Goldstein

Established 1911 • Proudly Australian Made

Installation and Operation Manual

800 SERIES RADIANT CHAR BROILER

Models: **RBA-12** **RBA-36**

RBA-24 **RBA-48**

Manufacturer:

Goldstein Eswood Commercial Cooking PTY LTD

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1. Contents

2. Introduction

Congratulations on purchasing your Goldstein commercial cooking appliance. Goldstein Eswood Commercial Cooking is an Australian company and has been operating since 1911, building high quality products.

The information contained in this manual will assist your installer and ensure correct location and connection. Thoroughly read the user instructions and the user maintenance sections, as understanding your products, its operation, its cleaning and service requirements will provide you with long and satisfactory service. Neglecting regular cleaning and maintenance could shorten the life of the product and decrease its efficiency. Please ensure only authorised service technicians are called to any difficulties that may arise.

2.1 Safety Notice

The below symbols may be used in isolation or combination throughout this manual. Where used, these symbols are intended to alert personnel of potential risk, either to themselves or to the equipment and/ or convey important messages regarding the safe operation and maintenance of the appliance.

WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Please read the installation, operating and maintenance instructions thoroughly before installing or servicing this appliance.

CAUTION

This appliance is intended for professional use and is only to be used by trained, qualified personnel.

Installation, maintenance and repairs should be performed by an authorized Goldstein Eswood service agent or other qualified personnel. Installation, maintenance or repairs by an unauthorized and unqualified personnel will void the warranty.

WARNING

DO NOT store or use gasoline, flammable vapours and liquids or any other flammable material near this or any other appliance. Do not spray aerosols near this appliance whilst in operation.

3. Specifications

3.1 General Description

A commercial, gas char broiler with heavy duty performance. The heat source is comprised of high output, cast alloy burners and highly radiant 'v' shaped hood. The body is made from high grade stainless steel for lasting durability and finish.

3.2 Model numbers covered in this manual:

- **RBA-12** - 12" Wide body with 2 Burners
- **RBA-24** - 24" Wide body with 4 Burners
- **RBA-36** - 36" Wide body with 6 Burners
- **RBA-48** - 48" Wide body with 8 Burners

3.3 Gas Supply Requirements:

	Natural Gas	LPG (Propane)
RBA-12	37 MJ/hr	31 MJ/hr
RBA-24	74 MJ/hr	62 MJ/hr
RBA-36	111 MJ/hr	93 MJ/hr
RBA-48	148 MJ/hr	124 MJ/hr
Supply Pressure	1.13 – 5.0 kPa	2.75 – 5.0 kPa
Operating Pressure	1.00 kPa	2.70 kPa
Gas Connection	¾" BSP Male (RBA-12: ½" BSP)	

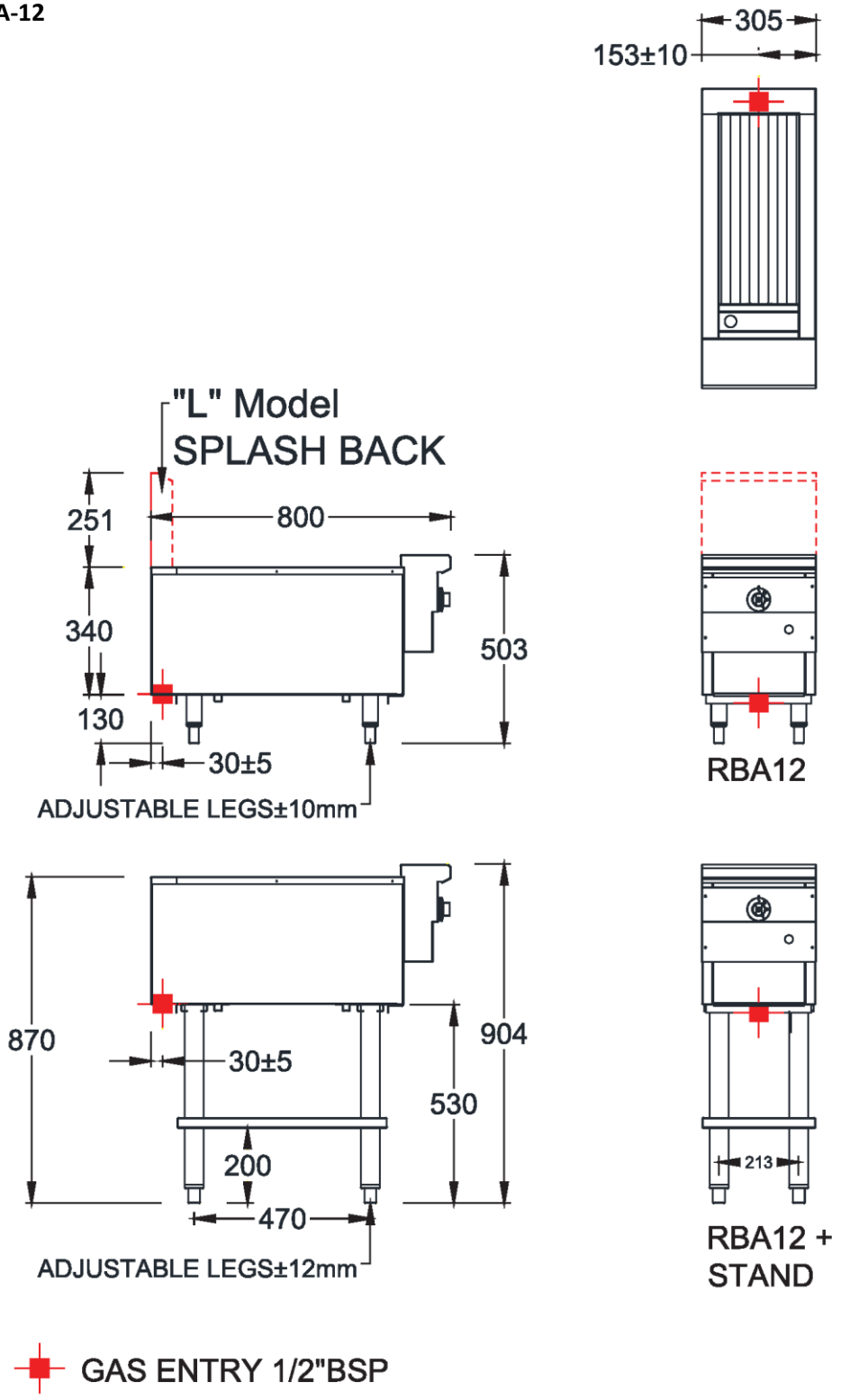
The operating pressure is factory pre-set and should not be adjusted. However, if further adjustment is required, measure the operating pressure at the test point and proceed to adjust pressure at the appliance gas valve with the unit running. Refer to the Gas Conversion section of this manual for more detailed instructions.

