

Bullfinch

PUTTING LPG TO WORK



PRODUCT BROCHURE

www.bullfinch-gas.co.uk

Bullfinch

PUTTING LPG TO WORK

Performance

Bullfinch products are designed and tested to operate over a wide range of temperatures and conditions so that they will not fail you on those vital days, such as those with low temperatures, when you need them most.



Quality

Bullfinch products are, where appropriate, manufactured and tested to the latest British and European Standards for safety and performance and where required are certified by independent laboratories. Bullfinch systems controlling quality have been certified as meeting the international quality standard BS EN ISO 9001:2008



5 Year Guarantee

Bullfinch manufactured products are guaranteed for 5 years against faulty components and workmanship. This guarantee covers the cost of replacement parts and labour in our factory. It does not cover normal wear and tear, misuse or tampering with the product by the user. We accept no responsibility for costs incurred as a result of work done by the customer, or a third party, or consequential damage or loss. A one year guarantee applies to other products (further details on the website).

Spares, after sales service and repairs

Comprehensive spares drawings and price lists are available on the website. Many dealers carry stock of spares or you can purchase them directly from us. Only genuine Bullfinch spares should be used and care must be taken in fitting them. We offer an economical and quick repair service and products should be returned to our works.



CE marking

It is a legal requirement that many gas appliances offered for sale conform to the Gas Appliances (Safety) Regulations 1995. These are generally appliances that are used to heat people, cook or provide lighting. All the appliances shown in this catalogue that fall under these regulations have been approved and carry the CE mark. For further details, see the website.



Supplies

Bullfinch products are available through a network of dealers who should be able to supply any of the items in the catalogue and spares. If you have any difficulty in obtaining supplies, or require further information, contact our Sales Offices (details on the back cover). Credit/debit card payment is welcomed.



Connecting to the gas supply

Normally, Bullfinch appliances require, hose, hose clips and a regulator for use in addition to a cylinder of gas and these need to be bought separately. The requirements are shown in blue tinted panels throughout the catalogue. Where appliances are sold with hose, clips and regulator this is clearly indicated and they are as follows: Torch kits (including Heatshrink gun 7072 and Poker kit 609), Superglow heater 1200HL, Spaceheater 1400/02. Gemini trolley heater 2200, Marquee heaters 2208 and 2217, Cabinet heaters REM440CR/01 & SC85, Master heaters BLP10M to BLP73MDV. The FirePower, and Performer torches do not require hose and separate regulators and fit directly to the small disposable cylinders.

Member of UKLPG - LP Gas and Equipment association - www.uklpg.org

When ordering please quote product numbers.

'BULLFINCH' is the registered trade mark of Bullfinch (Gas Equipment) Limited

More information on most of the products can be found at

www.bullfinch-gas.co.uk



Contents

Page

Standard Torch Kits Autotorch Kits, Brazing Kit Heatshrink Kit, Poker Kit	3	
Standard Torch Range	4-5	
Autotorch Range Autotorch Brazing System	6	
FirePower Blowtorch Standard Performer Bullfinch Disposable Cylinders	7	
High Pressure Regulators	8	
Low Pressure Regulators Manifolds Hose Assemblies	9	
Radiant Heaters	10	
Industrial Heaters	11	
Forced Air Heaters	12	
Marquee Heaters	13	
Cooking Stoves Industrial Lighting	14	
Outdoor Utility Points	15	
Fittings Large Bore Hose Assemblies	16	
Hose and Fittings Other Products	17	
Information	18	
Safety Precautions	19	
Contact Details	20	



Torch assembled with hose, regulator and burner for immediate use.
All you need is a cylinder of propane.
Further details of these torches can be found later in the catalogue.

Standard Torch Kits



110P Standard torch kit for propane.

Comprising:
 Handle No 1185
 Burner No 1230
 Tinyreg No 1041
 2.75m (9ft) hose No 1299
 Two 'O' clips No 1324



140P Standard torch kit for propane.

Comprising:
 Handle No 1340
 Burner No 1230
 Tinyreg No 1051
 2.75m (9ft) hose No 1299
 Two 'O' clips No 1324

Autotorch Kits



233P Autotorch kit 2300 for propane.

Comprising:
 Handle No 2300
 Burner No 2305
 Tinyreg No 1051/11
 2.75m (9ft) hose assembly No 1411



230P Autotorch kit for propane.

Comprising:
 Handle No 2100
 Burner No 2105
 Tinyreg No 1051
 2.75m (9ft) hose No 1299
 Two 'O' clips No 1324

Brazing Kit



404 Autotorch brazing kit for propane.

Comprising:
 Handle No 4100
 Burner No 4104
 Regulator No 4041
 2.75m (9ft) hose No 1299
 Two clips No 1324

Heatshrink Kit



7072 Heatshrink Gun for propane.

Ready for use complete with hose and regulator
 Piezo crystal ignition
 Fail-safe handle
 Excess Flow valve
 Heat input 5.8kW

Poker and Poker Kit

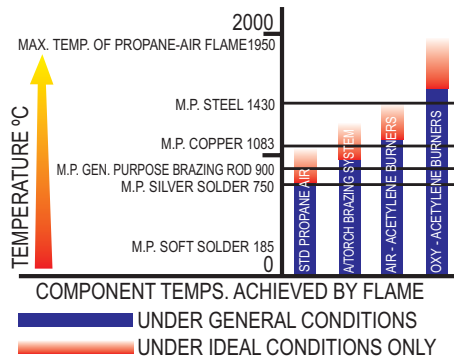


609 Poker kit - Propane only
 comprising:
 Head No 6095
 2.75 mtr hose No 1299
 Tinyreg No 1041
 Two clips No 1324



6095 Poker
 Suitable for propane or butane
 Heat input 7.3kW on propane at 1bar pressure.
 The most reliable way to light barbecues and outdoor fires.

Flame temperature



General uses of torches

Soft and silver soldering
 Central heating installation
 General plumbing work
 Factory maintenance work
 Public utility work
 Tube bending
 Paint stripping
 Modelling
 Jewellery work
 DIY work
 Electrical work
 Plastic tile laying
 Heat shrinking
 Bitumastic work
 Roof laying
 Torch-on roofing
 Weed burning
 Large pipe work
 Kilns

Uses of Brazing System

Jewellery
 Refrigeration
 Steam fittings installation
 Model engineering
 Heating and ventilation
 Agricultural machinery
 General engineering
 Appliance repair
 Technoweld aluminium brazing
 Maintenance
 Lighting barbecues
 Metal Sculptures

Flame Temperatures

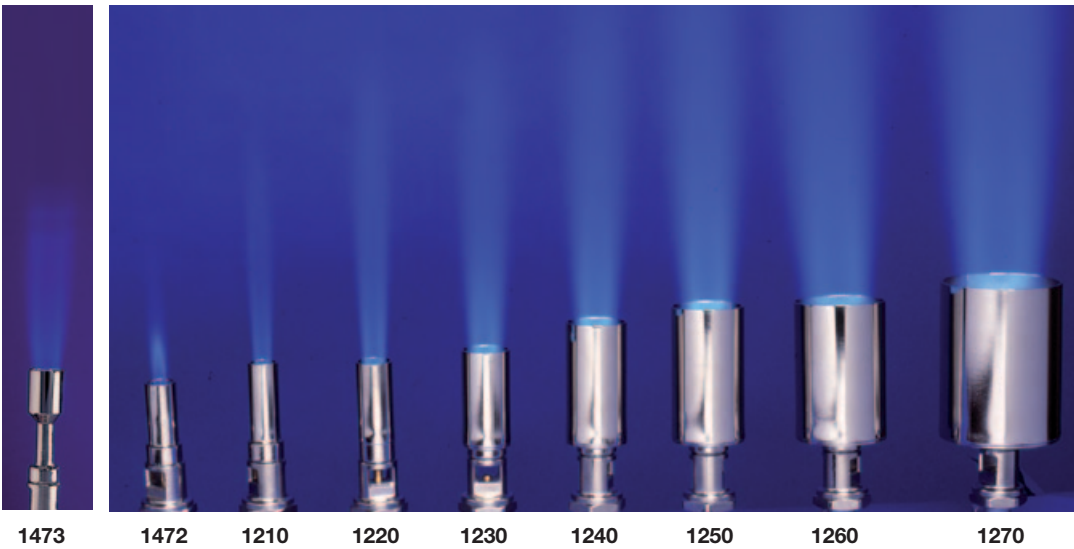
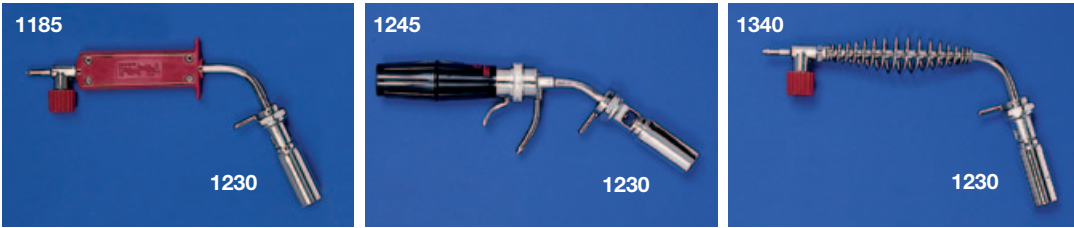
Although the flame temperature of an LPG (propane or butane) air burner at the hottest point is approximately 1900°C, the actual temperature a heated component can attain is much lower than this and depends on the burner, and the thermal properties of the component and its surroundings.

