



PRODUCT DOCUMENT PACK

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PRODUCT

B+S RF-2E Rapid Electric Fryers - Two Pan Four Basket Electric Fryer

Model / SKU: RF-2E

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INSTALLATION, OPERATING AND SERVICING INSTRUCTION MANUAL



Electric Rapid Fryer Series

Single Pan Electric Rapid Fryer - RF-1E

Two Pan Electric Rapid Fryer - RF-2E

Three Pan Electric Rapid Fryer - RF-3E

B+S Commercial Kitchens Pty Ltd

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Please ensure this booklet is kept in a safe and prominent location for future reference.

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Introduction

We are confident that you will be delighted with your B&S product, and that it will become the backbone of your kitchen. To ensure you receive the utmost benefit from your new B&S appliance, there are two important things you can do.

1. Ensure you read this booklet thoroughly and carefully follow the instructions given. Please also ensure that this booklet is kept in a safe and prominent location for future reference.
2. Should you be unsure of any aspect of the operation/performance, servicing and installation of the appliance, please contact your B&S dealer immediately. In most instances, a phone call could answer your question.

Electric Rapid Fryer Series

The B+S Rapid electric fryer embraces the future of electrification within commercial food service operations. Elevating your commercial kitchen's performance by experiencing high volume output, precise temperature control, consistency and quality with the professional cooking system. Constructed using high quality stainless steel, the electric rapid fryer series offers single, double or triple well frying solutions along with an inbuilt oil filtration system that filters and returns hot frying oil in minutes. No separate pumps and pans, no handling of hot oil. Frequent filtering extends frying oil life, improves product quality and reduces oil costs.

Controlled with a user friendly programmable LED display, the electric fryer series delivers the flexibility to customise cooking operations to ensure accurate temperature control is achieved. High efficiency heating elements translates into fast recovery and a built in thermal insulation layer effectively tackles high temperatures and improves efficiency.

Safety Symbols

	No user serviceable parts located inside the appliance. Qualified service person access only. Disconnect from the main power before servicing.
	Protective ground protection
	Equipotential bonding in the electrical equipment and other devices to the artificial or natural grounding conductor to reduce the potential difference. Reduce and prevent the risk of electric shock
	Surfaces on this product may be hot, use extreme care to avoid burns from hot surfaces.
	CAUTION is used with the safety alert symbol that indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

Product Specifications

Appliance Description	Single Pan Two Basket Electric Fryer - RF-1E Two Pan Four Basket Electric Fryer - RF-2E Three Pan Six Basket Electric Fryer - RF-3E
Manufacturer	B+S Commercial Kitchens Pty Ltd
Address	57 Plateau Road, Reservoir VIC 3073
Telephone	+61 (03) 9469 4754
Fax	+61 (03) 9469 4504
Web	www.bscommercialkitchens.com
E-Mail	info@bscommercialkitchens.com
Warranty service	www.bscommercialkitchens.com/request-a-warranty-service-call
Brand names marketed under	Rapid
Model number options	How to interpret model numbers: RF - XE - RF - Rapid Fryer Series - X - Number of Pans - E - Electric Examples: RF-1E Is a B+S Rapid series, single pan two basket electric fryer. RF-2E Is a B+S Rapid series, two pan four basket electric fryer. RF-3E Is a B+S Rapid series, three pan six basket electric fryer.
Date of Certification	11/11/2024
Electromagnetic Compatibility	AS/NZS CISPR 14.1:2021

Electrical Supply Requirements

Table 1: Electric Rapid Fryer Series

Model	Voltage (V)	Type	Frequency (Hz)	Total Power Input (kW)	L1 Amps (A)	L2 Amps (A)	L3 Amps (A)
RF-1E	400	3P+N+E	50/60	13.5	20	20	20
RF-2E	400	3P+N+E	50/60	13.5 + 13.5	20	20	20
RF-3E	400	3P+N+E	50/60	13.5 + 13.5 + 13.5	20	20	20

!Warning!

This appliance is equipped with equipotential bonding. If the supply cord is damaged in any way, shape or form, it must be replaced by a qualified professional in order to avoid any danger to the appliance or cause any harm to the individual operating the appliance.

When connecting your induction appliance to the mains supply, ensure that the following points are carried out:

- The supply power cord recommended for the unit is a **Prysmian L electric Cable 450/750V V-90 3C x 4mm² + E 2.5mm²**. The minimum supply cord length is 2m.
- If the supply power cord must be replaced, ensure the power supply cord is an oil-resistant sheathed flexible cable, not lighter than ordinary neoprene or other effective synthetic rubber sheathed cord (YZW) as per **AS/NZS 3191 (Refer to current version)**.
- This appliance must be physically hard-wired. There is **NO** plug.
- An isolating switch must be fitted within 2m of the appliance, but not on the appliance and in such a position that the user does not have to reach across the cooking surface.
- The branch supply line shall be individually overload protected to the correct current rating and the power supply cord shall be protected against any mechanical or thermal damage.
- Ensure all wiring connections are tight.

Dimensions

Table 2: Overall Dimensions

Unit Size (mm)	Weight (kg)	Height (mm)	Overall Depth (mm)	Overall Width (mm)	Working Height (mm)
RF-1E	128	1140	900	450	930
RF-2E	185	1140	900	860	930
RF-3E	237	1140	900	1270	930

Connections

RF-1E Unit Connection

Connections listed below are to be followed according to table 3.

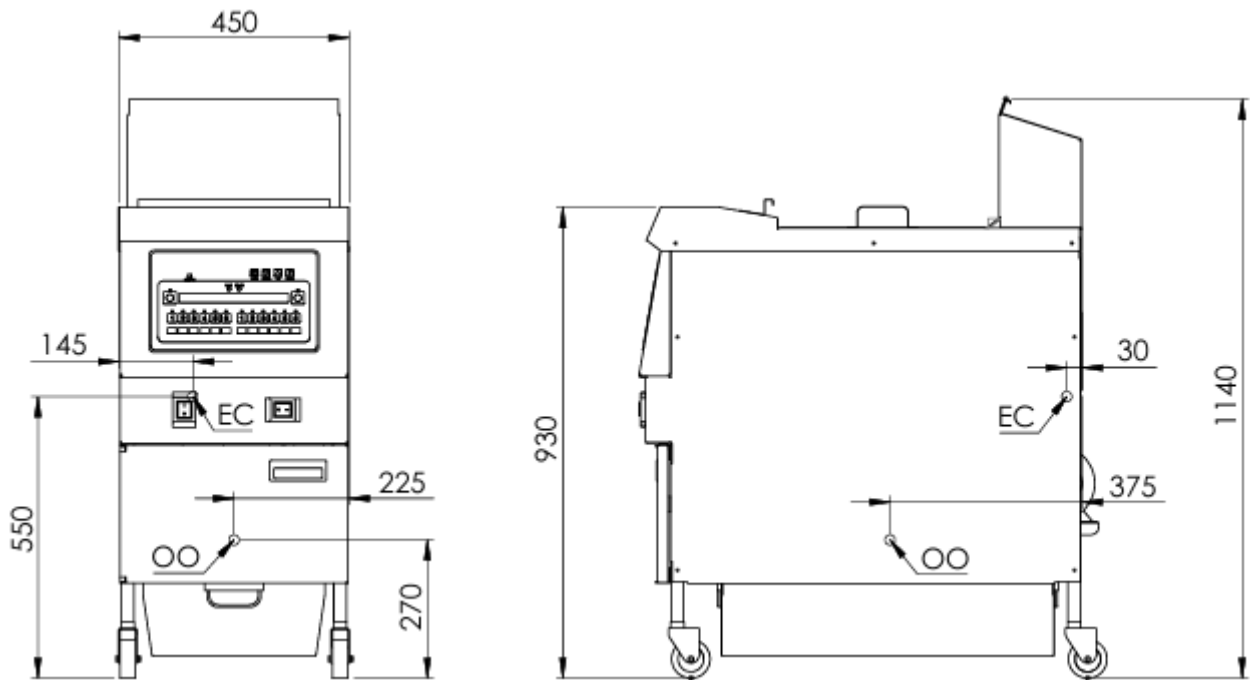


Figure 1: RF-1E Connections

Table 3: RF-1E Connection Values

Connection	Fitting	Height from Floor (mm)	Position from Rear of Appliance (mm)	Position from LH/RH of Appliance (mm)
Electrical Connection (EC)	Hard wired	550 (+/- 5)	30 (+/- 5)	145 (+/- 5) from LH
Oil Outlet (OO)	1-1/2" SS Pipe	270 (+/- 5)	375 (+/- 5)	225 (+/- 5) from RH

RF-2E Unit Connection

Connections listed below are to be followed according to table 4.