3.4 Injector Sizes

	Gas Type	Injector Size (mm)	Drill Size #
ALL MODELS	NG	2.00	47
	LPG	1.10	57

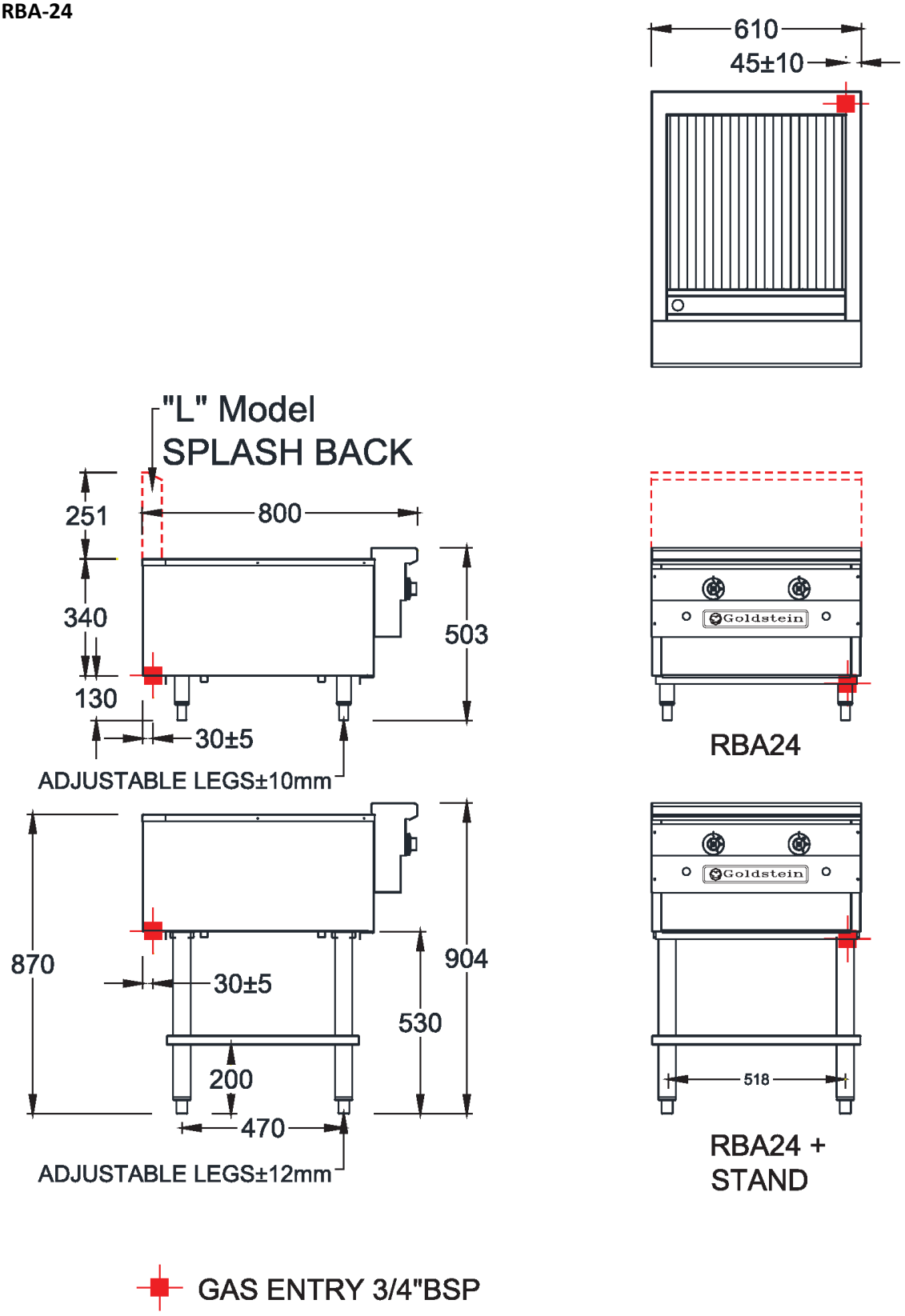
4. Dimensions

4.1 RBA-12



Note: Dimensions may change without notice in accordance with product design and development