The Autotorch brazing burners can give temperatures up to 950°C under general conditions and up to 1200°C in ideal conditions only. They can therefore bronze braze under most conditions as well as being able to make faster soft and silver soldered joints.

The Autotorch 2300 series burners, the Autotorch System 2 burners and the Standard torch burners can give temperatures up to 800°C under general conditions. They are, therefore, ideal for soft and silver soldering and lead welding, but cannot be used for bronze brazing.

Acetylene-air and MAP// Pro gas-air will give flame and component temperatures 200-300°C above this.

Standard Torches and Burners



Burners for Standard Torches

Robust, strong, reliable burners for a wide range of needs.

- 1472** - Well defined flame.
- 1473** - Soft flame for heat shrinking.
- 1210** - Small flame for narrow window sashes, central heating installations.
- 1220** - Medium flame - for soldering and silver soldering.
- 1230** - General purpose flame.
- 1240** - More powerful general purpose flame.
- 1250** - Suitable for metal melting.
- 1260** - Powerful flame for general engineering purposes.
- 1270** - Extremely powerful, for heavy soldering, forging, roofing, weed burning.

Manifolds

Note: Burners can be put on to a manifold using Burner Adaptor No. 1073.



Kilns

Our standard burners are widely used on kilns and we can also supply a suggested layout drawing - ask our sales office for a copy or download from our website.

Torch Handles

These three handles are in wide use in many industries and take any of the burners shown on this page.

1185 - Handle only

Comfortable strong, flat nylon handle with standard needle valve and integral 4.8mm hose end. Handle weight 210gm.

1185/01 - Handle only

As 1185 except hose inlet is replaced with 3/8in BSP-LH male union connection.

1245 - Handle only

Robust nylon handle and trigger operated diaphragm valve. Pilot flame is obtained by adjusting the cam ring above the trigger. Full flame is given by pulling the trigger which can be locked in position for continuous burning. With integral 4.8mm hose end. Handle weight 285gm.

1340 - Handle only

Specially designed with strong steel spring handle. With standard needle valve and integral 4.8mm hose end. Handle weight 260gm.

Gas supply

For use at high pressure (0.35-2 bar). Sizes up to No. 1230 burner can be used off either propane and butane; and also off Gaz cylinders (using adaptor No.1070). Nos. 1240 to 1270 burners should only be used off propane, and for continuous use the minimum size of cylinder is shown in the table.

Flashback arrestors - these are NOT required for Bullfinch propane torches.

Regulator

Any of the Tinyregs or Bijou regulators. The No. 1051 variable Tinyreg for propane is recommended to give best results from these torches.

Hose

4.8mm high pressure hose to BS. 3212/2 (No. 1299) only must be used, with suitable hose clips.

Technical Data

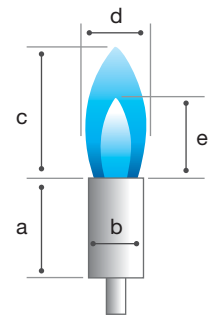
Burner No.	Jet Size	Heat Input *†		Gas Consumption *†	Dimensions					Wt.	Min. size Propane Cylinder
					Flame*			Burner			
		kW	Btu/h		gm/h	c mm	d mm	e ‡ mm	a mm	b mm	gm
1472	A	0.75	2550	54	105	8	42	74	16	73	-
1473	30	4.5	15450	325	300	25	-	32	22	92	-
1210	6B	1.3	4435	94	140	14	55	83	16	95	-
1220	16B	2.5	8600	181	155	21	80	83	19	100	-
1230	30B	4.5	15450	325	185	28	85	88	25	135	-
1240	55B	8.4	28490	601	215	38	90	101	32	180	13
1250	90B	12.6	43000	907	270	50	120	109	38	213	19
1260	150B	19.6	66920	1420	350	62	155	110	48	222	47
1270	250B	32.5	110860	2340	420	74	175	120	63	380	47

Notes:

* The data is for torch burning propane at 1 bar.

† To obtain gas consumption and heat input data at 2 bar, multiply these figures by 1.4

‡ This is the dimension from the end of the burner to the end of the inner cone of the flame (i.e. the hottest point)



Extended Handle, Burner adaptors and Extensions

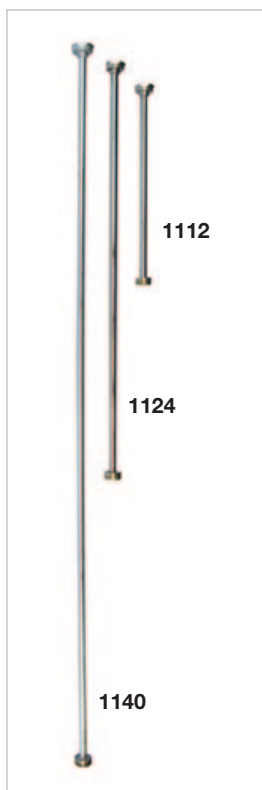


1051
1299
1324

1345

1122

1260



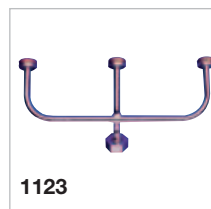
1112

1124

1140



1122



1123

All the burner adaptors and the extensions can be used in conjunction with the whole Standard torch range. The example below shows how this can work.



Longer Reach Torches and Multiple Burner Adaptors

These combinations are ideal for roofing work, road and tarmac work, and weed burning.

1345 - Extended Torch Handle

Extra long handle with arm rest. Standard needle valve. Takes any of the standard burners and can be used in conjunction with multiple burner adaptors 1122 and 1123. Length 1060mm weight 800gm.

Extension Tubes

For use between handle and burner for extending the reach. Can also be used in conjunction with Multiple burner adaptors Nos. 1122 and 1123.

1112 - Extension

305mm (12") long, Weight 150gm.

1124 - Extension

610mm (24") long, Weight 250gm.

1140 - Extension

1020mm (40") long, Weight 400gm.

Multiple Burner Adaptors

Allow two or three burners to be attached to Extended torch handle No. 1345 or to other torch handles (the latter usually in conjunction with the Extension tubes Nos. 1112, 1124 and 1140).

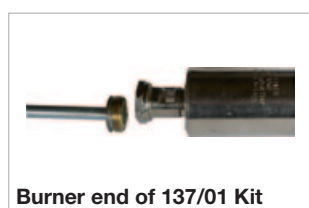
1122 - Twin Burner Adaptor

Length 120mm. Burner spacing 125mm. Weight 170gm.

1123 - Trident Burner Adaptor

Length 120mm. Burner spacing 125mm. Weight 250gm.

Extended Torch Kits



Burner end of 137/01 Kit

137/01 Single headed extended torch kit with armrest

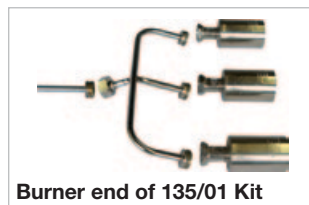
Comprising:
Handle No 1345
Burner No 1260
Tinyreg No 1051
3 mtr (10 ft) hose No 1299
Two 'O' clips No 1324



Burner end of 136/01 Kit

136/01 Twin headed extended torch kit with armrest

Comprising:
Handle No 1345
2 x Burner No 1260
Twin adaptor No 1122
Tinyreg No 1051
3 mtr (10 ft) hose No 1299
Two 'O' clips No 1324



