

G350/9 and G350/10 CHARGRILLS

INSTALLATION and SERVICING INSTRUCTIONS



These appliances 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/ UP/ 1, IGE/ UP/ 2

BS6173 and BS5440

These Appliances have 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

T100693 Ref. 2

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	WEIGHT lbs
G350/9	350	650	305	46	101
G350/10	700	650	305	78	172

1.2 SITING

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

Should the floor be of combustible material, then local fire requirements should be checked to ensure compliance. A clearance of 150mm should be left between the back and sides of the appliance and any combustible wall. There should be a minimum vertical clearance of 1650mm above top edge of chargrill flue.

The chargrill rear becomes VERY HOT. If installed in a free-standing position, appliance rear MUST BE GUARDED to protect operators against burns.

Important

If the appliance is to be installed in a suite formation with matching appliances then the instructional literature for these should be consulted in order to determine the necessary clearances to any combustible rear wall or overlying surface(s). Some units require greater clearances than others. The largest figure quoted in the individual instructions will therefore determine the clearance of the complete suite adjoining appliances.

1.3 VENTILATION

Adequate ventilation, whether natural or mechanical, must be provided to supply sufficient fresh air for combustion and allow easy removal of combustion products which may be harmful to health.

EQUIPMENT	Ventilation Rate Required	
	m ³ / min	ft ³ /min
Range, Unit Type	17	600
Pastry Oven	17	600
Fryer	26	900
Grill	17	600
Steak Grill	26	900
Boiling Pan	17	600
Steamer	17	600
Sterilizing Sink	14	500
Bains Marie	11	400
Tea/ Coffee Machine	8.5 - 14	300 - 500

Recommendations for Ventilation of Catering Appliances are given in BS5440 : 2. Furthermore, to ensure sufficient room ventilation, guidance on the volume of ventilation air required for different types of catering equipment is provided in the table. 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 heat without excessive pressure drop. A gas meter will be installed in the system by Gas Supplier. Any existing meter should be checked, preferably by Gas Supplier to ensure that it is of adequate capacity to supply the entire installation. This is, of course, particularly important when a number of units, (i.e. a "suite" is being installed.)

Installation pipework must be fitted in accordance with IGE/ UP/ 2.

The size of pipework supplying the appliance must be not less than the inlet connection (R¹/₂ , ¹/₂" BSP).

An isolating cock must be located close to the appliance to allow shut down during an emergency or routine servicing.

After installation, the complete installation must be checked for gas tightness: see IGE/ UP/ 1.

1.5 ELECTRICAL SUPPLY

Not applicable to these appliances.

1.6 WATER SUPPLY

Not applicable to these appliances.

1.7 TOTAL RATED HEAT INPUTS - NATURAL and PROPANE GAS

MODEL	kW (net)	Btu/hr (gross)
G350/9	9.6	36,000
G350/10	19.2	72,000

1.8 INJECTOR SIZE - NATURAL and PROPANE GAS

BURNER	NATURAL	PROPANE
MAIN	ø2.9	Amal 390
PILOT	N 16	LP 10

1.9 GAS PRESSURE

The pressure test point is situated on gas manifold behind front fascia panel.

	Burner Pressure		Supply Pressure	
	mbar	inches w.g	mbar	inches w.g
Natural	15.5	6.2	20	8
Propane	37	14.8	14.8	14.8

1.10 BURNER ADJUSTMENTS

1.10.1 Aeration Adjustment

The burners are fitted with fixed injectors.

Aeration is set and sealed by manufacturer by means of a screw in burner throat. After setting the pressure, flame quality should be such that there is no evidence of flame lift or light back. Also refer to Servicing Instructions, Section 3.3.

1.10.2 Low Flame Setting

Low flame adjustment has been set and sealed by manufacturer by means of a bypass screw in gas tap to approximately half full rate.

SECTION 2 - ASSEMBLY and COMMISSIONING

2.1 ASSEMBLY

1. The burners, bottomgrates and cooking bars are removed from their working locations and separately packed, together with a bag of lava-rock. Remove these components and carefully remove all packing material.
2. Locate burners (one only on G350/9) over injectors at front, and engage rear locating toes through corresponding holes in rear supporting angle.
3. Place hearth-surround into casing with tilting handles to front and ensure that fat trough is correctly located.
4. Lay bottomgrates in position (Two on G350/9 and Four on G350/10), ensuring the locating toes on underside engage in corresponding holes in hearth surround.
5. LAVA ROCK - DO NOT tip contents of bag of rock into grates. The dust, which accumulates naturally at the bag bottom during shipment, must be discarded as it will clog burner ports and affect unit performance. Set a single layer of lava rock, spread evenly over grate area (see User Instructions). Discard any small chips of rock as these may lodge between grates and block heat flow.
6. Fit brander bars (Three on G350/9 and Six on G350/10) with flanges toward rear.

7. Having assembled appliance, place it in it's working position and level it using the feet adjusters. If it is to be mounted on the special purpose metal stand. Refer to instructions supplied with stand.

2.2 CONNECTION TO GAS SUPPLY

The gas supply piping and connection to unit must be installed in accordance with the various regulations listed on the cover of this manual.

On Natural Gas appliances, the adjustable governor supplied MUST be fitted in the supply, being securely fixed in a position enabling adjustments to be made during commissioning. On Propane units, a governor must NOT be fitted.

2.3 CONNECTING TO AN ELECTRICAL SUPPLY

Not applicable to these appliances.

2.4 CONNECTION TO WATER SUPPLY

Not applicable to these appliances.