4.2 RBA-24



Note: Dimensions may change without notice in accordance with product design and development

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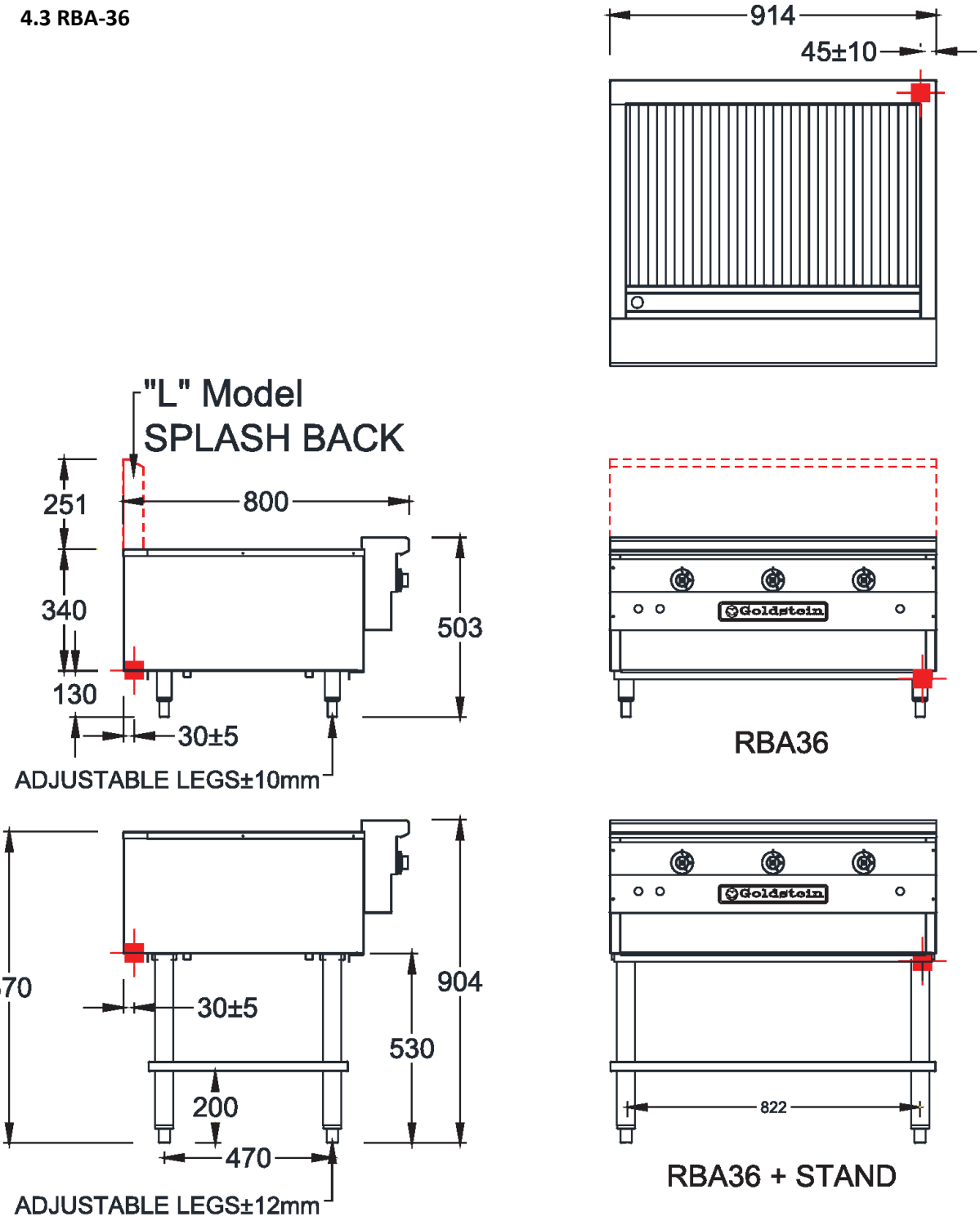
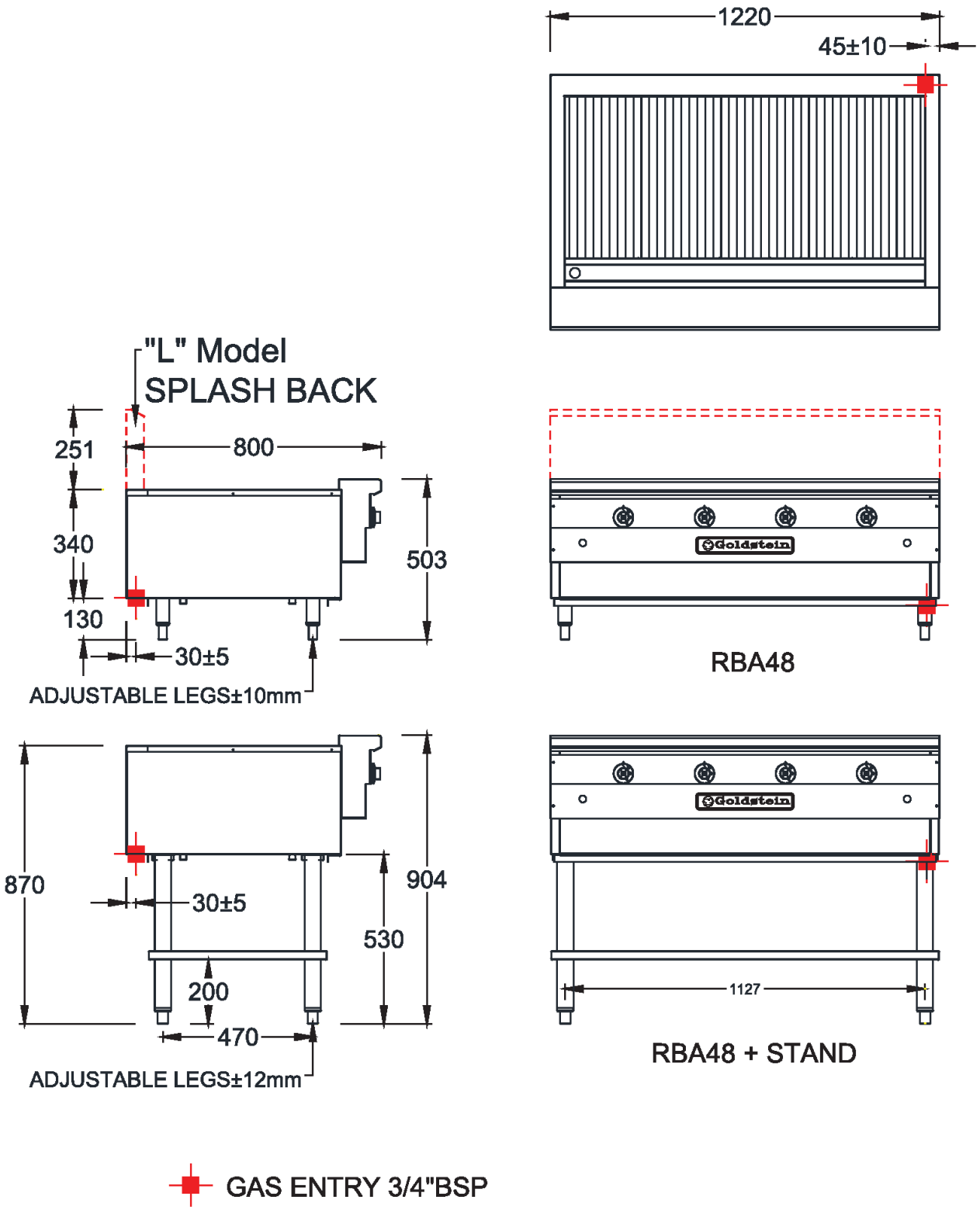