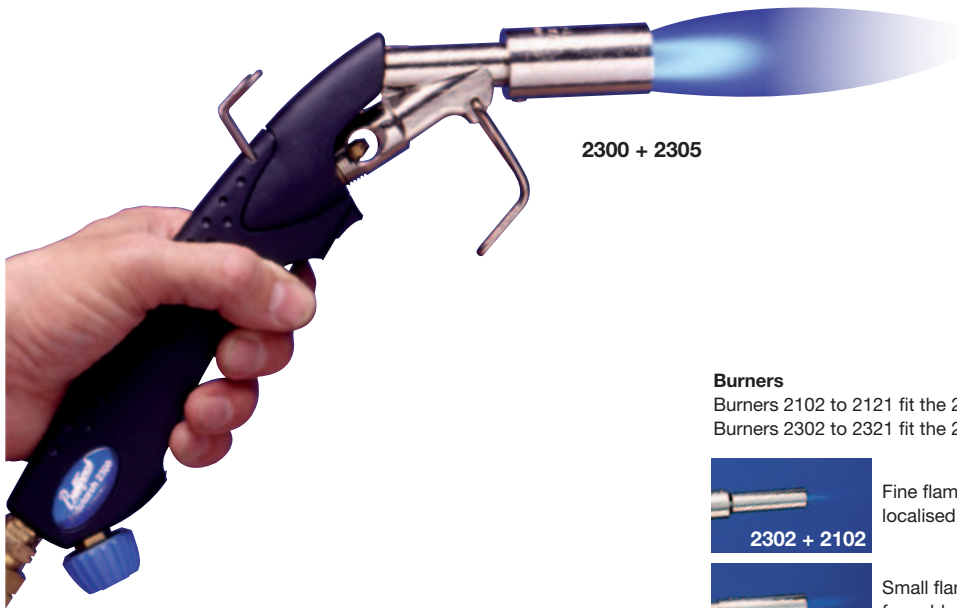
Burner end of 135/01 Kit

135/01 Triple headed extended torch kit with armrest

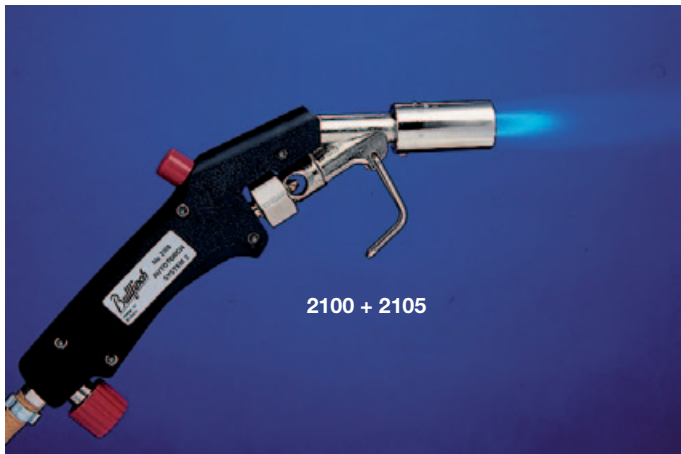
Comprising:
Handle No 1345
3 x Burner No 1260
Trident adaptor No 1123
Bijou regulator No 1465
3 mtr (10 ft) hose No 1299
Two 'O' clips No 1324

Extended Torch Kits

Our range of single, twin and triple headed extended torch kits all come assembled and ready for use. The extra long handle has an armrest for added comfort. Made of robust steel with a standard needle on/off valve.



2300 + 2305



2100 + 2105

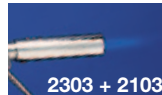
Burners

Burners 2102 to 2121 fit the 2100 handle
Burners 2302 to 2321 fit the 2300 handle



2302 + 2102

Fine flame burner for localised heating.



2303 + 2103

Small flame burner for soldering small assemblies.



2304 + 2104

Medium flame burners for heating, plumbing and engineering.



2305 + 2105

General purpose heating and soldering burner with a large well defined flame.



2306 + 2106

More powerful flame for general use.



2321 + 2121

Well spread flame for heat shrinking of plastics for cable jointing and other industrial plastics.

No matches, no lighters, easy to light in windy conditions. Advanced features for safety and ease of use.

2300 - Autotorch Handle

Single lever operation, lever turns on gas and ignites the burner. Fail-safe control, release the lever and the flame goes out.

Control knob shuts off gas supply. Extensive range of snap-fit quick connect burners. Integral, swivel connector on inlet. 3/8in BSP LH male inlet. Takes any of the burners Nos. 2302 to 2321

2100 - Autotorch Handle

Automatic push button piezo electric ignition. Needle valve shuts off gas supply. Styled, comfortable handle. Strong, glass filled nylon handle. 6 interchangeable burners. Integral 4.8mm hose end. Takes any of the burners Nos. 2102 to 2121

Gas supply

Propane or butane at high pressure (0.35-2 bar)

Cylinders

Any standard propane or butane cylinder (Gaz cylinders using No. 1070 adaptor).

Regulator

Any of the Tinyregs or Bijou regulators. The No. 1051 variable Tinyreg for propane is recommended to give best results from the Handle No. 2100, and the No. 1051/11 Variable Tinyreg from the Handle No. 2300.

Hose

4.8mm high pressure hose to BS. 3212/2 (No. 1299) only must be used, with suitable hose clips.

The Handle No. 2300 and Tinyreg No. 1051/11 require Hose connector No. 1021 to fit the hose. The hose assembly No. 1441 is ideal for connecting the Handle No. 2300 to a variable Tinyreg No. 1051/11 (hose connectors included).

Flashback arrestors

These are NOT required for Bullfinch propane torches.

Autotorch Brazing System



A portable bronze brazing system using only a single cylinder of propane. Automatic piezo ignition. Three highly efficient interchangeable burners give high velocity flames that heat components quicker and give the higher temperatures needed for bronze brazing.

More details can be found on our website.

Autotorch Acetylene System

This gives extra performance using acetylene.

See website for more details.

Technical Data

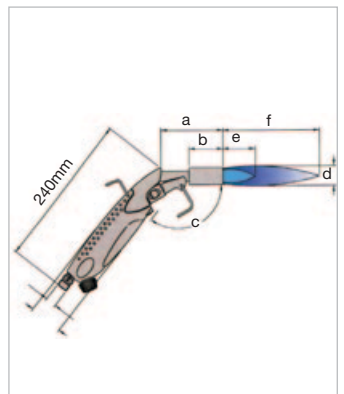
Burner No.	Jet Size	Heat Input *†		Gas Consumption *†		Dimensions						Wt. of Burner & Handle 2300 gm
						Flame*			Burner			
						kW	Btu/h	gm/h	oz/h	d mm	e ‡ mm	
2302 + 2102	A	0.92	3139	66	2.34	13	40	125	110	70	115	550
2303 + 2103	6	1.19	4060	86	3.02	15	40	150	110	70	115	540
2304 + 2104	16	3.01	10270	217	7.64	18	45	150	100	50	130	600
2305 + 2105	30	5.24	17879	377	13.31	30	45	150	100	50	130	600
2306 + 2106	55	9.40	32070	680	23.90	40	40	250	145	100	130	550
2321 + 2121	55	9.40	32070	680	23.90	54	24	290	132	90	130	630

Notes:

* The data is for torch burning propane at 1 bar.

† To obtain gas consumption and heat input data at 2 bar, multiply these figures by 1.4

‡ This is the dimension from the end of the burner to the end of the inner cone of the flame (i.e. the hottest point)



FIREPOWER

Cylinder Mounted Blowtorch with Piezo Ignition



- 3640 FirePower Torch** - Handle with Burner for disposable cylinders
- 3641 FirePower Torch** - Handle with Burner for Primus 2000 and Calor 340 cylinders
- 364 FirePower Torch Kit** - with 400g propane cylinder
- 394 FirePower Torch Kit** - with 399g MAP//Pro cylinder

Application

Balanced handling and high-performance enable flexible application range:

- Heating installation work
- Telecom, gas and electrical installations
- General maintenance work
- Silver and soft soldering
- Jewellery work
- Agricultural needs

Features

- Instant flame by Piezo Ignition
- Ergonomic lightweight design
- Balanced handling
- Robust engineering (all metal body)
- Longer body for improved reach
- MAP//Pro or propane cylinder compatible
- Replaceable burner tip
- Ignition button lock for continuous use

“Excellent design with robust engineering in a highly competitive package”

Consumption at full rate Propane 123g per hour MAP//Pro 139g per hour

Bullfinch cylinder mounted blowtorches

The **3640** works on both propane (1644) and MAP//Pro (1694) gases and fit most disposable propane or MAP//Pro cylinders. MAP//Pro has replaced the old MAPP gas which is no longer available. MAP//Pro has a higher flame temperature and better combustion intensity than propane yet propane will enable the user to complete most operations with confidence.

The **3641** works on the Primus 2000 or Calor 340 refillable cylinders.

Bullfinch Disposable Cylinders



1694 - Disposable MAP//Pro gas cylinder

Contains 399g MAP//Pro gas fuel. Gas valve with CGA 600 connection - 1in x 20 UNEF male. Gives a hotter flame than propane - does jobs faster



1644 - Disposable Propane cylinder

Contains 400g propane fuel. Gas valve with CGA 600 connection - 1in x 20 UNEF male.

Standard Performer

Burner



1651

Burner



1652

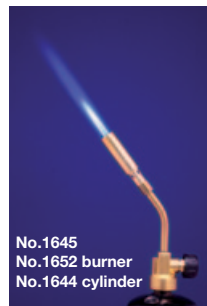
Fishtail



1474 Fits 1652 burner only



No.1640 No.1652 burner 2000 or 340 cylinder



No.1645 No.1652 burner No.1644 cylinder

164 - Standard performer kit for Disposable cylinders comprising: 1644 Disposable propane cylinder, 1645 Head connector for disposable cylinder, 1652 Regular burner

Technical Data

No.	Jet	Heat Input kW	Gas Cons. g/h	Inner Cone Length a (mm)	Outer Mantle		Wt. with 1640 head connector (g)
					Length b (mm)	Dia c (mm)	
1651 (propane)	SP1651F	0.8	60	32	140	13	145
1651 (MAP//Pro)	SP1651F	0.8	60	25	95	11	145
1652 (propane)	SP1652F	2.2	160	52	140	17	161
1652 (MAP//Pro)	SP1652F	2.2	160	45	140	14	161
1474	-	as 1652		10	80	80 (wide)	211
Inlet connection		1640 - M14 x 1.5 male BS 3643 for Primus 2000 and Calor 340 cylinders, 1645 - 1in x 20 UNEF female for Bullfinch disposable cylinders					

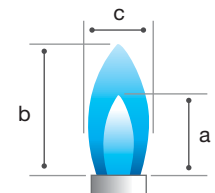
The Standard Performer range

Offers rugged construction with interchangeable, high performance burners. Manual ignition and has the Anti-flare feature. Can be used with Propane and MAP//Pro gas.

