# **G1478 STOCKPOT STOVE**

## 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 the 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 licensed 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 PHONE: 01438 363 000

## **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.

#### Take care when installing or removing cast items, they are heavy items. Removable Item - Pan Support – 6.2kg

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

Model	Width (mm)	Depth (mm)	Height (mm)	Weight (kg)
G1478 Stockpot	610	610	190	40
Stove	010	010	480	40

#### **1.2 SITING**

The appliance must be installed on a firm, level floor. Adequate ventilation must be available for combustion, and dispersal of combustion products. The location should be draught-free.

The appliance can be positioned to within 20 mm of a combustible wall, but to enable user access, a clearance of 75mm at the back and 150mm at the sides should be allowed.

#### **1.3 VENTILATION**

The grill MUST be installed level in a well lit and draught free position. Adequate ventilation, whether natural or mechanical, must be provided to ensure sufficient air for combustion and removal of combustion products and cooking vapours, which may be harmful to health.

This appliance is to be installed with sufficient ventilation to prevent the occurrence of unacceptable concentrations of substances harmful to health in the room which they are installed.

The fresh air requirement for this appliance at a rate of 1M<sup>3</sup>/hour per kW is 15 M<sup>3</sup> of fresh air per hour. Care must be taken not to disturb the air for combustion admission and evacuation of products of combustion on appliances fitted with open burners.

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.

The appliance flue discharges vertically through the grille at the top of the unit. There must be no direct connection of the flue to any mechanical extraction system or the outside air. Siting the unit under a ventilated canopy is the ideal arrangement. Remember, dirty extraction filters and drip trays may become a fire hazard due to drip-down on to equipment below. Regular cleaning of extraction filters and drip trays must be carried out.

#### 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 the Gas Supplier. Any existing meter should be checked by the Gas Supplier, to ensure that meter is of adequate capacity to supply the appliance and other associated equipment.

Installation pipe work should be fitted in accordance with IGE/UP/2. The size of the pipe work from meter to appliance must be no less than that of unit inlet connection, i.e. Rp1/2 (1/2 BSP female).

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

A governor is supplied and must be fitted to NATURAL ( $I_2h$ ) gas appliances ONLY. This device **is NOT required on PROPANE** ( $I_3p$ ) models.

#### The installation must be tested for gas soundness. Details are given in IGE/UP/1.

Gas supply tubing or hose shall comply with the national requirements in force, and shall be periodically examined and replaced as necessary. The tubing or Flexible hose must not exceed 1.5m in length.

#### **1.5 TOTAL RATED HEAT INPUTS**

#### NATURAL and PROPANE GAS

	Natural (I <sub>2</sub> H)		Propane (I₃P)	
	kW	Btu/hr	kW	Btu/hr
Total Rate	15	56,300	15	56,300
Turndown / Low rate	4	15,000	6.4	24,000

Turndown / Low rate setting	Natural (I <sub>2</sub> H)	Propane (I <sub>3</sub> P)
pressure (millibars)	1mb	5.9mb

#### **1.6 INJECTOR DIAMETERS –**

Burner	Natural (I <sub>2</sub> H)	Propane (I <sub>3</sub> P)
Inner Ring	Amal 420	Amal 170
Outer Ring	2.6mm Ø	Amal 380
Pilot	SIT No 36	SIT No 19

#### **1.7 GAS PRESSURE**

	Full Rate	Low Rate
Natural (I <sub>2</sub> H)	15mbar	1 mbar
Propane (I <sub>3</sub> P)	37 mbar	5.9mbar

#### **1.8 BURNER ADJUSTMENTS**

#### 1.8.1 To Adjust:

a) Fit a suitable pressure gauge to test point on Float rail and light Main Burners. Consult Users Instructions for lighting procedure.

b) With burner (pair) at FULL FLAME position, adjust pressure if necessary. Values are stated in Section 1.7.

c) On Natural gas (I<sub>2</sub>H) appliances, an adjustable governor is supplied and pressure is set by turning the inner cap with a screwdriver, Clockwise to increase. Replace outer cap after setting.

d) For Propane  $(I_3P)$  appliances, pressure is regulated at gas source.

e) Check that all burner ports cross light satisfactorily.

f) The gas control is provided with a LOW FLAME setting. Check it functions satisfactorily. In event of adjustment being necessary, follow procedure detailed in Section 1.8.2.