Note: Dimensions may change without notice in accordance with product design and development

4.4 RBA-48



Note: Dimensions may change without notice in accordance with product design and development

5. Installation

Goldstein 800 Series Char Broilers are designed to give long and satisfactory service and incorporate the best possible materials and workmanship. Proper installation and preventative maintenance are vital for optimum performance and efficiency.

WARNING

This appliance must be installed by authorized personnel and in accordance with AS5601 & AS/NZS5601 – Gas Installations and manufacturer's specifications outlined in this manual. Installation, maintenance or repairs by unauthorized and unqualified personnel will void the warranty.

5.1 Receiving Inspection & Unpacking

- Remove carton, packaging and all plastic protective material from the appliance.
- Check for damages to the appliance and report any damage to the transport company and dealer.
- Ensure all loose packaged items i.e. regulator, legs, grates, radiants, trays and warranty cards are provided with the unit and report any missing items to the dealer.
- Check that the rating plate on the front of the appliance corresponds with the available gas supply.

5.2 Installing into Location

- This appliance must be installed under an exhaust hood with adequate means of ventilation. Do not block, obstruct or connect a ventilation system directly to the appliance flue.
- Lift off the base and insert the adjustable legs provided with the appliance or place the appliance on the stand. Do not install the appliance without the legs or place any obstructions in and around the front of the appliance. Primary air for burner combustion is supplied through the front of the appliance and must be kept clear of obstructions.
- Position the appliance into the correct position.
- Level off the unit from left to right with a spirit level by rotating the feet. Also, level front to back with a fall of 2-3mm to the front to improve appliance ventilation & flue efficiency.

5.3 Installation Clearances

The following table shows the required clearances around this appliance to ensure correct and safe operation to the user, the appliance and its surroundings. Please refer to AS5601 or AS/NZS5601 for detailed gas installation requirements.

	Combustible material	Non-combustible material
Back	50mm	0mm
Sides	250mm (*)	0mm

Note: * If adjacent surface is of combustible material and is 100mm below the cooking surface, then only 50mm clearance is required.

5.4 Gas Connection

This appliance has been tested and pre-set before leaving the factory, however minor adjustments may be necessary to suit the gas supply pressure. Correct operation of the appliance must be tested as part of the installation procedure.