Head Connectors

The **1640 Head Connector** fits the Primus 2000 and Calor 340 Propane cylinders. The **1645 Head Connector** fits the Bullfinch disposable cylinders No 1644 (Propane) and 1694 (MAP//Pro gas).

Both connectors will accept the 1651 Pencil burner, 1652 Regular burner, 1474 Fishtail attachment.



Regulators High Pressure



1040 - 1 bar (15 psi) Pre-set Tinyreg for butane with integral 4.8mm hose outlet
1041 - 1 bar (15 psi) Pre-set Tinyreg for propane with integral 4.8mm hose outlet



1051 - 0-2 bar (0-30 psi) Variable Tinyreg for propane with integral 4.8mm hose outlet
1051/01 - 0-1 bar (0-15 psi) Variable Tinyreg for propane with integral 4.8mm hose outlet
1051/11 - 0-2 bar (0-30 psi) Variable Tinyreg for propane with 3/8in BSP-LH male union outlet



1465 - 0-2 bar (0-30 psi) Bijou variable regulator for propane with 3/8in BSP-LH male union outlet and 4.8mm hose end supplied (No 1021)
1465X - 0-1 bar (0-1 psi) Bijou variable regulator for propane with 3/8in BSP-LH male union outlet and 4.8mm hose end supplied (No 1021)



4041 - 4 bar pre-set brazing regulator for propane with integral 4.8mm hose outlet



1466 - 1 bar (15 psi) Bijou pre-set regulator for propane with 3/8in BSP-LH male union outlet and 4.8mm hose end supplied (No 1021)

Our high performance high pressure regulators

Operate over a temperature range of between -20°C to +50°C. Both the Tinyreg and Bijou ranges are of robust brass construction to withstand the severe use they often receive.

Tinyregs

A range of compact high performance regulators. Any Tinyreg can supply enough gas for any single Bullfinch product.

The Bijou regulators

High volume, compact regulators ideal for supplying two or more appliances and appliances with high through put such as forced air heaters, bitumen boilers and specialised machinery. They are supplied with a 4.8mm hose connector (No 1021) which is adequate for all flows taken off one cylinder.

For larger offtakes from cylinders linked together or from a tank, it may be necessary to use a larger hose connector (Nos 1022 or 1023) with larger hose.

The maximum rated capacities with the different hose connectors are shown in the table.

In addition the Bijou can be used with the two way outlet valve No 1263 where two appliances are required off one regulator.

Note:

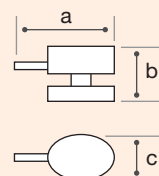
It is important to ensure that the regulator gives the correct pressure for the appliance.

Technical Data High Pressure Regulators

Regulator	Gas Type	Output Pressure		Hose End	Max. rated capacity at 1 bar outlet (and at 2 bar outlet)				Dimensions (mm)			Wt. (g)
		BAR	PSI		mm	kW	kg/h	dm ³ /h	ft ³ /h	a	b	
1040	B	1	15	4.8	45	3.3	1400	50	68	78	43	318
1041	P	1	15	4.8	36	2.6	1400	50	68	93	43	318
1051	P	0.35-2	5-30	4.8	36(64)	2.6(4.6)	1400(2500)	50(90)	68	115	43	330
1051/01	P	0.35-1	5-15	4.8	36	2.6	1400	50	68	115	43	330
1465	P	0.35-2	5-30	6.3 & 8 4.8	87(154) 77(129)	6.3 (11.1) 5.6 (9.3)	3400 (6000) 3000 (5000)	120 (212) 106 (176)	106	125	57	545
1465X	P	0.35-1	5-15	6.3 & 8 4.8	87 77	6.3 5.6	3400 3000	120 106	106	125	57	545
1466	P	1	15	6.3 & 8 4.8	87 77	6.3 5.6	3400 3000	120 106	106	105	57	480
4041	P	4	60	4.8	95	6.9	3700	130	68	93	43	318

Notes:

Maximum inlet pressure – for propane, 20 bar; for butane, 6 bar.
 Inlets – Butane regulators have a 21.8mm SI-LH female inlet
 Propane regulators have a 5/8in BSP-LH male POL inlet.
 Outlets – The Bijou regulators have 3/8in BSP-LH male union outlets and are supplied with 4.8mm hose connectors (No. 1021).
 The Tinyregs have either integral 4.8mm hose ends or 3/8in BSP-LH male union outlets (see descriptions above).
 Hose connectors not supplied for 3/8in versions.
 Variable regulators usually will turn down to zero.
 Technical information leaflets are available showing pressure/flow charts.
 For 'Gas type', P=Propane, B=Butane. Operating Temperature Range -20°C to +50°C



Regulators Low Pressure



7026 - 20mm Clip-on regulator for butane

7027 - 21mm Clip-on regulator for butane

- inlet pressure - max 6 bar
- operating pressure - 28 mbar - 11 in-wg
- capacity 1.3 kg/hr



330 - Screwed propane regulator for propane POL connection

- inlet pressure - max 20 bar
- operating pressure - 37 mbar - 14 in/wg
- capacity 1.1 kg/hr



7069 - 27mm Clip-on regulator for propane inlet pressure - max 20 bar

- operating pressure - 37 mbar - 14 in-wg
- capacity 1.5 kg/hr

Our low pressure regulators

For propane and butane are ideal for industrial and domestic use. All have an integral 8mm hose end connection.

Note:

It is important to ensure that the regulator gives the correct pressure for the appliance.

Technical Data Low Pressure Regulators

Regulator	Gas Type	Output Pressure* mbar	Capacity kg/hr	Connections Inlet	Outlet	Dimensions (mm)			Wt. gms
						length	height	width	
7026	B	28	1.3	20 mm clip - on	8 mm nozzle	100	60	73	28
7027	B	28	1.3	21 mm clip - on	8 mm nozzle	100	60	73	28
7069	P	37	1.5	27 mm clip - on	8 mm nozzle	100	60	73	28
330	P	37	1.1	5/8" POL-LH	8 mm nozzle	440	48	77	35

For 'Gas Type', P=Propane, B=Butane. Pressures and capacities in accordance with BS EN 12864. Operating temperature range -20°C to +50°C

Manifolds and Hose Assemblies



All these high performance hose assemblies and pigtails are tested and ready for use. They are generally used for linking cylinders to wall blocks, changeover valves or to other cylinders.

The pigtails No's 1482 and 1492 for changeover valves contain an excess flow and non return valve. The pigtails No's 1494, 1495 and 1496 can be used in conjunction with the manifold No 1506 to link propane cylinders together to improve the gas supply. The pigtails Nos 1662, 1663 and 1664 can be used to link appliances to manifolds and pipework.

All the pigtails are for use up to 17.5 bar. Unlike many hose assemblies they are made with hose that conforms to British Standard 3212/2 and either tamper proof stainless steel clips or ferrules.



1506 - 'Y' manifold

2 x 5/8in BSP - LH female POL x 5/8in BSP - LH male POL all for propane.



The 'Y' manifold can be used in conjunction with the Pigtails Nos 1496, 1494 and 1495 to link propane cylinders together to improve the gas supply. It can also be used to link two regulators to one cylinder.

Technical Data

Part No.	Description	Hose Type To BS 3212/2 a = Armoured	Hose Length mm	End 1	End 2	
1441	Hose Assembly	4.8mm bore	2750	3/8in BSP - Female Union	As End 1	
1481	Armoured pigtail for propane wall block	4.8mm bore -a	500	1/4in BSP female threaded compression fitting	All have 5/8 BSP - LH male POL for propane	
1482*	Armoured pigtail for changeover valve - 500mm*	6.3mm bore -a	500	M20 x 1.5 female threaded union connection		
1496	Armoured pigtail - 500mm	6.3mm bore -a	500	5/8in BSP - LH male POL connector for propane		
1491	Pigtail for propane wall block	4.8mm bore	500	1/4in BSP female threaded compression fitting		
1492*	Pigtail for changeover valve - 500mm*	6.3mm bore	500	M20 x 1.5 female threaded union connection		
1494	Pigtail - 500mm	6.3mm bore	500	5/8in BSP - LH male POL connector for propane		
1495	Pigtail - 750mm	6.3mm bore	750	5/8in BSP - LH male POL connector for propane		
1662	Armoured pigtail - 3/8in taper male x2 - 2m long	8mm bore -a	2000	3/8in BSP taper male		As End 1
1663	Armoured pigtail - 3/8in taper male x2 - 3m long	8mm bore -a	3000	3/8in BSP taper male		As End 1
1664	Armoured pigtail - 3/8in taper male x2 - 4m long	8mm bore -a	4000	3/8in BSP taper male		As End 1

* Indicates that these pigtails also contain an excess flow and non return valve * Suitable for new caravan connection

Radiant Heaters

REM440CR/01

Ready for use with hose and 21mm regulator fitted. High performance burner with long life ceramic plaque tiles. Flexible three level heat settings. Oxygen depletion safety device. Robust cabinet.



SC85 - Catalytic heater

Ready for use with hose and 21mm regulator fitted. Comfortable gentle heat with no flame on heating surface. Turn down control. Oxygen depletion safety device. Robust cabinet.



DTRD4200 - Simba wall mounted heater.

High performance burner with long life ceramic plaque tiles. Flexible three level heat settings. Oxygen depletion safety device. Requires a metal piped propane supply at a pressure of 37mbar.