#### 1.8.2 Low Flame Setting:

Low rate adjustment is achieved by turning gas tap low rate adjusting screw.

To access low rate adjusting screw;

Remove control knob. Screw is located under the main spindle.

To Adjust Turndown / Low rate;

Attach Manometer to pressure test point on Float rail.

Refer to Low rate manifold pressures in Table in Section 1.7

Turn screw clockwise, to decrease rate and anti-clockwise to increase rate.

#### **1.8.3 AERATION ADJUSTMENT**

The flames should not lift, light back or become sooty.

Propane Appliances:

Maximum aeration is required for correct operation on Propane  $(I_3P)$  gas appliances.

Natural Appliances:

Maximum aeration is not generally required for correct operation on Natural gas (I<sub>2</sub>H) appliances.

The burners have been correctly adjusted prior to despatch. It should not require adjustment under normal circumstances. If however, it should become necessary to reset the aeration of the flames. This is carried out by rotating the aeration discs, located at end of the burners. The burners must be removed to adjust the discs, as they are locked in position.

Burner removal is itemised in section 3.3.1

After adjustment, locking screws must be firmly tightened to discourage unauthorised tampering.

### **SECTION 2 - ASSEMBLY and COMMISSIONING**

#### 2.1 ASSEMBLY

#### Unpack appliance and check that all components are undamaged.

Unpack pan support and place it upon the location of the appliance frame.

Having assembled the stove, place unit in desired working position and level by means of foot adjusters.

The foot pads have knock out holes to accommodate screws.

#### **2.2 CONNECTION TO GAS SUPPLY**

Having selected appliance position and type of mounting, extend gas supply and prepare a suitable gas position connection point. Ensure that a gas isolating cock is fitted in supply at a convenient and accessible position adjacent to appliance.

Connect appliance to appropriate gas supply (NATURAL or PROPANE ). See Section 1.7 for gas pressures.

On Natural gas appliances ( $I_2H$ ), the adjustable governor supplied must be fitted. The governor must be securely fixed in a position which would enable adjustments to be made during commissioning.

Propane (I<sub>3</sub>P) models must not have a governor fitted. Please refer also to Section 1.4.

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

Gas supply tubing or hose shall comply with the national requirements in force, and shall be periodically examined and replaced as necessary. The tubing or Flexible hose must not exceed 1.5m in length.

#### **2.3 CONNECTION TO 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 test point situated on burner manifold. Check entire installation for gas soundness. Purge air from system and light burners in accordance with procedure detailed below. On natural gas models, pressure is set by means of the governor.

Lighting the Burners;

1. To light pilot, turn control knob to ignition position.

2. Apply lit taper to pilot burner while pressing in control knob.

When pilot is lit, hold knob in for up to 20 seconds before releasing it. This will enable the flame failure thermocouple to engage.

3. To light main burners, turn knob to full flame setting.

4. Check that burner ignites smoothly and all burner ports cross light satisfactorily.

5. To reduce heat, knob may be further turned anti-clockwise, to the minimum setting - low flame position.

#### 2.6 INSTRUCTION TO USER

After installation and commissioning, please hand user manual to user or purchaser. Ensure that person(s) responsible understands the procedure for lighting, cleaning and general operation.

It is important to ensure that the mains isolator location is known and that the drill for operation during an emergency be demonstrated.

### **SECTION 3 - SERVICING AND CONVERSION**

#### Important;

BEFORE ATTEMPTING ANY SERVICE OPERATION, TURN OFF THE ISOLATING COCK AND TAKE STEPS TO ENSURE THAT IT IS NOT INADVERTENTLY TURNED ON DURING THE TASK.

AFTER ANY SUCH SERVICE OPERATION, THE APPLIANCE MUST BE CHECKED TO DETERMINE 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 SOUNDNESS!**

#### **3.1 GAS CONVERSION CHECK LIST**

For conversion to NATURAL GAS (I<sub>2</sub>H), add correct governor and set burner pressure.