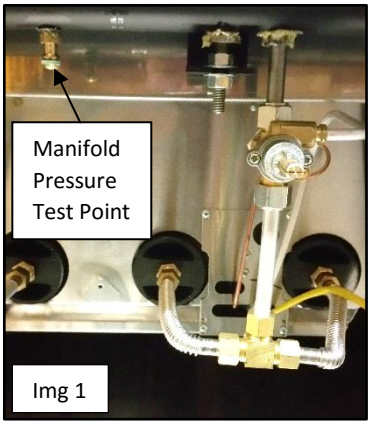
Note: Gas fitting must only be carried out by an authorised and qualified person.

1. Have a licensed gas fitter or your gas supply company connect & check that the gas supply line pressure and volume are adequate for the appliance being installed. The required pressure and input rating is shown on the rating plate behind the door.
2. Install the appliance in accordance with AS5601 & AS/NZS5601. Ensure that the appliance gas type corresponds with the gas supply. Different gas types are NOT compatible; however, the appliance can be converted from one gas type to another. Please see conversion instructions for more details and contact the dealer for any necessary components.
3. Fit an individual manual isolating valve to the appliance gas supply.
4. Fit the supplied regulator to the gas supply line as close as conveniently possible to the appliance.
5. Connect the appliance to the gas supply. Location of the connection is shown in Dimensions section 3 and is at the rear of the appliance with a ¾" B.S.P male fitting.
6. Ensure all gas connections are tight and free of leaks using appropriate gas detecting equipment.

WARNING

Never use an open flame to detect gas leakages.

7. Bleed out any air in the lines.
8. Measure the appliance operating pressure at the manifold test point with the appliance running. If required, adjust the pressure at the regulator to the value shown in Specifications section 3.3- Gas Supply Requirements.



Img 1

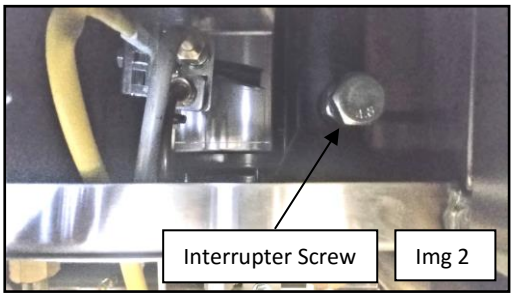
WARNING

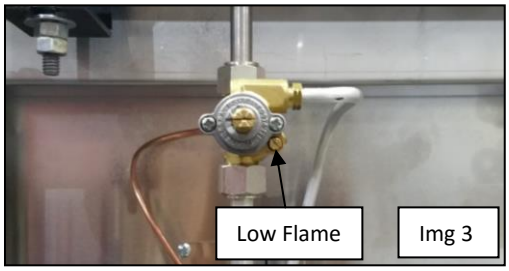
This appliance must be installed by a qualified gas fitter or plumber and in accordance with AS5601 & AS/NZS5601.

5.5 Commissioning

Once the appliance has been installed always ensure its functions are operating as per the following check list. Refer to Operation in section 6 for further details on how to operate each control.

1. Remove any plastic coating from steel panels.
2. Ensure all gas connections are correct and tight.
3. Ensure all parts are in their correct positions e.g. drip trays, radiants and grills.
4. Turn on the gas and check for leaks and correct gas pressure as in Specifications section 3.
5. Turn on and check the pilot flames, sparkers, gas controls and main burners are all operating correctly. Although the correct air ratio for the main burners have been factory pre-set, ensure the flame does not have yellow tips or lifts off from the burner ribbon port. The main burners can be adjusted by rotating the interrupter screw located on the burner venturi.
6. Check the low flame by turning the knob to the MIN flame setting and adjust on the gas valve if needed. Although the low flame setting is factory set minor adjustments may be necessary.
7. Instruct the operator on correct lighting procedures, starting up and shutting down the appliance.





5.6 Before First Use

Before initial start-up, clean the cast iron cooking grills with warm soapy water then dry thoroughly with a cloth or paper towel. It is recommended to lightly season the grills with cooking oil after cleaning.

ATTENTION

Please fill out and return the warranty card supplied with the machine to validate the warranty.

6. Operation

6.1 Operational Controls

Flame failure protection and permanent pilots are fitted as standard on all Goldstein Char Broilers as required by safety regulations and convenience to the operator. If the pilot flame goes out, the flame failure protection will shut off any gas to the burner. The permanent pilot allows for the appliance to go on stand-by and the operator to continuously re-light the main burners without re-ignition.

Img 4

1. Gas Control Valve

- OFF Position
- PILOT Position
- MAX Flame
- MIN Flame

2. Piezo Igniter

3. Rating Plate

6.2 Lighting the Pilot

1. Turn the gas control knob to the PILOT position. Push and hold the knob in while simultaneously pressing the SPARKER button. Continue holding in the PILOT position for approximately 10 seconds to establish the pilot flame.
2. If the pilot does not remain alight after 10 seconds, repeat step 1.
3. Ensure the pilot is lit through the viewing cavity from under the control panel.

6.5 Turning on the Main Burner

1. Once the pilot is lit, turn the gas control to the ON position.
2. Turn and select to the desired flame setting i.e. MAX – high flame or MIN – low flame.

