### G3512 and G3532 DOMINATOR*PLUS* Grills

# 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

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.

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.2

#### 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 ARE NOT TO BE ADJUSTED BY THE INSTALLER.

### 1.1 MODEL NUMBERS, NETT WEIGHTS and DIMENSIONS

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

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.

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 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.

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 open top 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.

#### 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, i.e.  $Rp\frac{1}{2}$  ( $\frac{1}{2}$ " 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 governor supplied must be fitted to natural gas appliances.

#### 1.5 ELECTRICAL SUPPLY

Not applicable to this appliance.

#### 1.6 WATER SUPPLY

Not applicable to this appliance.

### 1.7 HEAT INPUTS - Natural and Propane Gas (kW net - Btu/hr gross)

Model	kW	Btu/hr
G3512 grill	8.55	32,100
G3532 grill	6.65	25,100

#### 1.8 INJECTOR DIAMETERS - Natural Gas

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

#### **Propane Gas**

Model	Main burner(s)	X-lighting burner	Pilot
G3512	Amal 140 x 2	Amal 10	SIT 19
G3532	Amal 210	n/a	SIT 19

### 1.9 GAS PRESSURE ADJUSTMENT (Natural and Propane gas)

The following supply pressures apply to all models.

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

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

An adjustable governor (½" BSP) is provided on Natural gas units. This must be adjusted to achieve an operating pressure at control manifold of 15mbar (6 inches w.g.).

Low rate burner pressure must be adjusted to:-

Gas type	mbar	inches w.g
Natural gas	3.5	1.4
Propane gas	11	4.4

#### 1.10 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 using a taper or match. Hold knob in for 20 seconds and then release. Pilot will remain lit. Turn knob to required position.

#### 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 (situated behind front control facia).
- b) Turn on main gas valve at supply to unit.
- c) Light pilot flame as detailed in Section 2.1.1.
   Gas supply pipes may contain air so repeat procedure until burner lights.
- 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.
- 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**

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.

After carrying out any servicing or exchange of gas carrying component.

ALWAYS CHECK FOR GAS TIGHTNESS!

#### 3.1 GAS CONVERSION CHECK LIST

For conversion to NATURAL GAS, add correct governor and set burner pressure.

For conversion to PROPANE GAS, remove governor from gas circuit.

Other considerations CHANGE INJECTORS SET LOW RATE Refer to Section 1.9. CHANGE DATA PLATE Ensure gas supply is disconnected before commencing. Only reconnect gas supply after all conversion work has been completed.

Natural to Propane

Remove governor from appliance inlet pipe-work.

Propane to Natural

Fit governor to appliance inlet pipe-work and follow details in Section 2.5.

#### 3.1.1 Removal of Burners/Replacement of Injectors

- a) Remove control facia.
- b) Remove sides.
- c) Remove outer top.
- d) Remove Inner top, including grill plaques.
- e) Remove pilot assembly from RH burner.
- f) Remove the burners and cross lighter
- g) Remove existing injectors.
- h) Insert replacement injector.
- i) Remove existing pilot injector from pilot pipe.
- j) Fit replacement injector over pilot pipe.
- k) Refit pilot pipe to pilot assembly.
- I) Refit pilot assembly to burner.

#### 3.1.2 Bypass Screw

The bypass screw should be adjusted according to Section 1.9.

Ensure data plate with correct information is fitted after conversion.

#### 3.2 REMOVAL OF PANELS

Various panels are removed as follows:-

#### 3.2.1 To Remove Facia Panel

Remove control knob. Undo fixings along underside. Pull facia panel forward while slightly easing bottom edge upward to remove.

#### 3.2.2 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.

#### 3.2.3 To Remove Outer Top

#### G3512

Once the side panels are removed the outer top will come free from its fixings.

#### G3532

Remove fixings along rear.

Remove fixings from underside of front rail.

Pull outer top up at rear and forwards.

#### 3.2.4 Replacement of Plaques

Follow 3.1.1 to instruction d), remove and replace plaques as required.

#### 3.3 CLEANING

#### 3.3.1 Burners

Burners should be cleaned periodically to maintain maximum performance as detailed in User Instructions. 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 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.

#### 3.4.2 Thermocouple

Follow section 3.1.1 to instruction e)

Remove nut securing thermocouple to burner support bracket. Pull thermocouple through bracket from underside.

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

Replace in reverse order.

Ensure thermocouple does not touch any part of burner when fully re-assembled.

#### 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 facia 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 regrease 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.

#### 3.7 FAULT CHECK LIST

If a flame is not established on the burners 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 then check governor is fully operational or check for line blockage.
- 4. If gas is present, check burner injector for blockage.
- 5. If injector is OK then check FFD is engaging and passing gas.
- 6. 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.
- 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.