These cabinet heaters and wall mounted heaters offer safe, convenient, controllable radiant heat. Ideal for the home or workplace they give instant heat, where you want it, when you want it.

These unflued heaters must have adequate free space and ventilation area.

Radiant Plaque Heaters

2200 - Gemini Trolley Heater

Robust radiant heater on a stable trolley stand with spark ignition, supplied with 2mtr hose and low pressure regulator No 330.

Height of the heating unit can vary between 1750mm and 1460mm.

Polyester painted stand with wheels for easy movement. Stand will contain either a 13kg, 19kg or 47kg propane cylinder. The two plaques can be independently operated to give heat inputs of between 2.8 and 5.6 kW - both with piezo ignition.



1200HL - Superglow Heater

Super stable, rugged, wide frame with low centre of gravity makes it practically impossible to tip over.

The variable heat control is achieved by having two jets, one of which is controlled by the valve. Clean burning, highly efficient ceramic fibre plaque offers a fast warm up time.

Complete with hose and regulator.

Offer instant, portable, safe warmth with highly efficient, clean burning design. They have super safe features such as oxygen depletion devices, flame failure protection and guards. They are ready for use and fitted with 2 mtr of 8mm bore high pressure hose and a low pressure propane regulator No 330.

These unflued heaters must have adequate free space and ventilation area.

Gas supply

Apart from the wall mounted heater, all these heaters are supplied with hose and regulator fitted. The 1200HL Superglow and 2200 Gemini should be used with a standard propane cylinder with a 5/8in BSP - LH POL female outlet. The REM440CR/01 and SC85 should be used with a butane cylinder with a 21mm clip on connection.

The DTRD4200 wall mounted heater requires a metal piped propane supply at a pressure of 37mbar - consult your dealer.

Technical Data

* Refer to user instructions

Heater No.	Gas	Operating Pressure mbar	Heat Input		Gas Consumption		Min. Size of Room* m ³	Vent Area* cm ²	Wt. Kg	Heater Dimensions (mm)		
			kW	Btu/h	kg/h	lb/h				Ht	Width	Dep
1200HL	Propane	37	3.7 max 2.2 min	12500 max 7500 min	0.26 max 0.16 min	0.58 max 0.35 min	37	91.5	4.1	400	330	425
2200	Propane	37	5.6 max 2.8 min	19200 max 9500 min	0.40 max 0.20 min	0.88 max 0.44 min	56	140	11.5	1460/1750	560	450
REM440CR	Butane	28	4.2 max 1.4 min	14300 max 4800 min	0.30 max 0.10 min	0.58 max 0.35 min	42/84	105	8.9	725	420	470
SC85	Butane	28	3.0 max 2.0 min	10236 max 6824 min	0.22 max 0.14 min	0.88 max 0.44 min	42/84	105	9.0	730	430	470
DTRD4200	Propane	37	4.2 max 1.4 min	14300 max 4800 min	0.30 max 0.10 min	0.58 max 0.35 min	42/84	105	8.7	675	450	160

Industrial Heaters



1400 - Industrial space heater

With double skinned top to reduce temperature of top during burning. Superb swirl burner gives compact, high convectional heat output varying from 17 to 25 kW. No electricity required.

1400/02 - Industrial space heater complete with No. 1401 regulator and hose assembly.

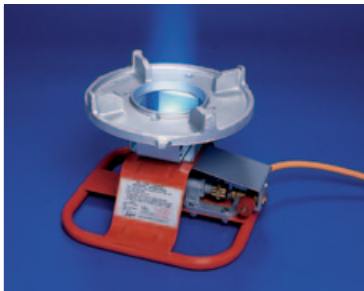
1401 - Regulator and hose assembly.

Variable Tinyreg No 1051/01 fitted to 4 mtrs of 4.8mm high pressure hose and hose clip for fitting to heater.

Industrial Space Heater

The 1400 Spaceheater is ideal for heating warehouses, factories, outhouses and for drying out buildings. Fitted with automatic piezo ignition and flame failure security.

These unflued heaters must have adequate free space and ventilation area.



1365 - Unilow furnace

This robust furnace with a wide, low frame gives great stability and safety. It incorporates an advanced design of air intake adjustment to give a wide range of flames from vigorous to soft giving a more precise control of the heat. Burner design prevents jets becoming blocked by spillage.



1360 - Standard single furnace

Lighter construction furnace than the 1365 for general use. Fitted with an easy to change burner.

Furnaces

These furnaces are ideal for melting lead and other metals, compounds, bitumen and for heating water etc. All incorporate standard needle valves. The furnaces generally heat compounds to about 600°C.

These unflued heaters must have adequate free space and ventilation area.



Gas supply

All these appliances require a cylinder of gas, hose, hose clips and a regulator as recommended in the table below. All appliances should be used with 4.8mm high pressure hose (No. 1299). Suitable hose clips must also be used.

Technical Data

Prod No.	Jet Sizes	Max Heat Input		Gas Usage		Gas Type	Pressure	Reg Rec.	Min. Hose Len	Min. Cyl Size	Min. Size of Room*	Vent Area*	Dimensions (m)			Wt. Kg
		kW	Btu/h	kg/h	lb/h								Ht	Width	Dep	
1360	90	12.6	43000	0.9	2.0	P	0-1bar	1051/01	3	13	126	315	0.25	0.30	0.30	5
1365	90	12.6	43000	0.9	2.0	P	0-1bar	1051/01	3	13	126	315	0.23	0.30	0.30	7.7
1400	170	25.0	84000	1.8	3.9	P	0-1bar	1051/01	4	47	250	625	0.60	0.43	0.43	13

For 'Gas type', P=Propane, B=Butane

Diameter between lugs on furnace top plate is 230mm (9in).

Master Propane Gas Heaters



BLP10M

- Max capacity 10 kW 240v
- 34000 Btu

BLP15M

- Max capacity 15 kW 240v
- 37500 - 51000 Btu

BLP30MDV

- Max capacity 30 kW Dual voltage
- 54500 - 102000 Btu

BLP53MDV

- Max capacity 50 kW Dual voltage
- 105500 - 157000 Btu

BLP73MDV

- Max capacity 70 kW Dual voltage
- 133000 - 235000 Btu

The Master propane gas heaters

Robust, portable heaters providing quick efficient heating for factories, workshops, farms etc. Available from 10-100kW. They offer clean combustion with no odours, 100% efficiency and are easily transportable.

From the BLP30MDV upwards they are dual voltage with variable heat settings.

From the BLP53MDV upwards they are available in an electronic ignition model where a room thermostat can be supplied as an extra (No. TH5).

These unflued heaters must have adequate free space and ventilation area.

Gas and electric supply

Hose and regulator are supplied with all models. Electric plug not supplied with dual voltage models.

Technical Data

* Dual voltage

Model No.	Ignition	Operating Pressure mbar	Heat Input kW	Gas Consumption kg/h	Power Supply V/Hz	Air Displacement m ³ /h	Thermostat Control	Rated Current	Net Wt. Kg	Gross Wt. Kg	Heater Dimensions (cm)		
											Ht	Width	Length
BLP10M	Piezo	0.3	10	0.757	230/50	300	no	0.19	4.6	5.2	29	19	37
BLP15M	Piezo	0.7	11-15	1.07	230/50	300	no	0.19	5	6	30	19	46
BLP30MDV*	Piezo	1.5	16-30	2.14	230/110/50	1,000	no	0.36	7.9	8.95	34	25	58
BLP53MDV*	Piezo	1.5	31-46	3.29	230/110/50	1,450	no	0.40	12.4	14.2	46	25	60
BLP73MDV*	Piezo	1.5	39-69	4.95	230/110/50	2,300	no	0.82	14.4	16.8	48	32	66
BLP100E	Electr.	0.5-2	53-86	6.30	230/50	2,300	yes	1.00	25	28	63	40	93

Diesel Oil Direct Fired Heaters

A range of Diesel direct and indirect fired heaters are available from 10 kW - 220 kW. Call for details or see our website.



BV290E



B230-360



XL9



2217



2208

Premier 80 and 170 Marquee Heaters

These are high quality heaters providing safe, reliable heat. They are fully approved and tested to European standards. They come complete with hose and regulator for the standard 5/8in BSP POL fitting on most propane cylinders.

Also provided is an electrical lead and plug for a standard 13 amp domestic 220/240v socket.

Ideal for marquees, workshops, factories, leisure areas.

- Clean burning
- No smell
- Quick warm up
- No cooldown cycle
- No fuel spillage
- Easy to set up
- Easy to operate
- Automatic spark ignition
- Remote thermostat
- Self diagnostic control
- Certified to CE standard
- Fan only facility included

Product Data	Premier 80	Premier 170
Model Number – Bullfinch number (LB White number)	No. 2208 (TS080)	No. 2217 (TS170)
Input rating	23.5kW (80000 Btu/h)	50kW (170000 Btu/h)
Gas consumption – propane	1.7 kg/h (3.7lb/h)	3.6 kg/h (7.9lb/h)
Heated air output – cu m per min (cu ft per min)	12.7 (450)	34.0 (1200)
Electrical supply – volts – amps (starting) continuous	240v – (5) 1.5 amps	240v – (8) 2.5 amps
Motor type	Ball bearing	Ball bearing
Case material	White 'Tri-Shield' Painted Steel	
Dimensions (mm) length x width x height	750 x 345 x 510	782 x 465 x 720
Net weight	30kg (66lb)	65kg (143lb)

Servicing and Spares

Bullfinch also service and run a comprehensive spares facility.