6.6 Turning off Main Burner and Pilot

1. Turn the gas control knob to the PILOT position to turn off the main burner. The pilot will remain alight. During service while the appliance is not in use, it is recommended to keep the pilot alight.
2. To completely shut down the main burner and pilot, push the gas control knob in and turn to the OFF position.

ATTENTION

Ensure all pilot burners are lit even while all burners are not operating to avoid blockages. If appliance burners appear to be 'yellow tipping', producing carbon deposits or if any unusual odours are present during normal operation; switch appliance off and contact Goldstein service or an authorised service agent.

7. Cleaning and Maintenance

7.1 General

Build-up of grease, fat and carbon will impede effective heat transfer from the heat source to the cooking medium. Keeping the appliance clean will ensure it operates correctly and efficiently.

To minimise flare ups during cooking, fill the drip trays with water up to the marked indicator level.

⚠ CAUTION

Do not use steel wool, abrasive materials or caustic detergents on the exterior surfaces of this appliance. Do not use metal knives, spatulas or any other metal utensils to scrape stainless steel surfaces. Use protective clothing for cleaning to avoid dangerous contact with hot surfaces.

⚠ CAUTION

Never use wash hoses on this appliance. The appliance is not waterproof and caution is advised when hosing down floors near this appliance. Appliance regulators are commonly connected near the bottom of the appliance and water in this area can create blockages.

7.2 During Service Cleaning

1. Brush away any food or carbon deposits left on the grill surface with a long-reach, copper or steel brush.
2. Ensure water is maintained in the drip trays to avoid flare ups.
3. Inspect and empty the grease tray as often as needed. Do not let the tray reach full capacity before emptying.

7.3 After Service Cleaning

1. Soak the grills with warm soapy water and scrub clean with steel wool or hard bristled nylon brush.
2. Remove the radiant hoods and clean as per step 1.
3. Clean the front grease trough and scrape away any excess into the drain chute. Wipe the grease trough clean with a cloth and warm soapy water and use a bottle brush to clean the drain chute.
4. Empty the grease tray and wash in warm soapy water then dry before replacing.
5. Thoroughly dry the grills and hoods with a cloth or paper towel. Replace the radiant hoods and grills and turn on the main burners momentarily to ensure they are completely dry. To avoid surface rust, never allow cast iron parts to air dry.
6. Lightly season the grills with cooking oil.
7. Wipe off exterior surfaces and clean with a suitable cloth and cleaning agent.

⚠ CAUTION

Do not pour water onto HOT grills and radiant hoods as warping or cracking may occur. Allow to cool down before cleaning.

7.4 Periodic Cleaning

1. Clean the exterior panels with a hot cloth or soft scrubbing brush and cleaning agent suitable for stainless steel. For stubborn or encrusted deposits, soak the area with the cleaning agent and hot water and use a wooden or nylon scraper to remove.
2. Remove the grills and radiant hoods to expose the burners and brush away any ash or carbon deposits that are on the burner.
3. Use a metal brush or picking tool and brush along the burner ribbon port to remove any particles lodged in between.

Img 5

7.5 Periodic Maintenance

Incorporating a regular maintenance schedule will optimise and keep services running efficiently. Goldstein can provide an MIS (Machine Inspection Service) that delivers regular inspection and maintenance to reduce problems before they occur. For more information or to setup an MIS, please contact the nearest Goldstein branch.

CAUTION

This appliance is intended for professional use and is only to be used by trained, qualified personnel.

Installation, maintenance and repairs should be performed by an authorized Goldstein service agent or other qualified personnel. Installation, maintenance or repairs by an unauthorized and unqualified personnel will void the warranty.

8. Trouble-Shooting

Please refer to the following guide as reference to diagnose and repair some of the more common problems encountered. Should a problem not listed arise, or in doubt, please contact Goldstein or an authorised service agent.

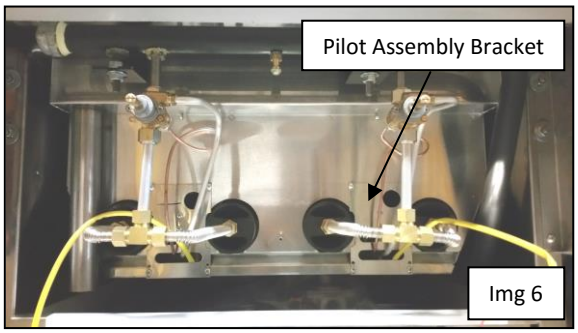
Fault	Cause	Solution
Pilot does not light.	No gas to appliance.	Turn on the gas isolation valve and/ or check LP bottles are not empty.
	Pilot injector blocked.	Contact Goldstein service.
	Air in gas line.	Hold in pilot position for 30 seconds while attempting to light.
Pilot lights but does not hold when releasing gas control knob.	Knob is released before heating thermocouple.	Hold the knob in for at least 20 seconds.
	Faulty thermocouple	Replace thermocouple. Call Goldstein service.
	Flame on pilot too small.	Gas pressure too low. Blocked injector. Contact Goldstein service.
	Wavy or uneven pilot flame.	Check and minimise strong draughts near the appliance.
Burner does not light.	Incorrect gas supply pressure.	Contact Goldstein service.
	Faulty gas control.	Contact Goldstein service.
Piezo sparker not lighting pilot	Sparker lead is loose, damaged or faulty.	Repair a loose connection or replace the lead.
	Faulty or cracked electrode.	Replace the electrode.
	Faulty piezo sparker.	Replace sparker.