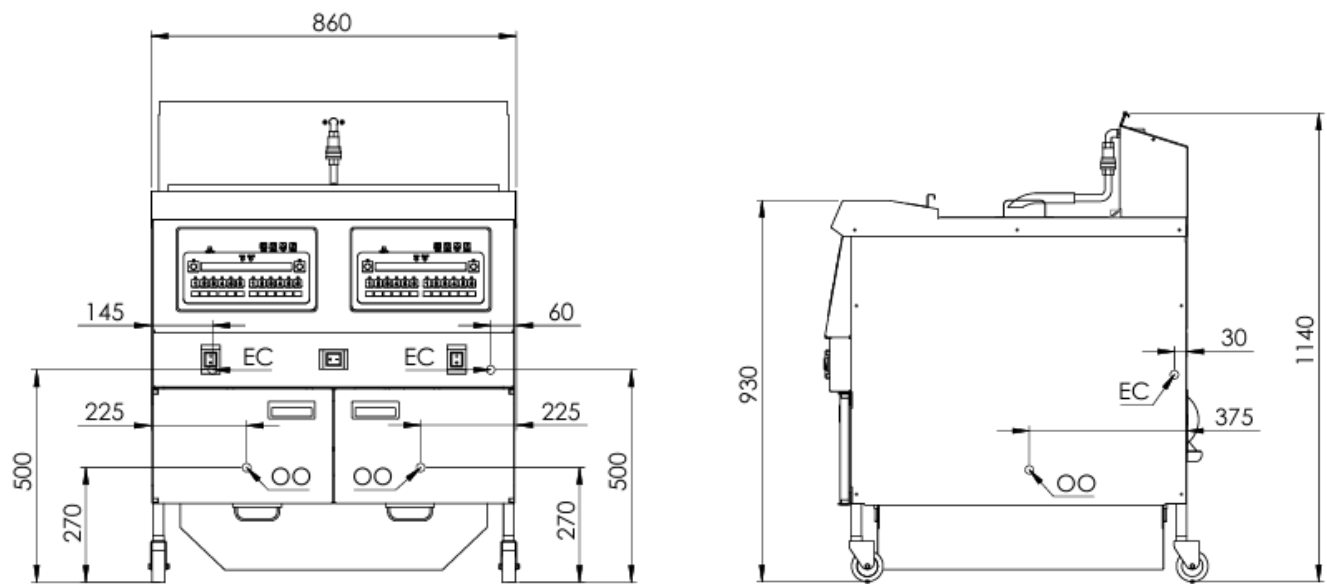


Figure 2: RF-2E Connections

Table 4: RF-2E Connection Values

Connection	Fitting	Height from Floor (mm)	Position from Rear of Appliance (mm)	Position from LH/RH of Appliance (mm)
Electrical Connection (EC)	Hard wired	500 (+/- 5)	30 (+/- 5)	145 (+/- 5) from LH
		500 (+/- 5)	30 (+/- 5)	60 (+/- 5) from RH
Oil Outlet (OO)	1-1/2" SS Pipe	270 (+/- 5)	375 (+/- 5)	225 (+/- 5) from LH
		270 (+/- 5)	375 (+/- 5)	225 (+/- 5) from RH

RF-3E Unit Connection

Connections listed below are to be followed according to table 5.

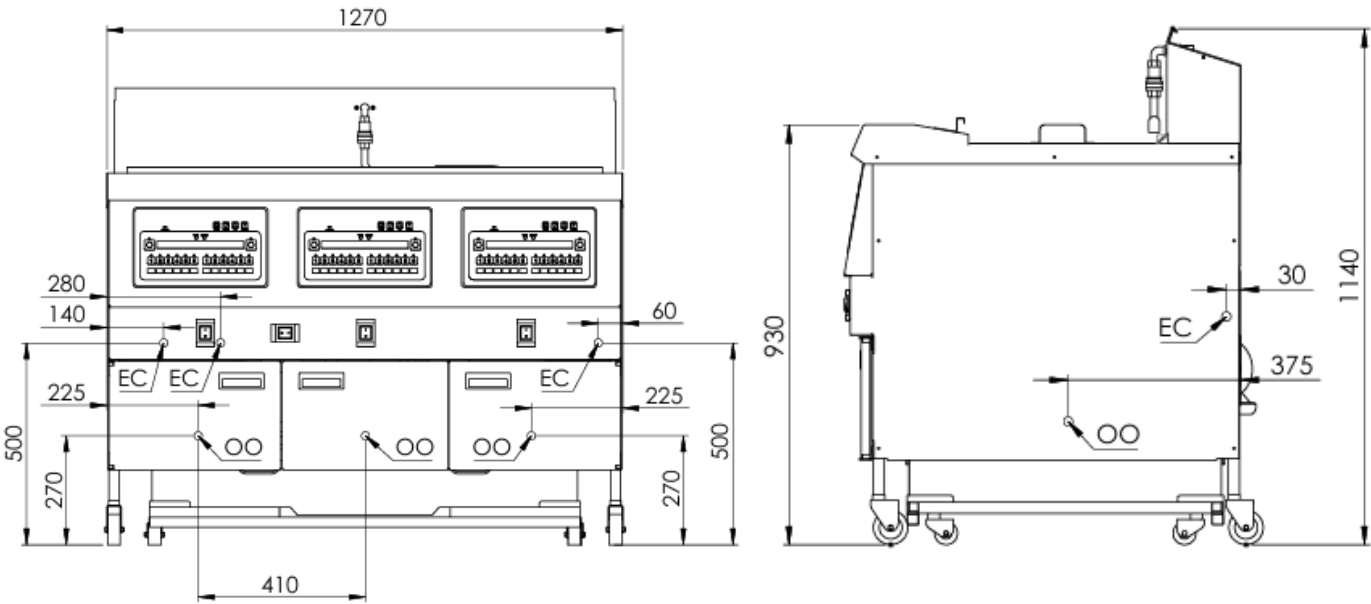


Figure 3: RF-3E Connections

Table 5: RF-3E Connection Values

Connection	Fitting	Height from Floor (mm)	Position from Rear of Appliance (mm)	Position from LH/RH of Appliance (mm)
Electrical Connection (EC)	Hard wired	500 (+/- 5)	30 (+/- 5)	140 (+/- 5) from LH
		500 (+/- 5)	30 (+/- 5)	280 (+/- 5) from LH
		500 (+/- 5)	30 (+/- 5)	60 (+/- 5) from RH
Oil Outlet (OO)	1-1/2" SS Pipe	270 (+/- 5)	375 (+/- 5)	225 (+/- 5) from LH
		270 (+/- 5)	375 (+/- 5)	635 (+/- 5) from LH
		270 (+/- 5)	375 (+/- 5)	225 (+/- 5) from RH

Important Warning Information

THIS APPLIANCE SHALL ONLY BE INSTALLED/SERVICED BY AN AUTHORISED INSTALLER.

THIS APPLIANCE MUST BE INSTALLED IN ACCORDANCE WITH THE SPECIFIED INSTRUCTIONS AND SPECIFICATIONS.

IMPROPER INSTALLATION OR OPERATION OF THIS APPLIANCE MAY RESULT IN PRODUCT FAILURE WHICH MAY LEAD TO PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

CAUTION MUST BE TAKEN WHEN OPERATING THIS APPLIANCE TO MINIMISE RISK OF FIRE. THE APPLIANCE MUST NOT BE LEFT ON OR UNATTENDED.

COOKING FOODS THAT CONTAIN FLAMMABLE SUBSTANCES SUCH AS ALCOHOL-CONTAINING FOODS ARE NOT ALLOWED. SUBSTANCES WITH LOW IGNITION TEMPERATURES MAY BE SELF IGNITING AND A RISK OF A FIRE INCREASES.

UNDER NO CIRCUMSTANCES MUST YOU HEAT AN EMPTY PAN. ALWAYS ENSURE THE CORRECT AMOUNT OF FRESH OIL IS BEING USED. USED OIL WITH FOREIGN SUBSTANCES SHALL NOT BE USED AT ANY TIME TO AVOID TAINING OF FRESH OIL AND SOOT BUILD UP.

