Routine maintenance

The following routine maintenance checks should be carried out at the beginning of each heating season or if the heater has not been used for a year or more. More frequent maintenance may be necessary if the heater is used in a dirty or industrial environment.

Cleaning

Metal surfaces can be wiped, when cold with a damp cloth but do not wipe or brush the radiant plaque; it is made from a soft non-asbestos, ceramic fibre and any light dirt or dust should be gently blown off to avoid damage.

Gas soundness

Check that the soundness of all gas joints with a leak detecting fluid (Bullfinch No. 550) and rectify all leaks before lighting the heater. Never search for leaks with a naked flame.

Operation

Light the heater in accordance with the operating instructions and ensure that it ignites and burns correctly. The ignition should be smooth and quiet and the plaque should burn cleanly without any loose or yellow flame or smell. The pilot should have a steady blue/green flame which covers the tip of the thermocouple.

Controls

Check the flame supervision device and the variable heat control all operate smoothly and that the thermocouple will hold the flame supervision device open within 10 seconds of lighting the burner. The flame supervision device should close within 90 seconds if the heater is turned off, or if the pilot is extinguished Check the thermocouple connection to the flame supervision device; it should be finger tight plus half a turn.

Servicing

Gas jets

To clean or replace the gas injector jets (sizes 45 & 65).

1 Remove the hose and regulator assembly from the safety valve.
2 Disconnect thermocouple from flame supervision device and pilot tube from variable heat control.
3 Remove four screws securing the variable heat control assembly to the burner and withdraw the assembly from the heater.
4 Remove jets and clean or renew them.
Note: Jets should only be cleaned with solvent or compressed air. If they cannot be cleaned easily they should be renewed. Poking out a jet orifice will damage the jet and affect the safety and performance of the heater.
5 Use PTFE tape or a small amount of of sealing type compound on the injector jet threads and replace them in their correct positions as marked on the variable heat control.
6 Reassemble in reverse order. The thermocouple nut should be finger tight plus half a turn.

Variable heat control

To replace the valve needle assembly.

1 Remove the head screw and shakeproof washer securing the control knob to the valve needle and pull off the control knob.
2 Remove the cap nut and unscrew the valve needle from the control valve.
3 Renew the valve needle if the cone point or the 'O' ring seal are worn or damaged.
4 Reassemble in reverse order.

Atmosphere sensitive pilot

To replace the pilot assembly.

1 Disconnect thermocouple from flame supervision device and pilot tube from pilot assembly.
2 Remove two screws securing pilot bracket to reflector and withdraw assembly.
3 Reassemble in reverse order. The thermocouple nut should be finger tight plus half a turn.
Note: The thermocouple is an integral part of the pilot assembly and cannot be serviced or replaced separately. Do not attempt to service or adjust the pilot beyond blowing or shaking out loose dirt or dust. Do not dismantle to clean

Burner and radiant plaque

To replace burner or radiant plaque.

1 Remove the hose and regulator assembly from the safety valve.
2 Disconnect thermocouple from flame supervision device and pilot tube from variable heat control.
3 Remove four screws securing the variable heat control assembly to the burner and withdraw the assembly from the heater.
4 Remove eight screws securing the burner housing to the reflector and lift the burner housing and radiant plaque from the reflector.
5 Scrape the old sealing strips off the reflector and secure new sealing strips using an inorganic adhesive (e. g. sodium silicate).
6 Make the new radiant plaque fit snugly into the burner housing by rounding its corners with a file or sandpaper as necessary.
Note: The radiant plaque and sealing strips are made from ceramic fibre. This does not contain asbestos and presents no health risk, but is very soft and should be handled carefully to avoid damage.
7 Relocate the radiant plaque and burner housing onto the reflector and secure in place with eight screws (M4 x 10). Tighten the screws evenly until the plaque is held securely but not crushed.
8 Reassemble in reverse order.

Flame supervision device

To replace the flame supervision device.

1 Remove the hose and regulator assembly from the safety valve by disconnecting the nut of the hose connector assembly.
2 Disconnect thermocouple from flame supervision device and pilot tube from variable heat control.
3 Remove four screws securing the variable heat control assembly to the burner and withdraw the assembly from the heater.
4 Remove the flame supervision device from the variable heat control assembly.
Note: The position of the flame supervision device is set at the factory and secured with 'Loctite' high strength adhesive.
5 Fit new flame supervision device and secure in position (see diagram) with 'Loctite' high strength adhesive.
6 Reassemble in reverse order.

Regulator

To replace the regulator.

1 Remove the hose and regulator assembly from the safety valve.
2 Cut through the hose approximately 50 mm from the regulator and discard the regulator.
3 Place a hose clip over the free end of the hose and push the end of the hose over the nozzle of the new regulator.
4 Secure the hose clips as shown in the diagram
Note: It is dangerous to attempt to adjust or repair the regulator.
We cannot recommend a particular size of clip for hose with a given bore size since the outside diameter can vary considerably.

