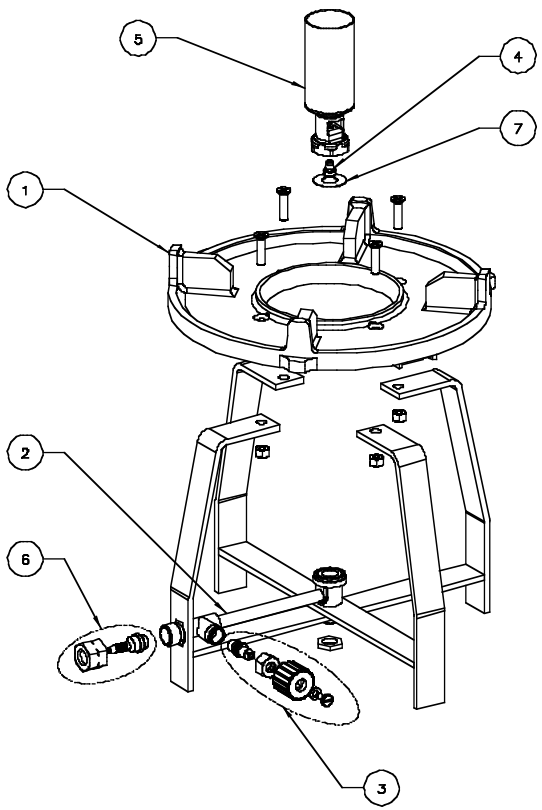
2 Unscrew the burner assembly from the connecting tube assembly.
3 Unscrew the locknut holding the connecting tube assembly to the furnace chassis and remove the connecting tube assembly.
4 Reassembly in reverse order.

7.4 Top Plate Assembly. To replace the Top Plate Assembly:
1 Remove four countersunk head screws securing the top plate to the chassis.
2 Fit new plate and reassemble in reverse order.

7.5 Standard Control Valve Component. To service the furnace valve:
1 Remove the knob screw, washer and valve knob.
2 Remove cap nut with 5/8 AF spanner (right hand thread).
3 Unscrew and inspect the valve needle. Renew if the cone is damaged or the 'O' ring seal is worn. Lightly lubricate the 'O' ring seal with a molybdenum disulphide grease before reassembly.
4 Clear the valve body of any dirt or swarf.
5 Reassemble the valve needle fully, followed by the valve spring and the cap nut; tighten cap nut firmly but without force. Refit valve knob, screw and lockwasher.



8 Accessories

The following accessories are available for the Standard Single Furnace.

Part	Description
1404 M	Flame Deflector
1404 N	Windshield

9 Spare Parts (See Diagram)

No.	Part	Description	No.	Part	Description
1	SP 1360 B	Top Plate	5	1250	Burner
2	SP 1360 M	Connecting Tube Assy.	6	1021	Hose Connector
3	SP 100 A	Std Control Valve Comp's	7	SP 1210 F	Sealing Washer
4	SP 90 B	Gas Jet			

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Bullfinch STANDARD FURNACE

BULLFINCH STANDARD SINGLE FURNACE No. 1360

A non-domestic, portable, industrial high output bulk heating furnace for propane gas.
For propane at 0.35 – 1 bar.
Max. Heat input 12.6 kW.
This appliance requires a hose and regulator.
Read instructions before use.

OPERATING, MAINTENANCE AND SERVICING INSTRUCTIONS.

CONTENTS.

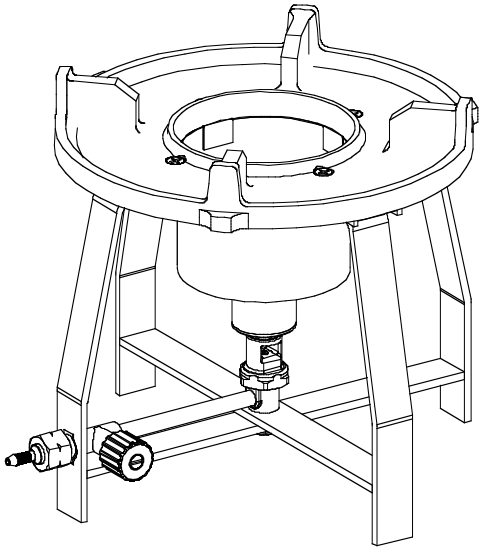
Section 1
Operating Instructions

1. Introduction

The STANDRAD SINGLE FURNACE No. 1360 is a non domestic portable high output furnace for use with propane at 0.35 – 1 bar pressure. It is ideal for melting lead and other metals, compounds bitumen, etc. The furnace is fitted with a needle valve, it is also supplied with a hose tail end suitable for fitting to 4.8 bore LPG hose to BS 3212/2 (high pressure). To get the best results from the furnace it should be used in accordance with these instructions and the enclosed safety precautions leaflet giving general advice on the safe use of LP gas.