THE APPLIANCE SHALL BE OPERATED BY DEDICATED PERSONAL WITH SUFFICIENT KNOWLEDGE OF THE MACHINES OPERATING SYSTEM. FAILURE TO DO SO CAN RESULT IN PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

DO NOT PLACE ALUMINIUM FOIL ON ANY SURFACE OF THE APPLIANCE.

METAL OBJECTS SUCH AS KNIVES, FORKS, SPOONS MUST NOT BE PLACED ON THE SURFACE OF THE HOB AS THEY MAY HAVE THE ABILITY TO FALL INTO THE PANS.

REGULAR INSPECTIONS BY AN AUTHORISED SERVICE PERSON ARE STRONGLY RECOMMENDED TO ENSURE PROPER AND SAFE FUNCTIONING OF THIS APPLIANCE.

AFTER ANY SERVICING OR ADJUSTING OF THE APPLIANCES COMPONENTRY, CHECK THAT ALL CONNECTIONS ARE CORRECTLY INSTALLED AND THAT ALL COVER PANELS HAVE BEEN RE-FITTED CORRECTLY.

NEVER STORE ANY FLAMMABLE LIQUIDS/VAPOURS IN THE VICINITY OF THIS APPLIANCE. NEVER SPRAY AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHILE IT IS IN OPERATION.

ENSURE ANY TRANSIENT PROTECTION IS REMOVED BEFORE INSTALLING THE APPLIANCE. ENSURE ANY POSSIBLE DAMAGE TO THE APPLIANCE OR COMPONENTS/PARTS THAT MAY HAVE BEEN SUSTAINED DURING TRANSPORTATION IS REPORTED TO THE MANUFACTURER ASAP.

THIS APPLIANCE IS NOT INTENDED TO BE USED IN A MARINE ENVIRONMENT.

ENSURE APPLIANCE IS INSTALLED IN A STABLE POSITION.

FAILURE TO FOLLOW ANY OF THE INFORMATION PROVIDED IN THIS BOOKLET WILL VOID THE B&S WARRANTY AND MAY RESULT IN DAMAGE TO EQUIPMENT OR INJURY TO PERSONNEL



Installation Instructions

Regulations

This appliance **must** be installed in accordance with national installation codes and in addition, in accordance with relevant national codes covering gas, electrical and fire safety. Installations **must** be carried out by authorised persons only and in accordance with the manufacturer's installation instructions, local regulations, municipal building codes, **AS/NZ 3000 (refer to current version)** – Electrical installations (Wiring Rules) and any other health and safety regulations, local authority, gas, electrical any other statutory regulations.

Data Label

The data label is located on the front of the appliance or located behind the door of the appliance if one is present. Please ensure that the electrical supply matches what is written on the data label. Ensure that there is adequate electrical supply power available – refer to the appliance for the following information:



Figure 4: B+S Data Label

In the event that the data label is missing or unreadable, refer to the manufacturer's servicing and installation manual or contact your B+S dealer for a replacement.

Ventilation

The appliance **must** always be installed under an extraction hood. Ventilation **must** be in accordance with **AS/NZS 5601 (refer to current version) - Gas Installations**. The appliance **must** have adequate ventilation means, to assist optimum performance. **Never** connect a ventilation system to the appliance directly.

The appliance shall be installed with an exhaust system comprising of a hood and duct system. The hood shall be made of a material which is impervious to fat, grease and vapour. It shall be constructed so that it can be readily and efficiently cleaned. Its internal structural faces shall be smooth and free of obstructions and all joints shall be grease tight.

The hood shall be located such that it effectively ventilates the appliance and shall extend at least 150mm beyond the perimeter of the appliance. The exhaust duct system shall be adequately sized and shall not get connected to any other ventilating or exhaust system.

A suitable grease trap shall be provided to prevent grease vapour entering the exhaust system and shall be located in a position that will avoid constituting a fire hazard and be readily accessible for regular cleaning.

Unless adequately protected, a hood and a duct shall be fitted at least 450mm from any combustible material and so that the lower edge of the grease filter is no less than 1.35 meters above the cooking surface. (Please refer to **AS/NZS 5601 (refer to current version) clause 6.10.2.2** to verify clearances for ventilation.)

The installation of the unit must comply with **clauses 6.2.4, 6.10.2 and 6.10.1.15** and an exhaust system shall be installed according to **AS1668.1 and AS1668.2** interlocked to the gas supply.

B+S shall not be responsible for any unauthorized and/or non-compliant installations and will void the warranty.

Combustible & Non-Combustible Surface Clearances

The appliance **must** be installed on a flat/level floor. The appliance is fitted with lockable castors. Once the appliance is positioned securely and level, **lock** the front castors to avoid any movement when in operation.

The unit must not be installed in the following areas:

Direct sunlight	High voltage power lines
Rain	Excessive temperatures and humidity
Vibration	Frequency interferences

Table 4: Combustible & Non-Combustible Surface Clearances

	COMBUSTIBLE SURFACE (mm)	NON COMBUSTIBLE SURFACE (mm)
Left/Right Hand Side	50	0
Rear	50	0

NOTE: Only non-combustible materials can be used in close proximity to this appliance.

Electrical Connection

All electrical connections must only be carried out by a qualified person.

Each appliance should be connected to an adequately protected power supply and isolation switch mounted adjacent to, but not behind the appliance. This switch must be clearly marked and readily accessible in case of fire.

This appliance is equipped with equipotential bonding. If the supply cord is damaged in any way, shape or form, it must be replaced by a qualified professional in order to avoid any danger to the appliance or cause any harm to the individual operating the appliance.

1. Check that the electricity supply is correct as shown on the data label. In the event that the data label is missing or unreadable, refer to the manufacturer’s servicing and installation manual or contact your B+S dealer for a replacement.
2. The mains supply terminal connections (L1, L2, L3, Neutral and Earth) are located at the rear of the appliance. Ensure all connections are securely locked into place from the manufacturer. If they appear loose, unscrew the mains supply terminal cover and tighten all connections and ensure that conductors are secure and appropriately terminated.
3. Correctly locate the appliance into its final operating position and using a spirit level lock the front castors.
4. Physically hard-wire the electrical cable to the power supply. There is **NO** plug supplied.
5. Check that the electrical supply is as shown on the data label or table 1 of this instruction manual.

Operating Instructions



Warning – Prior to Operation

- The appliance is for professional use and is to be used by qualified professionals only.
- Employees, visitors and contract personnel must be informed of the potential hazards for persons with pacemakers or metal implants. These persons must consult their doctor or the appliance manufacturer.
- **ONLY** authorised service technicians are to carry out installations and servicing requirements.
- **DO NOT** spray aerosols in the vicinity of this appliance while it is in operation.
- **DO NOT** store or use flammable liquids or items in the vicinity of this appliance.
- Never insert objects into the electrical appliance. Inside are highly dangerous voltages. Do not damage any wiring, e.g. with pointed / sharp objects, as this may lead to electric shock.
- This electric appliance is only for commercial cooking and for indoor use.
- **DO NOT** place metal objects, e.g. kitchen utensils, cutlery, tools, jewelry etc., on the cooking surface as they may have the ability to fall into the tanks.
- **DO NOT** place Aluminium Foil on the cooking zone.
- **DO NOT** use the hob as a work top.
- **DO NOT** damage the cooking surface. If the cooking surface shows visible signs of cracking, the appliance must be immediately disconnected from the mains supply.
- Switch '**OFF**' the cooking zone after use.

Improper operation practices can reduce the life of the appliance and produce a poor quality product. If for some reason it is not possible to get the appliance to operate correctly, turn off the mains supply to the appliance and contact your B+S dealer.