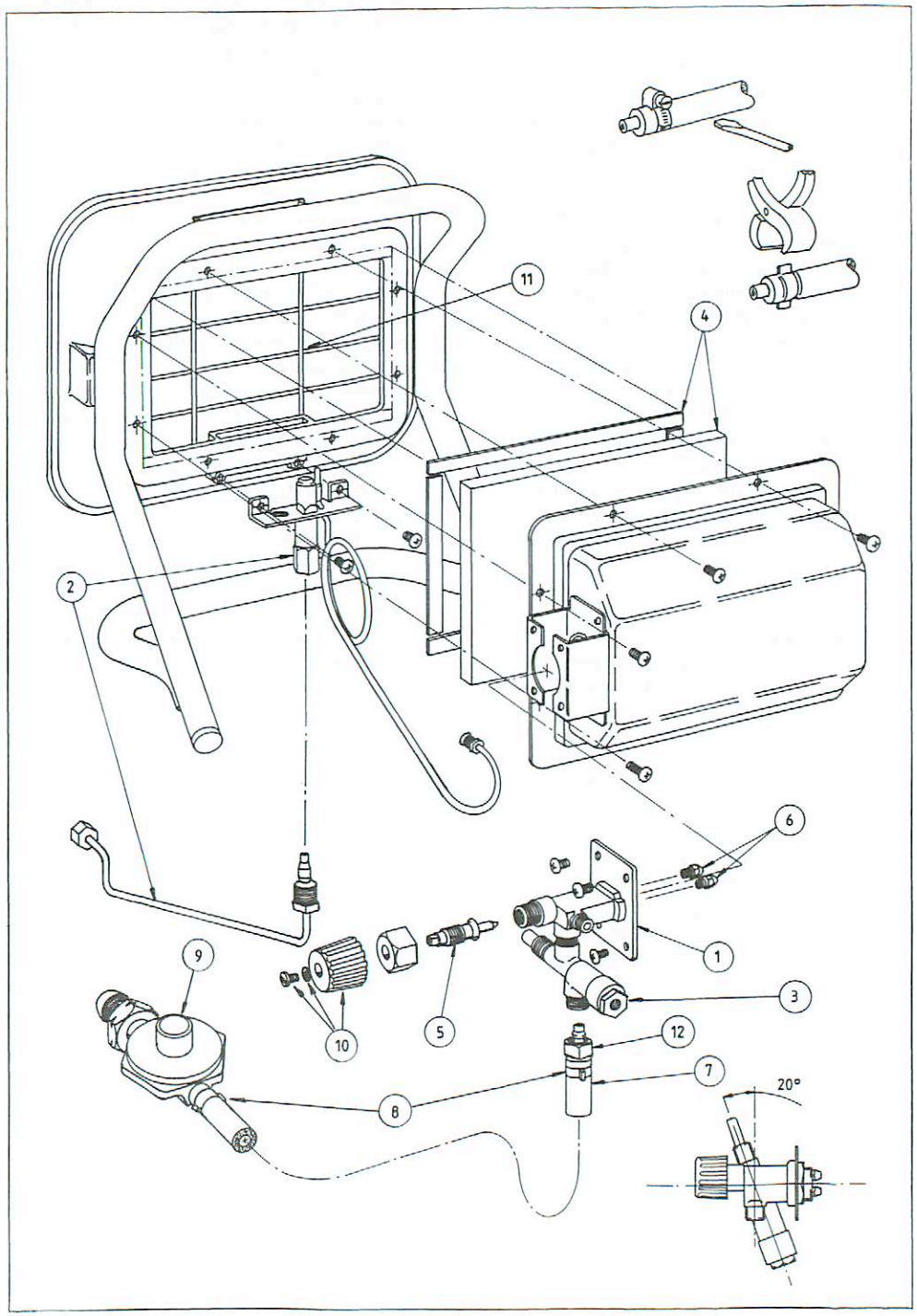
Hose

Replace worn or damaged hose with a maximum 2 m of 8 mm bore high pressure hose to BS 3212/2 (Bullfinch No. 1319).

1 Remove the hose and regulator assembly from the safety valve.
2 Remove and discard the existing hose clips and cut away the hose from the regulator and hose connector assembly.
3 Slip new hose clips over both ends of the new hose and push the ends over the hose connector and regulator connections. The hose should be a tight fit.
4 Reconnect the hose and regulator assembly to the heater.
Note: We cannot recommend a particular size of clip for hose with a given bore size since the outside diameter can vary considerably.

Spare Parts (See Diagram)

No.	Part	Description
1	SP1200GK	Heat Control Assembly
2	SP1200GT	Pilot & Tube Assembly
3	SP1200BS	Flame Supervision Device
4	SP1200DM	Radiant Plaque Kit
5	SP1200DJ	Valve Needle Kit
6	SP1203X	Gas Jet Pack (45 & 65)
7	1319	8 mm Bore H.P. Hose (2 m)
8	1327	'O' Clip (15/17 mm)
8	1325	'O' Clip (15/18 mm) - Alt
8	1307	Hose Clip (13/19 mm) - Alt
9	330	Regulator
10	SP100B	Valve Knob Kit
11	SP5204U	Guard Kit
12	SP1200DI	Hose Connector Assy



BULLFINCH SUPERGLOW HEATER NO. 1200 HL

No. 1200HL
with variable heat control.

MAINTENANCE AND SERVICING INSTRUCTIONS

Important

Servicing should only be carried out by trained and competent service agents. After the servicing or replacing of any part check for gas leaks and correct operation of the heater. Destroy all discarded parts after servicing to prevent them from being accidentally reused. The following notes refer to parts identified in the diagrams and spare parts list.

Technical data								
Heater No.	Jet size	Operating pressure mbar	Heat input kW	Heat input Btu/h	Gas consumption g/h	Gas consumption lb/h	Min. room size m³	Vent area cm²
1200HL	45 & 65	37	3.66 max. 2.22 min.	12500 max. 7575 min.	260 max. 160 min.	0.58 max. 0.35 min.	37	91.5

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