2.5 PRE-COMMISSIONING CHECK

After connecting to gas supply, fit a pressure gauge to the test point (see Installation, Section 1.9) and check entire installation for gas tightness. Purge air from system and light burners in accordance with procedures detailed below. On Natural Gas models, set pressure by means of the governor.

Lighting The Burners

DO NOT attempt to light burners through the simulated charcoal with a match or short taper because of the risk of burns.

To Turn A Burner ON (see Figure 1).

A taper (at least 230mm in length) is required.

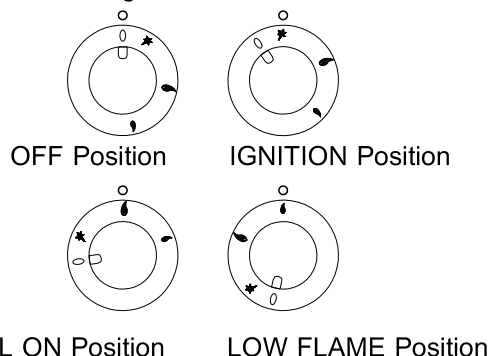
The following procedure applies to two-burner model (G350/10).

For single burner unit (G350/9), the lighting operation will of course be performed once only.

Pull out fat drawer and apply a lit taper through centre of opening and light either left or right pilot depending on which burner requires to be lit. Turn gas tap to required flame position for selected burner.

Check through viewing window that burner is fully alight before replacing fat drawer.

Repeat above to light other burner.



Burner Adjustment Checks

With burner lit, check flame quality and low flame setting are in accordance with Section 1.10.

To Turn A Burner OFF

Turn gas tap clockwise to stop, as shown in Figure 1.

Important

After installation, the engineer responsible should check that all gas connections are good and tight. Ensure unit is operating satisfactorily before leaving the premises.

2.6 INSTRUCTION TO USER

After installing and commissioning appliance, please hand User Instructions to user or purchaser and ensure that the person(s) responsible understands instructions for lighting, cleaning and correct use of unit. It is important to ensure that location of gas isolating cock is made known to user and that the procedure for operation in an emergency be demonstrated.

SECTION 3 - SERVICING and CONVERSION

Important

BEFORE ATTEMPTING ANY SERVICING, ENSURE THAT ISOLATING COCK IS TURNED OFF AND CANNOT BE INADVERTANTLY 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 components -

ALWAYS CHECK FOR GAS TIGHTNESS!!

3.1 CONVERSION TO OTHER GASES

This unit may be set for operation with Natural Gas (2H) at supply pressure of 20 mbar or propane (3P) at 37 mbar.

For detailed procedures, refer to appropriate sections of this document.

On completion, reapply any seals and locking nuts.

To Convert From NATURAL to PROPANE Gas

Change gas valve(s).

Change injectors.

Remove governor.

Adjust low flame setting.

Adjust burner aeration.

Change data plate.

To Convert From PROPANE to NATURAL Gas

Change gas valve(s).

Change injectors.

Install governor and adjust for inlet pressure accordingly.

Adjust low flame setting.

Adjust burner aeration.

Change data plate.

3.2 REMOVAL OF CONTROL PANEL

To remove control panel, pull off control knobs and remove fat-collecting drawer.

Remove fixings in top flange of facia panel, then lower panel and withdraw it forward.

3.3 BURNERS

Burners and injectors should be cleaned periodically to maintain maximum performance.

3.3.1 Main Burner

The adjustment of burner pressure is described in Section 1.9. Burners are accessed by removing lava rock, bottom grates and hearth surround.

Burners are best cleaned with a wire brush, ports being freed from blockage with a metal broach, any loose material being shaken out via burner shank. Ensure that burners are dry and free from any cleaning material before replacing.

3.3.2 Pilot Assembly

To remove proceed as follows:

- Remove branding bars, lava rock, bottomgrates and hearth.
- Release thermocouple fixing nut and remove thermocouple from assembly.
- Release pilot pipe fixing nut from pilot assembly taking care not to lose injector removed with nut.
- Undo fixing which secures pilot assembly.
- Re-assemble in reverse order.

3.4 INJECTORS

Should main injectors become blocked, remove these from chargrill for cleaning. First remove lava rock, bottom grates, hearth and burners. Unscrew injectors using a suitable spanner. Soak in solvent to remove blockage.

3.5 FLAME FAILURE THERMOCOUPLE

To gain access, remove front panel and hearth surround.

To remove thermocouple from pilot assembly, undo fixing nut from within control compartment and withdraw.

To remove thermocouple from gas tap, undo fixing nut on tap body.

3.6 GAS TAPS

To Service

Remove the fixings from front of tap body and withdraw spindle and seating arrangement thus allowing plug to be eased out.

Clean plug and body with a soft rag and re-grease with an approved high temperature lubricant. Apply grease sparingly and do not block gas passageways of plug and body.

When re-assembling parts, insert plug into body with gas passageways of plug and body.

Secure end cap to body, noting that fixing holes line up in one way only.

Note

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

To Remove

Undo brass nut at compression fitting on gas supply pipe at rear of gas tap.

Remove thermocouple connection from FFD section of tap.

Undo fixings and gently remove tap from supply manifold.

3.7 GOVERNOR

This applies to NATURAL GAS appliances only.

The type of governor used is maintenance free.

Check blue dust cap covering vent is fitted and in good condition. This protects breather hole.

SECTION 4 - SPARES

When ordering spare parts, always quote the appliance type and serial number. This information will be found on the data plate, located on a plate behind the rear flue upstand. A list of items available, along with code numbers is enclosed with the document pack.