Control Panel Operating Instructions

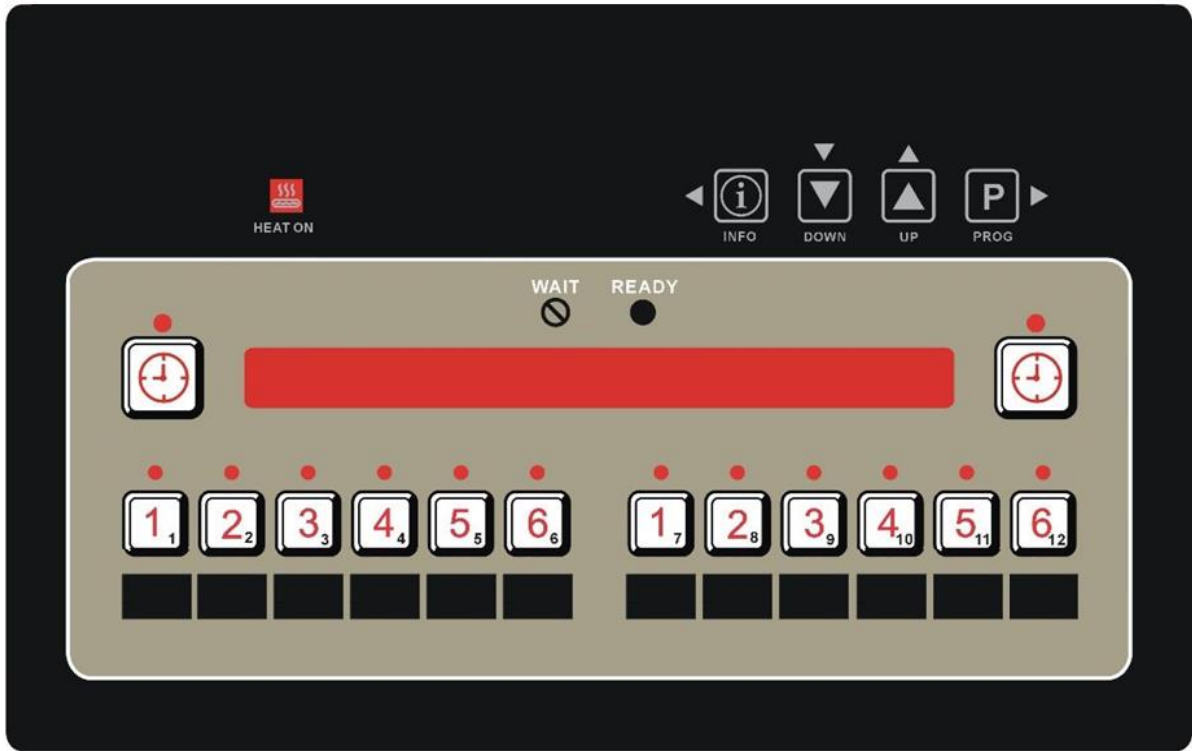
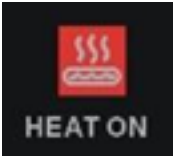
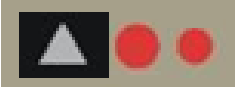
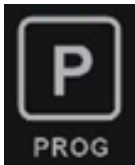


Figure 5: Electric Rapid Fryer Control Panel

Control Panel Light Indications

LIGHT INDICATION	DESCRIPTION
	Digital Display Shows all the functions of the cook cycle, program modes, diagnostic modes and alarms.
	Wait Indicator Flashes when the temperature in the pan is not at the set temperature of the program allocated.
	Ready Indicator Lights up when the temperature in the pan has reached the set temperature of the program allocated and product can be now cooked.
	Heat On Indicator Lights up when the control signals for the appliance to start heating the elements.
	Program Indicator Lights up to signal which program/function has been selected.

Control Panel Function Key Indications

FUNCTION KEY INDICATION	DESCRIPTION
	<u>Information View</u> Press to display current fryer information. This includes current oil temperature, set temperature, oil filter cycle remaining, date and current time.
	<u>Down and Up Function</u> Press to increase or decrease the value of the currently displayed setting visible on the digital display.
	<u>Program/Parameter Function</u> Press and hold for 3 seconds to enter the programmable parameter settings of each program 1-6. Define cook times, operating temps, load compensation, load compensation temps and alarms. Press and hold for 5 seconds to enter the advanced global parameter settings of the unit. Define clock, temperature unit, type of melt, idle functions, basket selection, filter parameters and cleaning parameters.
	<u>Stop/Start Cook Cycle Function</u> Press to start or stop the timer of the selected cooking program. This can be preset for each program via the program/parameter function.
	<u>Program Selection Function</u> Press any program 1-6 to select the desired cooking cycle. The smaller black digits located in the bottom RH corner 1-6 distinguish the programs for the left basket whilst 7-12 distinguish the programs for the right basket. The programs can be set via the program/parameter function button. Selecting any program will not start the cycle as you can only start the cycle by pressing the stop/start program shortly after selecting the desired program.

Understand your appliance

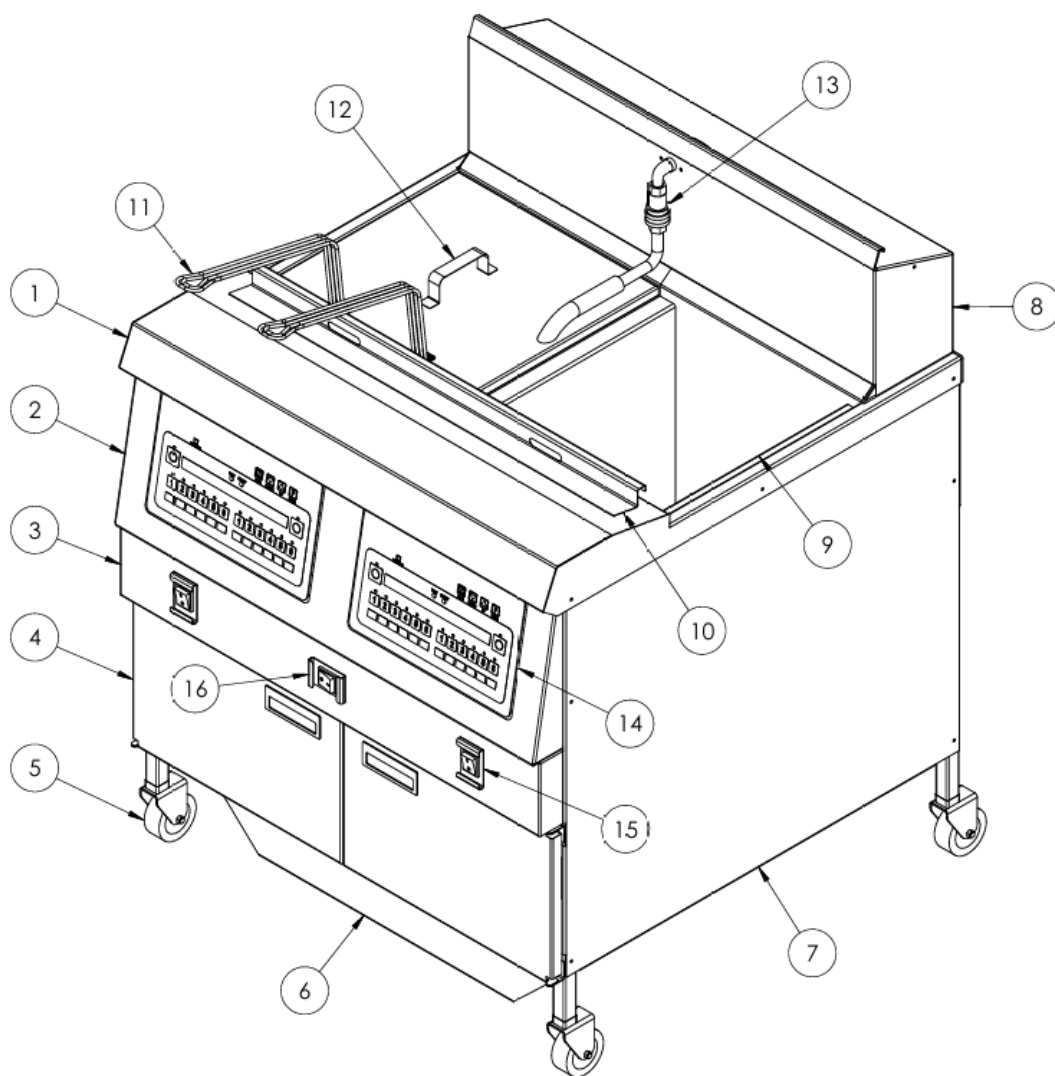


Figure 6: RF-2E

ITEM	ITEM DESCRIPTION
1	Hob
2	Control Panel
3	On/Off Switch Panel
4	Door Panel
5	Castors
6	Oil Collection Tank
7	Side Panel
8	Splashback

ITEM	ITEM DESCRIPTION
9	Tank
10	Basket Holder
11	Fryer Basket
12	Tank Cover
13	Oil Outlet
14	Control Board
15	Power On/Off Switch
16	Filter Pump On/Off Switch

Operating your appliance

Before operating your electric fryer, please note the following points:

- The appliance is for professional use and is to be used by qualified professionals only.
- Employees, visitors and contract personnel must be informed of the potential hazards for persons with pacemakers or metal implants. These persons must consult their doctor or the appliance manufacturer.
- Be aware that placing or wearing metal objects, e.g. kitchen utensils, cutlery, tools, jewelry etc., on or near the cooking surface may get hot when in close proximity to the cooking surface.
- If any malfunction occurs during operation the appliance must be immediately disconnected from the mains supply and contact your B+S dealer immediately.
- The user shall **not** dismantle or attempt to repair the appliance themselves. Exception to this rule is subject to the maintenance schedule listed in this manual. Please contact license personals for maintenance or adjustment/setup to avoid possible electrical shock and accident.