9. Gas Conversion

WARNING

Gas conversion procedures should only be performed by an authorized Goldstein Eswood service agent or qualified personnel. Unauthorized and unqualified personnel will void the warranty. Gas isolator MUST be turned off before commencing any service work.

1. Undo the existing regulator and replace with the new appropriate type.
2. Remove the gas valve knobs and front control panel. There are four fixing screws located on the side on the panel.
3. Undo the nuts from the steel tube to the injector and then undo the injector from the main burners. Replace the injectors with the new appropriate type as per specifications section.



4. Remove the pilot tube nut from the pilot assembly and replace the injector with the appropriate type. The pilot assembly can be accessed from the top of the unit after removing the grills, hoods and pilot cover or from the front of the appliance by removing the pilot assembly bracket.
5. Check the gas pressure and set per specifications section 2.5 Gas supply requirements when conversion is complete.
6. Check the low flame on the burner and adjust if needed by adjusting the low flame screw on the gas valve.
7. Check the aeration of the burners and adjust the interrupter screw on burner throat if required. The burner flame should not be yellow, lift off or rise from the burner ribbon port.

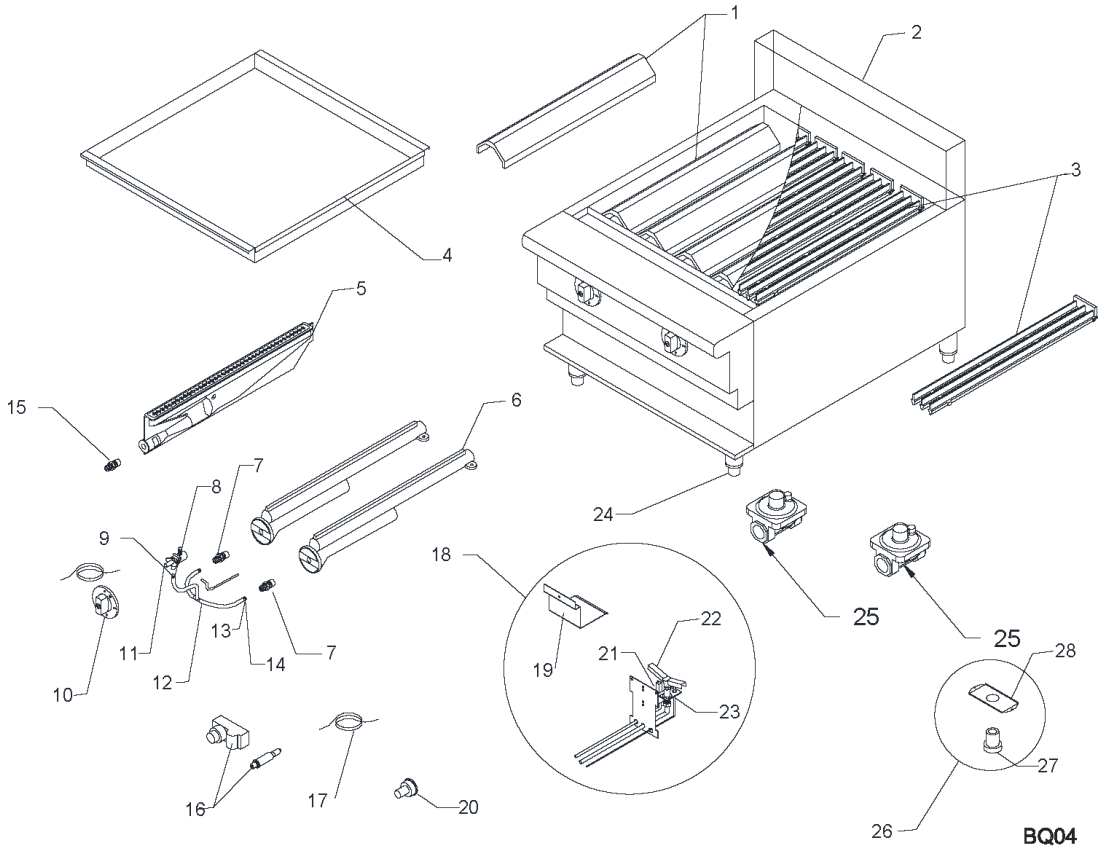
9.1 Commissioning

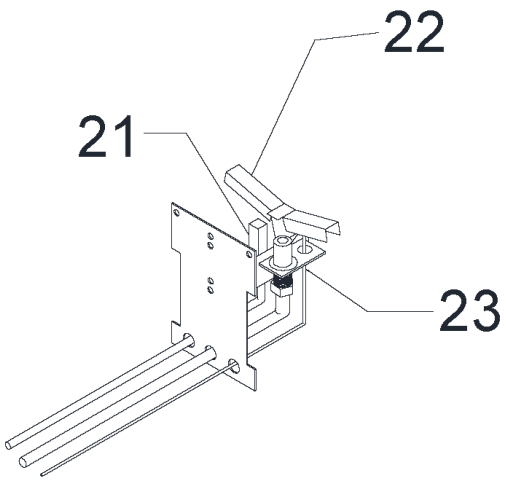
1. Check all work for leakage using appropriate gas detecting equipment.
2. Refer to section 4.6 Commissioning for a check list.
3. Replace the rating plate and any markings associated with the fuel type with the appropriate type.