For conversion to PROPANE GAS ( $I_3P$ ), remove governor from gas circuit.

Other considerations -

Change injectors in both main and pilot burners.

Set low rate and change data plate.

#### **3.2 REMOVAL OF CONTROL PANELS.**

Not applicable to this appliance.

#### **3.3 BURNERS, maintenance and removal.**

3.3.1 Main (Outer and Inner Rings)

The burners should be cleaned periodically to maintain maximum performance.

To Clean: Burners are best cleaned with a wire brush. Drilled ports should be cleared using a metal broach. Any loose material should be shaken out via burner venturi.

To Remove: Lift pan support away and undo burner support base fixing nuts. Push burners back off injectors at float rail and lift to withdraw.

#### 3.3.2 Pilot Burner

To Remove: Pilot assembly is secured to burner support base by means of a bracket. Access can be gained by lifting out pan support.

Disconnect pilot gas pipe and flame failure thermocouple from either gas tap or pilot assembly end.

#### 3.4 INJECTORS -

#### 3.4.1 Main Burner Injectors

The injectors should be cleaned periodically to maintain maximum performance.

#### To Remove

Remove burner as detailed in Section 3.3. This allows free access to injectors.

To Clean

Injectors should be cleaned with a wood splinter or soft fuse wire. Never use metal reamers as these will distort or increase orifice size.

#### 3.4.2 Pilot Burner Injectors

To Remove

Undo gas supply pipe at pilot assembly and remove injector.

#### **3.5 FLAME FAILURE THERMOCOUPLE**

To Remove

Lift out pan support and undo fixing nuts at both pilot assembly and control tap.

#### 3.6 GAS TAP

After a prolonged period of use, it will be necessary to re-grease gas taps to ensure gas tightness.

To re-grease, proceed as follows:

1. Pull off tap knob.

2. Slacken spindle retaining screw on tap body and pull plug out.

3. Clean plug and tap interior with clean soft cloth. Apply a thin coat of approved lubricant to tapered portion of plug.

4. Re-assemble and check for correct functioning and gas soundness.

#### **3.7 GOVERNOR**

This applies to natural gas units only.

The type of governor used will normally require little servicing. The air breather hole should be regularly checked for dirt blockage.

Always re-check pressure at test point after governor maintenance.

### **SECTION 4 - SPARES**

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

This information will be found on the data badge, located on the side of the unit.

ITEM No.	DESCRIPTION	SPARES No.
1	CAST HOB	537950140
2	CAST PAN SUPPORT	530950075
3	ST/ST LEG	537950165
4	ADJUSTABLE FOOT	537950180
5	CONTROL KNOB	537950026
6	GAS GOVERNOR - NOT SHOWN	530950260
7	DOUBLE BURNER ASSEMBLY	530950042
8	OUTER BURNER ASSEMBLY	530950300
9	INNER BURNER ASSEMBLY	530950310
10	BURNER AERATION RING	530950210
11	BASE PLATE	537950150
12	BURNER SUPPORT	530950290
13	PILOT PIPE (FLEXIBLE)	535010011
14	GAS INLET PIPE (FLEXIBLE)	537950190
15	GAS VALVE	537950020
16	COPPER SEALING WASHER	534350730
17	INJECTOR - OUTER RING (NAT GAS)	537950030
	INJECTOR - OUTER RING (PROPANE)	537950130
18	INJECTOR - INNER RING (NAT GAS)	537950031
10	INJECTOR - INNER RING (PROPANE)	537950120
19	MANIFOLD ASSEMBLY	537950050
20	PRESSURE TEST NIPPLE	530950270
21	VALVE TO MANIFOLD PIPE (FLEXIBLE)	537950200
22	THERMOCOUPLE	534101004
23	PILOT BURNER ASSEMBLY (NAT GAS)	537950060
43	PILOT BURNER ASSEMBLY (PROPANE)	537950065
24	PILOT INJECTOR (NAT GAS) - NOT SHOWN	539110270
	PILOT INJECTOR (PROPANE) - NOT SHOWN	537950110
25	PILOT BRACKET	537950080