Filling your appliance with oil/shortening

Before any operation, the shortening level must always be above the heating elements when the fryer is on the **'Heat On'** mode. Failure to follow these instructions could result in a fire and/or damage to the fryer.

When using solid shortening, it is recommended to melt the shortening on an outside heating source before placing it in the fryer pan. The heating elements must be completely submerged in shortening at the given levels indented at the rear of the pan. Neglecting this instruction may result in personal injury.

It is recommended that a high quality frying shortening be used in the open fryer. Some low grade shortenings have a high moisture content and will cause foaming and boiling over.

To avoid any burns when pouring hot shortening into the fryer pan, wear gloves and take care to avoid any splashing.

Each fryer pan requires approximately **40L** of oil/shortening. All fryer pans have two level indicator lines inscribed on the rear of the pan wall which shows when the heated oil/shortening is at the proper level. Cold oil/shortening should be filled to the lower **'MIN'** indicator line.



Figure 7: Electric Rapid Fryer Pan MIN/MAX Indicators

Initial Startup Operating Mode

B&S Commercial Kitchens appliances have been designed to provide simplicity to the end user. Upon initial start-up of the appliance, B+S have preloaded the following program parameters, these parameters can be adjusted at any time:

Left Basket Set Cooking Parameters

PROGRAM	PROGRAM NAME	COOK TIME	SET TEMP (°C)	COOK ID	LOAD COMP	LOAD COMP TEMP (°C)	ALARM TIME
1	1MIN	1:00	180	1L	3	170	0:00
2	2MIN	2:00	180	2L	3	170	0:00
3	3MIN	3:00	180	3L	3	170	0:00
4	4MIN	4:00	180	4L	3	170	0:00
5	5MIN	5:00	180	5L	3	170	0:00
6	6MIN	6:00	180	6L	3	170	0:00

Right Basket Set Cooking Parameters

PROGRAM	PROGRAM NAME	COOK TIME	SET TEMP (°C)	COOK ID	LOAD COMP	LOAD COMP TEMP (°C)	ALARM TIME
1	1MIN	1:00	180	1R	3	170	0:00
2	2MIN	2:00	180	2R	3	170	0:00
3	3MIN	3:00	180	3R	3	170	0:00
4	4MIN	4:00	180	4R	3	170	0:00
5	5MIN	5:00	180	5R	3	170	0:00
6	6MIN	6:00	180	6R	3	170	0:00

The following procedures should be followed on the initial start-up of the fryer, and each time the fryer is brought back into operation from a cold or shut down condition. These are basic, general instructions, please follow them correctly to ensure safe and effective cooking:

1. Ensure all drain valves and the filter union connections are in the closed position.
2. Place basket support inside of the fryer pan.
3. Ensure the oil/shortening is filled to the proper level in the pan. See **'filling your appliance'** section.
4. Switch the power **'ON'** from the mains supply.
5. The digital display on the control board will display **'OFF'**.
6. Push the power switch located directly below the control board to the **'ON'** position. The controller will then run a short diagnostics test.
7. The controller will then display the following message **'IS POT FILLED 1=YES OR 2=NO'**.
8. Press program key **'1'** for **'YES'** to begin the melt cycle mode or press program key **'2'** for **'NO'** to turn off the controller until the unit is filled.
9. If program key **'1'** for **'YES'** was selected, the unit will go into a melt cycle mode until the oil temperature reaches **110°C**. The melt cycle usually takes 15 minutes to complete. Ensure that you stir the oil/shortening as it is being heated up and ensure to stir right down to the bottom of the pan.
Note: If the oil temperature is already at 110°C or exceeds this value, the melt cycle will be bypassed.
Caution: Do not bypass the melt cycle unless the oil/shortening has completely melted and covers the heating elements. If this does not occur, excessive smoking of the shortening or fire can occur.
10. Once the unit has completed the melt cycle and the oil temperature is at 110°C, the unit will be at idle, and the **'Ready Indicator'** will be illuminated. If no program is selected the **'Heat On'** cycle will fluctuate around 5°C+/- that of 110°C.
11. Press the desired preset program **'1-6'** followed by the **'Stop/Start Cook Cycle Function'** to begin working mode. The program cook time will then be displayed on the control board and the countdown will begin. Preset Program **'5'** or **'6'** should be used initially to heat the oil to 180°C. The heating process usually takes 5 minutes. To view the current temperature during the cook cycle, simply press the **'Info function'**.

12. Once the oil has reached the desired set temperature and the **'Ready Indicator'** is illuminated, the fryer is now ready to load the desired product. Press the desired preset program **'1-6'** again followed by the **'Stop/Start Cook Cycle Function'** to begin working mode. At the end of the cook cycle, an alarm will sound, and the controller will display **"*DONE"**.

Note: The actual temperature may vary 20 degrees or more depending on oil/shortening age, product weights, product temperature and other operational variables.

Caution: Do not overload or place product with extreme moisture content into the fryer baskets or fryer pan directly. Failure to do so will result in oil splattering that can cause serious burns or damage to the appliance.

Program/Parameter Editing

If the preloaded parameter settings of each program **'1-6'** are to be adjusted, this can be simply done by pressing and holding the **'Program/Parameter function'** key for **3 seconds**. The controller display will then read **'ENTER CODE'**.

PASSWORD = 111

1. Once the password has been entered, the controller will display **'FOR OPTIONS, SELECT PRODUCT THEN PRESS PROG DOWN'**. Simply press which program you want adjusted **'1-6'** followed by the **'PROG'** and then **'DOWN'**.
2. The controller will display **'NAME----**'. This will be preset to the B+S program name of **'1min, 2min, 3min, 4min, 5min or 6min'** depending on what program was selected. To change the name of the program, simply press **'UP or DOWN'** to cycle through the letters and numbers. To move across, simply press **'INFO'** to move left or **'PROG'** to move right. There is a maximum of 7 characters. Once the name is entered, simply press **'PROG'** until the curser moves off the display and **'COOK TIME'** appears.
3. To adjust **'COOK TIME'** simply press **'UP or DOWN'** to adjust the time. Once the time is selected, press **'PROG'** to cycle to the next parameter **'TEMP'**.
4. To adjust the cooking temperature **'TEMP'** simply press **'UP or DOWN'** to adjust the cooking temperature. Once the cooking temperature is selected, press **'PROG'** to cycle to the next parameter **'COOK ID'**.
5. **'COOK ID'** is simply a reference to the program mark. Example, 1L means program button 1 on the left of the control board and 3R means program button 3 on the right of the control board. Ideally, this function can be skipped as it simply references the button selected. Once the **'COOK ID'** is selected, press **'PROG'** to cycle to the next parameter **'LOAD COMP'**.
6. **'LOAD COMP'** Load compensation adjusts the cook time based on load size. Load compensation slows the cooking time to allow larger load sizes to cook longer than standard load sizes and speeds up the cooking time so smaller load sizes cook for a shorter amount of time than a standard load size. Setting this step to 0 turns load compensation off. The higher the number of this setting, the slower the timer counts down when the oil temperature drops below the LC Ref Temperature setting. To adjust **'LOAD COMP'** simply press **'UP or DOWN'** to adjust the load compensation. Once the load compensation is set, press **'PROG'** to cycle to the next parameter **'LCOMP REF'**.
7. **'LCOMP REF'** is the reference temperature to which load compensation is to activate. In general this setting should be set to the average temperature of the oil while cooking a standard load size with load compensation set to 0. To adjust, simply press **'UP or DOWN'** and once the load compensation temperature is set, press **'PROG'** to cycle to the next parameter **'ALARM-1 AT'**.
8. **'ALARM-1 AT'** is the time to which the alarm will ring. To adjust, simply press **'UP or DOWN'**. Once completed, press **'PROG'** to cycle to the next parameter **'ALARM-1 TYPE'**.
9. **'ALARM-1 TYPE'** allows you set to 4 types of alarms during any program. To adjust, simply press **'UP or DOWN'** or to skip simply press **'PROG'** to cycle to the next parameter **'FILTER AFTER'**.
10. **'FILTER AFTER'** can be used as a filter reminder setting. A filter reminder can be set at an **'X'** amount of uses of the program. The amount of uses can be set in the global parameter settings. To skip, simply press **'PROG'**.
11. Once all program parameters are set, simply press and hold the **'PROG'** button to exit editing.