2. Ventilation and free space

Use only in a well ventilated area. The minimum room size for the Standard Furnace should not be less that 126m^3 (4453 ft^3) with a free ventilation area of more than 315 cm^2 (49 in^2) divided equally between high and low levels. This free space and ventilation area are in addition to those required for any other gas appliance and occupants of the room.



3. Positioning

Care should be taken to position the furnace so that it cannot overheat the gas cylinder (3m minimum distance) or any other combustible surface or wall (300 mm minimum distance). Avoid twisting or kinking the flexible hose. Do not use aerosols, paints, glues or other flammable liquids in the same room as the furnace. Do not use in basements or below ground level.

4. Gas supply

The furnace requires a propane gas supply at 1 bar (15 psi) regulated pressure. Minimum cylinder size 13 kg. Use a high pressure propane regulator, either pre set to 1 bar or variable up to 1 bar (Bullfinch Variable Tinyreg No. 1051/01 is suitable) and at least 3 m of high pressure 4,8 bore LPG hose to BS 3212/2 (Bullfinch No. 1299).

4.1 Connection to the gas supply

1 Fit hose to regulator and hose connector and secure with suitable hose clips.
2 Check that the regulator connection and the inside sealing face of the cylinder valve are clean and undamaged, connect the regulator to the cylinder and spanner tighten the nut. It has a left hand thread.
3 Check that the hose is not twisted or kinked and is secured to the fittings at both ends with the appropriate clips and that the gas connections are tight. Ensure that the furnace valve is in the off position and turn on the gas at the cylinder valve and if required adjust the pressure regulator to 1 bar.
4 Check for gas leaks using a soap solution or leak detecting fluid as described in the Safety Precautions. Do not light the furnace if it is leaking but turn off the cylinder valve and have the furnace serviced. **Never search for gas leaks with a naked flame.**
5 When changing gas cylinders always ensure that there are no naked flames in the area. Check that the cylinder valve is closed before disconnecting or reconnecting the furnace.

4.2 Lighting the furnace.

1 Adjust the pressure regulator to 1 bar and turn on the cylinder valve.
2 Open the furnace valve slightly to allow a small flow of gas to the burner and apply a flame to the top edge of the burner, once the burner is lit open the valve fully. The flame should burn fiercely without a yellow tip, with a dark blue outer mantle of approximately 270 mm long with a lighter blue inner cone of approximately 120 mm long.
3 If a variable regulator is being used, the heat input can be varied by reducing the pressure at the regulator.
4 After use turn the furnace off using the gas cylinder valve and allow the flame to die away before closing the furnace valve. Do not turn on the cylinder valve again until the furnace is about to be used.

If you are in any doubt about the use of the Standard Single Furnace, turn off the gas at the cylinder valve and consult your dealer.

5. Technical data

Technical data													
Heater No.	Jet size	Operating pressure bar	Heat input kw	Heat input Btu/h	Gas consumption kg/h	Gas consumption dm^3/h	Dimensions m ht	Dimensions m w	Dimensions m d	Min. size of room m^3	Vent. area cm^2	Min. cly. Size kg
1360	90	1	12.6	43000	0.9	472.5	0.25	0.3	0.3	126	315	13

All data are approximate and, in line wih our product improvement policy, may be subject to revision without notice.

Section 2
Maintenance and Servicing Instructions

6. Routine maintenance

The following routine maintenance checks should be carried out at regular intervals or if the furnace has not been used for a year or more.

6.1 Cleaning.

When the furnace is cold wipe exposed metal surfaces with a damp cloth.

6.2 Gas soundness

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

6.3 Operation.

Light the furnace in accordance with the operating instructions and ensure that it ignites and burns correctly.

6.4 Controls.

Check that the furnace valve operates without force and that it always closes off the gas flow to the burner when it is turned to the closed position.

7. Servicing

Important: Servicing should only be carried out by trained and competent service agents. After servicing or replacement of any part, check for gas leaks and correct operation before returning the furnace to the user.

7.1 Burner. To replace the burner assembly:
1 Unscrew the burner assembly from the base of the furnace.
2 Check condition of the burner sealing washer; replace if worn or damaged.
3 Refit new burner assembly No. 1250.

7.2 Gas Jet. To clean or replace the gas jet (size 90):
1 Remove the burner as described in 7.1.
2 Unscrew the jet from the burner base and clean or renew.
Note: Jets should only be cleaned with a solvent or compressed air. If they cannot be cleaned easily they should be renewed. Never poke out a jet orifice; it will damage the jet and affect the safety and performance of the furnace.
3 Replace the jet into the burner base. Tighten firmly with a screwdriver. **Note:** The jet cone makes a metal to metal gas seal inside the burner base. A sealing compound is not required.
4 Refit the burner as in 7.1.

7.3 Connecting Tube Assembly. To replace the Connecting Tube assembly:
1 Disconnect the hose assembly from the furnace inlet connection.