Please contact us for details

Air Distribution Options



Unit Diffuser 2214 for 2217 Heater
Unit Diffuser 2213 for 2208 Heater



Ducting 2211

Duct Diffuser 2212

Marquee heaters can be used with the accessories shown above.

Diffusers allow you to place the heaters outside the marquee and have a wide register that distributes the air at ground level. The unit diffuser fits on the unit, whilst a duct diffuser is used in combination with flexible ducting.

Product Data		length (mm)	width (mm)	air outlet (mm)	wt (kg/lb)
Unit diffuser for 80 – Bullfinch No. (LB White No.)	No. 2213 (09389)	485	380	380 x 100	7.7(17)
Unit diffuser for 170 – Bullfinch No. (LB White No.)	No. 2214 (09396)	585	610	610 x 130	11.4(25)
Ducting, white – Bullfinch No. (LB White No.)	No. 2211 (26347)	from 915 to 3660		305 round	9.1(20)
Duct diffuser – Bullfinch No. (LB White No.)	No. 2212 (26350)	610	610	610 x 130	11.4(25)

How many heaters

The following is a guide for the number of heaters required for a 20 deg C temperature rise in a 4m high marquee (approx figures as a guide only)

- 100 sq m (1000 sq ft) – 1 TS080 or 1 TS170
- 250 sq m (2500 sq ft) – 2 TS080 or 1 TS170
- 400 sq m (4000 sq ft) – 4 TS080 or 2 TS170
- 500 sq m (5000 sq ft) – 5 TS080 or 2 TS170

These unflued heaters must have adequate free space and ventilation area.

Electrical supply

All you need to provide is a 13 amp 240v electrical supply.

Gas supply

The 2208 heater requires one 47kg cylinder of propane, and the 2217 heater requires two 47kg cylinders of propane joined by a pigtail (Bullfinch 1494) and Y manifold (Bullfinch 1506).

Enamel Cooking Stoves



7410 - 1 burner

- Total burner power 2.0 kW
- Height (standard) 110mm Height (with FFD) 125mm
- Weight 1.8 kg Width 265mm Depth 265mm

7411 - 1 burner with FFD



7420 - 2 burner

- Total burner power 3.4 kW (1x2 kW, 1x1.4 kW)
- Height (standard) 110mm Height (with FFD) 125mm
- Weight 3.1 kg Width 495mm Depth 265mm

7421 - 2 burner with FFD



7430 - 3 burner

- Total power 4.4 kW (1x2 kW, 1x1.4 kW, 1x1 kW)
- Height (standard) 110mm Height (with FFD) 125mm
- Weight 4.2 kg Width 600mm Depth 295mm

7431 - 3 burner with FFD



7440 - 4 burner

- Total burner power 5.8 kW (1x2 kW, 2x1.4 kW, 1x1 kW)
- Height (standard) 110mm Height (with FFD) 125mm
- Weight 6 kg Width 502mm Depth 502mm

7441 - 4 burner with FFD

Our enamel stoves range

From a 2.0kW compact, single burner to a 5.8kW four burner unit. Simple to use and with a wipe clean, enamel surface, they bring kitchen standards of cooking into gardens, campsites and other leisure locations.

The two, three and four burner units all come with a lid as standard and all sizes are available with a flame failure device (FFD) option.



Cast Iron Stoves



7012 - Single cast burner

- Total burner power 2.5 kW
- Operating pressure 37 mbar



7014 - Triple cast burner

- Total burner power 12 kW
- Operating pressure 37 mbar



7013 - Double cast burner

- Total burner power 5 kW
- Operating pressure 37 mbar



7010 - Enamelled pressed steel stove

- Total burner power 8.8 kW
- Operating pressure 37 mbar

Gas supply

The cookers on this page can be used with propane at 37mbar or butane at 28mbar and require a suitable regulator (no. 330 for propane, or no. 7026 for 20mm or no. 7027 for 21mm butane clip on cylinders). You also need 8mm bore high pressure hose (our no. 1319) and hose clips.

More details on our website.

The cookers can also be used with propane or butane at 30 mbar from a caravan supply.

Our cast iron and pressed steel stoves

Offer instant, fast and reliable heat on a robust frame.

Enamelled Pressed Steel Stove

Industrial Lighting



1616 - Handilight

Robust construction with vitreous enamel top, aluminium base and heat resistant glass giving 150 watts, all round light. For use at 1 bar (15 psi). Use 4.8mm hose No 1299

1617 - Spare mantles

1618 - Spare glass

The 1616 Handilight

Gives a powerful 150 watt light source for a wide variety of needs such as building sites, outbuildings, roadworks, railways, public utilities, farms, lighting signs, emergencies and general use. It has a low gas consumption so can be used with any size cylinder.

Gas supply

This light can be used with propane or butane. Regulators 1041 for propane or 1040 for butane should be used. You also need 4.8mm high pressure hose (our no. 1299) with suitable hose clips.



6093/01

6088/01

6087/01

6097/01

6094/01

The Bullfinch range of Outdoor Utility points

Suitable for your home, motorhome, caravan, boat, mobile home, park home, re-locatable cabin etc and offer convenient service points for gas, water, electricity and satellite. They have an innovative, uniform, attractive appearance and are high quality for a long, reliable life. They are compact, lightweight and very easy to fit using 60mm or 105mm cutters and 4 self tapping screws.

6093/01 - Electric outlet point

Individually packed with fixing screws. Ideal for power tools, electric appliances up to 13 amp rating, TVs and other leisure products. Protected against water and dirt ingress when plug inserted and lid closed. Additional versions available for other countries (eg Europe, USA). IP 55 rating.

6088/01 - External shower point

Individually packed with fixing screws. Ideal for outdoor showers, washing pets and other articles and comes complete with a shower head and hose assembly. It uses existing hot and cold water supply. Inserting the shower assembly locks it in place and turns on the water. Temperature adjustment simply by turning the lever.

6087/01 - Gas point

Individually packed with fixing screws. Ideal for supplying barbecues, cooking appliances, patio heaters and other appliances for LPG (propane and butane) from the home's existing supply. It comes complete with a plug in tail connector for connecting onto the hose from the appliance. Inserting the gas fitting and turning locks it in place and allows the gas to flow.

6097/01 - Water inlet point

With pressure limiter - Individually packed, with fixing screws. Allows easy filling of water tanks. Pressure limiter version reduces mains water pressure to prevent damage to internal piping and equipment. Fits universal hose connections. Dual usage - water fill up from mains and from tank. Comes with air vents to release excess air during filling.

6094/01 - Satellite / TV / 12v Outlet point

Individually packed with fixing screws. 12v Cigarette Lighter Fitting / TV Connection Socket / Satellite Connection Socket

SP6098D - Optional 1.1mtr (3.6ft) suction pipe assembly for 6097/01.

SP6087D - Spare plug in tail connector.

SP6088D - Spare shower head assembly.



Technical Data

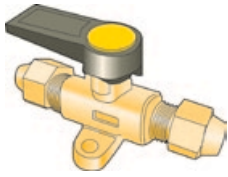
Gas/Water Utility Points

No.	Installation Requirements (mm)				Inlet Connection	Outlet Connection	Ht.	Dimensions (mm)			Wt. gms
	Aperture	Hole Centres		Wall Thk.				W	D	Projection	
6087	Ø60	55 (horiz)	67 (Vert)	40 Max	Comp Nut & Ring for Ø8 pipework	N/A	110	105	85 O/All	20 Closed	440 g
6088	Ø60	55 (horiz)	67 (Vert)	40 Max	Ø15 "Whale" type push fittings	N/A	110	105	85 O/All	20 Closed	460 g
6097	Ø60	55 (horiz)	67 (Vert)	40 Max	Universal Hose Connection	'Push in' fitting for Ø12 pipework	110	105	90 O/All	20 Closed	260 g

Electrical Utility Points

No.	Installation Requirements (mm)				Environmental Protection Rating	Ht.	Dimensions (mm)			Wt. gms
	Aperture	Hole centres		Wall Thk.			W	D	Projection	
6093	Ø105	96 (horiz)	78 (vert)	40 Max	IP 55	140	125	108 O/All	22 Closed	242 g
6094	Ø105	96 (horiz)	78 (vert)	40 Max	IP 55	140	125	108 O/All	22 Closed	242 g

Ball Valves



High quality ball valves for LPG and natural gas. Supplied with nut and olives

3004 - 1/4 x 1/4in compression - foot mounted.

3005 - 5/16 x 5/16in compression - foot mounted.

3006 - 3/8 x 3/8in compression - foot mounted.

Body material - forged brass nickel plated.
Ball material - forged brass chrome plated
Body seal - Teflon PTFE.
Shaft seal - nitrile 2 x NBR (max temp 90 deg C)
Max operating pressure 20 bar.
1/4 turn positive shut off. 100% factory tested
Compression fittings of forged brass nuts, nickel plated and brass machined olives.

Bottle Connectors and Adaptors

1015 - Taper connector
5/8in BSP-LH male POL for propane x 1/4 BSP taper male.