Internal Global Parameter Editing

If the preloaded advanced global internal parameter settings are to be adjusted, this can be simply done by pressing and holding the '**Program/Parameter function**' key for **5 seconds**. The controller display will then read '**L2**' then '**ENTER CODE**'.

PASSWORD = 111

1. Once the password has been entered, you can now edit the specified global parameters in '**SP PROG**'. Simply press '**PROG**' and '**UP or DOWN**' to adjust the following parameters in the table below:

CODE	DESCRIPTION	UNIT
SP-1	Temperature measurement unit	°F or °C (Factory set at °C)
SP-7	Type of melting product	1 = Liquid 2 = Solid (Factory set at Liquid)
SP-8	Idle mode activation	YES or NO (Factory set at NO)
SP-8A* (Only applicable if SP-8 is YES)	Idle mode set temperature	Adjust accordingly (Factory set at 140°C)
SP8-B* (Only applicable if SP-8 is YES)	Time to enter idle mode	Adjust accordingly (Factory set at 60 minutes)
SP8-C* (Only applicable if SP-8 is YES)	Enter idle mode when oil is melted	YES OR NO (Factory set at YES)
SP-9	Oil filtration reminder	1 = OFF 2 = MIXED 3 = GLOBAL (Factory set at OFF)
SP9-A* (Only applicable if SP-9 is 2 or 3)	Percentage of oil filter	% (Factory set at 75%)
SP9-B* (Only applicable if SP-9 is 2 or 3)	Oil filter unlocked	YES OR NO (Factory set at YES)
SP9-C* (Only applicable if SP-9 is 2 or 3)	Oil filter lock percentage	% (Factory set at 100%)
SP9-D* (Only applicable if SP-9 is 2 or 3)	Operating temperature of oil filter	°C (Factory set at 121°C)
SP-10	Program function selection key	COOK or SELECT (Factory set at COOK)
SP-13	Basket selection info	1 Basket or 2 Baskets (Factory set at 2 Baskets)
SP-20	Cleaning time	Adjust accordingly (Factory set at 10 minutes)
SP-21	Cleaning Temperature	Adjust accordingly (Factory set at 60°C)

Clock Set

If the preloaded clock is to be adjusted, this can be simply done by pressing and holding the ‘Program/Parameter function’ key for 5 seconds. The controller display will then read ‘L2’ then press ‘INFO’ to filter to selection ‘CLOCK SET’ and ‘ENTER CODE’.

PASSWORD = 111

To filter through the code set, simply press ‘UP or DOWN’ to cycle through. To move across, simply press ‘INFO’ to move left or ‘PROG’ to move right. To exit editing the clock set, simply hold ‘PROG’.

CODE	DESCRIPTION
C5-1	Year
C5-2	Month
C5-3	Day
C5-4	Hour
C5-5	Minutes
C5-6	24 Hour Clock or 12 Hour Clock
C5-7	Seconds
C5-8	Week

Filtering

Filtering Process

Clean oil not only makes your food taste better, but it also helps maintain a consistent cooking quality, extends the life of your oil, and keeps your fryer in good shape. It is highly recommended that you filter your oil once a day to extend the life of your oil and clean your filter oil collection tank each morning whilst it is at ambient room temperature and prior to emptying any hot oil.

For the best results, filter the oil at normal frying temperature (170°C-190°C).

Caution: The oil collection tank must be in the correct position and the cover in place. Ensure the oil pipes line up exactly with the openings in the cover. Failure to follow these instructions may cause splashing of oil and could result in personal injury. Surfaces of the fryer and componentry submerged within the oil will be hot. Use care when filtering to avoid burns.



Figure 8: Oil Collection Tank

1. Turn the power to the control unit **'OFF'**.
2. Using a nylon bottle brush or any equivalent non-abrasive cleaning tool, remove any buildup of products on the side walls and elements of the fryer pan.

Caution: Do **NOT** scrape the heating elements with any abrasive tool such as a metal spatula. Scraping the heating elements produces scratches in the elements causing any breadings to stick and burn on.

3. Half turn the drain valve handle in an anti-clockwise direction slowly, then to the fully open position (handle pointed down). This will help prevent splashing of the oil.
4. As the oil is draining from the fryer pan, use a nylon bottle brush to scrape and clean any remaining products to the bottom of the fryer tank and into the drain hole opening.
5. Once all the oil has been drained and cleaning of the internal fryer tank is satisfactory, turn the drain valve handle clockwise until the handle is in a horizontal position.

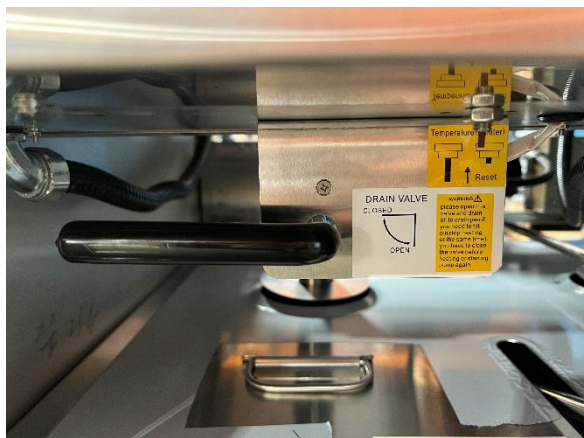


Figure 9: Drain Valve - CLOSED position

6. Before switching the filter pump on, ensure the filter union connection is closed. If the connection is loose or off, use protective gloves or a cloth, hold the stainless connection while sliding and securing the filter union collar. Ensure that the connection is tight. (Figure 10)
7. Using protective gloves or a cloth, hold and pull up the quick-disconnect fitting to remove or attach the oil outlet arm. Release the quick-disconnect fitting to fix the arm in position. (Figure 11)
8. Turn the filter pump switch **'ON'** to pump all the oil out of the collection tank and back into the desired pan.

Caution: Do not leave the appliance unattended when the oil is being pumped back in. This is to ensure there is no leakages from the connections of the filter union or oil outlet arm. If leakages occur switch all components **'OFF'** and immediately call your service technician.

9. When the pump is pumping air only, turn the filter pump switch to the **'OFF'** position. Check oil level and top up if necessary. You may turn the power to the control unit **'ON'** and start operating procedures.



Figure 10: Filter Union Connection



Figure 11: Oil Outlet Arm

Filter Envelope

Filter Envelopes **must** be used with this appliance. Filter envelopes help filter the frying oil to remove particulates from frying oils, thus extending their life and ensuring high food quality. High filtration efficiency means less oil absorption by foods, resulting in crisper outcomes.

B+S recommends changing the filter envelope every second to third day depending on the amount of usage and the type of crumb being using on the product. In busy environments, daily changeover would be essential.

1. Ensure the filter pump switch is '**OFF**'.
2. Disconnect the filter union and remove the oil collection tank from the unit.
Caution: The filter union could be hot. Wear protective gloves or a cloth as severe burns could result.
3. Lift the oil collection tank cover from the unit.
4. Wipe any oil, food particles or crumbs from the collection tank. Completely rinse with hot water if necessary.
5. By hand, unscrew the suction standpipe from the filter envelope assembly.
6. Remove the filter clips and take off the used filter paper.
7. Remove the crumb screens and clean completely with hot water.
Note: Ensure that the crumb screens, filter clips and standpipe is completely dry before reassembling as the water will dissolve the filter paper.
8. Assemble the crumb screens and slide them within the new filter envelope.
9. Screw the suction standpipe to the filter envelope assembly and fold the filter envelope closed and secure with two filter clips.
10. Connect the filter union by hand. **DO NOT** use a wrench to tighten.
11. The fryer is now ready to operate.