ATTENTION

Gas conversion is not complete until the appliance has been re-commissioned. Please refer to the Installation section 5.5 Commissioning of this manual for details.

10. Spare Parts





11.1 Parts Diagram – All Models

ITEM NO.	PART NUMBER	DESCRIPTION
1	RBA00M01	HOOD
2	RBA12P40	SPLASH BACK (RBA12P41 OUTSIDE BACK)
2	RBA24P40	SPLASH BACK (RBA24P41 OUTSIDE BACK)
2	RBA36P40	SPLASH BACK (RBA36P41 OUTSIDE BACK)
2	RBA48P40	SPLASH BACK (RBA48P41 OUTSIDE BACK)
2	RBA12P08	SPLASH BACK (NEW)
2	RBA24P08	SPLASH BACK (NEW)
2	RBA36P08	SPLASH BACK (NEW)
2	RBA48P08	SPLASH BACK (NEW)
3	RBA00M02	RBA TOP GRATE
4	RBA12P13	CURRENT DRIP TRAY (12"=1)
4	RBA24P39	CURRENT DRIP TRAY (24"=1, 48"=2)
4	RBA36P13	CURRENT DRIP TRAY (36"=2)
5	GBNRBA01	RBA12 BRAY BURNER
6	GBNRBA00	AC19S BURNER
7	GIJGP110	1.10mm LPG INJECTOR RBA 24/36/48
7	GIJGP200	2.00 NG INJECTOR RBA 24/36/48
8	GOL0001	3/8 OLIVE (GAS CONTROL)
9	GNT00022	10mm TUBE NUT (GAS CONTROL)
10	MKNPLM21	KNOB
11	GCKGR001	GAS COCK
12	RBA00A07	COPPER PIPE MANIFOLD TO INJECTOR
13	GOL00001	3/8 STANDARD OLIVE (BURNER)
14	GNT00005	3/8 BRASS NUT (BURNER)
15	GIJ00110	1.10mm LPG INJECTOR FOR RBA12
15	GIJ00200	2.00mm NG INJECTOR RBA12
16	GRG72M05	SINGLE PROBE ELEC SPARKER (12"=1)
16	GRG72M10	DOUBLE PROBE ELEC SPARKER (24"=1, 48"=2)
16	GRG72M15	TRIPLE PROBE ELEC SPARKER (36"=1)
16	ESP00009	PIEZO SPARKER

16	ESP00008	PIEZO SPARKER
17	ESPL0402	400 MANUAL SPARKER LEAD
17	ESPL0650	650 MANUAL SPARKER LEAD
17	ESPL0403	400 ELECTRONIC SPARKER LEAD
17	ESPL0651	650 ELECTRONIC SPARKER LEAD
18	GPI00A15	NEW PILOT ASSY
19	RBA00P42	CURRENT PILOT COVER
20	GPU00001	1.60mm LPG PILOT SPUD
20	GPU00002	2.60mm NG PILOT SPUD
21	GPIC0007	ELECTRODE - WING PILOT
22	GPIB0005	WING PILOT
23	GTC00450	450mm THERMOCOUPLE
24	MLESSBF2	BULLET FEET
25	GRL00024	LPG REGULATOR
25	GRL66019	NG REGULATOR
26	MMM00A35	CERAMIC BUSH & CIRDLIP KIT
27	MMM00035	CERAMIC BUSH
28	MCLIP004	CIRCLIP

11. Warranty

Installation must be carried out according to local regulations by qualified trade persons.

Isolating switch(es), shut-off valves etc. must be within easy reach of the machine for future service and maintenance requirements.

If in doubt call GOLDSTEIN/ESWOOD or their representative for further information. No responsibility will be accepted for defects or damages by improper installation, for changes to the product not authorised by GOLDSTEIN/ESWOOD or for operation outside the technical specifications.

GOLDSTEIN/ESWOOD warrants their products to be free from defects in material and workmanship under "normal use and service". This does not include normal wear and tear of parts. GOLDSTEIN/ESWOOD will repair or replace any parts, which in GOLDSTEIN/ESWOOD's sole judgement are defective in material or workmanship, in accordance with the warranty offered.

This undertaking covers the provision of labour and parts for 12 months from the date of delivery to the purchaser. This undertaking applies only to state capitals. Remote areas are not covered by this commitment and special enquiries should be made. (Note: Travel time not covered by warranty).

"To the maximum extent permitted by law, any liability on Goldstein/Eswood's part or on the part of its servants or agents for loss or damage of any kind whatsoever in connection with the products, including liability for or in respect of any claim arising out of contract, negligence or statute, shall not, in any event, exceed $100"

Labour under warranty is supplied free of charge during normal working hours, Monday to Friday. Should warranty work be requested outside of our normal working hours a labour charge will be applied equivalent to a normal hour rate, without out of hours' penalty rates. (Refer to last page of this manual for your closest branch for warranty repair services).