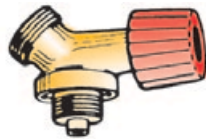
1016 - 4.8mm hose end connector
5/8in BSP-LH male POL for propane x 4.8mm hose end.

1019 - 6.3mm hose end connector
5/8in BSP-LH male POL for propane x 6.3mm hose end.



1070 - Gaz bottle adaptor
21.8mm SI - LH male for butane male Gaz.

For connecting butane regulators to Gaz cylinders.



1017 - Male connector
5/8in BSP - LH female POL x 1/4in BSP taper male.

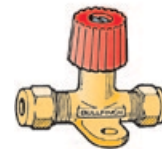


1301 - Gas bottle adaptor
5/8in BSP - LH POL x 21.8mm SI - LH female.



1073 - Burner adaptor
1.0in x 26tpi Whit. form (for standard burners) x 1/4in BSP taper male.

1263 - Two way outlet valve
3/8 BSP - LH female union with two 4.8mm hose ends
Needle valves on each outlet to suit bijou regulators.



122 - 1/4 x 1/4in foot mounted needle valve.

Hose Connectors

1021 - 4.8mm screwed hose connector
3/8 BSP-LH female union x 4.8mm hose end

1022 - 6.3mm screwed hose connector
3/8 BSP-LH female union x 6.3mm hose end

1023 - 8mm screwed hose connector
3/8 BSP-LH female union x 8mm hose end



1031 - Swivel hose connector
3/8 BSP - LH female x 4.8mm hose end with swivel action.



1043 - Three way plain hose connector
3 x 4.8mm hose ends joins three lengths of hose.



1121 - Screwed hose connector
1/4 BSP taper male x 4.8mm hose end.

1114 - Screwed hose connector
1/4 BSP taper male x 8mm hose end.

6006 - Screwed hose connector
3/8 BSP taper male x 8mm hose end.



1024 - Quick action connector.



1042 - Two way plain hose connector
2 x 4.8mm hose ends joins two lengths of hose.

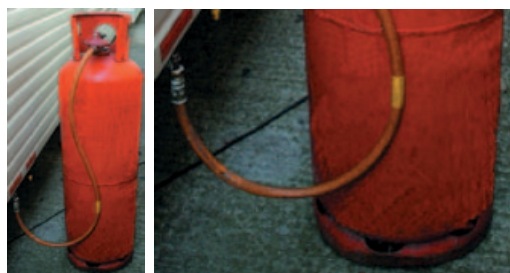
Large Bore Hose Assemblies

Large bore hose assemblies for propane

The assemblies comprise 1.5 mtr length of 1/2in bore hose with end connections which are 3/8in BSP taper male connection for regulator and 15mm compression fitting for copper pipe (supplied with nut and olive)
Better flow rates for caravans, mobile homes etc

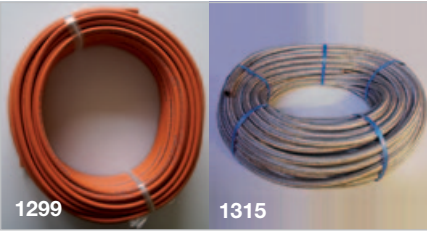
1670 - 1/2in bore x 1.5 mtr

1671 - 1/2in bore x 1.5 mtr - Armoured



The large bore hose assemblies allow full advantage to be taken of the capacity of the regulator which is normally restricted by smaller bore hoses and enables the appliance pressures to be maintained.

Hose and Fittings



High pressure hose - up to 17.5 bar

- 1299** - 4.8mm (3/16in) bore
- 1300** - 6.3mm (1/4in) bore
- 1319** - 8.0mm (5/16in) bore
- 1320** - 12.5mm (1/2in) bore
- 1315** - 4.8mm (3/16in) bore - Armoured
- 1316** - 6.3mm (1/4in) bore - Armoured
- 1317** - 8.0mm (5/16in) bore - Armoured

Low pressure tubing - up to 50 mbar

- 1314** - 8.0mm (5/16in) bore - Low pressure

Our high Performance Hose for LPG

Conforms to BS.3212/2. The armoured hose is also to the above specification with steel braiding for extra protection from wear, sharp objects and vermin.

Leak detecting kit

No 550 -120ml of specially formulated fluid with brush applicator, detects the smallest leak.



Spanners

No 250 – General spanner – Mild steel 3.2mm thick zinc plated for hexagon sizes 0.525in A/F, 0.82in A/F, 1.10in A/F, 1.20in A/F.



'O' Clips

- 1324** - 1/2in - for hose with outside diameter 11 - 13mm
- 1325** - 5/8in - for hose with outside diameter 15 - 18mm
- 1326** - 9/16in - for hose with outside diameter 13 - 15mm
- 1327** - 9/32in - for hose with outside diameter 15 - 17mm

Worm drive clips

- 1305** - 000 size - for hose with outside diameter 10 - 13mm
- 1306** - M00 size - for hose with outside diameter 13 - 16mm
- 1307** - 00 size - for hose with outside diameter 13 - 19mm



1420 - 'O' Clip pincer - for the assembly of hose to hose connectors

Other products within the Bullfinch Range

Tank fittings

The Combo Multi-Valve (6078) has multi functions and means there are less ports on the tank.



Eduction and Dip Tubes

A wide range of these tubes are also available - more details on the website.

Earthing Terminal 6079

for connecting an earthing clamp to a tank during filling.



Pipe fittings

BaileyGill Refrigeration fittings and parts

- a wide range of flared and other fittings, valves and gaskets.

Tocoflo Oil-line fittings and parts

- a wide range of flared and other fittings, and gaskets for oil-line pipework.



More details on:
www.baileygill.co.uk

Specials

We have also undertaken a number of other projects and welcome the opportunity to do so - often including the facilities of our associate Company - **Rainsford and Lynes** which manufactures machined hot brass stampings and assemblies (www.rainsford-lynes.co.uk)

Hadrian's Wall Beacons



Copyright Roger Clegg

Information

Properties of Gases

These are given for commercial propane and butane

	Butane	Propane
Chemical symbol	C ₄ H ₁₀	C ₃ H ₈
Relative density of gas to air (at 15°C, at atmospheric pressure)	Heavier than air	Heavier than air
Boiling point at atmospheric pressure	2.0	1.5
Pressure of gas at	-2°C	-42°C
0°C	Nil	4-5bar
20°C	1-3bar	7-9bar
50°C	3-7bar	15-19bar
Ratio: Gas volume to liquid volume (at 15°C, at atmospheric pressure)	238	279
Volume of gas to weight of liquid (at 15°C, at atmospheric pressure)	420dm ³ /kg	540dm ³ /kg
Calorific value (at 15°C, at atmospheric pressure)	6.6ft ³ /lb	8.6ft ³ /lb
	49.5 MJ/kg	50.4 MJ/kg
	21,200 Btu/lb	21,500 Btu/lb
	121.5 MJ/m ³	93 MJ/m ³
	3,200 Btu/ft ³	2,500 Btu/ft ³
	13.7 kWh/kg	14.0 kWh/kg
Air required for combustion:		
Ratio: Vol of air to vol of gas	30	24
Minimum ignition temperature air	410°C	460°C
Relative flame speed (hydrogen = 100)	16	16
Flame speed	0.36-0.40m/s	0.36-0.40m/s

Recommended maximum offtakes from cylinders

When gas is drawn off a cylinder it causes the liquid to cool and the pressure to drop. If gas is taken too quickly the pressure drops below an acceptable level and in some cases water vapour in the air will freeze on the outside of the cylinder.

If the cylinder will not give enough gas for the appliances either a larger cylinder must be used or cylinders must be coupled together using pigtails and manifolds. Therefore maximum permitted offtakes are laid down for given sizes as follows:

Cylinder size	Maximum offtake				
	kW	kg/h	lb/h	ft ³ /h	dm ³ /h
Butane					
4.5kg	5.73	0.418	0.92	6	175
14.5kg	9.50	0.696	1.53	10	280
Propane					
4kg	7.3	0.528	1.16	10	280
13kg	14.6	1.054	2.32	20	570
19kg	18.3	1.319	2.90	25	710
47kg	32.9	2.373	5.22	45	1270

These offtakes can be exceeded for the intermittent use of appliances

Useful information sources

UKLPG

www.uklpg.org

Various Codes of Practice, especially:

- No. 3 on fire with LPG
 - No. 4 on various propane appliances
 - No. 7 on storage of cylinders
 - No. 22 on piping systems
 - No. 24 on use of LPG cylinders
 - GN2 guide to servicing cabinet heaters
- These publications are available from UKLPG

BS.5482 Pts. 1, 2 for Domestic Butane and Propane Gas Burning Installations PD 5482-3 domestic butane and propane gas burning installations in boats, yachts and other vessels.

Available from British Standards Institution, 389 Chiswick High Rd., London W4 4AL. Tel: 0208-996 9000.

HSE Guidance Notes

Gas Safety (Installation and Use)
Regulations 1998, as amended.
Both available from HMSO.

Some useful conversions

1 ft = 0.305 m	1 Btu/h = 0.000293 kW
1 m = 3.28 ft	1 lb = 0.454 kg
1 in = 25.4 mm	1 kg = 2.2 lb
1 mm = 0.039 in	1 bar = 14.5 psi
1 dm ³ = 1 litre	1 psi = 0.0689 bar
1 ft ³ = 28.32 dm ³ = 0.028 m ³	1 bar = 1000 mbar
1 m ³ = 1000 dm ³ = 35.31 ft ³	1 in wg = 2.491 mbar
1 kW = 3412 Btu/h = 1kJ/s = 3.6 MJ/h	1 mbar = 0.401 in wg

All data in this catalogue is approximate.