Figure 12: Filter Envelope, Standpipe and Filter Clips



Figure 13: Crumb Screens

Maintenance and Care

To ensure longevity, continued performance and efficiency of your appliance, a good cleaning and maintenance program is paramount.

ALWAYS turn off the electrical power supply at the mains supply before cleaning. The electrical appliance is not waterproof. Do not use water jet spray or a high pressure cleaner to clean the interior or exterior of this appliance.

Carbonised grease on the surface of the heating element will hinder the transfer of heat from the cooking surface to the oil. This will result in a loss in cooking efficiency.

DO NOT use the following items to clean your unit unless specified:

- Abrasive detergents, cleansers or powders
- Abrasive materials such as wire brushes or steel wool
- Caustic detergents
- Acid to treat equipment as it may cause discoloration of the appliance

Daily & Fortnightly Checks & Service

If the appliance is being used heavily every week, we recommend that cleaning procedures occur more often. To keep your electric fryer clean and operating at peak efficiency, please follow the procedures listed below:

1. Thoroughly clean the exterior surfaces of the appliance with a clean, damp cloth soaked with mild detergent to remove any food particles, oils, dust and any other materials left on the surface.
2. Any carbonized food particles and oils located on the walls of the tank or heating element must be removed using a clean, damp cloth soaked in a mild detergent or a nylon bottle brush. Any residue can be cleaned with a soft dry cloth.
3. Thoroughly clean the control display with a damp cloth to ensure clear visibility of the screen.
4. Filter your oil once a day to extend the life of your oil and clean your filter oil collection tank each morning whilst it is at ambient room temperature and prior to emptying any hot oil.

Yearly Checks & Service

All appliances should be inspected and serviced periodically by a qualified service technician as part of any kitchen maintenance program. Do not wait until a problem occurs, any interruptions to start up procedures and induction performance ultimately will lead to a breakdown of the unit.

Depending on the usage of the appliance, B+S recommends that this appliance is inspected and serviced every 6 months by an authorized technician and as follows:

1. Visually inspect the entire appliance and note the areas that may need attention or are of concern.
2. Inspect for any foreign materials and buildup of food particles, oils and dust that may be located in and around the tank walls and heating elements.
3. Inspect all electrical connections to ensure wiring has not become loose or damaged overtime. Check the current draw and loading of the equipment. Refer to table 1 in the electrical supply requirements of this manual.
4. Ensure the appliance is operating according to the manufacturer's operating manual.

If the appliance fails to operate correctly after all checks have been carried out, please contact B+S:

B+S Commercial Kitchens Pty Ltd

57 Plateau Road Reservoir VIC 3073 AUSTRALIA

Tel: +61 3 9469 4754 **Fax:** +61 3 94694504 **Web:** www.bscommercialkitchens.com

Failure Fault Codes & High Limit Reset

This section provides an easy reference guide to the more common problems that may occur during the operation of your appliance. The fault finding guide in this section is intended to help you correct, or at least accurately diagnose problems with your equipment.

Although this section covers the most common problems reported, you may encounter a problem not covered in this section. In such instances, please contact your local authorised service agent who will make every effort to help you identify and resolve the problem. Please note that the service agent will require the model and serial number provided on your data label.

Table 5: Failure Display Codes

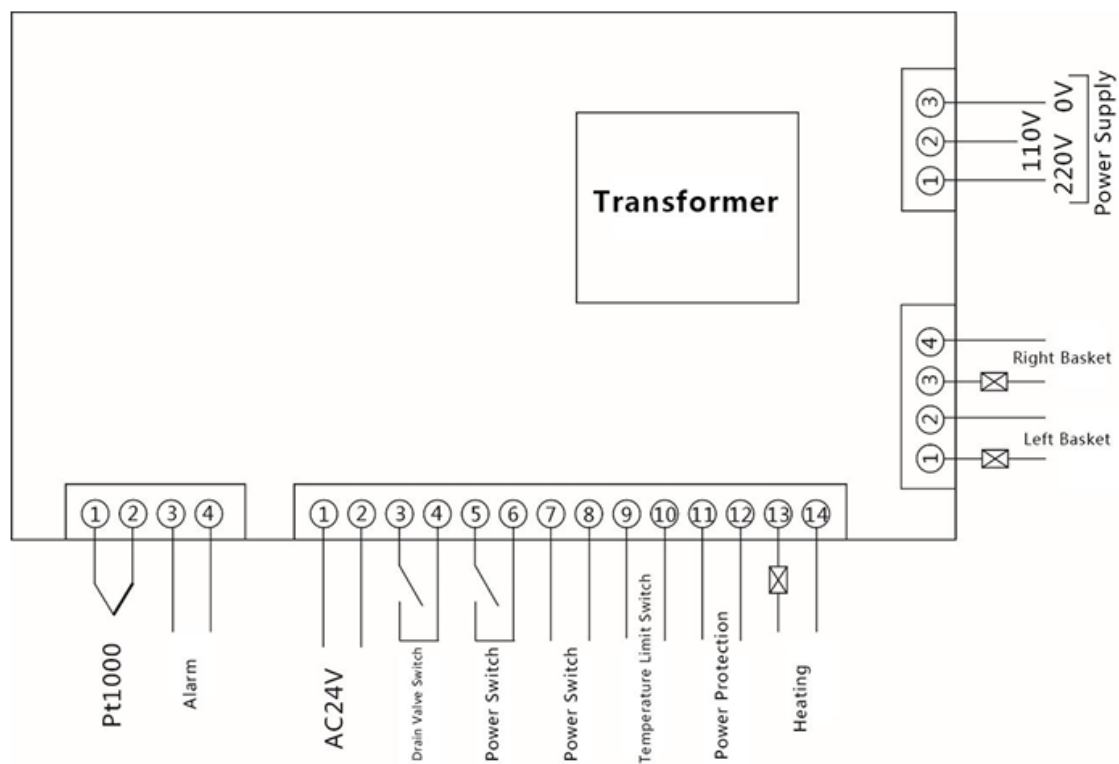
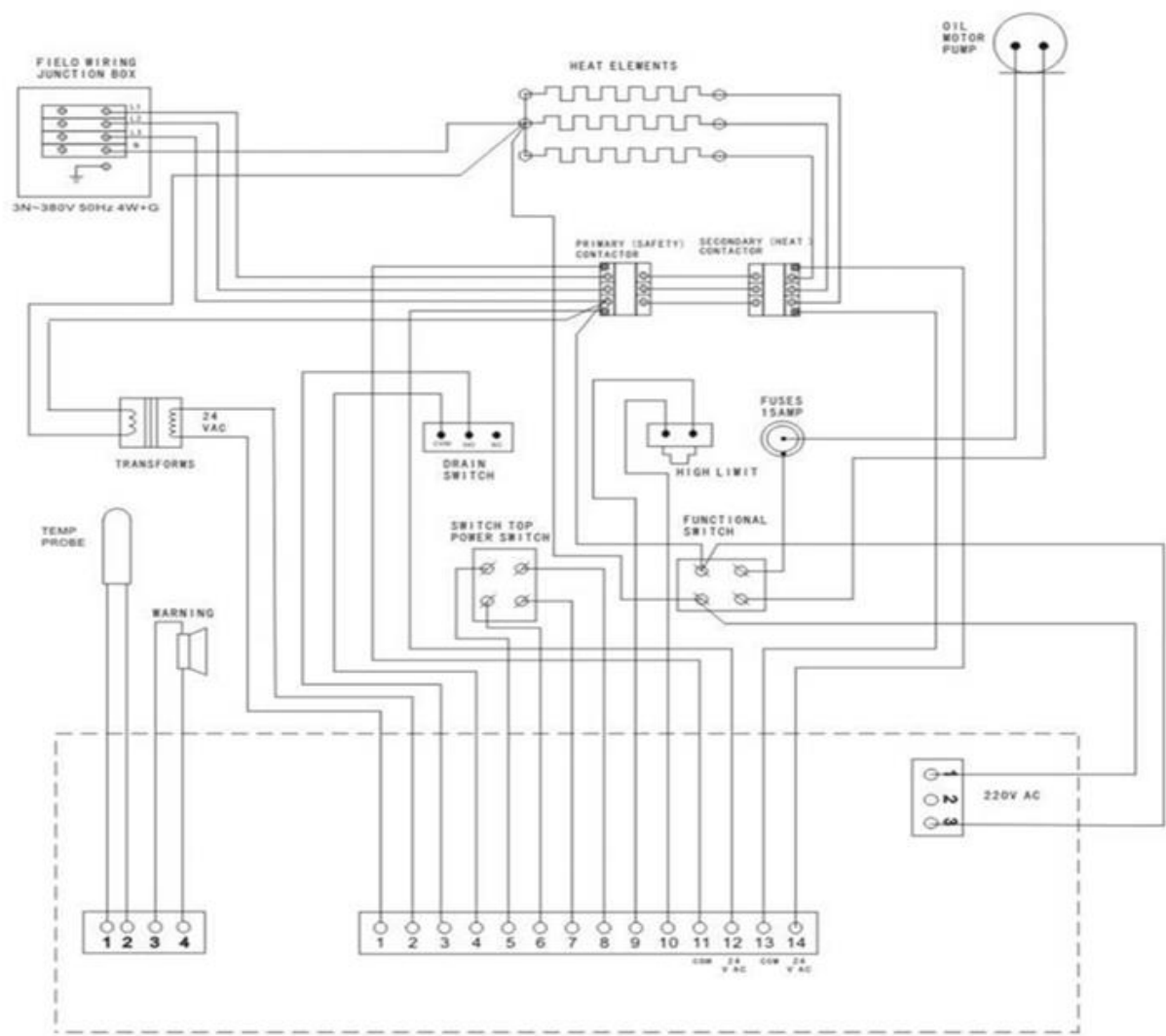
CODE	FAULT DESCRIPTION	FAULT SOLUTION
E-6	Faulty temperature probe or connection	Have temperature probe and connection checked
E-8	Oil temperature too hot, drain valve opened while heat was on, or faulty high limit	Check oil temperature for overheating; have heat components checked if high limit continues to trip.
E-15	Drain is open or faulty microswitch	Close drain; have drain microswitch checked if error code persists
FILTER LOCKOUT	Filtration is locked. See code SP9-C*.	Open the oil change valve to perform oil change. It will reset automatically. Alternatively, turn SP9 Oil filtration reminder OFF.
FILTER SUGGESTED	Suggested to filter the oil.	Follow filtering section of this handbook.
CHANGE OIL SOON	Oil needs to be changed soon.	Filter out the old used oil and replenish with new oil. Follow filling your appliance section of this handbook.

