inner top panel.
- g) Remove grill plaques.
- h) Remove pilot assembly from burner.
- i) Remove the burner. Injector may now be removed/replaced.
- j) Remove existing pilot injector from pilot pipe.
- k) Fit replacement injector over pilot pipe.
- I) Refit pilot pipe to pilot assembly.
- m) Refit pilot assembly to burner.

#### G3512;

Sections a to e above then

f) Remove inner top panel.

g) Disconnect upper rear panel from inner back panel.

(This is the panel holding the brick holders)

h) Pull the panel, complete with brick holders/ bricks towards the back of the grill and remove.

i) Disconnect Pilot pipe from Pilot assembly and remove injector.

j) Fit replacement Pilot injector over pipe and into Pilot assembly.

k) Left and cross lighting burners are now able to be removed. By removing thermocouple and Pilot gas pipe, the Right burner complete with Pilot assembly can be removed. This gives access to the injectors.

I) Remove existing injectors.

m) Insert replacement injectors.

#### 3.1.4 Low / Turndown screw.

The screw should be adjusted according to Section 1.9. Clockwise to decrease pressure and Anticlockwise to increase.

#### 3.1.5 Ensure data plate with correct information is fitted after conversion.

#### 3.2 REMOVAL OF PANELS

#### 3.2.1 Various panels are removed as follows:-

#### To Remove Control Panel.

Remove control knob. Undo fixings along underside. Pull facia panel forward at bottom while slightly easing tabs along top edge down out of top front facia panel.

To Remove Side Panels Remove fixings along side-top. Remove fixings at rear.

Remove fixings along underside of side panel. Panel can now be removed.

#### To Remove Outer Top

#### G3512

Once the side panels are removed, ease top panel up at front whilst pulling forward, easing rear edge tabs free from back panel slots.

#### G3532

Once the side panel top screws are removed, remove control panel. Remove fixings along rear of top panel. Remove fixings from underside of front top facia panel. Pull panel down and outwards to remove the front facia panel. Once front facia is removed, remove fixings in the front of the top panel and lift panel free.

#### **Replacement of Plaques**

G3512

#### Follow 3.1.3 Sections a to h

G3532

Follow 3.1.3 to instruction f), remove and replace plaques as required.

#### 3.3 CLEANING

#### 3.3.1 Burners

Burners should be cleaned periodically to maintain maximum performance. Burners are best cleaned with a wire brush; port blockage should be freed using a metal broach, any loose material being shaken out via burner shank. Ensure burners are dry and free from any cleaning material before replacing.

Check adjustment as detailed in Section 1.

#### 3.3.2 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.

#### 3.4 THERMOCOUPLES and FLAME FAILURE DEVICE (FFD)

#### 3.4.1 Flame Failure Device Magnet Unit

To remove and replace FFD magnet unit, the following procedures must be followed. Remove Control Panel and Side Panel as detailed in Section 3.2. Undo FFD thermocouple at rear of tap. Undo magnet at tap rear and withdraw. Replace in reverse order.

#### 3.4.2 Thermocouple: Remove Control Panel and Side Panel as detailed in Section 3.2

#### G3532:

Undo Nut securing thermocouple to Pilot burner. Undo thermocouple connection at FFD section of gas tap and carefully remove thermocouple.

**G3512**: Remove inspection panel on back panel to gain access to Pilot connections. Undo Nut securing thermocouple to Pilot burner. Undo thermocouple connection at FFD section of gas tap and carefully remove thermocouple.

#### 3.5 GOVERNOR (Natural Gas Models Only)

The governor 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 governor, be aware that unburned gas may be vented occasionally to release pressure on diaphragm. This should not be confused with a gas leak.

#### 3.6 GAS TAPS Note

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

#### 3.6.1 Service

Remove control knobs and Control 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 re-grease using an approved high temperature lubricant. Take care not to over-grease as surplus may cause gasway blockage.

Replace parts in correct order and check gas tightness.

#### 3.6.2 Gas Tap Removal:

Remove Control Panel and Side Panel as detailed in Section 3.2.

Remove Pilot pipe

Remove Thermocouple

Remove gas inlet and outlet pipes.

Remove nut securing front of tap to support bracket and withdraw. Replace in reverse order.

#### **3.7 FAULT CHECK LIST**

If a flame is not established on the burners follow this check list

#### A. If pilot is not lighting:

- 1. Check that mains gas is ON.
- 2. Wrong gas pressure adjustment
- 3. Check for line blockage.
- 4. If gas is present, check pilot injector for blockage.
- 5. Ensure Gas Control plug orifices are not blocked with excessive tap grease.
- 6. If flame is still not present, then re-check from start

#### B. If pilot is lighting but not staying on when Knob is released:

- 1. Ensure Thermocouple is tightened into magnet unit.
- 2. Ensure gas pressure is correctly adjusted.
- 3. Check thermocouple is positioned correctly in Pilot burner/pilot burner flame. Burner ports must

be clean.

- 4. Ensure pilot injector is clear and pilot flame is not restricted/shortened.
- 5. Ensure thermocouple is not damaged.
- 6. Ensure thermocouple tip is clean and free from soot.
- 7. Ensure Gas Control plug orifices are not blocked with excessive tap grease.
- 8. If, after carrying out the above, burner is still not maintaining flame then re-check from start.

### SECTION 4 - SPARES and ACCESSORIES.

Please refer to Users instructions for Spares list.

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

This information will be found on data badge attached to RH outer side panel.

The following parts may require replacing during appliance life;

	G3512	G3532
Burner Plaque	531600010	531600010
Thermocouple	531610010	531600040
Pilot Orifice NG	531600070	531600070
Pilot Orifice Prop	535410015	535410015
Governor	535820026	535820026
Gas Control	537560020	537560020
Control Knob	535310010	535310010
Grid Shelf Handle Disc	531532200	531532200
Grid Shelf Handle	531532190	531532190
Grid Shelf Assy	731540051	NEW
Brander Plate	521540035	521560035
Burner	531600230	535990000
Injector Nat Gas	531600220	531630010
Injector Propane	531600225	531630015
X lighting Injector NG	531610140	n/a
X lighting Injector Prop	531610145	n/a
Trough	531600003	531560220
Plaque Holder	531600606	NEW
Flue Diverter	535980000	525990000