Whilst every effort has been made to ensure the accuracy of the information in this catalogue we accept no responsibility for errors. In line with our policy of continued improvement of our products we reserve the right to alter the specification of any item without notice.

LPG – Liquefied Petroleum Gas

LPG, sold commercially as propane and butane, is hydrocarbon gas that forms a liquid, at normal temperatures, when pressure is applied to it. The pressure inside the cylinder is 7-8 bar for propane and 1-2 bar for butane at normal temperatures. When the cylinder valve is opened, gas flows out at these pressures and some of the liquid turns to gas to replace it. However, these pressures are usually too high to be fed directly to appliances and so a regulator has to be fitted to reduce and control the pressure. Most Bullfinch appliances operate at high pressures (ie in the range 0.35 to 2 bar) since this gives the hot, compact flames required for torches, lights and portable heating equipment. The Autotorch Brazing System operates at a higher pressure of 4 bar, to achieve the high temperatures for bronze brazing. The fact that the equipment requires one cylinder of gas only, containing very high quantities of energy, makes the Bullfinch range ideal for providing heat and light sources that are portable and can be used where other energy sources are not readily available.

The radiant and marquee heaters and most domestic equipment operate at low pressure.

Butane or Propane?

Similarities

Both gases burn cleanly and have a high calorific value, giving similar flame shapes and heat outputs. In principle, appliances will burn equally well off either gas.

Differences

However, as gas is drawn off from the cylinder and the liquid turns back into gas, the liquid cools down, causing the rate of change from liquid to gas to slow down. This effect is particularly marked for butane, which will not turn from a liquid to gas below 0°C, so that on cold days or when the gas is being withdrawn at a high rate, the liquid gets so cold that it delivers very low amounts of gas or, indeed, no gas at all. Thus, butane tends to be used for low pressure, domestic appliances, indoors or outdoors, in the summer only. Propane continues to turn from liquid to gas at much lower temperatures than butane and, thus, gives a high pressure of gas on the coldest of days. Although propane cylinders can be used indoors on a temporary basis, they should not be stored indoors because of the high pressures in them. Thus, we recommend propane for our appliances, although butane can be satisfactorily used in many instances.



Safety Precautions

Personnel

Never allow anyone other than a competent person to connect or disconnect appliances and regulators.

Appliances

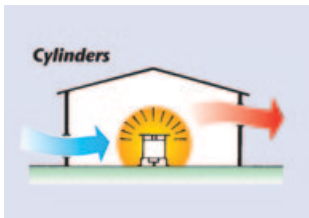
Read the instructions provided with the appliance, taking particular care to ensure that the gas type is correct and the supply can provide sufficient gas for the appliance and any other appliances drawing on the same supply. Ensure that the regulator provides gas at the correct pressure. Site the appliance so that it cannot overheat any surfaces and cannot cause an accident.

The appliance should burn cleanly without the formation of soot. If it does not, turn it off and ensure that maintenance is carried out by a competent person before re-using.

Ventilation requirements

All LPG equipment consumes oxygen and emits carbon dioxide and water vapour in use so that when using unflued equipment in a confined space it is important that there is ADEQUATE PERMANENT VENTILATION & ADEQUATE FREE SPACE surrounding it. These requirements are laid down in various British Standard Codes of Practice and a summary of the main requirements is given below.

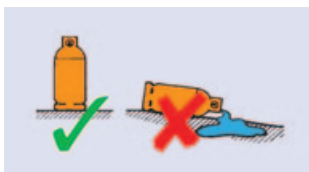
Cylinders



Make sure the cylinder is large enough for your requirements. Cylinders must be sited away from any heat source, in a well ventilated place whenever possible and must stand in a stable upright position.

Never put a cylinder in a sewer, culvert or work hole.

Regulators



Where required, Bullfinch appliances should only be used in conjunction with a British/European Standard regulator. It is important to check that the regulator;

a) gives the correct pressure for the appliance,

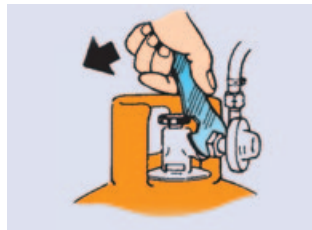
b) is suitable for the gas being used (check also that the gas is suitable for the appliance),

c) has a large enough maximum flow for the appliance.

For cylinders having screwed connectors:

Always, before connecting a regulator to a cylinder, ensure that the mating parts are clean, free from dirt and undamaged, and, in the case of butane regulators, check that the washer is in place on the spigot of the connector and is in good condition. The connecting nut of the regulator must be spanner tightened to the cylinder valve.

(Note: The thread is left-handed.)



For cylinders with 'switch-on' or 'clip-on' connectors: Consult your dealer on the type of adaptor or regulator you require and fit in accordance with the manufacturer's instructions.

Screwed connections

Most screwed connections should be firmly tightened with a spanner. Note that all nuts with notches on the hexagon have a left handed thread.

Hose and clips



British Standard hose only must be used for passing these gases and it must be securely attached with hose clips to the ends provided. Low pressure hose, (which must show the number BS.3212/1) must only be used for pressures up to 50 mbar.

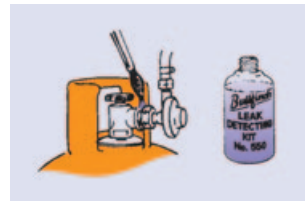
High pressure hose (which must show the number BS.3212/2) can be used for all pressures up to 17.5 bar.

Hose and clips should be regularly inspected and replaced if worn or damaged.

Leaks

After connecting appliances/regulators, etc, check that there is no leak of gas before using. Propane and butane have a distinctive smell and a leak can usually be detected

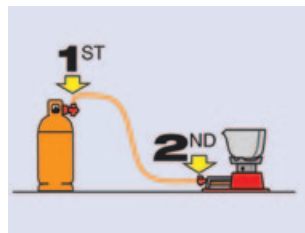
immediately by this fact. If a leak is suspected, extinguish all naked lights and close the cylinder valve. NEVER look for a leak with a naked flame, but trace it by smell and confirm by brushing leak detecting fluid (or soapy water) over the suspected joint. Equipment must not be used until any leak is eliminated.



Turning off

After using a portable appliance it is IMPORTANT

a) that the cylinder valve is closed first thus allowing the gas in the system to burn off:



b) that any valve fitted to the appliance is then closed to ensure that when the appliance is again used the turning on of the cylinder valve does not allow gas to escape from the appliance before being ignited.

Fire

If a fire develops, try to turn off the cylinder valve, remove the cylinder from the fire and extinguish the fire with a dry compound extinguisher. (Do not use a water jet on a fire of liquid LPG.) If this is too dangerous call the fire brigade and move all people from the area.



Problems

If you are in any doubt about the operation of the appliance please consult your dealer, or our sales office.



Safety Precautions

Bullfinch appliances and equipment have all been especially designed for use with Liquefied Petroleum Gases (propane and butane) and will give long and reliable service to the user, provided they are correctly operated and maintained. It is, however, essential that sensible safety precautions be followed with any appliances using butane and propane gases, which are considerably heavier than air and highly inflammable. Because of these facts, we list here simple safety measures, which should always be adopted when using the appliances. Failure to observe these could result in a serious accident.

Ventilation

For the use of unflued appliances in a confined space, these are general requirements for non domestic environments. Those for living areas and specific appliances may vary from these – see appliance instructions.

Main Requirements

1. The volume of the room space in which an appliance is used must be at least 10m³ for each 1kW of continuous heat input, with a minimum room size of 15m³. This is in addition to the volume required for other appliances.
2. Permanent ventilation must be provided by at least 25cm² of free ventilation area for each kW of continuous heat input. This is in addition to that required for other appliances and the occupants. There must be a minimum of 50cm² of free ventilation area. The ventilation area must be divided between high and low level and the ventilators must be constructed so that they cannot be closed. If the space is to be used for sleeping, the appliances must be turned off before retiring.

This information is available as a separate safety information leaflet, please call our sales office on 0121 765 2000 for free copies.

Bullfinch specialises in the supply of portable equipment that takes advantage of the unique features of LPG: compact flames, clean burning and portability. Our products provide heat and power where you need it with less waste and reducing your carbon footprint.

Our range includes blowtorches, heaters, furnaces and cookers.

Visit our website for more information:
www.bullfinch-gas.co.uk

Bullfinch

PUTTING LPG TO WORK

Bullfinch (Gas Equipment) Ltd.
Diadem Works,
Kings Road,
Tyseley,
Birmingham,
B11 2AJ
England

Sales Office Tel: 0121 765 2000
Main Office Tel: 0121 706 6301
Fax: 0121 707 0995

email: sales@bullfinch-gas.co.uk
www.bullfinch-gas.co.uk

South East Depot.
Unit 4,
Newhouse Farm,
Vicarage Lane East,
North Weald,
Essex
CM16 6AP
England

Tel: 0845 120 9639
Fax: 0845 120 9639

email: sedepot@bullfinch-gas.co.uk
www.bullfinch-gas.co.uk