The maximum working temperature of the pot is 200°C. Whenever there is a malfunction of the temperature control, the temperature limit control in the appliance will cut off the heating power. The appliance has a manual reset mechanism, only after the temperature is below 150°C could the reset button be used and the heating cycle will commence.



Figure 14: Temperature Reset Button

Electrical Wiring Diagram





Standard Warranty Conditions

B+S Commercial Kitchens Pty Ltd of 57 Plateau Road, Reservoir, Victoria (hereinafter called 'B+S') undertakes by this warranty, that B+S or its agent will pay for the cost of labor and parts which B+S, or its agent find defective for:

K+ Range - Eighteen (18) months from date of installation/hand over for projects.

B+S Black Range – Twenty Four (24) months from date of installation/hand over for projects.

B+S Black Induction Range – Twelve (12) months from date of installation/hand over for projects.

Verro Range – Thirty Six (24) months from date of installation/hand over for projects.

The liability of B+S under this warranty is limited to the repair or replacement of defective goods or components. All other costs including, without limitation, cartage, carriage and installation shall be borne by the purchaser.

IMPORTANT

Prior to requesting a service call, please be sure that the cooking equipment is being used and maintained in accordance with the instruction manual provided with your cooking equipment. Please also be sure that your cooking equipment has been installed in accordance with the manual by a qualified installer. All cooking equipment must be commissioned by the installer upon completion of installation. Failure of these procedures will result in non-warranty service costs.

Warranty labor is supplied free of charge during business hours (8 am to 4 pm AEST) Monday to Friday. Should warranty work be requested outside of our normal working hours, a labor charge will be applied equivalent to a normal hour rate, with out of hours penalty rates. Penalty rates amount must be borne by the purchaser. Claims for non-covered parts, no faults found, travel over 100km round trip or 2 or more hours of travel time from B+S Reservoir or B+S nominated service agent, or other items outside our standard terms and conditions will be chargeable. Note: Any additional time spent on site due to required inductions etc. is not covered by warranty.

1. This warranty applies only for mainland Australia and Tasmania, and does not cover any service consequent upon accident, alterations, misuse, fire, flood or act of God. Warranty for New Zealand is Twelve (12) months parts and labor for K+, B+S Black & Verro Ranges.
2. This warranty is only valid if the appliance has been installed in accordance with local regulations by a duly authorised person, and the B+S installation instructions provided with the appliance. If in doubt, please contact B+S 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 B+S or for the operation outside the technical specifications of the appliance.
3. This warranty is conditional upon the appliance being used in normal commercial catering operations.
4. This warranty is the only express warranty given by the Company. No person has authority to change or to add to these obligations and liabilities.
5. The Company has the right to determine whether or not a fault is caused by faulty workmanship or material or that any part is defective.
6. This warranty does not apply to any loss suffered through or resulting from the non-operation or the ineffective operation of the cooking appliance or any part of the cooking appliance.
7. This warranty does not extend to goods and components thereof manufactured either entirely or substantially of glass or similar substances, light globes, infrared or quartz tubes and electrical controls or elements.
8. While the goods are in the custody of the seller for investigation or repair, they shall be at the risk of the purchaser and no liability shall attach to the Company, its servants or agents for any damage occasioned to, or loan of, the goods whatsoever.
9. All warranties are non-transferable and are only applicable to the original end user (purchaser).
10. All warranty work must be carried out by a B+S approved service technician.

The Purchaser must give notice to the Company immediately upon it becoming aware of the alleged defect and in any event before the expiration of the appropriate warranty period.

B+S will endeavor to have a service technician on site for all warranty service requests within a 24 hour period or by the end of the next business day at the latest. All warranty requests must be made online at www.bscommercialkitchens.com or by following link at <https://bscommercialkitchens.com/request-a-warranty-service-call/>. When completing an online service call, customer will be asked for credit card details as security, in the case service call turns out to be a non-warranty issue. Where it is possible to do so, B+S will provide the buyer with an estimate of repair costs prior to costs being incurred by B+S. Estimates may be given by B+S in stages, based on travel costs for further assessment etc.

Details of the installer such as contact name, business name, telephone number and license number **MUST** be provided to avoid any delays.

11. Nothing in this warranty, however, shall be construed as affecting any rights you may have under the Trades Practices Act or any other Commonwealth or State Legislation which gives you rights which cannot be modified or excluded by agreement.

SPECIAL PROVISIONS – NOT COVERED BY WARRANTY

- Cleaning of spark and ignition sensors is not covered by warranty. Damage caused by fats, oils, water or food particles falling into burners or pilots **will not be covered under warranty.**
- Consumable items such as glass, ceramics, light globes, infrared or quartz tubes and electrical controls or elements, belts, water filters and fuses or re-setting of safety devices such as circuit breakers, use of
- Chemicals other than those recommended by B+S, accidental damage, misuse or negligence or failure to take reasonable care.
- Cleaning of burners due to blockage of burner orifices caused by fats, oils, water or food particles **is not covered by warranty.**
- Breakage of pilot knobs, knee valve handles and knee wands are not covered under warranty.
- Thermocouples, piezo leads and ignitors are only covered by Twelve (12) months parts and labor across K+, B+S Black and Verro ranges.
- Seizure of gas cocks and knobs.
- Cleaning of blocked drains.
- Damage caused by lime scale and/or corrosion.
- Parts not supplied by B+S or a B+S authorised service technician.
- Damage caused by rodents and insects.
- Scheduled general maintenance.
- Normal wear and tear of parts
- Filters for DSK Deck Steamers

Additional costs are payable for:

Accommodation, cost of transport such as flights/ferries, poor access and waiting times.

For all valid claims under this warranty, B+S will, at its discretion, either repair the product, replace the product with a product that is at least equivalent to the original product in function and quality, or refund the purchase price. When a product or part is replaced or refunded, any replaced product or part becomes the property of B+S.

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